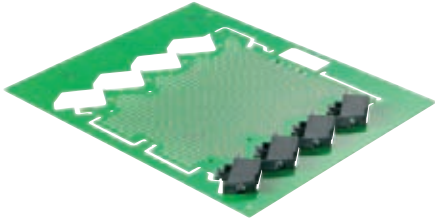


CH20M

Technical data

LHZ



THR PCB terminal for 6 mm housings,
CH20M6 reflow-compatible,
Pole count: 1
solder pin length: 1.5 mm
Orientation: 90°

Technical data

| | |
|--------------------------|-------|
| Insulating material | LCP |
| Flammability class UL 94 | V0 |
| Rated voltage | 250 V |
| Rated current | 13 A |

Conductors that can be connected

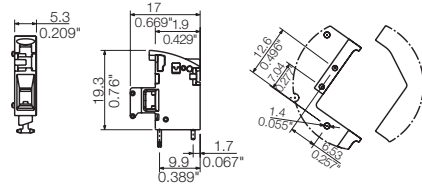
| | |
|--|--------------------|
| Clamping range | 0.13 mm² - 2.5 mm² |
| Wire cross-section, AWG, min. | AWG 26 - AWG 14 |
| Solid, min. H05(07) V-U | 0.2 mm² - 2.5 mm² |
| Flexible, min. H05(07) V-K | 0.2 mm² - 2.5 mm² |
| With wire end ferrule, acc. to DIN 46 228/1, max. | 0.2 mm² - 2.5 mm² |

Rated data according to DIN IEC

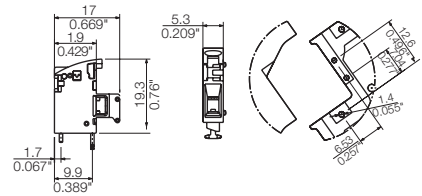
| | |
|--|-------|
| Rated voltage for surge voltage class / contamination degree III/3 | 250 V |
| Rated impulse voltage for surge voltage class / contamination degree III/3 | 4 kV |
| Rated voltage for surge voltage class / contamination degree III/2 | 320 V |
| Rated impulse voltage for surge voltage class / contamination degree III/2 | 4 kV |
| Rated voltage for surge voltage class / contamination degree II/2 | 500 V |
| Rated impulse voltage for surge voltage class / contamination degree II/2 | 4 kV |

Note: Rated data according to UL – refer to the online data sheet

Dimensional drawing

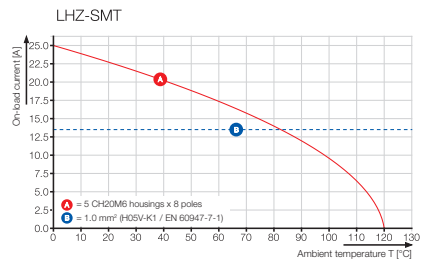


Version left



Version right

Derating curve



LHZ



Ordering data

| Type / Version | Qty. | Order No. |
|--|------|------------|
| LHZ-SMT L 1.5SN BK RL Version left, Tape-on-Reel | 432 | 2418580000 |
| LHZ-SMT R 1.5SN BK RL Version right, Tape-on-Reel | 432 | 2418590000 |

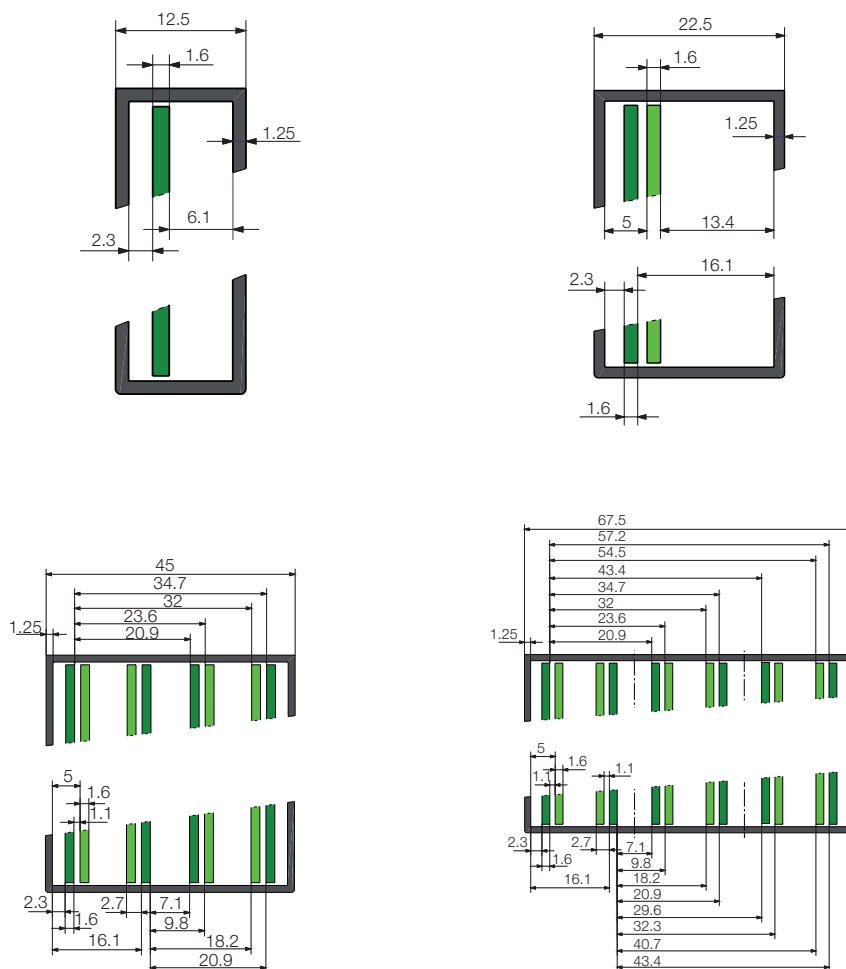
Circuit board positions in CH20M

Circuit board positions in CH20M

| | | | | |
|-----------------------------|------|------|----|------|
| Housing width (mm) | 12.5 | 22.5 | 45 | 67.5 |
| Number of circuit boards | 1 | 1 | 2 | 3 |
| Positions per circuit board | 1 | 2 | 4 | 4 |

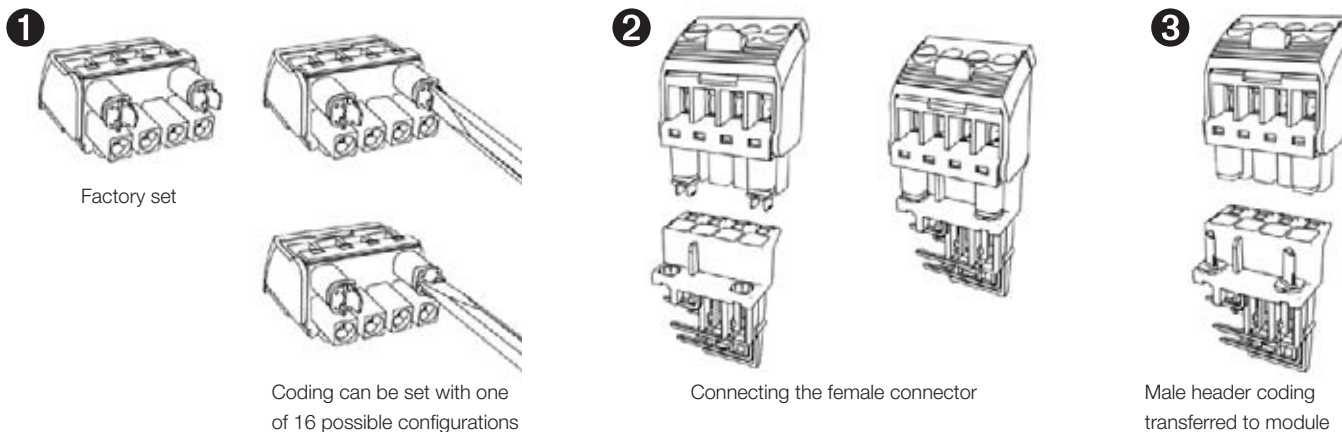


Dimensional drawing



Integrated coding in the BHZ/SHL-SMT connector system

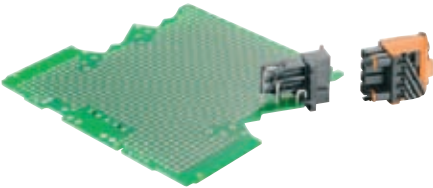
- Clamping yoke screw connection – with WIRE READY, wire guard protection and plus/minus screw
- Integrated, captive coding (with „AutoSet“ function) protects against false insertion
- Leading contact on the male headers
- Finger-safe on both sides



CH20M

Technical data

SHL-SMT



THR male header for modular housing CH20M12-67
Can be reflow soldered, resistant to high temperatures
Pin length of 1.5 mm:
LP in position 5.0 mm, reflow soldering
Pin length of 4.2 mm:
LP in position 2.3 mm, reflow soldering
Pin length of 5.9 mm:
LP in position 2.3 mm, wave soldering

Technical data

| | |
|--------------------------|-------|
| Insulating material | LCP |
| Flammability class UL 94 | V0 |
| Rated voltage | 250 V |
| Rated current | 10 A |

SHL-SMT 5.00/GL



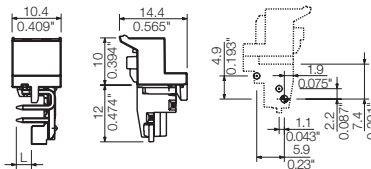
Version left
Box packaging

Ordering data

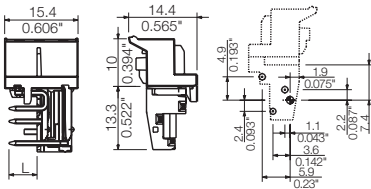
| Type / Version | Poles | Qty. | Order No. |
|-------------------------|-------|------|------------|
| SHL-SMT 5.00/02GL 4.2BX | 2 | 156 | 1069620000 |
| SHL-SMT 5.00/02GL 5.9BX | 2 | 156 | 1069750000 |
| SHL-SMT 5.00/03GL 1.5BX | 3 | 120 | 1063210000 |
| SHL-SMT 5.00/03GL 4.2BX | 3 | 120 | 1069630000 |
| SHL-SMT 5.00/03GL 5.9BX | 3 | 120 | 1069760000 |
| SHL-SMT 5.00/04GL 1.5BX | 4 | 120 | 1063220000 |
| SHL-SMT 5.00/04GL 4.2BX | 4 | 120 | 1069640000 |
| SHL-SMT 5.00/04GL 5.9BX | 4 | 120 | 1069770000 |

Dimensional drawing

Version left
2-pole



3-pole



SHL-SMT 5.00GL



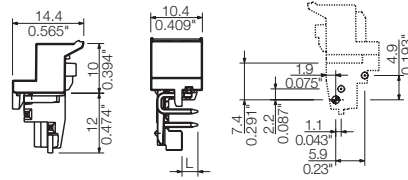
Version left
Tape-on-reel

Ordering data

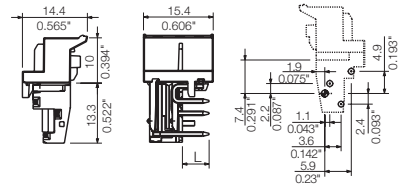
| Type / Version | Poles | Qty. | Order No. |
|-------------------------|-------|------|------------|
| SHL-SMT 5.00/02GL 4.2RL | 2 | 260 | 1069650000 |
| SHL-SMT 5.00/02GL 5.9RL | 2 | 260 | 1069780000 |
| SHL-SMT 5.00/03GL 1.5RL | 3 | 175 | 1063240000 |
| SHL-SMT 5.00/03GL 4.2RL | 3 | 175 | 1069660000 |
| SHL-SMT 5.00/03GL 5.9RL | 3 | 175 | 1069790000 |
| SHL-SMT 5.00/04GL 1.5RL | 4 | 130 | 1063250000 |
| SHL-SMT 5.00/04GL 4.2RL | 4 | 130 | 1069670000 |
| SHL-SMT 5.00/04GL 5.9RL | 4 | 130 | 1069810000 |

