

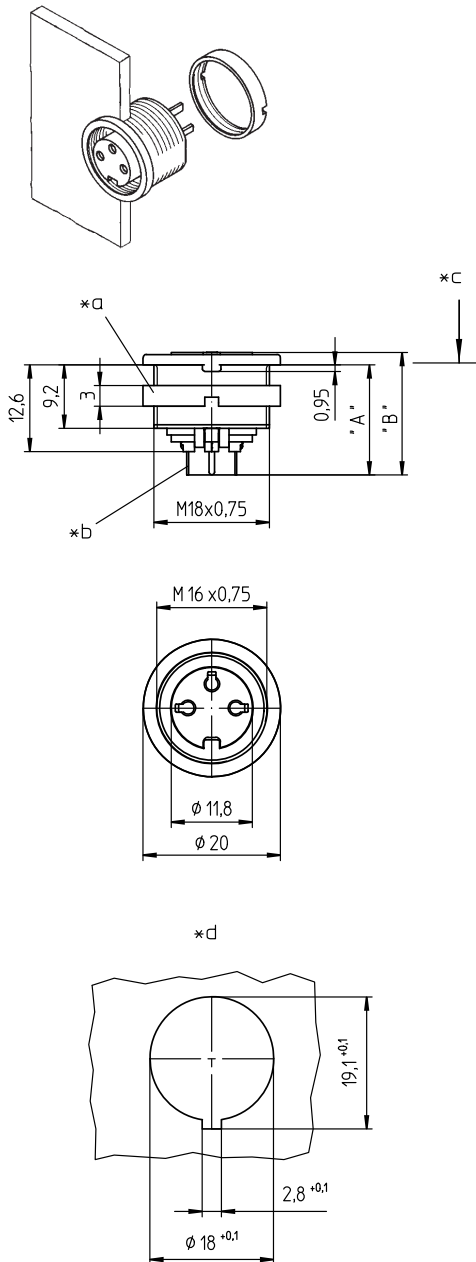
03 KFR

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 front mounting

03 KFR



**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 ≤ 5.0 N<sup>1</sup>  
 Withdrawal force/contact ≥ 1.2 N (3-8 poles)  
 ≥ 0.9 N (12 poles)<sup>1</sup>  
 Tightening torque connector 1-3 Nm  
 Tightening torque nut 1-3 Nm  
 Protection class IP40<sup>2</sup>

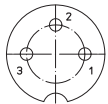
<sup>1</sup> measured with a polished steel pin, nominal thickness 1.5 mm (1.0 mm with 12 poles)  
<sup>2</sup> according to IEC DIN EN 60529, only in locked condition with an appropriate counterpart

**Electrical data (at T<sub>amb</sub> 20 °C)**

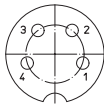
Contact resistance ≤ 5 mΩ  
 Rated current 5 A (T<sub>amb</sub> 40 °C, 3-8 poles)  
 3 A (T<sub>amb</sub> 40 °C, 12 poles)  
 Rated voltage with pollution degree 1:  
 300 V (versions 30, 40, 50/6, 60, 70)  
 100 V (versions 50, 71, 80, 81)  
 160 V (Polbild 120)  
 with pollution degree 2:  
 250 V (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 ≤ CTI < 600)  
 Overvoltage category I  
 Insulation resistance > 100 MΩ

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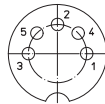
**Pin configurations, solder side view**



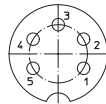
**03-a**  
KFR 30



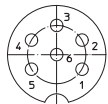
**04-a**  
KFR 40



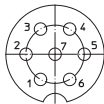
**05-b**  
KFR 50



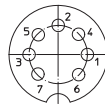
**05-a**  
KFR 50/6



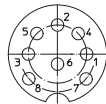
**06-a**  
KFR 60



**07-a**  
KFR 70



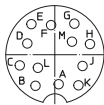
**07-b**  
KFR 71



**KFR 80**



**08-a**  
KFR 81



**12-a**  
KFR 120

**Associated products**

Counterparts

☞ SV ☞ SV ...-8 ☞ WSV

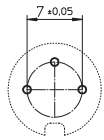
Accessories

☞ 0381 ☞ 038199 ☞ 0382

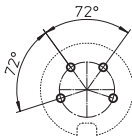
☞ 0384 ☞ 038799

**03 KFR**

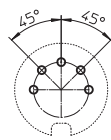
Printed circuit board layout, solder side view



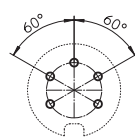
**03-a**  
KFR 30



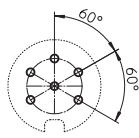
**04-a**  
KFR 40



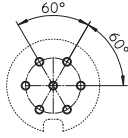
**05-b**  
KFR 50



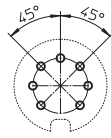
**05-a**  
KFR 50/6



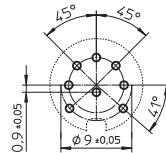
**06-a**  
KFR 60



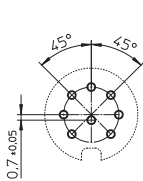
**07-a**  
KFR 70



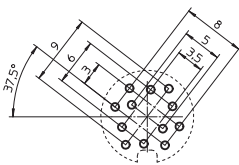
**07-b**  
KFR 71



**KFR 80**



**08-a**  
KFR 81



**12-a**  
KFR 120

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

Designation	Pole Number	PU (Pieces)	MDQ (Pieces)	Dimensions	
				A (mm)	B (mm)
KFR 30	3	50	100	16.0	17.8
KFR 40	4	50	100	16.0	17.8
KFR 50	5	50	100	16.0	17.8
KFR 50/6	5	50	100	16.0	17.8
KFR 60	6	50	100	16.0	17.8
KFR 70	7	50	100	16.0	17.8
KFR 71	7	50	100	16.0	17.8
KFR 80	8	50	100	16.0	17.8
KFR 81	8	50	100	16.0	17.8
KFR 120	12	50	100	15.6	17.1

**Packaging:**

in a cardboard box