## **OMNIMATE** Power Through-Panel Terminals

OMNIMATE Power Through-Panel Terminals Through-Panel Terminals for devices Series PGK 4 and WGK

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## **OMNIMATE – "PUSH IN" PGK 4 through-panel terminal** Comfortable, cost-saving installation and connection of conductors up to 4 mm<sup>2</sup>

In your applications space is limited. Save space and time for your housing feedthrough with our flexible connection system. Let's connect.

You are looking for a space-saving solution to quickly install wire connections for your device with panel or housing feed-throughs.

You'll find what you are looking for with our innovative "PUSH IN" connectivity technology solutions. Our PGK 4 feed-through terminal is worthy of note for its tool-free wire connection on the interior and exterior of your device. Thanks to its flexible, sliced construction and the intuitive fastening mechanism, it's easy for you to build blocks with plenty of poles.

With such features, our PGK 4 is currently the most compact and fastest solution for housing feedthroughs. Let's connect.

Flexible application options Due to its construction with only 5.1 mm wide slices, you can build simple, space-saving terminal blocks with plenty of poles.





**Clear marking** The terminals can be clearly labelled on the top and bottom, so that the terminal block can always be marked regardless of mounting position.





Simple handling and reduced assembly costs

Enjoy the benefits of the intuitive fastening mechanism and the ability to fasten the terminal block in the housing cut-out in seconds.





**Secure attachment through thick and thin** The innovative terminal block fixing mechanism ensures a safe and reliable hold for the device feedthrough and is suited to panel thicknesses between 1.50 mm and 3.00 mm.

# Solid contact with a large connection

**cross-section** Our innovative "PUSH IN" connection technology allows users to quickly and conveniently connect conductors. It also meets the need for permanent and vibration-resistant contacts. Conductor connections with a cross-section of up to 4.0 mm<sup>2</sup> with ferrules are possible.



## Future-proofed materials and approvals

Halogen-free materials and additional international approvals increase the application options for new device designs.



#### **Direct connected**

"PUSH IN" the quick, tool-free, intuitive connection mechanism for prepared wires. www.push-in.com



**Available for testing at any time** You can perform a simple function check at any time using the easily accessible diagnostic test points.





The universal solution to feed power through housing walls. Suitable for applications such as EMC filters, discretely structured converters for drive engineering, encapsulated equipment or inverters in the production of renewable energy.

Choose from the flexible range:

- Wide performance spectrum for currents up to 232 A and wire cross sections from 4 to 95 mm<sup>2</sup> (AWG 4/0)
- Various types of connections: castable solder connection, cable-lug-stud connection, and maintenance-free clamping-yoke screw connection
- · Shapes for accommodating horizontal or vertical wire outlets

#### **Clear marking in every situation**

Clarity is enhanced with clearly visible markers at each clamping point and in any position. The clamps can be marked with Weidmüller Dekafix markers and flexible paster tabs.



#### Safety with extra power

The high-performance insulating material WEMID meets maximum system availability requirements: With an RTI (relative temperature index) of 120 °C, the OMNIMATE power Through-Panel Terminals exceed the highest continued use temperature of standard PA (100 °C) at +20° K, thus creating more power reserves and maximum safety with temperature fluctuations and overloads



#### Easy handling

WGK series lead-through terminals consist of an inside and outside component that are easily locked with one another through the housing wall without any tools.



#### Solid and proven connection

Connections proven a million times. The terminal unit consists of hardened steel, for very high contact force. The current bar is made of copper, which gives a low voltage drop. The tin-plated surface ensures minimum contact resistances.



## 1460680000 - 2014/2015

## WGK series – System overview

Through-Panel Terminals for devices - Series WGK - connects up to 95 mm<sup>2</sup> | System overview

WGK



## **Easy installation**

WGK series feedthrough terminals consist of an inside and outside component that are easily locked with one another through the housing wall without any tools.

## Maximum freedom of design

Different types of connection on the inside such as a castable soldering connection (VWGK...), cable lug bolt connection (WGK ...VP) and a no-service clamping yoke-screw connection (WGK...) provide the optimum connection in any installation situation.

J



WGK...WGKV



J

All Through-Panel Terminals terminals are available with pins (WGK.../Z) for easy locking. Multi-pole blocks can be built up quickly and easily.

The VP and VWGK models of the WGK lead-through terminals with an insulating housing and clamping yoke connection on the outside are enhanced for use in

These products are developed for 100 % sealing in completely cast units.

encapsulated and cast equipment (such as EMV filters).

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.

Distance plates (DP WGK...) can be easily mounted with locking pins.

Fast and easy design in online CAD models. The CAD models for OMNIMATE Power WGK lead-through terminals can be found in Weidmüller's online catalogue and in the PART community.

