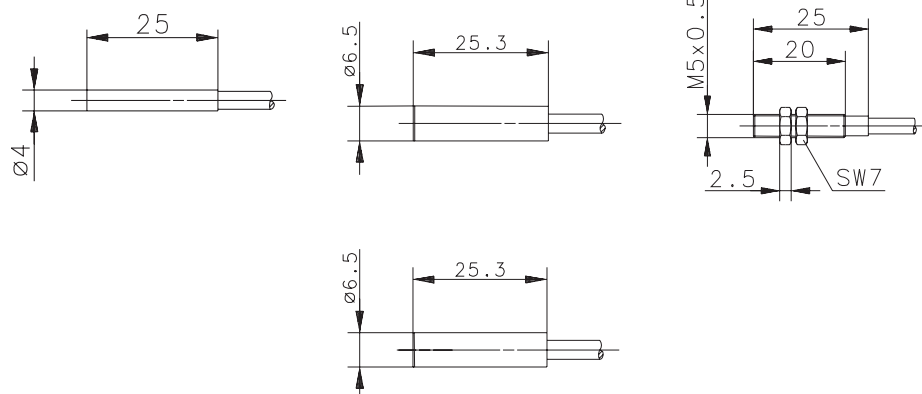


# Electronic Magnetic Sensors (Type D04, D06, M05, M08, M10, M12)

Type	D04	D06		M05
Operating mode	MR	Hall	MR	MR
Magnetic sensitivity (mT)	3 mT	10 mT	2 mT	3 mT
Sensing distance (Sn)	30 mm	17 mm	45 mm	30 mm
Reference magnet (Page)	T-62 N/S	T-62 N/S	T-62 N/S	T-62 N/S
Type of connection	Cable 2 m	Cable 2 m	Cable 2 m	Cable 2 m
Special feature				



PNP	NO contact	6373299132		6373270105	6373299133
	Type	MEN-D04PS/M03-K2		MEN-D06PS/M02-K2	MEM-M05PS/M03-K2
NPN	NO contact		6362670001		
	Type		MEN-D06NS/H10-K2		
Analogue	Current output		6363870032		
	Voltage output		MEN-D06NB/H11-K2		

## Technical data

Rated operating voltage $U_b$	4.5–30 VDC	4.5–24 VDC	10–30 VDC	4.5–30 VDC
Rated operating current $I_b$	200 mA	25 mA	200 mA	200 mA
Max. switching voltage $F$	10 kHz	20 kHz	1500 Hz	10 kHz
Function/operating voltage indicator	–/–	–/–	–/–	–/–
Sensitivity adjustable				
Short circuit-protection	Current limiter	Current limiter	Cyclic	Current limiter
Teachable				

