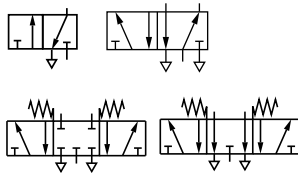


# Super X

## Manually & mechanically actuated spool valve

In-line

3/2, 5/2 & 5/3, 1/8" & 1/4" NPT



### Wide range of operators

Suitable for multi-directional flow and dual supply applications

High flow capacity

Lightweight corrosion resistant materials

\*Applies to emergency stop valves only

### Technical data

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operation:

Spool Valve, directly and indirectly actuated

Mounting:

Through-holes in valve body

Port Size:

1/8" and 1/4" NPT

Operating Pressure:

Maximum 26.5" Hg to 145 psig (-0.9 to 10 bar)

Flow Characteristics:

Size	Function	Cv	l/min
1/8" NPT	3/2, 5/2, 5/3	0.34	335
1/4" NPT	3/2, 5/2, 5/3	0.98	965

Operating Temperature:

32°F\* to 158°F (0°C\* to 70°C)

\* Consult our Technical Service for use below 35°F (2°C).

Materials

Diecast aluminum alloy body, aluminum or glass filled nylon end covers, nitrile rubber seals

Alternative models

Solenoid and pilot operated version – see web site

### 1/8" NPT 3/2 Mechanical Valves

	Model	Port size	Function	Actuation	Wt lb	Service kits	Drawing number
	03 0400 22	1/8 NPT	3/2	Plunger /Spring	0.31	03 8408 02	A, 1
	03 0417 22	1/8 NPT	3/2	Plunger /Pilot	0.44	03 8408 02	C, 2
	03 0402 22	1/8 NPT	3/2	Roller /Spring	0.31	03 8408 02	A, 3
	03 0411 22	1/8 NPT	3/2	Roller lever /Spring	0.46	03 8408 02	A, 6
	03 0293 22	1/8 NPT	3/2	Roller lever (heavy duty) /Spring	0.46	03 8408 02	A, 4
	03 0423 22	1/8 NPT	3/2	Sensitive roller lever / Spring	0.55	-	A, 5
	03 0409 22	1/8 NPT	3/2	Roller /Pilot	0.4	03 8408 02	C, 3
	03 0427 22	1/8 NPT	3/2	Roller lever /Pilot	0.55	03 8408 02	C, 6
	03 0410 22	1/8 NPT	3/2	One-way trip /Spring	0.46	03 8408 02	A, 7
	03 0294 22	1/8 NPT	3/2	One-way trip (heavy duty) /Spring	0.46	03 8408 02	A, 8
	03 0432 22	1/8 NPT	3/2	Antenna /Spring	0.46	-	A, 9

### 1/8" NPT 5/2 Mechanical Valves

	Model	Port size	Function	Actuation	Wt lb	Service kits	Drawing number
	X3 0440 22	1/8 NPT	5/2	Plunger /Spring	0.55	03 8408 02	E, 1
	X3 0457 22	1/8 NPT	5/2	Plunger /Pilot	0.68	03 8408 02	G, 2
	X3 0442 22	1/8 NPT	5/2	Roller /Spring	0.55	03 8408 02	E, 3
	X3 0451 22	1/8 NPT	5/2	Roller lever /Spring	0.71	03 8408 02	E, 6
	X3 0393 22	1/8 NPT	5/2	Roller lever (heavy duty) /Spring	0.64	03 8408 02	E, 4
	X3 0463 22	1/8 NPT	5/2	Sensitive roller lever / Spring	0.79	-	E, 5
	X3 0449 22	1/8 NPT	5/2	Roller /Pilot	0.64	03 8408 02	G, 3
	X3 0467 22	1/8 NPT	5/2	Roller lever /Pilot	0.79	03 8408 02	G, 6
	X3 0450 22	1/8 NPT	5/2	One-way trip /Spring	0.71	03 8408 02	E, 7
	X3 0394 22	1/8 NPT	5/2	One-way trip (heavy duty) /Spring	0.64	03 8408 02	E, 8
	X3 0472 22	1/8 NPT	5/2	Antenna /Spring	0.66	-	E, 9

