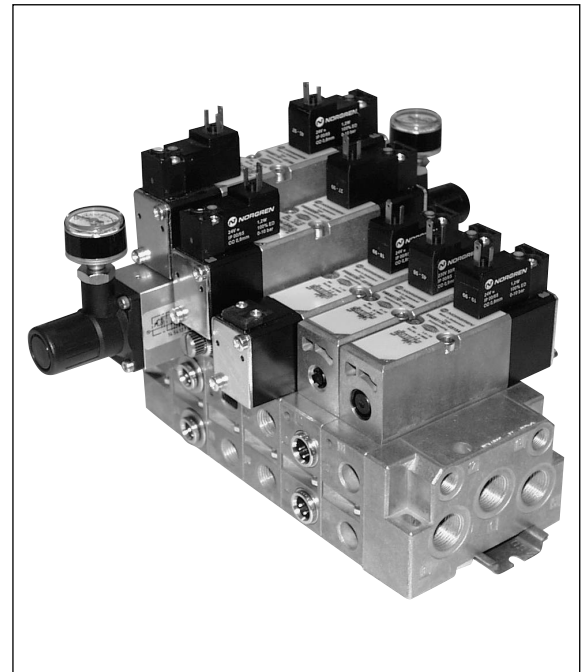


2x3/2, 5/2 and 5/3 Valves  
Solenoid and Pilot Actuated  
ISO 15407-1 / VDMA 24 563  
Size 26 mm

- Compact design and high performance
- Flexible Sub-base system
- True multipressure system
- Wide range of accessories
- Dual spool technology  
V44 Glandless spool and sleeve  
V45 Softseal spool
- Collected pilot exhaust with internal pilot air supply
- Easy to convert from internal to external pilot supply
- Exchange of valves under pressure



## Technical Data

### Medium:

Compressed air, 40µm filtered, lubricated or non-lubricated

### Operation:

V44: Glandless spool valve, solenoid pilot or air pilot actuated

V45: Softseal spool valve, solenoid pilot or air pilot actuated

### Mounting:

On sub-bases

### Size:

ISO 15407-1 / VDMA 24 563, 26 mm

### Operating Pressure:

#### Maximum pressure

10 bar (145 psig) V45 models and V44 solenoid pilot actuated valves with internal pilot supply

16 bar (232 psig) V44 solenoid pilot actuated valves w. ext. pilot supply and V44 air pilot actuated valves

Details of minimum and maximum pilot pressure see overleaf

### Flow Characteristics:

Series	Function	'C'	'b'	'A'	l/min	Cv	Kv
V44	5/2	4,03	0,07	14,38	900	0,92	0,79
V44	5/3 APB	4,03	0,07	14,38	900	0,92	0,79
V45	2x3/2 NC	4,75	0,14	17,63	1100	1,12	0,96
V45	5/2	5,26	0,11	19,19	1200	1,22	1,05
V45	5/3 APB	5,06	0,10	18,36	1150	1,17	1,00

### Ambient Temperature:

-15°C\* to +50°C (5°F\* to +122°F) V44/V45 sol. and V45 air pilot models

-15°C\* to +80°C (5°F\* to +176°F) V44 air pilot models

\*Consult our Technical Service for use below +2°C (36° F)

### Materials:

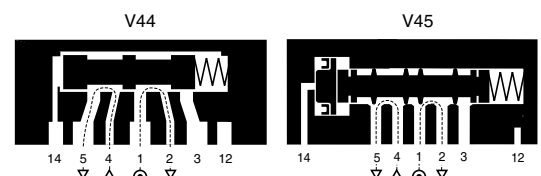
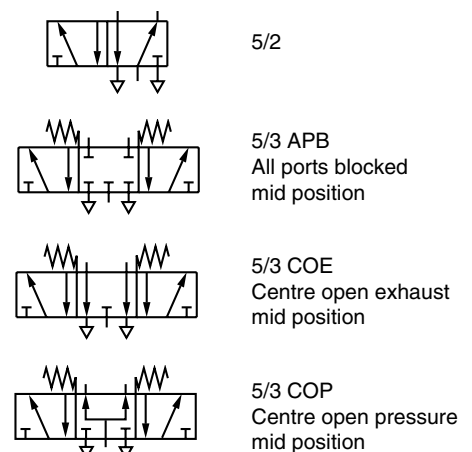
Die cast aluminium body and sub-base. Hard anodised, Teflon coated, matched aluminium spool and sleeve (V44) or aluminium alloy spool with HNBR Seals (V45). POM plastic parts and NBR static seals. End cover and screws zinc plated, stainless steel springs.

## Ordering Information

To order select model number, add voltage code from table overleaf,

e.g. V45A517D-C313A

for a 5/2 solenoid pilot actuated, spring return model, 24 V DC pilot.





General Information

2x3/2 Solenoid Pilot Actuated Valves

Symbol	Model	Function 2x3/2	Pilot Supply	Pilot Exhaust	Actuation 3/2 Function	Flow l/min.	Operating Pressure bar (psig)	Pilot Pressure bar (psig)	Weight kg (lb.)	Spares Kit
	V45AA11D-*****	Normally Closed	Internal	Collected <sup>x</sup>	Sol/Spring	1100	3 - 10 (43.5 - 145)	-	0,27 (0,53)	V70546-KAO
	V45AA22D-*****	Normally Closed	External	Not Collected	Sol/Spring	1100	0 - 10 (0 - 145)	1.5+(0.5xop.press.) (21.7+(0.5xop.press.))	0,27 (0,53)	V70546-KAO
	V45AB11D-*****	Normally Open	Internal	Collected <sup>x</sup>	Sol/Spring	1000	3 - 10 (43.5 - 145)	-	0,27 (0,53)	V70547-KAO
	V45AB22D-*****	Normally Open	External	Not Collected	Sol/Spring	1000	0 - 10 (0 - 145)	1.5+(0.5xop.press.) (21.7+(0.5xop.press.))	0,27 (0,53)	V70547-KAO
	V45AC11D-*****	Norm. Open/ Norm. Closed	Internal	Collected <sup>x</sup>	Sol/Spring	1000/1100	3 - 10 (43.5 - 145)	-	0,27 (0,53)	V70548-KAO
	V45AC22D-*****	Norm. Open/ Norm. Closed	External	Not collected	Sol/Spring	1000/1100	0 - 10 (0 - 145)	1.5+(0.5xop.press.) (21.7+(0.5xop.press.))	0,27 (0,53)	V70548-KAO