Dimensional drawing

Version right
2-pole



3-pole



Rated data when used together with BHZxx female plug:
refer to page I.30

SHL-SMT 5.00GR



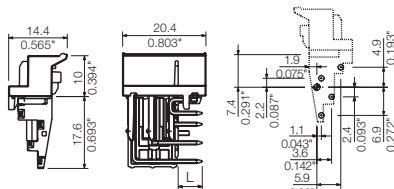
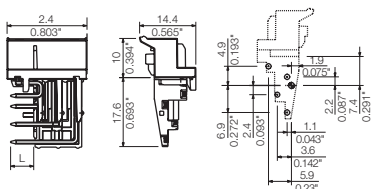
Version right
Tape-on-reel

Ordering data

| Type / Version | Poles | Qty. | Order No. |
|-------------------------|-------|------|------------|
| SHL-SMT 5.00/02GR 4.2RL | 2 | 260 | 1069580000 |
| SHL-SMT 5.00/02GR 5.9RL | 2 | 260 | 1069720000 |
| SHL-SMT 5.00/03GR 1.5RL | 3 | 175 | 1063170000 |
| SHL-SMT 5.00/03GR 4.2RL | 3 | 175 | 1069590000 |
| SHL-SMT 5.00/03GR 5.9RL | 3 | 175 | 1069730000 |
| SHL-SMT 5.00/04GR 1.5RL | 4 | 130 | 1063180000 |
| SHL-SMT 5.00/04GR 4.2RL | 4 | 130 | 1069610000 |
| SHL-SMT 5.00/04GR 5.9RL | 4 | 130 | 1069740000 |

Dimensional drawing

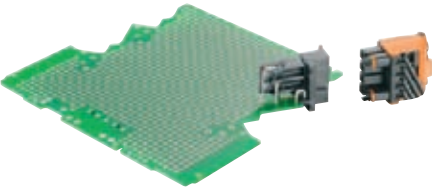
Version right
4-pole



CH20M

Technical data

BHZ



Female plug for modular housing CH20M12-67 5.00 mm, clamping-yoke connection, integrated coding, release lever can be colour coded

Technical data

| | |
|--------------------------|-------|
| Insulating material | PA |
| Flammability class UL 94 | V0 |
| Rated voltage | 250 V |
| Rated current | 10 A |

Conductors that can be connected

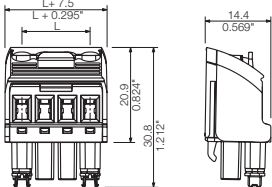
| | |
|---|---------------------|
| Clamping range | 0.13 mm² - 3.31 mm² |
| Wire cross-section, AWG, min. | AWG 26 - AWG 14 |
| Solid, min. H05(07) V-U | 0.2 mm² - 2.5 mm² |
| Flexible, min. H05(07) V-K | 0.2 mm² - 2.5 mm² |
| With wire end ferrule, acc. to DIN 46 228/1, max. | 0.2 mm² - 2.5 mm² |
| With wire-end ferrule with collar, DIN 46 228/4, min. | 0.2 mm² - 2.5 mm² |

Rated data according to DIN IEC

| | |
|--|-------|
| Rated current, Max. pole count (Tu=20 °C) | 10 A |
| Rated current, Max. pole count (Tu=40 °C) | 9 A |
| Rated voltage for surge voltage class / contamination degree III/3 | 250 V |
| Rated impulse voltage for surge voltage class / contamination degree III/3 | 4 kV |
| Rated impulse voltage for surge voltage class / contamination degree III/2 | 4 kV |
| Rated voltage for surge voltage class / contamination degree III/2 | 320 V |
| Rated voltage for surge voltage class / contamination degree II/2 | 400 V |
| Rated impulse voltage for surge voltage class / contamination degree II/2 | 4 kV |

Note: Rated data according to UL – refer to the online data sheet

Dimensional drawing



BHZ 5.00/90 BK/OR

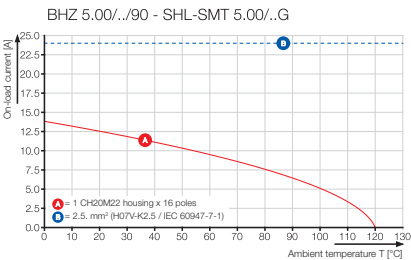
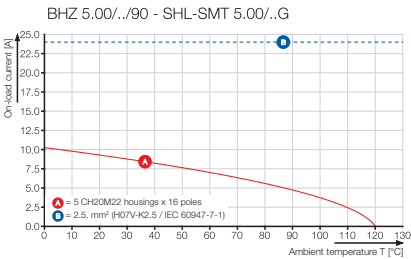


Release lever, orange

Ordering data

| Type / Version | Poles | Qty. | Order No. |
|------------------------|-------|------|------------|
| BHZ 5.00/02/90LH BK/OR | 2 | 150 | 1063260000 |
| BHZ 5.00/03/90LH BK/OR | 3 | 180 | 1063270000 |
| BHZ 5.00/04/90LH BK/OR | 4 | 78 | 1063280000 |

Derating curve



BHZ 5.00/90 BK/BK



Release lever, black

BHZ 5.00/90 BK/BL



Release lever, blue

Accessories



Marker for release lever

Ordering data

| Type / Version | Poles | Qty. | Order No. |
|------------------------|-------|------|------------|
| BHZ 5.00/02/90LH BK/BK | 2 | 150 | 1069330000 |
| BHZ 5.00/03/90LH BK/BK | 3 | 108 | 1069340000 |
| BHZ 5.00/04/90LH BK/BK | 4 | 78 | 1069350000 |

Ordering data

| Type / Version | Poles | Qty. | Order No. |
|------------------------|-------|------|------------|
| BHZ 5.00/02/90LH BK/BL | 2 | 150 | 1069360000 |
| BHZ 5.00/03/90LH BK/BL | 3 | 108 | 1069370000 |
| BHZ 5.00/04/90LH BK/BL | 4 | 78 | 1069380000 |

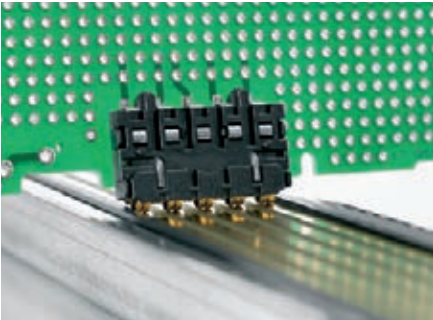
Ordering data

| Type / Version | Poles | Qty. | Order No. |
|------------------------|-------|------|------------|
| ESG 6.6/11 BHZ 5.00/02 | 2 | 200 | 1082490000 |
| ESG 6.6/15 BHZ 5.00/03 | 3 | 200 | 1082520000 |
| ESG 6.6/20 BHZ 5.00/04 | 4 | 200 | 1082540000 |



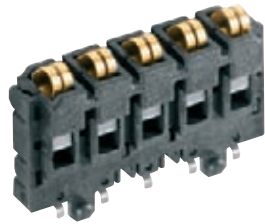
CH20M
Technical data

SR-SMD



Bus contact block
Reflow-compatible, resistant to high temperatures,
5-pole, for rail bus

SR-SMD

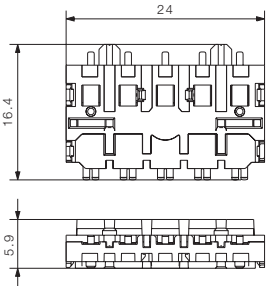


Bus contact for CH20M6

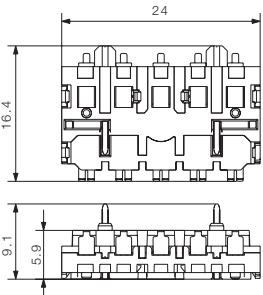
Technical data

| | |
|--------------------------|---------|
| Insulating material | LCP |
| Flammability class UL 94 | V0 |
| Rated voltage | 63 V AC |
| Rated current | 2 A |

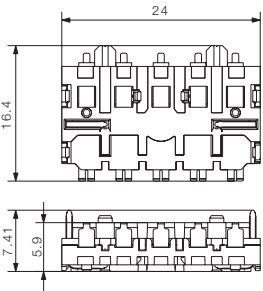
Dimensional drawing



For CH20M6



With centre solder flange for CH20M12-67

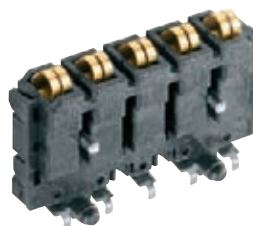


With solder flange for CH20M12-67

Ordering data

| Type / Version | Qty. | Order No. |
|----------------------------|------|------------|
| SR-SMD 4.50/05/90 AU BK BX | 72 | 1155840000 |

SR-SMD



Bus contact with centre solder flange
for CH20M12-67

SR-SMD



Bus contact with solder flange
for CH20M12-67

Accessories, bus connection



Ordering data

| Type / Version | Qty. | Order No. |
|-------------------------------|------|------------|
| SR-SMD 4.50/05/90LFM AU BK BX | 72 | 1155870000 |

Ordering data

| Type / Version | Qty. | Order No. |
|------------------------------|------|------------|
| SR-SMD 4.50/05/90LF AU BK BX | 72 | 1155890000 |

Bus PCB

| Type / Version | Qty. | Order No. |
|--------------------------|------|------------|
| CH20M BUS 4.50/05 AU/250 | 10 | 1248220000 |
| CH20M BUS 4.50/05 AU/500 | 10 | 1248230000 |
| CH20M BUS 4.50/05 AU/750 | 5 | 1248240000 |

Support section, bus circuit board

| Type / Version | Qty. | Order No. |
|--------------------------------|------|------------|
| CH20M BUS-PROFIL TS 35X15/250 | 10 | 1248180000 |
| CH20M BUS-PROFIL TS 35X15/500 | 10 | 1248190000 |
| CH20M BUS-PROFIL TS 35X15/750 | 5 | 1248210000 |
| CH20M BUS-PROFIL TS 35X7.5/250 | 5 | 1248150000 |
| CH20M BUS-PROFIL TS 35X7.5/500 | 5 | 1248160000 |
| CH20M BUS-PROFIL TS 35X7.5/750 | 5 | 1248170000 |

Note: length specification /XXX = 250, 500 or 750 mm

Hoods and end plates

| Type / Version | Qty. | Order No. |
|--------------------------------|------|------------|
| CH20M BUS-ADP TS 35/250 | 10 | 1248250000 |
| CH20M BUS-ADP TS 35/500 | 10 | 1248260000 |
| CH20M BUS-ADP TS 35/750 | 5 | 1248270000 |
| CH20M BUS-AP LI TS 35X7.5 & 15 | 50 | 1193160000 |
| CH20M BUS-AP RE TS 35X7.5 & 15 | 50 | 1193170000 |

Note: ADP = cover profile
AP = end plate

OMNIMATE Housing

Component housing WAVEBOX

The proven standard housing for the mounting rail

The characteristic "WAVE" design of the WAVEBOX provides optimal ventilation when used in a full electrical cabinet – especially for small component widths and high power losses.

