

Features

- High flow rate up to 400 l/min
- 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
- Version with integrated LED and electrical protection.
LED indicator visible from 3 sides
- 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) = $1.45 \times 10^{-8} \text{ m}^3/\text{s.Pa}$ (sonic conductance)

b (5/2) = 0.40 (critical pressure ratio)

Pneumatic base

3 & 4 station subbases

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	FPM (fluoroelastomer)

Materials in contact with fluid

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

Body

Zamak, E-coating treatment

Spool

Aluminium

Piston

POM

Spring

Stainless 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

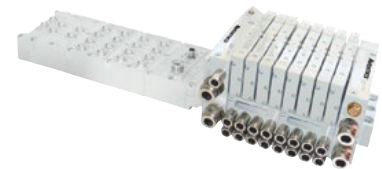
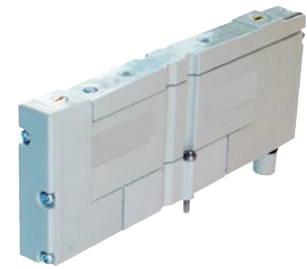
IP65 (EN 60529)

Standard voltages


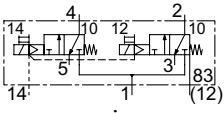
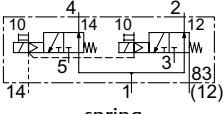
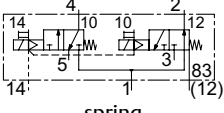
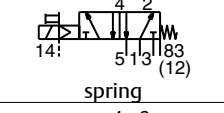
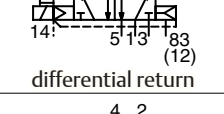
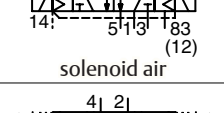
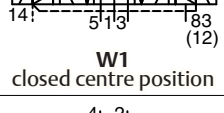
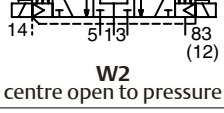
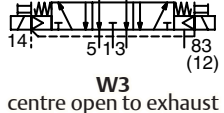
DC (=): 24V

Power ratings (hot/cold) (=)

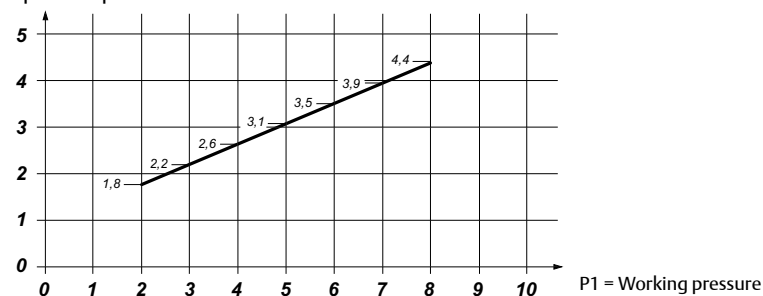
0.7 W / 0.8 W



Specifications

function	type	symbol	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.	max. (PS) air (*) =		
			l/min (ANR)							
			1 → 2 1 → 4	2 → 3 4 → 5						
SPOOL VALVE, RUBBER PACKED TECHNOLOGY, WITH IMPULSE MANUAL OPERATOR										
2 x 3/2 NC	K		405	415	18 / 18	(a)	8	2	8	R501A2BD0MA00F1
2 x 3/2 NO	N		400	400	18 / 18	(a)	8	2	8	R501A2BA0MA00F1
2 x 3/2 NC - NO	H		460 450	470 450	18 / 18	(a)	8	2	8	R501A2BC0MA00F1
5/2	S		405	410	14 / 29	2	8	-0.95	8	R501A2B10MA00F1
	M		405	410	25 / 21	2	8	-0.95	8	R501A2BN0MA00F1
	J		405	410	11 / 11	2	8	-0.95	8	R501A2B40MA00F1
5/3	G		405	410	13 / 12	2	8	-0.95	8	R501A2B60MA00F1
	B		405	360	17 / 38	2.5	8	-0.95	8	R501A2B70MA00F1
	E		365	415	27 / 12	2	8	-0.95	8	R501A2B50MA00F1

