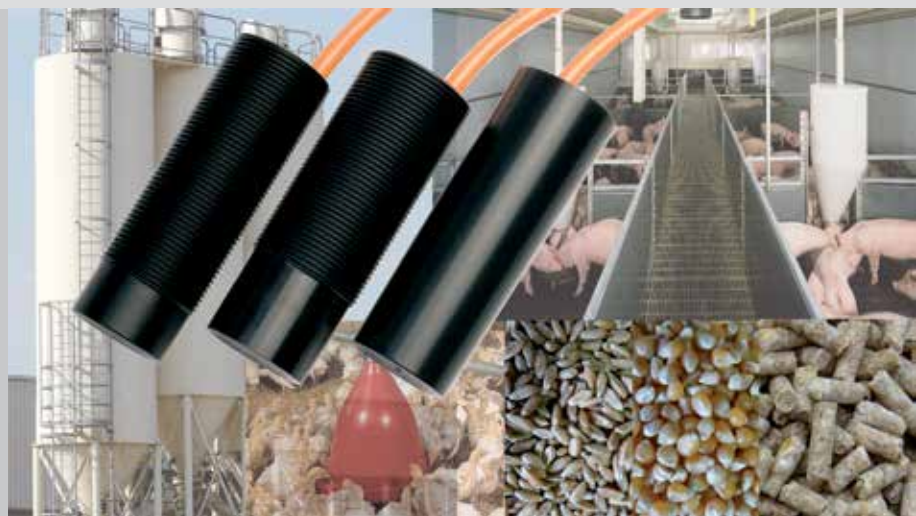


## ***CAPACITIVE SENSORS KAS SERIES 95***

*Sensors for industrial  
automation in the*

- Agriculture Industry*
- Feed Industry*

*Filling Level Control  
Backlog Jam Indication  
Full / Empty Indication*





Registration No.: 1327-01



Testing laboratory accredited according to  
DIN EN ISO / IEC 17025 Reg.-No. DGA-PL-048/95-03

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### **Edition December 2012**

With publication of this catalogue all former printed catalogues about RECHNER 95 series capacitive sensors are invalid.

# Capacitive Level Sensors KAS Series 95

For many years, in the field of industrial automation, capacitive proximity sensors (our abbreviation KAS) have been well accepted as indispensable elements for the level control of most different products. This is true whether the products are liquids, pastes, powder, seeds, grain or granulates. The sensors are available in a wide range of variants.

In the agriculture industry the capacitive sensors and probes control automatic animal feeding systems and detect fodder and seeds. They serve as a backlog jam indicator in conveying systems or as level control in dosing units, filling or packaging systems. They control the filling level both in large silos and in small storage containers.

Capacitive sensors detect the filling level within agriculture machinery, in the storage tanks and dosing units, for instance seed, fertilizer, etc.

This brochure presents one of our high lights: the series 95 capacitive sensors.

## Series 95

- Supply voltage 20 - 250 V AC / DC
- Relay output, optional time relay (1 sec. - 10 min. adjustable)
- Optional on-delay or off-delay switchable
- Low power consumption, 2 mA only
- Intelligent micro controller technology

The 95 series capacitive sensors are favoured in the agriculture industry as a universally applicable device. The reasons, apart from the quality and reliability, are the wide supply voltage range of 20...250 V AC / DC (alternating current and direct current), the easy mounting and installation and the potential-free relay output. The sensors can be connected to PLC's or using directly by the consumer for control purposes to a max. 1 A.

The components of the KAS are mounted in plastic or Plastic/metal casings and encapsulated with epoxy casting resin. Therefore all devices are insensitive to dirt, vibration (vibration stability: 30 g, 100...2000 Hz, 1 hour) and are watertight (depending on the type, up to IP 68).

The materials used for the housings are:

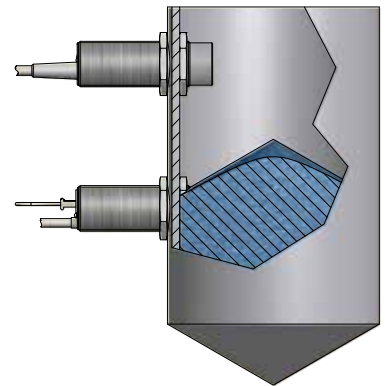
- POM (polyoxymethylene)
- PA (polyamide) 6.6. glass-fibre reinforced
- PC (polycarbonate)
- PPO (polyphenylenoxide)
- PTFE (polytetrafluor ethylene) (FDA 21 CFR 177.1550)
- Brass / chrome or nickel-plated

(For the housing materials used please see the respective technical specifications of the model).

All sensors shown in this brochure are for non-flush mounting. This means they are designed for applications where the active area of the sensor is in contact with the material to be detected.

With this kind of level control the sensor head (active area) is completely immersed into the powder, granulate or liquid.

Non-flush mounted capacitive sensors. Level control.



These sensors are also available with manufacturer certificate for use in ATEX zone 22

For further information about capacitive sensors please look at our main catalogue or our web site:

**[www.rechner-sensors.com](http://www.rechner-sensors.com)**

# APPLICATIONS

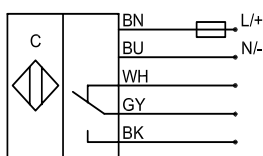
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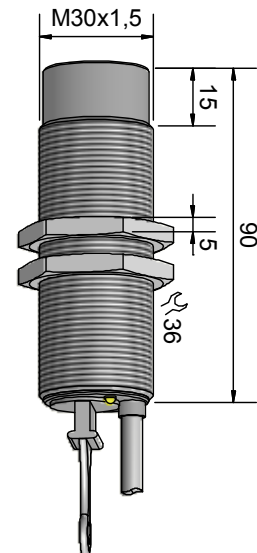
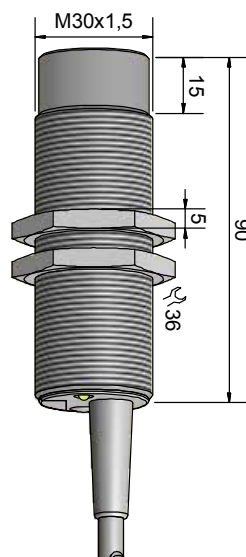
## CAPACITIVE SENSORS Series 95

