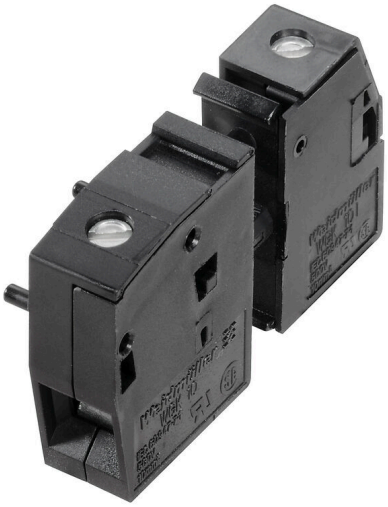
Data sheet

WGK 10/Z BK BX

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

www.weidmueller.com

Product image



Similar to illustration

The WGK finger-proof-insulated enclosures are especially suitable as industrial electronic enclosures for frequency converters, power supplies or filter components which offer a convenient and reliable form of connection internally and externally. To match the wire guides to the installation requirements in the best possible way, Weidmüller offers two versions with horizontal (WGK) and vertical (WGKV) outlet directions.

General ordering data

Version	OMNIMATE Power - series WGK, Feed-through terminal, Rated cross-section: 10 mm², Wemid (PA), Direct mounting, Feed-through (bushing)
Order No.	2439460000
Type	WGK 10/Z BK BX
GTIN (EAN)	4050118468090
Qty.	50 items
Product data	IEC: 500 V / 57 A / 0.5 - 16 mm² UL: 300 V / 65 A / AWG 24 - AWG 6
Packaging	Box

WGK 10/Z BK BX

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

www.weidmueller.com

Technical data

Approvals

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

Dimensions and weights

Height	31 mm	Height (inches)	1.2205 inch
Height of lowest version	31 mm	Width	13.7 mm
Width (inches)	0.5394 inch	Length	13.7 mm
Length (inches)	0.5394 inch	Net weight	17.27 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 connection
Conductor outlet direction	180°	Number of poles	1
Pin series quantity	1	Fitted by customer	Yes
Screwdriver blade	0.8 x 4.0	Tightening torque, min.	1.5 Nm
Tightening torque, max.	2.4 Nm	Clamping screw	M 4
Stripping length	11 mm	Touch-safe protection acc. to DIN VDE 0470	IP 20
Protection degree	IP20	Type of connection 1	Clamping yoke
Type of connection 2	Clamping yoke		

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 mm²
Clamping range, max.	16 mm²
Wire connection cross section AWG, min.	AWG 24
Wire connection cross section AWG, max.	AWG 6
Solid, min. H05(07) V-U	0.5 mm²
Solid, max. H05(07) V-U	16 mm²
Stranded, min. H07V-R	10 mm²
Stranded, max. H07V-R	16 mm²
Flexible, min. H05(07) V-K	0.5 mm²
Flexible, max. H05(07) V-K	10 mm²

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

www.weidmueller.com

Technical data

w. plastic collar ferrule, DIN 46228 pt 4, min.	0.5 mm²
w. plastic collar ferrule, DIN 46228 pt 4, max.	10 mm²
w. wire end ferrule, DIN 46228 pt 1, min.	0.5 mm²
w. wire end ferrule, DIN 46228 pt 1, max.	10 mm²

Clampable conductor	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.5 mm²	
	wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0,5/10	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	0.75 mm²	
	wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0,75/10	
	Cross-section for conductor connection	Type	fine-wired	
		nominal	1 mm²	
	wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H1,0/10	
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)	57 A
Rated current, max. number of poles (Tu=20°C)	57 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)	65 A
Rated current (Use group C / CSA)	65 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 6

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)	300 V
Rated voltage (Use group D / UL 1059)	300 V	Rated current (Use group B / UL 1059)	65 A
Rated current (Use group C / UL 1059)	65 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 24	Wire cross-section, AWG, max.	AWG 6
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	210.00 mm
VPE width	128.00 mm	VPE height	83.00 mm

