



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

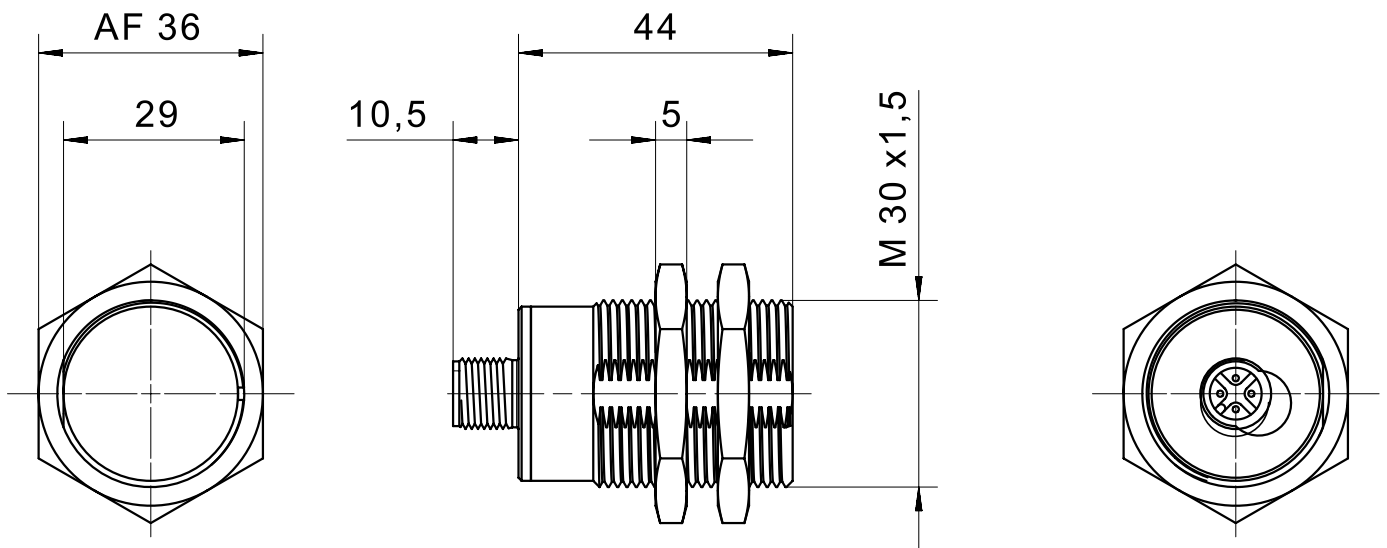
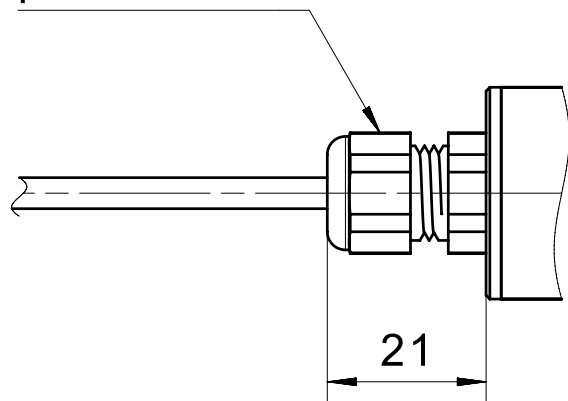
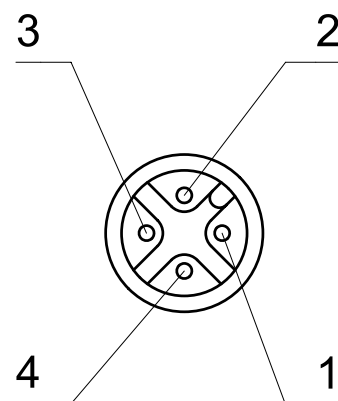


IMAGE 2/3

cable gland
plastic



male M12



cable gland
stainless steel

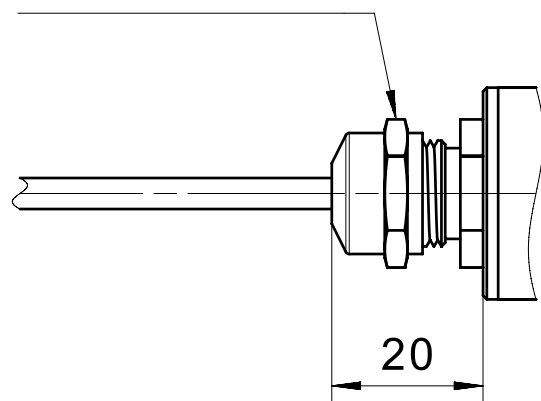
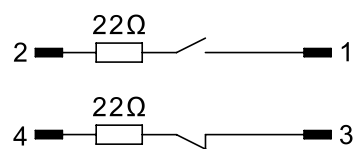
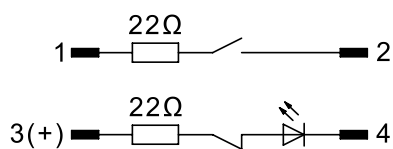


IMAGE 3/3

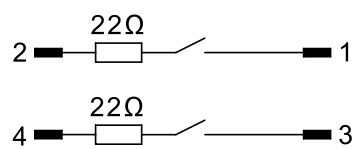
171271VY..



