BHZ 5.00/03/90LH BK/BL

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Product image





Naturally, the CH20M system also shows its perfection in the peripheral interface.
When considering design options, processing, usability, reliability and security, the PCB terminals or pin headers and connectors are just as important in the practice as the entire system.
In every sector, the connection technology is at the top of its class.

- **100% non-interchangeable** Together with the captive, unique "Auto-Set" encoding, the uniquely detectable markers on the plug connection and in the front ensure misconnection-proof assignment of the connections. Both markers can be printed as cards in a PrintJet and then permanently snapped on.
- **100% intuitive** Quick and easy operation by means of an integrated colour-coded release lever with grip tab and including a screwdriver pocket.
- **100% safe** Touch protection for the male and female header on both sides
- **100% efficient** All PCB connection elements are reflow compatible
- **100% time and cost savings** During the installation: the quick all-purpose "Multi-Tool" screw head ensures a secure contact, user-friendly operation and less complexity. Additional features, such as the "Wire ready" technology, enable you to minimize wiring costs and increase customer satisfaction.

Simple, component-friendly unplugging of the female plug using the integrated release lever.

General ordering data

Version	PCB plug-in connector Blue release lever BHZ 5.00/03/90LH SN BK/BL BX
Order No.	1069370000
Type	BHZ 5.00/03/90LH BK/BL
GTIN (EAN)	4032248824953
Qty.	108 pc(s).
Product data	IEC: 400 V / 10 A / 0.2 - 2.5 mm² UL: 300 V / 10 A / AWG 26 - AWG 12
Packaging	Box

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Technical data

Dimensions and weights

Height	29 mm	Height (inches)	1.142 inch
Width	17.4 mm	Width (inches)	0.685 inch
Length	14.6 mm	Length (inches)	0.575 inch
Net weight	7.157 g		

System Parameters

Product family	OMNIMATE Housing - series CH20M	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	5 mm
Pitch in inches (P)	0.197 inch	Conductor outlet direction	90°
Number of poles	3	L1 in mm	10 mm
L1 in inches	0.394 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	2.5 mm²
Protection degree	IP20	Can be coded	Yes
Stripping length	8 mm	Tightening torque for screw flange, min.	0.4 Nm
Tightening torque for screw flange, max.	0.6 Nm	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.6 Nm	Clamping screw	M 2.5
Screwdriver blade	0.6 x 3.5	Screwdriver blade standard	DIN 5264
Plugging cycles	25		

Material data

Insulating material	PA 66 GF 30	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	I
Comparative Tracking Index (CTI)	600 ≤ CTI	UL 94 flammability rating	V-0
Contact material	CuSn	Contact surface	tinned
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-40 °C	Operating temperature, max.	120 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	120 °C

Conductors suitable for connection

Clamping range, min.	0.13 mm²	Clamping range, max.	3.31 mm²
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 14
Solid, min. H05(07) V-U	0.2 mm²	Solid, max. H05(07) V-U	2.5 mm²
Stranded, max. H07V-R	2 mm²	Flexible, min. H05(07) V-K	0.2 mm²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.25 mm²	w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm²
w. wire end ferrule, DIN 46228 pt 1, min.	0.25 mm²	w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm²
Plug gauge in accordance with EN 60999 a x b; ø	2.8 mm x 2.4 mm; 3.0 mm	Reference text	The outside diameter of the plastic collar should not be larger than the pitch (P), Length of ferrules is to be chosen depending on the product and the rated voltage.

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Technical data

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	10 A
Rated current, min. number of poles (Tu=40°C)	9 A	Rated voltage for surge voltage class / pollution degree II/2	400 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	250 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV	Clearance, min.	3 mm
Creepage distance, min.	3.2 mm		

Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group C / CSA)	50 V
Rated voltage (Use group D / CSA)	300 V	Rated current (Use group B / CSA)	10 A
Rated current (Use group C / CSA)	10 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 12

Rated data acc. to UL 1059

Institute (cURus)	c US	Certificate No. (cURus)	E60693
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group C / UL 1059)	50 V
Rated voltage (Use group D / UL 1059)	300 V	Rated current (Use group B / UL 1059)	10 A
Rated current (Use group C / UL 1059)	10 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 12
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

General data

Colour	black	Colour chart (similar)	RAL 9011
Protection degree	IP20		

Material data

Comparative Tracking Index (CTI)	600 ≤ CTI	Insulating material	PA 66 GF 30
Insulating material group	I	UL 94 flammability rating	V-0

Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ECLASS 9.0	27-44-03-09
ECLASS 9.1	27-44-03-09	ECLASS 10.0	27-44-03-09
ECLASS 11.0	27-46-02-02	ECLASS 12.0	27-46-02-02

Important note

IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

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Technical data

Approvals

Approvals	
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Catalogues	Catalogues in PDF-format
Brochures	FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL MACHINE SAFETY EN FL 72H SAMPLE SER EN PO OMNIMATE EN PO OMNIMATE EN

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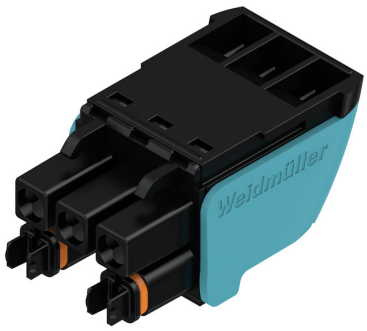
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Drawings

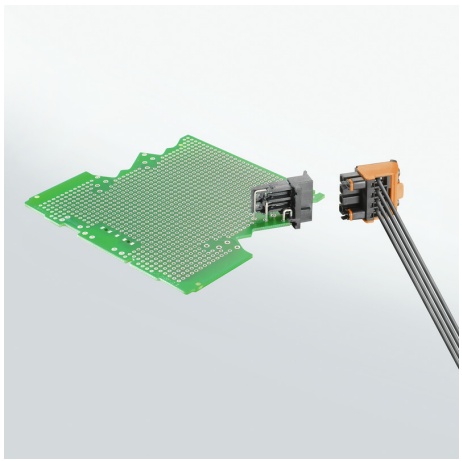
Product image



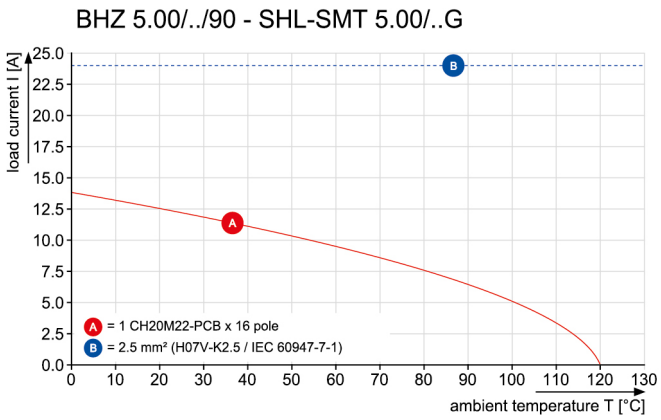
Product image



Similar to illustration, Example of use



Derating curve



Derating curve

