



## Safety sensor 171

The most common version on the market: magnetically actuated safety sensors in M30 housing. The large number of variants available from elobau provide solutions for almost all applications.

### Technical specifications

- Protection class IP6K9K ideal for wash down applications
- Available connection types: cable outlet and M12 housing connector
- Simple diagnosis through optional LED and control contact

### Technical drawing

IMAGE 1/3

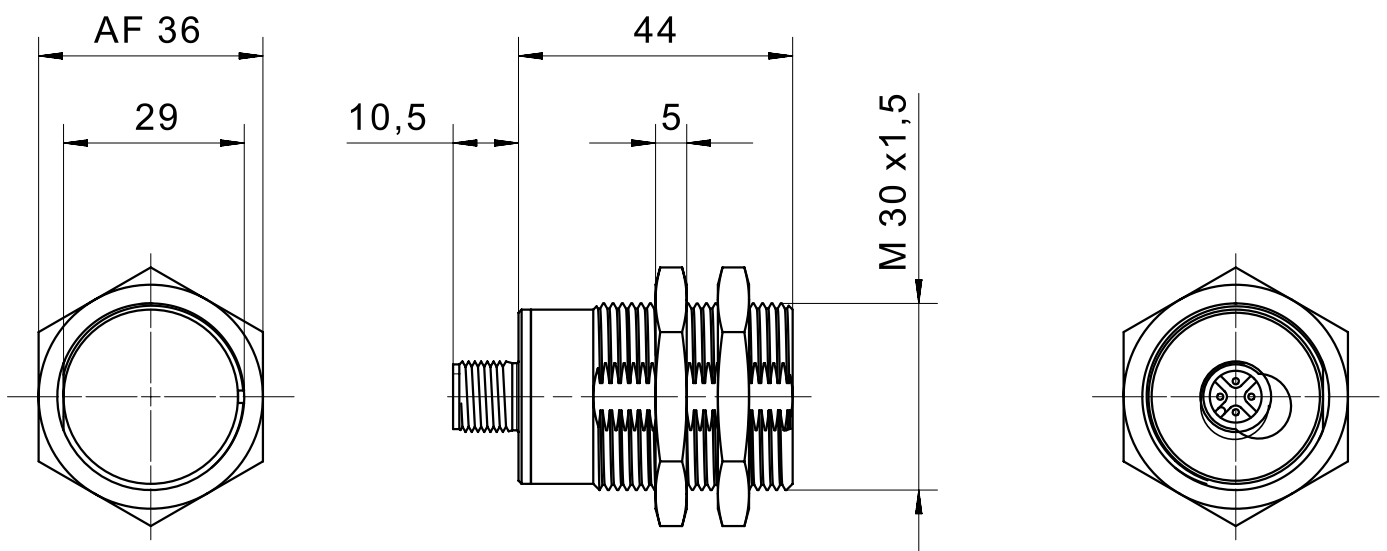
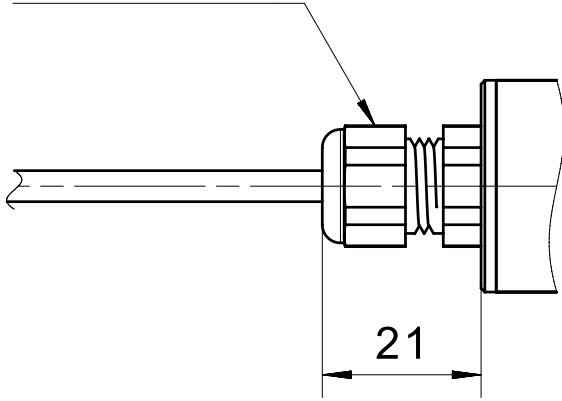
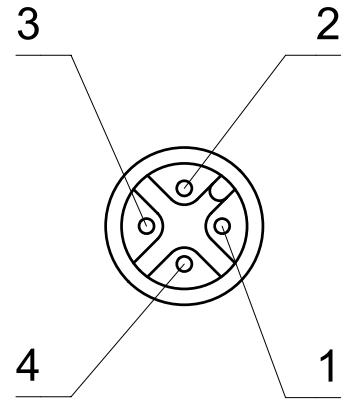