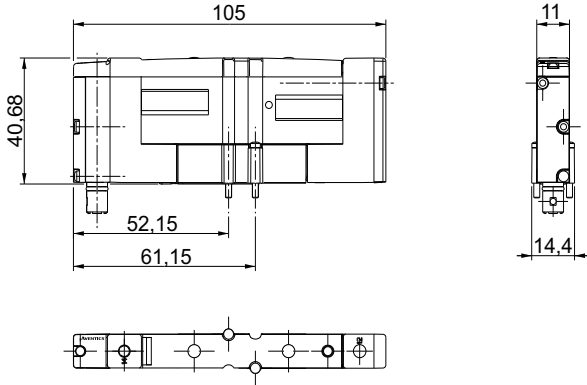
Pp = Pilot pressure



Plug in Valve

Dimensions (mm)

Series 501

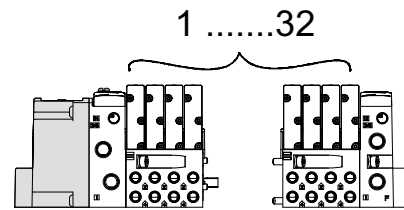


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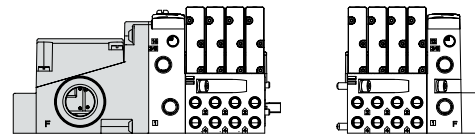
weight (kg)
0.093

Assembly kits

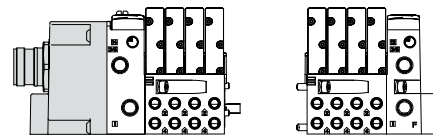
25 or 37 Pin Sub-D



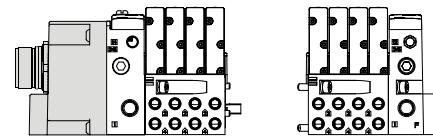
1-32 Terminal Strip



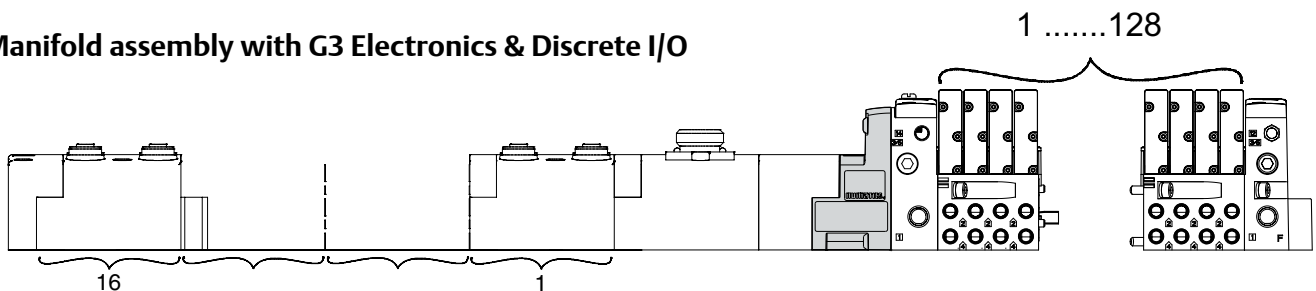
19 Pin Round Connector

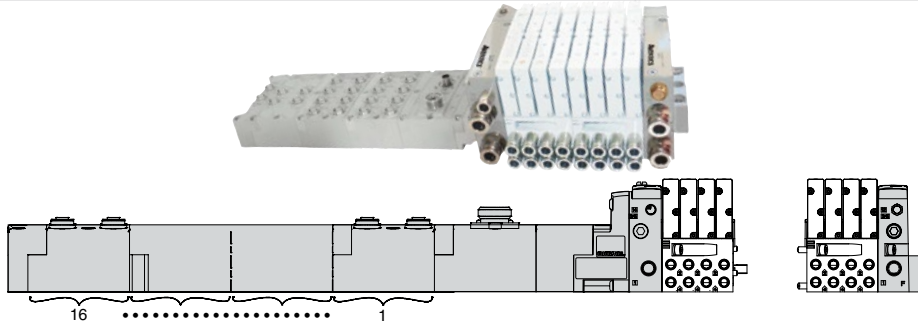


26 Pin Round Connector



Manifold assembly with G3 Electronics & Discrete I/O





Manifold assemblies kit (Electronic + End plate)

