

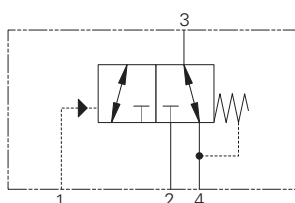
PTS13-10/12/16 - Pilot to shift valve

Pilot operated, directional control valve

PTS13-10: 30 L/min (8 USgpm) • 350 bar (5000 psi)

PTS13-12: 114 L/min (30 USgpm) • 350 bar (5000 psi)

PTS13-16: 132 L/min (35 USgpm) • 350 bar (5000 psi)



Operation

This valve allows flow between ports 3 and 4 while blocking port 2 until sufficient pressure has been applied to port 1 and the spring bias is overcome.

At this time, flow is directed between port 2 and port 3 while blocking port 4. During the cross-over transition, all ports are blocked. The spring chamber for this valve is vented to port 4.

Performance data

Ratings and specifications

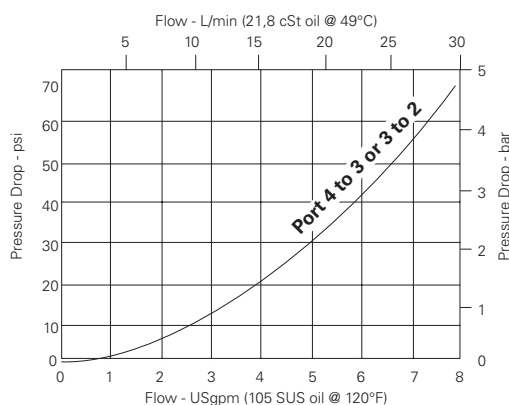
Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated Flow 10	30 L/min (8 USgpm)
Rated Flow 12	114 L/min (30 USgpm)
Rated Flow 16	132 L/min (35 USgpm)
Internal leakage	210 cc/min (13in ³ /min) @ 350 bar (5000 psi)
Temperature range	-40° to 120° C (-40° to 248°F)
Pilot Pressure 10	40 - 2,75 bar (40 psi) 80 - 5,5 bar (80 psi) 160 - 11,0 bar (160 psi)
Pilot Pressure 12	80 - 5,5 bar (80 psi) 120 - 8,3 bar (120 psi) 160 - 11,0 bar (160 psi)
Pilot Pressure 16	80 - 5,5 bar (80 psi) 160 - 11,0 bar (160 psi)
Pilot displacement volume	0,49 cm ³ (0.02 in ³)
Cavity 10	C-10-4
Cavity 12	C-12-4
Cavity 16	C-16-4
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 or Steel
Weight cartridge only 12	0.32 kg (0.70 lbs)
Weight cartridge only 16	0.5 kg (1.12 lbs)
Seal kit 10	889625 (Buna-N), 566080 (Viton®)
Seal kit 12	02-160979 (Buna-N), 02-160980 (Viton®)
Seal kit 16	889634 (Buna-N), 889638 (Viton®)

Viton is a registered trademark of E.I. DuPont

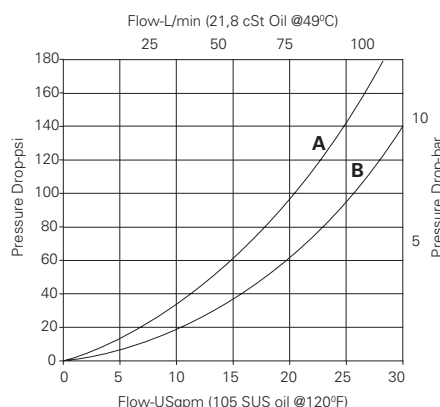
Pressure drop curves for -10

Cartridge only



Pressure drop curves for -12

Cartridge only



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS13-10/12/16 - Pilot to shift valve

Pilot operated, directional control valve

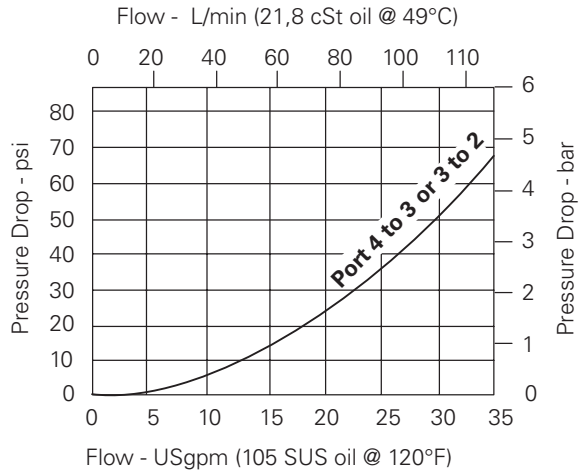
PTS13-10: 30 L/min (8 USgpm) • 350 bar (5000 psi)

PTS13-12: 114 L/min (30 USgpm) • 350 bar (5000 psi)

PTS13-16: 132 L/min (35 USgpm) • 350 bar (5000 psi)

Pressure drop curves for -16

Cartridge only



Model code

PTS13 - 10 - (V) - ** - *** - 00**

1 2 3 4 5 6

1 Function

PTS13 - Pilot to shift valve

2 Size

10 - 10 size

3 Seals

Blank - Buna-N
V - Viton®

4 Port size

0 - Cartridge only

Code	Port size	Housing number		
		Aluminum light duty	Aluminum fatigue rated	Steel
A3B	3/8" BSPP	02-179705		
A6T	SAE 6	566161		
A2G	1/4" BSPP		02-185804	
A3G	3/8" BSPP		02-185805	
A6H	SAE 6		02-185802	
A8H	SAE 8		02-185803	
S2G	1/4" BSPP			02-175139
S3G	3/8" BSPP			02-175140
S6T	SAE 6			02-175137
S8T	SAE 8			02-175138

See section J for housing details.

5 Pilot to shift (nominal)

40 - 2,75 bar (40 psi)

80 - 5,5 bar (80 psi)

160 - 11,0 bar (160 psi)

6 Special features

00 - None
(Only required if valve has special features, omitted if "00")

Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS13-10/12/16 - Pilot to shift valve

Pilot operated, directional control valve

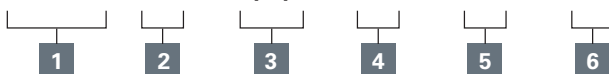
PTS13-10: 30 L/min (8 USgpm) • 350 bar (5000 psi)

PTS13-12: 114 L/min (30 USgpm) • 350 bar (5000 psi)

PTS13-16: 132 L/min (35 USgpm) • 350 bar (5000 psi)

Model code

PTS13 - 12 - (V) - ** - *** - 00**



1 Function

PTS13 - Pilot to shift valve

2 Size

12 - 12 size

3 Seals

Blank - Buna-N
V - Viton®

4 Port size

0 - Cartridge only

Code	Port size	Housing number	
		Aluminum	Steel
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	
S6G	3/4" BSPP		5991073-001
S10T	SAE 10		5991074-001
S12T	SAE 12		5991075-001

See section J for housing details.

5 Pilot to shift (nominal)

80 - 5,5 bar (80 psi)

120 - 8,3 bar (120 psi)

160 - 11,0 bar (160 psi)

6 Special features

04 - 'F Type' fixed type
w/closed transition

Model code

PTS13 - 16 (V) - ** - *** - 00**



1 Function

PTS13 - Pilot to shift valve

2 Size

16 - 16 size

3 Seals

Blank - Buna-N
V - Viton®

4 Port size

0 - Cartridge only

Code	Port size	Housing number		
		Aluminum light duty	Aluminum fatigue rated	Steel
A12T	SAE 12	566411		
A6B	3/4" BSPP		02-175468	
A10H	SAE 10		876729	
A12H	SAE 12		876731	
A4G	1/2" BSPP		876728	
A6G	3/4" BSPP		876730	
S4G	1/2" BSPP			02-175143
S6G	1/4" BSPP			02-175144
S10T	SAE 10			02-175141
S12T	SAE 12			02-175142

See section J for housing details.

