

API & ATEX

Pneumatic cylinders, slide units and mounting accessories



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Marked in accordance to 2014/34/EU

  II 2Gc IIC T5
II 2Dc T100°C

Valves, solenoid valves and relevant sub-bases



Solenoid valves	
Series A1, 1/8"	2.50.1 - 2.53.1
Series A1, 1/4"	2.70.1 - 2.73.1
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Series AX1, 1/4"	5.76.1 - 5.79.1
Sub-bases	
Series A1, 1/8"	2.65.1
Series A1, 1/4"	2.85.1
NAMUR solenoid valves	
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Series AX1, 1/4"	5.80.1



Valves ISO 5599/1	
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Marked in accordance to 2014/34/EU

  II 2Gc IIB/IIC T5
II 2Dc T100°C

API & ATEX

Switches



For switches MK500A



CE  II 3D Ex tc IIIC T125° Dc X

Switches
MK500A

1.110.10

For switches MK502A



CE  II 1G Ex ia IIC T4 Ga
II 1D Ex ia IIIC T135° Da

Switches
MK502A

1.110.10

Valves, solenoid valves and relevant sub-bases



Marked in accordance to 2014/34/EU

CE  II 3G Ex nA IIC T5 Gc X
II 3D Ex tc IIIC T95°C Dc X

Coils

ASA12/ATEX

2.200.50

Marked in accordance to 2014/34/EU

CE  II 2G Ex mb IIC T5 Gb
II 2D Ex tb IIIC T95°C IP66 Db

Coils

ASA2/ATEX

2.200.50



Marked in accordance to 2014/34/EU

CE  II 2G IIC T6 Gb
II 2D Ex tb IIIC T85°C IP65/IP67

Connectors

A12209N/ATEX

2.210.50

Marked in accordance to 2014/34/EU

CE  II GD

Connectors

A18209N/ATEX

2.210.50

Stainless steel airline equipment



Stainless steel airline equipment

Series 1/4"

5.140.20

Series 1/2"

5.140.40

Series 1"

5.140.60

Marked in accordance to 2014/34/EU

CE  II 2Gc IIC TX
II 2Dc IIIC TX

Air-reservoirs



Air-reservoirs

SBCV

4.70.1

SBCX

5.180.1

Marked in accordance to 2014/34/EU

CE  II 2GDc IIC TX

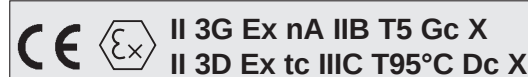
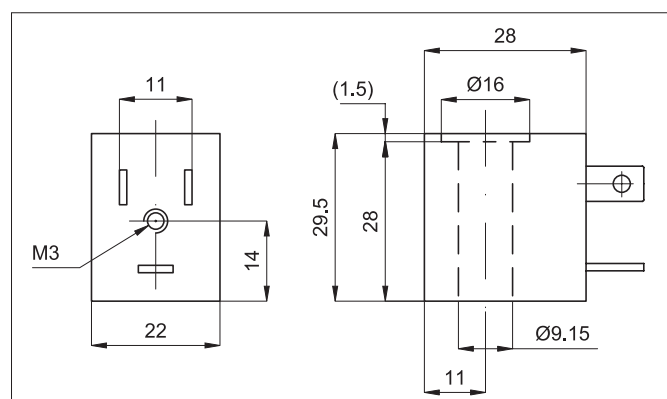
Type ASA12 / ATEX II3

Series of coils conforming to 2014/34/EU Directive for application in potential explosive atmospheres Group II, category 3, Gas and Dust. Isolation class F.

With ATEX certification, for valves series A1.

For the connector type A122... ATEX see page 2.210.50

Voltage		Code	Item
12V	DC	032100X	ASA1201200/ATEXII3
24V	DC	032102X	ASA1202400/ATEXII3
24V	AC	032103X	ASA1202450/ATEXII3
110V	AC	032105X	ASA1211050/ATEXII3
220V	AC	032106X	ASA1222050/ATEXII3



Supplied according to 2014/34/EU - ATEX



Technical data	Direct current	Alternating current
Voltage tolerance	± 10%	± 10%
Frequency	-	50/60 Hz
Electrical consumption	3 W	5 VA
Voltage	12 and 24 V	24, 110, 220 V
Duty cycle	100% ED	
Class protection	IP 65 (with connector already mounted)	
Temperature range	-15 °C ÷ + 50 °C	

