



MAGNETIC SENSORS

Ø 9 HALL EFFECT

12÷30 V DC - 3 WIRES - PNP OUTPUT

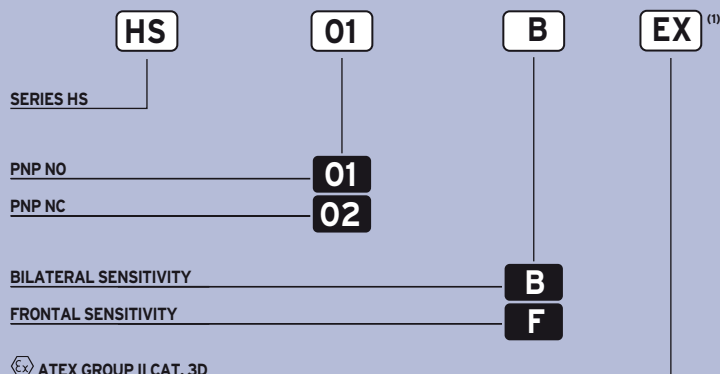
- Fast 50 ms ON/OFF
- Sensing models: Front end travel
Bilateral side travel
- Choice of magnet targets



HS Series



IDENTIFICATION CODE

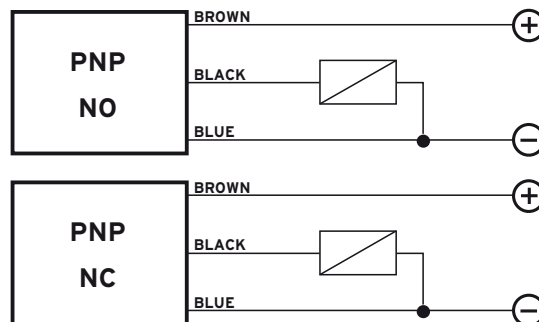


MAGNETIC FLUX (Gauss)

• SENSOR ON	≥ 25 (Tip. 15 at 25°C)
• SENSORE OFF	≤ 5 (Tip. 11 at 25°C)
• HYSTERESIS	Max. diff. 7 (Tip. 4 at 25°C)
NOMINAL VOLTAGE	12 ÷ 30 VDC (-15/+10%)
RESIDUAL RIPPLE	≤ 10%
MAX. CURRENT OUTPUT	200 mA
ABSORPTION AT 30 VDC	≤ 10 mA
VOLTAGE DROP (Sensor ON)	< 1.8 V
YELLOW LED	Output indicator
GREEN LED	Supply indicator
SWITCHING FREQUENCY (max.)	10 kHz
TIME RESPONSE	100 ms
START UP DELAY	50 ms
SHORT CIRCUIT PROTECTION	Present (self-resetting)
ELECTRIC PROTECTIONS	Against reversal polarity - inductive loads
TEMPERATURE LIMITS	-20 ÷ +60 °C
PROTECTION DEGREE	IP 67
CABLE LENGTH	2 m
CABLE SECTION	3 x 0.25 mm ²
HOUSING MATERIAL	Nickel-plated brass
WEIGHT (Approximately)	50 g

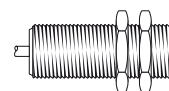
(1) Device marking II 3D IP67 T6X.

WIRING DIAGRAMS



HALL EFFECT SENSOR/MAGNETE SWITCHING DISTANCE (mm)