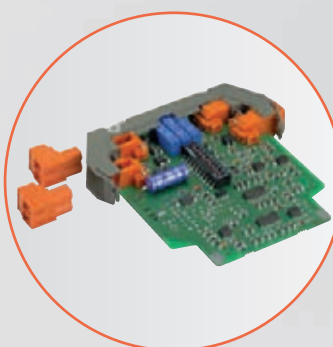
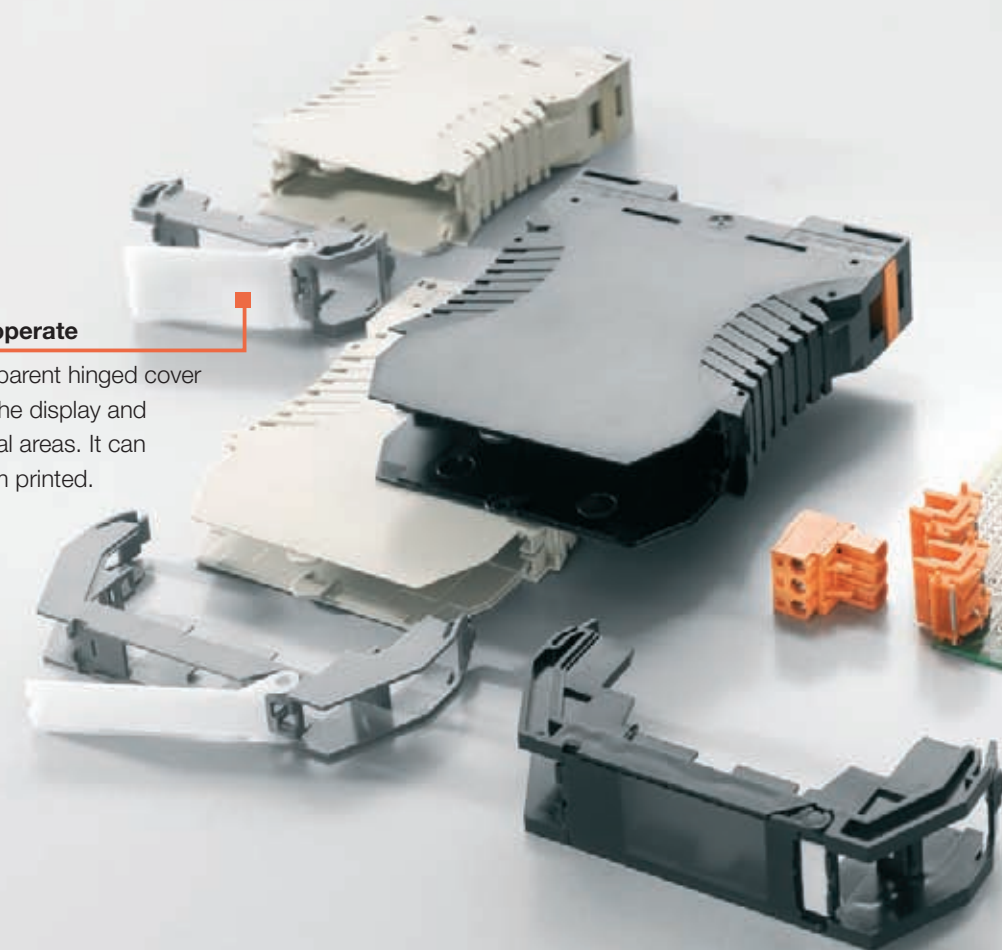
The electronics component can be removed in the field during servicing. Optionally, a spacious front element is available which can only be opened using a tool.

Weidmüller's reliable, wire-insert connection technology is available with either the screw connection or PUSH IN spring connection mechanisms.



Easy to operate

The transparent hinged cover protects the display and operational areas. It can be custom printed.



Easy to install

The connector and the electronics can be removed – this speeds up installation and service.

Easy to select

A large, spacious variant with a fixed head can be used instead of the tool-free pullable front element.



Ready to use



The WAVEBOX provides you with the right solution by simply combining 4 widths, 2 front elements and 2 connection levels. A small S version supplements the product line.

Easy to service



During service or maintenance, the component can be removed without taking apart the bottom section. Optionally available with fixed front element as well.

Reliable



Easy to connect

Bridges allow you to implement joint power feeds or signal distribution up to 24 A without any extra wiring work.

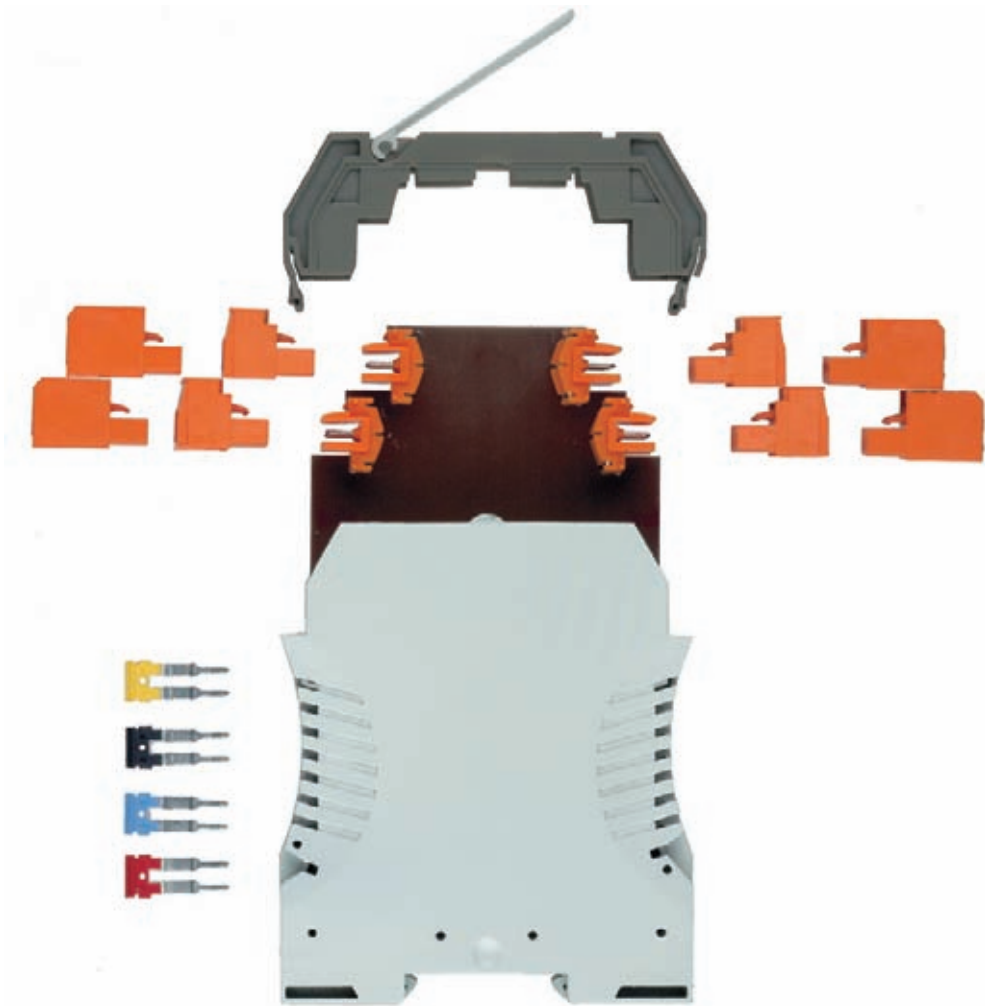


OMNIMATE Housing

Component housing WAVEBOX

The WAVEBOX electronics housing system is available in 4 widths. The electronics components can be removed along with the front element while in the field. Also available with a spacious fixed-mount front element.

| Width | Type | Reference kit | Catalogue pages | Colour |
|---------|-------------|------------------------------|-----------------|---------------------|
| 12.5 mm | WBL 12.5 | 1070770000 WBL 12.5 S-Kit | I.38 | Similar to RAL 9011 |
| 17.5 mm | WBL 17.5 | 1070790000 WBL 17.5 S-Kit | I.39 | Similar to RAL 7024 |
| 22.5 mm | WBS 22.5 | 1070820000 WBS 22.5 S-Kit | I.40 | Similar to RAL 7035 |
| 22.5 mm | WBL 22.5 | 1070840000 WBL 22.5 S-Kit | I.41 | |
| 22.5 mm | WBL 22.5 FH | 1070860000 WBL FH 22.5 S-Kit | I.42 | |
| 45 mm | WBL 45 | 1070880000 WBL 45 S-Kit | I.43 | |



Housing variants

WBL 12.5



Description / Type

WAVEBOX Large, 12.5 mm

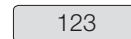
Features:

- 12.5 mm wide
- 2 x 2 or 4 x 2 connections 2.5 mm²
- Connector 400 V / 17 A (IEC)
- Hinged cover (transparent)

Design-Optionen



- pad printing
- markable
- machinable



WBL 17.5



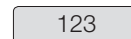
WAVEBOX Large, 12.5 mm

Features:

- 17.5 mm wide
- 2 x 3 or 4 x 3 connections 2.5 mm²
- Connector 400 V / 17 A (IEC)
- Hinged cover (transparent)



- pad printing
- markable
- machinable



WBL 22.5



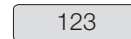
WAVEBOX Large, 12.5 mm

Features:

- 22.5 mm wide
- 2 x 3 or 4 x 3 connections 2.5 mm²
- Connector 400 V / 17 A (IEC)
- Hinged cover (transparent)



- pad printing
- markable
- machinable



- Optionally available with attached, spacious front element

WBS 22.5



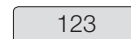
WAVEBOX Small, 12.5 mm

Features:

- 22.5 mm wide
- 2 x 3 connections 2.5 mm²
- Connector 400 V / 17 A (IEC)
- Hinged cover (transparent)



- pad printing
- markable
- machinable



WBL 45



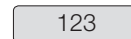
WAVEBOX Large, 45 mm

Features:

- 45 mm wide
- Up to 8 x 3 connections, 2.5 mm²
- Connector 400 V / 17 A (IEC)
- Hinged cover (transparent)



- pad printing
- markable
- machinable



- Optionally available with attached, spacious front element

Accessories



Connection system / Accessories

Standard connector

- Standard, pluggable female connector
- 400 V / 17 A (IEC)
- 300 V / 15 A (UL)
- Cross-connector 2 x 24 A (IEC)



- Clamping yoke screw connection



- PUSH IN spring connection

WAVEBOX

Technical data

WAVEBOX

A WAVEBOX 12.5 housing consists of:

- 1 housing base part with clip-on foot
- 1 top part
- 4 male connectors
- 1-4 female connectors

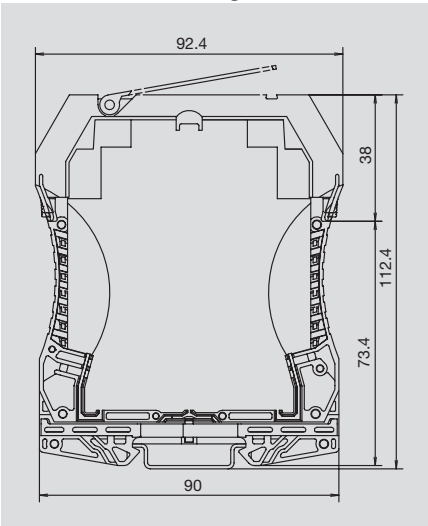
Description

The male headers (in left and right versions depending on the construction) are soldered onto the PCB and then snapped into the head piece. This unit is then inserted in the bottom section. A proper connection is ensured by the integrated anti-twist protection. Caps can be used to cover the unused ports. A bottom housing section that can be cross-connected is also available (with ZQV2.5N/2 cross-connector).

Female plugs are available in different versions (screw or spring connection) and can be coded.

The hinged, transparent top plate on the head piece and the bottom housing section can both be laser inscribed. The top plate enables easy access for calibration.

Dimensional drawing



Technical data

| General data | |
|--------------------------------------|--------------------|
| Dimensions W x L x H (w. TS35 x 7.5) | mm |
| Dimensions W x L x H (w. TS32) | |
| No. of connections | total |
| | left / right / top |
| Access for calibration | |
| Max. power loss | |
| Number of PCB per module | |
| Thickness of PCB | |
| Ingress protection class | |
| Tightening torque range | |
| Material | |
| Flammability class UL 94 | |
| Colour of insulating material | |
| Clampable conductors (H05V/H07V) | |
| Solid | mm² |
| Flexible | mm² |
| Max. conductor AWG | |
| Note | |

Ordering data

| Individual parts | |
|---|---|
| Bottom section with snap-on foot | cannot be cross-conn. can be cross-connected |
| Top part with transparent top plate mounted | |
| Ordering data connection method | |
| Pin block, 3-pole | orange, right orange, left |
| Pin block, 2-pole | orange, right orange, left |
| Socket block, clamp. yoke conn. | orange, 3-pole black, 3-pole orange, 2-pole black, 2-pole |
| Socket block, tension clamp connection | orange, 3-pole black, 3-pole orange, 2-pole black, 2-pole orange, 2-pole black, 2-pole |
| Female plug, PUSH IN | orange, 2-pole black, 2-pole |
| Note | |

Accessories

| Cross connection 2-pole (pluggable) | |
|-------------------------------------|-----------------------|
| | red blue yellow |
| Other accessories | |
| Coding element | black |
| Screw cap | |
| Self-assembly PCB | |
| Note | |

WAVEBOX 12.5



| General data | |
|--------------------------------------|---------------------|
| Dimensions W x L x H (w. TS35 x 7.5) | 12.5 / 92.4 / 112.4 |
| Dimensions W x L x H (w. TS32) | |
| No. of connections | 8 |
| | 4 / 4 |
| Access for calibration | |
| Max. power loss | |
| Number of PCB per module | |
| Thickness of PCB | |
| Ingress protection class | |
| Tightening torque range | |
| Material | |
| Flammability class UL 94 | |
| Colour of insulating material | |
| Clampable conductors (H05V/H07V) | |
| Solid | mm² |
| Flexible | mm² |
| Max. conductor AWG | |
| Note | |

| Type | Qty. | Order No |
|--|---|------------|
| WAVEBOX L 12.5 | 18 | 8426530000 |
| WAVEBOX L 12.5 QV | 18 | 8426540000 |
| TOP UNIT L 12.5 | 18 | 8426550000 |
| Ordering data connection method | | |
| Pin block, 3-pole | orange, right orange, left | |
| Pin block, 2-pole | orange, right orange, left | |
| Socket block, clamp. yoke conn. | orange, 3-pole black, 3-pole orange, 2-pole black, 2-pole | |
| Socket block, tension clamp connection | orange, 3-pole black, 3-pole orange, 2-pole black, 2-pole orange, 2-pole black, 2-pole | |
| Female plug, PUSH IN | orange, 2-pole black, 2-pole | |
| Note | | |

| Type | Qty. | Order No |
|--------------------|------|------------|
| ZQV 2.5N/2 RT | 60 | 1717900000 |
| ZQV 2.5N/2 BL | 60 | 1717990000 |
| ZQV 2.5N/2 GE | 60 | 1693800000 |
| Other accessories | | |
| BLZ-KO SW | 50 | 1545710000 |
| CAP 2 WAVEBOX 12.5 | 20 | 8428130000 |
| Note | | |

Full housing available as set on request.