5/2 Solenoid Pilot Actuated Valves

Symbol	Model	Spool Techn.	Pilot Supply	Pilot Exhaust	Operator 14	Return 12	Flow l/min	Operating Pressure bar (psig)	Pilot Pressure bar (psig)	Weight kg (lb.)	Spares Kit
	V44A513D-*****	GI	Internal	Collected <sup>x</sup>	Solenoid	Air Spring	900	1 - 10 (14.5 - 145)	-	0,24 (0,53)	V70540-KAO
	V44A523D-*****	GI	External	Not collected	Solenoid	Air Spring	900	-0.9 - 16 (-13.1 - 232)	1 - 10 (14.5 - 145)	0,24 (0,53)	V70540-KAO
	V44A517D-*****	GI	Internal	Collected <sup>x</sup>	Solenoid	Spring	900	1.6 - 10 (23.2 - 145)	-	0,20 (0,44)	V70540-KAO
	V45A517D-*****	Ss	Internal	Collected <sup>x</sup>	Solenoid	Spring	1200	2 - 10 (29 - 145)	-	0,21 (0,46)	V70541-KAO
	V44A527D-*****	GI	External	Not collected	Solenoid	Spring	900	-0.9 - 16 (-13.1 - 232)	1.6 - 10 (23.2 - 145)	0,20 (0,44)	V70540-KAO
	V45A527D-*****	Ss	External	Not collected	Solenoid	Spring	1200	-0.9 - 10 (-13.1 - 145)	2 - 10 (29 - 145)	0,21 (0,46)	V70541-KAO
	V44A511D-*****	GI	Internal	Collected <sup>x</sup>	Solenoid	Solenoid	900	2 - 10 (29 - 145)	-	0,27 (0,60)	V70540-KAO
	V45A511D-*****	Ss	Internal	Collected <sup>x</sup>	Solenoid	Solenoid	1200	2 - 10 (29 - 145)	-	0,27 (0,60)	V70542-KAO
	V44A522D-*****	GI	External	Not collected	Solenoid	Solenoid	900	-0.9 - 16 (-13.1 - 232)	2 - 10 (29 - 145)	0,27 (0,60)	V70540-KAO
	V45A522D-*****	Ss	External	Not collected	Solenoid	Solenoid	1200	-0.9 - 10 (-13.1 - 145)	2 - 10 (29 - 145)	0,27 (0,60)	V70542-KAO
	V44A591D-*****	GI	Internal	Collected <sup>x</sup>	Solenoid (Priority)	Solenoid	900	2 - 10 (29 - 145)	-	0,27 (0,60)	V70540-KAO
	V44A592D-*****	GI	External	Not collected	Solenoid (Priority)	Solenoid	900	-0.9 - 16 (-13.1 - 232)	2 - 10 (29 - 145)	0,27 (0,60)	V70540-KAO

5/3 Solenoid Pilot Actuated Valves

Symbol	Model	Spool Techn.	Valve Function	Pilot Supply	Pilot Exhaust	Operator 14	Return 12	Flow l/min	Operating Pressure bar (psig)	Pilot Pressure bar (psig)	Weight kg (lb.)	Spares Kit
	V44A611D-*****	GI	APB	Internal	Collected <sup>x</sup>	Solenoid	Solenoid	900	2 - 10 (29 - 145)	-	0,28 (0,62)	V70540-KAO
	V45A611D-*****	Ss	APB	Internal	Collected <sup>x</sup>	Solenoid	Solenoid	1150	2.5 - 10 (36.3 - 145)	-	0,27 (0,59)	V70543-KAO
	V44A622D-*****	GI	APB	External	Not collected	Solenoid	Solenoid	900	-0.9 - 16 (-13.1 - 232)	2 - 10 (29 - 145)	0,28 (0,62)	V70540-KAO
	V45A622D-*****	Ss	APB	External	Not collected	Solenoid	Solenoid	1150	-0.9 - 10 (-13.1 - 145)	2.5 - 10 (36.3 - 145)	0,27 (0,59)	V70543-KAO
	V44A711D-*****	GI	COE	Internal	Collected <sup>x</sup>	Solenoid	Solenoid	900	2 - 10 (29 - 145)	-	0,28 (0,62)	V70540-KAO
	V45A711D-*****	Ss	COE	Internal	Collected <sup>x</sup>	Solenoid	Solenoid	1150	2.5 - 10 (36.3 - 145)	-	0,27 (0,59)	V70544-KAO
	V44A722D-*****	GI	COE	External	Not collected	Solenoid	Solenoid	900	-0.9 - 16 (-13.1 - 232)	2 - 10 (29 - 145)	0,28 (0,62)	V70540-KAO
	V45A722D-*****	Ss	COE	External	Not collected	Solenoid	Solenoid	1150	-0.9 - 10 (-13.1 - 145)	2.5 - 10 (36.3 - 145)	0,27 (0,59)	V70544-KAO
	V44A811D-*****	GI	COP	Internal	Collected <sup>x</sup>	Solenoid	Solenoid	900	2 - 10 (29 - 145)	-	0,28 (0,62)	V70540-KAO
	V45A811D-*****	Ss	COP	Internal	Collected <sup>x</sup>	Solenoid	Solenoid	1150	2.5 - 10 (36.3 - 145)	-	0,27 (0,59)	V70545-KAO
	V44A822D-*****	GI	COP	External	Not collected	Solenoid	Solenoid	900	-0.9 - 16 (-13.1 - 232)	2 - 10 (29 - 145)	0,28 (0,62)	V70540-KAO
	V45A822D-*****	Ss	COP	External	Not collected	Solenoid	Solenoid	1150	-0.9 - 10 (-13.1 - 145)	2.5 - 10 (36.3 - 145)	0,27 (0,59)	V70545-KAO

\*\*\*\*\* Insert 'Voltage Code' from table 'Voltage Codes and Spare Pilot Valves' on page 5.4.152.03  
<sup>x</sup> Pilot Exhaust collected and exhausted via port 14!

Spool Technology Designations:  
 GI = Glandless Spool and Sleeve  
 Ss = Softseal Spool

Valve Function Designations:  
 APB = All Ports Blocked  
 COP = Centre Open Pressure

COE = Centre Open Exhaust



### 2x3/2 Air Pilot Actuated Valves (Softseal Spool)

Symbol	Model	Function 2x3/2	Actuation 3/2 Function	Flow l/min	Operating Pressure bar (psig)	Pilot Pressure bar (psig)	Weight kg (lb.)	Spares Kit
	V45AA33A-X0020	Normally Closed	Air/Spring	1100	0 - 10 (0 - 145)	1.5 + (0.5 x op. pressure) (21.7 + (0.5 x op. pressure))	0,20 (0,40)	V70546-KA0
	V45AB33A-X0020	Normally Open	Air/Spring	1000	0 - 10 (0 - 145)	1.5 + (0.5 x op. pressure) (21.7 + (0.5 x op. pressure))	0,20 (0,40)	V70547-KA0
	V45AC33A-X0020	Normally Open/ Normally Closed	Air/Spring	1000/ 1100	0 - 10 (0 - 145)	1.5 + (0.5 x op. pressure) (21.7 + (0.5 x op. pressure))	0,20 (0,40)	V70548-KA0

### 5/2 Air Pilot Actuated Valves

Symbol	Model	Spool Techn.	Operator 14	Return 12	Flow l/min	Operating Pressure bar (psig)	Pilot Pressure bar (psig)	Weight kg (lb.)	Spares Kit
	V44A537A-X0090	GI	Air	Spring	900	-0.9 - 16 (-13.1 - 232)	1.6 - 16 (23.2 - 232)	0,18 (0,40)	V70540-KA0
	V45A537A-X0090	Ss	Air	Spring	1200	-0.9 - 10 (-13.1 - 145)	2 - 10 (29 - 145)	0,18 (0,40)	V70541-KA0
	V44A533A-X0020	GI	Air	Air	900	-0.9 - 16 (-13.1 - 232)	2 - 16 (29 - 232)	0,20 (0,44)	V70540-KA0
	V45A533A-X0020	Ss	Air	Air	1200	-0.9 - 10 (-13.1 - 145)	2 - 10 (29 - 145)	0,20 (0,44)	V70542-KA0
	V44A533A-X0070	GI	Air (Priority)	Air	900	-0.9 - 16 (-13.1 - 232)	2 - 16 (29 - 232)	0,20 (0,44)	V70540-KA0

