





5/2 and 5/3 Spool Valves Solenoid Actuated Ø4, Ø6 mm or M5

- 266 litres/min from 10 mm body width
- Modular base system for DIN rail or surface mounting
- Multipole connection ready for use
- Low power solenoids with built-in LED and surge suppression
- Ø63 mm bore cylinder capability
- Internal and external pilot versions



Technical Data

Medium:

Compressed air, filtered to $5\mu m$, lubricated and non-lubricated Operation:

Spool valve, indirectly actuated

Mountina:

Through-holes in sub-base or to 35 mm DIN rail using modular base system

Port Sizes:

 \emptyset 4 mm or \emptyset 6 mm interchangeable push-in connectors, M5 thread (\emptyset 8 mm or G $^{1}\!\!/_{\!\!6}$ supply and exhaust)

Operating Pressure:

Maximum 7 bar

See individual details overleaf

Flow Characteristics:

Size	C'	ʻb'	'A'	l/min	Cv	Κv
M5	0,73	0,401	2,93	177	0,18	0,16
Ø4 mm	0,65	0,447	2,61	158	0,16	0,14
Ø6 mm	1,10	0,401	4,40	266	0,27	0,23

Ambient Temperature:

-20°C to +50°C

Materials:

Entirely non-corrodible. Aluminium and co-polymer bodies, aluminium spool, single base and rail bases, nitrile seals, stainless steel springs and yoke, reinforced co-polymer modular bases, nickel plated brass fittings.

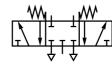
Ordering Information

To order, quote model number and voltage code from tables overleaf, e.g. V025511A-B263A for a Solenoid Pilot Actuated Set-reset internal supply model fitted with a 24V d.c. coil.

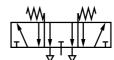
Order bases separately, e.g. M/P43149/4 for a 4 station rail base with M5 ports.



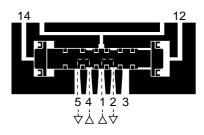




5/3
All ports blocked midposition



5/3 Centre, open exhaust mid-position



10/96 N/** **5.4.**102.01

^{*}Consult our Technical Service for use below +2°C

Nugget 30, V02 Series

General Information

Symbol	Model	Solenoid Pilot	Connection	Operator	Mld-position	Return	Operating Pressure (bar)	Pilot Pressure (bar)	Weight (g)
14 7 12 84 5 1 3	V025516A–B26*A V025516A–B24*A	Internal	Side plug Bottom plug	Solenoid	_	Spring and Air	1,5 – 7	_	27,3
14 7 12 X 5 1 7 3	V025526A–B26*A V025526A–B24*A	External	Side plug Bottom plug	Solenoid	-	Spring and Air	-0,9 - 7	0,9 minimum	27,3
14 2 12 84 5 1 382	V025511A–B26*A V025511A–B24*A	Internal	Side plug Bottom plug	Solenoid	-	Solenoid	1,5 – 7	-	40.8
14 12 12 X -5 V 1 V 3	V025522A–B26*A V025522A–B24*A	External	Side plug Bottom plug	Solenoid	-	Solenoid	-0,9 - 7	0,9 minimum	40.8
14 7 7 7 7 12 12 12 12 14 15 15 15 15 15 15 15 15 15 15 15 15 15	V025611A-B26*A V025611A-B24*A	Internal	Side plug Bottom plug	Solenoid	All ports blocked	Solenoid	2 – 7	-	40.8
14 7 12 X 5 1 3 3 - 12	V025622A-B26*A V025622A-B24*A	External	Side plug Bottom plug	Solenoid	All ports blocked	Solenoid	-0,9 - 7	0,9 minimum	40.8
14 2 W 12 12 12 12 12 12 12 12 12 12 12 12 12	V025711A–B26*A V025711A–B24*A	Internal	Side plug Bottom plug	Solenoid	Centre, open exhaust	Solenoid	2 – 7	-	40.8
14 7W 12 XI	V025722A–B26*A V025722A–B24*A	External	Side plug Bottom plug	Solenoid	Centre, open exhaust	Solenoid	-0,9 - 7	0,9 minimum	40.8

^{*}Insert voltage code from table below.

