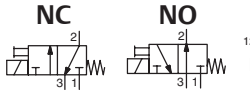
AVENTICS™ Solenoid Valves

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 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

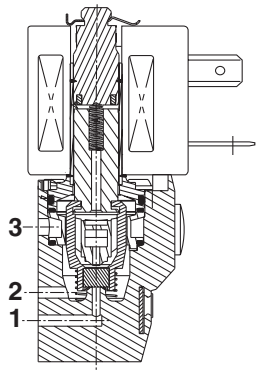
Differential pressure	See "SPECIFICATIONS" [1 bar =100 kPa]
Maximum allowable pressure	16 bar
Response time	7 ms

fluids (∗)	temperature range (TS)	seal materials (∗)
air, inert gas	- 10°C à + 60°C	NBR (nitrile) 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
Seals	NBR, PUR
Shading coil	Copper



NC function

Construction

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	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 IP67 (EN 60529) Moulded IP65, M12 version
Standard voltages	DC (=): 24V - 48V (M12: 24 V + LED and protection)
(Other voltages and 60 Hz on request)	AC (~): 24V - 48V - 115V - 230V / 50 Hz

power ratings				operator ambient temperature range (TS)	replacement coil		type (1)
inrush ~	holding ~		hot/cold =		~	=	
(VA)	(VA)	(W)	(W)	(C°)	230 V/50 Hz	24 V DC	
9	4	3	3 / 3	-10 to + 60	43005627	43005642	01
					-	43005664	06

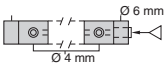
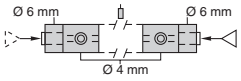
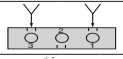
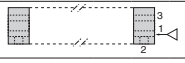
(1) Refer to the dimensional drawings on the following page.

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Specifications

pipe size	orifice size 1→2 (mm)	orifice size 2→3 (mm)	flow at 6 bar l/min (ANR) 1→2	flow at 6 bar l/min (ANR) 2→3	flow coefficient Kv 1→2 (l/min)	flow coefficient Kv 2→3 (l/min)	operating pressure differential (bar) min.	operating pressure differential (bar) max. (PS) air (∗) ~	operating pressure differential (bar) max. (PS) air (∗) =	power coil (W) ~	power coil (W) =	without man. operator	maintained man. operator	impulse man. operator	button man. operator	Catalog number with connector ~/=	Catalog number without connector ~/=	Catalog number M12 connection =
NC - Normally closed (with exhaust to the subbase)																		
pad mounting (1)	1,9	2.1	105	105	1.5	1.5	0	16	16	3	3	×				19201004	19201025	19201139
													●			19201005	19201026	19201140
														▼		19201006	19201027	19201141
															■	19201068	19201074	19201155
	2.1	2.3	112	154	1.6	2.2	0	12	12	3	3	×				19201001	19201022	19201136
													●			19201002	19201023	19201137
														▼		19201003	19201024	19201138
															■	19201067	19201073	19201154
NC - Normally closed (with exhaust 1/8 to the front side)																		
pad mounting (1)	1.9	2.1	105	105	1.5	1.5	0	16	16	3	3	×				19201010	19201031	19201145
													●			19201011	19201032	19201146
														▼		19201012	19201033	19201147
															■	19201070	19201076	19201157
	2.1	2.3	112	154	1.6	2.2	0	12	12	3	3	×				19201007	19201028	19201142
													●			19201008	19201029	19201143
														▼		19201009	19201030	19201144
															■	19201069	19201075	19201156
NO - Normally open (with exhaust to the subbase)																		
pad mounting (1)	2.1	1.9	112	105	1.6	1.5	0	10	10	3	3	×				19201013	19201034	19201148
													●			19201014	19201035	19201148
														▼		19201015	19201036	19201150
															■	19201071	19201077	19201158
U - Universal (with exhaust to the subbase)																		
pad mounting (1)	1.5	1.5	56	63	0.8	0.9	0	10	10	3	3	×				19201019	19201037	19201151
													●			19201020	19201038	19201152
														▼		19201021	19201039	19201153
															■	19201072	19201078	19201159

Subbases

pipe size		designation	composition	Catalog number
6/6 polyamide subbases				
instant fittings (2)		single subbase (instant fittings OD 4 mm)		35300069
		joinable subbase (instant fittings OD 4 mm)		35300070
		set of 2 joinable end subbases, right-hand pressure intake, endpieces with instant fittings OD 6 mm		35300071
		set of 2 joinable end subbases, right-hand and/or left-hand pressure intake, endpieces with instant fittings OD 6 mm		35300072 (3)
Zamak subbases				
tapped (G) (2)	1/8	laterally-connected single subbase		35300047
		laterally-connected joinable subbase		35300048
	1/4	laterally-connected single subbase (3 connectable ports lateral bore)		35300049
		laterally-connected joinable subbase (3 connectable ports lateral bore)		35300057

(1) Port 3: M5.

(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.

