

Viking Xtreme Lever Operated Series

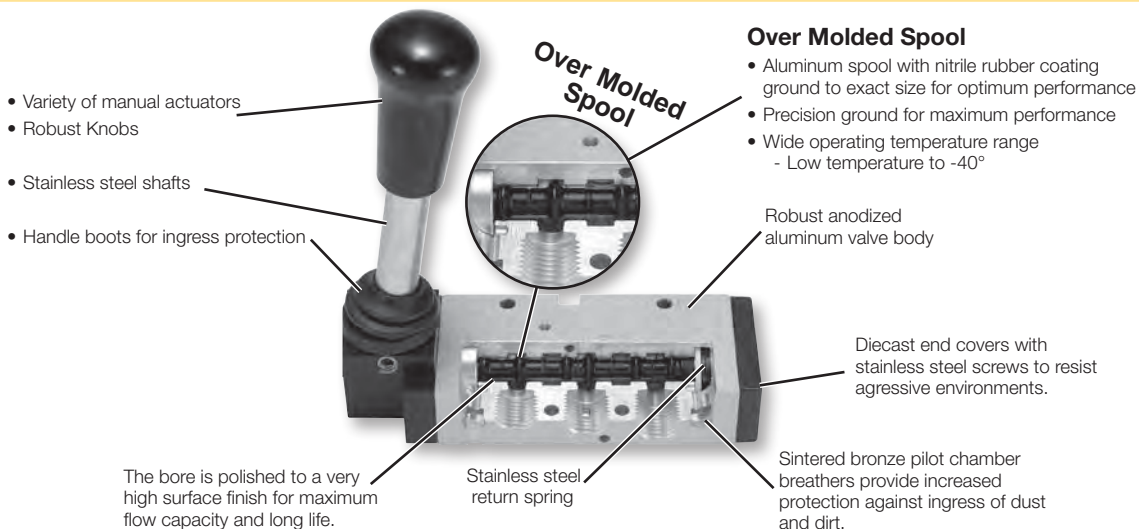
The Viking Xtreme Manual valve range is robust, versatile and combines high performance with compact installation dimensions. The valves rugged lever actuator has been specifically designed for gloved hands to suit mobile applications in the most arduous of environments. Available in 3/2, 5/2 and 5/3 functions with either spring return or detented lever. The lever actuated versions are available across the entire range from 1/8 to 1/2 port sizes.

- **Heavy duty lever**
- **Inline valve**
 - 1/8", 1/4", 3/8", 1/2" NPT & BSPP
- **2-position models**
 - 4-way & 3-way
- **3-position models**
 - all ports blocked
 - pressure center
 - center exhaust
- **Over-moulded single piece aluminium spool**
 - Reduced product complexity
 - Increased flow
 - Wide operating temperature range
 - Stable seal performance even with high flow / pressure drop across spool.

Material specifications

End covers	Anodized aluminum
Lever	Reinforced polyamide plastic
Lever housing	Acetal plastic
Piston	Acetal plastic / anodized aluminum
Seals	Nitrile rubber
Screws	Stainless steel
Spool	Aluminum & nitrile rubber
Springs	Stainless steel
Valve body	Anodized aluminum

Features



Operating information

Operating pressure: Type A & B: Vacuum to 232 PSIG (Vacuum to 16 bar Max.)
 Type C & D: Vacuum to 174 PSIG (Vacuum to 12 bar Max.)
 Temperature range: Xtreme: -40°F to 140°F (-40°C to 60°C)

