

MINI ISO VALVES

Size 18 mm, V40 / V41 SERIES

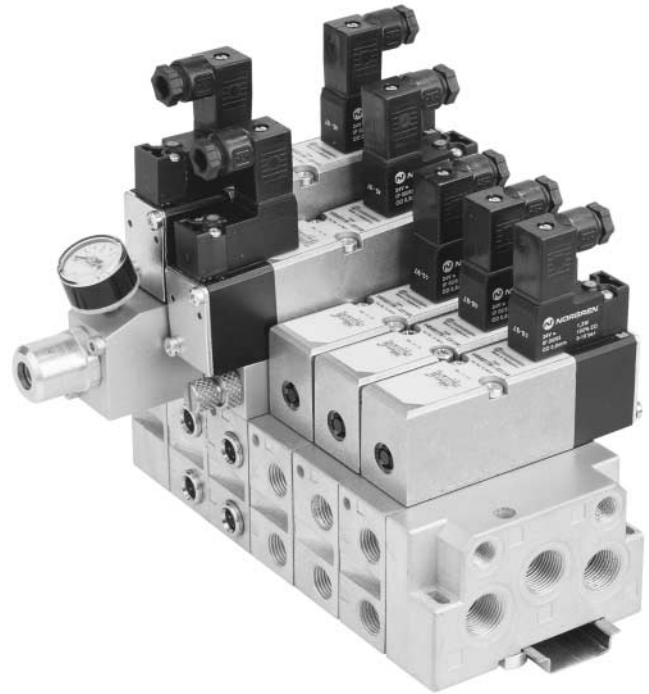
Size 26 mm, V44 / V45 SERIES



ISO 15407-1 / VDMA 24563

Brochure N-288

- Compact design and high performance
- The right spool technology for critical pneumatic applications
- Low power solenoid (1.2 W) and collected pilot exhaust
- Easily converted from internal to external pilot supply
- 18 mm and 26 mm widths
- A variety of valve functions and voltages



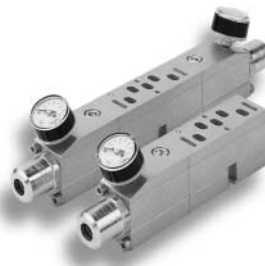
Flexible subbase system with a wide range of accessories



Single Valve Shut-Off Plate



Sandwich Flow Control



Single (Port 1,2 or 4)
and Double (Ports 2 and 4)
Sandwich Pressure Regulator



Intermediate Supply/
Exhaust Module



Single Station Subbase
Side ported, $\frac{1}{8}$ " or $\frac{1}{4}$ " NPTF or ISO G
with pilot ports



Modular Subbase
Side ported, $\frac{1}{8}$ " or $\frac{1}{4}$ " NPTF, or ISO G
with or without pilot ports



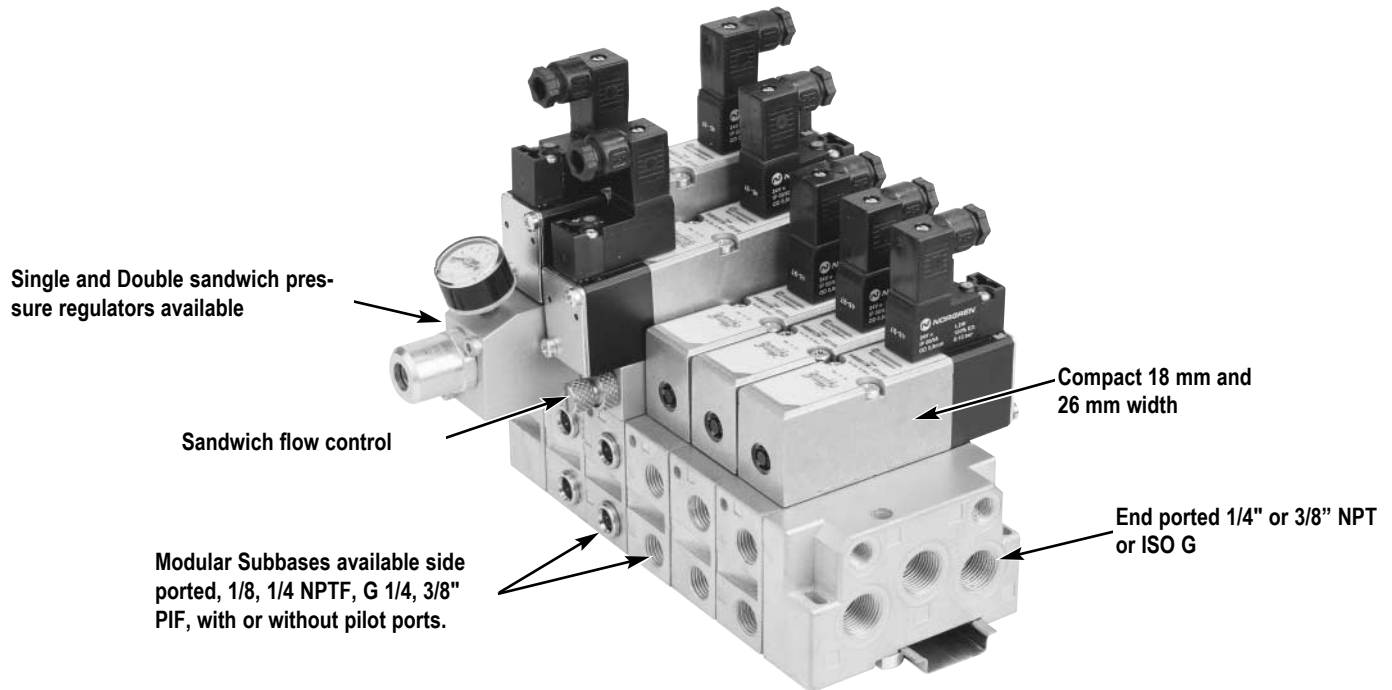
Modular Subbase
Side ported, $\frac{1}{4}$ " or $\frac{3}{8}$ " PIF
with or without pilot ports



End Plate Kit
End ported
 $\frac{1}{4}$ " or $\frac{3}{8}$ " NPTF or ISO G

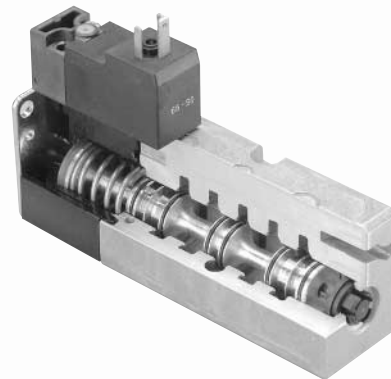
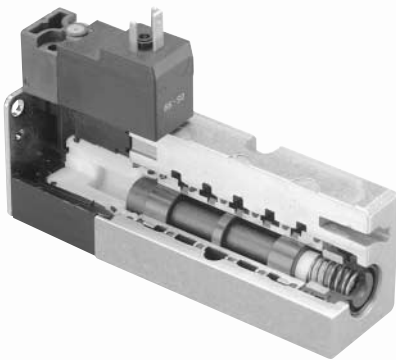
Mini ISO Directional Control Valves

Available with Metal Spool and Sleeve Technology or Softseal Technology, the Mini ISO Valve is an excellent choice for high and low pressure applications where a long lasting mini valve is required. With fast response times, extremely low leak rates, and competitive pricing, this valve will provide years of reliable service.



Metal Spool & Sleeve (V40 / V44)

Softseal Spool (V41 / V45)



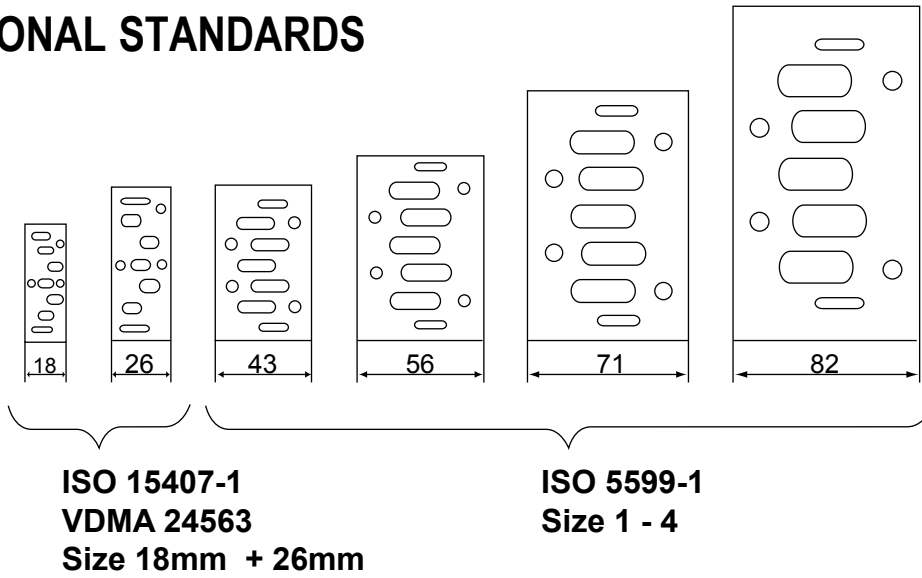
- Non-corrosive, Nituff®* coated, precision matched aluminum spool and sleeve
- High and low pressure applications
- Cv of 0.9 (26 mm) and 0.58 (18 mm)
- Minimum 100 million cycles

* Nituff is a finishing process producing a hard anodized coating of low friction teflon type polymers.

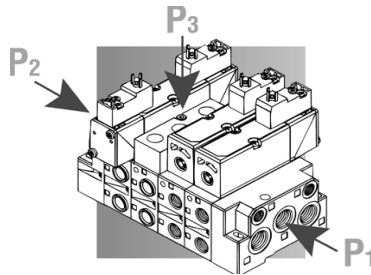
- High flow Cv of 1.2 (26 mm), 0.66 (18 mm)
- Fast response
- Minimum 50 million cycles
- Extremely low leakage rates
- Two 3/2 normally closed or normally open valves in one body
- Competitively priced

Mini ISO Directional Control Valves

INTERNATIONAL STANDARDS



FEATURES



VALVE FUNCTIONS

2 x 3/2	5/2	5/3
<p>Normally Closed</p>	<p>Air Spring Return</p>	<p>All Ports Blocked</p>
<p>Normally Open</p>	<p>Mechanical Spring Return</p>	<p>Center Open Pressure</p>
<p>Normally Closed, Normally Open</p>	<p>Impulse</p>	<p>Center Open Exhaust</p>

MINI ISO VALVES

18 mm (V40 / V41 Series)

2x3/2, 5/2 and 5/3 Valves Solenoid and Air Actuated
ISO 15407-1 / VDMA 24 563

Technical Data

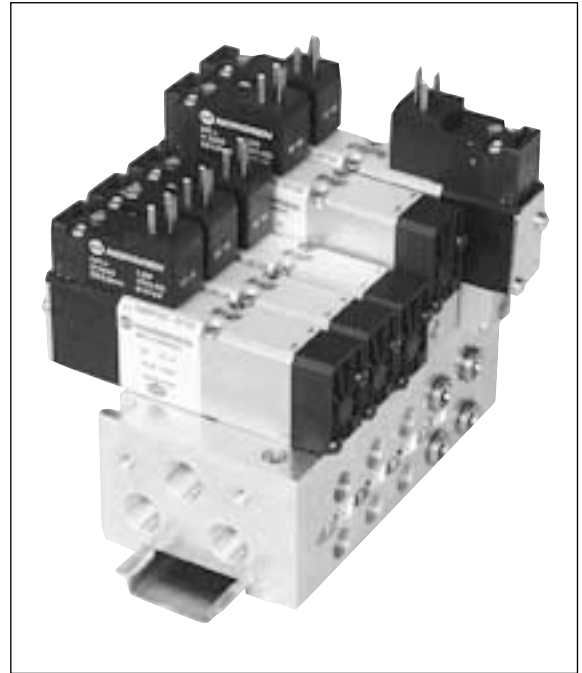
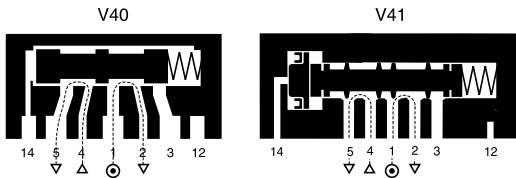
Medium:

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

Operation:

V40: Metal spool and sleeve valve, solenoid or air actuated

V41: Softseal spool valve, solenoid or air actuated



Mounting:

On sub-bases

Maximum Operating Pressure:

- 145 psig (10 bar) V41 models and V40 solenoid actuated valves with internal pilot supply
- 232 psig (16 bar) V40 solenoid actuated valves with external pilot supply and V40 air actuated valves

Ambient Temperature:

- 5°F* to +122°F (-15°C* to +50°C) V40/V41 sol. and V41 air pilot models
- 5°F* to +176°F (-15°C* to +80°C) V40 air pilot models
- *Consult our Technical Service for use below 36° F (+2°C)

Materials:

Aluminum alloy body and sub-base. Hard anodized, Teflon coated, matched aluminum spool and sleeve(V40) or aluminum alloy spool with HNBR Seals (V41). POM plastic parts and NBR static seals. End cover and screws zinc plated, stainless steel springs.

