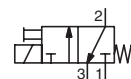




# SOLENOID VALVES

ISO 15218 (CNOMO, size 30) interface  
direct operated, pad mounting body  
subbases for instant fittings or 1/8 thread

NC



**3/2**  
Series  
**190**

## FEATURES

- CNOMO pad-mount version for valve piloting applications
- Compact size and low weight for easy installation on single or joinable subbases
- AC/DC interchangeability of the solenoid operator without any need for disassembly of the valve
- Version with M12 connection with visual indication and peak voltage suppression conforming to "UL" standards
- Flexible installation on joinable subbases
- Manual operator as standard
- The solenoid valves satisfy all relevant EU directives

## GENERAL

**Differential pressure** See "SPECIFICATIONS" [1 bar = 100 kPa]  
**Maximum allowable pressure** 16 bar  
**Response time** 5 ms

| fluids (*)     | temperature range (TS) | seal materials (*) |
|----------------|------------------------|--------------------|
| air, inert gas | - 10°C to + 60°C       | NBR (nitrile)      |

## MATERIALS IN CONTACT WITH FLUID

(\*) Ensure that the compatibility of the fluids in contact with the materials is verified

|                         |                  |
|-------------------------|------------------|
| Body                    | PA, glass-filled |
| Core tube               | Stainless steel  |
| Core and plugnut        | Stainless steel  |
| Internal parts, springs | Stainless steel  |
| Seals                   | NBR              |
| Shading coil            | Copper           |

## CONSTRUCTION

Mounting pad ISO 15218 (CNOMO 06-05-80 / NF E 49066, size 30)

## ELECTRICAL CHARACTERISTICS

Coil insulation class F  
 Connector Spade plug (cable Ø 6-10 mm) or M12  
 ISO 4400 / EN 175301-803, form A  
 or CNOMO E03.62.520.N (M12)

## Connector specification

## Electrical safety

## Electrical enclosure protection

## Standard voltages

(Other voltages and 60 Hz on request)

IEC 335  
 Moulded IP65 (EN 60529)  
 DC (=): 24V - 48V (M12: 24V + LED and protection)  
 AC (~): 24V - 48V - 115V - 230V / 50 Hz

| - | power ratings |              |               |       | operator<br>ambient<br>temperature<br>range (TS)<br>(C°) | replacement coil |          | type <sup>(1)</sup> |
|---|---------------|--------------|---------------|-------|----------------------------------------------------------|------------------|----------|---------------------|
|   | inrush<br>~   | holding<br>~ | hot/cold<br>= |       |                                                          | ~                | =        |                     |
|   | (VA)          | (VA)         | (W)           | (W)   |                                                          | 230 V/50 Hz      | 24 V DC  |                     |
| - | 9             | 4            | 3             | 3 / 3 | -10 to + 60                                              | 43004472         | 43004473 | 01                  |
| - |               |              |               |       |                                                          | -                | 43005525 | 06                  |

<sup>(1)</sup> Refer to the dimensional drawings on the following page.

## SPECIFICATIONS

| pipe<br>size                   | orifice<br>size |               | flow<br>at 6 bar<br>l/min (ANR) |       | flow<br>coefficient<br>Kv |                  | operating pressure<br>differential (bar) |           |    | power coil<br>(W) |   | without<br>man. operator | maintained<br>man. operator | impulse<br>man. operator | button<br>man. operator | catalogue number  |                      |                   |
|--------------------------------|-----------------|---------------|---------------------------------|-------|---------------------------|------------------|------------------------------------------|-----------|----|-------------------|---|--------------------------|-----------------------------|--------------------------|-------------------------|-------------------|----------------------|-------------------|
|                                | 1 → 2<br>(mm)   | 2 → 3<br>(mm) | 1 → 2                           | 2 → 3 | 1 → 2<br>(l/min)          | 2 → 3<br>(l/min) | min.                                     | max. (PS) |    | ~                 | = |                          |                             |                          |                         | with<br>connector | without<br>connector | M12<br>connection |
|                                |                 |               |                                 |       |                           |                  |                                          | air (*)   |    |                   |   |                          |                             |                          |                         |                   |                      |                   |
|                                |                 |               |                                 |       |                           |                  |                                          | ~         | =  |                   |   |                          |                             |                          |                         |                   |                      |                   |
| NC - Normally closed           |                 |               |                                 |       |                           |                  |                                          |           |    |                   |   |                          |                             |                          |                         |                   |                      |                   |
| pad<br>mounting <sup>(2)</sup> | 1,6             | 1,5           | 70                              | 84    | 1                         | 1,2              | 0                                        | 10        | 10 | 3                 | 3 | ×                        |                             |                          |                         | 19000005          | 19000013             | 19000043          |
|                                |                 |               |                                 |       |                           |                  |                                          |           |    |                   |   | ●                        |                             |                          |                         | 19000006          | 19000014             | 19000044          |
|                                |                 |               |                                 |       |                           |                  |                                          |           |    |                   |   | ▼                        |                             |                          |                         | 19000017          | 19000018             | 19000046          |
|                                |                 |               |                                 |       |                           |                  |                                          |           |    |                   |   | ■                        |                             |                          |                         | 19000008          | 19000016             | 19000045          |

