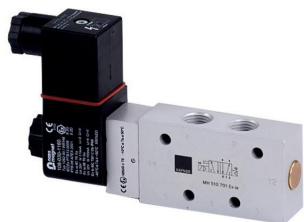


Distributeurs pneumatiques ATEX pour ambiances explosibles EEx ia - Corps aluminium - Plage de température standard



Material: Aluminum, anodized
 Zone: 1, 2, 21, 22
 Temperature range: -10°C ... +50°C
 Ignition protection type: Ex ia (intrinsically safe)
 Temperature class: T6

Marking on valve

II 2 G Ex h IIC T6 Gb
 -10°C ≤ Ta ≤ +50°C
 II 2 D Ex h IIIC T80°C
 Db -10°C ≤ Ta ≤ +50°C

Please note:
 Maximum operating pressure for valves with Ex ia solenoid system is 8 bar!

Coil is 30 mm wide!

Delivery contains valve with the appropriate operator system, coil, connector, manual and declaration of conformity.

The following solenoid valves are available:

| Type | Function | Port size | Installation |
|---------------------|-----------------------------|-------------------|--------------|
| MH 210 501 Ex ia | 2/2-way, single sol. | G 1/8" | in-line |
| MH 210 701 Ex ia | 2/2-way, single sol. | G 1/4" | in-line |
| MH 311 012 Ex ia | 3/2-way direct acting | M5 | in-line |
| MH 311 015 Ex ia | 3/2-way direct acting | G 1/8" | in-line |
| MH 310 501 Ex ia | 3/2-way, single sol. | G 1/8" | in-line |
| MOH 310 501 Ex ia | 3/2-way, n.o. single sol. | G 1/8" | in-line |
| MH 310 701 Ex ia | 3/2-way, single sol. | G 1/4" - 1/4" NPT | in-line |
| MOH 310 701 Ex ia | 3/2-way, n.o. single sol. | G 1/4" - 1/4" NPT | in-line |
| MH 310 801 Ex ia | 3/2-way, single sol. | G 1/4" | in-line |
| MOH 310 801 Ex ia | 3/2-way, n.o. single sol. | G 1/4" | in-line |
| MH 310 101 Ex ia | 3/2-way, single sol. | G 3/8" | in-line |
| MOH 310 101 Ex ia | 3/2-way, n.o. single sol. | G 3/8" | in-line |
| MH 310 121 Ex ia | 3/2-way, single sol. | G 1/2" - 1/2" NPT | in-line |
| MOH 310 121 Ex ia | 3/2-way, n.o. single sol. | G 1/2" - 1/2" NPT | in-line |
| MH 310 101 G Ex ia | 3/2-way, single sol. | G 3/8" | dual use* |
| MOH 310 101 G Ex ia | 3/2-way, n.o. single sol. | G 3/8" | dual use* |
| MH 310 121 G Ex ia | 3/2-way, single sol. | G 1/2" | dual use* |
| MOH 310 121 G Ex ia | 3/2-way, n.o. single sol. | G 1/2" | dual use* |
| MH 320 501 Ex ia | 3/2-way, double sol. | G 1/8" | in-line |
| MH 320 701 Ex ia | 3/2-way, double sol. | G 1/4" | in-line |
| MH 320 801 Ex ia | 3/2-way, double sol. | G 1/4" | in-line |
| MH 320 101 Ex ia | 3/2-way, double sol. | G 3/8" | in-line |
| MH 320 121 Ex ia | 3/2-way, double sol. | G 1/2" - 1/2" NPT | in-line |
| MH 320 121 G Ex ia | 3/2-way, double sol. | G 1/2" | dual use* |
| MH 510 501 Ex ia | 5/2-way, single sol. | G 1/8" | in-line |
| MH 510 701 Ex ia | 5/2-way, single sol. | G 1/4" - 1/4" NPT | in-line |
| MH 510 801 Ex ia | 5/2-way, single sol. | G 1/4" | in-line |
| MH 510 101 Ex ia | 5/2-way, single sol. | G 3/8" | in-line |
| MH 510 121 Ex ia | 5/2-way, single sol. | G 1/2" - 1/2" NPT | in-line |
| MH 510 101 G Ex ia | 5/2-way, single sol. | G 3/8" | dual use* |
| MH 510 121 G Ex ia | 5/2-way, single sol. | G 1/2" | dual use* |
| MH 520 501 Ex ia | 5/2-way, double sol. | G 1/8" | in-line |
| MH 520 701 Ex ia | 5/2-way, double sol. | G 1/4" - 1/4" NPT | in-line |
| MH 520 801 Ex ia | 5/2-way, double sol. | G 1/4" | in-line |
| MH 520 101 Ex ia | 5/2-way, double sol. | G 3/8" | in-line |
| MH 520 121 Ex ia | 5/2-way, double sol. | G 1/2" - 1/2" NPT | in-line |
| MH 520 101 G Ex ia | 5/2-way, double sol. | G 3/8" | dual use* |
| MH 520 121 G Ex ia | 5/2-way, double sol. | G 1/2" | dual use* |
| MH 53_ 501 Ex ia | 5/3-way, different versions | G 1/8" | in-line |
| MH 53_ 701 Ex ia | 5/3-way, different versions | G 1/4" - 1/4" NPT | in-line |
| MH 53_ 801 Ex ia | 5/3-way, different versions | G 1/4" | in-line |
| MH 53_ 101 Ex ia | 5/3-way, different versions | G 3/8" | in-line |
| MH 53_ 121 Ex ia | 5/3-way, different versions | G 1/2" - 1/2" NPT | in-line |
| MH 53_ 101 G Ex ia | 5/3-way, different versions | G 3/8" | dual use* |
| MH 53_ 121 G Ex ia | 5/3-way, different versions | G 1/2" | dual use* |

