

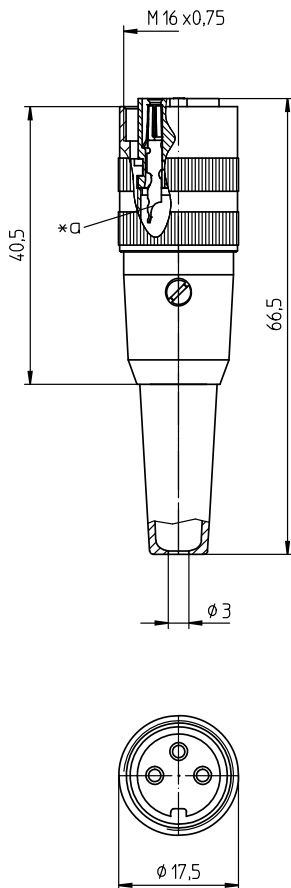
03 KV

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



Socket acc. to IEC 61076-2-106, IP40, straight version, with threaded joint, solder terminals and bend protection, for cable diameter up to 6 mm

03 KV



Environmental conditions

Temperature range	-40 °C/+85 °C
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Materials

Insulating body	PA GF, V-0 according to UL94
Contact bush	CuZn, silver-plated and passivated (3-8 poles) CuZn, pre-nickel and gold-plated (12 poles)
Sleeve	PC, HB according to UL94
Strain relief	steel, nickel-plated
Housing	CuZn, nickel-plated
Knurled nut	CuZn, nickel-plated
Bend protection sleeve	TPE
Screw	steel, 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
Protection class	IP40 ²

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

Connectable conductors for solder area

Section	$\leq 0.75 \text{ mm}^2$ (AWG 20) (3-8 poles) $\leq 0.25 \text{ mm}^2$ (AWG 24) (12 poles)
Cable diameter	4–6 mm

Electrical data (at T_{amb} 20 °C)

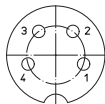
Contact resistance	$\leq 5 \text{ m}\Omega$
Rated current	5 A (T_{amb} 40 °C, 3-8 poles) 3 A (T_{amb} 40 °C, 12 poles)
Rated voltage	with pollution degree 1: 300 V (versions 30, 40, 50/6, 60, 70) 100 V (versions 50, 71, 80, 81) 160 V (Polbild 120) with pollution degree 2: 250 V (versions 30, 40) 32 V (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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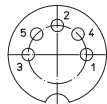
Pin configurations, solder side view



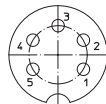
03-a
KV 30



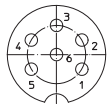
04-a
KV 40



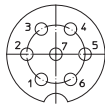
05-b
KV 50



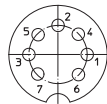
05-a
KV 50/6



06-a
KV 60



07-a
KV 70



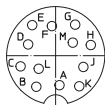
07-b
KV 71



KV 80



08-a
KV 81



12-a
KV 120

*a cup-shaped solder terminal

Associated products

Counterparts

 SFV	 SFV ... C	 SGR
 SGV	 SGV ... C	 SV
 SV ... C	 SV ...-8	 SV ...-8 C
 WSV	 WSV ... C	

Accessories

 0381	 038199	 038799
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03 KV

Designation	Pole Number	PU (Pieces)	MDQ (Pieces)
KV 30	3	50	100
KV 40	4	50	100
KV 50	5	50	100
KV 50/6	5	50	100
KV 60	6	50	100
KV 70	7	50	100
KV 71	7	50	100
KV 80	8	50	100
KV 81	8	50	100
KV 120	12	50	100

Packaging:

unassembled, individually in a plastic bag, in a cardboard box