WAVEBOX

A WAVEBOX 17.5 housing consists of:

- 1 housing base part with clip-on foot
- 1 top part
- 4 male connectors
- 1-4 female connectors

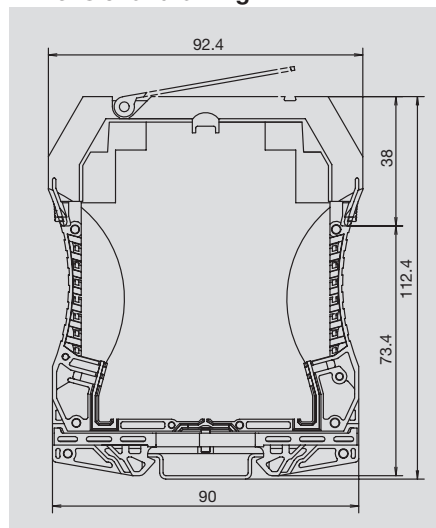
Description

The male headers (in left and right versions depending on the construction) are soldered onto the PCB and then snapped into the head piece. This unit is then inserted in the bottom section. A proper connection is ensured by the integrated anti-twist protection. Caps can be used to cover the unused ports. A bottom housing section that can be cross-connected is also available (with ZQV2.5N/2 cross-connector).

Female plugs are available in different versions (screw or spring connection) and can be coded.

The hinged, transparent top plate on the head piece and the bottom housing section can both be laser inscribed. The top plate enables easy access for calibration.

Dimensional drawing



Technical data

| General data | |
|--------------------------------------|--------------------|
| Dimensions W x L x H (w. TS35 x 7.5) | mm |
| Dimensions W x L x H (w. TS32) | |
| No. of connections | total |
| | left / right / top |
| Access for calibration | |
| Max. power loss | |
| Number of PCB per module | |
| Thickness of PCB | |
| Ingress protection class | |
| Tightening torque range | |
| Material | |
| Flammability class UL 94 | |
| Colour of insulating material | |
| Clampable conductors (H05V/H07V) | |
| Solid | mm ² |
| Flexible | mm ² |
| Max. conductor AWG | |
| Note | |

Ordering data

| Individual parts | |
|---|--|
| Bottom section with snap-on foot | cannot be cross-conn. can be cross-connected |
| Top part with transparent top plate mounted | |
| Ordering data connection method | |
| Pin block, 3-pole | orange, right orange, left |
| Pin block, 2-pole | orange, right orange, left |
| Socket block, clamp. yoke conn. | orange, 3-pole black, 3-pole orange, 2-pole black, 2-pole |
| Socket block, tension clamp connection | orange, 3-pole black, 3-pole orange, 2-pole black, 2-pole |
| Female plug, PUSH IN | orange, 3-pole black, 3-pole |
| Note | |

Accessories

| Cross connection 2-pole (pluggable) | |
|-------------------------------------|-----------------------|
| | red blue yellow |
| Other accessories | |
| Coding element | black |
| Screw cap | |
| Self-assembly PCB | |
| Note | |

WAVEBOX 17.5



| 17.5 / 92.4 / 112.4 | |
|---|--------------------------|
| 12 | |
| 6 / 6 | |
| Movable top plate | |
| 2.00 W /40°C | |
| 1 | |
| 1.0 (± 0.1) mm | |
| IP 20 | |
| 0.4...0.5 Nm | |
| PC | |
| V0 | |
| Head piece is grey (similar to RAL 7035)/Bottom section is grey (similar to RAL 7039) | |
| Clamp. yoke connection | Tension clamp connection |
| 0.2...2.5 | 0.2...2.5 |
| 0.2...2.5 | 0.2...2.5 |
| AWG 26...AWG 12 | AWG 26...AWG 12 |

| Type | Qty. | Order No |
|---------------------------------|------|------------|
| WAVEBOX L 17.5 | 12 | 8426560000 |
| WAVEBOX L 17.5 QV | 12 | 8426570000 |
| TOP UNIT L 17.5 | 12 | 8426580000 |
| SLEH 5.08/3 RE22.5 2.4 SN OR BX | 100 | 8449220000 |
| SLEH 5.08/3 LI22.5 2.4 SN OR BX | 100 | 8449230000 |
| BLZ 5.08/03/180 SN OR BX | 100 | 1526560000 |
| BLZ 5.08/03/180 SN BK BX | 100 | 1526510000 |
| BLZF 5.08/03/180 SN OR BX | 100 | 1707470000 |
| BLZF 5.08/03/180 SN BK BX | 100 | 1707700000 |
| BLF 5.08/03/180 SN OR BX | 120 | 1013690000 |
| BLF 5.08/03/180 SN BK BX | 120 | 1013440000 |
| Note | | |

| Type | Qty. | Order No |
|---|------|------------|
| ZQV 2.5N/2 RT | 60 | 1717900000 |
| ZQV 2.5N/2 BL | 60 | 1717990000 |
| ZQV 2.5N/2 GE | 60 | 1693800000 |
| BLZ-KO SW | 50 | 1545710000 |
| CAP WAVEBOX L22.5/17.5 | 20 | 8428120000 |
| Note | | |
| Full housing available as set on request. | | |

WAVEBOX

Technical data

WAVEBOX

A WAVEBOX S 22.5 housing consists of:

- 1 housing base part with clip-on foot
- 1 top part
- 2 male connectors
- 1-2 female connectors

Description

The male headers (in left and right versions depending on the construction) are soldered onto the PCB and then snapped into the head piece. This unit is then inserted in the bottom section. A proper connection is ensured by the integrated anti-twist protection. Caps can be used to cover the unused ports. A bottom housing section that can be cross-connected is also available (with ZQV2.5N/2 cross-connector).

Female plugs are available in different versions (screw or spring connection) and can be coded.

The hinged, transparent top plate on the head piece and the bottom housing section can both be laser inscribed. The top plate enables easy access for calibration.

WAVEBOX S 22.5



Technical data

| General data | |
|--------------------------------------|--------------------|
| Dimensions W x L x H (w. TS35 x 7.5) | mm |
| Dimensions W x L x H (w. TS32) | |
| No. of connections | total |
| | left / right / top |
| Access for calibration | |
| Max. power loss | |
| Number of PCB per module | |
| PCB contacting | |
| Thickness of PCB | |
| Ingress protection class | |
| Tightening torque range | |
| Material | |
| Flammability class UL 94 | |
| Colour of insulating material | |
| Clampable conductors (H05V/H07V) | |
| Solid | mm² |
| Flexible | mm² |
| Max. conductor AWG | |
| Note | |

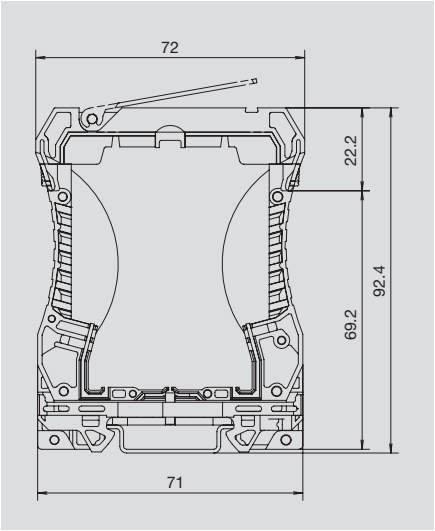
| 22.5 / 72 / 92.4 | |
|---|--------------------------|
| 6 | |
| 3 / 3 | |
| Movable top plate | |
| 2.00 W /40°C | |
| 1 | |
| soldered connection, directly | |
| 1.0 (± 0.1) mm | |
| IP 20 | |
| 0.4...0.5 Nm | |
| PC | |
| V0 | |
| Head piece is grey (similar to RAL 7035)/Bottom section is grey (similar to RAL 7039) | |
| Clamp. yoke connection | Tension clamp connection |
| 0.2...2.5 | 0.2...2.5 |
| 0.2...2.5 | 0.2...2.5 |
| AWG 26...AWG 12 | AWG 26...AWG 12 |
| | |

Ordering data

| Individual parts | |
|---|--|
| Bottom section with snap-on foot | cannot be cross-conn. can be cross-connected |
| Top part with transparent top plate mounted | |
| Ordering data connection method | |
| Pin block, 3-pole | orange, right orange, left |
| Pin block, 2-pole | orange, right orange, left |
| Socket block, clamp. yoke conn. | orange, 3-pole black, 3-pole orange, 2-pole black, 2-pole |
| Socket block, tension clamp connection | orange, 3-pole black, 3-pole orange, 2-pole black, 2-pole |
| Female plug, PUSH IN | orange, 3-pole black, 3-pole |
| Note | |

| Type | Qty. | Order No |
|---------------------------------|------|------------|
| WAVEBOX S 22.5 | 18 | 8426530000 |
| WAVEBOX S 22.5 QV | 18 | 8426540000 |
| TOP UNIT S 22.5 | 18 | 8426550000 |
| SLEH 5.08/3 RE22.5 2.4 SN OR BX | 100 | 8426620000 |
| SLEH 5.08/3 LI22.5 2.4 SN OR BX | 100 | 8426630000 |
| BLZ 5.08/03/180 SN OR BX | 100 | 1526560000 |
| BLZ 5.08/03/180 SN BK BX | 100 | 1526510000 |
| BLZF 5.08/03/180 SN OR BX | 100 | 1707470000 |
| BLZF 5.08/03/180 SN BK BX | 100 | 1707700000 |
| BLF 5.08/03/180 SN OR BX | 120 | 1013690000 |
| BLF 5.08/03/180 SN BK BX | 120 | 1013440000 |
| Note | | |

Dimensional drawing



Accessories

| Cross connection 2-pole (pluggable) | |
|-------------------------------------|-----------------------|
| | red blue yellow |
| Other accessories | |
| Coding element | black |
| Screw cap | |
| Self-assembly PCB | |
| Note | |

| Type | Qty. | Order No |
|---|------|------------|
| ZQV 2.5N/2 RT | 60 | 1717900000 |
| ZQV 2.5N/2 BL | 60 | 1717990000 |
| ZQV 2.5N/2 GE | 60 | 1693800000 |
| BLZ-KO SW | 50 | 1545710000 |
| CAP WAVEBOX L22.5/17.5 | 20 | 8428120000 |
| WB S PCB SAMPLE | 1 | 4074820000 |
| Note | | |
| Full housing available as set on request. | | |

WAVEBOX

A WAVEBOX L 22.5 housing consists of:

- 1 housing base part with clip-on foot
- 1 top part
- 4 male connectors
- 1-4 female connectors

Description

The male headers (in left and right versions depending on the construction) are soldered onto the PCB and then snapped into the head piece. This unit is then inserted in the bottom section. A proper connection is ensured by the integrated anti-twist protection. Caps can be used to cover the unused ports. A bottom housing section that can be cross-connected is also available (with ZQV2.5N/2 cross-connector).