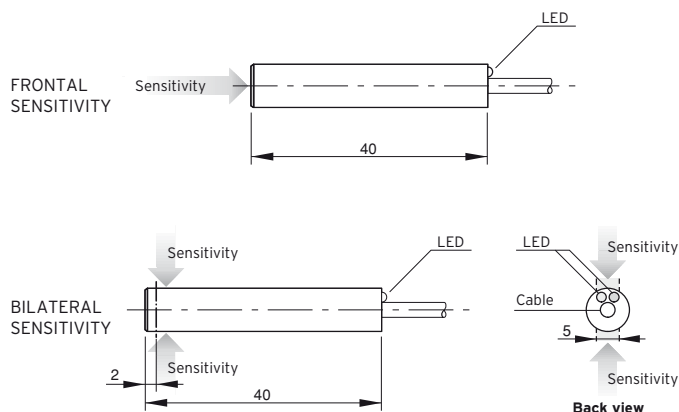
DIAMETER 9
Distance Hysteresis



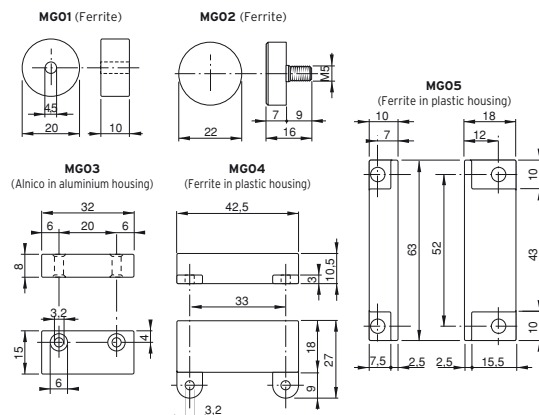
Distance	Hysteresis	Magnet Model
33	4	MG01
30	4	MG02
18	5	MG03
41	6,5	MG04
35	7	MG05

WARNING: The data specified in this table have an approximate value because they depend on the magnet position, on the material on which it is applied (ferromagnetic or not) and because they are related to the magnet during the frontal approach.

DIMENSIONS (mm)



MAGNETS DIMENSIONS (mm)





MAGNETIC SENSORS

Ø 12 HALL EFFECT

12÷30 V DC - 3 WIRES - PNP OUTPUT

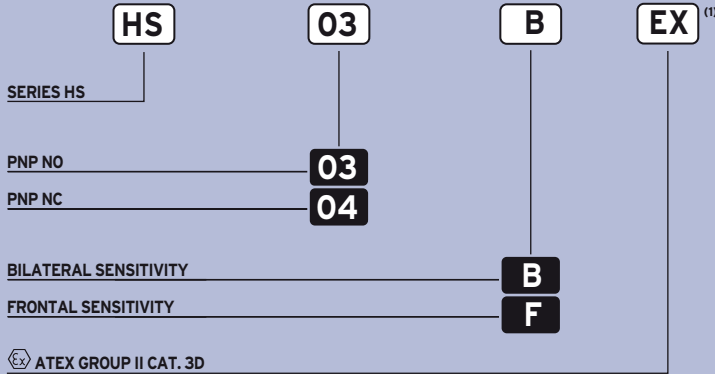
- Fast 50 ms ON/OFF
- Sensing models: Front end travel
Bilateral side travel
- Choice of magnet targets



HS Series



IDENTIFICATION CODE

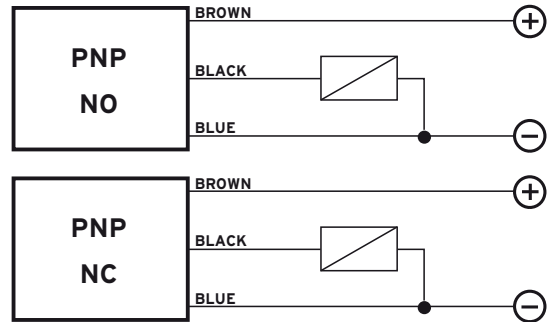


MAGNETIC FLUX (Gauss)

• SENSOR ON	≥ 25 (Tip. 15 at 25°C)
• SENSORE OFF	≤ 5 (Tip. 11 at 25°C)
• HYSTERESIS	Max. diff. 7 (Tip. 4 at 25°C)
NOMINAL VOLTAGE	12 ÷ 30 VDC (-15/+10%)
RESIDUAL RIPPLE	≤ 10%
MAX. CURRENT OUTPUT	200 mA
ABSORPTION AT 30 VDC	≤ 10 mA
VOLTAGE DROP (Sensor ON)	< 1.8 V
YELLOW LED	Output indicator
GREEN LED	Supply indicator
SWITCHING FREQUENCY (max.)	10 kHz
TIME RESPONSE	100 ms
START UP DELAY	50 ms
SHORT CIRCUIT PROTECTION	Present (self-resetting)
ELECTRIC PROTECTIONS	Against reversal polarity - inductive loads
TEMPERATURE LIMITS	-20 ÷ +60 °C
PROTECTION DEGREE	IP 67
CABLE LENGTH	2 m
CABLE SECTION	3 x 0.25 mm ²
HOUSING MATERIAL	Nickel-plated brass
WEIGHT (Approximately)	110 g

(1) Device marking II 3D IP67 T6X.

