


**Sub-base Mounted 3/2, 5/2  
and 5/3 Spool Valves**
**Solenoid Actuated and Pilot Operated  
Ø 6 mm or G<sup>1</sup>/<sub>8</sub>**

- High flow from 17mm body width
- Compact, sub-base mounted valves
- Low power solenoid models with a range of voltages
- Surface or DIN-Rail mounting
- Wide range of sub-bases for up to 20 stations


**Technical Data**
**Medium:**

Compressed air, filtered, lubricated and non-lubricated

**Operation:**

Spool valve, indirectly actuated

**Mounting:**

Through-holes in sub-base or DIN-Rail fixing

**Port Size (sub-base):**

 Ø 6 mm, G<sup>1</sup>/<sub>8</sub>
**Operating Pressure:**

Maximum 10 bar

See individual details overleaf

**Flow Characteristics:**

Size	Function	'C'	'b'	'A'	l/min	Cv	Kv
G <sup>1</sup> / <sub>8</sub>	5/2,3/2	1,87	0,51	7,49	453	0,46	0,39
Ø 6mm	5/2,3/2	1,57	0,26	6,28	394	0,41	0,36
Ø 6mm	5/3 APB	1,39	0,20	4,53	274	0,28	0,24

**Ambient Temperature:**

-20°C to +80°C Pilot models

-20°C to +50°C Solenoid models

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

**Materials**

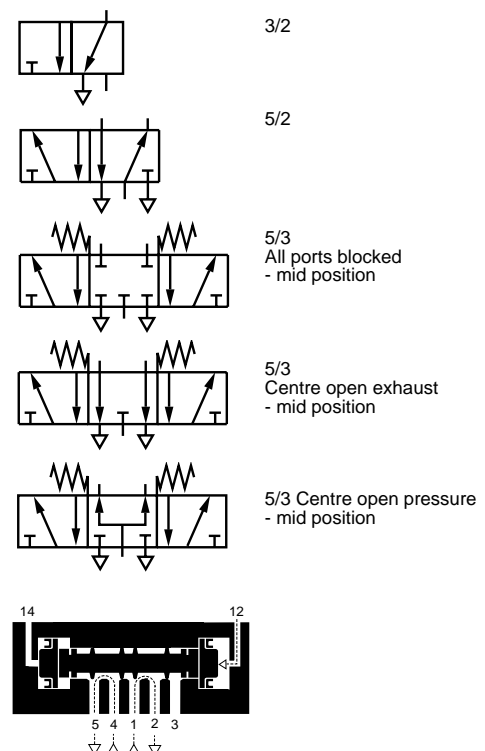
Zinc alloy body, glass filled co-polymer and zinc alloy end caps, aluminium spool with nitrile rubber seals, aluminium modular bases.

**Ordering Information**

To order, quote model number and voltage code from tables overleaf, e.g. V095516A-B213A for a Solenoid Pilot Actuated, Spring and Air Return model fitted with a 24V d.c. coil and screwdriver operated manual override.

**Multipole Systems**

For complete Valve Islands see section 5.4.112





### General Information 3/2 Solenoid Actuated Valves

Symbol	Model	Manual Override	Solenoid Pilot	Operator	Return	Operating Pressure (bar)	Pilot Pressure (bar)	Weight (kg)	Spares kit
	V095416R-B200A	Screwdriver Bi-stable	Internal	Solenoid	Spring and Air	3 to 10	-	0,140	V10034-K04
	V095416R-B300A	Push Button Spring Return							
	V095426R-B200A	Screwdriver Bi-stable	External	Solenoid	Spring and Air	-0,9 to 10	1,5 + 0,5 x supply	0,140	V10034-K04
	V095426R-B300A	Push Button Spring Return							

