

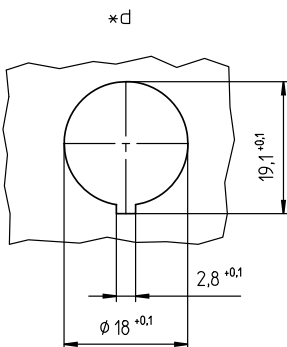
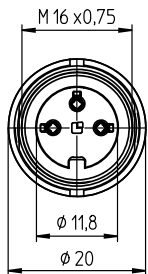
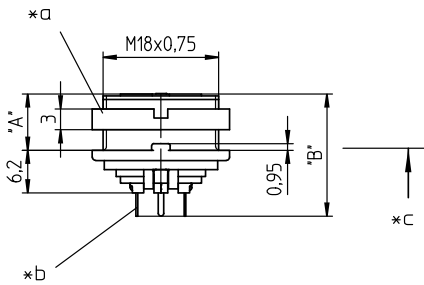
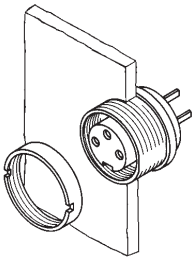
03 KGR

Circular connectors with threaded joint M16 acc. to IEC 61076-2-106, IP40/IP67/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

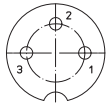
¹ measured with a polished steel pin, nominal thickness 1.5 mm (1.0 mm with 12 poles)
² according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

Electrical data (at T_{amb} 20 °C)

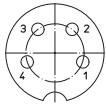
Contact resistance $\leq 5 \text{ m}\Omega$
 Rated current 5 A (T_{amb} 40 °C, 3-8 poles)
 3 A (T_{amb} 40 °C, 12 poles)
 Rated voltage with pollution degree 1:
 300 V (versions 30, 40, 50/6, 60, 70)
 100 V (versions 50, 71, 80, 81)
 160 V (Polbild 120)
 with pollution degree 2:
 250 V (versions 30,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

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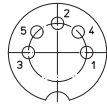
Pin configurations, solder side view



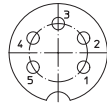
03-a
KGR 30



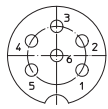
04-a
KGR 40



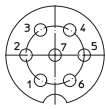
05-b
KGR 50



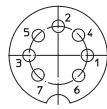
05-a
KGR 50/6



06-a
KGR 60



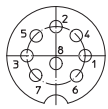
07-a
KGR 70



07-b
KGR 71



KGR 80



08-a
KGR 81



12-a
KGR 120

Associated products

Counterparts

☑ SV

☑ SV ...-8

☑ WSV

Accessories

☑ 0381

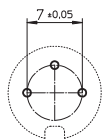
☑ 038199

☑ 0384

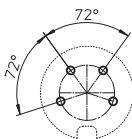
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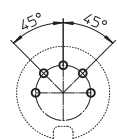
Printed circuit board layout, solder side view



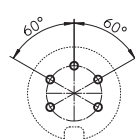
03-a
KGR 30



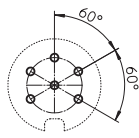
04-a
KGR 40



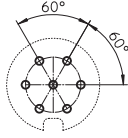
05-b
KGR 50



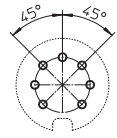
05-a
KGR 50/6



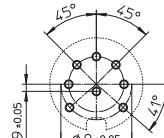
06-a
KGR 60



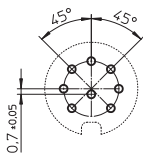
07-a
KGR 70



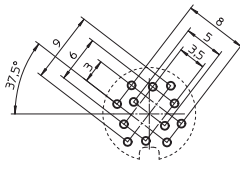
07-b
KGR 71



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