

Features and Benefits

- High flow rate up to 1400 l/min
- Spool and Sleeve or rubber packed technology in the same dimension body
- Wide electrical connection selection: G3 or 580 Fieldbus Electronics, 25 or 37 Pin Sub D connector, 19 Pin Round connector, 26 Pin Round connector or Terminal Strip
- Internal or external pilot pressure supply capability and compliance with ISO standard 15407-2 26 mm
- Solenoid air operated valves which can be mounted on manifold bases
- 580 Electronics

General

Operating pressure	See «SPECIFICATIONS» [1 bar = 100 kPa]
Ambient temperature range (TS)	See «SPECIFICATIONS»
Rated flow	See «SPECIFICATIONS»
conforming to ISO 6358	C (5/2) = 5.21×10^{-8} m ³ /s.Pa (sonic conductance) b (5/2) = 0.34 (critical pressure ratio)
Pneumatic base	High flow subbase or ISO 15407-2 26 mm
Connection	Joinable subbase
Response time	See «SPECIFICATIONS»

Fluids (*)	Temperature range (TS)	Technology	Seal materials (*)
air or inert gas ISO 8573 Level 7.4.4	-10°C to +50°C	rubber packed	PUR (polyurethane)
	-10°C to +50°C	spool & sleeve	metal-to-metal sealing

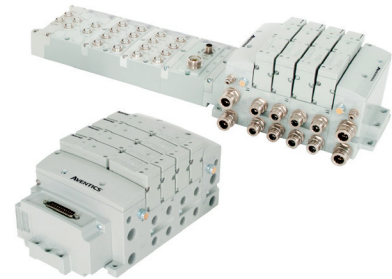
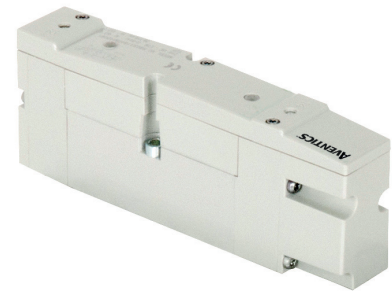
Materials in contact with fluid

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

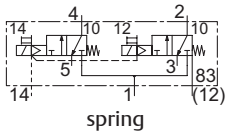
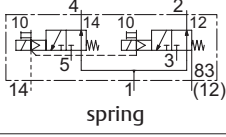
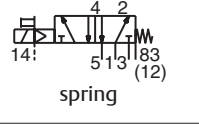
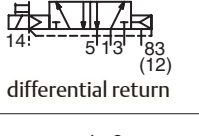
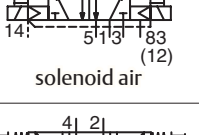
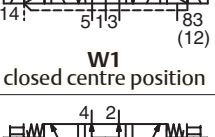
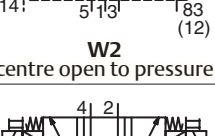
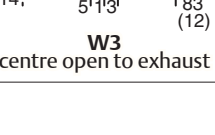
Body	Aluminium, E-coating treatment
Spool	Aluminium or st. steel (spool & sleeve)
Piston	POM (rubber packed)
Spring	Steel
Other seals	NBR
Other materials	PAM (polyarylamide) GF 50% (glass fiber reinforced)
Subbases	Aluminium, E-coating treatment

Electrical characteristics

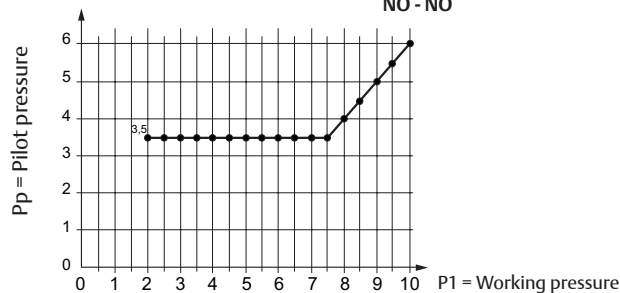
Coil insulation class	F
Electrical safety	IEC-EN 60730-1 / IEC-EN 60730-2-8
Electrical enclosure protection	IP65 (EN 60529)
Standard voltages	DC (=): 24V
Power ratings (hot/cold) (=)	1.4 W / 1.7 W