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PRODUCT CODE

G 501 A V 3 H 1 0 0 V A00

Thread connection

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

Product series

501 (11 mm valve)

Revision letter

A = Initial release

Product type

V = Valve Manifold Assembly

Electronics

- 8 = 580 Fieldbus Electronics
- D = CHARMs Electronics
- 3 = G3 Fieldbus Electronics
- J = 25 Pin Sub-D Connector
- M = 37 Pin Sub-D Connector
- Q = 19 Pin Round Connector
- R = 26 Pin Round Connector
- T = Terminal Strip 1-32
- Z = Fanuc Robot End Effector

Number of Valve Stations

Options

- A00 = Standard (no options)
- MUF = Muffler in End Plates
- DRM = DIN Rail Mount
- DWM = DIN Rail Mount with Muffler in End Plates
- 14X = External pilot supply from port 14
- D12 = External pilot supply from port 14 and Muffler in End Plates
- D14 = External pilot supply from port 14 and DIN Rail Mount
- F06 = External pilot supply from port 14 Muffler in End Plates and DIN Rail Mount

End Plate Style

V = Vertical

Second Valve Series

0 = No Second Valve Series

Valve Station Adder

- 0 = No Adder
- 1 = 32+
- 2 = 64+
- 3 = 96+

End Plate Port Size (1-3-5)

- Used with the first digit «G» or «8»:
- 1 = 1/8 (female thread only)
- Used with the first digit «K»:
- H = 6 x 8 mm (push-in connector)

501

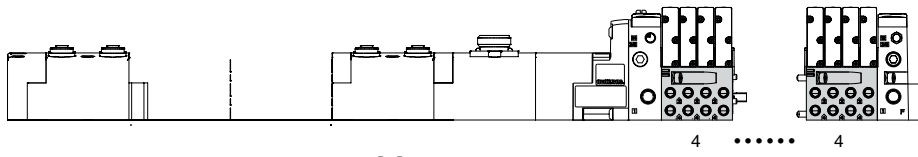
A = NA/33/65/97	I = 9/41/73/105	Q = 17/49/81/113	Y = 25/57/89/121
B = NA/34/66/98	J = 10/42/74/106	R = 18/50/82/114	Z = 26/58/90/122
C = 3/35/67/99	K = 11/43/75/107	S = 19/51/83/115	2 = 27/59/91/123
D = 4/36/68/100	L = 12/44/76/108	T = 20/52/84/116	3 = 28/60/92/124
E = NA/37/69/101	M = 13/45/77/109	U = 21/53/85/117	4 = 29/61/93/125
F = 6/38/70/102	N = 14/46/78/110	V = 22/54/86/118	5 = 30/62/94/126
G = 7/39/71/103	O = 15/47/79/111	W = 23/55/87/119	6 = 31/63/95/127
H = 8/40/72/104	P = 16/48/80/112	X = 24/56/88/120	7 = 32/64/96/128

Maximum Solenoid Outputs

Terminal Strip 1-32	25 Pin Sub-D Connector	37 Pin Sub-D Connector	19 Pin Round Connector	26 Pin Round Connector
32	22	32	16	22

*Note: Maximum number of valve stations is determined by:

- The electrical connection type.
- The valve type: single and/or double solenoid valves



Subbase

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PRODUCT CODE

H 501 **A** **M** **S4** **B** **M** **A00** **1** **0**

Thread connection
H = Metric thread
K = Push-in connectors

Product series
501 (11 mm valve)

Revision letter
A = Initial release

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

Interface
1 = High flow

Options
A00 = Standard (No option)
96X = 4 mm Port Size Override for Stations 5-8 of the 128 Solenoid Manifold Sub Base
M16 = With Back Pressure Check
M17 = (96X) + (M16)