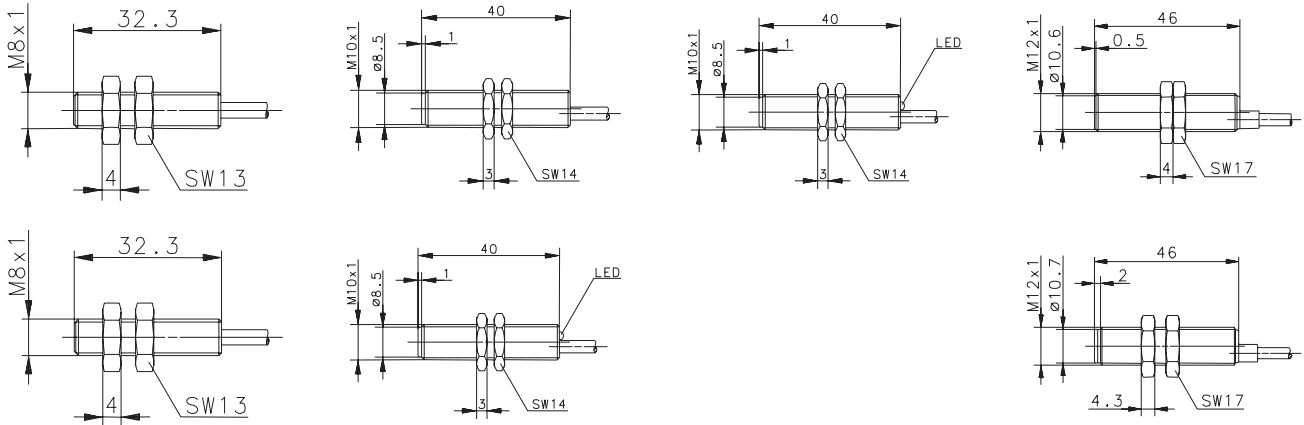
## Mechanical data

Ambient temperature (min/max)	–20°C/+70°C	–25°C/+70°C	–25°C/+70°C	–20°C/+70°C
Protection class in accordance with IEC 529, EN 60529	IP67	IP67	IP67	IP67
Enclosure material	Stainless steel 1.4401	Stainless steel 1.4401	Stainless steel 1.4401	CuZn39Pb3
Connection	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>

Please refer to Accessories for magnets, mounting brackets, cable couplers and sensor tester.



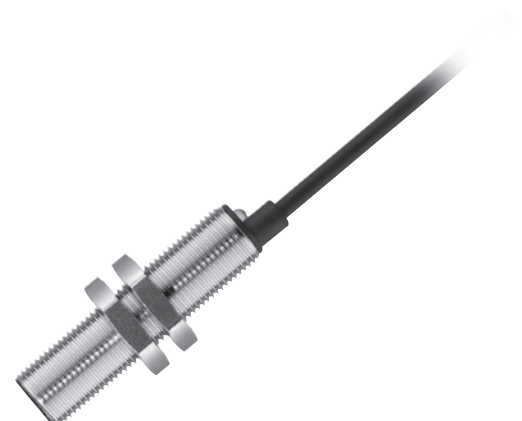
M08		M10		M10		M12	
Hall	MR	Hall	Hall	MR		Hall	Hall
10 mT	2 mT	10 mT	10 mT	1 mT		10 mT	10 mT
17 mm	45 mm	17 mm	17 mm	45 mm		17 mm	17 mm
T-62 N/S	T-62 N/S	T-62 N/S	T-62 N/S	T-62 N/S		T-62 N/S	T-62 N/S
Cable 2 m	Cable 2 m	Cable 2 m	Cable 2 m	Cable 2 m		Cable 2 m	Cable 2 m
			All-metal	All-metal			



	6373260107 MEM-M08PS/M02-K2		6372261085 MEM-M10PS/H10-KL2 6372161086 MEM-M10PÖ/H10-KL2 6373461124 MEM-M10PB/H11-KL2	6373261087 MEM-M10PS/M01-KL2 6373161088 MEM-M10PÖ/M01-KL2			
6362660002 MEM-M08NS/H10-K2		6362661003 MEM-M10NS/H10-K2				6362662004 MEM-M12NS/H10-K2	6362662005 MEK-M12NS/H10-K2
6363860033 MEM-M08NB/H11-K2		6363861034 MEM-M10NB/H11-K2				6363862035 MEM-M12NB/H11-K2	6363862036 MEK-M12NB/H11-K2