### 5/3 Air Pilot Actuated Valves

Symbol	Model	Spool Techn.	Valve Function	Operator 14	Return 12	Flow l/min	Operating Pressure bar (psig)	Pilot Pressure bar (psig)	Weight kg (lb.)	Spares Kit
	V44A633A-X0020	GI	APB	Air	Air	900	-0.9 - 16 (-13.1 - 232)	2 - 16 (29 - 232)	0,22 (0,48)	V70540-KA0
	V45A633A-X0020	Ss	APB	Air	Air	1150	-0.9 - 10 (-13.1 - 145)	2.5 - 10 (36.3 - 145)	0,21 (0,46)	V70543-KA0
	V44A733A-X0020	GI	COE	Air	Air	900	-0.9 - 16 (-13.1 - 232)	2 - 16 (29 - 232)	0,22 (0,48)	V70540-KA0
	V45A733A-X0020	Ss	COE	Air	Air	1150	-0.9 - 10 (-13.1 - 145)	2.5 - 10 (36.3 - 145)	0,21 (0,46)	V70544-KA0
	V44A833A-X0020	GI	COP	Air	Air	900	-0.9 - 16 (-13.1 - 232)	2 - 16 (29 - 232)	0,22 (0,48)	V70540-KA0
	V45A833A-X0020	Ss	COP	Air	Air	1150	-0.9 - 10 (-13.1 - 145)	2.5 - 10 (36.3 - 145)	0,21 (0,46)	V70545-KA0

Spool Technology Designations: GI = Glandless Spool and Sleeve  
Ss = Softseal Spool

Valve Function Designations: APB = All Ports Blocked  
COE = Centre Open Exhaust  
COP = Centre Open Pressure

### Electrical Details for Solenoid Pilot

Voltage Tolerances	-10% / +15%
Rating	100% Continuous Duty
Inlet orifice	0.8 mm
Electrical Connection	DIN 43 650 table 'C'
Manual Override	Shrouded push button, spring return Convertible into lockable type with Set-up Kit Part no. V70532-K00 (see page 5.4.152.04)
Protection Class	IP 65 with sealed plug (ISO 6952) NEMA 4
Materials	PPS (body), Viton and NBR (seals)

Connector plugs to be ordered separately. For technical data see section 7.7.001. Intrinsically safe version available on request.

### \*\*\*Voltage Codes and Spare Pilot Valves

Voltage	Code	Power Inrush / Hold	Pilot Valve Part.-no.
12 V d.c.	C312A	1 W	VZC7L2C1-C312A
24 V d.c.	C313A	1.2 W	VZC7L2C1-C313A
24 V 50/60 Hz.	C314A	2.1 / 1.5 VA	VZC7L2C1-C314A
48 V 50/60 Hz	C316A	2.1 / 1.5 VA	VZC7L2C1-C316A
110 V d.c.	C317A	1 W	VZC7L2C1-C317A
115 V 50/60 Hz	C318A	2.1 / 1.5 VA	VZC7L2C1-C318A
230 V 50/60 Hz	C319A	2.1 / 1.5 VA	VZC7L2C1-C319A

Other voltages available on request. Spare pilot valves are delivered with mounting screws.



## Bases and Accessories

### Bases

Sub-base Assemblies Side Ported	Sub-base Assemblies Side Ported with Pilot Ports	Sub-base Assemblies Bottom Ported	Sub-base Assemblies Bottom Ported with Pilot Ports	
V45xAX**-XXXXX Single Pressure	V45xEX**-XXXXX Single Pressure	V45BCX**-XXXXX Single Pressure	V45BFX**-XXXXX Single Pressure	
V45xAX**-**XXX Dual Pressure	V45xEX**-**XXX Dual Pressure	V45BCX**-**XXX Dual Pressure	V45BFX**-**XXX Dual Pressure	
Modular Sub-base Side Ported without Pilot Ports	Modular Sub-base Side Ported with Pilot Ports	Modular Sub-base Side Ported (PIF) without Pilot Ports	Modular Sub-base Side Ported (PIF) with Pilot Ports	Modular Sub-base Bottom Ported without Pilot Ports
V70525-BAF (G1/4)	V70526-BAF (G1/4)	V70525-8AF (ø8 mm)	V70526-8AF (ø8 mm)	V70525-BAE (G1/4)
V70525-PAF (1/8NPTF)	V70526-PAF (1/8NPTF)	V70525-YAF (ø10 mm)	V70526-YAF (ø10 mm)	
V70525-RAF (1/4NPTF)	V70526-RAF (1/4NPTF)	V70525-2AF (3/8")	V70526-2AF (3/8")	
Modular Sub-base Bottom Ported with Pilot Ports on side	End Plate Kit End Ported	Fixed Length Sub-base Bottom Ported	Single Station Sub-base Side Ported with Pilot Ports	
V70526-BAE (G1/4)	V70524-CAC (G3/8)	V705**-BAO (G1/4)	V70501-BAB (G1/4)	
	V70524-SAC (3/8NPTF)	V705**-RAO (1/4NPTF)	V70501-RAB (1/4NPTF)	
		** = 02,04,06,08,10,12 stations		

x Insert Code for port type. See table on page 5.4.152.08

\*\* Insert number of valve stations in sub-base assemblies.

\*\*-\*\* Insert valve station to indicate position of Dual Pressure Blanking Disk. See page 5.4.152.08

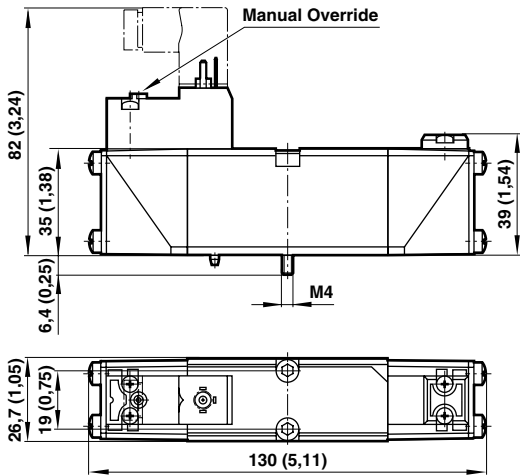
### Accessories

Intermediate Supply/Exhaust Module	Single Valve Shut-Off Plate	Single Pressure Regulator Plate	Double Pressure Regulator Plate	Flow Regulator Plate
V70529-BAO (G1/4)	V70530-KAO (Port 1 blocked)	V70527-KA1 (Port 1 reg.)	V70527-KA4 (Ports 2+4 reg.)	V70528-KAO (Ports 3+5 reg.)
V70529-RAO (1/4NPTF)		V70527-KA2 (Port 2 reg.)		
		V70527-KA3 (Port 4 reg.)		
Sandwich Plate with additional Pressure Port 1	DIN EN 50 022 rail (1 metre)	DIN-rail Mounting Kit	Blanking Plate for unused Station	Blanking Disk to Modular Sub-base
V70535-BAO (G1/4)	V10009-C00 (35x7.5mm)	V70531-KAO	V70500-KAO	V70522-K00 (Ports 1,3,5)
V70535-RAO (1/4NPTF)	V10592-C01 (35x15mm)			V70523-K00 (Ports 12+14)
Blanking Plug for Fixed Length Sub-base	Manual Override Set-Up Kit	Transition Plate #18 mm* -> #26 mm	Transition Plate #18 mm* -> #26 mm with Supply and Exhaust Ports	
V70521-K00 (Ports 3+5)	V70532-K00	V70436-K00	V70436-B00 G1/4	
V70533-K00 (Port 1)				