Flow Characteristics:

Series	Function	Cv	l/min	Kv
V40	5/2	0.58	570	0.50
V40	5/3 APB	0.62	610	0.53
V41	2x3/2 NC	0.62	610	0.53
V41	5/2	0.66	650	0.57
V41	5/3 APB	0.69	680	0.59

General Information

2x3/2 Solenoid Actuated Valves (Soft Seal Spool)

Symbol	Model	Function 2x3/2	Pilot Supply	Pilot Exhaust	Actuation 3/2 Function	Flow Cv	Operating Pressure psig (bar)	Pilot Pressure psig (bar)	Weight lb. (kg)	Repair Kit
	V415A11D-C3**†	Normally Closed	Internal	Collected ^x	Sol/Spring	0.62	36-145 (2.5-10)	-	0.40 (0.18)	V70447-K5O
	V415A22D-C3**†	Normally Closed	External	Not Collected	Sol/Spring	0.62	0-145 (0-10)	24.7 + (0.35 x op. press.) [[1.7 + (0.35 x op. press.)]]	0.40 (0.18)	V70447-K5O
	V415B11D-C3**†	Normally Open	Internal	Collected ^x	Sol/Spring	0.62	36-145 (2.5-10)	-	0.40 (0.18)	V70448-K5O
	V415B22D-C3**†	Normally Open	External	Not Collected	Sol/Spring	0.62	0-145 (0-10)	24.7 + (0.35 x op. press.) [[1.7 + (0.35 x op. press.)]]	0.40 (0.18)	V70448-K5O
	V415C11D-C3**†	Norm. Open/ Norm. Closed	Internal	Collected ^x	Sol/Spring	0.62 0.62	36-145 (2.5-10)	-	0.40 (0.18)	V70449-K5O
	V415C22D-C3**†	Norm. Open/ Norm. Closed	External	Not collected	Sol/Spring	0.62 0.62	0-145 (0-10)	24.7 + (0.35 x op. press.) [[1.7 + (0.35 x op. press.)]]	0.40 (0.18)	V70449-K5O

5/2 Solenoid Actuated Valves

Symbol	Model	Spool Techn.	Pilot Supply	Pilot Exhaust	Operator 14	Return 12	Flow Cv	Operating Pressure psig (bar)	Pilot Pressure psig (bar)	Weight lb. (kg)	Repair Kit
	V405513D-C3**†	M	Internal	Collected ^x	Solenoid	Air Spring	0.58	14.5-145 (1-10)	-	0.26 (0.12)	V70440-K5O
	V415513D-C3**†	Ss	Internal	Collected ^x	Solenoid	Air Spring	0.66	14.5-145 (1-10)	-	0.29 (0.13)	V70442-K5O
	V405523D-C3**†	M	External	Not collected	Solenoid	Air Spring	0.58	26" Hg-232 (-0.9-16)	14.5-145 (1-10)	0.26 (0.12)	V70440-K5O
	V415523D-C3**†	Ss	External	Not collected	Solenoid	Air Spring	0.66	26" Hg-145 (-0.9-10)	14.5-145 (1-10)	0.29 (0.13)	V70442-K5O
	V405516D-C3**†	M	Internal	Collected ^x	Solenoid	Spring & Air	0.58	23.2-145 (1.6-10)	-	0.29 (0.13)	V70440-K5O
	V415517D-C3**†	Ss	Internal	Collected ^x	Solenoid	Spring	0.66	29-145 (2-10)	-	0.29 (0.13)	V70442-K5O
	V405526D-C3**†	M	External	Not collected	Solenoid	Spring & Air	0.58	26" Hg-232 (-0.9-16)	23.2-145 (1.6-10)	0.29 (0.13)	V70440-K5O
	V415527D-C3**†	Ss	External	Not collected	Solenoid	Spring	0.66	26" Hg-145 (-0.9-10)	29-145 (2-10)	0.29 (0.13)	V70442-K5O
	V405511D-C3**†	M	Internal	Collected ^x	Solenoid	Solenoid	0.58	29-145 (2-10)	-	0.40 (0.18)	V70441-K5O
	V415511D-C3**†	Ss	Internal	Collected ^x	Solenoid	Solenoid	0.66	29-145 (2-10)	-	0.40 (0.18)	V70443-K5O
	V405522D-C3**†	M	External	Not collected	Solenoid	Solenoid	0.58	26" Hg-232 (-0.9-16)	29-145 (2-10)	0.40 (0.18)	V70441-K5O
	V415522D-C3**†	Ss	External	Not collected	Solenoid	Solenoid	0.66	26" Hg-145 (-0.9-10)	29-145 (2-10)	0.40 (0.18)	V70443-K5O
	V405591D-C3**†	M	Internal	Collected ^x	Solenoid (Priority)	Solenoid	0.58	29-145 (2-10)	-	0.40 (0.18)	V70441-K5O
	V405592D-C3**†	M	External	Not collected	Solenoid (Priority)	Solenoid	0.58	26" Hg-232 (-0.9-16)	29-145 (2-10)	0.40 (0.18)	V70441-K5O

** Insert 'Voltage Code' from table 'Voltage Codes and Spare Pilot Valves'
 Add connector code from table below
 x Pilot Exhaust collected and exhausted via port 14

Spool Technology Designations:
 M = Metal Spool and Sleeve
 Ss = Softseal Spool

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

Electrical Details for Solenoid Pilot Valve

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 7)
Protection Class	IP 65 with sealed plug (ISO 6952) NEMA 4
Materials	PPS (body), Viton and NBR (seals)

**Voltage Codes and Spare Pilot Valves

Voltage	Code	Power Inrush / Hold	Pilot Valve Part-no.
12 V d.c.	12	1 W	VZC7L2C1-C312A
24 V d.c.	13	1.2 W	VZC7L2C1-C313A
24 V 50/60 Hz.	14	2.1 / 1.5 VA	VZC7L2C1-C314A
48 V 50/60 Hz	16	2.1 / 1.5 VA	VZC7L2C1-C316A
110 V d.c.	17	1 W	VZC7L2C1-C317A
115 V 50/60 Hz	18	2.1 / 1.5 VA	VZC7L2C1-C318A
230 V 50/60 Hz	19	2.1 / 1.5 VA	VZC7L2C1-C319A

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

Connector Codes and Part Number

Code	Part Number
A = Solenoid without connector	
B = Cable grip	V10027-D00
C = 10 ft. molded cable, 0-240 VAC/VDC	V10013-D03
H = Cable grip w/indicator light, 24 VAC/VDC	V10012-D13
J = Cable grip w/indicator light, 120 VAC/VDC	V10012-D18
5 = 10 ft. molded cable with indicator light, surge suppression, 24 VAC/VDC	V10014-D03
6 = 10 ft. molded cable with indicator light, 110V/50 Hz-120V.60Hz	V10015-D03

Mini ISO Valves, 18 mm

5/3 Solenoid Actuated Valves

Symbol	Model	Spool Techn.	Valve Function	Pilot Supply	Pilot Exhaust	Operator 14	Return 12	Flow Cv	Operating Pressure psig (bar)	Pilot Pressure psig (bar)	Weight lb. (kg)	Repair Kit
	V405611D-C3**†	M	APB	Internal	Collected X	Solenoid	Solenoid	0.62	29-145 (2-10)	-	0.40 (0.18)	V70441-K50
	V415611D-C3**†	Ss	APB	Internal	Collected X	Solenoid	Solenoid	0.69	29-145 (2-10)	-	0.40 (0.18)	V70444-K50
	V405622D-C3**†	M	APB	External	Not collected	Solenoid	Solenoid	0.62	26" Hg-232 (-0.9-16)	29-145 (2-10)	0.40 (0.18)	V70441-K50
	V415622D-C3**†	Ss	APB	External	Not collected	Solenoid	Solenoid	0.69	26" Hg-145 (-0.9-10)	29-145 (2-10)	0.40 (0.18)	V70444-K50
	V405711D-C3**†	M	COE	Internal	Collected X	Solenoid	Solenoid	0.62	29-145 (2-10)	-	0.40 (0.18)	V70441-K50
	V415711D-C3**†	Ss	COE	Internal	Collected X	Solenoid	Solenoid	0.69	29-145 (2-10)	-	0.40 (0.18)	V70445-K50
	V405722D-C3**†	M	COE	External	Not collected	Solenoid	Solenoid	0.62	26" Hg-232 (-0.9-16)	29-145 (2-10)	0.40 (0.18)	V70441-K50
	V415722D-C3**†	Ss	COE	External	Not collected	Solenoid	Solenoid	0.69	26" Hg-145 (-0.9-10)	29-145 (2-10)	0.40 (0.18)	V70445-K50
	V405811D-C3**†	M	COP	Internal	Collected X	Solenoid	Solenoid	0.62	29-145 (2-10)	-	0.40 (0.18)	V70441-K50
	V415811D-C3**†	Ss	COP	Internal	Collected X	Solenoid	Solenoid	0.69	29-145 (2-10)	-	0.40 (0.18)	V70446-K50
	V405822D-C3**†	M	COP	External	Not collected	Solenoid	Solenoid	0.62	26" Hg-232 (-0.9-16)	29-145 (2-10)	0.40 (0.18)	V70441-K50
	V415822D-C3**†	Ss	COP	External	Not collected	Solenoid	Solenoid	0.69	26" Hg-145 (-0.9-10)	29-145 (2-10)	0.40 (0.18)	V70446-K50

2x3/2 Air Actuated Valves (Softseal Spool)

Symbol	Model	Function 2x3/2	Actuation 3/2 Function	Flow Cv	Operating Pressure psig (bar)	Pilot Pressure psig (bar)	Weight lb. (kg)	Repair Kit
	V415A33A-X0020	Normally Closed	Air/Spring	0.62	0-145 (0-10)	24.7 + (0.35 x op. pressure) (1.7 + (0.35 x op. pressure))	0.26 (0.12)	V70447-K50
	V415B33A-X0020	Normally Open	Air/Spring	0.62	0-145 (0-10)	24.7 + (0.35 x op. pressure) (1.7 + (0.35 x op. pressure))	0.26 (0.12)	V70448-K50
	V415C33A-X0020	Normally Open/ Normally Closed	Air/Spring	0.62 0.62	0-145 (0-10)	24.7 + (0.35 x op. pressure) (1.7 + (0.35 x op. pressure))	0.26 (0.12)	V70449-K50

5/2 Air Actuated Valves

Symbol	Model	Spool Techn.	Operator 14	Return 12	Flow Cv	Operating Pressure psig (bar)	Pilot Pressure psig (bar)	Weight lb. (kg)	Repair Kit
	V405537A-X0090	M	Air	Spring	0.58	26" Hg-232 (-0.9-16)	23.2-232 (1.6-16)	0.24 (0.11)	V70440-K50
	V415537A-X0090	Ss	Air	Spring	0.66	26" Hg-145 (-0.9-10)	29-145 (2-10)	0.22 (0.10)	V70442-K50
	V405533A-X0020	M	Air	Air	0.58	26" Hg-232 (-0.9-16)	29-232 (2-16)	0.24 (0.11)	V70441-K50
	V415533A-X0020	Ss	Air	Air	0.66	26" Hg-145 (-0.9-10)	29-145 (2-10)	0.24 (0.11)	V70443-K50
	V405533A-X0070	M	Air (Priority)	Air	0.58	26" Hg-232 (-0.9-16)	29-232 (2-16)	0.24 (0.11)	V70441-K50

5/3 Air Actuated Valves

Symbol	Model	Spool Techn.	Valve Function	Operator 14	Return 12	Flow Cv	Operating Pressure psig (bar)	Pilot Pressure psig (bar)	Weight lb. (kg)	Spares Kit
	V405633A-X0020	M	APB	Air	Air	0.62	26" Hg-232 (-0.9-16)	29-232 (2-16)	0.24 (0.11)	V70441-K50
	V415633A-X0020	Ss	APB	Air	Air	0.69	26" Hg-145 (-0.9-10)	29-145 (2-10)	0.26 (0.12)	V70444-K50
	V405733A-X0020	M	COE	Air	Air	0.62	26" Hg-232 (-0.9-16)	29-232 (2-16)	0.24 (0.11)	V70441-K50
	V415733A-X0020	Ss	COE	Air	Air	0.69	26" Hg-145 (-0.9-10)	29-145 (2-10)	0.26 (0.12)	V70445-K50
	V405833A-X0020	M	COP	Air	Air	0.62	26" Hg-232 (-0.9-16)	29-232 (2-16)	0.24 (0.11)	V70441-K50
	V415833A-X0020	Ss	COP	Air	Air	0.69	26" Hg-145 (-0.9-10)	29-145 (2-10)	0.26 (0.12)	V70446-K50

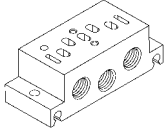
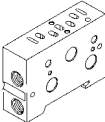
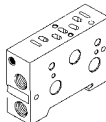
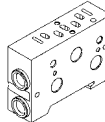
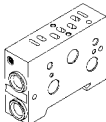
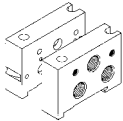
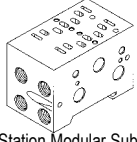
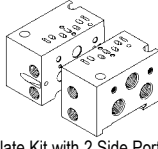
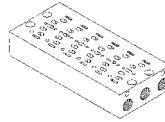
** Insert 'Voltage Code' from table 'Voltage Codes and Spare Pilot Valves' on page 5
† Add connector code from page 5
x Pilot Exhaust collected and exhausted via port 14

Spool Technology Designations:
M = Metal Spool and Sleeve
Ss = Softseal Spool

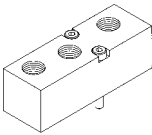
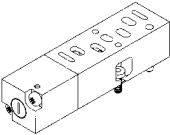
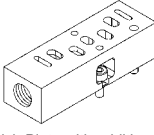
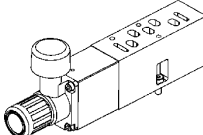
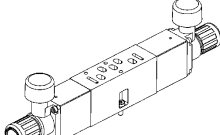
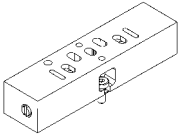
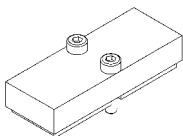
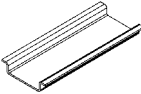
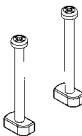
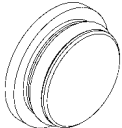
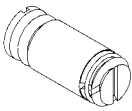
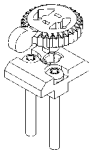
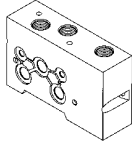
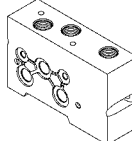
Valve Function Designations: APB = All Ports Blocked
COE = Center Open Exhaust
COP = Center Open Pressure

