

DRV & DRVP Series Flow Control Valves



DRV Series
Inline Mounting

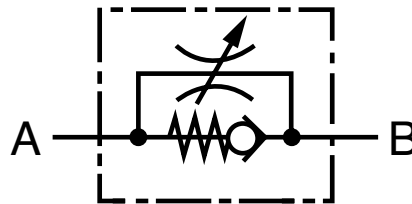


DRVP Series
Manifold Mounting

Specifications

- 5000 psi operating pressure
- 8 sizes, 1/8" - 1-1/2"
- NPTF or SAE O-Ring threaded connections, or manifold mounting
- Flows to 80 GPM
- Carbon steel housing
- FPM (Fluoroelastomer) O-Rings (standard)
- Color coded spindle for accurate flow control
- Provision for panel mounting
- Unique safety spindle design
- Temperature Range: -4° to 212°F at full pressure

Hydraulic Symbol



Model Code

DRV - 06 - 01 . X / 5 - 25 - S-M

Flow Control Valve

- DRV = Inline Mounting
- DRVP = Manifold Mounting

Nominal Sizes

Nominal Size (DRV + DRVP)	SAE (DRV only) Tube Size	Thread Size	NPTF (DRV Only) Pipe Size	Pipe OD	BSPP (DRV Only) Thread Size
06	-2	5/16-24 UNF	1/8"	0.405"	G1/8
08	-4	7/16-20 UNF	1/4"	0.540"	G1/4
10	-6	9/16-18 UNF	3/8"	0.675"	G3/8
12	-8	3/4-16 UNF	1/2"	0.840"	G1/2
16	-12	1-1/16-12 UN	3/4"	1.050"	G3/4
20	-16	1-5/16-12 UN	1"	1.315"	G1
25	-20	1-5/8-12 UN	1-1/4"	1.660"	G1 1/4
30	-24	1-7/8-12 UN	1-1/2"	1.900"	G1 1/2

Housing Material

- 01 = Carbon Steel

Modification Number

Port Configuration

- (omit) = DRVP only
- 0 = BSPP to DIN 3852, Part 2 -X
- 5 = NPTF (ANSI B1.20.3)
- 12 = SAE - SAEJ1926 Ports with ISO 725 Threads and O-Ring Sealing

Cracking Pressure

- (omit) = 7 PSI standard
- 25 = 25 PSI optional
- 65 = 65 PSI optional

Supplementary Details

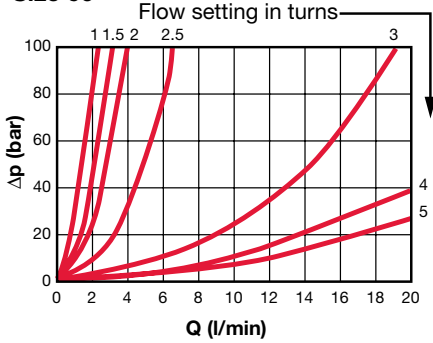
- S = Panel Mounting Kit (not available in sizes 20, 25, 30)

Model Codes containing selections listed in RED are non-standard items – Minimum quantities will apply – Contact HYDAC for information and availability
Not all combinations are available