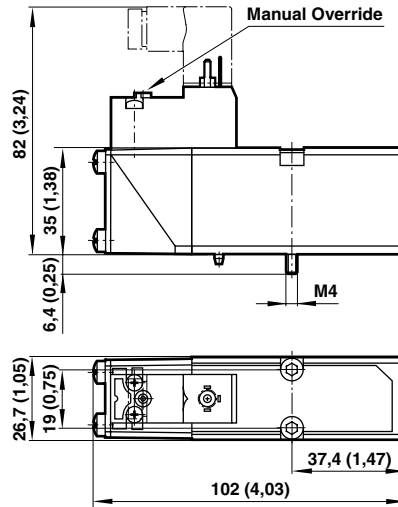
\*For technical data on V40 / V41 Mini ISO series size 18 mm see section 5.4.146



**V44A5\*3D-C3\*\*\* Models**  
**5/2 Single Solenoid Pilot Valve**  
**Air Spring Return**

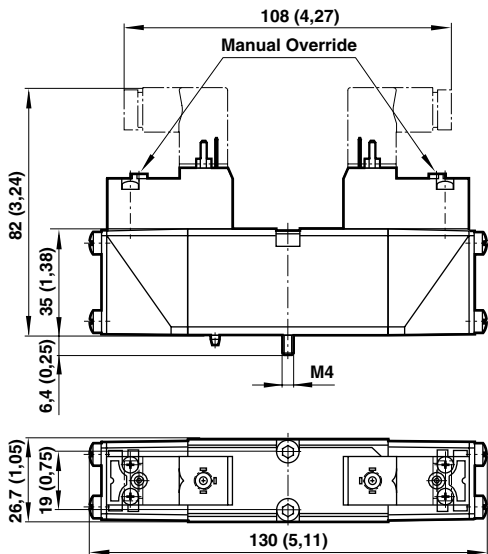


**V44A5\*7D-C3\*\*\* and**  
**V45A5\*7D-C3\*\*\* Models**  
**5/2 Single Solenoid Pilot Valve**  
**Mechanical Spring Return**

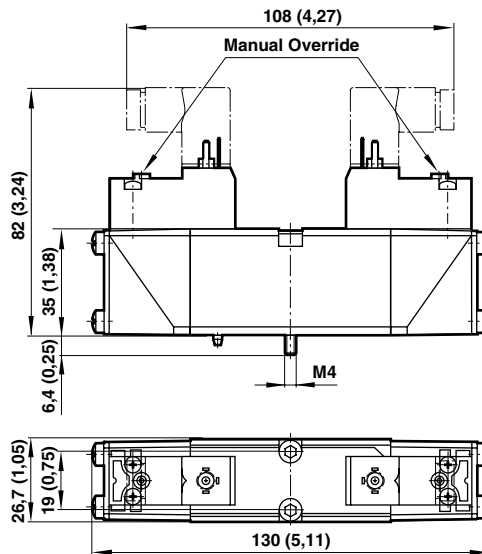


All dimensions  
in mm (inch)!

**V44A5\*\*D-C3\*\*\* and**  
**V45A5\*\*D-C3\*\*\* Models**  
**5/2 Double Solenoid Pilot Valve**

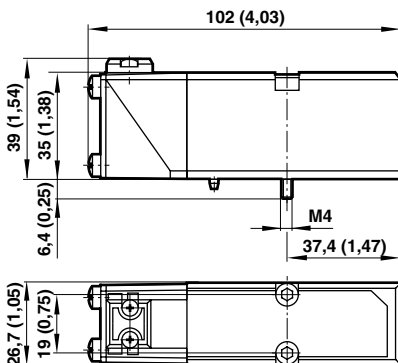


**V44A\*\*\*D-C3\*\*\* and**  
**V45A\*\*\*D-C3\*\*\* Models**  
**2x3/2 + 5/3 Double Solenoid Pilot Valve**

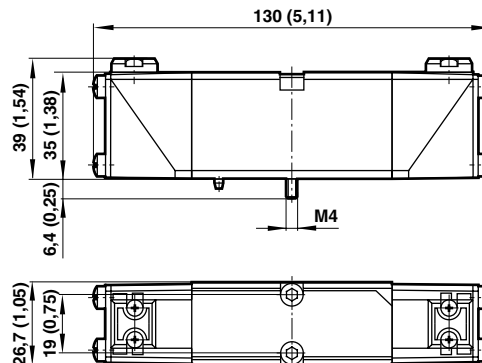


All dimensions  
in mm (inch)!

**V44A537A-X00\*0 and**  
**V45A537A-X00\*0 Models**  
**5/2 Single Air Pilot Valve**



**V44A\*33A-X00\*0 and**  
**V45A\*33A-X00\*0 Models**  
**2x3/2, 5/2 + 5/3 Double Air Pilot Valve**



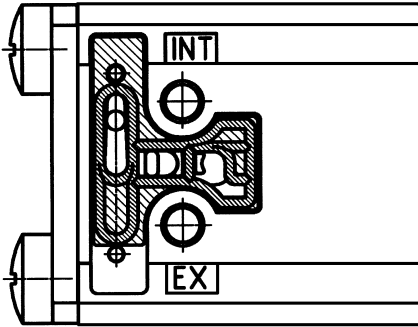
All dimensions  
in mm (inch)!



### Conversion from internal to external pilot supply / Collected pilot exhaust

The lowered and captive gasket between valve body and pilot valve defines and indicates pilot air supply as well as pilot exhaust function of the valve.

#### Solenoid pilot actuated valves

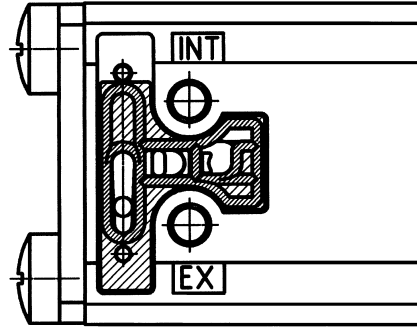


blue gasket

**Internal pilot supply,  
pilot exhaust air collected and exhausted via port 14.**

All solenoid pilot valves with code 1 at position 6 in the part number (e.g V45A51...) have the gasket mounted in this position on delivery.

Drawing shows no pilot valve.



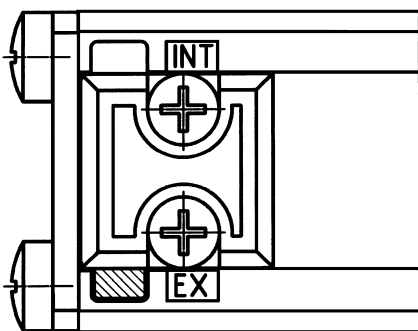
blue gasket

**External pilot supply from port 14 only,  
pilot exhaust air not collected but  
bled through valve body.**

All solenoid pilot valves with code 2 at position 6 in the part number (e.g V45A52...) have the gasket mounted in this position on delivery.

**Note:** Dismounting pilot valve gives access to gasket. Conversion from internal to external pilot supply (or vice versa) by turning the gasket.  
**Caution:** In this case part number and symbol on label shows different function. Therefore check gasket position when mounting valve.

#### Air pilot actuated valves



blue gasket

Drawing includes cover plate.

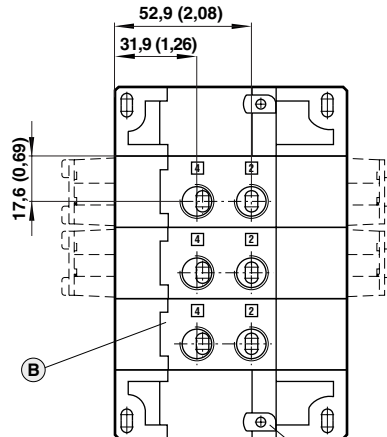
#### Air pilot actuated valves

External pilot supply.