### 5/2 Solenoid Actuated Valves

Symbol	Model	Manual Override	Solenoid Pilot	Operator	Return	Operating Pressure (bar)	Pilot Pressure (bar)	Weight (kg)	Spares kit
	V096516A-B21*A	Screwdriver Bi-stable	Internal	Solenoid	Spring and Air	3 to 10	-	0,155	V10034-K00
	V096516A-B31*A	Push Button Spring Return							
	V096526A-B21*A	Screwdriver Bi-stable	External	Solenoid	Spring and Air	1 to 10	1,5 + 0,5 x supply	0,155	V10034-K00
	V096526A-B31*A	Push Button Spring Return							
	V096511A-B21*A	Screwdriver Bi-stable	Internal	Solenoid	Solenoid	2 to 10	-	0,198	V10034-K00
	V096511A-B31*A	Push Button Spring Return							
	V096522A-B21*A	Screwdriver Bi-stable	External	Solenoid	Solenoid	1 to 10	2 to 10	0,198	V10034-K00
	V096522A-B31*A	Push Button Spring Return							
	V096513A-B21*A	Screwdriver Bi-stable	Internal	Solenoid	Air	1,5 to 10	-	0,155	V10034-K00
	V096513A-B31*A	Push Button Spring Return							

### 5/3 Solenoid Actuated Valves

Symbol	Model	Manual Override	Pilot Supply	Operator	Mid-Position	Return	Operating Pressure (bar)	Pilot Pressure (bar)	Weight (kg)	Spares kit	Mounting Option
	V096611A-B21*A	Screwdriver Bi-stable	Internal	Solenoid	APB	Solenoid	-0,9 to 10	-	0,205	V10034-K01	All Bases
	V096611A-B31*A	Push Button									
	V096622A-B21*A	Screwdriver Bi-stable	External	Solenoid	APB	Solenoid	-0,9 to 10	1,2 to 10	0,205	V10034-K01	Sub-base
	V096622A-B31*A	Push Button									
	V096711A-B21*A	Screwdriver Bi-stable	Internal	Solenoid	COE	Solenoid	-0,9 to 10	-	0,205	V10034-K02	All Bases
	V096711A-B31*A	Push Button									
	V096722A-B21*A	Screwdriver Bi-stable	External	Solenoid	COE	Solenoid	-0,9 to 10	1,2 to 10	0,205	V10034-K02	Sub-base
	V096722A-B31*A	Push Button									
	V096811A-B21*A	Screwdriver Bi-stable	Internal	Solenoid	COP	Solenoid	-0,9 to 10	-	0,205	V10034-K03	All Bases
	V096811A-B31*A	Push Button									
	V096822A-B21*A	Screwdriver Bi-stable	External	Solenoid	COP	Solenoid	-0,9 to 10	1,2 to 10	0,205	V10034-K03	Sub-base
	V096822A-B31*A	Push Button									

\* Insert Voltage Code from table (see page 3.)  
 APB = All Ports Blocked, COE = Centre Open Exhaust, COP = Centre Open Pressure.



### Pilot Actuated Valves

Symbol	Model	Operator	Mid-Position	Return	Operating Pressure (bar)	Pilot Pressure (bar)	Weight (kg)	Spares kit	Mounting Option
	V096536A-X0130	Pilot	-	Spring and Air	2 to 10	1,5 + 0,5 x supply	0,116	V10034-K00	All Bases
	V096533A-X0020	Pilot	-	Pilot	1 to 10	2 to 10	0,141	V10034-K00	All Bases
	V096533A-X0060	Pilot Priority	-	Pilot	1 to 10	2 to 10	0,141	V10034-K00	All Bases
	V096633A-X0020	Pilot	APB	Pilot	1 to 10	2 to 10	0,148	V10034-K01	All Bases
	V096733A-X0020	Pilot	COE	Pilot	1 to 10	2 to 10	0,148	V10034-K02	All Bases
	V096833A-X0020	Pilot	COP	Pilot	1 to 10	2 to 10	0,148	V10034-K03	All Bases