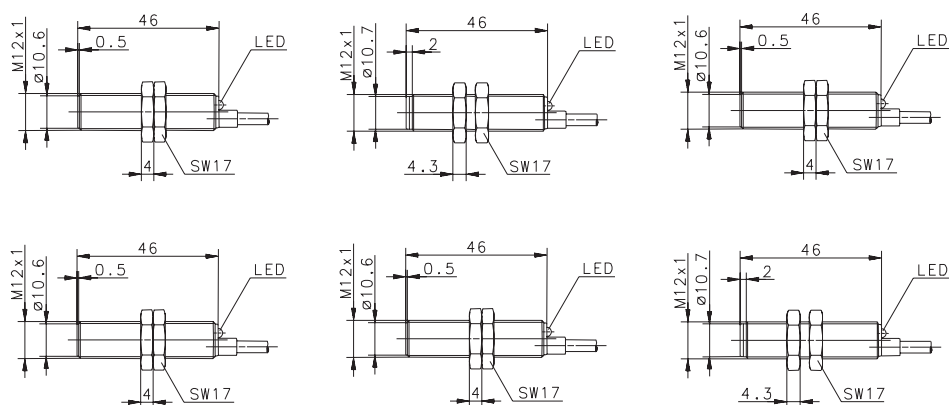
4.5–24 V	10–30 V	4.5–24 V	10–39 V	10–39 V	4.5–24 V	4.5–24 V
25 mA	200 mA	25 mA	400 mA	400 mA	25 mA	25 mA
20 kHz	1500 Hz	20 kHz	10 kHz	10 kHz	20 kHz	20 kHz
-/-	-/-	-/-	LED/-	LED/-	-/-	-/-
Current limiter	Cyclic	Current limiter	Cyclic	Cyclic	Current limiter	Current limiter

-25°C/+70°C	-25°C/+70°C	-25°C/+70°C	-25°C/+70°C	-25°C/+70°C	-25°C/+70°C	-25°C/+70°C
IP67	IP67	IP67	IP67	IP67	IP67	IP67
CuZn39Pb3	CuZn39Pb3	CuZn39Pb3	CuZn39Pb3	CuZn39Pb3	CuZn39Pb3	PA
3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>



# Electronic Magnetic Sensors (Type M12, M18)

Type	M12		M12		M12	
Operating mode	Hall	Hall	Hall	MR	MR	MR
Magnetic sensitivity (mT)	10 mT	10 mT	10 mT	1 mT	1 mT	1 mT
Sensing distance (Sn)	17 mm	17 mm	17 mm	45 mm	45 mm	45 mm
Reference magnet (Page)	T-62 N/S	T-62 N/S	T-62 N/S	T-62 N/S	T-62 N/S	T-62 N/S
Type of connection	Cable 2 m	Cable 10 m	Cable 2 m	Cable 2 m	Cable 5 m	Cable 2 m
Special feature						



PNP	NO contact	6372262090	6472262077	6372262089	6373262094	6373262123	6373262093
	Type	MEM-M12PS/H10-KL2	MEM-M12PS/H10-KL10	MEK-M12PS/H10-KL2	MEM-M12PS/M01-KL2	MEM-M12PS/M01-KL5	MEK-M12PS/M01-KL2
	NC contact	6372162092		6372162091	6373162096		6373162095
	Type	MEM-M12PÖ/H10-KL2		MEK-M12PÖ/H10-KL2	MEM-M12PÖ/M01-KL2		MEK-M12PÖ/M01-KL2
	Bistable	6373462126		6373462125			
	Type	MEM-M12PB/H11-KL2		MEK-M12PB/H11-KL2			
NPN	NO contact						
	Type						
	NC contact						
	Type						
Analogue	Current output						
	Voltage output						

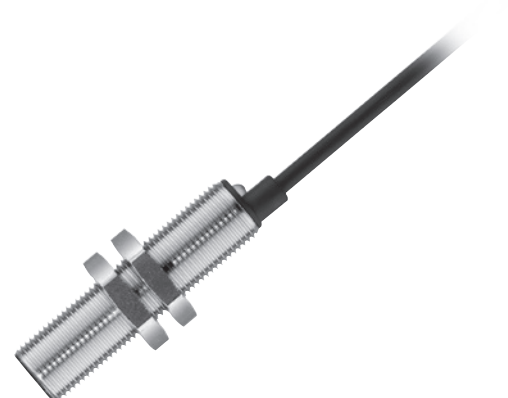
## Technical data

Rated operating voltage	$U_b$	10–39 VDC	10–39 VDC	10–39 VDC	10–39 VDC	10–39 VDC	10–39 VDC
Rated operating current	$I_b$	400 mA	400 mA	400 mA	400 mA	400 mA	400 mA
Max. switching voltage	F	10 kHz	10 kHz	10 kHz	10 kHz	1500 Hz	10 kHz
Function/operating voltage indicator		LED/-	LED/-	LED/-	LED/-	LED/-	LED/-
Sensitivity adjustable							
Short circuit-protection		Cyclic	Cyclic	Cyclic	Cyclic	Cyclic	Cyclic
Teachable							

