Engineering tables for EtherNet/IP™

When planning the automation of a facility, you must have a wide variety of components available. These engineering tables list all the components required for wiring up the SAI Active modules.

EtherNet/IP™ modules

EtherNet/IP™ accessories

Sensor/actuator accessories

Markers

Protective caps

Ordering data

Description	Type	Qty.	Order No.
EtherNet/IP™ modules			
16 Digital In	SAI-AU M12 EIP 16DI	1	**1906900000**
16 Digital In / 8 Digital Out	SAI-AU M12 EIP 16DI/8DO	1	**1906910000**
4 Analogue In / 2 Analogue Out / 4 Digital In	SAI-AU M12 EIP AI/AO/DI	1	**1906920000**
16 Digital In	SAI-AU M8 EIP 16DI	1	**1906930000**
16 Digital In / 8 Digital Out	SAI-AU M8 EIP 16DI/8DO	1	**1906940000**
EtherNet/IP™ accessories			
EtherNet/IP™ cables and plugs (refer to Catalogue 9/Chapter C)			
Sensor/actuator accessories			
Sensor-actuator cables			Chapter B
Sensor-actuator plugs			Chapter D
Markers			
Semi-transparent markers for PrintJet printing	ESG 8/13.5/43.3 SAI AU	5	**1912130000**
Protective caps			
M8 Dust cap (Sensor connections)	SAI-SK M8	50	**1802760000**
M12 Dust cap (Sensor connections)	SAI-SK	30	**9456050000**
M12 Dust cap (Bus-in and power-in)	SAI-SK-M12-UNI	20	**2330260000**
M12 Dust cap (Bus-in and power-in)	SAI-SK plug M12	50	**1781520000**

Modbus TCP
Remote I/O for digital signal processing

Modbus-IDA
the architecture for distributed automation

SAI-AU

SAI-AU

Ordering data

Module variants	Type	Qty.	Order No.
16 Digital In; 16 Digital In / 8 Digital Out	SAI-AU M8 IE 16DI	1	**1906880000**
16 Digital In; 16 Digital In / 8 Digital Out	SAI-AU M12 IE 16DI	1	**1906850000**
Note			

Type	Qty.	Order No.
SAI-AU M8 IE 16DI/8DO	1	**1906890000**
SAI-AU M12 IE 16DI/8DO	1	**1906860000**

Technical data

Connections		
Fieldbus (BUS-IN)	1x M12 female 4-pole, D-coded	1x M12 female 4-pole, D-coded
Supply voltage (AUX-IN)	1x M12 plug 5-pole, A-coded	2x M12 plug 5-pole, A-coded
Supply voltage (AUX-OUT)	1x M12 female 5-pole, A-coded	
I/O connections	16x M8 female 3-pole	16x M8 female 3-pole
Voltage supply		
Operating voltage	24 V (18 V DC ... 30 V DC)	24 V (18 V DC ... 30 V DC)
Contact load	Per PIN max. 4 A	Per PIN max. 4 A
Max. total current module	8 A	8 A
Digital inputs		
Permitted input voltage	-30 V to +30 V (protected against polarity reversal)	-30 V to +30 V (protected against polarity reversal)
Input voltage, low	<5 V in accordance with EN 61131-2 Typ 1	<5 V in accordance with EN 61131-2 Typ 1
Input voltage, high	>15 V in accordance with EN 61131-2 Typ 1	>15 V in accordance with EN 61131-2 Typ 1
Input current, low	< 15 mA in accordance with EN 61131-2 Type 1	< 15 mA in accordance with EN 61131-2 Type 1
Input current, high	2 mA to 15 mA in accordance with EN 61131-2 Type 1	2 mA to 15 mA in accordance with EN 61131-2 Type 1
Input filter	3 ms	3 ms
Digital outputs		
max. current-carrying capacity per output signal		0.5 A, 2 A
Switching frequency load (resistive / inductive / inrush)		max. 100 Hz / max. 1 Hz / max. 8 Hz
Short-circuit-proof		Yes, cut-off for short circuit and error message
Output voltage, low		0 V DC
Output voltage, high		Supply voltage less 0.7 V DC
Max. total current outputs		7 A
Fieldbus		
Bus system	Modbus TCP	Modbus TCP
Transmission rate	10/100 Mbit/s	10/100 Mbit/s
Addressing	DHCP, BOOTP, Static	DHCP, BOOTP, Static
System integration	Register, Webserver	Register, Webserver
General data		
L x W x H	210 mm / 54 mm / 32 mm	210 mm / 54 mm / 32 mm
Earth	< 400 g	< 400 g
Protection class	IP 67	IP 67
operating temperature	0 °C...+60 °C	0 °C...+60 °C
Storage temperature	-25 °C...+85 °C	-25 °C...+85 °C
Housing main material / Flammability class UL 94	Pocan, PBT / V-0	Pocan, PBT / V-0
Certificate	CE, cULus (planned for 4Q/2010)	CE, cULus (planned for 4Q/2010)

Note		

Modbus TCP
Remote I/O for digital and analogue signal processing

Modbus-IDA
the architecture for distributed automation

SAI-AU

Ordering data

Module variants
4 Analogue In / 2 Analogue Out / 4 Digital In
Note

Type	Qty.	Order No.
SAI-AU M12 IE AI/AO/DI	1	**1906870000**

Technical data

Connections	
Fieldbus (BUS-IN)	1x M12 female 4-pole, D-coded
Supply voltage (AUX-IN)	1x M12 plug 5-pole, A-coded
Supply voltage (AUX-OUT)	1x M12 female 5-pole, A-coded
I/O connections	8 x M12 female 5-pole, A-coded
Voltage supply	
Operating voltage	24 V (18 V DC ... 30 V DC)
Contact load	Per PIN max. 4 A
Max. total current module	8 A
Digital inputs	
Permitted input voltage	-30 V to +30 V (protected against polarity reversal)
Input voltage, low	<5 V in accordance with EN 61131-2 Typ 1
Input voltage, high	>15 V in accordance with EN 61131-2 Typ 1
Input current, low	< 15 mA in accordance with EN 61131-2 Type 1
Input current, high	2 mA to 15 mA in accordance with EN 61131-2 Type 1
Input filter	3 ms
Analogue inputs	
Measurement range	-10 V ... +10 V, 0 V ... 10V, 0 ... 20 mA, 4...20 mA
Maximum input voltage in relation to GND	35 V
Input resistance (load)	<125 Ohm
Max. input current (differential)	-50 mA to +50 mA (protected against polarity reversal)
Short-circuit-proof	Yes
Resolution / Accuracy	12-bit / < 0.2 %
Analogue outputs	
Measurement range	-10 V ... +10 V, 0 V ... 10V, 0 ... 20 mA, 4...20 mA
Output interval	5 ms to 250 ms (can be configured)
Short-circuit-proof	Yes
Resolution / Accuracy	12-bit / < 0.2 %
Fieldbus	
Bus system	Modbus TCP
Transmission rate	10/100 Mbit/s
Addressing	DHCP, BOOTP, Static
System integration	Register, Webserver
General data	
L x W x H	210 mm / 54 mm / 32 mm
Earth	< 400 g
Protection class	IP 67
operating temperature	0 °C...+60 °C
Storage temperature	-25 °C...+85 °C
Housing main material / Flammability class UL 94	Pocan, PBT / V-0
Certificate	CE, cULus (planned for 4Q/2010)

Note

Engineering tables for Modbus TCP

When planning the automation of a facility, you must have a wide variety of components available. These engineering tables list all the components required for wiring up the SAI Active modules.

Modbus TCP modules

Modbus TCP accessories

Sensor/actuator accessories

Markers

Protective caps

Ordering data

Description	Type	Qty.	Order No.
Modbus TCP modules			
16 Digital In	SAI-AU M12 IE 16DI	1	**1906850000**
16 Digital In / 8 Digital Out	SAI-AU M12 IE 16DI/8DO	1	**1906860000**
4 Analogue In / 2 Analogue Out / 4 Digital In	SAI-AU M12 IE AI/AO/DI	1	**1906870000**
16 Digital In	SAI-AU M8 IE 16DI	1	**1906880000**
16 Digital In / 8 Digital Out	SAI-AU M8 IE 16DI/8DO	1	**1906890000**
Modbus TCP accessories			
Modbus TCP cables and plugs (refer to Catalogue 9)			Chapter C
Sensor/actuator accessories			
Sensor-actuator cables			Chapter B
Sensor-actuator plugs			Chapter D
Markers			
Semi-transparent markers for PrintJet printing	ESG 8/13.5/43.3 SAI AU	5	**1912130000**
Protective caps			
M8 Dust cap (Sensor connections)	SAI-SK M8	50	**1802760000**
M12 Dust cap (Sensor connections)	SAI-SK	30	**9456050000**
M12 Dust cap (Bus-in and power-in)	SAI-SK-M12-UNI	20	**2330260000**
M12 Dust cap (Bus-in and power-in)	SAI-SK plug M12	50	**1781520000**

SAI Active Universal Pro

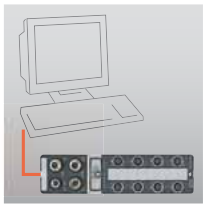
Professional versions of the Remote I/O System featuring IP67 protection

The modules in the SAI Active Universal Pro systems provide additional I/O and functional modules for more versatile topologies. The extension modules come in a compact, space saving design. They can also be mounted on the side because of the additional drilled holes in the side of the housing. Up to 15 extension modules can be connected over a distance of 50 metres using a shielded, standard M8 sensor cable and the SAI fieldbus module.

In addition to the digital input and output modules, we also offer counter unit modules, thermal modules, RTD modules and analogue modules. The digital input and output modules are also available in M8 and M12 variants. The analogue modules and functional modules are available with M12 connections. Markers are included with every SAI Active module for labelling the I/O channels and the entire device. These markers can be printed on using the PrintJet system from Weidmüller.

Cost-effective Subbus system

Subbus modules are wired up using conventional, shielded, standard M8 sensor cables. Thus there is no need for expensive custom cables. The extension modules enable versatile expansion and minimise the costs associated with the fieldbus interface. The modules do not, however, detract from the performance of the fieldbus system.



Integration with an industrial PC

Weidmüller offers an SAI Active Universal Pro module with USB and RS232 interfaces especially for controllers or industrial PCs without any Fieldbus connection. A driver is used to set up the connection; communication is based on the standard Modbus ASCII format.
All available extension modules can be used on these components and can be accessed via the controller.

Simplified installation

The modules have a compact, space saving design with additional holes drilled on the side of the housing: this allows them to be installed in a quick and versatile manner. All SAI Active modules with digital inputs or digital outputs are optionally available with standard M8 or M12 connection systems. The outputs are short-circuit-proof and protected against polarity reversal.

Efficient engineering

All Pro-System modules are described in the standardised fieldbus specific device description files. They can be integrated into any controller unit and corresponding engineering system regardless of the particular manufacturer. The configuration (whether for the input, DESINA input, or output) is carried out without any additional software. Any user can configure directly from the engineering system.

Gateway modules with digital inputs

SAI-AU GW

SAI-AU GW

Ordering data

Module variants		
	16 Digital In	
Note		

Type	Qty.	Order No.
SAI-AU M12 PB GW 16DI	1	**1938550000**

Type	Qty.	Order No.
SAI-AU M8 PB GW 16DI	1	**1024310000**

Technical data

Connections		
Fieldbus (BUS-IN)	1x M12 plug 5-pole, B-coded	1x M12 plug 5-pole, B-coded
Fieldbus (BUS-OUT)	1x M12 female 5-pole, B-coded	1x M12 female 5-pole, B-coded
Supply voltage (AUX-IN)	1x M12 plug 5-pole, A-coded	1x M12 plug 5-pole, A-coded
Connection to Subbus (SUB-OUT)	1 x M8 female 4-pole, A-coded	1 x M8 female 4-pole, A-coded
I/O connections	8 x M12 female 5-pole, A-coded	16x M8 female 3-pole
Voltage supply		
Operating voltage	24 V (18 V DC ... 30 V DC)	24 V (18 V DC ... 30 V DC)
Contact load	Per PIN max. 4 A	Per PIN max. 4 A
Max. total current module	8 A	8 A
Digital inputs		
Permitted input voltage	-30 V to +30 V (protected against polarity reversal)	-30 V to +30 V (protected against polarity reversal)
Input voltage, low	<5 V in accordance with EN 61131-2 Typ 1	<5 V in accordance with EN 61131-2 Typ 1
Input voltage, high	>15 V in accordance with EN 61131-2 Typ 1	>15 V in accordance with EN 61131-2 Typ 1
Input current, low	< 15 mA in accordance with EN 61131-2 Type 1	< 15 mA in accordance with EN 61131-2 Type 1
Input current, high	2 mA to 15 mA in accordance with EN 61131-2 Type 1	2 mA to 15 mA in accordance with EN 61131-2 Type 1
Input filter	1 ms, 3 ms, 5 ms, 10 ms, Configurable	1 ms, 3 ms, 5 ms, 10 ms, Configurable
Fieldbus		
Bus system	Profibus-DP	Profibus-DP
Transmission rate	Max. 12 Mbit/s (automatic detection)	Max. 12 Mbit/s (automatic detection)
Addressing	Via rotary coding switch (1 – 126)	Via rotary coding switch (1 – 126)
System integration	GSD file	GSD file
General data		
L x W x H	210 mm / 54 mm / 32 mm	210 mm / 54 mm / 32 mm
Earth	< 350 g	< 350 g
Protection class	IP 67	IP 67
operating temperature	0 °C...+60 °C	0 °C...+60 °C
Storage temperature	-25 °C...+85 °C	-25 °C...+85 °C
Housing main material / Flammability class UL 94	Pocan, PBT / V-0	Pocan, PBT / V-0
Certificate	CE, cULus	CE, cULus

Note		

Engineering tables for PROFIBUS

When planning the automation of a facility, you must have a wide variety of components available. These engineering tables list all the components required for wiring up the SAI Active modules.

PROFIBUS modules

PROFIBUS accessories

Subbus cables / Terminating resistor

Sensor/actuator accessories

Markers

Protective caps

Ordering data

Description	Type	Qty.	Order No.
PROFIBUS modules			
PROFIBUS Gateway M12	SAI-AU M12 PB GW 16DI	1	**1938550000**
PROFIBUS Gateway M8	SAI-AU M8 PB GW 16DI	1	**1024310000**
Subbus module	SAI-AU M12 SB 8DI	1	**1938610000**
Subbus module	SAI-AU M12 SB 8DI/8DO	1	**1938640000**
Subbus module	SAI-AU M8 SB 8DI	1	**1938600000**
Subbus module	SAI-AU M8 SB 8DI/8DO	1	**1938630000**
Subbus module	SAI-AU M12 SB AI	1	**1938690000**
Subbus module	SAI-AU M12 SB AO	1	**1938700000**
Subbus module	SAI-AU M12 SB PT100	1	**1938710000**
Subbus module	SAI-AU M12 SB Thermo	1	**1938720000**
Subbus module	SAI-AU M12 SB Zähler	1	**1938730000**
Subbus module	SAI-AU M8 SB 8DO 2A	1	**1938660000**
Subbus module	SAI-AU M12 SB 8DO 2A	1	**1938680000**
PROFIBUS accessories			
PROFIBUS cables with female plug and male plug			Chapter C
PROFIBUS cables with female plug and other side open			Chapter C
PROFIBUS cables with male plug and other side open			Chapter C
PROFIBUS plug-in connector			Chapter C
PROFIBUS terminating resistor	SAIEND PB M12 5P B-COD	1	**1784770000**
Subbus cables / Terminating resistor			
Subbus cables			Chapter C
Subbus terminating resistor	SAIEND CAN M8 4P	1	**1955340000**
Sensor/actuator accessories			
Sensor-actuator cables			Chapter B
Sensor-actuator plugs			Chapter D
Markers			
Semi-transparent markers for PrintJet printing	ESG 8/13.5/43.3 SAI AU	5	**1912130000**
Protective caps			
M8 Dust cap (Sensor connections)	SAI-SK M8	50	**1802760000**
M12 Dust cap (Sensor connections)	SAI-SK	30	**9456050000**
M12 Dust cap (Bus-in and power-in)	SAI-SK-M12-UNI	20	**2330260000**
M12 Dust cap (Bus-in and power-in)	SAI-SK plug M12	50	**1781520000**

Gateway modules with digital inputs

	SAI-AU GW	SAI-AU GW
		

Ordering data

Module variants			
	16 Digital In		
Note			

Type	Qty.	Order No.
SAI-AU M12 EIP GW 16DI	1	**1019490000**

Type	Qty.	Order No.
SAI-AU M12 DN GW 16DI	1	**1938570000**

Technical data

Connections		
Fieldbus (BUS-IN)	1x M12 female 4-pole, D-coded	1x M12 plug 5-pole, A-coded
Fieldbus (BUS-OUT)		1x M12 female 5-pole, A-coded
Supply voltage (AUX-IN)	1x M12 plug 5-pole, A-coded	1x M12 plug 5-pole, A-coded
Connection to Subbus (SUB-OUT)	1 x M8 female 4-pole, A-coded	1 x M8 female 4-pole, A-coded
I/O connections	8 x M12 female 5-pole, A-coded	8 x M12 female 5-pole, A-coded
Voltage supply		
Operating voltage	24 V (18 V DC ... 30 V DC)	24 V (18 V DC ... 30 V DC)
Contact load	Per PIN max. 4 A	Per PIN max. 4 A
Max. total current module	8 A	8 A
Digital inputs		
Permitted input voltage	-30 V to +30 V (protected against polarity reversal)	-30 V to +30 V (protected against polarity reversal)
Input voltage, low	<5 V in accordance with EN 61131-2 Typ 1	<5 V in accordance with EN 61131-2 Typ 1
Input voltage, high	>15 V in accordance with EN 61131-2 Typ 1	>15 V in accordance with EN 61131-2 Typ 1
Input current, low	< 15 mA in accordance with EN 61131-2 Type 1	< 15 mA in accordance with EN 61131-2 Type 1
Input current, high	2 mA to 15 mA in accordance with EN 61131-2 Type 1	2 mA to 15 mA in accordance with EN 61131-2 Type 1
Input filter	1 ms, 3 ms, 5 ms, 10 ms, Configurable	1 ms, 3 ms, 5 ms, 10 ms, Configurable
Fieldbus		
Bus system	EtherNet/IP	DeviceNet
Transmission rate	10/100 Mbit/s	Max. 500 kBit/s (automatic detection)
Addressing	DHCP, BOOTP, Static	Via rotary coding switch (0 – 63)
System integration	EDS file, Web server	EDS file
General data		
L x W x H	210 mm / 54 mm / 32 mm	210 mm / 54 mm / 32 mm
Earth	< 350 g	< 350 g
Protection class	IP 67	IP 67
operating temperature	0 °C...+60 °C	0 °C...+60 °C
Storage temperature	-25 °C...+85 °C	-25 °C...+85 °C
Housing main material / Flammability class UL 94	Pocan, PBT / V-0	Pocan, PBT / V-0
Certificate	CE, cULus (planned for 4Q/2010)	CE, cULus (planned for 4Q/2010)

Note		

Engineering tables for DeviceNet™ and EtherNet/IP™

When planning the automation of a facility, you must have a wide variety of components available. These engineering tables list all the components required for wiring up the SAI Active modules.

DeviceNet™ and EtherNet/IP™ modules

DeviceNet™ und EtherNet/IP™ accessories

Subbus cables / Terminating resistor

Sensor/actuator accessories

Markers

Protective caps

Ordering data

Description	Type	Qty.	Order No.
DeviceNet™ and EthernetIP™ modules			
DeviceNet™ Gateway	SAI-AU M12 DN GW 16DI	1	**1938570000**
EtherNet/IP™ Gateway	SAI-AU M12 EIP GW 16DI	1	**1019490000**
Subbus module	SAI-AU M12 SB 8DI	1	**1938610000**
Subbus module	SAI-AU M12 SB 8DI/8DO	1	**1938640000**
Subbus module	SAI-AU M8 SB 8DI	1	**1938600000**
Subbus module	SAI-AU M8 SB 8DI/8DO	1	**1938630000**
Subbus module	SAI-AU M12 SB AI	1	**1938690000**
Subbus module	SAI-AU M12 SB AO	1	**1938700000**
Subbus module	SAI-AU M12 SB PT100	1	**1938710000**
Subbus module	SAI-AU M12 SB Thermo	1	**1938720000**
Subbus module	SAI-AU M12 SB Zähler	1	**1938730000**
Subbus module	SAI-AU M8 SB 8DO 2A	1	**1938660000**
Subbus module	SAI-AU M12 SB 8DO 2A	1	**1938680000**
DeviceNET™ and EthernetIP™ accessories			
DeviceNet™ cables with female plug and male plug			Chapter C
DeviceNet™ cables with female plug and other side open			Chapter C
DeviceNet™ cables with male plug and other side open			Chapter C
DeviceNet™ plug-in connector			Chapter C
DeviceNet™ terminating resistor	SAIEND CAN-M12 5P A-COD	1	**1784760000**
EtherNet/IP™ cables and plugs (refer to Catalogue 9/Chapter C)			
Subbus cables / Terminating resistor			
Subbus cables			Chapter C
Subbus terminating resistor	SAIEND CAN M8 4P	1	**1955340000**
Sensor/actuator accessories			
Sensor-actuator cables			Chapter B
Sensor-actuator plugs			Chapter D
Markers			
Semi-transparent markers for PrintJet printing	ESG 8/13.5/43.3 SAI AU	5	**1912130000**
Protective caps			
M8 Dust cap (Sensor connections)	SAI-SK M8	50	**1802760000**
M12 Dust cap (Sensor connections)	SAI-SK	30	**9456050000**
M12 Dust cap (Bus-in and power-in)	SAI-SK-M12-UNI	20	**2330260000**
M12 Dust cap (Bus-in and power-in)	SAI-SK plug M12	50	**1781520000**

Gateway modules with digital inputs/outputs

SAI-AU GW

SAI-AU GW

Ordering data

Module variants			
	16 Digital In; 8 Digital In / 8 Digital Out		
Note			

Type	Qty.	Order No.
SAI-AU M12 IE GW 16DI	1	**1938580000**

Type	Qty.	Order No.
SAI-AU M12 USB GW 8I8O	1	**1962240000**

Technical data

Connections		
Fieldbus (BUS-IN)	1x M12 female 4-pole, D-coded	1x M12 plug 5-pole, B-coded (BUS-USB)
Fieldbus (BUS-OUT)		1x M12 female 5-pole, B-coded (BUS-RS232)
Supply voltage (AUX-IN)	1x M12 plug 5-pole, A-coded	1x M12 plug 5-pole, A-coded
Connection to Subbus (SUB-OUT)	1 x M8 female 4-pole, A-coded	1 x M8 female 4-pole, A-coded
I/O connections	8 x M12 female 5-pole, A-coded	8 x M12 female 5-pole, A-coded
Voltage supply		
Operating voltage	24 V (18 V DC ... 30 V DC)	24 V (18 V DC ... 30 V DC)
Contact load	Per PIN max. 4 A	Per PIN max. 4 A
Max. total current module	8 A	8 A
Digital inputs		
Permitted input voltage	-30 V to +30 V (protected against polarity reversal)	-30 V to +30 V (protected against polarity reversal)
Input voltage, low	<5 V in accordance with EN 61131-2 Typ 1	<5 V in accordance with EN 61131-2 Typ 1
Input voltage, high	>15 V in accordance with EN 61131-2 Typ 1	>15 V in accordance with EN 61131-2 Typ 1
Input current, low	< 15 mA in accordance with EN 61131-2 Type 1	< 15 mA in accordance with EN 61131-2 Type 1
Input current, high	2 mA to 15 mA in accordance with EN 61131-2 Type 1	2 mA to 15 mA in accordance with EN 61131-2 Type 1
Input filter	1 ms, 3 ms, 5 ms, 10 ms, Configurable	1 ms, 3 ms, 5 ms, 10 ms, Configurable
Digital outputs		
max. current-carrying capacity per output signal		0.5 A
Switching frequency load (resistive / inductive / inrush)		max. 100 Hz / max. 1 Hz / max. 8 Hz
Short-circuit-proof		Yes, cut-off for short circuit and error message
Output voltage, low		0 V DC
Output voltage, high		Supply voltage less 0.7 V DC
Max. total current outputs		4 A
Fieldbus		
Bus system	Modbus TCP	Modbus ASCII (RS 232 / USB)
Transmission rate	10/100 Mbit/s	115.2 kBit/s
Addressing	DHCP, BOOTP, Static	Static
System integration	Register, Webserver	Register
General data		
L x W x H	210 mm / 54 mm / 32 mm	210 mm / 54 mm / 32 mm
Earth	< 350 g	< 350 g
Protection class	IP 67	IP 67
operating temperature	0 °C...+60 °C	0 °C...+60 °C
Storage temperature	-25 °C...+85 °C	-20 °C...
Housing main material / Flammability class UL 94	Pocan, PBT / V-0	Pocan, PBT / V-0
Certificate	CE, cULus (planned for 4Q/2010)	CE, cULus (planned for 4Q/2010)

Note		

Engineering tables for Modbus TCP and USB

When planning the automation of a facility, you must have a wide variety of components available. These engineering tables list all the components required for wiring up the SAI Active modules.

Modbus TCP and USB modules

Modbus TCP and USB accessories

Subbus cables / Terminating resistor

Sensor/actuator accessories

Markers

Protective caps

Ordering data

Description	Type	Qty.	Order No.
Modbus TCP and USB modules			
USB Gateway	SAI-AU M12 USB GW 8I8O	1	**1962240000**
Modbus TCP Gateway	SAI-AU M12 IE GW 16DI	1	**1938580000**
Subbus module	SAI-AU M12 SB 8DI	1	**1938610000**
Subbus module	SAI-AU M12 SB 8DI/8DO	1	**1938640000**
Subbus module	SAI-AU M8 SB 8DI	1	**1938600000**
Subbus module	SAI-AU M8 SB 8DI/8DO	1	**1938630000**
Subbus module	SAI-AU M12 SB AI	1	**1938690000**
Subbus module	SAI-AU M12 SB AO	1	**1938700000**
Subbus module	SAI-AU M12 SB PT100	1	**1938710000**
Subbus module	SAI-AU M12 SB Thermo	1	**1938720000**
Subbus module	SAI-AU M12 SB Zähler	1	**1938730000**
Subbus module	SAI-AU M8 SB 8DO 2A	1	**1938660000**
Subbus module	SAI-AU M12 SB 8DO 2A	1	**1938680000**
Modbus TCP and USB accessories			
USB module plug-in connector			Chapter C
Modbus TCP cables and plugs (refer to Catalogue 9/Chapter C)			
Subbus cables / Terminating resistor			
Subbus cables			Chapter C
Subbus terminating resistor	SAIEND CAN M8 4P	1	**1955340000**
Sensor/actuator accessories			
Sensor-actuator cables			Chapter B
Sensor-actuator plugs			Chapter D
Markers			
Semi-transparent markers for PrintJet printing	ESG 8/13.5/43.3 SAI AU	5	**1912130000**
Protective caps			
M8 Dust cap (Sensor connections)	SAI-SK M8	50	**1802760000**
M12 Dust cap (Sensor connections)	SAI-SK	30	**9456050000**
M12 Dust cap (Bus-in and power-in)	SAI-SK-M12-UNI	20	**2330260000**
M12 Dust cap (Bus-in and power-in)	SAI-SK plug M12	50	**1781520000**

Subbus modules with digital inputs/ outputs

SAI-AU Digital

SAI-AU Digital

Ordering data

Module variants	Type	Qty.	Order No.
8 Digital In; 8 Digital In / 8 Digital Out	SAI-AU M8 SB 8DI	1	**1938600000**
8 Digital In; 8 Digital In / 8 Digital Out	SAI-AU M12 SB 8DI	1	**1938610000**
8 Digital Out 2A			
8 Digital Out 2A			
Note			

Type	Qty.	Order No.
SAI-AU M8 SB 8DIO	1	**1938630000**
SAI-AU M12 SB 8DIO	1	**1938640000**
SAI-AU M8 SB 8DO 2A	1	**1938660000**
SAI-AU M12 SB 8DO 2A	1	**1938680000**

Technical data

Connections		
Supply voltage (AUX-IN)		1x M12 plug 5-pole, A-coded
Connection to Subbus (SUB-IN)	1 x M8 plug 4-pole, A-coded	1 x M8 plug 4-pole, A-coded
Connection to Subbus (SUB-OUT)	1 x M8 female 4-pole, A-coded	1 x M8 female 4-pole, A-coded
I/O connections	4 x M12 female, 5-pole A-coded	4 x M12 female, 5-pole A-coded
Voltage supply		
Operating voltage	24 V (18 V DC ... 30 V DC)	24 V (18 V DC ... 30 V DC)
Contact load		Per PIN max. 4 A
Max. total current module		8 A
Digital inputs		
Permitted input voltage	-30 V to +30 V (protected against polarity reversal)	-30 V to +30 V (protected against polarity reversal)
Input voltage, low	<5 V in accordance with EN 61131-2 Typ 1	<5 V in accordance with EN 61131-2 Typ 1
Input voltage, high	>15 V in accordance with EN 61131-2 Typ 1	>15 V in accordance with EN 61131-2 Typ 1
Input current, low	< 15 mA in accordance with EN 61131-2 Type 1	< 15 mA in accordance with EN 61131-2 Type 1
Input current, high	2 mA to 15 mA in accordance with EN 61131-2 Type 1	2 mA to 15 mA in accordance with EN 61131-2 Type 1
Input filter	1 ms, 3 ms, 5 ms, 10 ms, Configurable	1 ms, 3 ms, 5 ms, 10 ms, Configurable
Separation of potentials to module electronics	none	none
Digital outputs		
max. current-carrying capacity per output signal		2 A
Separation of potentials to module electronics		none
Switching frequency, resistive load		max. 100 Hz
Switching frequency, inductive load		max. 1 Hz
Switching frequency, lamp load		max. 8 Hz
Short-circuit-proof		Yes, cut-off for short circuit and error message
Output voltage, low		0 V DC
Output voltage, high		Supply voltage less 0.7 V DC
Max. total current outputs		4 A
Fieldbus		
Bus system	Subbus	Subbus
Addressing	automatic	automatic
System integration	automatic	automatic
General data		
L x W x H	155 mm / 30 mm / 32 mm	180 mm / 30 mm / 32 mm
Earth	< 200 g	< 200 g
Protection class	IP 67	IP 67
operating temperature	0 °C...+60 °C	0 °C...+60 °C
Storage temperature	-25 °C...+85 °C	-25 °C...+85 °C
Housing main material / Flammability class UL 94	Pocan, PBT / 5VA	Pocan, PBT / 5VA
Certificate	CE, cULus	CE, cULus

Note		

Subbus modules with analogue input/ outputs

SAI-AU Analog

SAI-AU Analog

Ordering data

Module variants			
	4 Analogue Out / 4 Analogue In		
Note			

Type	Qty.	Order No.
SAI-AU M12 SB 4AO	1	**1938700000**

Type	Qty.	Order No.
SAI-AU M12 SB 4AI	1	**1938690000**

Technical data

Connections		
Connection to Subbus (SUB-IN)	1 x M8 plug 4-pole, A-coded	1 x M8 plug 4-pole, A-coded
Connection to Subbus (SUB-OUT)	1 x M8 female 4-pole, A-coded	1 x M8 female 4-pole, A-coded
I/O connections	4 x M12 female, 5-pole A-coded	4 x M12 female, 5-pole A-coded
Voltage supply		
Operating voltage	24 V (18 V DC ... 30 V DC)	24 V (18 V DC ... 30 V DC)
Analogue inputs		
Measurement range		-10 V ... +10 V, 0 V ... 10V, 0 … 20 mA, 4…20 mA
Maximum input voltage in relation to GND		35
Input resistance (load)		<125 Ohm
Max. input current (differential)		-50 mA to +50 mA (protected against polarity reversal)
Short-circuit-proof		Yes
Resolution / Accuracy		12-bit / < 0.2 %
Analogue outputs		
Measurement range	-10 V ... +10 V, 0 V ... 10V, 0 … 20 mA, 4…20 mA	
Output interval	5 ms to 250 ms (can be configured)	
Short-circuit-proof	Yes	
Resolution / Accuracy	12-bit / < 0.2 %	
Fieldbus		
Bus system	Subbus	Subbus
Addressing	automatic	automatic
System integration	automatic	automatic
General data		
L x W x H	155 mm / 30 mm / 32 mm	155 mm / 30 mm / 32 mm
Earth	< 200 g	< 200 g
Protection class	IP 67	IP 67
operating temperature	0 °C...+60 °C	0 °C...+60 °C
Storage temperature	-25 °C...+85 °C	-25 °C...+85 °C
Housing main material / Flammability class UL 94	Pocan, PBT / 5VA	Pocan, PBT / 5VA
Certificate	CE, cULus	CE, cULus

Note		

Subbus modules with functional inputs

SAI-AU Counter

Ordering data

Module variants	
	2 counter inputs / 2 gate outputs
Note	

Type	Qty.	Order No.
SAI-AU M12 SB 2Counter	1	**1938730000**

Technical data

Connections	
Supply voltage (AUX-IN)	1x M12 plug 5-pole, A-coded
Connection to Subbus (SUB-IN)	1 x M8 plug 4-pole, A-coded
Connection to Subbus (SUB-OUT)	1 x M8 female 4-pole, A-coded
I/O connections	4 x M12 female, 5-pole A-coded
Voltage supply	
Operating voltage	24 V (18 V DC ... 30 V DC)
Contact load	Per PIN max. 4 A
Max. total current module	8 A
Functional inputs	
Counting breadth	32 Bit
Switching frequency	100
No. Inputs	2 x enables, 2 x counters, 2 x count directions
Fieldbus	
Bus system	Subbus
Addressing	automatic
System integration	automatic
General data	
L x W x H	180 mm / 30 mm / 32 mm
Earth	< 200 g
Protection class	IP 67
operating temperature	0 °C...+60 °C
Storage temperature	-25 °C...+85 °C
Housing main material / Flammability class UL 94	Pocan, PBT / 5VA
Certificate	CE, cULus

Note	

Subbus modules with functional inputs

SAI-AU Thermo

Ordering data

Module variants	
	4 Thermo inputs
Note	

Type	Qty.	Order No.
SAI-AU M12 SB 4Thermo	1	**1938720000**

Technical data

Connections	
Connection to Subbus (SUB-IN)	1 x M8 plug 4-pole, A-coded
Connection to Subbus (SUB-OUT)	1 x M8 female 4-pole, A-coded
I/O connections	4 x M12 female, 5-pole A-coded
Voltage supply	
Operating voltage	24 V (18 V DC ... 30 V DC)
Functional inputs	
Sensor	Type J, K, L, B, E, N, R, S, T, U, mV measurement
Temperature range	Typical for sensor, Preset Type K, -100 °C to 1370 °C
Resolution	0.1 °C per digit
Conversion time	250 ms (can be configured to 70 ms)
Measurement error	< ± 0.5% (of measuring range limit)
Input filter	Configurable
cold junction compensation	External PT1000 connection on pins 1 and 3 (GND)
Fieldbus	
Bus system	Subbus
Addressing	automatic
System integration	automatic
General data	
L x W x H	155 mm / 30 mm32 mm
Earth	< 200 g
Protection class	IP 67
operating temperature	0 °C...+60 °C
Storage temperature	-25 °C...+85 °C
Housing main material / Flammability class UL 94	Pocan, PBT / 5VA
Certificate	CE, cULus

Note	

Subbus modules with functional inputs

SAI-AU PT100

Ordering data

Module variants	
	4 PT100 inputs
Note	

Type	Qty.	Order No.
SAI-AU M12 SB 4PT100	1	**1938710000**

Technical data

Connections	
Connection to Subbus (SUB-IN)	1 x M8 plug 4-pole, A-coded
Connection to Subbus (SUB-OUT)	1 x M8 female 4-pole, A-coded
I/O connections	4 x M12 female, 5-pole A-coded
Voltage supply	
Operating voltage	24 V (18 V DC ... 30 V DC)
Functional inputs	
Sensor	N100, N1000, N120, PT100, PT1000, PT200, PT300, PT500, *UNDEFINED TEXT*, Widerstandsmessung
Resolution	0.1 °C per digit
Conversion time	250 ms (can be configured to 65 ms)
Measurement error	< ± 1 °C
Input filter	Configurable
Measurement range for PT sensors	-200 °C … + 850 °C
Measurement range for Ni sensors	-60 °C … +250 °C
Resistance measurement	max. 4000 Ohm
Potentiometer	100 bis 4000 Ω (Three-conductor)
Measurement current	Typically 0.5 mA
Fieldbus	
Bus system	Subbus
Addressing	automatic
System integration	automatic
General data	
L x W x H	155 mm / 30 mm / 32 mm
Earth	< 200 g
Protection class	IP 67
operating temperature	0 °C...+60 °C
Storage temperature	-25 °C...+85 °C
Housing main material / Flammability class UL 94	Pocan, PBT / 5VA
Certificate	CE, cULus

Note	

SAI Active Universal Wireless

Wireless versions of the Remote I/O System with IP67 protection

Weidmüller offers a remote wireless solution – the SAI Active Universal Wireless series – for providing radio based communication to movable facility units. The remote modules form a safe, wireless I/O communications network and thus completely replace drag lines containing bus cables or interference-prone slip-ring assemblies. Maintenance and servicing is reduced because no communication cables are needed. Potential sources of error, such as broken shielding in the communication cables, are eliminated all together. Thus the user benefits from a long-term cost savings. He requires neither new cables nor installation material for the new communication system. For the engineering system, the change to a wireless system is transparent; it behaves in an identical manner as the cable bound SAI Active Universal Pro System. No complex programming using proprietary software is required. Safe and reliable operations are ensured by the comprehensive diagnostics options on the module and through the higher-level controller.

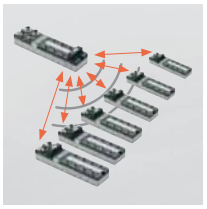
All wireless modules feature integrated radio-wave antennae and IP67 protection. They may be used directly in surroundings containing hazardous substances or humidity. The wireless modules bring together the required inputs and outputs in a very compact size. This ensures that the robot arms are not weighted down with bulky modules, additional components or external antennae. The wireless fieldbus module is a master module responsible for establishing communication with the higher-level controller unit and with the wireless I/O (slave) modules. Various slave modules with digital and analogue inputs and outputs are available and enable exact adjustments to the requirements of a given application. The wireless connection between the modules is established automatically and remains invisible to other wireless devices. This ensures that there will be no interference on the connection. The output power and, thus, the range, can be set individually on the module.

Can be used instead of bus cables in drag line or slip chains

In non stationary applications, a wireless connection can be used instead of the error prone drag-line based bus cable or slip chain transmission. This helps to minimise facility downtimes and reduce costs for maintenance, installation and materials. The SAI wireless system has a similar handling method compared to cable bound systems so installation is simple and safe.

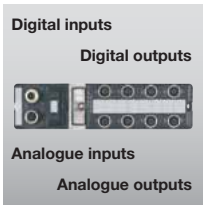
Coexistence with other wireless systems

The wireless modules transmit in the license free ISM frequency band. This allows them to be used throughout the world. Integrated wireless mechanisms ensure that the modules can be operated at the same time as other wireless systems from other vendors. This ensures communication with no interference and also allows the system to coexist alongside other wireless systems (such as WLAN, ZigBee or Bluetooth).



A maximum of 186 modules can be used simultaneously.

The SAI Active Universal Wireless System allows 31 wireless fieldbus modules to be operated simultaneously with six remote I/O modules each. This makes it possible to design an automation solution that can process up to 3348 digital signals. Standardised device description files are provided so that the modules can be integrated into other systems not manufactured by Weidmüller. No special proprietary software is required.



A wide variety of variants

The SAI Active Universal Wireless product line includes the wireless fieldbus module with its 12 integrated digital input channels. This product line also features additional wireless I/O modules with up to 16 digital inputs than can be optionally configured by the user as outputs.
A mixed module with both digital and analogue inputs and outputs is also available. The outputs can be supplied with power separate from the input channels.

Wireless gateway with digital inputs

Wireless-Gateway

Ordering data

Module variants	
	12 Digital In
Note	

Type	Qty.	Order No.
SAI-AU M12 GW PB/BT 12I	1	**1006980000**

Technical data

Connections	
Fieldbus (BUS-IN)	1x M12 plug 5-pole, B-coded
Fieldbus (BUS-OUT)	1x M12 female 5-pole, B-coded
Supply voltage (AUX-IN)	1x M12 plug 5-pole, A-coded
Supply voltage (AUX-OUT)	1x M12 female 5-pole, A-coded
I/O connections	6x M12 female 5-pole
Voltage supply	
Operating voltage	24 V DC (18 V DC ... 30 V DC)
Contact load	Per PIN max. 4 A
Digital inputs	
Permitted input voltage	-30 V to +30 V (protected against polarity reversal)
Input voltage, low	<5 V in accordance with EN 61131-2 Typ 1
Input voltage, high	>15 V in accordance with EN 61131-2 Typ 1
Input current, low	< 15 mA in accordance with EN 61131-2 Type 1
Input current, high	2 mA to 15 mA in accordance with EN 61131-2 Type 1
Input filter	1 ms, 3 ms, 5 ms, 10 ms, Configurable
Fieldbus	
Bus system	Profibus-DP
System integration	GSD file / WIAU0A75.GSD
Range of coverage	In accordance with the PROFIBUS specification
Addressing	Via rotary coding switch (1 – 126)
Communication coexistence	Max. 31 wireless gateways
Properties of radio system	
Frequency band / Channel usage	2.401 GHz – 2.480 GHz / 1 to 79 channels (can be configured)
Transmit power	0 dBm to 20 dBm / max 100 mW (can be configured)
General data	
L x W x H	210 mm / 54 mm / 52 mm
Earth	< 400 g
Protection class	IP 67
operating temperature	0 °C...+60 °C
Storage temperature	-25 °C...+85 °C
Housing main material / Flammability class UL 94	PBT, Pocan / V-0
Certificate	CE, cULus (planned for 4Q/2010)

Note	

Engineering tables for PROFIBUS

When planning the automation of a facility, you must have a wide variety of components available. These engineering tables list all the components required for wiring up the SAI Active modules.

PROFIBUS modules

PROFIBUS accessories

Sensor/actuator accessories

Markers

Protective caps

Ordering data

Description	Type	Qty.	Order No.
PROFIBUS modules			
Gateway module with 12 Digital In	SAI-AU M12 GW PB/BT 12I	1	**1006980000**
Subbus module with 16 Digital In	SAI-AU M12 BT 16DI	1	**1006940000**
Subbus module with 16 Digital In / 8 Digital Out	SAI-AU M12 BT 16DI/8DO	1	**1006930000**
Subbus module with 4 Analogue In / 2 Analogue Out / 2 Digital In / 2 Digital Out	SAI-AU M12 BT4AI2AO2DIO	1	**1006920000**
PROFIBUS accessories			
PROFIBUS cables with female plug and male plug			Chapter C
PROFIBUS cables with female plug and other side open			Chapter C
PROFIBUS cables with male plug and other side open			Chapter C
PROFIBUS plug-in connector			Chapter C
PROFIBUS terminating resistor	SAIEND PB M12 5P B-COD	1	**1784770000**
Sensor/actuator accessories			
Sensor-actuator cables			Chapter B
Sensor-actuator plugs			Chapter D
Markers			
Semi-transparent markers for PrintJet printing	ESG 8/13.5/43.3 SAI AU	5	**1912130000**
Protective caps			
M12 Dust cap (Sensor connections)	SAI-SK	30	**9456050000**
M12 Dust cap (Bus-in and power-in)	SAI-SK-M12-UNI	20	**2330260000**
M12 Dust cap (Bus-in and power-in)	SAI-SK plug M12	50	**1781520000**

SAI-Active Universal Wireless

Wireless slave modules for digital signal processing

PROFI PROCESS FIELD BUS

Wireless-Slave

Wireless-Slave

Ordering data

Module variants	Type	Qty.	Order No.
16 Digital In; 16 Digital In / 8 Digital Out	SAI-AU M12 BT 16DI	1	**1006940000**
16 Digital In / 8 Digital Out	SAI-AU M12 BT 16DI/8DO		**1006930000**
Note			

Technical data

Connections		
Supply voltage (AUX-IN)	1x M12 plug 5-pole, A-coded	2x M12 plug 5-pole, A-coded
Supply voltage (AUX-OUT)	1x M12 female 5-pole, A-coded	
I/O connections	8 x M12 female 5-pole, A-coded	8 x M12 female 5-pole, A-coded
Voltage supply		
Operating voltage	24 V DC (18 V DC ... 30 V DC)	24 V DC (18 V DC ... 30 V DC)
Contact load	Per PIN max. 4 A	Per PIN max. 4 A
Digital inputs		
Permitted input voltage	-30 V to +30 V (protected against polarity reversal)	-30 V to +30 V (protected against polarity reversal)
Input voltage, low	<5 V in accordance with EN 61131-2 Typ 1	<5 V in accordance with EN 61131-2 Typ 1
Input voltage, high	>15 V in accordance with EN 61131-2 Typ 1	>15 V in accordance with EN 61131-2 Typ 1
Input current, low	< 15 mA in accordance with EN 61131-2 Type 1	< 15 mA in accordance with EN 61131-2 Type 1
Input current, high	2 mA to 15 mA in accordance with EN 61131-2 Type 1	2 mA to 15 mA in accordance with EN 61131-2 Type 1
Input filter	1 ms, 3 ms, 5 ms, 10 ms, Configurable	1 ms, 3 ms, 5 ms, 10 ms, Configurable
Fieldbus		
Bus system	Radio in ISM band	Radio in ISM band
System integration	automatic	automatic
Range of coverage	Max. 100 m (open air), Max. 50 m (industrial surroundings)	Max. 100 m (open air), Max. 50 m (industrial surroundings)
Addressing	Via rotary coding switch	Via rotary coding switch
Communication coexistence	Max. 186 (for 31 wireless gateways each with 6 wireless slaves)	Max. 186 (for 31 wireless gateways each with 6 wireless slaves)
Properties of radio system		
Frequency band / Channel usage	2.401 GHz – 2.480 GHz / 1 to 79 channels (can be configured)	2.401 GHz – 2.480 GHz / 1 to 79 channels (can be configured)
Transmit power	0 dBm to 20 dBm / max 100 mW (can be configured)	0 dBm to 20 dBm / max 100 mW (can be configured)
General data		
L x W x H	210 mm / 54 mm / 52 mm	210 mm / 54 mm / 52 mm
Earth	< 400 g	< 400 g
Protection class	IP 67	IP 67
operating temperature	0 °C...+60 °C	0 °C...+60 °C
Storage temperature	-25 °C...+85 °C	-25 °C...+85 °C
Housing main material / Flammability class UL 94	PBT, Pocan / V-0	PBT, Pocan / V-0
Certificate	CE, cULus (planned for 4Q/2010)	CE, Gost R ME25, cULus (planned for 4Q/2010)

Note		

Wireless slave module for digital and analogue signal processing

Wireless-Slave

Ordering data

Module variants	Type	Qty.	Order No.
4 Analogue In / 2 Analogue Out / 2 Digital In / 2 Digital Out	SAI-AU M12 BT4AI2AO2DIO		1006920000
Note			

Technical data

Connections	
Supply voltage (AUX-IN)	1x M12 plug 5-pole, A-coded
Supply voltage (AUX-OUT)	1x M12 female 5-pole, A-coded
I/O connections	8 x M12 female 5-pole, A-coded
Voltage supply	
Operating voltage	24 V DC (18 V DC ... 30 V DC)
Contact load	Per PIN max. 4 A
Max. total current module	8 A
Digital inputs	
Permitted input voltage	-30 V to +30 V (protected against polarity reversal)
Input voltage, low	<5 V in accordance with EN 61131-2 Typ 1
Input voltage, high	>15 V in accordance with EN 61131-2 Typ 1
Input current, low	< 15 mA in accordance with EN 61131-2 Type 1
Input current, high	2 mA to 15 mA in accordance with EN 61131-2 Type 1
Input filter	1 ms, 3 ms, 5 ms, 10 ms, Configurable
Digital outputs	
max. current-carrying capacity per output signal	0.5 A
Switching frequency load (resistive / inductive / inrush)	max. 100 Hz / max. 1 Hz / max. 8 Hz
Short-circuit-proof	Yes, cut-off for short circuit and error message
Output voltage, low / Output voltage, high	0 V DC / Supply voltage less 0.7 V DC
Max. total current outputs	1 A
Analogue inputs	
Measurement range	-10 V ... +10 V, 0 V ... 10V, 0 … 20 mA, 4…20 mA
Maximum input voltage in relation to GND	35 V
Input resistance (load)	<125 Ohm
Max. input current (differential)	-50 mA to +50 mA (protected against polarity reversal)
Short-circuit-proof	Yes
Resolution / Accuracy	12-bit / < 0.2 %
Analogue outputs	
Measurement range	-10 V ... +10 V, 0 V ... 10V, 0 … 20 mA, 4…20 mA
Output interval	20 ms to 250 ms (can be configured)
Short-circuit-proof	Yes
Resolution / Accuracy	12-bit / < 0.2 %
Fieldbus	
Bus system	Radio in ISM band
System integration	automatic
Range of coverage	Max. 100 m (open air), Max. 50 m (industrial surroundings)
Addressing	Via rotary coding switch
Communication coexistence	Max. 186 (for 31 wireless gateways each with 6 wireless slaves)
Properties of radio system	
Frequency band / Channel usage	2.401 GHz – 2.480 GHz / 1 to 79 channels (can be configured)
Transmit power	0 dBm to 20 dBm / max 100 mW (can be configured)
General data	
L x W x H	210 mm / 54 mm / 52 mm
Earth	< 400 g
Protection class	IP 67
operating temperature	0 °C...+60 °C
Storage temperature	-25 °C...+85 °C
Housing main material / Flammability class UL 94	Pocan, PBT / V-0
Certificate	CE, Gost R ME25, cULus (planned for 4Q/2010)

Note	

JACKPAC® (IP67)

JACKPAC® (IP67)

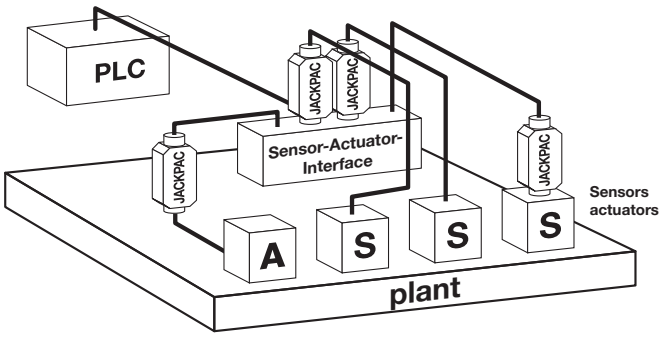
The Concept

The IP20 Solution

Until now, all signal conditioning tasks were carried out by modules designed to IP20. For their own protection, these need to be installed in central switchgear cabinets.
However, decentralised solutions that do not require large switchgear cabinets are increasingly being sought for use in modern industrial automation technology.
It is true that shielded signals can be fed to the machinery via powerful fieldbus systems; but in each case, however, there remains an interconnecting cable between the subdistribution boards and the sensors/actuators that is susceptible to interference from surrounding operations.
As has always been the case, signals are still influenced by overvoltages and earth loops; interference pulses are superimposed on sensor signals and malfunctions can be initiated.
The result is that signal conditioning modules sealed to IP20 require terminal boxes, such as switchgear cabinets, or even cost intensive special solutions (for example, sensor-actuator distributors with integrated signal conditioning functions providing as many functionalities as possible, even when these are surplus to requirements).

The JACKPAC® Solution

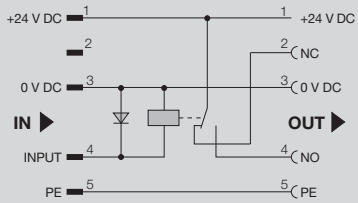
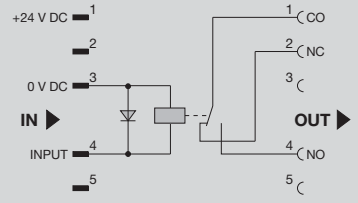
By introducing **JACKPAC®**, the new M12 Signal Box with the high IP67 ingress protection. Weidmüller can now provide a modular and versatile concept that makes it possible to condition signals in an industrial environment. Requiring no additional enclosure, these modules can be installed directly on the machine, in the production plant, conveyor system or within a process.
The M12 connector, which is standardised all over the world, makes it possible to integrate the **JACKPAC®** at any point in the sensor-actuator cabling. The fixed pin assignment means it is easy to install and is protected against polarity reversal.
This versatility really comes into its own when an installation needs to be altered or modernised, simply because no additional enclosures or cabling are required.
By providing this high degree of protection and versatility, **JACKPAC®** renders possible innovative automation concepts based on decentralised applications (without large control cabinets or small distribution boards) for consistent, transparent, efficient and cost-efficient installations.



- Easy ‘Plug and Play’ installation
- Universal and versatile usage
- No additional enclosure required
- Saves time and costs
- Ideal for decentralised concepts and plant modernisation (retrofitting)

Switching amplifier

- The switching amplifiers are simply built into the actuator system controls.
- For example, switching outputs can be amplified from 24 V DC / 0.5 A to 24 V DC / 2 A.
- Optionally with galvanic isolation for insulating between the input and output circuits, which prevents conducted interference on the switching output.
- Switched voltage feed at output via T-distributor.

	JPR 24 V DC 1CO M12	JPR 24 V DC ISO 1CO M12
		
		

Technical data

Input		
Rated control voltage	24 V DC ±20 %	24 V DC ±20 %
Rated current DC	8 mA	8 mA
Power rating	200 mW	200 mW
DC Response/dropout Volt	16.8 V / 1.2 V	16.8 V / 1.2 V
DC pickup/dropout current	5 mA / 1 mA	5 mA / 1 mA
Free-wheel diode	Yes	Yes
Output		
max. switching capacity	24 V / 2 A	24 V / 2 A
min. switching capacity	12 V / 10 mA	12 V / 10 mA
Contact material	AgSnO	AgSnO
Mechanical service life	$10*10^6$ switching cycles	$10*10^6$ switching cycles
Max. switching frequency at rated load	0.1 Hz	0.1 Hz
Sparkover time / Drop-out time	ca. 5 ms	ca. 5 ms
Insulation coordination (EN 50 178)		
Rated voltage	300	300
Overvoltage category	III	III
Pollution severity	2	2
Protective separation acc. to VDE 0106 part 101	No	Yes
General data		
operating temperature	-25 °C...+70 °C	-25 °C...+70 °C
Storage temperature	-25 °C...+70 °C	-25 °C...+70 °C
Conductor connection system	M12 plug / socket, A-coded	M12 plug / socket, A-coded
Approvals	cULus; CE	cULus; CE

Dimensions			
Clamping range (nominal / min. / max.)	mm^2		
Length x width x height	mm	83 / 36 / 14.4	83 / 36 / 14.4
Note		Details for TU = 20°C	Details for TU = 20°C

Ordering data

Connection system	Type	Qty.	Order No.
	JPR 24VDC 1CO M12	1	**8771420000**
	JPR 24VDC ISO 1CO M12	1	**8771430000**

Note		

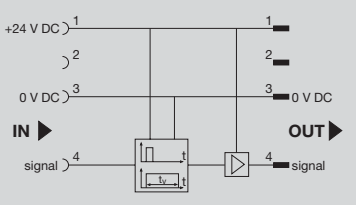
Accessories

	Retaining clip JP CLIP M: 8778490000	Retaining clip JP CLIP M: 8778490000

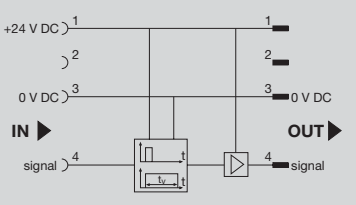
Timer relay

Signal extenders can be simply connected on the cable between the sensor and the input modules. They extend the pulse length from 1 ms. to 50 or 100 ms. Short sensor signals can also this enables short sensor signals to also be reliably recognized and evaluated by the controller.

JPTA 50 MS 24VDC PNP M12



JPTA 100 MS 24VDC PNP M12



Technical data

Input		
Rated control voltage	18...24...30 V DC	18...24...30 V DC
Rated current DC	3,5...7,0...10,0 mA	3,5...7,0...10,0 mA
Switch-off delay	50 ms	100 ms
Output		
Switching voltage DC, max.	30 V	30 V
Max. switching current	400 mA	400 mA
Insulation coordination (EN 50 178)		
Rated voltage	32 V	32 V
Impulse withstand voltage	330 V	330 V
Overvoltage category	I	I
Pollution severity	2	2
General data		
operating temperature	0 °C...+60 °C	0 °C...+60 °C
Storage temperature	-20 °C...+85 °C	-20 °C...+85 °C
Conductor connection system	M12 plug / socket, A-coded	M12 plug / socket, A-coded
Approvals	cULus; CE	cULus; CE

Dimensions			
Clamping range (nominal / min. / max.)	mm²		
Length x width x height	mm	83 / 36 / 14.4	83 / 36 / 14.4
Note			

Ordering data

Connection system	Type	Qty.	Order No.
	JPTA 50MS 24VDC PNP M12	1	**8771440000**
	JPTA100MS 24VDC PNP M12	1	**8836630000**

Note		

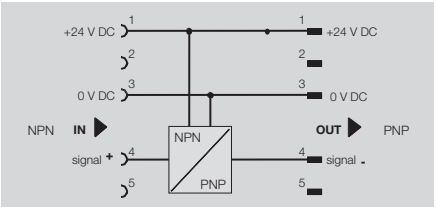
Accessories

	Retaining clip JP CLIP M: 8778490000	Retaining clip JP CLIP M: 8778490000

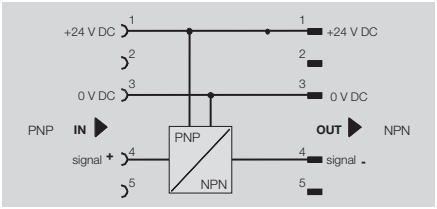
Signal inverter

Signal inverters convert PNP sensor signals to NPN signals and NPN signals back to PNP. Thus, existing circuits require no complex adaptation and the existing inputs on the I/O cards can be put to best use. This is particularly well suited for the Asian and North American markets.

JPP NPN PNP 24 V DC



JPP PNP NPN 24 V DC



Technical data

Input		
Sensor	2-/ 3-Conductor Sensor NPN-type	2-/ 3-Conductor Sensor PNP-Type
Rated control voltage	18...24...30 V DC	18...24...30 V DC
Input current for sensor	< 200 mA	< 200 mA
Type of contact	NO contact	NO contact
Output		
Solid-state type	Solid state relay	Solid state relay
Rated switching voltage	18...30 V DC	18...30 V DC
Rated switching current	400 mA	400 mA
Voltage drop at max. load	≤ 1 V	
Insulation coordination (EN 50 178)		
Rated voltage	32 V	32 V
Impulse withstand voltage	330 V	330 V
Overvoltage category	I	I
Pollution severity	2	2
General data		
operating temperature	0 °C...+60 °C	0 °C...+60 °C
Storage temperature	-20 °C...+85 °C	-20 °C...+85 °C
Conductor connection system	M12 plug / socket, A-coded	M12 plug / socket, A-coded
Approvals	cULus; CE	cULus; CE

Dimensions			
Clamping range (nominal / min. / max.)	mm²		
Length x width x height	mm	83 / 36 / 14.4	83 / 36 / 14.4
Note			

Ordering data

Connection system	Type	Qty.	Order No.
	JPP NPN PNP 24VDC	1	**8852350000**
	JPP PNP NPN 24VDC	1	**8857030000**

Note		

Accessories

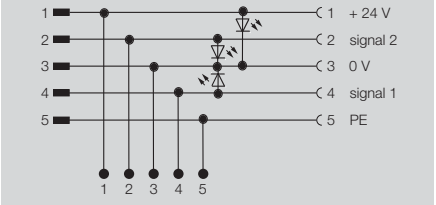
	Retaining clip JP CLIP M: 8778490000	Retaining clip JP CLIP M: 8778490000

JACKPAC® test

Test adapter

The new JACKPAC® test adapter now provides a simple way of intervening in an M12 network. It can be integrated at any point and enables quick and easy connection of a testing device via the 5 PUSH IN connections. Status indicators show the status of the 2 signal channels as well as the 24 VDC auxiliary voltage.

JP TEST



Technical data

Input	
Rated control voltage	18...24...30 V DC
Rated current DC	2.2 mA (LED)
Status indicator	Green LED
Output	
Continuous current	2 A
power	
General data	
operating temperature	0 °C...+55 °C
Storage temperature	-25 °C...+70 °C
Conductor connection system	M12 plug / socket, A-coded

Dimensions		
Clamping range (nominal / min. / max.)	mm²	
Length x width x height	mm	83 / 36 / 14.4
Note		

Ordering data

Connection system	Type	Qty.	Order No.
	JP TEST	1	**8794120000**

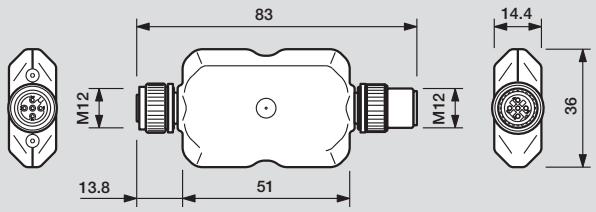
Note	

Accessories

	Retaining clip JP CLIP M: 8778490000

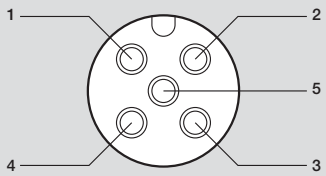
General data

Ingress protection class	IP67
Housing material	PBT, RAL 7032 (grey)
Flammability class	V0 to UL94
Screw socket	M12, CuZn, nickel plated, A-coded
Rated torque	0.8 … 1 Nm



Contact assignment (socket)

Pole	Assignment
1	+24 V DC
2	Input / output 2
3	0 V DC
4	Input / output 1
5	PE / Earth



Accessories

Retaining clip

Version	Type	Qty.	Order No.
Stainless steel	JP CLIP M	1	**8778490000**

Twin plug

	Type	Qty.	Order No.
5-pole	SAI-Y-5S PARA M12/M12	1	**1783430000**

Screwty M12

	Type	Qty.	Order No.
With torque	SCREWTY M12 DM	1	**1900001000**

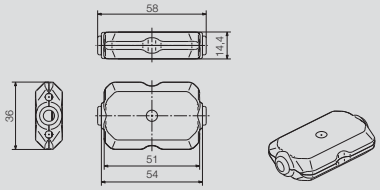
Sensor cables

	Type	Qty.	Order No.
4-pole, length 0.3 m	SAIL-M12G-M12G-4-0.3U	1	**9457150000**
4-pole, length 0.6 m	SAIL-M12G-M12G-4-0.6U	1	**9457160000**
4-pole, length 1.5 m	SAIL-M12G-M12G-4-1.5U	1	**9457170000**
5-pole, length 0.3 m	SAIL-M12G-M12G-5-0.3U	1	**9457340030**
5-pole, length 0.6 m	SAIL-M12G-M12G-5-0.6U	1	**9457340060**
5-pole, length 1.5 m	SAIL-M12G-M12G-5-1.5U	1	**9457340150**

Additional accessories can be found in the Sensor Actuator Interface catalogue.

Empty housing SAI JACKPAC® for custom built-in components

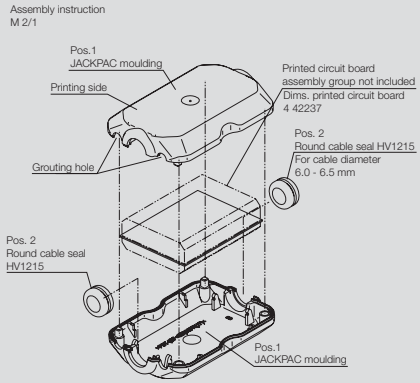
SAI JP



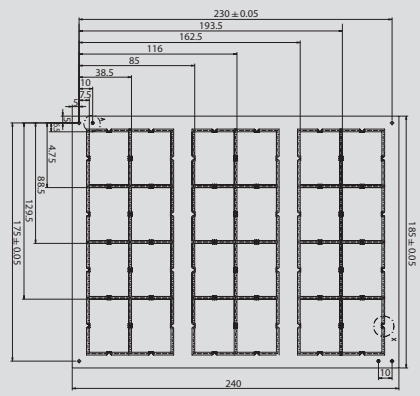
Technical data

General data	
Temperature range	-25 °C … +70 °C
Connection system	M12 plug/socket, A-coded
Contact base material	AgSnO
Surface finish	Au

Dimensioned drawing SAI JP



Dimensioned drawing, PCBs



Dimensions		
Length x width x height	mm	83 x 36 x 14.4

Note

Ordering data

Housing with M12 connectors		Type	No. of poles	Qty.	Order No.
Contents	1 piece	SAI JP 4P LG	4	1	**1915220000**
	1 piece	SAI JP 5P LG	5	1	**1918520000**
	100 pieces	SAI JP 4P LG 100	4	1	**8794090000**
	100 pieces	SAI JP 5P LG 100	5	1	**8794080000**

Note

Housing without M12 connectors SAI JP FC SET **1933680000**

Accessories

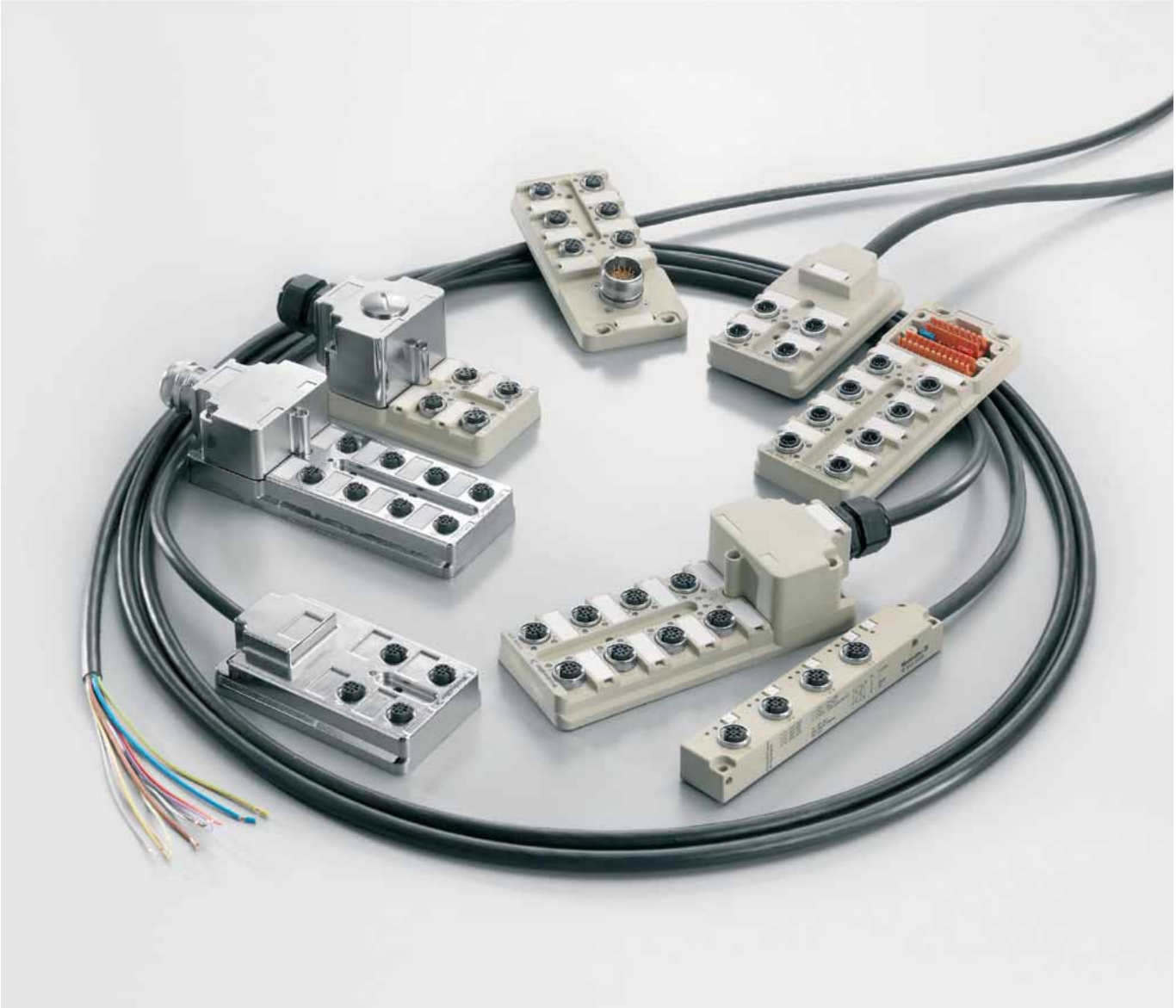
Passive distributors

Passive distributors

SAI Passive

SAI Passive products are built with premium materials using the highest quality production methods. The fully encapsulated distributors are designed to meet harsh industrial requirements. Naturally they have also been designed so that they are easy to handle. The self assembled connectors in the hooded version, for example, are joined into a single part so that the entire block is available for the connection. This is a unique solution for distributors that has no equal anywhere. Nothing can break off, get mixed up or wired up incorrectly.

The distributors are equipped by default with threaded metal rings. This ensures a very reliable screw-on connection. The nut is completely threaded without any interruptions. This eliminates the possibility of it getting stuck or jammed. The IDC versions are especially noteworthy. Sensor cables of the proper lengths can be connected directly here.



Compact

The connection block is a single piece.

Small

Extremely small M12 distributor

Fast

Insulation displacement connection can be used to directly connect the sensor cables

Robust

Threaded metal ring without cut outs for reliable, safe handling

M12 distributor standard

M12 distributor with DIP switch coding

M12 distributor with stainless steel housing

M12 distributor for Zone 1 and Zone 22

SAI distributor with plug in connection hood: SAI-M

- Integrated plug in connector in connection hood
- M12 robust metal thread for sensor/actuator connection, now also available with plastic thread as an alternative
- Quick replacement of bus cables
- Bus cable can be supplied pre assembled
- Two connection systems for bus cable: screw or tension clamp
- Very flat connection hood: no higher than smallest 90° M12 round plug
- Distributor and connection hood can be supplied separately
- Connection hood compatible with 4 and 8 channel SAI distributors (upgrades only entail changing the base module)
- IP 68 Ingress protection class (IDC IP 67),
- Housing made from Pocan (PBT):
  – high dimensional stability
  – good electrical and mechanical properties
  – flame retardant without dioxin or furan formers
  – resistant to coolants and lubricants
- UL/CSA approvals for M12 SAI distributor
- SAI distributor available in pollution severity class 3
- Cable exit on top
- Weidmüller SAI distributors have the largest storage capacity in the connection hood
- Female connectors integrated into the metal plate for fast and reliable connections
- Wide range of M8 and M12 cables and plug-in connectors
- Various cable length‘s available
- Metal hoods and housings also available
- Plug-in connection module for bus cables increases flexibility on site
- Integral, plug in electrical isolation for two separate electric circuits (e.g. for emergency stop)
- Simple and vibration resistant connections on site
- Captive metric screws (grade 8.8 steel) have a +/- head
- M12 and IDC connections
- 1:1 arrangement available

Overview of M12 Distributors

Fixed cable version

- Pre assembled bus cable minimises installation time and reduces wiring errors
- Cable carrier compatible versions are available with polyurethane (PUR) sheathing

M12 Push-Pull quick-fit connection system

M12 Push-Pull is the new connection system for sensors and actuators. It is downward compatible to the existing M12 system, which means that both old M12 and new M12 Push-Pull lines can be used together on these SAIs. M12 Push-Pull decreases installation time and increases installation safety by means of colour coding and provides an audible click on locking for added reassurance.

SAI ECO – the cost-effective alternative

Weidmüller SAI distributors with hood have long since been standard fittings in machines and installations.

Why plastic threaded rings?

There were some applications, however, that called for a further version. In some applications it is necessary to avoid all metal parts, unless these are made from stainless steel. In such cases stainless steel is then used for screws and nuts only, but the M12 threaded rings can also be made from plastic. Such modules can now be supplied on request.

The use of plastic rings therefore results in a cheaper alternative. Although the service life and resistance are reduced when compared to metal, this is acceptable for some applications.

Overview of SAI

M12 plastic

	Hood	M23	5 m	10 m	15 m	20 m
4-way, 4-pole	1705920000	9456000000	9456190000	9456200000	9456210000	9456230000
4-way, 5-pole	1701230000	9456000001	9456330000	9456340000	9456350000	9456370000
6-way, 4-pole	1705930000	9456010000	9456470000	9456480000	9456490000	9456510000
6-way, 5-pole	1701240000	9456010001	9456610000	9456620000	9456630000	9456650000
8-way, 4-pole	1705940000	9456020000	9456750000	9456760000	9456770000	9456790000
8-way, 5-pole	1701250000	1795470000	9456890000	9456900000	9456910000	9456930000

M12 metal

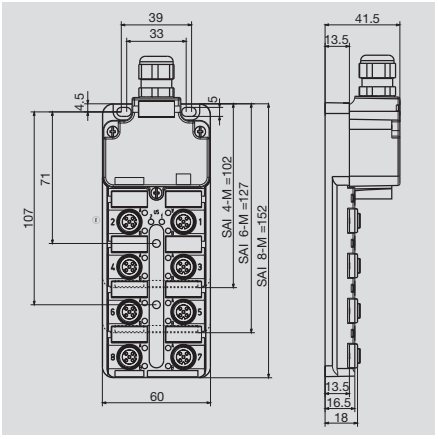
	Hood without shield connection	Hood with shield connection	5 m	10 m		
4-way, 4-pole		1783540000	9456190002	9456200002		
4-way, 5-pole	1783500000	1783520000				
8-way, 4-pole		1783530000	9456750002	9456760002		
8-way, 5-pole	1783490000	1783510000				

M8 line

	M12 group outlet	Solder version for PCB	5 m	10 m		
4-way, 3-pole	1828740000		1828720000	1828710000		
4-way, 4-pole			1849680000	1849690000		
6-way, 3-pole	1828730000	1057720000	1828700000	1828690000		
6-way, 4-pole			1849700000	1849670000		
8-way, 3-pole	1871680000		1828680000	1828670000		
8-way, 4-pole			1828620000	1828610000		
10-way, 3-pole	1877950000		1828660000	1828650000		
12-way, 3-pole			1828640000	1828630000		

M12 distributor

Hood version



Ordering data

Complete modules	
	4 channel
	6 channel
	8 channel
Without initiator-LED,for analogue signals	4 channel
Without initiator-LED,for analogue signals	8 channel
Tension clamp connection	4 plug-in slots
Tension clamp connection	8 channel
Base unit	
	4 channel
	6 channel
	8 channel
Mounting hood	
	Tension clamp connection
	Tension clamp connection
	Screw connection
	Screw connection
Complete modules,NPN-switched	8 channel
Note	

SAI-4/6/8-M — **4-pole**

Type	Qty.	Order No.
SAI-4-M 4P M12	1	**1705920000**
SAI-6-M 4P M12	1	**1705930000**
SAI-8-M 4P M12	1	**1705940000**
SAI-4 M 4P M12 UT	2	**1705921000**
SAI-6-M 4P M12 UT	2	**1705931000**
SAI-8-M 4P M12 UT	2	**1705941000**
SAI-4/6/8-MH BLZF3.5	1	**1752080000**
SAI-4/6/8-MH BLZF3.5 SV	50	**1752080050**
SAI-4/6/8-MH BL3.5	1	**1724750000**
SAI-4/6/8-MH BL3.5 SV	50	**1724750050**

Other versions on request

SAI-4/6/8-M

Type	Qty.	Order No.
SAI-4-M 5P M12	1	**1701230000**
SAI-6-M 5P M12	1	**1701240000**
SAI-8-M 5P M12	1	**1701250000**
SAI-4-M 5P M12 OL	1	**1800000000**
SAI-8-M 5P M12 OL2	1	**1816610000**
SAI-4-M 5P M12 ZF	1	**1854000000**
SAI-8-M 5P M12 ZF III	1	**1767880000**
SAI-4-M 5P M12 UT	2	**1701231000**
SAI-6-M 5P M12 UT	2	**1701241000**
SAI-8-M 5P M12 UT	2	**1701251000**
SAI-4/6/8-MH BLZF3.5	1	**1752080000**
SAI-4/6/8-MH BLZF3.5 SV	50	**1752080050**
SAI-4/6/8-MH BL3.5	1	**1724750000**
SAI-4/6/8-MH BL3.5 SV	50	**1724750050**
SAI-8-M 5P M12 NPN	1	**1781060000**

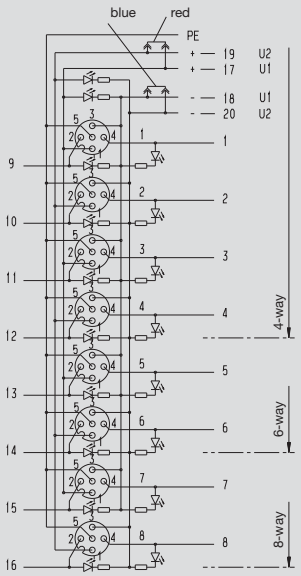
Other versions on request

Technical data

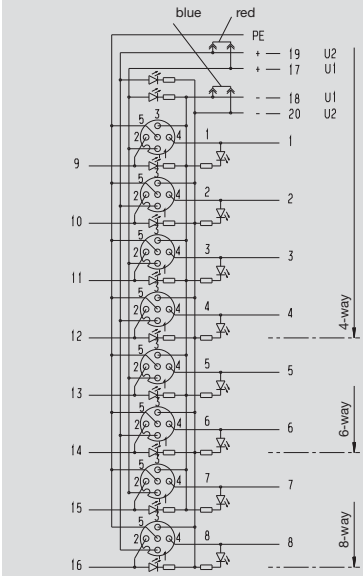
Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	3 A
Total current	10 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+90 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	0.08...1.5 mm²
Suitable for dragline cable (fixed cable connection)	

With dual power supply: 2x8 = 16A total current
Clamping range up to 2.5 mm² with screw connection

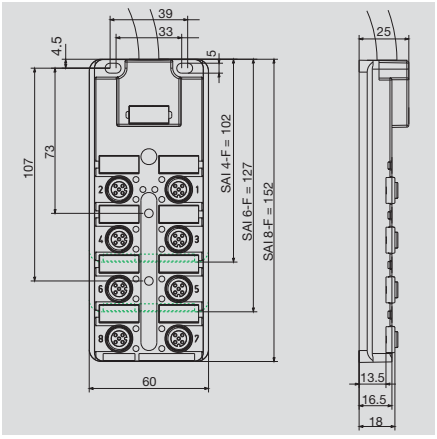
Wiring diagram



Wiring diagram



Fixed cable version



Ordering data

4 channel		
Cable length 3 m		
Cable length 5 m		
Cable length 10 m		
Cable length 15 m		
Cable length 20 m		
6 channel		
Cable length 3 m		
Cable length 5 m		
Cable length 10 m		
Cable length 15 m		
Cable length 20 m		
8 channel		
Cable length 3 m		
Cable length 5 m		
Cable length 10 m		
Cable length 15 m		
Cable length 20 m		
8 channel with reinforced fixed cable*		
Cable length 2 m		
Cable length 5 m		
Cable length 10 m		
Cable length 15 m		
Cable length 20 m		
Note		

SAI-4/6/8-F — 4-pole

Type	Qty.	Order No.
SAI-4-F 4P PUR 3M	1	**9456180000**
SAI-4-F 4P PUR 5M	1	**9456190000**
SAI-4-F 4P PUR 10M	1	**9456200000**
SAI-4-F 4P PUR 15M	1	**9456210000**
SAI-4-F 4P PUR 20M	1	**9456230000**
SAI-6-F 4P PUR 3M	1	**9456460000**
SAI-6-F 4P PUR 5M	1	**9456470000**
SAI-6-F 4P PUR 10M	1	**9456480000**
SAI-6-F 4P PUR 15M	1	**9456490000**
SAI-6-F 4P PUR 20M	1	**9456510000**
SAI-8-F 4P PUR 3M	1	**9456740000**
SAI-8-F 4P PUR 5M	1	**9456750000**
SAI-8-F 4P PUR 10M	1	**9456760000**
SAI-8-F 4P PUR 15M	1	**9456770000**
SAI-8-F 4P PUR 20M	1	**9456790000**

Other versions on request

SAI-4/6/8-F — 5-pole

Type	Qty.	Order No.
SAI-4-F 5P PUR 3M	1	**9456320000**
SAI-4-F 5P PUR 5M	1	**9456330000**
SAI-4-F 5P PUR 10M	1	**9456340000**
SAI-4-F 5P PUR 15M	1	**9456350000**
SAI-4-F 5P PUR 20M	1	**9456370000**
SAI-6-F 5P PUR 3M	1	**9456600000**
SAI-6-F 5P PUR 5M	1	**9456610000**
SAI-6-F 5P PUR 10M	1	**9456620000**
SAI-6-F 5P PUR 15M	1	**9456630000**
SAI-6-F 5P PUR 20M	1	**9456650000**
SAI-8-F 5P PUR 3M	1	**9456880000**
SAI-8-F 5P PUR 5M	1	**9456890000**
SAI-8-F 5P PUR 10M	1	**9456900000**
SAI-8-F 5P PUR 15M	1	**9456910000**
SAI-8-F 5P PUR 20M	1	**9456930000**
SAI-8-F 5P 2M 0.5/1.0U	1	**7915030000**
SAI-8-F 5P 5M 0.5/1.0U	1	**9457590000**
SAI-8-F 5P 10M 0.5/1.0U	1	**9457600000**
SAI-8-F 5P 15M 0.5/1.0U	1	**1784510000**
SAI-8-F 5P 20M 0.5/1.0U	1	**1784500000**

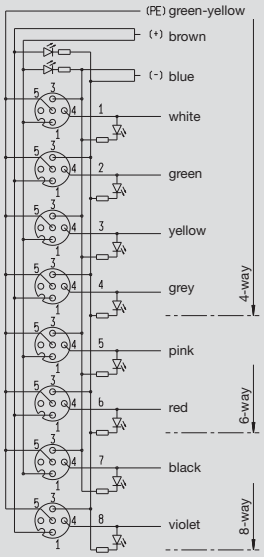
Other versions on request

Technical data

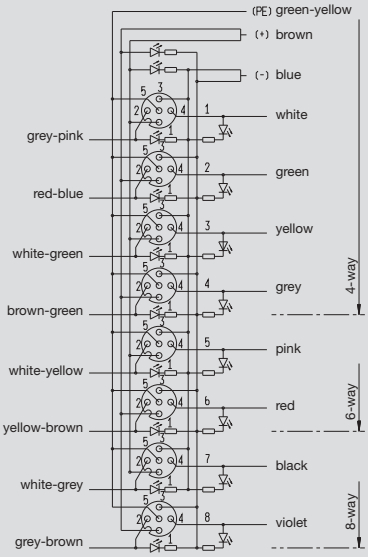
Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	3 A
Total current	9 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+80 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	Yes

* 3x1mm² und 16x0.5mm² total current 12A

Wiring diagram

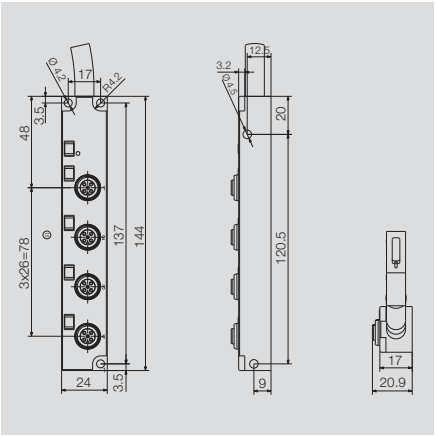


Wiring diagram



M12 distributor

Fixed-cable version
thin design



Ordering data

4 channel	
	Cable length 5 m
	Cable length 10 m
Note	

SAI-4-F M12 L — **4-pole**

Type	Qty.	Order No.
SAI-4-F 4P M12 L 5M	1	**1070650000**
SAI-4-F 4P M12 L 10M	1	**1070660000**

Other versions on request

SAI-4-F M12 L — **5-pole**

Type	Qty.	Order No.
SAI-4-F 5P M12 L 5M	1	**1070630000**
SAI-4-F 5P M12 L 10M	1	**1070640000**

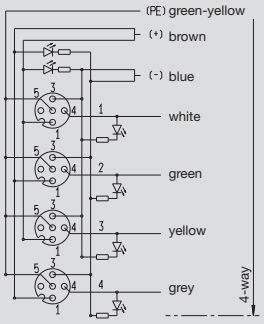
Other versions on request

G

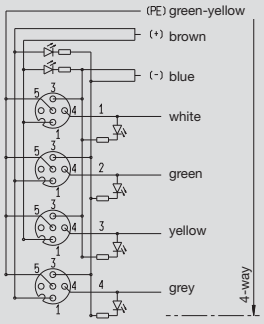
Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	3 A
Total current	9 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+80 °C
Housing main material	PA 6 GF
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	Yes

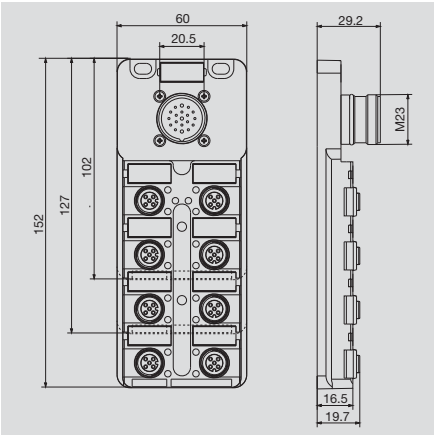
Wiring diagram



Wiring diagram



with M23 outlet



Ordering data

Complete modules	
4 channel	
6 channel	
8 channel	
Note	

SAI-4/6/8-S — **4-pole**

Type	Qty.	Order No.
SAI-4-S 4P M12	1	**9456000000**
SAI-6-S 4P M12	1	**9456010000**
SAI-8-S 4P M12	1	**9456020000**

Other versions on request

SAI-4/6/8-S — **5-pole**

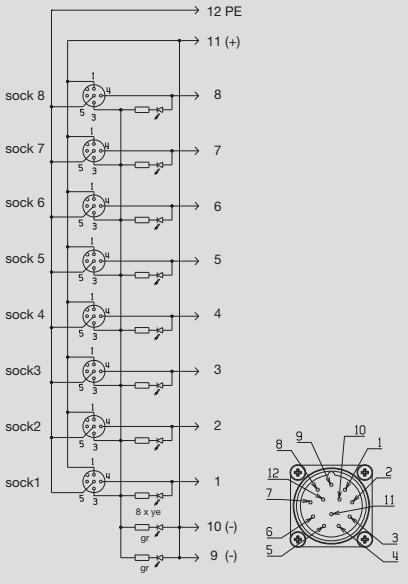
Type	Qty.	Order No.
SAI-4-S 5P M12	1	**9456000001**
SAI-6-S 5P M12	1	**9456010001**
SAI-8-S 5P M12	1	**1795470000**

Other versions on request

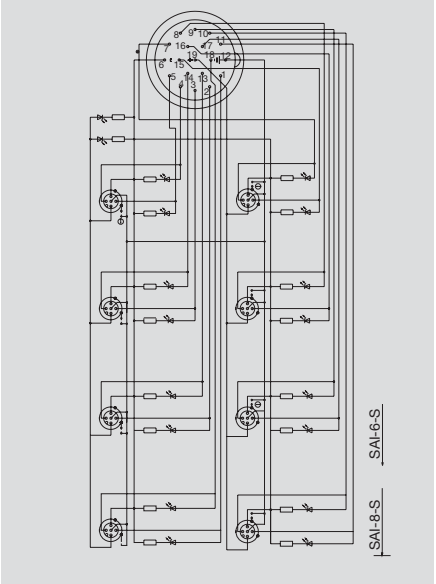
Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	3 A
Total current	10 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+90 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	

Wiring diagram



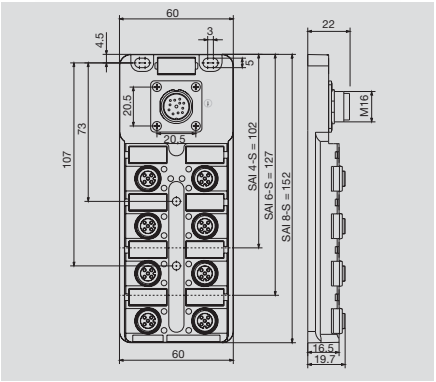
Wiring diagram



M12 distributor

with M16 outlet

SAI-8-M16



Ordering data

Complete modules	
	8 channel
Note	

SAI-8-M16 — 4-pole

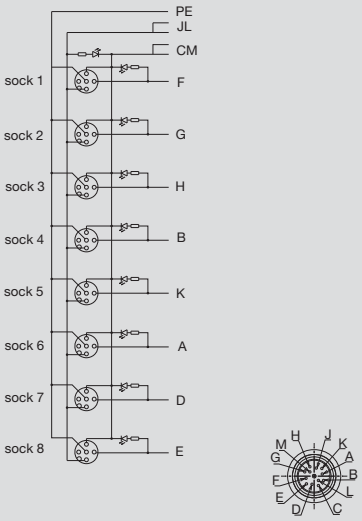
Type	Qty.	Order No.
SAI-8-M16 4P M12	1	**1831020000**

Other versions on request

Technical data

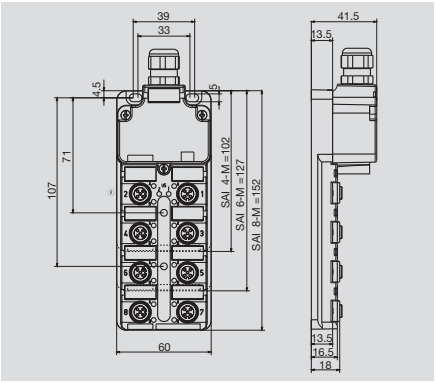
Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	3 A
Total current	6 A
Pollution severity	3
Protection class	IP 67
Ambient temperature range	-20...+90 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	

Wiring diagram



Hood version
with DIP-switch coding

SAI-8-M M12 DIP



Ordering data

SAI-8-M M12 DIP — 4-pole

Type	Qty.	Order No.
SAI-8-M-4P M12 DIP	1	**1059430000**

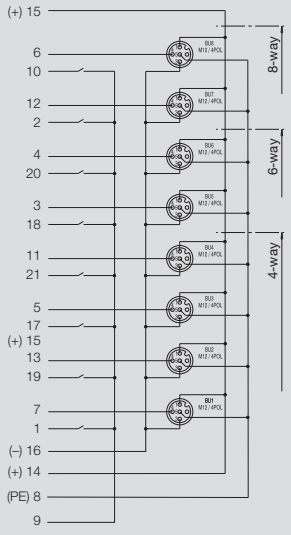
Complete modules	
	8 channel

Note
Other versions on request

Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	3 A
Total current	8 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+90 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	0.08...1.5 mm²
Suitable for dragline cable (fixed cable connection)	

Wiring diagram



SAI ECO

SAI ECO – the cost-effective alternative

The Weidmüller SAI distributors with hoods have long since been standard fittings in machines and installations.

