

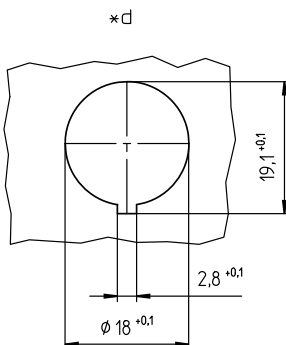
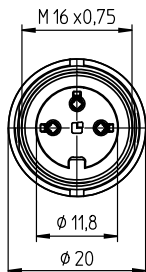
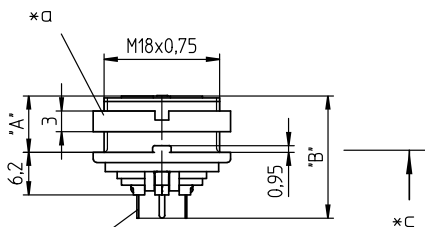
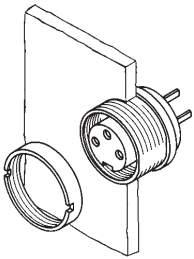
03 KGR

Circular connectors with threaded joint M16 acc. to IEC 61076-2-106, IP40/IP68



Chassis socket acc. to IEC 61076-2-106, IP40, with threaded joint, for printed circuit boards, for back side mounting

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Environmental conditions

Temperature range -40 °C/+85 °C

Materials

Insulating body PA GF, V-0 according to UL94
Contact bush CuZn, silver-plated and flash gold-plated, tin-plated in solder area (3-8 poles)
CuZn, pre-nickel and gold-plated, tin-plated in solder area (12 poles)
Housing Zn diecast, pre-copper and nickel-plated
Ring screw CuZn, nickel-plated

Mechanical data

Insertion force/contact $\leq 5,0 \text{ N}^1$
Withdrawal force/contact $\geq 1,2 \text{ N}$ (3-8 poles)
 $\geq 0,9 \text{ N}$ (12 poles)¹
Tightening torque connector 1-3 Nm
Tightening torque nut 1-3 Nm
Protection class IP40²

¹ measured with a polished steel pin, nominal thickness 1.5 mm (1.0 mm with 12 poles)

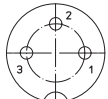
² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

Electrical data (at $T_{\text{amb}} 20 \text{ °C}$)

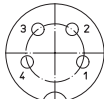
Contact resistance $\leq 5 \text{ m}\Omega$
Rated current 5 A ($T_{\text{amb}} 40 \text{ °C}$, 3-8 poles)
3 A ($T_{\text{amb}} 40 \text{ °C}$, 12 poles)
Rated voltage with pollution degree 1:
300 V (versions 30, 40, 50/6, 60, 70)
100 V (versions 50, 71, 80, 81)
160 V (Polbild 120)
with pollution degree 2:
250 V (versions 30, 40)
32 V (versions 50, 71, 80, 81)
160 V (versions 50/6, 60, 70, 120)
Rated impulse voltage 1500 V (versions 30, 40, 50/6, 60, 70, 120)
500 V (versions 50, 71, 80, 81)
Material group II (IEC)/I (UL) ($400 \leq \text{CTI} < 600$)
Overvoltage category I
Insulation resistance $> 100 \text{ M}\Omega$

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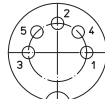
Pin configurations, solder side view



03-a
KGR 30



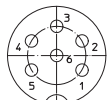
04-a
KGR 40



05-b
KGR 50



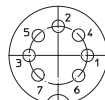
05-a
KGR 50/6



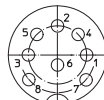
06-a
KGR 60



07-a
KGR 70



07-b
KGR 71



KGR 80



08-a
KGR 81



12-a
KGR 120

Associated products

Counterparts

☑ SV

☑ SV ...-8

☑ WSV

Accessories

☑ 0381

☑ 038199

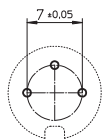
☑ 0384

☑ 0385

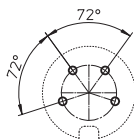
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03 KGR

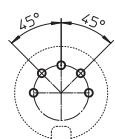
Printed circuit board layout, solder side view



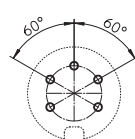
03-a
KGR 30



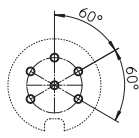
04-a
KGR 40



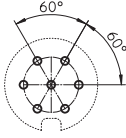
05-b
KGR 50



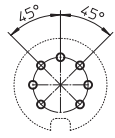
05-a
KGR 50/6



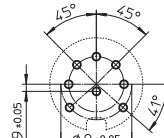
06-a
KGR 60



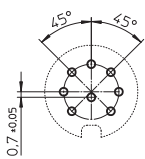
07-a
KGR 70



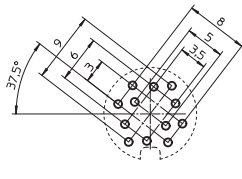
07-b
KGR 71



KGR 80



08-a
KGR 81



12-a
KGR 120

- *a nut enclosed separately
- *b for bore hole of printed circuit board
Ø 1.0 mm (KGR 30–81)
Ø 0.7 mm (KGR 120)
- *c mounting direction
- *d 12 pole version Ø 1.0 mm
- *e port in mounting plate

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Designation	Pole Number	PU (Pieces)	MDQ (Pieces)	Dimensions	
				A (mm)	B (mm)
KGR 30	3	50	100	8.2	17.8
KGR 40	4	50	100	8.2	17.8
KGR 50	5	50	100	8.2	17.8
KGR 50/6	5	50	100	8.2	17.8
KGR 60	6	50	100	8.2	17.8
KGR 70	7	50	100	8.2	17.8
KGR 71	7	50	100	8.2	17.8
KGR 80	8	50	100	8.2	17.8
KGR 81	8	50	100	8.2	17.8
KGR 120	12	50	100	7.9	17.1

Packaging:
in a cardboard box