**Lever Handle –
 1/8" valve size,
 5/2 & 5/3 only**



**Twist Handle –
 1/4" valve sizes**



**Lever Handle –
 All other valve
 sizes**



Directair 2,
 Directair 4

Viking Xtreme
 Lever Series

42 Lever /
 Pedal Series


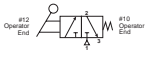

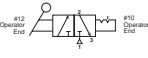

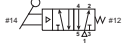

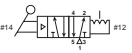

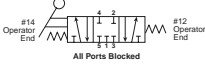

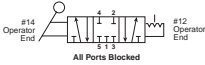




M0
 Series

LV-EZ Series
 Lockout Valves

Brass Poppet /
 Sliding Seal

D

Manual / Mechanical
 Valve Products

3/2 - 2-position	Symbol	Valve type	Port size	Cv	Weight lb (kg)	Part number NPT	Part number BSPP
		Lever spring return	1/8	0.6	0.73 (0.33)	P2LAX391VS	P2LAX311VS
			1/4	1.5	0.73 (0.33)	P2LBX392VS	P2LBX312VS
			3/8	2.5	0.88 (0.40)	P2LCX393VS	P2LCX313VS
			1/2	2.7	1.32 (0.60)	P2LDX394VS	P2LDX314VS
		Lever detent	1/8	0.7	0.73 (0.33)	P2LAX391VV	P2LAX311VV
			1/4	1.3	0.73 (0.33)	P2LBX392VV	P2LBX312VV
			3/8	2.5	0.88 (0.40)	P2LCX393VV	P2LCX313VV
			1/2	2.7	1.32 (0.60)	P2LDX394VV	P2LDX314VV
<hr/>							
5/2 - 2-position	Symbol	Valve type	Port size	Cv	Weight lb (kg)	Part number NPT	Part number BSPP
		Lever spring return	1/8	0.6	0.40 (0.18)	P2LAX591VS	P2LAX511VS
			1/4	1.5	0.73 (0.33)	P2LBX592VS	P2LBX512VS
			3/8	2.5	0.88 (0.40)	P2LCX593VS	P2LCX513VS
			1/2	2.7	1.32 (0.60)	P2LDX594VS	P2LDX514VS
		Lever detent	1/8	0.7	0.40 (0.18)	P2LAX591VV	P2LAX511VV
			1/4	1.3	0.73 (0.33)	P2LBX592VV	P2LBX512VV
			3/8	2.5	0.88 (0.40)	P2LCX593VV	P2LCX513VV
			1/2	2.7	1.32 (0.60)	P2LDX594VV	P2LDX514VV
<hr/>							
5/3 - 3-position, all ports blocked	Symbol	Valve type	Port size	Cv	Weight lb (kg)	Part number NPT	Part number BSPP
		Lever spring center	1/8	0.6	0.40 (0.18)	P2LAX69111	P2LAX61111
			1/4	1.5	0.73 (0.33)	P2LBX69211	P2LBX61211
			3/8	2.5	1.56 (0.71)	P2LCX69311	P2LCX61311
			1/2	2.7	1.61 (0.73)	P2LDX69411	P2LDX61411
		Lever detent	1/8	0.7	0.40 (0.18)	P2LAX69122	P2LAX61122
			1/4	1.3	0.73 (0.33)	P2LBX69222	P2LBX61222
			3/8	2.5	1.56 (0.71)	P2LCX69322	P2LCX61322
			1/2	2.7	1.61 (0.73)	P2LDX69422	P2LDX61422
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5/3 - 3-position, pressure center	Symbol	Valve type	Port size	Cv	Weight lb (kg)	Part number NPT	Part number BSPP
		Lever spring center	1/8	0.6	0.40 (0.18)	P2LAX79111	P2LAX71111
			1/4	1.5	0.73 (0.33)	P2LBX79211	P2LBX71211
			3/8	2.5	1.56 (0.71)	P2LCX79311	P2LCX71311
			1/2	2.7	1.61 (0.73)	P2LDX79411	P2LDX71411
		Lever detent	1/8	0.7	0.40 (0.18)	P2LAX79122	P2LAX71122
			1/4	1.3	0.73 (0.33)	P2LBX79222	P2LBX71222
			3/8	2.5	1.56 (0.71)	P2LCX79322	P2LCX71322
			1/2	2.7	1.61 (0.73)	P2LDX79422	P2LDX71422

Directair 2,
Directair 4

Viking Xtreme
Lever Series


42 Lever /
Pedal Series

M0
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LV-EZ Series
Lockout Valves

Brass Poppet /
Sliding Seal

D
Manual / Mechanical
Valve Products

 Most popular.