http://catalog.weidmueller.com/

http://weidmueller.partcommunity.com/







## http://www.OMNIMATE.net

## **Through-Panel terminals - WGK**





Device	Device				ve	ertical	
Outside Type of connection	Inside Type of connection	Clamping range IEC Clamping range UL	Max. rated voltage IEC Nominal current UL		Туре	Outlet direction	
PUSH IN	CU PUSH IN	0.5 - 4 mm² 24 - 10 AWG	32 A 30 A	-	PGK 4	horizontal	
Screw Clamping voke	Solder connection	0.5 - 6 mm² 30 - 10 AWG	32 A 30 A	9	VWGK 4	horizontal	
,		0.5 - 10 mm² 22 - 8 AWG	41 A 50 A	9	VWGK 6	horizontal	
	Screw Clamping voke	0.5 - 6 mm² 30 - 10 AWG	32 A 30 A	-	WGK 4 WGKV 4	horizontal vertical	
		0.5 - 16 mm² 24 - 6 AWG	57 A 65 A		WGK 10 WGKV 10	horizontal vertical	
	Screw Clamping yoke	0.5 - 25 mm²	76 A		WGK 16 WGKV 16	horizontal vertical	
	Cable lug	20 - 4 AWG	85 A	1	WGK 16 VP	horizontal	
	Screw Clamping yoke	6 - 35 mm²	- 35 mm² 101 A		WGK 25 WGKV 25	horizontal vertical	
	Cable lug	10 - 3 AWG	100 A	1	WGK 25 VP	horizontal	
	Screw Clamping yoke	16 - 50 mm²	150 A		WGK 50	horizontal	
	Cable lug	6 - 1/0 AWG	145 A		WGK 50 VP	horizontal	
	Screw Clamping yoke	35 - 95 mm²	232 A		WGK 95	horizontal	
	Cable lug	4 - 4/0 AWG	230 A	-	WGK 95 F VP	horizontal	

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Max. rated voltage IEC	400 V	50(	) V	690 V	1,000 V
Nominal voltage UL	30	0 V	600 V		
		$\bigcirc$			
		$\bigcirc$			
		$\bigcirc$			
	0				
		$\bigcirc$			
			0		
			0		
				$\bigcirc$	
					0
					0

## Max. clamping range: 4 mm<sup>2</sup>



The PGK 4 device feed-through terminal is the fastest and most compact solution for feed-throughs in housings.

The innovative "PUSH IN" connection system from Weidmüller makes for a simple, tool-free wire connection on the inside and outside of devices. The sliced design and an intuitive fastening mechanism enable high-density blocks to be constructed quickly and easily.

## Product data

IEC: 500 V / 32 A / 0.5 - 4 mm<sup>2</sup> UL: 300 V / 30 A / AWG 24 - 10

For additional articles and information, refer to catalog.weidmueller.com

## Note:

- Packing unit incl. 30 locking elements (VREL PGK 4 OR -1288610000)
- End plate required
- 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: BK = black; GN/YL = green yellow; none = grey • Additional colours on request



#### **Technical data**

In compliance with IEC 60664-1 /	IEC 61984	Ļ		
Clamping range, max.	mm <sup>2</sup>		0.54	
Solid core H05(07) V-U	mm²		0.54	
Stranded H07 V-R				
Flexible H05(07) V-K	mm <sup>2</sup>		0.54	
Flexible with ferrule	mm <sup>2</sup>		0.54	
Ferrule with plastic collar	mm <sup>2</sup>		0.52.5	i
Stripping length	mm		12	
Screwdriver blade	mm		0.4 x 2.5	5
According to norm				
Tightening torque range	Nm			
Rated current, max.	Α	32		
At ambient temperature		20°C		40°
For conductor cross-section	mm <sup>2</sup>		4	
Overvoltage category				
Pollution severity		3	2	2
Rated voltage	V	500		
Rated impulse voltage	kV	6		
UL / CUL (Use Group)		В	C	D
Rated voltage	v	300	150	30
Rated current	Α	30	30	30
AWG conductor	AWG		24-10	
CSA (Use Group)		В	C	D
Rated voltage	V	300	150	30
Rated current	Α	30	30	30
AWG conductor	AWG		24-10	
General data				
Type of insulation material		N	/emid (P	A)
UL 94 flammability rating			V-0	
Contact base material			E-Cu	
Material of contact surface			tinned	
Pin dimensions = d	mm			
Solder eyelet Ø = D	mm			
Solder eyelet Ø tolerance	mm			

#### Accessories



## PGK 4

#### "PUSH IN" connection





#### **Ordering data**

		With lock pins
Туре	Qty.	Order No.
BOIL & BUL	100	1000100000

## **EPL PGK 4**

ned drawing Dim

Ordering data

Qty.

With lock pins

**Oty. Order No.** 100 **1288590000** 

		With lock pins
Туре	Qty.	Order No.
EPL PGK4 BK	50	1288600000





Ordering data

**Type** PGK 4 BT BK

PGK 4 BT

"PUSH IN" connection





#### Max. clamping range: 6 mm<sup>2</sup>



**Through-Panel Terminals** 

**OMNIMATE Power** 

The high-current feed-through terminals of the WGK series provide a universal solution for feeding currents of different magnitude through the enclosure wall.

Various types of connection on the inside such as solder connections which can be encapsulated (VWGK ... ), cable lug connections (WGK ... VP) and maintenancefree clamping yoke screw connections (WGK...) with vertical and horizontal wire insertion provide the optimal connection for any installation situation.

Terminals with locking pins are available for simple and fast assembly for multi-pole blocks.