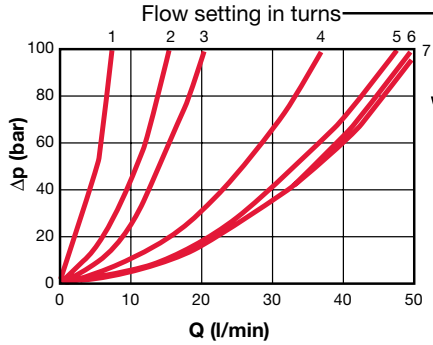
Pressure Drop Curves

Flow Direction: A to B / Throttled Flow

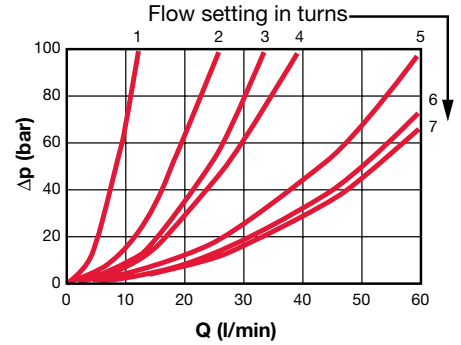
Size 06



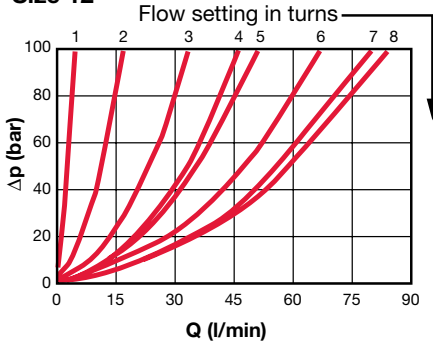
Size 08



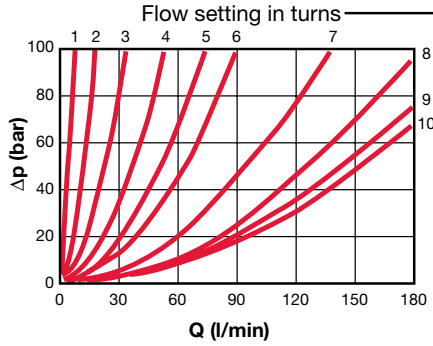
Size 10



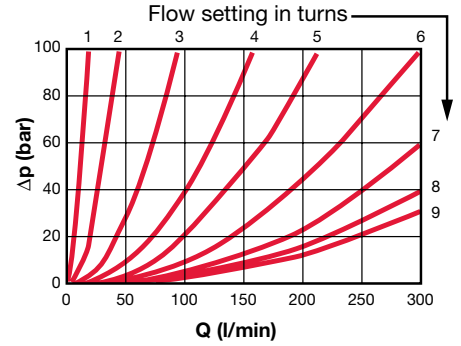
Size 12



Size 16

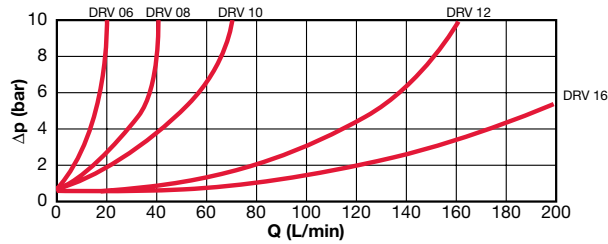


Size 20, 25, 30

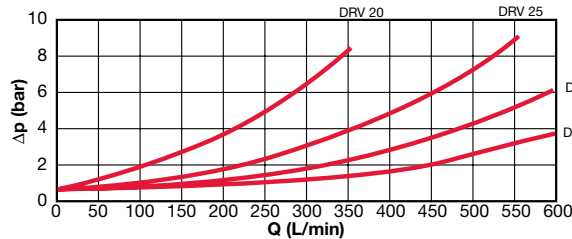


Flow Direction: B to A / Free Flow Through Check Valve

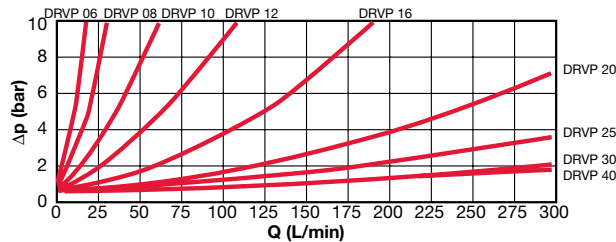
DRV-06-01.X to DRV-16-01.X



DRV-20-01.X to DRV-40-01.X



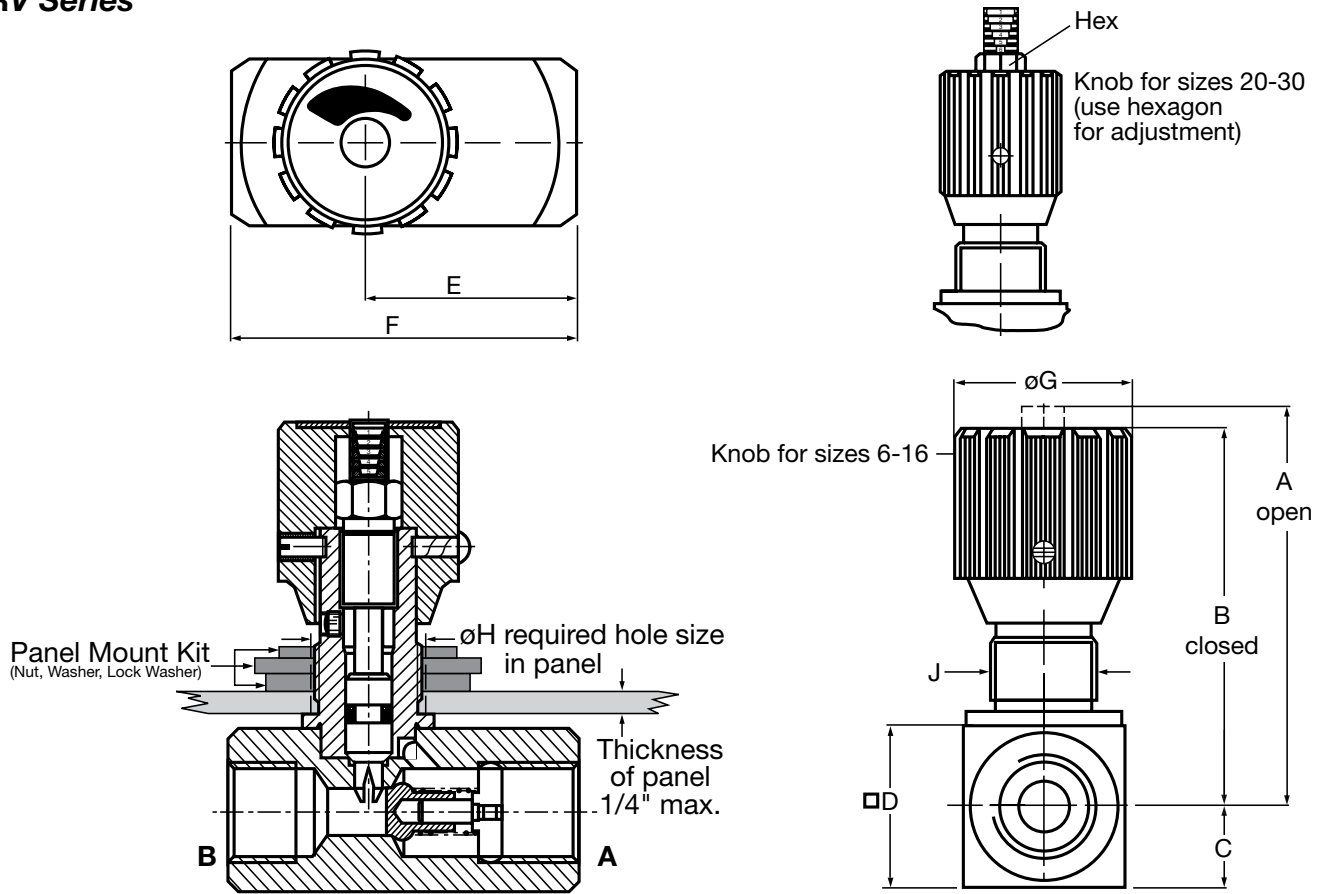
DRVP-06-01.X to DRVP-40-01.X



Pressure Drop curves were established by using mineral oil with kinematic viscosity 335 SUS at 86°F / 30°C