For valves without telntales, substitute letter **A** in the 8th position with letter **R** e.g. V096833**R**-X0020  
 APB = All Ports Blocked, COE = Centre Open Exhaust, COP = Centre Open Pressure

### \*Voltage Codes and Spare Coils

Voltage	Codes	Power Inrush/Hold	Coil Part Number
6V d.c.	1	1,5 W	V10025-A11
12V d.c.	2	1,7 W	V10025-A12
24V d.c.	3	1,7 W	V10025-A13
12V 50/60Hz	1	4,1/2,9 VA	V10025-A11
24V 50/60Hz	4	4,1/2,9 VA	V10025-A14
48V 50/60Hz	6	4,1/2,9 VA	V10025-A16
110V 50/60Hz	8	3,5/2,5 VA	V10025-A18
240V 50/60Hz	9	3,5/2,5 VA	V10025-A19

### Electrical Details for Solenoid Operators

Voltage Tolerances:	±10%
Rating:	100% E.D.
Inlet Orifice:	0,8 mm
Electrical Connection:	DIN 43650 table 'C'
Manual Override:	V0965--A-B21*A – Screwdriver Bi-stable V0965--A-B31*A – Push button, spring return
Protection Class:	IP 65 (DIN 40050)

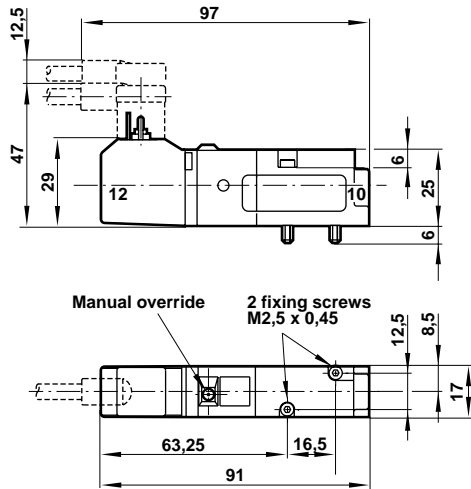
For details of connector plugs and light emitting seals see section 7.7.001.

### Accessories

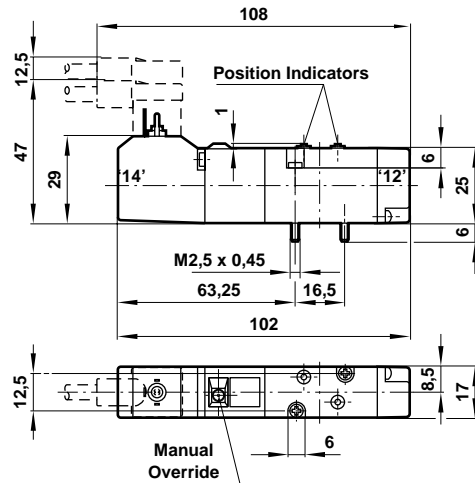
Sandwich Plate Flow Regulator V095516A-Q1200	Blanking Plate V095516A-Q1100	Optional Tie Rod Kits V085516A-Q0302 – 0320	DIN Rail Mounting Kits *V10007-K00 for V10006-G** bases *V10008-K00 for V10039-G** bases	Din Rail V10009-C00 1 metre
Blanking Plug V10511-K01	Intermediate Supply/Exhaust Plate V095516A-Q160G	Pressure Switch Assembly V095516A-Q1700	PIF Ø6 Sub-base V095516R-Q1306	