Why plastic threaded rings?

There were some applications, however, that called for a further version. In some applications it is necessary to avoid all metal parts. In such cases stainless steel is then used for screws and nuts only, but the M12 threaded rings can also be made from plastic. Such modules can now be supplied on request.

The use of plastic rings therefore results in a cheaper alternative. Although the service life and resistance are reduced when compared to metal, this is acceptable for some applications.

Special threaded ring increases durability

Cost-effective alternative

The ECO modules were developed to optimise costs. Many details of these modules were adapted in such a way that they can still be used wherever standard modules were used in the past, but the individual solutions have now become simpler:

- One way disconnector: Up until now it was usual to achieve electrical isolation devised by Weidmüller by way of jumpers. To reduce costs, these jumpers have been replaced by solder bridges. These are simply cut to provide electrical isolation.
- No protective caps: Normally, Weidmüller M12 distributors are always supplied with two protective caps. These were not always required and so they have been omitted.
- Standard cable gland: The vibration resistant black screw cable gland has been replaced by a standard IP 68 cable gland.

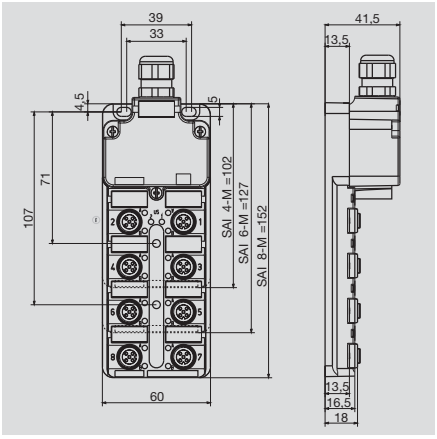
These cost-cutting measures result in yet more applications for Weidmüller SAI distributors.

Greater reliability than with comparable systems

Plastic threaded rings are nothing new. However, the problem in the past was that the threaded rings formed part of the housing and were therefore made from the same plastic.

Weidmüller has once again pioneered a new and better solution. Weidmüller plastic rings are manufactured separately, which means that a more suitable, more durable material can be chosen. The Weidmüller production method is also patented.

Hood version



Ordering data

Complete modules	
	4 channel
	6 channel
	8 channel
NPN	4 channel
NPN	8 channel
Base unit	
	4 channel
	6 channel
	8 channel
Mounting hood	
	Tension clamp connection
	Screw connection
Note	

SAI-4/6/8-M — **5-pole**

Type	Qty.	Order No.
SAI-4-M 5P M12 ECO	1	**1892100000**
SAI-6-M 5P M12 ECO	1	**1892090000**
SAI-8-M 5P M12 ECO	1	**1892080000**
SAI-4-M 5P M12 NPN ECO	1	**1892100005**
SAI-8-M 5P M12 NPN ECO	1	**1892080005**
SAI-4-M 5P M12 ECO UT	2	**1892101000**
SAI-6-M 5P M12 ECO UT	2	**1892091000**
SAI-8-M 5P M12 ECO UT	2	**1892081000**
SAI-4/6/8-MH BLZF3.5 SV	50	**1752080050**
SAI-4/6/8-MH BL3.5 SV	50	**1724750050**

These distributors are supplied without protective caps and markers.

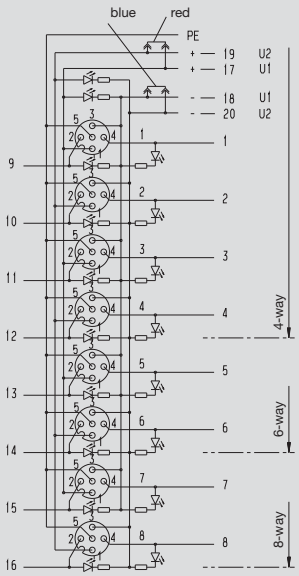
Type	Qty.	Order No.

Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	3 A
Total current	10 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+90 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	Pocan
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	0.08...1.5 mm²
Suitable for dragline cable (fixed cable connection)	

With dual power supply: 2x8 = 16A total current
Clamping range up to 2.5 mm² with screw connection

Wiring diagram



M12 Push-Pull: SAI distributors and cables, with rapid-connection technology

SAI distributors with M12 Push-Pull plug

M12 Push-Pull M23 versions

M12 Push-Pull hood version

M12 Push-Pull with bayonet connection

Whereas the standard M12 system requires the sleeves to be laboriously screwed on and that operation is hindered by the vibration guard, M12 Push-Pull works with one click, just like those well-known garden hose systems. The audible locking function guarantees a safe and reliable connection as well as a good seal.

M12 Push-Pull is currently supplied by Weidmüller and five other international companies

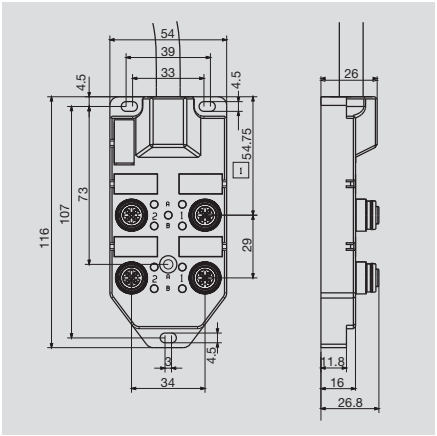
M12 Push-Pull connections provide sufficient space for using T-pieces. The SAI module is slimmer and now only 54 mm wide.

The new SAI M12 Push-Pull distributors can be used with M12 plug-in connectors but also with the new M12 Push-Pull plug-in connectors.

The SAI distributors are available in fixed cable, hood, bayonet connection and M23 versions.

M12 Push-Pull speeds up installation and increases installation reliability thanks to the colour coding and the audible click when locking it into place.

Fixed cable version



Ordering data

4 channel	
Cable length 2 m	
Cable length 5 m	
Cable length 10 m	
8 channel	
Cable length 2 m	
Cable length 5 m	
Cable length 10 m	
Note	

SAI-4/8-F 4-pole

Type	Qty.	Order No.
SAI-4-F 4P FC 2M	1	**1848080000**
SAI-4-F 4P FC 5M	1	**1848060000**
SAI-4-F 4P FC 10M	1	**1848050000**
SAI-8-F 4P FC 2M	1	**1847990000**
SAI-8-F 4P FC 5M	1	**1848000000**
SAI-8-F 4P FC 10M	1	**1847980000**

Other versions on request

SAI-4/8-F 5-pole

Type	Qty.	Order No.
SAI-4-F 5P FC 2M	1	**1847940000**
SAI-4-F 5P FC 5M	1	**1847950000**
SAI-4-F 5P FC 10M	1	**1847930000**
SAI-8-F 5P FC 2M	1	**1848020000**
SAI-8-F 5P FC 5M	1	**1848030000**
SAI-8-F 5P FC 10M	1	**1848010000**

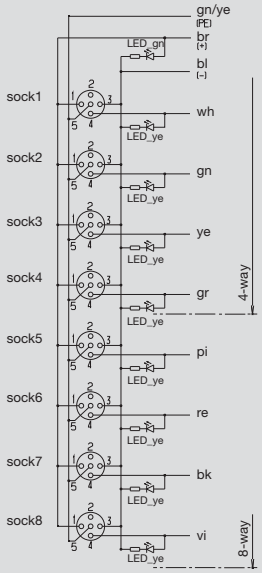
Other versions on request

Technical data

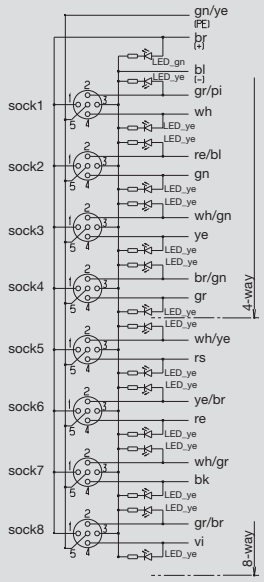
Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	4 A
Total current	10 A
Pollution severity	3
Protection class	IP 67
Ambient temperature range	-25...+80 °C
Housing main material	PA 6 GF
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	Yes

Master trunk cable 3x1mm² x n x 0.34mm²; Hallogen

Wiring diagram

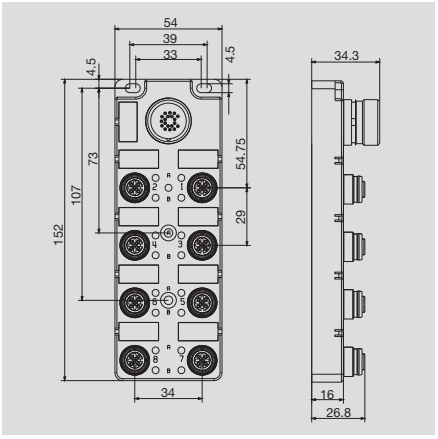


Wiring diagram



M12 Push-Pull

with M23 outlet



Ordering data

Complete modules	
4 channel	
8 channel	
Note	

SAI-4/8-S — **4-pole**

Type	Qty.	Order No.
SAI-4-S 4P FC	1	**1847960000**
SAI-8-S 4P FC	1	**1847920000**

Other versions on request

SAI-4/8-S — **5-pole**

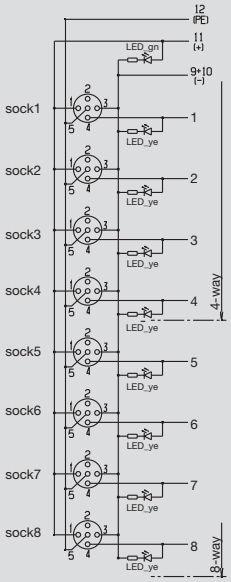
Type	Qty.	Order No.
SAI-4-S 5P FC	1	**1847970000**
SAI-8-S 5P FC	1	**1848040000**

Other versions on request

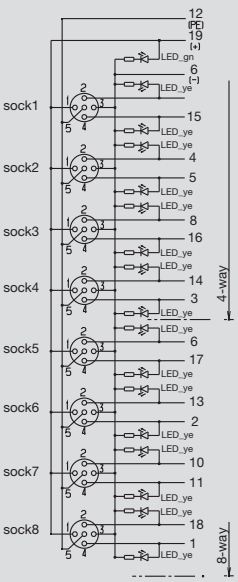
Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	4 A
Total current	9 A
Pollution severity	3
Protection class	IP 67
Ambient temperature range	-25...+80 °C
Housing main material	PA 6 GF
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	

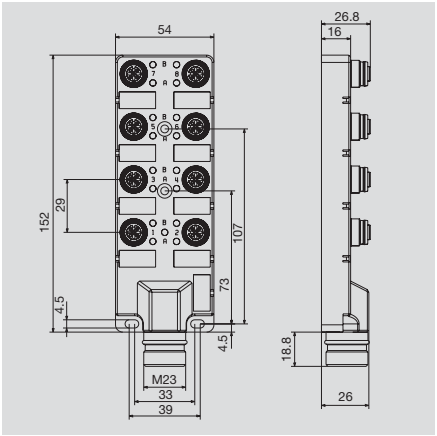
Wiring diagram



Wiring diagram



with M23 outlet on front



Ordering data

Complete modules	
4 channel	
8 channel	
Note	

SAI-4/8-SH — **4-pole**

Type	Qty.	Order No.
SAI-4-SH 4P FC	1	**1859110000**
SAI-8-SH 4P FC	1	**1859120000**

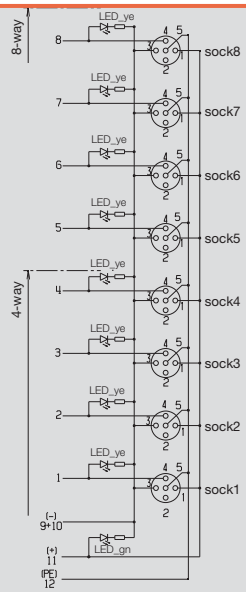
SAI-4/8-SH — **5-pole**

Type	Qty.	Order No.
SAI-4-SH 5P FC	1	**1859130000**
SAI-8-SH 5P FC	1	**1859140000**

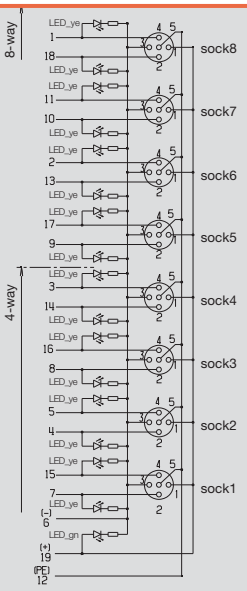
Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	4 A
Total current	9 A
Pollution severity	3
Protection class	IP 67
Ambient temperature range	-25...+80 °C
Housing main material	PA 6 GF
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	

Wiring diagram



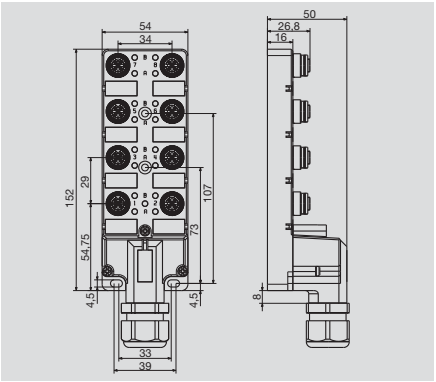
Wiring diagram



M12 Push-Pull

Hood version

SAI-8-M



Ordering data

Complete modules	
	8 channel
Note	

SAI-8-M — 5-pole

Type	Qty.	Order No.
SAI-8-M 5P FC	1	**1848070000**

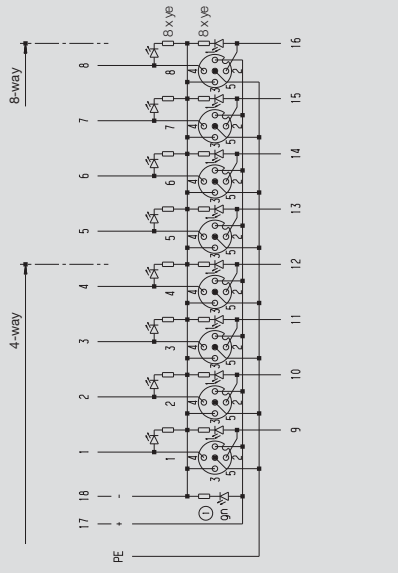
Other versions on request

Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	4 A
Total current	
Pollution severity	3
Protection class	IP 67
Ambient temperature range	-25...+80 °C
Housing main material	PA 6 GF
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	

Master trunk cable 3x1mm² x n x 0.34mm²; halogen-free

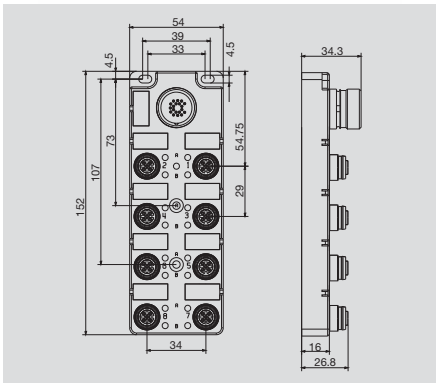
Wiring diagram



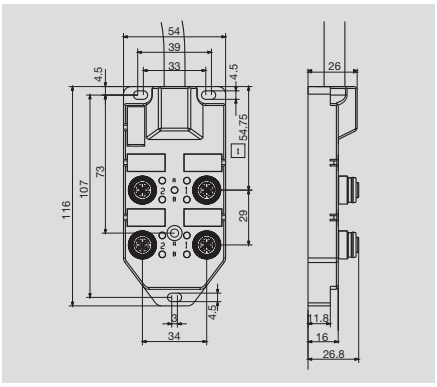
Terminal	Slot M12	Contact	Colour
1	1	4	white
2	2	4	green
3	3	4	yellow
4	4	4	grey
5	5	4	pink
6	6	4	red
7	7	4	black
8	8	4	violet
9	1	2	grey/pink
10	2	2	red/blue
11	3	2	white/green
12	4	2	brown/green
13	5	2	white/yellow
14	6	2	yellow/brown
15	7	2	white/grey
16	8	2	grey/brown
17	1–8	1	brown (+)
18	1–8	3	blue (–)
PE	1–8	5	green/yellow (PE)

CNOMO

SAI-4/8-S



SAI-4/8-F



Ordering data

SAI-4/8-S — 5-pole

4 channel	Qty.	Order No.
Cable length 5 m		
Cable length 10 m		
8 channel		
Cable length 5 m		
Cable length 10 m		
M23		
4 channel		
8 channel		
Note		

Type	Qty.	Order No.
SAI-4-S 5P CNOMO	1	**1861540000**
SAI-8-S 5P CNOMO	1	**1861580000**

SAI-4/8-F — 5-pole

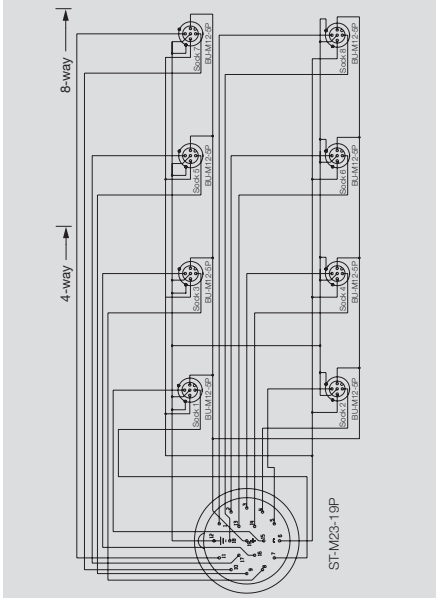
Type	Qty.	Order No.
SAI-4-F 5P CNOMO 5M	1	**1861570000**
SAI-4-F 5P CNOMO 10M	1	**1861560000**
SAI-8-F 5P CNOMO 5M	1	**1861550000**
SAI-8-F 5P CNOMO 10M	1	**1861590000**

Technical data

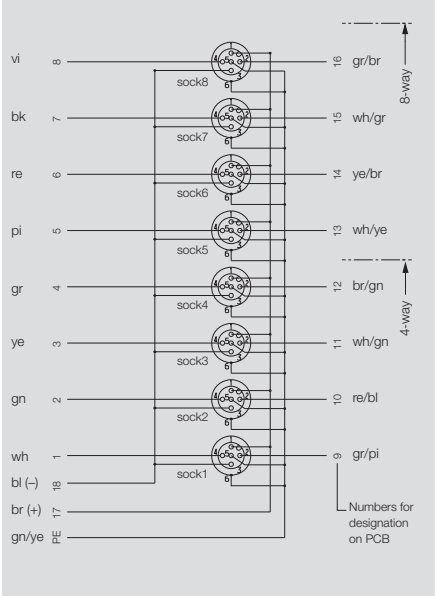
Operating voltage	10...50 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	4 A
Total current	8 A
Pollution severity	3
Protection class	IP 67
Ambient temperature range	-25...+80 °C
Housing main material	PA 6 GF
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	Yes

Max. total current with 4-channel distributor is 8A. And with 8-channel distributor is 12A

Wiring diagram



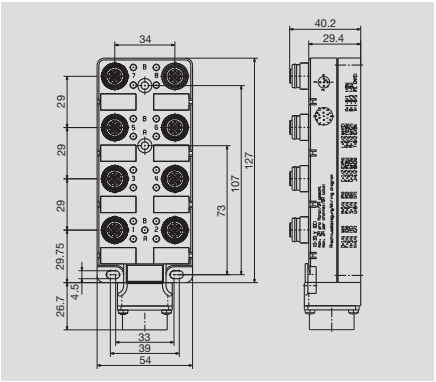
Wiring diagram



M12 Push-Pull

Bayonet joint

SAI-8-SHB



Ordering data

Complete modules	
	8 channel
Note	

SAI-8-SHB 5-pole

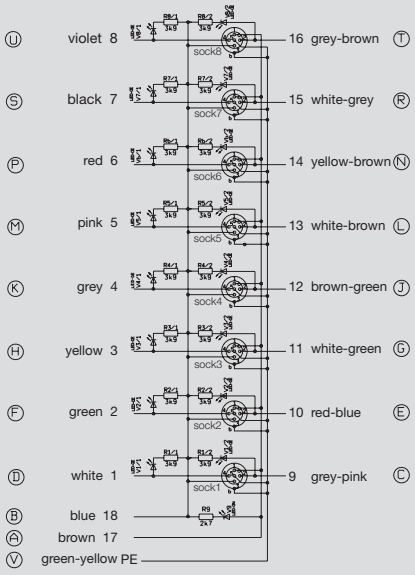
Type	Qty.	Order No.
SAI-8-SHB 5P FC	1	**1872440000**

Other versions on request

Technical data

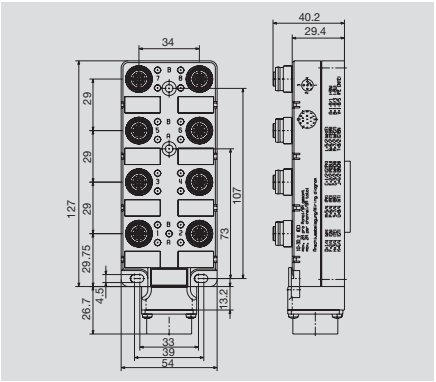
Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	4 A
Total current	9 A
Pollution severity	3
Protection class	IP 67
Ambient temperature range	-25...+80 °C
Housing main material	PA 6 GF
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	

Wiring diagram



Bayonet joint with socket connector on reverse

SAI-8-SHB



Ordering data

SAI-8-SHB	5-pole

Type	Qty.	Order No.
SAI-8-SHB 5P F13 FC	1	**1872460000**

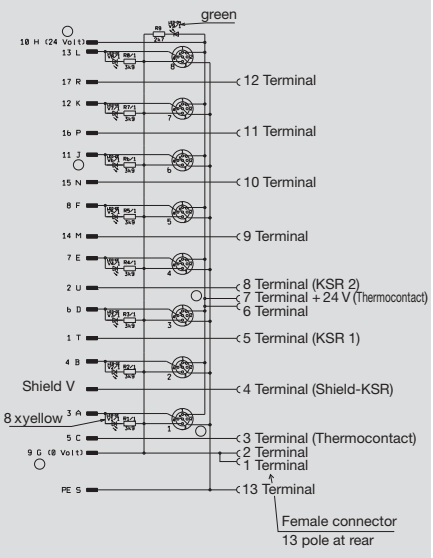
Other versions on request

Complete modules	
	8 channel
Note	

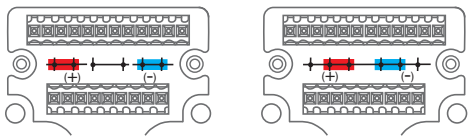
Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	4 A
Total current	9 A
Pollution severity	3
Protection class	IP 67
Ambient temperature range	-25...+80 °C
Housing main material	PA 6 GF
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	

Wiring diagram



IDC – the quick connection



Factory setting
(see wiring diagram)
Current bridged

Current isolated

Hood version

- Compact IDC connection cuts production, commissioning and maintenance work
- Robust, knurled metal nut, safe handling requiring little force
- The dimensions of the IDC distributor correspond to and are compatible with the standard SAI distributor.
- Plug-in connection module for bus cables enhances on-site flexibility
- Three sizes for 4, 6 and 8 channels
- 3-pole version with one I/O signal per channel, 4-pole version with two I/O signals per channel
- Individual on site assembly of sensor/actuator lines
- Fast, reliable connection with IDC connection element
- IP 67 Ingress protection classification.

SAI fixed cable version

- Pre-assembled bus cables minimise installation work and avoid wiring errors
- 3 sizes for 4, 6 and 8 channels
- Highly flexible, cable carrier compatible bus cables with polyurethane (PUR/PVC) sheathing
  – 3 x 0.75 mm^2
  – n x 0.34 mm^2,
- 3-pole version with one I/O signal per channel, 4-pole version with two I/O signals per channel

IDC connection element

Ordering data

Type	Qty.	Order No.
SAI-SA-3-IDC	1	9457720000
SAI-SA-4-IDC	1	1766810000

The significant advantages of Weidmüller tools:

- Easy handling
- Very small, ideal for confined assembly conditions
- Patented solution
- Metal Connectors

Insulation displacement connections on Weidmüller SAI distributors are currently the smallest but also the most robust connection elements on the market. Thanks to their extremely small dimensions, corresponding distributors are available with the same dimensions in M12 or IDC versions.
For large series, e.g. where more than 100 modules are used every year, we recommend using a special tool to simplify the handling of the connected lines even further. However, this tool is not always necessary because all connection elements can be readily tightened by hand.

IDC tool

Ordering data

Type	Qty.	Order No.
SAI-IDC-Tool	1	1795020000

Screwty®

The IDC elements can also be tightened with the Weidmüller Screwty®.

Ordering data

Type	Qty.	Order No.
Screwty M12	1	1900001000

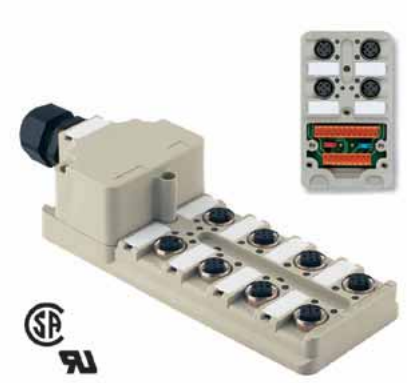
Protective cap M12 for IDC

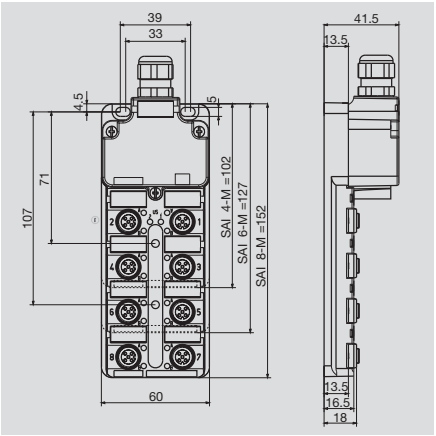
Ordering data

Type	Qty.	Order No.
SAI-SK-M12 IDC	10	1794850000

M12 IDC

Hood version





Ordering data

Complete modules	
4 channel	
6 channel	
8 channel	
Base unit	
4 channel	
6 channel	
8 channel	
Mounting hood	
Tension clamp connection	
Tension clamp connection	
Screw connection	
Screw connection	
Note	

SAI-4/6/8-M IDC — **4-pole**

Type	Qty.	Order No.
SAI-4-M 3P IDC	1	**1760040000**
SAI-6-M 3P IDC	1	**1760050000**
SAI-8-M 3P IDC	1	**1760060000**
SAI-4-M 3P IDC UT	2	**1760041000**
SAI-6-M 3P IDC UT	2	**1760051000**
SAI-8-M 3P IDC UT	2	**1760061000**
SAI-4/6/8-MH BLZF3.5	1	**1752080000**
SAI-4/6/8-MH BLZF3.5 SV	50	**1752080050**
SAI-4/6/8-MH BL3.5	1	**1724750000**
SAI-4/6/8-MH BL3.5 SV	50	**1724750050**

Other versions on request

SAI-4/6/8-M IDC — **4-pole**

Type	Qty.	Order No.
SAI-4-M 4P IDC	1	**1766780000**
SAI-6-M 4P IDC	1	**1766790000**
SAI-8-M 4P IDC	1	**1766800000**
SAI-4-M 4P IDC UT	2	**1766781000**
SAI-6-M 4P IDC UT	2	**1766791000**
SAI-8-M 4P IDC UT	2	**1766801000**
SAI-4/6/8-MH BLZF3.5	1	**1752080000**
SAI-4/6/8-MH BLZF3.5 SV	50	**1752080050**
SAI-4/6/8-MH BL3.5	1	**1724750000**
SAI-4/6/8-MH BL3.5 SV	50	**1724750050**

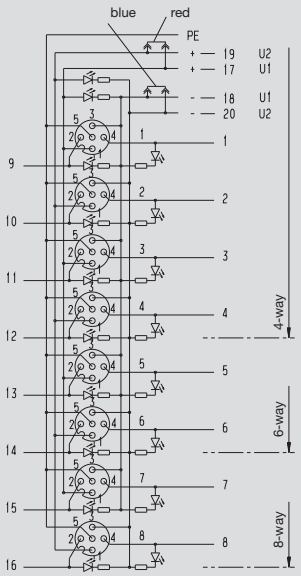
Other versions on request

Technical data

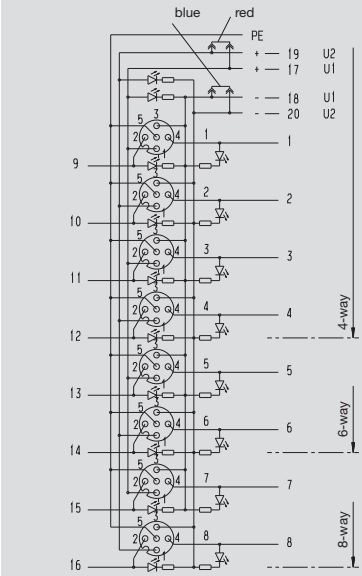
Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	3 A
Total current	10 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+90 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	0.08...1.5 mm²
Suitable for dragline cable (fixed cable connection)	

With dual power supply: 2x8 = 16A total current
Clamping range up to 2.5 mm² with screw connection

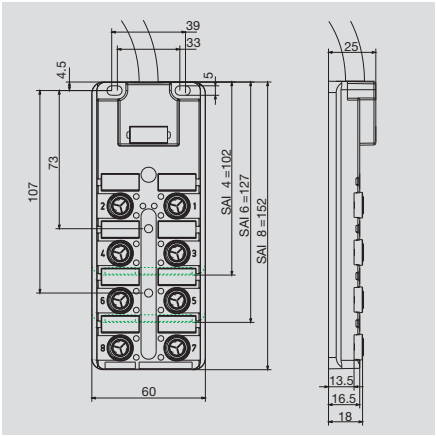
Wiring diagram



Wiring diagram



Fixed cable version



Ordering data

4 channel	
	Cable length 5 m
	Cable length 10 m
6 channel	
	Cable length 5 m
	Cable length 10 m
8 channel	
	Cable length 5 m
	Cable length 10 m
Note	

SAI-4/6/8-F IDC — 3-pole

Type	Qty.	Order No.
SAI-4-F 3P IDC PUR 5M	1	**1766720000**
SAI-4-F 3P IDC PUR 10M	1	**1766730000**
SAI-6-F 3P IDC PUR 5M	4	**1766740000**
SAI-6-F 3P IDC PUR 10M	1	**1766750000**
SAI-8-F 3P IDC PUR 5M	1	**1766760000**
SAI-8-F 3P IDC PUR 10M	1	**1766770000**

Other versions on request

SAI-4/6/8-F IDC — 4-pole

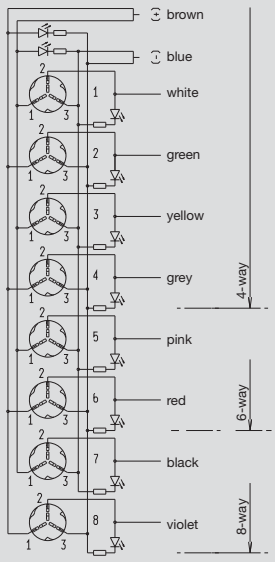
Type	Qty.	Order No.
SAI-4-F 4P IDC PUR 5M	1	**1766660000**
SAI-4-F 4P IDC PUR 10M	1	**1766670000**
SAI-6-F 4P IDC PUR 5M	1	**1766680000**
SAI-6-F 4P IDC PUR 10M	1	**1766690000**
SAI-8-F 4P IDC PUR 5M	1	**1766700000**
SAI-8-F 4P IDC PUR 10M	1	**1766710000**

Other versions on request

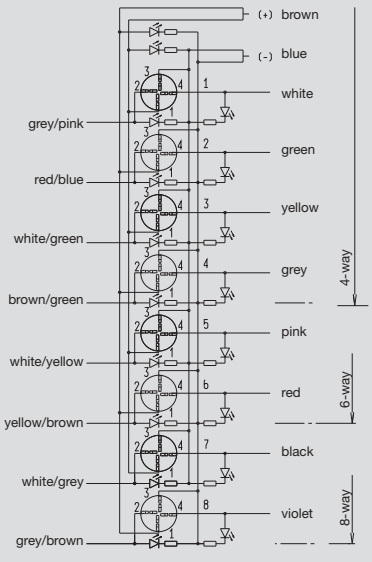
Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	3 A
Total current	9 A
Pollution severity	2
Protection class	IP 67
Ambient temperature range	-20...+80 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	Yes

Wiring diagram



Wiring diagram

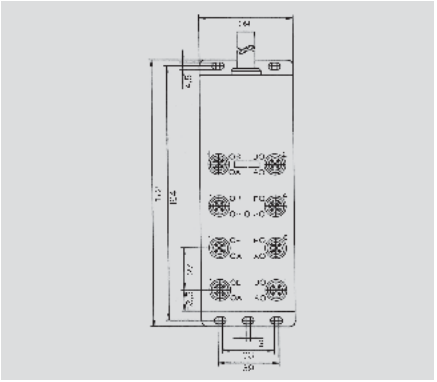


Fixed cable version

- 5-pole, 2 signals per socket
- green LED operating indicator and yellow LED function indicator
- with stainless steel housing and cable glands

Ideal for machinery within the Food and Beverage Industries

SAI-8-F 5P M12 5M VA



Ordering data

Male plug	
	M12 connectors in stainless steel

Note

SAI-8-F 5P M12 5M VA — 5-pole

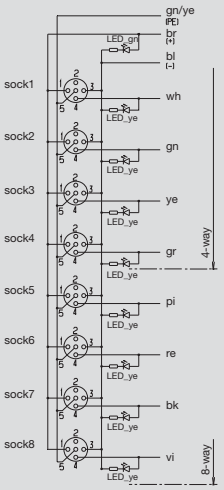
Type	Qty.	Order No.
SAI-8-F 5P M12 5M VA	1	**1865310000**
SAIS-5/9-VA	1	**1920700000**

Technical data

Temperature range	0 °C/+ 60 °C
Materials:	
Housing	stainless steel 1.4404/316L
Contact carrier	PVC
Contact	CuZn, pre-nickeled & 0.8 µm gold platin
Threaded bush	stainless steel 1.4404/316L
O-ring	EPDM
Mechanical data:	
Ingress protection class	IP69K only in screwed condition with associated mating pieces
Electrical data:	
Contact resistance	≤ 5mΩ
Current-carrying capacity	4 A per channel 12 A max. total
Operating voltage	10-30 V DC
Rated voltage	32 V AC eff
Pollution severity	2 to VDE 0110

Accessories (included)
4 protective caps for channels not assigned

Wiring diagram



Tension-clamp connection M12, stainless steel

SAIS / SAIB VA

straight

Ordering data

Male			
	5-pole, PG 9	1	**1920700000**
	5-pole, PG 9	1	**1920720000**
Socket			
	5-pole, PG 9	1	**1920710000**
	5-pole, PG 9	1	**1920730000**
Note			

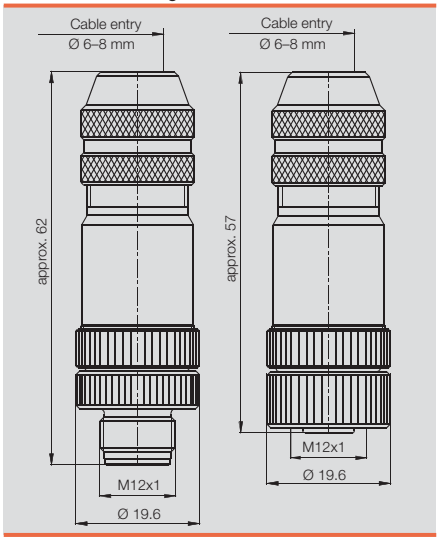
Type	Qty.	Order No.
SAIS 5/9-VA	1	**1920700000**
SAIS 5/9-VA-B-COD	1	**1920720000**
SAIB 5/9-VA	1	**1920710000**
SAIB 5/9-VA-B-COD	1	**1920730000**

Technical data

Type of connection	Tension clamp connection
Housing main material	1.4404/316L
Contact tube diameter	M12
Cable diameter	6...8 mm
Cross-section for connected wire	0.25 - 0.5 mm²
Rated current	4 A
Rated voltage	125 V
Temperature range of housing	-25…+85 °C
Protection class	IP 69 k
Contact surface	gold-plated
Note	PB = PROFIBUS (B-COD)

PB = PROFIBUS (B-COD)

Dimensioned drawing



Sensor-actuator distributors for special applications

All-metal
SAI-4/8-FMM M12

Shielded cable, e.g. for analogue initiators
Some applications need full shielding from sensor to control. This is possible with the all metal SAI distributors. The distributors are supplied with an EMC cable gland. Initiator LEDs are omitted.

Especially thick trunk cable
It is sometimes advisable to use the machine manufacturer's standard trunk cable. This cable will usually have a relatively large outside diameter and will therefore require plenty of space (SAI-4/6/8 MHD).

All-metal fixed cable distributors
Weidmüller metal distributors have proved their worth in many situations. They are available as 4 and 8 channel M12 versions with cable lengths of 5 or 10 m. Metal distributors are also necessary when ESD requirements must be complied with. The conductive metal surface provides low surface resistance.

Advantages:
- no ESD/EMC problems
- high resistance to chemicals or mechanical loads
- standard mounting dimensions

SAI-M with metal hood
SAI-4/6/8 MMS SAI-4/6/8 MM
MMS: **M**odular, **M**etal, **S**hield
MM: **M**odular, **M**etal

SAI-4/6/8 MMS with EMC cable gland in metal housing

Especially tough conditions where plastic is totally unsuitable. In certain cases it makes sense to avoid the use of plastics altogether. In such cases a distributor made completely from metal is required that can be connected to others using metal cable glands, without additional connections for the shielding.

SAI-4/6/8 MH
MH: **M**odular, **H**igh

Cable gland: M20

For cables with outside insulation diameter from 10 mm to 14 mm. Listed below are just some of the cable sizes that are suitable for the SAI distributor with M20 cable gland:
- 14 x 0.50 mm² bis 16 x 0.50 mm²
- 8 x 0.75 mm² bis 15 x 0.75 mm²
- 8 x 1.00 mm² bis 10 x 1.00 mm²
- 5 x 1.50 mm² bis 7 x 1.50 mm²

SAI-4/6/8 MHD
MHD: **M**odular, **H**igh, seale**D**
(for especially thick cables)

Cable gland: M25

For cables with outside insulation diameter from 13 mm to 18 mm. Listed below are just some of the cable sizes that are suitable for the SAI distributor with M25 cable gland:
- 21 x 0.50 mm²
- 18 x 0.75 mm² bis 21 x 0.75 mm²
- 14 x 1.00 mm² bis 20 x 1.00 mm²
- 8 x 1.50 mm² bis 16 x 1.50 mm²

Overview of metal distributors

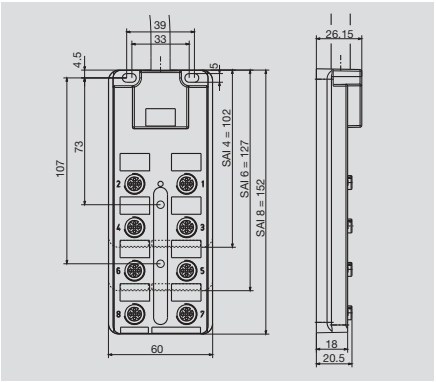
Type	SAI-UT	Sockets	M12	Poles–Hood	Form	Cable gland	Cable gland	Length	Order No.
SAI-4-MH-4P M12	PBT	4	4	Zn-G	high	M20	plastic		**1705922000**
SAI-6-MH-4P M12	PBT	6	4	Zn-G	high	M20	plastic		**1705932000**
SAI-8-MH-4P M12	PBT	8	4	Zn-G	high	M20	plastic		**1705942000**
SAI-4-MH-5P M12	PBT	4	5	Zn-G	high	M20	plastic		**1701232000**
SAI-6-MH-5P M12	PBT	6	5	Zn-G	high	M20	plastic		**1701242000**
SAI-8-MH-5P M12	PBT	8	5	Zn-G	high	M20	plastic		**1701252000**
SAI-4-MHD-5P M12	PBT	4	5	Zn-G	high	M25	plastic		**1701233000**
SAI-6-MHD-5P M12	PBT	6	5	Zn-G	high	M25	plastic		**1701243000**
SAI-8-MHD-5P M12	PBT	8	5	Zn-G	high	M25	plastic		**1701253000**
SAI-4-MHD-4P M12	PBT	4	4	Zn-G	high	M25	plastic		**1705923000**
SAI-6-MHD-4P M12	PBT	6	4	Zn-G	high	M25	plastic		**1705933000**
SAI-8-MHD-4P M12	PBT	8	4	Zn-G	high	M25	plastic		**1705943000**
SAI-4-MMS-4P M12	Zn-G	4	4	Zn-G	low	M20	EMC		**1783540000**
SAI-8-MMS-4P M12	Zn-G	8	4	Zn-G	low	M20	EMC		**1783530000**
SAI-4-MMS-5P M12	Zn-G	4	5	Zn-G	low	M20	EMC		**1783520000**
SAI-8-MMS-5P M12	Zn-G	8	5	Zn-G	low	M20	EMC		**1783510000**
SAI-4-MM-5P M12	Zn-G	4	5	Zn-G	low	M20	brass		**1783500000**
SAI-8-MM-5P M12	Zn-G	8	5	Zn-G	low	M20	brass		**1783490000**
SAI-4/6/8 MH-MH BL 3.5				Zn-G	high	M20	plastic		**1724752000**
SAI-4/6/8 MH-MHD BL 3.5				Zn-G	high	M25	plastic		**1724753000**
SAI-8-MH-5P M12 ZF III	PBT	8	5	Zn-G	high	M20	plastic		**1782760000**
SAI-8-MMS-5P M12 ZF III	Zn-G	8	5	Zn-G	high	M20	plastic		**1782740000**
SAI-4/6/8 MH-MH BL-ZF 3.5				Zn-G	high	M20	plastic		**1782750000**
SAI-4-FMM-4P M12 5M	Zn-G	4	4					5 m	**9456190002**
SAI-4-FMM-4P M12 10M	Zn-G	4	4					10 m	**9456200002**
SAI-8-FMM-4P M12 5M	Zn-G	8	4					5 m	**9456750002**
SAI-8-FMM-4P M12 10M	Zn-G	8	4					10 m	**9456760002**

Note: The cable outside diameter can vary from manufacturer to manufacturer. It is therefore possible that the cable glands hold other cables firmly despite a different strand lay-up. In each case, it is best to first measure the cable diameter and then choose an appropriate distributor.

M12 metal distributors

Fixed cable version

SAI-4-FMM



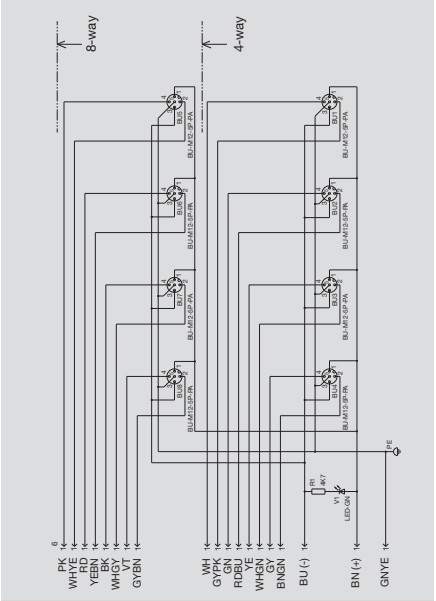
Ordering data

SAI-4-FMM		4-pole
Type	**Qty.**	**Order No.**
4 channel		
SAI-4-FMM-4P M12 5M	4	**9456190002**
SAI-4-FMM-4P M12 10M	3	**9456200002**
8 channel		
SAI-8-FMM-4P M12 5M	1	**9456750002**
SAI-8-FMM-4P M12 10M	3	**9456760002**
Note		
Additional variants on request Bus cable is not shielded		

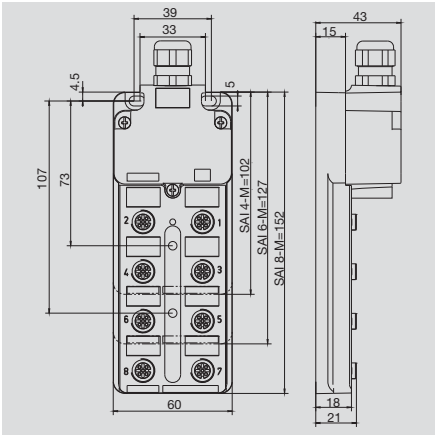
Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	3 A
Total current	9 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+90 °C
Housing main material	CuZn, nickel-plated
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	silver
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	Yes

Wiring diagram



Hood version



Ordering data

Complete modules,4-pole	
	4 channel
	8 channel
Complete modules,5-pole	
	4 channel
	8 channel
Tension-clamp connection,high cover	8 channel
Base unit	
	8 channel
Mounting hood	
	Screw connection
Note	

SAI-4/6/8-MMS — M12

Type	Qty.	Order No.
SAI-4-MMS 4P M12	1	**1783540000**
SAI-8-MMS 4P M12	1	**1783530000**
SAI-4-MMS 5P M12	1	**1783520000**
SAI-8-MMS 5P M12	1	**1783510000**
SAI-4/6/8 MH-MM BL 3.5	1	**1724754000**

With EMC cable gland

SAI-4/6/8-MM — M12

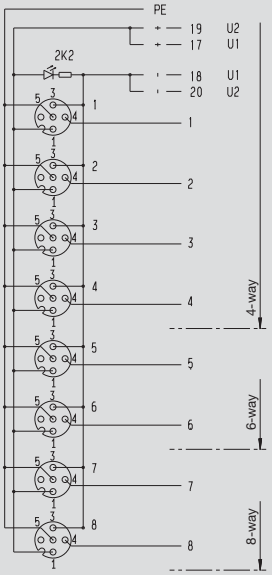
Type	Qty.	Order No.
SAI-4-MM 5P M12	1	**1783500000**
SAI-8-MM 5P M12	1	**1783490000**
SAI-8-MMH 5P M12 ZF	1	**1782740000**
SAI-8-MM 5P M12 UT	2	**1783491000**
SAI-4/6/8 MH-MM BL 3.5	1	**1724754000**

MM without initiator LED and with standard metal cable gland

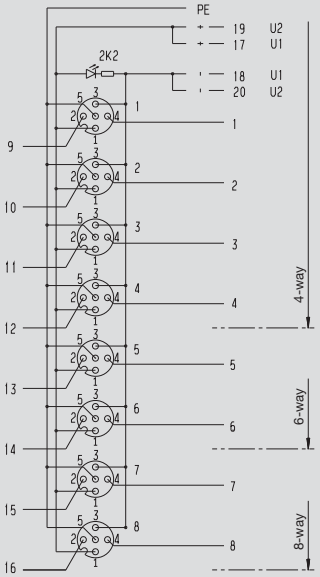
Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	3 A
Total current	10 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+90 °C
Housing main material	CuZn, nickel-plated
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	silver
Flammability class UL 94	V-0
Clamping range of hood-version	0.08...1.5 mm²
Suitable for dragline cable (fixed cable connection)	

Wiring diagram



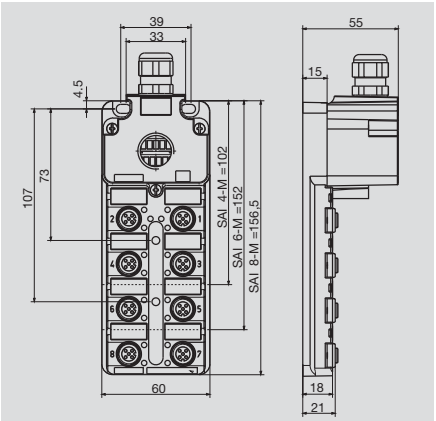
Wiring diagram



M12 metal distributors

Hood version with M20 outlet

For cables with 10-14 mm outer diameter



Ordering data

Complete modules	
	4 channel
	6 channel
	8 channel
Tension clamp connection	8 channel
Mounting hood	
	Tension clamp connection
	Screw connection
Note	

SAI-4/6/8-MH 4-pole

Type	Qty.	Order No.
SAI-4-MH-4P M12	1	**1705922000**
SAI-6-MH-4P M12	1	**1705932000**
SAI-8-MH-4P M12	1	**1705942000**
SAI-4/6/8 MH MH BLZF3,5	1	**1782750000**
SAI-4/6/8 MH-MH BL 3.5	1	**1724752000**

Other versions on request

SAI-4/6/8-MH 5-pole

Type	Qty.	Order No.
SAI-4-MH-5P M12	1	**1701232000**
SAI-6-MH-5P M12	1	**1701242000**
SAI-8-MH-5P M12	1	**1701252000**
SAI-8-MH-5P M12 ZF III	1	**1782760000**
SAI-4/6/8 MH MH BLZF3,5	1	**1782750000**
SAI-4/6/8 MH-MH BL 3.5	1	**1724752000**

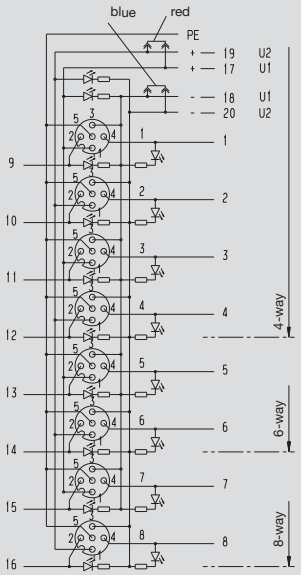
Other versions on request

Technical data

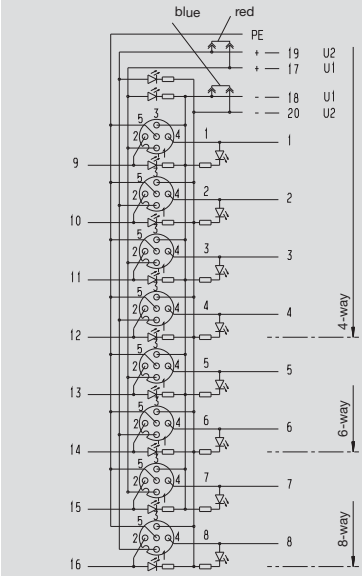
Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	3 A
Total current	10 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+90 °C
Housing main material	CuZn, nickel-plated
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	silver
Flammability class UL 94	V-0
Clamping range of hood-version	0.08...1.5 mm²
Suitable for dragline cable (fixed cable connection)	

With dual power supply: 2x8 = 16A total current
Clamping range up to 2.5 mm² with screw connection

Wiring diagram

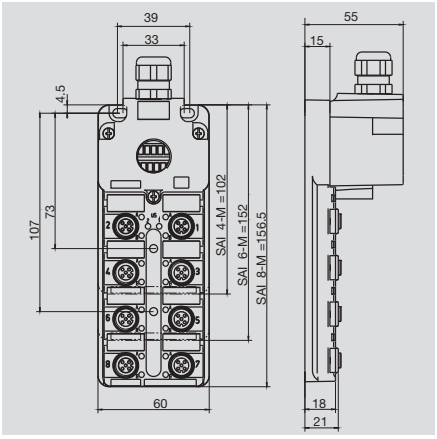


Wiring diagram



Hood version with M25 outlet

For cables with 13-18 mm outer diameter



Ordering data

Complete modules	
4 channel	
6 channel	
8 channel	
Mounting hood	
Screw connection	
Note	

SAI-4/6/8-MHD 4-pole

Type	Qty.	Order No.
SAI-4-MHD-4P M12	1	**1705923000**
SAI-6-MHD-4P M12	1	**1705933000**
SAI-8-MHD-4P M12	1	**1705943000**
SAI-4/6/8 MH-MHD BL 3.5	1	**1724753000**

Other versions on request

SAI-4/6/8-MHD 5-pole

Type	Qty.	Order No.
SAI-4-MHD-5P M12	1	**1701233000**
SAI-6-MHD-5P M12	1	**1701243000**
SAI-8-MHD-5P M12	1	**1701253000**
SAI-4/6/8 MH-MHD BL 3.5	1	**1724753000**

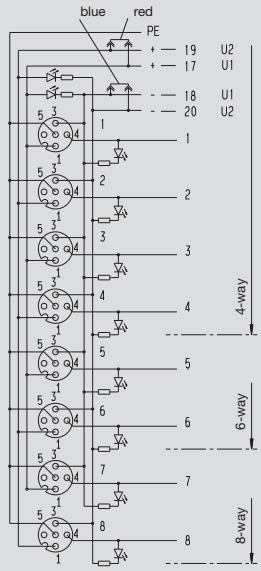
Other versions on request

Technical data

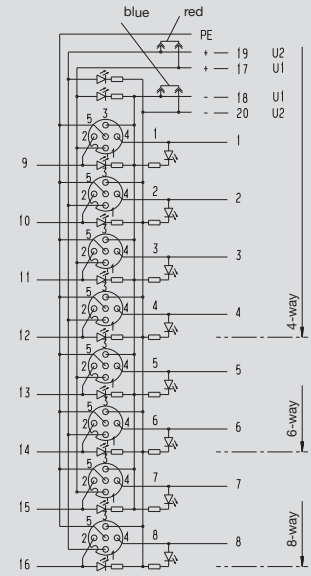
Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	3 A
Total current	10 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+90 °C
Housing main material	CuZn, nickel-plated
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	silver
Flammability class UL 94	V-0
Clamping range of hood-version	0.08...1.5 mm²
Suitable for dragline cable (fixed cable connection)	

With dual power supply: 2x8 = 16A total current
Clamping range up to 2.5 mm² with screw connection

Wiring diagram



Wiring diagram



For switching with five no-voltage contacts in an M12 without LED

with hood

base element

metal

Emergency stop wiring

Sometimes a machine builder will need more than two floating contacts in one M12 plug-in connector. This is the case, for example, in the wiring for some “emergency stop” circuits. It was for this application that Weidmüller developed the 1:1 SAI distributor.

This SAI distributor has four M12 plug-in connectors with five floating contacts in one socket connector. The distributor is supplied complete with hood.

When connecting PT100 3- and 4-conductor initiators, we recommend the new shielded metal version. If you need other circuit configurations, simply contact us.

Note: This distributor should not be used as base module for active bus distributors.

Wiring diagram

Socket	Contact	BL 3.5 contact
1	1	1
1	2	2
1	3	3
1	4	4
1	5	5
2	1	6
2	2	7
2	3	8
2	4	9
2	5	10
3	1	11
3	2	12
3	3	13
3	4	14
3	5	15
4	1	16
4	2	17
4	3	18
4	4	19
4	5	20
–	–	21

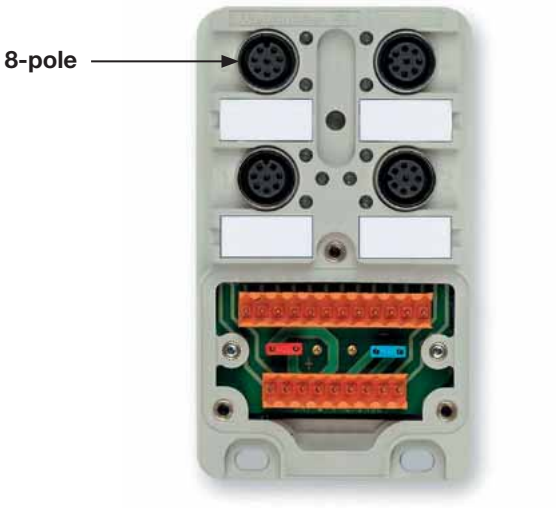
Technical data

Current per channel	2A
Total current	8A
LEDs	No LEDs are integrated at any point.

Ordering data

Type	Qty.	Order No.
SAI-4-M 5P M12 1:1 (plastic hood)	1	1806010000
Base element (plastic)	1	1806011000
SAI-4-MMS 5P M12 1:1 (Metal hood)	1	1897680000

SAI distributor with 8 poles per M12



Applications

This distributor can be used both as a base module for satellite solutions (SAI-Combi) and for connecting sensors/units with more than two contacts.

SAI-Combi

A sub-distribution board can be connected to every M12 with the help of the SAI-4-M 8P in conjunction with the SAI Active bus hood. This SAI should then be a 4-channel distributor with one channel per socket. The SAI-4-M 4P M12 is particularly suitable.
Part No. **1705920000.**

Sensors, units with more than two signals in one line

As one socket in this module contains four signal paths and, in addition, two +, two – and one PE, components with more than two signal lines can be connected to this module. Eight-pole connecting cables are available on request.

Wiring

M12 socket	M12 contact	BL 3.5 connection	PLC input	Supply
1	1	1	E0.0	
1	2	3	E0.1	
1	3	5	E0.2	
1	4	7	E0.3	
2	1	2	E0.4	
2	2	4	E0.5	
2	3	6	E0.6	
2	4	8	E0.7	
3	1	9	E1.0	
3	2	11	E1.1	
3	3	13	E1.2	
3	4	15	E1.3	
4	1	10	E1.4	
4	2	12	E1.5	
4	3	14	E1.6	
4	4	16	E1.7	
1/3	5	17		24 V
2/4	5	19		24 V
1/3	6/7	18		0 V
2/4	6/7	20		0 V
1/2/3/4	8	PE		PE

The jumpers in the distributor enable the potentials of 17 and 19 or 18 and 20 to be bridged Contacts 6 and 7 are bridged in the 8-pole M12 in order to increase the current-carrying capacity. total current per M12: 2 A, signal current per pin: 1 A

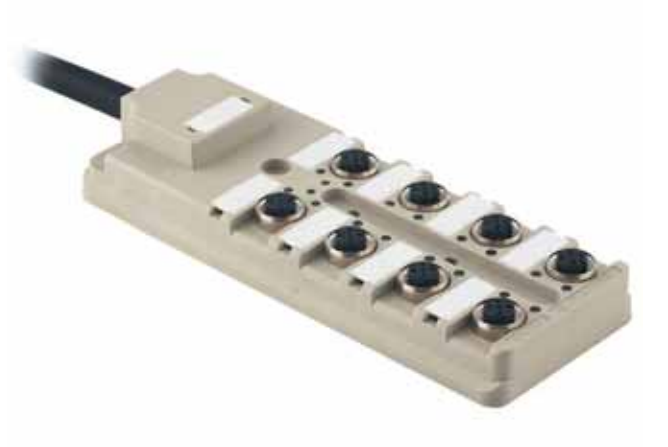
Ordering data

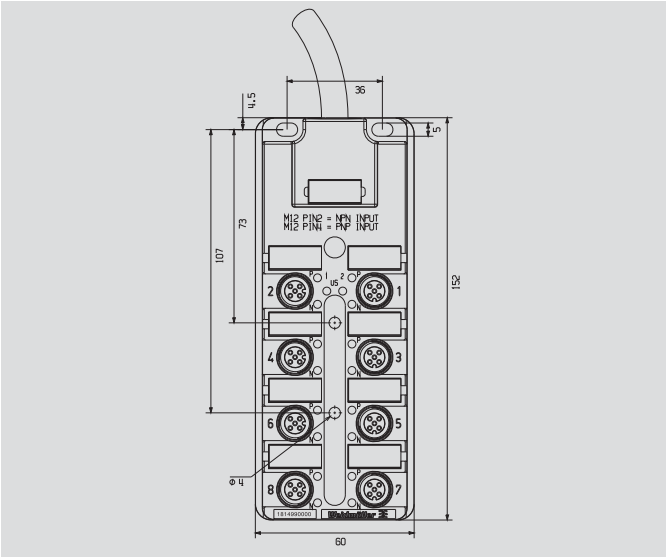
Type	Qty.	Order No.
Complete module: SAI-4-M 8P M12	1	**1807640000**
Base separate: SAI-4-M M12 UT	1	**1807641000**
Matching hood passive: SAI-4/6/8-MH-BL3.5	1	**1724750000**

Technical information: The distributor does not include any signalling LEDs. Supply LEDs and electrical isolation are provided.

Fixed cable version

Fixed cable version





This distributor includes the option of attaching either a PNP sensor or an NPN sensor with 2 or 3 conductor connection to an M12 socket.

Eight inputs are available in total. In the case of a switched sensor, a + signal on the corresponding wire is connected through and the appropriate LED is illuminated.

The upper LED “N” is illuminated for NPN sensors and the lower LED “P” for PNP sensors. Do not connect a T-piece to the M12 socket.

The existing M12 plug-in connectors are wired in such a manner that the PNP sensor can be connected to pin 4 and the NPN sensor to pin 2.

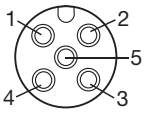
The distributor has eight channels and 5 m of cable. Other versions are also available.

Pin assignment

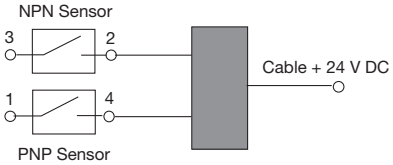
M12 socket	Pin	Function	Pin	Function	Output	Wire colour	Wire size
1	4	PNP	2	NPN	1	white	0.34 mm²
2	4	PNP	2	NPN	2	green	0.34 mm²
3	4	PNP	2	NPN	3	yellow	0.34 mm²
4	4	PNP	2	NPN	4	grey	0.34 mm²
5	4	PNP	2	NPN	5	pink	0.34 mm²
6	4	PNP	2	NPN	6	red	0.34 mm²
7	4	PNP	2	NPN	7	black	0.34 mm²
8	4	PNP	2	NPN	8	violet	0.34 mm²
all	1	24 V DC				brown	0.75 mm²
all	3	0 V DC				blue	0.75 mm²
all	5	PE				green/yellow	0.75 mm²

M12 sockets

Pin 1 = +24 V DC
Pin 2 = NPN input
Pin 3 = 0 V DC
Pin 4 = PNP input
Pin 5 = PE



Wiring diagram (schematic)



Technical data

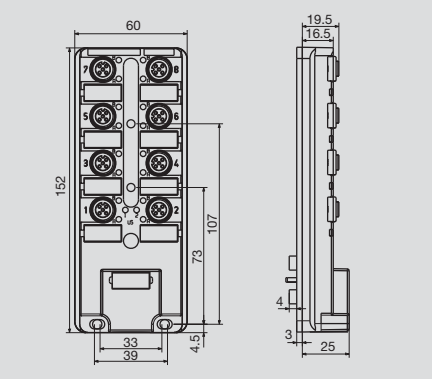
Operating voltage	24 V DC ±20 %
Operation temperature	0...80 °C
Storage temperature	–25...80 °C
Ingress protection class	IP68
PUR cable	5 m
Max. no-load current for 2-wire NPN sensors	2 mA DC

Ordering data

Type	Qty.	Order No.
SAI-8-F 5P NPN-PNP 5M	1	1814990000

Wall bushing

SAI-8-B 5P M12 SL



Ordering data

SAI-8-B 5P M12 SL	5-pole

Type	Qty.	Order No.
SAI-8-B 5P M12 SL	1	1847560000

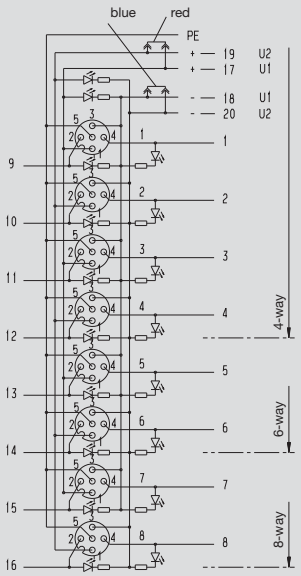
Note

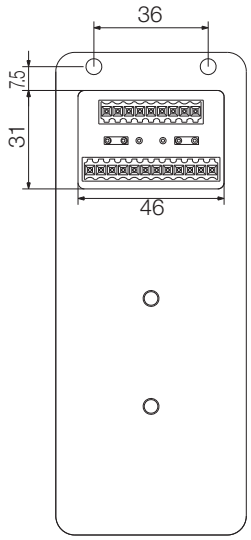
BL 3.5 connector included in delivery

Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	3 A
Total current	10 A
Pollution severity	3
Protection class	IP 65
Ambient temperature range	-20...+90 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	0.08...1.5 mm²
Suitable for dragline cable (fixed cable connection)	

Wiring diagram





Overview

Distributors for system cabling

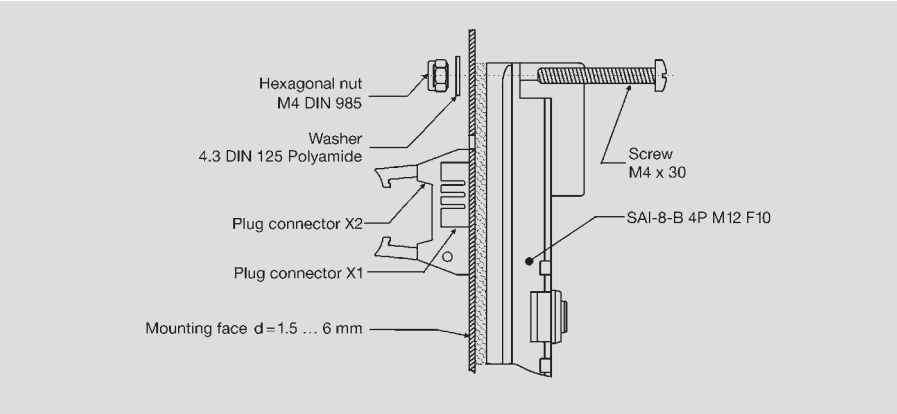
On site distribution is becoming more important. For example, in some places the IP 20 I/O module has to be mounted in housings directly on the machine. This is where a simplified form of wiring is essential.

Weidmüller now offers two simple solutions

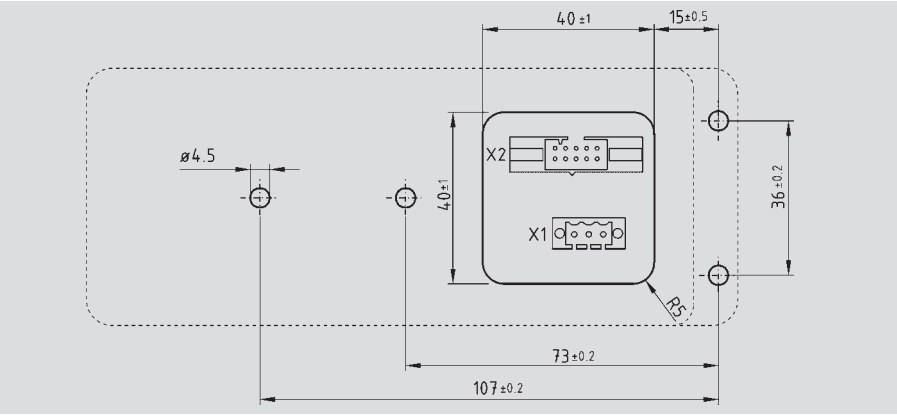
- A distributor equipped at the rear with a standardised ribbon cable connector, which is compatible with the Weidmüller PLC system interface.
- Weidmüller also offers a unique solution for feeding bus cables through panels that can be plugged in from both sides.

Advantages

- Sensors and actuators can be plugged in from outside
- Through-panel version can be mounted in cut outs in steel panels
- Standardised ribbon cable connector inside
- Plus: M12 through-panel feed that can be plugged in from both sides



Drilling template



Advantages of system cabling

Fast

- Time saving installation
- Reduces commissioning and trouble-shooting times
- On site wiring cuts wiring costs

Safe

- Reduces installation errors
- Using system cables instead of individual wires improves clarity in control cabinets
- Direct marking corresponding to the PLC

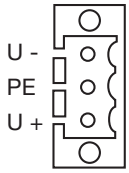
Variability

- Additional I/O modules available
- Cable length options
- Easy replacement of I/O interfaces provides flexibility

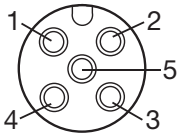
Contact assignment Male connector X1

M12 socket		Male connector X1
1 ... 8	Pin 1	U +
1 ... 8	Pin 3	U –
1 ... 8	Pin 5	PE

Male connector X1



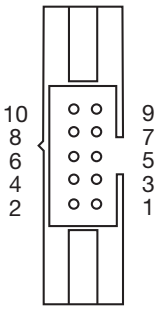
M12 socket



Contact assignment Male connector X2

M12 socket		Male connector X2
1	Pin 4	1
2	Pin 4	2
3	Pin 4	3
4	Pin 4	4
5	Pin 4	5
6	Pin 4	6
7	Pin 4	7
8	Pin 4	8
1 – 8	Pin 1	9
1 – 8	Pin 3	10

Male connector X2



Note:

You will find further products for Interface units and PLC solutions in the Electronic catalogue 4.5.

Technical data

Operating voltage	10 – 30 V (DC)
Outputs	max. 1 A per channel / max. 8 A in total
Inputs	max. 1 A in total
Mounting conditions	
Mounting surface	sheet steel, flat, min. 1.5 mm thick, or panels with at least equivalent stability, max. 6 mm thick
Surface temperature	max. 40 °C
Ingress protection class	IP67/IP68 only in conjunction with control cabinets with equivalent class of protection
Fixings	4 screws + washers + nuts / torque: 0.8 Nm
Note:	Connect the male connector 3.5 (X1) when using actuators

Ordering data

	Type	Qty.	Order No.
Distributor	SAI-8-B 4P M12 F10	1	**1812170000**
Male connector X1	BL 3.50/07/180 SN DKGN BX	50	**1606550000**

Pre-assembled hood version

In some instances it is helpful to order the hoods pre-assembled.

SAI distributor with pre-assembled hood
Colour-coded cable

Ordering data — 4-pole

Type	Length	Order No.
8-channel		
SAI-8-MF 4P PUR 5M	5 m	**1799960000**
SAI-8-MF 4P PUR 10M	10 m	**1789190000**

Ordering data — 5-pole

Type	Length	Order No.
4-channel		
SAI-4-MF 5P PUR 5M	5 m	**1804600000**
SAI-4-MF 5P PUR 10M	10 m	**1804580000**
8-channel		
SAI-8-MF 5P PUR 5M	5 m	**1804590000**
SAI-8-MF 5P PUR 10M	10 m	**9457430000**
8-channel, without initiator LED		
SAI-8-MF 5P PUR 5M OL	5 m	**9457350000**

Pre-assembled hood
Colour-coded cable

Ordering data — 4-pole

Type	Length	Order No.
SAI-4/6/8-MHF 4P PUR 4M	4 m	**1791450400**
SAI-4/6/8-MHF 4P PUR 6M	6 m	**1791450600**
SAI-4/6/8-MHF 4P PUR 9M	9 m	**1791450900**
SAI-4/6/8-MHF 4P PUR14M	14 m	**1791451400**
SAI-4/6/8-MHF 4P PUR20M	20 m	**1791452000**
SAI-4/6/8-MHF 4P PUR28M	28 m	**1791452800**
SAI-4/6/8-MHF 4P PUR34M	34 m	**1791453400**

Matching base module

Type	Qty.	Order No.
SAI-4-M-4PM12UT	1	**1705921000**
SAI-6-M-4PM12UT	1	**1705931000**
SAI-8-M-4PM12UT	1	**1705941000**

Pre-assembled hood

Ordering data — 5-pole

Type	Length	Order No.
SAI-4/6/8-MHF 5P PUR 4M	4 m	**1791460400**
SAI-4/6/8-MHF 5P PUR 6M	6 m	**1791460600**
SAI-4/6/8-MHF 5P PUR 9M	9 m	**1791460900**
SAI-4/6/8-MHF 5P PUR14M	14 m	**1791461400**
SAI-4/6/8-MHF 5P PUR16M	16 m	**1791461600**
SAI-4/6/8-MHF 5P PUR20M	20 m	**1791462000**
SAI-4/6/8-MHF 5P PUR28M	28 m	**1791462800**
SAI-4/6/8-MHF 5P PUR34M	34 m	**1791463400**
SAI-4/6/8-MHF 5P PUR40M	40 m	**1791464000**
SAI-4/6/8-MHF 5P PUR50M	50 m	**1791465000**
SAI-4/6/8-MHF 5P PUR55M	55 m	**1791465500**

Matching base module

Type	Qty.	Order No.
SAI-4-M-5PM12UT	1	**1701231000**
SAI-6-M-5PM12UT	1	**1701241000**
SAI-8-M-5PM12UT	1	**1701251000**

SAI M8

Weidmüller offers two different series for the M8 range. Both of these series offer key advantages: while one is optimised for size, the other has a patented shape and protected design that make it easy to handle. The SAI M8 product line is available with up to 12 plug in slots (as a fixed-cable version) and with up to 10 plug-in slots (as a pluggable version). The housings can be screwed on from the side or from the top which makes them more versatile. They are durable and well-sealed with a sturdy, fully encapsulated construction. These single row distributors are easy to handle; their compact shape makes them one of the smallest product solutions available on the market. The hooded distributor is a favourite from the line or ergonomic distributors (also knick named the hedgehog distributor). The cable outlet is customisable and can exit from the top or from the back. These distributors are of course also fully encapsulated.

Easily accessible

The side-mounted M8 connector ensures very convenient handling

Directly on the PCB

Custom versions are also available.
This is the PCB connection module.

Space-saving

The line version has a very small size.

Overview

Fixed cable version

Hood version

M23 version

Compact dimensions, readily accessible M8 connections, eye-catching design

The unconventional design of this generation of SAI M8 distributors catches the eye immediately. Their shape is helpful because in this patented design the sockets are no longer arranged in simple rows. Instead, some are on 45° bevelled surfaces. That considerably improves the accessibility of the screw connections for the sensor and actuator cables. Ease of use, compact dimensions and the eye catching design are the obvious advantages of this M8 generation.

The following variations are available:

- SAI M8 distributor with removable connection hood; the bus cable can be connected either vertically or horizontally
- SAI M8 distributor with permanently attached, pre-assembled bus cable, 5 or 10 m long; this version is particularly slim and is therefore ideal for mounting in confined spaces
- SAI M8 distributor with metal plated M23 thread

SAI-M8-Line

M8 distributor with M12 outlet

M8 distributor line / fixed-cable version

M8 distributor with solder pins

n

Extra-narrow M8 distributor for confined spaces

Single-row M8 distributors are the smallest sensor-actuator modules currently available with this thread size and it is precisely their size that is decisive for applications. Therefore, this form has become very popular. It is important to maintain the widest possible range of options. The SAI-M8-Line products can provide many interesting solutions:

- 4 and 6 channel modules with 8 pole M12 bus connection
- 8 and 10 channel modules with 12 pole bus connection
- 4, 10 and 12 channel distributors with fixed cable connection, the 4 and 8 channel modules also with 4 poles

It is important to note that the distributors can be labelled with the same markers as the Weidmüller 5 mm modular terminals. Therefore, no new tags had to be introduced. The modules can also be mounted sideways and are completely encapsulated.

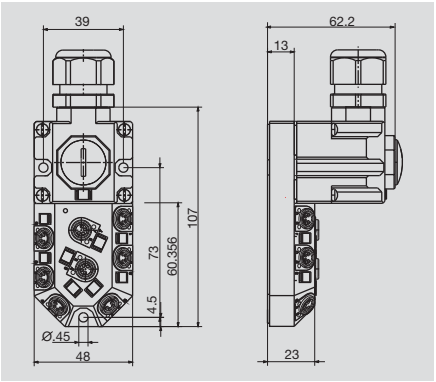
Consequently, Weidmüller SAI distributors represent stability, robustness, flexibility and compactness in one unit.

PCB version of a complete SAI distributor

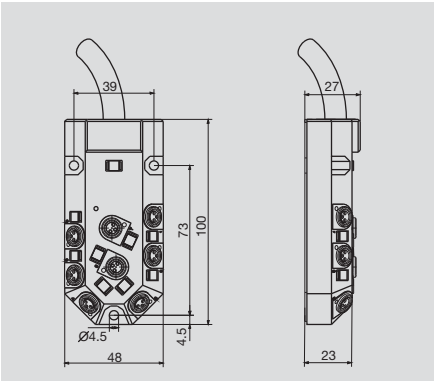
During the design of PCBs, it is often necessary to plug in different external data lines. There are a variety of connectors available for this purpose. For machine construction, the M8 and M12 connectors have become established as the standard solutions for sensor and actuator wiring. When attempting to mount these PCB-type connectors to the PCB, there is a significant risk that they will not be firmly attached to the board. Now, the SL version of the SAI distributor series solves this problem. The distributor can be completely mounted onto a PCB. It features soldering pins for the electrical connection to the PCB. The distributor itself should be slightly raised up during assembly by means of washers. This provides some clearance under the box. Naturally, the power supply channels are bridged in the distributor. This saves space on the PCB since there is no need for holes on any assembly surface. Thus the reverse side can be used for other purposes.