#### Product data

IEC: 500 V / 32 A / 0.5 - 6 mm<sup>2</sup> UL: 300 V / 30 A / AWG 30 - 10

For additional articles and information, refer to catalog.weidmueller.com

#### Note:

- 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; none = grey
- Additional colours 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
- WGKV: Rated voltage plastic walls: 1 4 mm = 400 V; metal walls: 1 2.5 mm = 400 V; metal walls: 2.5 4 mm = 250 V
- VWGK: Rated voltage plastic walls: 1 4 mm = 500 V; metal walls: 1 - 4 mm = 500 V

## WGK 4

#### Screw connection





## **Technical data**

In compliance with IEC 60664-1	/ IEC 61984	ŀ		
Clamping range, max.	mm <sup>2</sup>		0.56	
Solid core H05(07) V-U	mm <sup>2</sup>		0.56	
Stranded H07 V-R	mm <sup>2</sup>			
Flexible H05(07) V-K	mm <sup>2</sup>		0.54	
Flexible with ferrule	mm <sup>2</sup>		0.54	
Ferrule with plastic collar	mm <sup>2</sup>			
Stripping length	mm		8	
Screwdriver blade	mm		0.6 x 3.!	5
According to norm				
Tightening torque range	Nm		0.60.8	3
Rated current, max.	Α	32		
At ambient temperature		20°C		40
For conductor cross-section	mm <sup>2</sup>		4	
Overvoltage category				- 11
Pollution severity		3	2	2
Rated voltage	V	500		
Rated impulse voltage	kV	6		
UL / CUL (Use Group)		В	C	D
Rated voltage	V	300		
Rated current	Α	30		
AWG conductor	AWG		30-10	
CSA (Use Group)		В	C	D
Rated voltage	V	300		
Rated current	A	30		
AWG conductor	AWG		30-10	
General data				
Type of insulation material		N	/emid (P	A)
UL 94 flammability rating			V-0	
Contact base material			E-Cu	
Material of contact surface			tinned	
Pin dimensions = d	mm			
Solder eyelet Ø = D	mm			
Solder eyelet Ø tolerance	mm			

#### Accessories

Note: Refer to the Accessories chapter for additional accessories.				
<b>Distance</b> plate		Order No.		
	DP VWGK 4 SW	1251030000		
	DP VWGK4	1936430000		
	DP WGK 4	1936450000		
	DP WGK 4 SW	1297840000		
	DP WGKV 4	1936470000		
Screwdriver				
	SDIS 0.6X3.5X100	9008390000		
1				
/				
Identification :	systems			
p	DEK 5/5 MC-10 NE WS	1609801044		
	DEK 5/6 MC NE WS	1609820000		
1 million (	DEK 5/8 MC NE WS	1856740000		

#### Ordering data

		With lock pins	No lock pins
Туре	Qty.	Order No.	Order No.
WGK 4/Z SW	50	1250940000	
WGK 4/Z gn/ye	50	1936560000	
WGK 4/Z	50	1936570000	
WGK 4 SW	50		1250930000
WGK 4 GN/YE	50		1936540000
WGK 4	50		1936550000

## WGKV 4

## Screw connection





#### WGK 4 VP

Solder connection



VWGK 4

Solder connection



## Ordering data

		With lock pins	No lock pins
Туре	Qty.	Order No.	Order No.
WGKV 4/Z SW	50	1250960000	
WGKV 4/Z gn/ye	50	1936620000	
WGKV 4/Z	50	1936630000	
WGKV 4 SW	50		1250950000
WGKV 4 gn/ye	50		1936610000
WGKV 4	50		1934050000

## Ordering data

		With lock pins	No lock pins
Туре	Qty.	Order No.	Order No.
WGK 4 VP/Z BK	50	1339810000	
WGK 4 VP/Z GN/YE	50	1003900000	
WGK 4 VP/Z	50	1003910000	
WGK 4 VP BK	50		1339790000
WGK 4 VP GN/YE	50		1003890000
WGK 4 VP	50		1981890000

## Ordering data

		With lock pins
Type	Otv.	Order No.
VWGK 4 SW	50	1250650000
VWGK 4 GN/YE	50	1936480000
VWGK 4	50	1936490000

OMNIMATE Power Through-Panel Terminals

For the rated voltage of plastic and metal walls, see the "WGK" notes

## Max. clamping range: 10 mm<sup>2</sup>





The V versions of the WGK feed-through terminal with an insulated housing and clamping yoke connection on the outside, and a solder connection on the inside. Optimal connection options for use in encapsulated devices (e.g. EMC filters and/or fully insulated transformers).

Terminals with locking pins are available for simple and fast assembly of multi-pole blocks.

#### Product data

```
IEC: 500 V / 41 A / 0.5 - 10 mm<sup>2</sup>
UL: 300 V / 50 A / AWG 22 - 10
```

For additional articles and information, refer to catalog.weidmueller.com

#### Note:

- 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; none = grey
- Additional colours on request
- VWGK: Rated voltage plastic walls: 1 4 mm = 500 V; metal walls: 1 - 4 mm = 500 V

## VWGK 6

#### Solder connection





#### **Technical data**

In compliance with IEC 60664-1 /	IEC 61984	Ļ		
Clamping range, max.	mm <sup>2</sup>		0.510	)
Solid core H05(07) V-U	mm²		0.510	)
Stranded H07 V-R	mm <sup>2</sup>		6	
Flexible H05(07) V-K	mm <sup>2</sup>		0.56	
Flexible with ferrule	mm <sup>2</sup>		0.56	
Ferrule with plastic collar	mm <sup>2</sup>			
Stripping length	mm		13	
Screwdriver blade	mm		).8 x 4.	0
According to norm				
Tightening torque range	Nm		0.81.8	3
Rated current, max.	Α	41		
At ambient temperature		20°C		40
For conductor cross-section	mm <sup>2</sup>		6	
Overvoltage category		- 111	III	- 11
Pollution severity		3	2	2
Rated voltage	v	500		
Rated impulse voltage	kV	6		
UL / CUL (Use Group)		В	C	D
Rated voltage	v	300		
Rated current	Α	50		
AWG conductor	AWG		22-10	
CSA (Use Group)		В	C	D
Rated voltage	V	300		
Rated current	A	50		
AWG conductor	AWG		22-10	
General data				
Type of insulation material		W	emid (F	PA)
UL 94 flammability rating			V-0	
Contact base material			E-Cu	
Material of contact surface			tinned	
Pin dimensions = d	mm			
Solder eyelet Ø = D	mm			
Solder eyelet Ø tolerance	mm			

