



Safety sensor 171

Our bestsellers with a design common to the market: magnetically actuated safety sensors in M30 housing. The large number of variants available from elobau provide solutions for almost all applications.

Technical specification

- Available connection types: cable outlet, M8 and M12 housing connectors
- Simple diagnosis through optional LED and control contact
- Optionally with LED display

Technical drawing

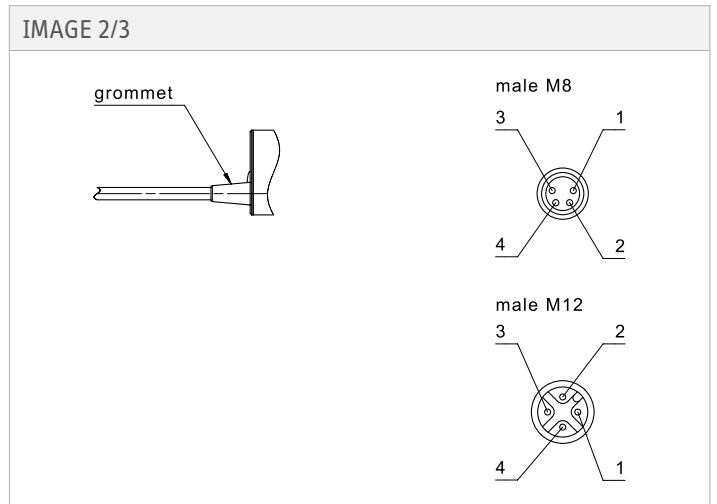
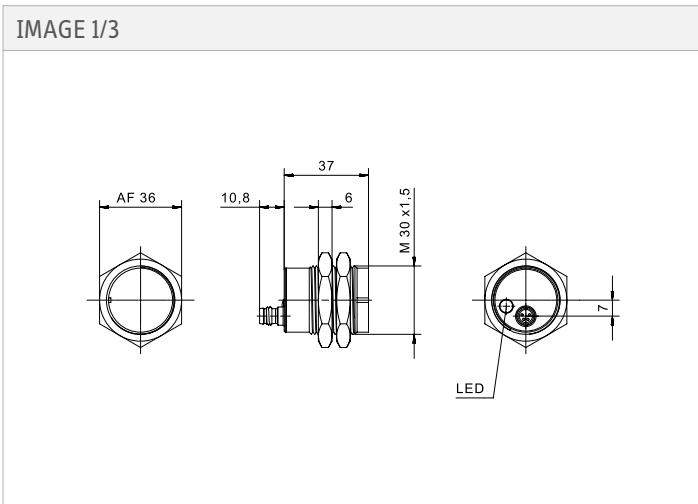
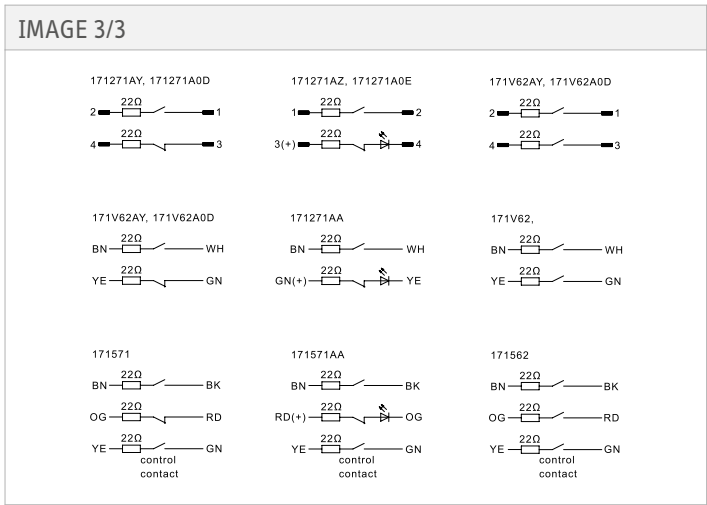


IMAGE 3/3



Electrical data

Attribute	171V62	171V62AY	171V62A0D	171271	171271AA	171271AY ▶
Min. switching voltage	19.2 V DC					
Max. switching voltage	28.8 V DC					
Max. switching current	0.1 A			-	0.1 A	
Max. switching current with LED	-				0.02 A	-
Max. switching power	3 W					
Switching frequency	5 Hz					
Assured switching distance (Sao)	4 mm					
Assured switch-off distance (Sar)	16 mm					
Minimum switching distance (S0 min)	0.5 mm					
LED display	No				single-coloured	No
Actuation	front					
Switching principle	magnetic					
Series resistor	22 Ohm					
Technology	Reed					
Contact form	NO/NO			NO/NC		
Pollution degree	3					
Protection class	III					

Electrical data

Attribute	171271AZ	171271A0D	171271A0E	171562	171571	171571AA
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	-	-	0.02 A
Max. switching power	3 W					
Switching frequency	5 Hz					
Assured switching distance (Sao)	4 mm					
Assured switch-off distance (Sar)	16 mm		17 mm		15 mm	
Minimum switching distance (S0 min)	0.5 mm					
LED display	single-coloured	No	single-coloured	No	No	single-coloured
Actuation	front					
Switching principle	magnetic					
Series resistor	22 Ohm					
Technology	Reed					
Contact form	NO/NC			NO/NO/NO (Kontrollkontakt)		
Pollution degree	3					
Protection class	III					