Female plugs are available in different versions (screw or spring connection) and can be coded.

The hinged, transparent top plate on the head piece and the bottom housing section can both be laser inscribed. The top plate enables easy access for calibration.

WAVEBOX L 22.5



Technical data

| General data | |
|--------------------------------------|--------------------|
| Dimensions W x L x H (w. TS35 x 7.5) | mm |
| Dimensions W x L x H (w. TS32) | |
| No. of connections | total |
| | left / right / top |
| Access for calibration | |
| Max. power loss | |
| Number of PCB per module | |
| Thickness of PCB | |
| Ingress protection class | |
| Tightening torque range | |
| Pollution severity | |
| Material | |
| Flammability class UL 94 | |
| Colour of insulating material | |
| Clampable conductors (H05V/H07V) | |
| Solid | mm² |
| Flexible | mm² |
| Max. conductor AWG | |
| Note | |

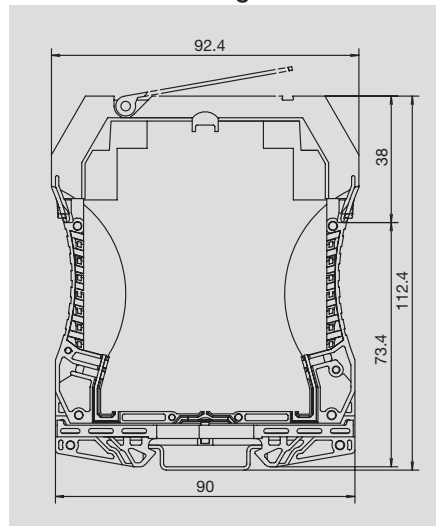
| 17.5 / 92.4 / 112.4 | |
|---|--------------------------|
| 12 | |
| 6 / 6 | |
| Movable top plate | |
| 2.00 W /40°C | |
| 1 | |
| 1.0 (± 0.1) mm | |
| IP 20 | |
| 0.4...0.5 Nm | |
| PC | |
| V0 | |
| Head piece is grey (similar to RAL 7035)/Bottom section is grey (similar to RAL 7039) | |
| Clamp. yoke connection | Tension clamp connection |
| 0.2...2.5 | 0.2...2.5 |
| 0.2...2.5 | 0.2...2.5 |
| AWG 26...AWG 12 | AWG 26...AWG 12 |

Ordering data

| Individual parts | |
|---|--|
| Bottom section with snap-on foot | cannot be cross-conn. can be cross-connected |
| Top part with transparent top plate mounted | |
| Ordering data connection method | |
| Pin block, 3-pole | orange, right orange, left |
| Pin block, 2-pole | orange, right orange, left |
| Socket block, clamp. yoke conn. | orange, 3-pole black, 3-pole orange, 2-pole black, 2-pole |
| Socket block, tension clamp connection | orange, 3-pole black, 3-pole orange, 2-pole black, 2-pole |
| Female plug, PUSH IN | orange, 3-pole black, 3-pole |
| Note | |

| Type | Qty. | Order No |
|---------------------------------|------|------------|
| WAVEBOX L 22.5 | 10 | 8426470000 |
| WAVEBOX L 22.5 QV | 10 | 8426480000 |
| TOP UNIT L 22.5 | 10 | 8426490000 |
| SLEH 5.08/3 RE22.5 2.4 SN OR BX | 100 | 8426620000 |
| SLEH 5.08/3 LI22.5 2.4 SN OR BX | 100 | 8426630000 |
| BLZ 5.08/03/180 SN OR BX | 100 | 1526560000 |
| BLZ 5.08/03/180 SN BK BX | 100 | 1526510000 |
| BLZF 5.08/03/180 SN OR BX | 100 | 1707470000 |
| BLZF 5.08/03/180 SN BK BX | 100 | 1707700000 |
| BLF 5.08/03/180 SN OR BX | 120 | 1013690000 |
| BLF 5.08/03/180 SN BK BX | 120 | 1013440000 |

Dimensional drawing



Accessories

| Cross connection 2-pole (pluggable) | |
|-------------------------------------|--------|
| | red |
| | blue |
| | yellow |
| Other accessories | |
| Coding element | black |
| Screw cap | |
| Self-assembly PCB | |
| Note | |

| Type | Qty. | Order No |
|---|------|------------|
| ZQV 2.5N/2 RT | 60 | 1717900000 |
| ZQV 2.5N/2 BL | 60 | 1717990000 |
| ZQV 2.5N/2 GE | 60 | 1693800000 |
| BLZ-KO SW | 50 | 1545710000 |
| CAP WAVEBOX L22.5/17.5 | 20 | 8428120000 |
| WB L PCB SAMPLE | 1 | 4074640000 |
| Full housing available as set on request. | | |

WAVEBOX

Technical data

WAVEBOX

- A WBL 22.5 FH housing consists of:
- 1 housing base part with clip-on foot
 - 1 top part
 - 2 male connectors
 - 1-2 female connectors

Description

The male headers (in left and right versions depending on the construction) are soldered onto the PCB and then snapped into the head piece. This unit is then inserted in the bottom section. A proper connection is ensured by the integrated anti-twist protection.

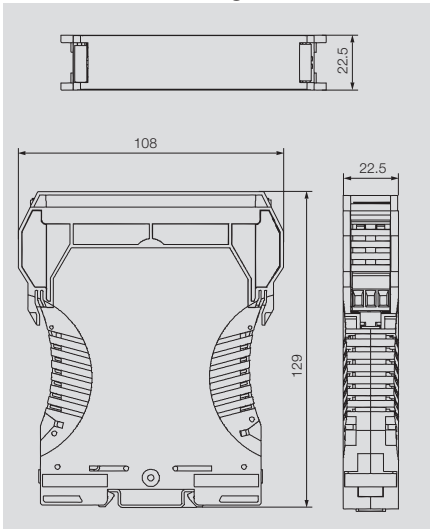
Caps can be used to cover the unused ports. A bottom housing section that can be cross-connected is also available (with ZQV2.5N/2 cross-connector).

Female plugs are available in different versions (screw or spring connection) and can be coded.

Only one tool is needed to open up the top.

The usable surface on the PCB is more than 8000 mm²

Dimensional drawing



Technical data

| General data | |
|--------------------------------------|--------------------|
| Dimensions W x L x H (w. TS35 x 7.5) | mm |
| Dimensions W x L x H (w. TS32) | |
| No. of connections | total |
| | left / right / top |
| Access for calibration | |
| Max. power loss | |
| Number of PCB per module | |
| Thickness of PCB | |
| Ingress protection class | |
| Tightening torque range | |
| Pollution severity | |
| Material | |
| Flammability class UL 94 | |
| Colour of insulating material | |
| Clampable conductors (H05V/H07V) | |
| Solid | mm ² |
| Flexible | mm ² |
| Max. conductor AWG | |
| Note | |

Ordering data

| Individual parts | |
|---|--|
| Bottom section with snap-on foot | cannot be cross-conn. can be cross-connected |
| Top part with transparent top plate mounted | |
| Ordering data connection method | |
| Pin block, 3-pole | orange, right orange, left |
| Pin block, 2-pole | orange, right orange, left |
| Socket block, clamp. yoke conn. | orange, 3-pole black, 3-pole orange, 2-pole black, 2-pole |
| Socket block, tension clamp connection | orange, 3-pole black, 3-pole orange, 2-pole black, 2-pole |
| Female plug, PUSH IN | orange, 3-pole black, 3-pole |
| Note | |

Accessories

| Cross connection 2-pole (pluggable) | |
|-------------------------------------|-----------------------|
| | red blue yellow |
| Other accessories | |
| Coding element | black |
| Screw cap | |
| Self-assembly PCB | |
| Note | |

WAVEBOX L 22.5 FH



| 22.5 / 108 / 129 | |
|---|--------------------------|
| 12 | |
| 6 / 6 | |
| detachable top plate | |
| 4 W /40°C (Horizontal mounting on terminal rail) | |
| 1 | |
| 1.0 (± 0.2) mm | |
| IP 20 | |
| 0.4...0.5 Nm | |
| PC | |
| V0 | |
| Head piece is grey (similar to RAL 7035)/Bottom section is grey (similar to RAL 7039) | |
| Clamp. yoke connection | Tension clamp connection |
| 0.2...2.5 | 0.2...2.5 |
| 0.2...2.5 | 0.2...2.5 |
| AWG 26...AWG 12 | AWG 26...AWG 12 |

| Type | Qty. | Order No |
|---------------------------------|------|------------|
| WAVEBOX L 22.5 | 10 | 8426470000 |
| WAVEBOX L 22.5 QV | 10 | 8426480000 |
| WBL 22.5 TU GY | 10 | 1964640000 |
| SLEH 5.08/3 RE22.5 2.4 SN OR BX | 100 | 8426620000 |
| SLEH 5.08/3 LI22.5 2.4 SN OR BX | 100 | 8426630000 |
| BLZ 5.08/03/180 SN OR BX | 100 | 1526560000 |
| BLZ 5.08/03/180 SN BK BX | 100 | 1526510000 |
| BLZF 5.08/03/180 SN OR BX | 100 | 1707470000 |
| BLZF 5.08/03/180 SN BK BX | 100 | 1707700000 |
| BLF 5.08/03/180 SN OR BX | 120 | 1013690000 |
| BLF 5.08/03/180 SN BK BX | 120 | 1013440000 |

| Type | Qty. | Order No |
|---|------|------------|
| ZQV 2.5N/2 RT | 60 | 1717900000 |
| ZQV 2.5N/2 BL | 60 | 1717990000 |
| ZQV 2.5N/2 GE | 60 | 1693800000 |
| BLZ-KO SW | 50 | 1545710000 |
| CAP WAVEBOX L22.5/17.5 | 20 | 8428120000 |
| Full housing available as set on request. | | |

WAVEBOX

A WBL 45 FH housing consists of:

- 1 housing base part with clip-on foot
- 1 top part
- 4 male connectors
- 1-4 female connectors

Description

The male headers (in left and right versions depending on the construction) are soldered onto the PCB and then snapped into the head piece. This unit is then inserted in the bottom section. A proper connection is ensured by the integrated anti-twist protection.

Caps can be used to cover the unused ports. Female plugs are available in different versions (screw or spring connection) and can be coded.

Only one tool is needed to open up the top.

The usable surface on the PCB is more than 8000 mm²

WAVEBOX L 45 FH



Technical data

| General data | |
|--------------------------------------|--------------------|
| Dimensions W x L x H (w. TS35 x 7.5) | mm |
| Dimensions W x L x H (w. TS32) | |
| No. of connections | total |
| | left / right / top |
| Access for calibration | |
| Max. power loss | |
| Number of PCB per module | |
| Thickness of PCB | |
| Ingress protection class | |
| Tightening torque range | |
| Pollution severity | |
| Material | |
| Flammability class UL 94 | |
| Colour of insulating material | |
| Clampable conductors (H05V/H07V) | |
| Solid | mm ² |
| Flexible | mm ² |
| Max. conductor AWG | |
| Note | |

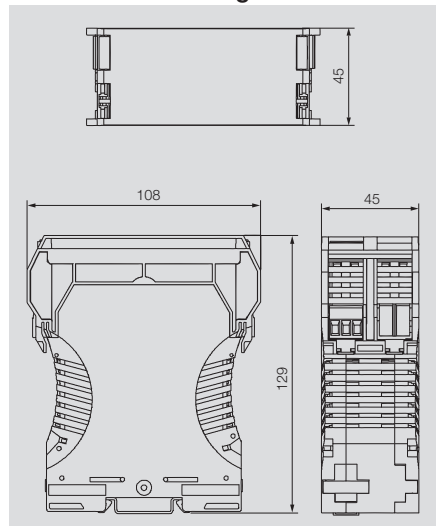
| 45 / 108 / 129 | |
|---|--------------------------|
| 12 | |
| 6 / 6 | |
| detachable top plate | |
| 7 W /40°C (Horizontal mounting on terminal rail) | |
| 1 | |
| 1.0 (± 0.2) mm | |
| IP 20 | |
| 0.4...0.5 Nm | |
| PC | |
| V0 | |
| Head piece is grey (similar to RAL 7035)/Bottom section is grey (similar to RAL 7039) | |
| Clamp. yoke connection | Tension clamp connection |
| 0.2...2.5 | 0.2...2.5 |
| 0.2...2.5 | 0.2...2.5 |
| AWG 26...AWG 12 | AWG 26...AWG 12 |