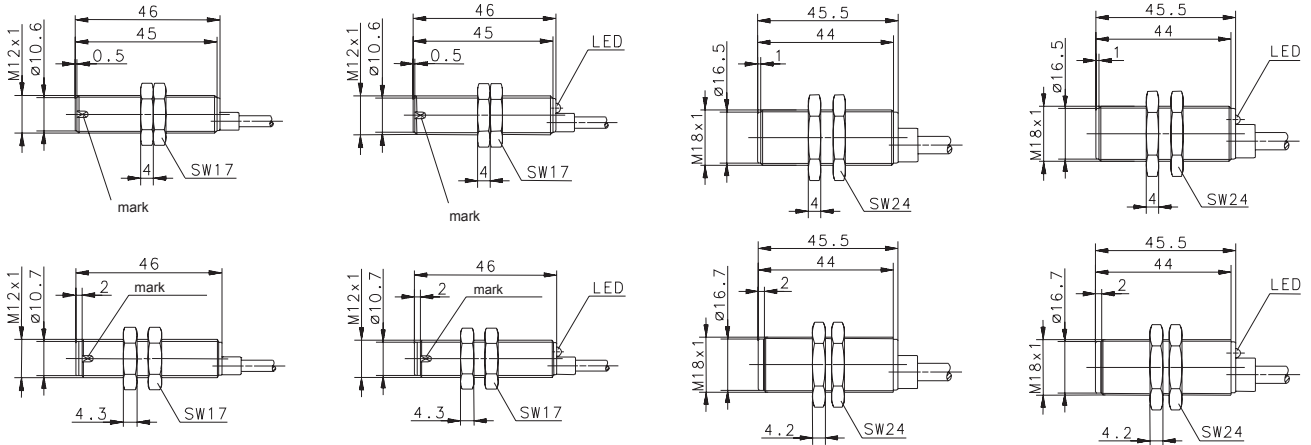
## Mechanical data

Ambient temperature (min/max)		-25°C/+70°C	-25°C/+70°C	-25°C/+70°C	-25°C/+70°C	-25°C/+70°C	-25°C/+70°C
Protection class in accordance with IEC 529, EN 60529		IP67	IP67	IP67	IP67	IP67	IP67
Enclosure material		CuZn39Pb3	CuZn39Pb3	PA	CuZn39Pb3	CuZn39Pb3	PA
Connection		3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>

Please refer to Accessories for magnets, mounting brackets, cable couplers and sensor tester.



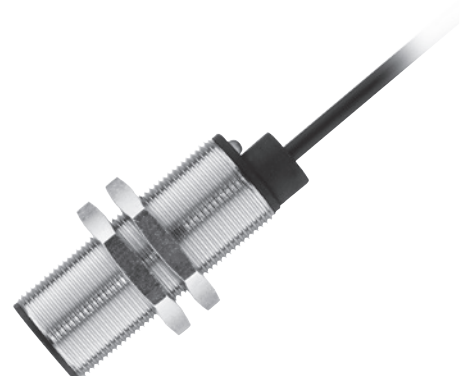
M12		M12		M18		M18	
Hall	Hall	Hall	Hall	Hall	Hall	Hall	Hall
-	-	-	-	10 mT	10 mT	10 mT	10 mT
0-2 mm	0-2 mm	0-2 mm	0-2 mm	17 mm	17 mm	17 mm	17 mm
-	-	-	-	T-62 N/S	T-62 N/S	T-62 N/S	T-62 N/S
Cable 2 m	Cable 2 m	Cable 2 m	Cable 2 m	Cable 2 m	Cable 2 m	Cable 2 m	Cable 2 m
Speed	Speed	Speed	Speed				