Dimension	M 30 x 1,5		M 30 x 1,5	
				
<b>Technical data</b>	Non-flush mountable		Non-flush mountable	
Sensing distance $S_n$ [mm]	15 mm		15 mm	
Sensing distance min. / max. [mm] adjustable	2...20 mm		2...20 mm	
	Description	Art.-No.	Description	Art.-No.
Type	KAS-95-A24-1CO-K-PBT	KA 0800	KAS-95-A24-1CO-K-PBT-TD	KA 0824
Electrical version	5 wire AC / DC		5 wire AC / DC	
Output function	Relay 1 CO		Relay 1 CO	
Certificates	CE, RoHS, UL / CSA		CE, RoHS, UL / CSA	
Operating voltage ( $U_B$ )	20...250 V AC / DC		20...250 V AC / DC	
Time delay	No		Adjustable 1 sec ...10 min.	
On-delay	No		Changeable	
Off-delay	No		Changeable	
Load max. AC (I, U)	1 A, 250 V		1 A, 250 V	
Load max. DC (I, U, P)	1 A, 220 V, 60 W		1 A, 220 V, 60 W	
Power consumption ( $I_s$ )	2.1 mA		2.1 mA	
Switching frequency max.	2 Hz		2 Hz	
Permitted ambient temperature	-25...+70 °C (ETL = +60 °C)		-25...+70 °C (ETL = +60 °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 cable, PVC, 5 x 0.34 mm <sup>2</sup>		2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>	
Housing material	PBT		POM	
Active surface	PBT		POM	
Lid	PA / PPO		PBT	



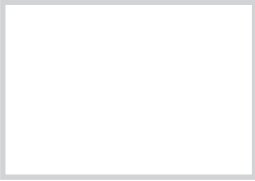
\*With sealed potentiometer screw

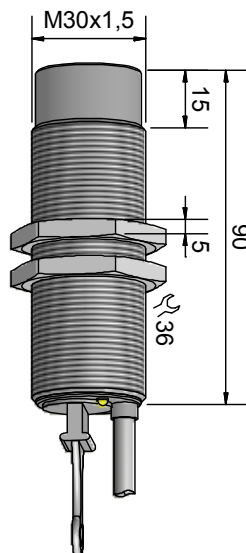
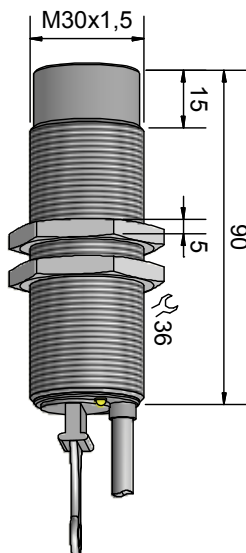


Connection diagram:  
 BN = brown,  
 BU = blue  
 WH = white  
 GY = grey  
 BK = black



## Dimension M 30 x 1.5

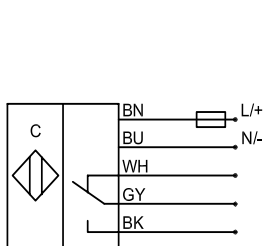
M 30 x 1,5		M 30 x 1,5		
				
Non-flush mountable		Non-flush mountable		
15 mm		15 mm		
2...20 mm		2...20 mm		
Description	Art.-No.	Description	Art.-No.	
KAS-95-A24-1CO-K-PBT-OND	KA 0852	KAS-95-A24-1CO-K-PBT-OFD	KA 0853	
5 wire AC / DC		5 wire AC / DC		
Relay 1 CO		20...250 V AC / DC		
CE, RoHS, UL / CSA		CE, RoHS, UL / CSA		
20...250 V AC / DC		20...250 V CA / CC		
Adjustable 1 sec ...10 min.		Adjustable 1 sec ...10 min.		
Yes		No		
No		Yes		
1 A, 250 V		1 A, 250 V		
1 A, 220 V, 60 W		1 A, 220 V, 60 W		
2.1 mA		2.1 mA		
2 Hz		2 Hz		
-25...+70 °C (ETL = +60 °C)		-25...+70 °C (ETL = +60 °C)		
Yellow		Yellow		
Built-in		Built-in		
IP 67*		IP 67*		
EN 60947-5-2		EN 60947-5-2		
2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>		2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>		
PBT		PBT		
PBT		PBT		
PBT		PBT		



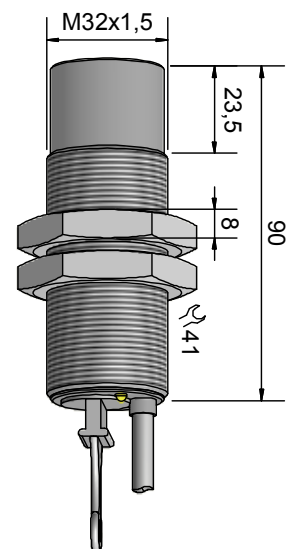
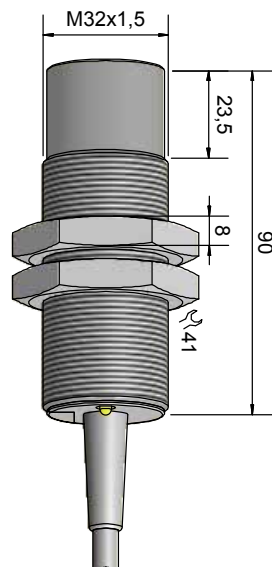
## CAPACITIVE SENSORS Series 95