Hooded/fixed cable version

SAI-4/8-M



SAI-4/8-F



Ordering data

SAI-4/8-M

		M8
Type	**Qty.**	**Order No.**
SAI-4-M 3P M8	1	**1784680000**
SAI-8-M 3P M8	1	**1784670000**
SAI-4-M 4P M8	1	**1784700000**
SAI-8-M 4P M8	1	**1784690000**

Other versions on request

SAI-4/8-F

		M8
Type	**Qty.**	**Order No.**
SAI-4-F 3P M8 PUR 5M	1	**1784640000**
SAI-8-F 3P M8 PUR 5M	1	**1784620000**
SAI-4-F 3P M8 PUR 10M	1	**1784630000**
SAI-8-F 3P M8 PUR 10M	1	**1784610000**
SAI-4-F 4P M8 PUR 5M	1	**1784600000**
SAI-8-F 4P M8 PUR 5M	1	**1784580000**
SAI-4-F 4P M8 PUR 10M	1	**1784590000**
SAI-8-F 4P M8 PUR 10M	1	**1784570000**

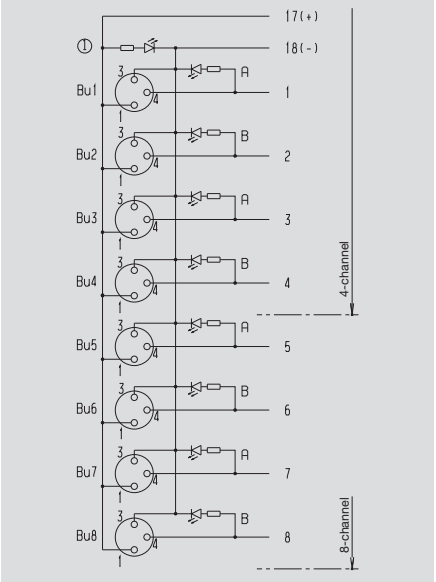
Other versions on request

3-pole	
Cable length 5 m (with fixed cable version)	4 channel
	8 channel
Cable length 10 m (with fixed cable version)	4 channel
	8 channel
4-pole	
Cable length 5 m (with fixed cable version)	4 channel
	8 channel
Cable length 10 m (with fixed cable version)	4 channel
	8 channel
Note	

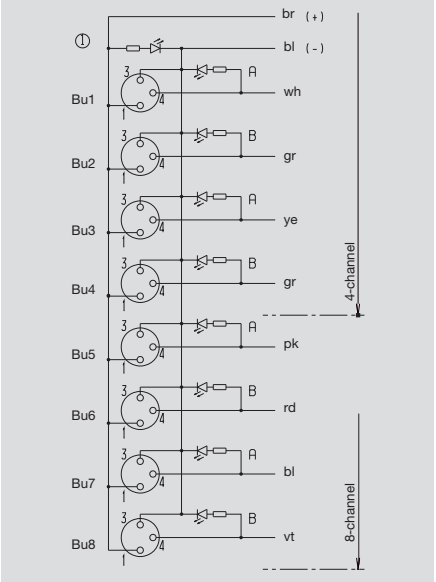
Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	2 A
Total current	8 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+80 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	0.08...1 mm²
Suitable for dragline cable (fixed cable connection)	Yes

Wiring diagram

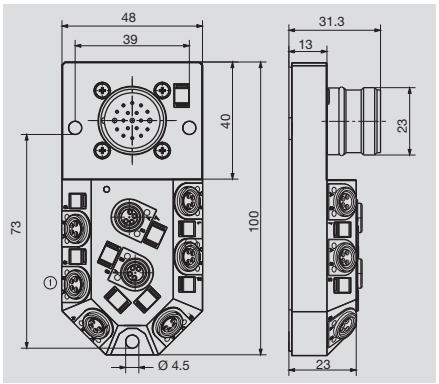


Wiring diagram

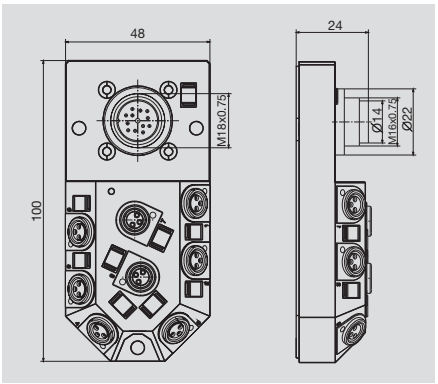


With M23/ M16 outlet

SAI-4/8-M23



SAI-8-M16



Ordering data

3-pole	
8 channel	
4-pole	
4 channel	
8 channel	
Note	

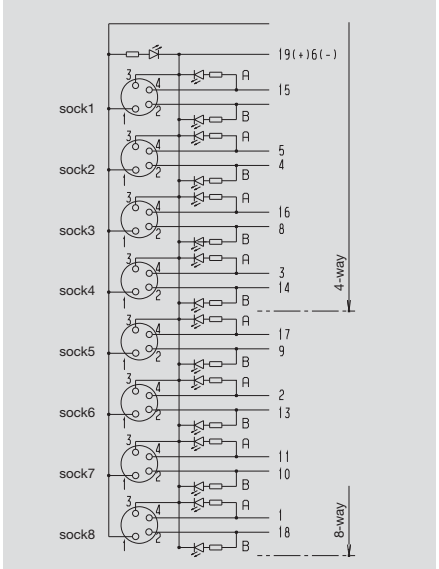
SAI-4/8-M23		M23
Type	**Qty.**	**Order No.**
SAI-4-M23 4P M8	1	**1784660000**
SAI-8-M23 4P M8	1	**1784650000**
Other versions on request		

SAI-8-M16		M16
Type	**Qty.**	**Order No.**
SAI-8-M16 3P M8	1	**1795900000**
Other versions on request		

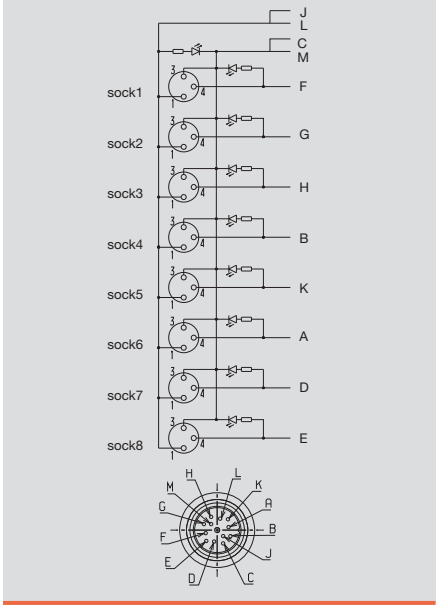
Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	2 A
Total current	8 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+90 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	

Wiring diagram



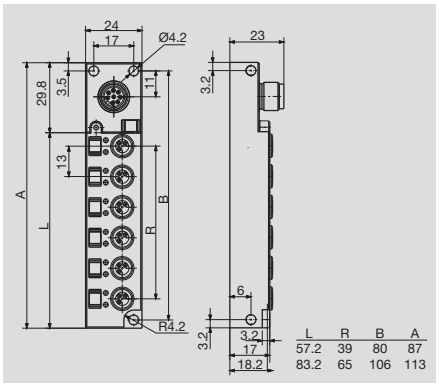
Wiring diagram



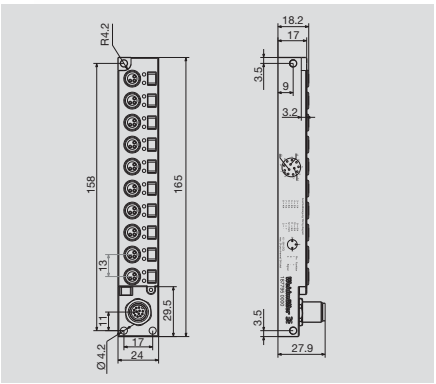
M8 distributors

Line

SAI-4/6-S



SAI-5/8-S



Ordering data

SAI-4/6-S — M12

Type	Qty.	Order No.
3-pole		
SAI-4-S 3P M8 L	1	**1828740000**
SAI-6-S 3P M8 L	1	**1828730000**
4 channel		
6 channel		
8 channel		
10 channel		
3-pole without LED		
SAI-4-S 3P M8 L OL	1	**1051760000**
SAI-6-S 3P M8 L OL	1	**1932380000**
4 channel		
6 channel		
Note		
Other versions on request		

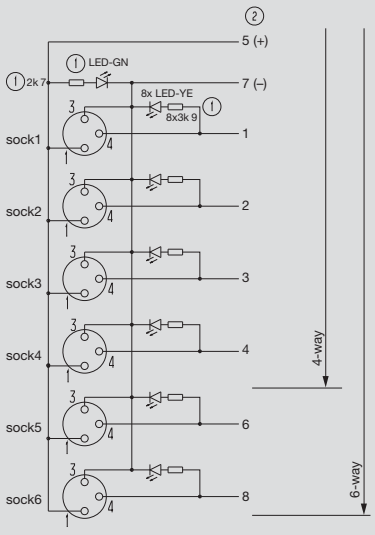
SAI-5/8-S — M12

Type	Qty.	Order No.
SAI-8-S12 3P M8 L	1	**1871680000**
SAI-10-S12 3P M8 L	1	**1877950000**

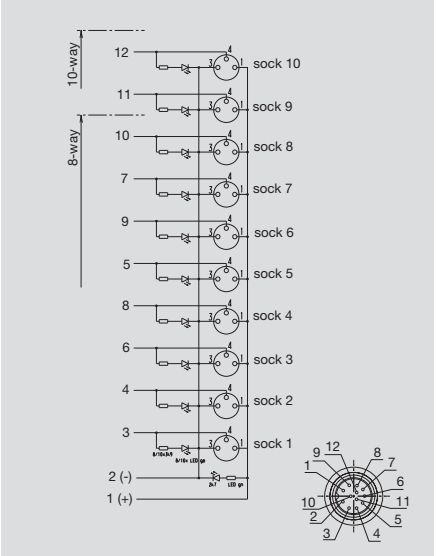
Technical data

Operating voltage	10...30 V
Current of continuous busbars	1 A
max. current-carrying capacity per slot	2 A
Total current	6 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-25...+80 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	Yes

Wiring diagram

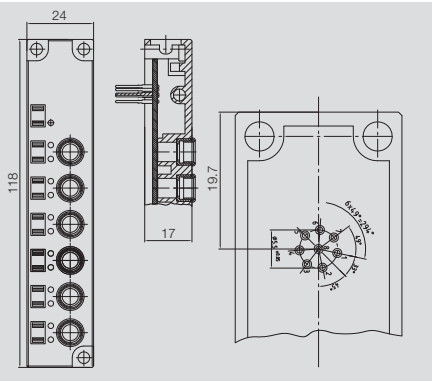


Wiring diagram



Line
PCB version

SAI-6-S M8 L SL



Ordering data

3-pole	
	6 channel
Note	

SAI-6-S M8 L SL — 3-pole

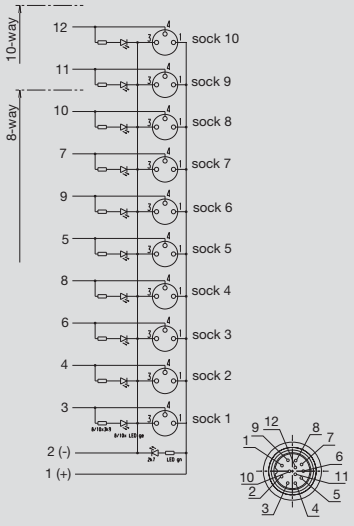
Type	Qty.	Order No.
SAI-6-S 3P M8 L SL	1	**1057720000**

Other versions on request

Technical data

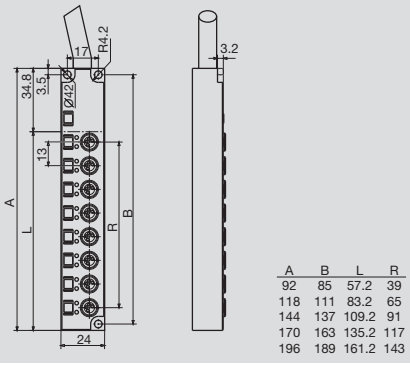
Operating voltage	10...30 V
Current of continuous busbars	1 A
max. current-carrying capacity per slot	2 A
Total current	6 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-25...+80 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	Yes

Wiring diagram



M8 distributors

Line / Fixed cable version



A	B	L	R
92	85	57.2	39
118	111	83.2	65
144	137	109.2	91
170	163	135.2	117
196	189	161.2	143

Ordering data

SAI-4/6/8/10/12-L — 3-pole

Type	Qty.	Order No.
Cable length 5 m (with fixed cable version)		
4 channel		
SAI-4-F 3P M8 L 5M	1	**1828720000**
6 channel		
SAI-6-F 3P M8 L 5M	1	**1828700000**
8 channel		
SAI-8-F 3P M8 L 5M	1	**1828680000**
10 channel		
SAI-10-F 3P M8 L 5M	1	**1828660000**
12 channel		
SAI-12-F 3P M8 L 5M	1	**1828640000**
Cable length 10 m (with fixed cable version)		
4 channel		
SAI-4-F 3P M8 L 10M	1	**1828710000**
6 channel		
SAI-6-F 3P M8 L 10M	1	**1828690000**
8 channel		
SAI-8-F 3P M8 L 10M	1	**1828670000**
10 channel		
SAI-10-F 3P M8 L 10M	1	**1828650000**
12 channel		
SAI-12-F 3P M8 L 10M	1	**1828630000**
Note		

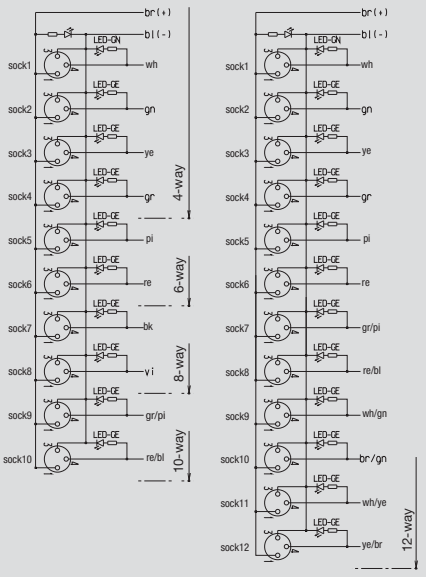
SAI-4/6/8/10/12-L — 4-pole

Type	Qty.	Order No.
SAI-4-F 4P M8 L 5M	1	**1849680000**
SAI-6-F 4P M8 L 5M	1	**1849700000**
SAI-8-F 4P M8 L 5M	1	**1828620000**
SAI-4-F 4P M8 L 10M	1	**1849690000**
SAI-6-F 4P M8 L 10M	1	**1849670000**
SAI-8-F 4P M8 L 10M	1	**1828610000**

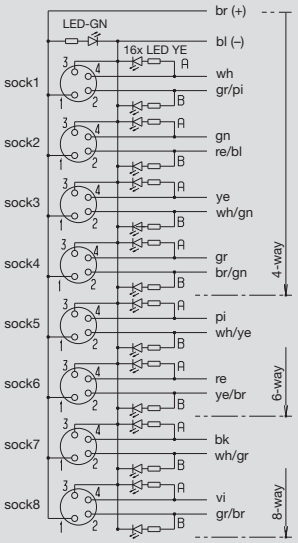
Technical data

Operating voltage	10...30 V
Current of continuous busbars	1 A
max. current-carrying capacity per slot	2 A
Total current	6 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-25...+80 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	Yes

Wiring diagram



Wiring diagram



Overview

M5-Line with M12 outlet

Fixed cable version

M5-Line with M16 outlet

The Weidmüller SAI-M5 distributors are currently the smallest SAI distributors in the world

Whether mobile phones or computers as the functionality increases so the size of the components decreases! Today, machine designers face the same problem. Space is at a premium here as well, even in large machines, particularly where the sensor components are located. In the past the M8 distributor solved these problems. However, these units are now considered to be too large. The first move was to make the sensors smaller. Then it was the turn of the cables and distributors.

These extremely small units are surprisingly easy to handle. M5 plug in connectors have three or four poles and are thus equivalent to M8 plug-in connectors.

But in contrast to the M8 plug in connectors, the different pole numbers here are compatible with each other. The advantage is obvious: 4 pole units which are required, for example, for antivalent sensors can now be plugged into one and the same distributor with standard NOC applications. In the M8 system special adapters are required. Besides their actual size, in some applications module weight is critical too.
For example, the speed of a handling machine is influenced by the weight of the moving parts. Here again, the M5 system offers outstanding advantages, with its almost unrivalled small size and light weight.

There is no version for custom bus cable assembly for this SAI distributor, which is delivered with a plug in connection and a fixed cable connection. A compact 12 pole M12 plug in connector has been developed as a plug in connection specifically for this distributor.

This ratio of surface area to number of connections is reminiscent of the computer industry. The M16 bus connection is also integrated in the module as an option, so the SAI M5 can be used as a combined SAI system as well. A Y-configuration is possible in conjunction with the M16 splitter.

The fixed cable version is particularly suitable for standard applications where the distributor is permanently installed and the electrical installation does not have to be disconnected after installation. The bus cable is reduced in cross section to save weight here too.

M5 distributors

Comparing the sizes

M12 M8 M5

M12 M8 M5

Quality comes in little packages…

This is the motto with which Weidmüller developed its distributor with M5 plug in connectors. The outstanding feature of these connectors is their size. Attention has also been given to stability and good conductivity.

For a comparison of sizes, take a look at the photos on the left.

These products are ideal for handling machines where light weight and small size are vital.

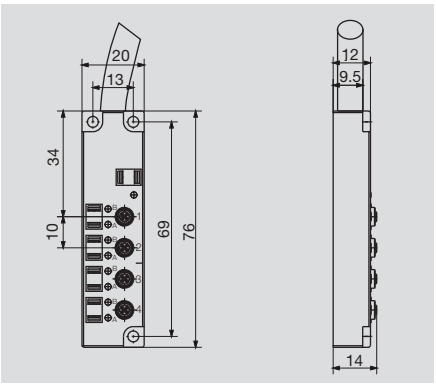
Marking

Each channel is marked with the channel number. Each initiator LED can be exactly allocated with the letters A and B. In addition, the distributor and every channel can be marked.

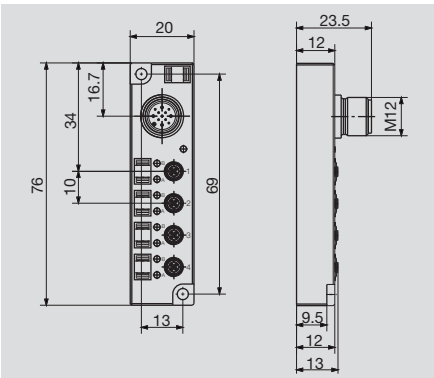
M5 distributors

Line

SAI-4/8-F



SAI-4/8-S



Ordering data

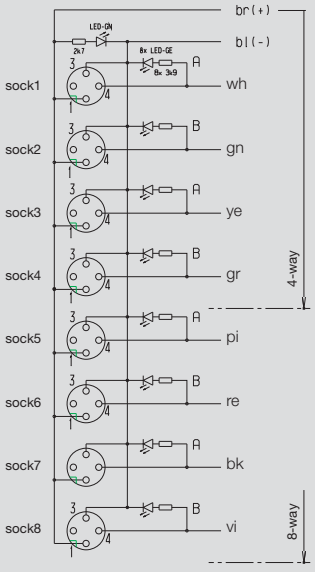
SAI-4/8-F		M5
Type	**Qty.**	**Order No.**
3-pole		
SAI-4-F 3P M5 L5M	1	**1851740000**
SAI-8-F 3P M5 L5M	1	**1851760000**
SAI-4-F 3P M5 L10M	1	**1845820000**
SAI-8-F 3P M5 L10M	1	**1845830000**
4-pole		
SAI-4-F 4P M5 L5M	1	**1851770000**
SAI-8-F 4P M5 L5M	1	**1851750000**
SAI-4-F 4P M5 L10M	1	**1845800000**
SAI-8-F 4P M5 L10M	1	**1845810000**
Other versions on request		

SAI-4/8-S		M5
Type	**Qty.**	**Order No.**
SAI-8-S 3P M5	1	**1845850000**
SAI-4-S 4P M5	1	**1845840000**
Other versions on request		

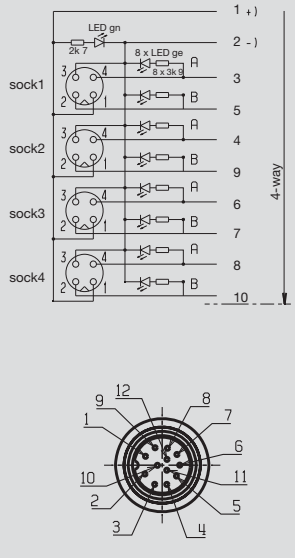
Technical data

Operating voltage	10...30 V
Current of continuous busbars	1 A
max. current-carrying capacity per slot	3 A
Total current	3 A
Pollution severity	3
Protection class	IP 67
Ambient temperature range	-25...+80 °C
Housing main material	PA 6 GF
Contact carrier material	CuZn, nickel-plated
Base material of contacts	Au (Gold)
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	Yes

Wiring diagram

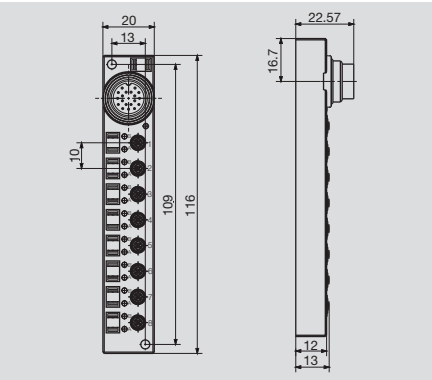


Wiring diagram



Line

SAI-4/8-S16



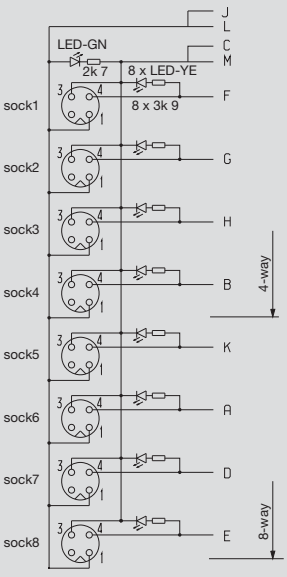
Ordering data

SAI-4/8-S16		M5
Type	**Qty.**	**Order No.**
3-pole		
4 channel		
SAI-4-S16 3P M5	1	**1845890000**
8 channel		
SAI-8-S16 3P M5	1	**1845880000**
4-pole		
4 channel		
SAI-4-S16 4P M5	1	**1845870000**
8 channel		
SAI-8-S16/19P 4P M5	1	**1845860000**
Note		
1845870000,1845880000 and 1845890000 with M16 / 12-pole 1845860000 with M16 / 19-pole		

Technical data

Operating voltage	10...30 V
Current of continuous busbars	1 A
max. current-carrying capacity per slot	3 A
Total current	3 A
Pollution severity	3
Protection class	IP 67
Ambient temperature range	-25...+80 °C
Housing main material	PA 6 GF
Contact carrier material	CuZn, nickel-plated
Base material of contacts	Au (Gold)
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	

Wiring diagram



SAI Ex i distributor for Ex i zone 1

Hooded version with 4 plug-in slots

Hooded version with 8 plug-in slots

SAI distributor for Ex i zone 1

Available for the first time: passive SAI distributors with M12 connection technology in IP 68 ingress protection classification for Ex i hazardous area applications.

SAI Ex i distributor certified for zone 1 of potentially explosive areas, even for G and D zones.

The SAI Ex i distributors are available with four or eight connections for simple connection of NAMUR sensors. Distribution boxes with costly certification are thus a thing of the past. These modules are suitable for process engineering, but also for “standard” machine applications. The versions are available with or without yellow LEDs.

The distributors are provided with a removable connection hood. This detail also helps to reduce costs because only the defective bus cable needs to be replaced and not the entire distributor.

SAI Ex i distributor for Ex i zone 22

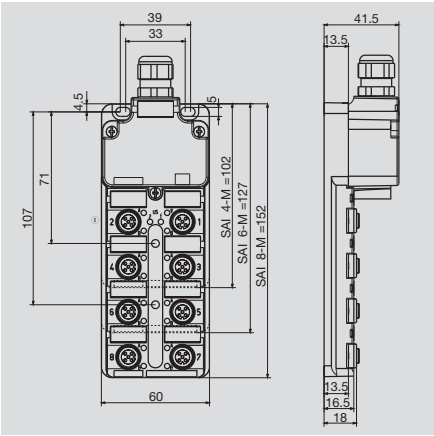
World first: SAI distributor for Ex i zone 22

In some areas of machine design only Ex i certified devices are permitted.

The wiring of these modules corresponds to that of standard SAI distributors. However, these components were specially developed, manufactured, checked and certified for zone 22 modules. All zone 22 modules are therefore provided with suitable printing.

Hood version

Zone 1



Ordering data

Complete modules	
	4 channel
	6 channel
	8 channel
Without initiator LED	4 channel
Without initiator LED	8 channel
Note	

SAI-4/8-M Ex i — 4-pole

Type	Qty.	Order No.
SAI-4-M 4P Exi Z1 IL	1	**1868360000**
SAI-8-M 4P Exi Z1 IL	1	**1868370000**
SAI-4-M 4P Exi Z1 OL	1	**1868350000**
SAI-8-M 4P Exi Z1 OL	1	**1894380000**

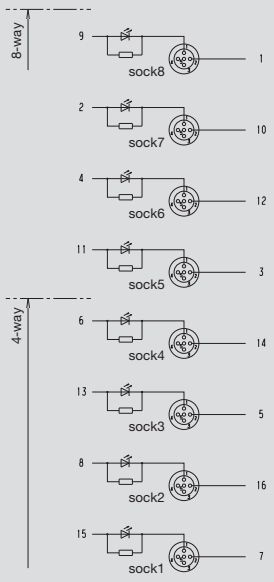
SAI-4/8-M Ex ia — 5-pole

Type	Qty.	Order No.
SAI-4-M 5P M12 Ex ia	1	**1896050000**
SAI-6-M 5P M12 Ex ia	1	**1896070000**
SAI-8-M 5P M12 Ex ia	1	**1896090000**

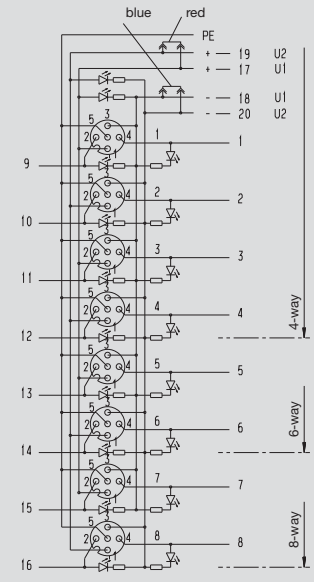
Technical data

Operating voltage	10...30 V
Current of continuous busbars	100 mA
max. current-carrying capacity per slot	100 mA
Total current	2.3 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+40 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	0.1...1.5 mm²
Suitable for dragline cable (fixed cable connection)	

Wiring diagram



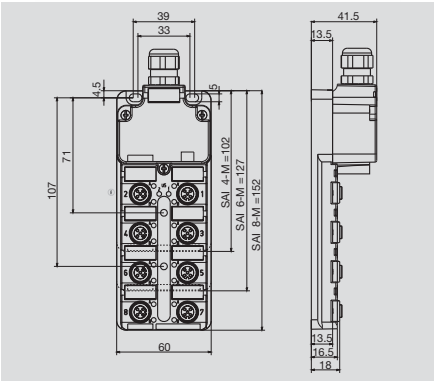
Wiring diagram



M12 Ex i distributors

Ex i distributor for the Ex i zone 22

SAI-4/6/8-M



Ordering data

Complete modules	
4 channel	
6 channel	
8 channel	
Note	

SAI-4/6/8-M — 5-pole

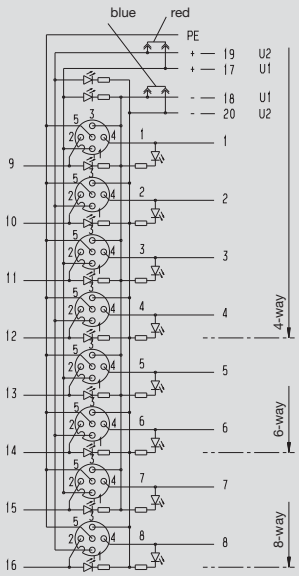
Type	Qty.	Order No.
SAI-4-M 5P Ex Z22	1	**1861850000**
SAI-6-M 5P Ex Z22	1	**1861840000**
SAI-8-M 5P Ex Z22	1	**1861530000**

Technical data

Operating voltage	10...30 V
Current of continuous busbars	100 mA
max. current-carrying capacity per slot	100 mA
Total current	2.3 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+80 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	0.1...1.5 mm²
Suitable for dragline cable (fixed cable connection)	

A higher current is allowed when using a lower voltage. A total capacity of 3W per plug-in station should not be exceeded.

Wiring diagram



M23 Connectors and cables

M23 Connectors and cables

SAI M23

A comprehensive product line of connectors, distributors and cables

M23 connectors are mainly used for connecting electrical drives and servo-motors into industrial automation applications. The M23 connectors are very easy to handle and operate. In addition to the injection-moulded variants and the SAI distributors with M23 connectors, Weidmüller is now offering customisable versions and built in plugs.

The M23 built in connector

The M23 built in connector provides a custom fit solution for building directly into the device.

M23 connectors for crimping

M23 connectors are easy to handle and operate. This is supported by the type of crimping that is used.

Robust metal housing

The M23 connectors feature an extra robust design.

Solutions for power and signals

The extensive product line includes the key housing shapes, such as angled connectors, coupling connectors and device connectors.

H

M23 connector for signal transmission

Housings

M23 connector for signal transmission

Built in connector

M23 connector for power transmission

Housings

M23 connector for power transmission

Built-in connector

Moulded M23 cables

SAI distributors

Product Description: SAI M23 Connectors

Technology and requirements

The M23 connectors are mainly used for integrating electrical drives and servo motors into industrial automation facilities. The M23 designation is based on the thread diameter of the connector, as shown in Figures 1 and 2.
With their wide variety of inserts and housings, these connector are equally suited for applications involving signal or power transmission. Applications set in harsh industrial environments place strict requirements on the connector. Much is demanded of the housing, the inner insert and the connector contact as well. Thermal loads, physical loads, and loads from the transmitted electrical power are commonplace. M23 connectors are capable of carrying a load of up to 250/630 V at 9/30 A.

The connectors must be resistant to the penetration of all particles and substances. They must also comply with the required class of IP protection. The material used for manufacture must be resistant to acid and alkaline solutions that may be used during cleaning or production processes. Also it must not be possible for residues to accumulate in the plug which could later contaminate the production flow. It must not be possible for the plug components to loosen due to vibration. In addition, the cable and connector must have EMC shielding for some applications. This keeps external interference from influencing the signals and it also prevents the transmitted signals in the cable from interfering with other cables or components. The standards and directives (such as the German or European standards) that are followed are basically only recommendations concerning the composition of the connector. A so-called “cold standard” exists for the M23 connectors.

Variants and designs

The variants can be classified generally according to their outer design into either customisable types or plastic moulded connectors with pre connected cables. Both variants are available in male or female versions, and in straight or angled design. Different designs and inserts can be combined to fit the particular application so that an almost limitless variety of combinations is possible. The connector inserts are available in a variety of different pole counts and as either male or female versions. The pole counts also vary in that some contacts in the mating profile may have a larger cross-section than the others. Other types include the device connector variants which are used for contacting and connecting housings. These also come in a variety of designs. The metal alloy in use may differ depending on the particular type of application. For example, stainless steel is used for those variants that will be used in the food processing industry. Each connector is optionally available with EMC protection and a plastic surface.

Customisable connectors

The customisable connectors are almost all manufactured from metal alloys. Variants with plastic housings or fitting nuts are rare and then used mostly for customer-specific solutions. Customiseable connectors are made up of a housing, a plastic contact carrier, and the contacts themselves. The various housing types can be equipped with the corresponding contact carriers. The carriers differ in their number of poles and the arrangement of the poles. Different types of contacts may also be used within the contact carriers. The shape of the contacts is either male or female. There are also difference in the width, material, and connection system (such as soldered, crimped or screwed).

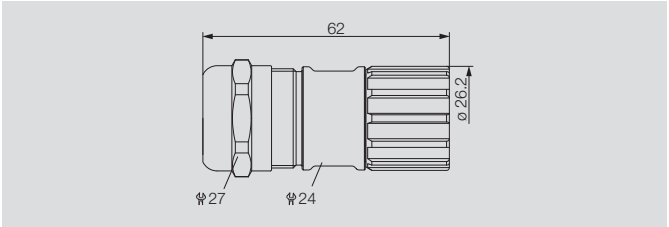


Figure 1: M23 cable connector

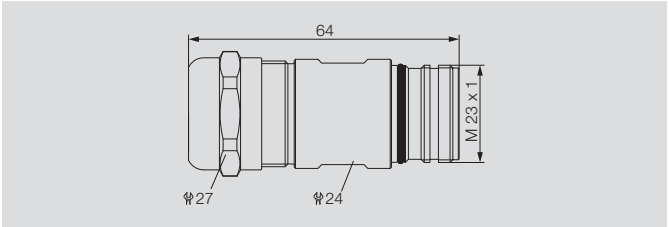


Figure 2: M23 coupling connector

This modular construction allows for a wide variety of combinations to fit any application type. Figure 3 shows the design and assembly of a M23 signal connector. Since the connector is usually put together in the field, the key requirement is that the connector is easy and reliable for the electrician to handle on-site. A good example of convenient handling is the integrated EMC shielding. An improved shield connection results because the shielding can be connected is less steps and with fewer tools. The complete assembly process must be clear and concise, and should only take a few steps.

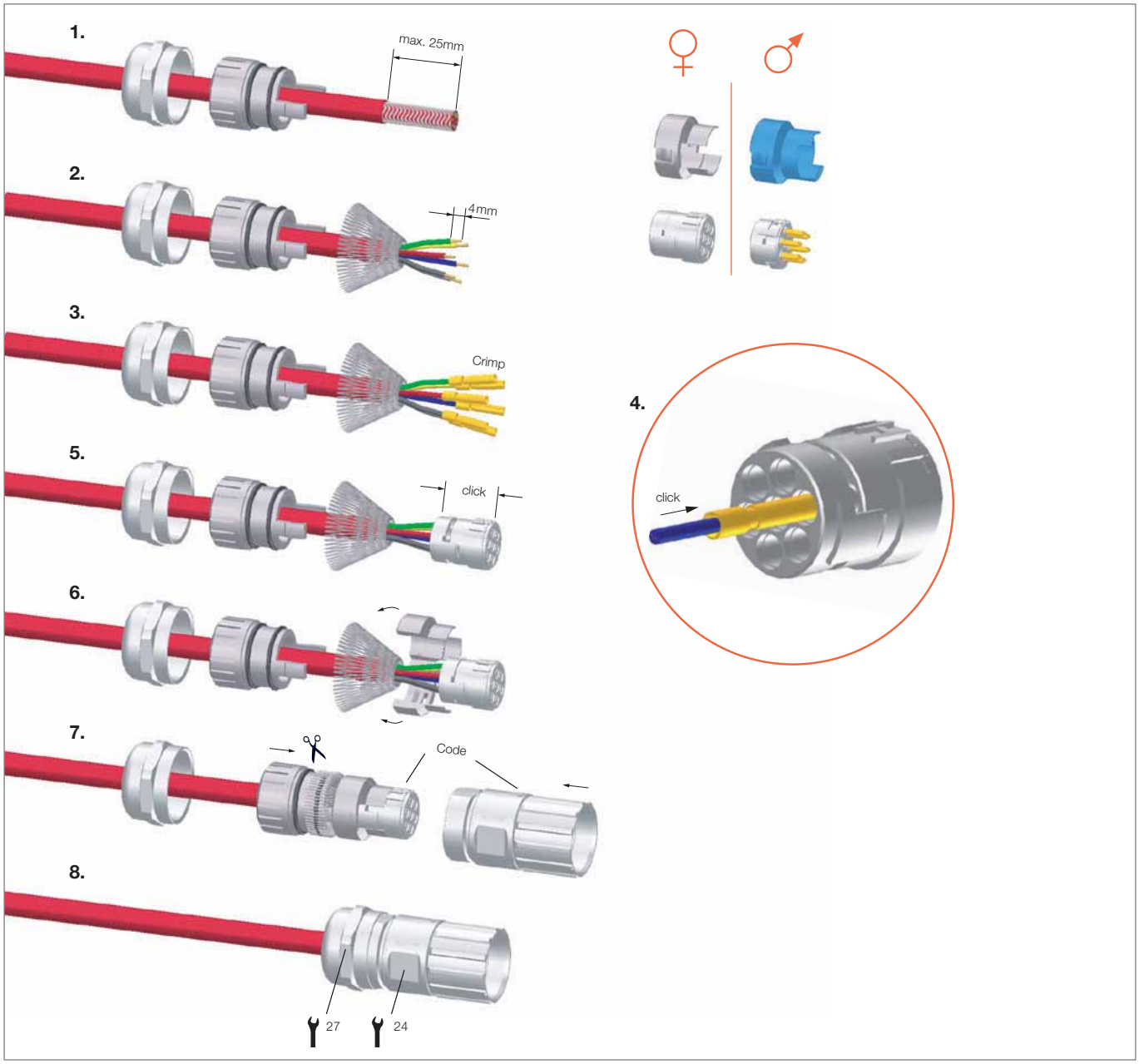


Figure 3: Design and assembly of an M23 connector

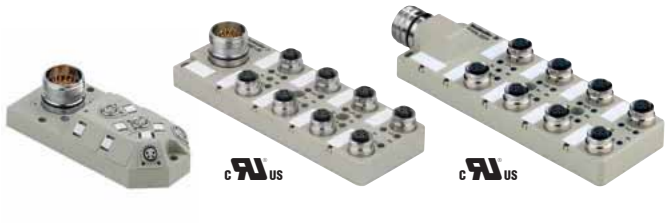
Plastic injection moulded connector with connected cable

The plastic injection moulded cables are cables that have already been fitted with connectors. First the cables are connected with the contacts and then these are mounted into the contact carrier. Next, plastic injection moulding is used to cover the cable and contact carrier with a plastic moulding. This ensures a highly stable and well sealed connector housing. The connector must be destroyed for it to be disconnected from its cable. The connector's outer form and material is arranged by a plastic processing tool.
The advantage of a moulded cable is that the connection between the cable and the connector has already been tested at the production factory. The electrician need only adjust the length. Depending on the application, he may choose to use another connector on the open end or connect the individual cable wires directly (for example, to a terminal block). These advantages of this variant type includes the inexpensive assembly of large batches, the high degree of automation and minimal amount of material used. High reliability and an excellent seal are two additional advantages.

Plastic injection-moulded M23 connector

Connector usage and application

M23 connectors are mainly used for integrating within machine and facility construction applications. These applications require connections with a long life span and high reliability. The failure of a single connector could lead to the failure of the entire production line. It's important to avoid facility outages caused by a connector malfunction, so the machine and facility construction industry relies on connectors with the advantages listed above. Both signals and power must be transferred in such applications. The connector and the cable must be able to withstand harsh industrial conditions. Cables may be under stress from constant motion, in particular for applications involving robotics or dragline chains. Special cables with a specific maximum bending radius are used for such applications (for example, the bending radius may be 10d, i.e., ten times the cable diameter). When constructing a facility, a variety of connection scenarios are possible based on the particular conditions or adaptations on existing facilities. The length or configuration of the cable must be adapted to fit these conditions. If space is constricted, for instance, it may be necessary to replace a straight connector with an angled one.
Cables can be equipped with both a moulded (extruded) connector and a customizable connector. This ensures proper functionality while providing the flexibility to adapt to changing conditions on location. Safe connections can thus be established with any possible connector combination or at any protective class required. This gives the facility planner the safety he needs. And the electrician on-site can set up the facility properly because he has sufficient flexibility to adapt to uncertain conditions. For sensor systems, connectors with high pole counts are often used on SAI distributors. Individual sensors are connected to the distributors where the signals are then centralized. They are then transferred to the controller using a cable with an M23 connector. The most common use for transmitting power involves the connection of servo-motors in machines. M23 connectors are used for this purpose because of their sturdy and compact design and their high power-carrying capacities. Because of the size of the M23 connector, it can also be used in a hybrid version for transmitting both signals and power. The signal-carrying contacts are then shielded within the connector to ensure that the transmitted voltages do not interfere with the signals.

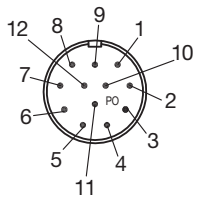


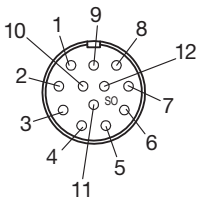
SAI distributor with M23 connector

Contact assignment SAI M23

M23 12- and 19-pole, for SAI distributors and cables

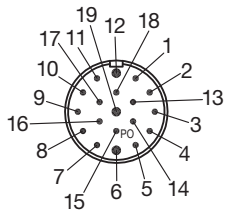
12-pole

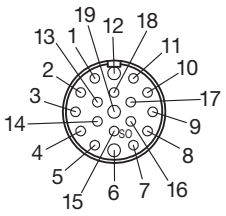




Pole	Colour code	Plug-in station	Contact M12
1	white	1	4
2	green	2	4
3	yellow	3	4
4	grey	4	4
5	pink	5	4
6	red	6	4
7	black	7	4
8	violet	8	4
9	blue (–)	1–8	3
10	blue (–)	1–8	3
11	brown (+)	1–8	1
12	green-yellow (PE)	1–8	5

19-pole





Pole	Colour code	Plug-in station	Contact M12
1	violet	8	4
2	red	6	4
3	grey	4	4
4	red/blue	2	2
5	green	2	4
7	grey/pink	1	2
8	white/green	3	2
9	white/yellow	5	2
10	white/grey	7	2
11	black	7	4
13	yellow/brown	6	2
14	brown/green	4	2
15	white	1	4
16	yellow	3	4
17	pink	5	4
18	grey/brown	8	2
6	blue (–)	1–8	3
12	green-yellow (PE)	1–8	5
19	brown (+)	1–8	1

Description code

Housing	
G	Inner thread
K	Outer thread
W	angled
S	Signal connectors
L	Power connectors
7/12	Cable passage
Inserts	
BE	Female insert
SE	Male insert
4/4	Number of contacts, here for 4 sensor and 4 power contacts
Contacts	
KBC	Female contact
Wire cross-section	
0.08/0.56	0.08 mm² – 0.56 mm²
0.25/1.0	0.25 mm² – 1.0 mm²
0.75/2.5	0.75 mm² – 2.5 mm²
Moulded M23 cables	
SAIS	Cable with male plug
SAIB	Cable with female plug
12p	12-pole
19p	19-pole
AN	angled
ST	straight
…M	Length in metres

Contact partitioning

Signal connectors			
Type	**1 mm contact**	**1.5 mm contact**	**2 mm contact**
6-pole			6
7-pole			7
9-pole	8		1
12-pole	12		
16-pole	16		
17-pole	17		
19-pole	16	3	
Power connectors			
Type	**1 mm contact**	**1.5 mm contact**	**2 mm contact**
6-pole			6
4+4-pole	4		4

Contacts for signal plugs cannot be used in inserts for power plugs and vice versa.

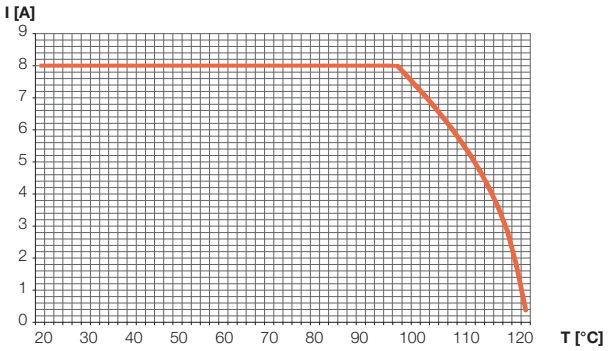
Signal connectors

Technical data

Mechanical data										
Housing		Copper-Zinc alloy Die Casting								
Housing surface		Nickel plated brass other surface upon request								
Inserts (for contacts)		Thermoplastic Polyamid PA 6 (Nylon 6/6), PBT / Fire protection class V-0								
Contacts		Brass Alloy								
Contact surface at point of contact		Nickel and gold plated (0.25 µm Au)								
Minimum mating cycles		> 1000								
Seals / O-Rings		Buna-N standard optional Viton® (Viton is a registered trademark of DuPont)								
Temperature range		-40 °C – 125 °C								
Type of contacts		Crimp, solder, dip-solder (PCB)								
Protection		IP 67 / IP 69 K per EN 60 529 (connected)								
Cable diameter range		3 – 17 mm								
Electrical Data										
Number of positions		6	7	9		12	16	17	19	
Number of contacts		6	7	8	1	12	16	17	16	3
Contact-Ø	mm	2	2	1	2	1	1	1	1	1.5
Nominal current	A	20	20	8	20	8	8	8	8	10
Nominal voltage at pollution degree 2	V~	630	630	500		500	400	400	320	
Nominal voltage at pollution degree 3	V~	300	300	200		200	160	160	100	
Test voltage	V~	2500	2500	2500		2500	1500	1500	1500	
Insulation resistance	MΩ	> 10^{10}	> 10^{10}	> 10^{10}		> 10^{10}	> 10^{6}	> 10^{6}	> 10^{6}	
Max. contact resistance	mΩ	3	3	3		3	3	3	3	

Derating curve

Straight Connectors male + female M 23, 12-pole, wires 12 x AWG17



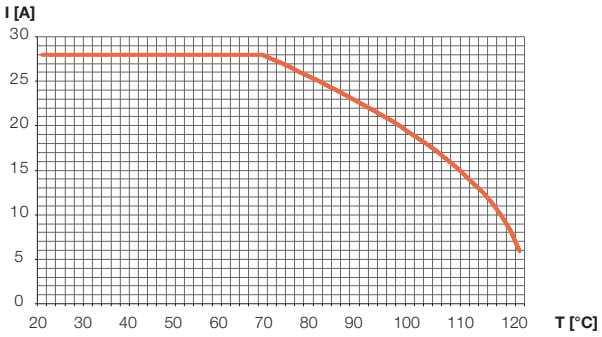
Power connectors

Technical data

Mechanical data				
Housing		Copper-Zinc alloy Die Casting		
Housing surface		Nickel plated brass other surface upon request		
Inserts (for contacts)		Thermoplastic Polyamid PA 6 (Nylon 6/6), PBT / Fire protection class V-0		
Contacts		Brass Alloy		
Contact surface at point of contact		Nickel and gold plated (0.25 µm Au)		
Minimum mating cycles		> 1000		
Seals / O-Rings		Buna-N standard optional Viton® (Viton is a registered trademark of DuPont)		
Temperature range		-40 °C – 125 °C		
Type of contacts		Crimp		
Protection		IP 67 / IP 69 K per EN 60 529 (connected)		
Cable diameter range		7 – 17 mm		
Electrical Data				
Number of positions		5 + PE	4/4	
Number of contacts		6	4	4
Contact-Ø	mm	2	1	2
Nominal current	A	28	8	28
Nominal voltage at pollution degree 2	V~	800	300	800
Nominal voltage at pollution degree 3	V~	600	300	600
Test voltage	V~	4000	2500	4000
Insulation resistance	MΩ	> 10^{13}	> 10^{13}	
Max. Max. contact resistance	mΩ	3	3	

Derating curve

Straight connectors male + female M 23, 5 + PE, wires 5 x AWG12



M23 connector for signal transmission

All customizable connectors can also be assembled together with shielded cables.

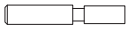
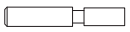
Housing	
Cable connector	
Coupling connector	
Angled connector	
Angled connector (coupling)	
Device connector (front panel)	
Device connector with knurled nut	
Device connector (single-hole mount)	
Device connector (angled)	
Device connector (back panel)	

Contact inserts*	
6-pole	
7-pole	
9-pole	
12-pole	
16-pole	
17-pole	
19-pole	

* Solder and crimp inserts

Contacts	
Crimp pin 1 mm rotated 0.08 – 0.56 mm²	
Crimp pin 1 mm rotated 0.14 – 1.00 mm²	
Crimp pin 1 mm rotated 1.00 – 1.50 mm²	
Crimp socket 1 mm rotated 0.08 – 0.56 mm²	
Crimp socket 1 mm rotated 0.14 – 1.00 mm²	
Crimp socket 1 mm rotated 1.00 – 1.50 mm²	
Crimp pin 2 mm rotated 0.14 – 0.56 mm²	
Crimp socket 2 mm rotated 0.56 – 1.00 mm²	
Crimp pin 2 mm rotated 0.75 – 2.50 mm²	
Crimp socket 2 mm rotated 0.75 – 2.50 mm²	

M23 connector for power transmission

Housing		Contact inserts*		Contacts	
Cable connector		6 x Male 2 mm		Crimp pin 1 mm turned 0.25 – 1.00 mm²	
Coupling connector		6 x Socket 2 mm		Crimp socket 1 mm turned 0.25 – 1.00 mm²	
Angled connector		4 x Male 1 mm 4 x Male 2 mm		Crimp pin 2 mm turned 0.75 – 2.50 mm²	
Angled connector (coupling)		4 x Socket 1 mm 4 x Socket 2 mm		Crimp pin 2 mm turned 2.50 – 4.00 mm²	
Device connector (front panel)				Crimp socket 2 mm turned 0.75 – 2.50 mm²	
Device connector with knurled nut				Crimp socket 2 mm turned 2.50 – 4.00 mm²	
Device connector (back panel)					
Device connector (back panel)					
Device connector (angled)					
		* Crimp inserts			

Moulded M23 cables

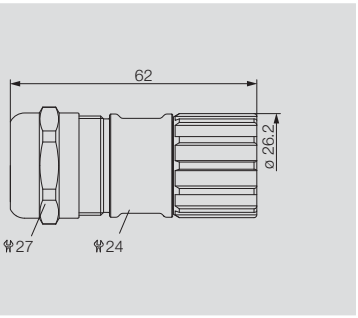
Housing
Cable connector
Coupling connector
Angled connector
Angled connector (coupling)

M23 connector for signal transmission

Housing

For cables with outer diameter of: 7–12 mm

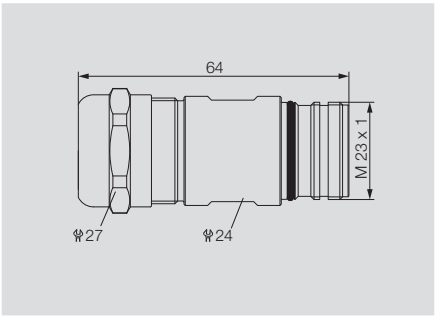
Cable connector



Ordering data

Type	Qty.	Order No.
SAI-M23-GS-7/12	1	**1995840000**

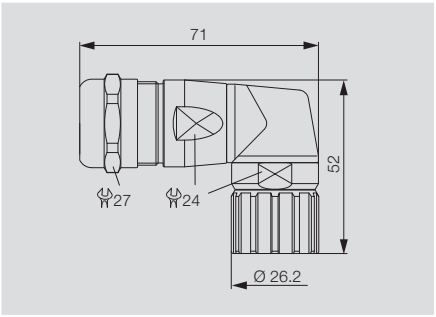
Coupling connector



Ordering data

Type	Qty.	Order No.
SAI-M23-KS-7/12	1	**1169900000**

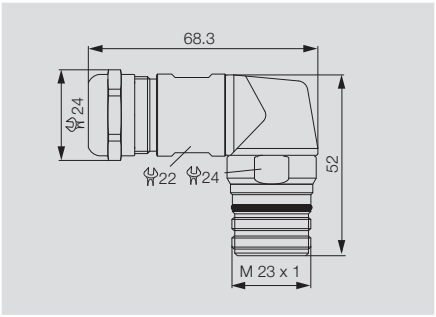
Angled connector



Ordering data

Type	Qty.	Order No.
SAIL-M23-GS-S-7/12	1	**1169920000**

Angled connector (coupling)



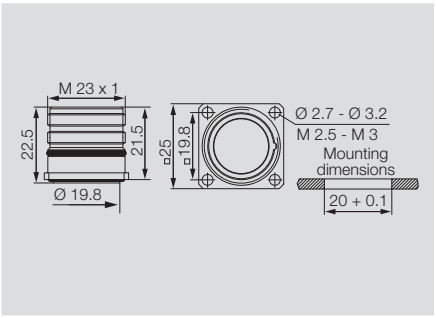
Ordering data

Type	Qty.	Order No.
SAIL-M23-KSW-7/12	1	**1169930000**

Built-in connector

With 3.2-mm mounting holes

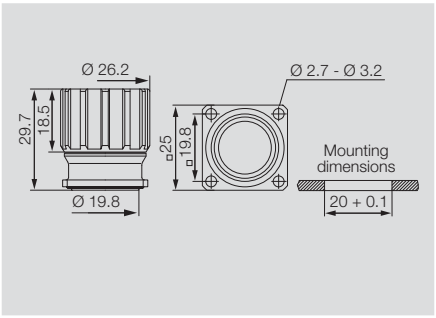
Device connector (front panel)



Ordering data

Type	Qty.	Order No.
SAIE-M23-S-VW	1	**1169940000**

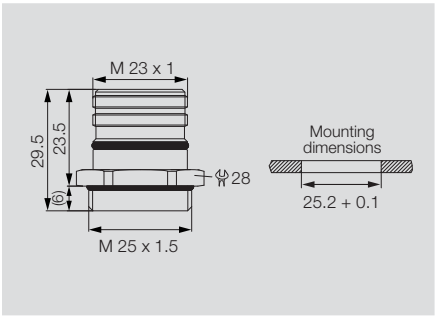
Device connector with knurled nut



Ordering data

Type	Qty.	Order No.
SAIE-M23-S-RM	1	**1169950000**

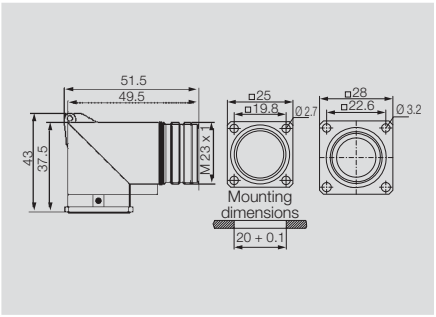
Device connector (single-hole mount)



Ordering data

Type	Qty.	Order No.
SAIE-M23-S-EM	1	**1169970000**

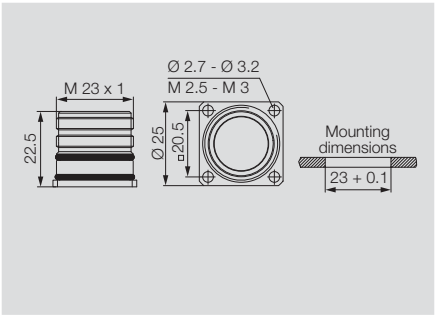
Device connector (angled)



Ordering data

Type	Qty.	Order No.
SAIE-M23-S-W	1	**1169980000**

Device connector (back panel)



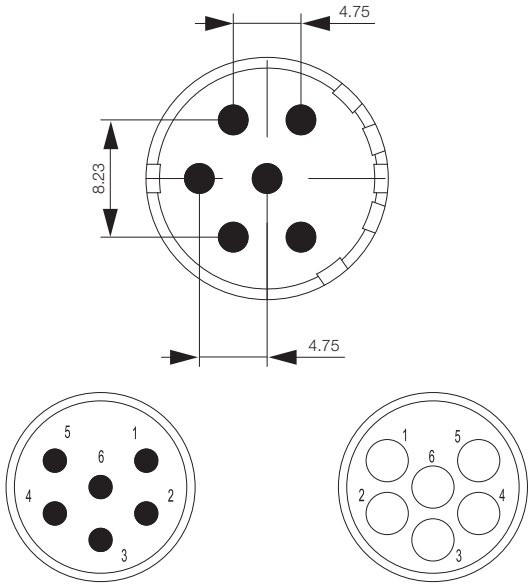
Ordering data

Type	Qty.	Order No.
SAIE-M23-S-HW	1	**1169990000**

M23 connector for signal transmission

Inserts

6-pole



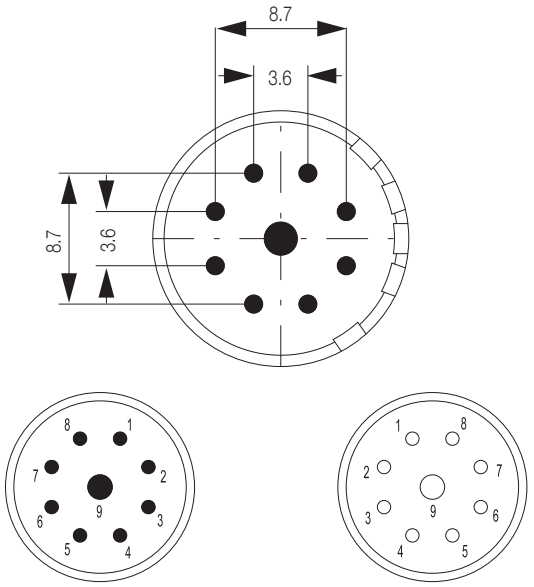
Male insert on plug side

Female insert on plug side

Ordering data

	Type	Qty.	Order No.
Insert 6-pole male	SAI-M23-SE-6	1	**1170000000**
Insert 6-pole socket	SAI-M23-BE-6	1	**1170020000**

9-pole



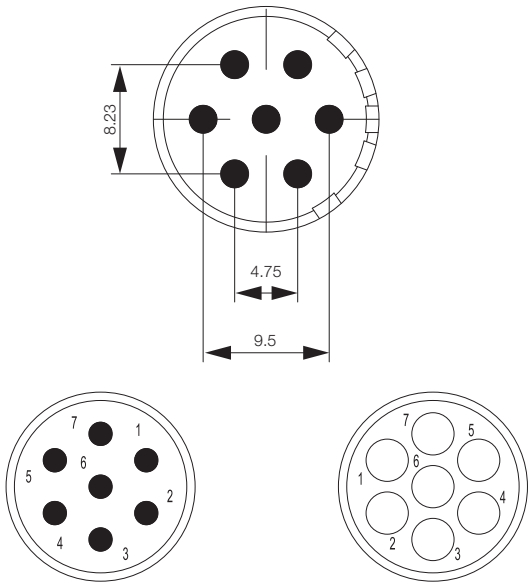
Male insert on plug side

Female insert on plug side

Ordering data

	Type	Qty.	Order No.
Insert 9-pole male	SAI-M23-SE-9	1	**1170050000**
Insert 9-pole socket	SAI-M23-BE-9	1	**1170060000**

7-pole



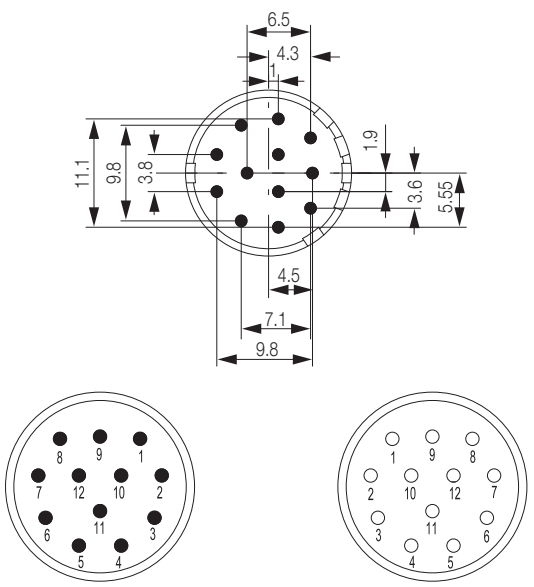
Male insert on plug side

Female insert on plug side

Ordering data

	Type	Qty.	Order No.
Insert 7-pole male	SAI-M23-SE-7	1	**1170030000**
Insert 7-pole socket	SAI-M23-BE-7	1	**1170040000**

12-pole



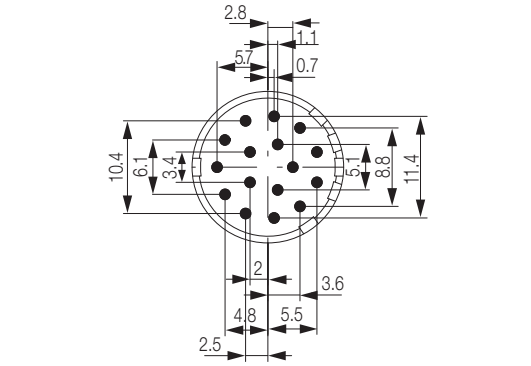
Male insert on plug side

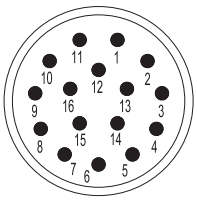
Female insert on plug side

Ordering data

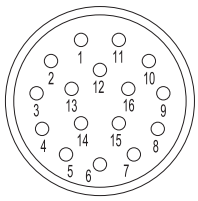
	Type	Qty.	Order No.
Insert 12-pole male	SAI-M23-SE-12	1	**1170070000**
Insert 12-pole socket	SAI-M23-BE-12	1	**1995850000**

16-pole





Male insert on plug side

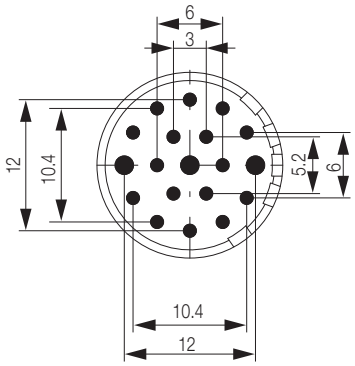


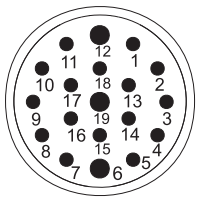
Female insert on plug side

Ordering data

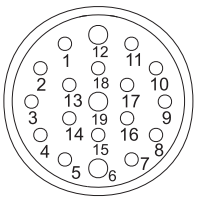
	Type	Qty.	Order No.
Insert 16-pole male	SAI-M23-SE-16	1	**1170080000**
Insert 16-pole socket	SAI-M23-BE-16	1	**1170090000**

19-pole





Male insert on plug side

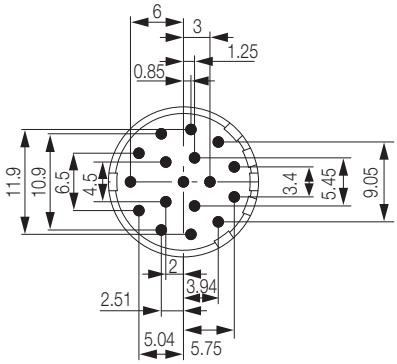


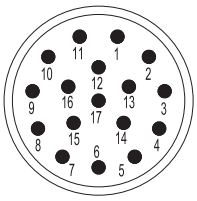
Female insert on plug side

Ordering data

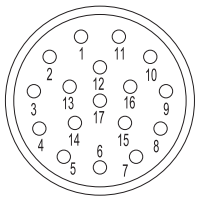
	Type	Qty.	Order No.
Insert 19-pole male	SAI-M23-SE-19	1	**1170120000**
Insert 19-pole socket	SAI-M23-BE-19	1	**1170130000**

17-pole





Male insert on plug side



Female insert on plug side

Ordering data

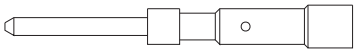
	Type	Qty.	Order No.
Insert 17-pole male	SAI-M23-SE-17	1	**1170100000**
Insert 17-pole socket	SAI-M23-BE-17	1	**1170110000**

M23 connector for signal transmission

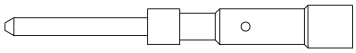
Contacts

Male, 1 mm

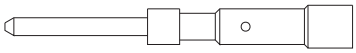
0.08-0.56



0.14-1.00



1.00-1.50

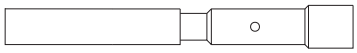


Ordering data

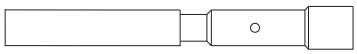
	Type	Qty.	Order No.
1.0 mm Male (0.08-0.56)	SAI-M23-KSC-0.08/0.56	50	**1170140000**
1.0 mm Male (0.14-1.00)	SAI-M23-KSC-0.14/1.00	50	**1170150000**
1.0 mm Male (1.00-1.50)	SAI-M23-KSC-1.00-1.5	50	**1170170000**

Female, 1 mm

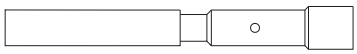
0.08-0.56



0.34-1.00



1.00-1.50

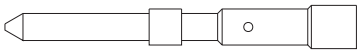


Ordering data

	Type	Qty.	Order No.
1.0 mm Socket (0.08-0.56)	SAI-M23-KBC-0.08/0.56	50	**1995860000**
1.0 mm Socket (0.34-1.00)	SAI-M23-KBC-0.34/1.00	50	**1170180000**
1.0 mm Male (1.00-1.50)	SAI-M23-KBC-1.00-1.5	50	**1170210000**

Male, 1.5 mm

0.14-1.00

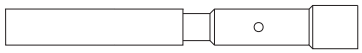


Ordering data

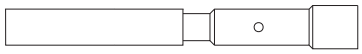
	Type	Qty.	Order No.
1.5 mm Male (0.14-1.00)	SAI-M23-KSC-1.5-0.14-1	50	**1170220000**

Female, 1.5 mm

0.14-0.56



0.56-1.00

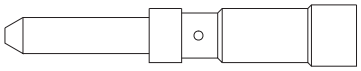


Ordering data

	Type	Qty.	Order No.
1.5 mm Socket (0.14-0.56)	SAI-M23-KBC-1.5-.14-.56	50	**1170230000**
1.5 mm Socket (0.56-1.00)	SAI-M23-KBC-1.5-.56-1.0	50	**1170240000**

Male, 2 mm

0.75-2.00

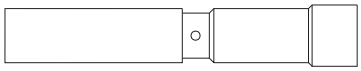


Ordering data

	Type	Qty.	Order No.
2.0 mm Male (0.75-2.00)	SAI-M23-KSC-2-0.75-2.00	50	**1170250000**

Female, 2 mm

0.75-2.00



Ordering data

	Type	Qty.	Order No.
2.0 mm Socket (0.75-2.00)	SAI-M23-KBC-2-0.75-2.00	50	**1170260000**

Technical data

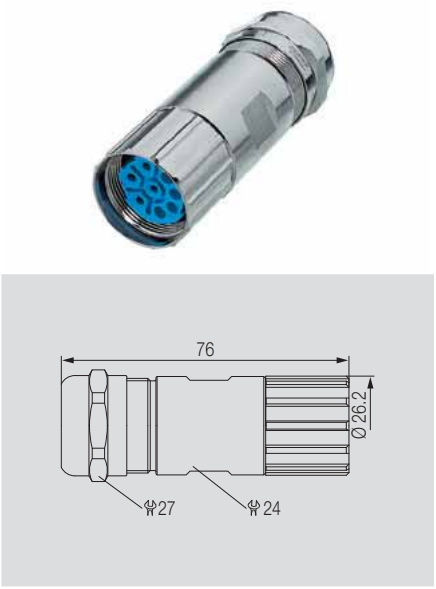
Number of positions		6	7	9		12	16	17	19	
Number of contacts		6	7	8	1	12	16	17	16	3
Contact-Ø	mm	2	2	1	2	1	1	1	1	1.5

M23 connector for power transmission

Housing

For cables with outer diameter of: 7–12 mm

Cable connector



Ordering data

Type	Qty.	Order No.
SAI-M23-GS-L-7/12	1	**1995800000**

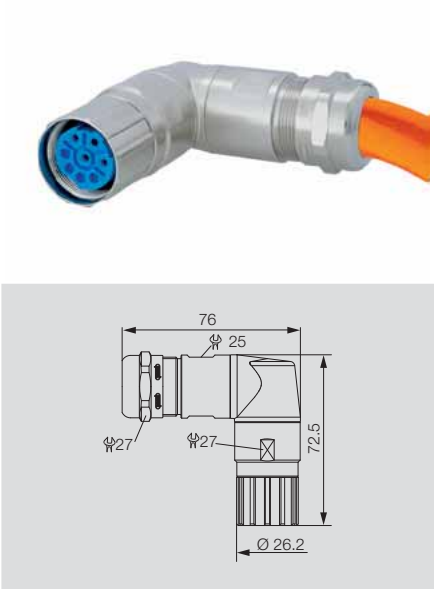
Coupling connector

Ordering data

Type	Qty.	Order No.
SAI-M23-KS-L-7/12	1	**1170270000**

H

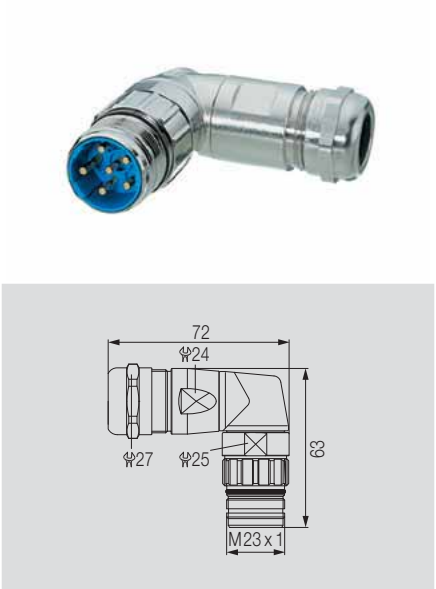
Angled connector



Ordering data

Type	Qty.	Order No.
SAIL-M23-GSW-L-7/12	1	**1170280000**

Angled connector (coupling)



Ordering data

Type	Qty.	Order No.
SAIL-M23-KSW-L-7/12	1	**1170290000**

Built-in connector

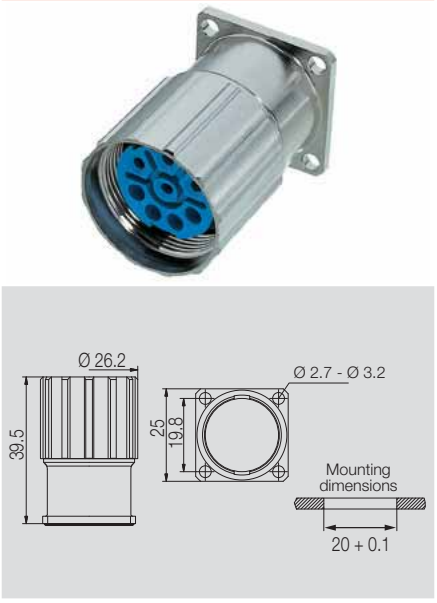
With 3.2-mm mounting holes

Device connector (front panel)

Ordering data

Type	Qty.	Order No.
SAIE-M23-L-VW	1	1170300000

Device connector with knurled nut



Ordering data

Type	Qty.	Order No.
SAIE-M23-L-RM	1	1170310000

Device connector (single-hole mount)

Ordering data

Type	Qty.	Order No.
SAIE-M23-L-EM	1	1170320000

Device connector (angled)

Ordering data

Type	Qty.	Order No.
SAIE-M23-L-W	1	1170330000

Device connector (back panel)

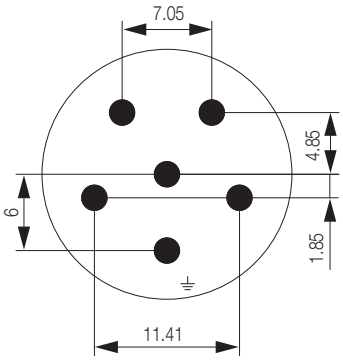
Ordering data

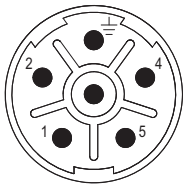
Type	Qty.	Order No.
SAIE-M23-L-HW	1	1170340000

M23 connector for power transmission

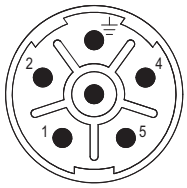
Inserts

5 + PE





6 times male, 2 mm

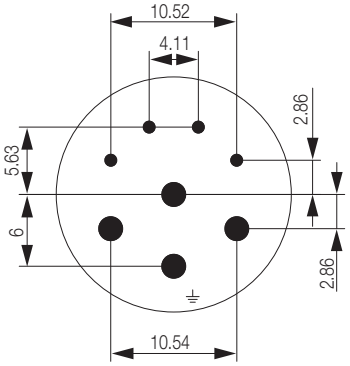


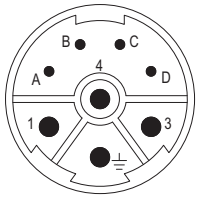
6 times female, 2 mm

Ordering data

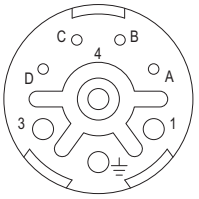
	Type	Qty.	Order No.
6 times male, 2 mm	SAI-M23-SE-L-6	1	**1170350000**
6 times female, 2 mm	SAI-M23-BE-L-6	1	**1170370000**

4/4





4 times 1-mm male and 4 times 2-mm male



4 times 1-mm female and 4 times 2-mm female

Ordering data

	Type	Qty.	Order No.
4 times 1-mm male and 4 times 2-mm male	SAI-M23-SE-L-4/4	1	**1170380000**
4 times 1-mm female and 4 times 2-mm female	SAI-M23-BE-L-4/4	1	**1995810000**

Contacts

Male, 1 mm

0.25 - 1.00

Ordering data

	Type	Qty.	Order No.
1 mm Male (0.25-1.00)	SAI-M23-KSC-0,25-1.0	50	**1170390000**

Female, 1 mm

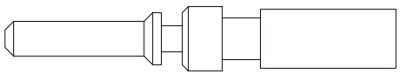
0.25 – 1.00

Ordering data

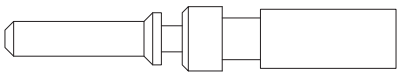
	Type	Qty.	Order No.
1 mm Socket (0.25-1.00)	SAI-M23-KBC-0.25-1.0	50	**1995830000**

Male, 2 mm

0.75 – 2.5



2.5 – 4.00

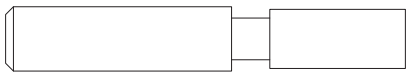


Ordering data

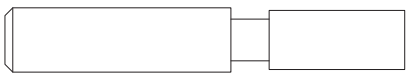
	Type	Qty.	Order No.
2 mm Male (0.75-2.5)	SAI-M23-KSC-L-0.75-2.5	50	**1170400000**
2 mm Male (2.5-4.00)	SAI-M23-KSC-L-2.5-4.0	50	**1170410000**

Female, 2 mm

0.75 – 2.5



2.5 – 4.00



Ordering data

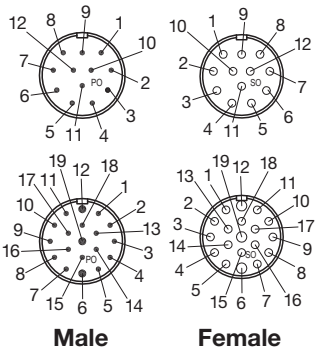
	Type	Qty.	Order No.
2 mm Socket (0.75-2.5)	SAI-M23-KBC-L-0.75-2.5	50	**1995820000**
2 mm Socket (2.5-4.00)	SAI-M23-KBC-L-2.5-4.0	50	**1170420000**

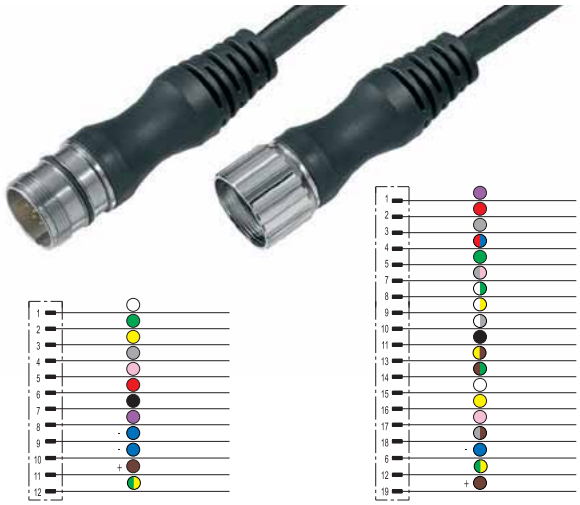
Technical data

Number of positions		5 + PE	4/4	
Number of contacts		6	4	4
Contact-Ø	mm	2	1	2

Moulded M23 cables

M23 cables





Ordering data

	12-pole		19-pole	
Male, straight	**Type**	**Order No.**	**Type**	**Order No.**
1 m	SAIS-M23-12P-AN-1,0M	**1906290100**	SAIS-M23-19P-AN-1,0M	**1818090100**
Male, angled				
1 m	SAIS-M23-12P-ST-1,0M	**1906280100**	SAIS-M23-19P-ST-1,0M	**1818160100**
Female, straight				
1 m	SAIB-M23-12P-AN-1,0M	**1877440100**	SAIB-M23-19P-AN-1,0M	**1818140100**
Female, angled				
1 m	SAIB-M23-12P-ST-1,0M	**1886440100**	SAIB-M23-19P-ST-1,0M	**1818180100**
Note	ST = straight AN = 90° elbow		Other versions on request	

Standard cable lengths

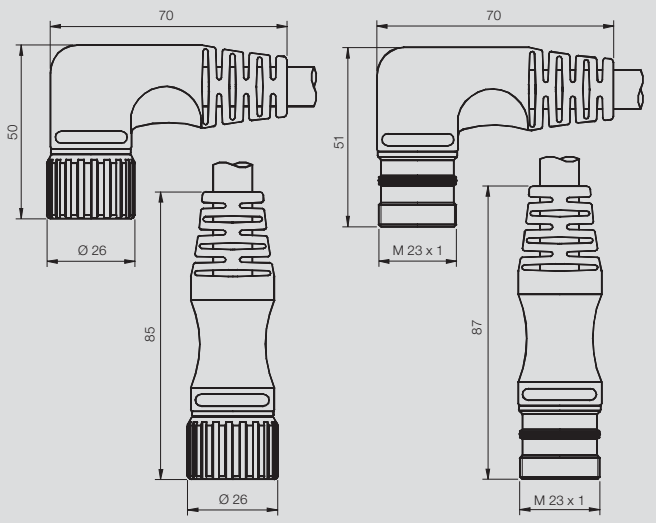
All cables listed under the ordering data have a length of 1.5 metres. The last four ordering digits must be changed when ordering other standard cable lengths.	1.5 m	xxxxxx0150
	3.0 m	xxxxxx0300
	5.0 m	xxxxxx0500
	10.0 m	xxxxxx1000

Technical data

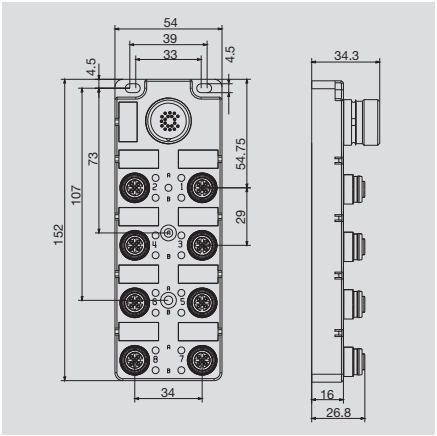
Rated current	8 A
Protection class	IP 67
Core cross-section	0.75 mm²
Contact surface	gold-plated
Temperature range of housing	-25…+85 °C
Rated voltage (acc. to VDE standard 0110 ISO group C)	150 V

Chapter W includes additional technical specifications for the cable

Dimensioned drawing



with M23 outlet



Ordering data

Complete modules	
4 channel	
8 channel	
Note	

SAI-4/8-S — **4-pole**

Type	Qty.	Order No.
SAI-4-S 4P FC	1	**1847960000**
SAI-8-S 4P FC	1	**1847920000**

Other versions on request

SAI-4/8-S — **5-pole**

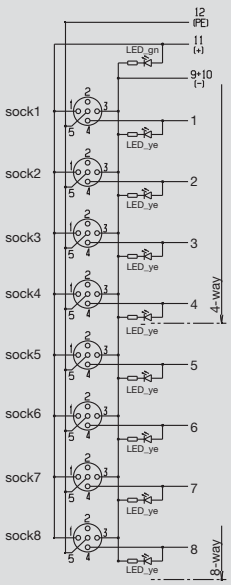
Type	Qty.	Order No.
SAI-4-S 5P FC	1	**1847970000**
SAI-8-S 5P FC	1	**1848040000**

Other versions on request

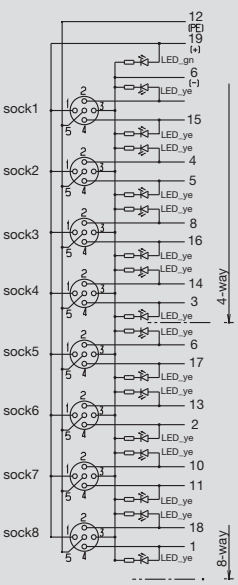
Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	4 A
Total current	9 A
Pollution severity	3
Protection class	IP 67
Ambient temperature range	-25...+80 °C
Housing main material	PA 6 GF
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	

Wiring diagram

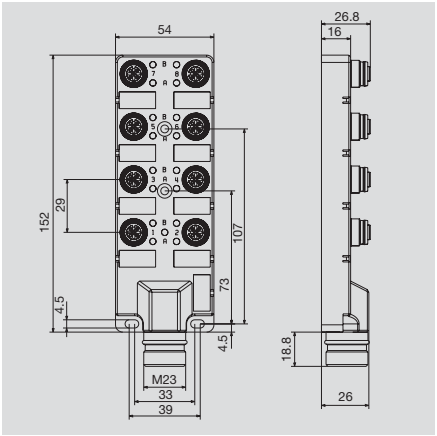


Wiring diagram



SAI distributor M12 with M23

with M23 outlet on front



Ordering data

Complete modules	
4 channel	
8 channel	
Note	

SAI-4/8-SH — **4-pole**

Type	Qty.	Order No.
SAI-4-SH 4P FC	1	**1859110000**
SAI-8-SH 4P FC	1	**1859120000**

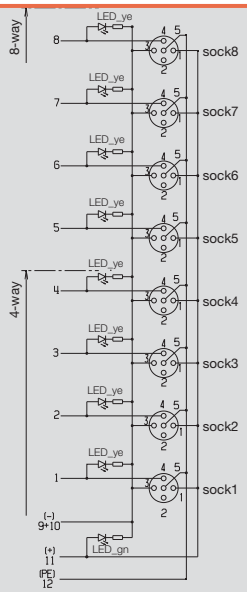
SAI-4/8-SH — **5-pole**

Type	Qty.	Order No.
SAI-4-SH 5P FC	1	**1859130000**
SAI-8-SH 5P FC	1	**1859140000**

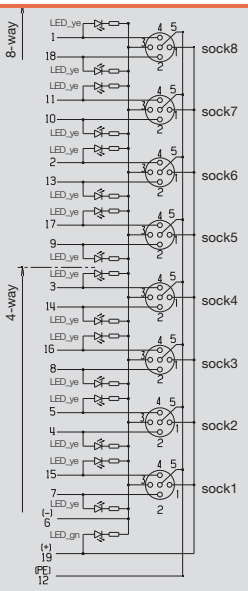
Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	4 A
Total current	9 A
Pollution severity	3
Protection class	IP 67
Ambient temperature range	-25...+80 °C
Housing main material	PA 6 GF
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	

Wiring diagram

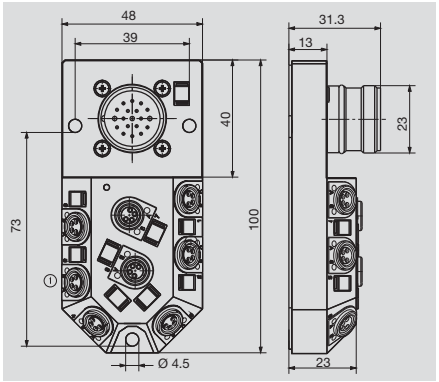


Wiring diagram



With M23/ M16 outlet

SAI-4/8-M23



Ordering data

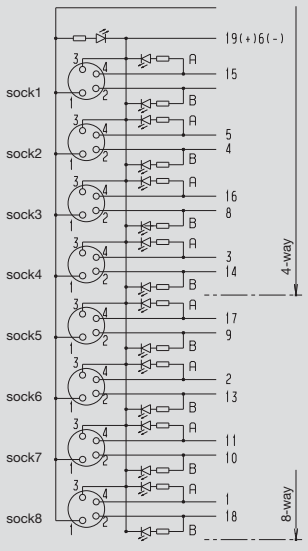
SAI-4/8-M23		M23
Type	**Qty.**	**Order No.**
SAI-4-M23 4P M8	1	**1784660000**
SAI-8-M23 4P M8	1	**1784650000**
Other versions on request		

3-pole	
	8 channel
4-pole	
	4 channel
	8 channel
Note	

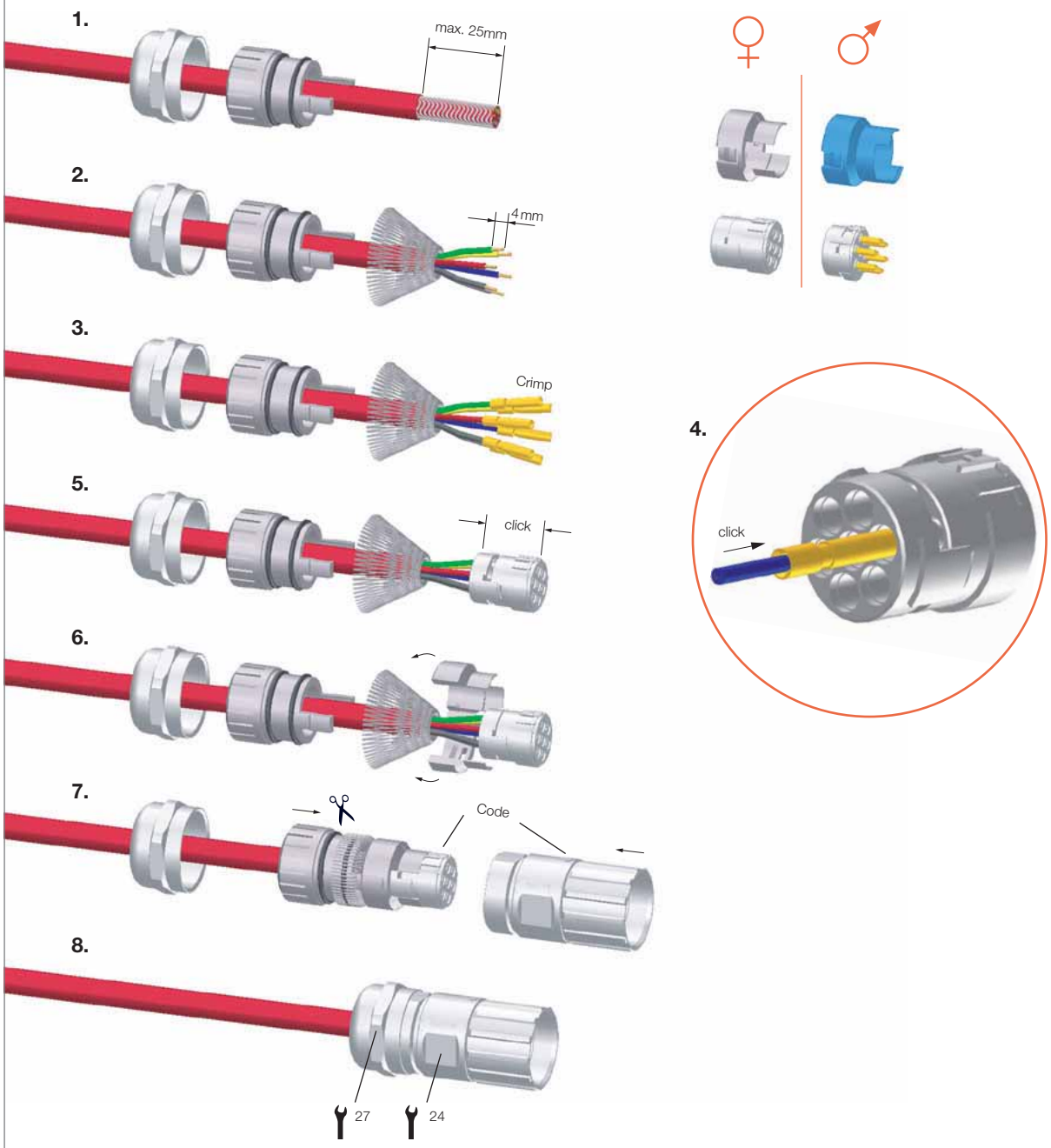
Technical data

Operating voltage	10...30 V
Current of continuous busbars	2 A
max. current-carrying capacity per slot	2 A
Total current	8 A
Pollution severity	3
Protection class	IP 68
Ambient temperature range	-20...+90 °C
Housing main material	Pocan
Contact carrier material	PBT UL 94 V0
Base material of contacts	CuZn, pre-nickeled, gold-plated
screw socket	CuZn, nickel-plated
Housing colour	grey, RAL 7032
Flammability class UL 94	V-0
Clamping range of hood-version	
Suitable for dragline cable (fixed cable connection)	

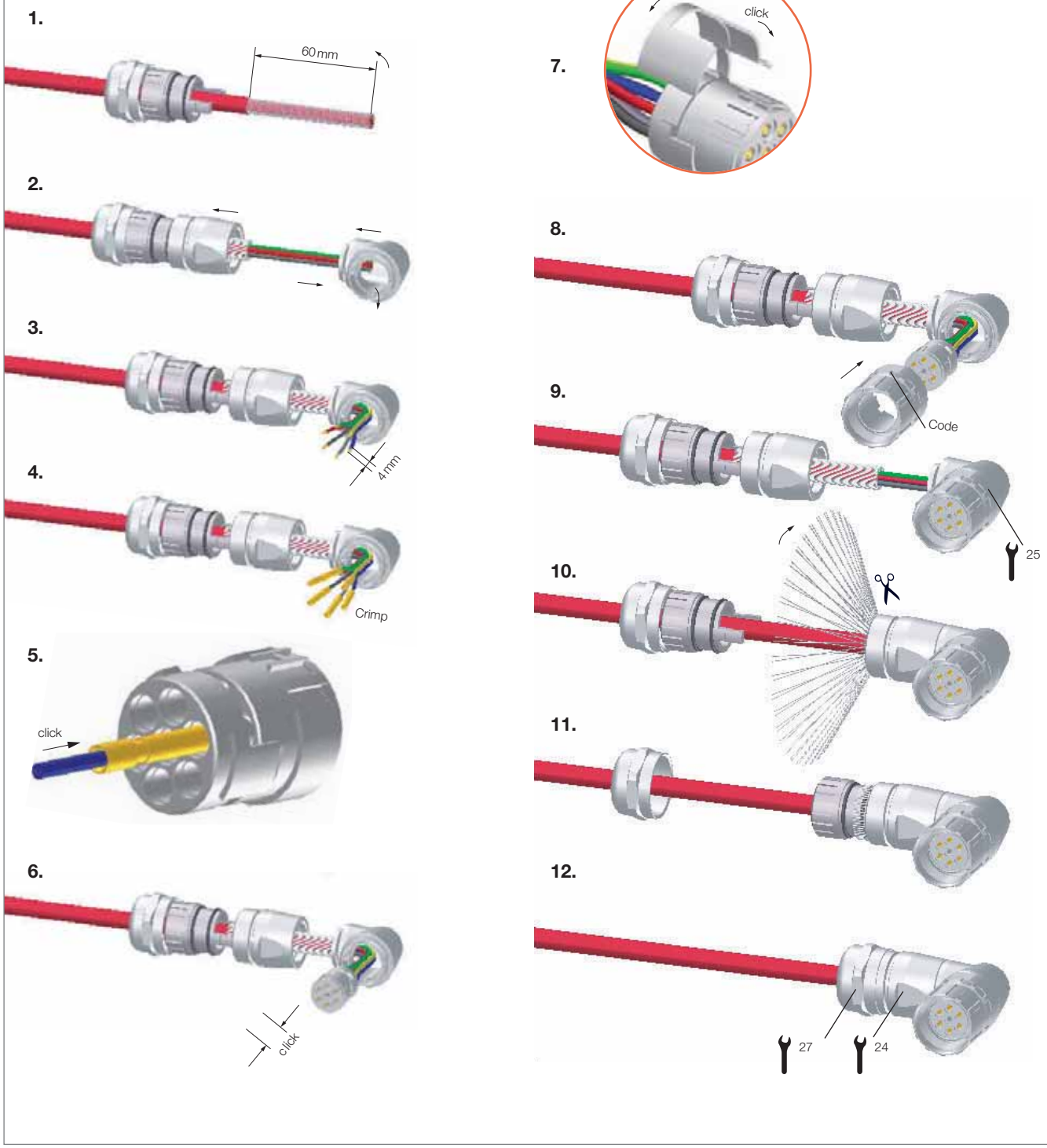
Wiring diagram



Cable connector



Angled connector



Device connector with knurled nut

1.