		6379262120 MEM-M12PD/H-KL2	6379262119 MEK-M12PD/H-KL2			6372263098 MEM-M18PS/H10-KL2	6372263097 MEK-M18PS/H10-KL2
						6372163100 MEM-M18PÖ/H10-KL2	6372163099 MEK-M18PÖ/H10-KL2
						6373463128 MEM-M18PB/H11-KL2	6373463127 MEK-M18PB/H11-KL2
6369662028 MEM-M12ND/H-K2	6369662027 MEK-M12ND/H-K2			6362663006 MEM-M18NS/H10-K2	6362663007 MEK-M18NS/H10-K2		
				6363863037 MEM-M18NB/H11-K2	6363863038 MEK-M18NB/H11-K2		

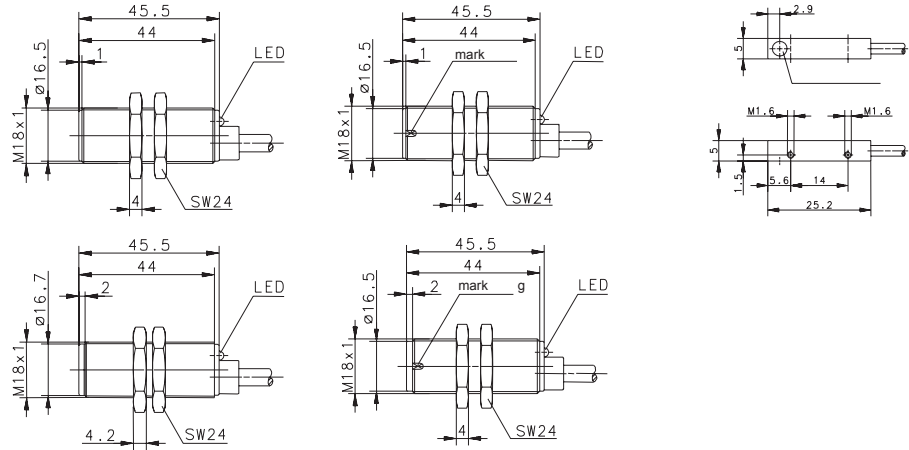
10-36 V	10-36 V	10-39 V	10-39 V	4.5-24 V	4.5-24 V	10-39 V	10-39 V
< 20 mA	< 20 mA	400 mA	400 mA	25 mA	25 mA	400 mA	400 mA
20 kHz	20 kHz	10 kHz	10 kHz	20 kHz	20 kHz	10 kHz	10 kHz
-/-	-/-	LED/-	LED/-	-/-	-/-	LED/-	LED/-
Cyclic	Cyclic	Cyclic	Cyclic	Current limiter	Current limiter	Cyclic	Cyclic

-25°C/+70°C	-25°C/+70°C	-25°C/+70°C	-25°C/+70°C	-25°C/+70°C	-25°C/+70°C	-25°C/+70°C	-25°C/+70°C
IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67
CuZn39Pb3	PA, red	CuZn39Pb3	PA, red	CuZn39Pb3	PBT	CuZn39Pb3	PBT
3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>



# Electronic Magnetic Sensors (Type M18, Q05, Q08, Q12, E27, E29)

Type	M18		M18		Q05
Operating mode	MR	MR	Hall	Hall	MR
Magnetic sensitivity (mT)	1 mT	1 mT	-	-	3 mT
Sensing distance (Sn)	45 mm	45 mm	0 – 2 mm	0 – 2 mm	10 mm
Reference magnet (Page)	T-62 N/S	T-62 N/S	-	-	T-62 N/S
Type of connection	Cable 2 m	Cable 2 m	Cable 2 m	Cable 2 m	Cable 2 m
Special feature			Speed	Speed	