5 Pilot to shift (nominal)

80 - 5,5 bar (80 psi)

160 - 11,0 bar (160 psi)

6 Special features

00 - None

(Only required if valve has special features, omitted if "00")

Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS13-10/12/16 - Pilot to shift valve

Pilot operated, directional control valve

PTS13-10: 30 L/min (8 USgpm) • 350 bar (5000 psi)

PTS13-12: 114 L/min (30 USgpm) • 350 bar (5000 psi)

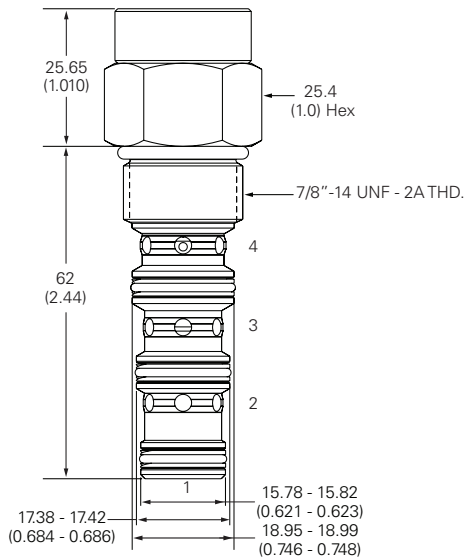
PTS13-16: 132 L/min (35 USgpm) • 350 bar (5000 psi)

PTS13-10

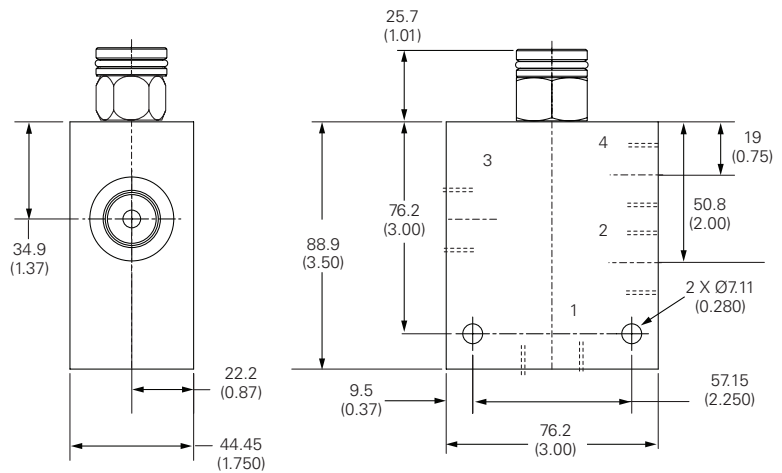
Dimensions

mm (inch)

Cartridge only

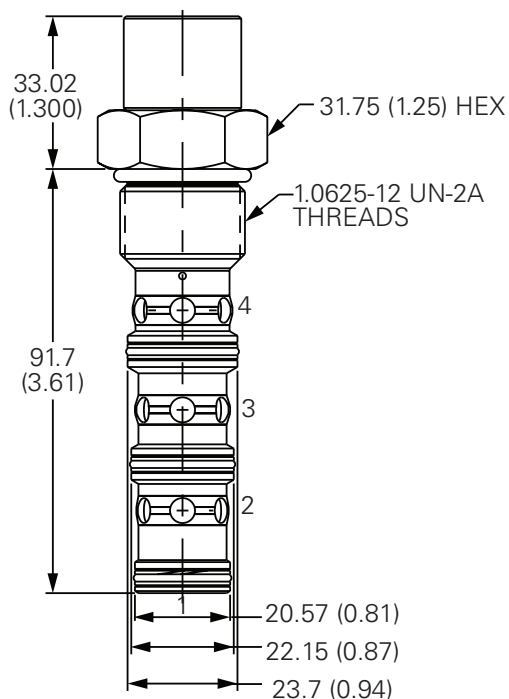


Installation drawing (Steel)

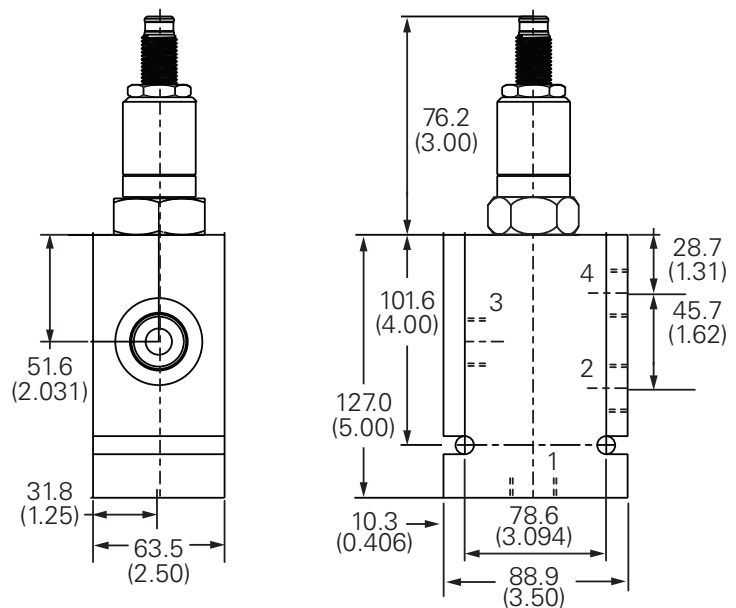


PTS13-12

Cartridge only



Installation drawing (steel)



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS13-10/12/16 - Pilot to shift valve

Pilot operated, directional control valve

PTS13-10: 30 L/min (8 USgpm) • 350 bar (5000 psi)

PTS13-12: 114 L/min (30 USgpm) • 350 bar (5000 psi)

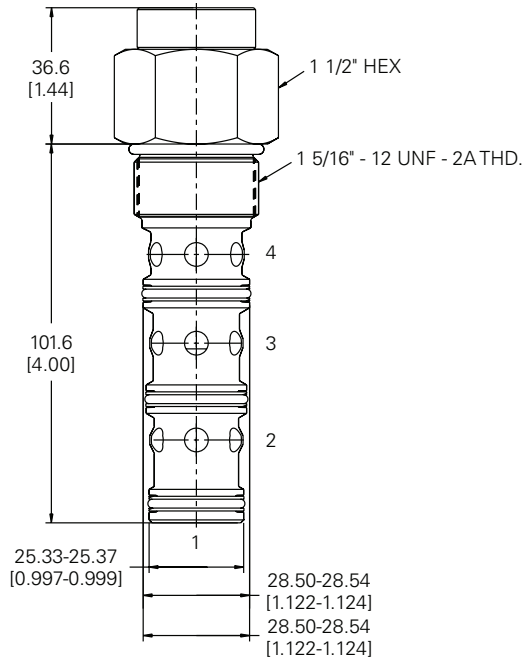
PTS13-16: 132 L/min (35 USgpm) • 350 bar (5000 psi)