*Voltage Codes

Voltage	Codes
12V d.c. (optional)	2
24V d.c. (standard)	3



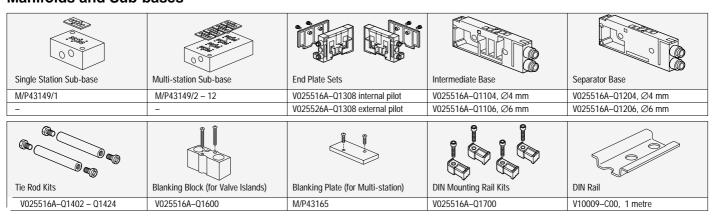
Side plug electrical connection. Bottom plug electrical connection.

Electrical Details for Solenoid Operators

Voltage Tolerances:	±10% rated voltage
Power:	1 W (24 V = 41 mA, 12 V = 83 mA)
Power Indicator:	LED (red)
Surge Suppressor:	Fly-wheel diode
Manual Override:	Push button, spring return with locking facility
Insulation Class:	В
Connection:	Side or bottom plug connector. Only one plug needed for double solenoid, common –Ve*

^{*&#}x27;D' Sub-connector via multipole.

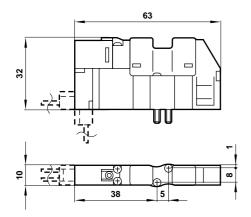
Manifolds and Sub-bases



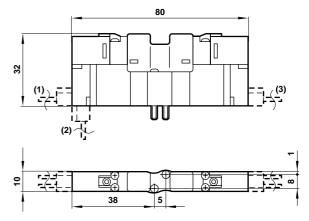
N/** **5.4.**102.02



V025516A and V025526A Models **Single Solenoid Valves**



V025511A, V025522A, V025611A, V025622A, V025711A and V025722A Models **Double Solenoid Valves**

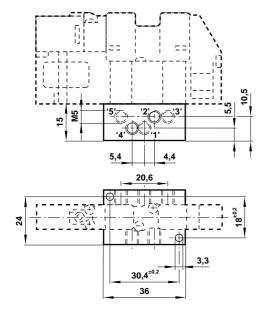


Either 3-wire plug in one side or two 2-wire plugs in both sides (1) Standard side plug position.
(2) Standard bottom plug position.

- (3) Alternative electrical connection position.

M/P43149/1 **Single Station Sub-base**

For valves with internal pilot supply only

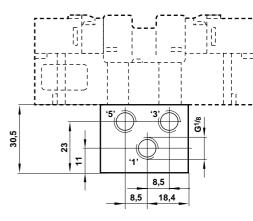


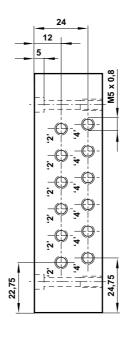
Туре	No. of stations
M/P43149/1	1
M/P43149/2	2
M/P43149/4	4
M/P43149/6	6
M/P43149/8	8
M/P43149/10	10
M/P43149/12	12

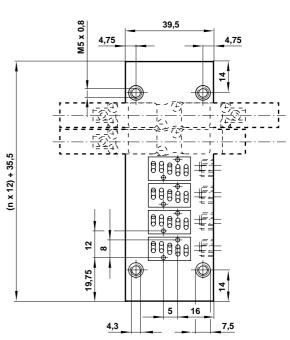
These sub-bases are supplied complete with gaskets.

M/P43149/2 - 12**Multi-station Sub-bases**

For valves with internal pilot supply only





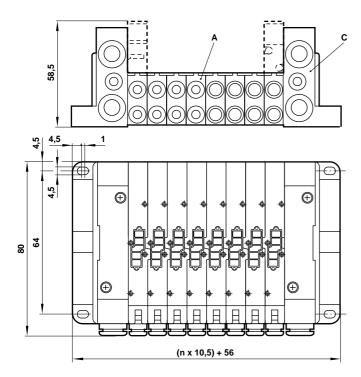


n = Number of stations on manifold

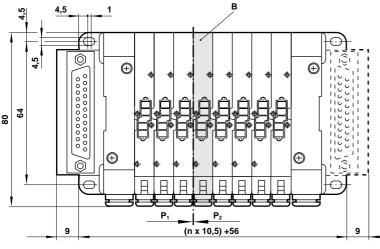
10/96 N/** **5.4.**102.03



Modular sub-base assemblies



Multipole



n = number of stations

Intermediate Bases (A)

