ISO size 01 (26 mm)

VDMA

SPOOL VALVES solenoid air operated

JOUCOMATIC

ISO 15407-1 - VDMA 24563 subbase-mounted body

CNOMO pilots, size 15

FEATURES

 The different electrical connections (DIN or metal M12) and low power consumption of the standard pilots allow the valves to be used in a variety of applications.

Application models 2x3/2 in piloting of valves

GENERAL

Air or neutral gaz, filtered, lubricated or not Fluid Operating pressure 1 to 10 bar (with internal supply to pilot) -0,950 bar to +10 bar (with external supply to pilot)

Ambient temperature -10 °C to +60 °C

Flow (Qv at 6 bar) 1150 l/min (ANR)

 $C = 4,40 \times 10^{-8} \text{ m}^3/\text{s.Pa}$ (sonic conductance) - conforming to ISO 6358

b = 0,28 (absolute static pressure)

Subbase Single or joinable subbases

CONSTRUCTION SPOOL VALVES

Body Injected aluminium Top cover, end covers PÁA (polyarylamide)

Internal parts POM (polyacetal) and aluminium

Seals NBR (nitrile) PILOTS (see page P502B)

Solenoid valves 3/2 NC, series 302, pad mounting CNOMO E06.36.120N (size15)

ELECTRICAL CHARACTERISTICS

vo	Itages	consumption		insulation protection		electrical
~	=	~	=	class	degree	connection
24V, 115V	12V, 24V	1,2 VA	1,1 W	_	IP 65	spade plug size 15 connector, DIN 43650, 9,4 mm, industry standard B,
230V	24V	1,6 VA	1,5 W		IF 65	rotatable by 90°
-	24V	-	1,15 W	F	IP 67	M12 connection + LED and protection

SPECIFICATIONS

ı				pilot pi	occuro		2 cata	logue n	ue numbers			
İ		-	unction symbol	operators solenoid air operated		ar)	spool	valve	+	solenoid valve quantity and cat.		İ
	symbol		pilot (14) return (12)	min.	max.	internal supply	external supply		connector size 15 M12 connection	(W)	(M)	
		NC-NC	14 4 12 12 12 12 12 12 12 12 12 12 12 12 12	spring return	2,5	10	53992126	53992135				
	2x 3/2	NO-NO	14 4 W W 12 12 12 12 12 12 12 12 12 12 12 12 12	spring return	2,5	10	53992123	53992132	+ 2x			
		NC-NO	14 4 12 12 12 12 12 12 12 12 12 12 12 12 12	spring return	2,5	10	53992125	53992134		30211109 (T15) 30211110 (T15)	1,1 1,1	•
			14 12 12 12 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14	spring return	2,5	10	53992121	53992149	>+ 1x	30211121 (T15) 30211122 (T15)	1,5 1,5	•
	-	. 10	14	differential return	2,5	10	53992026	53992148		30212109 (M12) 30212110 (M12)	'	
	5/2		14 4 2 12 5 5 7 3 1	solenoid differential return	2,5	10	53992122	53992150	+ 2x	to see our		
			14 1 2 12 5 5 13 1	solenoid air return	1	10	53992027	53992127		complete range of pilot 302 (P502B)		
			14 W 12 14 W 12 14 W 12 15 V 3	pressure held W1	2,5	10	53992028	53992129		(F302B)		
	5	5/3	14 W 12 5 V V 3	pressure applied W2	2,5	10	53992029	53992130	+ 2x			
			14 W 12	pressure release W3	2,5	10	53992030	53992131				

(M) Type of manual operator on pilot(s)

• : maintained

▼:impulse

When ordering, please specify in addition to the basic solenoid valve catalogue number:

- the type of current: voltage / frequency of the solenoid valve

- to be inserted after the basic solenoid valve catalogue number: --A (~) or --D (=)

Examples: 53992121 + 1 x 30211109--D 24V DC 53992126 + 2 x 30211110--A 230V AC

OPTIONS see page 6

and specifications are subject to change without notice. All rights reserved

SPOOL VALVES

solenoid air operated

ISO 15407-1 - VDMA 24563 subbase-mounted body

with integrated M12 connection

VDMA

FEATURES

JOUCOMATIC

• The different electrical connections (DIN or metal M12) and low power consumption of the standard pilots allow the valves to be used in a variety of applications.

