3 way, NC/NO/U, Direct Operated, ISO 15218 (CNOMO, size 30) interface, Pad Mounting Body, Instant Fitting or 1/8" - 1/4" Subbases

3/2 Series 192

Features & Benefits

- 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
- 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 7 ms

| fluids (*) | temperature range (TS) | seal materials (*) | | |
|----------------|------------------------|--------------------|--|--|
| air, inert gas | - 10°C à + 60°C | NBR (nitrile) | | |
| un, mere gus | -10 Ca + 00 C | PUR (polyurethane) | | |

Materials in contact with fluid

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

Body PAM, glass-filled Core tube Stainless steel Core and plugnut Stainless steel Internal parts, springs Stainless steel NBR, PUR **Shading coil** Copper



Mounting pad NC ISO 15218 (CNOMO 06-05-80 / NF E49-066, size 30)

> NO-U NF E 49-066

Electrical characteristics

Coil insulation class

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

Electrical safety IEC 335

Electrical enclosure protection Moulded IP67 (EN 60529)

Moulded IP65, M12 version

A.P.O. - ELMOS v.o.s., Pražská 90, 509 01 Nová Paka, Tel.: +420 493 504 261, E-mail: apo@apoelmos.cz, Internet: www.apoelmos.cz

DC (=): 24V - 48V (M12: 24 V + LED and protection) Standard voltages

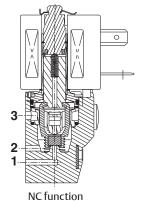
(Other voltages and 60 Hz on request) AC (~): 24V - 48V - 115V - 230V / 50 Hz

| power ratings | | | | operator | replacen | | |
|---------------|------|------|----------|------------------------|-------------|----------|--------|
| inrush | holo | ding | hot/cold | ambient temperature | Теріасен | tvpe (1) | |
| ~ | - | - | = | range (TS) | ~ | = | type 🗤 |
| (VA) | (VA) | (W) | (W) | (C°) | 230 V/50 Hz | 24 V DC | |
| 9 | 1 | 2 | 3/3 | -10 to + 60 | 43005627 | 43005642 | 01 |
| 9 | 4 | ٥ | 3/3 | -1010+00 | - | 43005664 | 06 |

⁽¹⁾ Refer to the dimensional drawings on the following page.







