

VWGK 6 BK BX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image



The V versions of the WGK feed-through terminals with an insulated housing and clamping yoke connections on the external side, and a solder connection on the internal side for use in encapsulated devices (e.g. EMC filters).

General ordering data

Version	OMNIMATE Power - series WGK, Feed-through terminal, Rated cross-section: 6 mm ² , Wemid (PA), Direct mounting, Feed-through (bushing)
Order No.	2484810000
Type	VWGK 6 BK BX
GTIN (EAN)	4050118520484
Qty.	50 items
Product data	IEC: 500 V / 41 A / 0.5 - 10 mm ² UL: 300 V / 50 A / AWG 22 - AWG 10
Packaging	Box

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Technical data

Approvals

ROHS	Conform
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Dimensions and weights

Height	31.5 mm	Height (inches)	1.2402 inch
Height of lowest version	31.5 mm	Width	10 mm
Width (inches)	0.3937 inch	Length	10.7 mm
Length (inches)	0.4213 inch	Net weight	6.25 g

Environmental Product Compliance

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

System parameters

Product family	OMNIMATE Power - series WGK	Wire connection method	Screw / solder connection
Conductor outlet direction	180°	Number of poles	1
Pin series quantity	1	Fitted by customer	No
Screwdriver blade	0.8 x 4.0	Tightening torque, min.	0.8 Nm
Tightening torque, max.	1.8 Nm	Clamping screw	M 3.5
Stripping length	13 mm	Touch-safe protection acc. to DIN VDE 0470	IP 20
Protection degree	IP20	Type of connection 1	Clamping yoke
Type of connection 2	Solder connection		

Material data

Insulating material	Wemid (PA)	Colour	black
Colour chart (similar)	RAL 9011	Moisture Level (MSL)	
UL 94 flammability rating	V-0	Contact material	Cu-alloy
Contact surface	tinned	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °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.	0.5 mm ²
Clamping range, max.	10 mm ²
Wire connection cross section AWG, min.	AWG 22
Wire connection cross section AWG, max.	AWG 10
Solid, min. H05(07) V-U	0.5 mm ²
Solid, max. H05(07) V-U	10 mm ²
Stranded, min. H07V-R	0.5 mm ²
Stranded, max. H07V-R	6 mm ²
Flexible, min. H05(07) V-K	0.5 mm ²
Flexible, max. H05(07) V-K	6 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 6 mm ² max.	

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w. wire end ferrule, DIN 46228 pt 1, min. 0.5 mm²

w. wire end ferrule, DIN 46228 pt 1, max. 6 mm²

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	2.5 mm ²
wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H2,5/12
Cross-section for conductor connection	Type	fine-wired	
		nominal	4 mm ²
wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H4,0/12
Cross-section for conductor connection	Type	fine-wired	
		nominal	6 mm ²
wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H6,0/12
Cross-section for conductor connection	Type	fine-wired	
		nominal	1.5 mm ²
wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H1,5/12

Reference text Length of ferrules is to be chosen depending on the product and the rated voltage. The outside diameter of the plastic collar should not be larger than the pitch (P)

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1	Rated current, min. number of poles (Tu=20°C)	41 A
Rated current, max. number of poles (Tu=20°C)	41 A	Rated voltage for surge voltage class / pollution degree III/3	500 V
Rated impulse voltage for surge voltage class/ contamination degree III/3	6 kV		

Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group C / CSA)	300 V
Rated voltage (Use group D / CSA)	300 V	Rated current (Use group B / CSA)	50 A
Rated current (Use group C / CSA)	50 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 22	Wire cross-section, AWG, max.	AWG 10

Rated data acc. to UL 1059

Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group C / UL 1059)	300 V
Rated voltage (Use group D / UL 1059)	300 V	Rated current (Use group B / UL 1059)	50 A
Rated current (Use group C / UL 1059)	50 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 22	Wire cross-section, AWG, max.	AWG 10

Packing

Packaging	Box	VPE length	124.00 mm
VPE width	117.00 mm	VPE height	50.00 mm

Important note

Notes

- Clearance and creepage distances to other components must be devised in accordance with the relevant application standard. This can be achieved in the device by full encapsulation or by the use of additional spacer plates.

Technical data

- Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.
- Colours: SW = black; GN/YL = green/yellow; GY = grey
- Additional variants on request
- VWGK: Rated voltage plastic walls: 1 - 4 mm = 500 V; metal walls: 1 - 4 mm = 500 V
- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Classifications

ETIM 8.0	EC001283	ETIM 9.0	EC001283
ETIM 10.0	EC001283	ECLASS 14.0	27-14-11-34
ECLASS 15.0	27-14-11-34		

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Drawings

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Dimensional drawing