IMAGE 2/3

**cable gland  
plastic**



**male M12**



**cable gland  
stainless steel**

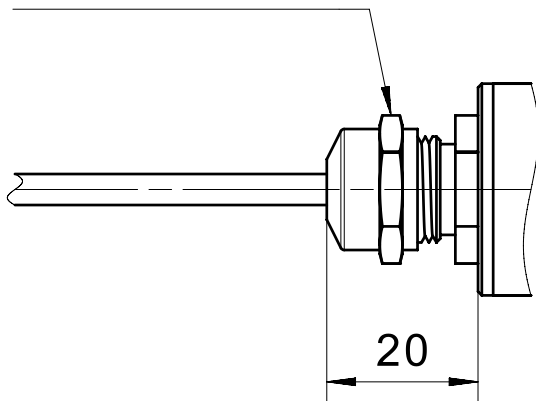
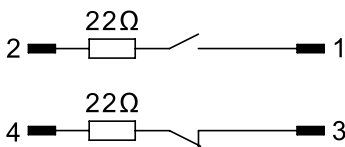
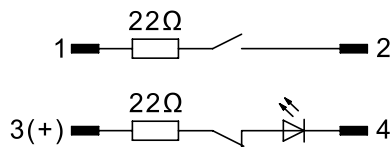


IMAGE 3/3

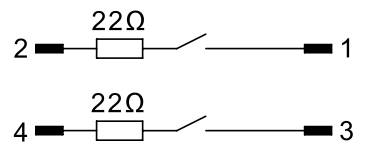
171271VY..



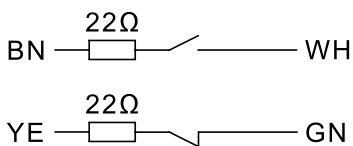
171271VZ



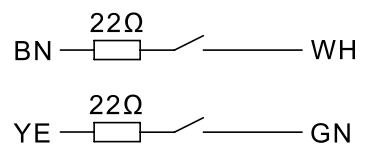
171V62VY..