Safety-related characteristics

Attribute	171V62	171V62AY	171V62A0D	171271	171271AA	171271AY ▶
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					

Safety-related characteristics

Attribute	171271AZ	171271A0D	171271A0E	171562	171571	171571AA
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					

Mechanical data

Attribute	171V62	171V62AY	171V62A0D	171271	171271AA	171271AY ▶
Housing design	cylindrical					
Dimensions	M30 x 37 mm					
Minimum installation distance (between two sensors)	50 mm					
cannot be mounted flush	yes					
Detent present	no					

Mechanical data

Attribute	171271AZ	171271A0D	171271A0E	171562	171571	171571AA
Housing design	cylindrical					
Dimensions	M30 x 37 mm					
Minimum installation distance (between two sensors)	50 mm					
cannot be mounted flush	yes					
Detent present	no					

Material information

Attribute	171V62	171V62AY	171V62A0D	171271	171271AA	171271AY ▶
Housing material	PBT					
Cable material	PVC	-		PVC		-
Nut material	PBT					
Housing colour	schwarz					

Material information

Attribute	171271AZ	171271A0D	171271A0E	171562	171571	171571AA
Housing material	PBT					
Cable material		-			PVC	
Nut material	PBT					
Housing colour	schwarz					

Environmental conditions

Attribute	171V62	171V62AY	171V62A0D	171271	171271AA	171271AY ▶
Protection class	IP67 DIN EN 60529		IP65 DIN EN 60529	IP67 DIN EN 60529		
Protection class, connector	-	IP67 DIN EN 60529 (geschraubt) - IP65 DIN EN 60529 (gesteckt)	IP65 DIN EN 60529	-	IP67 DIN EN 60529 (geschraubt) - IP65 DIN EN 60529 (gesteckt)	
Operating temperature min.	-25 °C					
Max. operating temperature	75 °C					
Min. cable temperature range, moving	-5 °C	-		-5 °C	-	
Max. cable temperature range, moving	70 °C	-		70 °C	-	
Min. cable temperature range, fixed installation	-25 °C	-		-25 °C	-	
Max. cable temperature range, fixed installation	70 °C	-		70 °C	-	
Shock resistance (Norm)	30g / 11ms					
Vibration resistance (Norm)	10 - 55Hz					
Min. storage temperature	-25 °C			-	-25 °C	
Max. storage temperature	75 °C			-	75 °C	

Environmental conditions

Attribute	171271AZ	171271A0D	171271A0E	171562	171571	171571AA
Protection class	IP67 DIN EN 60529	IP65 DIN EN 60529		IP67 DIN EN 60529		
Protection class, connector	IP67 DIN EN 60529	IP65 DIN EN 60529		-		
Operating temperature min.	-25 °C					
Max. operating temperature	75 °C			70 °C		
Min. cable temperature range, moving	-			-10 °C		
Max. cable temperature range, moving	-			105 °C		
Min. cable temperature range, fixed installation	-			-30 °C		
Max. cable temperature range, fixed installation	-			105 °C		
Shock resistance (Norm)	30g / 11ms					
Vibration resistance (Norm)	10 - 55Hz					
Min. storage temperature	-25 °C					
Max. storage temperature	75 °C			70 °C		

Installation

Attribute	171V62	171V62AY	171V62A0D	171271	171271AA	171271AY ▶
Mounting type	Fastening nut					
Thread	M30					
Torque for nuts	10 N m					
Installation	arbitrary					
Weight	60 g	-		60 g		-

Installation

Attribute	171271AZ	171271A0D	171271A0E	171562	171571	171571AA
Mounting type	Fastening nut					
Thread	M30					
Torque for nuts	10 N m					
Installation	arbitrary					
Weight	-			60 g		

Connection

Attribute	171V62	171V62AY	171V62A0D	171271	171271AA	171271AY ▶
Connector type	-	M12x1 - 4 polig	M8x1 - 4 polig	-		M12x1 - 4 polig
Cable length	1 m	-		1 m		-
Number of strands	4	-		4		-
Wire cross section	0.25 mm ²	-		0.25 mm ²		-
Cable type	LiYY 4x0,25	-		LiYY 4x0,25		-
Cable colour	grau	-		grau		-

Connection

Attribute	171271AZ	171271A0D	171271A0E	171562	171571	171571AA
Connector type	M12x1 - 4 polig	M8x1 - 4 polig		-		
Cable length	-		1 m			
Number of strands	-		6			
Wire cross section	-		0.22 mm ²			
Cable type	-		LiYY 6x0,25			
Cable colour	-		schwarz			

Approvals

Attribute	171V62	171V62AY	171V62A0D	171271	171271AA	171271AY ▶
CE label	yes			no	yes	
Certified in accordance with	ETL					

Approvals

Attribute	171271AZ	171271A0D	171271A0E	171562	171571	171571AA
CE label	yes					
Certified in accordance with	ETL					

Operating data

Attribute	171V62	171V62AY	171V62A0D	171271	171271AA	171271AY ▶
Possible actuators	30420000					

Operating data

Attribute	171271AZ	171271A0D	171271A0E	171562	171571	171571AA
Possible actuators	30420000					