PNP	NO contact Type NC contact Type Bistable Type	6373263102 MEM-M18PS/M01-KL2 6373163104 MEM-M18PÖ/M01-KL2	6373263101 MEK-M18PS/M01-KL2 6373163103 MEK-M18PÖ/M01-KL2	6379263122 MEM-M18PD/H-KL2	6379263121 MEK-M18PD/H-KL2	6373299134 MEM-Q05PS/M03-K2	
NPN	NO contact Type NC contact Bistable Type						
Analogue	Current output Voltage output						

### Technical data

Rated operating voltage	$U_b$	10–39 VDC	10–39 VDC	10–39 VDC	10–39 VDC	4.5–30 VDC
Rated operating current	$I_b$	400 mA	400 mA	400 mA	400 mA	200 mA
Max. switching voltage	F	10 kHz	10 kHz	10 kHz	10 kHz	10 kHz
Function/operating voltage indicator		LED/-	LED/-	LED/-	LED/-	-/-
Sensitivity adjustable						
Short circuit-protection		Cyclic	Cyclic	Cyclic	Cyclic	Current limiter
Teachable						

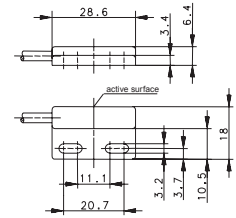
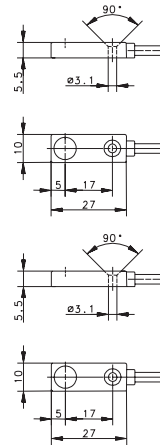
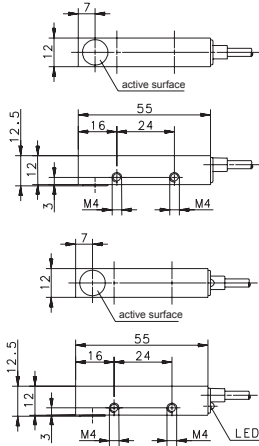
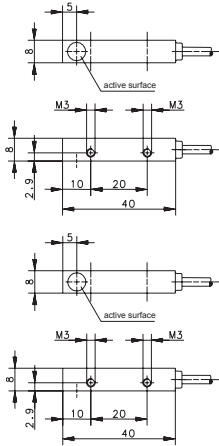
### Mechanical data

Ambient temperature (min/max)		-25°C/+70°C	-25°C/+70°C	-25°C/+70°C	-25°C/+70°C	-20°C/+70°C
Protection class in accordance with IEC 529, EN 60529		IP67	IP67	IP67	IP67	IP67
Enclosure material		CuZn39Pb3	PBT	CuZn39Pb3	PBT, black	CuZn39Pb3
Connection		3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.05 mm <sup>2</sup>

Please refer to Accessories for magnets, mounting brackets, cable couplers and sensor tester.



Q08		Q12		E27		E29
Hall	MR	Hall	Hall	Hall	Hall	Hall
10 mT	2 mT	10 mT	10 mT	10 mT	2 mT	10 mT
17 mm	45 mm	17 mm	17 mm	17 mm	30 mm	17 mm
T-62 N/S	T-62 N/S	T-62 N/S	T-62 N/S	T-62 N/S	T-62 N/S	T-62 N/S
Cable 2 m	Cable 2 m	Cable 2 m	Cable 2 m	Cable 2 m	Cable 2 m	Cable 2 m



	6373280106 MEM-Q08PS/M02-K2		6372255083 MEM-Q12PS/H10-KL2 6372155084 MEM-Q12PO/H10-KL2 6373455131 MEM-Q12PB/H11-KL2			
6362680012 MEM-Q08NS/H10-K2		6362655013 MEM-Q12NS/H10-K2		6362693010 MEK-E27NS/H10-K2		6362611008 MEK-E29NS/H10-K2
6363880043 MEM-Q08NB/H11-K2		6363855044 MEM-Q12NB/H11-K2		6363893041 MEK-E27NB/H11-K2	6363893031 MEK-E27NB/H02-K2	6363811039 MEK-E29NB/H11-K2

