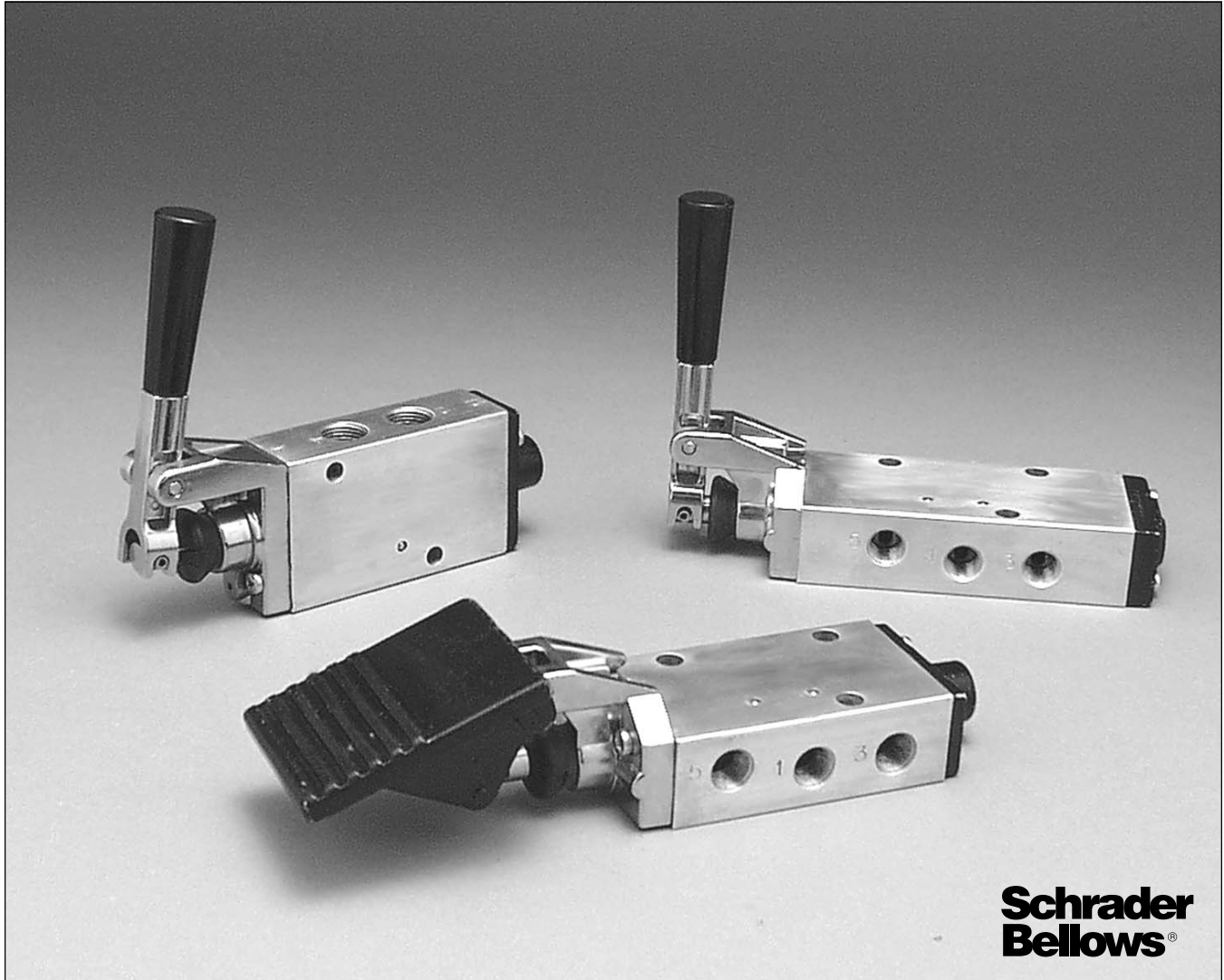


"42" Series

Lever / Pedal Valves

4-Way, 5-Port, 2 & 3-Position

Section R



R

**Schrader
Bellows®**

Basic Valve Functions 2

"42" Series Basic Valve Features 3

Common Part Numbers 4

Model Number Index & Accessories 5

Dimensions

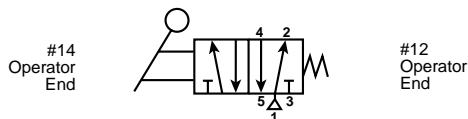
 Lever Valve 6

 Foot Pedal Valve, Foot Pedal Guard..... 7

Bold text part numbers are standard.
Standard text part numbers may have longer lead times.