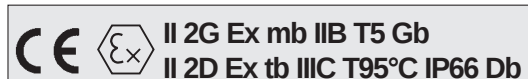
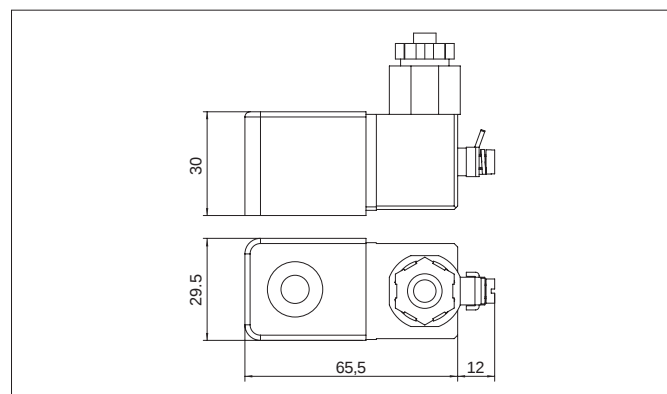
Type ASA2 / ATEX II2

Series of coils size 30 mm conforming to 2014/34/EU Directive for application in potential explosive atmospheres Group II, category 2, Gas and Dust. Isolation class F.

Supplied with 3 mt length cable, these won't need a connector mounted.

With ATEX certification, for valves series A1 / ISO

Voltage		Code	Item
24V	DC	032192	ASA202400/ATEXII2
24V	AC	032193	ASA202450/ATEXII2
48V	AC	032196	ASA204850/ATEXII2
110V	DC	032197	ASA211000/ATEXII2
110V	AC	032194	ASA211050/ATEXII2
230V	AC	032195	ASA222050/ATEXII2



Supplied according to 2014/34/EU - ATEX



Technical data	Direct current	Alternating current
Voltage tolerance	± 10%	± 10%
Frequency	-	50/60 Hz
Electrical consumption	3 W	3,2 VA
Voltage	24 and 110 V	12, 24, 48, 110, 230 V
Duty cycle	100% ED	
Class protection	IP 66	
Temperature range	-50 °C ÷ + 50 °C	

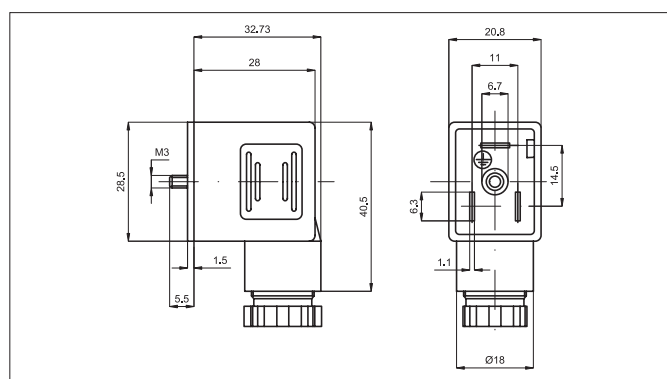
Type A12209N/ATEX

Connector ATEX version full fit the requirements of the ATEX directive 2014/34/EU, class II, Category 2G – 2D.

The ATEX connectors feature a special central fixing screw, which can only be opened with a special tool and pictograms on the connectors for not unmating the connector under voltage and the ATEX logo.

Outer dimension according to EN 175301-803 (formed DIN 43 650).

Standard executions		
Version	Code	Item
Standard, ATEX	032118X	A12209N/ATEX





II 2G IIC T6 Gb
II 2D Ex tb IIIC T85°C IP65/IP67

Supplied according to 2014/34/EU - ATEX



Technical data	
Contact distance	11 mm
Rated voltage	230 V
Rated impuls voltage	4000V
Rated current (40°C)	10 A
Contact resistance	≤ 15 mΩ
Insulation resistance	≥ 100 MΩ
Class protection	IP 65
Temperature range	-25 °C ÷ + 90 °C

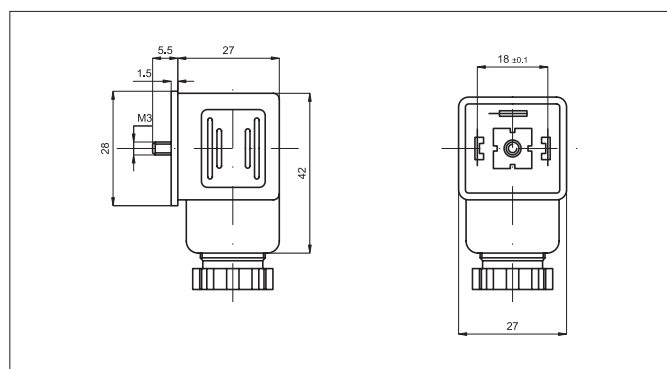
Type A18209N/ATEX

Connector ATEX version full fit the requirements of the ATEX directive 2014/34/EU, class II, Category 3GD.