PTS13-16

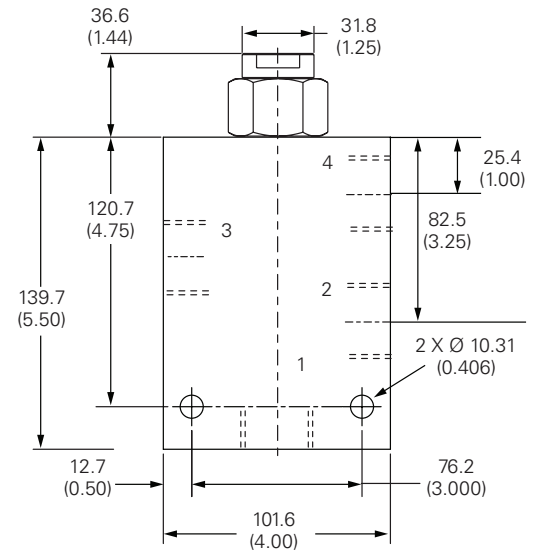
Dimensions

mm (inch)

Cartridge only



Installation drawing (Steel)



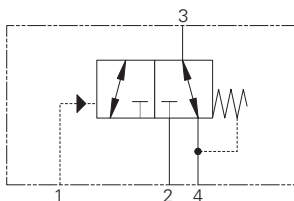
Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS3-16/20 - Pilot to shift valve

Pilot operated, directional control valve

PTS3-16: 132 L/min (35 USgpm) • 210 bar (3000 psi)

PTS3-20: 265 L/min (70 USgpm) • 210 bar (3000 psi)



Operation

This valve allows flow between ports 3 and 4 while blocking port 2 until sufficient pressure has been applied to port 1 and the spring bias is overcome.

At this time, flow is directed between port 2 and port 3 while blocking port 4. During the cross-over transition, all ports are blocked. The spring chamber for this valve is vented to port 4.

Performance data

Ratings and specifications

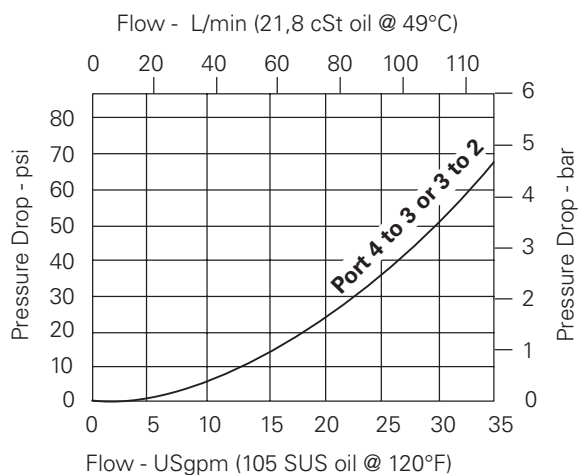
Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Rated Flow 16	132 L/min (35 USgpm)
Rated Flow 20	265 L/min (70 USgpm)
Internal leakage	164 cc/min (10 in ³ /min) maximum @ 210 bar (3000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Pilot Pressure 16	40 - 2,75 bar (40 psi) 80 - 5,5 bar (80 psi) 160 - 11,0 bar (160 psi)
Pilot Pressure 20	40 - 2,75 bar (40 psi) 80 - 5,5 bar (80 psi)
Pilot displacement volume	1,97 cm ³ (0.12 in ³)
Cavity 16	C-16-4
Cavity 20	C-20-4
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 cartridge only - 16	0,5 kg (1.12 lbs)
Weight cartridge only - 20	1.1 kg (1.12 lbs)
Seal kit 16	889634 (Buna-N), 889638 (Viton®)
Seal kit 20	565916 (Buna-N), 889646 (Viton®)

Viton is a registered trademark of E.I. DuPont

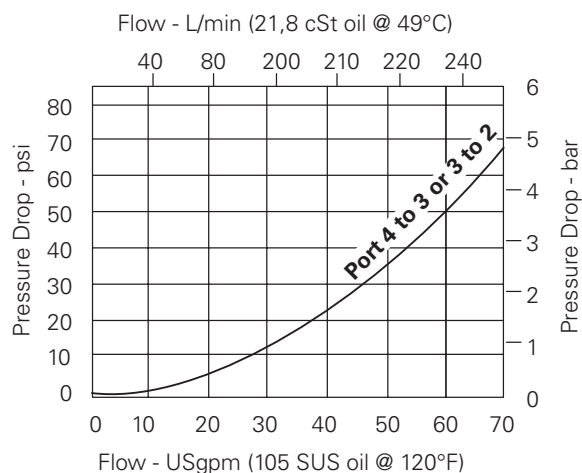
Pressure drop curves for - 16

Cartridge only



Pressure drop curves for - 20

Cartridge only



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS3-16/20 - Pilot to shift valve

Pilot operated, directional control valve
 PTS3-16: 132 L/min (35 USgpm) • 210 bar (3000 psi)
 PTS3-20: 265 L/min (70 USgpm) • 210 bar (3000 psi)

Model code

PTS3 - 16 (V) - ** - *** - 00**

1 2 3 4 5 6

1 Function

PTS3 - Pilot to shift valve

2 Size

16 - 16 size

3 Seal material

Blank - Buna-N
V - Viton®

4 Port size

Code	Port size	Housing number		
		Aluminum light duty	Aluminum fatigue rated	Steel
0	Cartridge			
A12T	SAE 12	566411	—	—
A6B	3/4" BSPP	02-175468	—	—
A10H	SAE 10	—	876729	—
A12H	SAE 12	—	876731	—
A4G	1/2" BSPP	—	876728	—
A6G	3/4" BSPP	—	876730	—

See section J for housing details.

5 Pilot to shift (nominal)

40 - 2,75 bar (40 psi)
80 - 5,5 bar (80 psi)
160 - 11,0 bar (160 psi)

6 Special features

00 - None
 (Only required if valve has special features, omitted if "00".)

Model code

PTS3 - 20 (V) - * - ** - 00**

1 2 3 4 5 6

1 Function

PTS3 - Pilot to shift valve

2 Size

20 - 20 size

3 Seal material

Blank - Buna-N
V - Viton®

4 Port size

Code	Port size	Housing number	
		Aluminum light duty	Aluminum fatigue rated
0	Cartridge only		
16T	SAE 16	566412	—
8B	1" BSPP	02-175469	—
12H	SAE 12	—	876745
16H	SAE 16	—	876747
6G	3/4" BSPP	—	876744
8G	1" BSPP	—	876746

See section J for housing details.

5 Pilot to shift (nominal)

40 - 2,75 bar (40 psi)
80 - 5,5 bar (80 psi)

6 Special features

00 - None
 (Only required if valve has special features, omitted if "00".)

