

# AVENTICS™ Solenoid Valves

3 way, NC, Direct Operated, ISO 15218 (CNOMO, size 30) interface, Pad Mounting Body, Subbases for instant fittings or 1/8 thread

3/2  
Series  
**190**

## 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 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 / NFE 49066, size 30)

## Electrical characteristics

Coil insulation class F  
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 IP65 (EN 60529)  
Standard voltages DC (=): 24V - 48V (M12: 24V + LED and protection)  
(Other voltages and 60 Hz on request) AC (~): 24V - 48V - 115V - 230V / 50 Hz

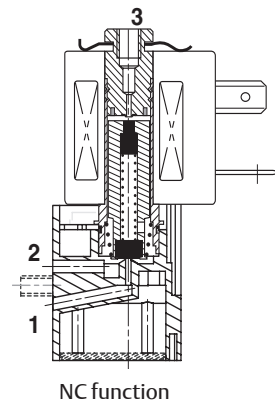
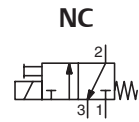
power ratings				operator ambient temperature range (TS) (°C)	replacement coil		type <sup>(1)</sup>
inrush ~ (VA)	holding ~ (VA) (W)		hot/cold = (W)		~ 230 V/50 Hz	= 24 V DC	
9	4	3	3 / 3	-10 to + 60	43004472	43004473	01
					-	43005525	06

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



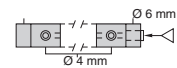
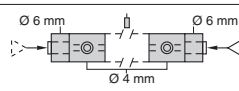


## Specifications

pipe size	orifice size		flow at 6 bar		flow coefficient		operating pressure differential (bar)			power coil (W)		catalogue number				
	1 → 2	2 → 3	l/min (ANR)		Kv		max. (PS)					with connector ~/=	without connector ~/=	M12 connection =		
	(mm)	(mm)	1 → 2	2 → 3	1 → 2	2 → 3	min.	air (*)		~	=					
<b>NC - Normally closed</b>																
pad 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

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



**Subbases**

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

<sup>(1)</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>(2)</sup> The equipment can be used for two different pressure intakes, supplied with one blanking plug to cover unused port.

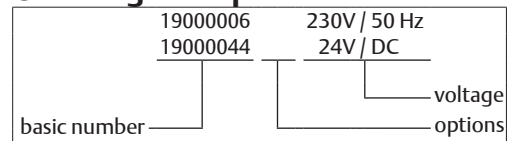
**Options**

- Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 2014/34/EU: Ex mb (PV), **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 (AC/DC), **88122603** - 48 V (AC/DC), **88122604** - 115 V (AC), **88122605** - 230 V (AC), **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

**Ordering examples valves:**

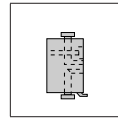
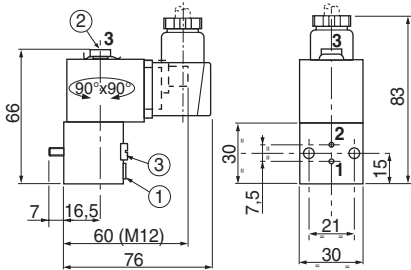


**Dimensions (mm), Weight (kg)**



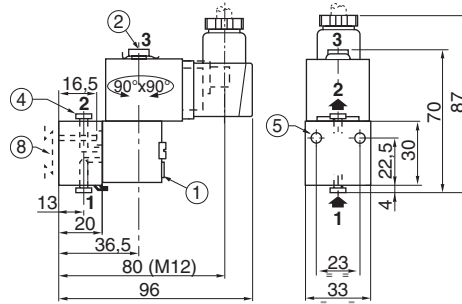
**TYPE 01-06**  
Spade plug /M12  
IEC 335  
EN 175301-803 (11 mm)/ E03.62.520.N - IP65

