



**Capacitive Sensors**  
Series 70 - NPN  
Series 80 - PNP

Housing M 18 x 1

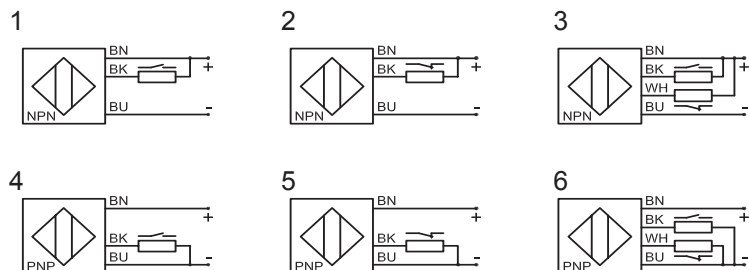
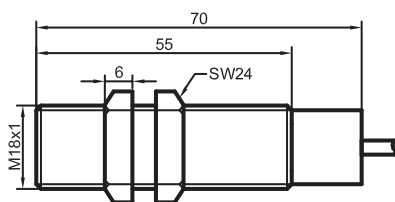
- Housing material: PPO
- Sensing distance 0...5 mm adjustable
- For the detection of conductive liquids through container walls or bypass tubes



Certificate:

Technical data	Flush mountable	Flush mountable
Operating distance $S_n$	2 mm	2 mm
Operating distance min./max. adjustable	0...5 mm	0...5 mm
Electrical version	3-wire DC	4-wire DC
Output	Normally open	Antivalent (NO + NC)
Type NPN	KAS-70-A13-S-K-HC	KAS-70-A13-A-K-HC
Art.-No.	KA 0389	KA 0553
Connection diagram No..	1	3
Type PNP		KAS-80-A13-A-K-HC
Art.-No.		KA 0627
Connection diagram No.		6
Operating voltage ( $U_B$ )	10...35 V DC	10...35 V DC
Output current max. ( $I_o$ )	250 mA	2 x 250 mA
Load current min.	-	-
Voltage drop max. ( $U_d$ )	< 2.0 V	< 2.0 V
Permitted residual ripple max.	10%	10%
No-load current ( $I_o$ )	Typ. 15 mA	Typ. 15 mA
Frequency of operating cycles max.	100 Hz	100 Hz
Permitted ambient temperature	-25...+70° C	-25...+70° C
LED-display	Green/yellow	Green/yellow
Protective circuit	Built-in	Built-in
Degree of protection IEC 60529	IP 67	IP 67
Norm	EN 60947-5-2	EN 60947-5-2
Connection cable	5 m, PUR, 3 x 0.34 mm <sup>2</sup>	5 m, PVC, 4 x 0.34 mm <sup>2</sup>
Housing material	PPO	PPO
Active surface	PPO	PPO
Lid	PPO	PPO

All specifications are subject to change without notice. (20.02.2008)



**Made in Germany**