5/3 - 3-position, center exhaust		Symbol	Valve type	Port size	Cv	Weight lb (kg)	Part number NPT	Part number BSPP
		Center Exhaust	Lever spring center	1/8	0.6	0.40 (0.18)	P2LAX89111	P2LAX81111
				1/4	1.5	0.73 (0.33)	P2LBX89211	P2LBX81211
				3/8	2.5	1.56 (0.71)	P2LCX89311	P2LCX81311
				1/2	2.7	1.61 (0.73)	P2LDX89411	P2LDX81411
		Center Exhaust	Lever detent	1/8	0.7	0.40 (0.18)	P2LAX89122	P2LAX81122
				1/4	1.3	0.73 (0.33)	P2LBX89222	P2LBX81222
				3/8	2.5	1.56 (0.71)	P2LCX89322	P2LCX81322
				1/2	2.7	1.61 (0.73)	P2LDX89422	P2LDX81422
3/2 - 2-position		Symbol	Valve type	Port size	Cv		Part number NPT	Part number BSPP
			Twist handle detent	1/4	1.3	0.73 (0.33)	P2LBX392JJ	P2LBX312JJ
5/2 - 2-position		Symbol	Valve type	Port size	Cv		Part number NPT	Part number BSPP
			Twist handle detent	1/4	1.3	0.73 (0.33)	P2LBX592JJ	P2LBX512JJ

Manual Operated Valves

Vacuum to 232 PSIG (Vacuum to 16 bar) -40°F to 158°F (-40°C to 70°C)

P2L A X 5 91 VS

Valve size	
1/8"	A
1/4"	B
3/8"	C
1/2"	D

Valve type / function	
3/2 NC - 2-position	3
5/2 2-position	5
5/3 3-position, APB	6
5/3 3-position, PC	7
5/3 3-position, CE	8

Actuator / return	
JJ*	Twist handle detent, 2-position
VS	Spring return lever, 2-position, 90° to ports
VV	Lever, detent, 2-position, 90° to ports
11	Spring centered lever, 3-position, 90° to ports
22	Lever, detent, 3-position, 90° to ports

* Not available with 3-position valves. Available Size B only.

Main port thread	
11	G1/8 (P2LA)
12	G1/4 (P2LB)
13	G3/8 (P2LC)
14	G1/2 (P2LD)
91	1/8" NPT (P2LA)
92	1/4" NPT (P2LB)
93	3/8" NPT (P2LC)
94	1/2" NPT (P2LD)

NOTE: For ATEX certified remote air pilot valves, build the valve part number from the model number index for remote pilot and add "-EX" following the number.

Example: P2LAX591VS-EX

Most popular.

Exhaust Mufflers

Pipe thread	Part number
M5	P6M-PAC5
1/8" NPT	EM12
1/4" NPT	EM25
3/8" NPT	EM37
1/2" NPT	EM50

P6M - Plastic; EM - Sintered bronze

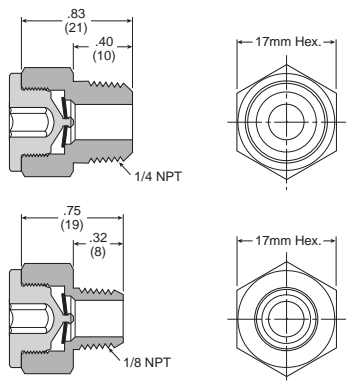


Plastic Silencers

Thread size	Part number		A (mm)	B (mm)
	NPT	BSPT		
M5	AS-5		.43 (11)	.32 (8)
1/8"	ASN-6	AS-6	1.57 (40)	.63 (16)
1/4"	ASN-8	AS-8	2.56 (65)	.83 (21)
3/8"	ASN-10	AS-10	3.35 (85)	.98 (25)
1/2"	ASN-15	AS-15	3.74 (95)	1.18 (30)



Exhaust Protector



Features

- 1/8 and 1/4 NPT male sizes
- Fitted with a brass pipe adapter and a fluorocarbon membrane
- Resistant to rust, clog, wash down and contamination

Applications

These protectors are intended for mobile applications, quick venting applications and alternative exhaust port breathers that require protection against clogging.