19000005 to 19000045



**TYPE 02**  
Single instant fitting subbase  
Polyamide

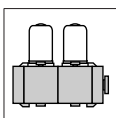
35300069



type	weight <sup>(1)</sup>
01	0.180
02	0.135
06	0.170

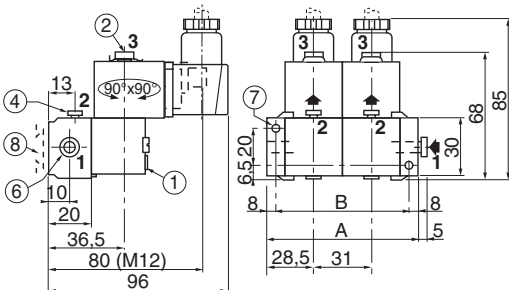
<sup>(1)</sup> including coil and connector.  
(except M12 connection type 06)

- ① Manual operator location
- ② Port 3: M5, depth 5.5 mm
- ③ Mounting: two CM4 x 33,5 screws
- ④ Instant-fitting connection for OD 4 mm tube
- ⑤ Mounting: two dia. 3.5 mm securing holes, dia. 6.5 mm counter-bores, depth 3.5 mm
- ⑥ Instant-fitting connection for OD 6 mm tube
- ⑦ 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	
	A	B
2	88	72
3	119	103
4	150	134
5	181	165
6	212	196
7	243	227
8	274	258

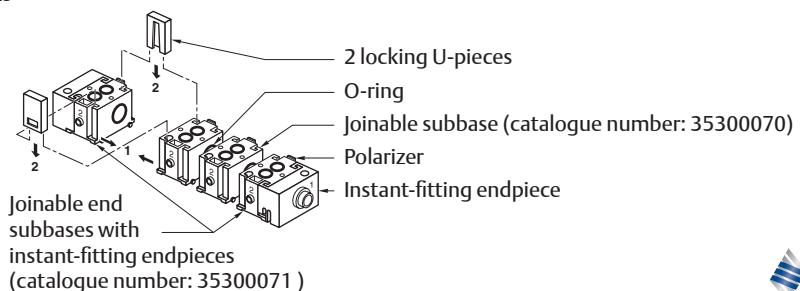
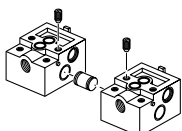


type	weight <sup>(2)</sup>						
	number of subbases						
	2	3	4	5	6	7	8
03+01	0.415	0.610	0.805	1.000	1.195	1.390	1.585
03+06	0.395	0.580	0.765	0.950	1.135	1.320	1.505

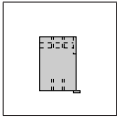
<sup>(2)</sup> Including seals, set screws and joining unit.

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.

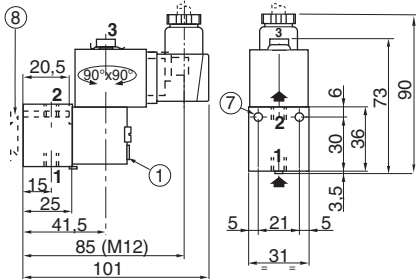
Joinable subbases assembled with adapter locked by sunk set screws.  
For DIN rail mounting: see type 03.



**Dimensions (mm), Weight (kg)**



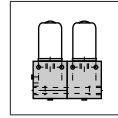
**TYPE 04**  
Single subbase  
Zamak  
35300047



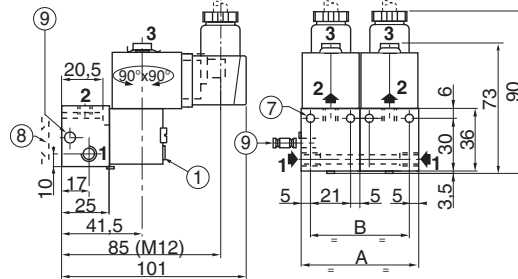
type	weight <sup>(1)</sup>
04	0.185

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

- ⑦ Mounting: two dia. 4.5 mm securing holes
- ⑧ Adaptable clips
- ⑨ Subbase mounting hole, adapter



**TYPE 05**  
Joinable subbase  
Zamak  
35300048



number of subbases	type 05	
	A	B
2	62	52
3	93	83
4	124	114
5	155	145
6	186	176
7	217	207
8	248	238

type	weight <sup>(2)</sup>						
	number of subbases						
	2	3	4	5	6	7	8
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.