2.

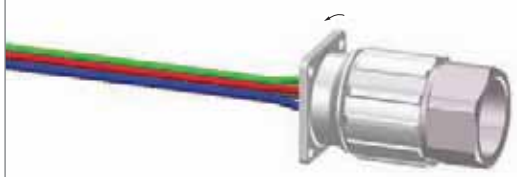
3.

5.

6.

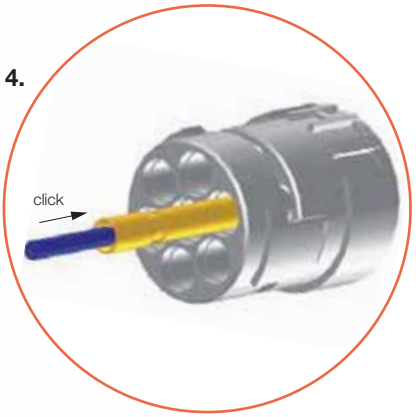
7.

8.

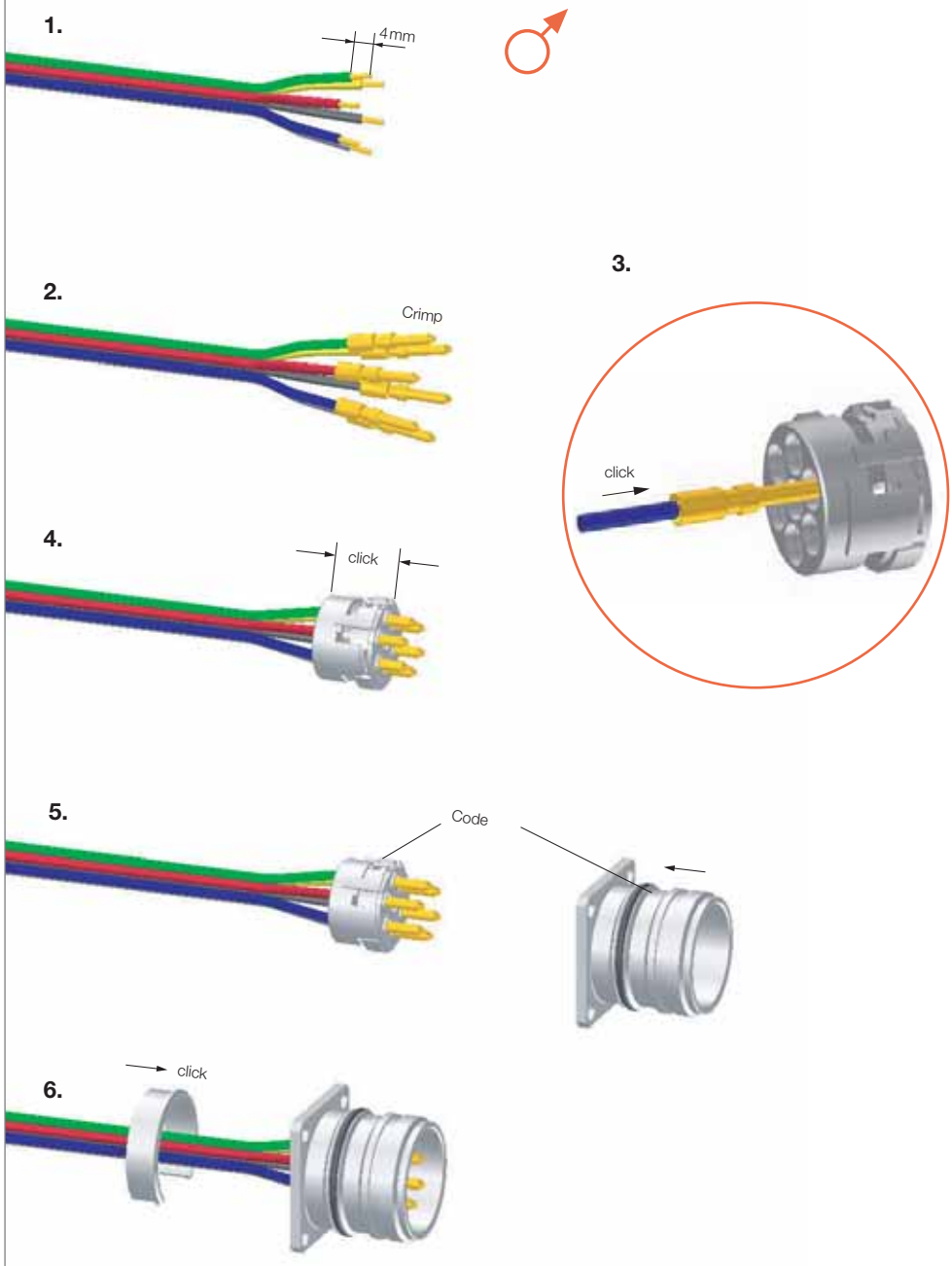


1238870000

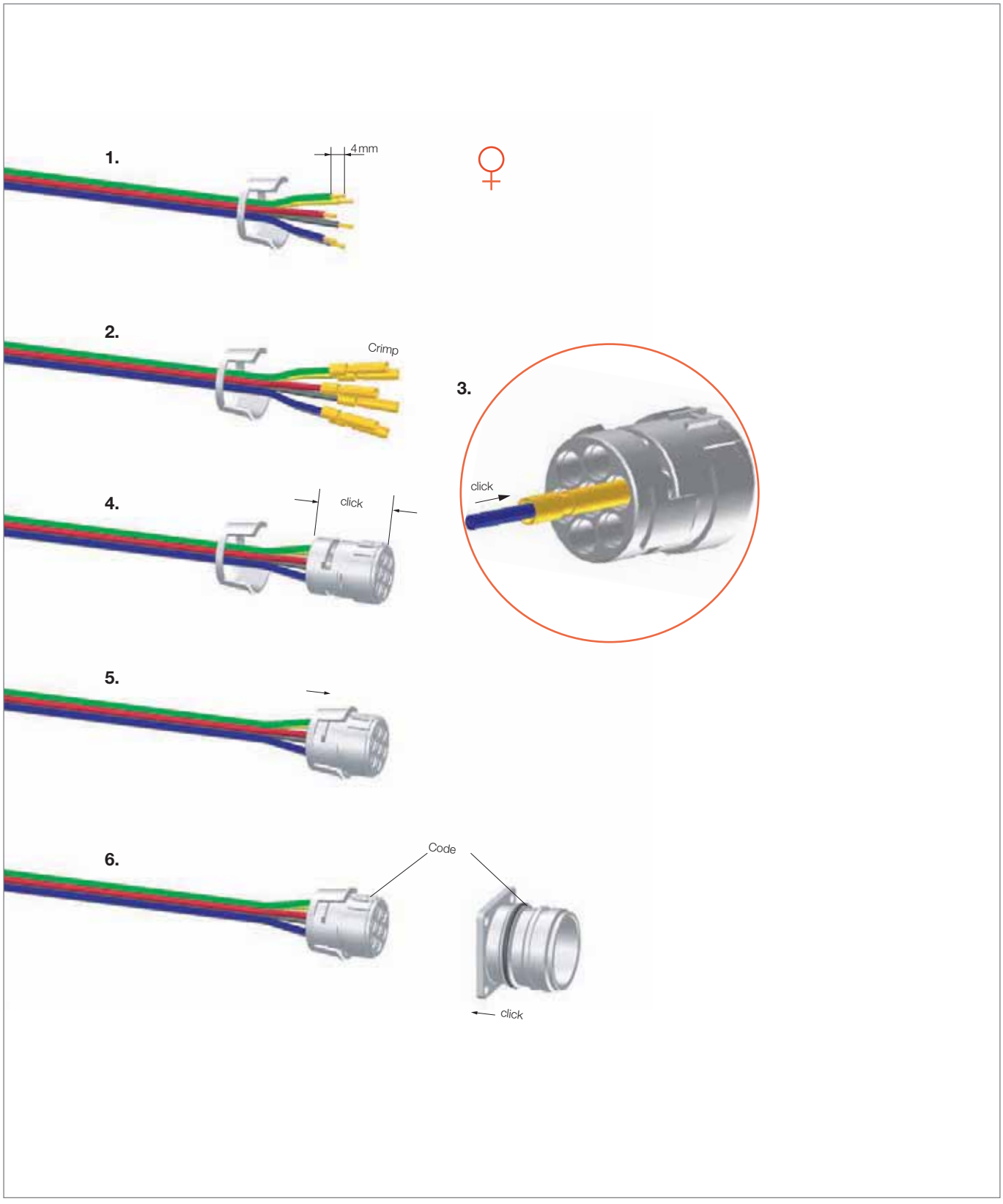
4.



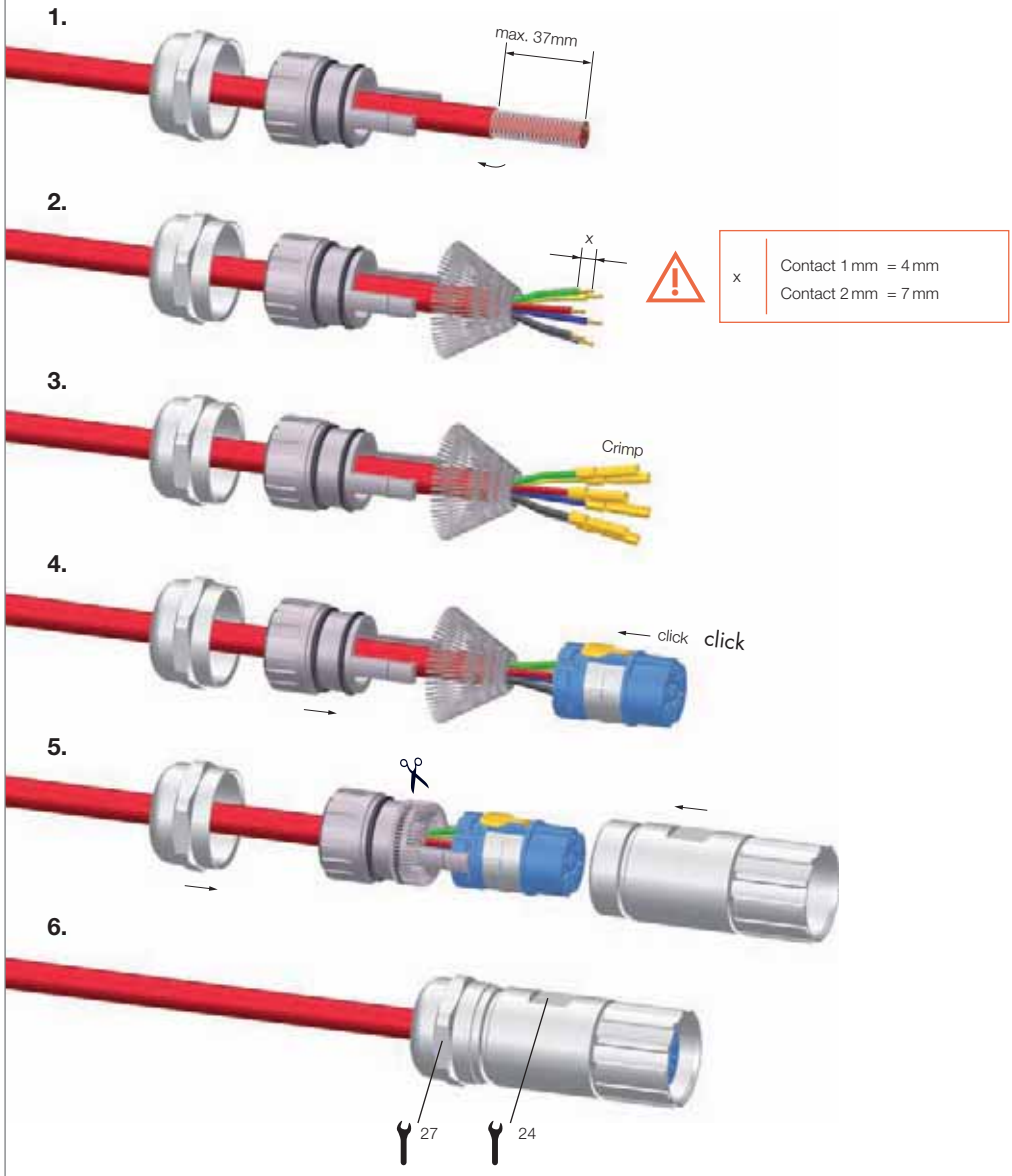
Device connector, male



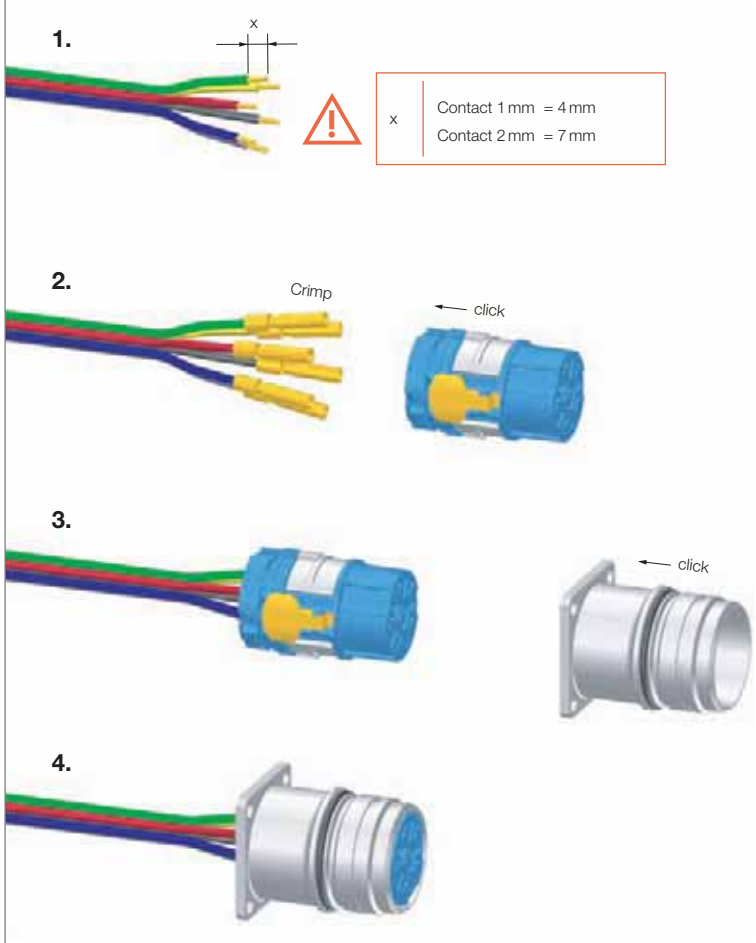
Device connector, female



Cable connector

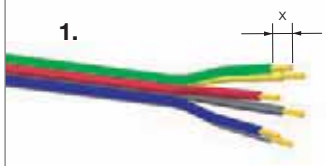


Device connector



Device connector

1.



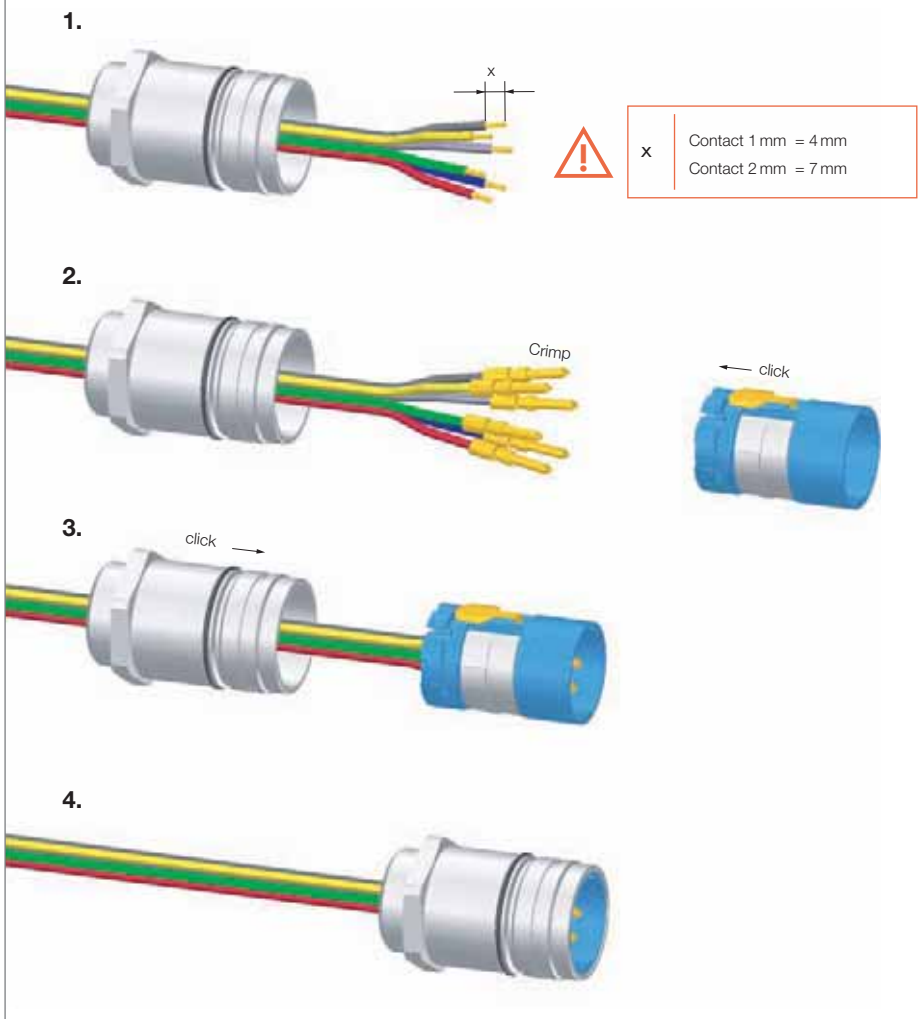
x	Contact 1 mm = 4 mm Contact 2 mm = 7 mm

2.

3.

4.

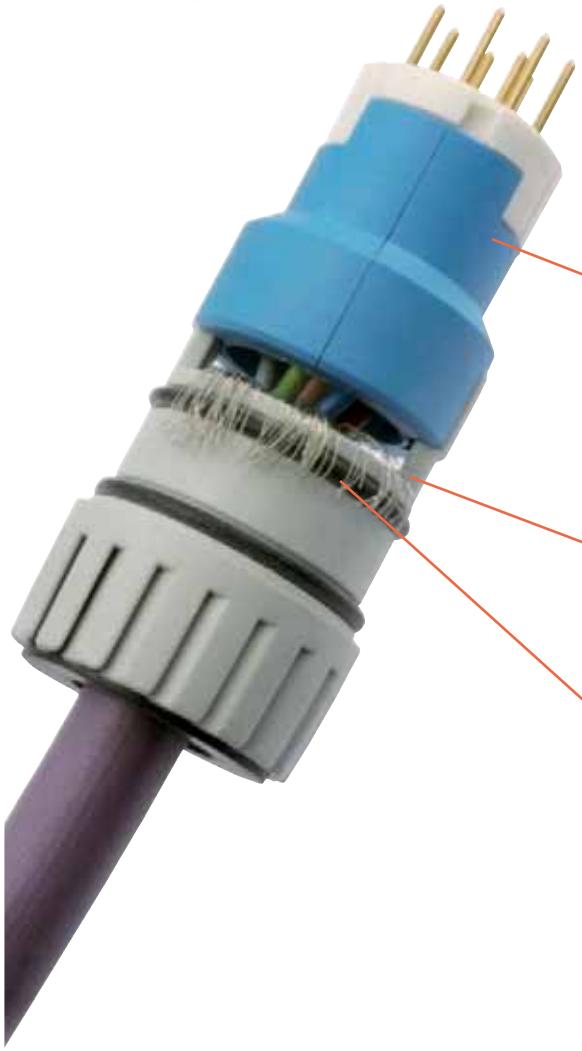
Device connector, single-hole mount



M23 connector

Easy to assemble

- An integrated approach for all plug sizes
- A patented assembly module consisting of terminal insert and insulating body
- Assembly and shield connection combined into one step
- Simple, quick and safe assembly in the housing



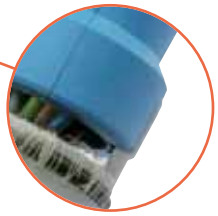
Flexibility

Total modularity means flexibility Male or female inserts can even be used with any of the housing types for the M23 power connectors.

The concise layout of this connector range and the reduced number of individual parts has clear benefits for the user – speedier assembly and easier installation.

The spacer sleeves are colour-coded for the male and female inserts.

Assembly and shield connection are combined into one step.



The snap-on terminal insert protects the cable outlet from getting twisted.

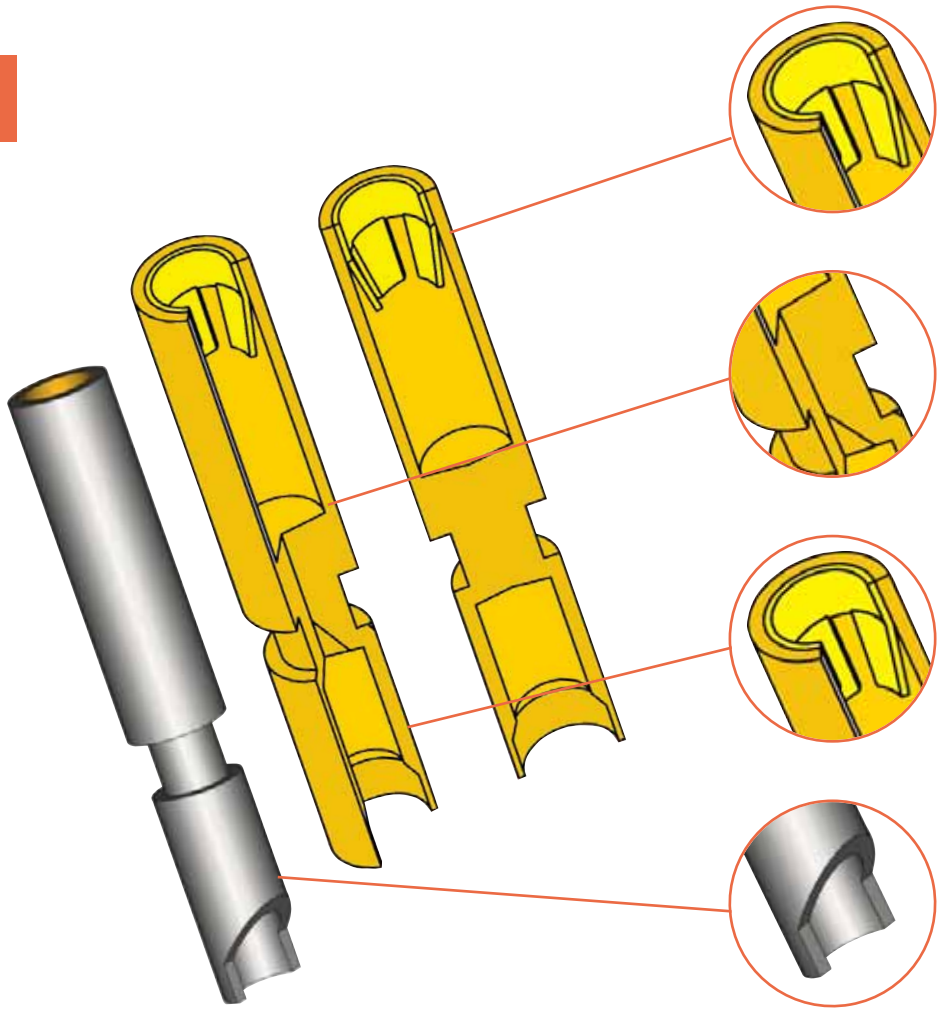
The variable shield connection ensures secure EMC protection for both light and heavy shielding braid.

H

Secure contact with SLS® technology

The new, premium-grade contact – the spring-loaded socket (SLS®) system

- Integrated spring takes the pin contact and clasps it radially
- Outstanding electrical characteristics with the most secure contact
- Quick assembly: solder contacts already tin-plated



The radially clasped spring mechanism made from copper beryllium ensures minimal insertion force and high number of plugging cycles.

The cylindrical outer shape of the female contact guarantees that the plugging process is properly centred.

Gold-plated contact surfaces provides minimal contact resistances.

Tin plated surfaces on the solder contacts helps to save time during assembly.

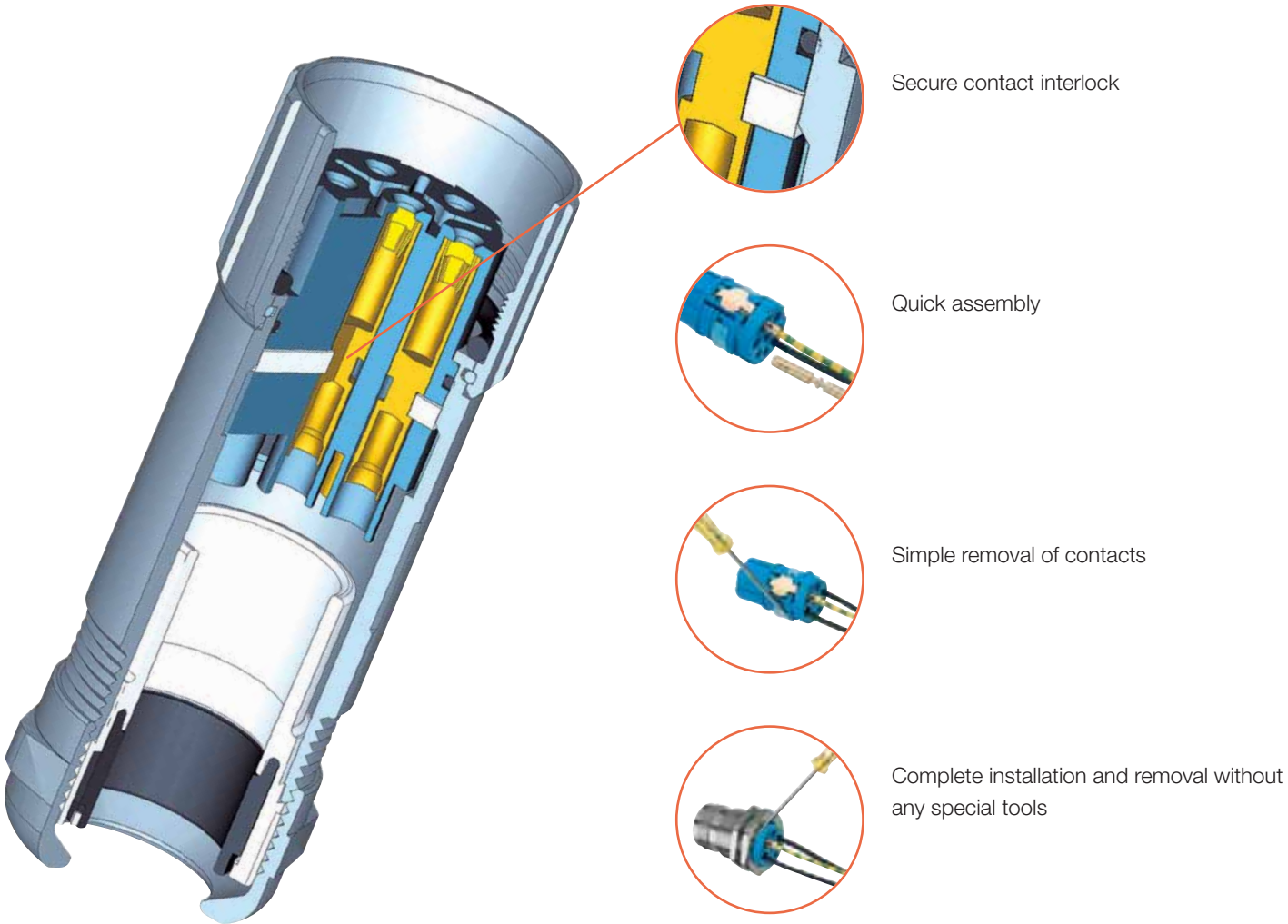
Euro-Lock system® for a secure mount

Euro-Lock system® – the patented interlock system

- The integrated support clip locks the contacts into the insulating body
- Contacts are easy to install and remove
- No special tool is required

High-quality cable gland

- Replaceable male or female inserts in each type of housing
- Integrated strain relief mechanism with patented HSK cable gland
- Internationally certified, with proven and established quality



Tools and markers

Tools and markers

SAI tools

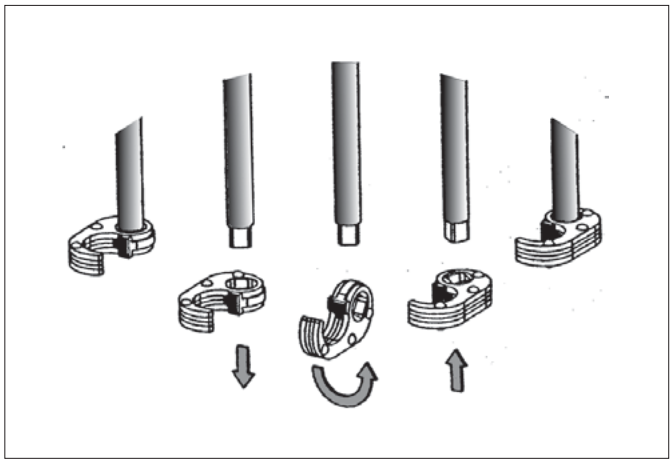
The Screwty® is a state of the art tool that features a unique, patented retention method. The adjustable torque ensures that the connectors have actually been sealed tightly. The Screwty® attachment for M23 is also very important. The sealing method for the M8 and M12 connectors is comparable to the M23.

The fact that the Screwty® attachment slips back is also a major advantage of this system. This means that it does not have to be re-applied, as would be the case when using an open ended wrench. There is also no risk that the screw can loosen when you turn the tool the wrong way since the Screwty® is only capable of exerting force in one direction.

It is also possible to put other tool attachments on the1/4"-drive. This allows the use of torque spanner wrenches or torque screwdrivers. This is also available without torque for those who cannot fit a torque tool into their budgets.

The Screwty® can also be used to screw on M23 connectors.

The tool does not have to be re applied. During the follow-up it simply slips back.



You can change the function from close to open by simply turning it around.

The Screwty® can also be purchased as a set with other suitable attachments.

Screwty® torque

- Screw-on circular plug, safety sealed
- Easier work

Cutting tools

- Cutting shape for various cable sizes
- Cutting without deformation of the conductor

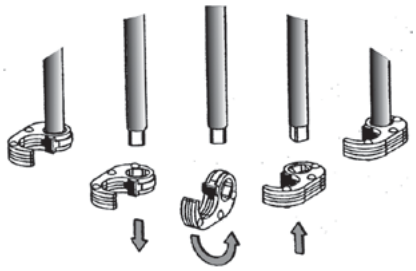
Sheathing and insulation stripping tools

- No need to adjust cutting depth
- No damage to inner conductors

Stripping and cutting tool

- Special, self adjusting stripping blades do not damage the conductor

Screwty® for M8/M12/M23



Simply turn the ratchet to tighten or loosen the cable gland.

The Torque Screwty®

- Easier work
- Screw on circular plug, safety sealed

The perfect tool for all situations

Screwty® is the ideal, universal tool for tightening and releasing cable glands on all common sensor and actuator cables. The Screwty® can also reach those round plugs normally considered inaccessible! No great force is required, simply turn the tool to tighten or release the plug in connector as required.
The Screwty® also fits the majority (more than 90 %) of the cables and plug-in connectors of other suppliers and is therefore a unique tool useful throughout the world. The Screwty® consists of a handle with a conventional 1/4“ fitting. This means it can be used for all sizes: for M12 and M8 round plugs, and the M12F and M8F types, also for plugs and sockets on custom cables.

The Screwty® is suitable for the following round plugs:

Size	M8	M8F	M12	M12F
	10 ±0.3 mm	11.9 ±0.3 mm	14.5 ±0.3 mm	19.8 ±0.3 mm
Thread	M8x1	M8x1	M12x1	M12x1

An adjustable torque fitting is also available for the Screwty®, for guaranteeing extra reliability during installation.
The torque can be infinitely adjusted between 0.5 and 1.7 Nm. This accurate setting enables all round plugs to be tightened precisely with a pre set torque.

Weidmüller specifies the following torques for its round plugs:

Size	M8	M8F	M12	M12F	M12 plastic
Torque	0.5-0.6 Nm	0.5-0.6 Nm	0.8-1.2 Nm	0.8-1.2 Nm	0.9-1.1 Nm
Thread	M8x1	M8x1	M12x1	M12x1	M12x1

The Screwty® can also be fitted with other blades to create a torque screwdriver.
You can find these blades in our catalogue “Tools”.

Use of a M12 Screwty®

1. Position Screwty®,
2. tighten connector,
3. finished!

Use of a M23 Screwty®

Screwty® standard

Ordering data

Type	Use	Qty.	Order No.
Screwty® M12	moulded M12 lines	1	**1900000000**
Screwty® M8	moulded M8 lines	1	**1900010000**
Screwty® M12 F	M12 plugs for custom assembly	1	**1900020000**
Screwty® M8 F	M8 plugs for custom assembly	1	**1900030000**

Screwty® Set

Ordering data

Type		Qty.	Order No.
Screwty® Set		1	**1910000000**
Fittings			
Type	**Contents**		
Screwty® Set	1 Screwty® standard handle + 1 M12, M8, M12 F, M8 F attachments		

Screwty® attachments

Screwty® M8 attachment | **Screwty® M8 F attachment** | **Screwty® M12 attachment** | **Screwty® M12 F attachment** | **Screwty® M23 attachment**

Ordering data

Type	Qty.	Order No.
Screwty® M12 KO o. SD	1	**1900100000**
Screwty® M8 KO o. SD	1	**1900110000**
Screwty® M12F KO o. SD	1	**1900120000**
Screwty® M8F KO o. SD	1	**1900130000**
Screwty® M23	1	**1981560000**

Legend:	
F	for custom assemblies
DM	torque
KO or SD	ratchet only (attachment)
Screwty®	screwdriver
Screwty® DM	torque screwdriver, interchangeable blade
WK	interchangeable blade
LS	power plug

Screwty® with torque fitting

Setting aid for Screwty® with torque fitting (included)

Ordering data

Type	Use	Qty.	Order No.
Screwty®-M12-DM	moulded M12 lines with torque requirement	1	**1900001000**
Screwty®-M8-DM	moulded M8 lines with torque requirement	1	**1900011000**
Screwty®-M12 F-DM	M12 plugs, custom assembly w. torque requirement	1	**1900021000**
Screwty®-M8 F-DM	M8 plugs, custom assembly with torque requirement	1	**1900031000**

Fittings	
Type	**Contents**
Screwty®-M12-DM	1 interchangeable blade, 1 torque handle, 1 setting aid for Screwty® torque, 1 Screwty® M12 attachment
Screwty®-M8-DM	1 interchangeable blade, 1 torque handle, 1 setting aid for Screwty® torque, 1 Screwty® M18 attachment
Screwty®-M12 F-DM	1 interchangeable blade, 1 torque handle, 1 setting aid for Screwty® torque, 1 Screwty® M12 F attachment
Screwty®-M8 F-DM	1 interchangeable blade, 1 torque handle, 1 setting aid for Screwty® torque, 1 Screwty® M18 F attachment

Screwty® Set-DM

Ordering data

Type		Qty.	Order No.
Screwty® Set-DM		1	**1920000000**
Fittings			
Type	**Contents**		
Screwty® Set-DM	1 interchangeable blade, 1 torque handle, 1 setting aid for Screwty® torque, 1 each of Screwty® M12, M8, M12 F, M8 F attachments		

Screwty® interchangeable handle/interchangeable bit

Ordering data

Type	Use	Qty.	Order No.
1/4“ handle		1	**4294820000**
WK-1/4“ (Screwty®)		1	**1862200000**

SAI tool boxes

SAI-Screwty® Box

- Stripping of PVC and PUR sensor/actuator cables
- Tightening of M8 and M12 round connectors with adjustable torque setting

Accessories

Article description	Qty.
Stripping tool Stripper 6–16 for plastic-sheathed cables up to 10 mm outside diameter	1
Torque screwdriver DMS manual for 0.5–1.7 Nm	1
Torque screwdriver DMS manual for 2.0–8.0 Nm	1
Screwty® attachment for plug-in connectors* M8	1
Screwty® attachment for plug-in connectors* M8F	1
Screwty® attachment for plug-in connectors* M12	1
Screwty® attachment for plug-in connectors* M12F	1
Carry case	1

*) Screwing attachment for M8/10 mm; M8F/11.9 mm; M12/14.5 mm; M12/19.8 mm; F…male and female connectors for custom assembly .

Ordering data

Type	Order No.
SAI-SCREWTY BOX	**1939180000**

SAI-Screwty® Tool Box

- Screwing of M8 and M12 round connectors with adjustable torque setting
- Tightening of slot-head and cross-head screws (PZ and PH)

Accessories

Article description	Qty.
Torque screwdriver DMS manual for 0.5–1.7 Nm	1
Torque screwdriver DMS manual for 2.0–8.0 Nm	1
Interchangeable blade 0.4 x 2.5 mm	1
Interchangeable blade 0.5 x 3.0 mm	1
Interchangeable blade 0.6 x 3.5 mm)	1
Interchangeable blade 0.8 x 4.0 mm	1
Interchangeable blade 1.0 x 5.5 mm	1
Interchangeable blade PZ0	1
Interchangeable blade PZ1	1
Interchangeable blade PZ2	1
Interchangeable blade PH=0	1
Interchangeable blade PH1	1
Interchangeable blade PH2	1
Screwty® attachment for plug-in connectors* M8	1
Screwty® attachment for plug-in connectors* M8F	1
Screwty® attachment for plug-in connectors* M12	1
Screwty® attachment for plug-in connectors* M12F	1
Carry case	1

*) Screwing attachment for M8/10 mm; M8F/11.9 mm; M12/14.5 mm; M12/19.8 mm; F…male and female connectors for custom assembly .

Ordering data

Type	Order No.
SAI-SCREWTY TOOL BOX	**1939170000**

Cutting tools

- Cutting formation for different cable sizes increases the quality of the cuts for smaller cross sections
- Not suitable for steel wires, steel armoured cables, aluminium alloys and hard drawn copper conductors!
- Cutting without deformation of the conductor

KT 8

⌀	max. 8 mm
●	max. 16 mm²
⁘	max. 16 mm²
⁘	max. 16 mm²

KT 12

⌀	max. 12 mm
●	max. 16 mm²
⁘	max. 25 mm²
⁘	max. 35 mm²

Technical data

		KT8	KT12
Max. cutting performance, copper cable			
Solid (max. conductor cross-section)	mm² / –	16 / 6	16 / 6
Stranded (max. conductor cross-section)	mm² / –	16 / 6	25 / 3
Flexible (max. conductor cross-section)	mm² / –	16 / 6	35 / 2
Flexible, stranded (max. conductor diameter)	mm	8	12
Max. cutting performance, aluminium cable			
Stranded (max. conductor cross-section)	mm² / –	16 / 6	25 / 6
Stranded (max. conductor diameter)	mm	8	8
solid	mm²	16	25
Data / telephone / control cable			
Max. outer diameter	mm	8	12
Tool data			
Length / Width / Height	mm	165 / 65 / 25	215 / 66 / 28
Weight	g	180	300
Note		Tool closed	Tool closed

Ordering data

Version	Type	Qty	Order No.	Type	Qty	Order No.
	KT 8	1	**9002650000**	KT 12	1	**9002660000**
Note						

Special sheathing and insulation stripping tools

- Quick and accurate stripping
- No need to adjust cutting depth
- No damage to inner conductors

Stripper 6-16

Stripper 6-16
The Stripper 6-16 insulation stripping tool is for removing the outer sheath of sensor cables. No damage to inner wires can occur because the blades have a specially ground surface. Adjusting the tool to different cross-sections is unnecessary. The visual scale of 15 to 20 mm enables quick and precise stripping of outer insulation.

AM12

For UTP and STP data cables

- Cutting of UTP and STP data cables and other flexible copper cables with a diameter of up to 4 mm² (~AWG11)
- Stripping of the outer insulation of UTP and STP data cables and other round cables with ø 0.5 ... 12.5 mm
- No damage to the shielding or conductor due to adjustable stripping blade
- Length end stop for repeated cutting or stripping lengths

Technical data

Max. stripping performance		Stripper 6-16	AM12
Cable model		suitable for PVC and PUR cables	UTP and STP data cables
Conductor cross-section	AWG		20...11
Conductor diameter	mm		0.5...12.5
Depth of cut			adjustable
Cutting performance			
UTP und STP data cables, max. diameter	mm		8
Flexible (max. conductor cross-section)	mm²		4
Tool data			
Length	mm	165	97
Weight	g	120	36
Information			

Ordering data

Version	Type	Qty.	Order No.	Type	Qty.	Order No.
	STRIPPER 6-16 RED-LINE	1	**9203110000**	AM 12	1	**9030060000**
Information						

Accessories

	Type	Qty.	Order No.	Type	Qty.	Order No.
Information				Sheathing stripper		

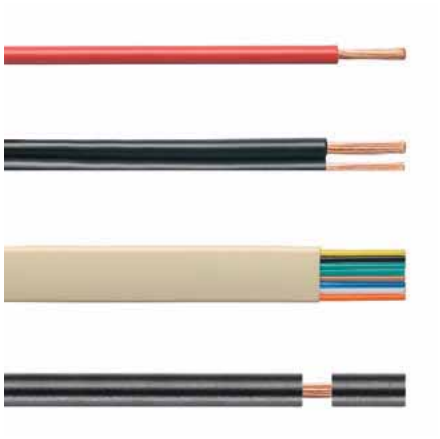
Stripping and cutting tools

- for flexible and solid conductors with PVC insulation
- Cable with double insulation in two processing steps without special adjustment
- Automatic opening of clamping jaws after stripping
- No play in self adjusting cutting unit
- Long-lasting
- No splicing of single conductors
- Optimised ergonomic design
- Stripping length adjustable via stop
- Adjustable for different insulation thicknesses
- Switchable partial stripping function
- Removable handle shells
- Fold-out cutting protection
- Custom marking with ESG device markers

stripax®

0.08 - 10 mm²

- Stripping: PVC insulated flexible conductor, size 0.08...10 mm² (~AWG 28...7)
- Cutting: PVC insulated flexible conductor, size 0.08...6 mm² (~AWG 28...10)
- Conductors undamaged due to self adjusting stripping blades.
- Processing of multi-conductors, with thin flat ribbon cables and even multiple conductors in one operation



Technical data

Max. stripping performance		**stripax®**
Cable type		Flexible and solid conductors with PVC insulation
Conductor cross-section	mm²	0.08...10
Stripping length, max.	mm	25
Cutting performance		
Max. cutting performance	mm²	6
Tool data		
Length	mm	190
Weight	g	175
Note		

Ordering data

Version	Type	Qty.	Order No.
	stripax®	1	**9005000000**
Note			

Accessories

	Type	Qty.	Order No.
	Spare stripping blades	1	**1119030000**
Note			

multi-stripax®

Multifunctional stripping tool for use on a multitude of conductor insulation forms and configurations – even those not covered by the standard

multi-stripax® – the troubleshooter

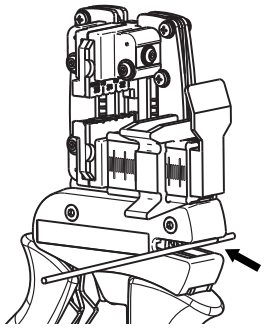
- Interchangeable stripping units
- Proper stripping of any conductor, round, flat or special profiles, thanks to the specially shaped stripping blades
- Incorporates cutting function for up to 2.5 mm² solid and 6 mm² fine
- Fatigueless operation thanks to ergonomic design
- No damage to conductor or remaining insulation
- Best stripping results for industrial applications
- Stripping results reproduced accurately time and time again
- A long lasting, reliable tool thanks to its robust design
- Plus, the customary Weidmüller repair service

Special stripping units – the answer to diverse stripping tasks

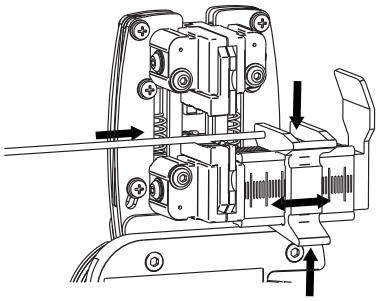
The multi-stripax® tool – distinguished by its robust design, was developed to handle all the stripping tasks met with in practice. Thanks to the interchangeable stripping units, a special solution can be found for every challenge in the marketplace.

The specially shaped stripping blades guarantee perfect stripping results. The guide plates ensure the correct positioning of the wire and therefore prevent damage to the remaining wire. The clamping jaws hold the conductor with just the right force during the stripping operation and are matched to the specific situation. This flexibility within the variables that affect the result of the stripping operation turns the multi-stripax® tool into a universal troubleshooter.

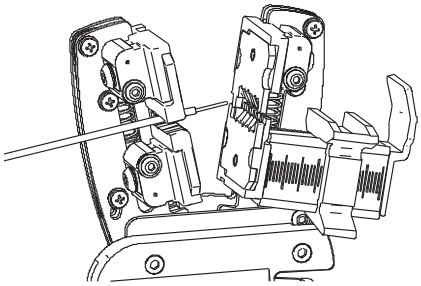
Cutting



Positioning



Stripping

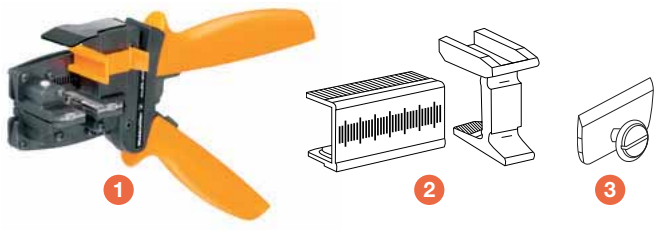


multi-stripax®

Technical data

Cable type	PVC, Teflon, PTE, PUR, silicone, halogen-free
Conductor cross-section, min.	2 mm
Conductor cross-section, max.	no limit (in several steps)
max. cutting capacity, fine-strand	6 mm²
max. cutting capacity, solid	2.5 mm²
max. cutting capacity, ribbon	10.2 x 4 mm
Length/Width/Height	250 / 85 / 40 mm
Weight	250 g
Information	

multi-stripax® incl. stripping unit



- High quality stripping for industrial applications
- Specially shaped stripping blades enable stripping of special types of insulation and conductor configurations
- Adjustable stop for setting stripping lengths from 2.3 to 30 mm
- Highly flexible thanks to interchangeable stripping units
- Stripping results reproduced accurately time and time again
- No damage to the conductor or insulation
- A long lasting, reliable tool thanks to its robust design
- Integral cutting function for max. 2.5 mm² solid or 6 mm² flexible cables

Ordering data

Illustration	Type	Qty.	Order No.	Features
1	multi-stripax® 6-16	1	**9202210000**	PVC-insulated cables; Cable cross-section 6 up to 16 mm²; max. stripping lengths depends on cable design / cable type 1. station solid, stranded and flexible 6 mm² 2. station solid, stranded and flexible 10 mm² 3. station solid, stranded and flexible 16 mm² double stranded (flexible) Cutting function up to 6 mm²
1	multi-stripax® ASI	1	**9202250000**	ASI Bus cables 2 x 1.5 mm² flexible for PTE, PUR and EPDM insulated cables Stripping of outer insulation and inner cable Cutting function up to 6 mm²
1	multi-stripax® GKW LW	1	**9205760000**	Railway cable Radox GKW LW; Cable cross-section 1.0; 1.5 and 2.5 mm² max. stripping lengths depends on cable design / cable type Cutting function up to 6 mm²
2	ERAN multi-stripax®	1	**9203100000**	Length stop
3	ERME multi-stripax®	1	**9203070000**	Cutting knife

Information

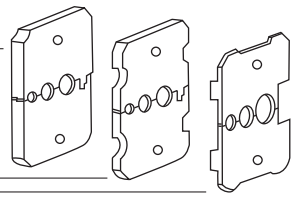
Stripping units for multi-stripax®

Stripping unit consists of:

Clamping jaws
Short symbol KLBC SPX SP

Insulation stripping tool
Short symbol AIME SPX SP

Guide plate
Short symbol FUEPL SPX SP



- High flexible thanks to interchangeable stripping units
- High quality stripping for industrial applications
- Specially shaped stripping blades enable stripping of special types of insulation and condcutor configurations

Ordering data

Type	Qty.	Order No.	Features
AIE multi-stripax® 6-16	1	**9202260000**	PVC-insulated cables; Cable cross-section 6 up to 16 mm²; max. stripping lengths depends on cable design / cable type 1. station solid, stranded and flexible 6 mm² 2. station solid, stranded and flexible 10 mm² 3. station solid, stranded and flexible 16 mm² double stranded (flexible)
AIE multi-stripax® ASI	1	**9202300000**	ASI Bus cables 2 x 1.5 mm² flexible for PTE, PUR and EPDM insulated cables Stripping of outer insulation and inner cable
AIE multi-stripax® GKW LW	1	**9205770000**	Railway cable Radox GKW LW; Cable cross-section 1.0; 1.5 and 2.5 mm² max. stripping lengths depends on cable design / cable type

M23 crimping tools

SAI M23 crimping tool 1

Technical data

Crimp contact	Wire cross-section (mm²)	Crimping mandrel adjustment	Locator position	Order No.
Crimp male, signal 1 mm	0.14 0.25 0.34 0.50 0.75 1.00	0.75 0.82 0.90 1.00 1.08 1.20	11	**1170150000**
Crimp female, signal 1 mm (0.08 - 0.56 mm²)	0.14 0.25 0.35 0.50	0.75 0.80 0.87 0.97	12	**1995860000**
Crimp female, signal 1 mm (0.34 - 1.00 mm²)	0.50 0.75 1.00	0.95 4.00 1.05	12	**1170180000**
Crimp male, signal 1.5 mm	0.14 0.25 0.35 0.50 0.75 1.00	0.75 0.82 0.90 0.96 1.03 1.00	3	**1170220000**
Crimp female, signal 1.5 mm	0.14 0.25 0.35 0.50	0.75 0.80 0.87 0.97	4	**1170230000**
Crimp female, signal 1.5 mm (0.34 - 1.00 mm²)	0.50 0.75 1.00	0.95 1.00 1.05	4	**1170240000**
Crimp male, signal 2 mm	0.75 1.00 1.50 2.50	1.30 1.40 1.55 1.75	5	**1170250000**
Crimp female, signal 2 mm	0.75 1.00 1.50 2.50	1.30 1.40 1.55 1.75	6	**1170260000**
Crimp male, power 1 mm	0.14 0.25 0.35 0.50 0.75 1.00	0.75 0.80 0.85 1.03 1.08 1.13	1	**1170390000**
Crimp female, power 1 mm	0.14 0.25 0.35 0.50 0.75 1.00	0.75 0.80 0.85 0.89 0.95 1.02	2	**1995830000**
Crimp male, power 2 mm	0.75 1.00 1.50 2.50	1.20 1.40 1.55 1.70	7	**1170400000**
Crimp male, power 2 mm	2.50 4.00	1.47 1.60	7	**1170410000**
Crimp female, power 2 mm	0.75 1.00 1.50 2.50	1.20 1.40 1.55 1.70	8	**1995820000**
Crimp female, power 2 mm	2.50 4.00	1.47 1.60	8	**1170420000**

Ordering data

Type	Order No.
SAI M23 CRIMPING TOOL 1	**1203840000**

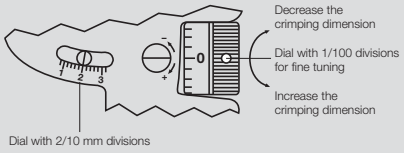
Adjusting the crimping dimensions

The adjustment mechanism is used to set the crimping depth of the crimping mandrel as described below. The adjusting dial is used to prepare the infeed; the dial can be turned clockwise (for decreasing the dimension) or counter-clockwise (for increasing the dimension).

Adjustment precision

- 1 division mark on the dial ≙ 1/100 mm adjustment
- 1 complete revolution of the dial ≙ 0,2 mm adjustment read from scale
- 5 revolutions of the dial ≙ 1 mm adjustment read from scale

Verifying the crimping dimension



The four-mandrel crimping tool is pre-set at the factory. The actual crimping size should still be checked periodically. It should be checked using the plug gauge (Ø 2.0 mm) that is included with the crimping tool as described below. Use the dial on the stationary tool shank to set the size to 2.0 mm on the scale. Set to the zero-point tick mark on the dial and close the tool. (Refer to the diagram showing the crimping size adjustment.) At this setting, it should be possible to move the 2.00-mm-Ø plug gauge without any play or extra room. If this is not possible, then the size deviation (+/-) can be determined using the dial's fine-adjustment mechanism. If this size check reveals that the tool is not within the tolerance range specified by the manufacturer of the contacts, then you should contact the manufacture of the tool for further inspection.

Servicing and maintenance

Before you start to use the hand crimping tool, it must be clean and in proper working condition. Crimp residue or fragments must be removed from the crimping jaws and locator. The joints should be regularly lubricated using machine oil to protect them from dirt. Make sure that all bolts are secured with locking rings.

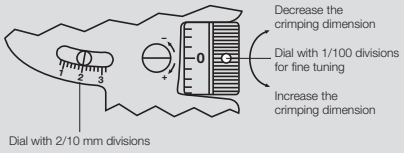
Operation mode
The following table specifies the locator positions and the crimping dimensions for various crimping contacts. The contact is inserted through the tool into the locator; this ensures the proper crimping position. The inserted contact is secured by closing gently (approximately to first snap-close level). Now the cable can be easily inserted and it is not possible for the contact to fall out. The tool must be pressed together until it reaches the end stop position in order to function properly. They are then able to open automatically which brings the crimping process to a close in the intended manner.

SAI M23 crimping tool 2

Adjusting the crimping dimensions
The adjustment mechanism is used to set the crimping depth of the crimping mandrel as described below.
The adjusting dial is used to prepare the infeed; the dial can be turned clockwise (for decreasing the dimension) or counter-clockwise (for increasing the dimension).

Adjustment precision
- 1 division mark on the dial ≙ 1/100 mm adjustment
- 1 complete revolution of the dial ≙ 0,2 mm adjustment read from scale
- 5 revolutions of the dial ≙ 1 mm adjustment read from scale

Verifying the crimping dimension



The four-mandrel crimping tool is pre-set at the factory. The actual crimping size should still be checked periodically. It should be checked using the plug gauge (Ø 1.0 mm) that is included with the crimping tool as described below. Use the dial on the stationary tool shank to set the size to 1.0 mm on the scale. Set to the zero-point tick mark on the dial and close the tool. (Refer to the diagram showing the crimping size adjustment.) At this setting, it should be possible to move the 1.00-mm-Ø plug gauge without any play or extra room. If this is not possible, then the size deviation (+/-) can be determined using the dial's fine-adjustment mechanism. If this size check reveals that the tool is not within the tolerance range specified by the manufacturer of the contacts, then you should contact the manufacture of the tool for further inspection.

Servicing and maintenance
Before you start to use the hand crimping tool, it must be clean and in proper working condition. Crimp residue or fragments must be removed from the crimping jaws and locator. The joints should be regularly lubricated using machine oil to protect them from dirt. Make sure that all bolts are secured with locking rings.

Technical data

Crimp contact	Wire cross-section (mm²)	Crimping mandrel adjustment	Locator position	Order No.
Crimp male 1 mm	0.14	0.86	1	**1170150000**
	0.25	0.90		
	0.34	0.95		
	0.56	0.98		
	0.75	1.03		
	1.00	1.08		
Crimp female 1 mm	0.08	0.75	2	**1995860000**
(0.08-0.56 mm²)	0.14	0.78		
	0.25	0.82		
	0.34	0.86		
	0.56	0.90		
Crimp female 1 mm	0.34	0.77	2	**1170180000**
(0.34-1.00 mm²)	0.56	0.82		
	0.75	0.88		
	1.00	0.95		
Crimp male 1.5 mm	0.14	0.65	3	**1170220000**
	0.25	0.68		
	0.34	0.72		
	0.56	0.81		
	0.75	0.95		
	1.00	1.07		
Crimp female 1.5 mm	0.14	0.70		**1170230000**
(0.14-0.75 mm²)	0.25	0.73		
	0.34	0.77		
	0.56	0.85		
	0.75	1.05		
Crimp female 1.5 mm	0.34	0.88		**1170240000**
(0.34-1.00 mm²)	0.56	0.95		
	0.75	1.05		
	1.00	1.13		
Crimp male 2.0 mm	0.75	1.20		**1170250000**
	1.00	1.35		
	1.50	1.45		
	2.50	1.60		
Crimp female 2.0 mm	0.75	1.25		**1170260000**
	1.00	1.35		
	1.50	1.45		
	2.50	1.60		

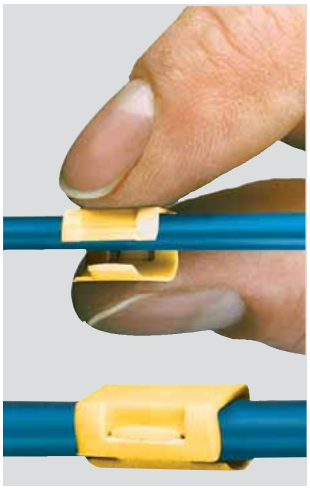
Ordering data

Type	Order No.
SAI M23 CRIMPING TOOL 2	**1203960000**

SlimFix Clip

The SlimFix Clip combines two advantages in one: its unique closure mechanism offers the reliability of a closed marker with ease of attaching an open marker. The Clip closure mechanism also allows quick, no fuss attachment of the markers after the wires have been installed. SlimFix Clip markers are suitable for wires and cables with external diameters up to 5 mm. Long sequences of characters are possible on the large marking surface – up to 30 mm.

- Halogen free, flammability class V2 material
- Narrow markers with reliable attachment thanks to compensation feature
- Clip closure mechanism ensures permanent attachment following wire installation
- Rapid attachment without tools
- Three sizes for wire cross-sections from 0.5 – 10.0 mm²
- Available in lengths of 12, 21 and 30 mm
- Markers available in the proven MultiCard format
- Additional marking surface for precise assignment to projects
- Custom-printed markers supplied to your specifications



Technical data

Material	Polyamide 66, halogen-free
UL 94 flammability rating	V2
Temperature range	–40 °C to 100 °C
Printing	black

Ordering data

Type	Wire, ext. ø	Wire cross-section
SFC 0	1.5 - 2.5 mm	0.5 - 1.0 mm²
SFC 1	2.0 - 3.5 mm	0.75 - 2.5 mm²
SFC 2	2.5 - 5.0 mm	2.5 - 4.0 mm²
SFC 2,5 n	4.0 - 6.0 mm	4.0 - 10.0 mm²
Colour	Other colours on request ● brown ● orange ● green ● violet ● grey	
Special printing	Specify special printing and colours per diskette, Excel file or using the M-Print® PRO software.	
Minimum order quantity	1 pack	
Note: SlimFix Clip markers can be printed with PrintJet.		

SFC - blank

Technical specification

Material	Polyamide
UL 94 flammability rating	V2
Min. temperature, continuous	-40 °C
Max. temperature, continuous	100 °C

Ordering data

Type	Length	Qty.	Order No. white	Order No. yellow	Order No. blue	Order No. red	Custom printing
SFC 0/12	12	200	**1813130000**	**1813160000**	**1813170000**	**1813150000**	
SFC 1/12	12	200	**1747320001**	**1747320004**	**1747320002**	**1747320003**	
SFC 2/12	12	120	**1758320001**	**1758320004**	**1758320002**	**1758320003**	
SFC 2,5/12	12	120	**1062000000**	**1062010000**	**1062030000**	**1062020000**	**1062040000**
SFC 0/21	21	200	**1813190000**	**1813210000**	**1813220000**	**1813200000**	
SFC 1/21	21	200	**1779080001**	**1779080004**	**1779080002**	**1779080003**	
SFC 2/21	21	120	**1805810000**	**1805780000**	**1805770000**	**1805790000**	
SFC 2,5/21	21	120	**1062050000**	**1062070000**	**1062090000**	**1062080000**	**1062110000**
SFC 0/30	30	150	**1813240000**	**1813260000**	**1813270000**	**1813250000**	
SFC 1/30	30	150	**1805760000**	**1805730000**	**1805720000**	**1805740000**	
SFC 2/30	30	90	**1805870000**	**1805830000**	**1805820000**	**1805850000**	

Marker tags for sensor cables

Sleeves for marking sensor cables

To enable unique marking of sensor/actuator cables, these can be identified with a marker tag. Each cable has a sleeve that accepts a marker tag TM-I 18. Cables open at one end have one sleeve, connecting cables have two marker sleeves. The TM-I 18 is available in various colours.

Ordering data

Type	Colour	Order No.
Sleeve		
TM 203/18 VO	transparent	**1798480000**
TM 4/18 HF/HB	transparent	**1719850000**
Marker		
TM-I 18 NEUTRAL WS	white	**1718431044**
TM-I 18 NEUTRAL GE	yellow	**1718431687**

The Weidmüller PrintJet marking system prints marker tags quickly, reliably and individually.

The **PrintJet PRO** inkjet printer prints markers for electric connectivity. These markers can be used for clear equipment identification on devices, cables and connectors. The labelling makes servicing, maintenance and troubleshooting much easier. Water-based ink is used for the spot colour printing. The print is crystal clear and resistant to environmental influences.
The **PrintJet PRO** prints plastic markers in **MultiCard** format.

In combination with the user-friendly **M-Print® PRO** software and the attached loader, the printer becomes an essential part of the production.The inkjet process being used, the subsequent fusing, as well as the printer cartridge and ink have all been specially adapted by Weidmüller for industrial use. The printer has excellent long-term use capabilities, thanks to its integrated loader.

Ordering data PrintJet PRO

Type		Order No.
PrintJet PRO 115V		**1024050000**
PrintJet PRO 230V		**1001180001**
Accessories		
PJ PRO TNTK INK SET COL	Ink tank starter set, colour	**1027110000**
PJ PRO TNTK INK K	● Ink tank Black	**1027040000**
PJ PRO TNTK INK C	● Ink tank Cyan	**1027050000**
PJ PRO TNTK INK M	● Ink tank Magenta	**1027060000**
PJ PRO TNTK INK Y	● Ink tank Yellow	**1027070000**
PJ PRO TNAW	Ink collecting tray	**1024140000**

Marker tags for distributors

Marker tags can be affixed to distributors to ensure unique identification. For marking of our standard M12 products, ESG 9/20 tags are used, M8 and M5 distributors can be labelled with WS 10/5 and DEK 5 markers. For labelling metal distributors, self-adhesive ESG 9/17 must be used.

In the case of the SAI Active family, we differentiate between SAI Active Universal and SAI Active Line. For labelling of Active Universal, we offer ESG 8/13.5/43.3 SAI AU. For labelling of Active Line, the ESG 9/6 is used.

All of these markers are available in MultiCard format and can therefore also be printed using our innovative PrintJet PRO marking solutions.

DEK for marking of M8 and M5 distributors

DEK – Blank

Type	Colour	Width/Length	Qty.	Order No.
DEK 5/5 MC	white	5 mm/5 mm	1000	**1609801044**

DEK – Custom printing

Type	Colour	Width/Length	Qty.	Order No.
DEK 5/5 MC	white	5 mm/5 mm	200	**1609810000**

WS for marking of M8 and M5 distributors

WS – Blank

Type	Colour	Width/Length	Qty.	Order No.
WS 10/5 MC	white	5 mm/10 mm	720	**1635000000**
WS 15/5 MC	white	5 mm/15 mm	480	**1609880000**

WS – Custom printing

Type	Colour	Width/Length	Qty.	Order No.
WS 10/5 MC	white	5 mm/10 mm	144	**1635010000**
WS 15/5 MC	white	5 mm/15 mm	96	**1609890000**

ESG for marking of M12 Universal distributors

Ordering data

Type for SAI Active Line	Colour	Width/Length	Qty.	Order No.
ESG 9/20 MC NEUTRAL WS	white	20 mm/9 mm	200	**1609940000**

ESG for marking of M12 Universal distributors

Ordering data

Type for SAI Active Universal	Colour	Width/Length	Qty.	Order No.
ESG 8/13.5/43.3 SAI AU	transparent	13,5 mm/43,3 mm/8 mm	5	**1912130000**

Technical appendix

Sensor Actuator Interface Passive – Overview

Technical data

			M5	M8	M12
Material data					
Insulating material	Housing		PA 6 GF	PBT (UL 94 V0)	PBT (UL 94 V0)
	Contact carrier		PA66	PBT (UL 94 V0)	PBT (UL 94 V0)
Base material	Contact		CuSn4	CuSn6	CuSn6
	Screw socket		CuZn, nickel-plated	CuZn, nickel-plated	CuZn, nickel-plated
Temperature range		°C	–25 …+90	–20…+90	–20…+90
Colour	Housing		grey, RAL 7032s	grey, RAL 7032	grey, RAL 7032
	PG & contact carrier			black	black
Cable sheathing			PUR	PUR	PUR
Cable type			PUR/PVC	halogen free	halogen free, UL
O-ring			Viton	Viton	Viton
Housing seal					foamed PUR
Type of connection, hood version				tension clamp	screw/tension clamp
Clamping range		mm^2		0.08…1.0	0.08…1.5
AWG No.				28…18	22…14
Stripping length, hood version		mm		100	100
Stripping length, screw version		mm		–	7
Stripping length, tension clamp version		mm		7	10
Contact surface				tinned	tinned
BL3.5 / B2L					
Contact base material				Cu alloy	Cu alloy
BL3.5 / B2L					
Torques					
Hoods		Nm		0.8	0.8
Blanking plugs		Nm		0.5	0.5
Mechanical data					
Ingress Predection Class*		IP	67	68 (M16/M23 IP67)	68
Suitability for cable carrier		cycles at 15d	1 million 15d	1 million 15d	2 million 10d
IDC connection					
Max. connect. frequency of a cable with same cross-section					–
Stripping length		mm			
Conductor cross-section (flexible)		mm^2			–
Smallest strand diameter		mm			–
Conductor insulation material					–
Conductor outside diameter		mm			–
Cable outside diameter		mm			–
Pin assignment					–
Electrical data to VDE 110 (Apr 97)					
Operating voltage		V-	10 … 30	10 … 30	10 … 30
Max. current carrying capacity per I/O signal		A	1	2 (Derating)	2 (Derating)
– total with single supply		A	3	8	10 (9 A for F-version)
– total with dual supply		A	–	–	2 x 8 = 16
Rated voltage		V_{eff}	24	32	32
Test voltage		kV_{eff}		1.0	1.0
Pollution severity				3	3
Insulation resistance		Ω		$> 10^9$	$> 10^9$
Other data					
Dimensions		see chapter G			
Fixing holes		see chapter G			
Function indicators					
for operating voltage			1 LED, green	1 LED, green	2 LEDs, green
for I/O function			1 LED, yellow (per function)	1 LED, yellow (per function)	1 LED, yellow (per function)
Current isolation (SAI-… -M)				–	via 2 jumper plugs
Cable strain relief (SAI-… -M)				M20	M20
Max. cable diameter (SAI-… -M)		mm		10–14	6–12

* only when plugged in and secured

Technical data

			IDC	M12 Push-Pull
Material data				
Insulating material	Housing		PBT (UL 94 V0)	PA 6 GF
	Contact carrier		PBT (UL 94 V0)	PBT (UL 94 V0)
Base material	Contact		CuZn, pre-nickeled & gold-plated	CuSn6
	Screw socket		CuZn, nickel-plated	CuZn, nickel-plated
Temperature range		°C	–20 … +90	–25 ... +80
Colour	Housing		grey, RAL 7032	grey, RAL 7032
	PG & contact carrier		black	black
Cable sheathing			PUR	PUR
Cable type			PUR/PVC	halogen free, UL
O-ring			Viton	Viton
Housing seal			foamed PUR	foamed PUR
Type of connection, hood version			screw/tension clamp	tension clamp
Clamping range		mm^2	0.08 … 1.5	0.08 … 1.5
AWG No.			22 … 14	22 … 14
Stripping length, hood version		mm	100	100
Stripping length, screw version		mm	7	7
Stripping length, tension clamp version		mm	10	10
Contact surface			tinned	tinned
BL3.5 / B2L				
Contact base material			CU-Alloy	CU-Alloy
BL3.5 / B2L				
Torques				
Hoods		Nm	0.8	0.8
Blanking plugs		Nm	0.5	
Mechanical data				
Ingress Predection Class*		IP	67	68
Suitability for cable carrier		cycles at 15d	1 million 15d	2 million 10d
IDC connection				
Max. connect. frequency of a cable with same cross-section			10	
Stripping length		mm	15 … 20	
Conductor cross-section (flexible)		mm^2	0.25 … 0.5	
Smallest strand diameter		mm	0.1	
Conductor insulation material			PVC/PE/PUR	
Conductor outside diameter		mm	1.2 … 1.6	
Cable outside diameter		mm	3.5 … 5.0	
Pin assignment			see next page	
Electrical data to VDE 110 (Apr 97)				
Operating voltage		V-	10 … 30	10 … 30
Max. current carrying capacity per I/O signal		A	2 (Derating)	2
– total with single supply		A	10 (9 A bei F-Version)	10
– total with dual supply		A	2 x 8 = 16	
Rated voltage		V_{eff}	32	32
Test voltage		kV_{eff}	1.0	1.0
Pollution severity			2	3
Insulation resistance		Ω	> 10^9	
Other data				
Dimensions		see chapter G		
Fixing holes		see chapter G		
Function indicators				
for operating voltage			2 LEDs, green	1 LED, green
for I/O function			1 LED, yellow (per function)	1 LED, yellow (per function)
Current isolation (SAI-… -M)			via 2 jumper plugs	
Cable strain relief (SAI-… -M)			M20	M20
Max. cable diameter (SAI-… -M)		mm	6–12	6–12

* only when plugged in and secured

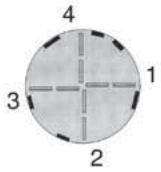
Contact assignment

SAI-M/SAI-F – IDC

3-pole

Pole	Colour code	Assignment
1	brown	+ 24 V DC
2	white	input/output
3	blue	0 V DC

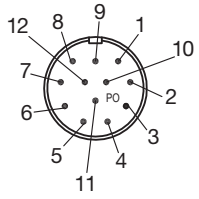
4-pole

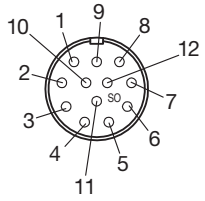


Pole	Colour code	Assignment
1	brown	+ 24 V DC
2	no colour	Input/output 2
3	blue	0 V DC
4	black	Input/output 1

M23

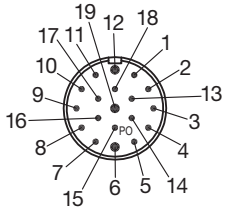
12-pole

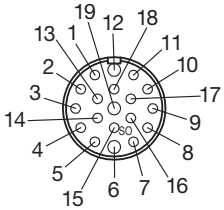




Pole	Colour code	Plug-in station	Contact M12
1	white	1	4
2	green	2	4
3	yellow	3	4
4	grey	4	4
5	pink	5	4
6	red	6	4
7	black	7	4
8	violet	8	4
9	blue (–)	1–8	3
10	blue (–)	1–8	3
11	brown (+)	1–8	1
12	green-yellow (PE)	1–8	5

19-pole





Pole	Colour code	Plug-in station	Contact M12
1	violet	8	4
2	red	6	4
3	grey	4	4
4	red/blue	2	2
5	green	2	4
7	grey/pink	1	2
8	white/green	3	2
9	white/yellow	5	2
10	white/grey	7	2
11	black	7	4
13	yellow/brown	6	2
14	brown/green	4	2
15	white	1	4
16	yellow	3	4
17	pink	5	4
18	grey/brown	8	2
6	blue (–)	1–8	3
12	green-yellow (PE)	1–8	5
19	brown (+)	1–8	1

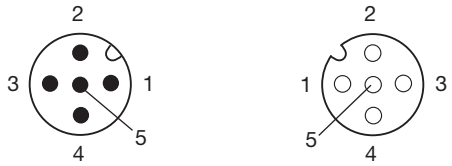
Coding systems for round connectors

Round connectors are used for wiring sensors, actuators and data cables. To prevent wiring errors, there are different coding systems: for M12, the plug-in connectors are coded A, B and D. The M12 A-coded plug-in connector is available with 3 to 5 pins, 6 to 8 and 9 to 12 pins. There is no coding for M8 and M5.

The arrangement of the pins in the M8 plug-in connector (asymmetrical) rules out the possibility of 3 and 4-pole M8 plug-in connectors being connected together. In the case of M5 plug-in connectors, 3 and 4-pole plug-in connectors can be connected together since the pins are symmetrically arranged.

A-coded, M12, Sensor wiring

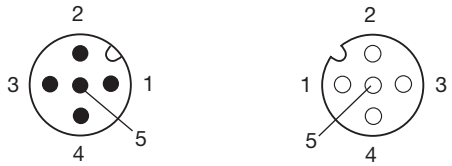
2- to 5-pole:



Pole	Colour code	Assignment
1	brown	+ 24 V DC
2	white	Input/output 2*
3	blue	0 V DC
4	black	Input/output 1
5	grey	FE
	Housing	shield**
	*) = only 5-pole version	**) = only with shielded version

A-coded, M12, PROFIBUS-PA

2- to 5-pole:



Pole	Assignment
1	DATA-B (red wire)
3	DATA-A (green wire)
Housing	shield

A-coded, M12, CANopen/DeviceNet

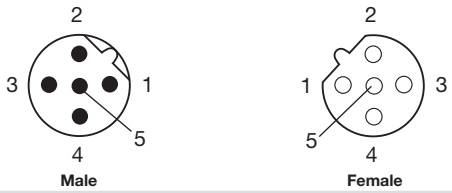
2- to 5-pole:

Pole	Assignment
1	shield
2	V+
3	V- (CAN_GND)
4	CAN_H signal
5	CAN_L signal

Coding systems

B-coded, M12, PROFIBUS-DP

3- to 5-pole:

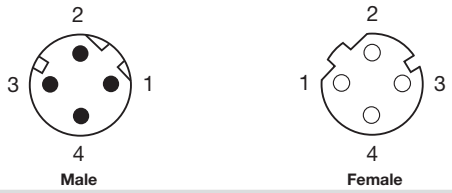


Pin	Assignment
2	Data A (green wire)
4	Data B (red wire)
Housing	shield

D-coded, M12, Industrial Ethernet

Industrial Ethernet

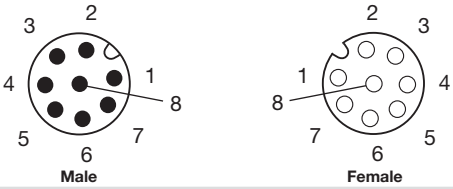
4-pole:



Pin	Assignment
1	TD+ (transmit data +)
2	RD+ (receive data +)
3	TD - (transmit data -)
4	RD - (receive data -)
Housing	shield

M12

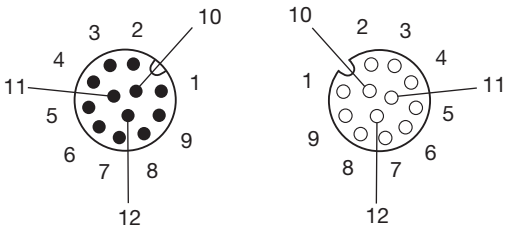
8-pole:



Pole	Colour code	Assignment
1	white	signal
2	brown	signal
3	green	signal
4	yellow	signal
5	grey	+ 24 V DC
6	pink	signal
7	blue	0 V DC
8	red	signal

M12

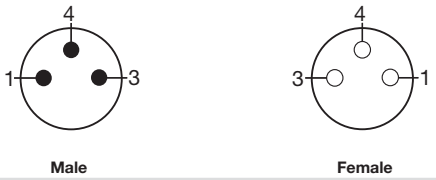
12-pole:



Pole	Colour code	Assignment
1	brown	+ 24 V DC
2	blue	0 V DC
3	white	input/output 1
4	green	input/output 1
5	pink	input/output 1
6	yellow	input/output 1
7	black	input/output 1
8	grey	input/output 1
9	red	input/output 1
10	violet	input/output 1
11	grey/pink	input/output 1
12	red/blue	input/output 1

M8 connector position

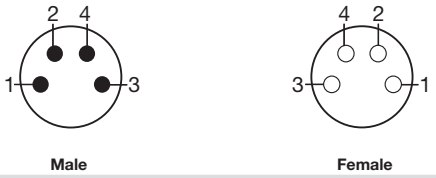
3-pole:



Pole	Colour code	Assignment
1	brown	+ 24 V DC
3	blue	0 V DC
4	black	Input/output 1

M8 connector position

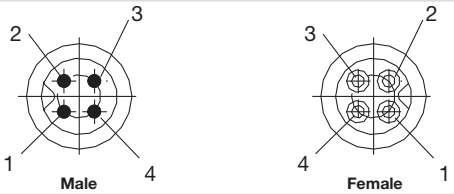
4-pole:



Pole	Colour code	Assignment
1	brown	+ 24 V DC
2	white	Input/output 2
3	blue	0 V DC
4	black	Input/output 1

M5 connector position

4-pole:

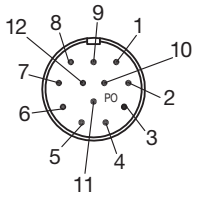


Pole	Colour code	Assignment
1	brown	+ 24 V DC
2	white	Input/output 2
3	blue	0 V DC
4	black	Input/output 1

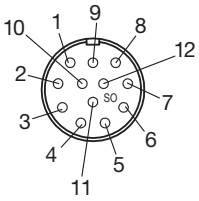
Coding systems

M23

12-pole:



Male

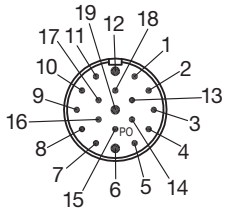


Female

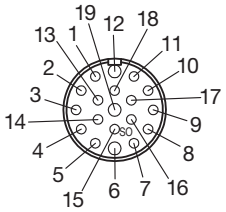
Pole	Colour code	Assignment	Cross-section
1	white	signal	0.34
2	green	signal	0.34
3	yellow	signal	0.34
4	grey	signal	0.34
5	pink	signal	0.34
6	red	signal	0.34
7	black	signal	0.34
8	violet	signal	0.34
9	nc	nc	nc
10	blue	0 V DC	0.75
11	brown	+ 24 V DC	0.75
12	green/yellow	PE	0.75

M23

19-pole:



Male



Female

Pole	Colour code	Assignment	Cross-section
1	violet	signal	0.34
2	red	signal	0.34
3	grey	signal	0.34
4	red/blue	signal	0.34
5	green	signal	0.34
6	blue	0 V DC	0.75
7	grey/pink	signal	0.34
8	white/green	signal	0.34
9	white/yellow	signal	0.34
10	white/grey	signal	0.34
11	black	signal	0.34
12	green/yellow	PE	0.75
13	yellow/brown	signal	0.34
14	brown/green	signal	0.34
15	white	signal	0.34
16	yellow	signal	0.34
17	pink	signal	0.34
18	grey/brown	signal	0.34
19	brown	+ 24 V DC	0.75

Sensor Actuator Interface Passive – Connection plan

Connection plan

Conductor colour

Terminal Connection No.		Connector position	M5/M8 contact 3-pole	M5/M8 contact 4-pole	M12-contact	IDC contact 3-pole	IDC contact 4-pole	Potential	Conductor colour	Colour code
1	=	1	4	4	4	2	4	E/A 1-1	white	WH
2	=	2	4	4	4	2	4	E/A 2-1	green	GN
3	=	3	4	4	4	2	4	E/A 3-1	yellow	YE
4	=	4	4	4	4	2	4	E/A 4-1	grey	GY
5	=	5	4	4	4	2	4	E/A 5-1	pink	PK
6	=	6	4	4	4	2	4	E/A 6-1	red	RD
7	=	7	4	4	4	2	4	E/A 7-1	black	BK
8	=	8	4	4	4	2	4	E/A 8-1	violet	VT
9	=	1	–	2	2*		2	E/A 1-2	grey/pink	GYPK
10	=	2	–	2	2*		2	E/A 2-2	red/blue	RDBL
11	=	3	–	2	2*		2	E/A 3-2	white/green	WHGN
12	=	4	–	2	2*		2	E/A 4-2	brown/green	BNGN
13	=	5	–	2	2*		2	E/A 5-2	white/yellow	WHYE
14	=	6	–	2	2*		2	E/A 6-2	yellow/brown	YEBN
15	=	7	–	2	2*		2	E/A 7-2	white/grey	WHGY
16	=	8	–	2	2*		2	E/A 8-2	grey/brown	GYBN
17	=	1, 3, 5, 7	1	1	1	1	1	U1 + (24 V DC)	brown	BN
18	=	1, 3, 5, 7	3	3	3	3	3	U1 - (0 V)	blue	BU
19	=	2, 4, 6, 8	–	–	1	1	1	U2 + (24 V DC)	red*	RD*
20	=	2, 4, 6, 8	–	–	3	3	3	U2 - (0 V)	black*	BK*
21	=	1, 2, 3, 4, 5, 6, 7, 8	–	–	5	–	–	PE	green/yellow	GNYE

* Contact used in 5-pole version only

Plug insert, hood version

Note:

SAI distributors with fixed cable have a single supply conductor as standard. The voltage U1 is supplied to all the sockets. An SAI distributor with fixed cable but with separate supply voltage is available on request.

