

BHZ 5.00/03/90LH BK/BK PRT 51

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

www.weidmueller.com

Product image



For our CH20M series, we offer first-class service with pre-coded and printed Female Plugs. This solution not only saves time during the installation of electronics housing thanks to pre-labeling but also provides protection against incorrect assembly through pre-coding—fully in line with the Poka-Yoke principle.

General ordering data

Version	PCB plug-in connector, female plug, 5.00 mm, Number of poles: 3, 90°, Clamping yoke connection, PRT 51 / 52 / 53; cod. 02, Box
Order No.	1086110000
Type	BHZ 5.00/03/90LH BK/BK PRT 51
GTIN (EAN)	4032248852635
Qty.	108 items
Product data	IEC: 400 V / 10 A / 0.2 - 2.5 mm ² UL: 300 V / 10 A / AWG 26 - AWG 12
Packaging	Box

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Technical data

Approvals

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

Dimensions and weights

Depth	30.6 mm	Depth (inches)	1.2047 inch
Height	29 mm	Height (inches)	1.1417 inch
Width	17.4 mm	Width (inches)	0.685 inch
Length	14.6 mm	Length (inches)	0.5748 inch
Net weight	2 g		

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

System Parameters

Product family	OMNIMATE Housing - series CH20M	Type of connection	Field connection
Wire connection method	Clamping yoke connection	Pitch in mm (P)	5.00 mm
Pitch in inches (P)	0.197 "	Conductor outlet direction	90°
Number of poles	3	L1 in mm	10.00 mm
L1 in inches	0.394 "	Number of rows	1
Pin series quantity	1	Rated cross-section	2.5 mm ²
Touch-safe protection acc. to DIN VDE 57 106	Safe from back-of-hand touch	Touch-safe protection acc. to DIN VDE 0470	IP20 plugged/ IP10 unplugged
Protection degree	IP20	Can be coded	Yes
Stripping length	8 mm	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 of operational elements	black	Colour chart (similar)	RAL 9011
Insulating material group	I	Comparative Tracking Index (CTI)	600 ≤ CTI
Moisture Level (MSL)		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.	-25 °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 mm ²	Clamping range, max.	3.31 mm ²
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 14
Solid, min. H05(07) V-U	0.2 mm ²	Solid, max. H05(07) V-U	2.5 mm ²
Stranded, min. H07V-R	0.2 mm ²	Stranded, max. H07V-R	2 mm ²

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Flexible, min. H05(07) V-K w. plastic collar ferrule, DIN 46228 pt 4, 0.25 mm ² min.	0.2 mm ²	Flexible, max. H05(07) V-K w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm ² max.	2.5 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.25 mm ²	w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm ²
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.

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	Creepage distance, min.	3.2 mm
Clearance, min.	3 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)	CURUS	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.		

Material data

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

General data

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

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.
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fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

Classifications

ETIM 8.0	EC002638	ETIM 9.0	EC002638
ETIM 10.0	EC002638	ECLASS 14.0	27-46-02-02
ECLASS 15.0	27-46-02-02		