Lever Valves – Parallel & Perpendicular Operated

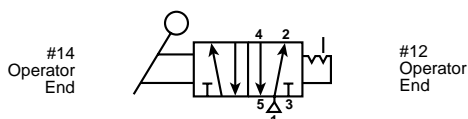
2-Position, Spring Return



Single Pressure at Port #1 – The Hand Lever alternately pressurizes port 2 or 4 while exhausting at port 3 or 5. When actuating Hand Lever, port 4 is pressurized; when releasing Hand Lever, spring returns the spool, pressurizing port 2.

Dual Pressure – Pressure at port 3 & 5 alternately pressurizes port 2 or 4 while exhausting at port 1. When actuating Hand Lever, port 2 is pressurized; when releasing Hand Lever, spring returns the spool, pressurizing port 4. (Must be ordered as dual pressure)

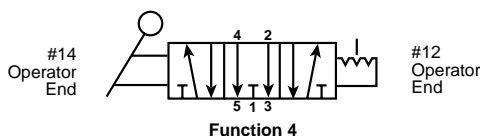
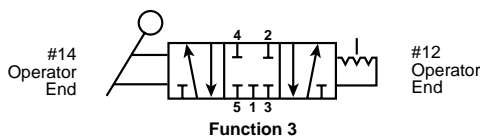
2-Position, Detent



Single Pressure at Port #1 – The Hand Lever alternately pressurizes port 2 or 4 while exhausting at port 3 or 5. When pulling Hand Lever, port 4 is pressurized; when pushing Hand Lever, port 2 is pressurized. Spool stays in last actuated position.

Dual Pressure – Pressure at port 3 & 5 alternately pressurizes port 2 or 4 while exhausting at port 1. When pulling Hand Lever, port 2 is pressurized; when pushing Hand Lever, port 4 is pressurized. Spool stays in last actuated position. (Must be ordered as dual pressure.)

3-Position, Detent



Single Pressure at Port #1 – The Hand Lever alternately pressurizes port 2 or 4 while exhausting at port 3 or 5. When pulling Hand Lever, port 4 is pressurized; when pushing Hand Lever, port 2 is pressurized. When Hand Lever is vertical, it is in the center position - either APB or CE. Spool stays in last actuated position.

Center Functions

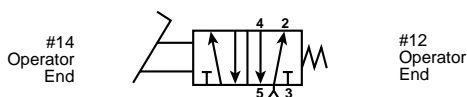
All Ports Blocked – Function 3
 Center Exhaust – Function 4

CAUTION:

For 3-Position lever function, do not restrict exhaust ports with speed controls.

Foot Pedal Operated

2-Position, Spring Return



CAUTION:

This valve shall not be used to actuate a punch press. Do not use this valve on punch presses or press brakes. See OSHA 1910.217. See Dimension page for Pedal Guard Kit.

Single Pressure at Port #1 – The Foot Pedal alternately

pressurizes port 2 or 4 while exhausting at port 3 or 5. When pressing Foot Pedal down, port 4 is pressurized; when releasing Foot Pedal, spring returns the spool, pressurizing port 2.

Dual Pressure – Pressure at port 3 & 5 alternately pressurizes port 2 or 4 while exhausting at port 1. When pressing Foot Pedal down, port 2 is pressurized; when releasing Foot Pedal, spring returns the spool, pressurizing port 4. (Must be ordered as dual pressure)

“42” Series

Specifications

Heavy Duty Lever

- Parallel Mount
- Perpendicular Mount

Heavy Duty Foot Pedal

Inline Valve

- 1/4" Port – 1.3 to 2.2 Cv
- 3/8" Port – 1.3 to 2.9 Cv

2-Position

3-Position

- All Ports Blocked
- Center Exhaust

Operating Pressure

- Vacuum to 150 PSI
 (710mm HG to 1035 kPa)

Operating Temperature

- 0°F to 140°F (-18°C to 60°C)



Lever Valve – Parallel



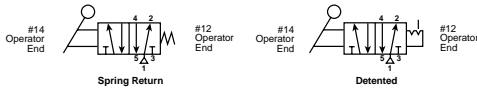
Foot Pedal Valve

Flow Rating (Cv)

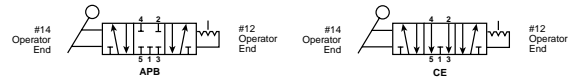
Port Size	Mounting Style	2-Position	3-Position
1/4" Ports	Inline	2.2	1.3
3/8" Ports	Inline	2.9	1.3