Bases and Accessories

Bases

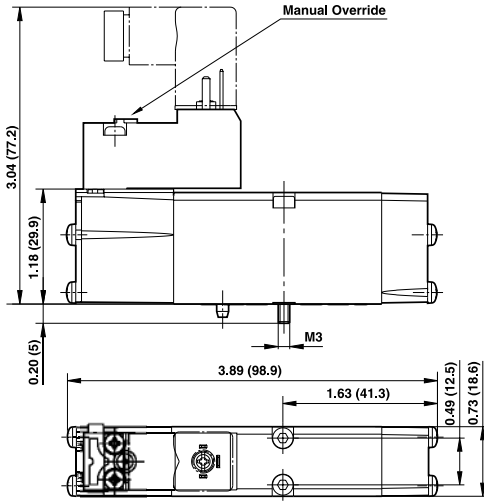
				
Single Station Sub-base Side Ported with Pilot Ports	Modular Sub-base Side Ported without Pilot Ports	Modular Sub-base Side Ported with Pilot Ports	Modular Sub-base Side Ported (PIF) without Pilot Ports	Modular Sub-base Side Ported (PIF) with Pilot Ports
V70401-P5B (1/8NPTF)	V70425-P5F (1/8NPTF)	V70426-P5F (1/8NPTF)	V70425-15F (ø1/4")	V70426-15F (ø1/4")
V70401-A5B (G1/8)	V70425-A5F (G1/8)	V70426-A5F (G1/8)	V70425-85F (ø8 mm)	V70426-85F (ø8 mm)
		V70425-65F (ø6 mm)	V70426-65F (ø6 mm)	
				
End Plate Kit End Ported	Double Station Modular Sub-base Side Ported without Pilot Ports	End Plate Kit with 2 Side Ported Valve Stations without Pilot Ports	Fixed Length Sub-base Bottom Ported	
V70424-R5C (1/4NPTF)	V70432-P5F (1/8NPTF)	V70431-P5F (1/4, 1/8NPTF)	V704**-P50 (1/8NPTF)	
V70424-B5C (G1/4)	V70432-A5F (G1/8")	V70431-A5F (G1/4, G1/8)	** = 02,04,06,08,10,12 stations	

Accessories

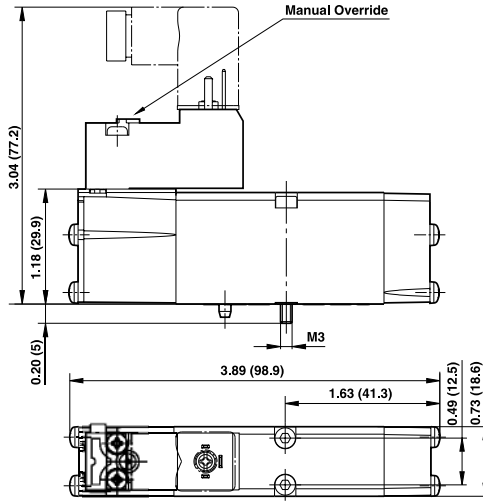
				
Intermediate Supply/Exhaust Module	Single Valve Shut-Off Plate	Sandwich Plate with additional Pressure Port 1	Single Pressure Regulator Plate	Double Pressure Regulator Plate
V70429-P50 (1/8NPTF)	V70430-K50 (Port 1 open/closed)	V70435-P50 (1/8NPTF)	V70427-K51 (Port 1 reg.)	V70427-K54 (Ports 2+4 reg.)
V70429-A50 (G1/8)			V70427-K52 (Port 2 reg.)	
			V70427-K53 (Port 4 reg.)	
				
Flow Regulator Plate	Blanking Plate for unused Station	DIN EN 50 022 rail (1 metre)	DIN-rail Mounting Kit	Blanking Disk to Modular Sub-base
V70428-K50 (Ports 3+5 reg.)	V70400-K50	V10009-C00 (35x7.5mm)	V70531-KA0	V70422-K50 (Ports 1,3,5)
		V10592-C01 (35x15mm)		V70423-K50 (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*	
V70421-K50 (Ports 1,3,5)	V70532-K00	V70436-K00	V70436-R00 (1/4NPTF)	
			V70436-B00 (G1/4)	

Mini ISO Valves, 18 mm

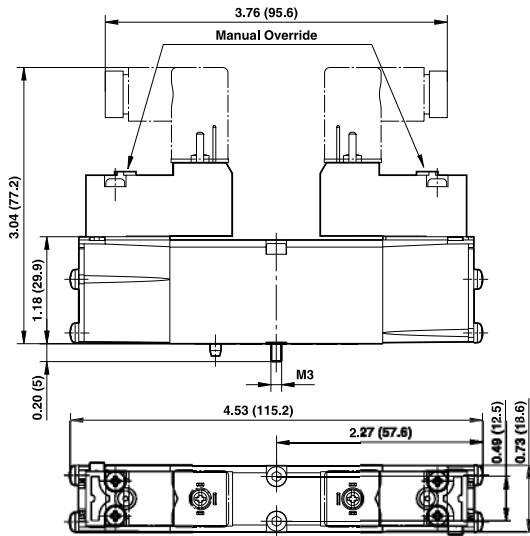
V4055*3D-C3* and V4155*3D-C3*** Models**
5/2 Single Solenoid Actuated Valve
Air Spring Return



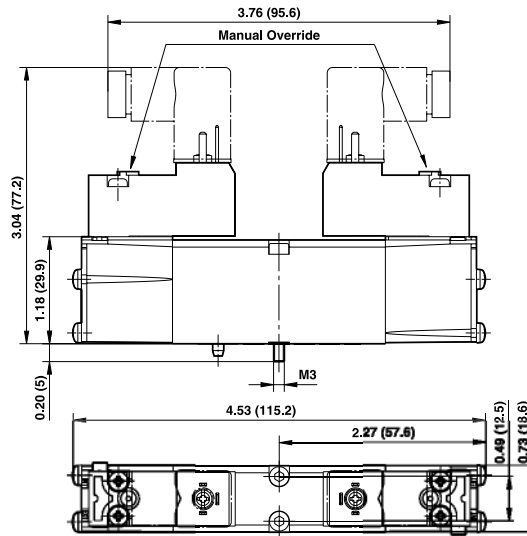
V4055*6D-C3* and V4155*7D-C3*** Models**
5/2 Single Solenoid Actuated Valve
Mechanical (& Air) Spring Return



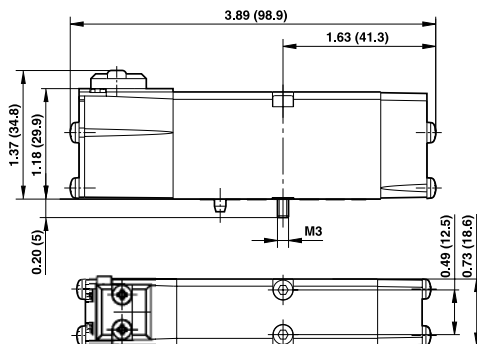
V4055D-C3*** and V4155**D-C3*** Models**
5/2 Double Solenoid Actuated Valve



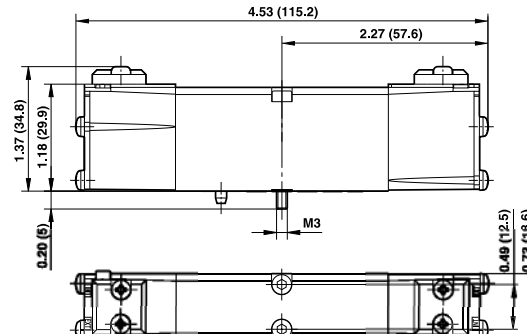
V405*D-C3*** and V415***D-C3*** Models**
2x3/2 + 5/3 Double Solenoid Actuated Valve



V415537A-X0090
5/2 Single Air Actuated Valve



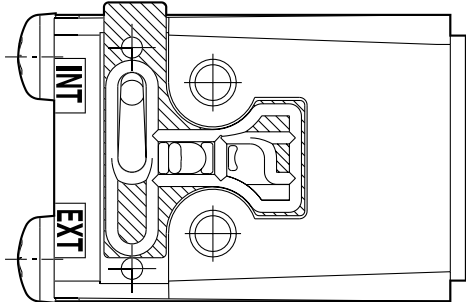
V405537A-X0090 5/2 Single Air Actuated Valve
V405*33A-X00*0 and V415*33A-X00*0 Models
2x3/2, 5/2 + 5/3 Double Air Actuated Valve



Conversion from internal to external pilot supply / Collected pilot exhaust

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

Solenoid actuated valves

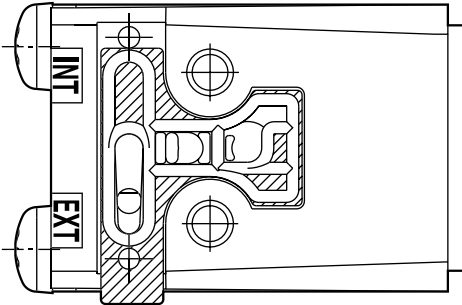


blue gasket

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

All solenoid actuated valves with code 1 at position 6 in the part number (e.g V41551...) have the gasket mounted in this position on delivery.

Drawing shows no pilot valve.



blue gasket

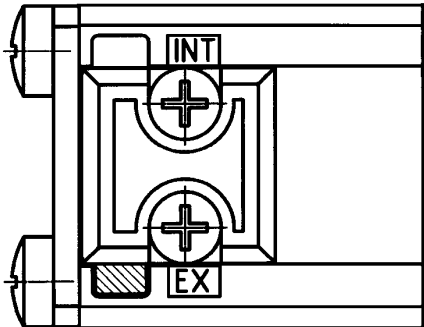
**External pilot supply from port 14 only,
pilot exhaust air not collected but
bleed through valve body.**

All solenoid actuated valves with code 2 at position 6 in the part number (e.g V41552...) 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 actuated valves

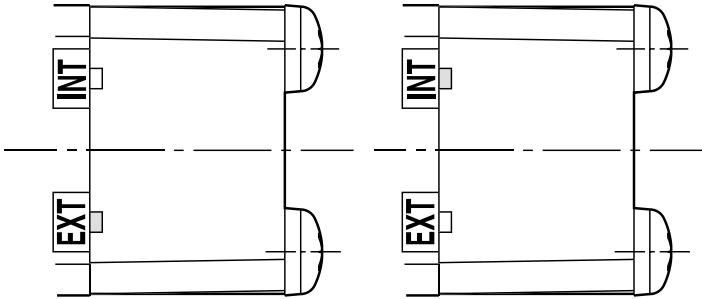
Drawing includes cover plate.



blue gasket

Air actuated valves
External pilot supply.

5/2 Solenoid actuated valves with air spring return
Drawing shows end cap side 12.

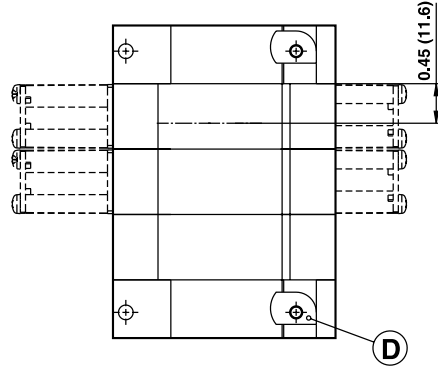


Note: The gasket between end cap and valve body must be set to the proper function.
For detailed instructions see installation- and Maintenance Sheet.

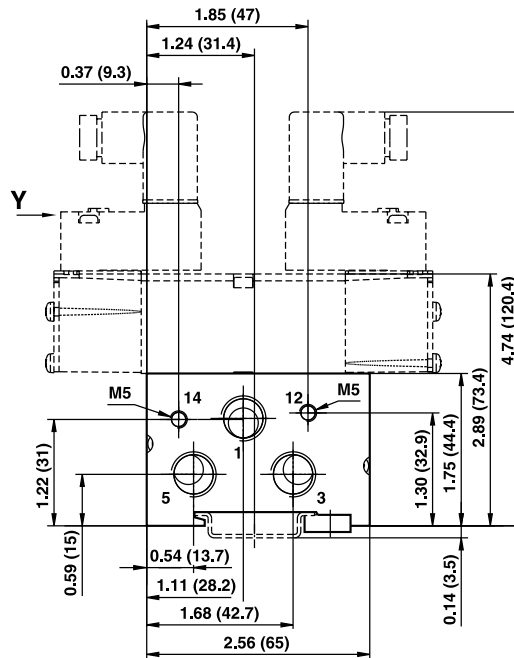
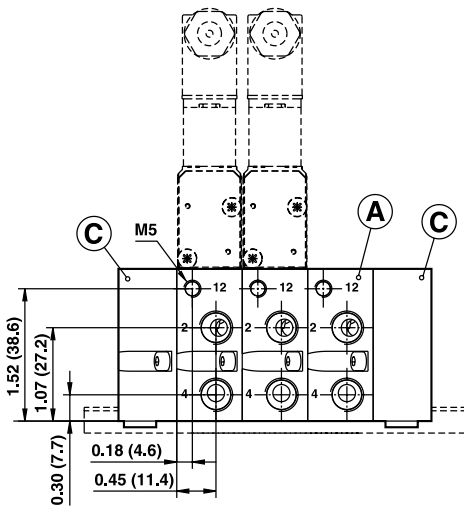
Mini ISO Valves, 18 mm

Modular Sub-bases parts for DIN rail or surface mounting

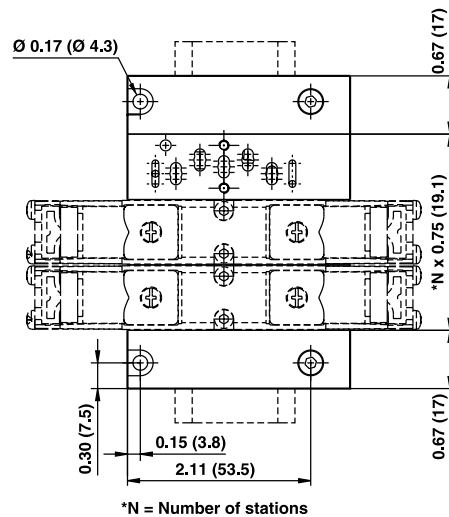
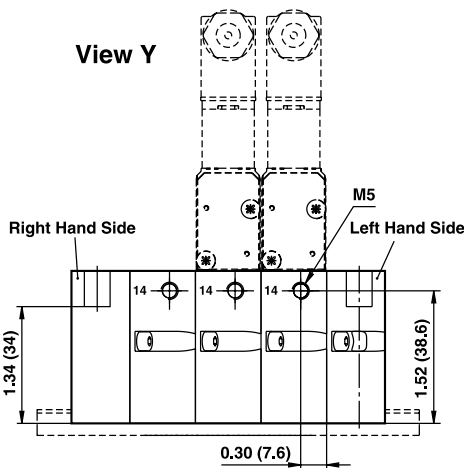
Bottom ported sub-base