171271V, 171271W

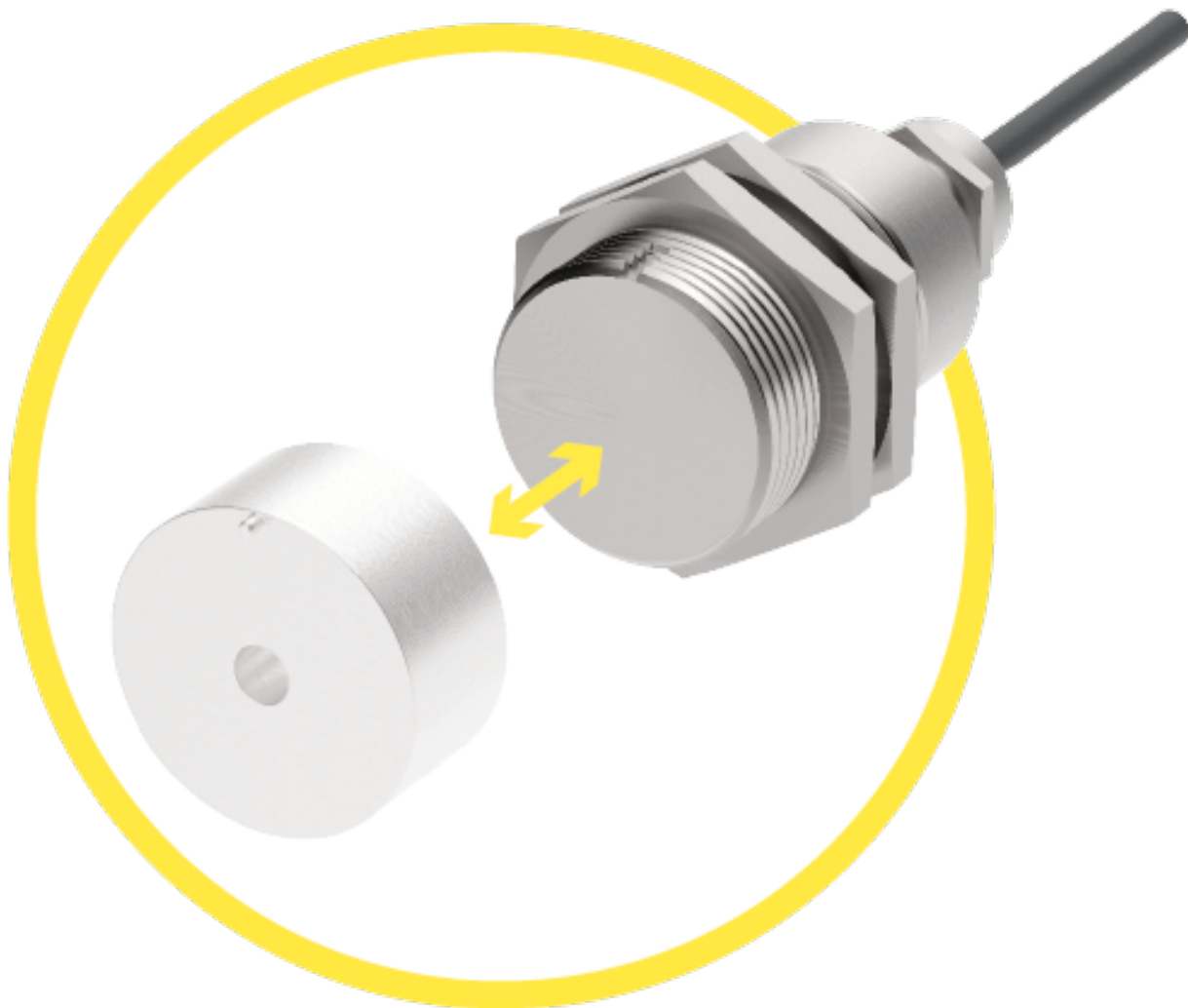


171V62V, 171V62W



### Product options

IMAGE 1/3



Suitable for front actuation. Offset with magnet system (coded) 304 200 00: max. 2 mm. Assured switching distance (Sao) of 4 mm with standard actuators, 7 mm with extended-range actuators. Assured switch-off distance (Sar) of 17 mm with standard actuators, of 23 mm with extended-range actuators.

IMAGE 2/3

**ORDERING KEY**

	171V62V	171V62VY	171V62VY01	171V62W	171271V
<b>Stainless steel housing M30</b>	X	X	X	X	X
<b>Plastic cable gland</b>	X	-	-	-	X
<b>Nickel-plated brass cable gland</b>	-	-	-	-	-
<b>Stainless steel cable gland</b>	-	-	-	X	-
<b>M12x1 connector, 4-pin, plastic</b>	-	-	-	-	-
<b>M12x1 connector, 4-pin, nickel-plated brass</b>	-	X	-	-	-
<b>M12x1 connector, 4-pin, stainless steel</b>	-	-	X	-	-
<b>Connection cable 1m*</b>	X	-	-	X	X
<b>N.O./N.O. contacts</b>	X	X	X	X	-
<b>N.O./N.C. contacts</b>	-	-	-	-	X
<b>LED in series to N.C.</b>	-	-	-	-	-
<b>Coded</b>	X	X	X	X	X
<b>Uncoded</b>	-	-	-	-	-