Dimension	M 32 x 1,5	M 32 x 1,5		
				
<b>Technical data</b>	Non-flush mountable	Non-flush mountable		
Sensing distance $S_n$ [mm]	20 mm	20 mm		
Sensing distance min. / max. [mm] adjustable	2...25 mm	2...25 mm		
	Description	Art.-No.	Description	Art.-No.
Type	KAS-95-32-1CO-K-M32-PBT	KA 0854	KAS-95-32-1CO-K-M32-PBT-TD	KA 0822
Electrical version	5 wire AC / DC		5 wire AC / DC	
Output function	Relay 1 CO		Relay 1 CO	
Certificates	CE, RoHS, UL / CSA		CE, RoHS, UL / CSA	
Operating voltage ( $U_B$ )	20...250 V AC / DC		20...250 V AC / DC	
Time delay	No		Adjustable 1 sec ... 10 min.	
On-delay	No		Changeable	
Off-delay	No		Changeable	
Load max. AC (I, U)	1 A, 250 V		1 A, 250 V	
Load max. DC (I, U, P)	1 A, 220 V, 60 W		1 A, 220 V, 60 W	
Power consumption ( $I_o$ )	2.1 mA		2.1 mA	
Switching frequency max.	2 Hz		2 Hz	
Permitted ambient temperature	-25...+70 °C (ETL = +60 °C)		-25...+70 °C (ETL = +60 °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 cable, PVC, 5 x 0.34 mm <sup>2</sup>		2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>	
Housing material	PBT		PBT	
Active surface	PBT		PBT	
Lid	PA / PPO		PBT	

\*With sealed potentiometer screw



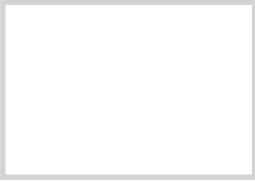


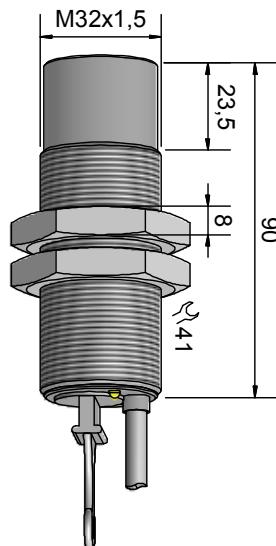
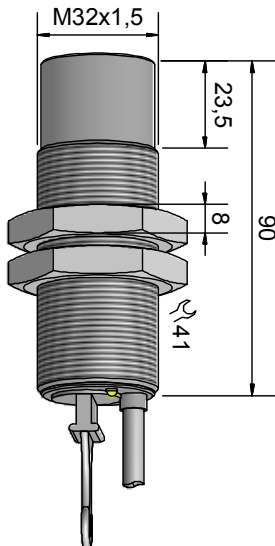
Connection diagram:  
 BN = brown,  
 BU = blue  
 WH = white  
 GY = grey  
 BK = black








## Dimension M 32 x 1.5

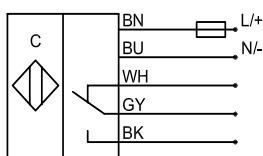
M 32 x 1,5		M 32 x 1,5		
				
Non-flush mountable		Non-flush mountable		
20 mm		20 mm		
2...25 mm		2...25 mm		
Description	Art.-No.	Description	Art.-No.	
KAS-95-32-1CO-K-M32-PBT-OND	KA 0855	KAS-95-32-1CO-K-M32-PBT-OFD	KA 0856	
5 wire AC / DC		5 wire AC / DC		
Relay 1 CO		Relay 1 CO		
CE, RoHS, UL / CSA		CE, RoHS, UL / CSA		
20...250 V AC / DC		20...250 V AC / DC		
Adjustable 1 sec ...10 min.		Adjustable 1 sec ...10 min.		
Yes		No		
No		Yes		
1 A, 250 V		1 A, 250 V		
1 A, 220 V, 60 W		1 A, 220 V, 60 W		
2.1 mA		2.1 mA		
2 Hz		2 Hz		
-25...+70 °C (ETL = +60 °C)		-25...+70 °C (ETL = +60 °C)		
Yellow		Yellow		
Built-in		Built-in		
IP 67*		IP 67*		
EN 60947-5-2		EN 60947-5-2		
2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>		2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>		
PBT		PBT		
PBT		PBT		
PBT		PBT		



## CAPACITIVE SENSORS Series 95

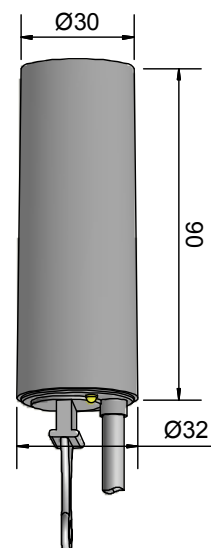
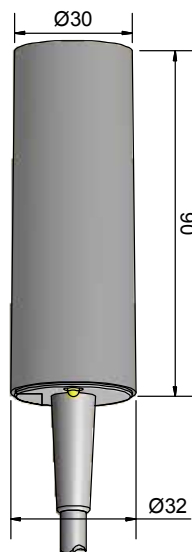
Dimension	Ø 32		Ø 32	
				
				
				
