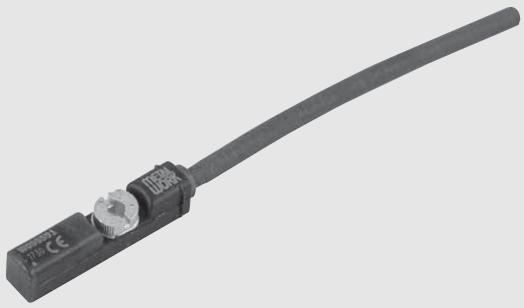
RETRACTABLE SENSOR, SQUARE TYPE

Traditional sensor, featuring:
- secure fixing by means of a steel eccentric pin that engages the sides of the seat;
- fixing screw suitable for flat screwdriver or a 2.5 mm Allen wrench;
- equipped with retaining tabs to hold the sensor in position during installation;
- increased resistance to atmospheric agents and moisture;
- compatible for use with both traditional T-slots and rectangular slots.

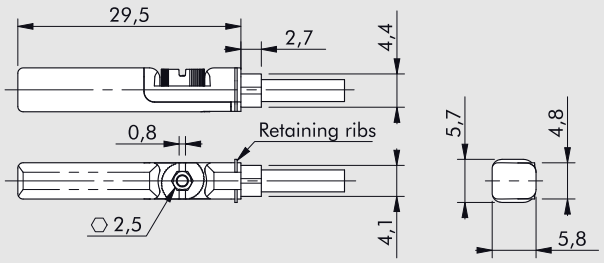


TECHNICAL DATA		RZT7	MRZT7	ATEX MZT8	HCR
		REED	HALL EFFECT	HALL EFFECT	HALL EFFECT
Type of contact		N.O.	N.O.	N.O.	N.O.
Switch		-	PNP	PNP	PNP
Supply voltage (Ub)	V	5 to 30 AC/DC	10 to 30 DC	10 to 26 DC	10 to 30 DC
Power	W	3 (6 di picco)	-	≤ 1.7	-
Voltage variation		-	≤ 10% of Ub	≤ 10% of Ub	-
Voltage drop at Imax	V	≤ 3.5	≤ 2.5	≤ 2.2	≤ 2.2
Input current	mA	-	≤ 8	≤ 10	≤ 10
Output current	mA	≤ 100	≤ 100	≤ 50	≤ 200
Switching frequency	Hz	≤ 400	≤ 1000	1000	≤ 1000
Short-circuit protection		-	Yes	Yes	Yes
Over-voltage suppression		-	-	-	Yes
Polarity inversion protection		-	Yes	Yes	Yes
EMC		EN 60 947-5-2	EN 60 947-5-2	EN 60 947-5-2	EN 60 947-5-2
LED display		Yellow	Yellow	Yellow	Yellow
Magnetic sensitivity	mT	2.1 - 3.5	2.4 - 3.6	2.4 - 3.6	2.4 - 3.6
Repeatability	mT	≤ 0.1	≤ 0.1	≤ 0.1 (Ub and ta fixed)	≤ 0.1
Degree of protection (EN 60529)		IP 67	IP 67	IP 67	IP 68 (M8) - IP69K 2m
Vibration and shock resistance		30 g, 11 ms, 10 ÷ 55 Hz, 1 mm			
Operating life		10^7 impulses	10^9 impulses	10^9 impulses	-
Temperature range	°C				
with polyurethane cable		-30 to 80 (static installation) / -20 to 80 (dynamic installation)			-30 to 80 (static installation)
with PVC cable		-30 to 80 (static installation) / -5 to 80 (dynamic installation)			-
Sensor capsule material		PA	PA	PA	PA12
2.5 m/2 m connecting cable		PVC; 2 x 0.12 mm^2	PVC; 3 x 0.12 mm^2	PVC; 3 x 0.14 mm^2	PUR; 3 x 0.14 mm^2
Connecting cable with M8x1		Polyurethane; 2 x 0.14 mm^2	Polyurethane; 3 x 0.14 mm^2	-	PUR; 3 x 0.14 mm^2
Wire NO.		2	3	3	3
Category ATEX		-	-	II 3G Ex nA op is IIC T4 Gc X II 3D Ex tc IIIC T135°C Dc IP67 X	-
Certifications		CE	CE	CE cULus Ex	CE cULus
ROBOTICS VERSIONS					
Angle of twist		±270° / 10 cm			
No. of cycles torsion		> 350.000 (±270° / 0.1 mm)			
Bending cycles		> 5 Mio (bending radius 29 mm)			
Maximum acceleration	m/s^2	max 5			
Maximum traverse speed at 5 m horizontal path	m/min	max 200			

