

5/2 and 5/3 Spool Valves **Solenoid Actuated**  $\emptyset$ 4,  $\emptyset$ 6 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 5µm, 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:

Ø4 mm or Ø6 mm interchangeable push-in connectors, M5 thread ( $\emptyset$ 8 mm or G<sup>1</sup>/<sub>8</sub> supply and exhaust)

#### **Operating Pressure:**

Maximum 7 bar

See individual details overleaf

#### Flow Characteristics:

		-				
Size	'C'	ʻb'	'A'	l/min	Cv	Kv
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

\*Consult our Technical Service for use below +2°C

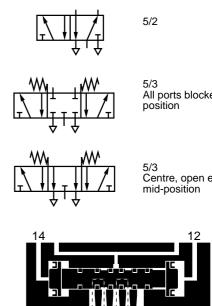
#### Materials:

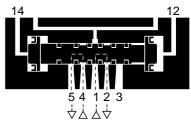
Entirely non-corrodible. Aluminium and co-polymer bodies, aluminium spool, single base and rail bases, nitrile seals, stainless steel springs and yoke, reinforced co-polymer modular bases, nickel plated brass fittings.

### **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.





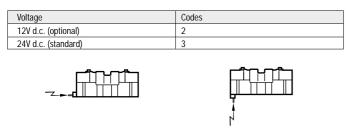


# **General Information**

Symbol	Model	Solenoid Pilot	Connection	Operator	MId-position	Return	Operating Pressure (bar)	Pilot Pressure (bar)	Weight (g)
$14 \boxed[]{14} []{$	V025516A-B26*A V025516A-B24*A	Internal	Side plug Bottom plug	Solenoid	-	Spring and Air	1,5 – 7	-	27,3
$\begin{array}{c c} & 4 & 2 \\ 14 & & & 12 \\ \hline & & & & 12 \\ \hline & & & & & 1 \\ \hline & & & & & & 1 \\ \hline & & & & & & & 1 \\ \hline & & & & & & & & 1 \\ \hline & & & & & & & & & 1 \\ \hline & & & & & & & & & & \\ \hline & & & & & &$	V025526A-B26*A V025526A-B24*A	External	Side plug Bottom plug	Solenoid	-	Spring and Air	-0,9 - 7	0,9 minimum	27,3
$14 \begin{array}{c} 4 \\ 14 \\ \hline \\ 84^{\vee} \\ 5^{\vee} \\ 1 \\ 3^{\vee} \\ 3^$	V025511A-B26*A V025511A-B24*A	Internal	Side plug Bottom plug	Solenoid	-	Solenoid	1,5 – 7	-	40.8
$\begin{array}{c c} & 4 & 2 \\ 14 & & & & \\ \hline \begin{matrix} 1 \\ T \\ X \end{matrix} \\ \hline \begin{matrix} T \\ T \\ T \end{matrix} \\ \hline \begin{matrix} T \\ T \\ T \end{matrix} \\ \hline \begin{matrix} T \\ T \\ T \end{matrix} \\ \hline \begin{matrix} T \\ T \\ T \end{matrix} \\ \hline \begin{matrix} T \\ T \\ T \end{matrix} \\ \hline \begin{matrix} T \\ T \\ T \end{matrix} \\ \hline \begin{matrix} T \\ T \\ T \end{matrix} \\ \hline \begin{matrix} T \\ T \\ T \end{matrix} \\ \hline \begin{matrix} T \\ T \\ T \end{matrix} \\ \hline \begin{matrix} T \\ T \\ T \end{matrix} \\ \hline \begin{matrix} T \\ T \\ T \end{matrix} \\ \hline \begin{matrix} T \\ T \\ T \end{matrix} \\ \hline \begin{matrix} T \\ T \\ T \end{matrix} \\ \hline \begin{matrix} T \\ T \\ T \end{matrix} \\ \hline \begin{matrix} T \\ T \\ T \end{matrix} \\ \hline \begin{matrix} T \\ T \end{matrix} \\ \hline \hline \hline \begin{matrix} T \\ T \end{matrix} \\ \hline \hline \hline \begin{matrix} T \\ T \end{matrix} \\ \hline \hline$	V025522A-B26*A V025522A-B24*A	External	Side plug Bottom plug	Solenoid	-	Solenoid	-0,9 - 7	0,9 minimum	40.8
$14 \begin{array}{ c c c c c } & & & & & & & & & & & & & & & & & & &$	V025611A-B26*A V025611A-B24*A	Internal	Side plug Bottom plug	Solenoid	All ports blocked	Solenoid	2 – 7	-	40.8
$14 \underbrace{ \begin{bmatrix} 1 & 4 & 2 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 & 1 \\ 1 & 1 &$	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 \underbrace{\begin{array}{c} & & & \\ & & & \\ 14 \\ & & & \\ 84 \\ & & \\ 5 \\ & & \\ 5 \\ & & \\ \end{array}} \underbrace{\begin{array}{c} & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}} \underbrace{\begin{array}{c} & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ \end{array}} \underbrace{\begin{array}{c} & & \\ $	V025711A-B26*A V025711A-B24*A	Internal	Side plug Bottom plug	Solenoid	Centre, open exhaust	Solenoid	2 – 7	-	40.8
$\begin{array}{c c} & & & & & \\ & & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & &$	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



