

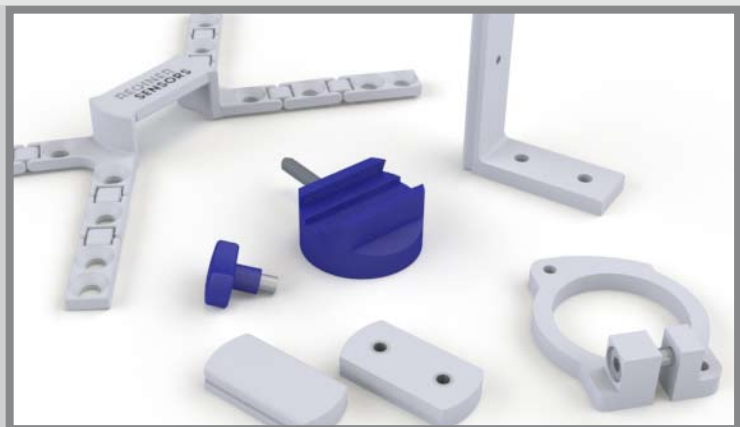
# RECHNER SENSORS

## CATALOGUE CAPACITIVE SENSORS

### EasyMount

#### Sensors for

- Level control of liquids
- Level control of bulk material
- Position control of objects
- Monitoring of Leaks



**CE**



Registration No.: 1327-01



Testing laboratory accredited according to  
DIN EN ISO/IEC 17025, Reg.-No. DAT-P-048/95-00

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**Edition June 2012**

With publication of this catalogue all former printed catalogues about RECHNER capacitive proximity sensors of the EasyMount series are invalid.

All specifications are subject to change without notice. (06/2012)

# Capacitive Sensors

- ✓ for level control of liquids
- ✓ for level control of bulk material
- ✓ for leakage detection
- ✓ for position control of objects ... and much more.

These small sensors have all that makes the handling and application easy for the user.

## EasyMount



cal characteristics and very small in size. It can be mounted in various ways. It can be glued in the desired position, fixed with a cable tie or it can be mounted with one of the holders from the range accessories.

The mounting is really simple. The sensor itself is featured with excellent techni-

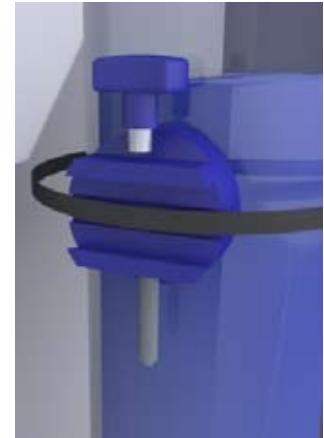
The sensitivity- or sensing distance adjustment is almost made by itself, thanks to the EasyTeach function.

## EasyTeach

el of choice. The steps one has to pass through are easy and finished quickly. So the user does not lose time from looking after his core business.

In the course of which it does not matter if the magnet is used or the version with EasyTeach by wire was the mod-

# = Simply perfect



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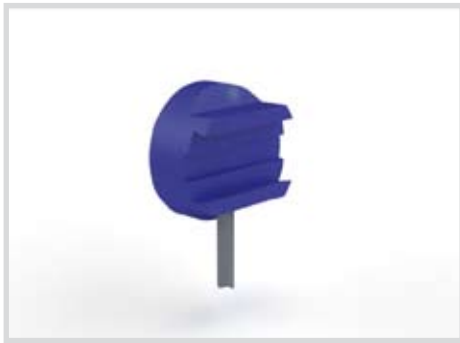
With the use of the newest production technologies the components of the sensors are embedded in the plastic body. They are watertight and operate wear-free. All sensors produced from RECHNER Sensors Germany are 100 % tested. The product marking is made with modern laser technology for everlasting identification and traceability.

# IP68

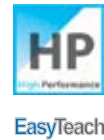
# Laser product marking

For further information about Rechner Sensors feel free to contact us or visit our web site under [www.rechner-sensors.com](http://www.rechner-sensors.com).