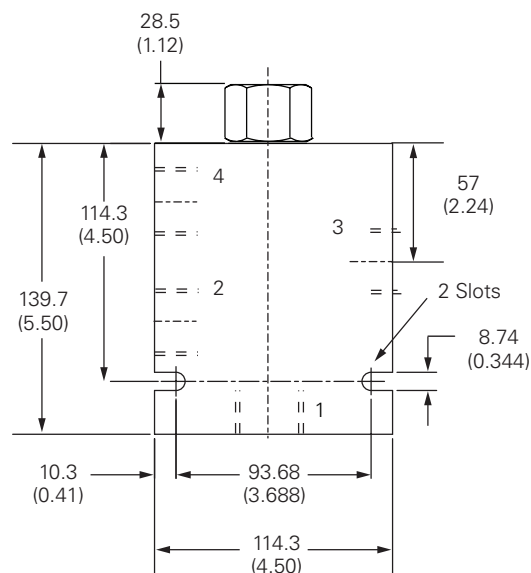
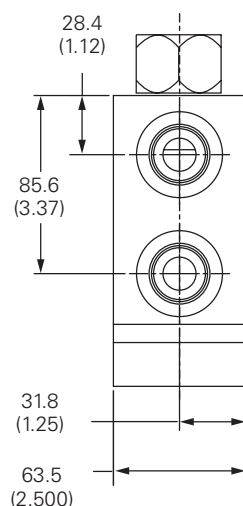
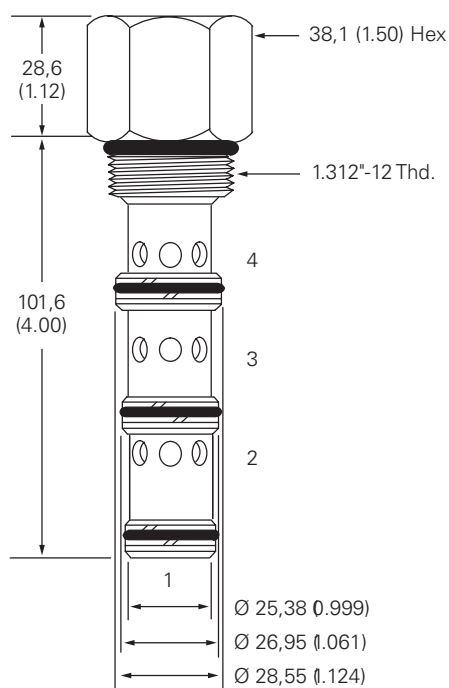
Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

D

PTS3-20: 265 L/min (70 USgpm) • 210 bar (3000 psi)

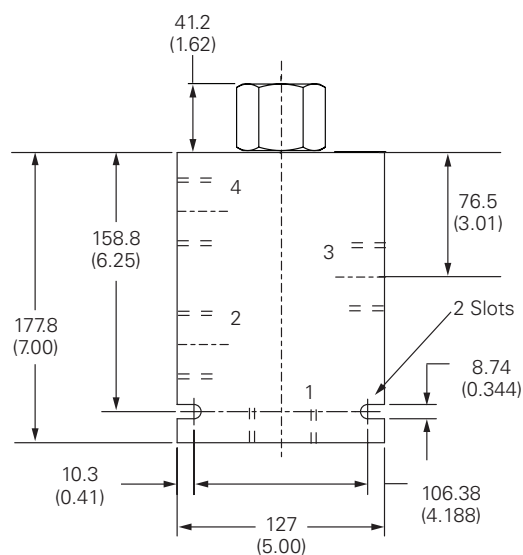
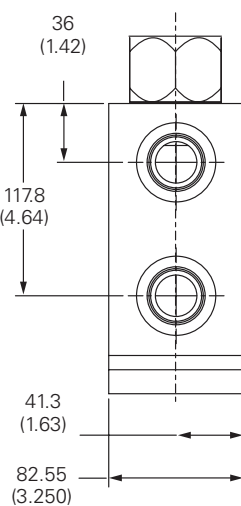
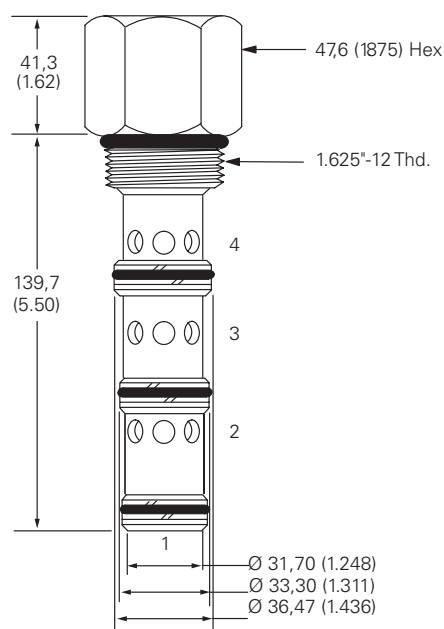
mm (inch)

Installation drawing (Aluminum)



Cartridge only

Installation drawing

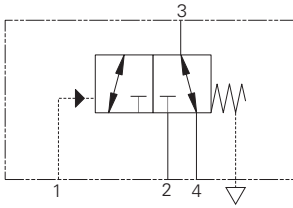


D-114

Eaton Hydraulic Screw-in Cartridge Valves (SiCV) E-VLSC-MC001-E7—April 2020 www.eaton.com

PTS14-12/16 - Pilot to shift valve

Pilot operated, directional control valve
 PTS14-12: 114 L/min (30 USgpm) • 350 bar (5000 psi)
 PTS14-16: 132 L/min (35 USgpm) • 350 bar (5000 psi)



Operation

This valve allows flow between ports 3 and 4 while blocking port 2 until sufficient pressure has been applied to port 1 and the spring bias is overcome.

At this time, flow is directed between port 2 and port 3 while blocking port 4. During the cross-over transition, all ports are blocked. The spring chamber for this valve is externally vented to atmosphere.

Performance data

Ratings and specifications

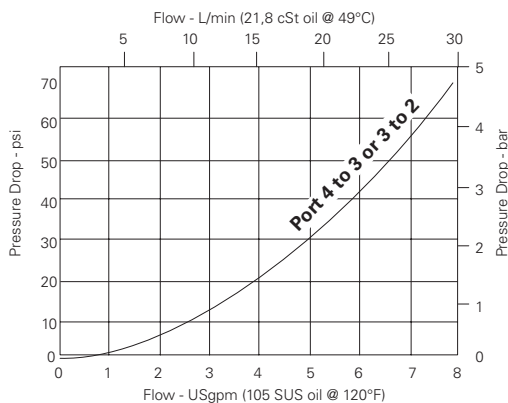
Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated Flow 12	114 L/min (30 USgpm)
Rated Flow 16	132 L/min (35 USgpm)
Internal leakage	210 cc/min (13in ³ /min) @ 350 bar (5000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Pilot Pressure 12	80 - 5,5 bar (80 psi)
	120 - 8,3 bar (120 psi)
Pilot Pressure 16	80 - 5,5 bar (80 psi)
	160 - 11,0 bar (160 psi)
Pilot displacement volume	1,97 cm ³ (0.12 in ³)
Cavity 12	C-12-4
Cavity 16	C-16-4
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 or Steel
Weight cartridge only - 12	0.32 kg (0.70 lbs)
Weight cartridge only - 16	0,5 kg (1.12 lbs)
Seal kit 12	02-160979 (Buna-N), 02-160980 (Viton®)
Seal kit 16	889634 (Buna-N), 889638 (Viton®)

Viton is a registered trademark of E.I. DuPont

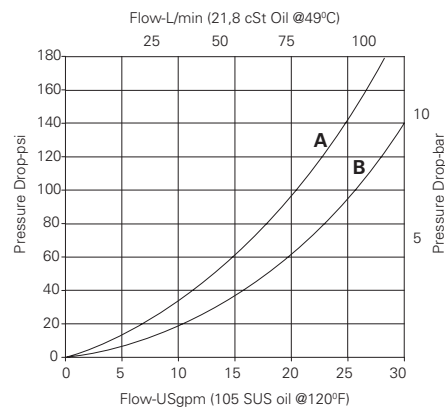
Pressure drop curves for - 16

Cartridge only



Pressure drop curves for -12

Cartridge only



A - P3 to P2

B - P3 to P4

Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS14-12/16 - Pilot to shift valve

Pilot operated, directional control valve

PTS14-12: 114 L/min (30 USgpm) • 350 bar (5000 psi)

PTS14-16: 132 L/min (35 USgpm) • 350 bar (5000 psi)

Model code

PTS14 - 12 - (V) - **** - *** - 00

1 2 3 4 5 6

1 Function

PTS14 - Pilot to shift valve

2 Size

12 - 12 size

3 Seals

Blank - Buna-N

V - Viton®

4 Port size

0 - Cartridge only

Code	Port size	Housing number	
		Aluminium fatigue rated	Steel
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	
A6G	3/4" BSPP		5991073-001
S10H	SAE 10		5991074-001
S12H	SAE 12		5991074-001

See section J for housing details.