Specifications

| pipe | orii si: | | | w bar | flo | icient | | J . | ng pressure ential (bar) max. (PS) | | ator | d ator | ator | button man. operator | Catalog number | | | |
|--------------|-------------|--------|---------|----------|----------|---------|----------|------------|--|-----|------|-----------|-------------|-------------------------|----------------|-----------|-----------|------------|
| size | | | I/min | (ANR) | K | .V | | max | (PS) | Š | 2 | per | ine per | e per | per | with | without | M12 |
| 3.20 | 1→2 | 2→3 | 1 → 2 | 2→3 | 1 → 2 | 2→3 | min. | air | (*) | ۵ | | ου 0.1 | nta 1. o | uls 0.0 | to .c | connector | connector | connection |
| | (mm) | (mm) | | | (l/min) | (l/min) | | ~ | = | ~ | = | wit | mai | in m | mai | ~/= | ~/= | = |
| NC - Norma | ally cl | osed (| with e | exhaus | st to th | ne subl | base) | | | | | | | | | | | <u>'</u> |
| | | | | | | | | | | | | × | | | | 19201004 | 19201025 | 19201139 |
| | 1.0 | 2.1 | 105 | 105 | 1.5 | 1 | | 1.0 | 1.0 | _ | _ | | • | | | 19201005 | 19201026 | 19201140 |
| | 1,9 | 2.1 | 105 | 105 | 1.5 | 1.5 | 0 | 16 | 16 | 3 | 3 | | | • | | 19201006 | 19201027 | 19201141 |
| pad | | | | | | | | | | | | | | | | 19201068 | 19201074 | 19201155 |
| mounting (1) | | | | | | | | | | | | × | | | | 19201001 | 19201022 | 19201136 |
| | | | 112 | 454 | 1.0 | | | | 4.5 | _ | | | • | | | 19201002 | 19201023 | 19201137 |
| | 2.1 | 2.3 | 112 | 154 | 1.6 | 2.2 | 0 | 12 | 12 | 3 | 3 | | | • | | 19201003 | 19201024 | 19201138 |
| | | | | | | | | | | | | | | | | 19201067 | 19201073 | 19201154 |
| NC - Norma | ally cl | osed (| with e | exhaus | st 1/81 | to the | front si | de) | | | | | | | | | | ! |
| | | | Ì | | | | | | | | | × | | | | 19201010 | 19201031 | 19201145 |
| | 1.0 | 2.1 | 105 | 105 | 4.5 | 4 - | • | 1.5 | 1.0 | _ | | | • | | | 19201011 | 19201032 | 19201146 |
| | 1.9 | 2.1 | 105 | 105 | 1.5 | 1.5 | 0 | 16 | 16 | 3 | 3 | | | • | | 19201012 | 19201033 | 19201147 |
| pad | | | | | | | | | | | | | | | | 19201070 | 19201076 | 19201157 |
| mounting (1) | | | | | | | | | | | | × | | | | 19201007 | 19201028 | 19201142 |
| | | | | | | | | | | _ | _ | | • | | | 19201008 | 19201029 | 19201143 |
| | 2.1 | 2.3 | 112 | 154 | 1.6 | 2.2 | 0 | 12 | 12 | 3 | 3 | | | • | | 19201009 | 19201030 | 19201144 |
| | | | | | | | | | | | | | | | П | 19201069 | 19201075 | 19201156 |
| NO - Norm | ally o | pen (v | with ex | xhaust | t to the | e subb | ase) | | | | _ | | | | | | | |
| | | , | | | | | | | | | | × | | | | 19201013 | 19201034 | 19201148 |
| pad | | 1.0 | 112 | 105 | 1.0 | | | 10 | 10 | _ | | | • | | | 19201014 | 19201035 | 19201148 |
| mounting (1) | 2.1 | 1.9 | 112 | 105 | 1.6 | 1.5 | 0 | 10 | 10 | 3 | 3 | | | ▼ | | 19201015 | 19201036 | 19201150 |
| | | | | | | | | | | | | | | | | 19201071 | 19201077 | 19201158 |
| U - Univers | al (wi | th exh | naust t | o the | subba | se) | | | | | | | | | | | | |
| | | | | | | | | | | | | × | | | | 19201019 | 19201037 | 19201151 |
| pad | 1.5 | 1.5 | 56 | 63 | 0.8 | 0.9 | 0 | 10 | 10 | 3 | 3 | | • | | | 19201020 | 19201038 | 19201152 |
| mounting (1) | ر.۱ | ۱.٦ | טכ | دن | 0.0 | 0.9 | U | 10 | 10 | د ا | د ا | | | • | | 19201021 | 19201039 | 19201153 |
| | | | | | | | | | | | | | | | | 19201072 | 19201078 | 19201159 |

Subbases

| uvva | 1363 | | | | | | |
|-------------------|------|---|--------------------------------|--------------|-------------------------|--|--|
| pipe size | | designation | | composition | Catalog number | | |
| 6/6 pol | lyam | ide subbases | | | | | |
| | | single subbase (instant fittings O | D 4 mm) | • | 35300069 | | |
| | | joinable subbase (instant fittings (| OD 4 mm) | | 35300070 | | |
| instan fitting | . | set of 2 joinable end subba: right-hand pressure intak endpieces with instant fittings C | ses, e, DD 6 mm | Ø 6 mm | 35300071 | | |
| (2) | | set of 2 joinable end subbar right-hand and/or left-hand pressi endpieces with instant fittings C | ses, ure intake, DD 6 mm | 06 mm 06 mm | 35300072 ⁽³⁾ | | |
| Zamak | subl | pases | | | | | |
| | 1/8 | laterally-connected single sul | obase | 0 | 35300047 | | |
| (C) | 1/0 | laterally-connected joinable su | ıbbase | | 35300048 | | |
| tapped (G) | 1/4 | laterally-connected single sul (3 connectable ports lateral l | obase oore) | Ý Ý Ģ Ó Ö | 35300049 | | |
| + | 1/4 | laterally-connected joinable su (3 connectable ports lateral l | ıbbase pore) | 3 1 | 35300057 | | |





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

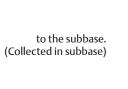
⁽³⁾ The equipment can be used for two different pressure intakes, supplied with one blanking plug to cover unused port.