Specifications


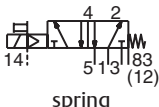
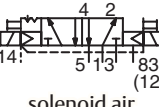
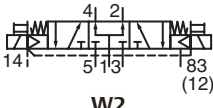
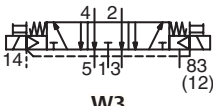
Function	Type	Symbol	Interface	Rated flow		Response time Open / Closed (ms)	Pilot pressure at 23°C (bar)		Operating pressure port 1		Catalog number
				at 6.3 bar ΔP 1 bar l/min (ANR)			Min.	Max.	Min.	Max. (PS)	
				1 → 2 1 → 4	2 → 3 4 → 5					Air (*) =	
SPOOL VALVE, RUBBER PACKED TECHNOLOGY, WITH IMPULSE MANUAL OPERATOR											
2 x 3/2 NC	K	 spring	High flow subbase	950	800	15 / 20	3.5 (a)	8	2	8	R503A2BD0MA00F1
				ISO	850						
2 x 3/2 NO	N	 spring	High flow subbase	950	950	15 / 20	3.5 (a)	8	2	8	R503A2BA0MA00F1
				ISO	850						
	S	 spring	High flow subbase	1400	1300	20 / 60	2	8	-0.95	8	R503A2B10MA00F1
				ISO	1150						
5/2	M	 differential return	High flow subbase	1400	1300	28 / 40	3	8	-0.95	8	R503A2BN0MA00F1
				ISO	1150						
	J	 solenoid air	High flow subbase	1400	1300	20 / 20	2	8	-0.95	8	R503A2B40MA00F1
				ISO	1150						
	G	 closed centre position W1	High flow subbase	1400	1300	15 / 20	4	8	-0.95	8	R503A2B60MA00F1
				ISO	1200						
5/3	B	 centre open to pressure W2	High flow subbase	1200	550	18 / 45	3	8	-0.95	8	R503A2B70MA00F1
				ISO	1100						
	E	 centre open to exhaust W3	High flow subbase	550	1200	18 / 45	3	8	-0.95	8	R503A2B50MA00F1
				ISO	550						

(a) NC - NC
NO - NO



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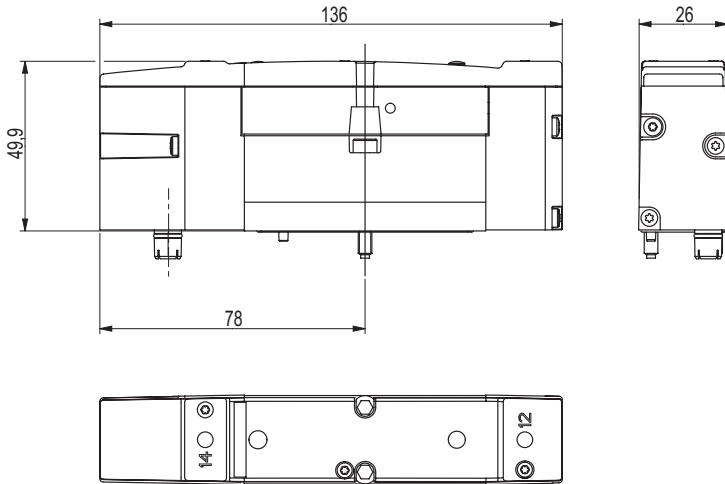
Specifications