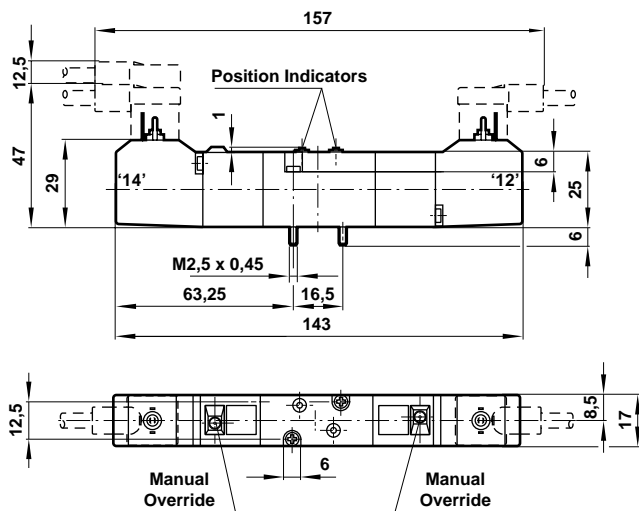
**V0954\*\*R Models**  
**3/2 Single Solenoid Valves**



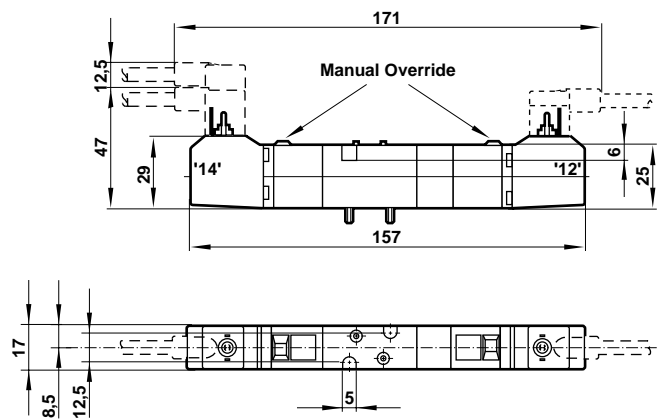
**V0965\*\*A Models**  
**5/2 Single Solenoid Valves**



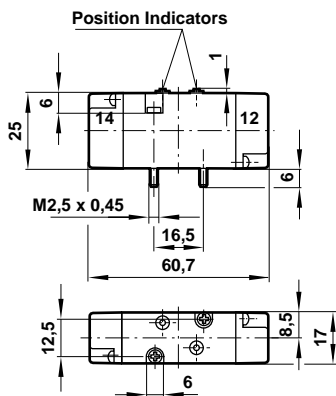
**V096511A and V096522A Models**  
**5/2 Double Solenoid Valves**



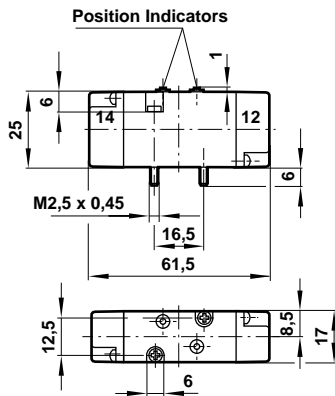
**V096\*\*\*A Models**  
**5/3 Double Solenoid Valve**



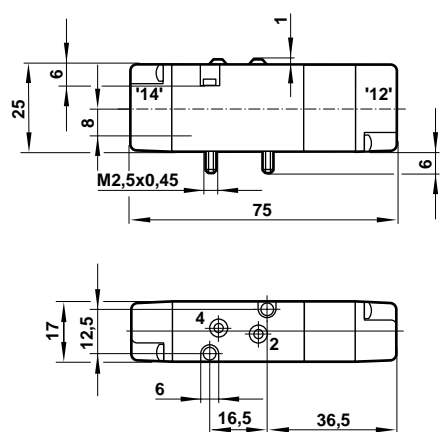
**V096536A-X0130 and V096533A-X0060**  
**5/2 Single Pilot and Priority Pilot Valves**