Pin assignment

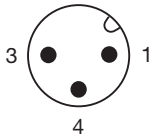
Tension clamp connection

Screw connection

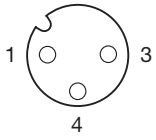
Technical data for sensor cables

M12

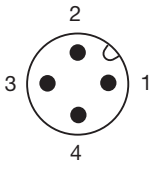
Male



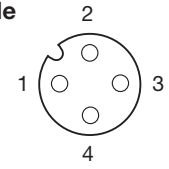
Female



Male



Female

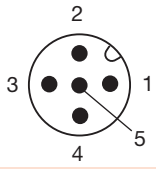


Technical data

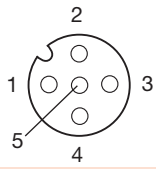
Material properties	3-pole PUR/TPE (Q)	3-pole PUR/PVC (U)	3-pole PVC/PVC (V)	4-pole PUR/TPE (Q)	4-pole PUR/PVC (U)	4-pole PVC/PVC (V)
Core cross-section	0.34 mm²	0.34 mm²	0.34 mm²	0.34 mm²	0.34 mm²	0.34 mm²
Cladding material	PUR	PUR	PVC	PUR	PUR	PVC
Wire core insulation	TPE	PVC	PVC	TPE	PVC	PVC
Conductor cross-section	4.3 ± 0.2	4.8 ± 0.2	4.8 ± 0.2	4.7 ± 0.2	5.2 ± 0.2	5.3 ± 0.2
Colour coding	brown, blue, black	brown, blue, black	brown, blue, black	brown, white, blue, black	brown, white, blue, black	brown, white, blue, black
Suitable for dragline cable carriers	Yes*	Yes*	Reduced*	Yes*	Yes*	Reduced*
Min. bending radius, flexible	10 x conductor cross-section	10 x conductor cross-section	10 x conductor cross-section	10 x conductor cross-section	10 x conductor cross-section	10 x conductor cross-section
Min. bending radius, rigid	5 x conductor cross-section	5 x conductor cross-section	5 x conductor cross-section	5 x conductor cross-section	5 x conductor cross-section	5 x conductor cross-section
Temperature, flexible	–25 °C / +80 °C	–5 °C / +80 °C	–5 °C / +80 °C	–25 °C / +80 °C	–5 °C / +80 °C	–5 °C / +80 °C
Temperature, rigid	–50 °C / +80 °C	–30 °C / +80 °C	–30 °C / +80 °C	–50 °C / +80 °C	–30 °C / +80 °C	–30 °C / +80 °C
UL	Yes	Yes	Yes	Yes	Yes	Yes
Colour	black	black	black	black	black	black
Free from halogens	Yes	No	No	Yes	No	No
Note	* Additional information available on request. Applies to unshielded M12 and M8 cables.			* Additional information available on request. Applies to unshielded M12 and M8 cables.		

M12

Male

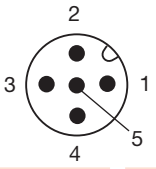


Female

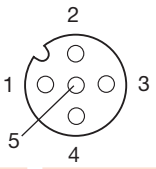


M12 Protected against welding splatter

Male



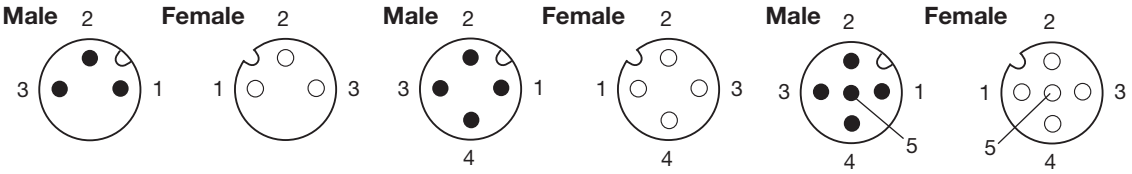
Female



Technical data

Material properties	5-pole PUR/TPE (Q)	5-pole PUR/PVC (U)	5-pole PVC/PVC (V)	3-pole PUR/PVC (T)	4-pole PUR/PVC (T)	5-pole PUR/PVC (T)
Core cross-section	0.34 mm²	0.34 mm²	0.34 mm²	0.34 mm²	0.34 mm²	0.34 mm²
Cladding material	PUR	PUR	PVC	PUR	PUR	PUR
Wire core insulation	TPE	PVC	PVC	PVC	PVC	PVC
Conductor cross-section	5.0 ± 0.2	5.6 ± 0.2	5,7 ± 0,1	4.9 ± 0.2	4.9 ± 0.2	5.1 ± 0.2
Colour coding	brown, white, blue, black, grey	brown, white, blue, black, grey	brown, white, blue, black, grey	brown, blue, black	brown, white, blue, black	brown, white, blue, black, grey
Suitable for dragline cable carriers	Yes*	Yes*	Reduced*	Yes*	Yes*	Yes*
Min. bending radius, flexible	10 x conductor cross-section	10 x conductor cross-section	10 x conductor cross-section	7.5 x conductor cross-section	7.5 x conductor cross-section	7.5 x conductor cross-section
Min. bending radius, rigid	5 x conductor cross-section	5 x conductor cross-section	5 x conductor cross-section			
Temperature, flexible	–25 °C / +80 °C	–5 °C / +80 °C	–5 °C / +80 °C	–30 °C / +120 °C	–30 °C / +120 °C	–30 °C / +120 °C
Temperature, rigid	–50 °C / +80 °C	–30 °C / +80 °C	–30 °C / +80 °C	–40 °C / +120 °C	–40 °C / +120 °C	–40 °C / +120 °C
UL	Yes	Yes	Yes	Yes	Yes	Yes
Colour	black	black	black	black	black	black
Free from halogens	Yes	No	No	Yes	Yes	Yes
Suitable for torsion				Yes	Yes	Yes
Note	* Additional information available on request. Applies to unshielded M12 and M8 cables.			* Additional information available on request.		

M12 shielded



Technical data

	3-pole	4-pole	5-pole
Material properties	**PUR/TPE (Q)**	**PUR/TPE (Q)**	**PUR/TPE (Q)**
Core cross-section	0.34 mm²	0.34 mm²	0.34 mm²
Cladding material	PUR	PUR	PUR
Wire core insulation	TPE	TPE	TPE
Conductor cross-section	5.0 ± 0.2	5.4 ± 0.2	5.7 ± 0.2
Colour coding	brown, blue, black	brown, white, blue, black	brown, white, blue, black, grey
Suitable for dragline cable carriers	Yes*	Yes*	Yes*
Min. bending radius, flexible	10 x conductor cross-section	10 x conductor cross-section	10 x conductor cross-section
Min. bending radius, rigid	5 x conductor cross-section	5 x conductor cross-section	5 x conductor cross-section
Temperature, flexible	–25 °C / +80 °C	–25 °C / +80 °C	–25 °C / +80 °C
Temperature, rigid	–40 °C / +80 °C	–40 °C / +80 °C	–40 °C / +80 °C
UL	Yes	Yes	Yes
Colour	black	black	black
Free from halogens	Yes	Yes	Yes

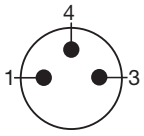
Note

* Additional information available on request.

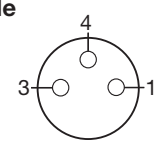
Overview of sensor cables

M8

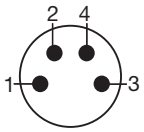
Male



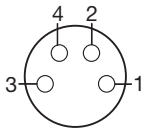
Female



Male



Female



Technical data

	3-pole			4-pole		
Material properties	**PUR/TPE**	**PUR/PVC**	**PVC/PVC**	**PUR/TPE**	**PUR/PVC**	**PVC/PVC**
Core cross-section	0.25 mm²	0.25 mm²	0.25 mm²	0.25 mm²	0.25 mm²	0.25 mm²
Cladding material	PUR	PUR	PVC	PUR	PUR	PVC
Wire core insulation	TPE	PVC	PVC	TPE	PVC	PVC
Conductor cross-section	4.1 ± 0.2	4.6 ± 0.2	4,5 ± 0,2	4.4 ± 0.2	5,0 ± 0,2	4.8 ± 0.2
Colour coding	brown, blue, black	brown, blue, black	brown, blue, black	black, brown, white, blue	black, brown, white, blue	brown, blue, black
Suitable for dragline cable carriers	Yes*	Yes*	Reduced*	Yes*	Yes*	Reduced*
Min. bending radius, flexible	10 x conductor cross-section	10 x conductor cross-section	10 x conductor cross-section	10 x conductor cross-section	10 x conductor cross-section	10 x conductor cross-section
Min. bending radius, rigid	5 x conductor cross-section	5 x conductor cross-section	5 x conductor cross-section	5 x conductor cross-section	5 x conductor cross-section	5 x conductor cross-section
Temperature, flexible	–25 °C / +80 °C	–5 °C / +80 °C	–5 °C / +80 °C	–25 °C / +80 °C	–5 °C / +80 °C	–5 °C / +80 °C
Temperature, rigid	–50 °C / +80 °C	–30 °C / +80 °C	–30 °C / +80 °C	–50 °C / +80 °C	–30 °C / +80 °C	–30 °C / +80 °C
UL	No	No	No	No	No	No
Colour	black	black	black	black	black	black
Free from halogens	Yes	No	No	Yes	No	No
Note	* Additional information available on request. Applies to unshielded M12 and M8 cables.			* Additional information available on request. Applies to unshielded M12 and M8 cables.		

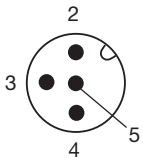
Technical data for bus cables

M 12

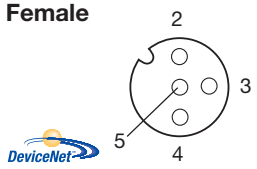
Male

Female

Male



Female

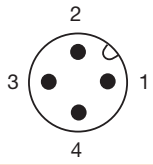


Technical data

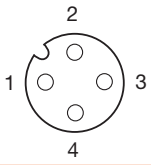
	2-pole		4-pole	
Material properties	**PUR/TPE**	**PVC/PVC**	**PUR/TPE**	**PVC/PVC**
Core cross-section	0.24 mm²	0.34 mm²	2x 0.34 + 2x 0.22 mm²	2x 0.34 + 2x 0.22 mm²
Cladding material	PUR	PVC	PUR	PVC
Wire core insulation	TPE	PVC	TPE	PVC
Conductor cross-section	7.8 ± 0.2	7.8 ± 0.2	7.0 ± 0.3	7.0 ± 0.3
Colour coding	red, green	red, green	red, black (0.34 mm²) + white, blue (0.22 mm²)	red, black (0.34 mm²) + white, blue (0.22 mm²)
Suitable for dragline cable carriers	Yes*	No**	Yes*	No
Min. bending radius, flexible	15 x conductor cross-section	9 x conductor cross-section	10 x conductor cross-section	10 x conductor cross-section
Min. bending radius, rigid	7.5 x conductor cross-section	18 x conductor cross-section	5 x conductor cross-section	5 x conductor cross-section
Temperature, flexible	–20 °C / +60 °C	–5 °C / +60 °C	–10 °C / +80 °C	–10 °C / +80 °C
Temperature, rigid	–40 °C / +70 °C	–20 °C / +70 °C	–40 °C / +80 °C	–40 °C / +80 °C
UL	No	No	Yes	Yes
Colour	violet	violet	black	black
Free from halogens	Yes	No	Yes	No
Note	* Additional information available on request. ** for rigid installation		* Additional information available on request.	

M 12

Male



Female

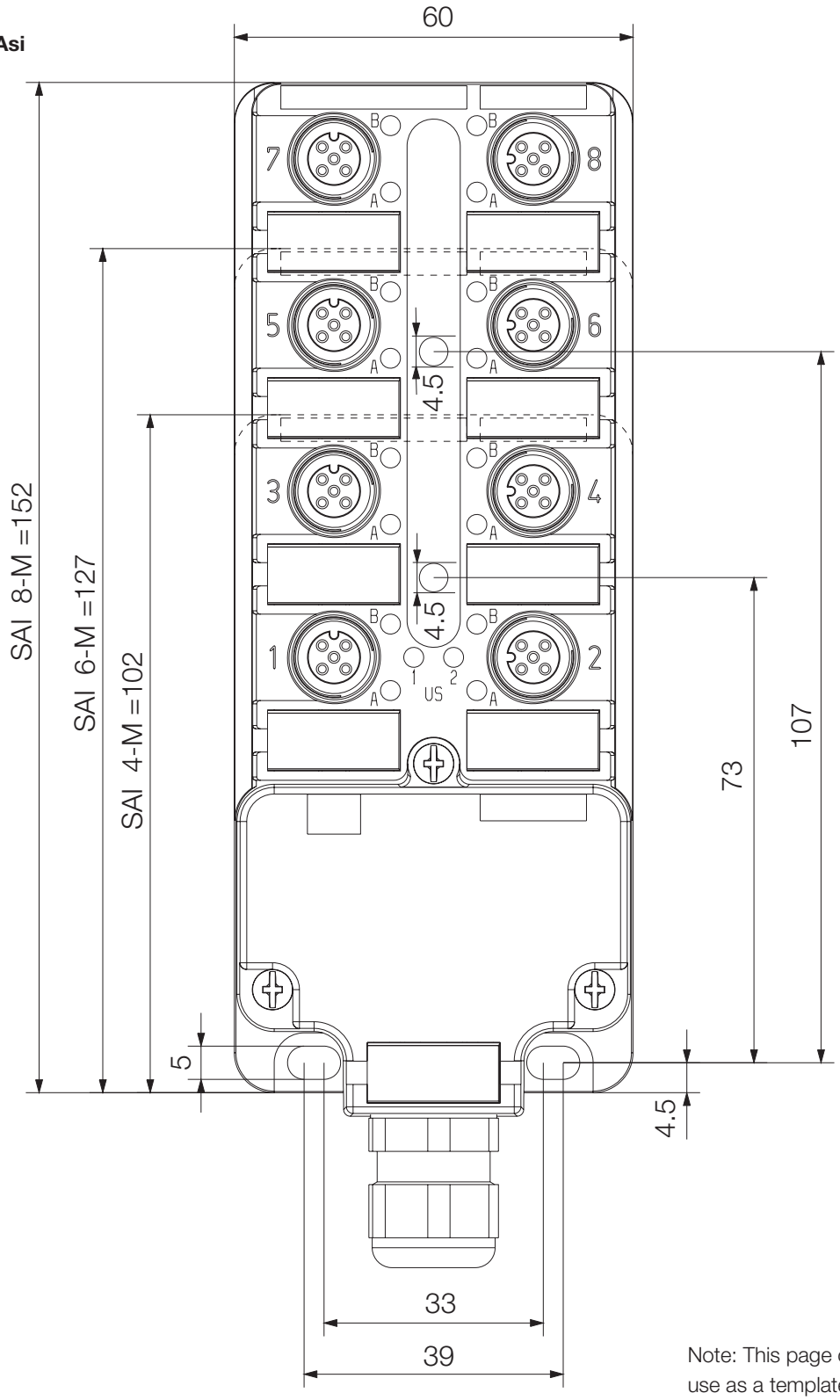


Technical data

	2-pole	
Material properties	**PVC/PE**	**PVC/PE**
Core cross-section	1.0 mm²	1.0 mm²
Cladding material	PVC	PVC
Wire core insulation	PE	PE
Conductor cross-section	8.0 ± 0.4	8.0 ± 0.4
Colour coding	red, green	red, green
Suitable for dragline cable carriers	No	No
Min. bending radius, flexible	-	-
Min. bending radius, rigid	-	-
Temperature, flexible	–5 °C / +60 °C	–5 °C / +60 °C
Temperature, rigid	–30 °C / +80 °C	–30 °C / +80 °C
UL	No	No
Colour	black	blue
Free from halogens	-	-
Note		

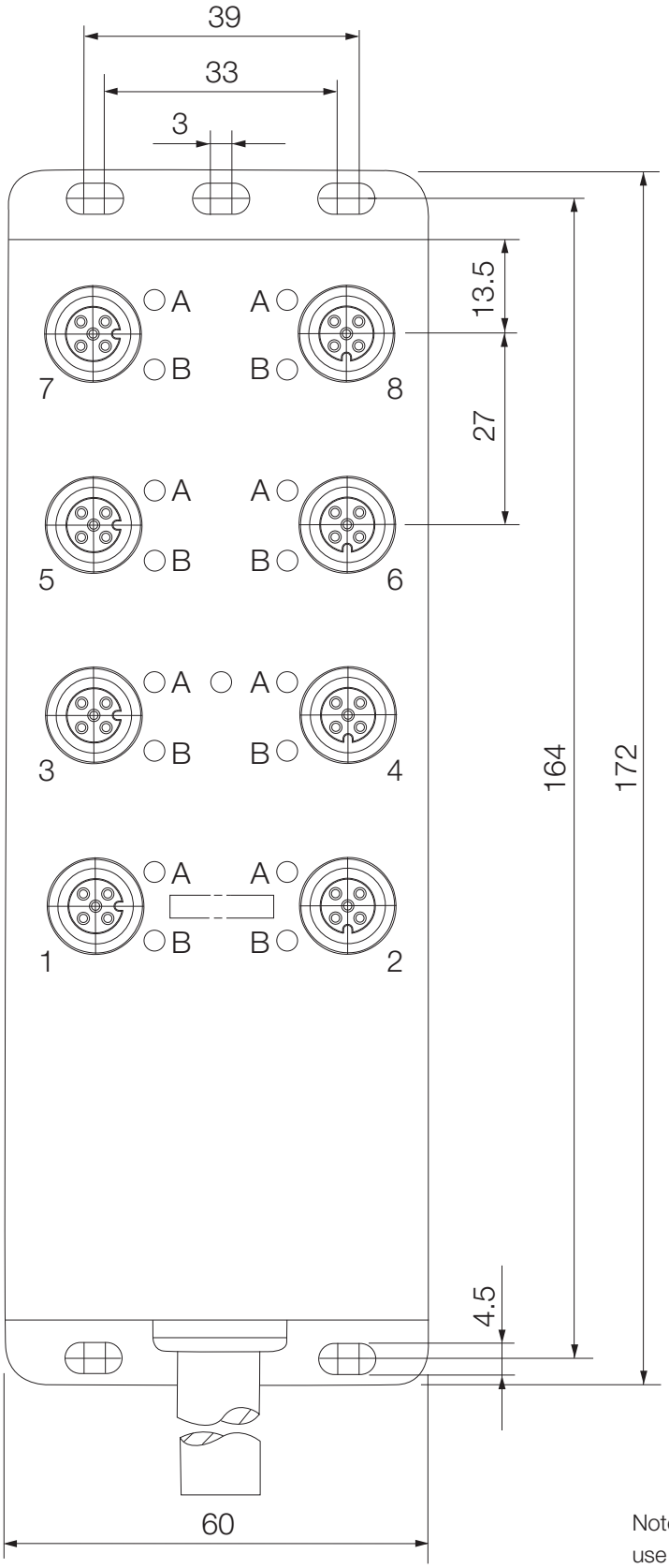
Drilling templates

**SAI M12 and M12 Push-Pull:
hood / M23 / M16 /
fixed cable / IDC / Asi**



Note: This page can be copied to use as a template.

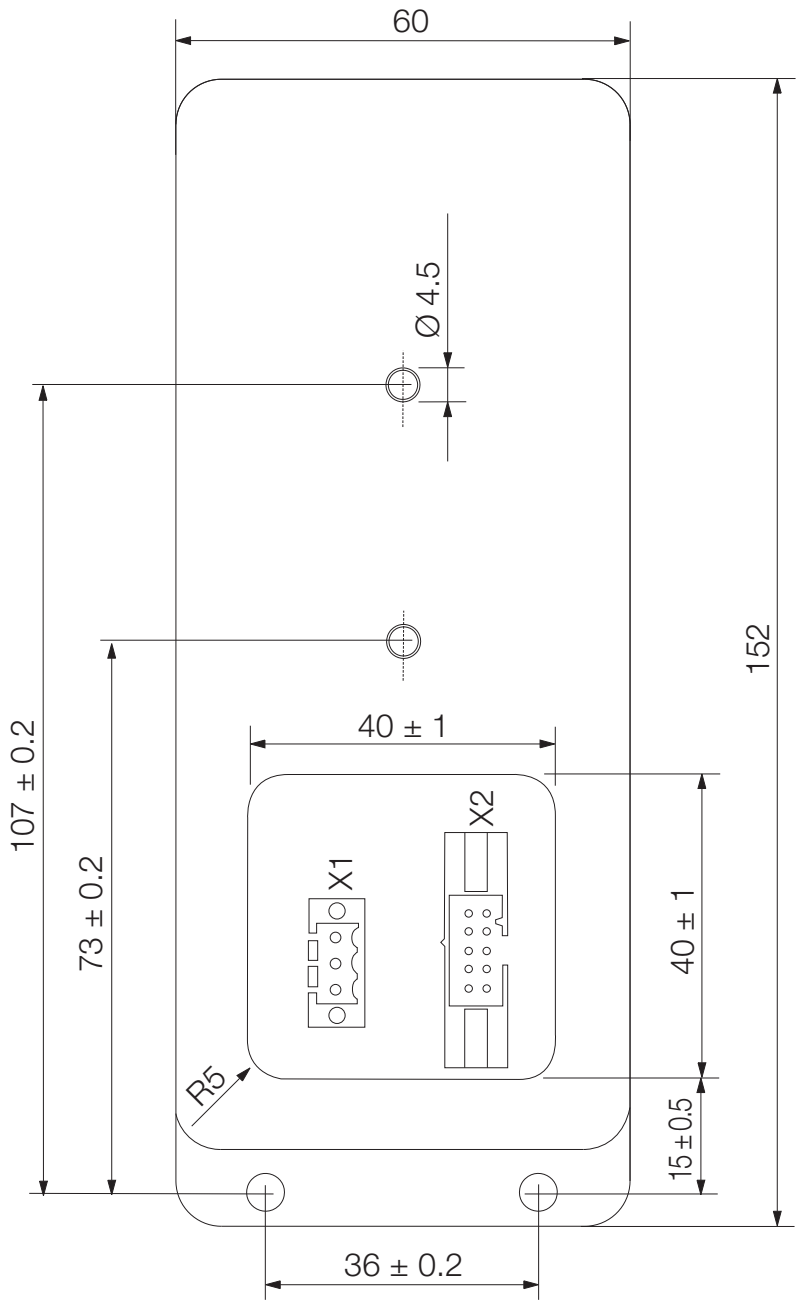
SAI stainless steel



Note: This page can be copied to use as a template.

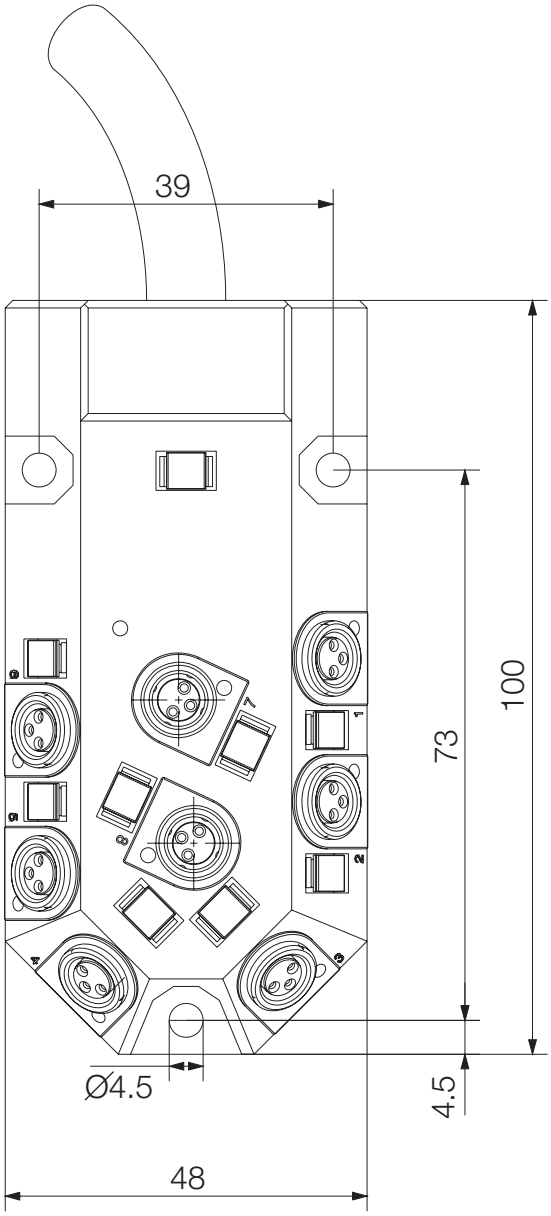
Drilling templates

SAI wall bushing



Note: This page can be copied to use as a template.

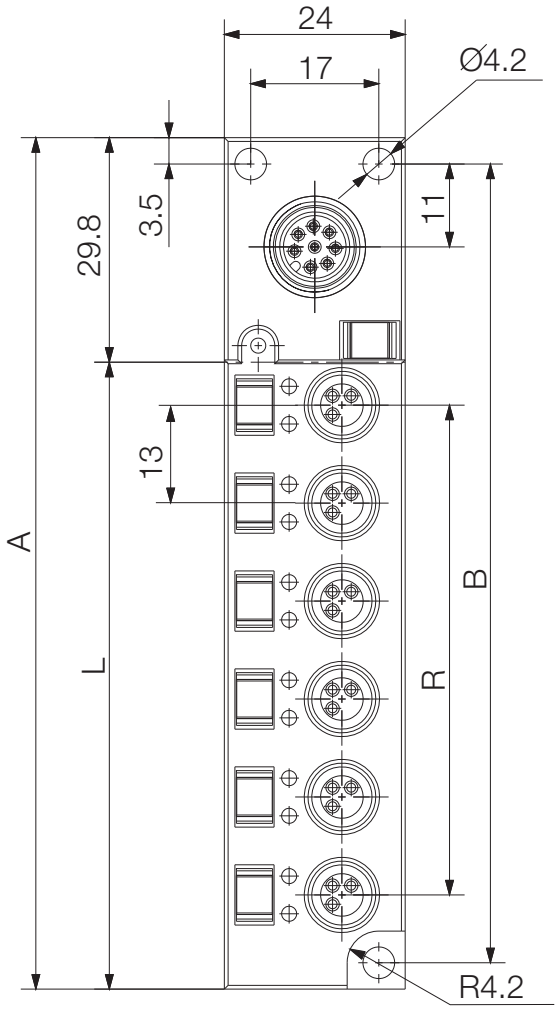
SAI M8 standard

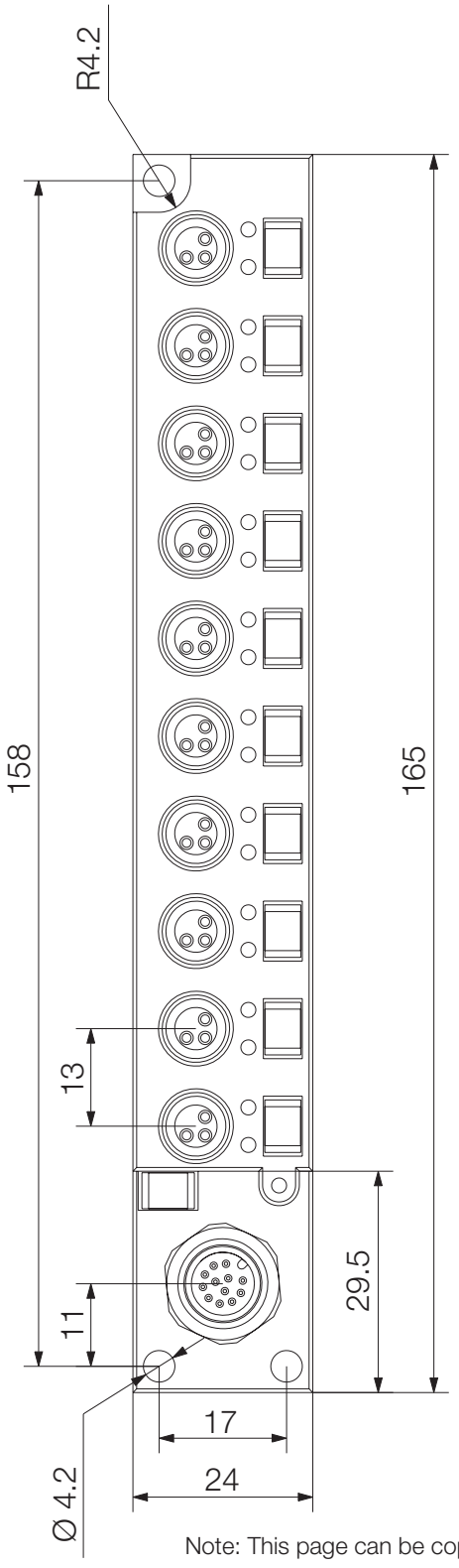


Note: This page can be copied to use as a template.

Drilling templates

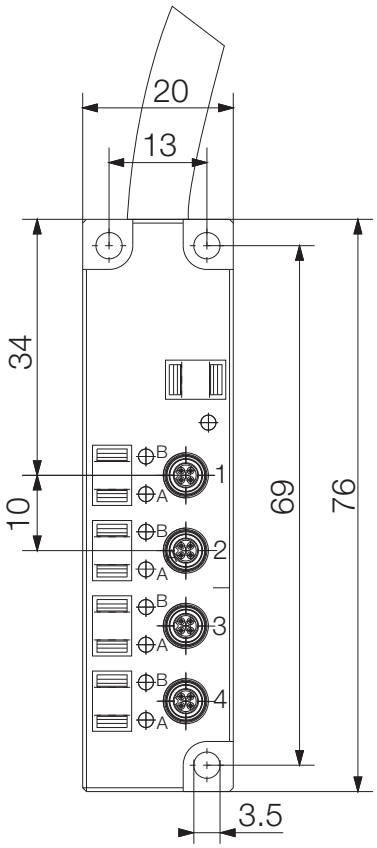
SAI M8 line

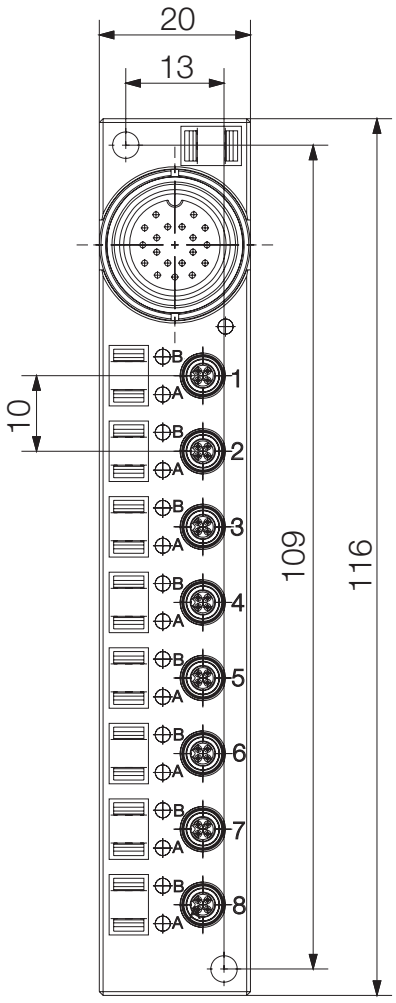




Note: This page can be copied to use as a template.

SAI M5

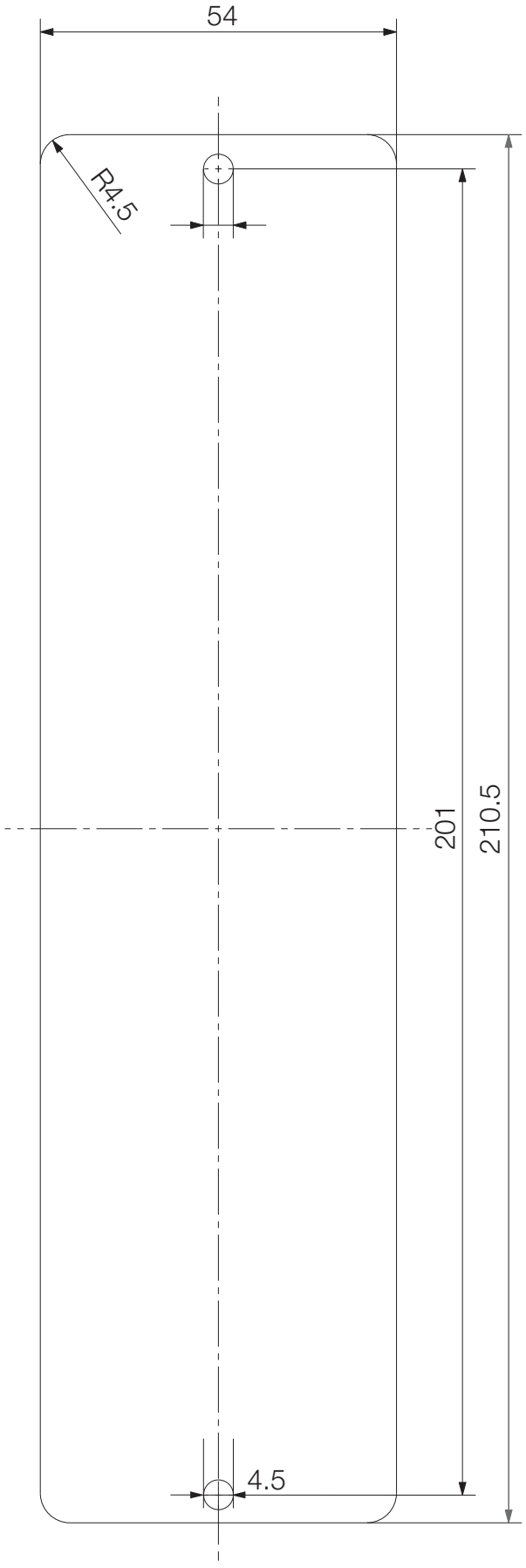




Note: This page can be copied to use as a template.

Drilling templates

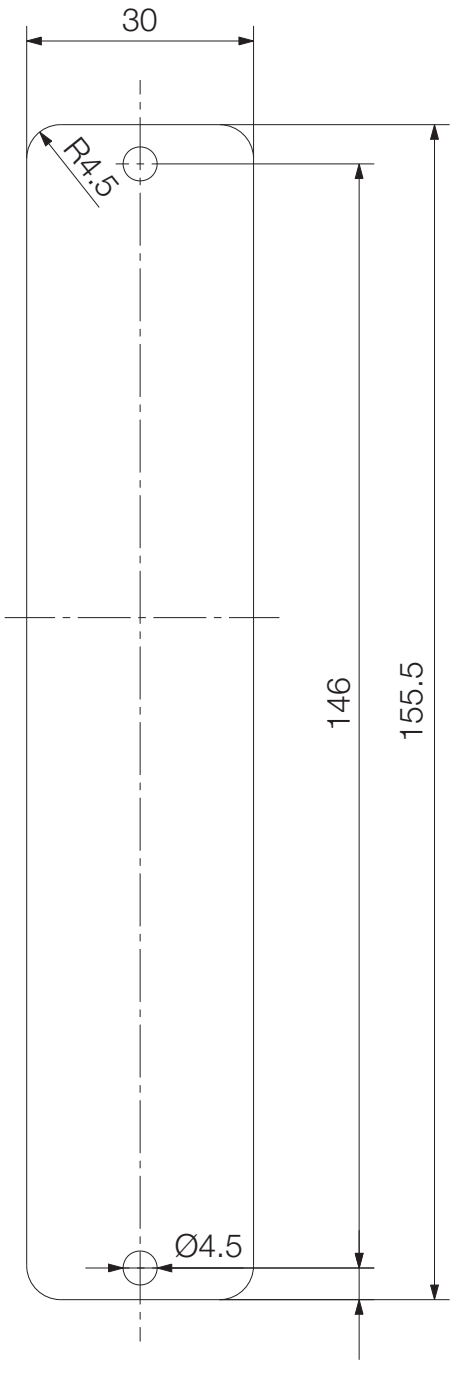
SAI Active Universal



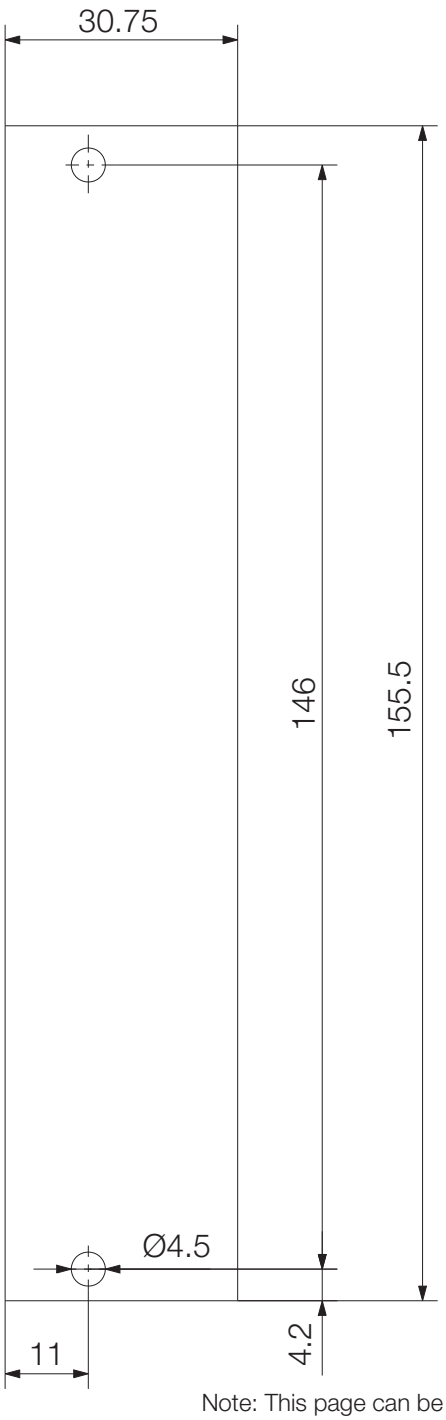
Note: This page can be copied to use as a template.

SAI Active Universal Pro:
Subbus modules with digital outputs

Plan view



Side view

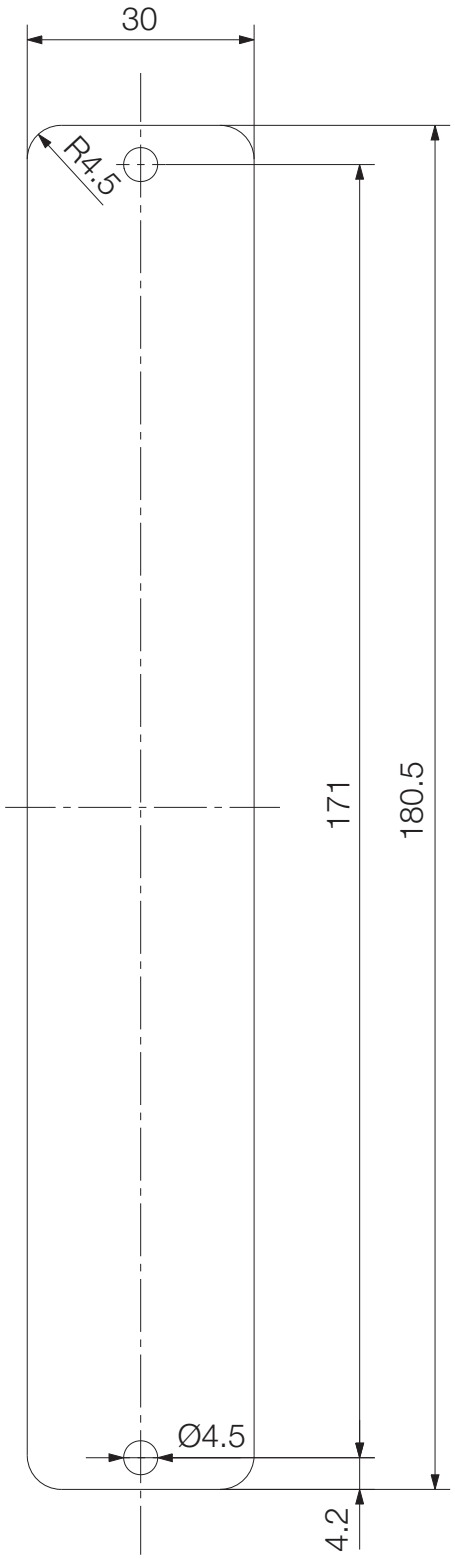


Note: This page can be copied to use as a template.

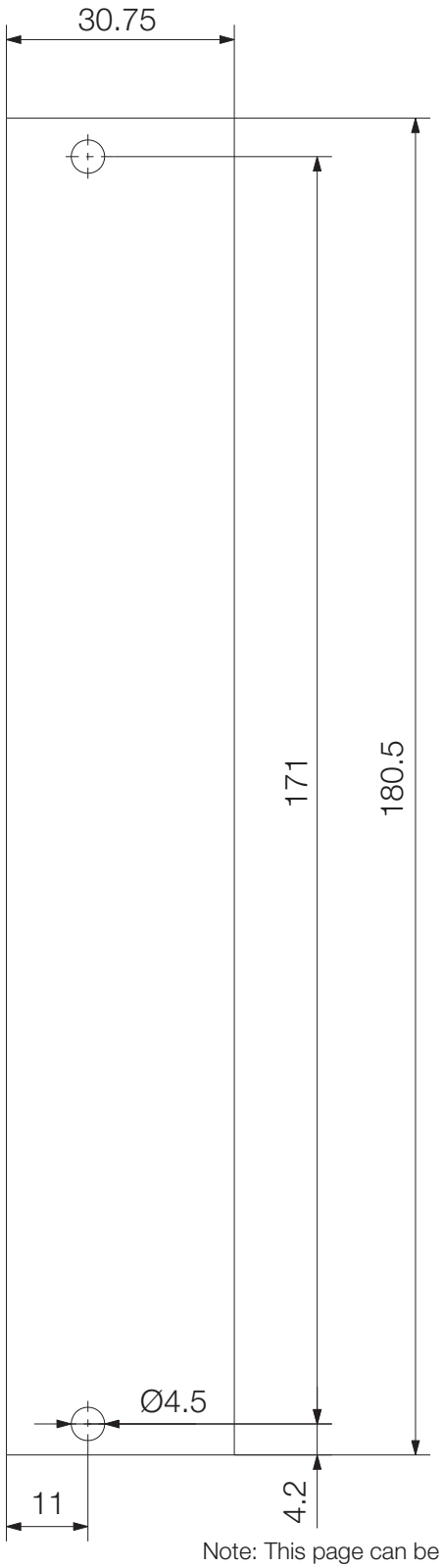
Drilling templates

SAI Active Universal Pro:
Subbus modules without digital outputs

Plan view



Side view



Note: This page can be copied to use as a template.

Chemical resistance of nickel

The statements on the resistance of nickel to chemicals only apply when the coating is undamaged and is not subject to any mechanical loads. These statements are based on a review of the literature available and it should be noted that pure nickel is not considered in the literature – only alloyed nickel steels.

The statements on page W.15 are based on research, and once again please note that pure nickel has not been included in the testing. The findings in the research are based on undamaged alloyed nickel steels that have not been subject to any mechanical loads.

The six materials in question are:

Chlorobenzene	1
Chloroform	1
Chromic acid hydride	1
Acetic acid	1
Hydrofluoric acid	2
Concentrated hydrochloric acid	2

The findings for the two materials above marked with a “2” could have a critical impact on applications. The findings for the four materials marked with a “1” should be taken into account but would not be considered critical for applications.

A further advantage of nickel is its thermal stability. The resistance does not change up to a temperature of 120 °C.

Pure nickel:
Corrosion properties are determined by the resistance of the passive layer.

Good resistance in:
- water containing oxygen
- flowing seawater
- alkalis (very good resistance) even at high temperatures and high concentrations
- neutral and alkaline salt solutions (carbonates, phosphates, sulphates, chlorides and nitrates) even at high concentrations and temperatures

Known problems:
- corrosion attack in heavily oxidising acids and solutions containing chlorides
- in inorganic and organic acids only resistant in diluted solutions and at low temperatures
- coating is not toxic (formation of deposits by micro-organisms can lead to destruction of the passive coating)

Chemical resistance of Pocan® (PBT)

Pocan offers good resistance to chemicals. Organic solvents, such as aliphatic hydrocarbons, alcohols, ether, long-chain ester as well as fats, oils and perchlorinated hydrocarbons do not corrode Pocan.

This is also true for water and aqueous solutions, neutral and acid salts, as well as diluted acids.

On the other hand, it is susceptible to alkalis, oxidising acids, ketones and phenols.

Susceptibility to universal alcohols, aromatics and ketones increases as the ambient temperature rises above 60 °C.

In the presence of water and aqueous solutions, hydrolytic degradation at higher temperatures increasingly leads to a decline in stability.

Substances like motor and transformer oils, petrol and brake fluids do not corrode Pocan, even at higher temperatures.

Medium	23 °C	60 °C
Acetic acid 10%	±	±
Acetone	+	-
Ammonia 10%	+	-
Ammonia, concentrated	±	-
Benzene	+	-
Brake fluid	+	+
Butane	+	+
Butanol	+	±
Butyl acetate	+	+
Calcium chloride 10%	+	+
Carbon disulphide	+	±
Carbon tetrachloride	+	±
Chlorobenzene	-	-
Chloroform	-	-
Chromic acid hydride 10%	+	+
Citric acid 10%	+	±
Cresol	-	-
Curd soap	+	+
Dibutyl phthalate	+	±
Diesel oil	+	+
Diethyl ether	+	±
Dioxan	+	-
Ethanol	+	+
Ethyl acetate	±	-
Ethyl dichloride	-	-
Ethylene glycol	+	±
Formic acid 10%	+	±
Freon 11	+	+
Frigen 113	+	+
Glacial acetic acid 10%	-	-
Glycerine	+	+
Heptane	+	+
Hexane	+	+
Hydraulic oil	+	+
Hydrochloric acid 10%	+	-
Hydrochloric acid, concentrated	-	-
Hydrofluoric acid 10%	+	+
Hydrogen peroxide 20%	+	±
Isopropyl alcohol	+	±
Kerosene	+	+

Medium	23 °C	60 °C
Linseed oil	+	+
Lubricating greases	+	+
Methanol	+	±
Methyl ethyl ketone	+	±
Methylene chloride	-	-
Mineral oils	+	+
Motor oils	+	+
Nitric acid 10%	+	±
Nitric acid, concentrated	-	-
Octane	+	+
Olive oil	+	+
Paraffin oil	+	+
Perchloroethylene	±	-
Petrol, normal and lead-free	+	+
Petrol, super	+	+
Petrol/methanol 85/15	+	+
Petroleum	+	+
Phenol 10%	-	-
Phosphoric acid 20%	+	±
Potassium chloride 10%	+	+
Potassium dichromate 10%	+	+
Potassium hydroxide 10%	-	-
Potassium permanganate 10%	+	±
Soap suds 10%	+	±
Sodium bisulphite 10%	+	+
Sodium carbonate 10%	+	+
Sodium chloride 10%	+	+
Sodium hydroxide 10%	-	-
Sulphuric acid 10%	+	±
Sulphuric acid, concentrated	-	-
Tetrahydrofuran	-	-
Toluene	±	-
Transformer oil	+	+
Trichlorethene/chloroform 1/1	±	-
Turpentine oil	+	+
Vegetable oils	+	+
Washing liquid	+	+
Washing powder, synthetic	+	+
Water	+	+
Xylol	±	-

The above values are for guidance only. A definite statement can only be made when based on the respective case in question.

+ = resistant
- = not resistant
± = partly resistant

Index

Type	Order No.	Page
SAI-4-MM 5P M12	1783500000	G.31
SAI-4-MM 5P M12	1783500000	G.33
SAI-4-MM 5P M12	1783500000	G.6
SAI-4-MMS 4P M12	1783540000	G.31
SAI-4-MMS 4P M12	1783540000	G.33
SAI-4-MMS 4P M12	1783540000	G.6
SAI-4-MMS 5P M12	1783520000	G.31
SAI-4-MMS 5P M12	1783520000	G.33
SAI-4-MMS 5P M12	1783520000	G.6
SAI-4-MMS 5P M12 1:1	1897680000	G.36
SAI-4-S 3P M8 L	1828740000	G.50
SAI-4-S 3P M8 L	1828740000	G.6
SAI-4-S 3P M8 L OL	1051760000	G.50
SAI-4-S 4P FC	1847960000	G.18
SAI-4-S 4P FC	1847960000	H.23
SAI-4-S 4P M12	9456000000	G.11
SAI-4-S 4P M12	9456000000	G.6
SAI-4-S 4P M5	1845840000	G.56
SAI-4-S 5P CNOMO	1861540000	G.21
SAI-4-S 5P FC	1847970000	G.18
SAI-4-S 5P FC	1847970000	H.23
SAI-4-S 5P M12	9456000001	G.11
SAI-4-S 5P M12	9456000001	G.6
SAI-4-S16 3P M5	1845890000	G.57
SAI-4-S16 4P M5	1845870000	G.57
SAI-4-SH 4P FC	1859110000	G.19
SAI-4-SH 4P FC	1859110000	H.24
SAI-4-SH 5P FC	1859130000	G.19
SAI-4-SH 5P FC	1859130000	H.24
SAI-6-F 3P IDC PUR 10M	1766750000	G.27
SAI-6-F 3P IDC PUR 5M	1766740000	G.27
SAI-6-F 3P M8 L 10M	1828690000	G.52
SAI-6-F 3P M8 L 10M	1828690000	G.6
SAI-6-F 3P M8 L 5M	1828700000	G.52
SAI-6-F 3P M8 L 5M	1828700000	G.6
SAI-6-F 4P IDC PUR 10M	1766690000	G.27
SAI-6-F 4P IDC PUR 5M	1766680000	G.27
SAI-6-F 4P M8 L 10M	1849670000	G.52
SAI-6-F 4P M8 L 10M	1849670000	G.6
SAI-6-F 4P M8 L 5M	1849700000	G.52
SAI-6-F 4P M8 L 5M	1849700000	G.6
SAI-6-F 4P PUR 10M	9456480000	G.6
SAI-6-F 4P PUR 10M	9456480000	G.9
SAI-6-F 4P PUR 15M	9456490000	G.6
SAI-6-F 4P PUR 15M	9456490000	G.9
SAI-6-F 4P PUR 20M	9456510000	G.6
SAI-6-F 4P PUR 20M	9456510000	G.9
SAI-6-F 4P PUR 3M	9456460000	G.9
SAI-6-F 4P PUR 5M	9456470000	G.6
SAI-6-F 4P PUR 5M	9456470000	G.9
SAI-6-F 5P PUR 10M	9456620000	G.6
SAI-6-F 5P PUR 10M	9456620000	G.9
SAI-6-F 5P PUR 15M	9456630000	G.6
SAI-6-F 5P PUR 15M	9456630000	G.9
SAI-6-F 5P PUR 20M	9456650000	G.6
SAI-6-F 5P PUR 20M	9456650000	G.9
SAI-6-F 5P PUR 3M	9456600000	G.9
SAI-6-F 5P PUR 5M	9456610000	G.6
SAI-6-F 5P PUR 5M	9456610000	G.9
SAI-6-M 3P IDC	1760050000	G.26
SAI-6-M 3P IDC UT	1760051000	G.26
SAI-6-M 4P IDC	1766790000	G.26
SAI-6-M 4P IDC UT	1766791000	G.26
SAI-6-M 4P M12	1705930000	G.6
SAI-6-M 4P M12	1705930000	G.8
SAI-6-M 4P M12 UT	1705931000	G.42
SAI-6-M 4P M12 UT	1705931000	G.8
SAI-6-M 5P Ex Z22	1861840000	G.60
SAI-6-M 5P M12	1701240000	G.6
SAI-6-M 5P M12	1701240000	G.8
SAI-6-M 5P M12 ECO	1892090000	G.15
SAI-6-M 5P M12 ECO UT	1892091000	G.15
SAI-6-M 5P M12 Ex ia	1896070000	G.59
SAI-6-M 5P M12 UT	1701241000	G.42
SAI-6-M 5P M12 UT	1701241000	G.8
SAI-6-MH-4P M12	1705932000	G.31
SAI-6-MH-4P M12	1705932000	G.34
SAI-6-MH-5P M12	1701242000	G.31
SAI-6-MH-5P M12	1701242000	G.34
SAI-6-MHD-4P M12	1705933000	G.31
SAI-6-MHD-4P M12	1705933000	G.35
SAI-6-MHD-5P M12	1701243000	G.31
SAI-6-MHD-5P M12	1701243000	G.35
SAI-6-S 3P M8 L	1828730000	G.50
SAI-6-S 3P M8 L	1828730000	G.6
SAI-6-S 3P M8 L OL	1932380000	G.50
SAI-6-S 3P M8 L SL	1057720000	G.51
SAI-6-S 3P M8 L SL	1057720000	G.6
SAI-6-S 4P M12	9456010000	G.11
SAI-6-S 4P M12	9456010000	G.6
SAI-6-S 5P M12	9456010001	G.11
SAI-6-S 5P M12	9456010001	G.6
SAI-8-B 4P M12 F10	1812170000	G.41
SAI-8-B 5P M12 SL	1847560000	G.39
SAI-8-F 3P IDC PUR 10M	1766770000	G.27
SAI-8-F 3P IDC PUR 5M	1766760000	G.27
SAI-8-F 3P M5 L10M	1845830000	G.56
SAI-8-F 3P M5 L5M	1851760000	G.56
SAI-8-F 3P M8 L 10M	1828670000	G.52
SAI-8-F 3P M8 L 10M	1828670000	G.6
SAI-8-F 3P M8 L 5M	1828680000	G.52
SAI-8-F 3P M8 L 5M	1828680000	G.6
SAI-8-F 3P M8 PUR 10M	1784610000	G.48
SAI-8-F 3P M8 PUR 5M	1784620000	G.48
SAI-8-F 4P FC 10M	1847980000	G.17
SAI-8-F 4P FC 2M	1847990000	G.17
SAI-8-F 4P FC 5M	1848000000	G.17
SAI-8-F 4P IDC PUR 10M	1766710000	G.27
SAI-8-F 4P IDC PUR 5M	1766700000	G.27
SAI-8-F 4P M5 L10M	1845810000	G.56
SAI-8-F 4P M5 L5M	1851750000	G.56
SAI-8-F 4P M8 L 10M	1828610000	G.52
SAI-8-F 4P M8 L 10M	1828610000	G.6
SAI-8-F 4P M8 L 5M	1828620000	G.52
SAI-8-F 4P M8 L 5M	1828620000	G.6
SAI-8-F 4P M8 PUR 10M	1784570000	G.48
SAI-8-F 4P M8 PUR 5M	1784580000	G.48
SAI-8-F 4P PUR 10M	9456760000	G.6
SAI-8-F 4P PUR 10M	9456760000	G.9
SAI-8-F 4P PUR 15M	9456770000	G.6
SAI-8-F 4P PUR 15M	9456770000	G.9
SAI-8-F 4P PUR 20M	9456790000	G.6
SAI-8-F 4P PUR 20M	9456790000	G.9
SAI-8-F 4P PUR 3M	9456740000	G.9
SAI-8-F 4P PUR 5M	9456750000	G.6
SAI-8-F 4P PUR 5M	9456750000	G.9
SAI-8-F 5P 10M 0.5/1.0U	9457600000	G.9
SAI-8-F 5P 15M 0.5/1.0U	1784510000	G.9
SAI-8-F 5P 20M 0.5/1.0U	1784500000	G.9
SAI-8-F 5P 2M 0.5/1.0U	7915030000	G.9
SAI-8-F 5P 5M 0.5/1.0U	9457590000	G.9
SAI-8-F 5P CNOMO 10M	1861590000	G.21
SAI-8-F 5P CNOMO 5M	1861550000	G.21
SAI-8-F 5P FC 10M	1848010000	G.17
SAI-8-F 5P FC 2M	1848020000	G.17
SAI-8-F 5P FC 5M	1848030000	G.17
SAI-8-F 5P M12 5M VA	1865310000	G.28
SAI-8-F 5P NPN-PNP 5M	1814990000	G.38
SAI-8-F 5P PUR 10M	9456900000	G.6
SAI-8-F 5P PUR 10M	9456900000	G.9
SAI-8-F 5P PUR 15M	9456910000	G.6
SAI-8-F 5P PUR 15M	9456910000	G.9
SAI-8-F 5P PUR 20M	9456930000	G.6
SAI-8-F 5P PUR 20M	9456930000	G.9
SAI-8-F 5P PUR 3M	9456880000	G.9
SAI-8-F 5P PUR 5M	9456890000	G.6
SAI-8-F 5P PUR 5M	9456890000	G.9
SAI-8-FMM-4P M12 10M	9456760002	G.31
SAI-8-FMM-4P M12 10M	9456760002	G.32
SAI-8-FMM-4P M12 10M	9456760002	G.6
SAI-8-FMM-4P M12 5M	9456750002	G.31
SAI-8-FMM-4P M12 5M	9456750002	G.32
SAI-8-FMM-4P M12 5M	9456750002	G.6
SAI-8-M 3P IDC	1760060000	G.26
SAI-8-M 3P IDC UT	1760061000	G.26
SAI-8-M 3P M8	1784670000	G.48
SAI-8-M 4P Exi Z1 IL	1868370000	G.59
SAI-8-M 4P Exi Z1 OL	1894380000	G.59
SAI-8-M 4P IDC	1766800000	G.26
SAI-8-M 4P IDC UT	1766801000	G.26
SAI-8-M 4P M12	1705940000	G.6
SAI-8-M 4P M12	1705940000	G.8
SAI-8-M 4P M12 UT	1705941000	G.42
SAI-8-M 4P M12 UT	1705941000	G.8
SAI-8-M 4P M8	1784690000	G.48
SAI-8-M 5P Ex Z22	1861530000	G.60
SAI-8-M 5P FC	1848070000	G.20
SAI-8-M 5P M12	1701250000	G.6
SAI-8-M 5P M12	1701250000	G.8
SAI-8-M 5P M12 ECO	1892080000	G.15
SAI-8-M 5P M12 ECO UT	1892081000	G.15
SAI-8-M 5P M12 Ex ia	1896090000	G.59
SAI-8-M 5P M12 NPN	1781060000	G.8
SAI-8-M 5P M12 NPN ECO	1892080005	G.15
SAI-8-M 5P M12 OL2	1816610000	G.8
SAI-8-M 5P M12 UT	1701251000	G.42
SAI-8-M 5P M12 UT	1701251000	G.8
SAI-8-M 5P M12 ZF III	1767880000	G.8
SAI-8-M16 3P M8	1795900000	G.49
SAI-8-M16 4P M12	1831020000	G.12
SAI-8-M23 4P M8	1784650000	G.49
SAI-8-M23 4P M8	1784650000	H.25
SAI-8-M-4P M12 DIP	1059430000	G.13
SAI-8-MF 4P PUR 10M M12	1789190000	G.42
SAI-8-MF 4P PUR 5M M12	1799960000	G.42
SAI-8-MF 5P PUR 10m	9457430000	G.42
SAI-8-MF 5P PUR 5M	1804590000	G.42
SAI-8-MF 5P PUR 5M OL	9457350000	G.42
SAI-8-MH-4P M12	1705942000	G.31
SAI-8-MH-4P M12	1705942000	G.34
SAI-8-MH-5P M12	1701252000	G.31
SAI-8-MH-5P M12	1701252000	G.34
SAI-8-MH-5P M12 ZF III	1782760000	G.31
SAI-8-MH-5P M12 ZF III	1782760000	G.34
SAI-8-MHD-4P M12	1705943000	G.31
SAI-8-MHD-4P M12	1705943000	G.35
SAI-8-MHD-5P M12	1701253000	G.31
SAI-8-MHD-5P M12	1701253000	G.35
SAI-8-MM 5P M12	1783490000	G.31
SAI-8-MM 5P M12	1783490000	G.33
SAI-8-MM 5P M12	1783490000	G.6
SAI-8-MM 5P M12 UT	1783491000	G.33
SAI-8-MMH 5P M12 ZF	1782740000	G.31
SAI-8-MMH 5P M12 ZF	1782740000	G.33
SAI-8-MMS 4P M12	1783530000	G.31
SAI-8-MMS 4P M12	1783530000	G.33
SAI-8-MMS 4P M12	1783530000	G.6
SAI-8-MMS 5P M12	1783510000	G.31
SAI-8-MMS 5P M12	1783510000	G.33
SAI-8-MMS 5P M12	1783510000	G.6
SAI-8-S 3P M5	1845850000	G.56
SAI-8-S 4P FC	1847920000	G.18
SAI-8-S 4P FC	1847920000	H.23
SAI-8-S 4P M12	9456020000	G.11
SAI-8-S 4P M12	9456020000	G.6
SAI-8-S 5P CNOMO	1861580000	G.21
SAI-8-S 5P FC	1848040000	G.18
SAI-8-S 5P FC	1848040000	H.23
SAI-8-S 5P M12	1795470000	G.11
SAI-8-S 5P M12	1795470000	G.6
SAI-8-S12 3P M8 L	1871680000	G.50
SAI-8-S12 3P M8 L	1871680000	G.6
SAI-8-S16 3P M5	1845880000	G.57
SAI-8-S16/19P 4P M5	1845860000	G.57
SAI-8-SH 4P FC	1859120000	G.19
SAI-8-SH 4P FC	1859120000	H.24
SAI-8-SH 5P FC	1859140000	G.19
SAI-8-SH 5P FC	1859140000	H.24
SAI-8-SHB 5P F13 FC	1872460000	G.23
SAI-8-SHB 5P FC	1872440000	G.22
SAI-ASI T FF small	1026090000	C.65
SAI-ASI T FFR	1924980000	C.65
SAI-ASI T FR	1925010000	C.64
SAI-AU M12 BT 16DI	1006940000	E.4
SAI-AU M12 BT 16DI	1006940000	E.45
SAI-AU M12 BT 16DI	1006940000	E.46
SAI-AU M12 BT 16DI/8DO	1006930000	E.4
SAI-AU M12 BT 16DI/8DO	1006930000	E.45
SAI-AU M12 BT 16DI/8DO	1006930000	E.46
SAI-AU M12 BT4AI2AO2DIO	1006920000	E.4
SAI-AU M12 BT4AI2AO2DIO	1006920000	E.45
SAI-AU M12 BT4AI2AO2DIO	1006920000	E.47
SAI-AU M12 CAN 16DI	1906650000	E.12
SAI-AU M12 CAN 16DI	1906650000	E.14
SAI-AU M12 CAN 16DI	1906650000	E.4
SAI-AU M12 CAN 16DI/8DO	1906660000	E.12
SAI-AU M12 CAN 16DI/8DO	1906660000	E.14
SAI-AU M12 CAN 16DI/8DO	1906660000	E.4
SAI-AU M12 CAN AI/AO/DI	1906670000	E.13
SAI-AU M12 CAN AI/AO/DI	1906670000	E.14
SAI-AU M12 CAN AI/AO/DI	1906670000	E.4
SAI-AU M12 DN 16DI	1906700000	E.16
SAI-AU M12 DN 16DI	1906700000	E.18
SAI-AU M12 DN 16DI	1906700000	E.4
SAI-AU M12 DN 16DI/8DO	1906710000	E.16
SAI-AU M12 DN 16DI/8DO	1906710000	E.18
SAI-AU M12 DN 16DI/8DO	1906710000	E.4
SAI-AU M12 DN AI/AO/DI	1906720000	E.17
SAI-AU M12 DN AI/AO/DI	1906720000	E.18
SAI-AU M12 DN AI/AO/DI	1906720000	E.4
SAI-AU M12 DN GW 16DI	1938570000	E.32
SAI-AU M12 DN GW 16DI	1938570000	E.33
SAI-AU M12 DN GW 16DI	1938570000	E.4
SAI-AU M12 EIP 16DI	1906900000	E.20
SAI-AU M12 EIP 16DI	1906900000	E.22
SAI-AU M12 EIP 16DI	1906900000	E.4
SAI-AU M12 EIP 16DI/8DO	1906910000	E.20
SAI-AU M12 EIP 16DI/8DO	1906910000	E.22
SAI-AU M12 EIP 16DI/8DO	1906910000	E.4
SAI-AU M12 EIP AI/AO/DI	1906920000	E.21
SAI-AU M12 EIP AI/AO/DI	1906920000	E.22
SAI-AU M12 EIP AI/AO/DI	1906920000	E.4
SAI-AU M12 EIP GW 16DI	1019490000	E.32
SAI-AU M12 EIP GW 16DI	1019490000	E.33
SAI-AU M12 EIP GW 16DI	1019490000	E.4
SAI-AU M12 GW PB/BT 12I	1006980000	E.4
SAI-AU M12 GW PB/BT 12I	1006980000	E.44
SAI-AU M12 GW PB/BT 12I	1006980000	E.45
SAI-AU M12 IE 16DI	1906850000	E.24
SAI-AU M12 IE 16DI	1906850000	E.26
SAI-AU M12 IE 16DI	1906850000	E.4
SAI-AU M12 IE 16DI/8DO	1906860000	E.24
SAI-AU M12 IE 16DI/8DO	1906860000	E.26
SAI-AU M12 IE 16DI/8DO	1906860000	E.4
SAI-AU M12 IE AI/AO/DI	1906870000	E.25
SAI-AU M12 IE AI/AO/DI	1906870000	E.26
SAI-AU M12 IE AI/AO/DI	1906870000	E.4
SAI-AU M12 IE GW 16DI	1938580000	E.34
SAI-AU M12 IE GW 16DI	1938580000	E.35
SAI-AU M12 IE GW 16DI	1938580000	E.4
SAI-AU M12 PB 16DI	1890020000	E.10
SAI-AU M12 PB 16DI	1890020000	E.4
SAI-AU M12 PB 16DI	1890020000	E.8
SAI-AU M12 PB 16DI/8DO	1890010000	E.10
SAI-AU M12 PB 16DI/8DO	1890010000	E.4
SAI-AU M12 PB 16DI/8DO	1890010000	E.8
SAI-AU M12 PB 8DI8DO 2A	1968220000	E.10
SAI-AU M12 PB 8DI8DO 2A	1968220000	E.4
SAI-AU M12 PB 8DI8DO 2A	1968220000	E.8
SAI-AU M12 PB AI/AO/DI	1890000000	E.10
SAI-AU M12 PB AI/AO/DI	1890000000	E.4
SAI-AU M12 PB AI/AO/DI	1890000000	E.9
SAI-AU M12 PB GW 16DI	1938550000	E.30
SAI-AU M12 PB GW 16DI	1938550000	E.31
SAI-AU M12 PB GW 16DI	1938550000	E.4
SAI-AU M12 SB 2Counter	1938730000	E.31
SAI-AU M12 SB 2Counter	1938730000	E.33
SAI-AU M12 SB 2Counter	1938730000	E.35
SAI-AU M12 SB 2Counter	1938730000	E.38
SAI-AU M12 SB 2Counter	1938730000	E.4
SAI-AU M12 SB 4AI	1938690000	E.31
SAI-AU M12 SB 4AI	1938690000	E.33
SAI-AU M12 SB 4AI	1938690000	E.35
SAI-AU M12 SB 4AI	1938690000	E.37
SAI-AU M12 SB 4AI	1938690000	E.4
SAI-AU M12 SB 4AO	1938700000	E.31
SAI-AU M12 SB 4AO	1938700000	E.33
SAI-AU M12 SB 4AO	1938700000	E.35
SAI-AU M12 SB 4AO	1938700000	E.37
SAI-AU M12 SB 4AO	1938700000	E.4
SAI-AU M12 SB 4PT100	1938710000	E.31
SAI-AU M12 SB 4PT100	1938710000	E.33
SAI-AU M12 SB 4PT100	1938710000	E.35
SAI-AU M12 SB 4PT100	1938710000	E.4
SAI-AU M12 SB 4PT100	1938710000	E.40
SAI-AU M12 SB 4Thermo	1938720000	E.31
SAI-AU M12 SB 4Thermo	1938720000	E.33
SAI-AU M12 SB 4Thermo	1938720000	E.35
SAI-AU M12 SB 4Thermo	1938720000	E.39
SAI-AU M12 SB 4Thermo	1938720000	E.4
SAI-AU M12 SB 8DI	1938610000	E.31
SAI-AU M12 SB 8DI	1938610000	E.33
SAI-AU M12 SB 8DI	1938610000	E.35
SAI-AU M12 SB 8DI	1938610000	E.36
SAI-AU M12 SB 8DI	1938610000	E.4
SAI-AU M12 SB 8DIO	1938640000	E.31
SAI-AU M12 SB 8DIO	1938640000	E.33
SAI-AU M12 SB 8DIO	1938640000	E.35
SAI-AU M12 SB 8DIO	1938640000	E.36
SAI-AU M12 SB 8DIO	1938640000	E.4
SAI-AU M12 SB 8DO 2A	1938680000	E.31
SAI-AU M12 SB 8DO 2A	1938680000	E.33
SAI-AU M12 SB 8DO 2A	1938680000	E.35
SAI-AU M12 SB 8DO 2A	1938680000	E.36
SAI-AU M12 SB 8DO 2A	1938680000	E.4
SAI-AU M12 USB GW 8I8O	1962240000	E.34
SAI-AU M12 USB GW 8I8O	1962240000	E.35
SAI-AU M12 USB GW 8I8O	1962240000	E.4
SAI-AU M8 CAN 16DI	1906680000	E.12
SAI-AU M8 CAN 16DI	1906680000	E.14
SAI-AU M8 CAN 16DI	1906680000	E.4
SAI-AU M8 CAN 16DI/8DO	1906690000	E.12
SAI-AU M8 CAN 16DI/8DO	1906690000	E.14
SAI-AU M8 CAN 16DI/8DO	1906690000	E.4
SAI-AU M8 DN 16DI	1906730000	E.16
SAI-AU M8 DN 16DI	1906730000	E.18
SAI-AU M8 DN 16DI	1906730000	E.4
SAI-AU M8 DN 16DI/8DO	1906740000	E.16
SAI-AU M8 DN 16DI/8DO	1906740000	E.18
SAI-AU M8 DN 16DI/8DO	1906740000	E.4
SAI-AU M8 EIP 16DI	1906930000	E.20
SAI-AU M8 EIP 16DI	1906930000	E.22
SAI-AU M8 EIP 16DI	1906930000	E.4
SAI-AU M8 EIP 16DI/8DO	1906940000	E.20
SAI-AU M8 EIP 16DI/8DO	1906940000	E.22
SAI-AU M8 EIP 16DI/8DO	1906940000	E.4
SAI-AU M8 IE 16DI	1906880000	E.24
SAI-AU M8 IE 16DI	1906880000	E.26
SAI-AU M8 IE 16DI	1906880000	E.4
SAI-AU M8 IE 16DI/8DO	1906890000	E.24
SAI-AU M8 IE 16DI/8DO	1906890000	E.26
SAI-AU M8 IE 16DI/8DO	1906890000	E.4
SAI-AU M8 PB 16DI	1906550000	E.10
SAI-AU M8 PB 16DI	1906550000	E.4
SAI-AU M8 PB 16DI	1906550000	E.8
SAI-AU M8 PB 16DI/8DO	1906640000	E.10
SAI-AU M8 PB 16DI/8DO	1906640000	E.4
SAI-AU M8 PB 16DI/8DO	1906640000	E.8
SAI-AU M8 PB 8DI8DO 2A	1975450000	E.10
SAI-AU M8 PB 8DI8DO 2A	1975450000	E.4
SAI-AU M8 PB 8DI8DO 2A	1975450000	E.8
SAI-AU M8 PB GW 16DI	1024310000	E.30
SAI-AU M8 PB GW 16DI	1024310000	E.31
SAI-AU M8 PB GW 16DI	1024310000	E.4
SAI-AU M8 SB 8DI	1938600000	E.31
SAI-AU M8 SB 8DI	1938600000	E.33
SAI-AU M8 SB 8DI	1938600000	E.35
SAI-AU M8 SB 8DI	1938600000	E.36
SAI-AU M8 SB 8DI	1938600000	E.4
SAI-AU M8 SB 8DIO	1938630000	E.31
SAI-AU M8 SB 8DIO	1938630000	E.33
SAI-AU M8 SB 8DIO	1938630000	E.35
SAI-AU M8 SB 8DIO	1938630000	E.36
SAI-AU M8 SB 8DIO	1938630000	E.4
SAI-AU M8 SB 8DO 2A	1938660000	E.31
SAI-AU M8 SB 8DO 2A	1938660000	E.33
SAI-AU M8 SB 8DO 2A	1938660000	E.35
SAI-AU M8 SB 8DO 2A	1938660000	E.36
SAI-AU M8 SB 8DO 2A	1938660000	E.4
SAIB 5/9-VA	1920710000	C.32

Type	Order No.	Page
SAIB 5/9-VA	1920710000	D.10
SAIB 5/9-VA	1920710000	G.29
SAIB 5/9-VA-B-COD	1920730000	C.10
SAIB 5/9-VA-B-COD	1920730000	D.10
SAIB 5/9-VA-B-COD	1920730000	G.29
SAIB-12/9-(TL)	1924960000	D.5
SAIB-3/7	1924940000	D.5
SAIB-3/7	1021490000	D.7
SAIB-3/9	1021510000	D.5
SAIB-3/9	1021510000	D.7
SAIB-3-IDC (0,75) M12	1852730000	D.23
SAIB-3-IDC (0,75) M12	1852730000	D.5
SAIB-3-IDC-M12B-COD	1864740000	C.12
SAIB-3-IDC-M12B-COD	1864740000	D.13
SAIB-3-IDC-M8 small	1784030001	D.24
SAIB-3-IDC-M8 small	1784030001	D.6
SAIB-4/7	9457240000	D.5
SAIB-4/7	9457240000	D.7
SAIB-4/7-(KV)	1921080000	D.9
SAIB-4/9	1807230000	D.5
SAIB-4/9	1807230000	D.7
SAIB-4-IDC (0,75) M12	1852750000	D.23
SAIB-4-IDC-M12 small	1781540001	D.22
SAIB-4-IDC-M12 small	1781540001	D.5
SAIB-4-IDC-M8 small	1784050001	D.24
SAIB-4-IDC-M8 small	1784050001	D.6
SAIB-5/6S M12 5P A-COD	1191020000	D.5
SAIB-5/7	9457250000	D.5
SAIB-5/7	9457250000	D.8
SAIB-5/7-(KV)	1921070000	D.9
SAIB-5/7-ZF	1924970000	D.16
SAIB-5/7-ZF	1924970000	D.5
SAIB-5/9	1807250000	D.5
SAIB-5/9	1807250000	D.8
SAIB-8/9	1836960000	D.5
SAIB-8/9	1836960000	D.8
SAIBM 5/8S M12 5P B-COD	1784780000	C.11
SAIBM 5/8S M12 5P B-COD	1784780000	D.13
SAIBM 5/8S M12 5P B-COD	1784780000	D.5
SAIB-M23-12P-AN-1,0M	1877440100	H.22
SAIB-M23-12P-ST-1,0M	1886440100	H.22
SAIB-M23-19P-AN-1,0M	1818140100	H.22
SAIB-M23-19P-ST-1,0M	1818180100	H.22
SAIBM-4/8S-M12 4P A-ZF	1784740002	D.5
SAIBM-4/8S-M12 4P D-ZF	1892130001	D.15
SAIBM-4/8S-M12 4P D-ZF	1892130001	D.5
SAIBM-4/8S-M12-4P D-COD	1892130000	C.70
SAIBM-4/8S-M12-4P D-COD	1892130000	C.71
SAIBM-4/8S-M12-4P D-COD	1892130000	D.13
SAIBM-4/8S-M12-4P D-COD	1892130000	D.5
SAIB-M-5/8S M12 5P A-COD	1784750000	C.31
SAIB-M-5/8S M12 5P A-COD	1784750000	C.63
SAIB-M-5/8S M12 5P A-COD	1784750000	D.12
SAIB-M-5/8S M12 5P A-COD	1784750000	D.5
SAIBM-8/11	1118920000	D.11
SAIB-M8-3P	1803870000	D.17
SAIB-M8-3P	1803870000	D.6
SAIB-M8-4P	1803880000	D.17
SAIB-M8-4P	1803880000	D.6
SAIBM-M8-3P-(IF)	1010080000	D.18
SAIBM-M8-3P-(IF)	1010080000	D.6
SAIBM-M8-3P(TL)	1921010000	D.18
SAIBM-M8-3P(TL)	1921010000	D.6
SAIBM-M8-4P-(IF)	1010090000	D.18
SAIBM-M8-4P-(IF)	1010090000	D.6
SAIBM-M8-4P(TL)	1921020000	D.18
SAIBM-M8-4P(TL)	1921020000	D.6
SAIB-VSA-3P/230/11-H/OB	1873150000	D.32
SAIB-VSA-3P/230/9/LD	1873110000	D.32
SAIB-VSA-3P/230/9-H/OB	1873130000	D.32
SAIB-VSA-3P/24/9/LD	1873120000	D.32
SAIB-VSA-3P/250/11-OB	1873090000	D.32
SAIB-VSA-3P/250/9-OB	1873070000	D.32
SAIB-VSA-4P/230/11-H/OB	1873160000	D.32
SAIB-VSA-4P/230/9-H/OB	1873140000	D.32
SAIB-VSA-4P/250/11-OB	1873100000	D.32
SAIB-VSA-4P/250/9-OB	1873080000	D.32
SAIB-VSB-3P/24/9/LD	1873180000	D.32
SAIB-VSB-3P/250/9-OB	1873170000	D.32
SAIB-VSBD-3P/250/9-OB	1873190000	D.32
SAIB-VSC-3P/250/7-OB	1873200000	D.32
SAIB-VSC-4P/250/7-OB	1873210000	D.32
SAIB-VSCD-3P/250/7-OB	1873220000	D.32
SAIB-VSCD-4P/250/7-OB	1873230000	D.32
SAIBW-3/7	1021310000	D.5
SAIBW-3/7	1021310000	D.7
SAIBW-3/9	1021320000	D.7
SAIBW-4/7	9457700000	D.5
SAIBW-4/7	9457700000	D.7
SAIBW-4/7-(KV)	1935610000	D.9
SAIBW-4/8S-M12 4P D-ZF	1139330000	C.70
SAIBW-4/8S-M12 4P D-ZF	1139330000	D.15
SAIBW-4/8S-M12 4P D-ZF	1139330000	D.5
SAIBW-4/9	1807240000	D.7
SAIBW-4-IDC M12	1812890000	D.22
SAIBW-5/7	9457260000	D.5
SAIBW-5/7	9457260000	D.8
SAIBW-5/7-(KV)	1962630000	D.9
SAIBW-5/9	1807330000	D.8
SAIBW-M-4/8 M12	1803910000	C.31

Type	Order No.	Page
SAIBW-M-4/8 M12	1803910000	D.12
SAIBW-M-4/8 M12	1803910000	D.5
SAIBW-M-5/8 M12	1803920000	C.31
SAIBW-M-5/8 M12	1803920000	C.63
SAIBW-M-5/8 M12	1803920000	D.12
SAIBW-M-5/8 M12	1803920000	D.5
SAIBW-M-5/8 M12 B-COD	1944580000	C.11
SAIBW-M-5/8 M12 B-COD	1944580000	D.14
SAIBW-M-5/8 M12 B-COD	1944580000	D.5
SAIBW-M8-3P(TL)	1920970000	D.19
SAIBW-M8-3P(TL)	1920970000	D.6
SAIBW-M8-4P(TL)	1920980000	D.19
SAIBW-M8-4P(TL)	1920980000	D.6
SAIE-EW-M20/PG9-SW24-VA	1950270000	C.33
SAIE-M12B-4-0.5U-FP-M16	1861190000	D.29
SAIE-M12B-4-0.5U-M16	1861120000	D.29
SAIE-M12B-4-0.5U-PG9	1861250000	D.30
SAIE-M12B-5-0.5U-FP-M16	1856110000	D.29
SAIE-M12B-5-0.5U-M16	1836910000	D.29
SAIE-M12B-5-0.5U-PG9	1814890000	D.30
SAIE-M12B-8-0,5U-M16	1861140000	D.29
SAIE-M12B-8-0.5U-FP-M16	1861210000	D.29
SAIE-M12B-8-0.5U-PG9	1861270000	D.30
SAIE-M12S-4-0.5U-AEH-VA	1861220001	C.33
SAIE-M12S-4-0.5U-FP-M16	1861160000	D.29
SAIE-M12S-4-0.5U-M16	1861090000	D.29
SAIE-M12S-4-0.5U-PG9	1861220000	D.30
SAIE-M12S-5-0.5U-FP-M16	1861170000	D.29
SAIE-M12S-5-0.5U-M16	1861230000	D.29
SAIE-M12S-5-0.5U-PG9	1856120000	D.30
SAIE-M12S-8-0.5U-FP-M16	1861180000	D.29
SAIE-M12S-8-0.5U-M16	1861110000	D.29
SAIE-M12S-8-0.5U-PG9	1861240000	D.30
SAIE-M23-L-EM	1170320000	H.19
SAIE-M23-L-HW	1170340000	H.19
SAIE-M23-L-RM	1170310000	H.19
SAIE-M23-L-VW	1170300000	H.19
SAIE-M23-L-W	1170330000	H.19
SAIE-M23-S-EM	1169970000	H.13
SAIE-M23-S-HW	1169990000	H.13
SAIE-M23-S-RM	1169950000	H.13
SAIE-M23-S-VW	1169940000	H.13
SAIE-M23-S-W	1169980000	H.13
SAIE-M5B-3-0.2U	1873060000	D.31
SAIE-M5B-4-0.2U	1873040000	D.31
SAIE-M5S-3-0.2U	1873050000	D.31
SAIE-M5S-4-0.2U	1873030000	D.31
SAIE-M8B-3-0.5U-FP-M8	1856130000	D.31
SAIE-M8B-4-0.5U-FP-M8	1856140000	D.31
SAIE-M8R-3-0.5U-FP-M8	1861280000	D.31
SAIE-M8R-4-0.5U-FP-M8	1861290000	D.31
SAIE-M8S-3-0.5U-FP-M8	1078730000	D.31
SAIE-M8S-4-0.5U-FP-M8	1078720000	D.31
SAIEND CAN M8 4P	1955340000	C.61
SAIEND CAN M8 4P	1955340000	E.31
SAIEND CAN M8 4P	1955340000	E.33
SAIEND CAN M8 4P	1955340000	E.35
SAIEND CAN-M12 5P A-COD	1784760000	E.14
SAIEND CAN-M12 5P A-COD	1784760000	E.18
SAIEND CAN-M12 5P A-COD	1784760000	E.33
SAIEND PB M12 5P B-COD	1784770000	E.10
SAIEND PB M12 5P B-COD	1784770000	E.31
SAIEND PB M12 5P B-COD	1784770000	E.45
SAIH-CD-2x0.34/2x0.22-PUR	1058630000	C.62
SAIH-PB-2X0.24-PUR	1232620000	C.8
SAIH-PB-2X0.34-PVC	1933640000	C.9
SAIH-PB-PA-2X1.0-PVC-BL	1232630000	C.30
SAIH-PB-PA-2X1.0-PVC-SW	1232640000	C.30
SAIH-SLL-3x0,25mm²(PUR)	1902140000	B.51
SAIH-SLL-3x0,25mm²(PVC)	1902190000	B.51
SAIH-SLL-3x0,25mm²(TPE)	1022970000	B.51
SAIH-SLL-3x0,34mm²(PUR)	1902110000	B.51
SAIH-SLL-3x0,34mm²(PVC)	1902160000	B.51
SAIH-SLL-3x0,34mm²(TPE)	1022940000	B.51
SAIH-SLL-3x0,75-8x0,34	9457420000	B.52
SAIH-SLL-3X0.75-16X0.34	9457560000	B.52
SAIH-SLL-4x0,25mm²(PUR)	1902120000	B.51
SAIH-SLL-4x0,25mm²(PVC)	1902170000	B.51
SAIH-SLL-4x0,25mm²(TPE)	1022980000	B.51
SAIH-SLL-4x0,34mm²(PUR)	1902130000	B.51
SAIH-SLL-4x0,34mm²(PVC)	1902180000	B.51
SAIH-SLL-4x0,34mm²(TPE)	1022950000	B.51
SAIH-SLL-5x0,25mm²(PUR)	1902100000	B.51
SAIH-SLL-5x0,25mm²(PVC)	1902150000	B.51
SAIH-SLL-5x0,34mm²(TPE)	1022960000	B.51
SAIH-SLL-5X0,75-16X0,34	9457970000	B.52
SAI-IDC-TOOL	1795020000	G.25
SAIL-M12BG-12-10U	1879711000	B.14
SAIL-M12BG-12-5,0U	1879710500	B.14
SAIL-M12BG-3-1.5Q	1926760150	B.11
SAIL-M12BG-3-1.5Q	1926760150	B.6
SAIL-M12BG-3-1.5QGE	1092910150	B.11
SAIL-M12BG-3-1.5T	1968590150	B.11
SAIL-M12BG-3-1.5U	9457820150	B.11
SAIL-M12BG-3-1.5U	9457820150	B.6
SAIL-M12BG-3-1.5V	1925570150	B.11
SAIL-M12BG-3-1.5V	1925570150	B.6
SAIL-M12BG-3-10Q	1926761000	B.6
SAIL-M12BG-3-10U	9457821000	B.6
SAIL-M12BG-3-10V	1925571000	B.6

