

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 |
|------|---------|

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 | | |

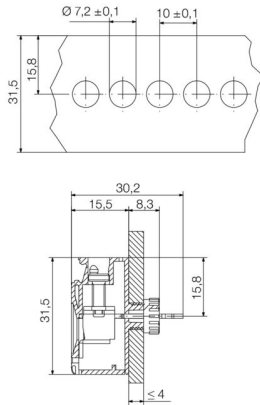
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Drawings

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Dimensional drawing



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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 VWGK 6 BK BX | Version | |
| Order No. | 1250630000 | | OMNIMATE Power - series WGK, Feed-through terminal |
| GTIN (EAN) | 4050118041712 | | |
| Qty. | 50 ST | | |
| Type | DP VWGK 6 GY BX | Version | |
| Order No. | 1965750000 | | OMNIMATE Power - series WGK, Feed-through terminal |
| GTIN (EAN) | 4032248758999 | | |
| Qty. | 50 ST | | |

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 thickness (A): 0.8 mm |
| GTIN (EAN) | 4050118897029 | | |
| 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 | |