5 Pilot to shift (nominal)

80 - 5,5 bar (80 psi)

120 - 8,3 bar (120 psi)

6 Special features

00 - None

(Only required if valve has special features, omitted if "00")

Model code

PTS14 - 16 (V) - **** - *** - 00

1 2 3 4 5 6

1 Function

PTS14 - Pilot to shift valve

2 Size

16 - 16 Size

3 Seals

Blank - Buna-N

V - Viton®

4 Port size

0 - Cartridge only

Code	Port size	Housing number	
		Aluminum light duty	Aluminium fatigue rated Steel
A12T	SAE 12	566411	
A6B	3/4" BSPP	02-175468	
A10H	SAE 10		876729
A12H	SAE 12		876731
A4G	1/2" BSPP		876728
A6G	3/4" BSPP		876730
S4G	1/2" BSPP		02-175143
S6G	3/4" BSPP		02-175144
S10T	SAE 10		02-175141
S12T	SAE 12		02-175142

See section J for housing details.

5 Pilot to shift (nominal)

80 - 5,5 bar (80 psi)

160 - 11,0 bar (160 psi)

6 Special features

00 - None

(Only required if valve has special features, omitted if "00")

Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS14-12/16 - Pilot to shift valve

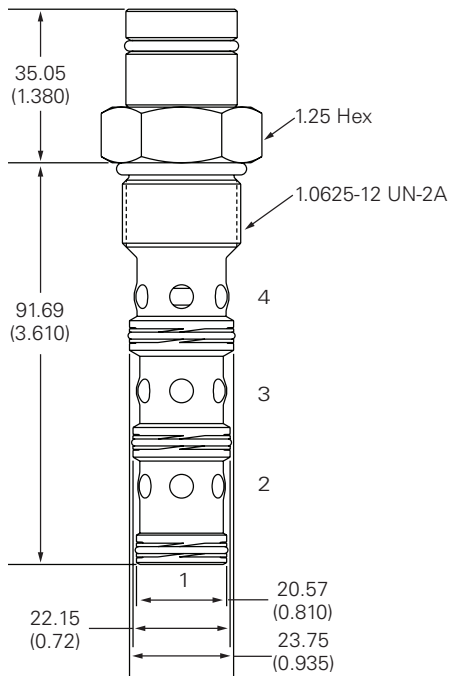
Pilot operated, directional control valve
 PTS14-12: 114 L/min (30 USgpm) • 350 bar (5000 psi)
 PTS14-16: 132 L/min (35 USgpm) • 350 bar (5000 psi)

PTS14-12

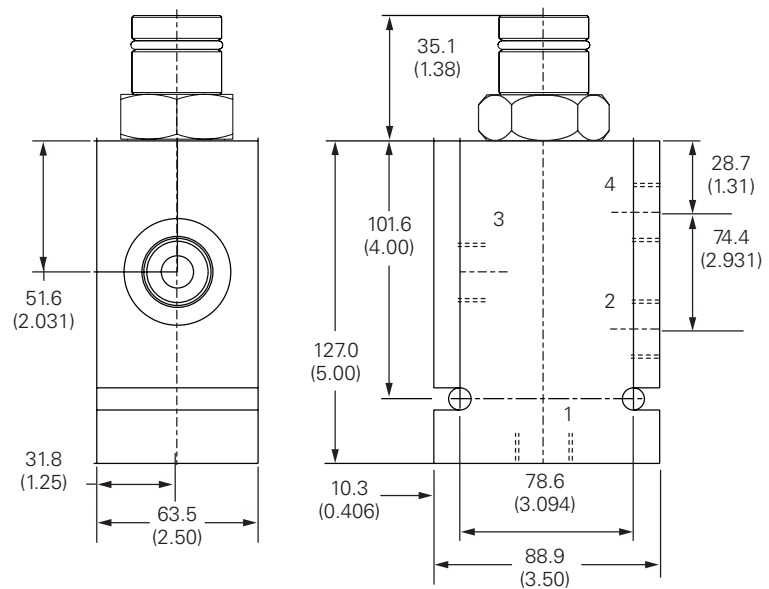
Dimensions

mm (inch)

Cartridge only

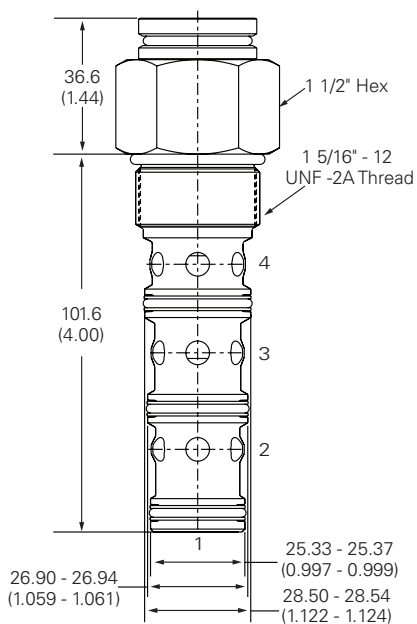


Installation drawing (steel)

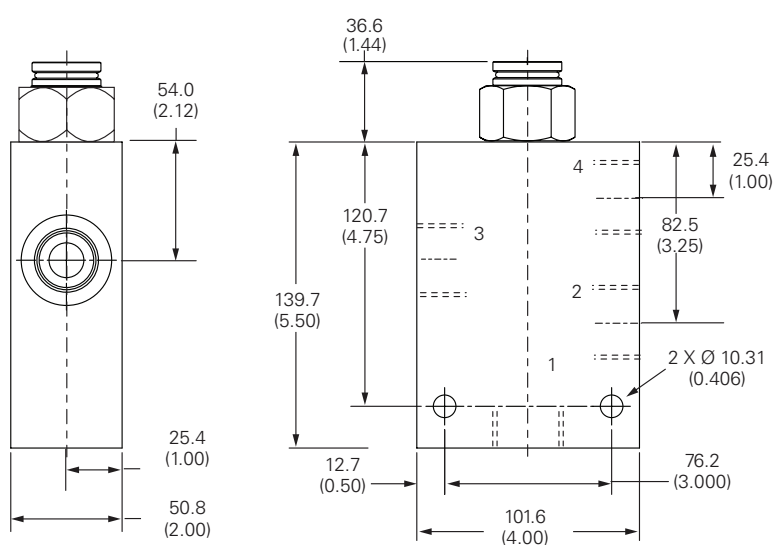


PTS14-16

Cartridge only



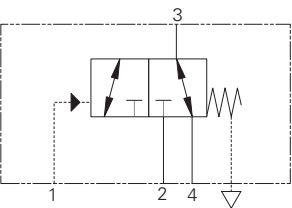
Installation drawing (steel)



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS5-16 - Pilot to shift valve

Pilot operated, directional control valve
132 L/min (35 USgpm) • 210 bar (3000 psi)



Operation

This valve allows flow between ports 3 and 4 while blocking port 2 until sufficient pressure has been applied to port 1 and the spring bias is overcome.