Type	Order No.	Page
SAIL-M12BG-3-3.0Q	1926760300	B.6
SAIL-M12BG-3-3.0U	9457820300	B.6
SAIL-M12BG-3-3.0V	1925570300	B.6
SAIL-M12BG-3-5.0Q	1926760500	B.6
SAIL-M12BG-3-5.0U	9457820500	B.6
SAIL-M12BG-3-5.0V	1925570500	B.6
SAIL-M12BG-3B-1.5Q	1057740150	B.41
SAIL-M12BG-3S1.5Q	1867410150	B.16
SAIL-M12BG-3-X.XQ	1926760000	B.6
SAIL-M12BG-3-X.XU	9457820000	B.6
SAIL-M12BG-3-X.XV	1925570000	B.6
SAIL-M12BG-4-1.5Q	1926770150	B.11
SAIL-M12BG-4-1.5Q	1926770150	B.6
SAIL-M12BG-4-1.5QGE	1092920150	B.11
SAIL-M12BG-4-1.5T	1968580150	B.11
SAIL-M12BG-4-1.5U	9457730150	B.11
SAIL-M12BG-4-1.5U	9457730150	B.6
SAIL-M12BG-4-1.5V	1925580150	B.11
SAIL-M12BG-4-1.5V	1925580150	B.6
SAIL-M12BG-4-10Q	1926771000	B.6
SAIL-M12BG-4-10U	9457731000	B.6
SAIL-M12BG-4-10V	1925581000	B.6
SAIL-M12BG-4-3.0Q	1926770300	B.6
SAIL-M12BG-4-3.0U	9457730300	B.6
SAIL-M12BG-4-3.0V	1925580300	B.6
SAIL-M12BG-4-5.0Q	1926770500	B.6
SAIL-M12BG-4-5.0U	9457730500	B.6
SAIL-M12BG-4-5.0V	1925580500	B.6
SAIL-M12BG-4B-1.5Q	1057750150	B.41
SAIL-M12BG-4S1.5Q	1812540150	B.16
SAIL-M12BG-4-X.XQ	1926770000	B.6
SAIL-M12BG-4-X.XU	9457730000	B.6
SAIL-M12BG-4-X.XV	1925580000	B.6
SAIL-M12BG-5-1.5Q	1926780150	B.11
SAIL-M12BG-5-1.5Q	1926780150	B.7
SAIL-M12BG-5-1.5QGE	1092930150	B.11
SAIL-M12BG-5-1.5T	1021670150	B.11
SAIL-M12BG-5-1.5U	9457910150	B.11
SAIL-M12BG-5-1.5U	9457910150	B.7
SAIL-M12BG-5-1.5V	1925590150	B.11
SAIL-M12BG-5-1.5V	1925590150	B.7
SAIL-M12BG-5-10Q	1926781000	B.7
SAIL-M12BG-5-10U	9457911000	B.7
SAIL-M12BG-5-10V	1925591000	B.7
SAIL-M12BG-5-3.0Q	1926780300	B.7
SAIL-M12BG-5-3.0U	9457910300	B.7
SAIL-M12BG-5-3.0V	1925590300	B.7
SAIL-M12BG-5-5.0Q	1926780500	B.7
SAIL-M12BG-5-5.0U	9457910500	B.7
SAIL-M12BG-5-5.0V	1925590500	B.7
SAIL-M12BG-5B-1.5Q	1061880150	B.41
SAIL-M12BG-5S1.5Q	9456140150	B.16
SAIL-M12BG-5-X.XQ	1926780000	B.7
SAIL-M12BG-5-X.XU	9457910000	B.7
SAIL-M12BG-5-X.XV	1925590000	B.7
SAIL-M12BG-8-(S)-1,5U	1890520150	B.14
SAIL-M12BG-8-(S)-10U	1890521000	B.14
SAIL-M12BG-8-(S)-3,0U	1890520300	B.14
SAIL-M12BG-8-(S)-5,0U	1890520500	B.14
SAIL-M12BG-8-1.5U	1865870150	B.14
SAIL-M12BG-8-10U	1865871000	B.14
SAIL-M12BG-8-3.0U	1865870300	B.14
SAIL-M12BG-8-5.0U	1865870500	B.14
SAIL-M12BG-CD-1.5A	1964690150	C.58
SAIL-M12BG-CD-1.5B	1060120150	C.58
SAIL-M12BG-PB-1.5D	1873320150	C.6
SAIL-M12BG-PB-1.5E	1058540150	C.6
SAIL-M12BG-VA-2/4-1.5U	1939410150	B.13
SAIL-M12BG-VA-4-1,5U	9457950150	B.13
SAIL-M12BW-12-10U	1898241000	B.14
SAIL-M12BW-12-5,0U	1898240500	B.14
SAIL-M12BW-3-1.5Q	1926820150	B.11
SAIL-M12BW-3-1.5Q	1926820150	B.7
SAIL-M12BW-3-1.5QGE	1092940150	B.11
SAIL-M12BW-3-1.5T	1968560150	B.11
SAIL-M12BW-3-1.5U	9457320150	B.11
SAIL-M12BW-3-1.5U	9457320150	B.7
SAIL-M12BW-3-1.5V	1925630150	B.11
SAIL-M12BW-3-1.5V	1925630150	B.7
SAIL-M12BW-3-10Q	1926821000	B.7
SAIL-M12BW-3-10U	9457321000	B.7
SAIL-M12BW-3-10V	1925631000	B.7
SAIL-M12BW-3-3.0Q	1926820300	B.7
SAIL-M12BW-3-3.0U	9457320300	B.7
SAIL-M12BW-3-3.0V	1925630300	B.7
SAIL-M12BW-3-5.0Q	1926820500	B.7
SAIL-M12BW-3-5.0U	9457320500	B.7
SAIL-M12BW-3-5.0V	1925630500	B.7
SAIL-M12BW-3B-1.5Q	1061890150	B.41
SAIL-M12BW-3L1.5Q	1926650150	B.15
SAIL-M12BW-3L1.5Q	1926650150	B.8
SAIL-M12BW-3L1.5QGE	1114880150	B.15
SAIL-M12BW-3L1.5T	1004330150	B.15
SAIL-M12BW-3L1.5U	9457800150	B.15
SAIL-M12BW-3L1.5U	9457800150	B.8
SAIL-M12BW-3L1.5V	1925460150	B.15
SAIL-M12BW-3L1.5V	1925460150	B.8
SAIL-M12BW-3L10Q	1926651000	B.8
SAIL-M12BW-3L10U	9457801000	B.8
SAIL-M12BW-3L10V	1925461000	B.8

Type	Order No.	Page
SAIL-M12BW-3L3.0Q	1926650300	B.8
SAIL-M12BW-3L3.0U	9457800300	B.8
SAIL-M12BW-3L3.0V	1925460300	B.8
SAIL-M12BW-3L5.0Q	1926650500	B.8
SAIL-M12BW-3L5.0U	9457800500	B.8
SAIL-M12BW-3L5.0V	1925460500	B.8
SAIL-M12BW-3LX.XQ	1926650000	B.8
SAIL-M12BW-3LX.XU	9457800000	B.8
SAIL-M12BW-3LX.XV	1925460000	B.8
SAIL-M12BW-3S1.5Q	1906950150	B.16
SAIL-M12BW-3-X.XQ	1926820000	B.7
SAIL-M12BW-3-X.XU	9457320000	B.7
SAIL-M12BW-3-X.XV	1925630000	B.7
SAIL-M12BW-4-1.5Q	1926830150	B.11
SAIL-M12BW-4-1.5Q	1926830150	B.7
SAIL-M12BW-4-1.5QGE	1092960150	B.11
SAIL-M12BW-4-1.5T	1968570150	B.11
SAIL-M12BW-4-1.5U	9457740150	B.11
SAIL-M12BW-4-1.5U	9457740150	B.7
SAIL-M12BW-4-1.5V	1925640150	B.11
SAIL-M12BW-4-1.5V	1925640150	B.7
SAIL-M12BW-4-10Q	1926831000	B.7
SAIL-M12BW-4-10U	9457741000	B.7
SAIL-M12BW-4-10V	1925641000	B.7
SAIL-M12BW-4-2L1.5Q	1926660150	B.15
SAIL-M12BW-4-2L1.5Q	1926660150	B.8
SAIL-M12BW-4-2L1.5QGE	1092950150	B.15
SAIL-M12BW-4-2L1.5T	1007000150	B.15
SAIL-M12BW-4-2L1.5U	9456380150	B.15
SAIL-M12BW-4-2L1.5U	9456380150	B.8
SAIL-M12BW-4-2L1.5V	1925470150	B.15
SAIL-M12BW-4-2L1.5V	1925470150	B.8
SAIL-M12BW-4-2L10Q	1926661000	B.8
SAIL-M12BW-4-2L10U	9456381000	B.8
SAIL-M12BW-4-2L10V	1925471000	B.8
SAIL-M12BW-4-2L3.0Q	1926660300	B.8
SAIL-M12BW-4-2L3.0U	9456380300	B.8
SAIL-M12BW-4-2L3.0V	1925470300	B.8
SAIL-M12BW-4-2L5.0Q	1926660500	B.8
SAIL-M12BW-4-2L5.0U	9456380500	B.8
SAIL-M12BW-4-2L5.0V	1925470500	B.8
SAIL-M12BW-4-2LX.XQ	1926660000	B.8
SAIL-M12BW-4-2LX.XU	9456380000	B.8
SAIL-M12BW-4-2LX.XV	1925470000	B.8
SAIL-M12BW-4-3.0Q	1926830300	B.7
SAIL-M12BW-4-3.0U	9457740300	B.7
SAIL-M12BW-4-3.0V	1925640300	B.7
SAIL-M12BW-4-3L1.5Q	1963950150	B.15
SAIL-M12BW-4-3L1.5U	1963940150	B.15
SAIL-M12BW-4-3L1.5V	1963960150	B.15
SAIL-M12BW-4-5.0Q	1926830500	B.7
SAIL-M12BW-4-5.0U	9457740500	B.7
SAIL-M12BW-4-5.0V	1925640500	B.7
SAIL-M12BW-4B-1.5Q	1061900150	B.41
SAIL-M12BW-4S1.5Q	1808970150	B.16
SAIL-M12BW-4-X.XQ	1926830000	B.7
SAIL-M12BW-4-X.XV	1925640000	B.7
SAIL-M12BW-5-1.5Q	1926840150	B.11
SAIL-M12BW-5-1.5Q	1926840150	B.7
SAIL-M12BW-5-1.5QGE	1092970150	B.11
SAIL-M12BW-5-1.5T	1021690150	B.11
SAIL-M12BW-5-1.5U	9457690150	B.11
SAIL-M12BW-5-1.5U	9457690150	B.7
SAIL-M12BW-5-1.5V	1925650150	B.11
SAIL-M12BW-5-1.5V	1925650150	B.7
SAIL-M12BW-5-10Q	1926841000	B.7
SAIL-M12BW-5-10U	9457691000	B.7
SAIL-M12BW-5-10V	1925651000	B.7
SAIL-M12BW-5-3.0Q	1926840300	B.7
SAIL-M12BW-5-3.0U	9457690300	B.7
SAIL-M12BW-5-3.0V	1925650300	B.7
SAIL-M12BW-5-5.0Q	1926840500	B.7
SAIL-M12BW-5-5.0U	9457690500	B.7
SAIL-M12BW-5-5.0V	1925650500	B.7
SAIL-M12BW-5B-1.5Q	1057760150	B.41
SAIL-M12BW-5S1.5Q	1906540150	B.16
SAIL-M12BW-5-X.XQ	1926840000	B.7
SAIL-M12BW-5-X.XU	9457690000	B.7
SAIL-M12BW-5-X.XV	1925650000	B.7
SAIL-M12BW-8-10U	1883461000	B.14
SAIL-M12BW-8-5.0U	1883460500	B.14
SAIL-M12BW-CD-1.5A	1061980150	C.58
SAIL-M12BW-CD-1.5B	1062180150	C.58
SAIL-M12BW-PB-1.5D	1062300150	C.6
SAIL-M12BW-PB-1.5E	1062370150	C.6
SAIL-M12BW-VA-2/4-1.5U	1939370150	B.13
SAIL-M12BW-VA-4-1,5U	9457960150	B.13
SAIL-M12G-3-1.5Q	1926620150	B.11
SAIL-M12G-3-1.5Q	1926620150	B.4
SAIL-M12G-3-1.5QGE	1092980150	B.11
SAIL-M12G-3-1.5T	1021750150	B.11
SAIL-M12G-3-1.5U	9457810150	B.11
SAIL-M12G-3-1.5U	9457810150	B.4
SAIL-M12G-3-1.5V	1925430150	B.11
SAIL-M12G-3-1.5V	1925430150	B.4
SAIL-M12G-3-10Q	1926621000	B.4
SAIL-M12G-3-10U	9457811000	B.4
SAIL-M12G-3-10V	1925431000	B.4
SAIL-M12G-3-3.0Q	1926620300	B.4
SAIL-M12G-3-3.0U	9457810300	B.4

Type	Order No.	Page
SAIL-M12G-3-3.0V	1925430300	B.4
SAIL-M12G-3-5.0Q	1926620500	B.4
SAIL-M12G-3-5.0U	9457810500	B.4
SAIL-M12G-3-5.0V	1925430500	B.4
SAIL-M12G-3B-1.5Q	1057770150	B.41
SAIL-M12G-3S1.5Q	1906470150	B.16
SAIL-M12G-3-X.XQ	1926620000	B.4
SAIL-M12G-3-X.XU	9457810000	B.4
SAIL-M12G-3-X.XV	1925430000	B.4
SAIL-M12G-4-1.5Q	1926630150	B.11
SAIL-M12G-4-1.5Q	1926630150	B.4
SAIL-M12G-4-1.5QGE	1077750150	B.11
SAIL-M12G-4-1.5T	1021770150	B.11
SAIL-M12G-4-1.5U	9456100150	B.11
SAIL-M12G-4-1.5U	9456100150	B.4
SAIL-M12G-4-1.5V	1925440150	B.11
SAIL-M12G-4-1.5V	1925440150	B.4
SAIL-M12G-4-10Q	1926631000	B.4
SAIL-M12G-4-10U	9456101000	B.4
SAIL-M12G-4-10V	1925441000	B.4
SAIL-M12G-4-3.0Q	1926630300	B.4
SAIL-M12G-4-3.0U	9456100300	B.4
SAIL-M12G-4-3.0V	1925440300	B.4
SAIL-M12G-4-5.0Q	1926630500	B.4
SAIL-M12G-4-5.0U	9456100500	B.4
SAIL-M12G-4-5.0V	1925440500	B.4
SAIL-M12G-4B-1.5Q	1057780150	B.41
SAIL-M12G-4S1.5Q	1906480150	B.16
SAIL-M12G-4-X.XQ	1926630000	B.4
SAIL-M12G-4-X.XU	9456100000	B.4
SAIL-M12G-4-X.XV	1925440000	B.4
SAIL-M12G-5-1.5Q	1926640150	B.11
SAIL-M12G-5-1.5Q	1926640150	B.4
SAIL-M12G-5-1.5QGE	1092990150	B.11
SAIL-M12G-5-1.5T	1021650150	B.11
SAIL-M12G-5-1.5U	9457610150	B.11
SAIL-M12G-5-1.5U	9457610150	B.4
SAIL-M12G-5-1.5V	1925450150	B.11
SAIL-M12G-5-1.5V	1925450150	B.4
SAIL-M12G-5-10Q	1926641000	B.4
SAIL-M12G-5-10U	9457611000	B.4
SAIL-M12G-5-10V	1925451000	B.4
SAIL-M12G-5-3.0Q	1926640300	B.4
SAIL-M12G-5-3.0U	9457610300	B.4
SAIL-M12G-5-3.0V	1925450300	B.4
SAIL-M12G-5-5.0Q	1926640500	B.4
SAIL-M12G-5-5.0U	9457610500	B.4
SAIL-M12G-5-5.0V	1925450500	B.4
SAIL-M12G-5B-1.5Q	1057790150	B.41
SAIL-M12G-5S1.5Q	1926690150	B.16
SAIL-M12G-5-X.XQ	1926640000	B.4
SAIL-M12G-5-X.XU	9457610000	B.4
SAIL-M12G-5-X.XV	1925450000	B.4
SAIL-M12G-CD-1.5A	1964700150	C.58
SAIL-M12G-CD-1.5B	1060110150	C.58
SAIL-M12GM12G-2/4-1.5Q	1926520150	B.26
SAIL-M12GM12G-2/4-1.5QGE	1093000150	B.26
SAIL-M12GM12G-2/4-1.5U	9456990150	B.26
SAIL-M12GM12G-2/4-1.5V	1925330150	B.26
SAIL-M12GM12G-3-1.5Q	1926490150	B.25
SAIL-M12GM12G-3-1.5Q	1926490150	B.6
SAIL-M12GM12G-3-1.5QGE	1093010150	B.25
SAIL-M12GM12G-3-1.5T	1021710150	B.25
SAIL-M12GM12G-3-1.5U	9457230150	B.25
SAIL-M12GM12G-3-1.5U	9457230150	B.6
SAIL-M12GM12G-3-1.5V	1925300150	B.25
SAIL-M12GM12G-3-1.5V	1925300150	B.6
SAIL-M12GM12G-3-10Q	1926491000	B.6
SAIL-M12GM12G-3-10U	9457231000	B.6
SAIL-M12GM12G-3-10V	1925301000	B.6
SAIL-M12GM12G-3-3.0Q	1926490300	B.6
SAIL-M12GM12G-3-3.0U	9457230300	B.6
SAIL-M12GM12G-3-3.0V	1925300300	B.6
SAIL-M12GM12G-3-5.0Q	1926490500	B.6
SAIL-M12GM12G-3-5.0U	9457230500	B.6
SAIL-M12GM12G-3-5.0V	1925300500	B.6
SAIL-M12GM12G-3B-1.5Q	1057830150	B.42
SAIL-M12GM12G-3S1.5Q	1058490150	B.28
SAIL-M12GM12G-3-X.XQ	1926490000	B.6
SAIL-M12GM12G-3-X.XU	9457230000	B.6
SAIL-M12GM12G-3-X.XV	1925300000	B.6
SAIL-M12GM12G-4-0.3U	9457150000	F.7
SAIL-M12GM12G-4-0.6U	9457160000	F.7
SAIL-M12GM12G-4-0.9U	9457170000	F.7
SAIL-M12GM12G-4-1.5Q	1926500150	B.25
SAIL-M12GM12G-4-1.5Q	1926500150	B.6
SAIL-M12GM12G-4-1.5QGE	1093020150	B.25
SAIL-M12GM12G-4-1.5T	1021730150	B.25
SAIL-M12GM12G-4-1.5U	1906300150	B.25
SAIL-M12GM12G-4-1.5U	1906300150	B.6
SAIL-M12GM12G-4-1.5V	1925310150	B.25
SAIL-M12GM12G-4-1.5V	1925310150	B.6
SAIL-M12GM12G-4-10Q	1926501000	B.6
SAIL-M12GM12G-4-10U	1906301000	B.6
SAIL-M12GM12G-4-10V	1925311000	B.6
SAIL-M12GM12G-4-3.0Q	1926500300	B.6
SAIL-M12GM12G-4-3.0U	1906300300	B.6
SAIL-M12GM12G-4-3.0V	1925310300	B.6
SAIL-M12GM12G-4-5.0Q	1926500500	B.6
SAIL-M12GM12G-4-5.0U	1906300500	B.6

Type	Order No.	Page
SAIL-M12GM12G-4-5.0V	1925310500	B.6
SAIL-M12GM12G-4S1.5Q	1058500150	B.28
SAIL-M12GM12G-4-X.XQ	1926500000	B.6
SAIL-M12GM12G-4-X.XU	1906300000	B.6
SAIL-M12GM12G-4-X.XV	1925310000	B.6
SAIL-M12GM12G-5-0.3U	9457340030	F.7
SAIL-M12GM12G-5-0.6U	9457340060	F.7
SAIL-M12GM12G-5-1.5Q	1926510150	B.25
SAIL-M12GM12G-5-1.5Q	1926510150	B.7
SAIL-M12GM12G-5-1.5QGE	1093030150	B.25
SAIL-M12GM12G-5-1.5T	1011970150	B.25
SAIL-M12GM12G-5-1.5U	9457340150	B.25
SAIL-M12GM12G-5-1.5U	9457340150	B.7
SAIL-M12GM12G-5-1.5U	9457340150	F.7
SAIL-M12GM12G-5-1.5V	1925320150	B.25
SAIL-M12GM12G-5-1.5V	1925320150	B.7
SAIL-M12GM12G-5-10Q	1926511000	B.7
SAIL-M12GM12G-5-10U	9457341000	B.7
SAIL-M12GM12G-5-10V	1925321000	B.7
SAIL-M12GM12G-5-3.0Q	1926510300	B.7
SAIL-M12GM12G-5-3.0U	9457340300	B.7
SAIL-M12GM12G-5-3.0V	1925320300	B.7
SAIL-M12GM12G-5-5.0Q	1926510500	B.7
SAIL-M12GM12G-5-5.0U	9457340500	B.7
SAIL-M12GM12G-5-5.0V	1925320500	B.7
SAIL-M12GM12G-5B-1.5Q	1057850150	B.42
SAIL-M12GM12G-5S1.5Q	1058510150	B.28
SAIL-M12GM12G-5-X.XQ	1926510000	B.7
SAIL-M12GM12G-5-X.XU	9457740000	B.7
SAIL-M12GM12G-5-X.XU	9457340000	B.7
SAIL-M12GM12G-5-X.XV	1925320000	B.7
SAIL-M12GM12G-CD-1.5A	1964710150	C.59
SAIL-M12GM12G-CD-1.5B	1060130150	C.59
SAIL-M12GM12G-PB-1.5D	1873310150	C.7
SAIL-M12GM12G-PB-1.5E	1058570150	C.7
SAIL-M12GM12W-2/4-1.5Q	1926560150	B.26
SAIL-M12GM12W-2/4-1.5QGE	1093040150	B.26
SAIL-M12GM12W-2/4-1.5U	9457890150	B.26
SAIL-M12GM12W-2/4-1.5V	1925370150	B.26
SAIL-M12GM12W-3-1.5Q	1926530150	B.25
SAIL-M12GM12W-3-1.5Q	1926530150	B.7
SAIL-M12GM12W-3-1.5QGE	1093050150	B.25
SAIL-M12GM12W-3-1.5T	1021720150	B.25
SAIL-M12GM12W-3-1.5U	9457390150	B.25
SAIL-M12GM12W-3-1.5U	9457390150	B.7
SAIL-M12GM12W-3-1.5V	1925340150	B.25
SAIL-M12GM12W-3-1.5V	1925340150	B.7
SAIL-M12GM12W-3-10Q	1926531000	B.7
SAIL-M12GM12W-3-10U	9457391000	B.7
SAIL-M12GM12W-3-10V	1925341000	B.7
SAIL-M12GM12W-3-3.0Q	1926530300	B.7
SAIL-M12GM12W-3-3.0U	9457390300	B.7
SAIL-M12GM12W-3-3.0V	1925340300	B.7
SAIL-M12GM12W-3-5.0Q	1926530500	B.7
SAIL-M12GM12W-3-5.0U	9457390500	B.7
SAIL-M12GM12W-3-5.0V	1925340500	B.7
SAIL-M12GM12W-3B-1.5Q	1057900150	B.42
SAIL-M12GM12W-3L1.5Q	1926600150	B.27
SAIL-M12GM12W-3L1.5Q	1926600150	B.8
SAIL-M12GM12W-3L1.5T	1004320150	B.27
SAIL-M12GM12W-3L1.5U	9457790150	B.27
SAIL-M12GM12W-3L1.5U	9457790150	B.8
SAIL-M12GM12W-3L1.5V	1925410150	B.27
SAIL-M12GM12W-3L1.5V	1925410150	B.8
SAIL-M12GM12W-3L10Q	1926601000	B.8
SAIL-M12GM12W-3L10U	9457791000	B.8
SAIL-M12GM12W-3L10V	1925411000	B.8
SAIL-M12GM12W-3L3.0Q	1926600300	B.8
SAIL-M12GM12W-3L3.0U	9457790300	B.8
SAIL-M12GM12W-3L3.0V	1925410300	B.8
SAIL-M12GM12W-3L5.0Q	1926600500	B.8
SAIL-M12GM12W-3L5.0U	9457790500	B.8
SAIL-M12GM12W-3L5.0V	1925410500	B.8
SAIL-M12GM12W-3LX.XQ	1926600000	B.8
SAIL-M12GM12W-3LX.XU	9457790000	B.8
SAIL-M12GM12W-3LX.XV	1925410000	B.8
SAIL-M12GM12W-3S1.5Q	1059470150	B.28
SAIL-M12GM12W-3-X.XQ	1926530000	B.7
SAIL-M12GM12W-3-X.XU	9457390000	B.7
SAIL-M12GM12W-3-X.XV	1925340000	B.7
SAIL-M12GM12W-4-1.5Q	1926540150	B.25
SAIL-M12GM12W-4-1.5Q	1926540150	B.7
SAIL-M12GM12W-4-1.5QGE	1093070150	B.25
SAIL-M12GM12W-4-1.5T	1021740150	B.25
SAIL-M12GM12W-4-1.5U	9457310150	B.25
SAIL-M12GM12W-4-1.5U	9457310150	B.7
SAIL-M12GM12W-4-1.5V	1925350150	B.25
SAIL-M12GM12W-4-1.5V	1925350150	B.7
SAIL-M12GM12W-4-10Q	1926541000	B.7
SAIL-M12GM12W-4-10U	9457311000	B.7
SAIL-M12GM12W-4-10V	1925351000	B.7
SAIL-M12GM12W-4-2L1.5Q	1926610150	B.27
SAIL-M12GM12W-4-2L1.5Q	1926610150	B.8
SAIL-M12GM12W-4-2L1.5T	1004310150	B.27
SAIL-M12GM12W-4-2L1.5U	1906410150	B.27
SAIL-M12GM12W-4-2L1.5U	1906410150	B.8
SAIL-M12GM12W-4-2L1.5V	1925420150	B.27
SAIL-M12GM12W-4-2L1.5V	1925420150	B.8
SAIL-M12GM12W-4-2L10Q	1926611000	B.8
SAIL-M12GM12W-4-2L10U	1906411000	B.8

Type	Order No.	Page
SAIL-M12GM12W-4-2L10V	1925421000	B.8
SAIL-M12GM12W-4-2L3.0Q	1926610300	B.8
SAIL-M12GM12W-4-2L3.0U	1906410300	B.8
SAIL-M12GM12W-4-2L3.0V	1925420300	B.8
SAIL-M12GM12W-4-2L5.0Q	1926610500	B.8
SAIL-M12GM12W-4-2L5.0U	1906410500	B.8
SAIL-M12GM12W-4-2L5.0V	1925420500	B.8
SAIL-M12GM12W-4-2LX.XQ	1926610000	B.8
SAIL-M12GM12W-4-2LX.XU	1906410000	B.8
SAIL-M12GM12W-4-2LX.XV	1925420000	B.8
SAIL-M12GM12W-4-3.0Q	1926540300	B.7
SAIL-M12GM12W-4-3.0U	9457310300	B.7
SAIL-M12GM12W-4-3.0V	1925350300	B.7
SAIL-M12GM12W-4-3L1.5Q	1232810150	B.27
SAIL-M12GM12W-4-3L1.5U	1963910150	B.27
SAIL-M12GM12W-4-3L1.5V	1963930150	B.27
SAIL-M12GM12W-4-3LW1.5QGE	1093060150	B.27
SAIL-M12GM12W-4-3LW1.5T	1020930150	B.27
SAIL-M12GM12W-4-5.0Q	1926540500	B.7
SAIL-M12GM12W-4-5.0U	9457310500	B.7
SAIL-M12GM12W-4-5.0V	1925350500	B.7
SAIL-M12GM12W-4S1.5Q	1059480150	B.28
SAIL-M12GM12W-4-X.XQ	1926540000	B.7
SAIL-M12GM12W-4-X.XU	9457310000	B.7
SAIL-M12GM12W-4-X.XV	1925350000	B.7
SAIL-M12GM12W-5-1.5Q	1926550150	B.25
SAIL-M12GM12W-5-1.5Q	1926550150	B.7
SAIL-M12GM12W-5-1.5QGE	1093080150	B.25
SAIL-M12GM12W-5-1.5T	1011990150	B.25
SAIL-M12GM12W-5-1.5U	9457270150	B.25
SAIL-M12GM12W-5-1.5U	9457270150	B.7
SAIL-M12GM12W-5-1.5V	1925360150	B.25
SAIL-M12GM12W-5-1.5V	1925360150	B.7
SAIL-M12GM12W-5-10Q	1926551000	B.7
SAIL-M12GM12W-5-10U	9457271000	B.7
SAIL-M12GM12W-5-10V	1925361000	B.7
SAIL-M12GM12W-5-3.0Q	1926550300	B.7
SAIL-M12GM12W-5-3.0U	9457270300	B.7
SAIL-M12GM12W-5-3.0V	1925360300	B.7
SAIL-M12GM12W-5-5.0Q	1926550500	B.7
SAIL-M12GM12W-5-5.0U	9457270500	B.7
SAIL-M12GM12W-5-5.0V	1925360500	B.7
SAIL-M12GM12W-5B-1.5Q	1057920150	B.42
SAIL-M12GM12W-5S1.5Q	1059540150	B.28
SAIL-M12GM12W-5-X.XQ	1926550000	B.7
SAIL-M12GM12W-5-X.XU	9457270000	B.7
SAIL-M12GM12W-5-X.XV	1925360000	B.7
SAIL-M12GM12W-CD-1.5A	1061990150	C.59
SAIL-M12GM12W-CD-1.5B	1062190150	C.59
SAIL-M12GM12W-PB-1.5D	1062310150	C.7
SAIL-M12GM12W-PB-1.5E	1062380150	C.7
SAIL-M12GM8G-3-1.5Q	1938040150	B.29
SAIL-M12GM8G-3-1.5U	9457770150	B.29
SAIL-M12GM8G-3-1.5V	1938170150	B.29
SAIL-M12GM8G-4-1.5Q	1938070150	B.29
SAIL-M12GM8G-4-1.5Q	1938070150	B.5
SAIL-M12GM8G-4-1.5U	9456660150	B.29
SAIL-M12GM8G-4-1.5U	9456660150	B.5
SAIL-M12GM8G-4-1.5V	1938200150	B.29
SAIL-M12GM8G-4-1.5V	1938200150	B.5
SAIL-M12GM8G-4-10Q	1938071000	B.5
SAIL-M12GM8G-4-10U	9456661000	B.5
SAIL-M12GM8G-4-10V	1938201000	B.5
SAIL-M12GM8G-4-3.0Q	1938070300	B.5
SAIL-M12GM8G-4-3.0U	9456660300	B.5
SAIL-M12GM8G-4-3.0V	1938200300	B.5
SAIL-M12GM8G-4-5.0Q	1938070500	B.5
SAIL-M12GM8G-4-5.0U	9456660500	B.5
SAIL-M12GM8G-4-5.0V	1938200500	B.5
SAIL-M12GM8G-4-X.XQ	1938070000	B.5
SAIL-M12GM8G-4-X.XU	9456660000	B.5
SAIL-M12GM8G-4-X.XV	1938200000	B.5
SAIL-M12GM8GR-3-1.5U	1984530150	B.30
SAIL-M12GM8W-3-1.5Q	1938050150	B.29
SAIL-M12GM8W-3-1.5Q	1938050150	B.5
SAIL-M12GM8W-3-1.5U	9457980150	B.29
SAIL-M12GM8W-3-1.5U	9457980150	B.5
SAIL-M12GM8W-3-1.5V	1938180150	B.29
SAIL-M12GM8W-3-1.5V	1938180150	B.5
SAIL-M12GM8W-3-10Q	1938051000	B.5
SAIL-M12GM8W-3-10U	9457981000	B.5
SAIL-M12GM8W-3-10V	1938181000	B.5
SAIL-M12GM8W-3-3.0Q	1938050300	B.5
SAIL-M12GM8W-3-3.0U	9457980300	B.5
SAIL-M12GM8W-3-3.0V	1938180300	B.5
SAIL-M12GM8W-3-5.0Q	1938050500	B.5
SAIL-M12GM8W-3-5.0U	9457980500	B.5
SAIL-M12GM8W-3-5.0V	1938180500	B.5
SAIL-M12GM8W-3L1.5Q	1962270150	B.31
SAIL-M12GM8W-3L1.5QGE	1093110150	B.31
SAIL-M12GM8W-3L1.5U	9457760150	B.31
SAIL-M12GM8W-3L1.5U	9457760150	B.5
SAIL-M12GM8W-3L1.5V	1962290150	B.31
SAIL-M12GM8W-3L10U	9457761000	B.5
SAIL-M12GM8W-3L3.0U	9457760300	B.5
SAIL-M12GM8W-3L5.0U	9457760500	B.5
SAIL-M12GM8W-3LX.XU	9457760000	B.5
SAIL-M12GM8W-3-X.XQ	1938050000	B.5
SAIL-M12GM8W-3-X.XU	9457980000	B.5
SAIL-M12GM8W-3-X.XV	1938180000	B.5

Type	Order No.	Page
SAIL-M12GM8W-4-1.5Q	1938080150	B.29
SAIL-M12GM8W-4-1.5Q	1938080150	B.5
SAIL-M12GM8W-4-1.5U	9456670150	B.29
SAIL-M12GM8W-4-1.5U	9456670150	B.5
SAIL-M12GM8W-4-1.5V	1938210150	B.29
SAIL-M12GM8W-4-1.5V	1938210150	B.5
SAIL-M12GM8W-4-10Q	1938081000	B.5
SAIL-M12GM8W-4-10U	9456671000	B.5
SAIL-M12GM8W-4-10V	1938211000	B.5
SAIL-M12GM8W-4-3.0Q	1938080300	B.5
SAIL-M12GM8W-4-3.0U	9456670300	B.5
SAIL-M12GM8W-4-3.0V	1938210300	B.5
SAIL-M12GM8W-4-5.0Q	1938080500	B.5
SAIL-M12GM8W-4-5.0U	9456670500	B.5
SAIL-M12GM8W-4-5.0V	1938210500	B.5
SAIL-M12GM8W-4L1.5Q	1962280150	B.31
SAIL-M12GM8W-4L1.5QGE	1093130150	B.31
SAIL-M12GM8W-4L1.5U	1906430150	B.31
SAIL-M12GM8W-4L1.5V	1962300150	B.31
SAIL-M12GM8W-4-X.XQ	1938080000	B.5
SAIL-M12GM8W-4-X.XU	9456670000	B.5
SAIL-M12GM8W-4-X.XV	1938210000	B.5
SAIL-M12GM8WR-3-1.5QGE	1093150150	B.30
SAIL-M12GM8WR-3-1.5U	9457570150	B.30
SAIL-M12G-PB-1.5D	1873300150	C.6
SAIL-M12G-PB-1.5E	1058530150	C.6
SAIL-M12W-3-1.5Q	1926700150	B.11
SAIL-M12W-3-1.5Q	1926700150	B.4
SAIL-M12W-3-1.5QGE	1093160150	B.11
SAIL-M12W-3-1.5T	1021760150	B.11
SAIL-M12W-3-1.5U	9456690150	B.11
SAIL-M12W-3-1.5U	9456690150	B.4
SAIL-M12W-3-1.5V	1925510150	B.11
SAIL-M12W-3-1.5V	1925510150	B.4
SAIL-M12W-3-10Q	1926701000	B.4
SAIL-M12W-3-10U	9456691000	B.4
SAIL-M12W-3-10V	1925511000	B.4
SAIL-M12W-3-3.0Q	1926700300	B.4
SAIL-M12W-3-3.0U	9456690300	B.4
SAIL-M12W-3-3.0V	1925510300	B.4
SAIL-M12W-3-5.0Q	1926700500	B.4
SAIL-M12W-3-5.0U	9456690500	B.4
SAIL-M12W-3-5.0V	1925510500	B.4
SAIL-M12W-3B-1.5Q	1057800150	B.41
SAIL-M12W-3S1.5Q	1906500150	B.16
SAIL-M12W-3-X.XQ	1926700000	B.4
SAIL-M12W-3-X.XU	9456690000	B.4
SAIL-M12W-3-X.XV	1925510000	B.4
SAIL-M12W-4-1.5Q	1926710150	B.11
SAIL-M12W-4-1.5Q	1926710150	B.4
SAIL-M12W-4-1.5QGE	1093170150	B.11
SAIL-M12W-4-1.5T	1021790150	B.11
SAIL-M12W-4-1.5U	1906260150	B.11
SAIL-M12W-4-1.5U	1906260150	B.4
SAIL-M12W-4-1.5V	1925520150	B.11
SAIL-M12W-4-1.5V	1925520150	B.4
SAIL-M12W-4-10Q	1926711000	B.4
SAIL-M12W-4-10U	1906261000	B.4
SAIL-M12W-4-10V	1925521000	B.4
SAIL-M12W-4-3.0Q	1926710300	B.4
SAIL-M12W-4-3.0U	1906260300	B.4
SAIL-M12W-4-3.0V	1925520300	B.4
SAIL-M12W-4-5.0Q	1926710500	B.4
SAIL-M12W-4-5.0U	1906260500	B.4
SAIL-M12W-4-5.0V	1925520500	B.4
SAIL-M12W-4B-1.5Q	1057810150	B.41
SAIL-M12W-4S1.5Q	1059650150	B.16
SAIL-M12W-4-X.XQ	1926710000	B.4
SAIL-M12W-4-X.XU	1906260000	B.4
SAIL-M12W-4-X.XV	1925520000	B.4
SAIL-M12W-5-1.5Q	1926720150	B.11
SAIL-M12W-5-1.5Q	1926720150	B.4
SAIL-M12W-5-1.5QGE	1093180150	B.11
SAIL-M12W-5-1.5T	1021660150	B.11
SAIL-M12W-5-1.5U	9457670150	B.11
SAIL-M12W-5-1.5U	9457670150	B.4
SAIL-M12W-5-1.5V	1925530150	B.11
SAIL-M12W-5-1.5V	1925530150	B.4
SAIL-M12W-5-10Q	1926721000	B.4
SAIL-M12W-5-10U	9457671000	B.4
SAIL-M12W-5-10V	1925531000	B.4
SAIL-M12W-5-3.0Q	1926720300	B.4
SAIL-M12W-5-3.0U	9457670300	B.4
SAIL-M12W-5-3.0V	1925530300	B.4
SAIL-M12W-5-5.0Q	1926720500	B.4
SAIL-M12W-5-5.0U	9457670500	B.4
SAIL-M12W-5-5.0V	1925530500	B.4
SAIL-M12W-5B-1.5Q	1057820150	B.41
SAIL-M12W-5S1.5Q	1906520150	B.16
SAIL-M12W-5-X.XQ	1926720000	B.4
SAIL-M12W-5-X.XU	9457670000	B.4
SAIL-M12W-5-X.XV	1925530000	B.4
SAIL-M12W-CD-1.5A	1062220150	C.58
SAIL-M12W-CD-1.5B	1062170150	C.58
SAIL-M12WM12G-3-1.5U	1821050150	B.6
SAIL-M12WM12G-3-10U	1821051000	B.6
SAIL-M12WM12G-3-3.0U	1821050300	B.6
SAIL-M12WM12G-3-5.0U	1821050500	B.6
SAIL-M12WM12G-3B-1.5Q	1057870150	B.42
SAIL-M12WM12G-3-X.XU	1821050000	B.6

Type	Order No.	Page
SAIL-M12WM12G-5-1.5U	9456500150	B.7
SAIL-M12WM12G-5-10U	9456501000	B.7
SAIL-M12WM12G-5-3.0U	9456500300	B.7
SAIL-M12WM12G-5-5.0U	9456500500	B.7
SAIL-M12WM12G-5B-1.5Q	1057890150	B.42
SAIL-M12WM12G-5-X.XU	9456500000	B.7
SAIL-M12WM12W-3-1.5Q	1926570150	B.25
SAIL-M12WM12W-3-1.5Q	1926570150	B.7
SAIL-M12WM12W-3-1.5U	1815670150	B.25
SAIL-M12WM12W-3-1.5U	1815670150	B.7
SAIL-M12WM12W-3-1.5V	1925380150	B.25
SAIL-M12WM12W-3-1.5V	1925380150	B.7
SAIL-M12WM12W-3-10Q	1926571000	B.7
SAIL-M12WM12W-3-10U	1815671000	B.7
SAIL-M12WM12W-3-10V	1925381000	B.7
SAIL-M12WM12W-3-3.0Q	1926570300	B.7
SAIL-M12WM12W-3-3.0U	1815670300	B.7
SAIL-M12WM12W-3-3.0V	1925380300	B.7
SAIL-M12WM12W-3-5.0Q	1926570500	B.7
SAIL-M12WM12W-3-5.0U	1815670500	B.7
SAIL-M12WM12W-3-5.0V	1925380500	B.7
SAIL-M12WM12W-3B-1.5Q	1061910150	B.42
SAIL-M12WM12W-3S1.5Q	1059720150	B.28
SAIL-M12WM12W-3-X.XQ	1926570000	B.7
SAIL-M12WM12W-3-X.XU	1815670000	B.7
SAIL-M12WM12W-3-X.XV	1925380000	B.7
SAIL-M12WM12W-4-1.5Q	1926580150	B.25
SAIL-M12WM12W-4-1.5Q	1926580150	B.7
SAIL-M12WM12W-4-1.5U	1906310150	B.25
SAIL-M12WM12W-4-1.5U	1906310150	B.7
SAIL-M12WM12W-4-1.5V	1925390150	B.25
SAIL-M12WM12W-4-1.5V	1925390150	B.7
SAIL-M12WM12W-4-10Q	1926581000	B.7
SAIL-M12WM12W-4-10U	1906311000	B.7
SAIL-M12WM12W-4-10V	1925391000	B.7
SAIL-M12WM12W-4-3.0Q	1926580300	B.7
SAIL-M12WM12W-4-3.0U	1906310300	B.7
SAIL-M12WM12W-4-3.0V	1925390300	B.7
SAIL-M12WM12W-4-5.0Q	1926580500	B.7
SAIL-M12WM12W-4-5.0U	1906310500	B.7
SAIL-M12WM12W-4-5.0V	1925390500	B.7
SAIL-M12WM12W-4S1.5Q	1059730150	B.28
SAIL-M12WM12W-4-X.XQ	1926580000	B.7
SAIL-M12WM12W-4-X.XU	1906310000	B.7
SAIL-M12WM12W-4-X.XV	1925390000	B.7
SAIL-M12WM12W-5-1.5Q	1926590150	B.25
SAIL-M12WM12W-5-1.5Q	1926590150	B.7
SAIL-M12WM12W-5-1.5U	9457900150	B.25
SAIL-M12WM12W-5-1.5U	9457900150	B.7
SAIL-M12WM12W-5-1.5V	1925400150	B.25
SAIL-M12WM12W-5-1.5V	1925400150	B.7
SAIL-M12WM12W-5-10Q	1926591000	B.7
SAIL-M12WM12W-5-10U	9457901000	B.7
SAIL-M12WM12W-5-10V	1925401000	B.7
SAIL-M12WM12W-5-3.0Q	1926590300	B.7
SAIL-M12WM12W-5-3.0U	9457900300	B.7
SAIL-M12WM12W-5-3.0V	1925400300	B.7
SAIL-M12WM12W-5-5.0Q	1926590500	B.7
SAIL-M12WM12W-5-5.0U	9457900500	B.7
SAIL-M12WM12W-5-5.0V	1925400500	B.7
SAIL-M12WM12W-5B-1.5Q	1061930150	B.42
SAIL-M12WM12W-5S1.5Q	1059740150	B.28
SAIL-M12WM12W-5-X.XQ	1926590000	B.7
SAIL-M12WM12W-5-X.XU	9457900000	B.7
SAIL-M12WM12W-5-X.XV	1925400000	B.7
SAIL-M12WM12W-CD-1.5A	1062150150	C.59
SAIL-M12WM12W-CD-1.5B	1062210150	C.59
SAIL-M12WM12W-PB-1.5D	1062330150	C.7
SAIL-M12WM12W-PB-1.5E	1062400150	C.7
SAIL-M12WM8W-3-1.5Q	1938060150	B.29
SAIL-M12WM8W-3-1.5Q	1938060150	B.5
SAIL-M12WM8W-3-1.5U	1906330150	B.29
SAIL-M12WM8W-3-1.5U	1906330150	B.5
SAIL-M12WM8W-3-1.5V	1938190150	B.29
SAIL-M12WM8W-3-1.5V	1938190150	B.5
SAIL-M12WM8W-3-10Q	1938061000	B.5
SAIL-M12WM8W-3-10U	1906331000	B.5
SAIL-M12WM8W-3-10V	1938191000	B.5
SAIL-M12WM8W-3-3.0Q	1938060300	B.5
SAIL-M12WM8W-3-3.0U	1906330300	B.5
SAIL-M12WM8W-3-3.0V	1938190300	B.5
SAIL-M12WM8W-3-5.0Q	1938060500	B.5
SAIL-M12WM8W-3-5.0U	1906330500	B.5
SAIL-M12WM8W-3-5.0V	1938190500	B.5
SAIL-M12WM8W-3-X.XQ	1938060000	B.5
SAIL-M12WM8W-3-X.XU	1906330000	B.5
SAIL-M12WM8W-3-X.XV	1938190000	B.5
SAIL-M12WM8W-4-1.5Q	1938090150	B.29
SAIL-M12WM8W-4-1.5Q	1938090150	B.5
SAIL-M12WM8W-4-1.5U	1906340150	B.29
SAIL-M12WM8W-4-1.5U	1906340150	B.5
SAIL-M12WM8W-4-1.5V	1938220150	B.29
SAIL-M12WM8W-4-1.5V	1938220150	B.5
SAIL-M12WM8W-4-10Q	1938091000	B.5
SAIL-M12WM8W-4-10U	1906341000	B.5
SAIL-M12WM8W-4-10V	1938221000	B.5
SAIL-M12WM8W-4-3.0Q	1938090300	B.5
SAIL-M12WM8W-4-3.0U	1906340300	B.5
SAIL-M12WM8W-4-3.0V	1938220300	B.5
SAIL-M12WM8W-4-5.0Q	1938090500	B.5

Type	Order No.	Page
SAIL-M12WM8W-4-5.0U	1906340500	B.5
SAIL-M12WM8W-4-5.0V	1938220500	B.5
SAIL-M12WM8W-4-X.XQ	1938090000	B.5
SAIL-M12WM8W-4-X.XU	1906340000	B.5
SAIL-M12WM8W-4-X.XV	1938220000	B.5
SAIL-M12W-PB-1.5D	1061970150	C.6
SAIL-M12W-PB-1.5E	1062340150	C.6
SAIL-M23-KSW-7/12	1169930000	H.12
SAIL-M5BG-3P-1.5U	1873290150	B.22
SAIL-M5BG-4P-1.5U	1873250150	B.22
SAIL-M5BW-3P-1.5U	1873260150	B.22
SAIL-M5BW-4P-1.5U	1873270150	B.22
SAIL-M5G-3P-1.5U	1854060150	B.22
SAIL-M5G-4P-1.5U	1871700150	B.22
SAIL-M5W-3P-1.5U	1873280150	B.22
SAIL-M5W-4P-1.5U	1873240150	B.22
SAIL-M8BG-3-1.5Q	1926980150	B.18
SAIL-M8BG-3-1.5Q	1926980150	B.4
SAIL-M8BG-3-1.5QGE	1093190150	B.18
SAIL-M8BG-3-1.5U	9457450150	B.18
SAIL-M8BG-3-1.5U	9457450150	B.4
SAIL-M8BG-3-1.5V	1927240150	B.18
SAIL-M8BG-3-1.5V	1927240150	B.4
SAIL-M8BG-3-10Q	1926981000	B.4
SAIL-M8BG-3-10U	9457451000	B.4
SAIL-M8BG-3-10V	1927241000	B.4
SAIL-M8BG-3-3.0Q	1926980300	B.4
SAIL-M8BG-3-3.0U	9457450300	B.4
SAIL-M8BG-3-3.0V	1927240300	B.4
SAIL-M8BG-3-5.0Q	1926980500	B.4
SAIL-M8BG-3-5.0U	9457450500	B.4
SAIL-M8BG-3-5.0V	1927240500	B.4
SAIL-M8BG-3S1.5U	1906600150	B.21
SAIL-M8BG-4-1.5Q	1927000150	B.18
SAIL-M8BG-4-1.5Q	1927000150	B.5
SAIL-M8BG-4-1.5QGE	1093200150	B.18
SAIL-M8BG-4-1.5U	9457850150	B.18
SAIL-M8BG-4-1.5U	9457850150	B.5
SAIL-M8BG-4-1.5V	1927260150	B.18
SAIL-M8BG-4-1.5V	1927260150	B.5
SAIL-M8BG-4-10Q	1927001000	B.5
SAIL-M8BG-4-10U	9457851000	B.5
SAIL-M8BG-4-10V	1927261000	B.5
SAIL-M8BG-4-3.0Q	1927000300	B.5
SAIL-M8BG-4-3.0U	9457850300	B.5
SAIL-M8BG-4-3.0V	1927260300	B.5
SAIL-M8BG-4-5.0Q	1927000500	B.5
SAIL-M8BG-4-5.0U	9457850500	B.5
SAIL-M8BG-4-5.0V	1927260500	B.5
SAIL-M8BG-4S-1.5Q-SB	1981910150	C.61
SAIL-M8BG-4S1.5U	1906610150	B.21
SAIL-M8BG-4S-10Q-SB	1981911000	C.61
SAIL-M8BG-4S-3.0Q-SB	1981910300	C.61
SAIL-M8BG-4S-5.0Q-SB	1981910500	C.61
SAIL-M8BG-4-X.XU	9457850000	B.5
SAIL-M8BGR-3-1.5Q	1948610150	B.19
SAIL-M8BGR-3-1.5U	1827020150	B.19
SAIL-M8BGR-3-1.5V	1948710150	B.19
SAIL-M8BGR-4-1.5Q	1948630150	B.19
SAIL-M8BGR-4-1.5U	1948530150	B.19
SAIL-M8BGR-4-1.5V	1948730150	B.19
SAIL-M8BGS-3-X.XQ	1926980000	B.4
SAIL-M8BGS-3-X.XU	9457450000	B.4
SAIL-M8BGS-3-X.XV	1927240000	B.4
SAIL-M8BGS-4-X.XQ	1927000000	B.5
SAIL-M8BGS-4-X.XV	1927260000	B.5
SAIL-M8BW-3-1.5Q	1927060150	B.18
SAIL-M8BW-3-1.5Q	1927060150	B.5
SAIL-M8BW-3-1.5QGE	1093220150	B.18
SAIL-M8BW-3-1.5U	9457380150	B.18
SAIL-M8BW-3-1.5U	9457380150	B.5
SAIL-M8BW-3-1.5V	1927320150	B.18
SAIL-M8BW-3-1.5V	1927320150	B.5
SAIL-M8BW-3-10Q	1927061000	B.5
SAIL-M8BW-3-10U	9457381000	B.5
SAIL-M8BW-3-10V	1927321000	B.5
SAIL-M8BW-3-3.0Q	1927060300	B.5
SAIL-M8BW-3-3.0U	9457380300	B.5
SAIL-M8BW-3-3.0V	1927320300	B.5
SAIL-M8BW-3-5.0Q	1927060500	B.5
SAIL-M8BW-3-5.0U	9457380500	B.5
SAIL-M8BW-3-5.0V	1927320500	B.5
SAIL-M8BW-3L1.5Q	1927090150	B.20
SAIL-M8BW-3L1.5Q	1927090150	B.5
SAIL-M8BW-3L1.5QGE	1093210150	B.20
SAIL-M8BW-3L1.5U	9457460150	B.20
SAIL-M8BW-3L1.5U	9457460150	B.5
SAIL-M8BW-3L1.5V	1927350150	B.20
SAIL-M8BW-3L1.5V	1927350150	B.5
SAIL-M8BW-3L10Q	1927091000	B.5
SAIL-M8BW-3L10U	9457461000	B.5
SAIL-M8BW-3L10V	1927351000	B.5
SAIL-M8BW-3L3.0Q	1927090300	B.5
SAIL-M8BW-3L3.0U	9457460300	B.5
SAIL-M8BW-3L3.0V	1927350300	B.5
SAIL-M8BW-3L5.0Q	1927090500	B.5
SAIL-M8BW-3L5.0U	9457460500	B.5
SAIL-M8BW-3L5.0V	1927350500	B.5
SAIL-M8BW-3LX.XU	9457460000	B.5
SAIL-M8BW-3S1.5U	1906620150	B.21

Type	Order No.	Page
SAIL-M8BW-4-1.5Q	1927080150	B.18
SAIL-M8BW-4-1.5Q	1927080150	B.5
SAIL-M8BW-4-1.5QGE	1093240150	B.18
SAIL-M8BW-4-1.5U	9456150150	B.18
SAIL-M8BW-4-1.5U	9456150150	B.5
SAIL-M8BW-4-1.5V	1927340150	B.18
SAIL-M8BW-4-1.5V	1927340150	B.5
SAIL-M8BW-4-10Q	1927081000	B.5
SAIL-M8BW-4-10U	9456151000	B.5
SAIL-M8BW-4-10V	1927341000	B.5
SAIL-M8BW-4-3.0Q	1927080300	B.5
SAIL-M8BW-4-3.0U	9456150300	B.5
SAIL-M8BW-4-3.0V	1927340300	B.5
SAIL-M8BW-4-5.0Q	1927080500	B.5
SAIL-M8BW-4-5.0U	9456150500	B.5
SAIL-M8BW-4-5.0V	1927340500	B.5
SAIL-M8BW-4L1.5Q	1927100150	B.20
SAIL-M8BW-4L1.5QGE	1093230150	B.20
SAIL-M8BW-4L1.5U	1906400150	B.20
SAIL-M8BW-4L1.5V	1927360150	B.20
SAIL-M8BW-4S1.5U	1906630150	B.21
SAIL-M8BW-4-X.XU	9456150000	B.5
SAIL-M8BWR-3-1.5Q	1948620150	B.19
SAIL-M8BWR-3-1.5U	1827010150	B.19
SAIL-M8BWR-3-1.5V	1948720150	B.19
SAIL-M8BWR-4-1.5Q	1948640150	B.19
SAIL-M8BWR-4-1.5U	1948540150	B.19
SAIL-M8BWR-4-1.5V	1948740150	B.19
SAIL-M8BWS-3LX.XQ	1927090000	B.5
SAIL-M8BWS-3LX.XV	1927350000	B.5
SAIL-M8BWS-3-X.XQ	1927060000	B.5
SAIL-M8BWS-3-X.XU	9457380000	B.5
SAIL-M8BWS-3-X.XV	1927320000	B.5
SAIL-M8BWS-4-X.XQ	1927080000	B.5
SAIL-M8BWS-4-X.XV	1927340000	B.5
SAIL-M8G-3-1.5Q	1926970150	B.18
SAIL-M8G-3-1.5Q	1926970150	B.4
SAIL-M8G-3-1.5U	1824590150	B.18
SAIL-M8G-3-1.5U	1824590150	B.4
SAIL-M8G-3-1.5V	1927230150	B.18
SAIL-M8G-3-1.5V	1927230150	B.4
SAIL-M8G-3-10Q	1926971000	B.4
SAIL-M8G-3-10U	1824591000	B.4
SAIL-M8G-3-10V	1927231000	B.4
SAIL-M8G-3-3.0Q	1926970300	B.4
SAIL-M8G-3-3.0U	1824590300	B.4
SAIL-M8G-3-3.0V	1927230300	B.4
SAIL-M8G-3-5.0Q	1926970500	B.4
SAIL-M8G-3-5.0U	1824590500	B.4
SAIL-M8G-3-5.0V	1927230500	B.4
SAIL-M8G-3S1.5U	1906560150	B.21
SAIL-M8G-3-X.XQ	1926970000	B.4
SAIL-M8G-3-X.XU	1824590000	B.4
SAIL-M8G-3-X.XV	1927230000	B.4
SAIL-M8G-4-1.5Q	1926990150	B.18
SAIL-M8G-4-1.5Q	1926990150	B.4
SAIL-M8G-4-1.5U	1906270150	B.18
SAIL-M8G-4-1.5U	1906270150	B.4
SAIL-M8G-4-1.5V	1927250150	B.18
SAIL-M8G-4-1.5V	1927250150	B.4
SAIL-M8G-4-10Q	1926991000	B.4
SAIL-M8G-4-10U	1906271000	B.4
SAIL-M8G-4-10V	1927251000	B.4
SAIL-M8G-4-3.0Q	1926990300	B.4
SAIL-M8G-4-3.0U	1906270300	B.4
SAIL-M8G-4-3.0V	1927250300	B.4
SAIL-M8G-4-5.0Q	1926990500	B.4
SAIL-M8G-4-5.0U	1906270500	B.4
SAIL-M8G-4-5.0V	1927250500	B.4
SAIL-M8G-4S1.5U	1906570150	B.21
SAIL-M8G-4-X.XQ	1926990000	B.4
SAIL-M8G-4-X.XU	1906270000	B.4
SAIL-M8G-4-X.XV	1927250000	B.4
SAIL-M8GM12G-3-1.5Q	1938100150	B.6
SAIL-M8GM12G-3-1.5U	1937950150	B.6
SAIL-M8GM12G-3-1.5V	1938230150	B.6
SAIL-M8GM12G-3-10Q	1938101000	B.6
SAIL-M8GM12G-3-10U	1937951000	B.6
SAIL-M8GM12G-3-10V	1938231000	B.6
SAIL-M8GM12G-3-3.0Q	1938100300	B.6
SAIL-M8GM12G-3-3.0U	1937950300	B.6
SAIL-M8GM12G-3-3.0V	1938230300	B.6
SAIL-M8GM12G-3-5.0Q	1938100500	B.6
SAIL-M8GM12G-3-5.0U	1937950500	B.6
SAIL-M8GM12G-3-5.0V	1938230500	B.6
SAIL-M8GM12G-3-X.XQ	1938100000	B.6
SAIL-M8GM12G-3-X.XU	1937950000	B.6
SAIL-M8GM12G-3-X.XV	1938230000	B.6
SAIL-M8GM12G-4-1.5Q	1938130150	B.6
SAIL-M8GM12G-4-1.5U	1937980150	B.6
SAIL-M8GM12G-4-1.5V	1938260150	B.6
SAIL-M8GM12G-4-10Q	1938131000	B.6
SAIL-M8GM12G-4-10U	1937981000	B.6
SAIL-M8GM12G-4-10V	1938261000	B.6
SAIL-M8GM12G-4-3.0Q	1938130300	B.6
SAIL-M8GM12G-4-3.0U	1937980300	B.6
SAIL-M8GM12G-4-3.0V	1938260300	B.6
SAIL-M8GM12G-4-5.0Q	1938130500	B.6
SAIL-M8GM12G-4-5.0U	1937980500	B.6
SAIL-M8GM12G-4-5.0V	1938260500	B.6

Type	Order No.	Page
SAIL-M8GM12G-4-X.XQ	1938130000	B.6
SAIL-M8GM12G-4-X.XU	1937980000	B.6
SAIL-M8GM12G-4-X.XV	1938260000	B.6
SAIL-M8GM12W-3-1.5Q	1938110150	B.7
SAIL-M8GM12W-3-1.5U	1937960150	B.7
SAIL-M8GM12W-3-1.5V	1938240150	B.7
SAIL-M8GM12W-3-10Q	1938111000	B.7
SAIL-M8GM12W-3-10U	1937961000	B.7
SAIL-M8GM12W-3-10V	1938241000	B.7
SAIL-M8GM12W-3-3.0Q	1938110300	B.7
SAIL-M8GM12W-3-3.0U	1937960300	B.7
SAIL-M8GM12W-3-3.0V	1938240300	B.7
SAIL-M8GM12W-3-5.0Q	1938110500	B.7
SAIL-M8GM12W-3-5.0U	1937960500	B.7
SAIL-M8GM12W-3-5.0V	1938240500	B.7
SAIL-M8GM12W-3-X.XQ	1938110000	B.7
SAIL-M8GM12W-3-X.XU	1937960000	B.7
SAIL-M8GM12W-3-X.XV	1938240000	B.7
SAIL-M8GM12W-4-1.5Q	1938140150	B.7
SAIL-M8GM12W-4-1.5U	1937990150	B.7
SAIL-M8GM12W-4-1.5V	1938270150	B.7
SAIL-M8GM12W-4-10Q	1938141000	B.7
SAIL-M8GM12W-4-10U	1937991000	B.7
SAIL-M8GM12W-4-10V	1938271000	B.7
SAIL-M8GM12W-4-3.0Q	1938140300	B.7
SAIL-M8GM12W-4-3.0U	1937990300	B.7
SAIL-M8GM12W-4-3.0V	1938270300	B.7
SAIL-M8GM12W-4-5.0Q	1938140500	B.7
SAIL-M8GM12W-4-5.0U	1937990500	B.7
SAIL-M8GM12W-4-5.0V	1938270500	B.7
SAIL-M8GM12W-4-X.XQ	1938140000	B.7
SAIL-M8GM12W-4-X.XU	1937990000	B.7
SAIL-M8GM12W-4-X.XV	1938270000	B.7
SAIL-M8GM8G-3-1.5Q	1926890150	B.32
SAIL-M8GM8G-3-1.5Q	1926890150	B.4
SAIL-M8GM8G-3-1.5QGE	1104470150	B.32
SAIL-M8GM8G-3-1.5U	1824570150	B.32
SAIL-M8GM8G-3-1.5U	1824570150	B.4
SAIL-M8GM8G-3-1.5V	1927150150	B.32
SAIL-M8GM8G-3-1.5V	1927150150	B.4
SAIL-M8GM8G-3-10Q	1926891000	B.4
SAIL-M8GM8G-3-10U	1824571000	B.4
SAIL-M8GM8G-3-10V	1927151000	B.4
SAIL-M8GM8G-3-3.0Q	1926890300	B.4
SAIL-M8GM8G-3-3.0U	1824570300	B.4
SAIL-M8GM8G-3-3.0V	1927150300	B.4
SAIL-M8GM8G-3-5.0Q	1926890500	B.4
SAIL-M8GM8G-3-5.0U	1824570500	B.4
SAIL-M8GM8G-3-5.0V	1927150500	B.4
SAIL-M8GM8G-3-X.XQ	1926890000	B.4
SAIL-M8GM8G-3-X.XU	1824570000	B.4
SAIL-M8GM8G-3-X.XV	1927150000	B.4
SAIL-M8GM8G-4-1.5Q	1926900150	B.32
SAIL-M8GM8G-4-1.5Q	1926900150	B.5
SAIL-M8GM8G-4-1.5U	1880470150	B.32
SAIL-M8GM8G-4-1.5U	1880470150	B.5
SAIL-M8GM8G-4-1.5V	1927160150	B.32
SAIL-M8GM8G-4-1.5V	1927160150	B.5
SAIL-M8GM8G-4-10Q	1926901000	B.5
SAIL-M8GM8G-4-10U	1880471000	B.5
SAIL-M8GM8G-4-10V	1927161000	B.5
SAIL-M8GM8G-4-3.0Q	1926900300	B.5
SAIL-M8GM8G-4-3.0U	1880470300	B.5
SAIL-M8GM8G-4-3.0V	1927160300	B.5
SAIL-M8GM8G-4-5.0Q	1926900500	B.5
SAIL-M8GM8G-4-5.0U	1880470500	B.5
SAIL-M8GM8G-4-5.0V	1927160500	B.5
SAIL-M8GM8G-4S-0.25-CAN	1216820025	C.60
SAIL-M8GM8G-4S-0.2-CAN	1216820020	C.60
SAIL-M8GM8G-4S-0.3-CAN	1216820030	C.60
SAIL-M8GM8G-4S-0.3Q-SB	1981900030	C.61
SAIL-M8GM8G-4S-0.5-CAN	1216820050	C.60
SAIL-M8GM8G-4S-0.8-CAN	1216820080	C.60
SAIL-M8GM8G-4S-1.0-CAN	1216820100	C.60
SAIL-M8GM8G-4S-1.0Q-SB	1981900100	C.61
SAIL-M8GM8G-4S-1.5-CAN	1216820150	C.60
SAIL-M8GM8G-4S-1.5Q-SB	1981900150	C.61
SAIL-M8GM8G-4S-10-CAN	1216821000	C.60
SAIL-M8GM8G-4S-10Q-SB	1981901000	C.61
SAIL-M8GM8G-4S-15Q-SB	1981901500	C.61
SAIL-M8GM8G-4S-20Q-SB	1981902000	C.61
SAIL-M8GM8G-4S-3.0-CAN	1216820300	C.60
SAIL-M8GM8G-4S-3.0Q-SB	1981900300	C.61
SAIL-M8GM8G-4S-3.5-CAN	1216820350	C.60
SAIL-M8GM8G-4S-5.0-CAN	1216820500	C.60
SAIL-M8GM8G-4S-5.0Q-SB	1981900500	C.61
SAIL-M8GM8G-4S-7.0-CAN	1216820700	C.60
SAIL-M8GM8G-4-X.XQ	1926900000	B.5
SAIL-M8GM8G-4-X.XU	1880470000	B.5
SAIL-M8GM8G-4-X.XV	1927160000	B.5
SAIL-M8GM8GR-3-1.5Q	1948550150	B.33
SAIL-M8GM8GR-3-1.5U	1948470150	B.33
SAIL-M8GM8GR-3-1.5V	1948650150	B.33
SAIL-M8GM8GR-4-1.5Q	1948580150	B.33
SAIL-M8GM8GR-4-1.5U	1948500150	B.33
SAIL-M8GM8GR-4-1.5V	1948680150	B.33
SAIL-M8GM8W-3-1.5Q	1926910150	B.32
SAIL-M8GM8W-3-1.5Q	1926910150	B.5
SAIL-M8GM8W-3-1.5U	1824580150	B.32
SAIL-M8GM8W-3-1.5U	1824580150	B.5

Type	Order No.	Page
SAIL-M8GM8W-3-1.5V	1927170150	B.32
SAIL-M8GM8W-3-1.5V	1927170150	B.5
SAIL-M8GM8W-3-10Q	1926911000	B.5
SAIL-M8GM8W-3-10U	1824581000	B.5
SAIL-M8GM8W-3-10V	1927171000	B.5
SAIL-M8GM8W-3-3.0Q	1926910300	B.5
SAIL-M8GM8W-3-3.0U	1824580300	B.5
SAIL-M8GM8W-3-3.0V	1927170300	B.5
SAIL-M8GM8W-3-5.0Q	1926910500	B.5
SAIL-M8GM8W-3-5.0U	1824580500	B.5
SAIL-M8GM8W-3-5.0V	1927170500	B.5
SAIL-M8GM8W-3L1.5Q	1926930150	B.34
SAIL-M8GM8W-3L1.5Q	1926930150	B.5
SAIL-M8GM8W-3L1.5U	1877250150	B.34
SAIL-M8GM8W-3L1.5U	1877250150	B.5
SAIL-M8GM8W-3L1.5V	1927190150	B.34
SAIL-M8GM8W-3L1.5V	1927190150	B.5
SAIL-M8GM8W-3L10Q	1926931000	B.5
SAIL-M8GM8W-3L10U	1877251000	B.5
SAIL-M8GM8W-3L10V	1927191000	B.5
SAIL-M8GM8W-3L3.0Q	1926930300	B.5
SAIL-M8GM8W-3L3.0U	1877250300	B.5
SAIL-M8GM8W-3L3.0V	1927190300	B.5
SAIL-M8GM8W-3L5.0Q	1926930500	B.5
SAIL-M8GM8W-3L5.0U	1877250500	B.5
SAIL-M8GM8W-3L5.0V	1927190500	B.5
SAIL-M8GM8W-3LX.XQ	1926930000	B.5
SAIL-M8GM8W-3LX.XU	1877250000	B.5
SAIL-M8GM8W-3LX.XV	1927190000	B.5
SAIL-M8GM8W-3-X.XQ	1926910000	B.5
SAIL-M8GM8W-3-X.XU	1824580000	B.5
SAIL-M8GM8W-3-X.XV	1927170000	B.5
SAIL-M8GM8W-4-1.5Q	1926920150	B.32
SAIL-M8GM8W-4-1.5Q	1926920150	B.5
SAIL-M8GM8W-4-1.5U	1857660150	B.32
SAIL-M8GM8W-4-1.5U	1857660150	B.5
SAIL-M8GM8W-4-1.5V	1927180150	B.32
SAIL-M8GM8W-4-1.5V	1927180150	B.5
SAIL-M8GM8W-4-10Q	1926921000	B.5
SAIL-M8GM8W-4-10U	1857661000	B.5
SAIL-M8GM8W-4-10V	1927181000	B.5
SAIL-M8GM8W-4-3.0Q	1926920300	B.5
SAIL-M8GM8W-4-3.0U	1857660300	B.5
SAIL-M8GM8W-4-3.0V	1927180300	B.5
SAIL-M8GM8W-4-5.0Q	1926920500	B.5
SAIL-M8GM8W-4-5.0U	1857660500	B.5
SAIL-M8GM8W-4-5.0V	1927180500	B.5
SAIL-M8GM8W-4L1.5Q	1926940150	B.34
SAIL-M8GM8W-4L1.5U	1906450150	B.34
SAIL-M8GM8W-4L1.5V	1927200150	B.34
SAIL-M8GM8W-4-X.XQ	1926920000	B.5
SAIL-M8GM8W-4-X.XU	1857660000	B.5
SAIL-M8GM8W-4-X.XV	1927180000	B.5
SAIL-M8GM8WR-3-1.5Q	1948560150	B.33
SAIL-M8GM8WR-3-1.5U	1948480150	B.33
SAIL-M8GM8WR-3-1.5V	1948660150	B.33
SAIL-M8GM8WR-4-1.5Q	1948590150	B.33
SAIL-M8GM8WR-4-1.5U	1948510150	B.33
SAIL-M8GM8WR-4-1.5V	1948690150	B.33
SAIL-M8W-3-1.5Q	1927050150	B.18
SAIL-M8W-3-1.5Q	1927050150	B.4
SAIL-M8W-3-1.5U	1857550150	B.18
SAIL-M8W-3-1.5U	1857550150	B.4
SAIL-M8W-3-1.5V	1927310150	B.18
SAIL-M8W-3-1.5V	1927310150	B.4
SAIL-M8W-3-10Q	1927051000	B.4
SAIL-M8W-3-10U	1857551000	B.4
SAIL-M8W-3-10V	1927311000	B.4
SAIL-M8W-3-3.0Q	1927050300	B.4
SAIL-M8W-3-3.0U	1857550300	B.4
SAIL-M8W-3-3.0V	1927310300	B.4
SAIL-M8W-3-5.0Q	1927050500	B.4
SAIL-M8W-3-5.0U	1857550500	B.4
SAIL-M8W-3-5.0V	1927310500	B.4
SAIL-M8W-3S1.5U	1906580150	B.21
SAIL-M8W-3-X.XQ	1927050000	B.4
SAIL-M8W-3-X.XU	1857550000	B.4
SAIL-M8W-3-X.XV	1927310000	B.4
SAIL-M8W-4-1.5Q	1927070150	B.18
SAIL-M8W-4-1.5Q	1927070150	B.4
SAIL-M8W-4-1.5U	1857560150	B.18
SAIL-M8W-4-1.5U	1857560150	B.4
SAIL-M8W-4-1.5V	1927330150	B.18
SAIL-M8W-4-1.5V	1927330150	B.4
SAIL-M8W-4-10Q	1927071000	B.4
SAIL-M8W-4-10U	1857561000	B.4
SAIL-M8W-4-10V	1927331000	B.4
SAIL-M8W-4-3.0Q	1927070300	B.4
SAIL-M8W-4-3.0U	1857560300	B.4
SAIL-M8W-4-3.0V	1927330300	B.4
SAIL-M8W-4-5.0Q	1927070500	B.4
SAIL-M8W-4-5.0U	1857560500	B.4
SAIL-M8W-4-5.0V	1927330500	B.4
SAIL-M8W-4S1.5U	1906590150	B.21
SAIL-M8W-4-X.XQ	1927070000	B.4
SAIL-M8W-4-X.XU	1857560000	B.4
SAIL-M8W-4-X.XV	1927330000	B.4
SAIL-M8WM12W-3-1.5Q	1938120150	B.7
SAIL-M8WM12W-3-1.5U	1937970150	B.7
SAIL-M8WM12W-3-1.5V	1938250150	B.7
SAIL-M8WM12W-3-10Q	1938121000	B.7
SAIL-M8WM12W-3-10U	1937971000	B.7
SAIL-M8WM12W-3-10V	1938251000	B.7
SAIL-M8WM12W-3-3.0Q	1938120300	B.7
SAIL-M8WM12W-3-3.0U	1937970300	B.7
SAIL-M8WM12W-3-3.0V	1938250300	B.7
SAIL-M8WM12W-3-5.0Q	1938120500	B.7
SAIL-M8WM12W-3-5.0U	1937970500	B.7
SAIL-M8WM12W-3-5.0V	1938250500	B.7
SAIL-M8WM12W-3-X.XQ	1938120000	B.7
SAIL-M8WM12W-3-X.XU	1937970000	B.7
SAIL-M8WM12W-3-X.XV	1938250000	B.7
SAIL-M8WM12W-4-1.5Q	1938150150	B.7
SAIL-M8WM12W-4-1.5U	1938000150	B.7
SAIL-M8WM12W-4-1.5V	1938280150	B.7
SAIL-M8WM12W-4-10Q	1938151000	B.7
SAIL-M8WM12W-4-10U	1938001000	B.7
SAIL-M8WM12W-4-10V	1938281000	B.7
SAIL-M8WM12W-4-3.0Q	1938150300	B.7
SAIL-M8WM12W-4-3.0U	1938000300	B.7
SAIL-M8WM12W-4-3.0V	1938280300	B.7
SAIL-M8WM12W-4-5.0Q	1938150500	B.7
SAIL-M8WM12W-4-5.0U	1938000500	B.7
SAIL-M8WM12W-4-5.0V	1938280500	B.7
SAIL-M8WM12W-4-X.XQ	1938150000	B.7
SAIL-M8WM12W-4-X.XU	1938000000	B.7
SAIL-M8WM12W-4-X.XV	1938280000	B.7
SAIL-M8WM8G-3-1.5Q	1078750150	B.32
SAIL-M8WM8W-3-1.5Q	1926950150	B.5
SAIL-M8WM8W-3-1.5U	1857670150	B.32
SAIL-M8WM8W-3-1.5U	1857670150	B.5
SAIL-M8WM8W-3-1.5V	1927210150	B.32
SAIL-M8WM8W-3-1.5V	1927210150	B.5
SAIL-M8WM8W-3-10Q	1926951000	B.5
SAIL-M8WM8W-3-10U	1857671000	B.5
SAIL-M8WM8W-3-10V	1927211000	B.5
SAIL-M8WM8W-3-3.0Q	1926950300	B.5
SAIL-M8WM8W-3-3.0U	1857670300	B.5
SAIL-M8WM8W-3-3.0V	1927210300	B.5
SAIL-M8WM8W-3-5.0Q	1926950500	B.5
SAIL-M8WM8W-3-5.0U	1857670500	B.5
SAIL-M8WM8W-3-5.0V	1927210500	B.5
SAIL-M8WM8W-3-X.XQ	1926950000	B.5
SAIL-M8WM8W-3-X.XU	1857670000	B.5
SAIL-M8WM8W-3-X.XV	1927210000	B.5
SAIL-M8WM8W-4-1.5Q	1926960150	B.32
SAIL-M8WM8W-4-1.5Q	1926960150	B.5
SAIL-M8WM8W-4-1.5U	1857680150	B.32
SAIL-M8WM8W-4-1.5U	1857680150	B.5
SAIL-M8WM8W-4-1.5V	1927220150	B.32
SAIL-M8WM8W-4-1.5V	1927220150	B.5
SAIL-M8WM8W-4-10Q	1926961000	B.5
SAIL-M8WM8W-4-10U	1857681000	B.5
SAIL-M8WM8W-4-10V	1927221000	B.5
SAIL-M8WM8W-4-3.0Q	1926960300	B.5
SAIL-M8WM8W-4-3.0U	1857680300	B.5
SAIL-M8WM8W-4-3.0V	1927220300	B.5
SAIL-M8WM8W-4-5.0Q	1926960500	B.5
SAIL-M8WM8W-4-5.0U	1857680500	B.5
SAIL-M8WM8W-4-5.0V	1927220500	B.5
SAIL-M8WM8W-4-X.XQ	1926960000	B.5
SAIL-M8WM8W-4-X.XU	1857680000	B.5
SAIL-M8WM8W-4-X.XV	1927220000	B.5
SAIL-M8WM8WR-3-1.5Q	1948570150	B.33
SAIL-M8WM8WR-3-1.5U	1948490150	B.33
SAIL-M8WM8WR-3-1.5V	1948670150	B.33
SAIL-M8WM8WR-4-1.5Q	1948600150	B.33
SAIL-M8WM8WR-4-1.5U	1948520150	B.33
SAIL-M8WM8WR-4-1.5V	1948700150	B.33
SAIL-VSA-1.5U	9457710150	B.45
SAIL-VSA-1.5U(0.5)	1845120150	B.49
SAIL-VSA-M12G-1.5U	9457040000	B.45
SAIL-VSA-M12W-1.5U	1857690150	B.45
SAIL-VSB-1.5U	9457930150	B.46
SAIL-VSB-1.5U(0.5)	1845140150	B.50
SAIL-VSBD-1,5U	9456070150	B.46
SAIL-VSBD-1.5U(0.5)	1845160150	B.50
SAIL-VSBD-M12G-1.5U	9457780150	B.46
SAIL-VSBD-M12W-1.5U	1857710150	B.46
SAIL-VSB-M12G-1.5U	9457680150	B.46
SAIL-VSB-M12W-1.5U	1857700150	B.46
SAIL-VSC-1.5U	9457920150	B.47
SAIL-VSCD-1.5U	9456240150	B.47
SAIL-VSCD-M12G-1.5U	9456170150	B.47
SAIL-VSCD-M12W-1.5U	1857730150	B.47
SAIL-VSC-M12G-1.5U	9457400150	B.47
SAIL-VSC-M12W-1.5U	1857720150	B.47
SAIL-ZW-3-1.5U	1964310150	B.17
SAIL-ZW-M12BG-2/4-1.5U	1812550150	B.38
SAIL-ZW-M12BG-3-1.5U	1005460150	B.37
SAIL-ZW-M12BW-2/4-1.5U	1964280150	B.38
SAIL-ZW-M12BW-2/4L1.5U	1964290150	B.38
SAIL-ZW-M12BW-3-1.5U	1005270150	B.37
SAIL-ZW-M12BW-3L1.5U	1912110150	B.37
SAIL-ZW-M8BG-3-1.5QGE	1093250150	B.39
SAIL-ZW-M8BG-3-1.5U	9457490150	B.39
SAIL-ZW-M8BW-3-1.5QGE	1093260150	B.39
SAIL-ZW-M8BW-3-1.5U	1964300150	B.39
SAIL-ZW-M8BW-3L1.5U	9457410150	B.39
SAI-M23-BE-12	1995850000	H.14
SAI-M23-BE-16	1170090000	H.15
SAI-M23-BE-17	1170110000	H.15
SAI-M23-BE-19	1170130000	H.15
SAI-M23-BE-6	1170020000	H.14
SAI-M23-BE-7	1170040000	H.14
SAI-M23-BE-9	1170060000	H.14
SAI-M23-BE-L-4/4	1995810000	H.20
SAI-M23-BE-L-6	1170370000	H.20
SAI-M23-GS-7/12	1995840000	H.12
SAI-M23-GS-L-7/12	1995800000	H.18
SAI-M23-GS-S-7/12	1169920000	H.12
SAI-M23-GSW-L-7/12	1170280000	H.18
SAI-M23-KBC-0.08/0.56	1995860000	H.16
SAI-M23-KBC-0.08/0.56	1995860000	I.12
SAI-M23-KBC-0.08/0.56	1995860000	I.13
SAI-M23-KBC-0.25/1.00	1995830000	H.21
SAI-M23-KBC-0.25/1.00	1995830000	I.12
SAI-M23-KBC-0.34/1.00	1170180000	H.16
SAI-M23-KBC-0.34/1.00	1170180000	I.12
SAI-M23-KBC-0.34/1.00	1170180000	I.13
SAI-M23-KBC-0.75/2.50	1995820000	H.21
SAI-M23-KBC-0.75/2.50	1995820000	I.12
SAI-M23-KBC-1.00-1.5	1170210000	H.16
SAI-M23-KBC-1.5-.14-.56	1170230000	H.16
SAI-M23-KBC-1.5-.14-.56	1170230000	I.12
SAI-M23-KBC-1.5-.14-.56	1170230000	I.13
SAI-M23-KBC-1.5-.56-1.0	1170240000	H.16
SAI-M23-KBC-1.5-.56-1.0	1170240000	I.12
SAI-M23-KBC-1.5-.56-1.0	1170240000	I.13
SAI-M23-KBC-2-0.75-2.0	1170260000	H.17
SAI-M23-KBC-2-0.75-2.0	1170260000	I.12
SAI-M23-KBC-2-0.75-2.0	1170260000	I.13
SAI-M23-KBC-L-2.5-4.0	1170420000	H.21
SAI-M23-KBC-L-2.5-4.0	1170420000	I.12
SAI-M23-KS-7/12	1169900000	H.12
SAI-M23-KSC-0,25-1.0	1170390000	H.21
SAI-M23-KSC-0,25-1.0	1170390000	I.12
SAI-M23-KSC-0.08/0.56	1170140000	H.16
SAI-M23-KSC-0.14/1.00	1170150000	H.16
SAI-M23-KSC-0.14/1.00	1170150000	I.12
SAI-M23-KSC-0.14/1.00	1170150000	I.13
SAI-M23-KSC-1.00-1.5	1170170000	H.16
SAI-M23-KSC-1.5-0.14-1	1170220000	H.16
SAI-M23-KSC-1.5-0.14-1	1170220000	I.12
SAI-M23-KSC-1.5-0.14-1	1170220000	I.13
SAI-M23-KSC-2-0.75-2.0	1170250000	H.17
SAI-M23-KSC-2-0.75-2.0	1170250000	I.12
SAI-M23-KSC-2-0.75-2.0	1170250000	I.13
SAI-M23-KSC-L-0.75-2.5	1170400000	H.21
SAI-M23-KSC-L-0.75-2.5	1170400000	I.12
SAI-M23-KSC-L-2.5-4.0	1170410000	H.21
SAI-M23-KSC-L-2.5-4.0	1170410000	I.12
SAI-M23-KS-L-7/12	1170270000	H.18
SAI-M23-KSW-L-7/12	1170290000	H.18
SAI-M23-SE-12	1170070000	H.14
SAI-M23-SE-16	1170080000	H.15
SAI-M23-SE-17	1170100000	H.15
SAI-M23-SE-19	1170120000	H.15
SAI-M23-SE-6	1170000000	H.14
SAI-M23-SE-7	1170030000	H.14
SAI-M23-SE-9	1170050000	H.14
SAI-M23-SE-L-4/4	1170380000	H.20
SAI-M23-SE-L-6	1170350000	H.20
SAIP-M12BG-3-1.5U	1108730150	B.12
SAIP-M12BG-4-1.5U	1108740150	B.12
SAIP-M12BG-5-1.5U	1108750150	B.12
SAIP-M12BW-3-1.5U	1108770150	B.12
SAIP-M12BW-4-1.5U	1108780150	B.12
SAIP-M12BW-5-1.5U	1108790150	B.12
SAIP-M12G-3-1.5U	1108800150	B.12
SAIP-M12G-4-1.5U	1108810150	B.12
SAIP-M12G-5-1.5U	1108820150	B.12
SAIP-M12W-3-1.5U	1108670150	B.12
SAIP-M12W-4-1.5U	1108680150	B.12
SAIP-M12W-5-1.5U	1108690150	B.12
SAIS 5/9-VA	1920700000	C.32
SAIS 5/9-VA	1920700000	D.10
SAIS 5/9-VA	1920700000	G.28
SAIS 5/9-VA	1920700000	G.29
SAIS 5/9-VA-B-COD	1920720000	C.10
SAIS 5/9-VA-B-COD	1920720000	D.10
SAIS 5/9-VA-B-COD	1920720000	G.29
SAIS-12/9-(TL)	1924950000	D.5
SAIS-3/7	1871710000	D.5
SAIS-3/7	1021470000	D.7
SAIS-3/9	1021480000	D.5
SAIS-3/9	1021480000	D.7
SAIS-3-IDC (0,75) M12	1852720000	D.23
SAIS-3-IDC M8 small	1784040001	D.24
SAIS-3-IDC M8 small	1784040001	D.6
SAIS-3-IDC-M12B-COD	1864730000	C.12
SAIS-3-IDC-M12B-COD	1864730000	D.13
SAIS-4/7	9457550000	D.5
SAIS-4/7	9457550000	D.7
SAIS-4/7-(KV)	1921060000	D.9
SAIS-4/9	1807340000	D.5
SAIS-4/9	1807340000	D.7
SAIS-4-IDC (0,75) M12	1852740000	D.23
SAIS-4-IDC (0,75) M12	1852740000	D.5
SAIS-4-IDC M12 small	1781550001	D.22
SAIS-4-IDC M12 small	1781550001	D.5
SAIS-4-IDC M8 small	1784060001	D.24
SAIS-4-IDC M8 small	1784060001	D.6
SAIS-5/7	9456940000	D.5
SAIS-5/7	9456940000	D.8
SAIS-5/7-(KV)	1921050000	D.9
SAIS-5/7-ZF	1906390000	D.16
SAIS-5/7-ZF	1906390000	D.5
SAIS-5/9	1807350000	D.5
SAIS-5/9	1807350000	D.8
SAIS-8/9	1836970000	D.5
SAIS-8/9	1836970000	D.8
SAI-SA-3-IDC	9457720000	D.20
SAI-SA-3-IDC	9457720000	G.24
SAI-SA-3-IDC (1Set)	1896740000	D.20
SAI-SA-4-IDC	1766810000	D.20
SAI-SA-4-IDC	1766810000	G.24
SAI-SCREWTY BOX	1939180000	I.6
SAI-SCREWTY TOOL BOX	1939170000	I.6
SAI-SK M12 MT	1802750000	D.27
SAI-SK M5	1855310000	D.27
SAI-SK M8	1802760000	D.27
SAI-SK M8	1802760000	E.10
SAI-SK M8	1802760000	E.14
SAI-SK M8	1802760000	E.18
SAI-SK M8	1802760000	E.22
SAI-SK M8	1802760000	E.26
SAI-SK M8	1802760000	E.31
SAI-SK M8	1802760000	E.33
SAI-SK M8	1802760000	E.35
SAI-SK Stecker M12	1781520000	D.27
SAI-SK Stecker M12	1781520000	E.10
SAI-SK Stecker M12	1781520000	E.14
SAI-SK Stecker M12	1781520000	E.18
SAI-SK Stecker M12	1781520000	E.22
SAI-SK Stecker M12	1781520000	E.26
SAI-SK Stecker M12	1781520000	E.31
SAI-SK Stecker M12	1781520000	E.33
SAI-SK Stecker M12	1781520000	E.35
SAI-SK Stecker M12	1781520000	E.45
SAI-SK-M12	9456050000	D.27
SAI-SK-M12	9456050000	E.10
SAI-SK-M12	9456050000	E.14
SAI-SK-M12	9456050000	E.18
SAI-SK-M12	9456050000	E.22
SAI-SK-M12	9456050000	E.26
SAI-SK-M12	9456050000	E.31
SAI-SK-M12	9456050000	E.33
SAI-SK-M12	9456050000	E.35
SAI-SK-M12	9456050000	E.45
SAI-SK-M12 BU	8425960000	D.27
SAI-SK-M12 IDC	1794850000	D.27
SAI-SK-M12 IDC	1794850000	G.25
SAI-SK-M12-UNI	2330260000	D.27
SAI-SK-M12-UNI	2330260000	E.10
SAI-SK-M12-UNI	2330260000	E.14
SAI-SK-M12-UNI	2330260000	E.18
SAI-SK-M12-UNI	2330260000	E.22
SAI-SK-M12-UNI	2330260000	E.26
SAI-SK-M12-UNI	2330260000	E.31
SAI-SK-M12-UNI	2330260000	E.33
SAI-SK-M12-UNI	2330260000	E.35
SAI-SK-M12-UNI	2330260000	E.45
SAISM 5/8S M12 5P B-COD	1784790000	C.11
SAISM 5/8S M12 5P B-COD	1784790000	D.13
SAISM 5/8S M12 5P B-COD	1784790000	D.5
SAIS-M23-12P-AN-1,0M	1906290100	H.22
SAIS-M23-12P-ST-1,0M	1906280100	H.22
SAIS-M23-19P-AN-1,0M	1818090100	H.22
SAIS-M23-19P-ST-1,0M	1818160100	H.22
SAISM-4/8S-M12 4P D-ZF	1892120001	D.15
SAISM-4/8S-M12 4P D-ZF	1892120001	D.5
SAISM-4/8S-M12-4P D-COD	1892120000	C.70
SAISM-4/8S-M12-4P D-COD	1892120000	C.71
SAISM-4/8S-M12-4P D-COD	1892120000	D.13
SAISM-4/8S-M12-4P D-COD	1892120000	D.5
SAISM-5/6S M12 5P A-COD	1191030000	D.5
SAIS-M-5/8S M12 5P A-COD	1784740000	C.31
SAIS-M-5/8S M12 5P A-COD	1784740000	C.63
SAIS-M-5/8S M12 5P A-COD	1784740000	D.12
SAIS-M-5/8S M12 5P A-COD	1784740000	D.5
SAISM-8/11	1118910000	D.11
SAIS-M8-3P	1803860000	D.17
SAIS-M8-3P	1803860000	D.6
SAIS-M8-4P	1803850000	D.17
SAIS-M8-4P	1803850000	D.6
SAISM-M8-3P-(IF)	1010060000	D.18
SAISM-M8-3P-(IF)	1010060000	D.6
SAISM-M8-3P(TL)	1921030000	D.18
SAISM-M8-3P(TL)	1921030000	D.6
SAISM-M8-4P-(IF)	1010070000	D.18
SAISM-M8-4P-(IF)	1010070000	D.6
SAISM-M8-4P(TL)	1921040000	D.18
SAISM-M8-4P(TL)	1921040000	D.6
SAI-SSA-PG7	1938300000	D.34
SAISW- 5/9	1807370000	D.8
SAISW-3/7	1021280000	D.5
SAISW-3/7	1021280000	D.7
SAISW-3/9	1021290000	D.7
SAISW-4/7	9457290000	D.5