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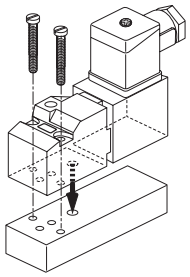
Options

- 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)

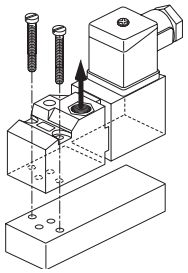
Installation

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

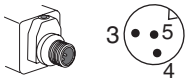
to the subbase.
(Collected in subbase)



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



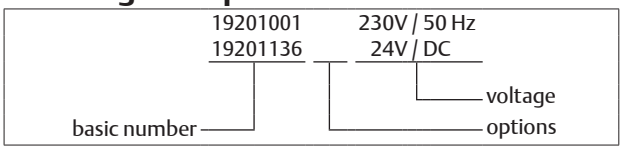
- Mounting on single or joinable subbases
- ATEX 2014/34/EU versions (option "PV") can be installed on single (all versions) or joinable zink diecast subbases
- Pipe connections 1/8 have standard thread according to ISO 228/1
- Installation/maintenance instructions are included with each valve
- M12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



3	-
4	+
5	earth

- Installation/maintenance instructions are included with each valve

Ordering examples valves:

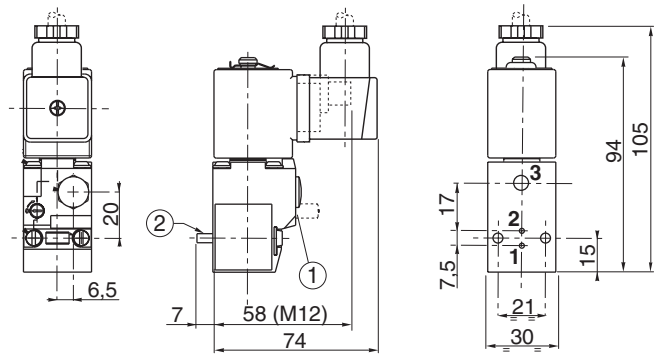


Dimensions (mm), Weight (kg)



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

NC/NO/U



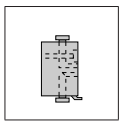
① Manual operator location
② Mounting: two CM4x20 screws

type		weight
01		0.270 (1)
	M12	0.260

(1) including coil and connector.

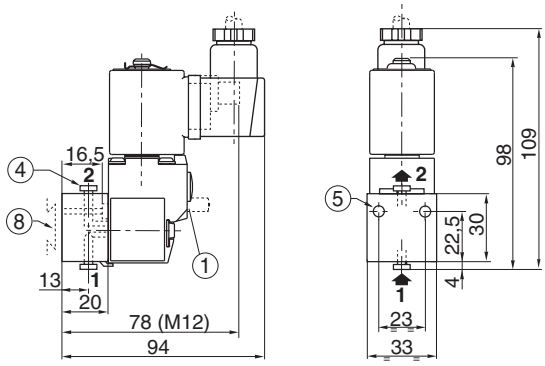
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Dimensions (mm), Weight (kg)



TYPE 02
Single instant fitting subbase
Polyamide

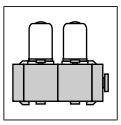
35300069



type	weight (1)
02	0.135

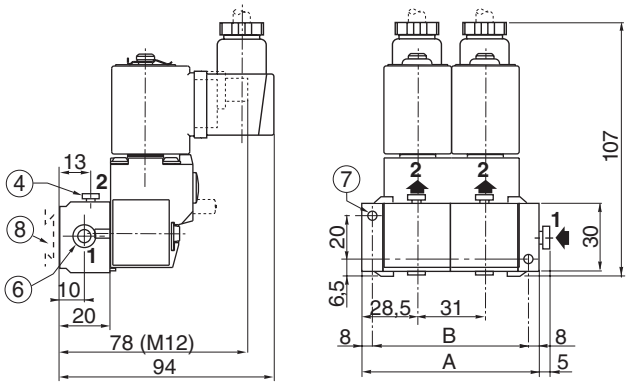
(1) including coil and connector.

4 Instant-fitting connection for OD 4 mm tube
5 Mounting: two dia. 3.5 mm securing holes, dia. 6.5 mm 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)

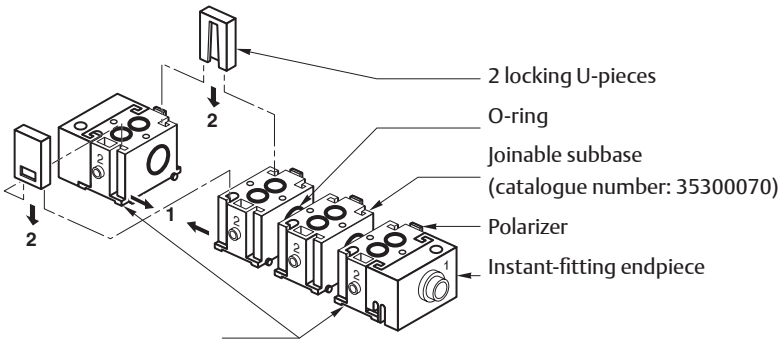


number of subbases	type 03	
	A	B
2	88	72
3	119	103
4	150	134
5	181	165
6	212	196
7	243	227
8	274	258

type	weight (2) 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.