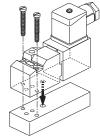
Options

- Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 2014/34/EU Ex mb (PV), catalogue numbers: PV19201001..1072
- 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)

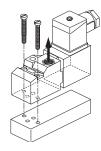
Installation

- The solenoid valves can be mounted in any position without affecting operation
- Selection of the exhaust port:





to front side (G 1/8) equipped with an exhaust plug. (Exhaust to atmosphere)



• Mounting on single or joinable subbases

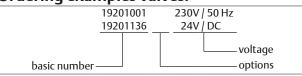
- ATEX 2014/34/EU versions (option "PV") can be installed on single (all versions) or joinable zink diecast subbases
- Pipe connections 1/8 have standard thread according to ISO 228/1
- Installation/maintenance instructions are included with each valve
- M12 electrical connection:





• Installation/maintenance instructions are included with each valve

Ordering examples valves:



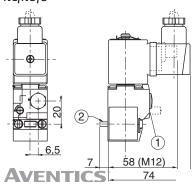
Dimensions (mm), **Weight** (kg) □

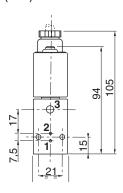




TYPE 01-06 Spade plug /M12 IEC 335 EN 175301-803 (11 mm) - IP67 / E03.62.520.N - IP65 (M12)

NC/NO/U





- (1) Manual operator location
- (2) Mounting: two CM4x20 screws

| type | | | weight | |
|------|-----|--------|-----------|------|
| 01 | | | 0.270 (1) | |
| 01 | M12 | | 0.260 | |
| | n | ector. | EMEF | RSON |

AVENTICS™ Solenoid Valves

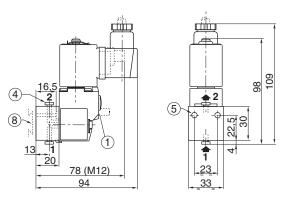
Dimensions (mm), **Weight** (kg) □ TYPE 02





Single instant fitting subbase Polyamide

35300069



| type | weight (1) |
|------|------------|
| 02 | 0.135 |

⁽¹⁾ including coil and connector.

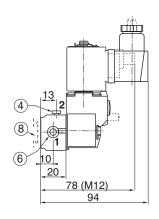
- (4) Instant-fitting connection for OD 4 mm tube
- (5) Mounting: two dia. 3.5 mm securing holes, dia. 6.5 mm counterbores, depth 3.5 mm
- (6) Instant-fitting connection for OD 6 mm tube
- Mounting: two dia. 4.5 mm securing holes
- (8) Adaptable clips

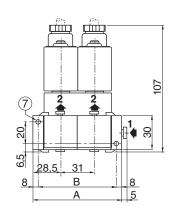


TYPE 03

Joinable instant fitting subbase Polyamide

35300070 / 35300071 (set of 2)





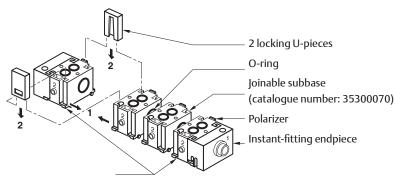
| number of subbases | type 03 | | | | |
|----------------------|---------|-----|--|--|--|
| Hullibel Of Subbases | Α | В | | | |
| 2 | 88 | 72 | | | |
| 3 | 119 | 103 | | | |
| 4 | 150 | 134 | | | |
| 5 | 181 | 165 | | | |
| 6 | 212 | 196 | | | |
| 7 | 243 | 227 | | | |
| 8 | 274 | 258 | | | |

| weight (2) | | | | | | | | | |
|------------|-------|--------------------|-------|------|-------|------|-------|--|--|
| type | | number of subbases | | | | | | | |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| 03+01 | 0.595 | 0.88 | 1.165 | 1.45 | 1.735 | 2.02 | 2.305 | | |

⁽²⁾ Including seals, set screws and joining unit.

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.