Order No.	Type	Page

1000000000

1001180001	PRINTJET PRO 230V	I.15
1004310150	SAIL-M12GM12W-4-2L1.5T	B.27
1004320150	SAIL-M12GM12W-3L1.5T	B.27
1004330150	SAIL-M12BW-3L1.5T	B.15
1005270150	SAIL-ZW-M12BW-3-1.5U	B.37
1005460150	SAIL-ZW-M12BG-3-1.5U	B.37
1006920000	SAI-AU M12 BT4AI2AO2DIO	E.4
1006920000	SAI-AU M12 BT4AI2AO2DIO	E.45
1006920000	SAI-AU M12 BT4AI2AO2DIO	E.47
1006930000	SAI-AU M12 BT 16DI/8DO	E.4
1006930000	SAI-AU M12 BT 16DI/8DO	E.45
1006930000	SAI-AU M12 BT 16DI/8DO	E.46
1006940000	SAI-AU M12 BT 16DI	E.4
1006940000	SAI-AU M12 BT 16DI	E.45
1006940000	SAI-AU M12 BT 16DI	E.46
1006980000	SAI-AU M12 GW PB/BT 12I	E.4
1006980000	SAI-AU M12 GW PB/BT 12I	E.44
1006980000	SAI-AU M12 GW PB/BT 12I	E.45
1007000150	SAIL-M12BW-4-2L1.5T	B.15

1010000000

1010060000	SAISM-M8-3P-(IF)	D.18
1010060000	SAISM-M8-3P-(IF)	D.6
1010070000	SAISM-M8-4P-(IF)	D.18
1010070000	SAISM-M8-4P-(IF)	D.6
1010080000	SAIBM-M8-3P-(IF)	D.18
1010080000	SAIBM-M8-3P-(IF)	D.6
1010090000	SAIBM-M8-4P-(IF)	D.18
1010090000	SAIBM-M8-4P-(IF)	D.6
1010840015	IE-C5DB4RE0015MCSXXX-X	C.68
1010840030	IE-C5DB4RE0030MCSXXX-X	C.68
1010840050	IE-C5DB4RE0050MCSXXX-X	C.68
1010840100	IE-C5DB4RE0100MCSXXX-X	C.68
1010850015	IE-C5DB4RE0015MCSMCS-E	C.68
1010850030	IE-C5DB4RE0030MCSMCS-E	C.68
1010850050	IE-C5DB4RE0050MCSMCS-E	C.68
1010850100	IE-C5DB4RE0100MCSMCS-E	C.68
1011970150	SAIL-M12GM12G-5-1.5T	B.25
1011990150	SAIL-M12GM12W-5-1.5T	B.25
1019490000	SAI-AU M12 EIP GW 16DI	E.32
1019490000	SAI-AU M12 EIP GW 16DI	E.33
1019490000	SAI-AU M12 EIP GW 16DI	E.4

1020000000

1020930150	SAIL-M12GM12W-4-3LW1.5T	B.27
1021280000	SAISW-3/7	D.5
1021280000	SAISW-3/7	D.7
1021290000	SAISW-3/9	D.7
1021310000	SAIBW-3/7	D.5
1021310000	SAIBW-3/7	D.7
1021320000	SAIBW-3/9	D.7
1021470000	SAIS-3/7	D.7
1021480000	SAIS-3/9	D.5
1021480000	SAIS-3/9	D.7
1021490000	SAIB-3/7	D.7
1021510000	SAIB-3/9	D.5
1021510000	SAIB-3/9	D.7
1021650150	SAIL-M12G-5-1.5T	B.11
1021660150	SAIL-M12W-5-1.5T	B.11
1021670150	SAIL-M12BG-5-1.5T	B.11
1021690150	SAIL-M12BW-5-1.5T	B.11
1021710150	SAIL-M12GM12G-3-1.5T	B.25
1021720150	SAIL-M12GM12W-3-1.5T	B.25
1021730150	SAIL-M12GM12G-4-1.5T	B.25
1021740150	SAIL-M12GM12W-4-1.5T	B.25
1021750150	SAIL-M12G-3-1.5T	B.11
1021760150	SAIL-M12W-3-1.5T	B.11
1021770150	SAIL-M12G-4-1.5T	B.11
1021790150	SAIL-M12W-4-1.5T	B.11
1022940000	SAIH-SLL-3x0,34mm²(TPE)	B.51
1022950000	SAIH-SLL-4x0,34mm²(TPE)	B.51
1022960000	SAIH-SLL-5x0,34mm²(TPE)	B.51
1022970000	SAIH-SLL-3x0,25mm²(TPE)	B.51
1022980000	SAIH-SLL-4x0,25mm²(TPE)	B.51
1024050000	PRINTJET PRO 115V	I.15
1024140000	PJ PRO TNAW	I.15
1024310000	SAI-AU M8 PB GW 16DI	E.30
1024310000	SAI-AU M8 PB GW 16DI	E.31
1024310000	SAI-AU M8 PB GW 16DI	E.4
1025940015	IE-C5DD4UG0015MCSXXX-X	C.66
1025940030	IE-C5DD4UG0030MCSXXX-X	C.66
1025940050	IE-C5DD4UG0050MCSXXX-X	C.66
1025940100	IE-C5DD4UG0100MCSXXX-X	C.66
1025950015	IE-C5DD4UG0015MCSMCS-E	C.66
1025950030	IE-C5DD4UG0030MCSMCS-E	C.66
1025950050	IE-C5DD4UG0050MCSMCS-E	C.66
1025950100	IE-C5DD4UG0100MCSMCS-E	C.66
1026090000	SAI-ASI T FF small	C.65
1027040000	PJ PRO TNTK INK K	I.15
1027050000	PJ PRO TNTK INK C	I.15
1027060000	PJ PRO TNTK INK M	I.15
1027070000	PJ PRO TNTK INK Y	I.15
1027110000	PJ PRO TNTK INK SET COL	I.15

Order No.	Type	Page

1040000000

1044470015	IE-C5DD4UG0015MCSA20-E	C.66
1044470030	IE-C5DD4UG0030MCSA20-E	C.66
1044470050	IE-C5DD4UG0050MCSA20-E	C.66
1044470100	IE-C5DD4UG0100MCSA20-E	C.66

1050000000

1051760000	SAI-4-S 3P M8 L OL	G.50
1057720000	SAI-6-S 3P M8 L SL	G.51
1057720000	SAI-6-S 3P M8 L SL	G.6
1057740150	SAIL-M12BG-3B-1.5Q	B.41
1057750150	SAIL-M12BG-4B-1.5Q	B.41
1057760150	SAIL-M12BW-5B-1.5Q	B.41
1057770150	SAIL-M12G-3B-1.5Q	B.41
1057780150	SAIL-M12G-4B-1.5Q	B.41
1057790150	SAIL-M12G-5B-1.5Q	B.41
1057800150	SAIL-M12W-3B-1.5Q	B.41
1057810150	SAIL-M12W-4B-1.5Q	B.41
1057820150	SAIL-M12W-5B-1.5Q	B.41
1057830150	SAIL-M12GM12G-3B-1.5Q	B.42
1057850150	SAIL-M12GM12G-5B-1.5Q	B.42
1057870150	SAIL-M12WM12G-3B-1.5Q	B.42
1057890150	SAIL-M12WM12G-5B-1.5Q	B.42
1057900150	SAIL-M12GM12W-3B-1.5Q	B.42
1057920150	SAIL-M12GM12W-5B-1.5Q	B.42
1058490150	SAIL-M12GM12G-3S1.5Q	B.28
1058500150	SAIL-M12GM12G-4S1.5Q	B.28
1058510150	SAIL-M12GM12G-5S1.5Q	B.28
1058530150	SAIL-M12G-PB-1.5E	C.6
1058540150	SAIL-M12BG-PB-1.5E	C.6
1058570150	SAIL-M12GM12G-PB-1.5E	C.7
1058630000	SAIH-CD-2x0.34/2x0.22-PUR	C.62
1059330015	IE-C5DD4UG0015MSSMCS-E	C.66
1059330030	IE-C5DD4UG0030MSSMCS-E	C.66
1059330050	IE-C5DD4UG0050MSSMCS-E	C.66
1059330100	IE-C5DD4UG0100MSSMCS-E	C.66
1059340015	IE-C5DB4RE0015MSSMCS-E	C.68
1059340030	IE-C5DB4RE0030MSSMCS-E	C.68
1059340050	IE-C5DB4RE0050MSSMCS-E	C.68
1059340100	IE-C5DB4RE0100MSSMCS-E	C.68
1059430000	SAI-8-M-4P M12 DIP	G.13
1059470150	SAIL-M12GM12W-3S1.5Q	B.28
1059480150	SAIL-M12GM12W-4S1.5Q	B.28
1059540150	SAIL-M12GM12W-5S1.5Q	B.28
1059650150	SAIL-M12W-4S1.5Q	B.16
1059720150	SAIL-M12WM12W-3S1.5Q	B.28
1059730150	SAIL-M12WM12W-4S1.5Q	B.28
1059740150	SAIL-M12WM12W-5S1.5Q	B.28
1059750015	IE-C5DD4UG0015MCAXXX-X	C.67
1059750030	IE-C5DD4UG0030MCAXXX-X	C.67
1059750050	IE-C5DD4UG0050MCAXXX-X	C.67
1059750100	IE-C5DD4UG0100MCAXXX-X	C.67
1059770015	IE-C5DD4UG0015MCSMCA-E	C.67
1059770030	IE-C5DD4UG0030MCSMCA-E	C.67
1059770050	IE-C5DD4UG0050MCSMCA-E	C.67
1059770100	IE-C5DD4UG0100MCSMCA-E	C.67
1059890015	IE-C5DD4UG0015MCAMCA-E	C.67
1059890030	IE-C5DD4UG0030MCAMCA-E	C.67
1059890050	IE-C5DD4UG0050MCAMCA-E	C.67
1059890100	IE-C5DD4UG0100MCAMCA-E	C.67
1059900015	IE-C5DB4RE0015MCAXXX-X	C.69
1059900030	IE-C5DB4RE0030MCAXXX-X	C.69
1059900050	IE-C5DB4RE0050MCAXXX-X	C.69
1059900100	IE-C5DB4RE0100MCAXXX-X	C.69
1059940015	IE-C5DB4RE0015MCSMCA-E	C.69
1059940030	IE-C5DB4RE0030MCSMCA-E	C.69
1059940050	IE-C5DB4RE0050MCSMCA-E	C.69
1059940100	IE-C5DB4RE0100MCSMCA-E	C.69
1059970015	IE-C5DB4RE0015MCAMCA-E	C.69
1059970030	IE-C5DB4RE0030MCAMCA-E	C.69
1059970050	IE-C5DB4RE0050MCAMCA-E	C.69
1059970100	IE-C5DB4RE0100MCAMCA-E	C.69

1060000000

1060110150	SAIL-M12G-CD-1.5B	C.58
1060120150	SAIL-M12BG-CD-1.5B	C.58
1060130150	SAIL-M12GM12G-CD-1.5B	C.59
1060730000	SAI-Y-4S-M12/M12	D.25
1061880150	SAIL-M12BG-5B-1.5Q	B.41
1061890150	SAIL-M12BW-3B-1.5Q	B.41
1061900150	SAIL-M12BW-4B-1.5Q	B.41
1061910150	SAIL-M12WM12W-3B-1.5Q	B.42
1061930150	SAIL-M12WM12W-5B-1.5Q	B.42
1061970150	SAIL-M12W-PB-1.5D	C.6
1061980150	SAIL-M12BW-CD-1.5A	C.58
1061990150	SAIL-M12GM12W-CD-1.5A	C.59
1062000000	SFC 2.5/12 MC NE WS	I.14
1062010000	SFC 2.5/12 MC NE GE	I.14
1062020000	SFC 2.5/12 MC NE RT	I.14
1062030000	SFC 2.5/12 MC NE BL	I.14
1062040000	SFC 2.5/12 MC SDR	I.14
1062050000	SFC 2.5/21 MC NE WS	I.14
1062070000	SFC 2.5/21 MC NE GE	I.14
1062080000	SFC 2.5/21 MC NE RT	I.14
1062090000	SFC 2.5/21 MC NE BL	I.14
1062110000	SFC 2.5/21 MC SDR	I.14
1062150150	SAIL-M12WM12W-CD-1.5A	C.59

Order No.	Type	Page

1062170150	SAIL-M12W-CD-1.5B	C.58
1062180150	SAIL-M12BW-CD-1.5B	C.58
1062190150	SAIL-M12GM12W-CD-1.5B	C.59
1062210150	SAIL-M12WM12W-CD-1.5B	C.59
1062220150	SAIL-M12W-CD-1.5A	C.58
1062300150	SAIL-M12BW-PB-1.5D	C.6
1062310150	SAIL-M12GM12W-PB-1.5D	C.7
1062330150	SAIL-M12WM12W-PB-1.5D	C.7
1062340150	SAIL-M12W-PB-1.5E	C.6
1062370150	SAIL-M12BW-PB-1.5E	C.6
1062380150	SAIL-M12GM12W-PB-1.5E	C.7
1062400150	SAIL-M12WM12W-PB-1.5E	C.7

1070000000

1070630000	SAI-4-F 5P M12 L 5M	G.10
1070640000	SAI-4-F 5P M12 L 10M	G.10
1070650000	SAI-4-F 4P M12 L 5M	G.10
1070660000	SAI-4-F 4P M12 L 10M	G.10
1077750150	SAIL-M12G-4-1.5QGE	B.11
1078720000	SAIE-M8S-4-0.5U-FP-M8	D.31
1078730000	SAIE-M8S-3-0.5U-FP-M8	D.31
1078750150	SAIL-M8WM8G-3-1.5Q	B.32

1090000000

1092910150	SAIL-M12BG-3-1.5QGE	B.11
1092920150	SAIL-M12BG-4-1.5QGE	B.11
1092930150	SAIL-M12BG-5-1.5QGE	B.11
1092940150	SAIL-M12BW-3-1.5QGE	B.11
1092950150	SAIL-M12BW-4-2L1.5QGE	B.15
1092960150	SAIL-M12BW-4-1.5QGE	B.11
1092970150	SAIL-M12BW-5-1.5QGE	B.11
1092980150	SAIL-M12G-3-1.5QGE	B.11
1092990150	SAIL-M12G-5-1.5QGE	B.11
1093000150	SAIL-M12GM12G-2/4-1.5QGE	B.26
1093010150	SAIL-M12GM12G-3-1.5QGE	B.25
1093020150	SAIL-M12GM12G-4-1.5QGE	B.25
1093030150	SAIL-M12GM12G-5-1.5QGE	B.25
1093040150	SAIL-M12GM12W-2/4-1.5QGE	B.26
1093050150	SAIL-M12GM12W-3-1.5QGE	B.25
1093060150	SAIL-M12GM12W-4-3LW1.5QGE	B.27
1093070150	SAIL-M12GM12W-4-1.5QGE	B.25
1093080150	SAIL-M12GM12W-5-1.5QGE	B.25
1093110150	SAIL-M12GM8W-3L1.5QGE	B.31
1093130150	SAIL-M12GM8W-4L1.5QGE	B.31
1093150150	SAIL-M12GM8WR-3-1.5QGE	B.30
1093160150	SAIL-M12W-3-1.5QGE	B.11
1093170150	SAIL-M12W-4-1.5QGE	B.11
1093180150	SAIL-M12W-5-1.5QGE	B.11
1093190150	SAIL-M8BG-3-1.5QGE	B.18
1093200150	SAIL-M8BG-4-1.5QGE	B.18
1093210150	SAIL-M8BW-3L1.5QGE	B.20
1093220150	SAIL-M8BW-3-1.5QGE	B.18
1093230150	SAIL-M8BW-4L1.5QGE	B.20
1093240150	SAIL-M8BW-4-1.5QGE	B.18
1093250150	SAIL-ZW-M8BG-3-1.5QGE	B.39
1093260150	SAIL-ZW-M8BW-3-1.5QGE	B.39

1100000000

1104470150	SAIL-M8GM8G-3-1.5QGE	B.32
1108670150	SAIP-M12W-3-1.5U	B.12
1108680150	SAIP-M12W-4-1.5U	B.12
1108690150	SAIP-M12W-5-1.5U	B.12
1108730150	SAIP-M12BG-3-1.5U	B.12
1108740150	SAIP-M12BG-4-1.5U	B.12
1108750150	SAIP-M12BG-5-1.5U	B.12
1108770150	SAIP-M12BW-3-1.5U	B.12
1108780150	SAIP-M12BW-4-1.5U	B.12
1108790150	SAIP-M12BW-5-1.5U	B.12
1108800150	SAIP-M12G-3-1.5U	B.12
1108810150	SAIP-M12G-4-1.5U	B.12
1108820150	SAIP-M12G-5-1.5U	B.12

1110000000

1114880150	SAIL-M12BW-3L1.5QGE	B.15
1118910000	SAISM-8/11	D.11
1118920000	SAIBM-8/11	D.11
1119030000	ERME 10² SPX 4	I.9

1130000000

1139330000	SAIBW-4/8S-M12 4P D-ZF	C.70
1139330000	SAIBW-4/8S-M12 4P D-ZF	D.15
1139330000	SAIBW-4/8S-M12 4P D-ZF	D.5

1140000000

1140640000	PB-DP SUB-D M12 TERM PS	C.17
1140650000	PB-DP SUB-D M12 TERM	C.16

1160000000

1160550000	SAISW-4/8S-M12-4P D-COD	C.71
1161870000	PB-DP SUB-D ZF TERM	C.21
1161880000	PB-DP SUB-D ZF TERM PS	C.21
1161890000	PB-DP SUB-D ZF	C.20
1169900000	SAI-M23-KS-7/12	H.12

Order No.	Type	Page

1169920000	SAI-M23-GS-S-7/12	H.12
1169930000	SAIL-M23-KSW-7/12	H.12
1169940000	SAIE-M23-S-VW	H.13
1169950000	SAIE-M23-S-RM	H.13
1169970000	SAIE-M23-S-EM	H.13
1169980000	SAIE-M23-S-W	H.13
1169990000	SAIE-M23-S-HW	H.13

1170000000

1170000000	SAI-M23-SE-6	H.14
1170020000	SAI-M23-BE-6	H.14
1170030000	SAI-M23-SE-7	H.14
1170040000	SAI-M23-BE-7	H.14
1170050000	SAI-M23-SE-9	H.14
1170060000	SAI-M23-BE-9	H.14
1170070000	SAI-M23-SE-12	H.14
1170080000	SAI-M23-SE-16	H.15
1170090000	SAI-M23-BE-16	H.15
1170100000	SAI-M23-SE-17	H.15
1170110000	SAI-M23-BE-17	H.15
1170120000	SAI-M23-SE-19	H.15
1170130000	SAI-M23-BE-19	H.15
1170140000	SAI-M23-KSC-0.08/0.56	H.16
1170150000	SAI-M23-KSC-0.14/1.00	H.16
1170150000	SAI-M23-KSC-0.14/1.00	I.12
1170150000	SAI-M23-KSC-0.14/1.00	I.13
1170170000	SAI-M23-KSC-1.00-1.5	H.16
1170180000	SAI-M23-KBC-0.34/1.00	H.16
1170180000	SAI-M23-KBC-0.34/1.00	I.12
1170180000	SAI-M23-KBC-0.34/1.00	I.13
1170210000	SAI-M23-KBC-1.00-1.5	H.16
1170220000	SAI-M23-KSC-1.5-0.14-1	H.16
1170220000	SAI-M23-KSC-1.5-0.14-1	I.12
1170220000	SAI-M23-KSC-1.5-0.14-1	I.13
1170230000	SAI-M23-KBC-1.5-.14-.56	H.16
1170230000	SAI-M23-KBC-1.5-.14-.56	I.12
1170230000	SAI-M23-KBC-1.5-.14-.56	I.13
1170240000	SAI-M23-KBC-1.5-.56-1.0	H.16
1170240000	SAI-M23-KBC-1.5-.56-1.0	I.12
1170240000	SAI-M23-KBC-1.5-.56-1.0	I.13
1170250000	SAI-M23-KSC-2-0.75-2.0	H.17
1170250000	SAI-M23-KSC-2-0.75-2.0	I.12
1170250000	SAI-M23-KSC-2-0.75-2.0	I.13
1170260000	SAI-M23-KBC-2-0.75-2.0	H.17
1170260000	SAI-M23-KBC-2-0.75-2.0	I.12
1170260000	SAI-M23-KBC-2-0.75-2.0	I.13
1170270000	SAI-M23-KS-L-7/12	H.18
1170280000	SAI-M23-GSW-L-7/12	H.18
1170290000	SAI-M23-KSW-L-7/12	H.18
1170300000	SAIE-M23-L-VW	H.19
1170310000	SAIE-M23-L-RM	H.19
1170320000	SAIE-M23-L-EM	H.19
1170330000	SAIE-M23-L-W	H.19
1170340000	SAIE-M23-L-HW	H.19
1170350000	SAI-M23-SE-L-6	H.20
1170370000	SAI-M23-BE-L-6	H.20
1170380000	SAI-M23-SE-L-4/4	H.20
1170390000	SAI-M23-KSC-0,25-1.0	H.21
1170390000	SAI-M23-KSC-0,25-1.0	I.12
1170400000	SAI-M23-KSC-L-0.75-2.5	H.21
1170400000	SAI-M23-KSC-L-0.75-2.5	I.12
1170410000	SAI-M23-KSC-L-2.5-4.0	H.21
1170410000	SAI-M23-KSC-L-2.5-4.0	I.12
1170420000	SAI-M23-KBC-L-2.5-4.0	H.21
1170420000	SAI-M23-KBC-L-2.5-4.0	I.12
1173220000	PB-DP SUB-D ZF35TERM	C.18
1173240000	PB-DP SUB-D ZF35TERM PS	C.19

1190000000

1191020000	SAIB-5/6S M12 5P A-COD	D.5
1191030000	SAISM-5/6S M12 5P A-COD	D.5

1200000000

1203840000	SAI M23 CRIMPING TOOL 1	I.12
1203960000	SAI M23 CRIMPING TOOL 2	I.13

1210000000

1216820020	SAIL-M8GM8G-4S-0.2-CAN	C.60
1216820025	SAIL-M8GM8G-4S-0.25-CAN	C.60
1216820030	SAIL-M8GM8G-4S-0.3-CAN	C.60
1216820050	SAIL-M8GM8G-4S-0.5-CAN	C.60
1216820080	SAIL-M8GM8G-4S-0.8-CAN	C.60
1216820100	SAIL-M8GM8G-4S-1.0-CAN	C.60
1216820150	SAIL-M8GM8G-4S-1.5-CAN	C.60
1216820300	SAIL-M8GM8G-4S-3.0-CAN	C.60
1216820350	SAIL-M8GM8G-4S-3.5-CAN	C.60
1216820500	SAIL-M8GM8G-4S-5.0-CAN	C.60
1216820700	SAIL-M8GM8G-4S-7.0-CAN	C.60
1216821000	SAIL-M8GM8G-4S-10-CAN	C.60

1230000000

1232620000	SAIH-PB-2X0.24-PUR	C.8
1232630000	SAIH-PB-PA-2X1.0-PVC-BL	C.30
1232640000	SAIH-PB-PA-2X1.0-PVC-SW	C.30
1232810150	SAIL-M12GM12W-4-3L1.5Q	B.27

Order No.	Type	Page
1813200000	SFC 0/21 NEUTRAL RT	I.14
1813210000	SFC 0/21 NEUTRAL GE	I.14
1813220000	SFC 0/21 NEUTRAL BL	I.14
1813240000	SFC 0/30 NEUTRAL WS	I.14
1813250000	SFC 0/30 NEUTRAL RT	I.14
1813260000	SFC 0/30 NEUTRAL GE	I.14
1813270000	SFC 0/30 NEUTRAL BL	I.14
1814890000	SAIE-M12B-5-0.5U-PG9	D.30
1814990000	SAI-8-F 5P NPN-PNP 5M	G.38
1815670000	SAIL-M12WM12W-3-X.XU	B.7
1815670150	SAIL-M12WM12W-3-1.5U	B.25
1815670150	SAIL-M12WM12W-3-1.5U	B.7
1815670300	SAIL-M12WM12W-3-3.0U	B.7
1815670500	SAIL-M12WM12W-3-5.0U	B.7
1815671000	SAIL-M12WM12W-3-10U	B.7
1816610000	SAI-8-M 5P M12 OL2	G.8
1818090100	SAIS-M23-19P-AN-1,0M	H.22
1818140100	SAIB-M23-19P-AN-1,0M	H.22
1818160100	SAIS-M23-19P-ST-1,0M	H.22
1818180100	SAIB-M23-19P-ST-1,0M	H.22
1819450000	SAI-WDF 5P M12 60mm	C.28
1819450000	SAI-WDF 5P M12 60mm	C.29
1819450000	SAI-WDF 5P M12 60mm	D.26

1820000000

1820690000	SAI-WDF 5P B M12 60mm	D.26
1821050000	SAIL-M12WM12G-3-X.XU	B.6
1821050150	SAIL-M12WM12G-3-1.5U	B.6
1821050300	SAIL-M12WM12G-3-3.0U	B.6
1821050500	SAIL-M12WM12G-3-5.0U	B.6
1821051000	SAIL-M12WM12G-3-10U	B.6
1824570000	SAIL-M8GM8G-3-X.XU	B.4
1824570150	SAIL-M8GM8G-3-1.5U	B.32
1824570150	SAIL-M8GM8G-3-1.5U	B.4
1824570300	SAIL-M8GM8G-3-3.0U	B.4
1824570500	SAIL-M8GM8G-3-5.0U	B.4
1824571000	SAIL-M8GM8G-3-10U	B.4
1824580000	SAIL-M8GM8W-3-X.XU	B.5
1824580150	SAIL-M8GM8W-3-1.5U	B.32
1824580150	SAIL-M8GM8W-3-1.5U	B.5
1824580300	SAIL-M8GM8W-3-3.0U	B.5
1824580500	SAIL-M8GM8W-3-5.0U	B.5
1824581000	SAIL-M8GM8W-3-10U	B.5
1824590000	SAIL-M8G-3-X.XU	B.4
1824590150	SAIL-M8G-3-1.5U	B.18
1824590150	SAIL-M8G-3-1.5U	B.4
1824590300	SAIL-M8G-3-3.0U	B.4
1824590500	SAIL-M8G-3-5.0U	B.4
1824591000	SAIL-M8G-3-10U	B.4
1826880000	SAI-Y-5S- M12/M12	D.25
1827010150	SAIL-M8BWR-3-1.5U	B.19
1827020150	SAIL-M8BGR-3-1.5U	B.19
1828610000	SAI-8-F 4P M8 L 10M	G.52
1828610000	SAI-8-F 4P M8 L 10M	G.6
1828620000	SAI-8-F 4P M8 L 5M	G.52
1828620000	SAI-8-F 4P M8 L 5M	G.6
1828630000	SAI-12-F 3P M8 L 10M	G.52
1828630000	SAI-12-F 3P M8 L 10M	G.6
1828640000	SAI-12-F 3P M8 L 5M	G.52
1828640000	SAI-12-F 3P M8 L 5M	G.6
1828650000	SAI-10-F 3P M8 L 10M	G.52
1828650000	SAI-10-F 3P M8 L 10M	G.6
1828660000	SAI-10-F 3P M8 L 5M	G.52
1828660000	SAI-10-F 3P M8 L 5M	G.6
1828670000	SAI-8-F 3P M8 L 10M	G.52
1828670000	SAI-8-F 3P M8 L 10M	G.6
1828680000	SAI-8-F 3P M8 L 5M	G.52
1828680000	SAI-8-F 3P M8 L 5M	G.6
1828690000	SAI-6-F 3P M8 L 10M	G.52
1828690000	SAI-6-F 3P M8 L 10M	G.6
1828700000	SAI-6-F 3P M8 L 5M	G.52
1828700000	SAI-6-F 3P M8 L 5M	G.6
1828710000	SAI-4-F 3P M8 L 10M	G.52
1828710000	SAI-4-F 3P M8 L 10M	G.6
1828720000	SAI-4-F 3P M8 L 5M	G.52
1828720000	SAI-4-F 3P M8 L 5M	G.6
1828730000	SAI-6-S 3P M8 L	G.50
1828730000	SAI-6-S 3P M8 L	G.6
1828740000	SAI-4-S 3P M8 L	G.50
1828740000	SAI-4-S 3P M8 L	G.6

1830000000

1831020000	SAI-8-M16 4P M12	G.12
1836910000	SAIE-M12B-5-0.5U-M16	D.29
1836960000	SAIB-8/9	D.5
1836960000	SAIB-8/9	D.8
1836970000	SAIS-8/9	D.5
1836970000	SAIS-8/9	D.8
1837560000	SAIS-ZWW	D.26

1840000000

1845120150	SAIL-VSA-1.5U(0.5)	B.49
1845140150	SAIL-VSB-1.5U(0.5)	B.50
1845160150	SAIL-VSBD-1.5U(0.5)	B.50
1845800000	SAI-4-F 4P M5 L10M	G.56
1845810000	SAI-8-F 4P M5 L10M	G.56
1845820000	SAI-4-F 3P M5 L10M	G.56
1845830000	SAI-8-F 3P M5 L10M	G.56
1845840000	SAI-4-S 4P M5	G.56
1845850000	SAI-8-S 3P M5	G.56
1845860000	SAI-8-S16/19P 4P M5	G.57
1845870000	SAI-4-S16 4P M5	G.57
1845880000	SAI-8-S16 3P M5	G.57
1845890000	SAI-4-S16 3P M5	G.57
1847560000	SAI-8-B 5P M12 SL	G.39
1847920000	SAI-8-S 4P FC	G.18
1847920000	SAI-8-S 4P FC	H.23
1847930000	SAI-4-F 5P FC 10M	G.17
1847940000	SAI-4-F 5P FC 2M	G.17
1847950000	SAI-4-F 5P FC 5M	G.17
1847960000	SAI-4-S 4P FC	G.18
1847960000	SAI-4-S 4P FC	H.23
1847970000	SAI-4-S 5P FC	G.18
1847970000	SAI-4-S 5P FC	H.23
1847980000	SAI-8-F 4P FC 10M	G.17
1847990000	SAI-8-F 4P FC 2M	G.17
1848000000	SAI-8-F 4P FC 5M	G.17
1848010000	SAI-8-F 5P FC 10M	G.17
1848020000	SAI-8-F 5P FC 2M	G.17
1848030000	SAI-8-F 5P FC 5M	G.17
1848040000	SAI-8-S 5P FC	G.18
1848040000	SAI-8-S 5P FC	H.23
1848050000	SAI-4-F 4P FC 10M	G.17
1848060000	SAI-4-F 4P FC 5M	G.17
1848070000	SAI-8-M 5P FC	G.20
1848080000	SAI-4-F 4P FC 2M	G.17
1849670000	SAI-6-F 4P M8 L 10M	G.52
1849670000	SAI-6-F 4P M8 L 10M	G.6
1849680000	SAI-4-F 4P M8 L 5M	G.52
1849680000	SAI-4-F 4P M8 L 5M	G.6
1849690000	SAI-4-F 4P M8 L 10M	G.52
1849690000	SAI-4-F 4P M8 L 10M	G.6
1849700000	SAI-6-F 4P M8 L 5M	G.52
1849700000	SAI-6-F 4P M8 L 5M	G.6

1850000000

1851740000	SAI-4-F 3P M5 L5M	G.56
1851750000	SAI-8-F 4P M5 L5M	G.56
1851760000	SAI-8-F 3P M5 L5M	G.56
1851770000	SAI-4-F 4P M5 L5M	G.56
1852720000	SAIS-3-IDC (0,75) M12	D.23
1852730000	SAIB-3-IDC (0,75) M12	D.23
1852730000	SAIB-3-IDC (0,75) M12	D.5
1852740000	SAIS-4-IDC (0,75) M12	D.23
1852740000	SAIS-4-IDC (0,75) M12	D.5
1852750000	SAIB-4-IDC (0,75) M12	D.23
1854000000	SAI-4-M 5P M12 ZF	G.8
1854060150	SAIL-M5G-3P-1.5U	B.22
1855310000	SAI-SK M5	D.27
1856110000	SAIE-M12B-5-0.5U-FP-M16	D.29
1856120000	SAIE-M12S-5-0.5U-PG9	D.30
1856130000	SAIE-M8B-3-0.5U-FP-M8	D.31
1856140000	SAIE-M8B-4-0.5U-FP-M8	D.31
1857550000	SAIL-M8W-3-X.XU	B.4
1857550150	SAIL-M8W-3-1.5U	B.18
1857550150	SAIL-M8W-3-1.5U	B.4
1857550300	SAIL-M8W-3-3.0U	B.4
1857550500	SAIL-M8W-3-5.0U	B.4
1857551000	SAIL-M8W-3-10U	B.4
1857560000	SAIL-M8W-4-X.XU	B.4
1857560150	SAIL-M8W-4-1.5U	B.18
1857560150	SAIL-M8W-4-1.5U	B.4
1857560300	SAIL-M8W-4-3.0U	B.4
1857560500	SAIL-M8W-4-5.0U	B.4
1857561000	SAIL-M8W-4-10U	B.4
1857660000	SAIL-M8GM8W-4-X.XU	B.5
1857660150	SAIL-M8GM8W-4-1.5U	B.32
1857660150	SAIL-M8GM8W-4-1.5U	B.5
1857660300	SAIL-M8GM8W-4-3.0U	B.5
1857660500	SAIL-M8GM8W-4-5.0U	B.5
1857661000	SAIL-M8GM8W-4-10U	B.5
1857670000	SAIL-M8WM8W-3-X.XU	B.5
1857670150	SAIL-M8WM8W-3-1.5U	B.32
1857670150	SAIL-M8WM8W-3-1.5U	B.5
1857670300	SAIL-M8WM8W-3-3.0U	B.5
1857670500	SAIL-M8WM8W-3-5.0U	B.5
1857671000	SAIL-M8WM8W-3-10U	B.5
1857680000	SAIL-M8WM8W-4-X.XU	B.5
1857680150	SAIL-M8WM8W-4-1.5U	B.32
1857680150	SAIL-M8WM8W-4-1.5U	B.5
1857680300	SAIL-M8WM8W-4-3.0U	B.5
1857680500	SAIL-M8WM8W-4-5.0U	B.5
1857681000	SAIL-M8WM8W-4-10U	B.5
1857690150	SAIL-VSA-M12W-1.5U	B.45
1857700150	SAIL-VSB-M12W-1.5U	B.46
1857710150	SAIL-VSBD-M12W-1.5U	B.46
1857720150	SAIL-VSC-M12W-1.5U	B.47
1857730150	SAIL-VSCD-M12W-1.5U	B.47
1859110000	SAI-4-SH 4P FC	G.19
1859110000	SAI-4-SH 4P FC	H.24
1859120000	SAI-8-SH 4P FC	G.19
1859120000	SAI-8-SH 4P FC	H.24
1859130000	SAI-4-SH 5P FC	G.19
1859130000	SAI-4-SH 5P FC	H.24
1859140000	SAI-8-SH 5P FC	G.19
1859140000	SAI-8-SH 5P FC	H.24

1860000000

1861090000	SAIE-M12S-4-0.5U-M16	D.29
1861110000	SAIE-M12S-8-0.5U-M16	D.29
1861120000	SAIE-M12B-4-0.5U-M16	D.29
1861140000	SAIE-M12B-8-0,5U-M16	D.29
1861160000	SAIE-M12S-4-0.5U-FP-M16	D.29
1861170000	SAIE-M12S-5-0.5U-FP-M16	D.29
1861180000	SAIE-M12S-8-0.5U-FP-M16	D.29
1861190000	SAIE-M12B-4-0.5U-FP-M16	D.29
1861210000	SAIE-M12B-8-0.5U-FP-M16	D.29
1861220000	SAIE-M12S-4-0.5U-PG9	D.30
1861220001	SAIE-M12S-4-0.5U-AEH-VA	C.33
1861230000	SAIE-M12S-5-0.5U-M16	D.29
1861240000	SAIE-M12S-8-0.5U-PG9	D.30
1861250000	SAIE-M12B-4-0.5U-PG9	D.30
1861270000	SAIE-M12B-8-0.5U-PG9	D.30
1861280000	SAIE-M8R-3-0.5U-FP-M8	D.31
1861290000	SAIE-M8R-4-0.5U-FP-M8	D.31
1861530000	SAI-8-M 5P Ex Z22	G.60
1861540000	SAI-4-S 5P CNOMO	G.21
1861550000	SAI-8-F 5P CNOMO 5M	G.21
1861560000	SAI-4-F 5P CNOMO 10M	G.21
1861570000	SAI-4-F 5P CNOMO 5M	G.21
1861580000	SAI-8-S 5P CNOMO	G.21
1861590000	SAI-8-F 5P CNOMO 10M	G.21
1861840000	SAI-6-M 5P Ex Z22	G.60
1861850000	SAI-4-M 5P Ex Z22	G.60
1862200000	WK-1/4"(Screwty)	I.5
1864730000	SAIS-3-IDC-M12B-COD	C.12
1864730000	SAIS-3-IDC-M12B-COD	D.13
1864740000	SAIB-3-IDC-M12B-COD	C.12
1864740000	SAIB-3-IDC-M12B-COD	D.13
1865310000	SAI-8-F 5P M12 5M VA	G.28
1865870150	SAIL-M12BG-8-1.5U	B.14
1865870300	SAIL-M12BG-8-3.0U	B.14
1865870500	SAIL-M12BG-8-5.0U	B.14
1865871000	SAIL-M12BG-8-10U	B.14
1867410150	SAIL-M12BG-3S1.5Q	B.16
1868350000	SAI-4-M 4P Exi Z1 OL	G.59
1868360000	SAI-4-M 4P Exi Z1 IL	G.59
1868370000	SAI-8-M 4P Exi Z1 IL	G.59
1868560000	DAE M12 PA short	C.73

1870000000

1871680000	SAI-8-S12 3P M8 L	G.50
1871680000	SAI-8-S12 3P M8 L	G.6
1871700150	SAIL-M5G-4P-1.5U	B.22
1871710000	SAIS-3/7	D.5
1872440000	SAI-8-SHB 5P FC	G.22
1872460000	SAI-8-SHB 5P F13 FC	G.23
1873030000	SAIE-M5S-4-0.2U	D.31
1873040000	SAIE-M5B-4-0.2U	D.31
1873050000	SAIE-M5S-3-0.2U	D.31
1873060000	SAIE-M5B-3-0.2U	D.31
1873070000	SAIB-VSA-3P/250/9-OB	D.32
1873080000	SAIB-VSA-4P/250/9-OB	D.32
1873090000	SAIB-VSA-3P/250/11-OB	D.32
1873100000	SAIB-VSA-4P/250/11-OB	D.32
1873110000	SAIB-VSA-3P/230/9/LD	D.32
1873120000	SAIB-VSA-3P/24/9/LD	D.32
1873130000	SAIB-VSA-3P/230/9-H/OB	D.32
1873140000	SAIB-VSA-4P/230/9-H/OB	D.32
1873150000	SAIB-VSA-3P/230/11-H/OB	D.32
1873160000	SAIB-VSA-4P/230/11-H/OB	D.32
1873170000	SAIB-VSB-3P/250/9-OB	D.32
1873180000	SAIB-VSB-3P/24/9/LD	D.32
1873190000	SAIB-VSBD-3P/250/9-OB	D.32
1873200000	SAIB-VSC-3P/250/7-OB	D.32
1873210000	SAIB-VSC-4P/250/7-OB	D.32
1873220000	SAIB-VSCD-3P/250/7-OB	D.32
1873230000	SAIB-VSCD-4P/250/7-OB	D.32
1873240150	SAIL-M5W-4P-1.5U	B.22
1873250150	SAIL-M5BG-4P-1.5U	B.22
1873260150	SAIL-M5BW-3P-1.5U	B.22
1873270150	SAIL-M5BW-4P-1.5U	B.22
1873280150	SAIL-M5W-3P-1.5U	B.22
1873290150	SAIL-M5BG-3P-1.5U	B.22
1873300150	SAIL-M12G-PB-1.5D	C.6
1873310150	SAIL-M12GM12G-PB-1.5D	C.7
1873320150	SAIL-M12BG-PB-1.5D	C.6
1877250000	SAIL-M8GM8W-3LX.XU	B.5
1877250150	SAIL-M8GM8W-3L1.5U	B.34
1877250150	SAIL-M8GM8W-3L1.5U	B.5
1877250300	SAIL-M8GM8W-3L3.0U	B.5
1877250500	SAIL-M8GM8W-3L5.0U	B.5
1877251000	SAIL-M8GM8W-3L10U	B.5
1877440100	SAIB-M23-12P-AN-1,0M	H.22
1877950000	SAI-10-S12 3P M8 L	G.50
1877950000	SAI-10-S12 3P M8 L	G.6
1879710500	SAIL-M12BG-12-5,0U	B.14
1879711000	SAIL-M12BG-12-10U	B.14

1880000000

1880470000	SAIL-M8GM8G-4-X.XU	B.5
1880470150	SAIL-M8GM8G-4-1.5U	B.32
1880470150	SAIL-M8GM8G-4-1.5U	B.5
1880470300	SAIL-M8GM8G-4-3.0U	B.5
1880470500	SAIL-M8GM8G-4-5.0U	B.5
1880471000	SAIL-M8GM8G-4-10U	B.5
1881710000	SAI-Y-5S M12/M12 2Bo	D.26
1883460500	SAIL-M12BW-8-5.0U	B.14
1883461000	SAIL-M12BW-8-10U	B.14
1886440100	SAIB-M23-12P-ST-1,0M	H.22

1890000000

1890000000	SAI-AU M12 PB AI/AO/DI	E.10
1890000000	SAI-AU M12 PB AI/AO/DI	E.4
1890000000	SAI-AU M12 PB AI/AO/DI	E.9
1890010000	SAI-AU M12 PB 16DI/8DO	E.10
1890010000	SAI-AU M12 PB 16DI/8DO	E.4
1890010000	SAI-AU M12 PB 16DI/8DO	E.8
1890020000	SAI-AU M12 PB 16DI	E.10
1890020000	SAI-AU M12 PB 16DI	E.4
1890020000	SAI-AU M12 PB 16DI	E.8
1890520150	SAIL-M12BG-8-(S)-1,5U	B.14
1890520300	SAIL-M12BG-8-(S)-3,0U	B.14
1890520500	SAIL-M12BG-8-(S)-5,0U	B.14
1890521000	SAIL-M12BG-8-(S)-10U	B.14
1892080000	SAI-8-M 5P M12 ECO	G.15
1892080005	SAI-8-M 5P M12 NPN ECO	G.15
1892081000	SAI-8-M 5P M12 ECO UT	G.15
1892090000	SAI-6-M 5P M12 ECO	G.15
1892091000	SAI-6-M 5P M12 ECO UT	G.15
1892100000	SAI-4-M 5P M12 ECO	G.15
1892100005	SAI-4-M 5P M12 NPN ECO	G.15
1892101000	SAI-4-M 5P M12 ECO UT	G.15
1892120000	SAISM-4/8S-M12-4P D-COD	C.70
1892120000	SAISM-4/8S-M12-4P D-COD	C.71
1892120000	SAISM-4/8S-M12-4P D-COD	D.13
1892120000	SAISM-4/8S-M12-4P D-COD	D.5
1892120001	SAISM-4/8S-M12 4P D-ZF	D.15
1892120001	SAISM-4/8S-M12 4P D-ZF	D.5
1892130000	SAIBM-4/8S-M12-4P D-COD	C.70
1892130000	SAIBM-4/8S-M12-4P D-COD	C.71
1892130000	SAIBM-4/8S-M12-4P D-COD	D.13
1892130000	SAIBM-4/8S-M12-4P D-COD	D.5
1892130001	SAIBM-4/8S-M12 4P D-ZF	D.15
1892130001	SAIBM-4/8S-M12 4P D-ZF	D.5
1894380000	SAI-8-M 4P Exi Z1 OL	G.59
1896050000	SAI-4-M 5P M12 Ex ia	G.59
1896070000	SAI-6-M 5P M12 Ex ia	G.59
1896090000	SAI-8-M 5P M12 Ex ia	G.59
1896740000	SAI-SA-3-IDC (1Set)	D.20
1897680000	SAI-4-MMS 5P M12 1:1	G.36
1898240500	SAIL-M12BW-12-5,0U	B.14
1898241000	SAIL-M12BW-12-10U	B.14

1900000000

1900000000	Screwty- M12	I.5
1900001000	Screwty-M12-DM	F.7
1900001000	Screwty-M12-DM	G.25
1900001000	Screwty-M12-DM	I.5
1900010000	Screwty- M8	I.5
1900011000	Screwty-M8-DM	I.5
1900020000	Screwty- M12 F	I.5
1900021000	Screwty-M12 F-DM	I.5
1900030000	Screwty- M8 F	I.5
1900031000	Screwty-M8 F-DM	I.5
1900100000	Screwty M12 KO o. SD	I.5
1900110000	Screwty M8 KO o. SD	I.5
1900120000	Screwty M12f KO o. SD	I.5
1900130000	Screwty M8F KO o. SD	I.5
1902100000	SAIH-SLL-5x0,25mm²(PUR)	B.51
1902110000	SAIH-SLL-3x0,34mm²(PUR)	B.51
1902120000	SAIH-SLL-4x0,25mm²(PUR)	B.51
1902130000	SAIH-SLL-4x0,34mm²(PUR)	B.51
1902140000	SAIH-SLL-3x0,25mm²(PUR)	B.51
1902150000	SAIH-SLL-5x0,25mm²(PVC)	B.51
1902160000	SAIH-SLL-3x0,34mm²(PVC)	B.51
1902170000	SAIH-SLL-4x0,25mm²(PVC)	B.51
1902180000	SAIH-SLL-4x0,34mm²(PVC)	B.51
1902190000	SAIH-SLL-3x0,25mm²(PVC)	B.51
1906260000	SAIL-M12W-4-X.XU	B.4
1906260150	SAIL-M12W-4-1.5U	B.11
1906260150	SAIL-M12W-4-1.5U	B.4
1906260300	SAIL-M12W-4-3.0U	B.4
1906260500	SAIL-M12W-4-5.0U	B.4
1906261000	SAIL-M12W-4-10U	B.4
1906270000	SAIL-M8G-4-X.XU	B.4
1906270150	SAIL-M8G-4-1.5U	B.18
1906270150	SAIL-M8G-4-1.5U	B.4
1906270300	SAIL-M8G-4-3.0U	B.4
1906270500	SAIL-M8G-4-5.0U	B.4
1906271000	SAIL-M8G-4-10U	B.4
1906280100	SAIS-M23-12P-ST-1,0M	H.22
1906290100	SAIS-M23-12P-AN-1,0M	H.22
1906300000	SAIL-M12GM12G-4-X.XU	B.6
1906300150	SAIL-M12GM12G-4-1.5U	B.25
1906300150	SAIL-M12GM12G-4-1.5U	B.6
1906300300	SAIL-M12GM12G-4-3.0U	B.6
1906300500	SAIL-M12GM12G-4-5.0U	B.6
1906301000	SAIL-M12GM12G-4-10U	B.6
1906310000	SAIL-M12WM12W-4-X.XU	B.7
1906310150	SAIL-M12WM12W-4-1.5U	B.25
1906310150	SAIL-M12WM12W-4-1.5U	B.7

Order No.	Type	Page
1906310300	SAIL-M12WM12W-4-3.0U	B.7
1906310500	SAIL-M12WM12W-4-5.0U	B.7
1906311000	SAIL-M12WM12W-4-10U	B.7
1906330000	SAIL-M12WM8W-3-X.XU	B.5
1906330150	SAIL-M12WM8W-3-1.5U	B.29
1906330150	SAIL-M12WM8W-3-1.5U	B.5
1906330300	SAIL-M12WM8W-3-3.0U	B.5
1906330500	SAIL-M12WM8W-3-5.0U	B.5
1906331000	SAIL-M12WM8W-3-10U	B.5
1906340000	SAIL-M12WM8W-4-X.XU	B.5
1906340150	SAIL-M12WM8W-4-1.5U	B.29
1906340150	SAIL-M12WM8W-4-1.5U	B.5
1906340300	SAIL-M12WM8W-4-3.0U	B.5
1906340500	SAIL-M12WM8W-4-5.0U	B.5
1906341000	SAIL-M12WM8W-4-10U	B.5
1906390000	SAIS-5/7-ZF	D.16
1906390000	SAIS-5/7-ZF	D.5
1906400150	SAIL-M8BW-4L1.5U	B.20
1906410000	SAIL-M12GM12W-4-2LX.XU	B.8
1906410150	SAIL-M12GM12W-4-2L1.5U	B.27
1906410150	SAIL-M12GM12W-4-2L1.5U	B.8
1906410300	SAIL-M12GM12W-4-2L3.0U	B.8
1906410500	SAIL-M12GM12W-4-2L5.0U	B.8
1906411000	SAIL-M12GM12W-4-2L10U	B.8
1906430150	SAIL-M12GM8W-4L1.5U	B.31
1906450150	SAIL-M8GM8W-4L1.5U	B.34
1906470150	SAIL-M12G-3S1.5Q	B.16
1906480150	SAIL-M12G-4S1.5Q	B.16
1906500150	SAIL-M12W-3S1.5Q	B.16
1906520150	SAIL-M12W-5S1.5Q	B.16
1906540150	SAIL-M12BW-5S1.5Q	B.16
1906550000	SAI-AU M8 PB 16DI	E.10
1906550000	SAI-AU M8 PB 16DI	E.4
1906550000	SAI-AU M8 PB 16DI	E.8
1906560150	SAIL-M8G-3S1.5U	B.21
1906570150	SAIL-M8G-4S1.5U	B.21
1906580150	SAIL-M8W-3S1.5U	B.21
1906590150	SAIL-M8W-4S1.5U	B.21
1906600150	SAIL-M8BG-3S1.5U	B.21
1906610150	SAIL-M8BG-4S1.5U	B.21
1906620150	SAIL-M8BW-3S1.5U	B.21
1906630150	SAIL-M8BW-4S1.5U	B.21
1906640000	SAI-AU M8 PB 16DI/8DO	E.10
1906640000	SAI-AU M8 PB 16DI/8DO	E.4
1906640000	SAI-AU M8 PB 16DI/8DO	E.8
1906650000	SAI-AU M12 CAN 16DI	E.12
1906650000	SAI-AU M12 CAN 16DI	E.14
1906650000	SAI-AU M12 CAN 16DI	E.4
1906660000	SAI-AU M12 CAN 16DI/8DO	E.12
1906660000	SAI-AU M12 CAN 16DI/8DO	E.14
1906660000	SAI-AU M12 CAN 16DI/8DO	E.4
1906670000	SAI-AU M12 CAN AI/AO/DI	E.13
1906670000	SAI-AU M12 CAN AI/AO/DI	E.14
1906670000	SAI-AU M12 CAN AI/AO/DI	E.4
1906680000	SAI-AU M8 CAN 16DI	E.12
1906680000	SAI-AU M8 CAN 16DI	E.14
1906680000	SAI-AU M8 CAN 16DI	E.4
1906690000	SAI-AU M8 CAN 16DI/8DO	E.12
1906690000	SAI-AU M8 CAN 16DI/8DO	E.14
1906690000	SAI-AU M8 CAN 16DI/8DO	E.4
1906700000	SAI-AU M12 DN 16DI	E.16
1906700000	SAI-AU M12 DN 16DI	E.18
1906700000	SAI-AU M12 DN 16DI	E.4
1906710000	SAI-AU M12 DN 16DI/8DO	E.16
1906710000	SAI-AU M12 DN 16DI/8DO	E.18
1906710000	SAI-AU M12 DN 16DI/8DO	E.4
1906720000	SAI-AU M12 DN AI/AO/DI	E.17
1906720000	SAI-AU M12 DN AI/AO/DI	E.18
1906720000	SAI-AU M12 DN AI/AO/DI	E.4
1906730000	SAI-AU M8 DN 16DI	E.16
1906730000	SAI-AU M8 DN 16DI	E.18
1906730000	SAI-AU M8 DN 16DI	E.4
1906740000	SAI-AU M8 DN 16DI/8DO	E.16
1906740000	SAI-AU M8 DN 16DI/8DO	E.18
1906740000	SAI-AU M8 DN 16DI/8DO	E.4
1906850000	SAI-AU M12 IE 16DI	E.24
1906850000	SAI-AU M12 IE 16DI	E.26
1906850000	SAI-AU M12 IE 16DI	E.4
1906860000	SAI-AU M12 IE 16DI/8DO	E.24
1906860000	SAI-AU M12 IE 16DI/8DO	E.26
1906860000	SAI-AU M12 IE 16DI/8DO	E.4
1906870000	SAI-AU M12 IE AI/AO/DI	E.25
1906870000	SAI-AU M12 IE AI/AO/DI	E.26
1906870000	SAI-AU M12 IE AI/AO/DI	E.4
1906880000	SAI-AU M8 IE 16DI	E.24
1906880000	SAI-AU M8 IE 16DI	E.26
1906880000	SAI-AU M8 IE 16DI	E.4
1906890000	SAI-AU M8 IE 16DI/8DO	E.24
1906890000	SAI-AU M8 IE 16DI/8DO	E.26
1906890000	SAI-AU M8 IE 16DI/8DO	E.4
1906900000	SAI-AU M12 EIP 16DI	E.20
1906900000	SAI-AU M12 EIP 16DI	E.22
1906900000	SAI-AU M12 EIP 16DI	E.4
1906910000	SAI-AU M12 EIP 16DI/8DO	E.20
1906910000	SAI-AU M12 EIP 16DI/8DO	E.22
1906910000	SAI-AU M12 EIP 16DI/8DO	E.4
1906920000	SAI-AU M12 EIP AI/AO/DI	E.21
1906920000	SAI-AU M12 EIP AI/AO/DI	E.22
1906920000	SAI-AU M12 EIP AI/AO/DI	E.4
1906930000	SAI-AU M8 EIP 16DI	E.20
1906930000	SAI-AU M8 EIP 16DI	E.22
1906930000	SAI-AU M8 EIP 16DI	E.4
1906940000	SAI-AU M8 EIP 16DI/8DO	E.20
1906940000	SAI-AU M8 EIP 16DI/8DO	E.22
1906940000	SAI-AU M8 EIP 16DI/8DO	E.4
1906950150	SAIL-M12BW-3S1.5Q	B.16
1909500000	VG M16 - MS 1/EMV	C.73
1909860000	VG M16-1/K68	C.73
1909910000	VG M16-1/MS68	C.73

1910000000

1910000000	Screwty Set	I.5
1912110150	SAIL-ZW-M12BW-3L1.5U	B.37
1912130000	ESG 8/13.5/43.3 SAI AU	E.10
1912130000	ESG 8/13.5/43.3 SAI AU	E.14
1912130000	ESG 8/13.5/43.3 SAI AU	E.18
1912130000	ESG 8/13.5/43.3 SAI AU	E.22
1912130000	ESG 8/13.5/43.3 SAI AU	E.26
1912130000	ESG 8/13.5/43.3 SAI AU	E.31
1912130000	ESG 8/13.5/43.3 SAI AU	E.33
1912130000	ESG 8/13.5/43.3 SAI AU	E.35
1912130000	ESG 8/13.5/43.3 SAI AU	E.45
1912130000	ESG 8/13.5/43.3 SAI AU	I.16
1915220000	SAI JP 4P LG	F.8
1918520000	SAI JP 5P LG	F.8
1919680000	PB SUB-D IDC TERM PS	C.15

1920000000

1920000000	Screwty Set -DM	I.5
1920700000	SAIS 5/9-VA	C.32
1920700000	SAIS 5/9-VA	D.10
1920700000	SAIS 5/9-VA	G.28
1920700000	SAIS 5/9-VA	G.29
1920710000	SAIB 5/9-VA	C.32
1920710000	SAIB 5/9-VA	D.10
1920710000	SAIB 5/9-VA	G.29
1920720000	SAIS 5/9-VA-B-COD	C.10
1920720000	SAIS 5/9-VA-B-COD	D.10
1920720000	SAIS 5/9-VA-B-COD	G.29
1920730000	SAIB 5/9-VA-B-COD	C.10
1920730000	SAIB 5/9-VA-B-COD	D.10
1920730000	SAIB 5/9-VA-B-COD	G.29
1920970000	SAIBW-M8-3P(TL)	D.19
1920970000	SAIBW-M8-3P(TL)	D.6
1920980000	SAIBW-M8-4P(TL)	D.19
1920980000	SAIBW-M8-4P(TL)	D.6
1920990000	SAISW-M8-3P(TL)	D.19
1920990000	SAISW-M8-3P(TL)	D.6
1921000000	SAISW-M8-4P(TL)	D.19
1921000000	SAISW-M8-4P(TL)	D.6
1921010000	SAIBM-M8-3P(TL)	D.18
1921010000	SAIBM-M8-3P(TL)	D.6
1921020000	SAIBM-M8-4P(TL)	D.18
1921020000	SAIBM-M8-4P(TL)	D.6
1921030000	SAISM-M8-3P(TL)	D.18
1921030000	SAISM-M8-3P(TL)	D.6
1921040000	SAISM-M8-4P(TL)	D.18
1921040000	SAISM-M8-4P(TL)	D.6
1921050000	SAIS-5/7-(KV)	D.9
1921060000	SAIS-4/7-(KV)	D.9
1921070000	SAIB-5/7-(KV)	D.9
1921080000	SAIB-4/7-(KV)	D.9
1924940000	SAIB-3/7	D.5
1924950000	SAIS-12/9-(TL)	D.5
1924960000	SAIB-12/9-(TL)	D.5
1924970000	SAIB-5/7-ZF	D.16
1924970000	SAIB-5/7-ZF	D.5
1924980000	SAI-ASI T FFR	C.65
1925010000	SAI-ASI T FR	C.64
1925300000	SAIL-M12GM12G-3-X.XV	B.6
1925300150	SAIL-M12GM12G-3-1.5V	B.25
1925300150	SAIL-M12GM12G-3-1.5V	B.6
1925300300	SAIL-M12GM12G-3-3.0V	B.6
1925300500	SAIL-M12GM12G-3-5.0V	B.6
1925301000	SAIL-M12GM12G-3-10V	B.6
1925310000	SAIL-M12GM12G-4-X.XV	B.6
1925310150	SAIL-M12GM12G-4-1.5V	B.25
1925310150	SAIL-M12GM12G-4-1.5V	B.6
1925310300	SAIL-M12GM12G-4-3.0V	B.6
1925310500	SAIL-M12GM12G-4-5.0V	B.6
1925311000	SAIL-M12GM12G-4-10V	B.6
1925320000	SAIL-M12GM12G-5-X.XV	B.7
1925320150	SAIL-M12GM12G-5-1.5V	B.25
1925320150	SAIL-M12GM12G-5-1.5V	B.7
1925320300	SAIL-M12GM12G-5-3.0V	B.7
1925320500	SAIL-M12GM12G-5-5.0V	B.7
1925321000	SAIL-M12GM12G-5-10V	B.7
1925330150	SAIL-M12GM12G-2/4-1.5V	B.26
1925340000	SAIL-M12GM12W-3-X.XV	B.7
1925340150	SAIL-M12GM12W-3-1.5V	B.25
1925340150	SAIL-M12GM12W-3-1.5V	B.7
1925340300	SAIL-M12GM12W-3-3.0V	B.7
1925340500	SAIL-M12GM12W-3-5.0V	B.7
1925341000	SAIL-M12GM12W-3-10V	B.7
1925350000	SAIL-M12GM12W-4-X.XV	B.7
1925350150	SAIL-M12GM12W-4-1.5V	B.25
1925350150	SAIL-M12GM12W-4-1.5V	B.7
1925350300	SAIL-M12GM12W-4-3.0V	B.7
1925350500	SAIL-M12GM12W-4-5.0V	B.7
1925351000	SAIL-M12GM12W-4-10V	B.7
1925360000	SAIL-M12GM12W-5-X.XV	B.7
1925360150	SAIL-M12GM12W-5-1.5V	B.25
1925360150	SAIL-M12GM12W-5-1.5V	B.7
1925360300	SAIL-M12GM12W-5-3.0V	B.7
1925360500	SAIL-M12GM12W-5-5.0V	B.7
1925361000	SAIL-M12GM12W-5-10V	B.7
1925370150	SAIL-M12GM12W-2/4-1.5V	B.26
1925380000	SAIL-M12WM12W-3-X.XV	B.7
1925380150	SAIL-M12WM12W-3-1.5V	B.25
1925380150	SAIL-M12WM12W-3-1.5V	B.7
1925380300	SAIL-M12WM12W-3-3.0V	B.7
1925380500	SAIL-M12WM12W-3-5.0V	B.7
1925381000	SAIL-M12WM12W-3-10V	B.7
1925390000	SAIL-M12WM12W-4-X.XV	B.7
1925390150	SAIL-M12WM12W-4-1.5V	B.25
1925390150	SAIL-M12WM12W-4-1.5V	B.7
1925390300	SAIL-M12WM12W-4-3.0V	B.7
1925390500	SAIL-M12WM12W-4-5.0V	B.7
1925391000	SAIL-M12WM12W-4-10V	B.7
1925400000	SAIL-M12WM12W-5-X.XV	B.7
1925400150	SAIL-M12WM12W-5-1.5V	B.25
1925400150	SAIL-M12WM12W-5-1.5V	B.7
1925400300	SAIL-M12WM12W-5-3.0V	B.7
1925400500	SAIL-M12WM12W-5-5.0V	B.7
1925401000	SAIL-M12WM12W-5-10V	B.7
1925410000	SAIL-M12GM12W-3LX.XV	B.8
1925410150	SAIL-M12GM12W-3L1.5V	B.27
1925410150	SAIL-M12GM12W-3L1.5V	B.8
1925410300	SAIL-M12GM12W-3L3.0V	B.8
1925410500	SAIL-M12GM12W-3L5.0V	B.8
1925411000	SAIL-M12GM12W-3L10V	B.8
1925420000	SAIL-M12GM12W-4-2LX.XV	B.8
1925420150	SAIL-M12GM12W-4-2L1.5V	B.27
1925420150	SAIL-M12GM12W-4-2L1.5V	B.8
1925420300	SAIL-M12GM12W-4-2L3.0V	B.8
1925420500	SAIL-M12GM12W-4-2L5.0V	B.8
1925421000	SAIL-M12GM12W-4-2L10V	B.8
1925430000	SAIL-M12G-3-X.XV	B.4
1925430150	SAIL-M12G-3-1.5V	B.11
1925430150	SAIL-M12G-3-1.5V	B.4
1925430300	SAIL-M12G-3-3.0V	B.4
1925430500	SAIL-M12G-3-5.0V	B.4
1925431000	SAIL-M12G-3-10V	B.4
1925440000	SAIL-M12G-4-X.XV	B.4
1925440150	SAIL-M12G-4-1.5V	B.11
1925440150	SAIL-M12G-4-1.5V	B.4
1925440300	SAIL-M12G-4-3.0V	B.4
1925440500	SAIL-M12G-4-5.0V	B.4
1925441000	SAIL-M12G-4-10V	B.4
1925450000	SAIL-M12G-5-X.XV	B.4
1925450150	SAIL-M12G-5-1.5V	B.11
1925450150	SAIL-M12G-5-1.5V	B.4
1925450300	SAIL-M12G-5-3.0V	B.4
1925450500	SAIL-M12G-5-5.0V	B.4
1925451000	SAIL-M12G-5-10V	B.4
1925460000	SAIL-M12BW-3LX.XV	B.8
1925460150	SAIL-M12BW-3L1.5V	B.15
1925460150	SAIL-M12BW-3L1.5V	B.8
1925460300	SAIL-M12BW-3L3.0V	B.8
1925460500	SAIL-M12BW-3L5.0V	B.8
1925461000	SAIL-M12BW-3L10V	B.8
1925470000	SAIL-M12BW-4-2LX.XV	B.8
1925470150	SAIL-M12BW-4-2L1.5V	B.15
1925470150	SAIL-M12BW-4-2L1.5V	B.8
1925470300	SAIL-M12BW-4-2L3.0V	B.8
1925470500	SAIL-M12BW-4-2L5.0V	B.8
1925471000	SAIL-M12BW-4-2L10V	B.8
1925510000	SAIL-M12W-3-X.XV	B.4
1925510150	SAIL-M12W-3-1.5V	B.11
1925510150	SAIL-M12W-3-1.5V	B.4
1925510300	SAIL-M12W-3-3.0V	B.4
1925510500	SAIL-M12W-3-5.0V	B.4
1925511000	SAIL-M12W-3-10V	B.4
1925520000	SAIL-M12W-4-X.XV	B.4
1925520150	SAIL-M12W-4-1.5V	B.11
1925520150	SAIL-M12W-4-1.5V	B.4
1925520300	SAIL-M12W-4-3.0V	B.4
1925520500	SAIL-M12W-4-5.0V	B.4
1925521000	SAIL-M12W-4-10V	B.4
1925530000	SAIL-M12W-5-X.XV	B.4
1925530150	SAIL-M12W-5-1.5V	B.11
1925530150	SAIL-M12W-5-1.5V	B.4
1925530300	SAIL-M12W-5-3.0V	B.4
1925530500	SAIL-M12W-5-5.0V	B.4
1925531000	SAIL-M12W-5-10V	B.4
1925570000	SAIL-M12BG-3-X.XV	B.6
1925570150	SAIL-M12BG-3-1.5V	B.11
1925570150	SAIL-M12BG-3-1.5V	B.6
1925570300	SAIL-M12BG-3-3.0V	B.6
1925570500	SAIL-M12BG-3-5.0V	B.6
1925571000	SAIL-M12BG-3-10V	B.6
1925580000	SAIL-M12BG-4-X.XV	B.6
1925580150	SAIL-M12BG-4-1.5V	B.11
1925580150	SAIL-M12BG-4-1.5V	B.6
1925580300	SAIL-M12BG-4-3.0V	B.6
1925580500	SAIL-M12BG-4-5.0V	B.6
1925581000	SAIL-M12BG-4-10V	B.6
1925590000	SAIL-M12BG-5-X.XV	B.7
1925590150	SAIL-M12BG-5-1.5V	B.11
1925590150	SAIL-M12BG-5-1.5V	B.7
1925590300	SAIL-M12BG-5-3.0V	B.7
1925590500	SAIL-M12BG-5-5.0V	B.7
1925591000	SAIL-M12BG-5-10V	B.7
1925630000	SAIL-M12BW-3-X.XV	B.7
1925630150	SAIL-M12BW-3-1.5V	B.11
1925630150	SAIL-M12BW-3-1.5V	B.7
1925630300	SAIL-M12BW-3-3.0V	B.7
1925630500	SAIL-M12BW-3-5.0V	B.7
1925631000	SAIL-M12BW-3-10V	B.7
1925640000	SAIL-M12BW-4-X.XV	B.7
1925640150	SAIL-M12BW-4-1.5V	B.11
1925640150	SAIL-M12BW-4-1.5V	B.7
1925640300	SAIL-M12BW-4-3.0V	B.7
1925640500	SAIL-M12BW-4-5.0V	B.7
1925641000	SAIL-M12BW-4-10V	B.7
1925650000	SAIL-M12BW-5-X.XV	B.7
1925650150	SAIL-M12BW-5-1.5V	B.11
1925650150	SAIL-M12BW-5-1.5V	B.7
1925650300	SAIL-M12BW-5-3.0V	B.7
1925650500	SAIL-M12BW-5-5.0V	B.7
1925651000	SAIL-M12BW-5-10V	B.7
1926490000	SAIL-M12GM12G-3-X.XQ	B.6
1926490150	SAIL-M12GM12G-3-1.5Q	B.25
1926490150	SAIL-M12GM12G-3-1.5Q	B.6
1926490300	SAIL-M12GM12G-3-3.0Q	B.6
1926490500	SAIL-M12GM12G-3-5.0Q	B.6
1926491000	SAIL-M12GM12G-3-10Q	B.6
1926500000	SAIL-M12GM12G-4-X.XQ	B.6
1926500150	SAIL-M12GM12G-4-1.5Q	B.25
1926500150	SAIL-M12GM12G-4-1.5Q	B.6
1926500300	SAIL-M12GM12G-4-3.0Q	B.6
1926500500	SAIL-M12GM12G-4-5.0Q	B.6
1926501000	SAIL-M12GM12G-4-10Q	B.6
1926510000	SAIL-M12GM12G-5-X.XQ	B.7
1926510150	SAIL-M12GM12G-5-1.5Q	B.25
1926510150	SAIL-M12GM12G-5-1.5Q	B.7
1926510300	SAIL-M12GM12G-5-3.0Q	B.7
1926510500	SAIL-M12GM12G-5-5.0Q	B.7
1926511000	SAIL-M12GM12G-5-10Q	B.7
1926520150	SAIL-M12GM12G-2/4-1.5Q	B.26
1926530000	SAIL-M12GM12W-3-X.XQ	B.7
1926530150	SAIL-M12GM12W-3-1.5Q	B.25
1926530150	SAIL-M12GM12W-3-1.5Q	B.7
1926530300	SAIL-M12GM12W-3-3.0Q	B.7
1926530500	SAIL-M12GM12W-3-5.0Q	B.7
1926531000	SAIL-M12GM12W-3-10Q	B.7
1926540000	SAIL-M12GM12W-4-X.XQ	B.7
1926540150	SAIL-M12GM12W-4-1.5Q	B.25
1926540150	SAIL-M12GM12W-4-1.5Q	B.7
1926540300	SAIL-M12GM12W-4-3.0Q	B.7
1926540500	SAIL-M12GM12W-4-5.0Q	B.7
1926541000	SAIL-M12GM12W-4-10Q	B.7
1926550000	SAIL-M12GM12W-5-X.XQ	B.7
1926550150	SAIL-M12GM12W-5-1.5Q	B.25
1926550150	SAIL-M12GM12W-5-1.5Q	B.7
1926550300	SAIL-M12GM12W-5-3.0Q	B.7
1926550500	SAIL-M12GM12W-5-5.0Q	B.7
1926551000	SAIL-M12GM12W-5-10Q	B.7
1926560150	SAIL-M12GM12W-2/4-1.5Q	B.26
1926570000	SAIL-M12WM12W-3-X.XQ	B.7
1926570150	SAIL-M12WM12W-3-1.5Q	B.25
1926570150	SAIL-M12WM12W-3-1.5Q	B.7
1926570300	SAIL-M12WM12W-3-3.0Q	B.7
1926570500	SAIL-M12WM12W-3-5.0Q	B.7
1926571000	SAIL-M12WM12W-3-10Q	B.7
1926580000	SAIL-M12WM12W-4-X.XQ	B.7
1926580150	SAIL-M12WM12W-4-1.5Q	B.25
1926580150	SAIL-M12WM12W-4-1.5Q	B.7
1926580300	SAIL-M12WM12W-4-3.0Q	B.7
1926580500	SAIL-M12WM12W-4-5.0Q	B.7
1926581000	SAIL-M12WM12W-4-10Q	B.7
1926590000	SAIL-M12WM12W-5-X.XQ	B.7
1926590150	SAIL-M12WM12W-5-1.5Q	B.25
1926590150	SAIL-M12WM12W-5-1.5Q	B.7
1926590300	SAIL-M12WM12W-5-3.0Q	B.7
1926590500	SAIL-M12WM12W-5-5.0Q	B.7
1926591000	SAIL-M12WM12W-5-10Q	B.7
1926600000	SAIL-M12GM12W-3LX.XQ	B.8
1926600150	SAIL-M12GM12W-3L1.5Q	B.27
1926600150	SAIL-M12GM12W-3L1.5Q	B.8
1926600300	SAIL-M12GM12W-3L3.0Q	B.8
1926600500	SAIL-M12GM12W-3L5.0Q	B.8
1926601000	SAIL-M12GM12W-3L10Q	B.8
1926610000	SAIL-M12GM12W-4-2LX.XQ	B.8
1926610150	SAIL-M12GM12W-4-2L1.5Q	B.27
1926610150	SAIL-M12GM12W-4-2L1.5Q	B.8
1926610300	SAIL-M12GM12W-4-2L3.0Q	B.8
1926610500	SAIL-M12GM12W-4-2L5.0Q	B.8
1926611000	SAIL-M12GM12W-4-2L10Q	B.8
1926620000	SAIL-M12G-3-X.XQ	B.4
1926620150	SAIL-M12G-3-1.5Q	B.11
1926620150	SAIL-M12G-3-1.5Q	B.4
1926620300	SAIL-M12G-3-3.0Q	B.4
1926620500	SAIL-M12G-3-5.0Q	B.4
1926621000	SAIL-M12G-3-10Q	B.4
1926630000	SAIL-M12G-4-X.XQ	B.4
1926630150	SAIL-M12G-4-1.5Q	B.11
1926630150	SAIL-M12G-4-1.5Q	B.4

Order No.	Type	Page
1926630300	SAIL-M12G-4-3.0Q	B.4
1926630500	SAIL-M12G-4-5.0Q	B.4
1926631000	SAIL-M12G-4-10Q	B.4
1926640000	SAIL-M12G-5-X.XQ	B.4
1926640150	SAIL-M12G-5-1.5Q	B.11
1926640150	SAIL-M12G-5-1.5Q	B.4
1926640300	SAIL-M12G-5-3.0Q	B.4
1926640500	SAIL-M12G-5-5.0Q	B.4
1926641000	SAIL-M12G-5-10Q	B.4
1926650000	SAIL-M12BW-3LX.XQ	B.8
1926650150	SAIL-M12BW-3L1.5Q	B.15
1926650150	SAIL-M12BW-3L1.5Q	B.8
1926650300	SAIL-M12BW-3L3.0Q	B.8
1926650500	SAIL-M12BW-3L5.0Q	B.8
1926651000	SAIL-M12BW-3L10Q	B.8
1926660000	SAIL-M12BW-4-2LX.XQ	B.8
1926660150	SAIL-M12BW-4-2L1.5Q	B.15
1926660150	SAIL-M12BW-4-2L1.5Q	B.8
1926660300	SAIL-M12BW-4-2L3.0Q	B.8
1926660500	SAIL-M12BW-4-2L5.0Q	B.8
1926661000	SAIL-M12BW-4-2L10Q	B.8
1926690150	SAIL-M12G-5S1.5Q	B.16
1926700000	SAIL-M12W-3-X.XQ	B.4
1926700150	SAIL-M12W-3-1.5Q	B.11
1926700150	SAIL-M12W-3-1.5Q	B.4
1926700300	SAIL-M12W-3-3.0Q	B.4
1926700500	SAIL-M12W-3-5.0Q	B.4
1926701000	SAIL-M12W-3-10Q	B.4
1926710000	SAIL-M12W-4-X.XQ	B.4
1926710150	SAIL-M12W-4-1.5Q	B.11
1926710150	SAIL-M12W-4-1.5Q	B.4
1926710300	SAIL-M12W-4-3.0Q	B.4
1926710500	SAIL-M12W-4-5.0Q	B.4
1926711000	SAIL-M12W-4-10Q	B.4
1926720000	SAIL-M12W-5-X.XQ	B.4
1926720150	SAIL-M12W-5-1.5Q	B.11
1926720150	SAIL-M12W-5-1.5Q	B.4
1926720300	SAIL-M12W-5-3.0Q	B.4
1926720500	SAIL-M12W-5-5.0Q	B.4
1926721000	SAIL-M12W-5-10Q	B.4
1926760000	SAIL-M12BG-3-X.XQ	B.6
1926760150	SAIL-M12BG-3-1.5Q	B.11
1926760150	SAIL-M12BG-3-1.5Q	B.6
1926760300	SAIL-M12BG-3-3.0Q	B.6
1926760500	SAIL-M12BG-3-5.0Q	B.6
1926761000	SAIL-M12BG-3-10Q	B.6
1926770000	SAIL-M12BG-4-X.XQ	B.6
1926770150	SAIL-M12BG-4-1.5Q	B.11
1926770150	SAIL-M12BG-4-1.5Q	B.6
1926770300	SAIL-M12BG-4-3.0Q	B.6
1926770500	SAIL-M12BG-4-5.0Q	B.6
1926771000	SAIL-M12BG-4-10Q	B.6
1926780000	SAIL-M12BG-5-X.XQ	B.7
1926780150	SAIL-M12BG-5-1.5Q	B.11
1926780150	SAIL-M12BG-5-1.5Q	B.7
1926780300	SAIL-M12BG-5-3.0Q	B.7
1926780500	SAIL-M12BG-5-5.0Q	B.7
1926781000	SAIL-M12BG-5-10Q	B.7
1926820000	SAIL-M12BW-3-X.XQ	B.7
1926820150	SAIL-M12BW-3-1.5Q	B.11
1926820150	SAIL-M12BW-3-1.5Q	B.7
1926820300	SAIL-M12BW-3-3.0Q	B.7
1926820500	SAIL-M12BW-3-5.0Q	B.7
1926821000	SAIL-M12BW-3-10Q	B.7
1926830000	SAIL-M12BW-4-X.XQ	B.7
1926830150	SAIL-M12BW-4-1.5Q	B.11
1926830150	SAIL-M12BW-4-1.5Q	B.7
1926830300	SAIL-M12BW-4-3.0Q	B.7
1926830500	SAIL-M12BW-4-5.0Q	B.7
1926831000	SAIL-M12BW-4-10Q	B.7
1926840000	SAIL-M12BW-5-X.XQ	B.7
1926840150	SAIL-M12BW-5-1.5Q	B.11
1926840150	SAIL-M12BW-5-1.5Q	B.7
1926840300	SAIL-M12BW-5-3.0Q	B.7
1926840500	SAIL-M12BW-5-5.0Q	B.7
1926841000	SAIL-M12BW-5-10Q	B.7
1926890000	SAIL-M8GM8G-3-X.XQ	B.4
1926890150	SAIL-M8GM8G-3-1.5Q	B.32
1926890150	SAIL-M8GM8G-3-1.5Q	B.4
1926890300	SAIL-M8GM8G-3-3.0Q	B.4
1926890500	SAIL-M8GM8G-3-5.0Q	B.4
1926891000	SAIL-M8GM8G-3-10Q	B.4
1926900000	SAIL-M8GM8G-4-X.XQ	B.5
1926900150	SAIL-M8GM8G-4-1.5Q	B.32
1926900150	SAIL-M8GM8G-4-1.5Q	B.5
1926900300	SAIL-M8GM8G-4-3.0Q	B.5
1926900500	SAIL-M8GM8G-4-5.0Q	B.5
1926901000	SAIL-M8GM8G-4-10Q	B.5
1926910000	SAIL-M8GM8W-3-X.XQ	B.5
1926910150	SAIL-M8GM8W-3-1.5Q	B.32
1926910150	SAIL-M8GM8W-3-1.5Q	B.5
1926910300	SAIL-M8GM8W-3-3.0Q	B.5
1926910500	SAIL-M8GM8W-3-5.0Q	B.5
1926911000	SAIL-M8GM8W-3-10Q	B.5
1926920000	SAIL-M8GM8W-4-X.XQ	B.5
1926920150	SAIL-M8GM8W-4-1.5Q	B.32
1926920150	SAIL-M8GM8W-4-1.5Q	B.5
1926920300	SAIL-M8GM8W-4-3.0Q	B.5
1926920500	SAIL-M8GM8W-4-5.0Q	B.5
1926921000	SAIL-M8GM8W-4-10Q	B.5