<b>Technical data</b>	Non-flush mountable		Non-flush mountable	
Sensing distance $S_n$ [mm]	20 mm		20 mm	
Sensing distance min. / max. [mm] adjustable	2...25 mm		2...25 mm	
	Description	Art.-No.	Description	Art.-No.
Type	KAS-95-32-1CO-K-PBT	KA 0857	KAS-95-32-1CO-K-PBT-TD	KA 0858
Electrical version	5 wire AC / DC		5 wire AC / DC	
Output function	Relay 1 CO		Relay 1 CO	
Certificates	CE, RoHS, UL / CSA		CE, RoHS, UL / CSA	
Operating voltage ( $U_B$ )	20...250 V AC / DC		20...250 V AC / DC	
Time delay	No		Adjustable 1 sec ... 10 min.	
On-delay	No		Changeable	
Off-delay	No		Changeable	
Load max. AC (I, U)	1 A, 250 V		1 A, 250 V	
Load max. DC (I, U, P)	1 A, 220 V, 60 W		1 A, 220 V, 60 W	
Power consumption ( $I_o$ )	2.1 mA		2.1 mA	
Switching frequency max.	2 Hz		2 Hz	
Permitted ambient temperature	-25...+70 °C (ETL = +60 °C)		-25...+70 °C (ETL = +60 °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 cable, PVC, 5 x 0.34 mm <sup>2</sup>		2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>	
Housing material	PBT		PBT	
Active surface	PBT		PBT	
Lid	PA / PPO		PBT	

\*With sealed potentiometer screw



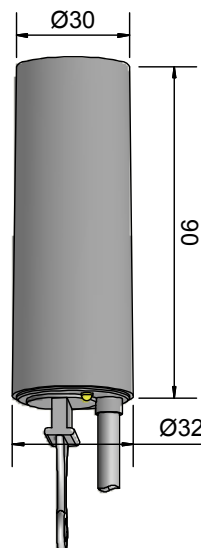
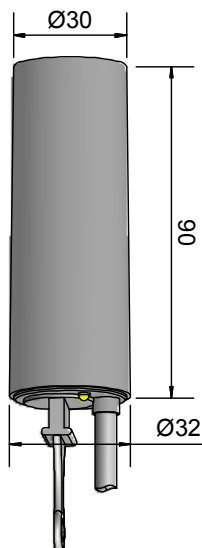
Connection diagram:

BN = brown,  
BU = blue  
WH = white  
GY = grey  
BK = black



## Dimension Ø 32 mm

Ø 32		Ø 32	
			
Non-flush mountable		Non-flush mountable	
20 mm		20 mm	
2...25 mm		2...25 mm	
Description	Art.-No.	Description	Art.-No.
KAS-95-32-1CO-K-PBT-OND	KA 0859	KAS-95-32-1CO-K-PBT-OFD	KA 0860
5 wire AC / DC		5 wire AC / DC	
Relay 1 CO		Relay 1 CO	
CE, RoHS, UL / CSA		CE, RoHS, UL / CSA	
20...250 V AC / DC		20...250 V AC / DC	
Adjustable 1 sec ...10 min.		Adjustable 1 sec ...10 min.	
Yes		No	
No		Yes	
1 A, 250 V		1 A, 250 V	
1 A, 220 V, 60 W		1 A, 220 V, 60 W	
2.1 mA		2.1 mA	
2 Hz		2 Hz	
-25...+70 °C (ETL = +60 °C)		-25...+70 °C (ETL = +60 °C)	
Yellow		Yellow	
Built-in		Built-in	
IP 67*		IP 67*	
EN 60947-5-2		EN 60947-5-2	
2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>		2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>	
PBT		PBT	
PBT		PBT	
PBT		PBT	



## CAPACITIVE SENSORS Series 95

Dimension

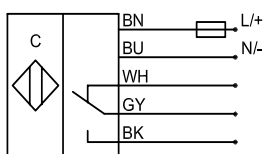
M 30 x 1,5

M 30 x 1,5



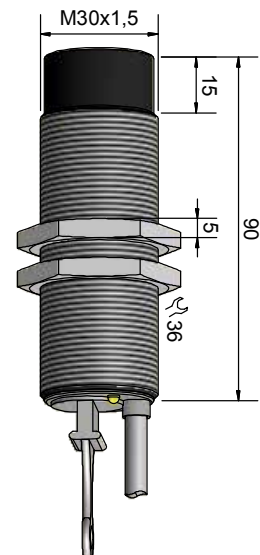
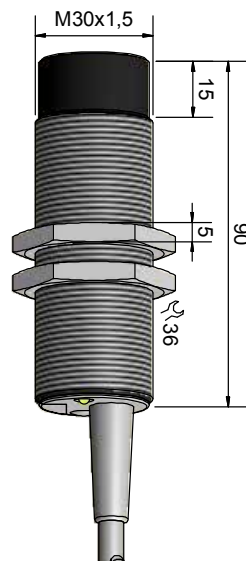
Technical data	Non-flush mountable		Non-flush mountable	
Sensing distance $S_n$ [mm]	15 mm		15 mm	
Sensing distance min. / max. [mm] adjustable	2...20 mm		2...20 mm	
	Description	Art.-No.	Description	Art.-No.
Type	KAS-95-A24-1CO-K-POM	KA 0747	KAS-95-A24-1CO-K-POM-TD	KA 0748
Electrical version	5 wire AC / DC		5 wire AC / DC	
Output function	Relay 1 CO		Relay 1 CO	
Certificates	CE, RoHS		CE, RoHS	
Operating voltage ( $U_B$ )	20...250 V AC / DC		20...250 V AC / DC	
Time delay	No		Adjustable 1 sec ... 10 min.	
On-delay	No		Changeable	
Off-delay	No		Changeable	
Load max. AC (I, U)	1 A, 250 V		1 A, 250 V	
Load max. DC (I, U, P)	1 A, 220 V, 60 W		1 A, 220 V, 60 W	
Power consumption ( $I_c$ )	2.1 mA		2.1 mA	
Switching frequency max.	2 Hz		2 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 cable, PVC, 5 x 0.34 mm <sup>2</sup>		2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>	
Housing material	POM		POM	
Active surface	POM		POM	
Lid	PA / PPO		PBT	