WGK 10/Z BK BX

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

www.weidmueller.com

Technical data

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. • 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 • WGK: Rated voltage plastic walls: 1 - 4 mm = 500 V; metal walls: 1 - 2.5 mm = 400 V; metal walls: 2.5 - 4 mm = 250 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		

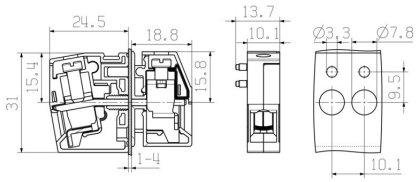
WGK 10/Z BK BX

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

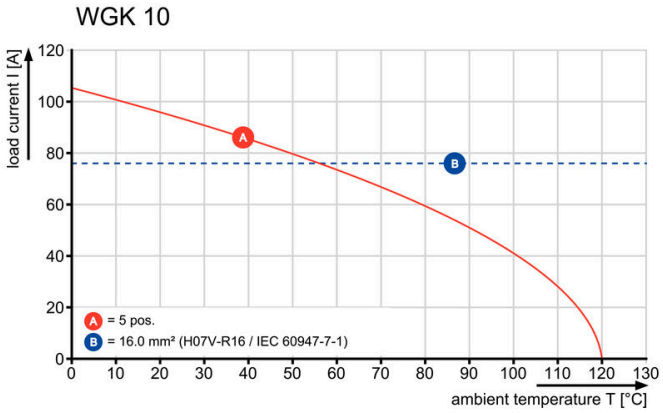
www.weidmueller.com

Drawings

Dimensional drawing



Derating curve



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

www.weidmueller.com

Accessories

Slotted screwdriver

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

General ordering data

Type	SDIS 0.8X4.0X100	Version
Order No.	2749820000	Screwdriver, Blade width (B): 4 mm, Blade length: 100 mm, Blade
GTIN (EAN)	4050118897029	thickness (A): 0.8 mm
Qty.	1 ST	

Blank

The Dekafix (DEK) marker is the universal marker for all conductor and plug-in connectors as well as for electronic sub-assemblies. The system is ideal for short number sequences and covers a wide range of ready-printed markers.
Strips for fast installation in only one work step. The printing is easy to read, rich in contrast and available in various widths.

- Large range of ready-to-use markers
- Strips for fast installation
- Terminal markers, suitable for all Weidmüller cable connectors
- Available as blank MultiCard or with standard printing

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

Type	DEK 5/5 MC NE WS	Version
Order No.	1609801044	Dekafix, Terminal marker, 5 x 5 mm, Pitch in mm (P): 5.00
GTIN (EAN)	4008190397111	Weidmueller, white
Qty.	1000 ST	
Type	DEK 5/6 MC NE WS	Version
Order No.	1609820000	Dekafix, Terminal marker, 5 x 6 mm, Pitch in mm (P): 6.00
GTIN (EAN)	4008190203436	Weidmueller, white
Qty.	1000 ST	
Type	DEK 5/8 MC NE WS	Version
Order No.	1856740000	Dekafix, Terminal marker, 5 x 8 mm, Pitch in mm (P): 8.00
GTIN (EAN)	4032248400850	Weidmueller, white
Qty.	800 ST	

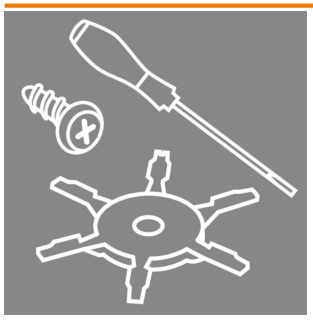
WGK 10/Z BK BX

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

www.weidmueller.com

Accessories

Accessories



Integrate, expand and customise: the perfect supplement to every application. Universal system accessories enable easy adaptation of the interfaces to fulfil specific requirements for the relevant application.

General ordering data

Type	DP WGK 10 BK BX	Version
Order No.	1250570000	OMNIMATE Power - series WGK, Feed-through terminal
GTIN (EAN)	4050118041651	
Qty.	50 ST	
Type	DP WGK 10 GY BX	Version
Order No.	1936440000	OMNIMATE Power - series WGK, Feed-through terminal
GTIN (EAN)	4032248664764	
Qty.	50 ST	