The ATEX connectors feature a special central fixing screw, which can only be opened with a special tool and pictograms on the connectors for not unmating the connector under voltage and the ATEX logo.

Outer dimension according to EN 175301-803 (formed DIN 43 650).

Standard executions		
Version	Code	Item
Standard, ATEX	032119X	A18209N/ATEX





II 3GD

Supplied according to 2014/34/EU - ATEX



Technical data	
Contact distance	18 mm
Rated voltage	230 V
Rated impuls voltage	4000V
Rated current (40°C)	10 A
Contact resistance	≤ 15 mΩ
Insulation resistance	≥ 100 MΩ
Class protection	IP 65
Temperature range	-25 °C ÷ + 90 °C

Stainless steel valves series

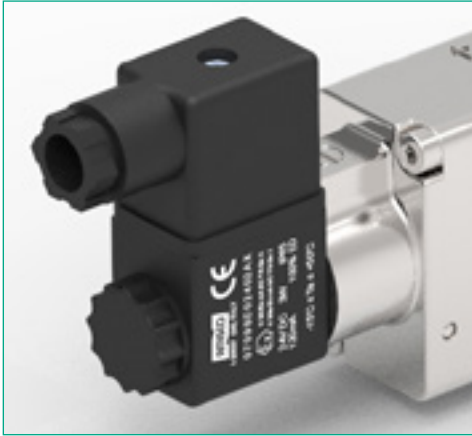
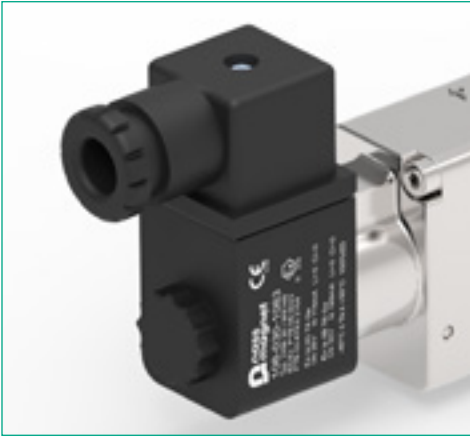
Electrically and pneumatic operated in AISI 316L

The range of API products expands with the “new” series of “AX” valves with functions 3/2, 5/2, 5/3, connections on line on the body and NAMUR interface, electric, electric servo pilot and pneumatic pilot.

They are manufactured in AISI 316L stainless steel, especially suitable in the food, chemical, pharmaceutical, Oil & gas and mining field.

AX valves are manufactured according to 94/9/EC ATEX norm, to be used in environment potentially explosive thanks to different versions of the pilot, electric and pneumatic; with these features we can cover different zone and fields.

The ports are ¼ G and ¼ NPT.



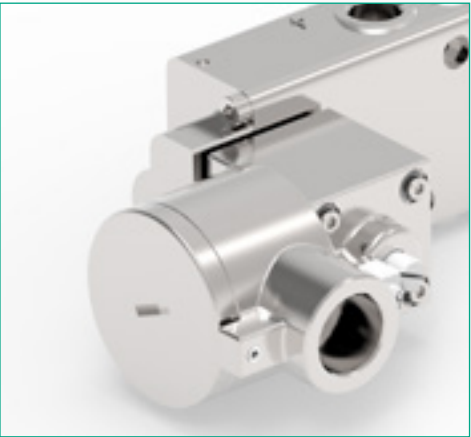
XX: II 3G Ex nA IIC T5 Gc X
II 3D Ex tc IIIC T5 Dc X