At this time, flow is directed between port 2 and port 3 while blocking port 4. During the cross-over transition, all ports are open. The spring chamber for this valve is externally vented to atmosphere.

Performance data

Ratings and specifications

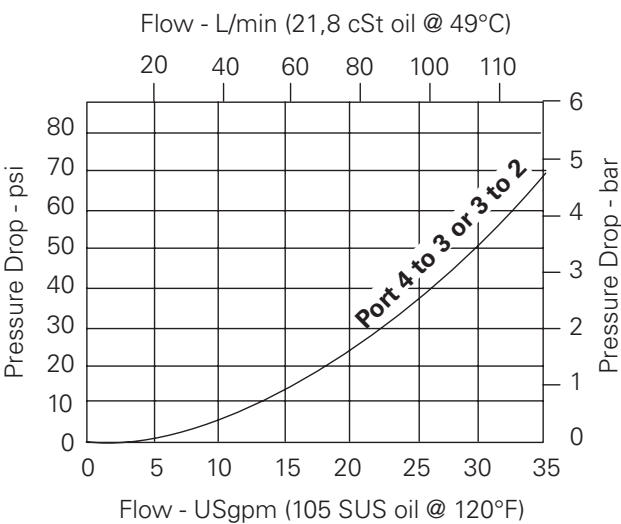
Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Rated flow	132 L/min (35 USgpm)
Internal leakage	164 cc/min (10 in ³ /min) maximum @ 210 bar (3000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Pilot pressures	40 - 2,75 bar (40 psi) 80 - 5,5 bar (80 psi) 160 - 11,0 bar (160 psi)
Pilot displacement volume	1,97 cm ³ (0.12 in ³)
Cavity	C-16-4
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 cartridge only	0,5 kg (1.12 lbs)
Seal kit	889634 (Buna-N), 889638 (Viton®)

Viton is a registered trademark of E.I. DuPont.

Pressure drop curves

Cartridge only



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS5-16 - Pilot to shift valve

Pilot operated, directional control valve
132 L/min (35 USgpm) • 210 bar (3000 psi)

Model code

PTS5 - 16 (V) - ** - *** - 00**

1 2 3 4 5 6

1 Function

PTS5 - Pilot to shift valve

2 Size

16 - 16 size

3 Seal material

Blank - Buna-N
V - Viton®

4 Port size

Code	Port size	Housing number		
		Aluminum light duty	Aluminum fatigue rated	Steel
0	Cartridge			
A12T	SAE 12	566411	—	—
A6B	3/4" BSPP	02-175468	—	—
A10H	SAE 10	—	876729	—
A12H	SAE 12	—	876731	—
A4G	1/2" BSPP	—	876728	—
A6G	3/4" BSPP	—	876730	—

See section J for housing details.

5 Pilot to shift (nominal)

40 - 2,75 bar (40 psi)
80 - 5,5 bar (80 psi)
160 - 11,0 bar (160 psi)

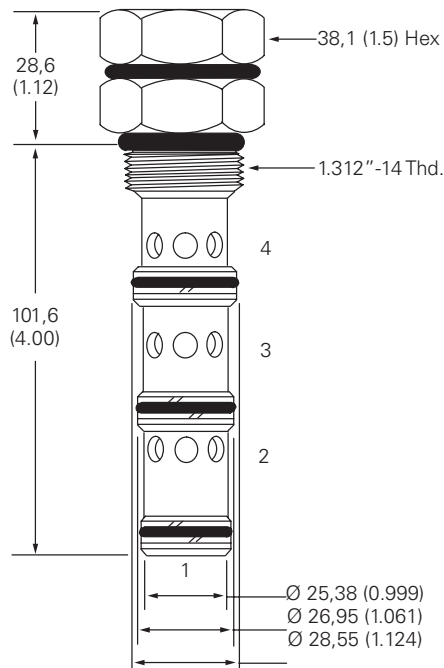
6 Special features

00 - None
(Only required if valve has special features, omitted if "00".)

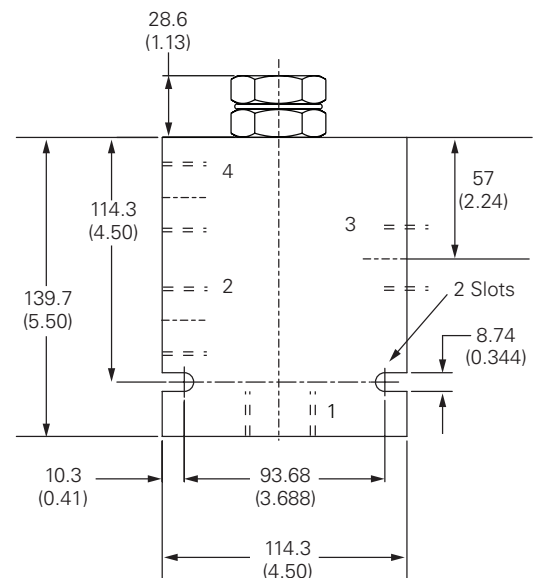
Dimensions

mm (inch)

Cartridge only



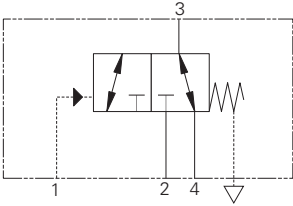
Installation drawing



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS15-16 - Pilot to shift valve

Pilot operated, directional control valve
132 L/min (35 USgpm) • 350 bar (5000 psi)



Operation

This valve allows flow between ports 3 and 4 while blocking port 2 until sufficient pressure has been applied to port 1 and the spring bias is overcome.

At this time, flow is directed between port 2 and port 3 while blocking port 4. During the cross-over transition, all ports are open. The spring chamber for this valve is externally vented to atmosphere.

Performance data

Ratings and specifications

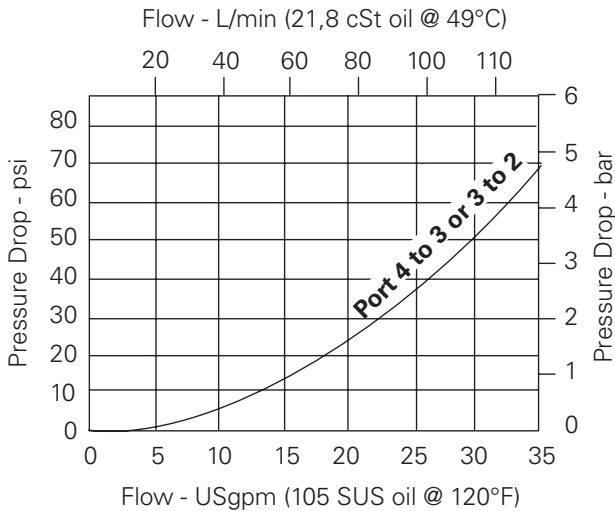
Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	132 L/min (35 USgpm)
Internal leakage	210 cc/min (13in ³ /min) @ 350 bar (5000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Pilot pressures	80 - 5,5 bar (80 psi) 160 - 11,0 bar (160 psi)
Pilot displacement volume	1,97 cm ³ (0.12 in ³)
Cavity	C-16-4
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 or Steel
Weight cartridge only	0.5 kg (1.12 lbs)
Seal kit	889634 (Buna-N), 889638 (Viton®)

Viton is a registered trademark of E.I. DuPont.