Model Number: V025516A-Q1104

Type: Complete with Ø4 mm push-in fittings

Model Number: V025516A-Q1106

Type: Complete with ∅6 mm push-in fittings All Intermediate Bases are supplied with fittings, a base seal, an intermediate seal between bases and a fittings retaining plate. Fittings cartridges are interchangeable between bases

and sizes can be mixed.

Separator Bases (B) for dual supply

Model Number: V025516A-Q1204

Type: Separator base complete with $\emptyset 4 \text{ mm}$

push-in fittings

Model Number: V025516A-Q1206

Type: Separator base complete with $\varnothing 6 \text{ mm}$

push-in fittings

Manifolds can be assembled with dual pressure supplies. A separator base **V025516A**–**Q1204** (∅4 mm) or **V025516A**–**Q1206** (∅6 mm) is required, replacing one of the Intermediate Bases.

End Plate Sets (C)

Set consists of 1 left hand and 1 right hand End Plate with push-in connectors as detailed below. Each End Plate features an inlet connection and a common silenced exhaust.

Model Number: V025516A-Q1308

Type: Internal pilot supply. Complete with \emptyset 8 mm push-in fittings and pilot connection plugs.

Model Number: V025526A-Q1308

Type: External pilot supply. Complete with $\emptyset 8$ mm push-in fittings and $\emptyset 4$ mm push-in fittings for pilot connection.

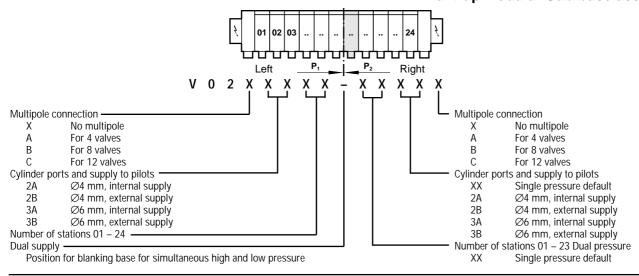
Tie Rod Kits

Model Number: V025516A-Q14**

Type: For 2 to 24 stations

**Specify number of stations in manifold - 02 to 24

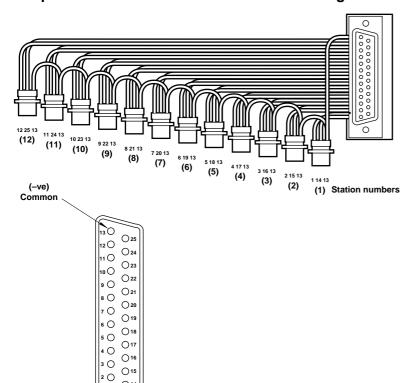
Built-up Modular Sub-base assemblies



N/** **5.4.**102.04



Multipole D Sub-connector harness and housing for sub-base assemblies



Harness and housing

Model Number: V025516A-Q1904

Type: For up to 4 stations

Model Number: V025516A-Q1908

Type: For up to 8 stations

Model Number: **V025516A-Q1912**

Type: For up to 12 stations

For 13 to 24 stations use one harness at each

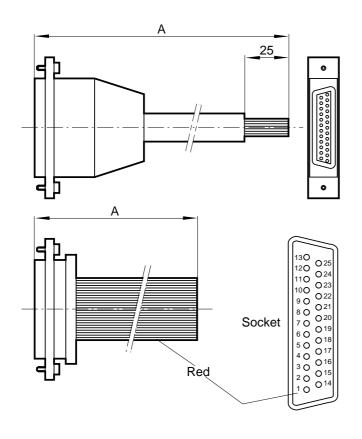
end of the manifold.

For Multipole connection use bottom plug versions of the valves. Only pin numbers 1 – 12 are used for Solenoid/Spring models.