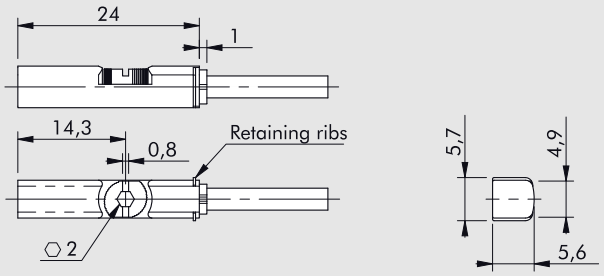
METAL WORK PNEUMATIC

OVERALL DIMENSIONS AND ORDERING CODES

T7

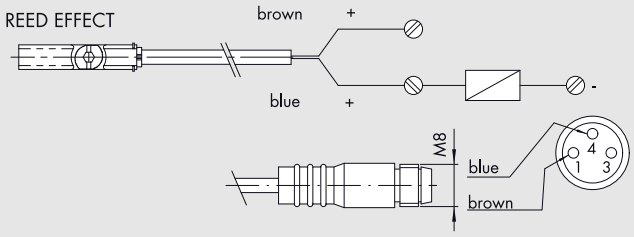


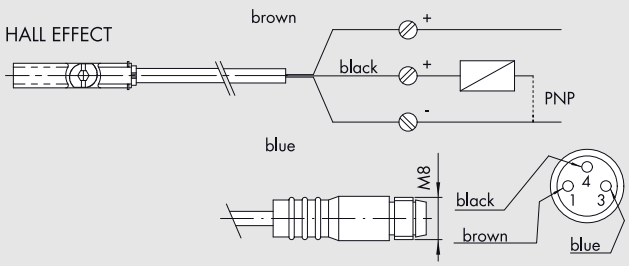
T8



Code	Description
T7	
W095414	REED sensor, T7 SQUARE, 2 wires 2.5 m
W095415	REED sensor, T7 SQUARE, 2 wires 5 m
W095416	REED sensor, T7 SQUARE, 2 wires 10 m
W09541C	REED sensor, T7 SQUARE, 2 wires 2.5 m robotics
W095411	REED sensor, T7 SQUARE, 2 wires 300 mm M8 robotics
W095434	HALL sensor, T7 SQUARE, 3 wires 2.5 m
W095435	HALL sensor, T7 SQUARE, 3 wires 5 m
W09543C	HALL sensor, T7 SQUARE, 3 wires 2.5 m robotics
W095431	HALL sensor, T7 SQUARE, 3 wires 300 mm M8 robotics
T8 ATEX	
W0955A9	HALL sensor, T8 SQUARE, 3 wires ATEX 2 m SH.OV.
T8 (for corrosive environments)	
W0952125396	HALL sensor, T8 SQUARE, 3 wires 2 m HCR
W0952129394	HALL sensor, T8 SQUARE, 3 wires 300 mm M8 HCR

WIRING DIAGRAM





NOTES

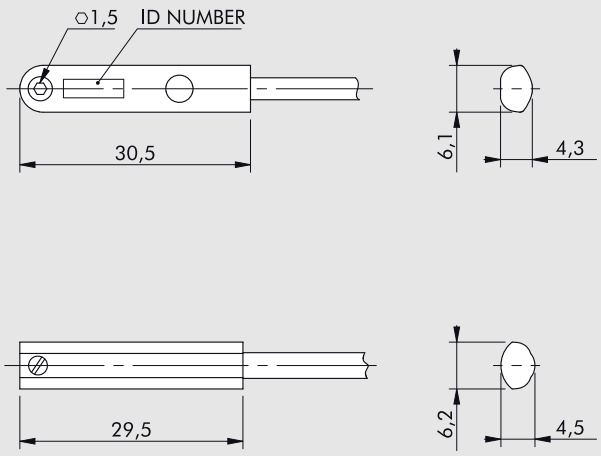
RETRACTABLE SENSOR, TYPE OVAL

Traditional sensor, featuring:
- the sensor is inserted into the slot from the narrowest side and then rotated into the fixing position;
- fixing using a screw that is pressed against the bottom of the T-slot to cause the sensor to rest on the narrowest part of the T-slot;
- fixing screw suitable for a 1.5 mm Allen wrench;
- compatible for use with traditional T-slots.