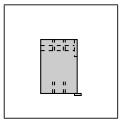
Right-hand pressure intake option or 2 different pressure intakes by procuring the set of two end subbases with endpieces (catalogue number: 35300072).
When mounted on DIN rail, it is recommended to use a securing clip on the end subbases as well as on the central subbase.



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

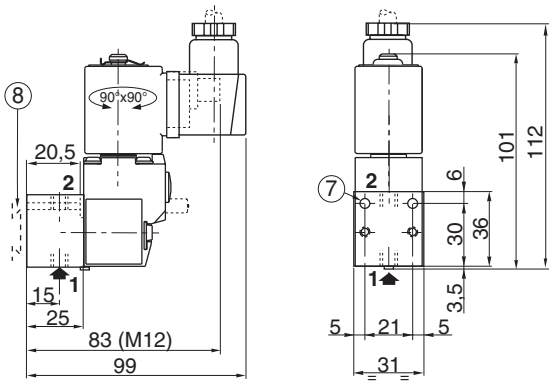
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Dimensions (mm), Weight (kg)



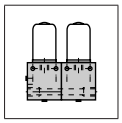
TYPE 04
Single subbase
1/8 - Zamak
NC function only
2 connectable ports

35300047



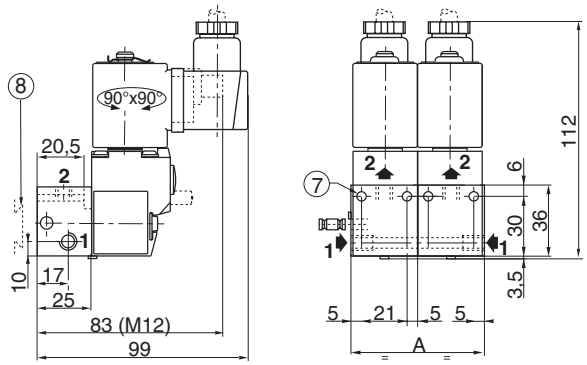
type	weight (1)
04	0.185
04 + 01	0.455

(1) including coil and connector.



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

35300048

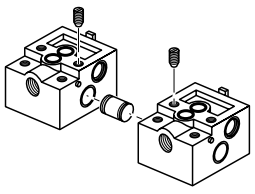


type	weight (2)						
	number of subbases						
	2	3	4	5	6	7	8
05+01	0.74	1.10	1.48	1.85	2.22	2.59	2.96

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

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

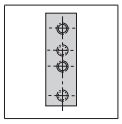
(7) Mounting: two dia. 4.5 mm securing holes
(8) Adaptable clips



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

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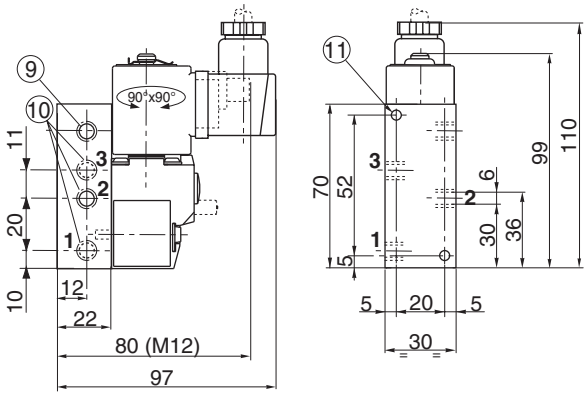
Dimensions (mm), Weight (kg)



TYPE 06

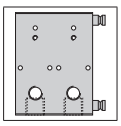
Single subbase
1/4 - Zamak
NC, NO or U function
3 connectable ports

35300049



type	weight (1)
06	0.240
06 + 01	0.510

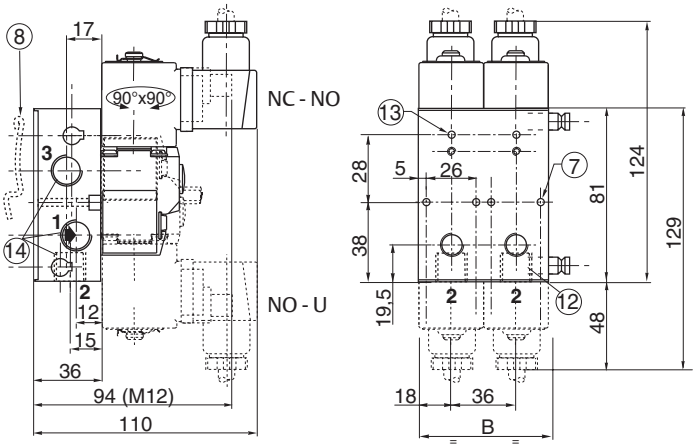
(1) including coil and connector.



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

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

number of subbases	type 07 B
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
(9) 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 counter-bores, depth 6 mm
(14) NC-NO-U: Port 3 (exhaust) / Port 2 (Outlet pressure)
Port 1 (Inlet pressure)