**V096533A-X0020 Model**  
**5/2 Double Pilot Valve**

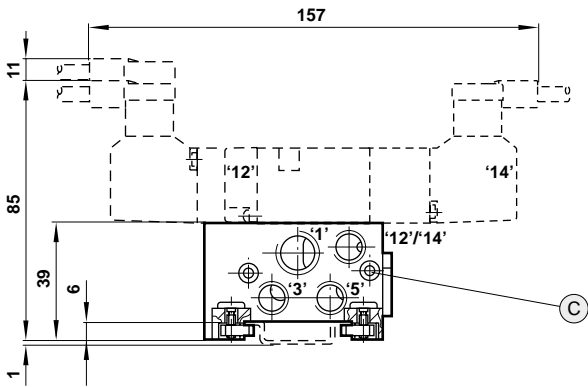


**V096\*33A-X0020 Model**  
**5/3 Double Pilot Valve**





**Modular Sub-bases for DIN-Rail or surface mounting**



**Modular Sub-base (A)**

**V095516R-Q130G**

Modular Sub-base G<sup>1/8</sup>

**Modular Sub-base with Push-in Fitting**

**V095516R-Q1306**

Modular Sub-base Ø6 PIF

**End Plate Kit (B)**

**V095516R-Q140G**

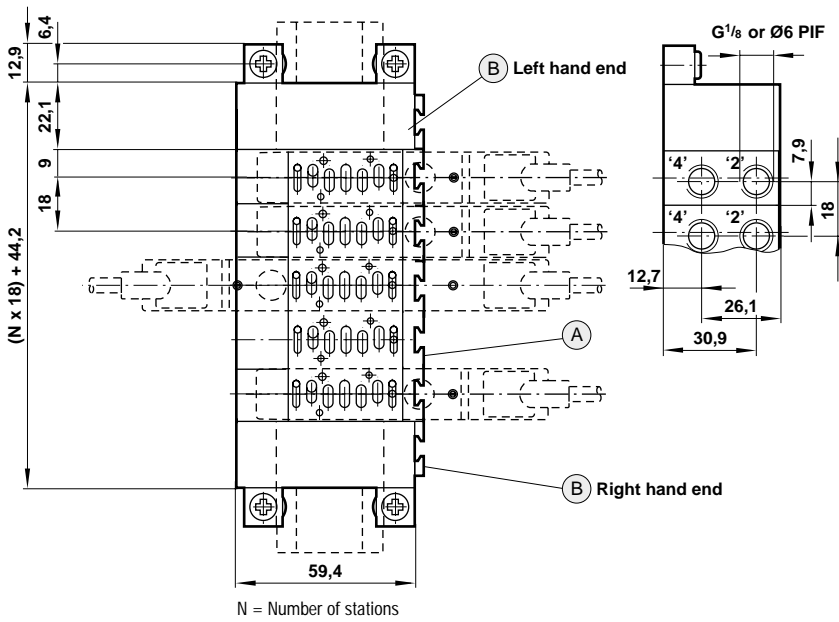
Consisting of 1 left hand and 1 right hand end cap and DIN rail mounting system.