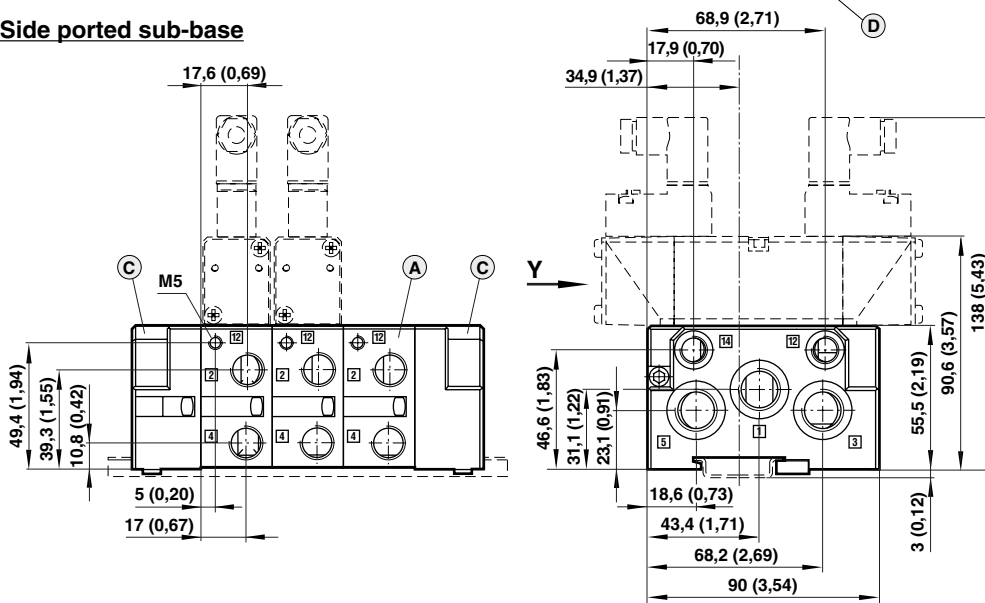


## Modular Sub-bases parts for DIN rail or surface mounting

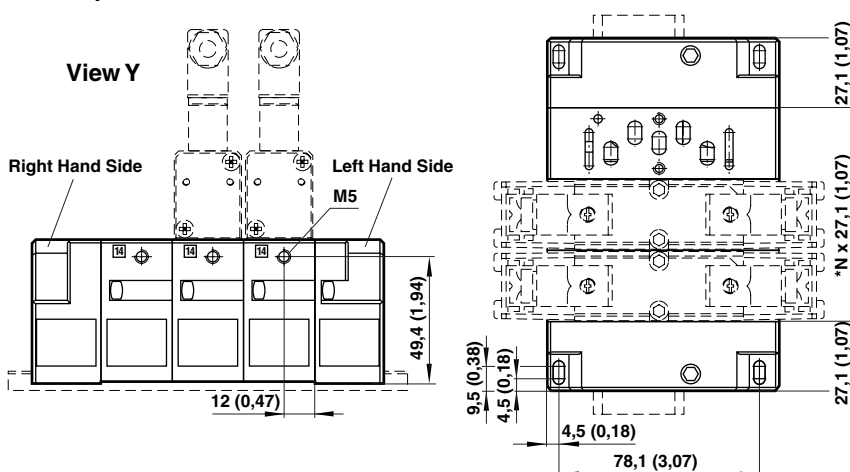
### Bottom ported sub-base



### Side ported sub-base



### Bottom and side ported sub-base



\* N = Number of stations

### Note:

Port 14 either used for external pilot air supply or for collected pilot air exhaust.  
**Therefore, do never plug port 14 when using valves with internal pilot air supply.**  
 Port 12 is not used, plugging not necessary.

### Individual components

**Modular Sub-base** <sup>Ⓐ</sup> 0,18 kg  
 Ports 2+4 on side (0,40 lb)  
**V70525-xAF**

**Modular Sub-base** <sup>Ⓐ</sup> 0,18 kg  
 Ports 2+4 on side (0,40 lb)  
 Pilot Ports 12+14 on side  
**V70526-xAF**

**Modular Sub-base** <sup>Ⓑ</sup> 0,18 kg  
 Ports 2+4 on bottom (0,40 lb)  
**V70525-BAE**

**Modular Sub-base** <sup>Ⓑ</sup> 0,18 kg  
 Ports 2+4 on bottom (0,40 lb)  
 Pilot Ports 12+14 on side  
**V70526-BAE**

**End Plate Kit** <sup>Ⓒ</sup> 0,36 kg  
 Side Ported (0,80 lb)  
**V70524-CAC (G3/8, 12/14 G1/8)**  
**V70524-SAC (3/8NPTF, 12/14 1/8 NPTF)**  
 End ported end caps  
 1 left hand and 1 right hand

### Accessories

**DIN EN 50022 rail** 0,31 kg  
 35 x 7,5 mm, 1m (0,68 lb)  
**V10009-C00**

**DIN EN 50022 rail** 1,02 kg  
 35 x 15 mm, 1m (2,25 lb)  
**V10592-C01**

**DIN rail Mounting Kit** <sup>Ⓓ</sup> 0,01 kg  
**V70531-KAO** (0,02 lb)

**Blanking Disk to Modular Sub-base** 0,01 kg  
 Ports 1, 3, 5 (0,02 lb)  
**V70522-K00**

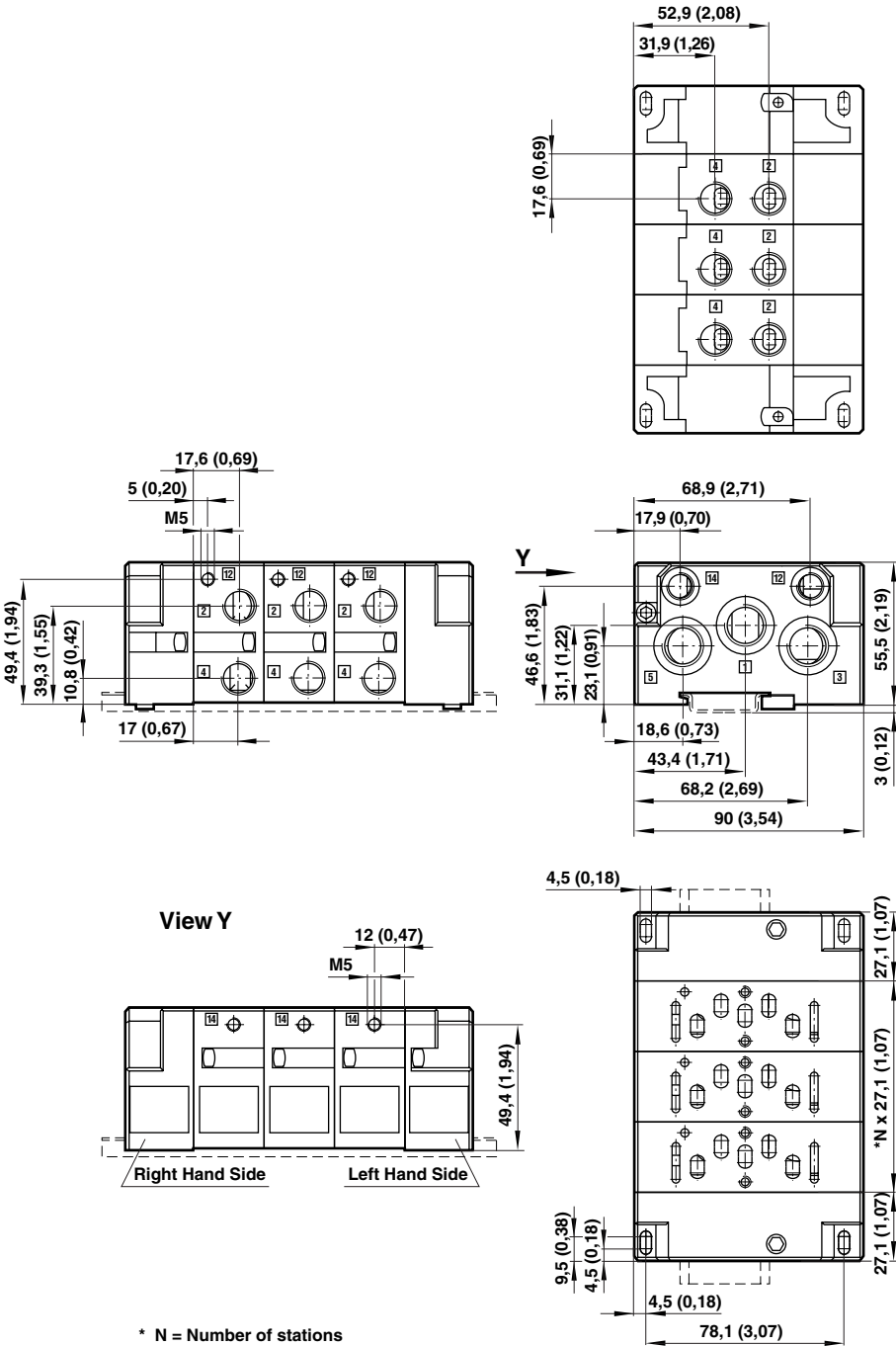
**Blanking Disk to Modular Sub-base** 0,01 kg  
 Ports 12+14 (0,02 lb)  
**V70523-K00**