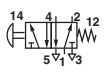
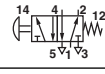
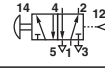
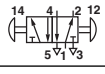
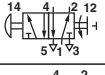
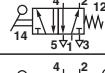
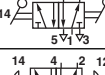


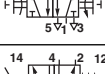
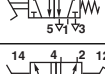
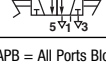
# Super X

Manually & mechanically actuated spool valve

In-line

3/2, 5/2 & 5/3, 1/8", & 1/4" NPT

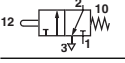
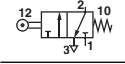
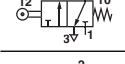
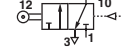
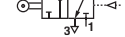
## 1/8" NPT 5/2 Manual Valves

	Model	Port size	Function	Actuation	Mid position	Color	Wt lb	Service kits	Drawing number
	X3 0444 22	1/8 NPT	5/2	Button/spring	–	Black	0.57	03 8408 02	E, 10
	X3 0386 22	1/8 NPT	5/2	Button (palm)/spring	–	Red	0.88	03 8408 02	E, 11
	X3 0387 22	1/8 NPT	5/2	Button (palm)/spring	–	Green	0.88	03 8408 02	E, 11
	X3 0388 22	1/8 NPT	5/2	Button (palm)/spring	–	Black	0.88	03 8408 02	E, 11
	X3 0454 22	1/8 NPT	5/2	Button (shrouded)/spring	–	Black	0.71	03 8408 02	E, 12
	X3 0455 22	1/8 NPT	5/2	Button (shrouded)/spring	–	Green	0.71	03 8408 02	E, 12
	X3 0456 22	1/8 NPT	5/2	Button (shrouded)/spring	–	Red	0.71	03 8408 02	E, 12
	X3 0448 22	1/8 NPT	5/2	Button/pilot	–	Black	0.75	03 8408 02	G, 10
	X3 0460 22	1/8 NPT	5/2	Button/pilot	–	Green	0.75	03 8408 02	G, 10
	X3 0461 22	1/8 NPT	5/2	Button/pilot	–	Red	0.75	03 8408 02	G, 10
	X3 0465 22	1/8 NPT	5/2	Knob, push/knob, pull	–	Black	0.62	03 8408 02	E, 18
	X3 0299 22	1/8 NPT	5/2	Emergency stop/twist ring	–	Red	1.19	03 8473 02	E, 13
	X3 0375 22 801	1/8 NPT	5/2	Button (palm)/key	–	Red	1.06	03 8408 02	E, 14
	X3 0478 22	1/8 NPT	5/2	Lever/spring	–	Black	0.88	03 8408 02	E, 16
	X3 0466 22	1/8 NPT	5/2	Lever knob/spring	–	Black	0.62	03 8408 02	E, NA
	X3 0443 22	1/8 NPT	5/2	Toggle/toggle	–	Black	0.6	03 8408 02	E, 16
	X3 0477 22	1/8 NPT	5/2	Lever/lever	–	Black	0.88	03 8408 02	E, 17
	X3 0464 22	1/8 NPT	5/2	Knob/knob or pilot	–	Black	0.71	03 8408 02	G, 10
	X3 0298 22	1/8 NPT	5/2	Rotary knob/rotary knob	–	Black	0.88	03 8408 02	E, 19
	X3 0458 22 801	1/8 NPT	5/2	Key/key	–	Chrome	1.04	03 8408 02	E, 20
	X3 0482 22	1/8 NPT	5/2	Pedal/spring	–	Black	2.47	03 8408 02	22
	X3 0484 22	1/8 NPT	5/2	Pedal/pedal	–	Black	2.6	03 8408 02	22

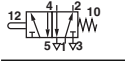

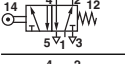
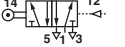
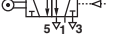
APB = All Ports Blocked COE = Center Open Exhaust