Ordering data

| Individual parts | |
|---|--|
| Bottom section with snap-on foot | cannot be cross-conn. can be cross-connected |
| Top part with transparent top plate mounted | |
| Ordering data connection method | |
| Pin block, 3-pole | orange, right orange, left |
| Pin block, 2-pole | orange, right orange, left |
| Socket block, clamp. yoke conn. | orange, 3-pole black, 3-pole orange, 2-pole black, 2-pole |
| Socket block, tension clamp connection | orange, 3-pole black, 3-pole orange, 2-pole black, 2-pole |
| Female plug, PUSH IN | orange, 3-pole black, 3-pole |
| Note | |

| Type | Qty. | Order No |
|---------------------------------|------|------------|
| WBL 45 BU QV GY | 10 | 1964650000 |
| WBL 45 TU GY | 10 | 1964660000 |
| SLEH 5.08/3 RE22.5 2.4 SN OR BX | 100 | 8426620000 |
| SLEH 5.08/3 LI22.5 2.4 SN OR BX | 100 | 8426630000 |
| BLZ 5.08/03/180 SN OR BX | 100 | 1526560000 |
| BLZ 5.08/03/180 SN BK BX | 100 | 1526510000 |
| BLZF 5.08/03/180 SN OR BX | 100 | 1707470000 |
| BLZF 5.08/03/180 SN BK BX | 100 | 1707700000 |
| BLF 5.08/03/180 SN OR BX | 120 | 1013690000 |
| BLF 5.08/03/180 SN BK BX | 120 | 1013440000 |

Dimensional drawing



Accessories

| Cross connection 2-pole (pluggable) | |
|-------------------------------------|--------|
| | red |
| | blue |
| | yellow |
| Other accessories | |
| Coding element | black |
| Screw cap | |
| Self-assembly PCB | |
| Note | |

| Type | Qty. | Order No |
|---|------|------------|
| ZQV 2.5N/2 RT | 60 | 1717900000 |
| ZQV 2.5N/2 BL | 60 | 1717990000 |
| ZQV 2.5N/2 GE | 60 | 1693800000 |
| BLZ-KO SW | 50 | 1545710000 |
| CAP WAVEBOX L22.5/17.5 | 20 | 8428120000 |
| Full housing available as set on request. | | |

MICROBOX / TERMINALBOX**Explanation**

OMNIMATE Housing MICROBOX / TERMINALBOX

The MICROBOX and TERMINALBOX series of small housings are the perfect solution for miniature sliced applications or for the protective circuitry used in connection with terminal blocks.

Up to 6 wires can be connected using the integrated (but high-performance) clamping-yoke screw or tension-clamp wire connection mechanisms.

Because of its closed construction, each individual MICROBOX is finger-safe. The TERMINALBOX can be aligned side-by-side without end or closed off using an end plate.

Pluggable cross-connectors from our terminal block line allow simple, safe power distribution of up to 32 A.

Secure contacts

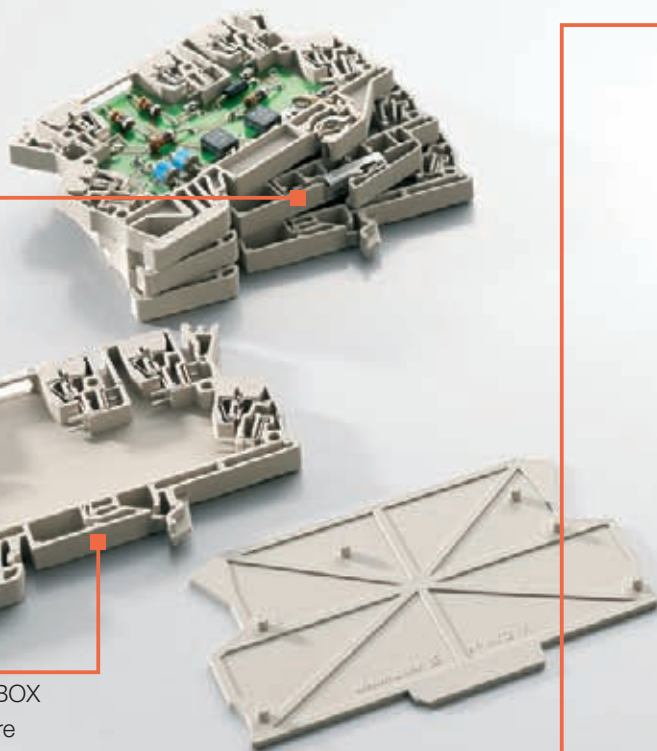
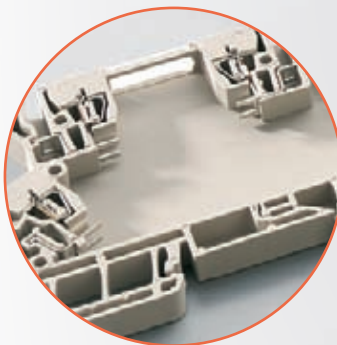
The TERMINALBOX MCZ 1.5 can optionally be equipped with a contact element that automatically establishes contact with the rail when the housing is snapped on.

Compact integration

With a width of only 6.00 mm, the TERMINALBOX MCZ 1.5 provides enough space for a miniature circuit board and 5 tension clamp connection for wires up to 1.5 mm².

Seamlessly connected

High-power cross-connectors allow power (up to 32 A) to be easily and quickly distributed on up to three levels.



Easy to operate

The transparent hinged covers make adjustments simple (for example, using DIP switches). Labelling is also possible.

MICROBOX MHS 6



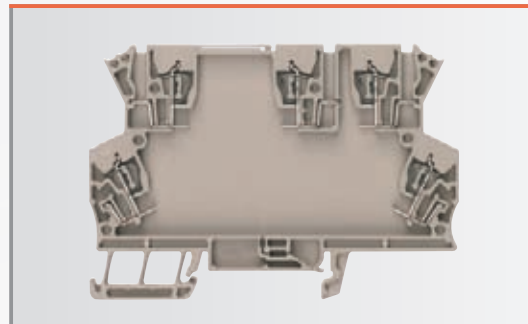
Miniature sliced-section housing in 6.1 mm width A total of 6 clamping yoke screw connections (for 2.5 mm² wires) can be manually or selectively wave soldered.

MICROBOX MHZ 6



Miniature sliced-section housing in 6.1 mm width A total of 6 tension clamp connection (for 1.5 mm² wires) can be manually or selectively wave soldered.

TERMINALBOX MCZ 1.5



Terminal-block-format open housings with tension clamp connection for wires up to 1.5 mm². A total of 5 connection elements can be manually or selectively wave soldered.

Connect reliably

The MICROBOX provides a permanent, secure clamp connection for 6 wires up to 2.5 mm² (MHS 6 with clamping yoke screw connection) or up to 1.5 mm² (MHZ 6 with tension-clamp spring connection).

Technical data

screw connection

- tension clamp connection

- 1 terminal carrier for TS35
- 2 busbars, long version
- 4 current bars, short version
- 1 housing cover

General data

| | |
|--------------------------------------|-------|
| Dimensions W x L x H (w. TS35 x 7.5) | mm |
| No. of connections | total |
| Access for calibration | |
| Shielding | |
| Contact to the mounting rail | |
| Number of PCB per module | |
| PCB-connection | |
| Thickness of PCB | |
| Ingress protection class | |
| Tightening torque range | |
| Stripping length | |
| Pollution severity | |
| Material | |
| Flammability class UL 94 | |
| Colour of insulating material | |

Clampable conductors (H05V/H07V)

| | |
|-----------------------|-----------------|
| Solid | mm ² |
| Flexible | mm ² |
| Max. conductor AWG | |
| Plug gauge to 60947-1 | |

Note

Individual parts

| | |
|--|---|
| For mounting rail TS35 | with connection element |
| | for connection element |
| | for mounting rail contact, for connection element |
| For mounting rail TS32 | with connection element |
| Frame for TS35 | |
| Frame for TS35 | for connection element |
| Frame for TS32 | |
| Top part | open |
| | closed |
| Current bars (w. tension clamp) | short version |
| | long version |
| Current bars | horizontal |
| | vertical |
| Clamp. yoke unit | clamp. yoke + screw |
| Screw | |
| Clamping yoke | |
| Mounting rail contact | |

Housing cover

Note

End plate

Cross-connection

Note

Screw connection



| | |
|-------------------------------|---------------------------------|
| 6.1 / 88 / 97.8 | |
| 6 | |
| not available | |
| 1 | |
| soldered connection, directly | |
| 0.5 ... 1.0 mm | |
| IP 20 | |
| 0.4...0.6 Nm | |
| 7 mm | |
| 2 | |
| PA | |
| V0 | |
| grey | |
| Screw connection | Tension clamp connection |
| 0.2...2.5 | |
| 0.2...2.5 | |
| AWG 28...AWG 14 | |

| Type | Qty. | Order No |
|--------------------|------|------------|
| MHS 6 | 10 | 1925740000 |
| EBGH MSA ZB | 50 | 2277700000 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| SMSE MSA ZB | 1 | 4286620000 |
| SMSE 1 MSD ZB | 1 | 4060540000 |
| ZBSC DLI2.5/M2.5X6 | 1 | 1919670000 |

| | | |
|-------------------|---|------------|
| GHDE MSA ZB FR 12 | 1 | 2279280000 |
|-------------------|---|------------|

| Type | Qty. | Order No |
|---|------|------------|
| ZQV 4N/2 RT | 60 | 1793950000 |
| ZQV 4N/2 BL | 60 | 1793960000 |
| ZQV 4N/2 GE | 60 | 1758250000 |
| Full housing available as set on request. | | |

Tension clamp connection



| | |
|-------------------------------|---------------------------------|
| 6.1 / 92 / 97.8 | |
| 6 | |
| not available | |
| 1 | |
| soldered connection, directly | |
| 0.5 ... 1.0 mm | |
| IP 20 | |
| 0.4...0.6 Nm | |
| 6 mm | |
| 2 | |
| PA | |
| V0 | |
| grey | |
| Screw connection | Tension clamp connection |
| | 0.2...1.5 |
| | 0.2...1.5 |
| | AWG 26...AWG 16 |

| Type | Qty. | Order No |
|--------------|------|------------|
| MHZ 6 | 10 | 1925760000 |
| EBGH MSA ZF | 50 | 2277710000 |
| | | |
| | | |
| | | |
| | | |
| | | |
| SMSE FE MSA | 1 | 2279350000 |
| SMSE2 ZF MSD | 1 | 2277000000 |

| | | |
|-------------|---|------------|
| GHDE MSA ZF | 1 | 2279300000 |
|-------------|---|------------|

| Type | Qty. | Order No |
|---|------|------------|
| ZQV 4N/2 RT | 60 | 1793950000 |
| ZQV 4N/2 BL | 60 | 1793960000 |
| ZQV 4N/2 GE | 60 | 1758250000 |
| Full housing available as set on request. | | |

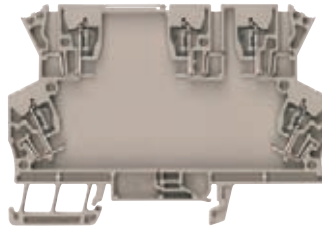
MCZ 1.5

The transparent hinged top plate is used for labelling and calibration. Maximum equipment level requires 2 short and 3 long current bars. The space available and the number of connections can be doubled using the frame. CAD drawings that ease the production of layouts and equipping of boards (details of blocked area, max. component heights, pads, etc.), are available on request. The MCZ housing kit consists of:

- 1 terminal holder
- 1 top plate
- 1-5 current bars with tension clamp
- 1 end plate (if required)

Technical data

| General data | | |
|--------------------------------------|-----------------|--|
| Dimensions W x L x H (w. TS35 x 7.5) | mm | |
| No. of connections | total | |
| Access for calibration | | |
| Shielding | | |
| Contact to the mounting rail | | |
| Number of PCB per module | | |
| PCB-connection | | |
| Thickness of PCB | | |
| Ingress protection class | | |
| Tightening torque range | | |
| Stripping length | | |
| Pollution severity | | |
| Material | | |
| Flammability class UL 94 | | |
| Colour of insulating material | | |
| Clampable conductors (H05V/H07V) | | |
| Solid | mm ² | |
| Flexible | mm ² | |
| Max. conductor AWG | | |
| Plug gauge to 60947-1 | | |
| Note | | |