x = Insert port type from table below

Code	Ports 2+4	Ports 12+14
B	G1/4	M5
P	1/8NPTF	M5
R	1/4NPTF	M5
8	ø 8 mm PIF	M5
Y	ø 10 mm PIF	M5
2	ø 3/8" PIF	M5



Modular Sub-base Assemblies for DIN rail or surface mounting



**Modular Sub-base Assemblies**  
Side Ported without Pilot Ports  
**V45xAX\*\*-XXXXX**

**Modular Sub-base Assemblies**  
Side Ported with Pilot Ports  
**V45xEX\*\*-XXXXX**

**Modular Sub-base Assemblies**  
Bottom Ported without Pilot Ports  
**V45BCX\*\*-XXXXX**

**Modular Sub-base Assemblies**  
Bottom Ported with Pilot Ports  
**V45BFX\*\*-XXXXX**

\*\* = Insert number of valve station

**Dual Pressure Modular Sub-base Assemblies**  
Side Ported without Pilot Ports  
**V45xAX\*\*-\*\*XXX**

**Dual Pressure Modular Sub-base Assemblies**  
Side Ported with Pilot Ports  
**V45xEX\*\*-\*\*XXX**

**Dual Pressure Modular Sub-base Assemblies**  
Bottom Ported without Pilot Ports  
**V45BCX\*\*-\*\*XXX**

**Dual Pressure Modular Sub-base Assemblies**  
Bottom Ported with Pilot Ports  
**V45BFX\*\*-\*\*XXX**

\*\*\_\*\* indicates position of Dual Pressure Blanking Plate e.g V45BFX03-04XXX indicates a 7 station base divided into groups of 3 and 4.

**Weight:**  
(N x 0,18 kg (0,40 lb)) + 0,36 kg (0,80 lb)

x = Insert port type from table below

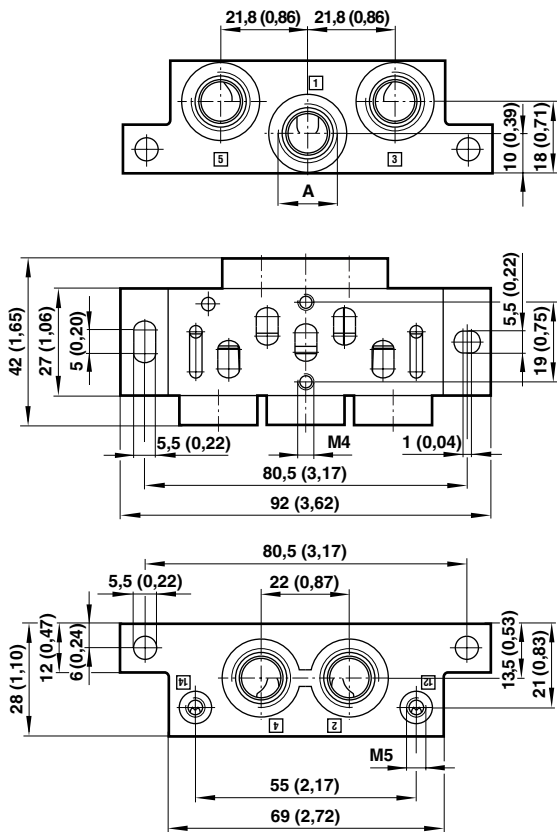
Code	Ports 2+4	Port 1/3/5	Ports 12+14
B	G1/4	G3/8	M5
P	1/8NPTF	3/8NPTF	M5
R	1/4NPTF	3/8NPTF	M5
8	ø 8 mm PIF	G3/8	M5
Y	ø 10 mm PIF	G3/8	M5
2	ø 3/8" PIF	3/8NPTF	M5

**Note:**  
Port 14 either used for external pilot air supply or for collected pilot air exhaust.  
**Therefore, do never plug port 14 when using valves with internal pilot air supply.**  
Port 12 is not used, plugging not necessary.





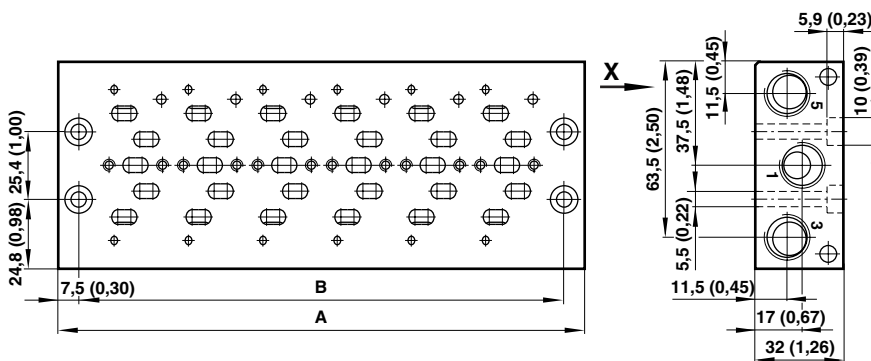
### Single Station Sub-base - Side Ported with Pilot Ports



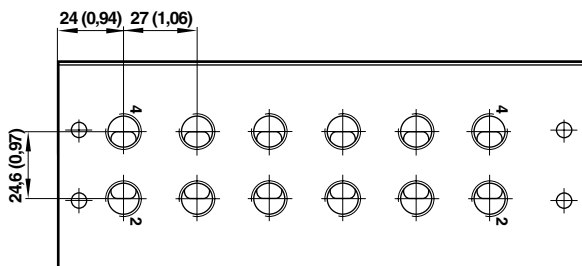
Model	Port Size A	Weight kg (lb)
V70501-BAB	G1/4 Side Ported with Pilot Ports	0,11
V70501-RAB	NPTF1/4 Side Ported with Pilot Ports	(0,24)

Note: Pilot Ports for both types = M5!