Wiring option
M = Plug-in
V = +24 V DC Separation at First Station

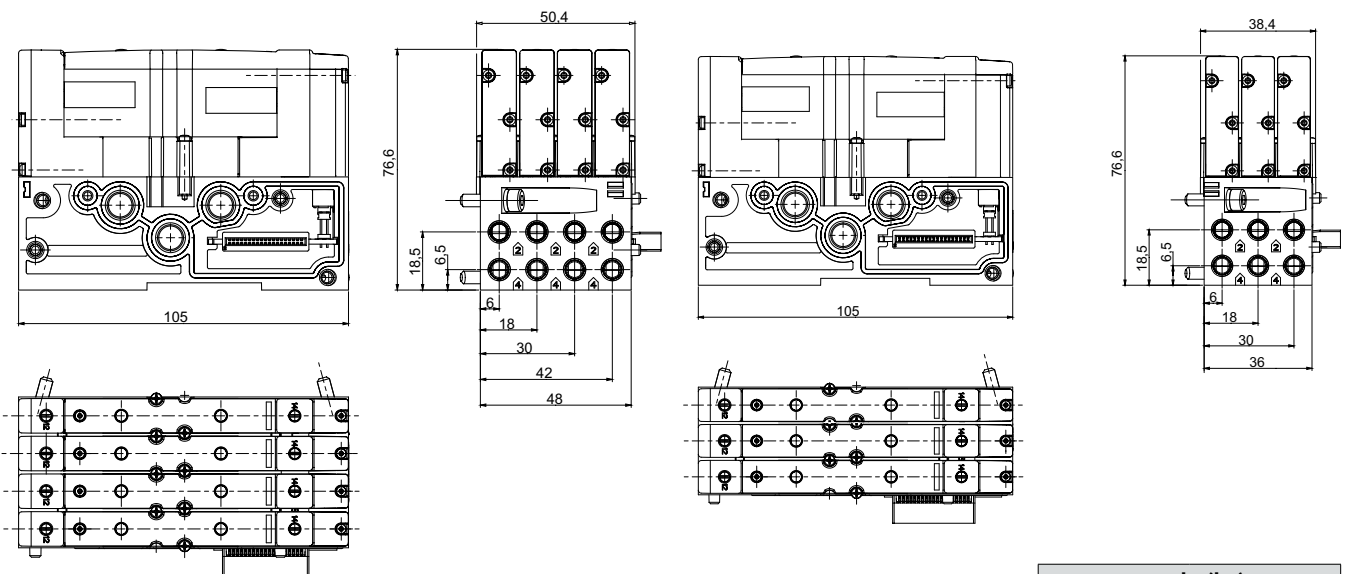
Port connection
B = M7 (female thread only)
D = 2.7 x 4 mm [push-in connector only] (Mid station supply not available)
F = 4 x 6 mm [push-in connector only]

Mounting
S3 = Manifold base, 3 stations, side port, single Z-Board™
M3 = Manifold base, 3 stations, side port, double Z-Board™
S4 = Manifold base, 4 stations, side port, single Z-Board™
S4 = Manifold base, 4 stations, side port, single Z-Board™
M4 = Manifold base, 4 stations, side port, double Z-Board™
M8 = 32+ Manifold Sub Base, 8 Stations, Side Ports, Double Z-Board™

Dimensions (mm)

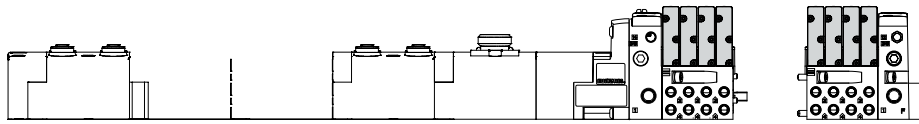
Plug in Valve Mounted

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weight (kg)	
4	3
0.65	0.50

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Valves

PRODUCT CODE

R 501 A 2 B 4 0 M A00 F1

Thread connection
R = Pad mount

Product series
501 (11 mm valve)

Revision letter
A = Initial release

Actuation
2 = Rubber packed

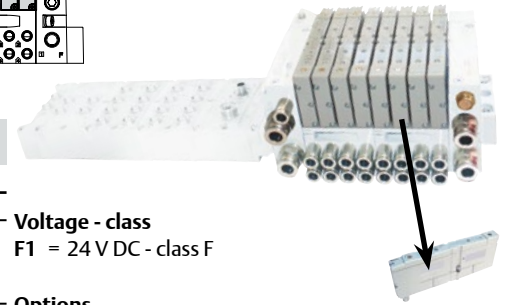
Valve type
B = Solenoid pilot

Function
 A = 2x3/2 NO, dual 3-way
 D = 2x3/2 NC, dual 3-way
 C = 2x3/2 NC x NO, dual 3-way
 F = 2x3/2 NO x NC, dual 3-way
 N = 5/2, Differential air return
 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
 7 = 5/3, W2, open center to pressure