Function	Type	Symbol	Interface	Rated flow		Response time Open / Closed (ms)	Pilot pressure at 23°C (bar)		Operating pressure port 1		Catalog number 
				at 6.3 bar ΔP 1 bar			Min.	Max.	Min.	Max. (PS)	
				l/min (ANR)						Air (*)	
				1 → 2 1 → 4	2 → 3 4 → 5		=				
SPOOL VALVE, SPOOL AND SLEEVE TECHNOLOGY, WITH IMPULSE MANUAL OPERATOR											
5/2	S	 spring	High flow subbase	1100	1200	20 / 60	2	8	-0.95	8	R503A1B10MA00F1
			ISO subbase	1000	950						
5/2	J	 solenoid air	High flow subbase	1100	1200	15 / 15	2	8	-0.95	8	R503A1B40MA00F1
			ISO subbase	1000	950						
5/3	W2	 centre open to pressure	High flow subbase	900	950	20 / 60	2	8	-0.95	8	R503A1B70MA00F1
			ISO subbase	700	750						
5/3	W3	 centre open to exhaust	High flow subbase	1000	1000	20 / 60	2	8	-0.95	8	R503A1B50MA00F1
			ISO subbase	750	700						

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

Plug in Valve

Dimensions (mm)

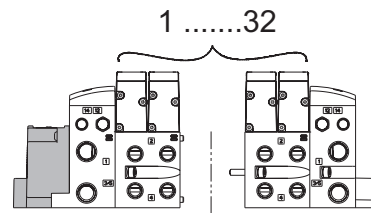


Configurator - CAD Files

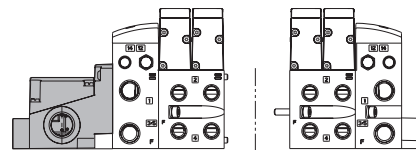
Weight (kg)
0.236

Assembly kits

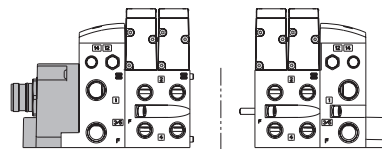
25 or 37 Pin Sub-D



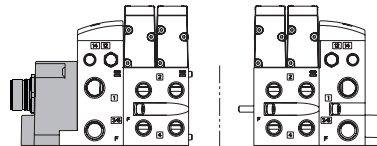
1-32 Terminal Strip



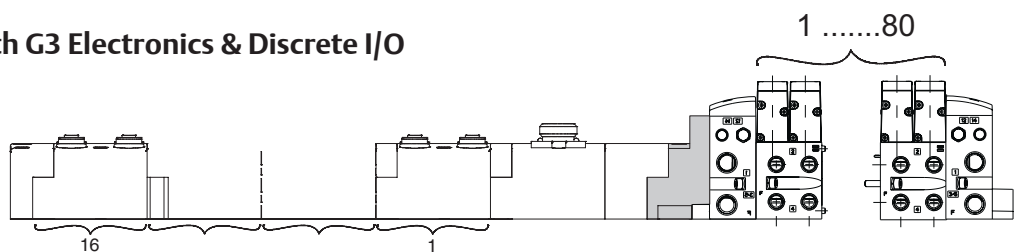
19 Pin Round Connector



26 Pin Round Connector



Manifold assembly with G3 Electronics & Discrete I/O



How to Order: Manifold assemblies and subbase

Configurator - CAD Files

Subbases

PRODUCT CODE

G 503 A M S2 2 M A00 1 0

Thread connection
G = ISO 228/1
8 = NPT (contact us)
K = Push-in connectors

Product series
503 (26 mm valve)

Revision letter
A = Initial release

Product type
M = Manifold base
Z = Mid station supply
F = 32+ Solenoid Manifold Subbase

Mounting
S2 = Manifold base, 2 stations, side port, single Z-Board™
M2 = Manifold base, 2 stations, side port, double Z-Board™
M4 = 32+ Manifold Sub Base, 4 Stations, Side Ports, Double Z-Board™
D2 = Manifold Sub Base, 2 Stations, Dual Flow, Side Ports, Double Z-Board™