TECHNICAL DATA				ATEX
		REED	HALL EFFECT	HALL EFFECT
Type of contact		N.O.	N.O.	N.O.
Switch		-	PNP	PNP
Supply voltage (Ub)	V	10 to 30 AC/DC	10 to 30 DC	18 to 30 DC
Power	W	3 (peak valve = 6)	3	≤ 1.7
Voltage variation		-	≤ 10% of Ub	≤ 10% of Ub
Voltage drop	V	-	≤ 2	≤ 2.2
Input current	mA	-	≤ 10	≤ 10
Output current	mA	≤ 100	≤ 100	≤ 70
Switching frequency	Hz	≤ 400	≤ 5000	1000
Short-circuit protection		-	Yes	Yes
Over-voltage suppression		-	Yes	Yes
Polarity inversion protection		-	Yes	Yes
EMC		EN 60 947-5-2	EN 60 947-5-2	EN 60 947-5-2
LED display		Yellow	Yellow	Yellow
Magnetic sensitivity		2.8 mT ± 25%	2.8 mT ± 25%	2.6 mT
		1.9 mT ± 20% (for HS)	2.1 mT ± 20% (for HS)	-
Repeatability		≤ 0.1 mT	≤ 0.1 mT	≤ 0.1 mT (Ub and ta fixed)
Degree of protection (EN 60529)		IP 67	IP 67	IP 68, IP 69K
Vibration and shock resistance		30 g, 11 ms, 10 to 55 Hz, 1 mm	30 g, 11 ms, 10 to 55 Hz, 1 mm	30 g, 11 ms, 10 to 55 Hz, 1 mm
Operating life		10^7 impulses	10^9 impulses	10^9 impulses
Temperature range	°C	-25 to +75	-25 to +75	-20 to +45
Sensor capsule material		PA66 + PA6I/6T	PA66 + PA6I/6T	PA
2.5 m/2 m connecting cable		PVC; 2 x 0.12 mm²	PVC; 3 x 0.14 mm²	PVC; 3 x 0.12 mm²
Connecting cable with M8x1		Polyurethane; 2 x 0.14 mm²	Polyurethane; 3 x 0.14 mm²	-
Wire NO.		2	3	3
Category ATEX		-	-	II 3G Ex nA op is IIC T4 Gc X II 3D Ex tc IIIC T135°C Dc IP67 X
Certifications		CE	CE	CE cULus Ex
ROBOTICS VERSIONS				
2.5 m / 300 mm connecting cables		Polyurethane; 2 x 0.14 mm²	Polyurethane; 3 x 0.14 mm²	-
Cable test conditions:	bending	> 5.000.000 cycles (bending radius 29 mm)		-
	torsion	> 350.000 cycles (± 270°/0.1 mm)		-