# Super X

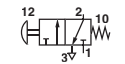
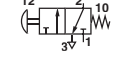
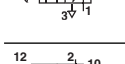
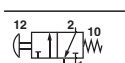
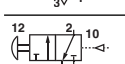
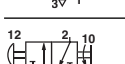
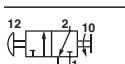
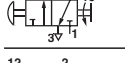
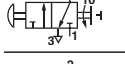
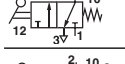

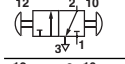
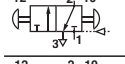
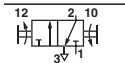
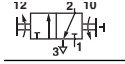
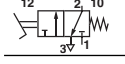
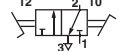



## 1/4" NPT 3/2 Mechanical Valves

	Model	Port size	Function	Actuation	Wt lb	Service kits	Drawing number
	03 0600 22	1/4 NPT	3/2	Plunger /Spring	0.75	03 8602 02	B, 1
	03 0602 22	1/4 NPT	3/2	Roller /Spring	0.75	03 8602 02	B, 3
	03 0611 22	1/4 NPT	3/2	Roller lever /Spring	0.9	03 8602 02	B, 6
	03 0609 22	1/4 NPT	3/2	Roller /Pilot	0.86	03 8612 02	D, 3
	03 0624 22	1/4 NPT	3/2	Roller lever /Pilot	0.99	03 8612 02	D, 6

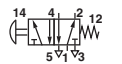
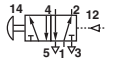
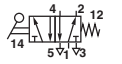
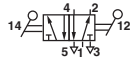
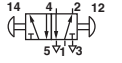
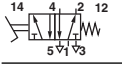
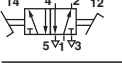


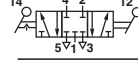
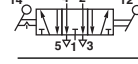


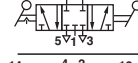

## 1/4" NPT 5/2 Mechanical Valves

	Model	Port size	Function	Actuation	Wt lb	Service kits	Drawing number
	X3 0640 22	1/4 NPT	5/2	Plunger /Spring	1.01	03 8602 02	B, 2
	X3 0642 22	1/4 NPT	5/2	Roller /Spring	1.01	03 8602 02	B, 3
	X3 0651 22	1/4 NPT	5/2	Roller lever /Spring	1.17	03 8602 02	B, 6
	X3 0649 22	1/4 NPT	5/2	Roller /Pilot	1.10	03 8612 02	D, 3
	X3 0664 22	1/4 NPT	5/2	Roller lever /Pilot	1.26	03 8612 02	D, 6

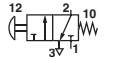
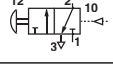
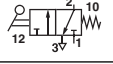
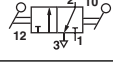
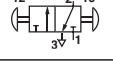
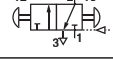
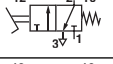
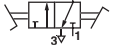
## 1/8" NPT 3/2 Manual Valves