# 100 % tested



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

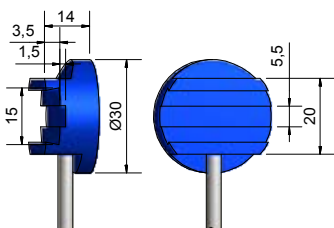
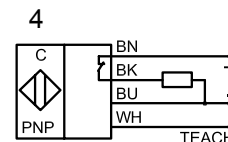
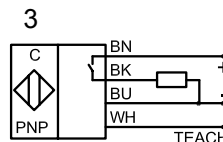
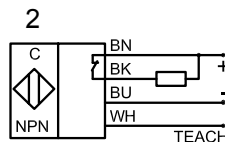
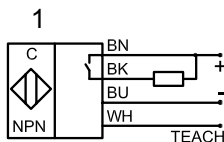


- Housing Ø 30 mm
- EasyTeach by wire
  - Housing material: Polyamide (PA)
  - Various mounting possibilities (see accessories)
  - Capacitive sensor for level control of liquids or bulk material
  - Capacitive sensor for detecting the position of objects
  - Watertight

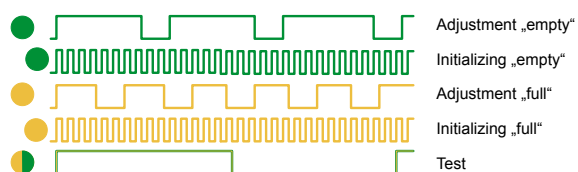
Certificate:



Technical data	Flush mountable	Flush mountable
Operating distance $S_n$	5 mm	5 mm
Operating distance min. / max. programmable	0...10 mm	0...10 mm
Electrical version	3 wire DC	3 wire DC
Output function	Normally open (NO)	Normally closed (NC)
<b>Type NPN</b>	<b>KAS-70-30/EM-S-ETW</b>	<b>KAS-70-30/EM-Ö-ETW</b>
<b>Art.-No.</b>	<b>KA 1153</b>	<b>KA 1154</b>
Connection diagram no.	1	2
<b>Type PNP</b>	<b>KAS-80-30/EM-S-ETW</b>	<b>KAS-80-30/EM-Ö-ETW</b>
<b>Art.-No.</b>	<b>KA 1149</b>	<b>KA 1150</b>
Connection diagram no.	3	4
Operating voltage ( $U_b$ )	10...35 V DC	10...35 V DC
Output current max. ( $I_o$ )	200 mA	200 mA
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.	2 Hz	2 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 68	IP 68
Norm	EN 60947-5-2	EN 60947-5-2
Connection cable	2 m PVC, 4 x 0.14 mm <sup>2</sup>	2 m PVC, 4 x 0.14 mm <sup>2</sup>
Housing material	PA	PA
Accessory supplied with the sensor	-	-

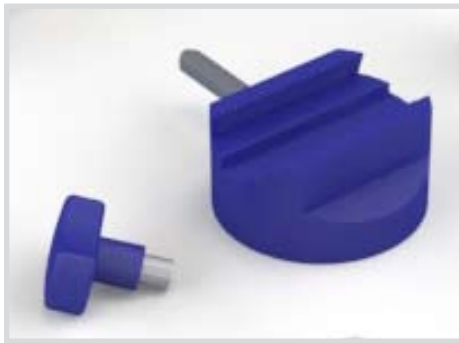


**EasyTeach chart:**  
LED / Output function  
Yellow = A1  
Green = A1



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



EasyTeach

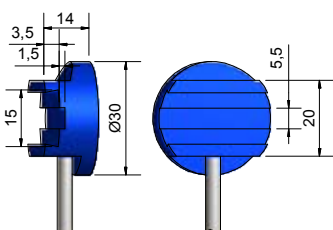
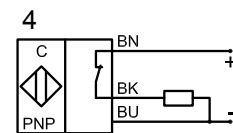
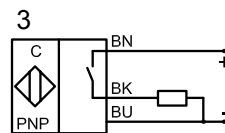
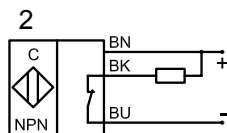
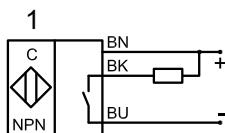
- Housing Ø 30 mm
- EasyTeach by magnet (Magnet is supplied with the sensor)
  - Housing material: Polyamid (PA)
  - Various mounting possibilities (see accessories)
  - Capacitive sensor for level control of liquids or bulk material
  - Capacitive sensor for detecting the position of objects
  - Watertight

Certificate:

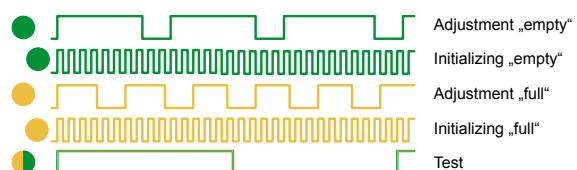


Technical data	Flush mountable	Flush mountable
Operating distance $S_n$	5 mm	5 mm
Operating distance min. / max. programmable	0...10 mm	0...10 mm
Electrical version	3 wire DC	3 wire DC
Output function	Normally open (NO)	Normally closed (NC)
<b>Type NPN</b>	<b>KAS-70-30/EM-S-ETM</b>	<b>KAS-70-30/EM-Ö-ETM</b>
<b>Art.-No.</b>	<b>KA 1151</b>	<b>KA 1152</b>
Connection diagram no.	1	2
<b>Type PNP</b>	<b>KAS-80-30/EM-S-ETM</b>	<b>KAS-80-30/EM-Ö-ETM</b>
<b>Art.-No.</b>	<b>KA 1147</b>	<b>KA 1148</b>
Connection diagram no.	3	4
Operating voltage ( $U_B$ )	10...35 V DC	10...35 V DC
Output current max. ( $I_o$ )	200 mA	200 mA
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.	2 Hz	2 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	IP68	IP 68
Norm	EN 60947-5-2	EN 60947-5-2
Connection cable	2 m PVC, 3 x 0.14 mm <sup>2</sup>	2 m PVC, 3 x 0.14 mm <sup>2</sup>
Housing material	PA	PA
Accessory supplied with the sensor	Teach magnet	Teach magnet

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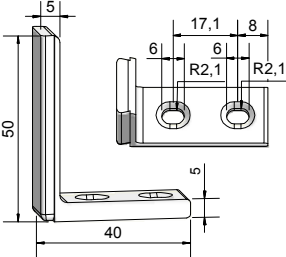

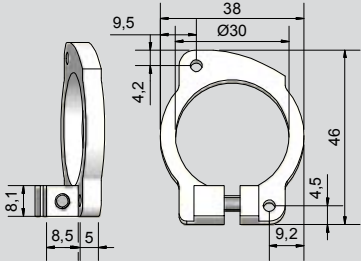

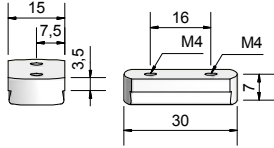

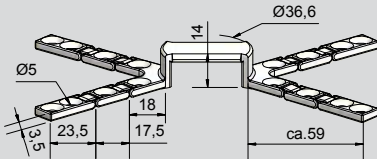

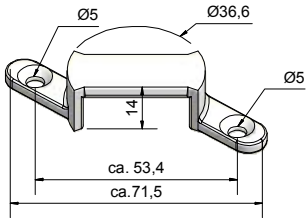


**EasyTeach chart:**  
LED / Output function  
Yellow = A1  
Green = A1



**Made in Germany**

## Accessories

Picture	Art.-No.	Description	Dimensions
	196389	H-01 Angled holder Material PA 2200	
	196390	H-02 Mounting adapter Material PA 2200	
	196391	H-03 Mounting adapter Material PA 2200	
	196392	H-04 Mounting adapter foldable, e.g. for positioning of the sensor for leak control Material PA 2200	
	196393	H-05 Mounting adapter Material PA 2200	

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KA1148	KAS-80-30/EM-Ö-ETM	5
KA1149	KAS-80-30/EM-S-ETW	4
KA1150	KAS-80-30/EM-Ö-ETW	4
KA1151	KAS-70-30/EM-S-ETM	5
KA1152	KAS-70-30/EM-Ö-ETM	5
KA1153	KAS-70-30/EM-S-ETW	4
KA1154	KAS-70-30/EM-Ö-ETW	4

## TYPE SELECTION IN DESCRIPTION ORDER

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EasyMount H-04	196392	6
EasyMount H-05	196393	6
KAS-70-30/EM-Ö-ETM	KA1152	5
KAS-70-30/EM-Ö-ETW	KA1154	4
KAS-70-30/EM-S-ETM	KA1151	5
KAS-70-30/EM-S-ETW	KA1153	4
KAS-80-30/EM-Ö-ETM	KA1148	5
KAS-80-30/EM-Ö-ETW	KA1150	4
KAS-80-30/EM-S-ETM	KA1147	5
KAS-80-30/EM-S-ETW	KA1149	4

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