



## ELECTRICAL CHARACTERISTICS

|  |  |
|--|--|
| <b>Coil insulation class</b>           | H  |
| <b>Coil connection</b>                 | Screw terminals                          |
| <b>Electrical safety</b>               | IEC 335                                  |
| <b>Electrical enclosure protection</b> | Moulded IP65 (EN 60529)                  |
| <b>Standard voltages</b>               | DC (=) : 24V - 48V                       |
| (Other voltages and 60 Hz on request)  | AC (~) : 24V - 48V - 115V - 230V / 50 Hz |

## SAFETY CODE

Ex d IIC T6-T5 Gb  
Ex t IIIC T85°C-T100°C Db IP65

| operator type | power ratings           |           | operator ambient temperature range (TS)<br>(C°) | safety code                      | replacement coil /kit |          | type <sup>(1)</sup> |
|---------------|-------------------------|-----------|---|----------------------------------|-----------------------|----------|---------------------|
|               | hot/cold <sup>(2)</sup> | hot/cold  |   |                                  | ~                     | =        |                     |
|               | ~<br>(W)                | =<br>(W)  |   |                                  |                       |          |                     |
| MB            | 13/18                   | 10,4/12,5 | -40 to +60                                      | Ex d IIC Gb<br>Ex t IIIC Db IP65 | 43004053              | 43002092 | 01                  |

<sup>(1)</sup> Refer to the dimensional drawings on the following page. <sup>(2)</sup> AC: Rectified coil construction

## TEMPERATURE CLASSIFICATION

operator AC (~)

| Pn  | max. ambient temp. °C <sup>(3)</sup> |               |
|-----|--------------------------------------|---------------|
|     | surface temperature                  |               |
|     | T6                                   | T5            |
| (W) | 85°C                                 | 100°C         |
| 18  | 50                                   | 60 (SIL = 65) |

operator DC (=)

| Pn   | max. ambient temp. °C <sup>(3)</sup> |               |
|------|--------------------------------------|---------------|
|      | surface temperature                  |               |
|      | T6                                   | T5            |
| (W)  | 85°C                                 | 100°C         |
| 12,5 | 50                                   | 60 (SIL = 65) |

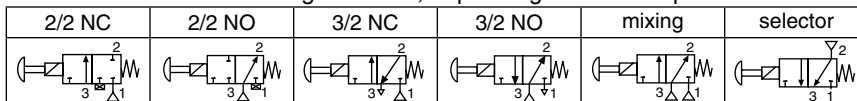
<sup>(3)</sup> Contact us for temperatures above +60°C.

## OPTIONS

- IECEx-ATEX cable gland certified to ATEX, 3/4 NPT, pre-installed on solenoid valve, supplied with cable clamp (see "Explosionproof Solenoids" section)
  - for non-armoured cable of 8,5 to 16 mm dia., catalogue number **660510**
  - for armoured cable of ID 8,5 to 16 mm / OD 12 to 21 mm, catalogue number **660514**
- Other cable diameters
- Exhaust protector:
  - bronze for brass body, catalogue number **560595**
  - stainless steel for stainless steel body, catalogue number **560594**
- Oxygen service (min. -25°C; contact us for lower temperatures), catalogue number **970530**
- Temperatures down to -50°C, catalogue number **610536**
- Marine paint/anti-corrosive or dust environments (solenoid operator enclosure only)

## INSTALLATION

- Always install solenoid valves with body vertical and solenoid upward
- Can be used for the following functions, depending on how the ports are connected:

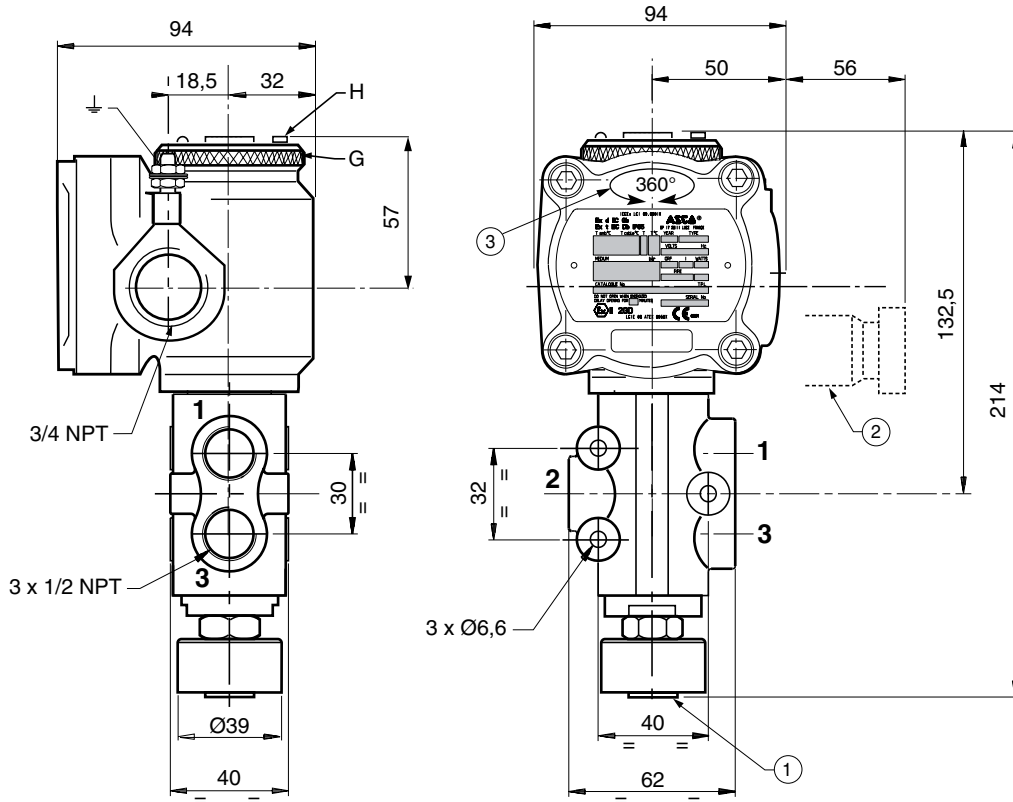


- Solenoid valves have 3 mounting holes in body
- IEC 61508 Functional Safety, allowable temperature range: -40°C to +65°C. Probability of failure on demand, contact us
- Threaded pipe connection is standard NPT (ANSI 1.20.3)
- Installation/maintenance instructions are included with each valve

### DIMENSIONS (mm), WEIGHT (kg)



**TYPE 01:**  
 MB Solenoid  
 Aluminium  
 EN-IEC: 13463-1, 60079-0, 60079-1 and 6079-31

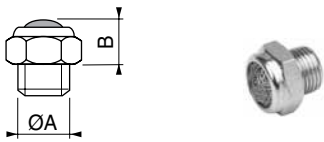


| type | power level | body            | weight <sup>(1)</sup> |
|------|-------------|-----------------|-----------------------|
| 01   | basic power | brass           | 2,5                   |
|      |             | stainless steel | 2,1                   |

<sup>(1)</sup> including enclosure and coil.

- ① Manual reset operator location.
- ② Explosionproof cable gland with clamp according to IECEx-ATEX.
- ③ To change the orientation of the solenoid operator relative to the ports, the screw (H) and the nut on the cover (G) must be loosened.

### ACCESSORIES



|    |     |
|----|-----|
| ØA | 1/2 |
| B  | 14  |

**stainless steel exhaust protector,**  
 catalogue number **34600481**