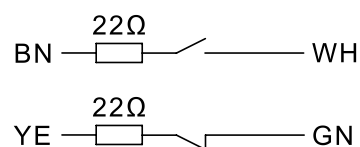
171271VZ



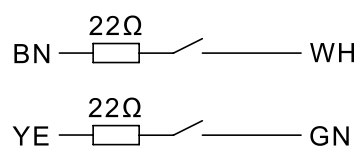
171V62VY..



171271V, 171271W

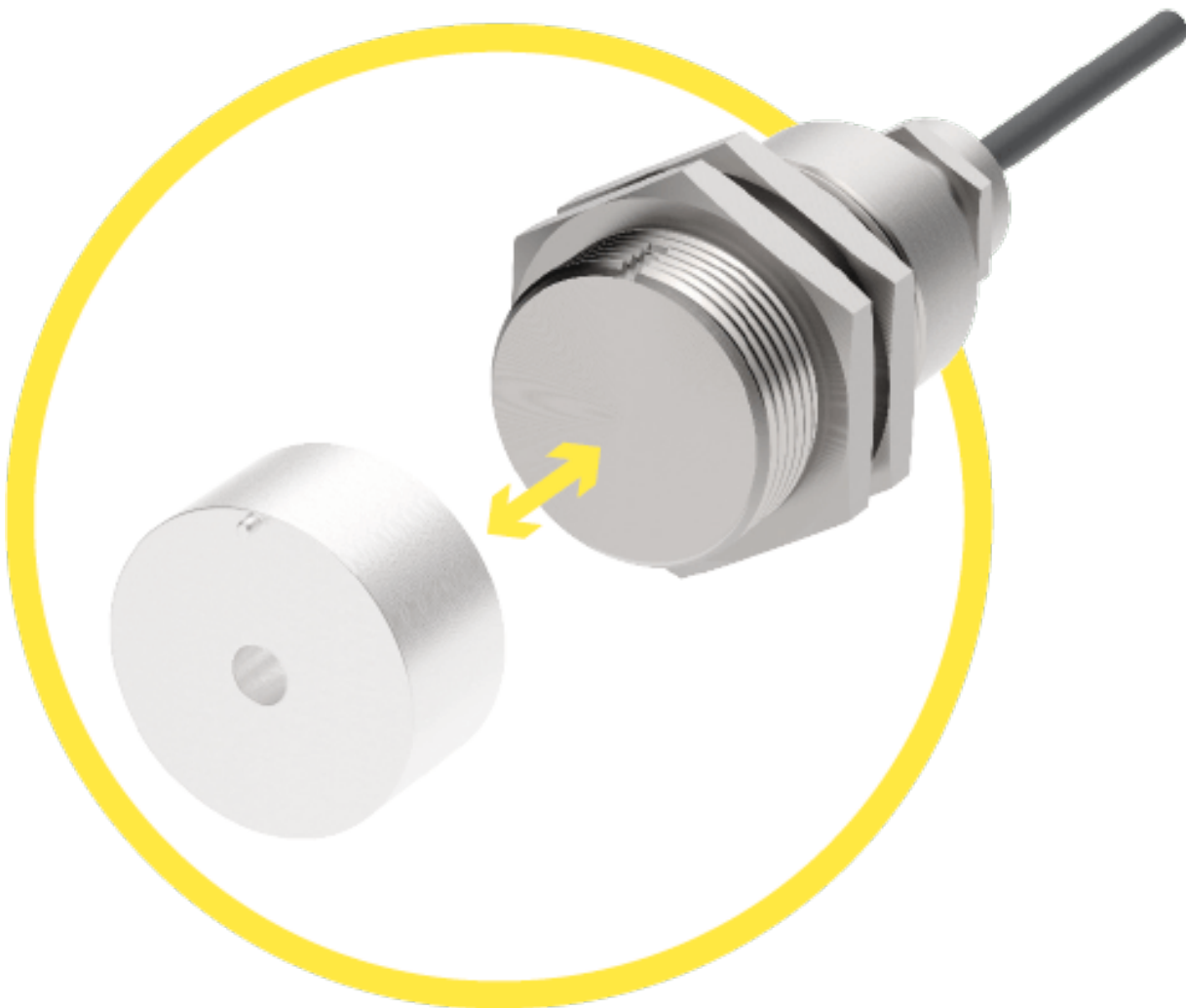


171V62V, 171V62W



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

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

* 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 _{0 min}	S _{ao}	S _{ar}	S _{0 min}	S _{ao}	S _{ar}	S _{0 min}	S _{ao}	S _{ar}	S _{0 min}	S _{ao}	S _{ar}	S _{0 min}	S _{ao}	S _{ar}
304 200 00/..V/..H	front	0,5	4	16	0,5	3	16	0,5	4	16	0,5	4	12	0,5	4	16
304 200 00 S/..VS/..SH		3	7	20	3	7	20	3	7	23	3	6	20	3	7	23