WIRING DIAGRAMS

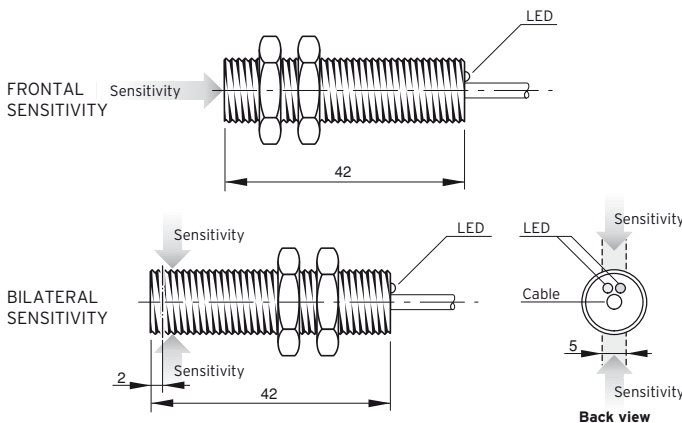


HALL EFFECT SENSOR/MAGNETE SWITCHING DISTANCE (mm)

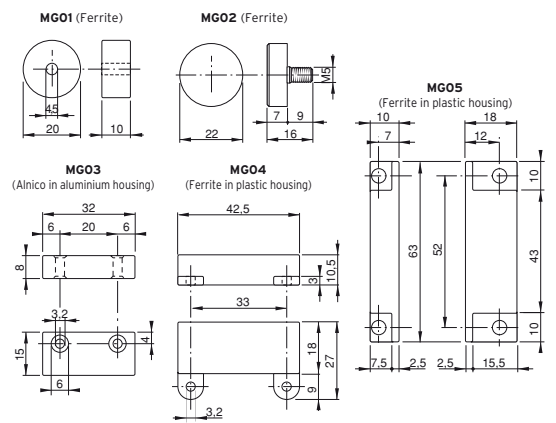
Distance	Hysteresis	Magnet Model
33	4	MG01
30	4	MG02
18	5	MG03
41	6,5	MG04
35	7	MG05

WARNING: The data specified in this table have an approximate value because they depend on the magnet position, on the material on which it is applied (ferromagnetic or not) and because they are related to the magnet during the frontal approach.

DIMENSIONS (mm)



MAGNETS DIMENSIONS (mm)



MAGNETIC SENSORS



Ø 18 HALL EFFECT

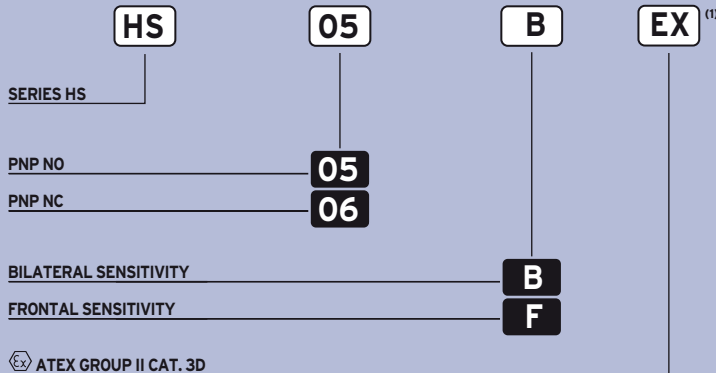
12÷30 V DC - 3 WIRES - PNP OUTPUT

- Fast 50 ms ON/OFF
- Sensing models: Front end travel
Bilateral side travel
- Choice of magnet targets

HS Series



IDENTIFICATION CODE



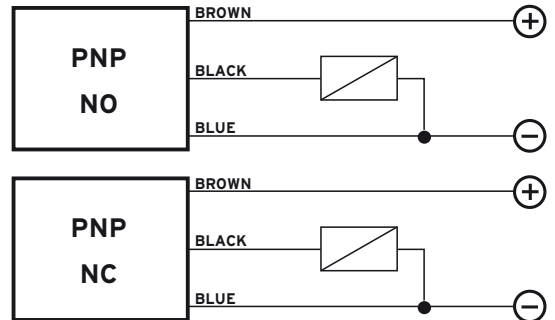
MAGNETIC FLUX (Gauss)

• SENSOR ON	≥ 25 (Tip. 15 at 25°C)
• SENSORE OFF	≤ 5 (Tip. 11 at 25°C)
• HYSTERESIS	Max. diff. 7 (Tip. 4 at 25°C)

NOMINAL VOLTAGE	12 ÷ 30 VDC (-15/+10%)
RESIDUAL RIPPLE	≤ 10%
MAX. CURRENT OUTPUT	200 mA
ABSORPTION AT 30 VDC	≤ 10 mA
VOLTAGE DROP (Sensor ON)	< 1.8 V
YELLOW LED	Output indicator
GREEN LED	Supply indicator
SWITCHING FREQUENCY (max.)	10 kHz
TIME RESPONSE	100 ms
START UP DELAY	50 ms
SHORT CIRCUIT PROTECTION	Present (self-resetting)
ELECTRIC PROTECTIONS	Against reversal polarity - inductive loads
TEMPERATURE LIMITS	- 20 ÷ +60 °C
PROTECTION DEGREE	IP 67
CABLE LENGTH	2 m
CABLE SECTION	3 x 0.25 mm ²
HOUSING MATERIAL	Nickel-plated brass
WEIGHT (Approximately)	145 g

(1) Device marking II 3D IP67 T6X.