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Lever Valve – 2-Position
(Parallel Shown)



Lever Valve – 3-Position
(Perpendicular Shown)



Inline – Parallel

Single Pressure	Return	Port
422CS011K	Spring	1/4" NPT
422CS021K		3/8" NPT
422CS011W	Detent	1/4" NPT
422CS021W		3/8" NPT

Inline – Parallel

Single Pressure	Type	Port
422CS013W	3-Pos APB	1/4" NPT
422CS023W		3/8" NPT
422CS014W	3-Pos CE	1/4" NPT
422CS024W		3/8" NPT

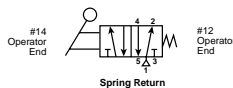
Inline – Perpendicular

Single Pressure	Return	Port
422CR011K	Spring	1/4" NPT
422CR021K		3/8" NPT
422CR011W	Detent	1/4" NPT
422CR021W		3/8" NPT

Inline – Perpendicular

Single Pressure	Type	Port
422CR013W	3-Pos APB	1/4" NPT
422CR023W		3/8" NPT
422CR014W	3-Pos CE	1/4" NPT
422CR024W		3/8" NPT

Foot Pedal Valve – 2-Position

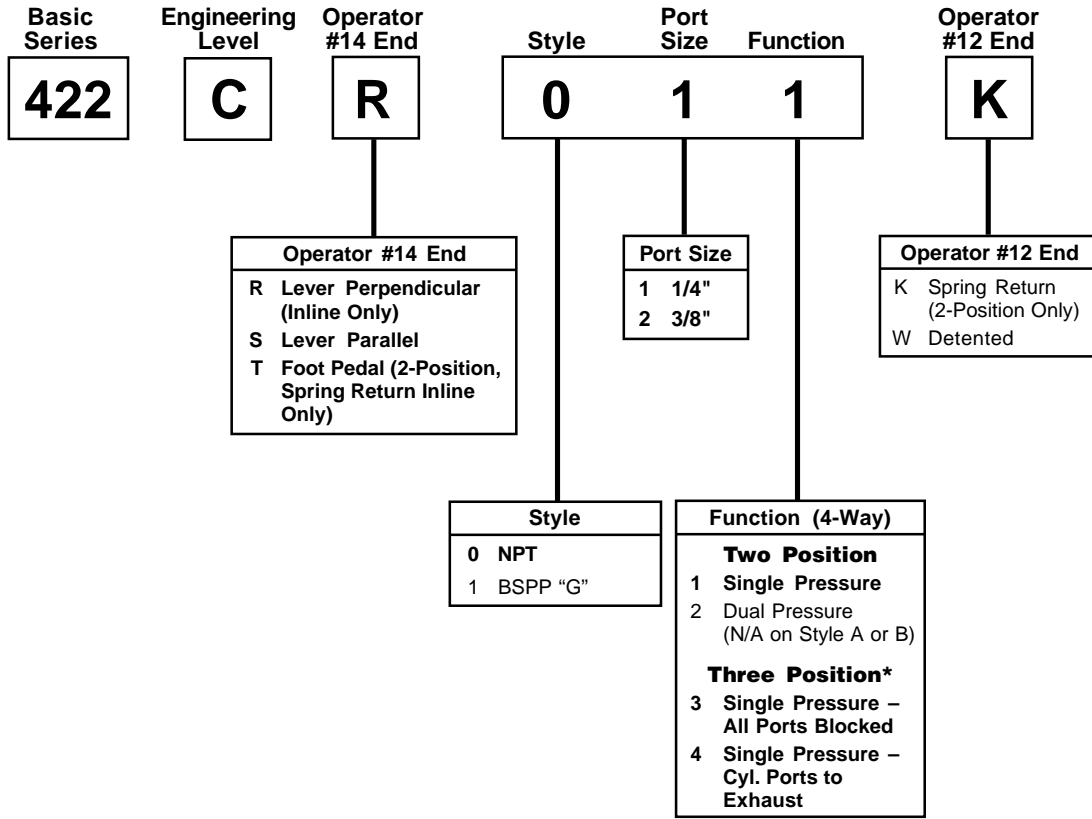


Inline

Single Pressure	Type	Return	Port
422CT011K	2-Pos	Spring	1/4" NPT
422CT021K			3/8" NPT

CAUTION:
 This valve shall not be used to actuate a punch press.
 Do not use this valve on punch presses or press
 brakes. See OSHA 1910.217.
 See Dimensions page for Pedal Guard Kit.