Side ported sub-base



Bottom and side ported sub-base



Note:

Port 14 either used for external pilot air supply or for collected pilot air exhaust.
Therefore, 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 (A) 0.12 kg
 Ports 2+4 on side (0.26 lb)
V70425-x5F

Double Station Modular Sub-base 0.24 kg
 Ports 2+4 on side (0.53 lb)
V70432-y5F

Modular Sub-base (A) 0.12 kg
 Ports 2+4 on side (0.26 lb)
 Pilot Ports 12+14 on side
V70426-x5F

End Plate Kit (C) 0.21 kg
 End Ported (0.46 lb)
V70424-B5C (G1/4)
V70424-R5C (1/4NPTF)

End ported end caps
 1 left hand and 1 right hand

End Plate Kit with Valve Station
 Ports 2+4 on side 0.4 kg
V70431-A5F (0.88 lb)

(1/3/5 G1/4, 2/4 G1/8)
V70431-P5F
(1/3/5 1/4NPTF, 2/4 1/8NPTF)

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 (D) 0.01 kg
V70531-KAO (0.02 lb)

Blanking Disk to Modular Sub-base 0.01 kg
 Ports 1, 3, 5 (0.02 lb)
V70422-K50

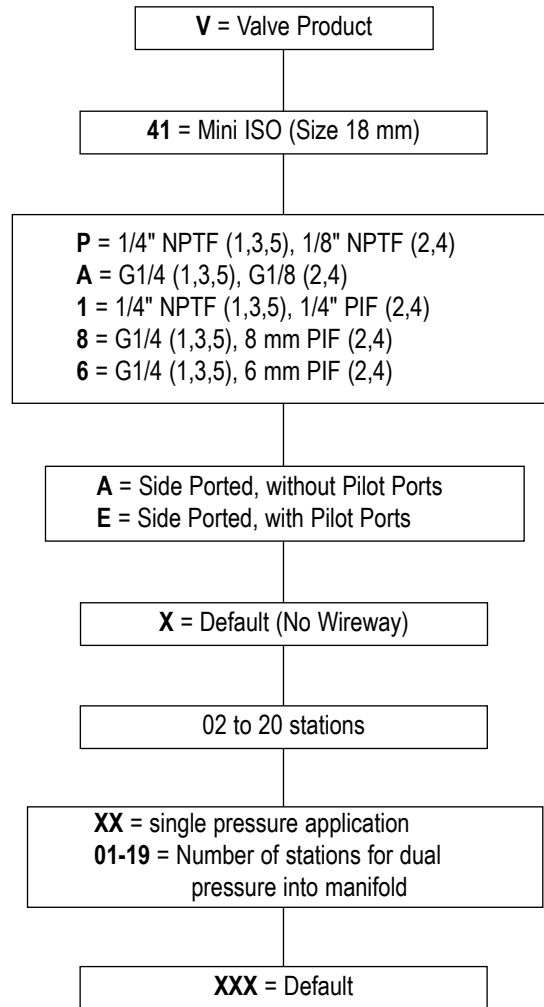
Blanking Disk to Modular Sub-base 0.01 kg
 Ports 12+14 (0.02 lb)
V70423-K50

x/y = Insert port type from table below

Code x	Code y	Ports 2+4	Ports 12+14
A	A	G1/8	M5
P	P	1/8NPTF	10-32 UNF
8	-	ø 8 mm PIF	M5
6	-	ø 6 mm PIF	M5
1	-	ø 1/4" PIF	10-32 UNF

Order a factory assembled manifold

V 4 5 R A X 0 7 - X X X X X



Ordering Example

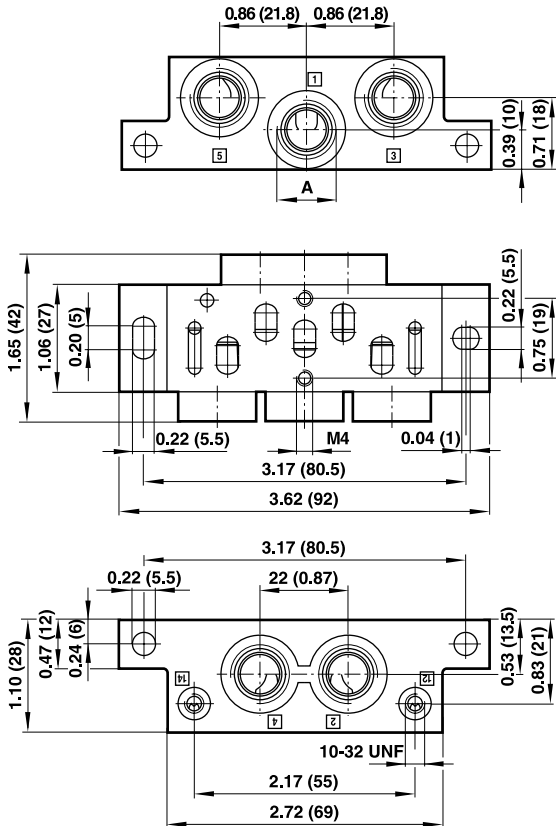
The following ordering example details the information needed to order a 4-valve, single solenoid, 24 VDC, cable grip electrical connector, single pressure manifold.

One Mini ISO manifold consisting of:

Position	Quantity	Part No.
1-4	4	V40A513D-C313B
	1	V41PAX04-XXXXXX

Mini ISO Valves, 18 mm

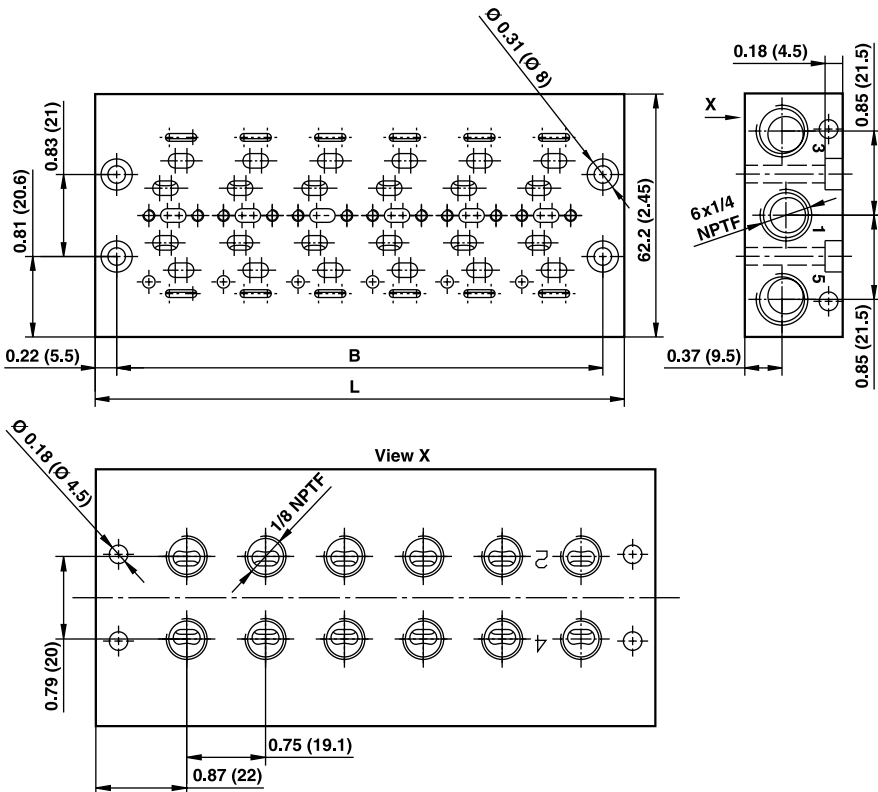
Single Station Sub-base - Side Ported with Pilot Ports



Model	Port Size A	Weight lb (kg)
V70401-P5B	1/8NPTF Side Ported with Pilot Ports	0.18 (0.08)
V70401-A5B	G1/8 Side Ported with Pilot Ports	

Note: Pilot Ports
NPT types = 10-32 UNF
ISO G = M 5

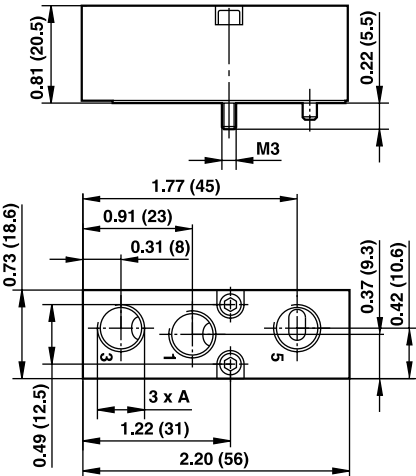
Fixed Length Sub-base - Bottom Ported



Model	No. of Stations	A inch (mm)	B inch (mm)	Weight lb (kg)
V70402-P5O	2	2.33 (59.1)	1.89 (48.1)	0.40 (0.18)
V70404-P5O	4	3.83 (97.3)	3.40 (86.3)	0.66 (0.30)
V70406-P5O	6	5.34 (135.5)	4.90 (124.5)	0.93 (0.42)
V70408-P5O	8	6.84 (173.7)	6.41 (162.7)	1.19 (0.54)
V70410-P5O	10	8.34 (211.9)	7.91 (200.9)	1.46 (0.66)
V70412-P5O	12	9.85 (250.1)	9.41 (239.1)	1.72 (0.78)

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

Intermediate Supply / Exhaust Module

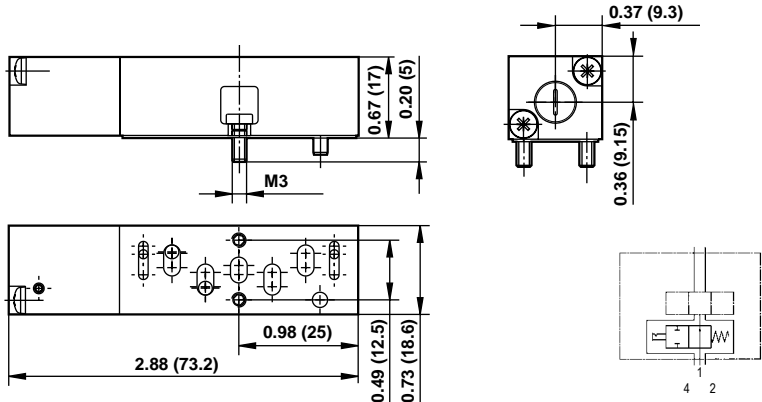


Model	Port Size A	Weight lb (kg)
V70429-P5O	1/8NPTF	0.11
V70429-A5O	G1/8	(0.05)

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



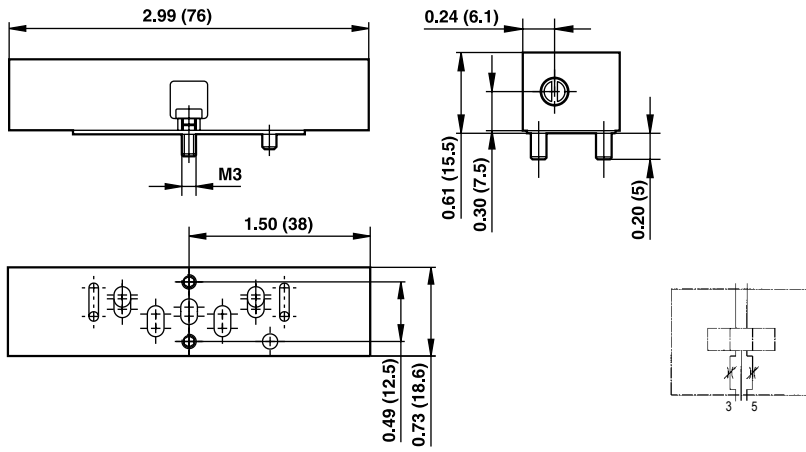
Model	Description	Weight lb (kg)
V70430-K5O	Single Shut-Off Plate supplied with gasket	0.13 (0.06)

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

Note: Flow restricted to maximum .24 Cv

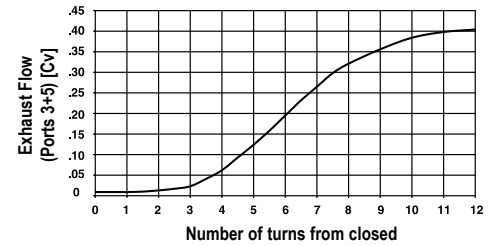
Mini ISO Valves, 18 mm

Sandwich Flow Control



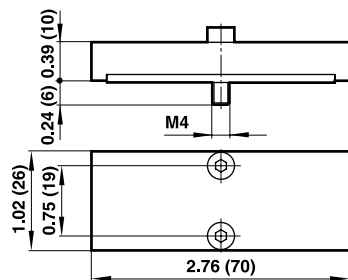
Model	Description	Weight lb (kg)
V70428-K50	Flow Control supplied with gasket	0.13 (0.06)

Dual Regulation of Exhaust Ports 3 and 5



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

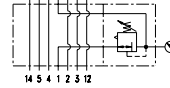
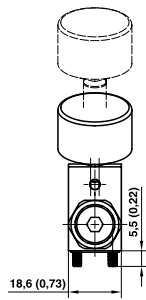
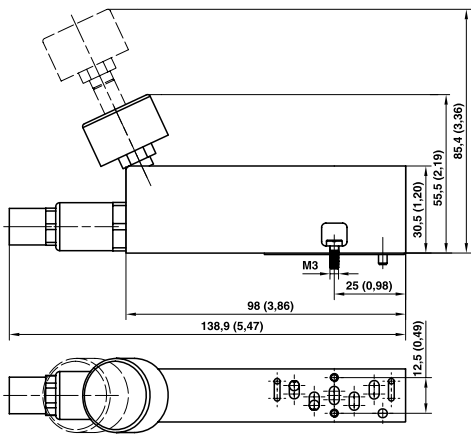
Blanking Plate