WIRING DIAGRAMS



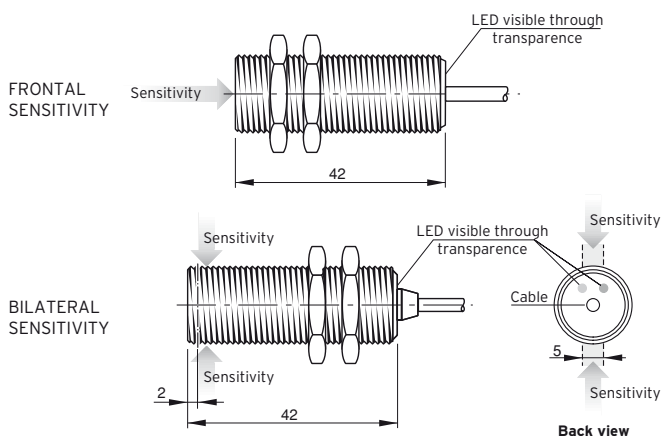
HALL EFFECT SENSOR/MAGNETE SWITCHING DISTANCE (mm)

DIAMETER 18
Distance Hysteresis

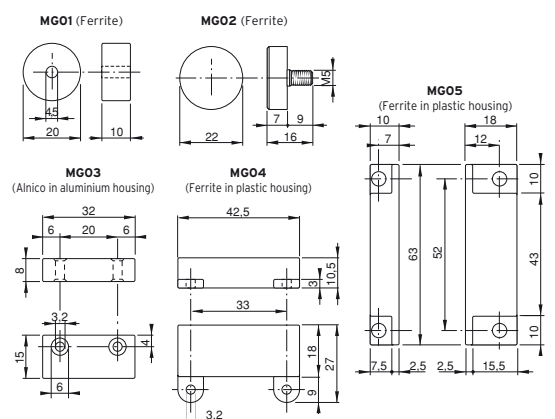
Distance	Hysteresis	Magnet Model
33	4	MG01
30	4	MG02
18	5	MG03
41	6,5	MG04
35	7	MG05

WARNING: The data specified in this table have an approximate value because they depend on the magnet position, on the material on which it is applied (ferromagnetic or not) and because they are related to the magnet during the frontal approach.

DIMENSIONS (mm)



MAGNETS DIMENSIONS (mm)



MAGNETIC SENSORS

Ø 6 REED CONTACT

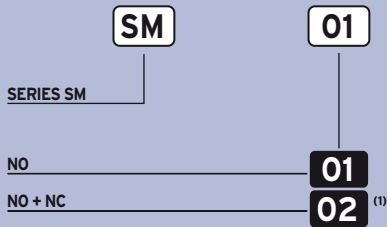


- Plastic housing
- 2 ms delay on activation
- 2 m integrated cable
- Choice of magnet targets

SM Series



IDENTIFICATION CODE

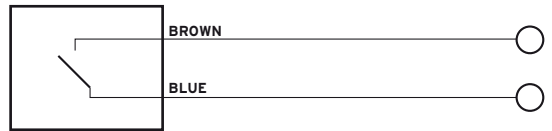


MAX. VOLTAGE (SM01)	250 Vpeak (I max = 0.04 A)
MAX. CURRENT (SM01)	0.04 A
POWER (SM01)	10 VA
SWITCHING FREQUENCY	200 Hz
DELAY ON ACTIVATION	2 ms
REPEATABILITY	± 0.3 mm
TEMPERATURE LIMITS	-20 ÷ +60°C
PROTECTION DEGREE	IP 67
CABLE LENGTH	2 m
CABLE SECTION	SM01=2x0.50mm ² /SM02=3x0.35mm ²
HOUSING MATERIAL	ABS

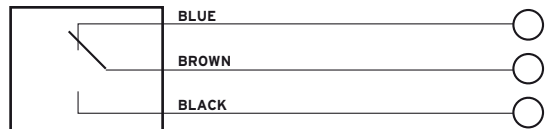
⁽¹⁾ P_w = 3VA : 100 Vpeak (I max = 0.03A) - 12V (I max = 0.25A)