Interface
1 = Pneumatic high flow
2 = ISO 15407-2 (26 mm)

Options
A00 = Standard (internal pilot)
14X = External pilot supply from port 14
83H = Pilot Separation from Station 1
83J = Pilot Separation from Station 2

Wiring option
M = Plug-in
V = +24 V DC Separation at First Station
W = +24 V DC Separation at Second Station
X = 0 & +24 V DC Separation at First Station

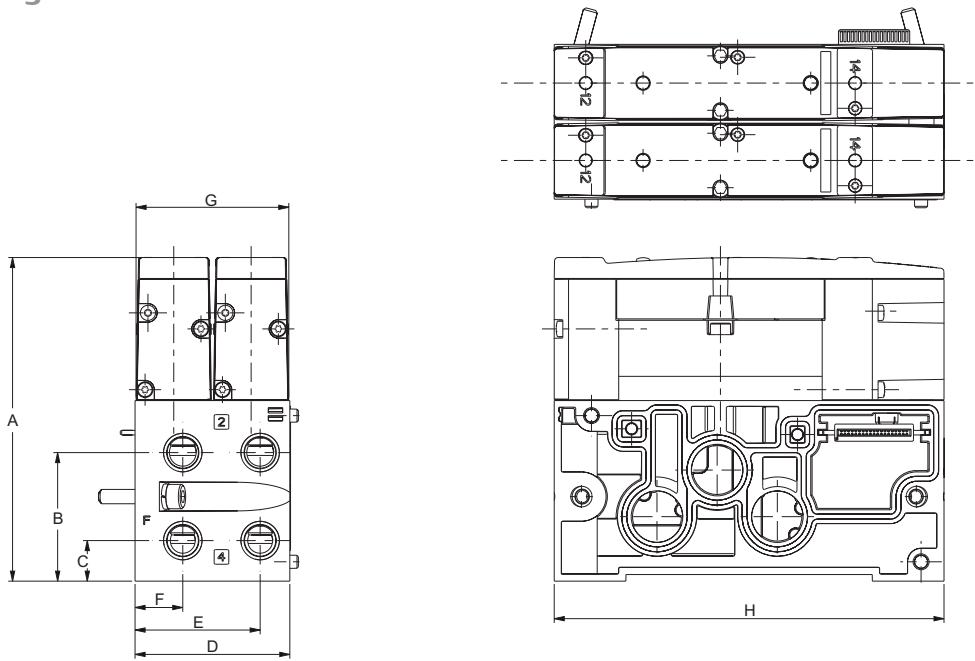
T = 32+ Solenoid Auxiliary Power (used with M4 and F)

Port connection (2-4)
Used with the first digit «G» or «8»:
2 = 1/4
4 = 1/2 (Used for Dual Flow only)
Used with the first digit «K»:
H = 6 x 8 mm [push-in connector only]
K = 8 x 10 mm [push-in connector only]

Dimensions (mm)

Plug in Valve Mounted

Configurator - CAD Files



A	B	C	D	E	F	G	H
112.9	44.9	14.2	54	43.7	16.7	53.3	136

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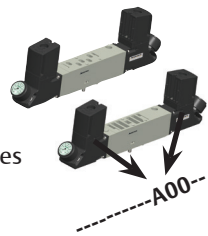
How to Order - Valves