**Tie Rod Kits (C)**

**V085516A-Q03\*\***

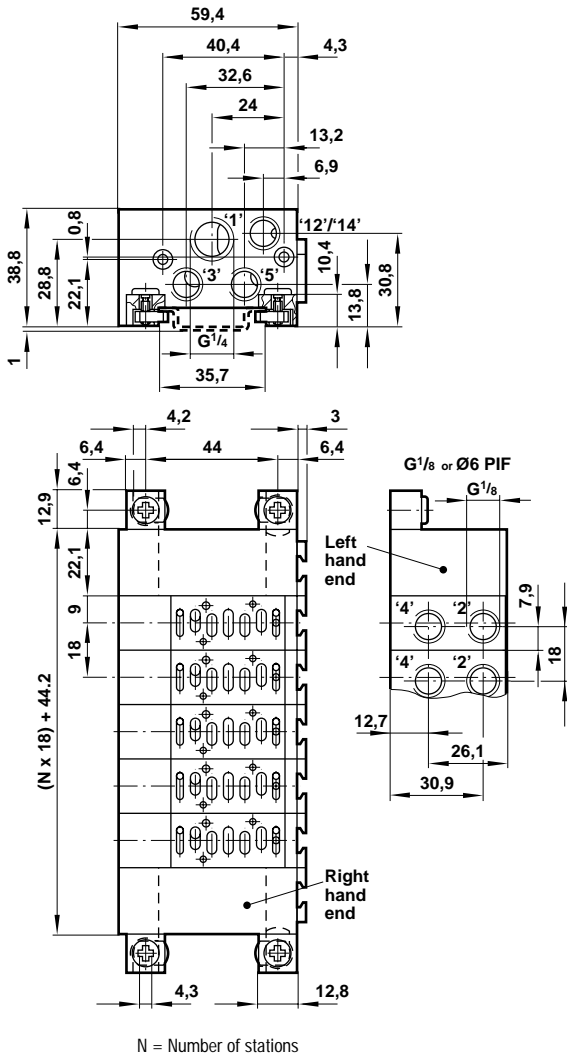
\*\* = Number of stations in manifold, 02 to 20.

Consisting of 1 x barrel nut, 1 x Tie rod and 1 x M3 nut





### Modular Sub-base assemblies for DIN-Rail or surface mounting



#### Modular Sub-base assemblies

V09AAX\*\*-XXXXX

Modular Sub-base assemblies for 2 to 20 valves.

\*\* = 02 to 20.

#### Modular Sub-base Assemblies with Ø6 Push-in Fittings

V096AX\*\*-XXXXX

Modular Sub-base assemblies for 2 to 20 valves.

\*\* = 02 to 20.

#### Dual Pressure Modular Sub-base assemblies

V09AAX\*\*-\*\*XXX

Modular Sub-base assemblies for 2 to 20 stations. Allows supply of two different inlet pressures simultaneously  
\*\* = 1 to 19 to indicate position of Dual Pressure Plug, e.g V09AAX03-07XXX indicates a 10 station base divided into groups of 3 and 7.

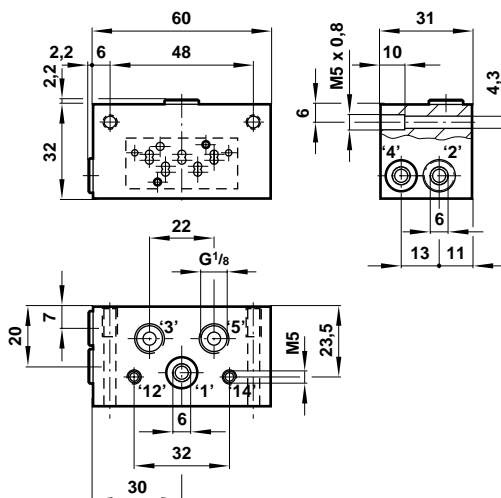
#### Dual Pressure Modular Sub-base Assemblies with Ø6 Push-in Fittings