WIRING DIAGRAMS

NO CONTACT

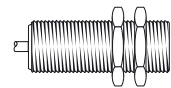


NO + NC CONTACT



REED EFFECT SENSOR/MAGNETE SWITCHING DISTANCE (mm)

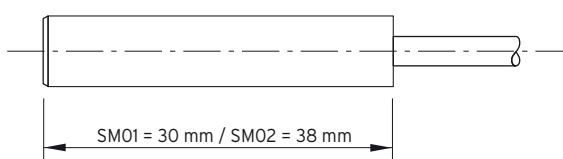
DIAMETER 6
Distance Hysteresis



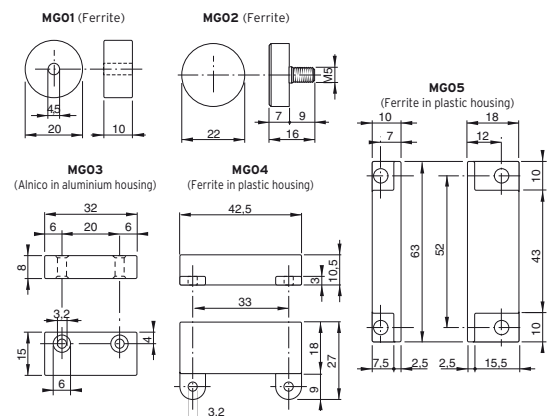
Distance	Hysteresis	Magnet Target
24	5	MG01
22	5	MG02
6	2,5	MG03
32	5	MG04
29	5	MG05

WARNING: The data specified in this table have an approximate value because they depend on the magnet position, on the material on which it is applied (ferromagnetic or not) and because they are related to the magnet during the frontal approach. Reed contact sensors can be also activated laterally considering that switching distances are always influenced by the magnet position and orientation besides the material on which it is applied (ferromagnetic or not).

DIMENSIONS (mm)



MAGNETS DIMENSIONS (mm)



MAGNETIC SENSORS

Ø 8 REED CONTACT

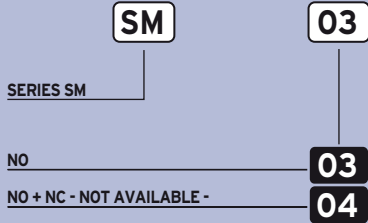


- Metal housing
- 2 ms delay on activation
- 2 m integrated cable
- Choice of magnet targets

SM Series



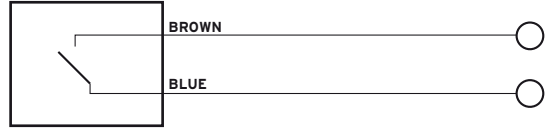
IDENTIFICATION CODE



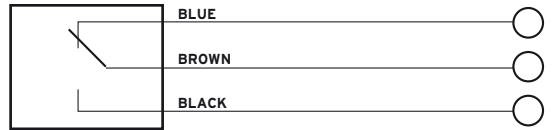
MAX. VOLTAGE	250 Vpeak (I max = 0.05 A)
MAX. CURRENT	0.5 A (V max = 20V)
POWER	10 VA
SWITCHING FREQUENCY	200 Hz
DELAY ON ACTIVATION	2 ms
REPEATABILITY	± 0.3 mm
TEMPERATURE LIMITS	-20 + +60°C
PROTECTION DEGREE	IP 67
CABLE LENGTH	2m
CABLE SECTION	3 x 0.50 mm ²
HOUSING MATERIAL	Nickel-plated brass

WIRING DIAGRAMS

NO CONTACT

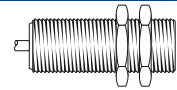


NO + NC CONTACT



REED CONTACT SENSOR MAGNET SWITCHING DISTANCE (mm)