Pressure drop curves

Cartridge only



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS15-16 - Pilot to shift valve

Pilot operated, directional control valve
132 L/min (35 USgpm) • 350 bar (5000 psi)

Model code

PTS15 - 16 - (V) - ** - *** - 00**

1 2 3 4 5 6

1 Function

PTS15 - Pilot to shift valve

2 Size

16 - 16 Size

3 Seals

Blank - Buna-N

4 Port size

0 - Cartridge only

Code	Port size	Housing number		
		Aluminum light duty	Aluminum fatigue rated	Steel
A12T	SAE 12	566411		
A6B	3/4" BSPP	02-175468		
A10H	SAE 10		876729	
A12H	SAE 12		876731	
A4G	1/2" BSPP		876728	
A6G	3/4" BSPP		876730	
S4G	1/2" BSPP			02-175143
S6G	3/4" BSPP			02-175144
S10T	SAE 10			02-175141
S12T	SAE 12			02-175142

See section J for housing details.

5 Pilot to shift (nominal)

40 - 2,76 bar (40 psi)
80 - 5,5 bar (80 psi)
160 - 11,0 bar (160 psi)

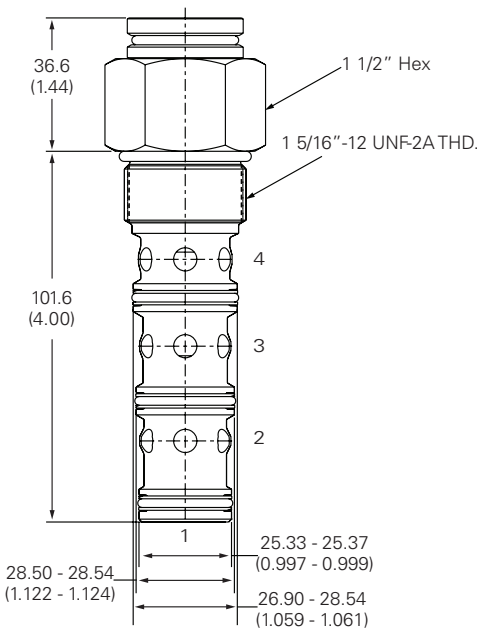
6 Special features

00 - None
(Only required if valve has special features, omitted if "00")

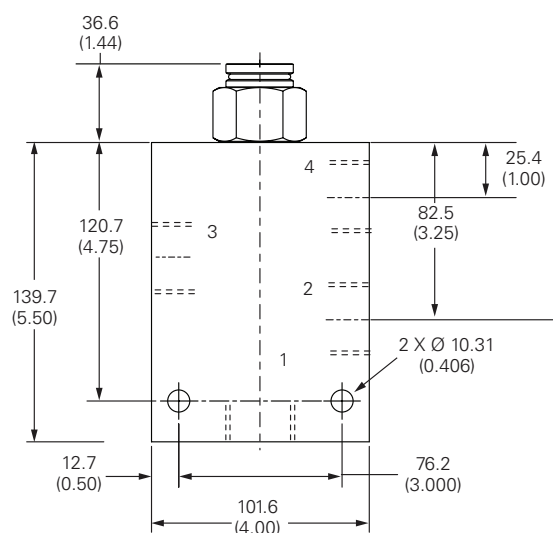
Dimensions

mm (inch)

Cartridge only



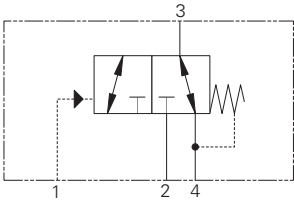
Installation drawing (steel)



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS6-16 - Pilot to shift valve

Pilot operated, directional control valve
132 L/min (35 USgpm) • 210 bar (3000 psi)



Operation

This valve allows flow between ports 3 and 4 while blocking port 2 until sufficient pressure has been applied to port 1 and the spring bias is overcome.

At this time, flow is directed between port 2 and port 3 while blocking port 4. During the cross-over transition, all ports are open. The spring chamber for this valve is vented to port 4.

Performance data

Ratings and specifications

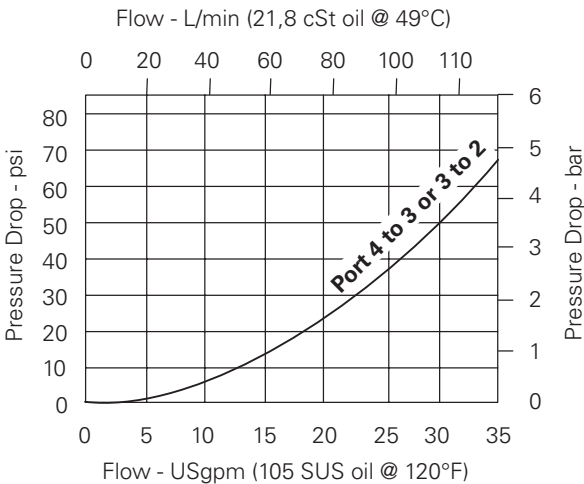
Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)

Typical application pressure (all ports)	210 bar (3000 psi)
Cartridge fatigue pressure (infinite life)	210 bar (3000 psi)
Rated flow	132 L/min (35 USgpm)
Internal leakage	164 cc/min (10 in ³ /min) maximum @ 210 bar (3000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Pilot pressures	40 - 2,75 bar (40 psi) 80 - 5,5 bar (80 psi) 160 - 11,0 bar (160 psi)
Pilot displacement volume	1,97 cm ³ (0.12 in ³)
Cavity	C-16-4
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 cartridge only	0,5 kg (1.12 lbs)
Seal kit	889634 (Buna-N), 889638 (Viton®)

Viton is a registered trademark of E.I. DuPont

Pressure drop curves

Cartridge only



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS6-16 - Pilot to shift valve

Pilot operated, directional control valve
132 L/min (35 USgpm) • 210 bar (3000 psi)

Model code

PTS6 - 16 (V) - ** - *** - 00**

1 2 3 4 5 6

1 Function

PTS6 - Pilot to shift valve

2 Size

16 - 16 size

3 Seal material

Blank - Buna-N
V - Viton®

4 Port size

Code	Port size	Housing number		
		Aluminum light duty	Aluminum fatigue rated	Steel
0	Cartridge			
A12T	SAE 12	566411	—	—
A6B	3/4" BSPP	02-175468	—	—
A10H	SAE 10	—	876729	—
A12H	SAE 12	—	876731	—
A4G	1/2" BSPP	—	876728	—
A6G	3/4" BSPP	—	876730	—

See section J for housing details.

5 Pilot to shift (nominal)

40 - 2,75 bar (40 psi)

80 - 5,5 bar (80 psi)

160 - 11,0 bar (160 psi)

6 Special features

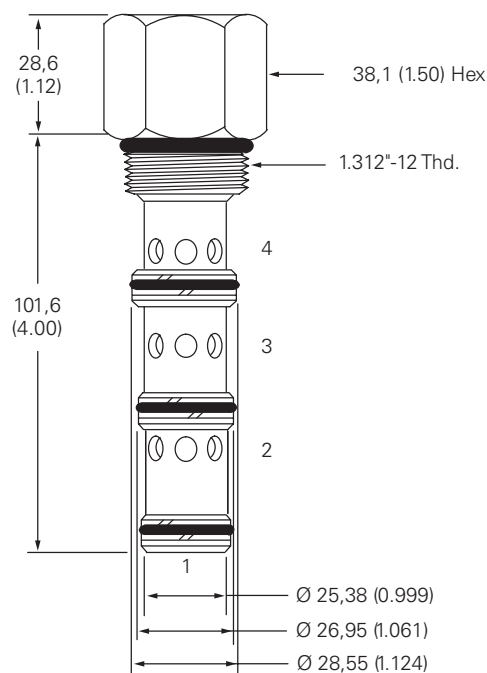
00 - None

(Only required if valve has special features, omitted if "00".)