#### Accessories

Note: Refer to the Accessories chapter for additional accessories.				
Distance plate	Order No.			
	DP VWGK 6 SW	1250630000		
	DP VWGK6	1965750000		
Screwdriver				
	SDIS 0.8X4.0X100	9008400000		
1				
Identification sy	stems			
	DEK 5/5 MC-10 NE WS	1609801044		
	DEK 5/6 MC NE WS	1609820000		
	DEK 5/8 MC NE WS	1856740000		

#### Ordering data

		With lock pins
Туре	Qtv.	Order No.
VWGK 6 SW	50	1250640000
VWGK 6 GN/YE	50	1965730000
VWGK 6	50	10657/10000

#### Variants

The WGK...VP, VWGK 4 and VWGK 6 variants of the WGK series, with an insulating housing and clamping yoke connection on the outside, are specially enhanced for use in potted and through-panel applications. These products are developed for 100 % sealing in completely enclosed units..

WGK variants are used, for example, as device connections for EMC filters or fully insulated transformers.



#### **Clamping yoke screw connection**

The clamping yoke connection is a proven connection in use around the world today.

Steel clamping yokes made using a stamping and bending process guarantee a vibration proof clamp connection. When the screw on the clamp is tightened, there is a counter effect in the clamping yoke's threaded area which prevents the connection accidentally loosening. As the screw thread is on an inclined plane, the force is amplified and a very high clamping force is achieved. Weidmüller uses hardened steel with optimised corrosion protection for stability and safety in addition to copper alloys in the contact area for good electrical conductivity.



## Max. clamping range: 16 mm<sup>2</sup>



The high-current feed-through terminals of the WGK series provide a universal solution for feeding currents of different magnitude through the enclosure wall.

Different types of connection on the inside, such as a solder connection which can be encapsulated (WGK ...VP) or a maintenance-free clamping yoke screw connection (WGK...) with vertical and horizontal wire connections, provide the optimal connection for any installation situation.

Terminals with locking pins are available for simple and fast assembly of multi-pole blocks.

#### Product data

IEC: 500 V / 57 A / 0.5 - 16 mm<sup>2</sup> UL: 300 V / 65 A / AWG 24 - 6

For additional articles and information, refer to catalog.weidmueller.com

#### Note:

- 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; none = grey
- Additional colours 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

## WGK 10

#### Screw connection



## Technical data

In compliance with IEC 6066	4-1 / IEC 61984	Ļ		
Clamping range, max.	mm <sup>2</sup>		0.516	
Solid core H05(07) V-U	mm <sup>2</sup>	0.516		j
Stranded H07 V-R	mm <sup>2</sup>	1016		
Flexible H05(07) V-K	mm <sup>2</sup>		0.510	
Flexible with ferrule	mm <sup>2</sup>		0.510	
Ferrule with plastic collar	mm <sup>2</sup>			
Stripping length	mm		11	
Screwdriver blade	mm		D.8 x 4.0	0
According to norm				
Tightening torque range	Nm		57	
Rated current, max.	Α	57		
At ambient temperature		20°C		40
For conductor cross-section	mm <sup>2</sup>		10	
Overvoltage category			III	
Pollution severity		3	2	2
Rated voltage	v	500		
Rated impulse voltage	kV	6		
UL / CUL (Use Group)		В	C	D
Rated voltage	v	300		
Rated current	Α	65		
AWG conductor	AWG		24-6	
CSA (Use Group)		В	C	D
Rated voltage	V	300		
Rated current	А	65		
AWG conductor	AWG		24-6	
General data				
Type of insulation material		W	emid (P	'A)
UL 94 flammability rating			V-U	
Contact base material			E-Cu	
iviaterial of contact surface			tinned	
Pin dimensions = d	mm			
Solder eyelet $V = U$	mm			
Solder eyelet Ø tolerance	mm			

#### Accessories

Note: Refer to the Accessories chapter for additional accessories.				
Distance plate		Order No.		
	DP WGK 10	1936440000		
	DP WGK 10 SW	1250570000		
	DP WGKV 10	1936460000		
Screwdriver				
	SDIS 0.8X4.0X100	9008400000		
1				
•				
Identification sy	stems			
p	DEK 5/5 MC-10 NE WS	1609801044		
	DEK 5/6 MC NE WS	1609820000		
[]	DEK 5/8 MC NE WS	1856740000		

#### Ordering data

		With lock pins	No lock pins
_			
Туре	Uty.	Urder No.	Urder No.
WGK 10/Z SW	50	1250890000	
WGK 10/Z gn/ye	50	1936520000	
WGK 10/Z	50	1936530000	
WGK 10 SW	50		1250880000
WGK 10 GN/YE	50		1936500000
WGK 10	50		1936510000

## **WGKV 10**

## Screw connection

**Ordering data** 

WGKV 10/Z SW WGKV 10/Z gn/ye WGKV 10/Z

WGKV 10 SW

WGKV 10

WGKV 10 gn/ye

Туре



#### **WGK 10 VP**





With lock pins No lock pins

Order No.