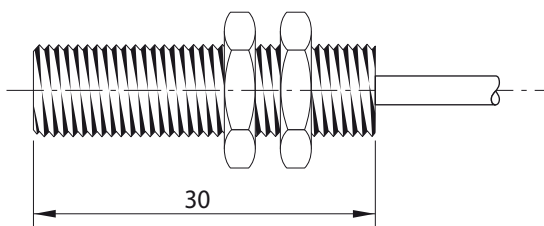
DIAMETER 8
Distance Hysteresis



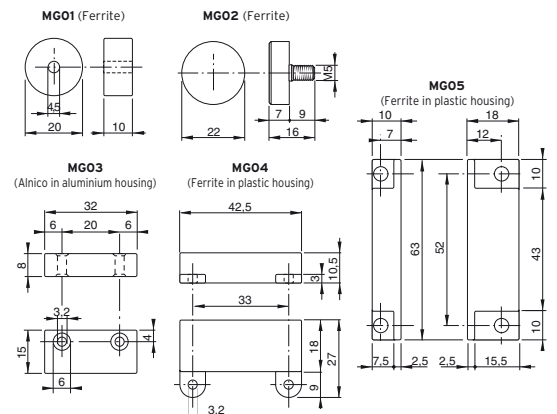
Distance	Hysteresis	Magnet Target
24	5	MG01
22	5	MG02
6	2,5	MG03
32	5	MG04
29	5	MG05

WARNING: The data specified in this table have an approximate value because they depend on the magnet position, on the material on which it is applied (ferromagnetic or not) and because they are related to the magnet during the frontal approach. Reed contact sensors can be also activated laterally considering that switching distances are always influenced by the magnet position and orientation besides the material on which it is applied (ferromagnetic or not).

DIMENSIONS (mm)



MAGNETS DIMENSIONS (mm)





MAGNETIC SENSORS

Ø 10 REED CONTACT

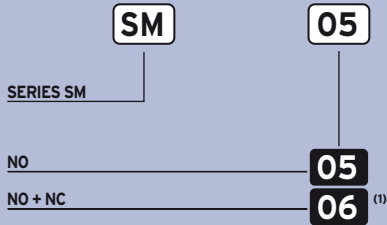
- Metal housing
- 2 ms delay on activation
- 2 m integrated cable
- Choice of magnet targets



SM Series



IDENTIFICATION CODE

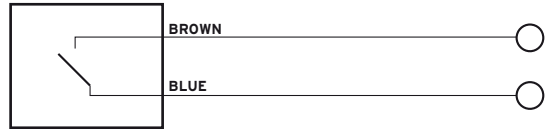


MAX. VOLTAGE (SM05)	250 Vpeak
MAX. CURRENT (SM05)	0.04 A
POWER (SM05)	10 VA
SWITCHING FREQUENCY	200 Hz
DELAY ON ACTIVATION	2 ms
REPEATABILITY	± 0.3 mm
TEMPERATURE LIMITS	-20 ÷ +60°C
PROTECTION DEGREE	IP 67
CABLE LENGTH	2m
CABLE SECTION	SM05 = 2x0.50 mm ² / SM06 = 3x0.35 mm ²
HOUSING MATERIAL	Nickel-plated brass

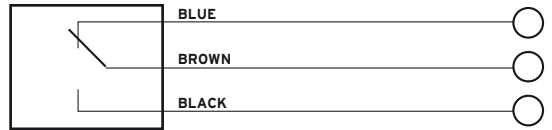
(1) Max Power = 3 Va : 100 Vpeak (I max = 0.03 A) - 12 V (I max = 0.25 A)

WIRING DIAGRAMS

NO CONTACT

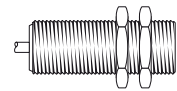


NO + NC CONTACT



REED EFFECT SENSOR/MAGNETE SWITCHING DISTANCE (mm)

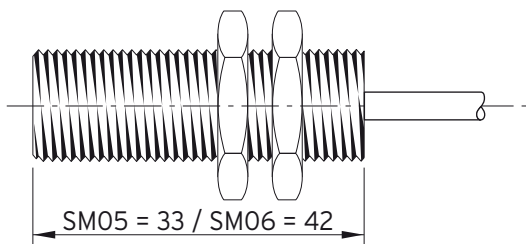
DIAMETER 10
Distance Hysteresis



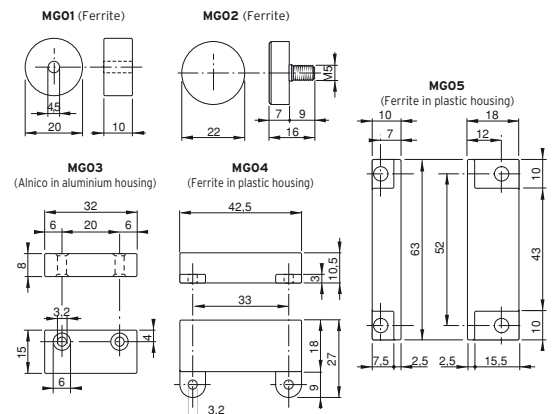
Distance	Hysteresis	Magnet
24	5	MG01
22	5	MG02
6	2,5	MG03
32	5	MG04
29	5	MG05

WARNING: The data specified in this table have an approximate value because they depend on the magnet position, on the material on which it is applied (ferromagnetic or not) and because they are related to the magnet during the frontal approach. Reed contact sensors can be also activated laterally considering that switching distances are always influenced by the magnet position and orientation besides the material on which it is applied (ferromagnetic or not).

