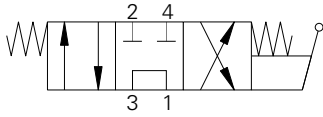


MLV9-12-A - Directional Valve

Manual lever valve, spool

60 L/min (15.9 USgpm) • 210 bar (3000 psi)



Operation

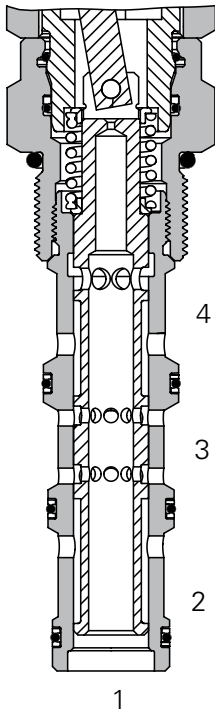
In the center position, this valve allows flow from port 3 to port 1 and blocks ports 2 and 4.

In position 1, flow is directed from port 3 to port 2 and from port 4 to port 1. In position 2, flow is directed from port 3 to port 4 and from port 2 to port 1.

Features

Hardened, ground and honed working parts to limit leakage and prolong life. Compact design with a low pressure drop. Handle position fully adjustable.

Sectional View



Performance Data

Ratings and Specifications

Performance data is typical with fluid at 21,8 cST (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Fatigue pressure	(210 bar) 3,000 psi per NFPA/T2-6-1 R2-2000
Rated burst pressure	(626 bar) 9090 psi per NFPA/T2-6-1 R2-2000
Max flow	60 L/min (15.9 USgpm)
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-12-4
Fluids	All general purpose hydraulic fluids such as: MILH-5606, SAE 10, SAE 20 etc.
Filtration	Cleanliness code 18/ 16/13
Standard housing materials	Aluminum
Weight	.57 kg (1.25 lbs)
Seal kit	9900171-000 (Buna-N), 9900172 (Viton®)
Internal leakage	246 cm ³ /min (15 in ³ /min) max. @ 210 bar (3000 psi)

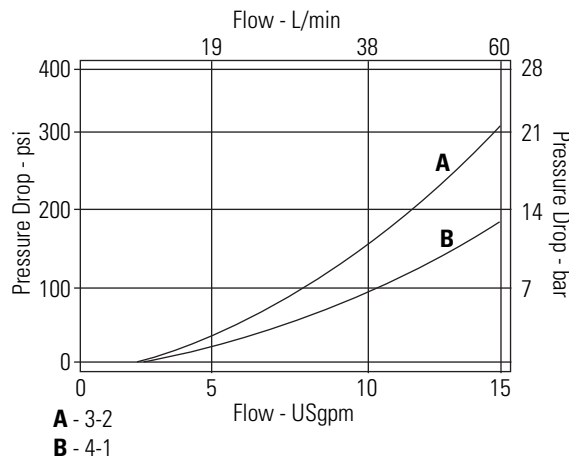
Endurance tested to 1 million cycles at full rated flow and pressure

Viton is a registered trademark of E.I. DuPont

Description

This is a lever operated 4 way 3 position direct acting spool type directional valve. Spung centered with port 3 open to port 1 (Tank). Ports 2 and 4 blocked. This valve can easily be installed into a manifold simplifying the design and removing leak points.

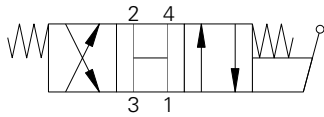
Pressure Drop



MLV9-12-B - Directional Valve

Manual lever valve, spool

60 L/min (15.9 USgpm) • 210 bar (3000 psi)



Operation

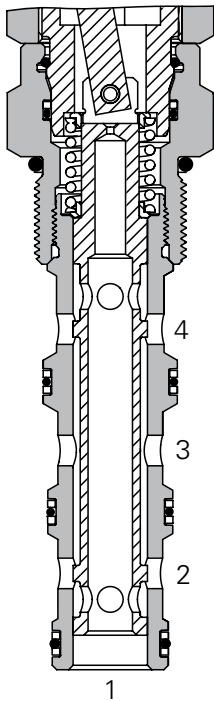
In the center position, all ports are open to each other. In position 1, flow is directed from port 3 to port 4 and from port 2 to port 1.

In position 2, flow is directed from port 3 to port 2 and from port 4 to port 1.

Features

Hardened, ground and honed working parts to limit leakage and prolong life. Compact design with a low pressure drop. Handle position fully adjustable.