METAL WORK PNEUMATIC

OVERALL DIMENSIONS AND ORDERING CODES

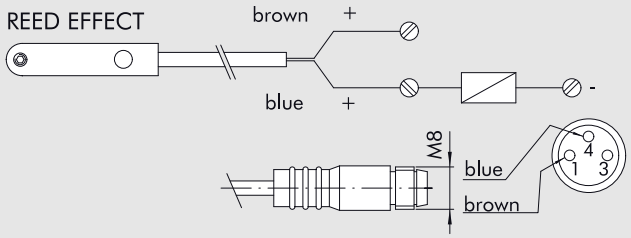


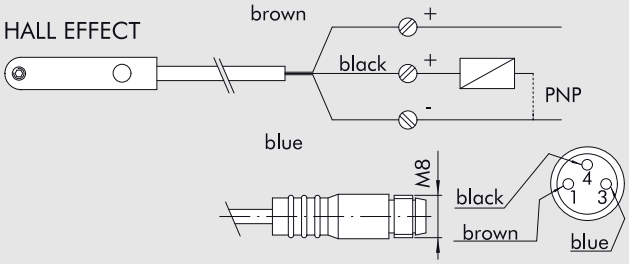
Code	Description	ID Number
W0952025390	HALL N.O. sensor, OVAL, 2.5 m	CE32MP
W0952225390	HALL N.O. sensor, OVAL, 2.5 m robotics	CE32MPR
W0952029394	HALL N.O. sensor, OVAL, 300 mm M8 robotics	CE3M8P
W0952022180	REED N.O. sensor, OVAL, 2.5 m	CR22M
W0952222180	REED N.O. sensor, OVAL, 2.5 m robotics	CR22RM
W0952028184	REED N.O. sensor, OVAL, 300 mm M8 robotics	CR2M8
W0952125556	HALL N.O. sensor, OVAL, 2 m ATEX	-
W0952025500*	HALL N.O. sensor, OVAL, HS 2.5 m	-
W0952029504*	HALL N.O. sensor, OVAL, HS 300 mm M8	-
W0952022500*	REED N.O. sensor, OVAL, HS 2.5 m	-
W0952128184*	REED N.O. sensor, OVAL, HS 300 mm M8	-

*** For use on the rodless cylinder "V" guide Ø25 or when standard sensors do not detect the magnet, e.g. near metal masses.**

Note: Individually packed

WIRING DIAGRAM



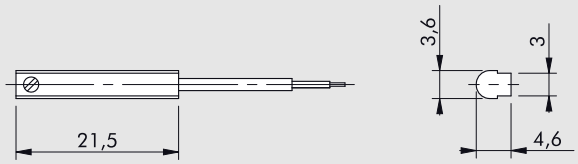


NOTES

SENSOR Ø 4

SENSOR Ø 4

Code	Description
W0950044180	Sensor REED 2 wires 2.5 m robotics
W0950045390	Sensor HALL 3 wires 2.5 m robotics



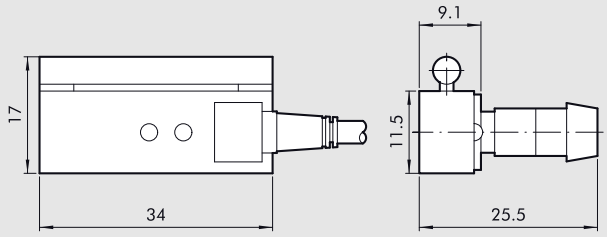
TECHNICAL DATA

		REED	HALL EFFECT
Type of contact		N.O.	N.O.
Switch		-	PNP
Supply voltage (Ub)	V	3 to 30 AC/DC	6 to 30 DC
Power (resistive load)	W	6	6
Voltage drop	V	< 3	< 1
Input current	mA	-	≤ 10
Output current	mA	≤ 200	≤ 200
Switching frequency	Hz	≤ 500	≤ 200000
Short-circuit protection		-	-
Over-voltage suppression		-	-
Polarity inversion protection		-	Yes
EMC		EN 60 947-5-2	EN 60 947-5-2
LED display		Yellow	Yellow
Magnetic sensitivity		2.3 mT ± 10%	2.8 mT ± 25%
Repeatability		≤ 0.1 mT	≤ 0.1 mT
Degree of protection (EN 60529)		IP 67	IP 67
Operating life		10^7 impulses	10^9 impulses
Temperature range	°C	-10 to +60	-10 to +60
Sensor capsule material		PET + AISI 303	PET + AISI 303
2.5 m connecting cable		Polyurethane; 2 x 0.13 mm²	Polyurethane; 3 x 0.13 mm²
Wire NO.		2	3
Certifications		CE UL	CE UL
Cable test conditions:	bending	> 5.000.000 cycles (bending radius 28 mm)	
	torsion	> 350.000 cycles (± 270°/0.1 mm)	

WIRING DIAGRAM

SENSOR SERIE DSM

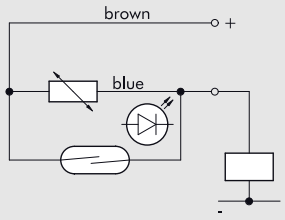
SENSOR SERIES DSM



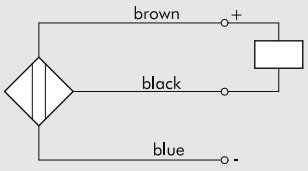
Code	Description
W0950000201	Reed sensor DSM2-C525 HS
W0950000222	E.HALL PNP sensor DSM3-N225
W0950000232	E. HALL NPN sensor DSM3-M225