Ideal for valves exposed to harsh environmental conditions (which can cause a "caking up" in the exhaust pipe ports where the bronze mufflers or breather vents are installed).

Particularly suitable for time-sensitive applications such as axle-lift suspensions or pushers or tag axles.

Specifications

Operating pressure 0 – 150 PSIG
 (0 to 10 bar, 0 to 1034 kPa)

Operating temperature -40°F to 158°F (-40°C to 70°C)

Material:

Body and pipe adapter Brass
 Membrane Fluorocarbon

Flow Data (SCFM)

Part number	Size	60 PSIG inlet	90 PSIG inlet	125 PSIG inlet
E90016	1/8"	40.1	56.5	75.5
E90017	1/4"	44.6	62.7	83.5

Directair 2,
Directair 4

Viking Xtreme
Lever Series

42 Lever /
Pedal Series

M0
Series

LV-EZ Series
Lockout Valves

Brass Poppet /
Sliding Seal

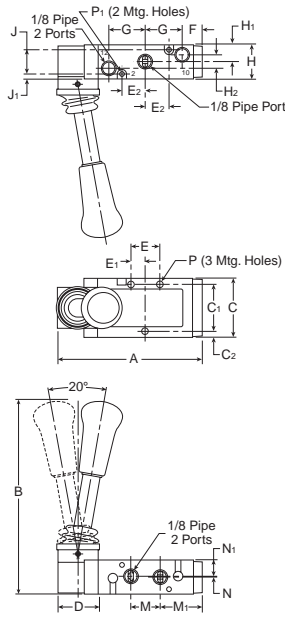
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Manual / Mechanical
Valve Products

P2LAX 3/2 Hand Lever Operated

P2LAX 5/2 & 5/3 Hand Lever Operated

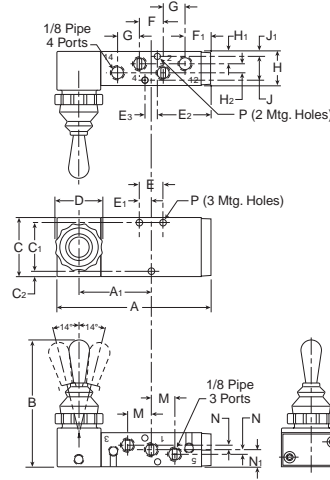
Directair 2,
 Directair 4
 Viking Xtreme
 Lever Series
 42 Lever /
 Pedal Series
 Series M0
 LV-EZ Series
 Lockout Valves
 Brass Poppet /
 Sliding Seal
D
 Manual / Mechanical
 Valve Products



**P2LAX 3/2
 (hand lever)**

A	B	C
3.88 (99)	5.23 (133)	1.57 (40)
C ₁	C ₂	D
1.26 (32)	.16 (4)	1.06 (27)
E	E ₁	E ₂
.79 (20)	.39 (10)	.63 (16)
F	G	H
.55 (14)	.98 (25)	.87 (22)
H ₁	H ₂	J
.42 (10.6)	.02 (0.5)	.65 (16.5)
J ₁	M	M ₁
.11 (2.9)	.79 (20)	1.14 (29)
N	N ₁	P
.18 (4.5)	.26 (6.6)	∅ .17 (∅ 4.3)
P ₁	∅ .12 (∅ 3.1)	

Inches (mm)



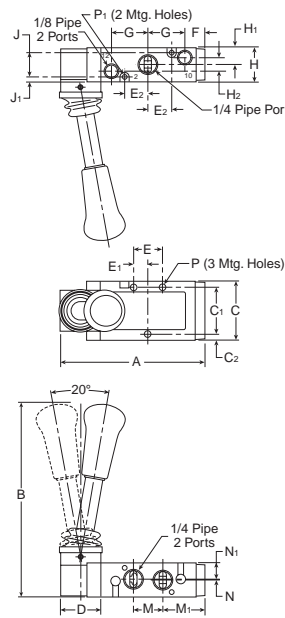
**P2LAX 5/2 & 5/3
 (hand lever)**

A	A ₁	B
4.02 (102)	1.89 (48)	3.23 (82)
C	C ₁	C ₂
1.57 (40)	1.30 (33)	.14 (3.5)
D	E ₂	E ₃
1.18 (30)	1.42 (36)	.33 (8.5)
F	F ₁	G
.63 (16)	.67 (17)	.59 (15)
H	H ₁	H ₂
.87 (22)	.31 (8)	.24 (6)
J	J ₁	M
.63 (16)	.12 (3)	.63 (16)
N	N ₁	P
.12 (3)	.43 (11)	∅ .16 (∅ 4.1)