| Valves with interface according to NAMUR-standard | | | |
|---------------------------------------------------|-----------------------------|-------------------|------------|
| MNH 350 701 Ex ia | 3/2-way & 5/2-way | G 1/4" - 1/4" NPT | 1/4" NAMUR |
| MNH 310 701 Ex ia | 3/2-way, single sol. | G 1/4" - 1/4" NPT | 1/4" NAMUR |
| MNH 310 711 Ex ia | 3/2-way, single sol. | G 1/4" | 1/4" NAMUR |
| MNH 310 121 Ex ia | 3/2-way, single sol. | G 1/2" - 1/2" NPT | 1/2" NAMUR |
| MNH 510 701 Ex ia | 5/2-way, single sol. | G 1/4" - 1/4" NPT | 1/4" NAMUR |
| MNH 510 711 Ex ia | 5/2-way, single sol. | G 1/4" | 1/4" NAMUR |
| MNH 510 121 Ex ia | 5/2-way, single sol. | G 1/2" - 1/2" NPT | 1/2" NAMUR |
| MNH 520 701 Ex ia | 5/2-way, double sol. | G 1/4" - 1/4" NPT | 1/4" NAMUR |
| MNH 520 121 Ex ia | 5/2-way, double sol. | G 1/2" - 1/2" NPT | 1/2" NAMUR |
| MNH 53_ 701 Ex ia | 5/3-way, different versions | G 1/4" - 1/4" NPT | 1/4" NAMUR |
| MNH 53_ 121 Ex ia | 5/3-way, centre closed | G 1/2" - 1/2" NPT | 1/2" NAMUR |

* dual use valves can either be used in-line or on a manifold plate.

Distributeurs pneumatiques ATEX pour ambiances explosibles EEx ia - Corps aluminium - Basse température



Material: Aluminum, anodized
 Zone: 1, 2, 21, 22
 Temperature range: -40°C ... +50°C ❄️
 Ignition protection type: Ex ia (intrinsically safe)
 Temperature class: T6

Marking on valve

CE Ex II 2 G Ex h IIC T6 Gb
 -40°C ≤ Ta ≤ +50°C
 CE Ex II 2 D Ex h IIC T80°C
 Db -40°C ≤ Ta ≤ +50°C

Please note:

Maximum operating pressure for valves with Ex ia solenoid system is 8 bar!

Coil is 30 mm wide!