• Application models 2x3/2 in piloting of valves

GENERAL

Subbase

Air or neutral gaz, filtered, lubricated or not Fluid 1 to 10 bar (with internal supply to pilot) **Operating pressure**

-0,950 bar to +10 bar (with external supply to pilot)

Ambient temperature -10°C to +60°C Flow (Qv at 6 bar) 1150 I/min (ANR)

- conforming to ISO 6358 $C = 4,40 \times 10^{-8} \text{ m}^3/\text{s.Pa}$ (sonic conductance)

> b = 0.28 (absolute static pressur) Single or joinable subbases

CONSTRUCTION **SPOOL VALVES**

Body Injected aluminium Top cover, end covers PAA (polyarylamide)

POM (polyacetal) and aluminium Internal parts

NBR (nitrile) **Seals**

PILOTS (see leaflet P502B)

Solenoid valves 3/2 NC, series 302, pad mounting CNOMO E06.36.120N (15x15)

ports

2x3/2-5/2-5/3

ISO size 01 (26 mm)

Type

= Pressure supply 2-4 = Outlets 3-5 =Exhausts

82/84 = Pilot exhaust

ELECTRICAL CHARACTERISTICS

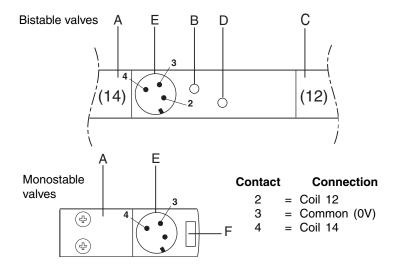
SV type	voltage	consumption	insulation class	protection degree	electrical connection
series 302	24V =	1,15 W	F	IP 67	centralised M12 connection CNOMO E03.62.520N on socket with 3 male pins

SPECIFICATIONS

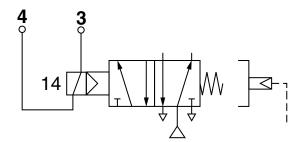
	function symbol		operators pilot solenoid air operated pilot (14) (bar)		sure	catalogue number spool valve with series 302 pilot(s)			
			return (12)	min.	max.	internal supply	external supply	(M)	
2x 3/2	NC-NC	14 4 W W 12 12 12 12 12 12 12 12 12 12 12 12 12	spring retun	2,5	10	53902155	53902154	•	
		14 12 12 12 12 12 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15	spring retun	2,5	10	53902072	53902069	•	
5/2		14 2 12 35 12 55 13 12 12 12 12 12 12 13 13	differential retun	2,5	10	53902066	53902063	•	
		14 4 2 12 5 5 7 3 1	solenoid differential return	2,5	10	53902084	53902081	•	
		14 4 2 12 55 73 1	solenoid air operated return	1	10	53902090	53902087	•	
		14 W 12 W 12 S V V 3	pressure held W1	2,5	10	53902096	53902093	•	
5	5/3	14 W 12 12 14 15 15 15 15 15 15 15 15 15 15 15 15 15	pressure applied W2	2,5	10	53902102	53902099	•	
		14 M 12 M 12	pressure release W3	2,5	10	53902108	53902105	•	

(M) Type of manual operator on pilot(s): ▼: impulse

DISPLAY AND CONNECTION OF M12 CONNECTOR



■ Monostable spool valves



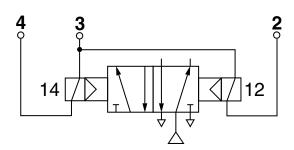


- A: Operator pilot valve (14)
- B: Yellow LED indicating energisation of pilot valve 14 (operator)
- C: Return pilot valve (12), bistable or 5/3
- D: Yellow LED indicating energisation of pilot valve 12 (return)
- E: Bulkhead connector, 3 male contacts, CNOMO E03.62.520N, for electrical connection of two pilot valves.
- F: Yellow LED indicating energisation of pilot valve.

NOTE: The built-in electrical protection is provided by bi-directional Transil diodes.

Assignment is as per ISO/CD20401 standard.

■ Bistable and 5/3 spool valves





JOUCOMATIC

METALIC JOINABLE SUBBASES

side or bottom ports

G 1/4 or with couplers for flexible tube 10mm O.D.