\*With sealed potentiometer screw




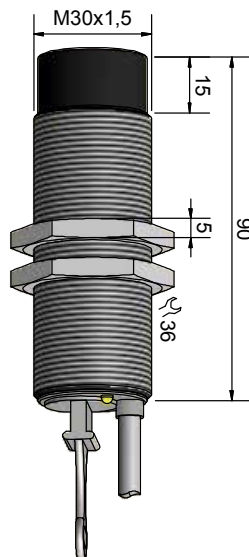
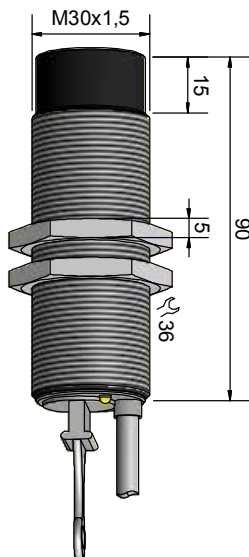
Connection diagram:

BN = brown,  
BU = blue  
WH = white  
GY = grey  
BK = black



## Dimension M 30 x 1.5

M 30 x 1,5		M 30 x 1,5	
			
Non-flush mountable		Non-flush mountable	
15 mm		15 mm	
2...20 mm		2...20 mm	
Description	Art.-No.	Description	Art.-No.
KAS-95-A24-1CO-K-POM-OND	KA 0749	KAS-95-A24-1CO-K-POM-OFD	KA 0750
5 wire AC / DC		5 wire AC / DC	
Relay 1 CO		20...250 V AC / DC	
CE, RoHS		CE, RoHS	
20...250 V AC / DC		20...250 V CA / CC	
Adjustable 1 sec ...10 min.		Adjustable 1 sec ...10 min.	
Yes		No	
No		Yes	
1 A, 250 V		1 A, 250 V	
1 A, 220 V, 60 W		1 A, 220 V, 60 W	
2.1 mA		2.1 mA	
2 Hz		2 Hz	
-25...+70 °C		-25...+70 °C	
Yellow		Yellow	
Built-in		Built-in	
IP 67*		IP 67*	
EN 60947-5-2		EN 60947-5-2	
2 m, PVC cable, 5 x 0.34 mm <sup>2</sup>		2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>	
POM		POM	
POM		POM	
PBT		PBT	



## CAPACITIVE SENSORS Series 95

Dimension

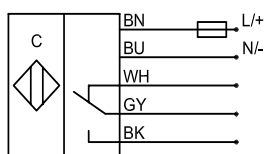
M 32 x 1,5

M 32 x 1,5

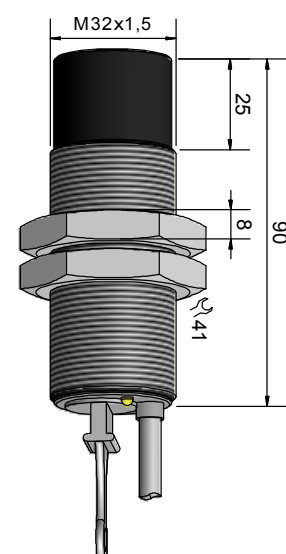
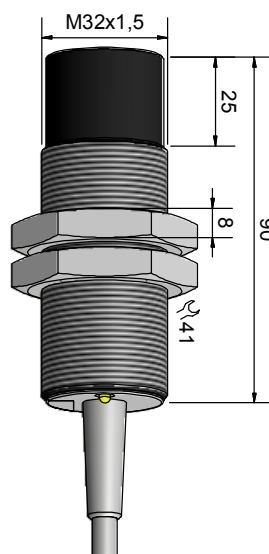


Technical data	Non-flush mountable		Non-flush mountable	
Sensing distance $S_n$ [mm]	20 mm		20 mm	
Sensing distance min. / max. [mm] adjustable	2...25 mm		2...25 mm	
	Description	Art.-No.	Description	Art.-No.
Type	KAS-95-32-1CO-K-M32-POM	KA 0743	KAS-95-32-1CO-K-M32-POM-TD	KA 0744
Electrical version	5 wire AC / DC		5 wire AC / DC	
Output function	Relay 1 CO		Relay 1 CO	
Certificates	CE, RoHS		CE, RoHS	
Operating voltage ( $U_B$ )	20...250 V AC / DC		20...250 V AC / DC	
Time delay	No		Adjustable 1 sec ... 10 min.	
On-delay	No		Changeable	
Off-delay	No		Changeable	
Load max. AC (I, U)	1 A, 250 V		1 A, 250 V	
Load max. DC (I, U, P)	1 A, 220 V, 60 W		1 A, 220 V, 60 W	
Power consumption ( $I_o$ )	2.1 mA		2.1 mA	
Switching frequency max.	2 Hz		2 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 cable, PVC, 5 x 0.34 mm <sup>2</sup>		2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>	
Housing material	POM		POM	
Active surface	POM		POM	
Lid	PA / PPO		PBT	

\*With sealed potentiometer screw

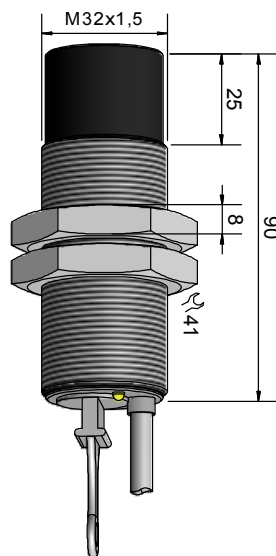
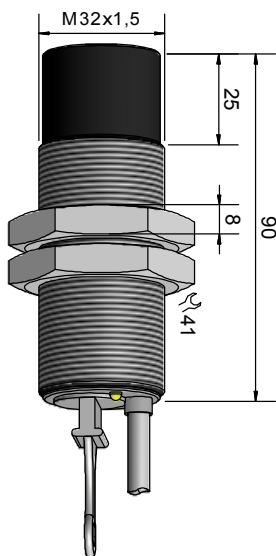