1250910000

1936580000

1934060000



## Ordering data

		With lock pins	No lock pins
Туре	Qty.	Order No.	Order No.
WGK 10 VP/Z BK	50	1469900000	
WGK 10 VP/Z GN/YE	50	1003970000	
WGK 10 VP/Z	50	1003920000	
WGK 10 VP BK	50		1469890000
WGK 10 VP GN/YE	50		1003960000
WGK 10 VP	50		1981880000

## Variants

The WGK...VP, VWGK 4 and VWGK 6 variants of the WGK series, with an insulating housing and clamping yoke connection on the outside, are specially enhanced for use in potted and through-panel applications. These products are developed for 100 % sealing in completely enclosed units..

WGK variants are used, for example, as device connections for EMC filters or fully insulated transformers.



#### **Clamping yoke screw connection**

The clamping yoke connection is a proven connection in use around the world today.

Steel clamping yokes made using a stamping and bending process guarantee a vibration proof clamp connection. When the screw on the clamp is tightened, there is a counter effect in the clamping yoke's threaded area which prevents the connection accidentally loosening. As the screw thread is on an inclined plane, the force is amplified and a very high clamping force is achieved. Weidmüller uses hardened steel with optimised corrosion protection for stability and safety in addition to copper alloys in the contact area for good electrical conductivity.

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For the rated voltage of plastic and metal walls, see the "WGK" notes

Qty.

50 50

50

50

50

50

Order No.

1250920000 1936590000

1936600000

For the rated voltage of plastic and metal walls, see the "WGK" notes



## Max. clamping range: 25 mm<sup>2</sup>

**OMNIMATE Power** 



The high-current feed-through terminals of the WGK series provide a universal solution for feeding currents of different magnitude through the enclosure wall.

Various types of connection on the inside, such as cable lug connections which can be encapsulated (WGK ... VP) and maintenance-free clamping yoke screw connections (WGK...) with vertical and horizontal wire insertion provide the optimal connection for any installation situation.

Terminals with locking pins are available for simple and fast assembly of mutli-pole blocks.

#### Product data

IEC: 500 V / 76 A / 0.5 - 16 mm<sup>2</sup> UL: 600 V / 85 A / AWG 20 - 4

For additional articles and information, refer to catalog.weidmueller.com

#### Note:

- 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; none = grey
- Additional colours on request
- WGK: Rated voltage plastic walls: 1 6 mm = 800 V; metal walls: 1 - 2.5 mm = 800 V; metal walls: 2.5 - 4 mm = 690 V; metal walls: 4 - 6 mm = 500 V

## **WGK 16**

#### Screw connection



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## **Technical data**

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In compliance with IEC 60664-1	/ IEC 61984	Ļ		
Clamping range, max.	mm <sup>2</sup>		0.525	
Solid core H05(07) V-U	mm <sup>2</sup>		0.516	;
Stranded H07 V-R	mm <sup>2</sup>		1025	
Flexible H05(07) V-K	mm <sup>2</sup>		0.516	
Flexible with ferrule	mm <sup>2</sup>		0.516	
Ferrule with plastic collar	mm <sup>2</sup>			
Stripping length	mm		16	
Screwdriver blade	mm		1.0 x 5.	5
According to norm				
Tightening torque range	Nm		22.3	
Rated current, max.	Α	76		
At ambient temperature		20°C		40
For conductor cross-section	mm <sup>2</sup>		16	
Overvoltage category				1
Pollution severity		3	2	2
Rated voltage	V	500		
Rated impulse voltage	kV	6		
UL / CUL (Use Group)		В	C	0
Rated voltage	v	600		
Rated current	Α	85		
AWG conductor	AWG		20-4	
CSA (Use Group)		В	C	
Rated voltage	V	600		
Rated current	A	85		
AWG conductor	AWG		20-4	
General data		_		
Type of insulation material		N	'emid (P	A)
UL 94 flammability rating			V-0	
Contact base material			E-Cu	
Material of contact surface			tinned	
Pin dimensions = d	mm			
Solder eyelet $\emptyset = D$	mm			
Solder eyelet Ø tolerance	mm			

#### Accessories

Note: Refer to the Accessories chapter for additional accessories.				
Distance plate		Order No.		
	DP WGK 16	1936700000		
	DP WGK 16 SW	1250580000		
Screwdriver				
	SDIS 1.0X5.5X125	9008410000		
1				
-				
Identification sy	stems			
[married	DEK 5/5 MC-10 NE WS	1609801044		
	DEK 5/6 MC NE WS	1609820000		
[]	DEK 5/8 MC NE WS	1856740000		

#### **Ordering data**

		With lock pins	No lock pins
Туре	Qty.	Order No.	Order No.
WGK 16/Z SW	50	1250870000	
WGK 16/Z gn/ye	50	1936820000	
WGK 16/Z	50	1936830000	
WGK 16 SW	50		1250860000
WGK 16 gn/ye	50		1936760000
WGK 16	50		1936810000

mm <sup>2</sup>	0.516	
mm <sup>2</sup>	0.516	
mm <sup>2</sup>		
mm	16	
mm	1.0 x 5.5	

## **WGKV 16**

## Screw connection





#### Ordering data

		With lock pins	No lock pins
Туре	Qty.	Order No.	Order No.
WGKV 16/Z SW	50	1250850000	
WGKV 16/Z GN/YE	50	1003930000	
WGKV 16/Z	50	1003940000	
WGKV 16 SW	50		1250840000
WGKV 16 GN/YE	50		1003950000
WGKV 16	50		1003880000