5/2-5/3 Series 355

ISO size 01 (26 mm)



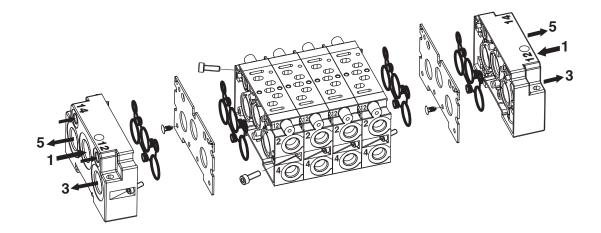
GENERAL

This subbase system offers the following main characteristics:

- The equipment has a **standard** interface complying with the international standard ISO 15407-1, size 01 (26 mm), so that spool valves series 539 can be fitted.
- · Subbases with side ports or bottom ports.
- Choice of connections: ports 2 and 4 tapped or with couplers.
- The subbases are fitted with selector plates, allowing for a choice of piping arrangements and inter-connections.

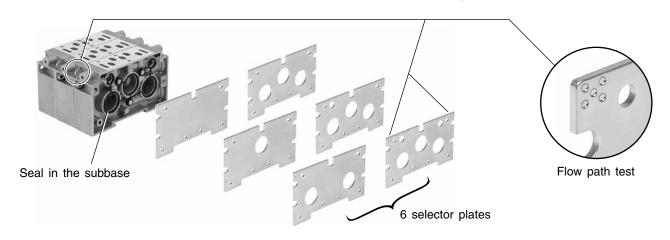
CHARACTERISTICS AND ADVANTAGES

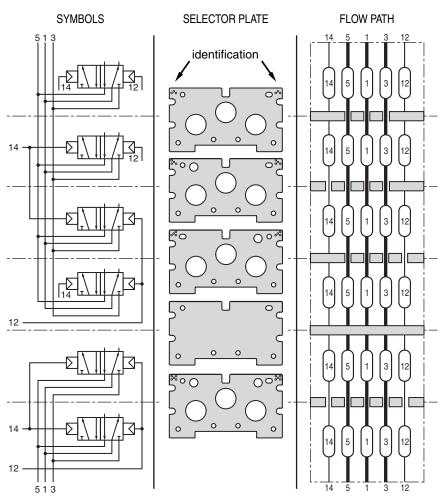
- Easy connection due to a large number of piping options on the subbase:
 - Side ports (2 and 4: tapped or with couplers).
 - Bottom ports (2 and 4: tapped or with couplers).
 - Ports 12 and 14 for external pilot pressure supply (tapped M5).
- · Captive selector plates:
 - Each plate is provided with perforations allowing for error-free identification of the ports in use.
 - The standard selector plate (connection of ports 1-3-5-12-14) is pre-mounted on the subbase to allow for quick installation.
- Suitable for direct installation on machine frame:
 - Quick mounting on DIN rail with eccentric quarter-turn tappets.
- Easy assembly/disassembly: easy maintenance.
 - The inclined position of the mounting screws provides for easy assembly or disassembly of individual subbases without having to disassemble the whole system.



POSSIBLE FLOW PATHS

The subbases include 5 flow paths (1-3-5-12-14), all of which can be connected through the end plates of each manifold assembly.





The pilots are piped separately to each subbase.

Pilot on side 14 is connected between 2 or more subbases.

Return on side 12 is connected between 2 or more subbases (uses the same plate as the one above).

Blanking plate (allows a manifold to be used with 2 different supply pressures).

Allows the inter-connection of both pilots 12, 14 between 2 or more valves.

PIPING OF SUPPLY AND EXHAUSTS TO THE END COVERS

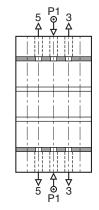
Pressure supply and exhaust on the end fittings.

Supply and exhausts to 1 side plate.

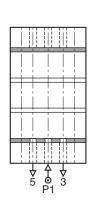
Assembly with 2 different pressures and with the exhaust piped to both end plates.

Assembly with 1 supply on 1 plate but with exhausts from the 2nd end plate.

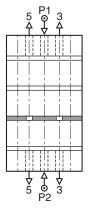
Assembly with the supply port in 1 end plate and the exhaust from the other end plate.



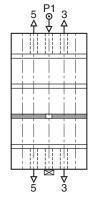
Selector plates supplied as standard allows the assembly as shown above.