	Model	Port size	Function	Actuation	Mid position	Color	Wt lb	Service kits	Drawing number
	03 0404 22	1/8 NPT	3/2	Button/spring	-	Black	0.33	03 8408 02	A, 10
	03 0366 22	1/8 NPT	3/2	Button (palm)/spring	-	Red	0.64	03 8408 02	A, 11
	03 0367 22	1/8 NPT	3/2	Button (palm)/spring	-	Green	0.64	03 8408 02	A, 11
	03 0368 22	1/8 NPT	3/2	Button (palm)/spring	-	Black	0.64	03 8408 02	A, 11
	03 0414 22	1/8 NPT	3/2	Button (shrouded)/spring	-	Black	0.46	03 8408 02	A, 12
	03 0408 22	1/8 NPT	3/2	Button/pilot	-	Black	0.49	03 8408 02	D, 10
	03 0420 22	1/8 NPT	3/2	Button/pilot	-	Green	0.49	03 8408 02	D, 10
	03 0421 22	1/8 NPT	3/2	Button/pilot	-	Red	0.49	03 8408 02	D, 10
	03 0299 22	1/8 NPT	3/2	Emergency stop/twist ring	-	Red	0.68	03 8473 02	A, 13
	03 0335 22 801	1/8 NPT	3/2	Button (palm)/key	-	Red	0.82	03 8408 02	A, 14
	03 0438 22	1/8 NPT	3/2	Lever/spring	-	Black	0.62	03 8408 02	A, 17
	03 0426 22	1/8 NPT	3/2	Lever knob/spring	-	Black	0.55	03 8408 02	A, 25
	03 0437 22	1/8 NPT	3/2	Lever/lever	-	Black	0.64	03 8408 02	A, 17
	03 0403 22	1/8 NPT	3/2	Toggle/toggle	-	Black	0.35	03 8408 02	A, 16
	03 0425 22	1/8 NPT	3/2	Knob/knob	-	Black	0.37	03 8408 02	A, 10
	03 0424 22	1/8 NPT	3/2	Knob/knob or pilot	-	Black	0.46	03 8408 02	D, 10
	03 0298 22	1/8 NPT	3/2	Rotary knob/rotary knob	-	Black	0.64	03 8408 02	A, 19
	03 0418 22 801	1/8 NPT	3/2	Key/key	-	Chrome	0.79	03 8408 02	A, 20
	03 0481 22	1/8 NPT	3/2	Pedal/spring	-	Black	2.27	03 8408 02	21
	03 0483 22	1/8 NPT	3/2	Pedal/pedal	-	Black	2.36	03 8408 02	21

## 1/8" NPT 5/2 & 5/3 Manual Valves

	Model	Port size	Function	Actuation	Mid position	Color	Wt lb	Service kits	Drawing number
	X3 0644 22	1/4 NPT	5/2	Button/spring	–	Black	1.04	03 8602 02	F, 23
	X3 0648 22	1/4 NPT	5/2	Button/pilot	–	Black	1.19	03 8612 02	H, 23
	X3 0678 22	1/4 NPT	5/2	Lever/spring	–	Black	1.32	03 8602 02	E, 22
	X3 0677 22	1/4 NPT	5/2	Lever/lever	–	Black	1.35	03 8602 02	E, 22
	X3 0665 22	1/4 NPT	5/2	Knob/knob	–	Black	1.08	03 8602 02	21
	X3 0682 22	1/4 NPT	5/2	Pedal/spring	–	Black	2.93	03 8602 02	21
	X3 0684 22	1/4 NPT	5/2	Pedal/pedal	–	Black	3.06	03 8602 02	J, 22
	X3 3438 22	1/8 NPT	5/3	Lever/spring/lever	APB	Black	1.87	03 8408 02	J, 16
	X3 3478 22	1/8 NPT	5/3	Lever/spring/lever	COE	Black	1.87	03 8408 02	J, 16
	X3 3437 22	1/8 NPT	5/3	Lever/lever/lever	APB	Black	0.97	03 8408 02	J, 16
	X3 3477 22	1/8 NPT	5/3	Lever/lever/lever	COE	Black	0.97	03 8408 02	J, 16
	X3 3638 22	1/4 NPT	5/3	Lever/spring/lever	APB	Black	1.06	03 8602 02	J, 22
	X3 3678 22	1/4 NPT	5/3	Lever/spring/lever	COE	Black	1.06	03 8602 02	J, 22
	X3 3637 22	1/4 NPT	5/3	Lever/lever/lever	APB	Black	1.43	03 8602 02	J, 22
	X3 3677 22	1/4 NPT	5/3	Lever/lever/lever	COE	Black	1.43	03 8602 02	J, 22