#### **WGK 16 VP**

#### **Cable lug connection**



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## **Ordering data**

		With lock pins	No lock pins
Туре	Qty.	Order No.	Order No.
WGK 16 VP/Z SW	50	1250830000	
WGK 16 VP/Z GN/YE	50	1936790000	
WGK 16 VP/Z	50	1936800000	
WGK 16 VP SW	50		1250820000
WGK 16 VP GN/YE	50		1936770000
WGK 16 VP	50		1936780000

## Variants

The WGK...VP, VWGK 4 and VWGK 6 variants of the WGK series, with an insulating housing and clamping yoke connection on the outside, are specially enhanced for use in potted and through-panel applications. These products are developed for 100 % sealing in completely enclosed units..

WGK variants are used, for example, as device connections for EMC filters or fully insulated transformers.



#### **Clamping yoke screw connection**

The clamping yoke connection is a proven connection in use around the world today.

Steel clamping yokes made using a stamping and bending process guarantee a vibration proof clamp connection. When the screw on the clamp is tightened, there is a counter effect in the clamping yoke's threaded area which prevents the connection accidentally loosening. As the screw thread is on an inclined plane, the force is amplified and a very high clamping force is achieved. Weidmüller uses hardened steel with optimised corrosion protection for stability and safety in addition to copper alloys in the contact area for good electrical conductivity.

For the rated voltage of plastic and metal walls, see the "WGK" notes

For the rated voltage of plastic and metal walls, see the "WGK" notes



## Max. clamping range: 35 mm<sup>2</sup>

**OMNIMATE Power** 

The high-current feed-through terminals of the WGK series provide a universal solution for feeding currents of different magnitude through the enclosure wall.

Various types of connection on the inside, such as cable lug connections which can be encapsulated (WGK ... VP) and maintenance-free clamping yoke screw connections (WGK...) with vertical and horizontal wire insertion provide the optimal connection for any installation situation.

Terminals with locking pins are available for simple and fast assembly of multi-pole blocks.

#### Product data

IEC: 690 V / 101 A / 6 - 16 mm<sup>2</sup> UL: 600 V / 100 A / AWG 10 - 3

For additional articles and information, refer to catalog.weidmueller.com

#### Note:

- 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; none = grey • Additional colours on request
- WGK: Rated voltage plastic walls: 1 6 mm = 800 V; metal walls: 1 - 4 mm = 800 V; metal walls: 4 - 6 mm = 690 V
- WGKV: Rated voltage plastic walls: 1 6 mm = 800 V; metal walls:
- 1 4 mm = 800 V; metal walls: 4 6 mm = 690 V
  WGK...VP: Rated voltage plastic walls: 1 6 mm = 800 V; metal walls: 1 - 2.5 mm = 800 V; metal walls: 2.5 - 4 mm = 690 V; metal walls: 4 - 6 mm = 500 V

## **WGK 25**

#### Screw connection





## **Technical data**

In compliance with IEC 60664-1	/ IEC 61984	Ļ		
Clamping range, max.	mm <sup>2</sup>		435	
Solid core H05(07) V-U	mm <sup>2</sup>		616	
Stranded HO7 V-R	mm <sup>2</sup>		1035	
Flexible H05(07) V-K	mm <sup>2</sup>		616	
Flexible with ferrule	mm <sup>2</sup>		425	
Ferrule with plastic collar	mm <sup>2</sup>			
Stripping length	mm		18	
Screwdriver blade	mm		1.2 x 6.	5
According to norm				
Tightening torque range	Nm		44.5	
Rated current, max.	Α	101		
At ambient temperature		20°C		40°
For conductor cross-section	mm <sup>2</sup>		25	
Overvoltage category				
Pollution severity		3	2	2
Rated voltage	V	690		
Rated impulse voltage	kV	6		
UL / CUL (Use Group)		В	C	D
Rated voltage	V	600		
Rated current	Α	100		
AWG conductor	AWG		10-3	
CSA (Use Group)		В	C	D
Rated voltage	V	600		
Rated current	A	100		
AWG conductor	AWG		10-3	
General data				
Type of insulation material		N	/emid (F	PA)
UL 94 flammability rating			V-0	
Contact base material			E-Cu	
Material of contact surface			tinned	
Pin dimensions = d	mm			
Solder eyelet Ø = D	mm			
Solder eyelet Ø tolerance	mm			

#### Accessories

Note: Refer to the Accessories chapter for additional accessories.					
Distance plate		Order No.			
	DP WGK 25	1936710000			
	DP WGK 25 SW	1250590000			
	DP WGKV 25	1936690000			
Screwdriver					
	SDIS 1.2X6.5X150	9008420000			
1					
-					
Identification sy	stems				
pit	DEK 5/5 MC-10 NE WS	1609801044			
	DEK 5/6 MC NE WS	1609820000			
1	DEK 5/8 MC NE WS	1856740000			

#### **Ordering data**

		With lock pins	No lock pins
Туре	Qty.	Order No.	Order No.
WGK 25/Z SW	50	1250810000	
WGK 25/Z GN/YE	50	1936900000	
WGK 25/Z	50	1936910000	
WGK 25 SW	50		1250790000
WGK 25 GN/YE	50		1936840000
WGK 25	50		1936850000



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## **WGKV 25**

#### Screw connection



#### WGK 25 VP

#### **Cable lug connection**



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Variants

The WGK...VP, VWGK 4 and VWGK 6 variants of the WGK series, with an insulating housing and clamping yoke connection on the outside, are specially enhanced for use in potted and through-panel applications. These products are developed for 100 % sealing in completely enclosed units..

