

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	2,5 VDC (at 200mA load current and with 2 m cable)											
	Voltage drop												
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/s² (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 mm²			2 m PVC-cable, 3 x 0,25 mm²					2m PVC-cable, 3 x 0,5 mm²		
	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/s² (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 mm²		2 m PVC-cable, 3 x 0,25 mm²				
	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.