Connection diagram:  
 BN = brown,  
 BU = blue  
 WH = white  
 GY = grey  
 BK = black



## Dimension M 32 x 1.5

M 32 x 1,5		M 32 x 1,5	
			
Non-flush mountable		Non-flush mountable	
20 mm		20 mm	
2...25 mm		2...25 mm	
Description	Art.-No.	Description	Art.-No.
KAS-95-32-1CO-K-M32-POM-OND	KA 0745	KAS-95-32-1CO-K-M32-POM-OFD	KA 0746
5 wire AC / DC		5 wire AC / DC	
Relay 1 CO		Relay 1 CO	
CE, RoHS		CE, RoHS	
20...250 V AC / DC		20...250 V AC / DC	
Adjustable 1 sec ...10 min.		Adjustable 1 sec ...10 min.	
Yes		No	
No		Yes	
1 A, 250 V		1 A, 250 V	
1 A, 220 V, 60 W		1 A, 220 V, 60 W	
2.1 mA		2.1 mA	
2 Hz		2 Hz	
-25...+70 °C		-25...+70 °C	
Yellow		Yellow	
Built-in		Built-in	
IP 67*		IP 67*	
EN 60947-5-2		EN 60947-5-2	
2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>		2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>	
POM		POM	
POM		POM	
PBT		PBT	



## CAPACITIVE SENSORS Series 95

Dimension

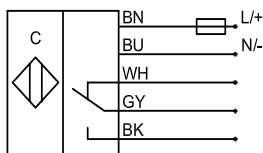
Ø 32

Ø 32



Technical data	Non-flush mountable		Non-flush mountable	
Sensing distance $S_n$ [mm]	20 mm		20 mm	
Sensing distance min. / max. [mm] adjustable	2...25 mm		2...25 mm	
	Description	Art.-No.	Description	Art.-No.
Type	KAS-95-32-1CO-K-POM	KA 0760	KAS-95-32-1CO-K-POM-TD	KA 0761
Electrical version	5 wire AC / DC		5 wire AC / DC	
Output function	Relay 1 CO		Relay 1 CO	
Certificates	CE, RoHS		CE, RoHS	
Operating voltage ( $U_B$ )	20...250 V AC / DC		20...250 V AC / DC	
Time delay	No		Adjustable 1 sec ... 10 min.	
On-delay	No		Changeable	
Off-delay	No		Changeable	
Load max. AC (I, U)	1 A, 250 V		1 A, 250 V	
Load max. DC (I, U, P)	1 A, 220 V, 60 W		1 A, 220 V, 60 W	
Power consumption ( $I_o$ )	2.1 mA		2.1 mA	
Switching frequency max.	2 Hz		2 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 cable, PVC, 5 x 0.34 mm <sup>2</sup>		2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>	
Housing material	POM		POM	
Active surface	POM		POM	
Lid	PA / PPO		PBT	

\*With sealed potentiometer screw


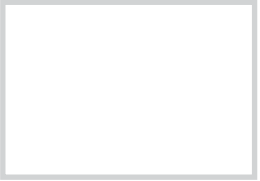


Connection diagram:  
 BN = brown,  
 BU = blue  
 WH = white  
 GY = grey  
 BK = black





## Dimension Ø 32 mm

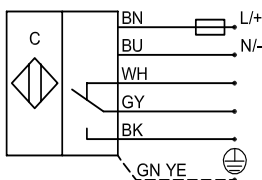
Ø 32		Ø 32		
				
Non-flush mountable		Non-flush mountable		
20 mm		20 mm		
2...25 mm		2...25 mm		
Description	Art.-No.	Description	Art.-No.	
KAS-95-32-1CO-K-POM-OND	KA 0762	KAS-95-32-1CO-K-POM-OFD	KA 0763	
5 wire AC / DC		5 wire AC / DC		
Relay 1 CO		Relay 1 CO		
CE, RoHS		CE, RoHS		
20...250 V AC / DC		20...250 V AC / DC		
Adjustable 1 sec ...10 min.		Adjustable 1 sec ...10 min.		
Yes		No		
No		Yes		
1 A, 250 V		1 A, 250 V		
1 A, 220 V, 60 W		1 A, 220 V, 60 W		
2.1 mA		2.1 mA		
2 Hz		2 Hz		
-25...+70 °C		-25...+70 °C		
Yellow		Yellow		
Built-in		Built-in		
IP 67*		IP 67*		
EN 60947-5-2		EN 60947-5-2		
2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>		2 m cable, PVC, 5 x 0.34 mm <sup>2</sup>		
POM		POM		
POM		POM		
PBT		PBT		