Model	Description	Weight lb (kg)
V70400-K50	Blanking Plate for blocking of unused Stations (supplied with gasket)	0.04 (0.02)

Pressure Regulator Plates (including gauge and adapter tube)

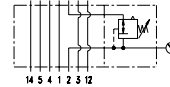
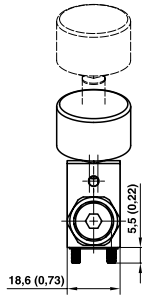
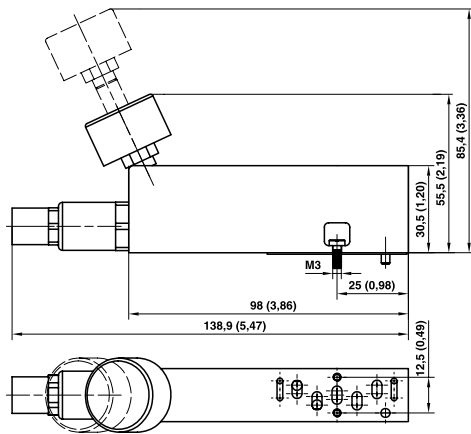
Mini ISO Valves, 18 mm



Model	Description	Weight kg (lb)
V70427-K51	Regulation of Port 1	0,21 (0,46)

Maximum inlet pressure 16 bar
(232 psig)
Regulated pressure 1–10 bar
(14,5–145 psig)

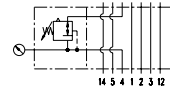
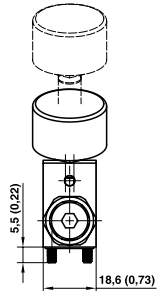
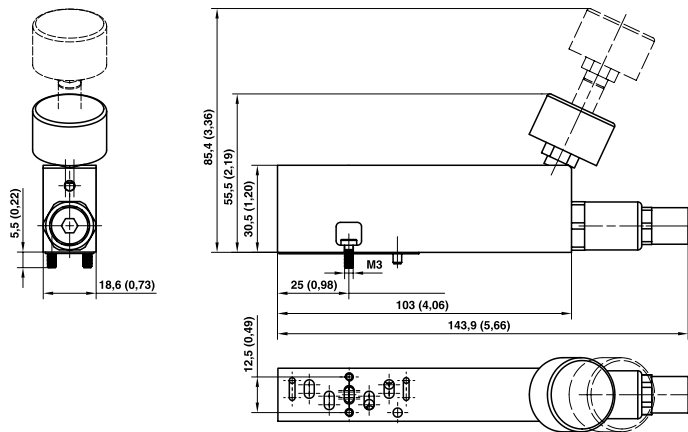
Flow Characteristics



Model	Description	Weight kg (lb)
V70427-K52	Regulation of Port 2	0,21 (0,46)

Maximum inlet pressure 16 bar
(232 psig)
Regulated pressure 1–10 bar
(14,5–145 psig)

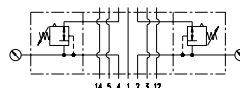
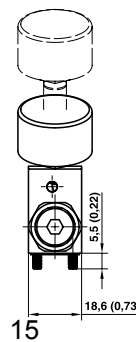
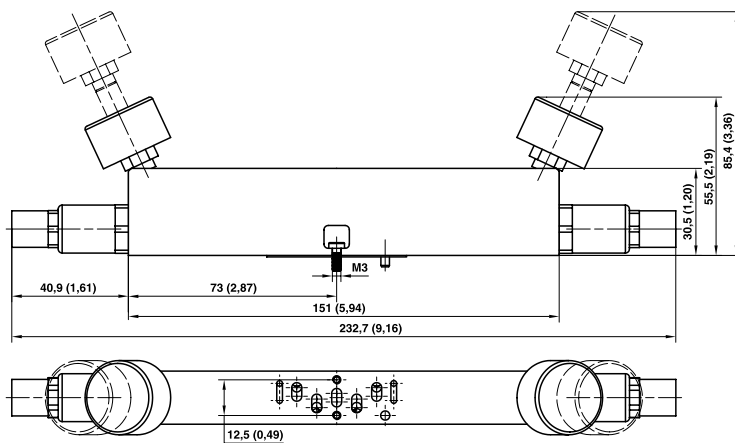
Flow Characteristics



Model	Description	Weight kg (lb)
V70427-K53	Regulation of Port 4	0,21 (0,46)

Maximum inlet pressure 16 bar
(232 psig)
Regulated pressure 1–10 bar
(14,5–145 psig)

Flow Characteristics



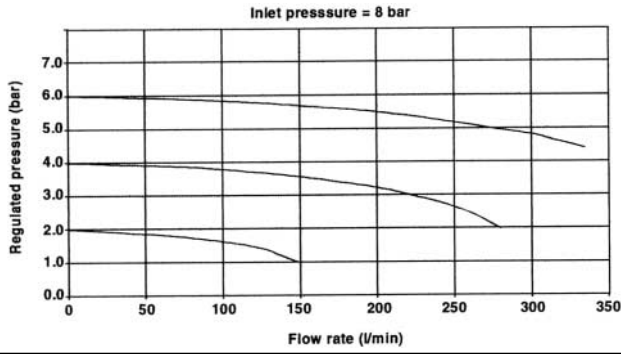
Model	Description	Weight kg (lb)
V70427-K54	Regulation of Ports 2+4	0,36 (0,79)

Maximum inlet pressure 16 bar
(232 psig)
Regulated pressure 1–10 bar
(14,5–145 psig)

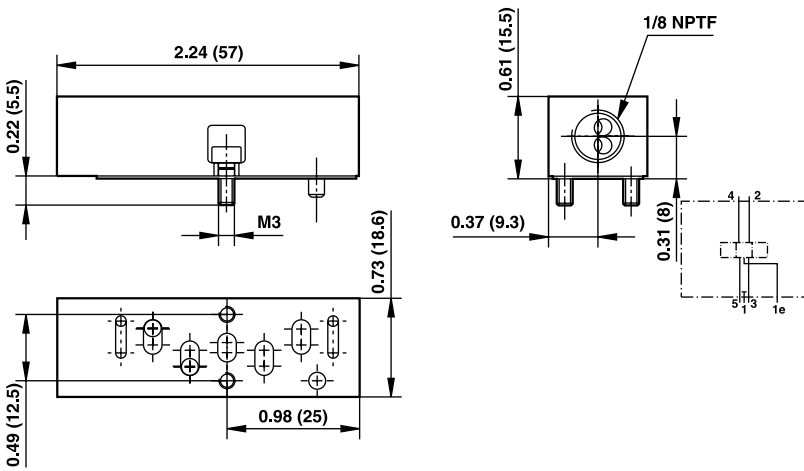
Flow Characteristics

Mini ISO Valves, 18 mm

Flow Characteristics for Pressure Regulator Plates

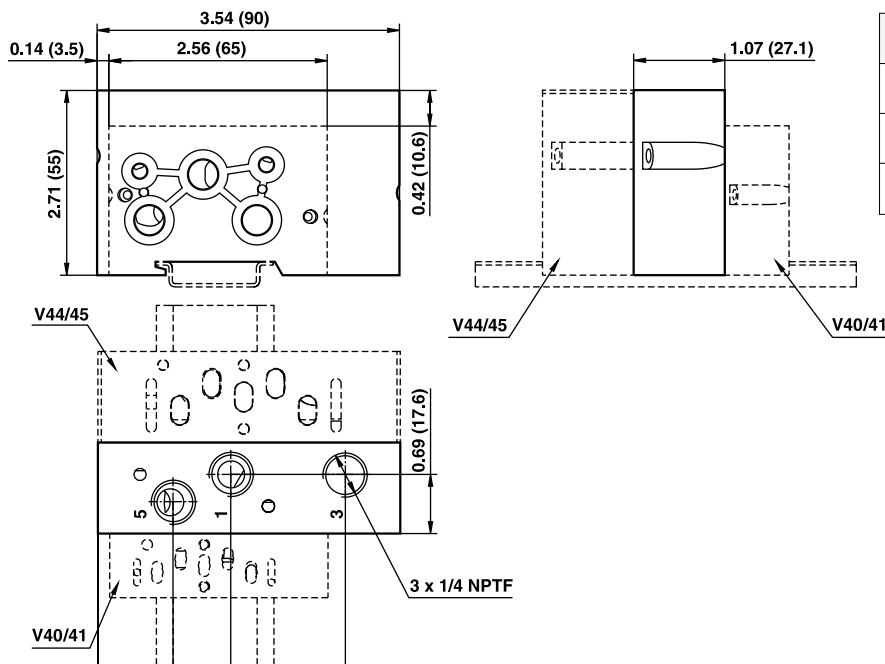


Sandwich Plate with additional Pressure Port 1



Model	Description	Weight lb (kg)
V70435-P50	Sandwich Plate with additional Port 1, supplied with gasket	0.09 (0.04)

Transition Plate 18 mm 26 mm



Model	Description	Port 1/3/5	Weight lb (kg)
V70436-K00	Transition Plate 18 to 26 mm	without Ports 1/3/5	0.71 (0.32)
V70436-R00	Transition Plate 18 to 26 mm	1/4 NPTF	0.68 (0.31)
V70436-B00	Transition Plate 18 to 26 mm	G1/4	0.68 (0.31)

MINI ISO VALVES

26 mm (V44 / 45 Series)

2x3/2, 5/2 and 5/3, Solenoid and Air Actuated
ISO 15407-1 / VDMA 24 563

Technical Data

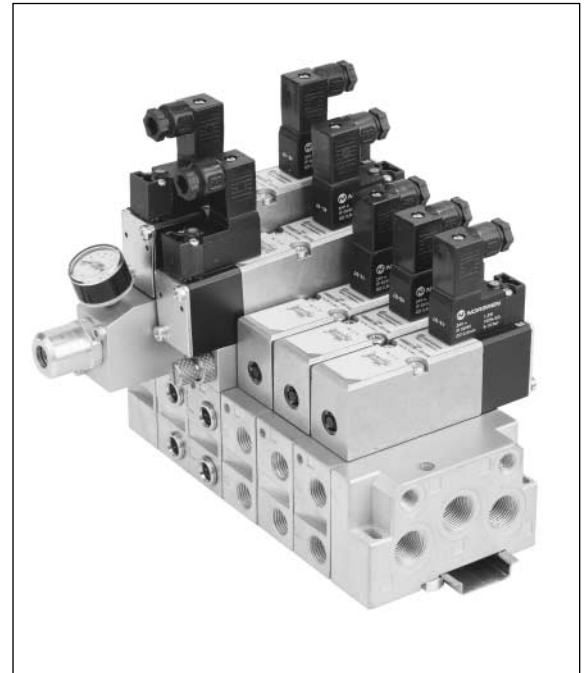
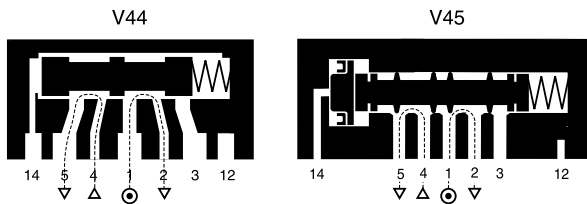
Medium

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

Operation

V44: Metal spool and sleeve valve, solenoid or air actuated

V45: Softseal spool valve, solenoid or air actuated



Mounting

On sub-bases

Maximum Operating Pressure

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

232 psig (16 bar) V44 solenoid actuated valves with external pilot supply and V44 air actuated valves

Ambient Temperature

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

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

*Consult our Application Engineering for use below 36° F (+2°C)

Materials

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

Flow Characteristics

Series	Function	Cv	l/min	Kv
V44	5/2	0.92	900	0.79
V44	5/3	0.92	900	0.79
V45	2x3/2 NC	1.12	1100	0.96
V45	5/2	1.22	1200	1.05
V45	5/3	1.17	1150	1.00

Mini ISO Valves, 26 mm

2x3/2 Solenoid Actuated Valves (Soft Seal Spool)

Symbol	Model	Function 2x3/2	Pilot Supply	Pilot Exhaust	Actuation 3/2 Function	Flow Cv	Operating Pressure psig (bar)	Pilot Pressure psig (bar)	Weight lb. (kg)	Repair Kit
	V45AA11D-C3***	Normally Closed	Internal	Collected X	Sol/Spring	1.1	43.5 - 145 (3 - 10)	-	0.53 (0.27)	V70546-KAO
	V45AA22D-C3***	Normally Closed	External	Not Collected	Sol/Spring	1.1	0 - 145 (0 - 10)	21.7+(0.5xop.press.) (1.5+(0.5xop.press.))	0.53 (0.27)	V70546-KAO
	V45AB11D-C3***	Normally Open	Internal	Collected X	Sol/Spring	1.0	43.5 - 145 (3 - 10)	-	0.53 (0.27)	V70547-KAO
	V45AB22D-C3***	Normally Open	External	Not Collected	Sol/Spring	1.0	0 - 145 (0 - 10)	21.7+(0.5xop.press.) (1.5+(0.5xop.press.))	0.53 (0.27)	V70547-KAO
	V45AC11D-C3***	Norm. Open/ Norm. Closed	Internal	Collected X	Sol/Spring	1.0/ 1.1	43.5 - 145 (3 - 10)	-	0.53 (0.27)	V70548-KAO
	V45AC22D-C3***	Norm. Open/ Norm. Closed	External	Not collected	Sol/Spring	1.0/ 1.1	0 - 145 (0 - 10)	21.7+(0.5xop.press.) (1.5+(0.5xop.press.))	0.53 (0.27)	V70548-KAO

