



## Capacitive Sensors

Series 70 - NPN  
Series 80 - PNP

Housing M 18 x 1

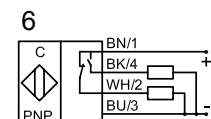
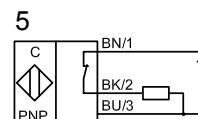
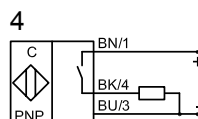
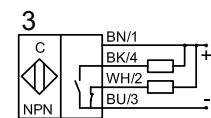
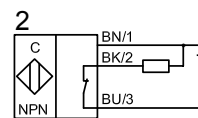
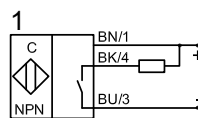
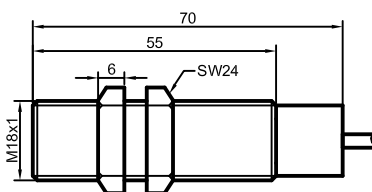
- Housing material: PA / PPO
- Sensing distance 1...8 mm adjustable

Certificate:



Technical data	Flush mountable	Flush mountable
Operating distance $S_n$	5 mm	5 mm
Operating distance min. / max. adjustable	1...8 mm	1...8 mm
Electrical version	3-wire DC	4-wire DC
Output	Normally open (NO)	Antivalent
<b>Type NPN</b>	<b>KAS-70-A13-S-K-NL</b>	<b>KAS-70-A13-A-K-NL</b>
<b>Art.-No.</b>	<b>KA 0648</b>	<b>KA 0637</b>
Connection diagram No..	1	3
<b>Type PNP</b>	<b>KAS-80-A13-S-K-NL</b>	<b>KAS-80-A13-A-K-NL</b>
<b>Art.-No.</b>	<b>KA 0717</b>	<b>KA 0680</b>
Connection diagram No.	4	6
Operating voltage ( $U_B$ )	12...30 V DC	12...30 V DC
Output current max. ( $I_o$ )	200 mA	2 x 200 mA
Voltage drop max. ( $U_d$ )	≤ 2.0 V	≤ 2.0 V
Permitted residual ripple max.	5 %	5 %
No-load current ( $I_o$ )	< 15 mA	< 15 mA
Frequency of operating cycles max.	200 Hz	200 Hz
Permitted ambient temperature	-25...+70 °C	-25...+70 °C
LED-display	Yellow	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	2 m, PUR, 3 x 0.34 mm <sup>2</sup>	2 m, PVC, 4 x 0.34 mm <sup>2</sup>
Housing material	PA / PPO	PA / PPO
Active surface	PA / PPO	PA / PPO
Lid	PA / PPO	PA / PPO

All specifications are subject to change without notice. (01.02.2010)



**Made in Germany**