Joinable end subbases with instant-fitting endpieces (catalogue number: 35300071)



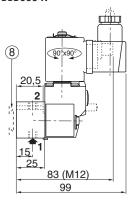
Dimensions (mm), **Weight** (kg) □

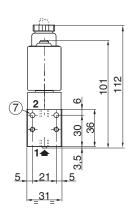




TYPE 04 Single subbase 1/8 - Zamak NC function only 2 connectable ports

35300047





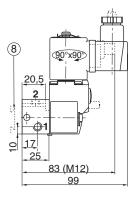
| type | weight (1) | | | |
|--------------|------------|--|--|--|
| 04 | 0.185 | | | |
| 04 + 01 | 0.455 | | | |
| (4) - 1 11 1 | | | | |

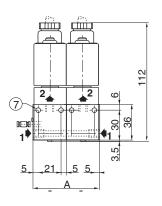
 $[\]overline{\ }^{(1)}$ including coil and connector.



TYPE 05 Joinable subbase **1/8** - Zamak NC function only 2 connectable ports

35300048



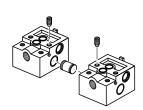


| type | | number of subbases | | | | | | | |
|-------|------|--------------------|------|------|------|------|------|--|--|
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| 05+01 | 0.74 | 1.10 | 1.48 | 1.85 | 2.22 | 2.59 | 2.96 | | |

⁽²⁾ Including seals, set screws and joining unit.

| number of subbases | type 06 |
|--------------------|---------|
| number of subbases | Α |
| 2 | 62 |
| 3 | 93 |
| 4 | 124 |
| 5 | 155 |
| 6 | 186 |
| 7 | 217 |
| 8 | 248 |

- (7) Mounting: two dia. 4.5 mm securing holes
- 8 Adaptable clips



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

AVENTICS™ Solenoid Valves

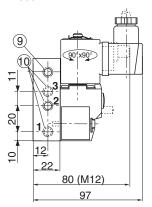
Dimensions (mm), **Weight** (kg) □

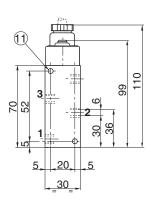




TYPE 06 Single subbase 1/4 - Zamak NC, NO or U function 3 connectable ports

35300049





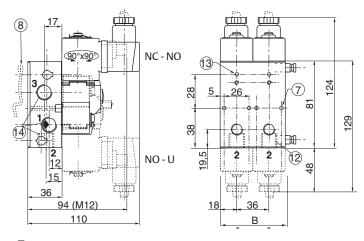
| type | weight (1) | | | | |
|---------|------------|--|--|--|--|
| 06 | 0.240 | | | | |
| 06 + 01 | 0.510 | | | | |

⁽¹⁾ including coil and connector.



TYPE 07 Joinable subbase 1/4 - Zamak NC, NO or U function 3 connectable ports

35300057



| type | weight (2) | | | | | | |
|-------|--------------------|------|------|-----|------|------|------|
| | number of subbases | | | | | | |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 07+01 | 0.88 | 1.32 | 1.76 | 2.2 | 2.64 | 3.08 | 3.52 |

 $[\]ensuremath{^{(2)}}$ Including seals, set screws and joining unit.

| number of subbases | type 07 | | |
|--------------------|---------|--|--|
| number of subbases | В | | |
| 2 | 72 | | |
| 3 | 108 | | |
| 4 | 144 | | |
| 5 | 180 | | |
| 6 | 216 | | |
| 7 | 252 | | |
| 8 | 288 | | |

- (7) Mounting: two dia. 4.5 mm securing holes
- (8) Adaptable clips
- Non-used port
- (10) Port 3: NC (exhaust) / NO (Inlet pressure)
 - Port 2: NC NO (Outlet pressure)
 - Port 1: NC (Inlet pressure) / NO (exhaust)
 - U: Pressure entry through any port
- (11) Mounting: two dia. 4.5 mm securing holes, dia. 8 mm counter-bores, depth 6 mm
- (12) Port 2: Accessible by removing cap
- (13) Mounting: two dia. 4.5 mm securing holes, dia. 7.5 mm counterbores, depth 6 mm
- (14) NC-NO-U: Port 3 (exhaust) / Port 2 (Outlet pressure) Port 1 (Inlet pressure)



AVENTICS