V096AX\*\*-\*\*XXX

#### Dual Pressure Blanking Disk set

V095516A-Q1900

### Single Sub-base



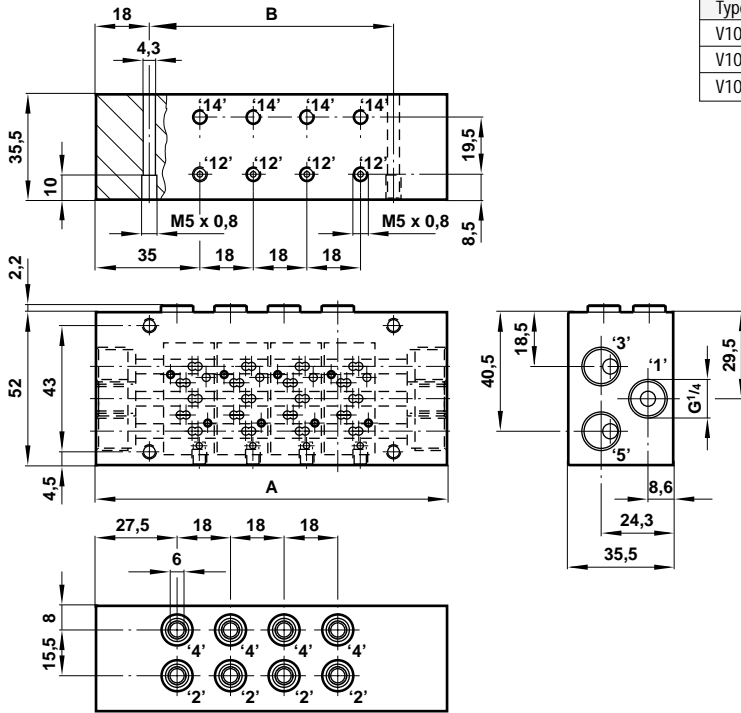
#### Side Ported Sub-base

V10038-G00

Single Station Side Ported Sub-base.

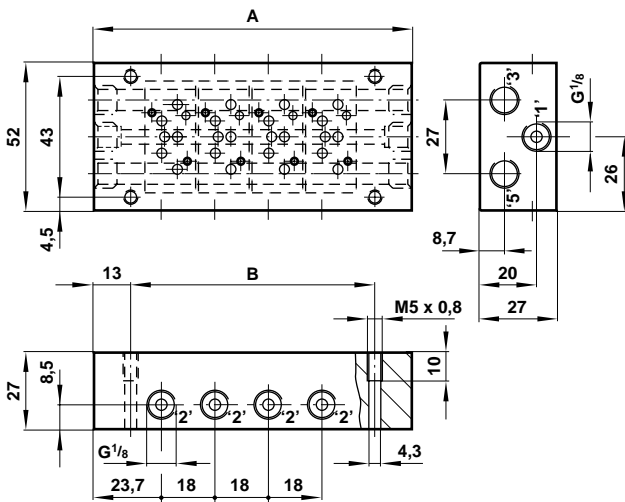


### Fixed Length Sub-bases with Ø 6 mm push-in cartridges



Type	No. of stations	A	B
V10039-G02	2	82	46
V10039-G04	4	118	82
V10039-G06	6	154	118

### Fixed Length Sub-bases with G<sup>1</sup>/<sub>8</sub> connections



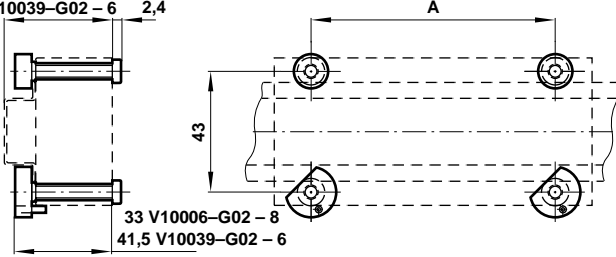
Type	No. of stations	A	B
V10006-G02	2	72	46
V10006-G04	4	108	82
V10006-G06	6	144	118
V10006-G08	8	180	154

**Note:** These sub-bases can not be used with Pilot valves or solenoid valves with External pilot supply.



### DIN-Rail Mounting Kits

34,3 V10006-G02 - 8  
42,8 V10039-G02 - 6 2,4

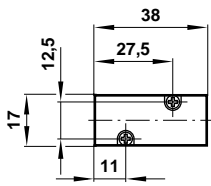


#### V10007-K00

Kit for adapting V10006-G\*\* series bases to DIN 46277-3, BS5584 and CENELEC EN 50-022 mounting rail.