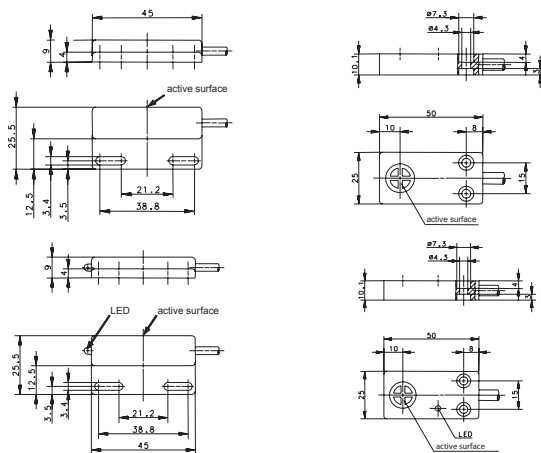
4.5–24 VDC	10–30 VDC	4.5–24 VDC	10–39 VDC	4.5–24 VDC	4.5–24 VDC	4.5–24 VDC
25 mA	200 mA	25 mA	400 mA	25 mA	25 mA	25 mA
20 kHz	1500 Hz	20 kHz	10 kHz	20 kHz	20 kHz	20 kHz
–/–	–/–	–/–	LED/–	–/–	–/–	–/–
Current limiter	Cyclic	Current limiter	Cyclic	Current limiter	Current limiter	Current limiter

–25°C/+70°C	–25°C/+70°C	–25°C/+70°C	–25°C/+70°C	–25°C/+70°C	–25°C/+70°C	–25°C/+70°C
IP67	IP67	IP67	IP67	IP67	IP67	IP67
CuZn39Pb3	CuZn39Pb3	CuZn39Pb3	CuZn39Pb3	PA	PA	PA
3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>



# Electronic Magnetic Sensors (Type E45, E50)

Type	E45		E50	
Operating mode	Hall	Hall	Hall	Hall
Magnetic sensitivity (mT)	10 mT	10 mT	10 mT	10 mT
Sensing distance (Sn)	17 mm	17 mm	17 mm	17 mm
Reference magnet (Page)	T-62 N/S	T-62 N/S	T-62 N/S	T-62 N/S
Type of connection	Cable 2 m	Cable 2 m	Cable 2 m	Cable 2 m
Special feature				



PNP	NO contact	6372245079	6372290081
	Type	MEK-E45PS/H10-KL2	MEK-E50PS/H10-KL2
	NC contact	6372145080	6372190082
	Type	MEK-E45PÖ/H10-KL2	MEK-E50PÖ/H10-KL2
Bistable	Type	6373445129	6373490130
	Type	MEK-E45PB/H11-KL2	MEK-E50PB/H11-KL2
NPN	NO contact	6362645009	6362690011
	Type	MEK-E45NS/H10-K2	MEK-E50NS/H10-K2
	NC contact	6363845040	6363890042
Bistable	Type	MEK-E45NB/H11-K2	MEK-E50NB/H11-K2
Analogue	Current output		
	Voltage output		

## Technical data

Rated operating voltage	$U_B$	4.5–24 VDC	10–39 VDC	4.5–24 VDC	10–39 VDC
Rated operating current	$I_B$	25 mA	400 mA	25 mA	400 mA
Max. switching voltage	F	20 kHz	10 kHz	20 kHz	10 kHz
Function/operating voltage indicator		–/–	LED/–	–/–	LED/–
Sensitivity adjustable					
Short circuit-protection		Current limiter	Cyclic	Current limiter	Cyclic
Teachable					

## Mechanical data

Ambient temperature (min/max)		–25°C/+70°C	–25°C/+70°C	–25°C/+70°C	–25°C/+70°C
Protection class in accordance with IEC 529, EN 60529		IP67	IP67	IP67	IP67
Enclosure material		PA	PA	PBT	PBT
Connection		3 x 0.14 mm <sup>2</sup>	3 x 0.14 mm <sup>2</sup>	3 x 0.50 mm <sup>2</sup>	3 x 0.50 mm <sup>2</sup>

Please refer to Accessories for magnets, mounting brackets, cable couplers and sensor tester.