Inches (mm)

P2LBX 3/2 Hand Lever Operated

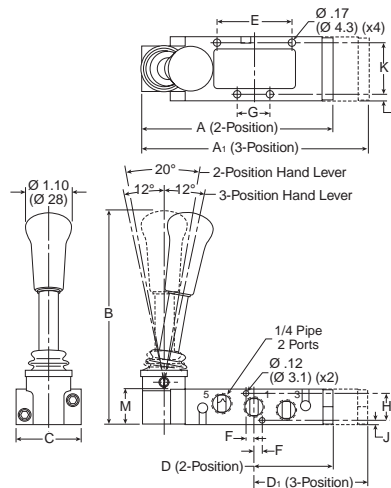
P2LBX 5/2 & 5/3 Hand Lever Operated



**P2LBX 3/2
 (hand lever)**

A	B	C
3.88 (99)	5.23 (133)	1.57 (40)
C ₁	C ₂	D
1.26 (32)	.16 (4)	1.06 (27)
E	E ₁	E ₂
.79 (20)	.39 (10)	.63 (16)
F	G	H
.55 (14)	.98 (25)	.87 (22)
H ₁	H ₂	J
.42 (10.6)	.02 (0.5)	.65 (16.5)
J ₁	M	M ₁
.11 (2.9)	.79 (20)	1.14 (29)
N	N ₁	P
.18 (4.5)	.26 (6.6)	∅ .17 (∅ 4.3)
P ₁	∅ .12 (∅ 3.1)	

Inches (mm)