## 1/4" NPT 3/2 Manual Valves

	Model	Port size	Function	Actuation	Mid position	Color	Wt lb	Service kits	Drawing number
	03 0604 22	1/4 NPT	3/2	Button/spring	–	Black	0.77	03 8602 02	B, 23
	03 0608 22	1/4 NPT	3/2	Button/pilot	–	Black	0.93	03 8612 02	D, 23
	03 0638 22	1/4 NPT	3/2	Lever/spring	–	Black	2.34	03 8602 02	B, 22
	03 0637 22	1/4 NPT	3/2	Lever/lever	–	Black	1.08	03 8602 02	B, 22
	03 0625 22	1/4 NPT	3/2	Knob/knob	–	Black	0.82	03 8602 02	B, 24
	03 0627 22	1/4 NPT	3/2	Knob/knob or pilot	–	Black	0.9	03 8612 02	D, 24
	03 0681 22	1/4 NPT	3/2	Pedal/spring	–	Black	2.71	03 8602 02	21
	03 0683 22	1/4 NPT	3/2	Pedal/pedal	–	Black	2.8	03 8602 02	21

# Super X

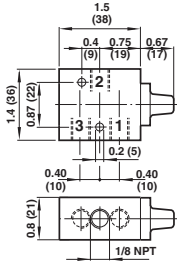
Manually & mechanically actuated spool valve

In-line

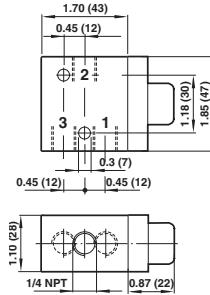
3/2, 5/2 & 5/3, 1/8" & 1/4" NPT

Dimensions in inches (mm)

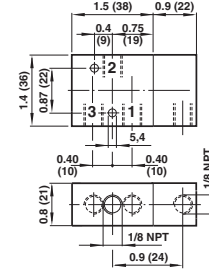
**A** 1/8" NPT, 3/2 Spring return, basic body



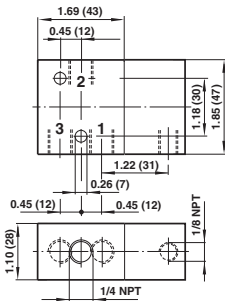
**B** 1/4" NPT, 3/2 Spring return, basic body



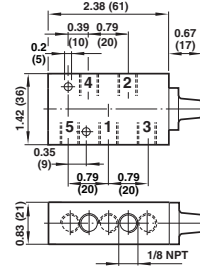
**C** 1/8" NPT, 3/2 Pilot return, basic body



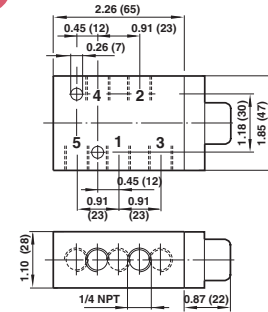
**D** 1/4" NPT, 3/2 Pilot return, basic body



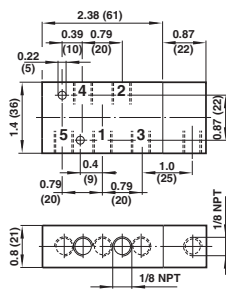
**E** 1/8" NPT, 5/2 Spring return, basic body



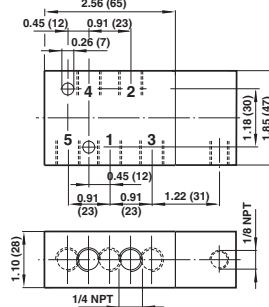
**F** 1/4" NPT, 5/2 Spring return, basic body



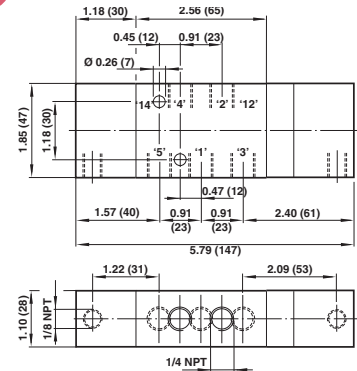
**G** 1/8" NPT, 5/2 Pilot return, basic body



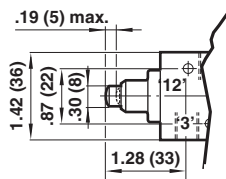
**H** 1/4" NPT, 5/2 Pilot return, basic body