“42” Series **BOLD OPTIONS ARE STANDARD**



* Available Detented Only

Valve Body Service Kits

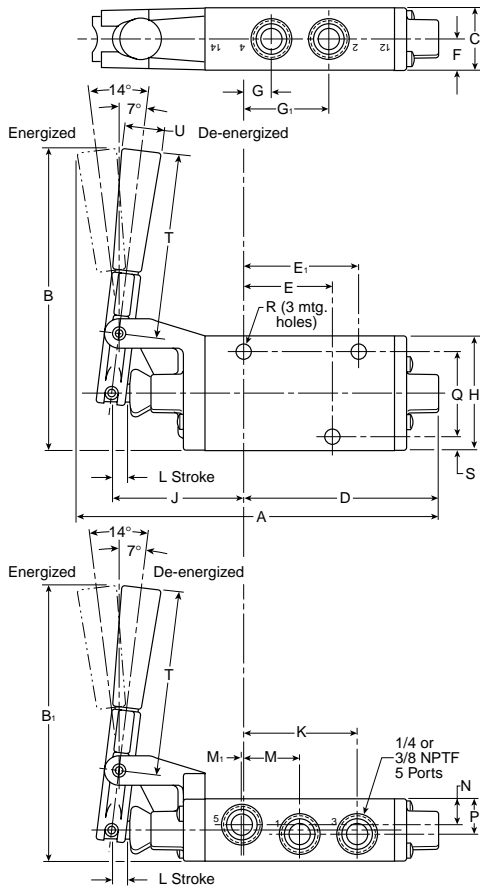
Function / Operator	Single Pressure	Dual Pressure
2-Position / Manual	PS2038P	PS2039P
3-Position / Manual, Detented	PS2041P	

Kit includes: all soft seals and spool.

