

Magnetic Limit switch

Bistable magnetically operated switch
Proximity switch acc. to NAMUR
Switch direction reversible
Switching status remains in the currentless condition

Product group **740**

Type **0200**

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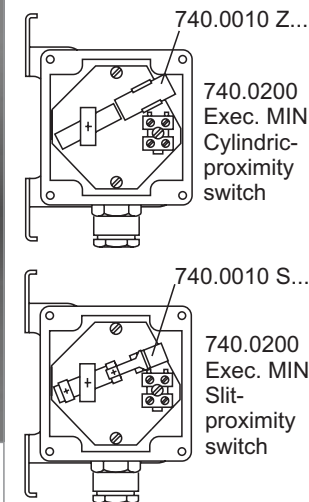
Revision: 8

Date:

3/07



Example: 740.0200AZN MAX



Field of Application

This switch is for signalling level limits with magnetic level gauges. All controllers in accordance with DIN 50227 (NAMUR) may be used for operation. Use in Ex Zone 1 and 2 is allowed only when connected to intrinsically safe circuits. Also redundant and fail safe operation is possible.

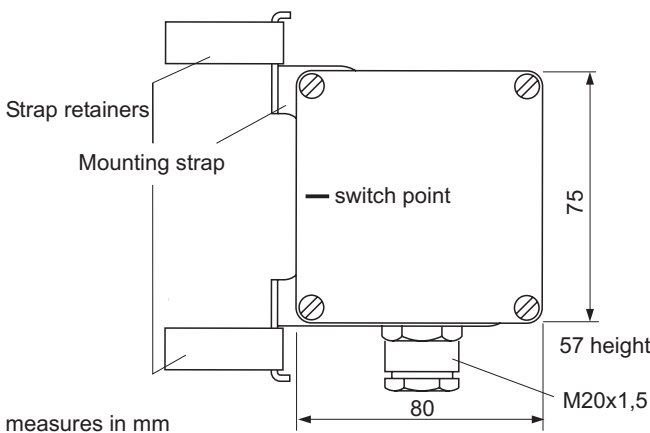
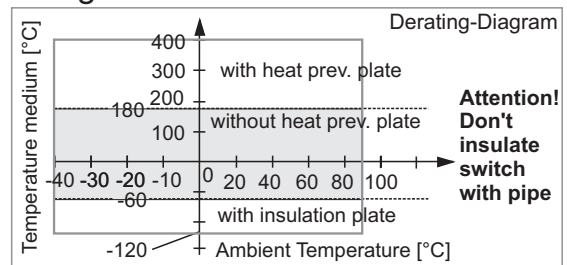
General Data

Switching rate: 2 Hz
Hysteresis [mm]:

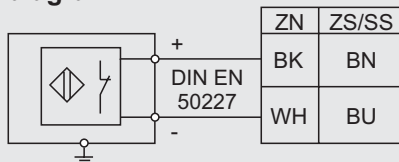
Gauge Type	ZS	SS	ZN
710.100/102/106/110/120/130	10	5	10
710.098/104	40	25	40
710.104.3/140.3	-	20	-
710.110.3	15	10	10
710.120.3/130.3/150	20	10	10
710.140	10	10	10
710.160	-	15	-

Fastening: with strap retainers (Acc., s. page 2)
Fitting position: Cable gland downwards
Ingress protection: IP67
Material housing: Aluminium
Measures/Weights: 75x80x57/0,4 kg

Design Data



Connection diagram



Electrical Data

Interface: to DIN EN 50227
Wire cross section: 2,5 mm²
Cable gland: M20x1,5 blue

Switch module	Type, principle	Redundant safety
740.0010 ZN	Cylindric, Hall	no
740.0010 ZS	Cylindric, inductive	yes **)
740.0010 SS	Slit, inductive	yes **)

**) Only in combination with redundant switch amplifier
Subject to alterations

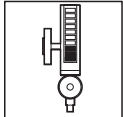
Ordering no.