This assembly requires a blank selector plate (no flow).



For this assembly a selector plate with connections between 3, 5 is necessary.



For this assembly a selector plate allows flow through port 1 if required. The supply port in the second plate must be plugged.



For this assembly you require 2 selector plates, 1 allowing flow through port 1 and 1 allowing flow through ports 3, 5. This arrangement allows the assembly without plugging any ports.

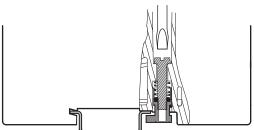
SUBBASES

bb	-1		de conintien	ı	port connection	n	catalogue
subbase	size	connection	description	1-3-5	2-4	12-14	number
single subbase	ISO 01		subbase	G 1/4	G 1/4	M5	35500526
		oido	1 subbase + 2 seals	-	G 1/4	(1)	35500576
		side	1 selector plate (connects ports 1-3-5-12-14)	-	instant fittings tube 10mm O.D	-	35500578
		h attaus	1 subbase + 2 seals	-	G 1/4	-	35500573
		bottom	1 selector plate (connects ports 1-3-5-12-14)	-	instant fittings tube 10mm O.D	-	35500575
joinable			2 end plates + 2 seals 1 selector plate (connects ports 1-3-5-12-14)	G 1/2	-	G 1/8	88135559
subbases	ISO 01		blank selector plate (no flow)				88135558
			selector plate (connects port 1)	88135557			
			selector plate (connects ports 3 and 5)				
			selector plate (connects ports 1 - 3 - 5)			88135555	
selector plate (conne		selector plate (connects ports 1 - 3 - 5 and 1	pilot 12 or	14)		88135554	
			selector plate (connects ports 1 - 3 - 5 and 2	pilots 12 a	nd 14)		88135553

(1) Joinable subbase with side ports G 1/4 and ports 12-14 tapped M5, catalogue number 35500588



Spool valves with subbase mounted pilots on joinable subbases Joinable subbases ISO 01 can be mounted on symmetrical EN 50022 profile with two 1/4-turn eccentric nuts.



SPOOL VALVE OPTIONS

- Material and solenoid pilot valve for use in potentially explosive atmospheres caused by gases or dusts ATEX directive 94/9/EC (consult our ATEX - X019 catalogue)
- · Version with collectable exhausts, consult us

M12 CONNECTORS

Straight M12 connector with 5 female contacts, Ø4 to 6mm cable entry, catalogue number: **88100304**Straight M12 connector with 5 female contacts, Ø6 to 8mm cable entry, catalogue number: **88100256**Straight M12 connector with 5 female contacts, cable length 5m, catalogue number: **88130212**Right-angle M12 connector with 5 female contacts, cable length 5m, catalogue number: **88130213**

DIMENSIONS (mm), **WEIGHT** (kg)

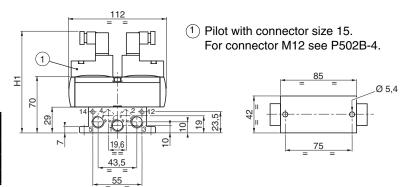


Spool valve on single subbase

weight			
spool valve + subbase			
with 1 pilot	with 2 pilots		
0,465	0,510		

n° ports	Ø ports
1-3-5	G 1/4
2-4	G 1/4
12-14	M5

pilot	dimension H1
size 15	120
M12	109
integrated M12	109



Spool valve on joinable subbases

number of	dime	nsion	weight
subbases	Α	В	spool valve + 2 pilots + subbases + end plates
3	128,8	140	1,601
4	155,8	167	1,966
5	182,8	194	2,331
6	209,8	221	2,696
7	236,8	248	3,061
8	263,8	275	3,426
+1	+27 +27		0,365

n° ports	Ø ports
1-3-5	G 1/2
2-4	G 1/4
12-14 (*)	G 1/8

pilot	dimension H2
size 15	151
M12	140
integrated M12	140

(*) subbases : tapping M5 of ports 12 and 14 on request

- 1 Pilot with connector size 15. Connector M12: see P502B-4.
- (2) Tapped bottom port
- 3 Bottom port with instant fittings for flexible tube 10mm O.D
- 4 Tapped side port
- (5) Side port with instant fittings for flexible tube 10mm O.D