Voltage - class
F1 = 24 V DC - class F

Options
 A00 = With impulse manual operator
 11B = With maintained manual operator
 11M = Without manual operator

Electrical interface
M = Plug-in (with LED indicator / DC)



Regulators

PRODUCT CODE

R 501 A R S 5 2 J A00 1 0

Thread connection
R = Pad mount

Product series
501 (11 mm valve)

Revision letter
A = Initial release

Product type
R = Pressure regulator

Regulator type
S = Single regulator - Pressure to port 1

Not use

Interface
1 = Pneumatic

Options
 A00 = Gauge upper position
 18V = Gauge lower position

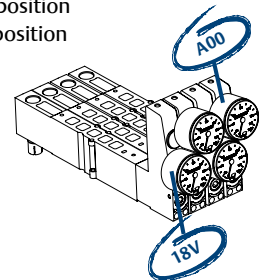
Wiring option
J = Plug-in

Gauge type
 0 = W/O Gauge
 2 = Gauge scale (bar)

Pressure range
5 = 0,7 to 8 bar (10 to 115 psi)



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Adaptor Plate Kit

The kit includes the adapter plate, transfer board, gasket and screws.
Individual end plates for the 501 and 502 are not include.
This adaptor allows the transition from the 502 to the 501 series.

EXAMPLE ORDERS :

Adapter plate kit:

Valves:

G502AVJF311VA00
R502A1B40MA00F1
R502A1B40MA00F1
G502AMM21MA0010
R501A2B40MA00F1
R501A2B40MA00F1
R501A2B40MA00F1
R501A2B40MA00F1
R501A2B40MA00F1
H501AMM4BMA0010
ASSEMBLED



and mounting:

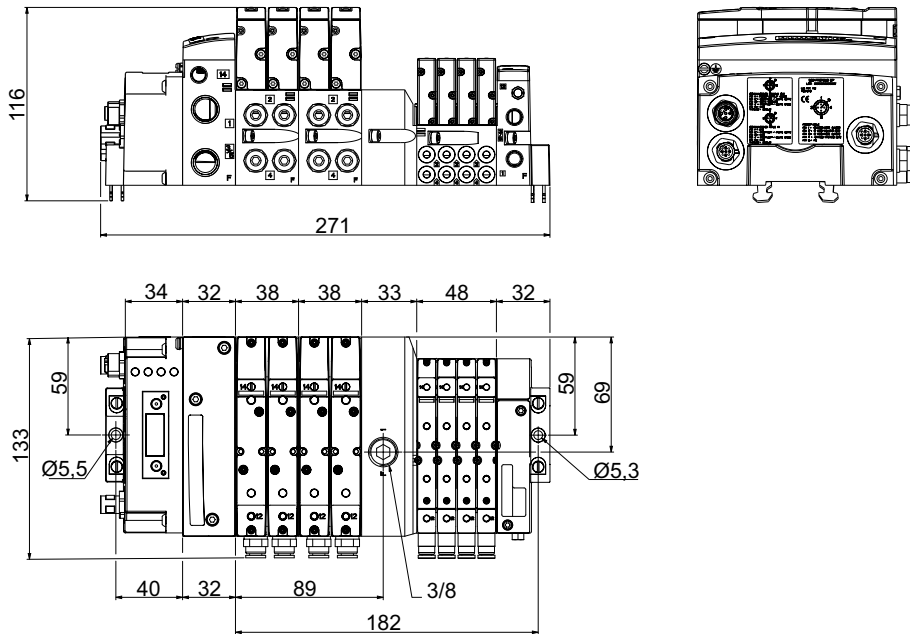
Adaptor Plate Kit with Standard End Plates

Description	Catalog number
502 with 3/8 G-tap to 501	G502AT429963002




Dimensions (mm)

502 to 501



501 Back Pressure Check Kit

Replacement Parts Kit	Product Image (Example Only)	Description	Parts Included	Restrictions	Part Number
Back Pressure Checks		Back pressure checks installed in ports 3 and 5 of the manifold blocks. Used to reduce/prevent back pressure into the valve.	2x Check Bodies and 2x Balls	Pressure must come from port 1 and exhaust must leave ports 3 and 5. Not allowed with Dual Pressure setup or Pilot supply from port 14 (no option 14X or combination thereof)	M501AU535182001

Manifold Assembly