DIMENSIONS (mm)



MAGNETS DIMENSIONS (mm)



MAGNETIC SENSORS

Ø 12 REED CONTACT



SM Series



- Metal and plastic housing
- 2 ms delay on activation
- 2 m integrated cable
- Choice of magnet targets

IDENTIFICATION CODE

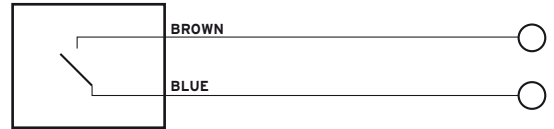
SM	07
SERIES SM	
NO - Length 40mm	07
NO + NC - Length 42mm	08 ⁽⁴⁾
POWER NO - Length 30mm	09 ⁽²⁾
POWER NO - Length 70mm	13 ⁽¹⁾
POWER NO+NC - Length 70mm	14 ⁽³⁾
NO - Length 100mm - plastic	19 ⁽²⁾
POWER NO+NC - Length 100mm - plastic	20 ⁽⁵⁾
POWER NO - Length 100mm - plastic	21 ⁽¹⁾
BISTABLE - Length 100mm - plastic	22 ⁽³⁾
NO+NC - Length 100mm - plastic	23 ⁽⁶⁾

MAX. VOLTAGE (SM07)	230 Vpeak
MAX. CURRENT (SM07)	0.04 A
POWER (SM07)	10 VA
SWITCHING FREQUENCY	200 Hz
DELAY ON ACTIVATION	2 ms
REPEATABILITY	± 0.3 mm
TEMPERATURE LIMITS	-20 ÷ +60°C
PROTECTION DEGREE	IP 67
CABLE LENGTH	2m
CABLE SECTION	SM07/SM09/SM13=2x0.50mm ² - SM08/SM14=3x0.35mm ² - SM19/SM21/SM22=2x0.75mm ²
HOUSING MATERIAL	Nickel-plated brass

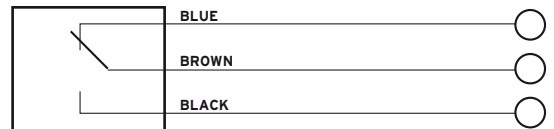
- (1) Pw = 100W : I max = 3A (V = 33V) - Vpeak = 250V (I = 0.4A)
 (2) Pw = 50W : I max = 1A (V = 50V) - Vpeak = 250V (I = 0.2A)
 (3) Pw = 100W : I max = 3A (V = 33V) - Vpeak = 250V (I = 0.4A)
 (4) Pw = 3W : I max = 0.25A (V = 12V) - Vpeak = 100V (I = 0.03A)
 (5) Pw = 60W : I max = 3A (V = 20V) - Vpeak = 250V (I = 0.24A)
 (6) Pw = 10W : I max = 0.5A (V = 20V) - Vpeak = 175V (I = 0.06A)

WIRING DIAGRAMS

NO CONTACT

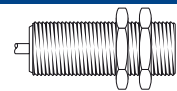


NO + NC CONTACT



REED CONTACT SENSOR MAGNET SWITCHING DISTANCE (mm)

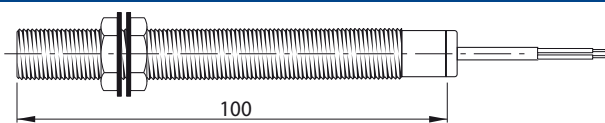
DIAMETER 12
Distance Hysteresis



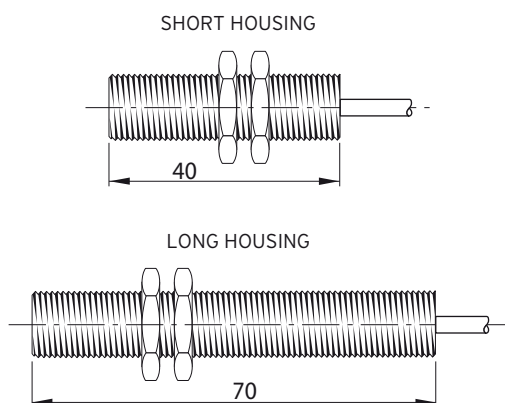
24 12 (Power)	5 7 (Power)	MG01
22 10 (Power)	5 6 (Power)	MG02
6 0 (Power)	2.5 0 (Power)	MG03
22 22 (Power)	9 9 (Power)	MG04
20 20 (Power)	9 9 (Power)	MG05

WARNING: The data specified in this table have an approximate value because they depend on the magnet position, on the material on which it is applied (ferromagnetic or not) and because they are related to the magnet during the frontal approach. Reed contact sensors can be also activated laterally considering that switching distances are always influenced by the magnet position and orientation besides the material on which it is applied (ferromagnetic or not).