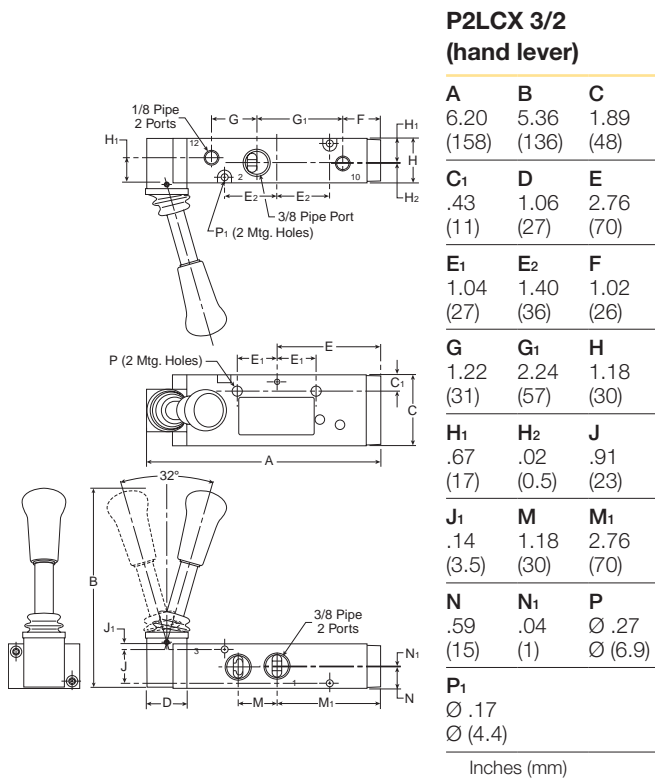


**P2LBX 5/2 & 5/3
 (hand lever)**

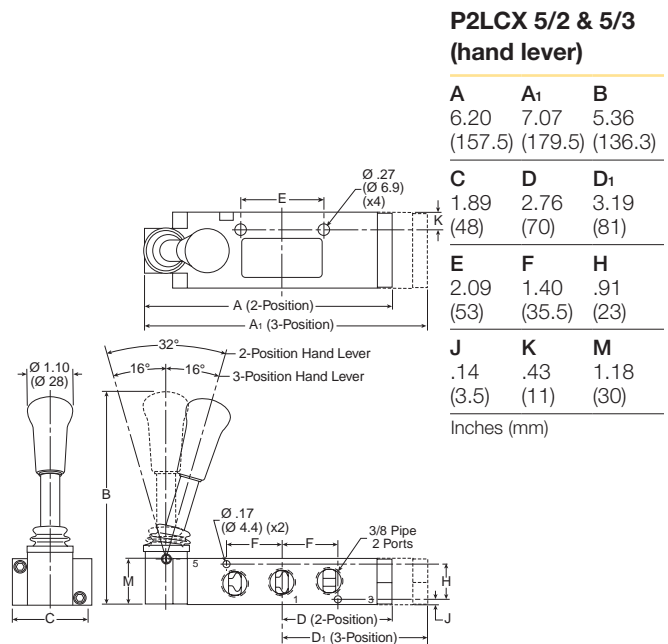
A	A ₁	B	
4.67 (118.5)	5.51 (140)	5.19 (131.8)	
C	D	D ₁	
1.57 (40)	1.93 (49)	2.35 (59.8)	
E	F	G	
1.81 (46)	.20 (5)	.79 (20)	
H	J	K	
.65 (16.5)	.11 (2.85)	1.26 (32)	
L	M		
.16 (4)	.87 (22.2)		

Inches (mm)