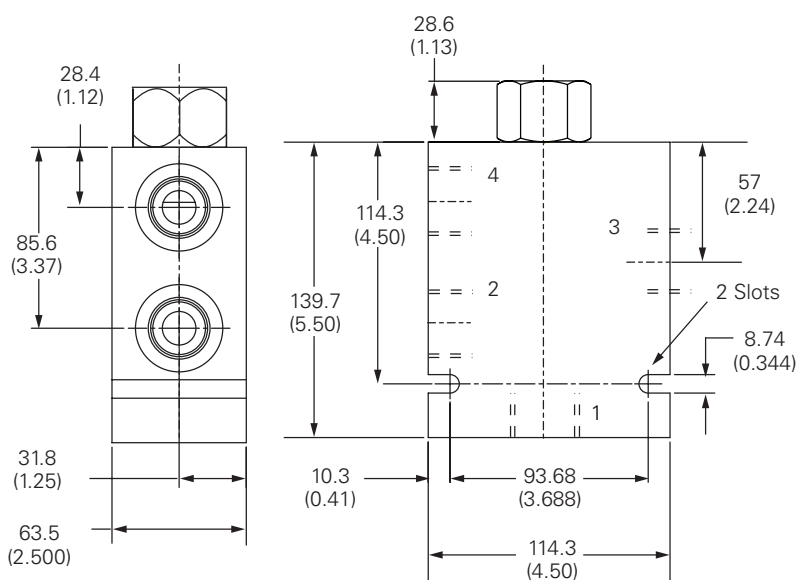
Dimensions

mm (inch)

Cartridge only



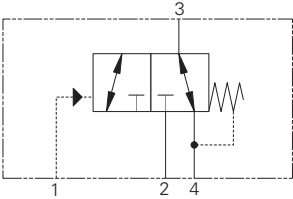
Installation drawing



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS16-16 - Pilot to shift valve

Pilot operated, directional control valve
132 L/min (35 USgpm) • 350 bar (5000 psi)



Operation

This valve allows flow between ports 3 and 4 while blocking port 2 until sufficient pressure has been applied to port 1 and the spring bias is overcome.

At this time, flow is directed between port 2 and port 3 while blocking port 4. During the cross-over transition, all ports are open. The spring chamber for this valve is vented to port 4.

Performance data

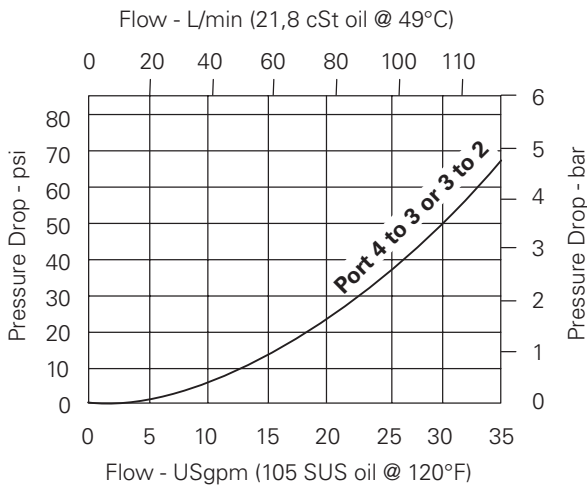
Ratings and specifications

Performance data is typical with fluid at 21,8 cSt (105 SUS) and 49°C (120°F)	
Typical application pressure (all ports)	350 bar (5000 psi)
Cartridge fatigue pressure (infinite life)	350 bar (5000 psi)
Rated flow	132 L/min (35 USgpm)
Internal leakage	210 cc/min (13in³/min) @ 350 bar (5000 psi)
Temperature range	-40° to 120°C (-40° to 248°F)
Pilot pressures	80 - 5,5 bar (80 psi) 160 - 11,0 bar (160 psi)
Pilot displacement volume	1,97 cm³ (0.12 in³)
Cavity	C-I6-4
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 or Steel
Weight cartridge only	0,5 kg (1.12 lbs)
Seal kit	889634 (Buna-N), 889638 (Viton®)

Viton is a registered trademark of E.I. DuPont.

Pressure drop curves

Cartridge only



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

PTS16-16 - Pilot to shift valve

Pilot operated, directional control valve
132 L/min (35 USgpm) • 350 bar (5000 psi)

Model code

PTS16 - 16 - (V) - * - ** - 00**

1 2 3 4 5 6

1 Function

PTS16 - Pilot to shift valve

2 Size

16 - 16 Size

3 Seals

Blank - Buna-N
V - Viton®

4 Port size

0 - Cartridge only

Code	Port size	Housing number		
		Aluminum light duty	Aluminum fatigue rated	Steel
A12T	SAE 12	566411		
A6B	3/4" BSPP	02-175468		
A10H	SAE 10		876729	
A12H	SAE 12		876731	
A4G	1/2" BSPP		876728	
A6G	3/4" BSPP		876730	
S4G	1/2" BSPP			02-175143
S6G	3/4" BSPP			02-175144
S10T	SAE 10			02-175141
S12T	SAE 12			02-175142

See section J for housing details.

5 Pilot to shift (nominal)

80 - 5,5 bar (80 psi)
160 - 11,0 bar (160 psi)

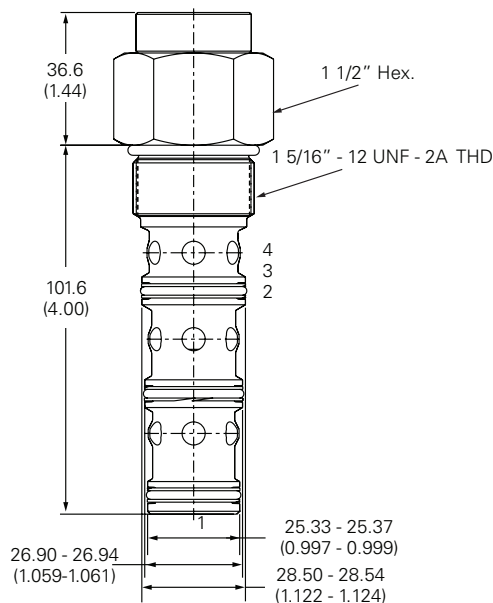
6 Special features

00 - None
(Only required if valve has special features, omitted if "00")

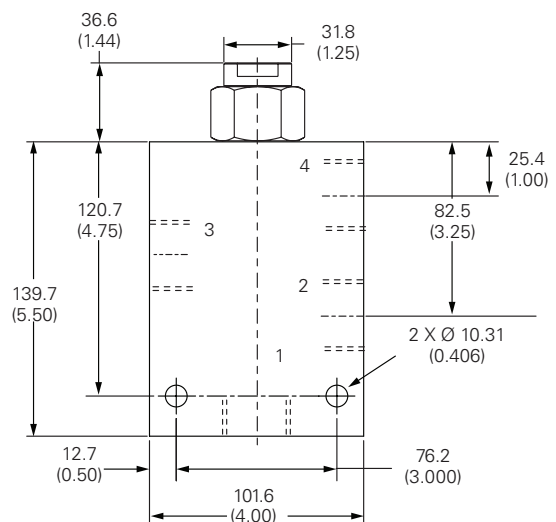
Dimensions

mm (inch)

Cartridge only



Installation drawing (steel)



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.