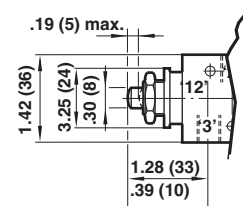
**J** 1/4" NPT, 5/3 Spring return, basic body



**1** Plunger Spring Return



**2** Plunger Pilot Return

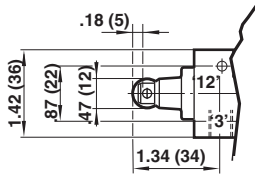


# Super X

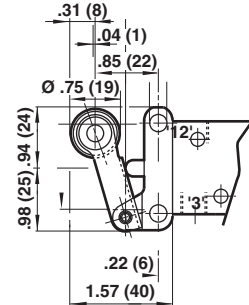
Manually & mechanically actuated spool valve  
In-line  
3/2, 5/2 & 5/3, 1/8", & 1/4" NPT

Dimensions in inches (mm)

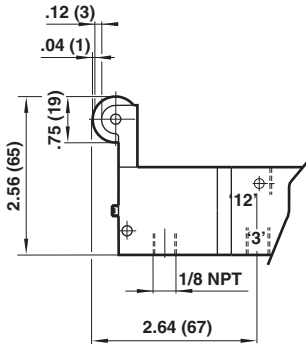
**3** Roller



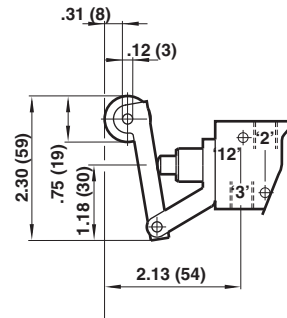
**4** Heavy Duty Roller Lever



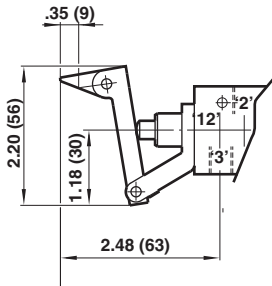
**5** Sensitive Roller Lever



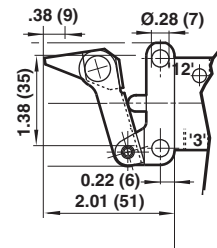
**6** Roller Lever



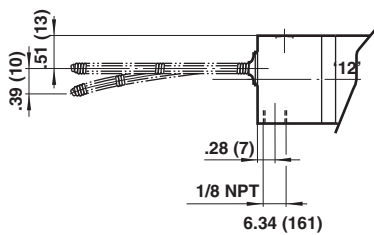
**7** One-way Trip



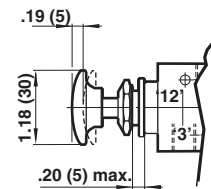
**8** Heavy Duty One Way Trip



**9** Antenna



**10** Button Operated



# Super X

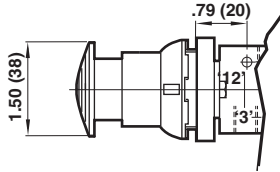
Manually & mechanically actuated spool valve

In-line

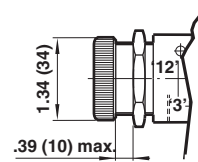
3/2, 5/2 & 5/3, 1/8" & 1/4" NPT

Dimensions in inches (mm)

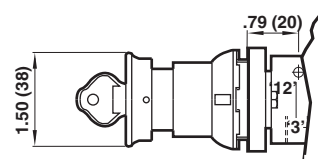
**11** Button (Palm) Operated



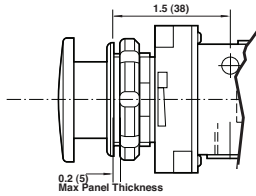
**12** Button (Shrouded) Operated



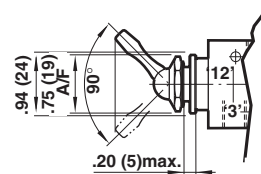
**14** Button (Palm) Operated Key Return Valve