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*

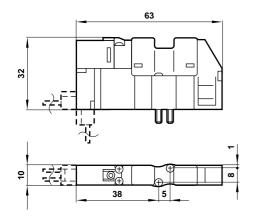
\*'D' Sub-connector via multipole.

# Manifolds and Sub-bases

Single Station Sub-base	Multi-station Sub-base	End Plate Sets	Intermediate Base	Separator Base
M/P43149/1	M/P43149/2 – 12	V025516A–Q1308 internal pilot	V025516A-Q1104, Ø4 mm	V025516A–Q1204, Ø4 mm
-	-	V025526A–Q1308 external pilot	V025516A–Q1106, Ø6 mm	V025516A–Q1206, Ø6 mm
Tie Rod Kits	Blanking Block (for Valve Islands)	Blanking Plate (for Multi-station)	DIN Mounting Rail Kits	DIN Rail
V025516A–Q1402 – Q1424	V025516A-Q1600	M/P43165	V025516A-Q1700	MP/43135/1 1 metre



### V025516A and V025526A Models Single Solenoid Valves

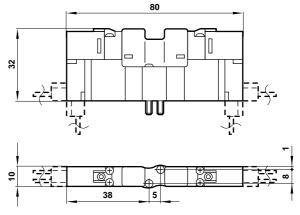


M/P43149/1

Single Station Sub-base

For valves with internal pilot supply only

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

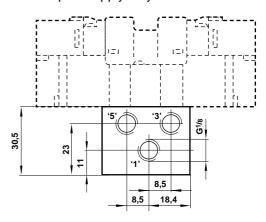


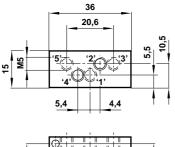
Either 3-wire plug in one side or two 2-wire plugs in both sides (1) Standard side plug position.

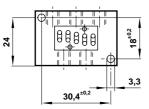
(2) Standard bottom plug position.

(3) Alternative electrical connection position.

#### M/P43149/2 – 12 Multi-station Sub-bases For valves with internal pilot supply only

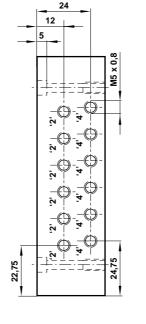


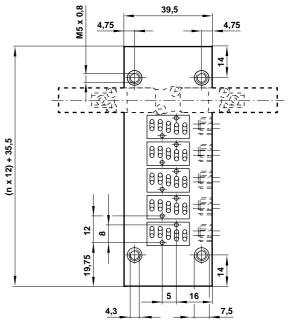




Туре	No. of stations
M/P43149/1	1
M/P43149/2	2
M/P43149/4	4
M/P43149/6	6
M/P43149/8	8
M/P43149/10	10
M/P43149/12	12

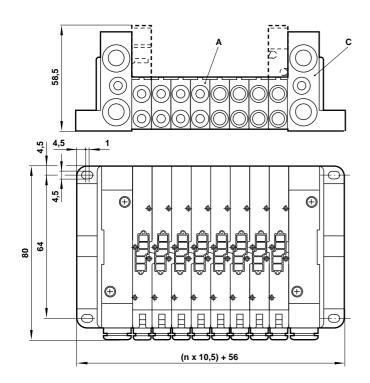
These sub-bases are supplied complete with gaskets.



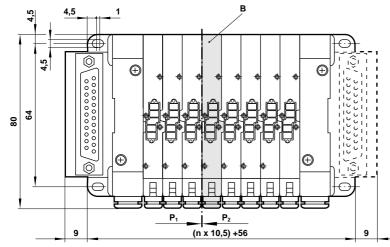


n = Number of stations on manifold

### 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 Ø6 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 Ø4 mm push-in fittings

Model Number: **V025516A–Q1206** Type: Separator base complete with Ø6 mm push-in fittings

Manifolds can be assembled with dual pressure supplies. A separator base **V025516A–Q1204** (Ø4 mm) or **V025516A–Q1206** (Ø6 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  $\varnothing 8$  mm push-in fittings and pilot connection plugs.