The following solenoid valves are available:

| Type | Function | Port size | Installation |
|-----------------------|-----------------------------|-------------------|--------------|
| MH 311 012 TT Ex ia | 3/2-way direct acting | M5 | in-line |
| MH 311 015 TT Ex ia | 3/2-way direct acting | G 1/8" | in-line |
| MH 310 501 TT Ex ia | 3/2-way, single sol. | G 1/8" | in-line |
| MOH 310 501 TT Ex ia | 3/2-way, n.o. single sol. | G 1/8" | in-line |
| MH 310 701 GTT Ex ia | 3/2-way, single sol. | G 1/4" - 1/4" NPT | dual use* |
| MOH 310 701 GTT Ex ia | 3/2-way, n.o. single sol. | G 1/4" - 1/4" NPT | dual use* |
| MH 320 501 TT Ex ia | 3/2-way, double sol. | G 1/8" | in-line |
| MH 320 701 GTT Ex ia | 3/2-way, double sol. | G 1/4" | dual use* |
| MH 510 501 GTT Ex ia | 5/2-way, single sol. | G 1/8" | dual use* |
| MH 510 701 GTT Ex ia | 5/2-way, single sol. | G 1/4" - 1/4" NPT | dual use* |
| MH 520 501 GTT Ex ia | 5/2-way, double sol. | G 1/8" | dual use* |
| MH 520 701 GTT Ex ia | 5/2-way, double sol. | G 1/4" - 1/4" NPT | dual use* |
| MH 53_ 501 GTT Ex ia | 5/3-way, different versions | G 1/8" | dual use* |
| MH 53_ 701 GTT Ex ia | 5/3-way, different versions | G 1/4" - 1/4" NPT | dual use* |

Valves with interface according to NAMUR-standard

| | | | |
|----------------------|------------------------|-------------------|------------|
| MNH 310 701 TT Ex ia | 3/2-way, single sol. | G 1/4" - 1/4" NPT | 1/4" NAMUR |
| MNH 510 701 TT Ex ia | 5/2-way, single sol. | G 1/4" - 1/4" NPT | 1/4" NAMUR |
| MNH 510 711 TT Ex ia | 5/2-way, single sol. | G 1/4" | 1/4" NAMUR |
| MNH 520 701 TT Ex ia | 5/2-way, double sol. | G 1/4" - 1/4" NPT | 1/4" NAMUR |
| MNH 531 701 TT Ex ia | 5/3-way, centre closed | G 1/4" - 1/4" NPT | 1/4" NAMUR |

* dual use valves can either be used in-line or on a manifold plate.

Delivery contains valve with the appropriate operator system, coil, manual and declaration of conformity.

MA 30 EEx ia tD II CT6 24DC



When this solenoid system is used in combination with „ATEX certified“ mechanical components conforming EN 13463-1:2001 and PrEN 13463-5:2000, the entire valve can be used in explosive hazardous environment zone 1, 2, 21, and 22.

ATEX approved intrinsic safety coil and connector for gas and dust explosion-hazardous environment. System is also IEC-Ex approved. Electrical connection according to DIN EN 175301-803-A / ISO 4400.

Coil:

Electrical characteristics: 21,6... 28 V DC
 >37 mA
 final temperature rise 18 K
 275 Ohm +/- 8 %

Relative duty cycle: 100 %

Temperature range: -40°... +50° C

Insulation class of insulating materials according to DIN VDE 0580: F

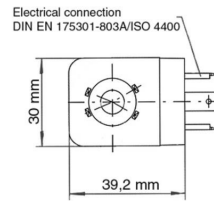
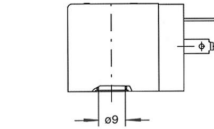
Protection level with connector according to EN 60529: IP 65

Moulding material: Thermoset resin (Epoxy)

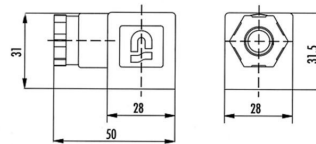
Marking on coil: II 2G Ex ia IIB/IIC T6
 II 2D Ex tb IIIC T80°C

Barrier:

Electrical characteristics: 21,6... 28 V DC
 Admissible peak value: 28 V DC
 115 mA
 1,6 W



