

KD/KL 12

Capacitive sensor



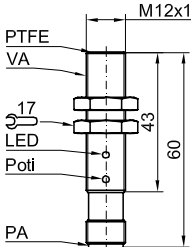
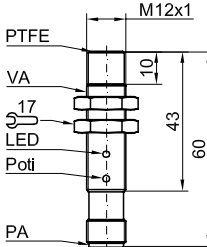
PRODUCT HIGHLIGHTS

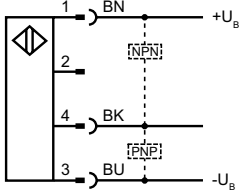
- Ideal for filling level measurements
- Robust stainless steel housings
- Optional N.O. or N.C. variants
- Flush or non-flush design options

Sensor data		Functions	
Switching distance (flush)	1 ... 4 mm	Indicator LED, yellow	Switching output indication
Switching distance (non-flush)	1 ... 8 mm	Sensitivity adjustment	Via potentiometer
Hysteresis	15 % ¹	Default settings	Max. switching distance
Repeatability	2 % ¹		
Temperature drift (flush)	20 % / °C ¹ [-5 ... +55°C]		
Temperature drift (non-flush)	15 % / °C ¹ [-5 ... +55°C]		
Electrical data		Mechanical data	
Operating voltage, +U _B	12 ... 35 V DC	Dimensions	M12 × 60 mm
No-load current, I ₀	≤ 10 mA	Enclosure rating	IP 65
Output current, I _e	≤ 200 mA	Material, housing	Stainless steel VA
Protective circuits	Reverse polarity protection. U _B / short-circuit protection (Q) / overload protection	Material, front surface	PTFE
Power On Delay	< 300 ms	Type of connection	See Selection Table
Switching output, Q	PNP / NPN (see Selection Table)	Ambient temperature: operation	-30 ... +70 °C
Output function	N.O. / N.C. (see Selection Table)	Vibration and impact resistance	EN 60947-5-2
Switching frequency f (ti/tp 1:1)	100 Hz		

¹ Relating to switching distance

Switching distance	Installation	Switching output	Type of connection	Part number	Article number
1 ... 4 mm	Flush	PNP (N.O.)	Plug, M12x1, 4-pin	KD 12 B-PSL4	681-50914
1 ... 4 mm	Flush	PNP (N.C.)	Plug, M12x1, 4-pin	KD 12 B-POL4	681-50915
1 ... 4 mm	Flush	NPN (N.O.)	Plug, M12x1, 4-pin	KD 12 B-NSL4	681-50916
1 ... 4 mm	Flush	NPN (N.C.)	Plug, M12x1, 4-pin	KD 12 B-NOL4	681-50917
1 ... 8 mm	Non-flush	PNP (N.O.)	Plug, M12x1, 4-pin	KL 12 NB-PSL4	682-50994
1 ... 8 mm	Non-flush	PNP (N.C.)	Plug, M12x1, 4-pin	KL 12 NB-POL4	682-50995
1 ... 8 mm	Non-flush	NPN (N.O.)	Plug, M12x1, 4-pin	KL 12 NB-NSL4	682-50996
1 ... 8 mm	Non-flush	NPN (N.C.)	Plug, M12x1, 4-pin	KL 12 NB-NOL4	682-50997

Plug connection (flush)	Plug connection (non-flush)
 153-00520	 153-00521

Connection, 4-pin
 154-00460

Accessories	
Connection cables	From Page A-38
Brackets	From Page A-4