## CAPACITIVE SENSORS Series 95 ATEX with manufacturer declaration for use in zone 22

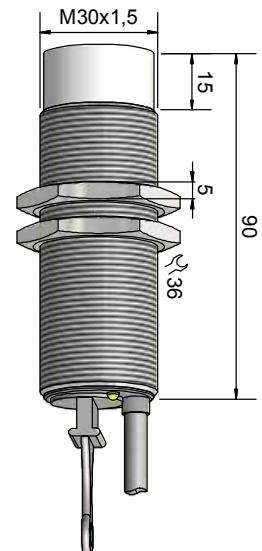
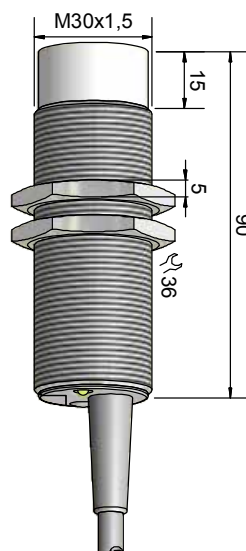
Dimension	M 30 x 1,5		M 30 x 1,5	
<b>Technical data</b>	Non-flush mountable		Non-flush mountable	
Sensing distance $S_n$ [mm]	15 mm		15 mm	
Sensing distance min. / max. [mm] adjustable	2...20 mm		2...20 mm	
	Description	Art.-No.	Description	Art.-No.
Type	KAS-95-A24-1CO-PTFE/MS-3D, ATEX	KA 1010	KAS-95-A24-1CO-PTFE/MS-TD-3D, ATEX	KA 1008
Electrical version	5 wire AC / DC		5 wire AC / DC	
Output function	Relay 1 CO		Relay 1 CO	
Certificates	CE, RoHS, UL / CSA		CE, RoHS, UL / CSA	
Operating voltage ( $U_b$ )	20...250 V AC / DC		20...250 V AC / DC	
Time delay	No		Adjustable 1 sec ... 10 min.	
Load max. AC (I, U)	1 A, 250 V		1 A, 250 V	
Load max. DC (I, U, P)	1 A, 220 V, 60 W		1 A, 220 V, 60 W	
Power consumption ( $I_o$ )	2.1 mA		2.1 mA	
Switching frequency max.	2 Hz		2 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 cable, PVC, 6 x 0.34 mm <sup>2</sup>		2 m cable, PVC, 6 x 0.34 mm <sup>2</sup>	
Housing material	Brass		Brass	
Active surface	PTFE (FDA 21 CFR 177.1550)		PTFE (FDA 21 CFR 177.1550)	
Lid	PA / PPO		PBT	

\*With sealed potentiometer screw



Connection diagram:

BN = brown,  
BU = blue  
WH = white  
GY = grey  
BK = black  
GN / YE = green / yellow

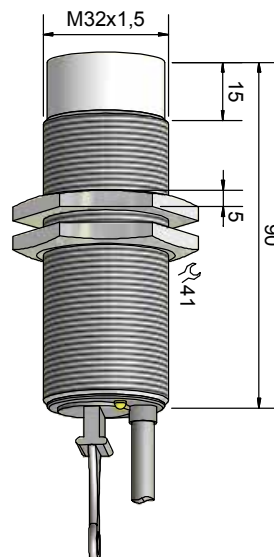
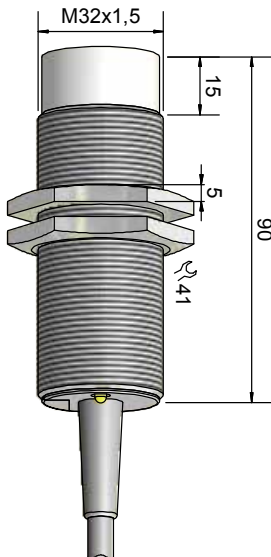


**M 32 x 1,5**

**M 32 x 1,5**



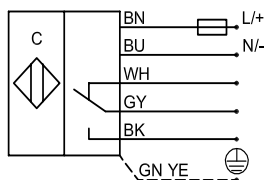
Non-flush mountable		Non-flush mountable		
20 mm		20 mm		
2...25 mm		2...25 mm		
Description	Art.-No.	Description	Art.-No.	
KAS-95-32-1CO-M32-PTFE/MS-3D, ATEX	KA 1007	KAS-95-32-1CO-M32-PTFE/MS-TD-3D, ATEX	KA 1009	
5 wire AC / DC		5 wire AC / DC		
Relay 1 CO		20...250 V AC / DC		
CE, RoHS, UL / CSA		CE, RoHS, UL / CSA		
20...250 V AC / DC		20...250 V CA / CC		
No		Adjustable 1 sec ...10 min.		
1 A, 250 V		1 A, 250 V		
1 A, 220 V, 60 W		1 A, 220 V, 60 W		
2.1 mA		2.1 mA		
2 Hz		2 Hz		
-25...+70 °C		-25...+70 °C		
Yellow		Yellow		
Built-in		Built-in		
IP 67*		IP 67*		
EN 60947-5-2		EN 60947-5-2		
2 m cable, PVC, 6 x 0.34 mm <sup>2</sup>		2 m cable, PVC, 6 x 0.34 mm <sup>2</sup>		
Brass		Brass		
PTFE (FDA 21 CFR 177.1550)		PTFE (FDA 21 CFR 177.1550)		
PBT		PBT		



## CAPACITIVE SENSORS Series 95 ATEX with manufacturer declaration for use in zone 22

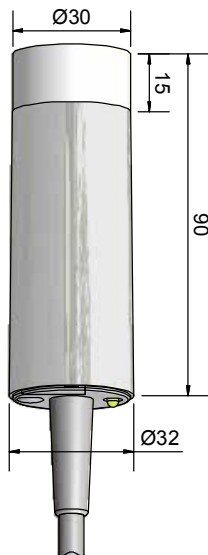
Dimension	Ø 32		Ø 32	
				
				
				
Technical data	Non-flush mountable		Non-flush mountable	
Sensing distance $S_n$ [mm]	20 mm		20 mm	
Sensing distance min. / max. [mm] adjustable	2...25 mm		2...25 mm	
	Description	Art.-No.	Description	Art.-No.
Type	KAS-95-32-1CO-PTFE/MS-3D, ATEX	KA 1005	KAS-95-32-1CO-PTFE/MS-TD-3D, ATEX	KA 1006
Electrical version	5 wire AC / DC		5 wire AC / DC	
Output function	Relay 1 CO		Relay 1 CO	
Certificates	CE, RoHS, UL / CSA		CE, RoHS, UL / CSA	
Operating voltage ( $U_B$ )	20...250 V AC / DC		20...250 V AC / DC	
Time delay	No		Adjustable 1 sec ...10 min.	
Load max. AC (I, U)	1 A, 250 V		1 A, 250 V	
Load max. DC (I, U, P)	1 A, 220 V, 60 W		1 A, 220 V, 60 W	
Power consumption ( $I_o$ )	2.1 mA		2.1 mA	
Switching frequency max.	2 Hz		2 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 cable, PVC, 6 x 0.34 mm <sup>2</sup>		2 m cable, PVC, 6 x 0.34 mm <sup>2</sup>	
Housing material	Brass		Brass	
Active surface	PTFE (FDA 21 CFR 177.1550)		PTFE (FDA 21 CFR 177.1550)	
Lid	PA / PPO		PBT	

