

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.