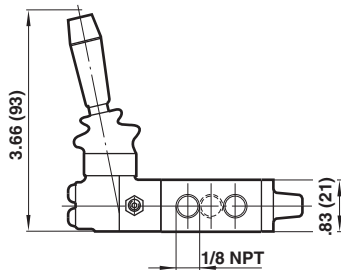
**13** Palm Button Operated, Twist Return Valve (Emergency Stop)



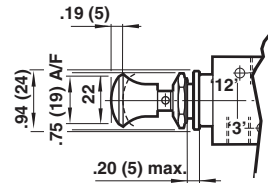
**16** Lever Operated



**17** Lever Operated



**18** Knob Operated



# Super X

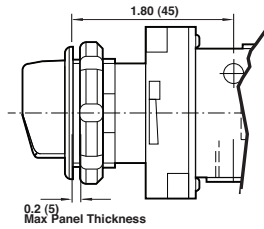
Manually & mechanically actuated spool valve

In-line

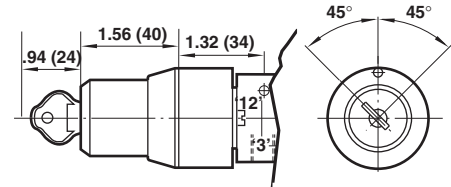
3/2, 5/2 & 5/3, 1/8", & 1/4" NPT

Dimensions in inches (mm)

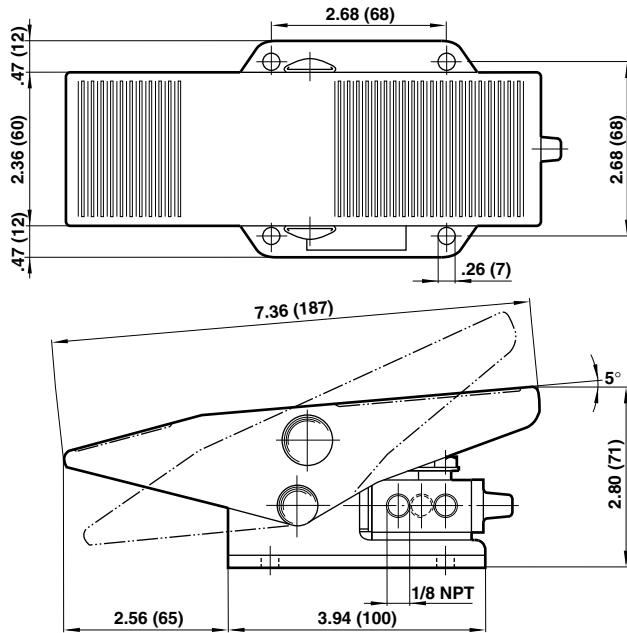
**19** Rotary Knob Operated Rotary Knob Return Valve



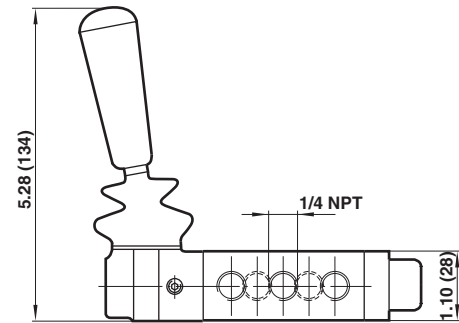
**20** Key Operated Key Return Valve



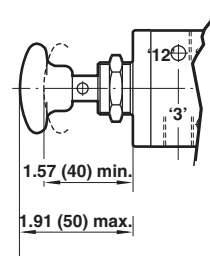
**21** Pedal



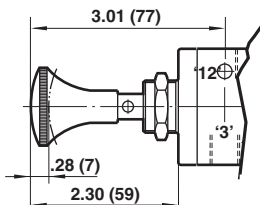
**22** Lever Operated Valves



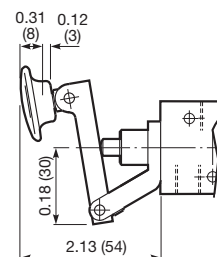
**23** Button Operated Pilot Return Valve