S_{0 min} = minimum switching distance (mm), S_{ao} = operating distance (mm), S_{ar} = 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 mm²		-	
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					

Attribute	171271VZ	171271W	171V62V	BA_171V62VY	BA_171V62VY01	171..._Vorlage ▶
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	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 mm²		-		
Cable type	-	LiYY 4x0,25		-		
Cable colour	-	grau		-		
Certified in accordance with	-	CE				-

Attribute	171271VZ	171271W	171V62V	BA_171V62VY	BA_171V62VY01	171..._Vorlage ▶
CE label	yes					
Possible actuators	30420000					

Attribute	EDBA_171V62VY	EDBA_171V62VY01	ED171..._Vorlage	ED171V62V	ED171V62VY	ED171V62VY01 ▶
Min. switching voltage				-		
Max. switching voltage				-		
Max. switching current				-		
Max. switching current with LED				-		
Max. switching power				-		
Switching frequency				-		
Assured switching distance (Sao)				-		
Assured switch-off distance (Sar)				-		
Minimum switching distance (S0 min)				-		
LED display				-		
Actuation				-		
Switching principle				-		
Series resistor				-		
Technology				-		
Contact form				-		
Pollution degree				-		
Protection class				-		
Min. switching voltage with LED				-		
Max. switching voltage with LED				-		
Coding acc. to EN ISO 14119				-		
B10d acc. to EN ISO 13849-1				-		
Type acc. to EN ISO 14119				-		
Mission time in years				-		
Structure acc. to EN ISO 13849-1				-		
Housing design				-		
Dimensions				-		
Minimum installation distance (between two sensors)				-		
cannot be mounted flush				-		

Attribute	EDBA_171V62VY	EDBA_171V62VY01	ED171..._Vorlage	ED171V62V	ED171V62VY	ED171V62VY01 ▶
Detent present				-		
Housing material				-		
Cable material				-		
Nut material				-		
Housing colour				-		
Protection class				-		
Protection class, connector				-		
Operating temperature min.				-		
Max. operating temperature				-		
Min. cable temperature range, moving				-		
Max. cable temperature range, moving				-		
Min. cable temperature range, fixed installation				-		
Max. cable temperature range, fixed installation				-		
Shock resistance (Norm)				-		
Vibration resistance (Norm)				-		
Min. storage temperature				-		
Max. storage temperature				-		
Mounting type				-		
Thread				-		
Torque for nuts				-		
Installation				-		
Connector type				-		
Cable length				-		
Number of strands				-		
Wire cross section				-		
Cable type				-		
Cable colour				-		
Certified in accordance with				-		
CE label				-		
Possible actuators				-		

Attribute	ED171V62W	ED171271V	ED171271VY01	ED171271VY03	ED171271VZ	ED171271W
Min. switching voltage				-		
Max. switching voltage				-		
Max. switching current				-		
Max. switching current with LED				-		
Max. switching power				-		
Switching frequency				-		
Assured switching distance (Sao)				-		
Assured switch-off distance (Sar)				-		
Minimum switching distance (S0 min)				-		
LED display				-		
Actuation				-		
Switching principle				-		
Series resistor				-		
Technology				-		
Contact form				-		
Pollution degree				-		
Protection class				-		
Min. switching voltage with LED				-		
Max. switching voltage with LED				-		
Coding acc. to EN ISO 14119				-		
B10d acc. to EN ISO 13849-1				-		
Type acc. to EN ISO 14119				-		
Mission time in years				-		
Structure acc. to EN ISO 13849-1				-		
Housing design				-		
Dimensions				-		
Minimum installation distance (between two sensors)				-		
cannot be mounted flush				-		
Detent present				-		

Attribute	ED171V62W	ED171271V	ED171271VY01	ED171271VY03	ED171271VZ	ED171271W
Housing material				-		
Cable material				-		
Nut material				-		
Housing colour				-		
Protection class				-		
Protection class, connector				-		
Operating temperature min.				-		
Max. operating temperature				-		
Min. cable temperature range, moving				-		
Max. cable temperature range, moving				-		
Min. cable temperature range, fixed installation				-		
Max. cable temperature range, fixed installation				-		
Shock resistance (Norm)				-		
Vibration resistance (Norm)				-		
Min. storage temperature				-		
Max. storage temperature				-		
Mounting type				-		
Thread				-		
Torque for nuts				-		
Installation				-		
Connector type				-		
Cable length				-		
Number of strands				-		
Wire cross section				-		
Cable type				-		
Cable colour				-		
Certified in accordance with				-		
CE label				-		
Possible actuators				-		