Sectional View



Performance Data

Ratings and Specifications

Performance data is typical with fluid at 21,8 cST (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Fatigue pressure	(210 bar) 3,000 psi per NFPA/T2-6-1 R2-2000
Rated burst pressure	(626 bar) 9090 psi per NFPA/T2-6-1 R2-2000
Max flow	60 L/min (15.9 USgpm)
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-12-4
Fluids	All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20 etc.
Filtration	Cleanliness code 18/ 16/13
Standard housing materials	Aluminum
Weight	.57 kg (1.25 lbs)
Seal kit	9900171-000 (Buna-N), 9900172 (Viton®)
Internal leakage	246 cm ³ /min (15 in ³ /min) max. @ 210 bar (3000 psi)

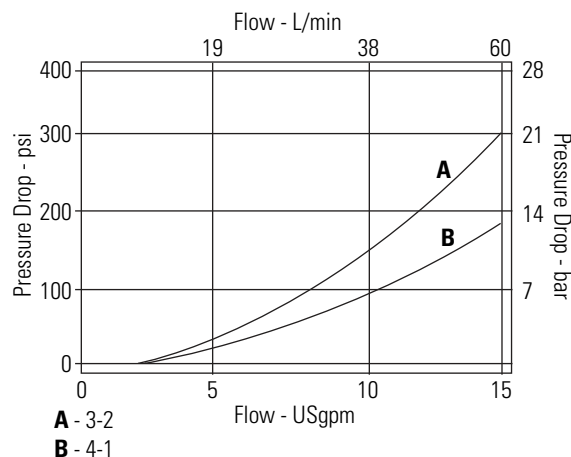
Endurance tested to 1 million cycles at full rated flow and pressure

Viton is a registered trademark of E.I. DuPont

Description

This is a lever operated 4 way 3 position direct acting spool type directional valve. Spring centered with all ports open. This valve can easily be installed into a manifold simplifying the design and removing leak points.

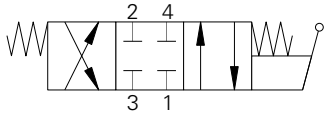
Pressure Drop



MLV9-12-E - Directional Valve

Manual lever valve, spool

60 L/min (15.9 USgpm) • 210 bar (3000 psi)



Operation

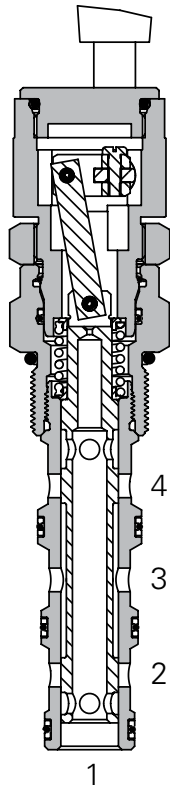
In the center position, all ports are blocked. In position 1, flow is directed from port 3 to port 1 and from port 2 to port 4.

In position 2, flow is directed from port 3 to port 2 and from port 4 to port 1.

Features

Hardened, ground and honed working parts to limit leakage and prolong life. Compact design with a low pressure drop. Handle position fully adjustable.

Sectional View



Performance Data

Ratings and Specifications

Performance data is typical with fluid at 21,8 cST (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Fatigue pressure	(210 bar) 3,000 psi per NFPA/T2-6-1 R2-2000
Rated burst pressure	(626 bar) 9090 psi per NFPA/T2-6-1 R2-2000
Max flow	60 L/min (15.9 USgpm)
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-12-4
Fluids	All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20 etc.
Filtration	Cleanliness code 18/16/13
Standard housing materials	Aluminum
Weight	.57 kg (1.25 lbs)
Seal kit	9900171-000 (Buna-N), 9900172 (Viton®)
Internal Leakage	246 cm ³ /min (15 in ³ /min) max. @ 210 bar (3000psi)

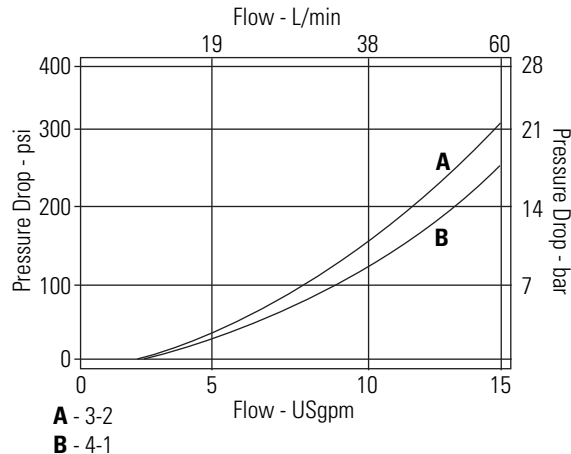
Endurance tested to 1 million cycles at full rated flow and pressure

Viton is a registered trademark of E.I. DuPont

Description

This is a lever operated 4 way 3 position direct acting spool type directional valve. Spring centered with all ports closed. This valve can easily be installed into a manifold simplifying the design and removing leak points.