740.0200AXXX

Safety direction	MIN	L	Z	Cylindric	Magnetic field float	
	MAX	H	S	Slit		
				N	Standard	Proximity switch
				S	Redundant	
				I	inverted	Form
					normal	

PHÖNIX

Messtechnik GmbH
Salzschlierfer Straße 13
D-60386 Frankfurt/M.
Tel. +49/69/41 67 42 - 20
Fax +49/69/41 67 42 - 29
sales@phoenix-mt.com
www.phoenix-mt.com



Magnetic limit switch

Application hints

Product group **740**

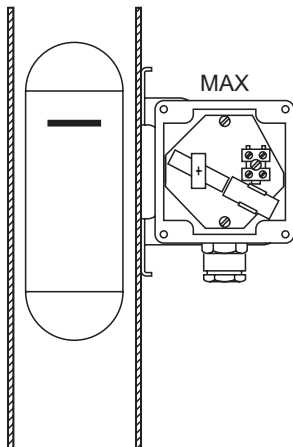
Type **0200**

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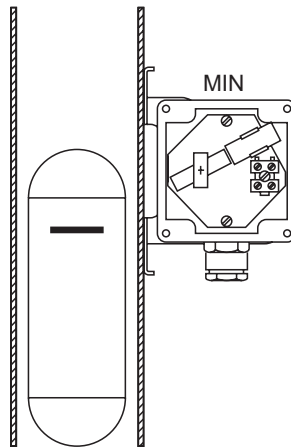
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740.0200 MAX for H-level
The magnet damps the proximity switch when the float is higher (fail-safe).



740.0200 MIN for L-level
The magnet damps the proximity switch when the float is lower (fail-safe).

Power supply (DIN EN 50227): 8,2 V= (Ri ca 1kΩ)
Wire resistance: < 100R

Switch module Type 740.0010 ZN

Exi Data:

Parameter	EEx ib IIC T6/T5/T4
U _i	≤ 18 V
I _i	≤ 86 mA
P _i	≤ 95 mW
L _i	1 μH
C _i	230 nF

OFF-current: < 0,4 mA

ON-current: > 2,50 mA

Remaining ripple: < 0,03 mA

Switch module Type 740.0010 ZS/SS

Ex-Data: II 2G EEx ia IIC T6/T5/T4

U_i: ≤ 16 V

L_i ZS/SS: 150/100 μH

C_i ZS/SS: 50/30 nF

Temperature classes ZS + SS:

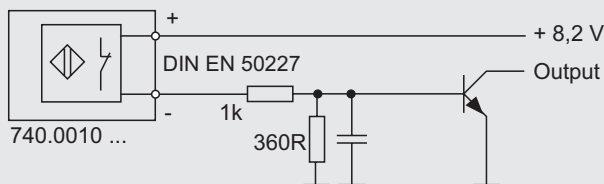
P _i [mW]	34	64	169	242
I _i [mA]	25	25	52	76
T6 [°C]	73	66	45	30
T5 [°C]	88	81	60	45
T4 [°C]	100	100	89	74

OFF-current: ≤ 1 mA

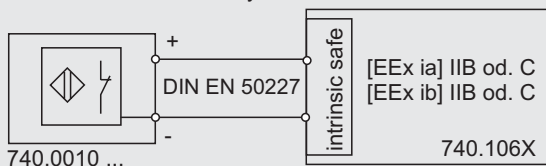
ON-current: ≥ 3mA

Power supply and signal conversion acc. to NAMUR

Example for discrete switch circuit



Operation with an intrinsically safe controller



Certificates

Switch module Type 740.0010 ZN

EC-Type-Examination Certificate: ZELM 02 ATEX 0083

Switch module Type 740.0010 ZS/SS

EC-Type-Examination Certificate: PTB 00 ATEX 2049 X

May be connected to intrinsic safe circuits and may be operated in zone 1 and zone 2.

Subject to alterations

Ordering no. Accessories

fixing elements

Strap retainers for 710.104/2XX	171538
Strap retainers for 710.100/103	171546
Strap retainers for 710.110/120/106/130/100.3	171553

PHÖNIX

Messtechnik GmbH
Salzschlirfer Straße 13
D-60386 Frankfurt/M.
Tel. +49/69/41 67 42 -20
Fax +49/69/41 67 42 -29
sales@phoenix-mt.com
www.phoenix-mt.com

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