Station number	Pin number near solenoid	Pin number far solenoid	Left	Wire colour Centre	Right (Com)
1	1	14	Brown	Red	Green
2	2	15	Orange	Yellow	Green
3	3	16	Green	Blue	Green
4	4	17	Purple	Grey	Green
5	5	18	White	Black	Green
6	6	19	Brown	Red	Green
7	7	20	Orange	Yellow	Green
8	8	21	Green	Blue	Green
9	9	22	Purple	Grey	Green
10	10	23	White	Black	Green
11	11	24	Brown	Red	Green
12	12	25	Orange	Yellow	Green

Multipole D Sub-connector

O14 1 ()



D Sub-connector with cable

Type: 25 pin D Sub-connector. Cable size 0,22 mm²

Model		A metres		
V025516A-Q2210)	1,0		
V025516A-Q2230)	3,0		
V025516A-Q2250	1	5,0		
Pin number	Wire colour	Pin number	Wire colour	

Pin number	Wire colour	Pin number	Wire colour
1	Red	14	Green/red
2	Blue	15	Yellow/red
3	Green	16	White/red
4	Yellow	17	Red/black
5	White	18	Red/brown
6	Brown	19	Yellow/blue
7	Violet	20	White/blue
8	Orange	21	Blue/black
9	Pink	22	Orange/blue
10	Turquoise	23	Yellow/green
11	Grey	24	White/green
12	Red/blue	25	Orange/green
13	Black		

D Sub-connector Ribbon Cable

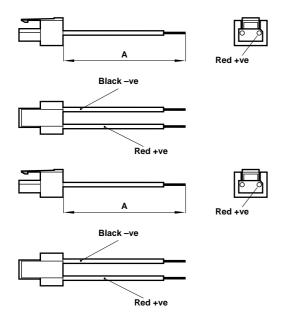
Type: 25 pin D Sub-connector. Cable size 0,08 mm²

Model		A metres		
V025516A-Q4310)	1,0		
V025516A-Q4330	1	3,0		
V025516A-Q4350	1	5,0		
Pin number	Wire colour	Pin number	Wire colour	
1	Red	2 – 25	Grey	

10/96 N/** **5.4.**102.05



Plug Connectors with clip



Model Number: V025516A-Q20**

Type: 2-wire negative common for use with

single solenoid valves

Model Number: V025516A-Q21**

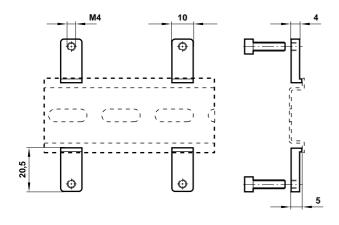
Type: 3-wire negative common for use with double solenoid valves

	Α
516A-Q2003	300

Model	Α
V025516A-Q2003	300
V025516A-Q2010	1000
V025516A-Q2103	300
V025516A-Q2110	1000
V10175-K00 Connectors only (pack of 10)	_

^{**}Complete part number from table.

DIN Mounting Rail Kits

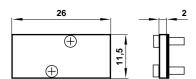


Model Number: V025516A-Q1700

Type: Kit for Modular bases to EN 50022

mounting rail

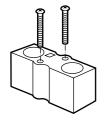
Accessories



Blanking Plate

Model Number: M/P43165

Blanking Plate for blocking off unwanted stations on Multi-station sub-bases.



Blanking Block

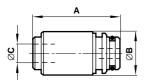
Model Number: V025516A-Q1600

For blocking off unwanted Intermediate Base

stations on Modular sub-bases

N/** **5.4.**102.06 10/96

Accessories



Fittings Cartridges

Model Number: 10X000004

Ø4 mm removable push-in fittings cartridge

Model Number: 10X000006

Ø6 mm removable push-in fittings cartridge

Model Number: 10X000008

Ø8 mm removable push-in fittings cartridge

Model	10X000004	10X000006	10X000008
A	19,9	20,2	20,2
В	9,9	9,9	13,9
С	4	6	8

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where *pressures* and *temperatures* can exceed those listed under '**Technical Data**'.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure of the fail

the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be

adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

10/96 N/** **5.4.**102.07