## SUBBASES

| pipe<br>size                       | designation                                                                                                                | composition | catalogue number        |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------|
| <b>6/6 polyamide subbases</b>      |                                                                                                                            |             |                         |
| instant<br>fittings <sup>(3)</sup> | single subbase (instant fittings OD 4 mm)                                                                                  |             | 35300069                |
|                                    | joinable subbase (instant fittings OD 4 mm)                                                                                |             | 35300070                |
|                                    | set of 2 joinable end subbases,<br>right-hand pressure intake,<br>endpieces with instant fittings OD 6 mm                  |             | 35300071                |
|                                    | set of 2 joinable end subbases,<br>right-hand and/or left-hand pressure intake,<br>endpieces with instant fittings OD 6 mm |             | 35300072 <sup>(4)</sup> |
| <b>Zamak subbases</b>              |                                                                                                                            |             |                         |
| G 1/8 <sup>(3)</sup><br>tapped     | laterally-connected single subbase                                                                                         |             | 35300047                |
|                                    | laterally-connected joinable subbase                                                                                       |             | 35300048                |

<sup>(2)</sup> Port 3: M5.

<sup>(3)</sup> These subbases can be mounted on omega rail to EN 50022 using 2 clips (clips sold in packs of 10, catalogue number: 33400036).

<sup>(4)</sup> The equipment can be used for two different pressure intakes, supplied with one blanking plug to cover unused port.

All leaflets are available on: [www.asco.com](http://www.asco.com)

Solenoid valves (3/2) - 29

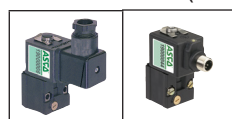
### OPTIONS

- Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 2014/34/EU (see "Explosionproof solenoids" section): Ex mb (PV), **PV19000005/6/17/8** / Potentially explosive atmospheres (SG), zone 22
- Straight M12 connector (IP67 protection with connector correctly installed): with 5 m cable: catalogue number **88130212**
- Right-angle M12 connector (IP67 protection with connector correctly installed), with 5 m cable: catalogue number **88130213**
- Catalogue number (without connector) + connector catalogue number (with integrated LED indicator and electrical protection): 24 V (~/-), **88122603** - 48 V (~/-), **88122604** - 115 V (~), **88122605** - 230 V (~), **88122608**
- M5 flow control regulator to fit port 3, catalogue number: **34600380**
- Plug with visual indication and peak voltage suppression or with cable length of 2 m (see Solenoids, Coils & Accessories section)

### INSTALLATION

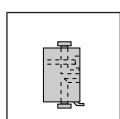
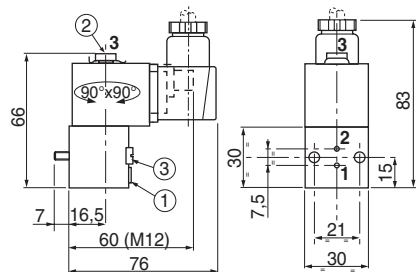
- The solenoid valves can be mounted in any position without affecting operation
- Mounting on single or joinable subbases
- ATEX 2014/34/EU versions (options "SG" and "PV") can be installed on single (all versions) or joinable zinc diecast subbases
- Pipe connections 1/8 have standard thread according to ISO 228/1
- Installation/maintenance instructions are included with each valve

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



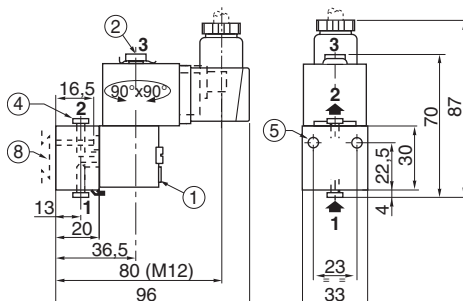
**TYPE 01-06**  
Spade plug /M12  
IEC 335 /  
EN 175301-803 (11 mm)  
E03.62.520.N, IP65

19000005 to 19000045



**TYPE 02**  
Single instant fitting  
subbase  
Polyamide

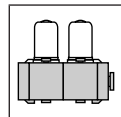
35300069



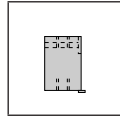
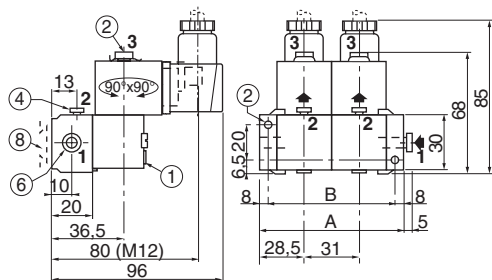
### ORDERING EXAMPLES:

|              |                 |
|--------------|-----------------|
| 19000006     | 230V / 50 Hz    |
| 19000044     | 24V / DC        |
| basic number | voltage options |