**24** Knob Operated Knob Return Valve

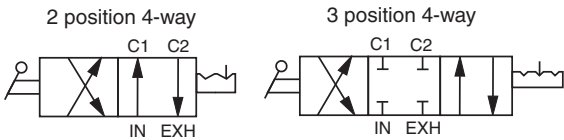


**25** Lever/Knob



# VHLA Series Rotary Hand Valves

1/4", 3/8", and 1/2" NPT porting



Aluminum die casting design for heavy applications

Detented center position

Easy to grasp and rotate handle

Cv's of 0.4 to 3.1

Port sizes of 1/4", 3/8", and 1/2"

2 or 3 position functions available

## Technical Data

Fluid: Compressed air

Maximum operating pressure: 140 psi (9.7 bar)

Temperature Range: 40° to 140°F\* (5° to 60°C).

\*With a dew point of supply air less than air temperature below 35°F (2°C).

Flow:	1/4"	Cv 0.4
	3/8"	Cv 1.1
	1/2"	Cv 3.1

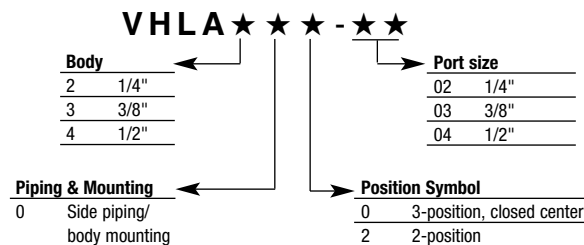
Materials of Construction

Body: Die cast aluminum

## Order information

Port Size	Function	Model Number
1/4"	3 position, 4-way	VHLA200-02
1/4"	2 position, 4-way	VHLA202-02
3/8"	3 position, 4-way	VHLA300-03
3/8"	2 position, 4-way	VHLA302-03
1/2"	3 position, 4-way	VHLA400-04
1/2"	2 position, 4-way	VHLA402-04

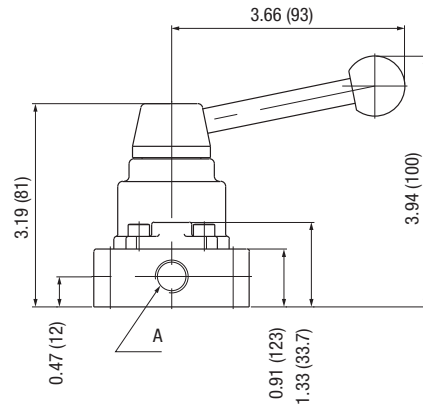
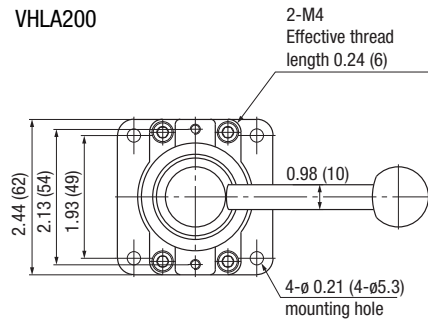
## Options deconfigurator



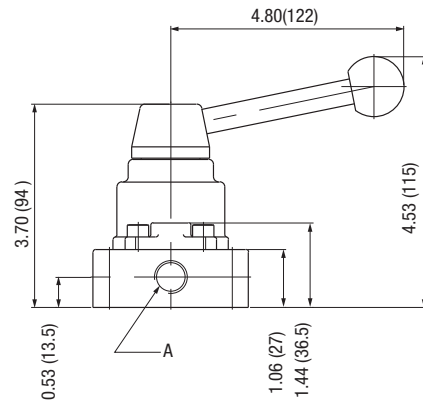
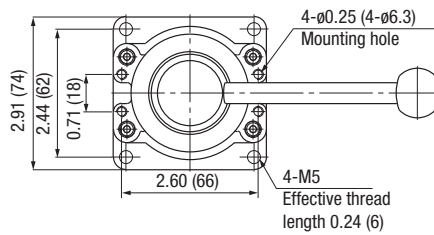
# VHLA Series Rotary Hand Valves

1/4", 3/8", and 1/2" NPT porting

VHLA200



VHLA300



VHLA400