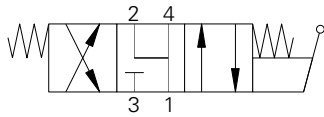
Pressure Drop



MLV9-12-F - Directional Valve

Manual lever valve, spool

60 L/min (15.9 USgpm) • 210 bar (3000 psi)



Operation

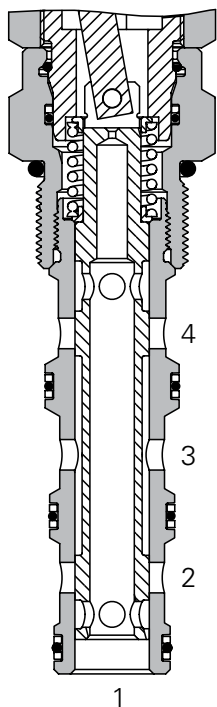
In the center position, port 1, port 2, and port 4 are open to each other while port 3 is blocked. In position 1, flow is directed from port 3 to port 4 and from port 2 to port 1.

In position 2, flow is directed from port 3 to port 2 and from port 4 to port 1.

Features

Hardened, ground and honed working parts to limit leakage and prolong life. Compact design with a low pressure drop. Handle position fully adjustable.

Sectional View



Performance Data

Ratings and Specifications

Performance data is typical with fluid at 21,8 cST (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Fatigue pressure	(210 bar) 3,000 psi per NFPA/T2-6-1 R2-2000
Rated burst pressure	(626 bar) 9090 psi per NFPA/T2-6-1 R2-2000
Max flow	60 L/min (15.9 USgpm)
Temperature range	-40° to 120°C (-40° to 248°F)
Cavity	C-12-4
Fluids	All general purpose hydraulic fluids such as: MIL-H-5606, SAE 10, SAE 20 etc.
Filtration	Cleanliness code 18/16/13
Standard housing materials	Aluminum
Weight	.57 kg (1.25 lbs)
Seal kit	9900171-000 (Buna-N), 9900172 (Viton®)
Internal Leakage	246 cm ³ /min (15 in ³ /min) max. @ 210 bar (3000psi)

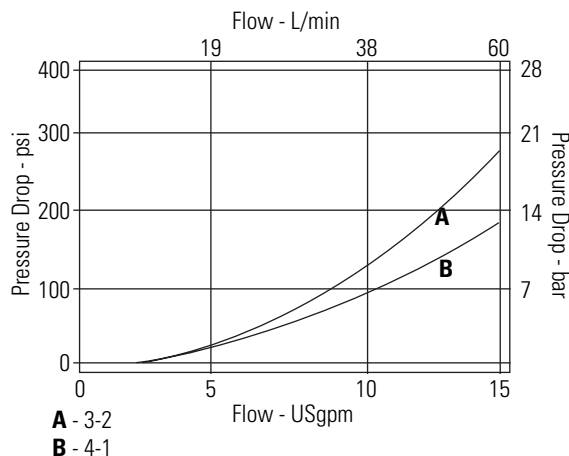
Endurance tested to 1 million cycles at full rated flow and pressure

Viton is a registered trademark of E.I. DuPont

Description

This is a lever operated 4 way 3 position direct acting spool type directional valve. Spring centered with ports 2 and 4 to tank and port 2 blocked. This valve can easily be installed into a manifold simplifying the design and removing leak points.

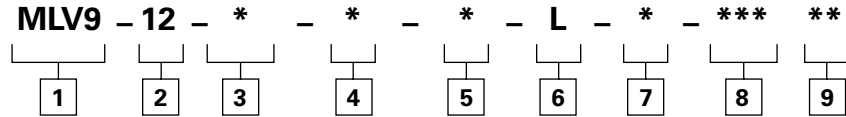
Pressure Drop



MLV9-12 - Directional Valve

Manual lever valve, spool
 60 L/min (15.9 USgpm) • 210 bar (3000 psi)

Model Code

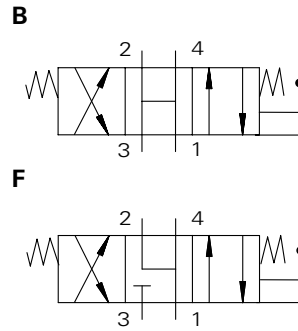
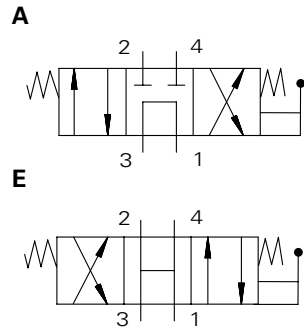