XA: II 2G EEx ia IIC T6
Intrinsic safety

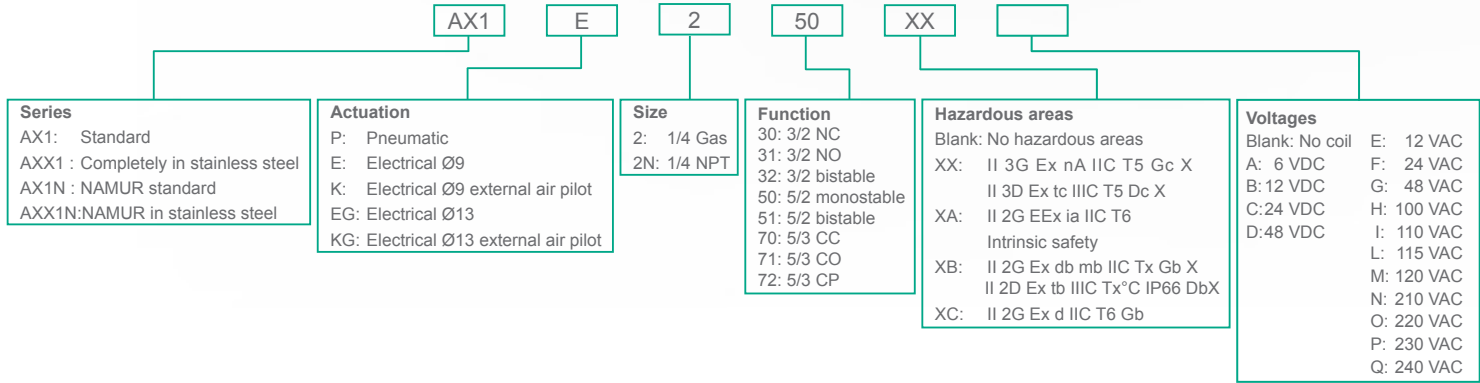


XB: II 2G Ex db mb IIC Tx Gb X
II 2D Ex tb IIIC Tx°C IP66 DbX



XC: II 2G Ex d IIC T6 Gb

How to order



Body 5/2



Body 3/2



Body Namur

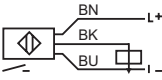
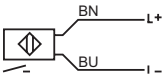
Technical data

Fluid:	Compressed air
Port size:	1/4 Gas - 1/4 NPT
Electrically operated	Monostable 1,5 ÷ 10 bar (1,5 ÷ 12 bar EG/KG actuating) Bistable 1 ÷ 10 bar (1 ÷ 12 bar EG/KG actuating) 3 position 2,5 ÷ 10 bar (2,5 ÷ 12 bar EG/KG actuating)
Pneumatically operated:	Monostable 1,5 ÷ 12 bar Bistable 1 ÷ 12 bar 3 position 2,5 ÷ 12 bar
Temperature range:	-25 ÷ 70°C (-20 ÷ +60°C only for XC)
Orifice:	Ø 8
Flow rate:	1.100 NI/min a 6 bar at ΔP 1 bar
Mounting:	In any position
Manual override:	Bistable

Materials of construction

Body:	Stainless steel AISI 316
Cover:	Stainless steel AISI 316
Spool:	Hard aluminium anodized (AX series) Stainless steel AISI 316(AXX series)
Distancers:	Fortron 1140L4 (AX series) Stainless steel AISI 316 (AXX series)
Seals:	Hydrogenate Nitrile Butadine Rubber (HNBR)

Standard executions

Version	Circuit	ATEX	Code	Item
3 poles, with flying lead flexible cable 2 m.		II3D	071120	MK500A
2 poles, with flying lead flexible cable 6 m.		II1G	071108	MK502A



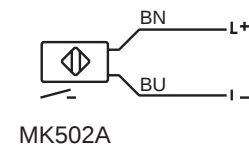
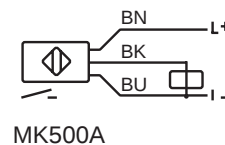
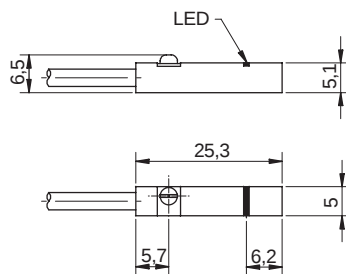
Series of magnetic switches conforming to
2014/34/EU Directive - ATEX

For fixing brackets

see page 1.120.1

For coupling item / switches

see pag. 1.120.5

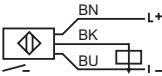
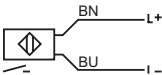