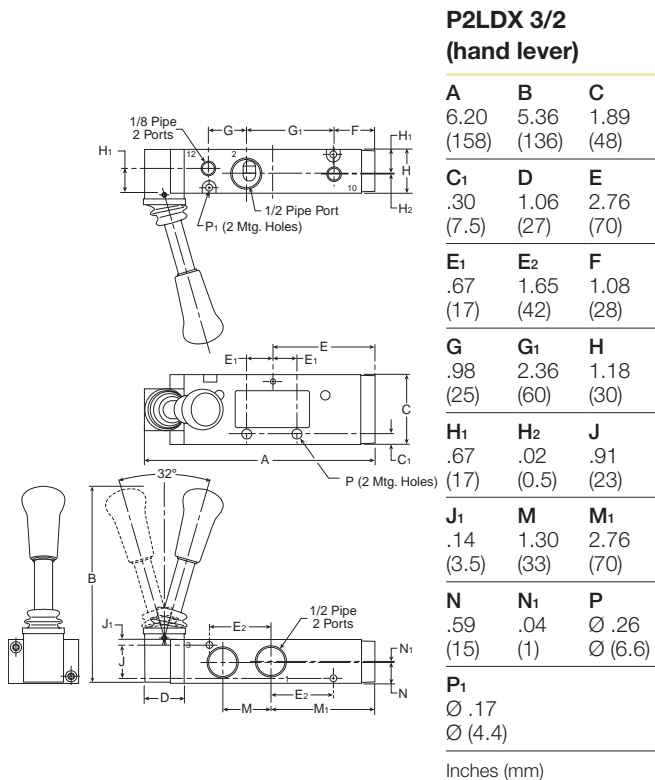
P2LCX 3/2 Hand Lever Operated



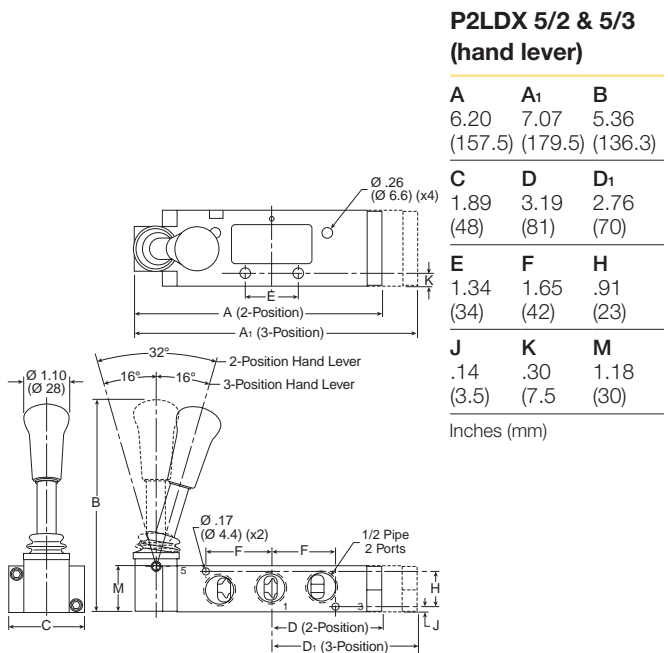
P2LCX 5/2 & 5/3 Hand Lever Operated



P2LDX 3/2 Hand Lever Operated



P2LDX 5/2 & 5/3 Hand Lever Operated



Directair 2,
Directair 4

Viking Xtreme
Lever Series

42 Lever /
Pedal Series

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LV-EZ Series
Lockout Valves

Brass Poppet /
Sliding Seal

D
Manual / Mechanical
Valve Products

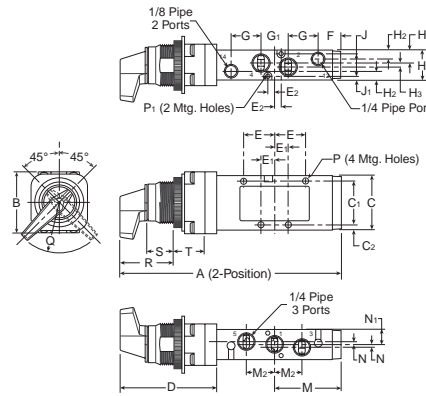
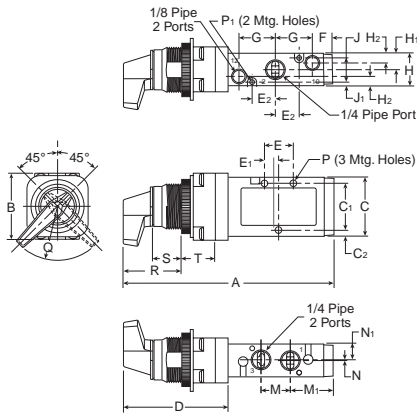
P2LBX 3/2 Twist Lever Operated

P2LBX 5/2 Twist Lever Operated

Directair 2,
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 4/2 Lever /
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 M0
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D
 Manual / Mechanical
 Valve Products

**P2LBX 3/2
 (hand lever)**

**P2LBX 5/2
 (hand lever)**



A	B	C
5.67 (144)	1.79 (45.5)	1.57 (40)
C ₁	C ₂	D
1.26 (32)	.16 (4)	2.87 (73)
E	E ₁	E ₂
.79 (20)	.39 (10)	.63 (16)
F	G	H
.55 (14)	.98 (25)	.87 (22.2)
H ₁	H ₂	J
.44 (11.1)	.26 (6.6)	.65 (16.5)
J ₁	M	M ₁
.11 (2.9)	.79 (20)	1.14 (29)
N	N ₁	P
.02 (0.5)	.42 (10.6)	∅ .17 ∅ (4.3)
P ₁	Q	R
∅ .12 ∅ (3.1)	1.5R (38.1)R	1.85 (47)
S	T	
1.10 (28)	.67 (17)	

A	B	C
6.46 (164)	1.79 (45.5)	1.57 (40)
C ₁	C ₂	D
1.26 (32)	.15 (4)	2.87 (73)
E	E ₁	E ₂
.91 (23)	.39 (10)	.20 (5)
F	G	G ₁
.67 (17)	.87 (22)	.79 (20)
H	H ₁	H ₂
.87 (22.2)	.44 (11.1)	.26 (6.6)
H ₃	J	J ₁
.12 (3)	.65 (16.5)	.11 (2.9)
M	N	N ₁
1.93 (49)	.08 (0.2)	.44 (11.1)
P	P ₁	Q
∅ .17 ∅ (4.3)	∅ .12 ∅ (3.1)	1.5R (38.1)R
R	S	T
1.85 (47)	1.10 (28)	.67 (17)

Panel Cutout Detail (All Port Sizes)