5/2 Solenoid Actuated Valves

Symbol	Model	Spool Techn.	Pilot Supply	Pilot Exhaust	Operator 14	Return 12	Flow Cv	Operating Pressure psig (bar)	Pilot Pressure psig (bar)	Weight lb. (kg)	Repair Kit
	V44A513D-C3***†	M	Internal	Collected X	Solenoid	Air Spring	0.9	14.5 - 145 (1 - 10)	-	0.53 (0.24)	V70540-KAO
	V44A523D-C3***†	M	External	Not collected	Solenoid	Air Spring	0.9	26" Hg - 232 (-0.9 - 16)	14.5 - 145 (1 - 10)	0.53 (0.24)	V70540-KAO
	V44A517D-C3***†	M	Internal	Collected X	Solenoid	Spring	0.9	23.2 - 145 (1.6 - 10)	-	0.44 (0.20)	V70540-KAO
	V45A517D-C3***†	Ss	Internal	Collected X	Solenoid	Spring	1.2	29 - 145 (2 - 10)	-	0.46 (0.21)	V70541-KAO
	V44A527D-C3***†	M	External	Not collected	Solenoid	Spring	0.9	26" Hg - 232 (-0.9 - 16)	23.2 - 145 (1.6 - 10)	0.44 (0.20)	V70540-KAO
	V45A527D-C3***†	Ss	External	Not collected	Solenoid	Spring	1.2	26" Hg - 145 (-0.9 - 10)	29 - 145 (2 - 10)	0.46 (0.21)	V70541-KAO
	V44A511D-C3***†	M	Internal	Collected X	Solenoid	Solenoid	0.9	29 - 145 (2 - 10)	-	0.60 (0.27)	V70540-KAO
	V45A511D-C3***†	Ss	Internal	Collected X	Solenoid	Solenoid	1.2	29 - 145 (2 - 10)	-	0.60 (0.27)	V70542-KAO
	V44A522D-C3***†	M	External	Not collected	Solenoid	Solenoid	0.9	26" Hg - 232 (-0.9 - 16)	29 - 145 (2 - 10)	0.60 (0.27)	V70540-KAO
	V45A522D-C3***†	Ss	External	Not collected	Solenoid	Solenoid	1.2	26" Hg - 145 (-0.9 - 10)	29 - 145 (2 - 10)	0.60 (0.27)	V70542-KAO

** Insert 'Voltage Code' from table 'Voltage Codes and Spare Pilot Valves'
 † Add connector code from table 'Connector Codes and Part Numbers'
 X Pilot Exhaust collected and exhausted via port 14

Spool Technology Designations:
 M = Metal Spool and Sleeve
 Ss = Softseal Spool

Valve Function Designations: APB = All Ports Blocked
 COE = Center Open Exhaust
 COP = Center 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 7)
Protection Class	IP 65 NEMA 4
Materials	PPS (body), Viton and NBR (seals)

Voltage Codes and Spare Pilot Valves

Voltage	Code	Power Inrush / Hold	Pilot Valve Part.-no.
12 V d.c.	12	1.2 W	VZC7L2C1-C312A
24 V d.c.	13	1.2 W	VZC7L2C1-C313A
24 V 50/60 Hz.	14	2.1 / 1.5 VA	VZC7L2C1-C314A
48 V 50/60 Hz	16	2.1 / 1.5 VA	VZC7L2C1-C316A
110 V d.c.	17	1 W	VZC7L2C1-C317A
115 V 50/60 Hz	18	2.1 / 1.5 VA	VZC7L2C1-C318A
230 V 50/60 Hz	19	2.1 / 1.5 VA	VZC7L2C1-C319A

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

Connector Codes and Part Number

Code	Part Number
A = Solenoid without connector	
B = Cable grip	V10027-D00
C = 10 ft. molded cable, 0-240 VAC/VDC	V10013-D03
H = Cable grip w/indicator light, 24 VAC/VDC	V10012-D13
J = Cable grip w/indicator light, 120 VAC/VDC	V10012-D18
5 = 10 ft. molded cable with indicator light, surge suppression, 24 VAC/VDC	V10014-D03
6 = 10 ft. molded cable with indicator light, 110V/50 Hz-120V.60Hz	V10015-D03

5/3 Solenoid Actuated Valves

Symbol	Model	Spool Techn.	Valve Function	Pilot Supply	Pilot Exhaust	Operator 14	Return 12	Flow Cv	Operating Pressure psig (bar)	Pilot Pressure psig (bar)	Weight lb. (kg)	Repair Kit
	V44A611D-C3**†	M	APB	Internal	Collected X	Solenoid	Solenoid	0.9	29 - 145 (2 - 10)	-	0.62 (0.28)	V70540-KAO
	V45A611D-C3**†	Ss	APB	Internal	Collected X	Solenoid	Solenoid	1.15	36.3 - 145 (2.5 - 10)	-	0.59 (0.27)	V70543-KAO
	V44A622D-C3**†	M	APB	External	Not collected	Solenoid	Solenoid	0.9	26" Hg - 232 (-0.9 - 16)	29 - 145 (2 - 10)	0.62 (0.28)	V70540-KAO
	V45A622D-C3**†	Ss	APB	External	Not collected	Solenoid	Solenoid	1.15	26" Hg - 145 (-0.9 - 10)	36.3 - 145 (2.5 - 10)	0.59 (0.27)	V70543-KAO
	V44A711D-C3**†	M	COE	Internal	Collected X	Solenoid	Solenoid	0.9	29 - 145 (2 - 10)	-	0.62 (0.28)	V70540-KAO
	V45A711D-C3**†	Ss	COE	Internal	Collected X	Solenoid	Solenoid	1.15	36.3 - 145 (2.5 - 10)	-	0.59 (0.27)	V70544-KAO
	V44A722D-C3**†	M	COE	External	Not collected	Solenoid	Solenoid	0.9	26" Hg - 232 (-0.9 - 16)	29 - 145 (2 - 10)	0.62 (0.28)	V70540-KAO
	V45A722D-C3**†	Ss	COE	External	Not collected	Solenoid	Solenoid	1.15	26" Hg - 145 (-0.9 - 10)	36.3 - 145 (2.5 - 10)	0.59 (0.27)	V70544-KAO
	V44A811D-C3**†	M	COP	Internal	Collected X	Solenoid	Solenoid	0.9	29 - 145 (2 - 10)	-	0.62 (0.28)	V70540-KAO
	V45A811D-C3**†	Ss	COP	Internal	Collected X	Solenoid	Solenoid	1.15	36.3 - 145 (2.5 - 10)	-	0.59 (0.27)	V70545-KAO
	V44A822D-C3**†	M	COP	External	Not collected	Solenoid	Solenoid	0.9	26" Hg - 232 (-0.9 - 16)	29 - 145 (2 - 10)	0.62 (0.28)	V70540-KAO
	V45A822D-C3**†	Ss	COP	External	Not collected	Solenoid	Solenoid	1.15	26" Hg - 145 (-0.9 - 10)	36.3 - 145 (2.5 - 10)	0.59 (0.27)	V70545-KAO

5/2 Air Actuated Valves

Symbol	Model	Spool Techn.	Operator 14	Return 12	Flow Cv	Operating Pressure psig (bar)	Pilot Pressure psig (bar)	Weight lb. (kg)	Repair Kit
	V44A537A-X0090	M	Air	Spring	0.9	26" Hg - 232 (-0.9 - 16)	23 - 232 (1.6 - 16)	0.40 (0.18)	V70540-KAO
	V45A537A-X0090	Ss	Air	Spring	1.2	26" Hg - 145 (-0.9 - 10)	29 - 145 (2 - 10)	0.40 (0.18)	V70541-KAO
	V44A533A-X0020	M	Air	Air	0.9	26" Hg - 232 (-0.9 - 16)	29 - 232 (2 - 16)	0.44 (0.20)	V70540-KAO
	V45A533A-X0020	Ss	Air	Air	1.2	26" Hg - 145 (-0.9 - 10)	29 - 145 (2 - 10)	0.44 (0.20)	V70542-KAO

5/3 Air Actuated Valves

Symbol	Model	Spool Techn.	Valve Function	Operator 14	Return 12	Flow Cv	Operating Pressure psig (bar)	Pilot Pressure psig (bar)	Weight lb. (kg)	Spares Kit
	V44A633A-X0020	M	APB	Air	Air	0.9	26" Hg - 232 (-0.9 - 16)	29 - 232 (2 - 16)	0.48 (0.22)	V70540-KAO
	V45A633A-X0020	Ss	APB	Air	Air	1.15	26" Hg - 145 (-0.9 - 10)	36 - 145 (2.5 - 10)	0.46 (0.21)	V70543-KAO
	V44A733A-X0020	M	COE	Air	Air	0.9	26" Hg - 232 (-0.9 - 16)	29 - 232 (2 - 16)	0.48 (0.22)	V70540-KAO
	V45A733A-X0020	Ss	COE	Air	Air	1.15	26" Hg - 145 (-0.9 - 10)	36 - 145 (2.5 - 10)	0.46 (0.21)	V70544-KAO
	V44A833A-X0020	M	COP	Air	Air	0.9	26" Hg - 232 (-0.9 - 16)	29 - 232 (2 - 16)	0.48 (0.22)	V70540-KAO
	V45A833A-X0020	Ss	COP	Air	Air	1.15	26" Hg - 145 (-0.9 - 10)	36 - 145 (2.5 - 10)	0.46 (0.21)	V70545-KAO

** Insert 'Voltage Code' from table 'Voltage Codes and Spare Pilot Valves' on page 17.

† Add connector code from table 'Connector Codes and Part Numbers' on page 17.

X Pilot Exhaust collected and exhausted via port 14

Spool Technology Designations:

M = Metal Spool and Sleeve

Ss = Softseal Spool

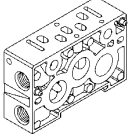
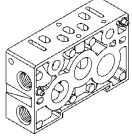
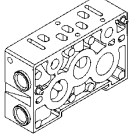
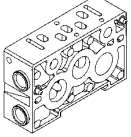
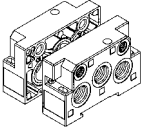
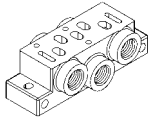
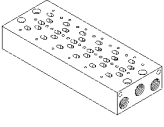
Valve Function Designations: APB = All Ports Blocked

COE = Center Open Exhaust

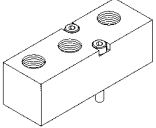
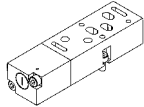
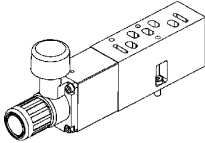
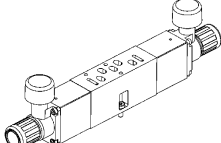
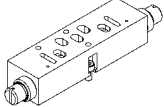
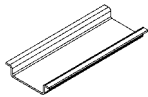
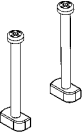
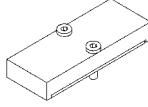

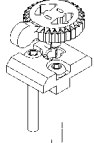
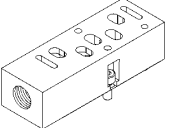
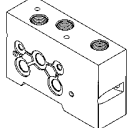
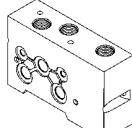
COP = Center Open Pressure

Mini ISO Valves, 26 mm

Bases

				
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	
V70525-PAF (1/8 NPTF)	V70526-PAF (1/8 NPTF)	V70525-2AF (3/8 PIF)	V70526-2AF (3/8 PIF)	
V70525-RAF (1/4 NPTF)	V70526-RAF (1/4 NPTF)	V70525-8AF (ø8 mm)	V70526-8AF (ø8 mm)	
V70525-BAF (G1/4)	V70526-BAF (G1/4)	V70525-YAF (ø10 mm)	V70526-YAF (ø10 mm)	
				
End Plate Kit End Ported	Single Station Sub-base Side ported with Pilot Ports	Fixed Length Sub-base Bottom ported		
V70524-SAC (3/8 NPTF)	V70501-RAB (1/4 NPTF)	V705**-RA0		
V70524-CAC (G3/8)	V70501-BAB (G1/4)	**=02, 04, 06, 08, 10, 12 stations		

Accessories

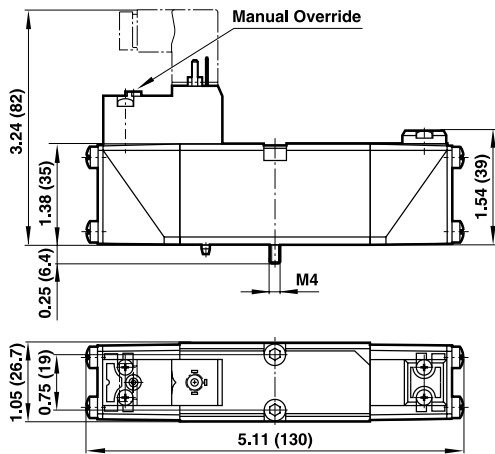
				
Intermediate Supply/Exhaust Module	Single Valve Shut-Off Plate	Single Pressure Regulator Plate	Double Pressure Regulator Plate	Flow Control Plate
V70529-RA0 (1/4 NPTF)	V70530-KA0 (Port 1 blocked)	V70527-KA1 (Port 1 reg.)	V70527-KA4 (Ports 2+4 reg.)	V70528-KA0 (Ports 3+5)
V70529-BA0 (G1/4)		V70527-KA2 (Port 2 reg.)		
		V70527-KA3 (Port 4 reg.)		
				