MA 30 EEx ia tD II CT6 24DC



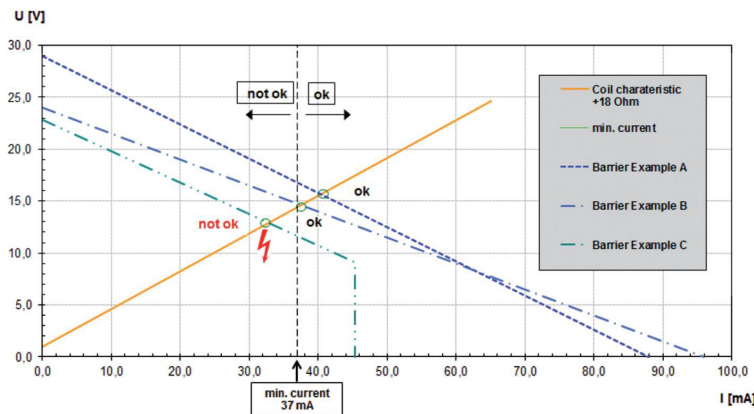
ST 30 Ex ia

Order Code: MA 30 EEx ia tD II CT6 24DC

As the coil is 30 mm wide, a spacer plate called „ZPN 5“ has to be used, in case of combination with our NAMUR-valve series 700 refer to page 2.10.12.

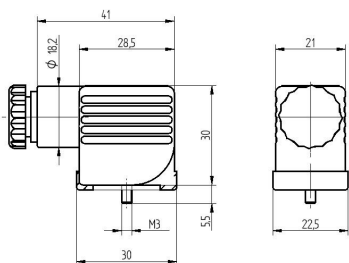
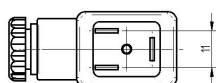
ST 30 Ex ia is an ATEX approved connector, especially designed for being used in combination with the intrinsic safety coil. For dust approval (zone 21), this original connector is mandatory. Delivery includes connector ST 30 Ex ia, flat nitril gasket and fixing screw (zinc-plated steel). Form according to A - ISO 4400, no LED, no varistor, operating voltage 0 – 250 V, max. current 10 A, cable diameter 6 – 8 mm.

How to select a suitable barrier:
I/U Characteristics supply units/solenoid coil

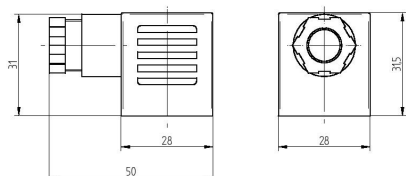
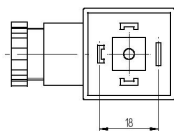


The ATEX approval is only valid as long as the associated components are used.

Connecteur électrique - Pour ambiances explosibles (ATEX) - Compatible avec bobines ST22 / ST30 EEx ia et EEx nA



ST 22 Ex



ST 30 Ex ia / ST 30 Ex nA



Connectors as accessories for explosion-proof coils.

Type ST 22 Ex

Connector to be used in combination with MA 22 Ex nA. Connector is classified for zone 2 and 22 cat. IIG/D. Includes flat seal.

Type ST 30 Ex ia

Connector which is to be used in combination with the coil type MA 30 Ex ia tD II CT6 24DC. Connector has no separate ATEX certification. Connector is classified for zone 21, cat. IID. Can also be used in combination with intrinsically safe coils in zone 1 (cat. IIG). Includes flat silicon seal.

Type ST 30 Ex nA

Connector to be used in combination with MA 30 Ex nA. Connector is classified for zone 2 and 22, cat. IIIG and IID. Includes profiled NBR seal.

Other connectors are available on request.

| Type | Form | LED | VAR | Operat. voltage | Max. current | Cable diameter |
|-------------|-------------|-----|-----|-----------------|--------------|----------------|
| ST 22 Ex | Industrial | no | no | 0 - 250 V | 10 A | 6 - 8 mm |
| ST 30 Ex ia | A, ISO 4400 | no | no | 0 - 250 V | 10 A | 6 - 8 mm |
| ST 30 Ex nA | A, ISO 4400 | no | no | 0 - 250 V | 10 A | 4 - 8 mm |