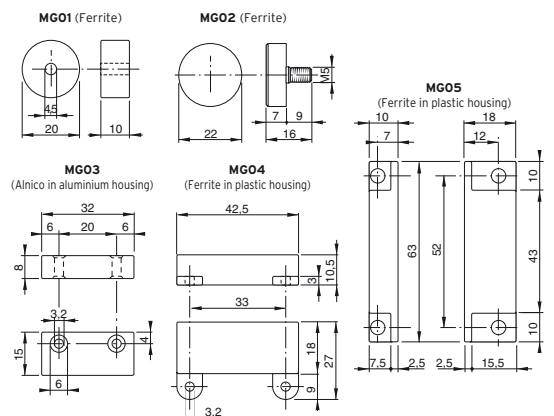
PLASTIC HOUSING MODELS DIMENSIONS (mm)



METAL HOUSING MODELS DIMENSIONS (m)



MAGNETS DIMENSIONS (mm)





MAGNETIC SENSORS

Ø 18 REED CONTACT

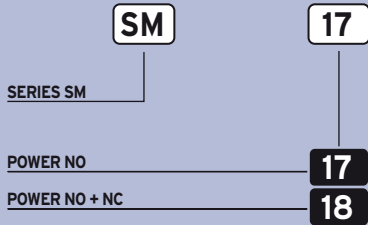
- Metal housing
- 2 ms delay on activation
- 2 m integrated cable
- Choice of magnet targets



SM Series



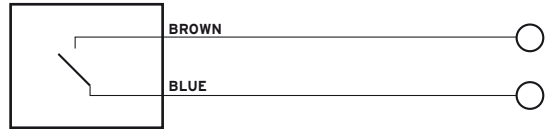
IDENTIFICATION CODE



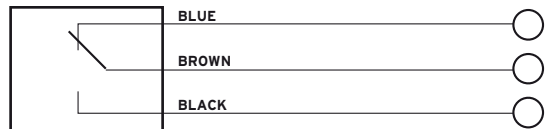
MAX. VOLTAGE	SM17 : 250Vpeak (I=0.4A) - SM18 : 250Vpeak (I=0.25A)
MAX. CURRENT	SM17 : 0.4 A (V=250V) - SM18 : 3 A (V=20V)
POWER	SM17 = 100 VA - SM18 = 60 VA
SWITCHING FREQUENCY	200 Hz
DELAY ON ACTIVATION	2 ms
REPEATABILITY	± 0.3 mm
TEMPERATURE LIMITS	-20 ÷ +60°C
PROTECTION DEGREE	IP 67
CABLE LENGTH	2m
CABLE SECTION	SM17=2x0.5 mm ² / SM18=3x0.5 mm ²
HOUSING MATERIAL	Nickel-plated brass

WIRING DIAGRAMS

NO CONTACT

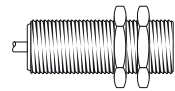


NO + NC CONTACT



HALL EFFECT SENSOR/MAGNETE SWITCHING DISTANCE (mm)

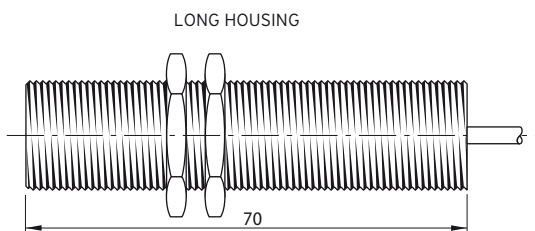
DIAMETER 18
Distance Hysteresis



Distance	Hysteresis	Magnet Type
12	7	MG01
10	6	MG02
-	-	MG03
22	9	MG04
20	9	MG05

WARNING: The data specified in this table have an approximate value because they depend on the magnet position, on the material on which it is applied (ferromagnetic or not) and because they are related to the magnet during the frontal approach. Reed contact sensors can be also activated laterally considering that switching distances are always influenced by the magnet position and orientation besides the material on which it is applied (ferromagnetic or not).

DIMENSIONS (mm)



MAGNETS DIMENSIONS (mm)