DIN EN 50 022 rail (3.28 feet)	DIN-rail Mounting Kit	Blanking Plate for unused station	Blanking Disk to Modular Sub-base	Manual Override Set-Up Kit
V10009-C00 (35x7.5mm)	V70531-KA0	V70500-KA0	V70522-K00 (Ports 1,3,5)	V70532-K00
V10592-C01 (35x15mm)			V70523-K00 (Ports 12+14)	
				
Sandwich Plate with additional Pressure Port 1	Transition Plate #18 Æ#26 mm	Transition Plate #18 Æ#26 mm		
V70535-RA0 1/4 NPTF	V70436-K00	V70436-R00 1/4 NPTF		
V70535-BA0 G1/4		V70436-B00 G1/4		

Mini ISO Valves, 26 mm

All Dimensions in inches (mm)

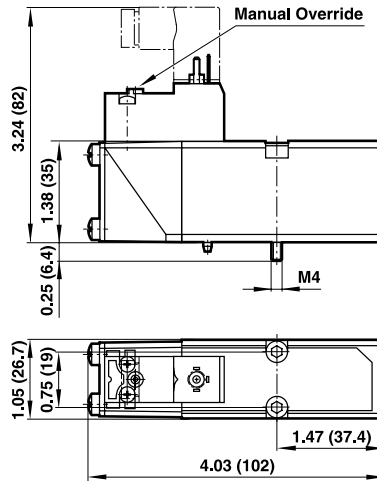
V44A5*3D-C3***

5/2 Single Solenoid Actuated Valve
Air Spring Return



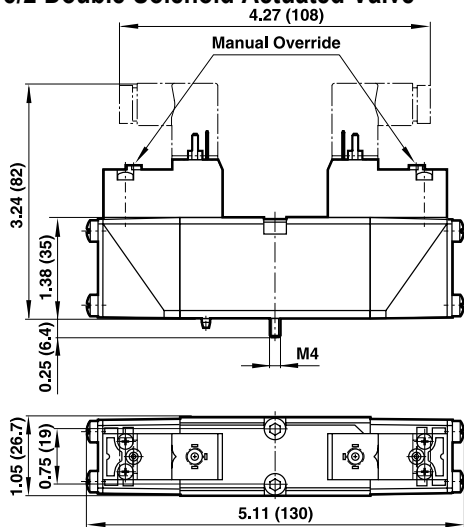
V44A5*7D-C3*** and V45A5*7D-C3***

5/2 Single Solenoid Actuated Valve
Mechanical Spring Return



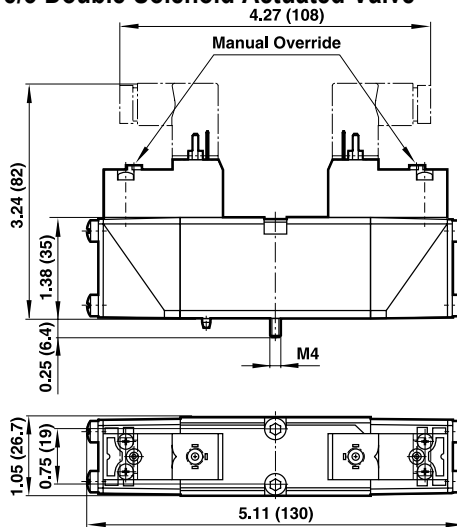
V44A5**D-C3*** and V45A5**D-C3***

5/2 Double Solenoid Actuated Valve



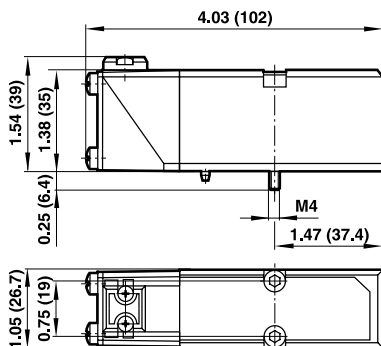
V44A***D-C3*** and V45A***D-C3***

5/3 Double Solenoid Actuated Valve



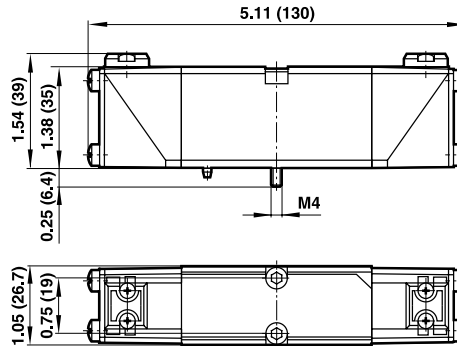
V44A537A-X00*0 and V45A537A-X00*0

5/2 Single Air Actuated Valves



V44A*33A-X00*0 and V45A*33A-X00*0

5/2 + 5/3 Double Air Actuated Valve

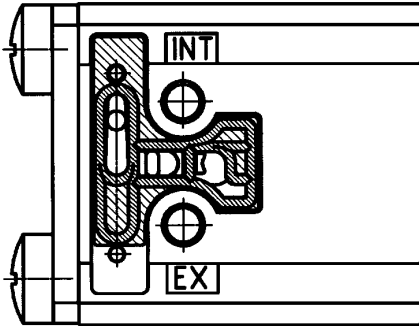


Mini ISO Valves, 26 mm

Conversion from internal to external pilot supply / Collected pilot exhaust

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

Solenoid actuated valves

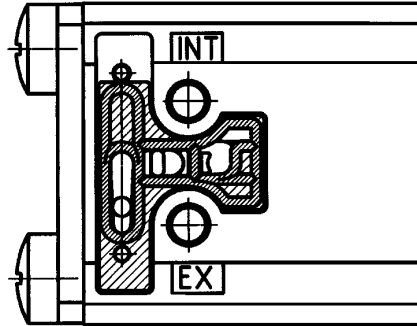


blue gasket

**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

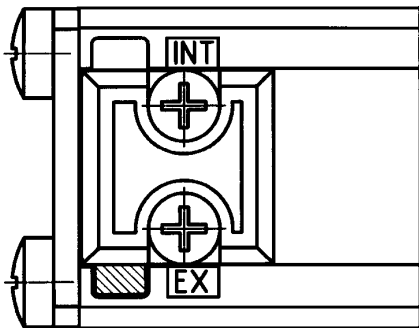
**External pilot supply from port 14 only,
pilot exhaust air not collected but
bleed through valve body.**

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: Removing of 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 actuated valves



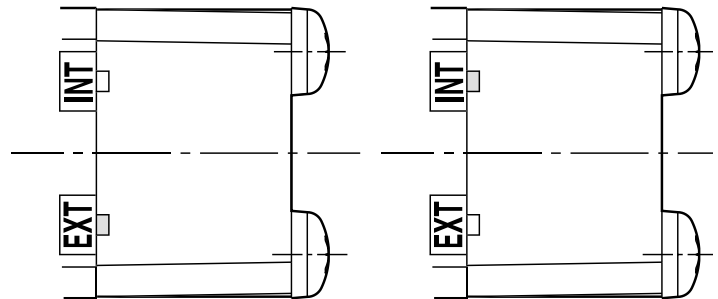
blue gasket

Air actuated valves
External pilot supply.

5/2 Solenoid actuated valves with air spring return

Drawing shows end cap side 12.

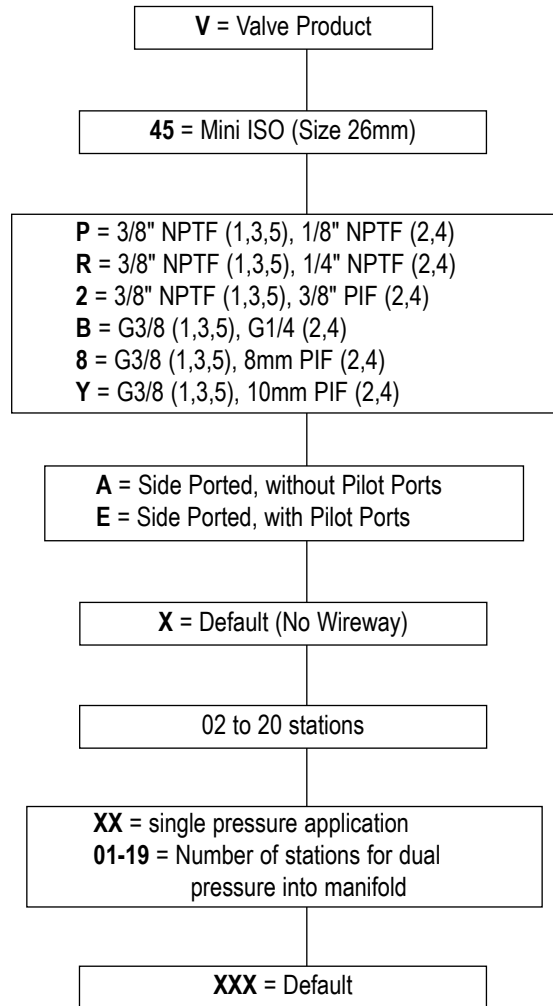
Drawing includes cover plate.



Note: The gasket between end cap and valve body must be set to the proper function.
For detailed instructions see installation- and Maintenance Sheet.

Order a factory assembled manifold

V 4 5 R A X 0 7 - X X X X X



Ordering Example

The following ordering example details the information needed to order a 4-valve, single solenoid, 24 VDC, cable grip electrical connector, single pressure manifold.

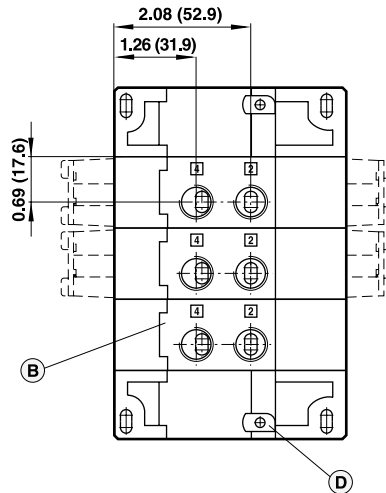
One Mini ISO manifold consisting of:

Position	Quantity	Part No.
1-4	4	V44A513D-C313B
	1	V45RAX04-XXXXX

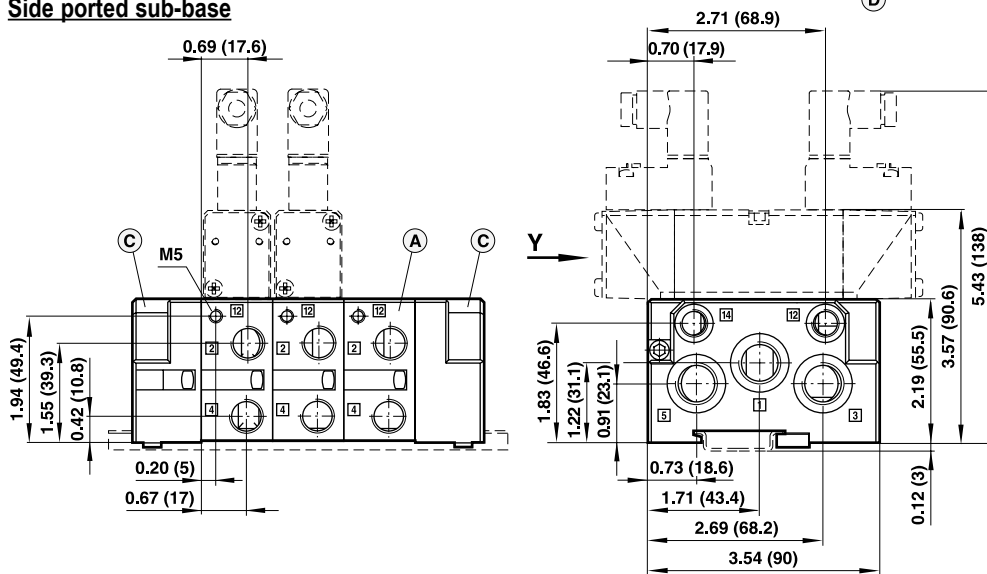
Mini ISO Valves, 26 mm

Modular Sub-bases parts for DIN rail or surface mounting

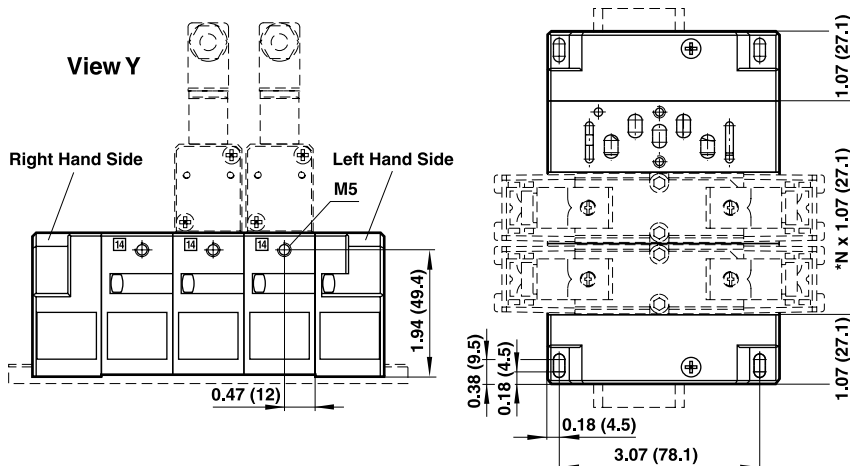
Bottom ported sub-base



Side ported sub-base



Bottom and side ported sub-base



* N = Number of stations

Individual components

Modular Sub-base ① 0.40 lb
Ports 2+4 on side (0.18 kg)
V70525-xAF

Modular Sub-base ① 0.40 lb
Ports 2+4 on side (0.18 kg)
Pilot Ports 12+14 on side
V70526-xAF

Modular Sub-base ② 0.40 lb
Ports 2+4 on bottom (0.18 kg)
V70525-BAE

Modular Sub-base ② 0.40 lb
Ports 2+4 on bottom (0.18 kg)
Pilot Ports 12+14 on side
V70526-BAE

End Plate Kit ③ 0.80 lb
Side Ported (0.36 kg)
V70524-CAC (G3/8)
V70524-SAC (3/8NPTF)
End ported end caps
1 left hand and 1 right hand

Accessories

DIN EN 50022 rail 0.68 lb
35 x 7.5 mm, 3.3' (1m) (0.31 kg)
V10009-C00

DIN EN 50022 rail 2.25 lb
35 x 15 mm, 3.3' (1m) (1.02 kg)
V10592-C01

DIN rail ④ 0.02 lb
Mounting Kit (0.01 kg)
V70531-KAO

Blanking Disk to Modular Sub-base 0.02 lb
Ports 1, 3, 5 (0.01 kg)
V70522-K00

Blanking Disk to Modular Sub-base 0.02 lb
Ports 12+14 (0.01 kg)
V70523-K00

x = Insert port type from table below

Code	Ports 2+4	Ports 12+14
P	1/8NPTF	10-32 UNF
R	1/4NPTF	10-32 UNF
2	3/8 PIF	10-32 UNF
B	G1/4	M5
8	ø 8 mm PIF	M5
Y	ø 10 mm PIF	M5

Note:

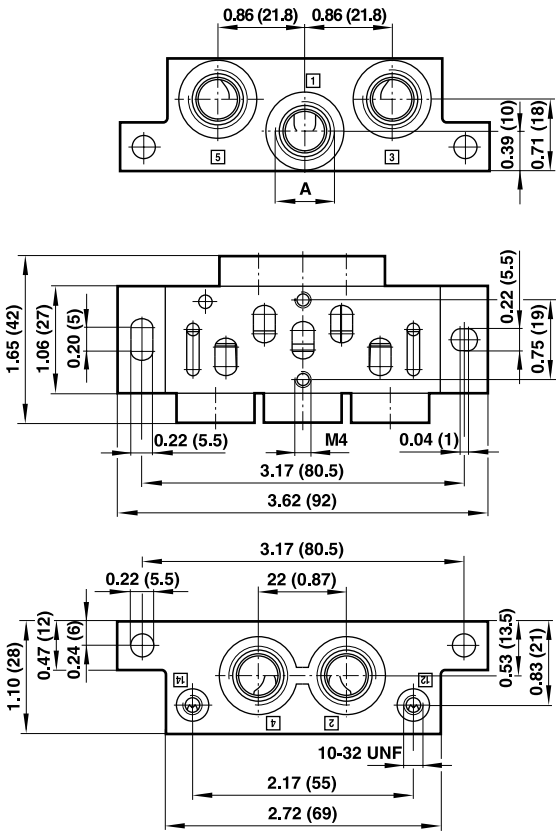
Port 14 used for external pilot air supply or for collected pilot air exhaust.

