

# Specifications

## ■ Brass type

Type	Ø6,5		M8		M12		M18		M30					
Operating voltage	10 to 35 VDC													
Rated supply voltage	24 VDC													
Current consumption	max. 15 mA at 24 VDC													
Sensing object	Ferrous metals													
Mounting ((s)hielded, (n)on-shielded) (see note 1)	s	n	s	n	s	s	n	s	s	n	s	n		
Operating distance in mm	1,5	2,0	1,5	2,0	2,0	4,0	4,0	5,0	8,0	8,0	10,0	15,0		
Tolerance of operating distance	±10%													
Standard target size in mm (L x W x H in mm, FE 37)	6,5x6,5x1		8x8x1		12x12x1		18x18x1		24x24x1		30x30x1		45x45x1	
Differential travel	1 % ... 15 % of operating distance													
Max. response frequency in kHz	5,0		5,0		2,0	0,6	1,0	0,5	0,3	0,5	0,25	0,15		
Control output Type	E2EL-... E1 type: NPN-NO E2 type: NPN-NC F1 type: PNP-NO F2 type: PNP-NC													
Max-Load	200 mA													
Max-on-state Voltage drop	2,5 VDC (at 200mA load current and with 2 m cable)													
Circuit protection	Reverse polarity, output short-circuit													
Indicator	Operating indicator (yellow LED)													
Ambient temperature	Operating: -25° to 70°C													
Humidity	35 to 95 % RH													
Influence of temperature	± 10 % max. of Sn at 23°C in temperature range of -25° to 70°C													
Dielectric strength	1.500 VAC, 50/60 Hz for 1 min. between current carry parts and case													
Electromagnetic compatibility EMC	EN 60947-5-2													
Vibration resistance	Destruction: 10 to 70 Hz, 1,5 mm double amplitude for 1 hour each in X, Y and Z directions													
Shock resistance	Destruction: 300 m/s <sup>2</sup> (approx. 30 G) for 6 times each in X, Y and Z directions													
Enclosure rating	IP 67 (EN 60947-1)													
Connection (see note 2)	Pre-wired	2 m PVC-cable, 3 x 0,14 mm <sup>2</sup>				2 m PVC-cable, 3 x 0,25 mm <sup>2</sup>				2m PVC-cable, 3 x 0,5 mm <sup>2</sup>				
	Connector	M8 plug		M8 plug M12 plug		M12 plug								
Weight in g	Pre-wired	long	45	50	75		115		260					
		short	43	48	70		100		200					
	Connector	long	10	15	25		60		155					
		short	8	13	20		50		110					
Material	Case	Brass												
	Sensing face	PBTP												

- Note:** 1. For detailed mounting instruction please refer to page 11.  
2. PUR cable and different length on request.

## ■ Stainless steel type

Type	Ø6,5	M8	M12	M18		
Operating voltage	10 to 35 VDC					
Rated supply voltage	24 VDC					
Current consumption	max. 15 mA at 24 VDC					
Mounting (see note 1)	Shielded					
Sensing object	Ferrous metals					
Operating distance in mm	2,0	2,0	4,0	8,0		
Tolerance of operating distance	±10%					
Standard target size (L x W x H in mm, FE 37)	6,5x6,5x1	8x8x1	12x12x1	24x24x1		
Differential travel	1 % ... 15 % of operating distance					
Max. response frequency in kHz	4,0	4,0	0,6	0,25		
Control output Type	E2EL-... E1 type: NPN-NO E2 type: NPN-NC F1 type: PNP-NO F2 type: PNP-NC					
Max-Load	200 mA					
Max-on-state Voltage drop	2,5 VDC (at 200mA load current and with 2 m cable)					
Circuit protection	Reverse polarity, output short-circuit					
Indicator	Operating indicator (yellow LED)					
Ambient temperature	Operating: -25° to 70°C					
Humidity	35 to 95 % RH					
Influence of temperature	± 10 % max. of Sn at 23°C in temperature range of -25° to 70°C					
Dielectric strength	1.500 VAC, 50/60 Hz for 1 min. between current carry parts and case					
Electromagnetic compatibility EMC	EN 60947-5-2					
Vibration resistance	Destruction: 10 to 70 Hz, 1,5 mm double amplitude for 1 hour each in X, Y and Z directions					
Shock resistance	Destruction: 300 m/s <sup>2</sup> (approx. 30 G) for 6 times each in X, Y and Z directions					
Enclosure rating	IP 67 (EN 60947-1)					
Connection (see note 2)	Pre-wired	2 m PVC-cable, 3 x 0,14 mm <sup>2</sup>		2 m PVC-cable, 3 x 0,25 mm <sup>2</sup>		
	Connector	-	M8 plug	M12 plug		
Weight in g	Pre-wired	long	45	50	75	120
		short	43	48	70	105
	Connector	long	-	10	25	65
		short	-	-	20	55
Material	Case	stainless steel 1.4305 / AISI 303				
	Sensing face	PBTP				

- Note:** 1. For detailed mounting instruction please refer to page 11.  
2. PUR cable and different length on request.