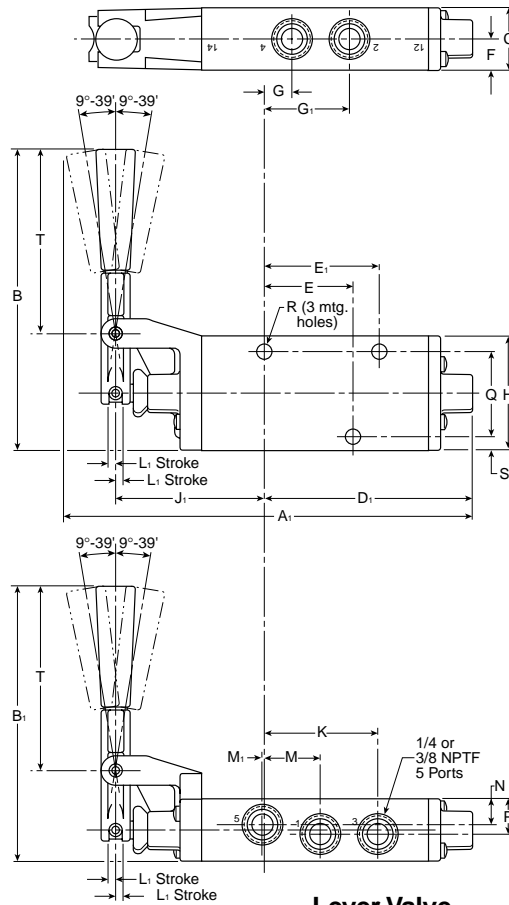


Lever Valve

2-Position



3-Position

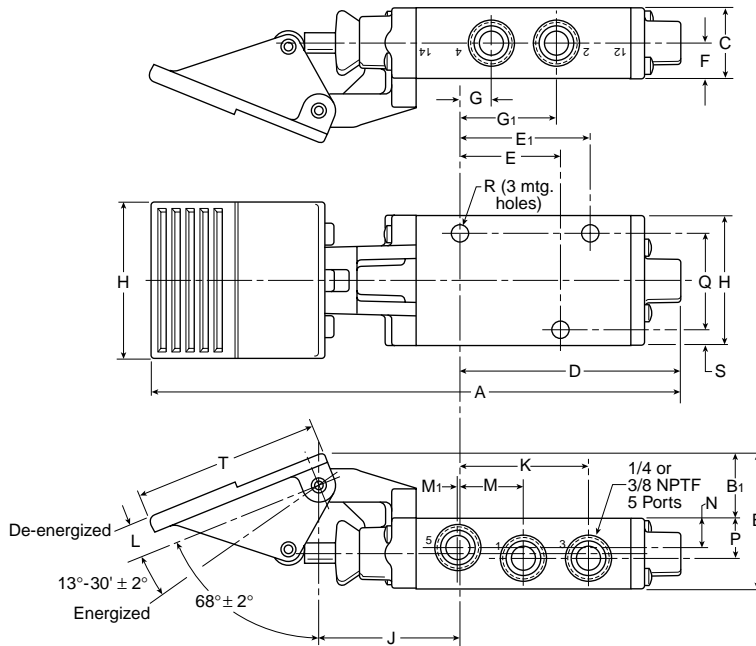


Lever Valve

A 6.70 (170)	A₁ 7.58 (193)	B 5.55 (141)	B₁ 5.05 (128)	C 1.15 (29)
D 3.59 (91)	D₁ 3.83 (97)	E 1.58 (40)	E₁ 2.06 (52)	F .57 (14)
G NPT 1/4" .51 (13) 3/8" .55 (14)		G₁ NPT 1/4" 1.56 (40) 3/8" 1.51 (38)		H 2.13 (54)
J 2.44 (62)	J₁ 2.80 (71)	K NPT 1/4" 2.08 (53) 3/8" 2.13 (54)		L .25 (6)
L₁ .18 (5)	M 1.03 (36)	M₁ NPT 1/4" .02 (.5) 3/8" .06 (2)		N .50 (13)
P .65 (17)	Q 1.58 (40)	R .33 (8)	S .27 (7)	T 3.42 (87)
U Dia .75 (19)				

Inches (mm)

Foot Pedal Valve



Foot Pedal Valve

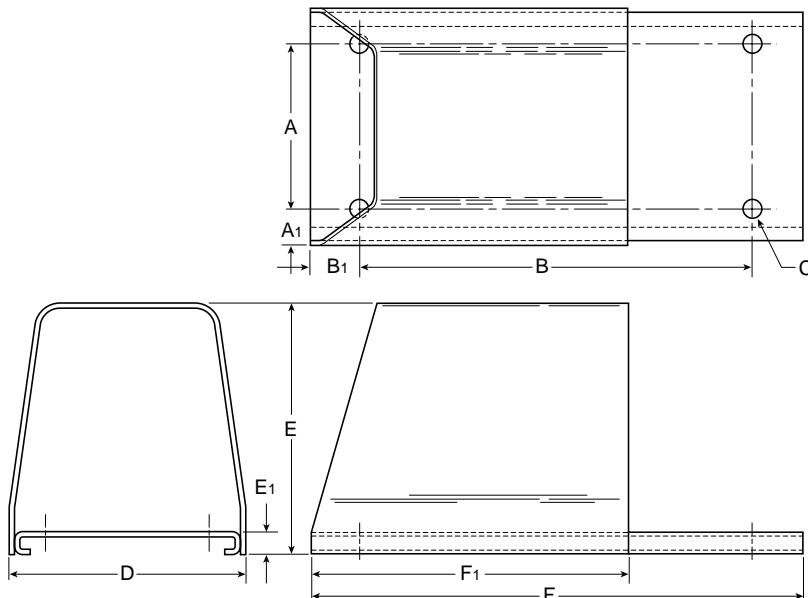
A 8.64 (220)	B 2.18 (55)	B₁ 1.03 (26)	C 1.15 (29)	D 3.59 (91)
E 1.58 (40)	E₁ 2.06 (52)	F .57 (14)	G NPT 1/4" .51 (13) 3/8" .55 (14)	
G₁ NPT 1/4" 1.56 (40) 3/8" 1.51 (38)		H 2.13 (54)	H₁ 2.50 (64)	J 2.32 (59)
K NPT 1/4" 2.08 (53) 3/8" 2.13 (54)		L .60 (15)	M 1.03 (26)	
M₁ NPT 1/4" .02 (.5) 3/8" .06 (2)		N .50 (13)	P .65 (17)	Q 1.58 (40)
R .33 (8)	S .27 (7)	T 3.00 (76)	U .48 (11)	

Inches (mm)

CAUTION:
 This valve shall not be used to actuate a punch press. Do not use this valve on punch presses or press brakes. See OSHA 1910.217.

Foot Pedal Valve Guard

To order Foot Pedal Valve Guard, specify part number PS2043P.
 This kit contains the valve mounting hardware.



Foot Valve Guard

A 4.50 (114)	A₁ .75 (19)	B 10.50 (267)	B₁ 1.25 (32)	C .48 (11)
D 6.00 (152)	E 7.13 (181)	E₁ .50 (13)	F 13.00 (330)	F₁ 8.38 (213)

Inches (mm)

R