Order No.	Type	Page
1926930000	SAIL-M8GM8W-3LX.XQ	B.5
1926930150	SAIL-M8GM8W-3L1.5Q	B.34
1926930150	SAIL-M8GM8W-3L1.5Q	B.5
1926930300	SAIL-M8GM8W-3L3.0Q	B.5
1926930500	SAIL-M8GM8W-3L5.0Q	B.5
1926931000	SAIL-M8GM8W-3L10Q	B.5
1926940150	SAIL-M8GM8W-4L1.5Q	B.34
1926950000	SAIL-M8WM8W-3-X.XQ	B.5
1926950150	SAIL-M8WM8W-3-1.5Q	B.5
1926950300	SAIL-M8WM8W-3-3.0Q	B.5
1926950500	SAIL-M8WM8W-3-5.0Q	B.5
1926951000	SAIL-M8WM8W-3-10Q	B.5
1926960000	SAIL-M8WM8W-4-X.XQ	B.5
1926960150	SAIL-M8WM8W-4-1.5Q	B.32
1926960150	SAIL-M8WM8W-4-1.5Q	B.5
1926960300	SAIL-M8WM8W-4-3.0Q	B.5
1926960500	SAIL-M8WM8W-4-5.0Q	B.5
1926961000	SAIL-M8WM8W-4-10Q	B.5
1926970000	SAIL-M8G-3-X.XQ	B.4
1926970150	SAIL-M8G-3-1.5Q	B.18
1926970150	SAIL-M8G-3-1.5Q	B.4
1926970300	SAIL-M8G-3-3.0Q	B.4
1926970500	SAIL-M8G-3-5.0Q	B.4
1926971000	SAIL-M8G-3-10Q	B.4
1926980000	SAIL-M8BGS-3-X.XQ	B.4
1926980150	SAIL-M8BG-3-1.5Q	B.18
1926980150	SAIL-M8BG-3-1.5Q	B.4
1926980300	SAIL-M8BG-3-3.0Q	B.4
1926980500	SAIL-M8BG-3-5.0Q	B.4
1926981000	SAIL-M8BG-3-10Q	B.4
1926990000	SAIL-M8G-4-X.XQ	B.4
1926990150	SAIL-M8G-4-1.5Q	B.18
1926990150	SAIL-M8G-4-1.5Q	B.4
1926990300	SAIL-M8G-4-3.0Q	B.4
1926990500	SAIL-M8G-4-5.0Q	B.4
1926991000	SAIL-M8G-4-10Q	B.4
1927000000	SAIL-M8BGS-4-X.XQ	B.5
1927000150	SAIL-M8BG-4-1.5Q	B.18
1927000150	SAIL-M8BG-4-1.5Q	B.5
1927000300	SAIL-M8BG-4-3.0Q	B.5
1927000500	SAIL-M8BG-4-5.0Q	B.5
1927001000	SAIL-M8BG-4-10Q	B.5
1927050000	SAIL-M8W-3-X.XQ	B.4
1927050150	SAIL-M8W-3-1.5Q	B.18
1927050150	SAIL-M8W-3-1.5Q	B.4
1927050300	SAIL-M8W-3-3.0Q	B.4
1927050500	SAIL-M8W-3-5.0Q	B.4
1927051000	SAIL-M8W-3-10Q	B.4
1927060000	SAIL-M8BWS-3-X.XQ	B.5
1927060150	SAIL-M8BW-3-1.5Q	B.18
1927060150	SAIL-M8BW-3-1.5Q	B.5
1927060300	SAIL-M8BW-3-3.0Q	B.5
1927060500	SAIL-M8BW-3-5.0Q	B.5
1927061000	SAIL-M8BW-3-10Q	B.5
1927070000	SAIL-M8W-4-X.XQ	B.4
1927070150	SAIL-M8W-4-1.5Q	B.18
1927070150	SAIL-M8W-4-1.5Q	B.4
1927070300	SAIL-M8W-4-3.0Q	B.4
1927070500	SAIL-M8W-4-5.0Q	B.4
1927071000	SAIL-M8W-4-10Q	B.4
1927080000	SAIL-M8BWS-4-X.XQ	B.5
1927080150	SAIL-M8BW-4-1.5Q	B.18
1927080150	SAIL-M8BW-4-1.5Q	B.5
1927080300	SAIL-M8BW-4-3.0Q	B.5
1927080500	SAIL-M8BW-4-5.0Q	B.5
1927081000	SAIL-M8BW-4-10Q	B.5
1927090000	SAIL-M8BWS-3LX.XQ	B.5
1927090150	SAIL-M8BW-3L1.5Q	B.20
1927090150	SAIL-M8BW-3L1.5Q	B.5
1927090300	SAIL-M8BW-3L3.0Q	B.5
1927090500	SAIL-M8BW-3L5.0Q	B.5
1927091000	SAIL-M8BW-3L10Q	B.5
1927100150	SAIL-M8BW-4L1.5Q	B.20
1927150000	SAIL-M8GM8G-3-X.XV	B.4
1927150150	SAIL-M8GM8G-3-1.5V	B.32
1927150150	SAIL-M8GM8G-3-1.5V	B.4
1927150300	SAIL-M8GM8G-3-3.0V	B.4
1927150500	SAIL-M8GM8G-3-5.0V	B.4
1927151000	SAIL-M8GM8G-3-10V	B.4
1927160000	SAIL-M8GM8G-4-X.XV	B.5
1927160150	SAIL-M8GM8G-4-1.5V	B.32
1927160150	SAIL-M8GM8G-4-1.5V	B.5
1927160300	SAIL-M8GM8G-4-3.0V	B.5
1927160500	SAIL-M8GM8G-4-5.0V	B.5
1927161000	SAIL-M8GM8G-4-10V	B.5
1927170000	SAIL-M8GM8W-3-X.XV	B.5
1927170150	SAIL-M8GM8W-3-1.5V	B.32
1927170150	SAIL-M8GM8W-3-1.5V	B.5
1927170300	SAIL-M8GM8W-3-3.0V	B.5
1927170500	SAIL-M8GM8W-3-5.0V	B.5
1927171000	SAIL-M8GM8W-3-10V	B.5
1927180000	SAIL-M8GM8W-4-X.XV	B.5
1927180150	SAIL-M8GM8W-4-1.5V	B.32
1927180150	SAIL-M8GM8W-4-1.5V	B.5
1927180300	SAIL-M8GM8W-4-3.0V	B.5
1927180500	SAIL-M8GM8W-4-5.0V	B.5
1927181000	SAIL-M8GM8W-4-10V	B.5
1927190000	SAIL-M8GM8W-3LX.XV	B.5
1927190150	SAIL-M8GM8W-3L1.5V	B.34
1927190150	SAIL-M8GM8W-3L1.5V	B.5

Order No.	Type	Page
1927190300	SAIL-M8GM8W-3L3.0V	B.5
1927190500	SAIL-M8GM8W-3L5.0V	B.5
1927191000	SAIL-M8GM8W-3L10V	B.5
1927200150	SAIL-M8GM8W-4L1.5V	B.34
1927210000	SAIL-M8WM8W-3-X.XV	B.5
1927210150	SAIL-M8WM8W-3-1.5V	B.32
1927210150	SAIL-M8WM8W-3-1.5V	B.5
1927210300	SAIL-M8WM8W-3-3.0V	B.5
1927210500	SAIL-M8WM8W-3-5.0V	B.5
1927211000	SAIL-M8WM8W-3-10V	B.5
1927220000	SAIL-M8WM8W-4-X.XV	B.5
1927220150	SAIL-M8WM8W-4-1.5V	B.32
1927220150	SAIL-M8WM8W-4-1.5V	B.5
1927220300	SAIL-M8WM8W-4-3.0V	B.5
1927220500	SAIL-M8WM8W-4-5.0V	B.5
1927221000	SAIL-M8WM8W-4-10V	B.5
1927230000	SAIL-M8G-3-X.XV	B.4
1927230150	SAIL-M8G-3-1.5V	B.18
1927230150	SAIL-M8G-3-1.5V	B.4
1927230300	SAIL-M8G-3-3.0V	B.4
1927230500	SAIL-M8G-3-5.0V	B.4
1927231000	SAIL-M8G-3-10V	B.4
1927240000	SAIL-M8BGS-3-X.XV	B.4
1927240150	SAIL-M8BG-3-1.5V	B.18
1927240150	SAIL-M8BG-3-1.5V	B.4
1927240300	SAIL-M8BG-3-3.0V	B.4
1927240500	SAIL-M8BG-3-5.0V	B.4
1927241000	SAIL-M8BG-3-10V	B.4
1927250000	SAIL-M8G-4-X.XV	B.4
1927250150	SAIL-M8G-4-1.5V	B.18
1927250150	SAIL-M8G-4-1.5V	B.4
1927250300	SAIL-M8G-4-3.0V	B.4
1927250500	SAIL-M8G-4-5.0V	B.4
1927251000	SAIL-M8G-4-10V	B.4
1927260000	SAIL-M8BGS-4-X.XV	B.5
1927260150	SAIL-M8BG-4-1.5V	B.18
1927260150	SAIL-M8BG-4-1.5V	B.5
1927260300	SAIL-M8BG-4-3.0V	B.5
1927260500	SAIL-M8BG-4-5.0V	B.5
1927261000	SAIL-M8BG-4-10V	B.5
1927310000	SAIL-M8W-3-X.XV	B.4
1927310150	SAIL-M8W-3-1.5V	B.18
1927310150	SAIL-M8W-3-1.5V	B.4
1927310300	SAIL-M8W-3-3.0V	B.4
1927310500	SAIL-M8W-3-5.0V	B.4
1927311000	SAIL-M8W-3-10V	B.4
1927320000	SAIL-M8BWS-3-X.XV	B.5
1927320150	SAIL-M8BW-3-1.5V	B.18
1927320150	SAIL-M8BW-3-1.5V	B.5
1927320300	SAIL-M8BW-3-3.0V	B.5
1927320500	SAIL-M8BW-3-5.0V	B.5
1927321000	SAIL-M8BW-3-10V	B.5
1927330000	SAIL-M8W-4-X.XV	B.4
1927330150	SAIL-M8W-4-1.5V	B.18
1927330150	SAIL-M8W-4-1.5V	B.4
1927330300	SAIL-M8W-4-3.0V	B.4
1927330500	SAIL-M8W-4-5.0V	B.4
1927331000	SAIL-M8W-4-10V	B.4
1927340000	SAIL-M8BWS-4-X.XV	B.5
1927340150	SAIL-M8BW-4-1.5V	B.18
1927340150	SAIL-M8BW-4-1.5V	B.5
1927340300	SAIL-M8BW-4-3.0V	B.5
1927340500	SAIL-M8BW-4-5.0V	B.5
1927341000	SAIL-M8BW-4-10V	B.5
1927350000	SAIL-M8BWS-3LX.XV	B.5
1927350150	SAIL-M8BW-3L1.5V	B.20
1927350150	SAIL-M8BW-3L1.5V	B.5
1927350300	SAIL-M8BW-3L3.0V	B.5
1927350500	SAIL-M8BW-3L5.0V	B.5
1927351000	SAIL-M8BW-3L10V	B.5
1927360150	SAIL-M8BW-4L1.5V	B.20

1930000000

1932380000	SAI-6-S 3P M8 L OL	G.50
1933640000	SAIH-PB-2X0.34-PVC	C.9
1934200000	PB SUB-D ZF TERM PS	C.15
1935610000	SAIBW-4/7-(KV)	D.9
1937950000	SAIL-M8GM12G-3-X.XU	B.6
1937950150	SAIL-M8GM12G-3-1.5U	B.6
1937950300	SAIL-M8GM12G-3-3.0U	B.6
1937950500	SAIL-M8GM12G-3-5.0U	B.6
1937951000	SAIL-M8GM12G-3-10U	B.6
1937960000	SAIL-M8GM12W-3-X.XU	B.7
1937960150	SAIL-M8GM12W-3-1.5U	B.7
1937960300	SAIL-M8GM12W-3-3.0U	B.7
1937960500	SAIL-M8GM12W-3-5.0U	B.7
1937961000	SAIL-M8GM12W-3-10U	B.7
1937970000	SAIL-M8WM12W-3-X.XU	B.7
1937970150	SAIL-M8WM12W-3-1.5U	B.7
1937970300	SAIL-M8WM12W-3-3.0U	B.7
1937970500	SAIL-M8WM12W-3-5.0U	B.7
1937971000	SAIL-M8WM12W-3-10U	B.7
1937980000	SAIL-M8GM12G-4-X.XU	B.6
1937980150	SAIL-M8GM12G-4-1.5U	B.6
1937980300	SAIL-M8GM12G-4-3.0U	B.6
1937980500	SAIL-M8GM12G-4-5.0U	B.6
1937981000	SAIL-M8GM12G-4-10U	B.6
1937990000	SAIL-M8GM12W-4-X.XU	B.7
1937990150	SAIL-M8GM12W-4-1.5U	B.7

Order No.	Type	Page
1937990300	SAIL-M8GM12W-4-3.0U	B.7
1937990500	SAIL-M8GM12W-4-5.0U	B.7
1937991000	SAIL-M8GM12W-4-10U	B.7
1938000000	SAIL-M8WM12W-4-X.XU	B.7
1938000150	SAIL-M8WM12W-4-1.5U	B.7
1938000300	SAIL-M8WM12W-4-3.0U	B.7
1938000500	SAIL-M8WM12W-4-5.0U	B.7
1938001000	SAIL-M8WM12W-4-10U	B.7
1938040150	SAIL-M12GM8G-3-1.5Q	B.29
1938050000	SAIL-M12GM8W-3-X.XQ	B.5
1938050150	SAIL-M12GM8W-3-1.5Q	B.29
1938050150	SAIL-M12GM8W-3-1.5Q	B.5
1938050300	SAIL-M12GM8W-3-3.0Q	B.5
1938050500	SAIL-M12GM8W-3-5.0Q	B.5
1938051000	SAIL-M12GM8W-3-10Q	B.5
1938060000	SAIL-M12WM8W-3-X.XQ	B.5
1938060150	SAIL-M12WM8W-3-1.5Q	B.29
1938060150	SAIL-M12WM8W-3-1.5Q	B.5
1938060300	SAIL-M12WM8W-3-3.0Q	B.5
1938060500	SAIL-M12WM8W-3-5.0Q	B.5
1938061000	SAIL-M12WM8W-3-10Q	B.5
1938070000	SAIL-M12GM8G-4-X.XQ	B.5
1938070150	SAIL-M12GM8G-4-1.5Q	B.29
1938070150	SAIL-M12GM8G-4-1.5Q	B.5
1938070300	SAIL-M12GM8G-4-3.0Q	B.5
1938070500	SAIL-M12GM8G-4-5.0Q	B.5
1938071000	SAIL-M12GM8G-4-10Q	B.5
1938080000	SAIL-M12GM8W-4-X.XQ	B.5
1938080150	SAIL-M12GM8W-4-1.5Q	B.29
1938080150	SAIL-M12GM8W-4-1.5Q	B.5
1938080300	SAIL-M12GM8W-4-3.0Q	B.5
1938080500	SAIL-M12GM8W-4-5.0Q	B.5
1938081000	SAIL-M12GM8W-4-10Q	B.5
1938090000	SAIL-M12WM8W-4-X.XQ	B.5
1938090150	SAIL-M12WM8W-4-1.5Q	B.29
1938090150	SAIL-M12WM8W-4-1.5Q	B.5
1938090300	SAIL-M12WM8W-4-3.0Q	B.5
1938090500	SAIL-M12WM8W-4-5.0Q	B.5
1938091000	SAIL-M12WM8W-4-10Q	B.5
1938100000	SAIL-M8GM12G-3-X.XQ	B.6
1938100150	SAIL-M8GM12G-3-1.5Q	B.6
1938100300	SAIL-M8GM12G-3-3.0Q	B.6
1938100500	SAIL-M8GM12G-3-5.0Q	B.6
1938101000	SAIL-M8GM12G-3-10Q	B.6
1938110000	SAIL-M8GM12W-3-X.XQ	B.7
1938110150	SAIL-M8GM12W-3-1.5Q	B.7
1938110300	SAIL-M8GM12W-3-3.0Q	B.7
1938110500	SAIL-M8GM12W-3-5.0Q	B.7
1938111000	SAIL-M8GM12W-3-10Q	B.7
1938120000	SAIL-M8WM12W-3-X.XQ	B.7
1938120150	SAIL-M8WM12W-3-1.5Q	B.7
1938120300	SAIL-M8WM12W-3-3.0Q	B.7
1938120500	SAIL-M8WM12W-3-5.0Q	B.7
1938121000	SAIL-M8WM12W-3-10Q	B.7
1938130000	SAIL-M8GM12G-4-X.XQ	B.6
1938130150	SAIL-M8GM12G-4-1.5Q	B.6
1938130300	SAIL-M8GM12G-4-3.0Q	B.6
1938130500	SAIL-M8GM12G-4-5.0Q	B.6
1938131000	SAIL-M8GM12G-4-10Q	B.6
1938140000	SAIL-M8GM12W-4-X.XQ	B.7
1938140150	SAIL-M8GM12W-4-1.5Q	B.7
1938140300	SAIL-M8GM12W-4-3.0Q	B.7
1938140500	SAIL-M8GM12W-4-5.0Q	B.7
1938141000	SAIL-M8GM12W-4-10Q	B.7
1938150000	SAIL-M8WM12W-4-X.XQ	B.7
1938150150	SAIL-M8WM12W-4-1.5Q	B.7
1938150300	SAIL-M8WM12W-4-3.0Q	B.7
1938150500	SAIL-M8WM12W-4-5.0Q	B.7
1938151000	SAIL-M8WM12W-4-10Q	B.7
1938170150	SAIL-M12GM8G-3-1.5V	B.29
1938180000	SAIL-M12GM8W-3-X.XV	B.5
1938180150	SAIL-M12GM8W-3-1.5V	B.29
1938180150	SAIL-M12GM8W-3-1.5V	B.5
1938180300	SAIL-M12GM8W-3-3.0V	B.5
1938180500	SAIL-M12GM8W-3-5.0V	B.5
1938181000	SAIL-M12GM8W-3-10V	B.5
1938190000	SAIL-M12WM8W-3-X.XV	B.5
1938190150	SAIL-M12WM8W-3-1.5V	B.29
1938190150	SAIL-M12WM8W-3-1.5V	B.5
1938190300	SAIL-M12WM8W-3-3.0V	B.5
1938190500	SAIL-M12WM8W-3-5.0V	B.5
1938191000	SAIL-M12WM8W-3-10V	B.5
1938200000	SAIL-M12GM8G-4-X.XV	B.5
1938200150	SAIL-M12GM8G-4-1.5V	B.29
1938200150	SAIL-M12GM8G-4-1.5V	B.5
1938200300	SAIL-M12GM8G-4-3.0V	B.5
1938200500	SAIL-M12GM8G-4-5.0V	B.5
1938201000	SAIL-M12GM8G-4-10V	B.5
1938210000	SAIL-M12GM8W-4-X.XV	B.5
1938210150	SAIL-M12GM8W-4-1.5V	B.29
1938210150	SAIL-M12GM8W-4-1.5V	B.5
1938210300	SAIL-M12GM8W-4-3.0V	B.5
1938210500	SAIL-M12GM8W-4-5.0V	B.5
1938211000	SAIL-M12GM8W-4-10V	B.5
1938220000	SAIL-M12WM8W-4-X.XV	B.5
1938220150	SAIL-M12WM8W-4-1.5V	B.29
1938220150	SAIL-M12WM8W-4-1.5V	B.5
1938220300	SAIL-M12WM8W-4-3.0V	B.5
1938220500	SAIL-M12WM8W-4-5.0V	B.5
1938221000	SAIL-M12WM8W-4-10V	B.5

Order No.	Type	Page
1938230000	SAIL-M8GM12G-3-X.XV	B.6
1938230150	SAIL-M8GM12G-3-1.5V	B.6
1938230300	SAIL-M8GM12G-3-3.0V	B.6
1938230500	SAIL-M8GM12G-3-5.0V	B.6
1938231000	SAIL-M8GM12G-3-10V	B.6
1938240000	SAIL-M8GM12W-3-X.XV	B.7
1938240150	SAIL-M8GM12W-3-1.5V	B.7
1938240300	SAIL-M8GM12W-3-3.0V	B.7
1938240500	SAIL-M8GM12W-3-5.0V	B.7
1938241000	SAIL-M8GM12W-3-10V	B.7
1938250000	SAIL-M8WM12W-3-X.XV	B.7
1938250150	SAIL-M8WM12W-3-1.5V	B.7
1938250300	SAIL-M8WM12W-3-3.0V	B.7
1938250500	SAIL-M8WM12W-3-5.0V	B.7
1938251000	SAIL-M8WM12W-3-10V	B.7
1938260000	SAIL-M8GM12G-4-X.XV	B.6
1938260150	SAIL-M8GM12G-4-1.5V	B.6
1938260300	SAIL-M8GM12G-4-3.0V	B.6
1938260500	SAIL-M8GM12G-4-5.0V	B.6
1938261000	SAIL-M8GM12G-4-10V	B.6
1938270000	SAIL-M8GM12W-4-X.XV	B.7
1938270150	SAIL-M8GM12W-4-1.5V	B.7
1938270300	SAIL-M8GM12W-4-3.0V	B.7
1938270500	SAIL-M8GM12W-4-5.0V	B.7
1938271000	SAIL-M8GM12W-4-10V	B.7
1938280000	SAIL-M8WM12W-4-X.XV	B.7
1938280150	SAIL-M8WM12W-4-1.5V	B.7
1938280300	SAIL-M8WM12W-4-3.0V	B.7
1938280500	SAIL-M8WM12W-4-5.0V	B.7
1938281000	SAIL-M8WM12W-4-10V	B.7
1938300000	SAI-SSA-PG7	D.34
1938550000	SAI-AU M12 PB GW 16DI	E.30
1938550000	SAI-AU M12 PB GW 16DI	E.31
1938550000	SAI-AU M12 PB GW 16DI	E.4
1938570000	SAI-AU M12 DN GW 16DI	E.32
1938570000	SAI-AU M12 DN GW 16DI	E.33
1938570000	SAI-AU M12 DN GW 16DI	E.4
1938580000	SAI-AU M12 IE GW 16DI	E.34
1938580000	SAI-AU M12 IE GW 16DI	E.35
1938580000	SAI-AU M12 IE GW 16DI	E.4
1938600000	SAI-AU M8 SB 8DI	E.31
1938600000	SAI-AU M8 SB 8DI	E.33
1938600000	SAI-AU M8 SB 8DI	E.35
1938600000	SAI-AU M8 SB 8DI	E.36
1938600000	SAI-AU M8 SB 8DI	E.4
1938610000	SAI-AU M12 SB 8DI	E.31
1938610000	SAI-AU M12 SB 8DI	E.33
1938610000	SAI-AU M12 SB 8DI	E.35
1938610000	SAI-AU M12 SB 8DI	E.36
1938610000	SAI-AU M12 SB 8DI	E.4
1938630000	SAI-AU M8 SB 8DIO	E.31
1938630000	SAI-AU M8 SB 8DIO	E.33
1938630000	SAI-AU M8 SB 8DIO	E.35
1938630000	SAI-AU M8 SB 8DIO	E.36
1938630000	SAI-AU M8 SB 8DIO	E.4
1938640000	SAI-AU M12 SB 8DIO	E.31
1938640000	SAI-AU M12 SB 8DIO	E.33
1938640000	SAI-AU M12 SB 8DIO	E.35
1938640000	SAI-AU M12 SB 8DIO	E.36
1938640000	SAI-AU M12 SB 8DIO	E.4
1938660000	SAI-AU M8 SB 8DO 2A	E.31
1938660000	SAI-AU M8 SB 8DO 2A	E.33
1938660000	SAI-AU M8 SB 8DO 2A	E.35
1938660000	SAI-AU M8 SB 8DO 2A	E.36
1938660000	SAI-AU M8 SB 8DO 2A	E.4
1938680000	SAI-AU M12 SB 8DO 2A	E.31
1938680000	SAI-AU M12 SB 8DO 2A	E.33
1938680000	SAI-AU M12 SB 8DO 2A	E.35
1938680000	SAI-AU M12 SB 8DO 2A	E.36
1938680000	SAI-AU M12 SB 8DO 2A	E.4
1938690000	SAI-AU M12 SB 4AI	E.31
1938690000	SAI-AU M12 SB 4AI	E.33
1938690000	SAI-AU M12 SB 4AI	E.35
1938690000	SAI-AU M12 SB 4AI	E.37
1938690000	SAI-AU M12 SB 4AI	E.4
1938700000	SAI-AU M12 SB 4AO	E.31
1938700000	SAI-AU M12 SB 4AO	E.33
1938700000	SAI-AU M12 SB 4AO	E.35
1938700000	SAI-AU M12 SB 4AO	E.37
1938700000	SAI-AU M12 SB 4AO	E.4
1938710000	SAI-AU M12 SB 4PT100	E.31
1938710000	SAI-AU M12 SB 4PT100	E.33
1938710000	SAI-AU M12 SB 4PT100	E.35
1938710000	SAI-AU M12 SB 4PT100	E.4
1938710000	SAI-AU M12 SB 4PT100	E.40
1938720000	SAI-AU M12 SB 4Thermo	E.31
1938720000	SAI-AU M12 SB 4Thermo	E.33
1938720000	SAI-AU M12 SB 4Thermo	E.35
1938720000	SAI-AU M12 SB 4Thermo	E.39
1938720000	SAI-AU M12 SB 4Thermo	E.4
1938730000	SAI-AU M12 SB 2Counter	E.31
1938730000	SAI-AU M12 SB 2Counter	E.33
1938730000	SAI-AU M12 SB 2Counter	E.35
1938730000	SAI-AU M12 SB 2Counter	E.38
1938730000	SAI-AU M12 SB 2Counter	E.4
1939170000	SAI-SCREWTY TOOL BOX	I.6
1939180000	SAI-SCREWTY BOX	I.6
1939370150	SAIL-M12BW-VA-2/4-1.5U	B.13
1939410150	SAIL-M12BG-VA-2/4-1.5U	B.13

1940000000

Order No.	Type	Page
1944570000	SAISW-M-5/8 M12 B-COD	C.11
1944570000	SAISW-M-5/8 M12 B-COD	D.14
1944570000	SAISW-M-5/8 M12 B-COD	D.5
1944580000	SAIBW-M-5/8 M12 B-COD	C.11
1944580000	SAIBW-M-5/8 M12 B-COD	D.14
1944580000	SAIBW-M-5/8 M12 B-COD	D.5
1948470150	SAIL-M8GM8GR-3-1.5U	B.33
1948480150	SAIL-M8GM8WR-3-1.5U	B.33
1948490150	SAIL-M8WM8WR-3-1.5U	B.33
1948500150	SAIL-M8GM8GR-4-1.5U	B.33
1948510150	SAIL-M8GM8WR-4-1.5U	B.33
1948520150	SAIL-M8WM8WR-4-1.5U	B.33
1948530150	SAIL-M8BGR-4-1.5U	B.19
1948540150	SAIL-M8BWR-4-1.5U	B.19
1948550150	SAIL-M8GM8GR-3-1.5Q	B.33
1948560150	SAIL-M8GM8WR-3-1.5Q	B.33
1948570150	SAIL-M8WM8WR-3-1.5Q	B.33
1948580150	SAIL-M8GM8GR-4-1.5Q	B.33
1948590150	SAIL-M8GM8WR-4-1.5Q	B.33
1948600150	SAIL-M8WM8WR-4-1.5Q	B.33
1948610150	SAIL-M8BGR-3-1.5Q	B.19
1948620150	SAIL-M8BWR-3-1.5Q	B.19
1948630150	SAIL-M8BGR-4-1.5Q	B.19
1948640150	SAIL-M8BWR-4-1.5Q	B.19
1948650150	SAIL-M8GM8GR-3-1.5V	B.33
1948660150	SAIL-M8GM8WR-3-1.5V	B.33
1948670150	SAIL-M8WM8WR-3-1.5V	B.33
1948680150	SAIL-M8GM8GR-4-1.5V	B.33
1948690150	SAIL-M8GM8WR-4-1.5V	B.33
1948700150	SAIL-M8WM8WR-4-1.5V	B.33
1948710150	SAIL-M8BGR-3-1.5V	B.19
1948720150	SAIL-M8BWR-3-1.5V	B.19
1948730150	SAIL-M8BGR-4-1.5V	B.19
1948740150	SAIL-M8BWR-4-1.5V	B.19

1950000000

Order No.	Type	Page
1950270000	SAIE-EW-M20/PG9-SW24-VA	C.33
1955340000	SAIEND CAN M8 4P	C.61
1955340000	SAIEND CAN M8 4P	E.31
1955340000	SAIEND CAN M8 4P	E.33
1955340000	SAIEND CAN M8 4P	E.35

1960000000

Order No.	Type	Page
1962240000	SAI-AU M12 USB GW 8I8O	E.34
1962240000	SAI-AU M12 USB GW 8I8O	E.35
1962240000	SAI-AU M12 USB GW 8I8O	E.4
1962270150	SAIL-M12GM8W-3L1.5Q	B.31
1962280150	SAIL-M12GM8W-4L1.5Q	B.31
1962290150	SAIL-M12GM8W-3L1.5V	B.31
1962300150	SAIL-M12GM8W-4L1.5V	B.31
1962610000	SAISW-5/7-(KV)	D.9
1962620000	SAISW-4/7-(KV)	D.9
1962630000	SAIBW-5/7-(KV)	D.9
1963910150	SAIL-M12GM12W-4-3L1.5U	B.27
1963930150	SAIL-M12GM12W-4-3L1.5V	B.27
1963940150	SAIL-M12BW-4-3L1.5U	B.15
1963950150	SAIL-M12BW-4-3L1.5Q	B.15
1963960150	SAIL-M12BW-4-3L1.5V	B.15
1964280150	SAIL-ZW-M12BW-2/4-1.5U	B.38
1964290150	SAIL-ZW-M12BW-2/4L1.5U	B.38
1964300150	SAIL-ZW-M8BW-3-1.5U	B.39
1964310150	SAIL-ZW-3-1.5U	B.17
1964690150	SAIL-M12BG-CD-1.5A	C.58
1964700150	SAIL-M12G-CD-1.5A	C.58
1964710150	SAIL-M12GM12G-CD-1.5A	C.59
1968220000	SAI-AU M12 PB 8DI8DO 2A	E.10
1968220000	SAI-AU M12 PB 8DI8DO 2A	E.4
1968220000	SAI-AU M12 PB 8DI8DO 2A	E.8
1968560150	SAIL-M12BW-3-1.5T	B.11
1968570150	SAIL-M12BW-4-1.5T	B.11
1968580150	SAIL-M12BG-4-1.5T	B.11
1968590150	SAIL-M12BG-3-1.5T	B.11

1970000000

Order No.	Type	Page
1975450000	SAI-AU M8 PB 8DI8DO 2A	E.10
1975450000	SAI-AU M8 PB 8DI8DO 2A	E.4
1975450000	SAI-AU M8 PB 8DI8DO 2A	E.8

1980000000

Order No.	Type	Page
1981560000	Screwty M23	I.5
1981900030	SAIL-M8GM8G-4S-0.3Q-SB	C.61
1981900100	SAIL-M8GM8G-4S-1.0Q-SB	C.61
1981900150	SAIL-M8GM8G-4S-1.5Q-SB	C.61
1981900300	SAIL-M8GM8G-4S-3.0Q-SB	C.61
1981900500	SAIL-M8GM8G-4S-5.0Q-SB	C.61
1981901000	SAIL-M8GM8G-4S-10Q-SB	C.61
1981901500	SAIL-M8GM8G-4S-15Q-SB	C.61
1981902000	SAIL-M8GM8G-4S-20Q-SB	C.61
1981910150	SAIL-M8BG-4S-1.5Q-SB	C.61
1981910300	SAIL-M8BG-4S-3.0Q-SB	C.61
1981910500	SAIL-M8BG-4S-5.0Q-SB	C.61
1981911000	SAIL-M8BG-4S-10Q-SB	C.61
1984530150	SAIL-M12GM8GR-3-1.5U	B.30

1990000000

Order No.	Type	Page
1995800000	SAI-M23-GS-L-7/12	H.18
1995810000	SAI-M23-BE-L-4/4	H.20
1995820000	SAI-M23-KBC-0.75/2.50	H.21
1995820000	SAI-M23-KBC-0.75/2.50	I.12
1995830000	SAI-M23-KBC-0.25/1.00	H.21
1995830000	SAI-M23-KBC-0.25/1.00	I.12
1995840000	SAI-M23-GS-7/12	H.12
1995850000	SAI-M23-BE-12	H.14
1995860000	SAI-M23-KBC-0.08/0.56	H.16
1995860000	SAI-M23-KBC-0.08/0.56	I.12
1995860000	SAI-M23-KBC-0.08/0.56	I.13

2330000000

Order No.	Type	Page
2330260000	SAI-SK-M12-UNI	D.27
2330260000	SAI-SK-M12-UNI	E.10
2330260000	SAI-SK-M12-UNI	E.14
2330260000	SAI-SK-M12-UNI	E.18
2330260000	SAI-SK-M12-UNI	E.22
2330260000	SAI-SK-M12-UNI	E.26
2330260000	SAI-SK-M12-UNI	E.31
2330260000	SAI-SK-M12-UNI	E.33
2330260000	SAI-SK-M12-UNI	E.35
2330260000	SAI-SK-M12-UNI	E.45

4290000000

Order No.	Type	Page
4294820000	1/4" Handgriff	I.5

7910000000

Order No.	Type	Page
7915030000	SAI-8-F 5P 2M 0.5/1.0U	G.9

8390000000

Order No.	Type	Page
8395500000	PB-DP SUB-D	C.14

8420000000

Order No.	Type	Page
8425910000	POS-4P M12 PG13,5 300 mm	C.33
8425930000	POS-4P M12 M20 150mm	C.33
8425940000	POS-4P M12 M20 300mm	C.33
8425960000	SAI-SK-M12 BU	D.27
8426220000	FBCon M12 4P FM EMC	C.31
8426220000	FBCon M12 4P FM EMC	D.12
8426220000	FBCon M12 4P FM EMC	D.5

8460000000

Order No.	Type	Page
8460860000	PB-DP SUB-D TERM	C.15

8550000000

Order No.	Type	Page
8556460000	FBCon Term.D Ex FM	C.56

8560000000

Order No.	Type	Page
8564060000	FBCon PA CG/M12 1way	C.36
8564070000	FBCon PA CG/M12 2way	C.37
8564080000	FBCon PA CG/M12 4way	C.38
8564090000	FBCon PA CG 1way	C.36
8564100000	FBCon PA CG 2way	C.37
8564110000	FBCon PA CG 4way	C.38
8564150000	FBCon PA CG/M12 1way Ex	C.52
8564160000	FBCon PA CG/M12 2way Ex	C.53
8564170000	FBCon PA CG/M12 4way Ex	C.54
8564180000	FBCon PA CG 1way Ex	C.52
8564190000	FBCon PA CG 2way Ex	C.53
8564200000	FBCon PA CG 4way Ex	C.54
8564240000	FBCon PA CG 8way Ex	C.55
8564250000	FBCon PA CG/M12 8way Ex	C.55
8564290000	FBCon DP CG Term 24V	C.24
8564300000	FBCon PA CG 8way	C.39
8564310000	FBCon PA CG/M12 8way	C.39
8564320000	FBCon DP M12 Term 5V	C.24
8564330000	FBCon DP M12 Term 24V	C.24
8564340000	FBCon DP CG 1way	C.23
8564350000	FBCon DP M12 1way	C.23

8600000000

Order No.	Type	Page
8606180000	FBCon Term.D Ex FM/PEAN	C.56
8606190000	FBCon Term.D Ex	C.56
8606200000	FBCon Term.D Ex PEAN	C.56

8610000000

Order No.	Type	Page
8613670000	FBCon SS PCG 1way	C.36
8613680000	FBCon SS PCG 4way	C.38

8640000000

Order No.	Type	Page
8640720000	FBCon SS PCG 8way	C.39

8700000000

Order No.	Type	Page
8703430000	FBCon SS CG 1way	C.36
8703450000	FBCon SS CG 4way	C.38
8703470000	FBCon SS CG 8way	C.39

8710000000

Order No.	Type	Page
8714080000	FBCon PA CG/M12 1way OVP	C.41
8714090000	FBCon PA CG/M12 2way OVP	C.42
8714100000	FBCon PA CG/M12 4way OVP	C.43
8714110000	FBCon PA CG/M12 8way OVP	C.44
8714120000	FBCon PA CG 1way OVP	C.41
8714130000	FBCon PA CG 2way OVP	C.42
8714140000	FBCon PA CG 4way OVP	C.43
8714150000	FBCon PA CG 8way OVP	C.44
8714160000	FBCon PA CG/M12 1way Limiter	C.45
8714170000	FBCon PA CG/M12 2way Limiter	C.46
8714180000	FBCon PA CG/M12 4way Limiter	C.47
8714190000	FBCon PA CG/M12 8way Limiter	C.48
8714200000	FBCon PA CG 1way Limiter	C.45
8714210000	FBCon PA CG 2way Limiter	C.46
8714220000	FBCon PA CG 4way Limiter	C.47
8714230000	FBCon PA CG 8way Limiter	C.48
8714240000	FBCon SS DP PCG Term 24V	C.24
8714250000	FBCon SS DP M12 Term 24V	C.24
8714260000	FBCon SS DP PCG 1way	C.23
8714270000	FBCon SS DP M12 1way	C.23
8715260000	FBCon SS PCG 4way Limiter	C.47
8715270000	FBCon SS PCG 1way OVP	C.41

8720000000

Order No.	Type	Page
8726020000	FBCon SS CG/M12 1way	C.36
8726040000	FBCon SS CG/M12 4way	C.38
8726050000	FBCon SS CG/M12 8way	C.39
8726080000	FBCon SS PCG 4way OVP	C.43
8726090000	FBCon SS PCG 8way OVP	C.44
8726110000	FBCon SS PCG 1way Limiter	C.45
8726160000	FBCon SS PCG 8way Limiter	C.48

8770000000

Order No.	Type	Page
8771420000	JPR 24VDC 1CO M12	F.3
8771430000	JPR 24VDC ISO 1CO M12	F.3
8771440000	JPTA 50MS 24VDC PNP M12	F.4
8778490000	JP CLIP M	F.7

8780000000

Order No.	Type	Page
8788580000	RS PB-DP T SUB-D	C.25
8794080000	SAI JP 5P LG 100	F.8

8790000000

Order No.	Type	Page
8794090000	SAI JP 4P LG 100	F.8
8794120000	JP TEST	F.6

8800000000

Order No.	Type	Page
8800040000	RS PB-DP T	C.25

8830000000

Order No.	Type	Page
8836630000	JPTA100MS 24VDC PNP M12	F.4

8850000000

Order No.	Type	Page
8852350000	JPP NPN PNP 24VDC	F.5
8857030000	JPP PNP NPN 24VDC	F.5

9000000000

Order No.	Type	Page
9002650000	KT 8	I.7
9002660000	KT 12	I.7
9005000000	STRIPAX	I.9

9030000000

Order No.	Type	Page
9030060000	AM 12	I.8

9200000000

Order No.	Type	Page
9202210000	multi-stripax 6-16	I.11
9202250000	multi-stripax ASI	I.11
9202260000	AIE multi-stripax 6-16	I.11
9202300000	AIE multi-stripax ASI	I.11
9203070000	ERME MULTI-STRIPAX	I.11
9203100000	ERAN MULTI-STRIPAX	I.11
9203110000	STRIPPER 6-16 RED-LINE	I.8
9205760000	multi-stripax GKW LW	I.11
9205770000	AIE multi-stripax GKWLW	I.11

9450000000

Order No.	Type	Page
9455110000	AS-KG-GE	C.64
9455120000	AS-KG-SW	C.64
9455640000	FBCon M12 4P M EMC	C.31
9455640000	FBCon M12 4P M EMC	D.12
9455640000	FBCon M12 4P M EMC	D.5
9455650000	POS-4P M12 PG13,5 150mm	C.33
9456000000	SAI-4-S 4P M12	G.11
9456000000	SAI-4-S 4P M12	G.6
9456000001	SAI-4-S 5P M12	G.11

Order No.	Type	Page
9456000001	SAI-4-S 5P M12	G.6
9456010000	SAI-6-S 4P M12	G.11
9456010000	SAI-6-S 4P M12	G.6
9456010001	SAI-6-S 5P M12	G.11
9456010001	SAI-6-S 5P M12	G.6
9456020000	SAI-8-S 4P M12	G.11
9456020000	SAI-8-S 4P M12	G.6
9456050000	SAI-SK-M12	D.27
9456050000	SAI-SK-M12	E.10
9456050000	SAI-SK-M12	E.14
9456050000	SAI-SK-M12	E.18
9456050000	SAI-SK-M12	E.22
9456050000	SAI-SK-M12	E.26
9456050000	SAI-SK-M12	E.31
9456050000	SAI-SK-M12	E.33
9456050000	SAI-SK-M12	E.35
9456050000	SAI-SK-M12	E.45
9456070150	SAIL-VSBD-1,5U	B.46
9456100000	SAIL-M12G-4-X.XU	B.4
9456100150	SAIL-M12G-4-1.5U	B.11
9456100150	SAIL-M12G-4-1.5U	B.4
9456100300	SAIL-M12G-4-3.0U	B.4
9456100500	SAIL-M12G-4-5.0U	B.4
9456101000	SAIL-M12G-4-10U	B.4
9456140150	SAIL-M12BG-5S1.5Q	B.16
9456150000	SAIL-M8BW-4-X.XU	B.5
9456150150	SAIL-M8BW-4-1.5U	B.18
9456150150	SAIL-M8BW-4-1.5U	B.5
9456150300	SAIL-M8BW-4-3.0U	B.5
9456150500	SAIL-M8BW-4-5.0U	B.5
9456151000	SAIL-M8BW-4-10U	B.5
9456170150	SAIL-VSCD-M12G-1.5U	B.47
9456180000	SAI-4-F 4P PUR 3M	G.9
9456190000	SAI-4-F 4P PUR 5M	G.6
9456190000	SAI-4-F 4P PUR 5M	G.9
9456190002	SAI-4-FMM-4P M12 5M	G.31
9456190002	SAI-4-FMM-4P M12 5M	G.32
9456190002	SAI-4-FMM-4P M12 5M	G.6
9456200000	SAI-4-F 4P PUR 10M	G.6
9456200000	SAI-4-F 4P PUR 10M	G.9
9456200002	SAI-4-FMM-4P M12 10M	G.31
9456200002	SAI-4-FMM-4P M12 10M	G.32
9456200002	SAI-4-FMM-4P M12 10M	G.6
9456210000	SAI-4-F 4P PUR 15M	G.6
9456210000	SAI-4-F 4P PUR 15M	G.9
9456230000	SAI-4-F 4P PUR 20M	G.6
9456230000	SAI-4-F 4P PUR 20M	G.9
9456240150	SAIL-VSCD-1.5U	B.47
9456320000	SAI-4-F 5P PUR 3M	G.9
9456330000	SAI-4-F 5P PUR 5M	G.6
9456330000	SAI-4-F 5P PUR 5M	G.9
9456340000	SAI-4-F 5P PUR 10M	G.6
9456340000	SAI-4-F 5P PUR 10M	G.9
9456350000	SAI-4-F 5P PUR 15M	G.6
9456350000	SAI-4-F 5P PUR 15M	G.9
9456370000	SAI-4-F 5P PUR 20M	G.6
9456370000	SAI-4-F 5P PUR 20M	G.9
9456380000	SAIL-M12BW-4-2LX.XU	B.8
9456380150	SAIL-M12BW-4-2L1.5U	B.15
9456380150	SAIL-M12BW-4-2L1.5U	B.8
9456380300	SAIL-M12BW-4-2L3.0U	B.8
9456380500	SAIL-M12BW-4-2L5.0U	B.8
9456381000	SAIL-M12BW-4-2L10U	B.8
9456460000	SAI-6-F 4P PUR 3M	G.9
9456470000	SAI-6-F 4P PUR 5M	G.6
9456470000	SAI-6-F 4P PUR 5M	G.9
9456480000	SAI-6-F 4P PUR 10M	G.6
9456480000	SAI-6-F 4P PUR 10M	G.9
9456490000	SAI-6-F 4P PUR 15M	G.6
9456490000	SAI-6-F 4P PUR 15M	G.9
9456500000	SAIL-M12WM12G-5-X.XU	B.7
9456500150	SAIL-M12WM12G-5-1.5U	B.7
9456500300	SAIL-M12WM12G-5-3.0U	B.7
9456500500	SAIL-M12WM12G-5-5.0U	B.7
9456501000	SAIL-M12WM12G-5-10U	B.7
9456510000	SAI-6-F 4P PUR 20M	G.6
9456510000	SAI-6-F 4P PUR 20M	G.9
9456600000	SAI-6-F 5P PUR 3M	G.9
9456610000	SAI-6-F 5P PUR 5M	G.6
9456610000	SAI-6-F 5P PUR 5M	G.9
9456620000	SAI-6-F 5P PUR 10M	G.6
9456620000	SAI-6-F 5P PUR 10M	G.9
9456630000	SAI-6-F 5P PUR 15M	G.6
9456630000	SAI-6-F 5P PUR 15M	G.9
9456650000	SAI-6-F 5P PUR 20M	G.6
9456650000	SAI-6-F 5P PUR 20M	G.9
9456660000	SAIL-M12GM8G-4-X.XU	B.5
9456660150	SAIL-M12GM8G-4-1.5U	B.29
9456660150	SAIL-M12GM8G-4-1.5U	B.5
9456660300	SAIL-M12GM8G-4-3.0U	B.5
9456660500	SAIL-M12GM8G-4-5.0U	B.5
9456661000	SAIL-M12GM8G-4-10U	B.5
9456670000	SAIL-M12GM8W-4-X.XU	B.5
9456670150	SAIL-M12GM8W-4-1.5U	B.29
9456670150	SAIL-M12GM8W-4-1.5U	B.5
9456670300	SAIL-M12GM8W-4-3.0U	B.5
9456670500	SAIL-M12GM8W-4-5.0U	B.5
9456671000	SAIL-M12GM8W-4-10U	B.5
9456690000	SAIL-M12W-3-X.XU	B.4
9456690150	SAIL-M12W-3-1.5U	B.11
9456690150	SAIL-M12W-3-1.5U	B.4
9456690300	SAIL-M12W-3-3.0U	B.4
9456690500	SAIL-M12W-3-5.0U	B.4
9456691000	SAIL-M12W-3-10U	B.4
9456740000	SAI-8-F 4P PUR 3M	G.9
9456750000	SAI-8-F 4P PUR 5M	G.6
9456750000	SAI-8-F 4P PUR 5M	G.9
9456750002	SAI-8-FMM-4P M12 5M	G.31
9456750002	SAI-8-FMM-4P M12 5M	G.32
9456750002	SAI-8-FMM-4P M12 5M	G.6
9456760000	SAI-8-F 4P PUR 10M	G.6
9456760000	SAI-8-F 4P PUR 10M	G.9
9456760002	SAI-8-FMM-4P M12 10M	G.31
9456760002	SAI-8-FMM-4P M12 10M	G.32
9456760002	SAI-8-FMM-4P M12 10M	G.6
9456770000	SAI-8-F 4P PUR 15M	G.6
9456770000	SAI-8-F 4P PUR 15M	G.9
9456790000	SAI-8-F 4P PUR 20M	G.6
9456790000	SAI-8-F 4P PUR 20M	G.9
9456880000	SAI-8-F 5P PUR 3M	G.9
9456890000	SAI-8-F 5P PUR 5M	G.6
9456890000	SAI-8-F 5P PUR 5M	G.9
9456900000	SAI-8-F 5P PUR 10M	G.6
9456900000	SAI-8-F 5P PUR 10M	G.9
9456910000	SAI-8-F 5P PUR 15M	G.6
9456910000	SAI-8-F 5P PUR 15M	G.9
9456930000	SAI-8-F 5P PUR 20M	G.6
9456930000	SAI-8-F 5P PUR 20M	G.9
9456940000	SAIS-5/7	D.5
9456940000	SAIS-5/7	D.8
9456950000	SAISW-5/7	D.5
9456950000	SAISW-5/7	D.8
9456990150	SAIL-M12GM12G-2/4-1.5U	B.26
9457040000	SAIL-VSA-M12G-1.5U	B.45
9457150000	SAIL-M12GM12G-4-0.3U	F.7
9457160000	SAIL-M12GM12G-4-0.6U	F.7
9457170000	SAIL-M12GM12G-4-0.9U	F.7
9457230000	SAIL-M12GM12G-3-X.XU	B.6
9457230150	SAIL-M12GM12G-3-1.5U	B.25
9457230150	SAIL-M12GM12G-3-1.5U	B.6
9457230300	SAIL-M12GM12G-3-3.0U	B.6
9457230500	SAIL-M12GM12G-3-5.0U	B.6
9457231000	SAIL-M12GM12G-3-10U	B.6
9457240000	SAIB-4/7	D.5
9457240000	SAIB-4/7	D.7
9457250000	SAIB-5/7	D.5
9457250000	SAIB-5/7	D.8
9457260000	SAIBW-5/7	D.5
9457260000	SAIBW-5/7	D.8
9457270000	SAIL-M12GM12W-5-X.XU	B.7
9457270150	SAIL-M12GM12W-5-1.5U	B.25
9457270150	SAIL-M12GM12W-5-1.5U	B.7
9457270300	SAIL-M12GM12W-5-3.0U	B.7
9457270500	SAIL-M12GM12W-5-5.0U	B.7
9457271000	SAIL-M12GM12W-5-10U	B.7
9457290000	SAISW-4/7	D.5
9457290000	SAISW-4/7	D.7
9457310000	SAIL-M12GM12W-4-X.XU	B.7
9457310150	SAIL-M12GM12W-4-1.5U	B.25
9457310150	SAIL-M12GM12W-4-1.5U	B.7
9457310300	SAIL-M12GM12W-4-3.0U	B.7
9457310500	SAIL-M12GM12W-4-5.0U	B.7
9457311000	SAIL-M12GM12W-4-10U	B.7
9457320000	SAIL-M12BW-3-X.XU	B.7
9457320150	SAIL-M12BW-3-1.5U	B.11
9457320150	SAIL-M12BW-3-1.5U	B.7
9457320300	SAIL-M12BW-3-3.0U	B.7
9457320500	SAIL-M12BW-3-5.0U	B.7
9457321000	SAIL-M12BW-3-10U	B.7
9457340000	SAIL-M12GM12G-5-X.XU	B.7
9457340030	SAIL-M12GM12G-5-0.3U	F.7
9457340060	SAIL-M12GM12G-5-0.6U	F.7
9457340150	SAIL-M12GM12G-5-1.5U	B.25
9457340150	SAIL-M12GM12G-5-1.5U	B.7
9457340150	SAIL-M12GM12G-5-1.5U	F.7
9457340300	SAIL-M12GM12G-5-3.0U	B.7
9457340500	SAIL-M12GM12G-5-5.0U	B.7
9457341000	SAIL-M12GM12G-5-10U	B.7
9457350000	SAI-8-MF 5P PUR 5M OL	G.42
9457380000	SAIL-M8BWS-3-X.XU	B.5
9457380150	SAIL-M8BW-3-1.5U	B.18
9457380150	SAIL-M8BW-3-1.5U	B.5
9457380300	SAIL-M8BW-3-3.0U	B.5
9457380500	SAIL-M8BW-3-5.0U	B.5
9457381000	SAIL-M8BW-3-10U	B.5
9457390000	SAIL-M12GM12W-3-X.XU	B.7
9457390150	SAIL-M12GM12W-3-1.5U	B.25
9457390150	SAIL-M12GM12W-3-1.5U	B.7
9457390300	SAIL-M12GM12W-3-3.0U	B.7
9457390500	SAIL-M12GM12W-3-5.0U	B.7
9457391000	SAIL-M12GM12W-3-10U	B.7
9457400150	SAIL-VSC-M12G-1.5U	B.47
9457410150	SAIL-ZW-M8BW-3L1.5U	B.39
9457420000	SAIH-SLL-3x0,75-8x0,34	B.52
9457430000	SAI-8-MF 5P PUR 10m	G.42
9457450000	SAIL-M8BGS-3-X.XU	B.4
9457450150	SAIL-M8BG-3-1.5U	B.18
9457450150	SAIL-M8BG-3-1.5U	B.4
9457450300	SAIL-M8BG-3-3.0U	B.4
9457450500	SAIL-M8BG-3-5.0U	B.4
9457451000	SAIL-M8BG-3-10U	B.4
9457460000	SAIL-M8BW-3LX.XU	B.5
9457460150	SAIL-M8BW-3L1.5U	B.20
9457460150	SAIL-M8BW-3L1.5U	B.5
9457460300	SAIL-M8BW-3L3.0U	B.5
9457460500	SAIL-M8BW-3L5.0U	B.5
9457461000	SAIL-M8BW-3L10U	B.5
9457490150	SAIL-ZW-M8BG-3-1.5U	B.39
9457540000	SAIS-ZW-5	D.26
9457550000	SAIS-4/7	D.5
9457550000	SAIS-4/7	D.7
9457560000	SAIH-SLL-3X0.75-16X0.34	B.52
9457570150	SAIL-M12GM8WR-3-1.5U	B.30
9457590000	SAI-8-F 5P 5M 0.5/1.0U	G.9
9457600000	SAI-8-F 5P 10M 0.5/1.0U	G.9
9457610000	SAIL-M12G-5-X.XU	B.4
9457610150	SAIL-M12G-5-1.5U	B.11
9457610150	SAIL-M12G-5-1.5U	B.4
9457610300	SAIL-M12G-5-3.0U	B.4
9457610500	SAIL-M12G-5-5.0U	B.4
9457611000	SAIL-M12G-5-10U	B.4
9457670000	SAIL-M12W-5-X.XU	B.4
9457670150	SAIL-M12W-5-1.5U	B.11
9457670150	SAIL-M12W-5-1.5U	B.4
9457670300	SAIL-M12W-5-3.0U	B.4
9457670500	SAIL-M12W-5-5.0U	B.4
9457671000	SAIL-M12W-5-10U	B.4
9457680150	SAIL-VSB-M12G-1.5U	B.46
9457690000	SAIL-M12BW-5-X.XU	B.7
9457690150	SAIL-M12BW-5-1.5U	B.11
9457690150	SAIL-M12BW-5-1.5U	B.7
9457690300	SAIL-M12BW-5-3.0U	B.7
9457690500	SAIL-M12BW-5-5.0U	B.7
9457691000	SAIL-M12BW-5-10U	B.7
9457700000	SAIBW-4/7	D.5
9457700000	SAIBW-4/7	D.7
9457710150	SAIL-VSA-1.5U	B.45
9457720000	SAI-SA-3-IDC	D.20
9457720000	SAI-SA-3-IDC	G.24
9457730000	SAIL-M12BG-4-X.XU	B.6
9457730150	SAIL-M12BG-4-1.5U	B.11
9457730150	SAIL-M12BG-4-1.5U	B.6
9457730300	SAIL-M12BG-4-3.0U	B.6
9457730500	SAIL-M12BG-4-5.0U	B.6
9457731000	SAIL-M12BG-4-10U	B.6
9457740000	SAIL-M12GM12G-5-X.XU	B.7
9457740150	SAIL-M12BW-4-1.5U	B.11
9457740150	SAIL-M12BW-4-1.5U	B.7
9457740300	SAIL-M12BW-4-3.0U	B.7
9457740500	SAIL-M12BW-4-5.0U	B.7
9457741000	SAIL-M12BW-4-10U	B.7
9457760000	SAIL-M12GM8W-3LX.XU	B.5
9457760150	SAIL-M12GM8W-3L1.5U	B.31
9457760150	SAIL-M12GM8W-3L1.5U	B.5
9457760300	SAIL-M12GM8W-3L3.0U	B.5
9457760500	SAIL-M12GM8W-3L5.0U	B.5
9457761000	SAIL-M12GM8W-3L10U	B.5
9457770150	SAIL-M12GM8G-3-1.5U	B.29
9457780150	SAIL-VSBD-M12G-1.5U	B.46
9457790000	SAIL-M12GM12W-3LX.XU	B.8
9457790150	SAIL-M12GM12W-3L1.5U	B.27
9457790150	SAIL-M12GM12W-3L1.5U	B.8
9457790300	SAIL-M12GM12W-3L3.0U	B.8
9457790500	SAIL-M12GM12W-3L5.0U	B.8
9457791000	SAIL-M12GM12W-3L10U	B.8
9457800000	SAIL-M12BW-3LX.XU	B.8
9457800150	SAIL-M12BW-3L1.5U	B.15
9457800150	SAIL-M12BW-3L1.5U	B.8
9457800300	SAIL-M12BW-3L3.0U	B.8
9457800500	SAIL-M12BW-3L5.0U	B.8
9457801000	SAIL-M12BW-3L10U	B.8
9457810000	SAIL-M12G-3-X.XU	B.4
9457810150	SAIL-M12G-3-1.5U	B.11
9457810150	SAIL-M12G-3-1.5U	B.4
9457810300	SAIL-M12G-3-3.0U	B.4
9457810500	SAIL-M12G-3-5.0U	B.4
9457811000	SAIL-M12G-3-10U	B.4
9457820000	SAIL-M12BG-3-X.XU	B.6
9457820150	SAIL-M12BG-3-1.5U	B.11
9457820150	SAIL-M12BG-3-1.5U	B.6
9457820300	SAIL-M12BG-3-3.0U	B.6
9457820500	SAIL-M12BG-3-5.0U	B.6
9457821000	SAIL-M12BG-3-10U	B.6
9457850000	SAIL-M8BG-4-X.XU	B.5
9457850150	SAIL-M8BG-4-1.5U	B.18
9457850150	SAIL-M8BG-4-1.5U	B.5
9457850300	SAIL-M8BG-4-3.0U	B.5
9457850500	SAIL-M8BG-4-5.0U	B.5
9457851000	SAIL-M8BG-4-10U	B.5
9457890150	SAIL-M12GM12W-2/4-1.5U	B.26
9457900000	SAIL-M12WM12W-5-X.XU	B.7
9457900150	SAIL-M12WM12W-5-1.5U	B.25
9457900150	SAIL-M12WM12W-5-1.5U	B.7
9457900300	SAIL-M12WM12W-5-3.0U	B.7
9457900500	SAIL-M12WM12W-5-5.0U	B.7
9457901000	SAIL-M12WM12W-5-10U	B.7
9457910000	SAIL-M12BG-5-X.XU	B.7
9457910150	SAIL-M12BG-5-1.5U	B.11
9457910150	SAIL-M12BG-5-1.5U	B.7
9457910300	SAIL-M12BG-5-3.0U	B.7
9457910500	SAIL-M12BG-5-5.0U	B.7
9457911000	SAIL-M12BG-5-10U	B.7
9457920150	SAIL-VSC-1.5U	B.47
9457930150	SAIL-VSB-1.5U	B.46
9457950150	SAIL-M12BG-VA-4-1,5U	B.13
9457960150	SAIL-M12BW-VA-4-1,5U	B.13
9457970000	SAIH-SLL-5X0,75-16X0,34	B.52
9457980000	SAIL-M12GM8W-3-X.XU	B.5
9457980150	SAIL-M12GM8W-3-1.5U	B.29
9457980150	SAIL-M12GM8W-3-1.5U	B.5
9457980300	SAIL-M12GM8W-3-3.0U	B.5
9457980500	SAIL-M12GM8W-3-5.0U	B.5
9457981000	SAIL-M12GM8W-3-10U	B.5

Addresses worldwide

AE United Arab Emirates
Weidmuller Middle East FZE
P.O. Box 8591
SAIF-Zone
Sharjah – U. A. E.
Phone +971 6 5572723
Fax +971 6 5572724
wme.info@weidmueller.com

AR Argentina
CPI SA
Bauness 2660
1431 Buenos Aires
Phone +54 11 45238008
Fax + 54 11 45220546
info@cpi.com.ar
www.cpi.com.ar

AT Austria
Weidmüller GmbH.
Industriezentrum Nö Süd
Straße 2, Objekt M2
2355 Wiener Neudorf
Phone +43 2236 6708-0
Fax +43 2236 6708-199
office.at@weidmueller.com

AU Australia
Weidmüller Pty. Ltd.
P.O.Box 6944
Huntingwood Drive 43
Huntingwood,
NSW, 2148
Phone +61 2 9671-9999
Fax +61 2 9671-9911
info@weidmueller.com.au
www.weidmuller.com.au

AZ Azerbaijan
West Industries Ltd.
Caspian Plaza, 5-th Floor
44 J. Jabbarly Str., Baku
Phone +99412 499 15 15
Fax +99412 499 14 93
sales@west-i.com

BA Bosnia and Herzegovina
BH ES ELEKTROSISTEM d.o.o.
Bul. Vojvode S.
Stepanovica kod br. 272
78000 BiH - Banja Luka
Phone +387 51 420-340
Fax +387 51 420-341
elsist@inecco.net
www.elektrosistem.ba

BE Belgium
Weidmüller Benelux B.V.
Mechelsesteenweg 519 bus 6 en 7
1930 Nossegem
Phone +32 2 752 4070
Fax +32 2 751 3606
info@weidmueller.be
www.weidmueller.be

BG Bulgaria
Weid-Bul EOOD
1113 Sofia
33A Nezabravka, bl.
315, fl.3, ap. 10
Phone +359 2 9632560
Fax +359 2 9631098
weidbul@nat.bg
www.weidbul.com

BH Bahrain
Khayber Trading Company
P.O. Box 1976 Manama,
Phone +973 720747
Fax +973 720331
khayber@batelco.com.bh

BR Brazil
Conexel Conexoes Elétricas Ltda.
Rua Garcia Lorca, 176
09695-900, Sao Paulo SP
Phone +55 11 43669600
Fax +55 11 43621677
vendas@conexel.com.br
www.conexel.com.br

BY Belarus
TECHNIKON Ltd.
Oktyabrskaya Str. 16/5
Apt. 704, Minsk 220801
Phone +375 17 2275830
Fax +375 17 2275830
technikon@belsonet.net

CA Canada
W Interconnections CANADA Ltd.
10 Spy Court, Markham,
Ontario L3 R5 H6
Phone +1 905 475-1507
Fax +1 905 475-2798
info1@weidmuller.ca
www.weidmuller.ca

CH Switzerland
Weidmüller Schweiz AG
Rundbuckstraße 2
8212 Neuhausen am Rheinfall
Phone +41 52 6740707
Fax +41 52 6740708
info@weidmueller.ch
www.weidmueller.ch

CL Chile
Felipe Bahamondes S.A./ATS AGRO
Maria Luisa Santander 0475
Casilla 3425
Santiago
Phone +56 2 341-1271
Fax +56 2 341-1275
felipe@atsintech.com

CN China
Weidmüller Interface International
Trading (Shanghai) Co., Ltd.
25F, BM Intercontinental Business
Center,
100 Yutong Road,Shanghai 200070
P.R. China
Phone +86 21 22195008
Fax +86 21 22195009
www.cnweidmuller.com

CO Colombia
Automatización Avanzada S. A.
Carrera 97 No.24c, 23 B4
4 Bogotá D. C.
Phone +57 1 5478510
Fax +57 1 4223044
comercial@
automatizacionavanzada.com
www.automatizacionavanzada.com

CR Costa Rica
ELVATRON S.A.
la Uruca 400 Norte
Banco Costa Rica
San José Costa Rica
Phone +506 2 961060
Fax +506 5 200609
dirk.haase@elvatron.com
www.elvatron.com

CZ Czech Republic
Weidmüller s. r. o.
Lomnického 5/1705
14000 Praha 4
Phone +420 2 44001400
Fax +420 2 44001499
office@weidmueller.cz
www.weidmueller.cz

DE Germany
Weidmüller GmbH & Co. KG
P.O. Box 3054
32720 Detmold
Ohmstraße 9
32758 Detmold
Phone +49 5231 1428-0
Fax +49 5231 1428-116
weidmueller@weidmueller.de
www.weidmueller.de

DK Denmark
Wexøe A/S
Lejrvej 31
3500 Vaerloese
Phone +45 45465800
Fax +45 45465801
wexoe@wexoe.dk
www.wexoe.dk

EC Ecuador
Elsystec S. A. Electricidad
Sistemas y Tecnología
Vasco de Contreras N35-25
y Mañosca, Quito
Phone +593 2 2456510
Fax+593 2 2456755
Elsystec@uio.satnet.net

EE Estonia
Soots Interface OÜ
Pärnu mnt 142
11317 Tallinn
Phone +372 5296177
Fax +372 6096933
info@sootsinterface.ee
www.sootsinterface.ee

EG Egypt
Standard Electric (OMEGA)
87, Mohamed Farid Street
Heliopolis, Cairo
Phone +20 26422977
Fax +20 26422955
stdelec@rite.com

ES Spain
Weidmüller S. A.
Narcis Monturiol 11-13
Pol. Ind. Sudoeste
08960 Sant Just Desvern
Barcelona
Phone +34 93 4803386
Fax +34 93 3718055
weidmuller@weidmuller.es
www.weidmuller.es

FI Finland
JUHA-ELEKTRO OY
P. O. Box 57, 641 Helsinki
Kylvöpolku 6, 680 Helsinki
Phone +358 10 8328 100
Fax +358 10 8328 109
info@juha-elektro.fi
www.juha-elektro.fi

FR France
Weidmüller E. U. R. L.
12, Chaussée Jules César
B.P. 263 Osny
95523 Cergy Pontoise Cedex
Phone +33 1 34245500
Fax +33 1 34245501
mail@weidmuller.fr

GB Great Britain
Weidmüller Ltd.
1 Abbey Wood Road
Kings, West Malling
ME19 4YT
Phone +44 1732 877000
Fax +44 1732 874296
marketing@weidmuller.co.uk

GR Greece
Electrorama S.A.
1 An. Martali Str.
41335 Larissa
Phone +30 2410 552533188
Fax +30 2410 283463189
valvizos@electrorama.com.gr

Greece
GA Contact Solutions
11, Ippokratous Str.
14452 Metamorfosi Attika
Phone +30 210 2823233
Fax +30 210 2823233
gasaless@gmail.com

HK Hong Kong
United Equity Limited
Suite B, 11/F International Industrial
Centre
2-8 Kwei Tei Street, Fotan, Shatin
Phone +852 26876739
Fax +852 26876735
united_equity@sinatown.com

HR Croatia
Elektro Partner d.o.o.
Slavonska Avenija 24/6
10000 Zagreb
Phone +385 1 6184793
Fax +385 1 6184795
elektropartner@zg.t-com.hr

HU Hungary
Weidmüller Kft
Gubacsi út 6
1097 Budapest
Phone +36 1 3827700
Fax +36 1 3827701
info@weidmueller.hu

ID Indonesia
PT. Nego Electrindo
Ruko Mega Grosir Cempaka Mas,
Blok I No 20 – 22
Jl. Let.Jend. Suprato –
Jakarta 10640
Phone +62 21 42882255
Fax +62 21 42882266
sales@negoelectrindo.co.id

IE Ireland
Please contact Weidmüller Ltd. in
Great Britain

IL Israel
A.U.Shay Ltd.
P.O. Box 10049
Embar Street 23/25
Petch-Tikwa 49222
Phone +972 3 9233601
Fax +972 3 9234601

Israel
ATEKA Ltd.
23 Hayetzira St.
Kiryat Aryeh
49130 Petach-Tikva, Israel
Phone +972 3 9392344
Fax +972 3 9243273
marketing@ateka.co.il
www.ateka.co.il

IN India
Weidmuller Electronics India Pvt. Ltd
Plot # 32, 3rd Floor, North Court
Lane North Avenue, Opp Jogger's Park
Kalyani Nagar, Maharastra
411006 Pune
Phone +91 9049800960
Nitish.Rajan@weidmueller.de

IR Iran
Tamin Ehtiajat Fani Tehran (TAF Co.)
72, Iranshahr Ave.(Unit # 5)
15816 Tehran
Phone +98 21 8831-7851
Fax +98 21 8882-0268
tafco@safineh.net

IS Iceland
Samey Automation Center
Lyngas 13, 210 Garoabaer,
Phone +354 510 5200
Fax +354 510 5201
samey@samey.is

IT Italy
Weidmüller S.R.L.
Via Albert Einstein 4
20092 Cinisello Balsamo
Milano
Phone +39 02 660681
Fax +39 02 6124945
weidmuller@weidmuller.it
www.weidmuller.it

JO Jordan
HORIZONS
P.O.Box: 330607
Amman Jordan 11133
Phone +962 6 4882114
Fax +962 6 4882115
horizons@go.com.jo

JP Japan
Nihon Weidmüller Co. Ltd.
Sphere Tower Tennoz,
2-2-8 Higashi-Shinagawa,
Shinagawa-Ku, Tokyo 140-0002
Phone +81 3 6711-5300
Fax +81 3 6711-5333
www.weidmuller.co.jp

KR Korea
Weidmüller Korea Co., Ltd.
6floor, Sukyoung building, 242-54
Nonhyun-dong, Kangnam-Gu
Seoul, Korea
Zip: 135-830
Phone +82 2 5160003
Fax +82 2 5160090
info@weidmuller.co.kr

KW Kuwait
KANA CONTROLS General
Trading & Cont. CO. W.L.L.
Al Rai Industrial Area,
Plot 28-30, St. 31
P.O.Box: 25593
Safat, 13016
Phone +966-474 1373/4
Fax +966-474 1537
info@kanacontrols.com

Group companies DE
Agency abroad DE
Without own Agency DE

LB **Lebanon**
Progress Engineering & Trading Enterprises
Al Nahr Street
Beirut
Phone +961 1 444664
Fax +961 1 561880
progress@inco.com.lb

LT **Lithuania**
ELEKTROS IRANGA
Tinklu g.29a, 5319 Panevezys
Phone +370 45582828
Fax +370 45582727
info@eliranga.lt

LU **Luxembourg**
Please contact Weidmüller Benelux B.V. in the Netherlands

LV **Latvia**
SIA "ABI4"
56A Daugavgrivas str.
1007 Riga
Phone +371 67470999
Fax +371 67465637
abi_4@tvnet.lv

MD **Moldova**
BERHORD A&D srl
44, srt. Sarmizegetusa 37/3
Off 414. b-dul Decebal, 3,
Chisinau, MD 2001
Phone +373 22 507137
Fax +373 22 507134
atiuleanu@berhord.com

ME **Montenegro**
Please contact
ES-YU Elektrosistem in Serbia

MK **Macedonia**
ELEKTRO – SMK dooel
UL. III Makedonska brigada b.b.
1000 Skopje
Phone +389 22 460 295
Fax +389 22 460 298
Elektro-smk@telekabel.net.mk

MT **Malta**
E. S. S., Electrical Supplies & Services Ltd
104 J. Sciberras Str.
Hamrun HMR 08
Phone +356 21 255 777
Fax +356 21 255 999
robert@ess.com.mt

MU **Mauritius**
MUBELO Electrical Ltd
Office 26, Gateway building,
St Jean Road, Quatre Bornes
Phone +230 498 6410
Fax +230 467 0989
richard.mubelo@orange.mu

MX **Mexico**
W Interconnections, S.A. DE C.V.
Blvd. Hermanos Serdán No. 698
Col. San Rafael Oriente
Puebla, C.P. 72029
Phone +52 222 22686227
clientes@weidmuller.com.mx

MY **Malaysia**
Connect Plus Technology Sdn Bhd
No. 43, Jalan PJS 11/22,
Bandar Sunway, 46150 Petaling Jaya
Selangor Darul Ehsan
Phone +60 3 5633 7363
Fax +60 3-5633 6562
paul@cptech.com.my
www.cptech.com.my

NL **Netherlands**
Weidmüller Benelux B.V.
Franciscusweg 221
1216 SE Hilversum
Postbus 1505
1200 BM Hilversum
Phone +31 35 6261261
Fax +31 35 6232044
info@weidmuller.nl

NO **Norway**
Siv. Ing. J. F. Knudtzen A/S
Billingstadsletta 97
P.O. Box 160
1378 Nesbru
Phone +47 66 983350
Fax +47 66 980955
firmapost@jfknudtzen.no
www.jfknudtzen.no

NZ **New Zealand**
Cuthbert S. Steward Limited
27 Te Puni Street
POB 38496
Petone, Wellington
Phone +64 4 5686156
Fax +64 4 5686056
info@weidmueller.de

OM **Oman**
DAN INTERNATIONAL LLC.
PO.BOX 2901
111 Seeb
Phone +968 503 677
Fax +968 503 755
yedu@danintl.com

PE **Peru**
TECNOLOGÍA ELÉCTRICA Y SOLUCIONES S.A.C.
Calle Huandoy 501, Lima 32, Peru
Phone / Fax +51 1 562-0004
info@tecsol-peru.com

Peru
IMGEPRO DEL PERU S.A.C.
Jr. Arequipa 3410, Lima 31, Peru
Phone / Fax +51 1 569-7678
dbernardo@imgepro.com.pe
www.imgepro.pe

PH **Philippines**
Enclosure Systems Specialists Inc
W-15 La Fuerza Compound
2241 Don Chino Roces Avenue
Makati City 1231
Phone +63 2 813 8580
Fax +63 2 813 8596
sales_encsys@pldtdsl.net

PK **Pakistan**
Kana Controls (Pak)
Apartment No. 33 C III
Chenab Block,
Allama Iqbal Town
Lahore, Pakistan
Phone +92 42 5419948
+92 42 7845160
Fax +92 42 5422895
nadeem@kanapak.com
www.kanapak.com

PL **Poland**
Weidmüller Sp. z o.o.
Ul. Goledzinowska 10
03-302 Warszawa
Phone +48 22 5100940
Fax +48 22 5100941
biuro@weidmuller.com.pl
www.weidmuller.pl

PT **Portugal**
Weidmüller Sistemas de Interface S. A.
Estrada Outeiro Polima, R. Augusto Dias da Silva, Lote B, Esct. 2
2785-515 Abóboda -São Domingos de Rana
Phone +351 21 4459191
Fax +351 21 4455871
www.weidmueller.pt

QA **Qatar**
Doha Motors Trading Co.
(Technical Division)
Post Box No. 145
Airport Road
Doha - Qatar
Phone +974 465 1441
Fax +974 465 0925
dmtctech@qatar.net.qa

RO **Romania**
Rominterface Impex SRL
Str. Gh. Dem Teodorescu 30 A
30916 Bucuresti - sector 3
Phone +40 21 3220230
Fax + 40 21 3228857
office@rominterface.ro

RS **Serbia**
ES-YU Elektrosistem
Pariske komune 41
11070 Novi Beograd, Serbia
Phone +381 11 3018660
Fax +381 11 2693608
esyu@eunet.rs
www.elektrosistem.co.rs

RU **Russia**
Weidmüller Interface GmbH & Co. KG
Representative Office
Warshavskoye highway, 25A, bld. 6
117105 Moscow
Phone +7 4 95 771-6940
Fax +7 4 95 771-6941
info@weidmueller.ru
www.weidmueller.rus

SA **Saudi Arabia**
Al Abdulkarim Holding Co.
P.O Box. 4
Dammam 31411
Phone +9668337110
Fax +9668338242
salehsk@akh.com.sa
www.akte.com.sa

Saudi Electric Supply Co.
P.O. Box 3298
Al Khobar 31952
Phone +966 3 882 9546227
Fax +966 3 882 9547
Safdar.malik@sesco-ge.com

SE **Sweden**
Weidmüller AB
Axel Daniessons väg 271
P.O. box 31025
200 49 Malmö
Phone +46 (0) 7 71 43 00 44
Fax +46 (0) 40 37 48 60
info@weidmuller.se
www.weidmuller.se

SG **Singapore**
Weidmuller Pte. Ltd.
70 Bendemeer Road
#04-03 Luzerne
Singapore 339940
Phone +65 6841 5311
Fax +65 6841 5377
info@weidmuller.com.sg
www.weidmuller.com.sg

SI **Slovenia**
ELEKTROSPOJI d.o.o.
Stegne 25, 1000 Ljubljana
Phone +386 15113810
Fax +386 15111604
info@elektrospoji.si
www.elektrospoji.si

SK **Slovakia**
ELEKTRIS s.r.o.
Elektrárenská 1
83104 Bratislava
Phone +421 2 49200113
Fax +421 2 49200119
weidmueller@computel.sk

TH **Thailand**
Pisanu Engineering Co., Ltd
800/43-45 Soi Trakulsuk
Asoke-dindaeng Road,
Dindaeng, Bangkok 10400
Phone +66 2 245 9113
Fax +66 2 6429220
jayasankar@pisanu.co.th
www.pisanu.co.th

TN **Tunisia**
Please contact
Weidmüller E.U.R.L. in France

TR **Turkey**
Weidmüller Elektronik Ticaret Ltd.
Sirketi
Kavacik Mah. Orhan Veli Kanik Caddesi 9/1
34810 Beykoz – İstanbul
Phone +90 216 5371070 (Pbx)
Fax +90 216 5371077
info@weidmuller.com.tr
www.weidmuller.com.tr

TW **Taiwan**
Fittatek Co., Ltd.
12F No. 185 Fu-Kuo Road,
Tso Ying Dist, Kaohsiung
Phone +886 7 556 0858
Fax +886 7 556 3279
stanley@fittatek.com.tw
www.fittatek.com.tw

Taiwan
Eucan Enterprise Ltd.
No. 145 He Ping 2nd Rd
Kaohsiung
Phone +886 7 715 6610
Fax +886 7 715 8748
mark@eucan.com.tw
www.eucan.com.tw

UA **Ukraine**
TEKO INTERFACE ooo
ul. Lewanewskogo 6
03058 Kiev
Phone +38 044 401 09 90
Fax +38 044 401 08 64
weidmueller@tekointerface.com
www.tekointerface.com.ua

US **United States**
W-Interconnections Inc.
821 Southlake Boulevard,
Virginia - Richmond 23236
Phone +1 804 7942877
Fax +1 804 3792593
info@weidmuller.com
www.weidmuller.com

UY **Uruguay**
REWO Uruguay S.A
Av. Bolivia 2001 Esq Rocafuerte
Carrasco Montevideo 11300
Phone / Fax +598 260 48439
clorda@rewouruguay.com.uy

UZ **Uzbekistan**
OOO "Elektro Potential"
Gani Mavljanova str., 2B
100084 Tashkent
Phone +998 98-3003821
Fax +998 71-1249286
mz1958@yandex.ru

VE **Venezuela**
Somerinca C.A.
Quinta Sagrado Corazon de Jesus - 3ra Transversal - Los Dos Caminos,
Caracas 1070 - A
Phone +58 212 2352748
Fax +58 212 2399341
klocmoeller@cantv.net
www.kmsomerinca.com.ve

VN **Vietnam**
AUMI Co., Ltd
E1, La Thanh Hotel,
218 Doi Can Street,
Lieu Giai Ward, Ba Dinh District,
Hanoi City
Phone +84 4762 8601
Fax +84 4266 1391
aumi@aumi.com.vn

Linh Kim Hai Co,. Ltd
78 Hoa Cuc Street Ward 7,
Phu Bhuan District,
Ho Chi Minh City
Phone +84 8517 1717
Fax +84 8517 1818
lkh@linhkimhai.com.vn

New Sky Co., Ltd
44/28 Tan Hai Street,
Ward 13, Tan Binh District,
Ho Chi Minh City
Phone +84 8812 6593
Fax +84 8812 6594
newsky-e@hcm.vnn.vn
www.newsky-e.com

ZA **South Africa**
Phambili Interface (Pty) Ltd
P.O. Box 193, 1609 Johannesburg
5 Bundo Road, Sebenza
1610 Johannesburg, Endenvale
Phone +27 11 452 1930
Fax +27 11 452 6455
sales@weidmuller.co.za
www.radinterface.co.za

DE **Other countries**
Weidmüller Interface GmbH & Co. KG
Postfach 3030
32720 Detmold
Klingenbergstraße 16
32758 Detmold
Phone +49 5231 14-0
Fax +49 5231 14-2083
info@weidmueller.de
www.weidmueller.com

We cannot guarantee that there are no mistakes in the publications or software provided by us to the customer for the purpose of making orders. We try our best to quickly correct errors in our printed media.

All orders are based on our general terms of delivery, which can be reviewed on the websites of our group companies where you place your order. On demand we can also send the general terms of delivery to you.

www.weidmueller.com

Argentina
Australia
Austria
Azerbaijan
Bahrain
Belarus
Belgium
Bosnia and Herzegovina
Brazil
Bulgaria
Canada
Chile
China
Colombia
Costa Rica
Croatia
Czech Republic
Denmark
Ecuador
Egypt
Estonia
Finland
France
Germany
Great Britain
Greece
Hong Kong
Hungary
Iceland
India
Indonesia
Iran
Ireland
Israel
Italy
Japan
Jordan
Kazakhstan
Korea
Kuwait
Latvia
Lebanon
Lithuania
Luxembourg
Macedonia
Malaysia
Malta
Mexico
Moldova
Netherlands
New Zealand
Norway
Oman
Pakistan
Peru
Philippines
Poland
Portugal
Qatar
Romania
Russia
Saudi Arabia
Serbia
Singapore
Slovakia
Slovenia
South Africa
Spain
Sweden
Switzerland
Taiwan
Thailand
Tunisia
Turkey
Ukraine
United Arab Emirates
United States
Uruguay
Uzbekistan
Venezuela
Vietnam

Weidmüller is a leading international provider of solutions for electrical connectivity, transmission and conditioning of power, signal and data in industrial environments.

The company with headquarters in Detmold/Germany develops, produces and sells products in the field of electrical connectivity and electronics all over the world. Via a network of application specialists Weidmüller offers engineering services and develops application specific solutions.

The complete product and service portfolio consistently assures both Weidmüller and its customers of competitive advantages and an increase in value.

Order number:
1235620000/10/2010/SMMD