

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

#### **Product image**















## 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, customised design, innovative functionality and cost efficiency. You need a choice which offers the maximum performance with the minimum overhead.

The CH20M22 modular electronics housing is the standard format from amongst the different housing widths. It has the optimal width for most typical 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 ESDcompliant 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 throughout design, production and use.

#### General ordering data

Version	Modular housing, OMNIMATE Housing - series CH20M Graphite grey, Base element, Width: 22.5 mm
Order No.	<u>1073350000</u>
Туре	CH20M22 B GGY/BK 2019
GTIN (EAN)	4032248831432
Qty.	10 pc(s).



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Technical data**

## **Dimensions and weights**

Depth	107.4 mm	Depth (inches)	4.228 inch
Height	109.3 mm	Height (inches)	4.303 inch
Width	22.5 mm	Width (inches)	0.886 inch
Net weight	40.5 g		

## **Temperatures**

Operating temperature range	Humidity	5 - 93% rel. humidity, Tu =
-40 °C12	20 °C	40°C, no condensation

#### **Material data**

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

#### **General data**

Colour	Graphite grey	Colour chart (similar)	RAL 7024
Encapsulation option	No	Protection degree	IP20 in installed state
Rail	TS 35		

## **Assembly properties**

Number of slots for female connectors of		Number of PCBs, max.	
the mounted assembly, max.	6		1
Number of connection levels, max.	3	Number of poles, max.	24
Height of components on the PCB, max	. 16.1 mm	Type of assembly of the PCB	double-sided

### **Mechanical tests**

According to Standard	DIN EN 61373:1999 (shock and vibra	DIN EN 61373:1999 (shock and vibration)		
Test conditions	five housings installed in a row, 200g a	additional weight on the PCB		
Proved axles	X, Y, Z			
Shock test	General test advices	All mechanical tests were tested on examplary setup, or in view of depending regulation. The specified results do not replace approval relevant tests. They are just orientation values.		
	Test category	1		
	Number of shocks per axle	3 in positive and negative direction		
	Shock duration	30 ms		
	Acceleration horizontal	30 m/s <sup>2</sup>		
	Acceleration vertical	30 m/s <sup>2</sup>		
	Acceleration longitudinal	50 m/s <sup>2</sup>		
Vibration test	Test duration	5 hours per axle		
	Effective acceleration	7.9 m/s <sup>2</sup>		
	Test category	1B		



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Technical data**

#### Thermal tests

Thermal tests	General test advices	All thermal tests were tested on examplary setup, or in view of depending regulation. The specified results do not replace approval relevant tests. They are just orientation values.
	Test conditions	three housings installed in a row - no spacing, three connection level - six connectors per housing
	Test axles	horizontal, More on request
	Ambient temperature	70 °C
	Power dissapation, max.	1.9 W
	Ambient temperature	60 °C
	Power dissapation, max.	2.35 W
	Ambient temperature	40 °C
	Power dissapation, max.	3.4 W
	Ambient temperature	20 °C
	Power dissapation, max.	4.5 W

#### **Component properties**

Color of clip-on foot	black	Number of connection levels, max 3	

## **Design - IN requirements**

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

#### **Individualization options**

Customer specific labelling possible		Customer specific order process	See guideline under
	Yes		downloads
Processing possibilities	Laser processing	-	

## Classifications

ETIM 6.0	EC001031	ETIM 7.0	EC001031
ETIM 8.0	EC001031	ETIM 9.0	EC001031
ECLASS 9.0	27-18-27-90	ECLASS 9.1	27-18-27-90
ECLASS 10.0	27-18-27-92	ECLASS 11.0	27-18-27-92
ECLASS 12.0	27-18-27-92	ECLASS 13.0	27182792

#### Important note

Product information	Circuit board contour, restricted zones, and other information for the design in of the circuit board can be found
	in the category connection technology under the corresponding male headers in the downloads.

#### **Approvals**

ROHS	Conform



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

# **Technical data**

#### **Downloads**

CAD data – STEP
CAD data - Pin_header_pin_length_CH20M_A_OV_PCB-SHL_70315
PCB_position_50881_LP-POSITION_22MM
Guideline customerspecific housings
Guideline kundenspezifische Gehäuse
Catalogues in PDF-format
FL ANALO.SIGN.CONV. EN
MB DEVICE MANUF. EN
FL MACHINE SAFETY EN
FL 72H SAMPLE SER EN
PO OMNIMATE EN



Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

## **Drawings**

## **Product image**



## **Product image**



Base element without cut-out in snap-in foot area

## **Dimensioned drawing**