WGK variants are used, for example, as device connections for EMC filters or fully insulated transformers.



#### Ordering data

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		With lock pins	No lock pins
Tumo	044	Order Ne	Order Ne
туре	uly.	Urder No.	Uraer No.
WGKV 25/Z SW	25	1250780000	
WGKV 25/Z gn/ye	25	1936740000	
WGKV 25/Z	25	1936750000	
WGKV 25 SW	25		1250770000
WGKV 25 gn/ye	25		1936720000
WGKV 25	25		1934070000

#### Ordering data

48.5

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		With lock pins	No lock pins
Туре	Qty.	Order No.	Order No.
WGK 25 VP/Z SW	50	1250760000	
WGK 25 VP/Z GN/YE	50	1936880000	
WGK 25 VP/Z	50	1936890000	
WGK 25 VP SW	50		1250750000
WGK 25 VP GN/YE	50		1936860000
WGK 25 VP	50		1936870000

#### **Clamping yoke screw connection**

The clamping yoke connection is a proven connection in use around the world today.

Steel clamping yokes made using a stamping and bending process guarantee a vibration proof clamp connection. When the screw on the clamp is tightened, there is a counter effect in the clamping yoke's threaded area which prevents the connection accidentally loosening. As the screw thread is on an inclined plane, the force is amplified and a very high clamping force is achieved. Weidmüller uses hardened steel with optimised corrosion protection for stability and safety in addition to copper alloys in the contact area for good electrical conductivity.

Rated voltage for plastic and metal walls such as WGK



## Max. clamping range: 50 mm<sup>2</sup>



The high-current feed-through terminals of the WGK series provide a universal solution for feeding currents of different magnitude through the enclosure wall.

Various types of connection on the inside, such as cable lug connections which can be encapsulated (WGK ...VP) and maintenance-free clamping yoke screw connections (WGK...) provide the optimal connection for any installation situation.

Terminals with locking pins are available for simple and fast assembly of multi-pole blocks.