TECHNICAL DATA SERIE DSM		REED	HALL EFFECT	
Type of contact		N.O.	N.O.	N.O.
Switch		-	PNP	NPN
Supply voltage (Ub)	V	3 to 250 AC/DC	6 to 30 DC	
Power	W	10	6	
Voltage drop	V	< 3	< 1	
Output current	mA	1500	250	
Switching frequency	Hz	500	> 2000	
Polarity inversion protection		Sì	Sì	
EMC		EN 60 947-5-2	EN 60 947-5-2	
LED display		Yellow	Yellow	
Degree of protection (EN 60529)		IP 67	IP 67	
Operating life		10^7 impulses	10^9 impulses	
Temperature range	°C	-10 to +70	-10 to +70	
Sensor capsule material		PA; AISI 303; OT 63	PA; AISI 303; OT 63	
2.5 m connecting cable		PVC; 2 x 0.25 mm²	PVC; 3 x 0.25 mm²	
Wire NO.		2	3	
Certifications		CE	CE	

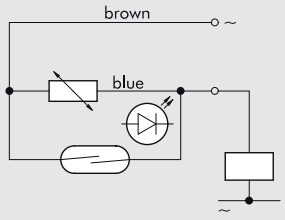
DC



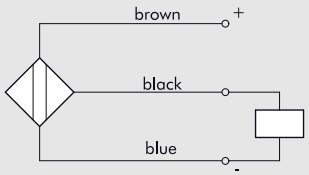
Version NPN



AC

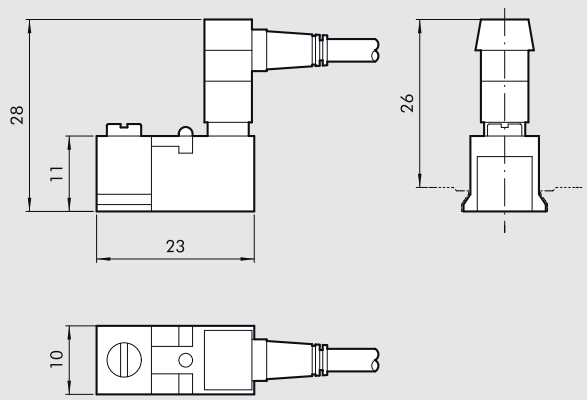


Version PNP



SENSOR SERIE DCB

SENSOR SERIE DCB

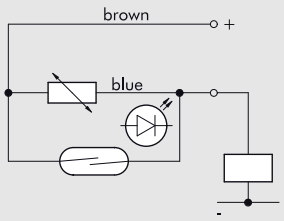


Code	Bore	Model	Version
W0950000252	12 to 100	REED sensor DCB 2C-425	Reed connector + bracket - CB
W0950000253	12 to 100	HALL PNP sensor DCB3-N225	Hall PNP connector + bracket - CB
W0950014360	12 to 100	HALL NPN sensor DCB3-M225	Hall NPN connector + bracket - CB

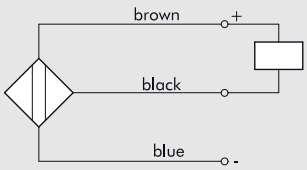
TECHNICAL DATA SERIE DCB

Type		REED + VARISTOR + LED 2 WIRES	HALL VERSION PNP/NPN 3 WIRES
Contact		REED + VARISTOR + LED NO	HALL EFFECT NO PNP/NPN
Max AC/DC voltage	V	3 to 48 (DC); 3 to 110 (AC)	6-30 V DC
Max current at 25°C	mA	300	250
Power with inductive load	VA	8	–
Power with resistive load	Watt	15	6
Switch-on time	m sec	0.5	0.8
Switch-off time	m sec	0.1	3
Switch-on point	Gauss	110	15
Switch-off point	Gauss	60	8
Operating life		10^7 impulses	10^9 impulses
Contact resistance		0.1	–
Cable length	m	2.5	2.5
Cable cross section	mm^2	0.35	0.35
Cable material		Soft PVC	Soft PVC
Circuit			

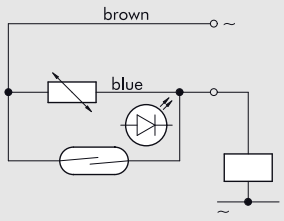
DC



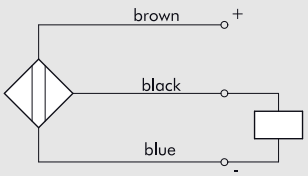
Version NPN



AC



Version PNP



METAL WORK PNEUMATIC

NOTES