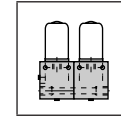
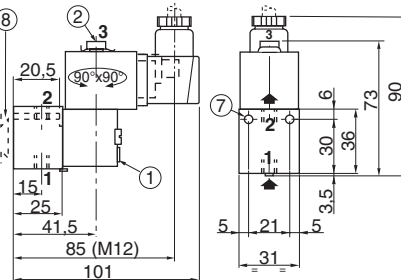
- Manual operator location
- Port 3: M5, depth 5,5 mm
- Mounting: two CM4 x 33,5 screws
- Instant-fitting connection for OD 4 mm tube
- Mounting: two dia. 3,5 mm securing holes, dia. 6,5 mm counter-bores, depth 3,5 mm
- Instant-fitting connection for OD 6 mm tube
- Mounting: two dia. 4,5 mm securing holes
- Adaptable clips
- Subbase mounting hole, adapter



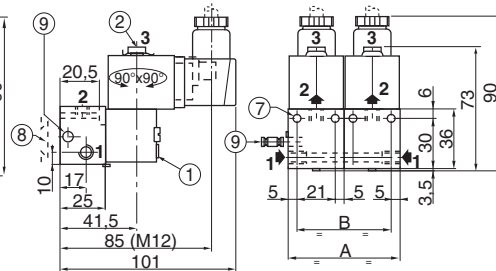
**TYPE 03**  
Joinable instant fitting subbase  
Polyamide  
**35300070**  
**35300071** (set of 2)



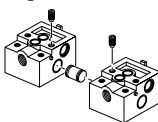
**TYPE 04**  
Single subbase  
Zamak  
**35300047**



**TYPE 05**  
Joinable subbase  
Zamak  
**35300048**



Joinable subbases assembled with adapter locked by sunk set screws.  
For DIN rail mounting: see type 03.

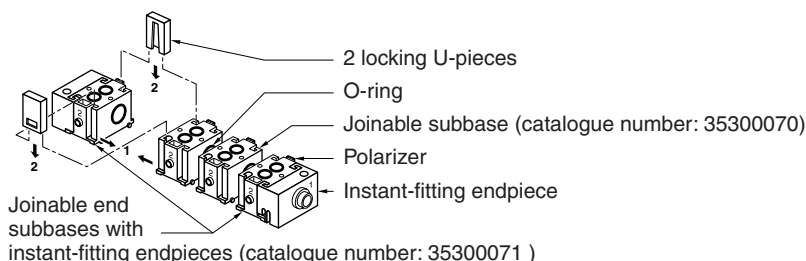


Right-hand pressure intake option or 2 different pressure intakes by procuring the set of two end subbases with endpieces (catalogue number: 35300072).  
When mounted on DIN rail, it is recommended to use a securing clip on the end subbases as well as on the central subbase.

| type | weight <sup>(1)</sup> |
|------|-----------------------|
| 01   | 0,180                 |
| 02   | 0,135                 |
| 04   | 0,185                 |
| 06   | 0,170                 |

<sup>(1)</sup> including coil and connector.  
(except M12 connection type 06)

| number of subbases | type 03 |     | type 05 |     |
|--------------------|---------|-----|---------|-----|
|                    | A       | B   | A       | B   |
| 2                  | 88      | 72  | 62      | 52  |
| 3                  | 119     | 103 | 93      | 83  |
| 4                  | 150     | 134 | 124     | 114 |
| 5                  | 181     | 165 | 155     | 145 |
| 6                  | 212     | 196 | 186     | 176 |
| 7                  | 243     | 227 | 217     | 207 |
| 8                  | 274     | 258 | 248     | 238 |



| type  | weight <sup>(2)</sup> |       |       |       |       |       |       |
|-------|-----------------------|-------|-------|-------|-------|-------|-------|
|       | number of subbases    |       |       |       |       |       |       |
|       | 2                     | 3     | 4     | 5     | 6     | 7     | 8     |
| 03+01 | 0,415                 | 0,610 | 0,805 | 1,000 | 1,195 | 1,390 | 1,585 |
| 03+06 | 0,395                 | 0,580 | 0,765 | 0,950 | 1,135 | 1,320 | 1,505 |
| 05+01 | 0,490                 | 0,735 | 0,980 | 1,225 | 1,470 | 1,715 | 1,960 |
| 05+06 | 0,470                 | 0,705 | 0,940 | 1,175 | 1,410 | 1,645 | 1,880 |

<sup>(2)</sup> Including seals, set screws and joining unit.

All leaflets are available on: [www.ascocom](http://www.ascocom)



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