#### Product data

```
IEC: 690 V / 150 A / 16 - 50 mm<sup>2</sup>
UL: 600 V / 145 A / AWG 6 - 1/0
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For additional articles and information, refer to catalog.weidmueller.com

#### Note:

- 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; none = grey
- Additional colours on request
- WGK: Rated voltage plastic walls: 1 6 mm = 800 V; metal walls: 1 - 2.5 mm = 800 V; metal walls: 2.5 - 6 mm = 690 V

## WGK 50

#### Screw connection



## Technical data

In compliance with IEC 60664-1	/ IEC 61984	Ļ		
Clamping range, max.	mm <sup>2</sup>		1050	
Solid core H05(07) V-U	mm <sup>2</sup>		1650	
Stranded HO7 V-R	mm <sup>2</sup>		1650	
Flexible H05(07) V-K	mm <sup>2</sup>		1650	
Flexible with ferrule	mm <sup>2</sup>		1050	
Ferrule with plastic collar	mm <sup>2</sup>			
Stripping length	mm		24	
Screwdriver blade	mm		1.2 x 6.	5
According to norm				
Tightening torque range	Nm		48	
Rated current, max.	Α	150		
At ambient temperature		20°C		40
For conductor cross-section	mm <sup>2</sup>		50	
Overvoltage category				- 11
Pollution severity		3	2	2
Rated voltage	v	690		
Rated impulse voltage	kV	6		
UL / CUL (Use Group)		В	C	D
Rated voltage	v	600		
Rated current	Α	145		
AWG conductor	AWG		6-1/0	
CSA (Use Group)		В	C	D
Rated voltage	V	600		
Rated current	A	145		
AWG conductor	AWG		6-1/0	
General data				
Type of insulation material		W	emid (P	A)
UL 94 flammability rating			V-0	
Contact base material			E-Cu	
Material of contact surface			tinned	
Pin dimensions = d	mm			
Solder eyelet Ø = D	mm			
Solder evelet Ø tolerance	mm			

#### Accessories

Note: Refer to the Accessories chapter for additional accessories.					
Distance plate		Order No.			
	DP WGK 50	1937030000			
	DP WGK 50 SW	1250610000			
Screwdriver					
1	SDIS 1.2X6.5X150	9008420000			
1					
-					
Identification sy	stems				
[]	DEK 5/5 MC-10 NE WS	1609801044			
	DEK 5/6 MC NE WS	1609820000			
(1	DEK 5/8 MC NE WS	1856740000			

## Ordering data

		With lock pins	No lock pins
Туре	Qty.	Order No.	Order No.
WGK 50/Z SW	10	1250740000	
WGK 50/Z GN/YE	10	1937100000	
WGK 50/Z	10	1937110000	
WGK 50 SW	10		1250730000
WGK 50 GN/YE	10		1937040000
WGK 50	10		1937090000

## WGK 50 VP

## Cable lug connection



Dimensioned draw

#### Variants

The WGK...VP, VWGK 4 and VWGK 6 variants of the WGK series, with an insulating housing and clamping yoke connection on the outside, are specially enhanced for use in potted and through-panel applications. These products are developed for 100 % sealing in completely enclosed units..

WGK variants are used, for example, as device connections for EMC filters or fully insulated transformers.





#### Ordering data

	With lock pins	No lock pins
Qty.	Order No.	Order No.
10	1250720000	
10	1937070000	
10	1937080000	
10		1250710000
10		1937050000
10		1937060000
	<b>Q</b> ty. 10 10 10 10 10 10	With lock pins           0ty.         Order No.           10         1250720000           10         1937070000           10         1937080000           10         1937080000           10         10           10         10           10         10

#### **Clamping yoke screw connection**

The clamping yoke connection is a proven connection in use around the world today.

Steel clamping yokes made using a stamping and bending process guarantee a vibration proof clamp connection. When the screw on the clamp is tightened, there is a counter effect in the clamping yoke's threaded area which prevents the connection accidentally loosening. As the screw thread is on an inclined plane, the force is amplified and a very high clamping force is achieved. Weidmüller uses hardened steel with optimised corrosion protection for stability and safety in addition to copper alloys in the contact area for good electrical conductivity.

For the rated voltage of plastic and metal walls, see the "WGK" notes



OMNIMATE Power Through-Panel Terminals

## Max. clamping range: 95 mm<sup>2</sup>



The high-current feed-through terminals of the WGK series provide a universal solution for feeding currents of different magnitude through the enclosure wall.

Various types of connection on the inside, such as cable lug connections which can be encapsulated (WGK ... VP) and maintenance-free clamping yoke screw connections (WGK...) provide the optimal connection for any installation situation.

Terminals with locking pins are available for simple and fast assembly of mutlti-pole blocks.

#### Product data

IEC: 1000 V / 232 A / 35 - 95 mm<sup>2</sup> UL: 600 V / 230 A / AWG 4 - 4/0

For additional articles and information, refer to catalog.weidmueller.com

#### Note:

- 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; none = grey
- Additional colours on request
- WGK: Rated voltage plastic walls: 1-6 mm = 1000 V; metal walls: < 1 mm = 1000 V; metal walls: 1-3.5 mm = 800 V; metal walls: 3.5-5.5 mm = 690 V

## WGK 95

#### Screw connection





## **Technical data**

In compliance with IEC 60664-1	I / IEC 61984	ŀ		
Clamping range, max.	mm <sup>2</sup>		3595	
Solid core H05(07) V-U	mm <sup>2</sup>		3595	i
Stranded H07 V-R	mm <sup>2</sup>		3595	
Flexible H05(07) V-K	mm <sup>2</sup>		3595	
Flexible with ferrule	mm <sup>2</sup>		3595	
Ferrule with plastic collar	mm <sup>2</sup>			
Stripping length	mm		27	
Screwdriver blade	mm			
According to norm				
Tightening torque range	Nm		1520	
Rated current, max.	Α	232		
At ambient temperature		20°C		40
For conductor cross-section	mm <sup>2</sup>		95	
Overvoltage category				
Pollution severity		3	2	2
Rated voltage	V	1000		
Rated impulse voltage	kV	8		
UL / CUL (Use Group)		В	C	D
Rated voltage	V	600		
Rated current	Α	230		
AWG conductor	AWG		4-4/0	
CSA (Use Group)		В	C	D
Rated voltage	V	600		
Rated current	A	230		
AWG conductor	AWG		4-4/0	
General data				
Type of insulation material		W	emid (P	A)
UL 94 flammability rating			V-0	
Contact base material			E-Cu	
Material of contact surface			tinned	
Pin dimensions = d	mm			
Solder eyelet Ø = D	mm			
Solder eyelet Ø tolerance	mm			

#### Accessories

Note: Refer to the Accessories chapter for additional accessories.					
Distance plate		Order No.			
	DP WGK 95	1937020000			
	DP WGK 95 SW	1250620000			
Identification sy					
p	DEK 5/5 MC-10 NE WS	1609801044			
	DEK 5/6 MC NE WS	1609820000			
	DEK 5/8 MC NE WS	1856740000			

## Ordering data

		With lock pins	No lock pins
Туре	Qty.	Order No.	Order No.
WGK 95/Z SW	10	1250690000	
WGK 95/Z GN/YE	10	1937390000	
WGK 95/Z	10	1937400000	
WGK 95 SW	10		1250680000
WGK 95 GN/YE	10		1937370000
WGK 95	10		1937380000



## WGK 95 F VP

## Cable lug connection



Dimensioned drav

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The WGK...VP, VWGK 4 and VWGK 6 variants of the WGK series, with an insulating housing and clamping yoke connection on the outside, are specially enhanced for use

WGK variants are used, for example, as device connections

in potted and through-panel applications. These products are developed for 100 % sealing in

for EMC filters or fully insulated transformers.

completely enclosed units..

#### Ordering data

	With lock pins	No lock pins
Qty.	Order No.	Order No.
10	1250670000	
10	1937360000	
10	1937140000	
10		1250660000
10		1937120000
10		1937130000
	<b>Qty.</b> 10 10 10 10 10 10	With lock pins           Qty.         Order No.           10         1250670000           10         1937360000           10         1937140000           10         10           10         10

#### **Clamping yoke screw connection**

Variants

The clamping yoke connection is a proven connection in use around the world today.

Steel clamping yokes made using a stamping and bending process guarantee a vibration proof clamp connection. When the screw on the clamp is tightened, there is a counter effect in the clamping yoke's threaded area which prevents the connection accidentally loosening. As the screw thread is on an inclined plane, the force is amplified and a very high clamping force is achieved. Weidmüller uses hardened steel with optimised corrosion protection for stability and safety in addition to copper alloys in the contact area for good electrical conductivity.