MCZ 1.5**Tension clamp connection**

| 6 / 91.3 / 63.5 | |
|-------------------------------|--------------------------|
| 5 | |
| Movable top plate | |
| not available | |
| Earthing-contact | |
| 1 | |
| soldered connection, directly | |
| 1.0 (+ 0.2) mm | |
| IP 20 | |
| 6 mm | |
| 3 | |
| PA | |
| V0 | |
| beige/black | |
| Screw connection | Tension clamp connection |
| | 0.2...1.5 |
| | 0.2...1.5 |
| | AWG 26...AWG 16 |

Ordering data

| Individual parts | | |
|--|---|--|
| For mounting rail TS35 | with connection element | |
| | for connection element | |
| | for mounting rail contact, for connection element | |
| For mounting rail TS32 | with connection element | |
| Frame for TS35 | | |
| Frame for TS35 | for connection element | |
| Frame for TS32 | | |
| Top part | open | |
| | closed | |
| Current bars (w. tension clamp) | short version | |
| | long version | |
| Current bars | horizontal | |
| | vertical | |
| Clamp. yoke unit | clamp. yoke + screw | |
| Screw | | |
| Clamping yoke | | |
| Mounting rail contact | | |
| Housing cover | | |
| Note | | |

| Type | Qty. | Order No |
|--------------------|------|------------|
| MCZ 5 | 10 | 8857560000 |
| GH MCZ1.5 | 1 | 2224220000 |
| GH MCZUE1.5/UE | 1 | 2312290000 |
| RA MCZ1.5 | 25 | 2224240000 |
| KOPL MCZ1.5 | 18 | 2224040000 |
| SMSE KU FE MCZ 1.5 | 1 | 2224390000 |
| SMSE LN FE MCZ 1.5 | 1 | 2224380000 |
| SMSE FE MCZ 1.5/PE | 100 | 1003280000 |
| Note | | |

Accessories

| End plate | |
|------------------|--|
| Cross-connection | |
| Note | |

| Type | Qty. | Order No |
|---|------|------------|
| AP MCZ1.5 | 50 | 8389030000 |
| ZQV 4N/2 RT | 60 | 1793950000 |
| ZQV 4N/2 BL | 60 | 1793960000 |
| ZQV 4N/2 GE | 60 | 1758250000 |
| Full housing available as set on request. | | |

OMNIMATE Housing RS

Profile housing

Flexible – more flexible – Profilform

Build housing in profile form – the flexible modular system of coloured and transparent PVC profiles and carrier modules the perfect combination of any mounting utilising standard pitches and precisely cut to length, this creates the perfect balance between flexibility and efficiency: The modular approach is ideal for assemblies with high space requirements and is particularly suited for small quantities or variable widths.



Flexible covers

See-through covers in various heights protect assemblies even with high components safely.



Flexible installation

Extruded profiles can take several modules next to each other. Depending on the type of circuit boards can be installed on two different levels.

Flexible lengths

Cut, or joined together in a row: extruded profiles can be easily adjusted to the space requirements of every application.

Variable RS-profile housing



Variable, precision cut extruded profile with different height cover hods allow maximum packing density even for large electronic sub-assemblies.

Modular RS-profile housing



Tool-free latching profiles with standard widths from 5 to 45 mm allow rapid assembly of tailor made solutions.

Flexible mounting

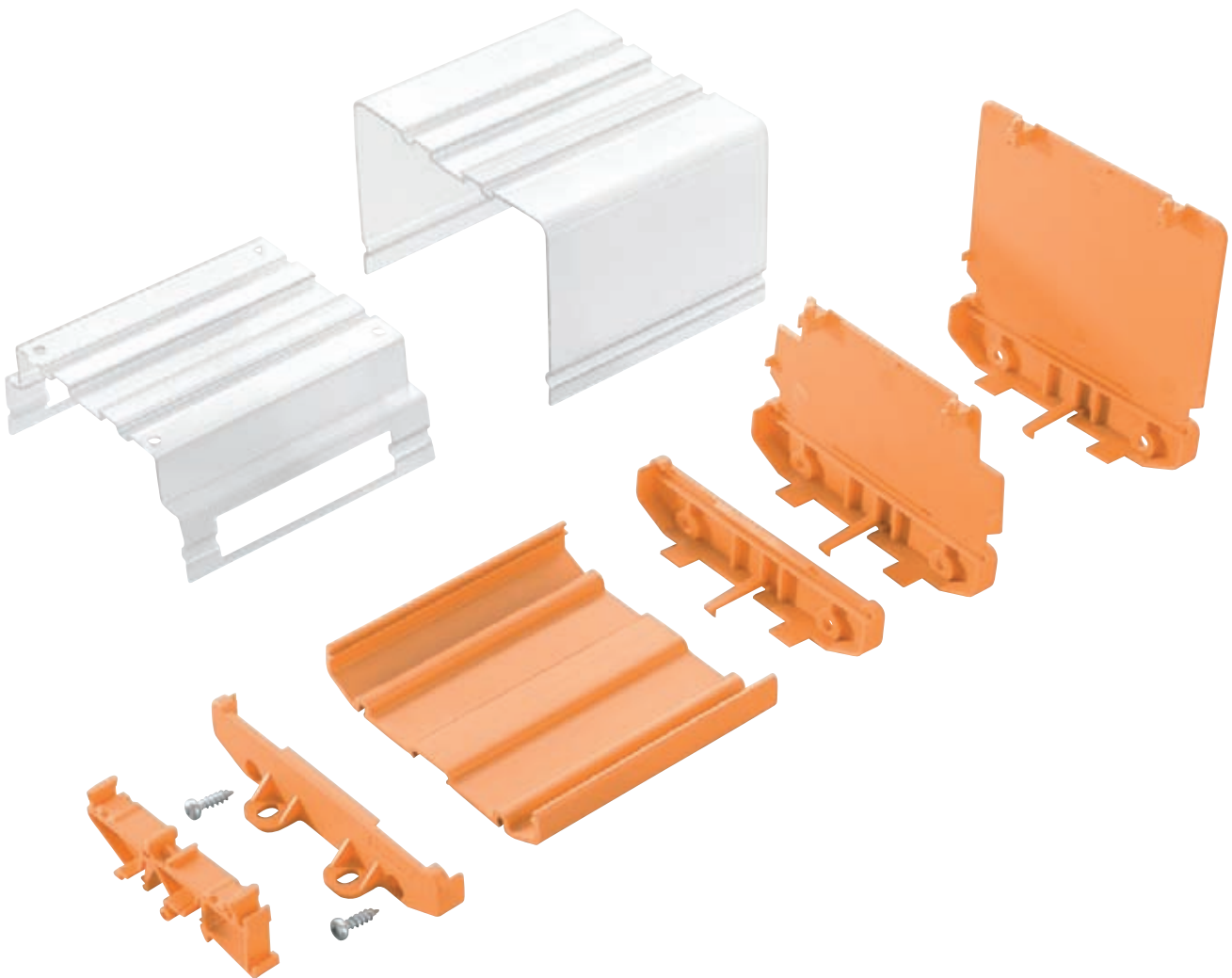
Mounting options: snapped onto the mounting rail or directly secured using screws.

OMNIMATE Housing RS

Profile housing

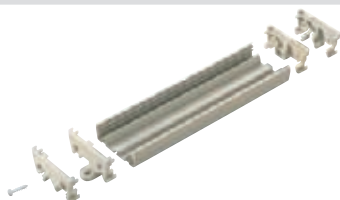
RS profile housings can be snapped on to DIN rails or mounted directly. They are available in six widths. The extruded profiles can be cut to length or joined together in modules and are ideal for low volume, special assemblies or test set-ups. Fitted transparent hoods are used to protect the components.

| Width | Type | Construction/Width of circuit board | Catalogue pages | Colour |
|----------|--------|-------------------------------------|-----------------|-----------------------|
| 45 mm | RS 45 | Variable / 42 mm | I.52 | ■ Similar to RAL 9011 |
| 70 mm | RS 70 | Modular / 67.8 mm | I.53 | ■ Similar to RAL 7024 |
| 87 mm | RS 80 | Variable / 67.8 mm | I.54 | ■ Similar to RAL 2000 |
| 86 mm | RS 90 | Variable / 79.8 mm | I.55 | |
| 109 mm | RS 100 | Variable / 100 mm | I.56 | |
| 130.8 mm | RS 122 | Variable / 122 mm | I.57 | |



Housing variants

RS 45



Description / Type

RS extruded profile 45 mm variable

Features:

- Width 45 mm
- Circuit board width: 42 mm
- Number of circuit boards (max.): 1
- Protection class (max.): IP 00

Design options



- Can be shortened to any length
- Rail mounted
- Direct mount ²⁾
- machinable



RS 70



RS extruded profile 70 mm modular

Features:

- Width 70 mm
- Circuit board width: 67.8 mm
- Number of circuit boards (max.): 1
- Protection class (max.): IP 00



- Can be aligned side-by-side without any tools
- Rail mounted

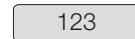
RS 80



RS extruded profile 80 mm variable

Features:

- Width 87 mm
- Circuit board width: 67.8 mm
- Number of circuit boards (max.): 1
- Protection class (max.): IP 20
- Markable



- Can be shortened to any length
- Rail mounted
- Direct mount ²⁾
- Transparent hood (opt.)
- machinable

RS 90



RS extruded profile 90 mm variable

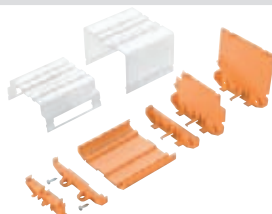
Features:

- Width 86 mm
- Circuit board width: 79.8 mm
- Number of circuit boards (max.): 1
- Protection class (max.): IP 00



- Can be shortened to any length
- Rail mounted
- Direct mount ²⁾
- machinable

RS 100



RS extruded profile 100 mm variable

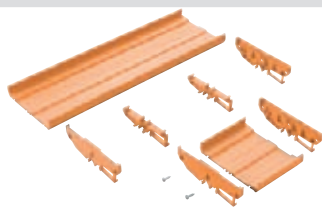
Features:

- Width 109 mm
- Circuit board width: 100 mm
- Number of circuit boards (max.): 1
- Protection class (max.): IP 20



- Can be shortened to any length
- Rail mounted
- Direct mount ²⁾
- Transparent hood (opt.)
- machinable

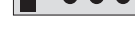
RS 122



RS extruded profile 122 mm variable

Features:

- Width 130.8 mm
- Circuit board width: 122 mm
- Number of circuit boards (max.): 2
- Protection class (max.): IP 00



- Can be shortened to any length
- Rail mounted
- machinable



pad printing,

123

markable,



machinable,

²⁾ Screw mount

Profile housing
Technical data

RS 45

Chassis plus 4 screws available in two versions:

Rail-mounted version

- 2 end plates for rail mounting
- 1 extruded profile, Direct-mount version
- 2 end plates for direct mounting
- 1 extruded profile

Description

3 heights are available for cover profile and end plates:

TS-mounting:

TS32 = 45 mm, TS35x7.5 = 40.5 mm

Direct mounting: 24 mm

Dimensions of PCB

Thickness: 1.6 (±0.2) mm, width: 42 (+0.5) mm

Size of RS segment = PCB length - 4.5 mm

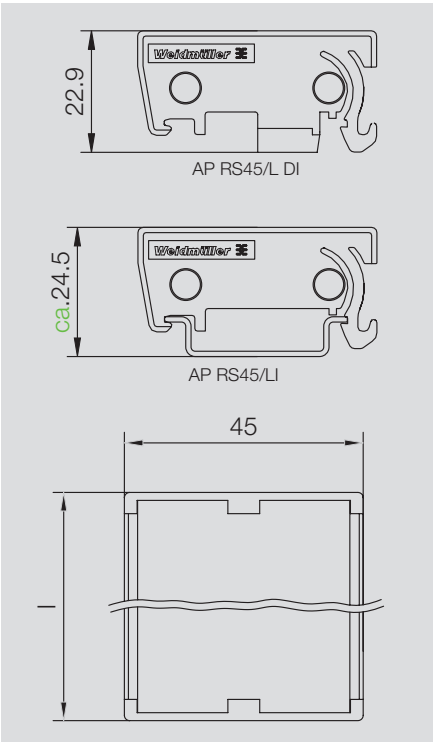
Size of ADP segment = PCB length - 1 mm

Example:

PCB length 160 mm,

RS = 155.5 mm, ADP = 159 mm

Dimensioned drawing



Technical data

| General data | |
|-------------------------------|--|
| Number of PCB per module | |
| Thickness of PCB | |
| Material | |
| Flammability class UL 94 | |
| Colour of insulating material | |
| Note | |

Ordering data

| Extruded profile | |
|---------------------------|----------------------------|
| 2000 mm | orange |
| 2000 mm | grey |
| 1000 mm | grey |
| 155 mm | orange |
| Intermediate piece | |
| 5 mm | |
| 15 mm | |
| 25 mm | |
| 30 mm | |
| 45 mm | |
| End plate w. locking foot | |
| Without cover | grey, left version |
| | grey, right-hand version |
| | orange, left version |
| | orange, right-hand version |

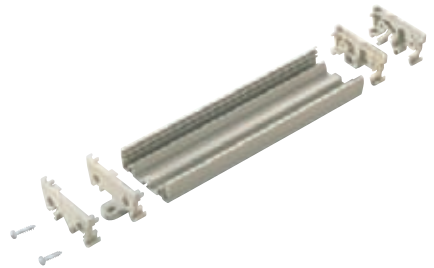
| Locking foot | |
|----------------------------|-------------------|
| | orange |
| | grey |
| With marking facilities | left version |
| | right version |
| Without marking facilities | left version |
| | right version |
| Central | intermediate foot |

| End plate for direct mounting | |
|--|---------------------|
| Without cover | grey, left version |
| | grey, right version |
| | orange |
| | grey |
| For medium-high cover profile | orange |
| | grey |
| For high cover profile | orange |
| | grey |
| End plate for mounting rail installation | |
| Without cover | orange |
| | grey |
| For medium-high cover profile | orange |
| | grey |
| For high cover profile | orange |
| | grey |

| | |
|-----------------------|-------------|
| Cover profile 1000 mm | Medium-high |
| | high |
| Screws | |

Note

RS 45



| General data | |
|----------------|--|
| 1 | |
| 1.6 (± 0.2) mm | |
| PVC/PA | |
| V2 | |
| beige | |

| Type | Qty. | Order No. |
|------------------|-------|------------|
| RF RS 45 OR 2000 | V0 1 | 4340430000 |
| PF RS 45 GR 2000 | V0 1 | 4027750000 |
| PF RS 45 GR 1000 | V0 10 | 8140880000 |

| | | |
|--|--|--|
| | | |
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| | | |

| | | |
|-------------|-------|------------|
| AP 45/LI | V2 20 | 8143910000 |
| AP 45/RE | V2 20 | 8143900000 |
| AP 45/LI OR | V2 20 | 1011590000 |
| AP 45/RE OR | V2 20 | 1011600000 |

| | | |
|--|--|--|
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| | | |
|-------------|-------|------------|
| AP 45/LI DI | V2 20 | 8140870000 |
| AP 45/RE DI | V2 20 | 8140860000 |

| | | |
|--|--|--|
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|--|--|--|
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| | | |
|--------------|------|------------|
| ADP 1/HP1 1M | V2 1 | 0485200000 |
|--------------|------|------------|

| | | |
|----------------|-----|------------|
| LKSC M2.9x13VZ | 100 | 4011200000 |
|----------------|-----|------------|

| | | |
|--|--|--|
| | | |
| | | |

Other lengths on request.

1.53

RS 90

Chassis plus 4 screws available in two versions:

- 2 end plates
- 2 or more clip-on feet
- 1 extruded profile

Description

Dimensions of PCB

Thickness: 1.6 (± 0.2) mm, width: 79.8 (± 0.2) mm

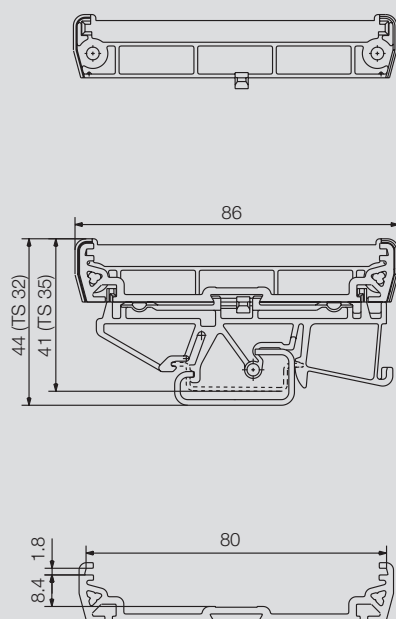
Size of RS segment = PCB length - 4.5 mm

Example:

PCB length 160 mm

RS = 155.5 mm

Dimensioned drawing



Technical data

General data

| |
|-------------------------------|
| Number of PCB per module |
| Thickness of PCB |
| Material |
| Flammability class UL 94 |
| Colour of insulating material |

Note

Ordering data

Extruded profile

| | |
|---------|--------|
| 2000 mm | orange |
| 2000 mm | grey |
| 1000 mm | grey |
| 155 mm | orange |

Intermediate piece

| |
|-------|
| 5 mm |
| 15 mm |
| 25 mm |
| 30 mm |
| 45 mm |

End plate w. locking foot

| | |
|---------------|---------------------|
| Without cover | grey, left version |
| | grey, right version |

Locking foot

| | |
|----------------------------|-------------------|
| | orange |
| | grey |
| With marking facilities | left version |
| | right version |
| Without marking facilities | left version |
| | right version |
| Central | Intermediate foot |

End plate for direct mounting

| | |
|-------------------------------|---------------------|
| Without cover | grey, left version |
| | grey, right version |
| | orange |
| | grey |
| For medium-high cover profile | orange |
| | grey |
| For high cover profile | orange |
| | grey |

End plate for mounting rail installation

| | |
|-------------------------------|--------|
| Without cover | orange |
| | grey |
| For medium-high cover profile | orange |
| | grey |
| For high cover profile | orange |
| | grey |

| | |
|---------------|-------------|
| Cover profile | Medium-high |
| | high |

Screws

Note

RS 90



| |
|----------------------|
| 1 |
| 1.6 (± 0.2) mm |
| PVC/PA |
| V0 |
| orange |

| Type | Qty. | Order No. |
|--------------------|------|------------|
| PF RS 90 OR 2000MM | V0 1 | 4053240000 |
| PF RS 90 GR 2000MM | V0 1 | 4051810000 |

| | | |
|-----------|-------|------------|
| RF 180 | V2 20 | 1324460000 |
| RF 180 GR | V2 20 | 1773400000 |

| | | |
|----------|-------|------------|
| AP 90 OR | V2 20 | 1961880000 |
| AP 90 GR | V2 20 | 1961890000 |

| | | |
|----------------|-----|------------|
| LKSC M2.9x13VZ | 100 | 4011200000 |
|----------------|-----|------------|

Other lengths on request.

Profile housing Technical data

RS 100

- Chassis plus 4 screws available in two versions:
- Rail-mounted version
- 2 end plates for rail mounting
 - 2 or more clip-on feet
 - 1 extruded profile
 - 1 cover profile (if required) Direct-mount version
 - 2 end plates for direct mounting
 - 1 extruded profile
 - 1 cover profile (if required)

Description

3 heights are available for cover profile and end plates:

Rail mounting without cover:
TS32 = 45 mm, TS35x7.5 = 40.5 mm

Rail mounting with low cover:
TS32 = 89 mm, TS35x7.5 = 84.5 mm

Rail mounting with high cover:
TS32 = 121 mm, TS35x7.5 = 116.5 mm

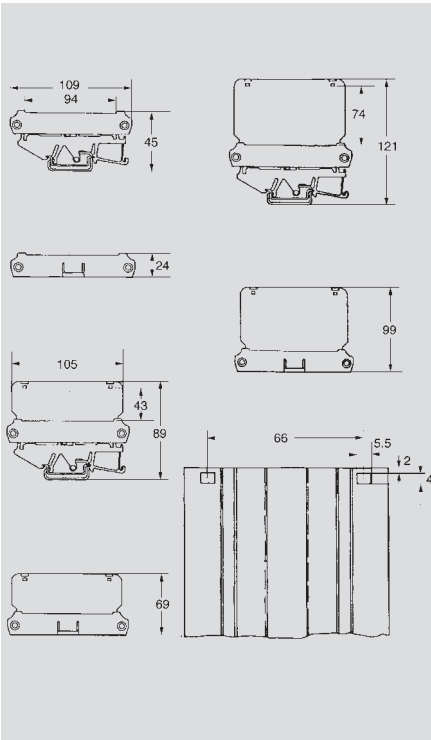
Direct mounting without/low/high cover:
24 / 69 / 99 mm

Dimensions of PCB
Thickness: 1.6 (±0.2) mm, width:
100 (+0.5) mm

Size of RS segment = PCB length - 4.5 mm
Size of ADP segment = PCB length - 1 mm

Example:
PCB length 160 mm
RS = 155.5 mm, ADP = 159 mm

Dimensioned drawing



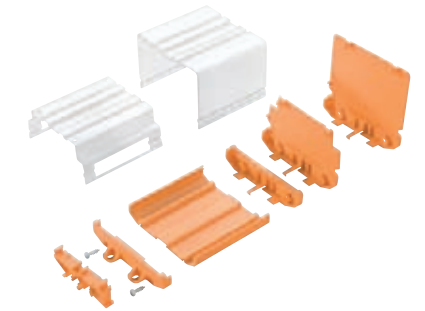
Technical data

| General data | |
|-------------------------------|----------------------------------|
| Number of PCB per module | 1 |
| Thickness of PCB | 1.6 (± 0.2) mm |
| Material | PVC/PA |
| Flammability class UL 94 | V0 |
| Colour of insulating material | orange / grey (Black on request) |
| Note | |

Ordering data

| Extruded profile | |
|--|---|
| 2000 mm | orange |
| 2000 mm | grey |
| 100 0mm | grey |
| 155 mm | orange |
| Intermediate piece | |
| 5 mm | |
| 15 mm | |
| 25 mm | |
| 30 mm | |
| 45 mm | |
| End plate w. locking foot | |
| Without cover | grey, left version grey, right version |
| Locking foot | |
| | orange grey |
| With marking facilities | left version right version |
| Without marking facilities | left version right version |
| Central | Intermediate foot |
| End plate for direct mounting | |
| Without cover | grey, left version grey, right version orange grey |
| For medium-high cover profile | orange grey |
| For high cover profile | orange grey |
| End plate for mounting rail installation | |
| Without cover | orange grey |
| For medium-high cover profile | orange grey |
| For high cover profile | orange grey |
| Cover profile 2000 mm | Medium-high |
| 2000 mm | high |
| Screws | |
| Note | |

RS 100



| General data | |
|-------------------------------|----------------------------------|
| Number of PCB per module | 1 |
| Thickness of PCB | 1.6 (± 0.2) mm |
| Material | PVC/PA |
| Flammability class UL 94 | V0 |
| Colour of insulating material | orange / grey (Black on request) |
| Note | |

| Type | Qty. | Order No. |
|---------------------------|-------|------------|
| PF RS 100 OR 2000MM A.1 | V0 1 | 4144870000 |
| PF RS 100 GR 2000MM A.1 | V0 1 | 4010870000 |
| PF RS 100 A.1 OR 155.5 | V0 25 | 4148400000 |
| RF 180 | V2 20 | 1324460000 |
| RF 180 GR | V2 20 | 1773400000 |
| AP 100 D | V2 20 | 1185160000 |
| AP 110 D | V2 10 | 1185360000 |
| AP 111 D | V2 10 | 1185560000 |
| AP 100 | V2 20 | 1185060000 |
| AP 110 | V2 10 | 1185260000 |
| AP 111 | V2 10 | 1185460000 |
| ADP 10 | V2 1 | 4169320000 |
| ADP 11 | V2 1 | 4169330000 |
| PTSC KB40X14 | 100 | 4019420000 |
| Other lengths on request. | | |