Configurator - CAD Files

	PRODUCT CODE
<p>Thread connection R = Pad mount</p> <p>Product series 503 (26 mm valve)</p> <p>Revision letter A = Initial release</p> <p>Actuation 1 = Spool and sleeve 2 = Rubber packed</p> <p>Valve type B = Solenoid pilot (With impulse manual operator)</p> <p>Function A = 2x3/2 NO, dual 3-way (2) D = 2x3/2 NC, dual 3-way (2) N = 5/2, Differential air return (2) 1 = 5/2, spring return 4 = 5/2, solenoid air return 5 = 5/3, W3, open center to exhaust 6 = 5/3, W1, center closed (2) 7 = 5/3, W2, open center to pressure</p>	<p>R 503 A 2 B 4 0 M A00 F1</p> <p>Voltage - class F1 = 24 V DC - class F</p> <p>Options A00 = Standard (No option) With impulse manual operator (1) 11B = With maintained manual operator 11Z = With push-button type maintained manual operator 11M = Without manual operator 14B = Internal pilot supply from port 1 83B = 10 b max. pressure - non UL certified 81G = 11B + 14B 82K = 11M + 14B</p> <p>Electrical interface M = Plug-in (with LED indicator / DC)</p> <p>(1) Used external spool valves (internal/external supply configured in the end plate kits). For internal piloting, contact us. (2) Only with rubber packed version.</p>

How to Order - Regulators

	PRODUCT CODE
<p>Thread connection R = Pad mount</p> <p>Product series 503 (26 mm valve)</p> <p>Revision letter A = Initial release</p> <p>Product type R = Pressure regulator</p> <p>Regulator type S = Single regulator - Pressure to port 1 D = Regulator - Pressure to ports 5 & 3 E = Regulator- Pressure to ports 4 & 2, without valve T = Regulator - Pressure to ports 1 & 3, 2 pressure selector</p>	<p>R 503 A R S 1 2 J A00 1 0</p> <p>Configurator - CAD Files</p> <p>Interface 1 = Pneumatic high flow 2 = ISO 15407-2</p> <p>Options A00 = Standard (no options) 16N = Jumper on 14 end 16P = Jumper on 12 end 14M = Tamperproof needle cartridge assembly or regulator</p> <p>Wiring option J = Plug-in</p> <p>Gauge type 2 = bar (standard)</p> <p>Pressure range 1 = 0.7 to 9 bar 3 = 0.2 to 2 bar 4 = 0.3 to 4 bar</p>



How to Order - G3 Electronics

G3 ED1 00 D 0 STD

Electronics Protocols

- CC1** = CC Link IE Field (1)
- CO1** = CANopen®
- DN1** = DeviceNet™
- EC1** = EtherCAT® (1)
- ED1** = EtherNET/IP™ DLR (1)
- EM1** = ModBus®/TCP (1)
- PL1** = POWERLINK (1)
- PT1** = PROFIBUS-DP® (1)
- PN1** = PROFINET® (1)
- DS2** = Backplane extension Valve Manifold (1)
- DS3** = Backplane extension I/O Assembly

Number of I/O Modules

- 00** = 0
- 01** = 1
- 02** = 2
- 03** = 3
- 04** = 4
- 05** = 5
- 06** = 6
- 07** = 7
- 08** = 8
- 09** = 9
- 10** = 10
- 11** = 11
- 12** = 12
- 13** = 13
- 14** = 14
- 15** = 15
- 16** = 16

Left Mounting

- D** = w/ Backplane extension Out
- H** = w/ Terminating Resistor

(1) 32+ capable.

Special Options

- STD** = Standard
- DRM** = DIN Rail Mounting
- E23** = Fieldbus assembly without valves
- E28** = Valve Side 25 pin Sub D NPN output module
- E43** = Wireless Auto Recovery Module (ARM + Wireless)
- E44** = Auto recovery Module (ARM)
- G32** = DRM-Din Rail Mounting
E44-Auto Recovery Module (ARM)
- G33** = DRM-Din Rail Mounting
E28-Valve Side 25 pin Sub D NPN output module
- G34** = E28-Valve Side 25 pin Sub D NPN output module
E44-Auto Recovery Module (ARM)
- G36** = E23-Fieldbus assembly without valves
DRM-Din Rail Mounting
- J32** = DRM-Din Rail Mounting
E28-Valve Side 25 pin Sub D NPN output module
E44-Auto Recovery Module (ARM)

Modification

- 0** = Initial release