	171271VY01	171271VY03	171271VZ	171271W	
<b>Stainless steel housing M30</b>	X	X	X	X	
<b>Plastic cable gland</b>	-	-	-	-	
<b>Nickel-plated brass cable gland</b>	-	-	-	-	
<b>Stainless steel cable gland</b>	-	-	-	X	
<b>M12x1 connector, 4-pin, plastic</b>	-	-	X	-	
<b>M12x1 connector, 4-pin, nickel-plated brass</b>	X	-	-	-	
<b>M12x1 connector, 4-pin, stainless steel</b>	-	X	-	-	
<b>Connection cable 1m*</b>	-	-	-	X	
<b>N.O./N.O. contacts</b>	-	-	-	-	
<b>N.O./N.C. contacts</b>	X	X	X	X	
<b>LED in series to N.C.</b>	-	-	X	-	
<b>Coded</b>	X	X	X	X	
<b>Uncoded</b>	-	-	-	-	

\* Other cable lengths, cable materials and connector types on request

IMAGE 3/3

**MATCHING ACTUATORS**

Actuators	Actuation direction	171V62VY..			171262V..			171271V.. 171271W..			171271VY02			171271V05		
		S <sub>0_min</sub>	S <sub>ao</sub>	S <sub>ar</sub>	S <sub>0_min</sub>	S <sub>ao</sub>	S <sub>ar</sub>	S <sub>0_min</sub>	S <sub>ao</sub>	S <sub>ar</sub>	S <sub>0_min</sub>	S <sub>ao</sub>	S <sub>ar</sub>	S <sub>0_min</sub>	S <sub>ao</sub>	S <sub>ar</sub>
<b>304 200 00/..V/..H</b>	front	0,5	4	16	0,5	3	16	0,5	4	16	0,5	4	12	0,5	4	16
<b>304 200 00 S/..VS/..SH</b>		3	7	20	3	7	20	3	7	23	3	6	20	3	7	23

S<sub>0\_min</sub> = minimum switching distance (mm), S<sub>ao</sub> = operating distance (mm), S<sub>ar</sub> = assured switch-off distance (mm)

## Article characteristics

Attribute	171V62VY	171V62VY01	171V62W	171271V	171271VY01	171271VY03 ▶
Min. switching voltage	19.2 V DC					
Max. switching voltage	28.8 V DC					
Max. switching current	0.1 A					
Max. switching current with LED	-					
Max. switching power	3 W					
Switching frequency	5 Hz					
Assured switching distance (Sao)	3.5 mm			4 mm		
Assured switch-off distance (Sar)	16 mm					
Minimum switching distance (S0 min)	0.5 mm					
LED display	No					
Actuation	front					
Switching principle	magnetic					
Series resistor	22 Ohm					
Technology	Reed					
Contact form	NO/NO			NO/NC		
Pollution degree	3					
Protection class	III					
Min. switching voltage with LED	-					
Max. switching voltage with LED	-					
Coding acc. to EN ISO 14119	Low					
B10d acc. to EN ISO 13849-1	20000000					
Type acc. to EN ISO 14119	4					
Mission time in years	20 a					
Structure acc. to EN ISO 13849-1	Two-channel					
Housing design	cylindrical					
Dimensions	M30 x 44 mm					
Minimum installation distance (between two sensors)	50 mm			-		
				50 mm		

Attribute	171V62VY	171V62VY01	171V62W	171271V	171271VY01	171271VY03 ▶
cannot be mounted flush	yes					
Detent present	no					
Housing material	Edelstahl		Edelstahl , Kabelverschraubung Edelstahl	Edelstahl , Kabelverschraubung Kunststoff		Edelstahl
Cable material	-		PVC			-
Nut material	Edelstahl					
Housing colour	silber					
Protection class	IP67 DIN EN 60529	IP68 DIN EN 60529	IP69K DIN 40050 - IP68 5bar DIN EN 60529		IP67 DIN EN 60529	IP68 DIN EN 60529
Protection class, connector	IP67 / IP69K DIN EN 60529	IP68 DIN EN 60529	-		IP67 DIN EN 60529	IP68 DIN EN 60529
Operating temperature min.	-25 °C					
Max. operating temperature	75 °C					
Min. cable temperature range, moving	-		-5 °C			-
Max. cable temperature range, moving	-		70 °C			-
Min. cable temperature range, fixed installation	-		-25 °C			-
Max. cable temperature range, fixed installation	-		70 °C			-
Shock resistance (Norm)	30g / 11ms					
Vibration resistance (Norm)	10 - 55Hz					
Min. storage temperature	-25 °C					
Max. storage temperature	75 °C					
Mounting type	Fastening nut					
Thread	M30					
Torque for nuts	50 N m					
Installation	arbitrary					
Connector type	M12x1 - 4 polig		-			M12x1 - 4 polig
Cable length	-		1 m			-
Number of strands	-		4			-
Wire cross section	-		0.25 mm <sup>2</sup>			-
Cable type	-		LiYY 4x0,25			-
Cable colour	-		grau			-

