

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

#### **Product image**





Similar to illustration

### Superior efficiency, flexibility and design - the "standard tailor-made fit"

When selecting a housing design, flexibility is a key factor. Other important criteria are: scalability, customized design, innovative functionality and cost efficiency. You need a choice which offers the maximum performance with the minimum overhead.

The CH20M12 modular electronics housing is the "small" option amongst the "large" housing solutions for compact electronics applications.

The entire system is characterized by excellence: outstanding scalability and flexibility, a high security level, innovative application functionality and a variety of practical details.

- Quicker installation with features such as "Wire ready" the universal multi-tool screw head
- **User-friendly operations:** with clear and permanent labelling and extra marking possibilities, integrated release clip or transparent cover
- Maximum interference immunity with EMCcompliant construction featuring deeply overlapping module joint edges made from high-performance plastic
- High operational reliability with the unique Auto-Set coding system and featuring double-sided touch protection on the pin header and socket blocks

CH20M - a compact name for the most flexible system available on the market. It doesn't just stand for "Component Housing IP20 Modular".

CH20M also stands for efficiency and innovation

CH20M also stands for efficiency and innovation throughout design, production and use.

#### General ordering data

Version	Electronics housing sample, OMNIMATE Housing - series CH2OM black, Sample kit for developers, consisting of individual parts incl. female plug, Width: 12.5 mm
Order No.	<u>1519270000</u>
Туре	CH20M12 SET 2/3 BK/OR
GTIN (EAN)	4050118326888
Qty.	1 pc(s).



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# **Technical data**

Dimensions	and weights
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Height	113.6 mm	Height (inches)	4.472 inch
Length	119.2 mm	Length (inches)	4.693 inch
Net weight	92 g	Width	12.5 mm
Width (inches)	0.492 inch		

#### **Temperatures**

Installation temperature	Humidity	5 - 93% rel. humidity, Tu =
-2	5 °C85 °C	40°C, no condensation

#### Rated data acc. to IEC

Rated current, max. number of poles	40.4	Rated current, max. number of poles	
(Tu=20°C)	10 A	(Tu=40°C)	9 A
Rated voltage for surge voltage class /		Rated voltage for surge voltage class /	
pollution degree II/2	400 V	pollution degree III/2	320 V
Rated voltage for surge voltage class /		Rated impulse voltage for surge voltage	
pollution degree III/3	250 V	class/ pollution degree II/2	4 kV
Rated impulse voltage for surge voltage		Rated impulse voltage for surge voltage	
class/ pollution degree III/2	4 kV	class/ contamination degree III/3	4 kV

#### **Design - IN requirements**

PCB thickness	1.6 mm	Tolerance for the PCB shape	±0.1 mm
Tolerance of circuit board thickness	+0.15 mm		

### **Assembly properties**

Number of connection levels	3	Number of poles	2	
Type of contact to PCB	Solder connection, direct	Type of connection	pluggable	

### **Connectable coducteurs**

Stripping length	8 mm	Tightening torque, min.	0.4 Nm	
Tightening torque, max.	0.5 Nm	Clamping range, min.	0.13 mm <sup>2</sup>	
Clamping range, max.		Wire connection cross section A	WG,	
	2.5 mm <sup>2</sup>	min.	AWG 26	
Wire connection cross section A	WG,	Solid, min. H05(07) V-U		
max.	AWG 14		0.2 mm <sup>2</sup>	
Solid, max. H05(07) V-U	2.5 mm <sup>2</sup>	Stranded, max. H07V-R	2.5 mm <sup>2</sup>	
Flexible, min. H05(07) V-K		w. plastic collar ferrule, DIN 46228 pt 4,		
	0.2 mm <sup>2</sup>	min.	0.25 mm <sup>2</sup>	
w. plastic collar ferrule, DIN 462	.28 pt 4,	w. wire end ferrule, DIN 46228	pt 1,	
max.	2.5 mm <sup>2</sup>	min.	0.25 mm <sup>2</sup>	
w. wire end ferrule, DIN 46228	pt 1,	Max. clamping range		
max.	2.5 mm <sup>2</sup>		2.5 mm <sup>2</sup>	

#### **General data**

Colour	black	Colour chart (similar)	RAL 9011
Encapsulation option	No		

### **Material data**

Comparative Tracking Index (CTI)	≥ 550	Insulating material	PA 66 GF 30
Insulating material group	II	UL 94 flammability rating	V-0



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#### Classifications

ETIM 6.0	EC001031	ETIM 7.0	EC001031
ECLASS 9.0	27-18-27-02	ECLASS 9.1	27-18-27-92
ECLASS 10.0	27-18-27-02	ECLASS 11.0	27-18-27-02
Important note			
Product information		stricted zones, and other information for ion technology under the corresponding	the design in of the circuit board can be found male headers in the downloads.
Approvals			
ROHS	Conform		
1010	Comorni		
Downloads			
Engineering Data		<u>LP-POSITION_12MM</u> th CH20M A OV PCB-SHL 70315	



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# **Drawings**

## **Dimensional drawing**