BN: brown
BK: black
BU: blue

Technical data

Item	MK500A	MK502A
Electrical design	DC PNP	Connection to certified intrinsically safe circuits with the max. values $U = 15 \text{ V} / I = 50 \text{ mA} / P = 120 \text{ mW}$
Operating voltage	10 ÷ 30 V DC	8,2 V DC
Current consumption	≤10 mA	≥ 2,2 mA
Protection class	III	III
Reverse polarity protection	SI	-
Power-on delay time	< 30 ms	-
Output function	NO	NO
Voltage drop	< 2,5 V	-
Current rating	100 mA	-
Short-circuit protection	SI	-
Overload protection	SI	-
Switching frequency	10000 Hz	2000 Hz
Magnetic sensitivity	2,8 mT	2 mT
Travel speed	> 10 m/s	> 10 m/s
Hysteresis	< 1,5 mm	< 1 mm
Repeatability	< 0,2 mm	< 0,2 mm
Temperature	-25 °C ÷ +60 °C	-25 °C ÷ +70 °C
Protection	IP 65 / IP 67	IP 65 / IP 67
ATEX certification	 II 3D Ex tc IIIC T125°C Dc X	 II 1G Ex ia IIC T4 Ga  II 1D Ex ia IIIC T135°C Da
Materials	PA - stainless steel	PA - stainless steel
LED	Yellow	Yellow
Cable	PVC / 2m; 3x0.14mm ²	PVC / 6m; 2x0.14mm ²
Weight	59 g	86 g

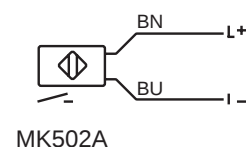
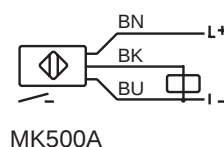
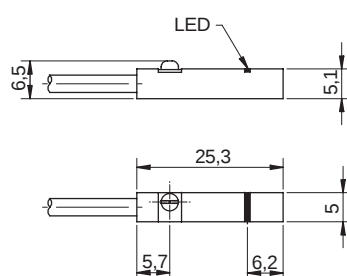
Esecuzioni standard

Versione	Circuito	ATEX	Codice	Articolo
3 poli, uscita diretta con cavo 2 mt.		II3D	071120	MK500A
2 poli, uscita diretta con cavo 6 mt.		II1G	071108	MK502A



Serie di finecorsa magnetici secondo la
Direttiva 2014/34/UE - ATEX

Per staffe di fissaggio vedi pag. 1.120.1
Per accoppiamenti articoli / sensori vedi pag. 1.120.5



BN: marrone
BK: nero
BU: blu

Caratteristiche tecniche

Articolo	MK500A	MK502A
Modello elettrico	DC PNP	Collegamento a circuiti elettrici a sicurezza intrinseca certificati con i valori massimi $U = 15 \text{ V} / I = 50 \text{ mA} / P = 120 \text{ mW}$
Tensione	10 ÷ 30 V DC	8,2 V DC
Corrente assorbita	≤10 mA	≥ 2,2 mA
Classe d'isolamento	III	III
Protezione da inversione di polarità	SI	-
Ritardo alla disponibilità	< 30 ms	-
Funzione dell'uscita	NO	NO
Caduta di tensione	< 2,5 V	-
Capacità di corrente	100 mA	-
Protezione da cortocircuito	SI	-
Resistente a sovraccarico	SI	-
Frequenza di commutazione	10000 Hz	2000 Hz
Sensibilità di reazione	2,8 mT	2 mT
Velocità di passaggio	> 10 m/s	> 10 m/s
Isteresi	< 1,5 mm	< 1 mm
Riproducibilità	< 0,2 mm	< 0,2 mm
Temperatura	-25 °C ÷ +60 °C	-25 °C ÷ +70 °C
Grado di protezione	IP 65 / IP 67	IP 65 / IP 67
Certificazione ATEX	 II 3D Ex tc IIIC T125°C Dc X	 II 1G Ex ia IIC T4 Ga  II 1D Ex ia IIIC T135°C Da
Materiali	PA - Inox	PA - Inox
LED	Giallo	Giallo
Cavo	PVC / 2m; 3x0.14mm ²	PVC / 6m; 2x0.14mm ²
Peso	59 g	86 g