1 Function
MLV9 - Manual lever valve

2 Size
12 - 12 size

3 Seal Material
Blank - Buna-N
V - Viton®

4 Spool Center Condition



9 Lever Position
00 - 90°

5 Dentent Option
O - Spring return
D - Dentent, Spring Centered

6 Lever
L - Lever

7 Housing Material
Blank - Cartridge only
A - Aluminum

8 Port Size - Bodied Valve

Code	Port Size	Housing Number
		Aluminum
0	Cartridge only	
A4G	1/2" BSPP	5986431-001
A6G	3/4" BSPP	5986432-001
A8H	SAE 8	5986433-001
A10H	SAE 10	5986434-001
A12H	SAE 12	5986436-001

See section J for housing details.

MLV9-12 - Directional Valve

Manual lever valve, spool

60 L/min (15.9 USgpm) • 210 bar (3000 psi)

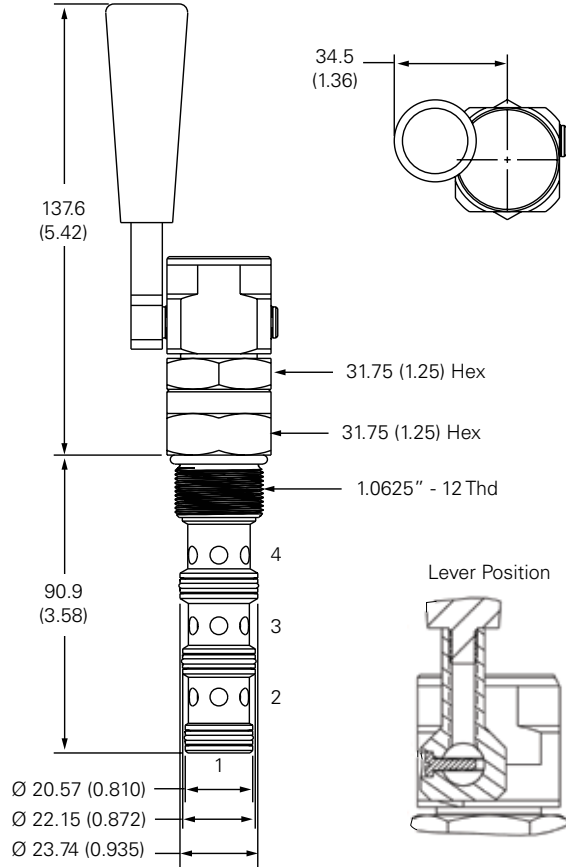
Dimensions

mm (inch)

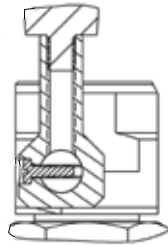
Torque cartridge in aluminum or steel housing

34-41 Nm (25-30 ft lbs)

Cartridge Only



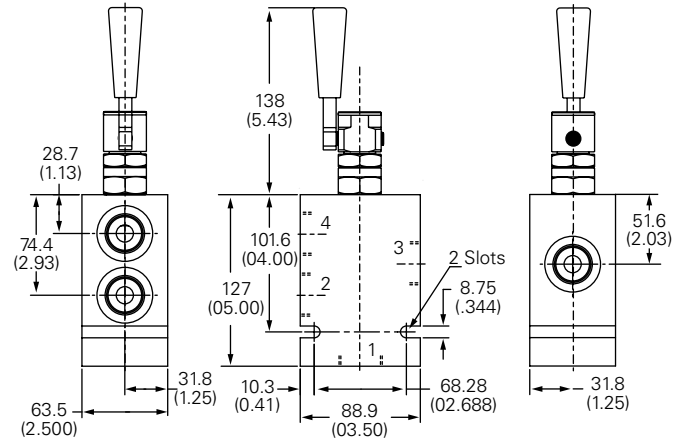
Lever Position



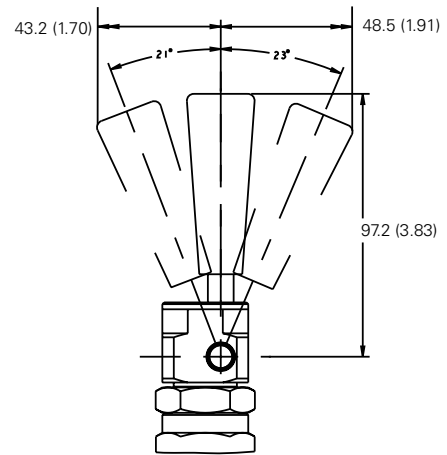
Spare Parts
Lever - 21113

Installation Drawings (Aluminum)

MLV9-12-A/B/E/F



MLV9-12-A



MLV9-12-B/E/F