Never plug port 14 when using valves with internal pilot air supply.

Port 12 is not used, plugging not necessary.

Mini ISO Valves, 26 mm

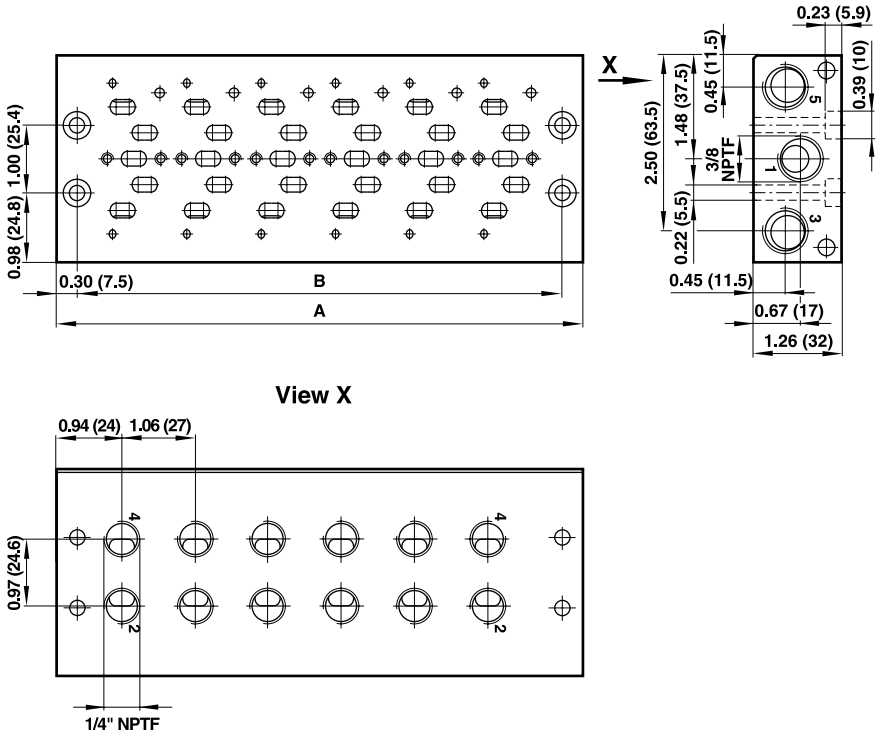
Single Station Sub-base - Side Ported with Pilot Ports



Model	Port Size A	Weight lb (kg)
V70501-RAB	NPTF1/4 side ported with pilot ports	0.24 (0.11)
V70501-BAB	G1/4 side ported with pilot ports	

Note: Pilot Ports
 NPT types = 10-32 UNF
 ISO G = M 5

Fixed Length Sub-base - Bottom Ported



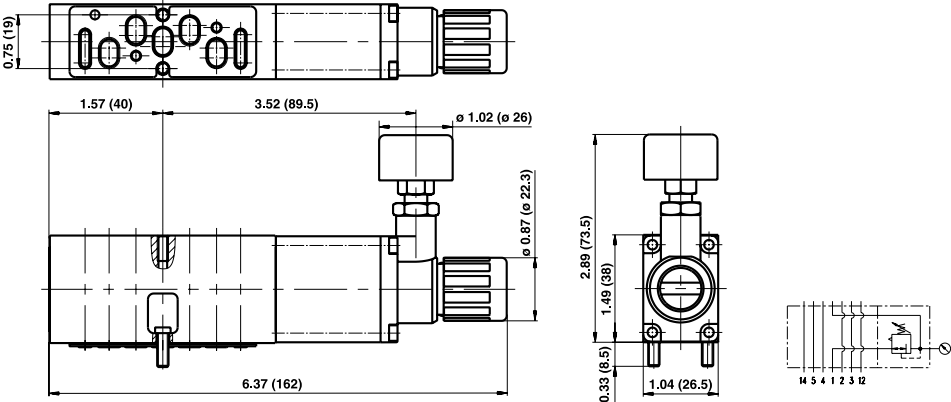
Model	No. of Stations	A inch (mm)	B inch (mm)	Weight lb (kg)
V70502-RA0	2	3.27 (83)	2.68 (68)	0.88 (0.40)
V70504-RA0	4	5.39 (137)	4.80 (122)	1.43 (0.65)
V70506-RA0	6	7.52 (191)	6.93 (176)	2.00 (0.91)
V70508-RA0	8	9.65 (245)	9.06 (230)	2.53 (1.15)
V70510-RA0	10	11.77 (299)	11.18 (284)	3.11 (1.41)
V70512-RA0	12	13.90 (353)	13.31 (338)	3.66 (1.66)

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

Mini ISO Valves, 26 mm

All Dimensions in Inches (mm)

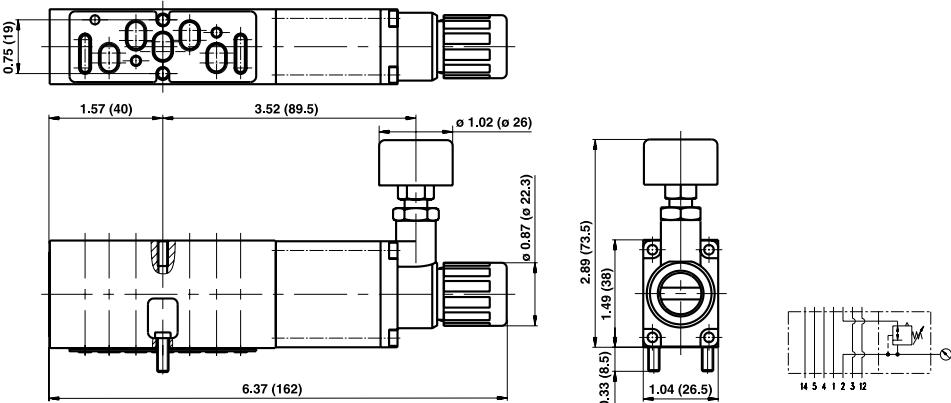
Pressure Regulator Plates (including gauges)



Model	Description	Weight lb (kg)
V70527-KA1	Regulation of Port 1	0.36 (0.79)

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

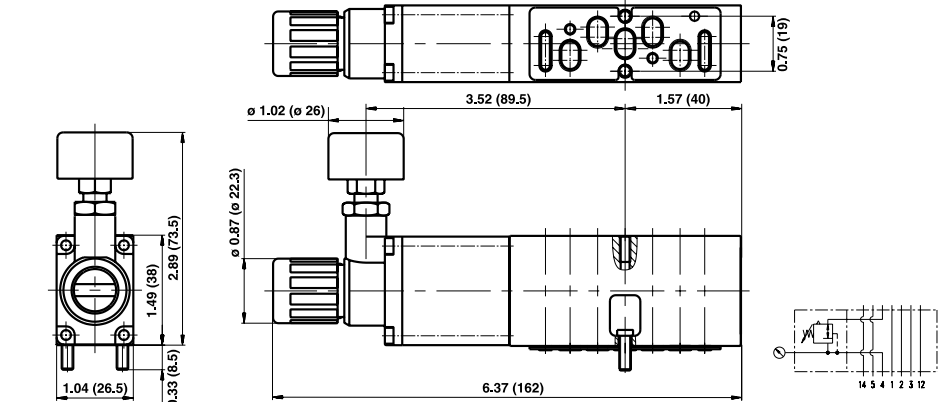
Flow Characteristics
see page 28



Model	Description	Weight lb (kg)
V70527-KA2	Regulation of Port 2	0.79 (0.36)

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

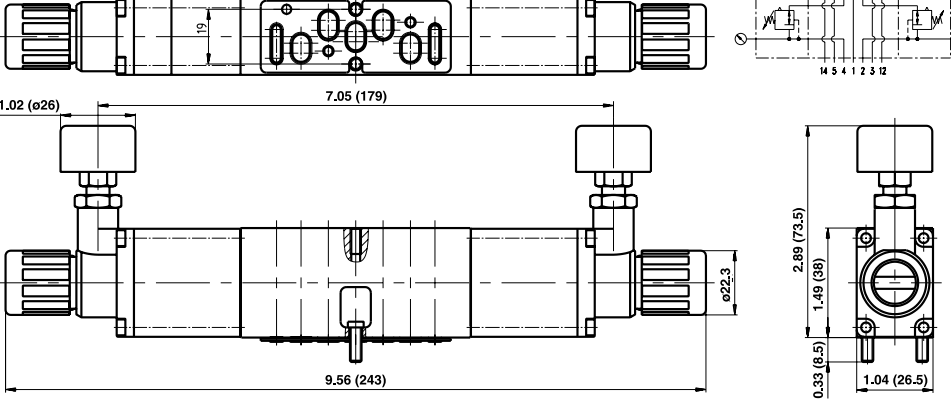
Flow Characteristics
see page 28



Model	Description	Weight lb (kg)
V70527-KA3	Regulation of Port 4	0.79 (0.36)

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

Flow Characteristics
see page 28



Model	Description	Weight lb (kg)
V70527-KA4	Regulation of Ports 2+4	1.23 (0.56)

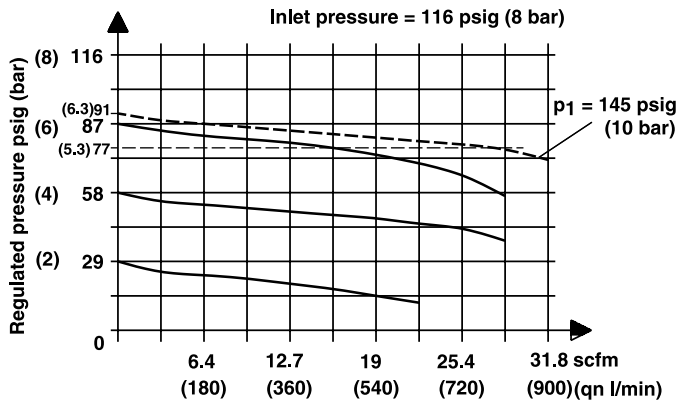
Maximum inlet pressure 232 psig
(16 bar)
Regulated pressure 7.25–145 psig
(0.5–10 bar)

Flow Characteristics
see page 28

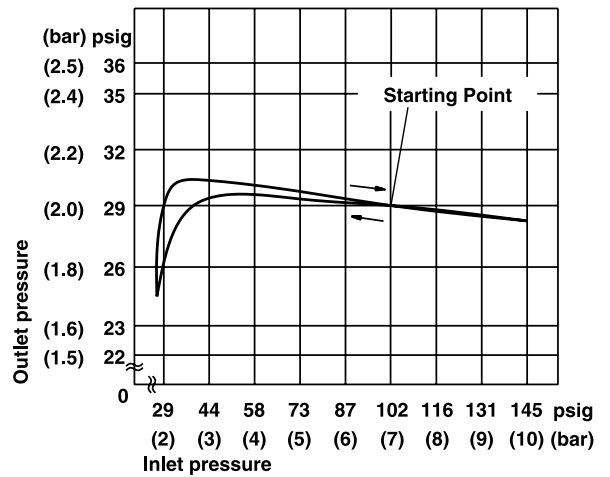
Mini ISO Valves, 26 mm

All Dimensions in Inches (mm)

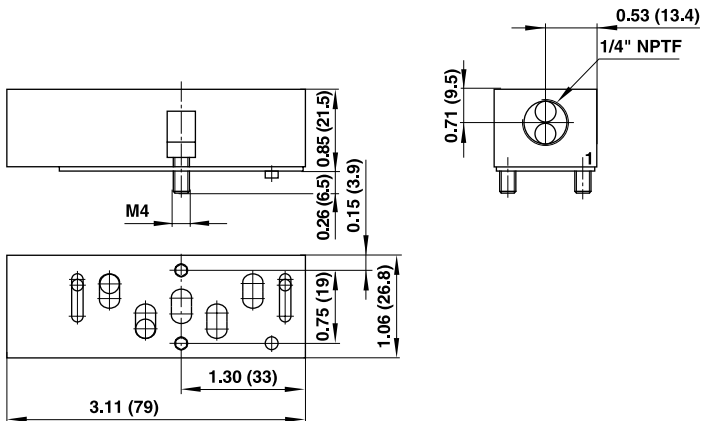
Flow Characteristics for Pressure Regulator Plates



Hysteresis



Sandwich Plate with additional Pressure Port 1



Model	Description	Weight lb (kg)
V70535-RAO	Sandwich Plate with additional Port 1, supplied with gasket	0.26 (0.12)

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