### Fixed Length Sub-base - Bottom Ported



View X



Model	No. of Stations	A mm (inch)	B mm (inch)	Weight kg (lb)
V70502-xA0	2	83 (3,27)	68 (2,68)	0,40 (0,88)
V70504-xA0	4	137 (5,39)	122 (4,80)	0,65 (1,43)
V70506-xA0	6	191 (7,52)	176 (6,93)	0,91 (2,00)
V70508-xA0	8	245 (9,65)	230 (9,06)	1,15 (2,53)
V70510-xA0	10	299 (11,77)	284 (11,18)	1,41 (3,11)
V70512-xA0	12	353 (13,90)	338 (13,31)	1,66 (3,66)

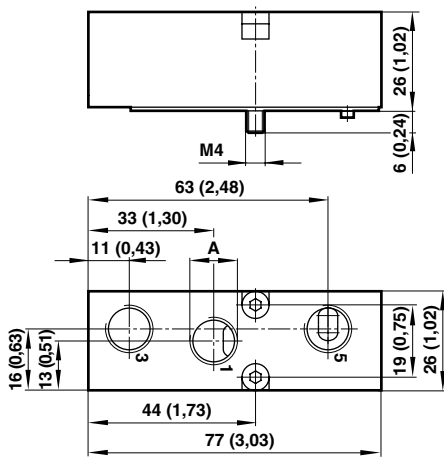
x = Insert port type from table below.

Code	Ports 2 + 4	Ports 1/3/5
B	G1/4	G3/8
R	1/4NPTF	3/8NPTF

Note: This sub-base is suitable for solenoid pilot actuated valves with internal pilot air supply only.



### Intermediate Supply / Exhaust Module



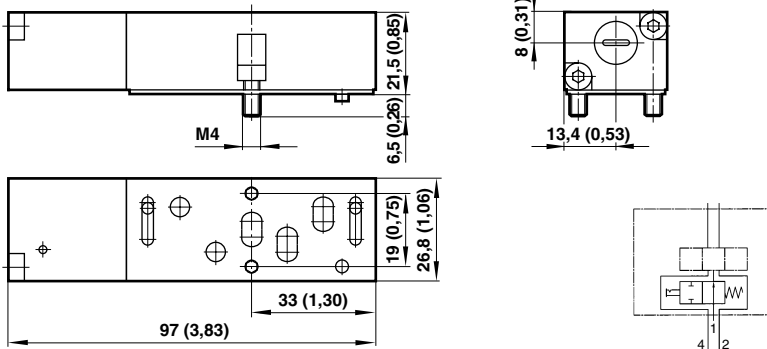
Model	Port Size A	Weight kg (lb)
V70529-BA0	G1/4	0,12
V70529-RA0	1/4NPTF	(0,26)

Provides additional porting on Modular- or Fixed Length Sub-base.  
Occupies one valve station.  
Supplied with gasket for both sub-bases.

Can be used to:

- Improve supply flow
- Increase exhaust capacity
- Pneumatically separate valves for fail save emergency
- Multipressure system and system solutions

### Single Valve Shut-Off Plate

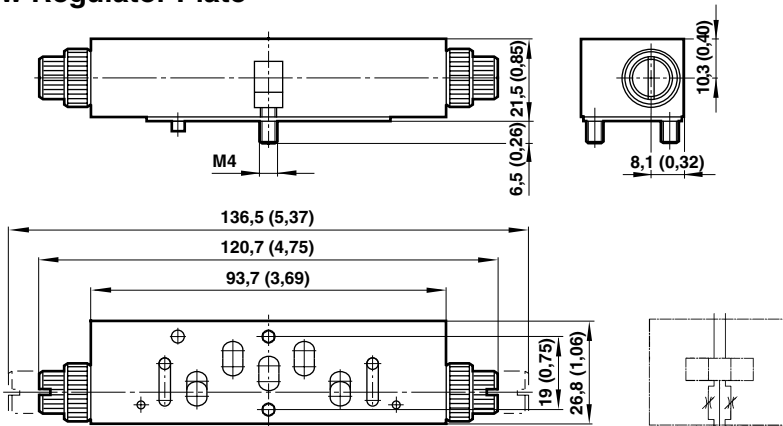


Model	Description	Weight kg (lb)
V70530-KA0	Single Shut-Off Plate supplied with gasket	0,13 (0,28)

Allows individual exchange of valve, while valve island is pressurised by port 1!

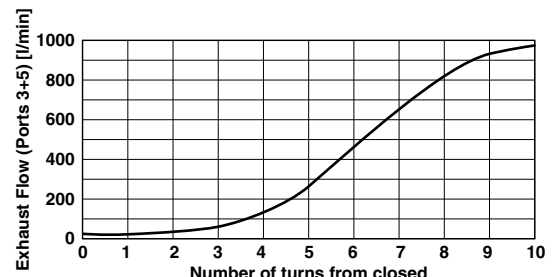
**Note:** Flow restricted to max. 500 l/min

### Flow Regulator Plate



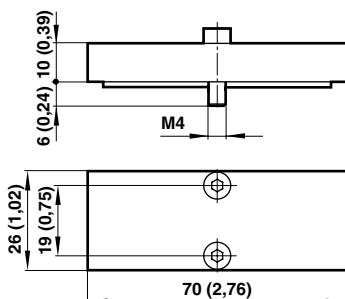
Model	Description	Weight kg (lb)
V70528-KA0	Flow Regulator supplied with gasket	0,17 (0,37)

Dual Regulation of Exhaust Ports 3 and 5



Flow: Port 1 → 2 and 1 → 4: remains unchanged  
Flow measured at 6 bar inlet, Pressure drop 1 bar

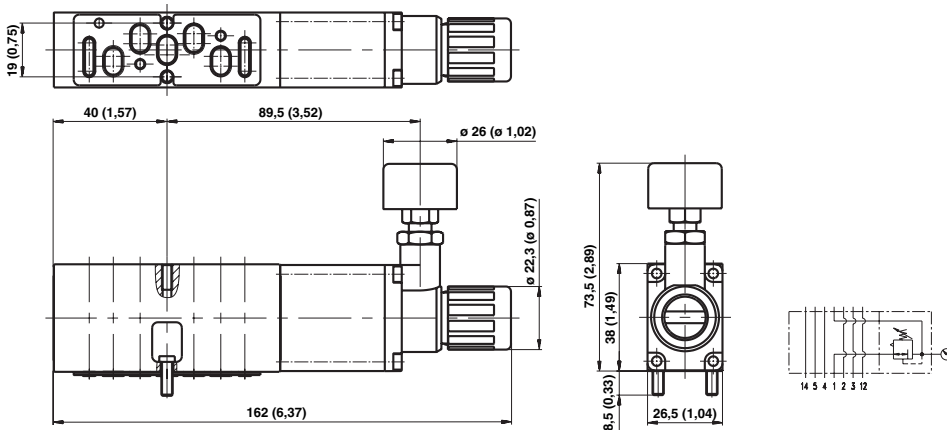
### Blanking Plate



Model	Description	Weight kg (lb)
V70500-KA0	Blanking Plate for blocking of unused Stations (supplied with gasket)	0,05 (0,11)