#### V10008-K00

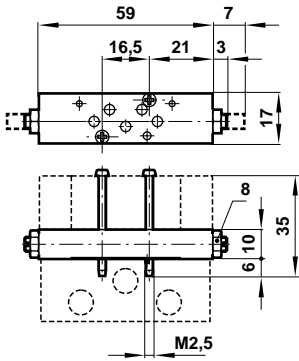
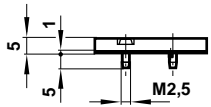
Kit for adapting V10039-G\*\* series bases to DIN 46277-3, BS5584 and CENELEC EN 50-022 mounting rail.



#### Blanking Plate

##### V095516A-Q1100

Blanking Plate for blocking off unwanted stations.

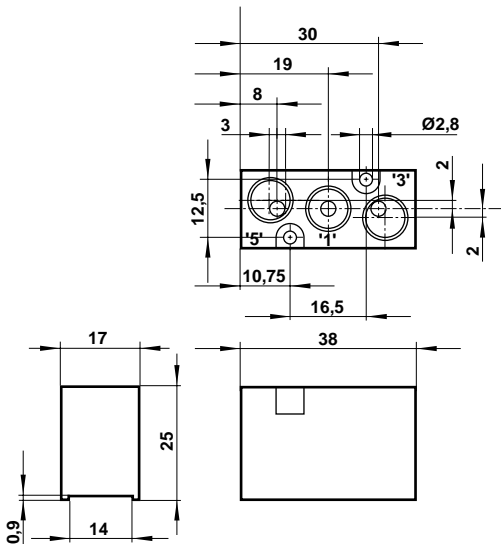


#### Sandwich Plate Flow Regulator

##### V095516A-Q1200

Fits between valve body and sub-base to provide compact exhaust flow regulation.





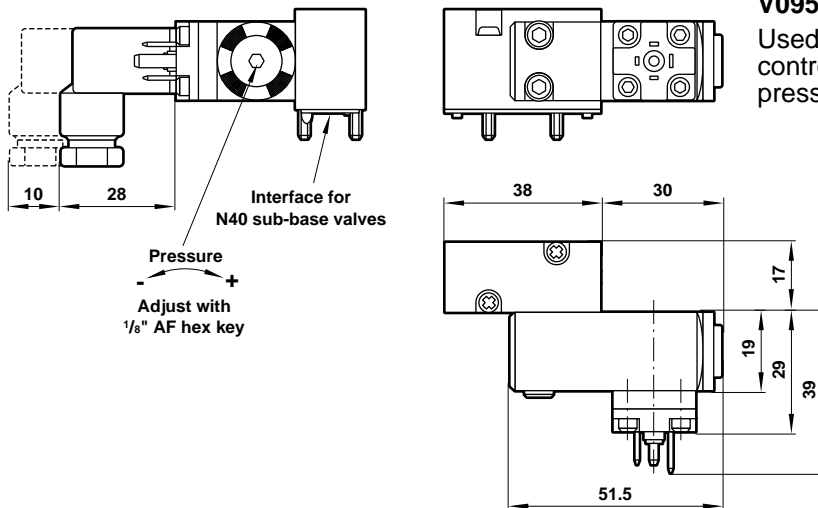
**Intermediate Supply/Exhaust Module**

**V095516A-Q160G**

0,040 Kg

1/8 NPT, Rc1/8, G1/8. Provides additional porting on Modular Sub-base or Fixed Length Manifold systems. Occupies one valve station. Supplied with gaskets for Sub-base and Manifold mounting.

- Can be used to:
- Improve supply flow
- Increase exhaust capacity
- Pneumatically separate valves used on Valve Islands for fail safe in emergency
- Supply and exhaust Twin Supply Valves



**Pressure Switch Assembly**

**V095516A-Q1700**

0,120 Kg

Used in conjunction with a suitable P.L.C. based control system. Valves will not operate until the pressure on the valve island is above a pre-set level.

**Accessories**

Connecting Plugs and Light Emitting Seals see section 7.7.001

**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 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.