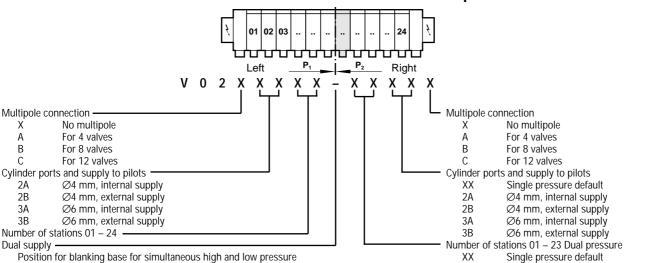
Model Number: V025526A-Q1308

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**

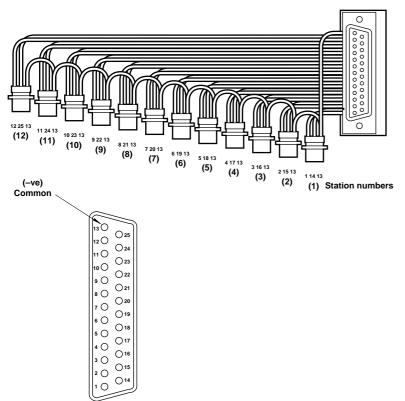
Model Number: **V025516A–Q14**\*\* Type: For 2 to 24 stations \*\*Specify number of stations in manifold – **02** to **24** 

# **Built-up Modular Sub-base assemblies**





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



### Harness and housing

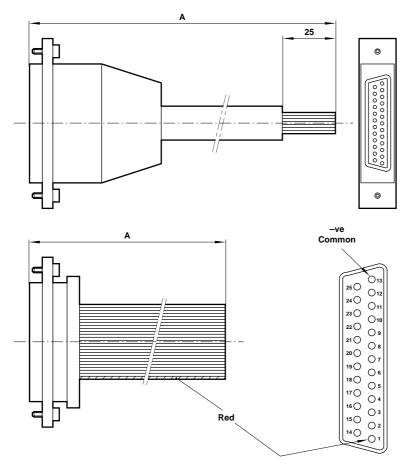
Model Number: **V025516A–Q1904** Type: For up to 4 stations Model Number: **V025516A–Q1908** Type: For up to 8 stations Model Number: **V025516A–Q1912** Type: For up to 12 stations

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)
Turriber	Tiedi Suleriulu	Tal sulenulu	Leit	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**



# D Sub-connector with cable

Type: 25 pin D Sub-connector. Cable size 0,22  $\mbox{mm}^2$ 

Model		A metres			
V025516A-Q22	215	1,5	1,5		
V025516A-Q22	230	3,0			
V025516A-Q22	250	5,0			
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				

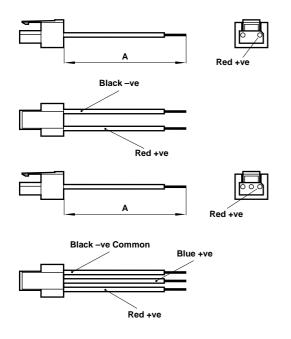
# **D** Sub-connector Ribbon Cable

Type: 25 pin D Sub-connector. Cable size 0,08 mm<sup>2</sup>

Model		A metres		
V025516A-Q4315		1,5		
V025516A-Q4330	1	3,0		
V025516A-Q4350		5,0		
Pin number Wire colour		Pin number	Wire colour	
1 Red		2 – 25	Grey	



# **Plug Connectors with clip**

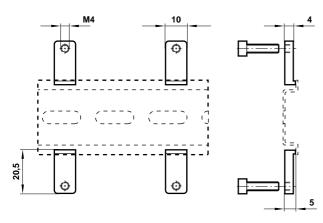


### Model Number: **V025516A–Q20\*\*** Type: 2-wire negative common Model Number: **V025516A–Q21\*\*** Type: 3-wire negative common

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

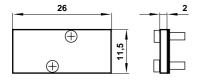
\*\*Complete part number from table.

**DIN Mounting Rail Kits** 



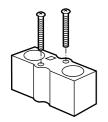
Model Number: **V025516A–Q1700** Type: Kit for Modular bases to EN 50022 mounting rail

# Accessories



### **Blanking Plate**

Model Number: **M/P43165** Blanking Plate for blocking off unwanted stations on Multi-station sub-bases.

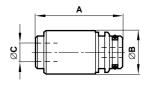


# **Blanking Block**

Model Number: **V025516A–Q1600** For blocking off unwanted Intermediate Base stations on Modular sub-bases



### 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: 10X00008

Ø8 mm removable push-in fittings cartridge

I	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 MARTONAIR.

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 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.