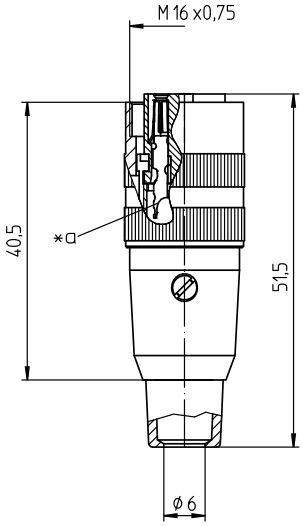
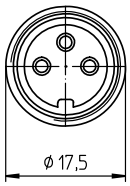
03 KV ...-8

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 8 mm

03 KV ...-8





Environmental conditions

Temperature range	-40 °C/+85 °C

Materials

Insulating body	PA GF, V-0 according to UL94
Contact bush	CuZn, pre-nickel and silver-plated, 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	≤ 5.0 N [1]
Withdrawal force/contact	≥ 1.2 N (3-8 poles) ≥ 0.9 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	≤ 0.75 mm² (AWG 20) (3-8 poles) ≤ 0.25 mm² (AWG 24) (12 poles)
Cable diameter	6–8 mm

Electrical data (at T_{amb} 20 °C)

Contact resistance	≤ 5 mΩ
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)/1 (UL) (400 ≤ CTI < 600)
Overvoltage category	I
Insulation resistance	> 100 MΩ

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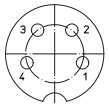
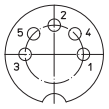
Pin configurations, solder side view

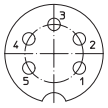
03-a
KV 30-8



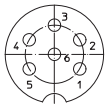
04-a
KV 40-8



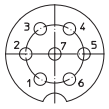
05-b
KV 50-8



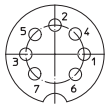
05-a
KV 50/6-8



06-a
KV 60-8

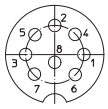


07-a
KV 70-8



07-b
KV 71-8

KV 80-8



08-a
KV 81-8

12-a
KV 120-8

*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

03 KV ...-8

Designation	Pole Number	PU (Pieces)	MDQ (Pieces)
KV 30-8	3	50	500
KV 40-8	4	50	500
KV 50-8	5	50	500
KV 50/6-8	5	50	500
KV 60-8	6	50	500
KV 70-8	7	50	500
KV 71-8	7	50	500
KV 80-8	8	50	500
KV 81-8	8	50	500
KV 120-8	12	50	500

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