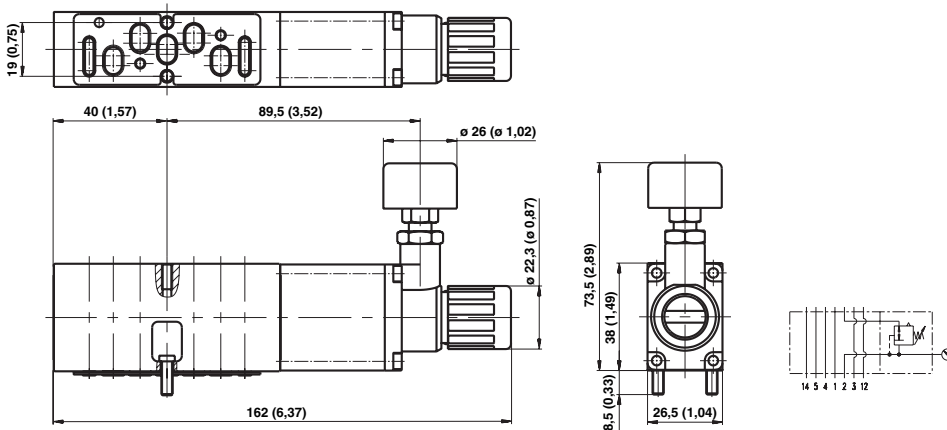
**Pressure Regulator Plates (including gauges)**



Model	Description	Weight kg (lb)
V70527-KA1	Regulation of Port 1	0,36 (0,79)

Maximum inlet pressure 16 bar  
(232 psig)  
Regulated pressure 0.5–10 bar  
(7.25–145 psig)

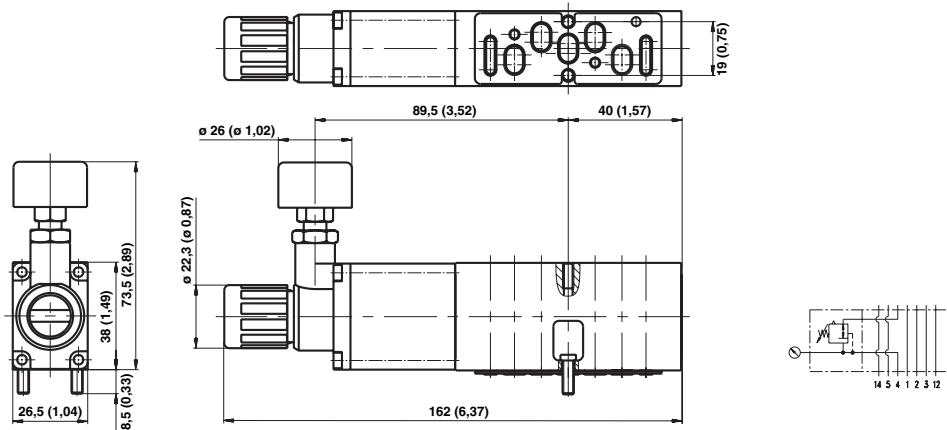
Flow Characteristics  
see page 5.4.152.12



Model	Description	Weight kg (lb)
V70527-KA2	Regulation of Port 2	0,36 (0,79)

Maximum inlet pressure 16 bar  
(232 psig)  
Regulated pressure 0.5–10 bar  
(7.25–145 psig)

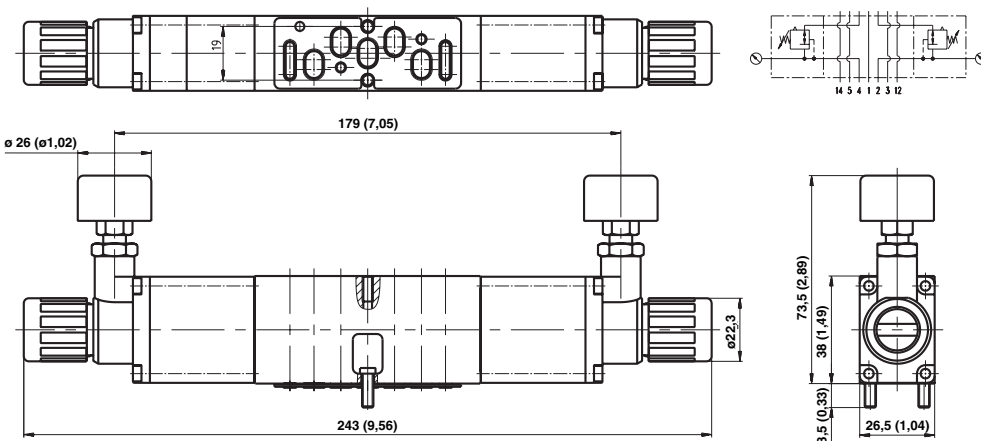
Flow Characteristics  
see page 5.4.152.12



Model	Description	Weight kg (lb)
V70527-KA3	Regulation of Port 4	0,36 (0,79)

Maximum inlet pressure 16 bar  
(232 psig)  
Regulated pressure 0.5–10 bar  
(7.25–145 psig)

Flow Characteristics  
see page 5.4.152.12



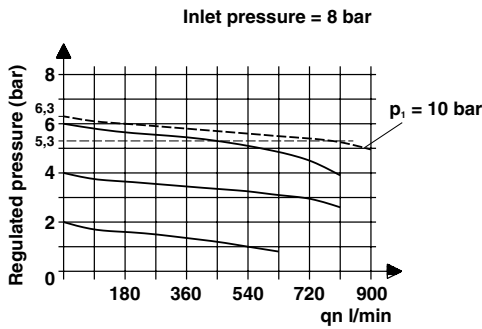
Model	Description	Weight kg (lb)
V70527-KA4	Regulation of Ports 2+4	0,56 (1,23)

Maximum inlet pressure 16 bar  
(232 psig)  
Regulated pressure 0.5–10 bar  
(7.25–145 psig)

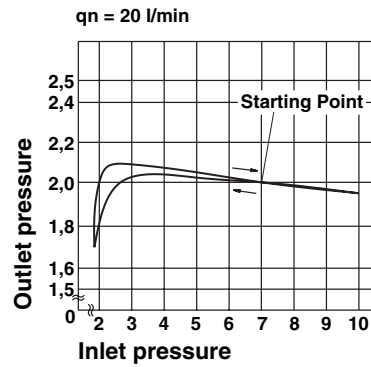
Flow Characteristics  
see page 5.4.152.12



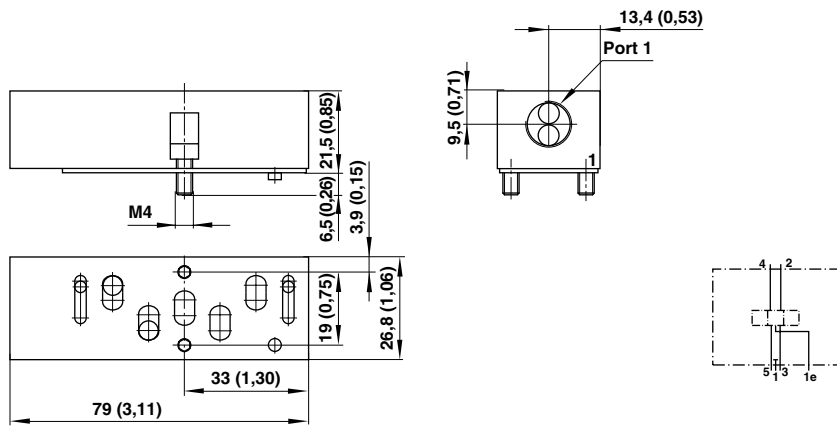
### Flow Characteristics for Pressure Regulator Plates



### Hysteresis



### Sandwich Plate with additional Pressure Port 1



Model	Description	Weight kg (lb)
V70535-BA0	Sandwich Plate with additional Port 1 G1/4, supplied with gasket	0,12 (0,26)
V70535-RA0	Sandwich Plate with additional Port 1 1/4NPTF, supplied with gasket	0,12 (0,25)

### 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 where applicable.