Attribute	171V62VY	171V62VY01	171V62W	171271V	171271VY01	171271VY03 ▶
Certified in accordance with	CE			ETL	-	CE
CE label	yes					
Possible actuators	30420000					

Attribute	171271VZ	171271W	171V62V	BA_171V62VY	BA_171V62VY01	171..._Vorlage
Min. switching voltage	-			19.2 V DC		
Max. switching voltage	-			28.8 V DC		
Max. switching current	-			0.1 A		
Max. switching current with LED	0.02 A			-		0.02 A
Max. switching power				3 W		
Switching frequency				5 Hz		
Assured switching distance (Sao)				4 mm		
Assured switch-off distance (Sar)	17 mm			16 mm		
Minimum switching distance (S0 min)				0.5 mm		
LED display	single-coloured			No		single-coloured
Actuation				front		
Switching principle				magnetic		
Series resistor				22 Ohm		
Technology				Reed		
Contact form		NO/NC			NO/NO	NO/NC
Pollution degree				3		
Protection class				III		
Min. switching voltage with LED	2.7 V DC			-		
Max. switching voltage with LED	28.8 V DC			-		
Coding acc. to EN ISO 14119				Low		
B10d acc. to EN ISO 13849-1				20000000		4000000
Type acc. to EN ISO 14119				4		
Mission time in years				20 a		
Structure acc. to EN ISO 13849-1				Two-channel		
Housing design				cylindrical		
Dimensions				M30 x 44 mm		
Minimum installation distance (between two sensors)	-			50 mm		-
cannot be mounted flush				yes		
Detent present				no		

Attribute	171271VZ	171271W	171V62V	BA_171V62VY	BA_171V62VY01	171..._Vorlage
Housing material	Edelstahl	Edelstahl , Kabelverschraubung Edelstahl	Edelstahl , Kabelverschraubung Kunststoff	Edelstahl		
Cable material	-	PVC		-		
Nut material	Edelstahl					
Housing colour	silber					
Protection class	IP67 DIN EN 60529	IP69K DIN 40050 - IP68 5bar DIN EN 60529		IP67 DIN EN 60529	IP68 DIN EN 60529	IP67 DIN EN 60529
Protection class, connector	IP67 DIN EN 60529	-		IP67 / IP69K DIN EN 60529	IP68 DIN EN 60529	IP67 DIN EN 60529
Operating temperature min.	-25 °C					
Max. operating temperature	75 °C					
Min. cable temperature range, moving	-	-5 °C		-		
Max. cable temperature range, moving	-	70 °C		-		
Min. cable temperature range, fixed installation	-	-25 °C		-		
Max. cable temperature range, fixed installation	-	70 °C		-		
Shock resistance (Norm)	30g / 11ms					
Vibration resistance (Norm)	10 - 55Hz					
Min. storage temperature	-25 °C					
Max. storage temperature	75 °C					
Mounting type	Fastening nut					
Thread	M30					
Torque for nuts	50 N m					
Installation	arbitrary					
Connector type	M12x1 - 4 polig	-		M12x1 - 4 polig		
Cable length	-	1 m		-		
Number of strands	-	4		-		
Wire cross section	-	0.25 mm <sup>2</sup>		-		
Cable type	-	LiYY 4x0,25		-		
Cable colour	-	grau		-		
Certified in accordance with	-	CE				-
CE label	yes					
Possible actuators	30420000					