\*With sealed potentiometer screw





Connection diagram:

BN = brown,  
BU = blue  
WH = white  
GY = grey  
BK = black  
GN / YE = green / yellow



# Accessories

For mounting of sensors		... with body size
	<p>Sensor holder, flexible, T shape, splash-proof, transparent, matched to 29 to 30 mm diameter sensors. With 2 hose band clamps, VA (AISI 304), span spread 50 - 70 mm and 1 hose band clamp VA (AISI 304), span spread 30 - 45 mm</p> <p>Article No. 190711</p>	<p>Ø 29 - 30 mm, (KAS-95-32) M 30 x 1,5</p>
	<p>Control tube 60 mm in diameter, complete transparent, with two internal mechanical stops for the tubes. With 2 hose band clamps, VA (AISI 304), for feeder downpipe, span spread 50 - 70 mm</p> <p>Article No. 190710</p>	<p>Ø 29 - 30 mm, (KAS-95-32) M 30 x 1,5</p>

## TYPE SELECTION IN ARTICLE NUMBER ORDER

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190711	Sensor holder	21
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KA0744	KAS-95-32-1CO-K-M32-POM-TD	14
KA0745	KAS-95-32-1CO-K-M32-POM-OND	15
KA0746	KAS-95-32-1CO-K-M32-POM-OFD	15
KA0747	KAS-95-A24-1CO-K-POM	12
KA0748	KAS-95-A24-1CO-K-POM-TD	12
KA0749	KAS-95-A24-1CO-K-POM-OND	13
KA0750	KAS-95-A24-1CO-K-POM-OFD	13
KA0760	KAS-95-32-1CO-K-POM	16
KA0761	KAS-95-32-1CO-K-POM-TD	16
KA0762	KAS-95-32-1CO-K-POM-OND	17
KA0763	KAS-95-32-1CO-K-POM-OFD	17
KA0800	KAS-95-A24-1CO-K-PBT	6
KA0822	KAS-95-32-1CO-K-M32-PBT-TD	8
KA0842	KAS-95-A24-1CO-K-PBT-TD	6
KA0852	KAS-95-A24-1CO-K-PBT-OND	7

Art.-No.	Description	Page
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KA0855	KAS-95-32-1CO-K-M32-PBT-OND	9
KA0856	KAS-95-32-1CO-K-M32-PBT-OFD	9
KA0857	KAS-95-32-1CO-K-PBT	10
KA0858	KAS-95-32-1CO-K-PBT-TD	10
KA0859	KAS-95-32-1CO-K-PBT-OND	11
KA0860	KAS-95-32-1CO-K-PBT-OFD	11
KA1005	KAS-95-32-1CO-PTFE/MS-3D, ATEX	20
KA1006	KAS-95-32-1CO-PTFE/MS-TD-3D, ATEX	20
KA1007	KAS-95-32-1CO-M32-PTFE/MS-3D, ATEX	19
KA1008	KAS-95-A24-1CO-PTFE/MS-TD-3D, ATEX	18
KA1009	KAS-95-32-1CO-M32-PTFE/MS-TD-3D, ATEX	19
KA1010	KAS-95-A24-1CO-PTFE/MS-3D, ATEX	18

## TYPE SELECTION IN DESCRIPTION ORDER

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190710	Control tube for sensor holder	21
KA0854	KAS-95-32-1CO-K-M32-PBT	8
KA0856	KAS-95-32-1CO-K-M32-PBT-OFD	9
KA0855	KAS-95-32-1CO-K-M32-PBT-OND	9
KA0822	KAS-95-32-1CO-K-M32-PBT-TD	8
KA0743	KAS-95-32-1CO-K-M32-POM	14
KA0746	KAS-95-32-1CO-K-M32-POM-OFD	15
KA0745	KAS-95-32-1CO-K-M32-POM-OND	15
KA0744	KAS-95-32-1CO-K-M32-POM-TD	14
KA0857	KAS-95-32-1CO-K-PBT	10
KA0860	KAS-95-32-1CO-K-PBT-OFD	11
KA0859	KAS-95-32-1CO-K-PBT-OND	11
KA0858	KAS-95-32-1CO-K-PBT-TD	10
KA0760	KAS-95-32-1CO-K-POM	16
KA0763	KAS-95-32-1CO-K-POM-OFD	17
KA0762	KAS-95-32-1CO-K-POM-OND	17
KA0761	KAS-95-32-1CO-K-POM-TD	16
KA1007	KAS-95-32-1CO-M32-PTFE/MS-3D, ATEX	19
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KA1010	KAS-95-A24-1CO-PTFE/MS-3D, ATEX	18
KA1006	KAS-95-32-1CO-PTFE/MS-TD-3D, ATEX	20
KA1008	KAS-95-A24-1CO-PTFE/MS-TD-3D, ATEX	18
KA0800	KAS-95-A24-1CO-K-PBT	6
KA0853	KAS-95-A24-1CO-K-PBT-OFD	7
KA0852	KAS-95-A24-1CO-K-PBT-OND	7
KA0842	KAS-95-A24-1CO-K-PBT-TD	6
KA0747	KAS-95-A24-1CO-K-POM	12
KA0750	KAS-95-A24-1CO-K-POM-OFD	13
KA0749	KAS-95-A24-1CO-K-POM-OND	13
KA0748	KAS-95-A24-1CO-K-POM-TD	12
190711	Sensor holder	21
196370	Squeeze screwing PG36	21



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