Dimensions

DRV Series



Model Code	Port Size NPTF	Port Size SAE	A	B	C	D	E	F	øG	øH	J ¹⁾ thread	Hex	Weight
DRV-06	1/8"	5/16-24UNF (SAE-2)	2.17 (55)	1.97 (50)	0.31 (8)	0.63 (16)	1.02 (26)	1.77 (45)	0.94 (24)	0.51 (13)	Pg 7	-	0.29 (0.13)
DRV-08	1/4"	7/16-20UNF (SAE-4)	2.84 (72)	2.56 (65)	0.49 (12.5)	0.98 (25)	1.32 (33.5)	2.17 (55)	1.14 (29)	0.75 (19)	Pg 11	-	0.66 (0.30)
DRV-10	3/8"	9/16-18UNF (SAE-6)	2.91 (74)	2.64 (67)	0.59 (15)	1.18 (30)	1.61 (41)	2.56 (65)	1.14 (29)	0.75 (19)	Pg 11	-	0.99 (0.45)
DRV-12	1/2"	3/4-16UNF (SAE-8)	3.62 (92)	3.23 (82)	0.69 (17.5)	1.38 (35)	1.73 (44)	2.87 (73)	1.50 (38)	0.91 (23)	Pg 16	-	1.76 (0.80)
DRV-16	3/4"	1 1/16-12UN (SAE-12)	4.17 (106)	3.78 (96)	0.89 (22.5)	1.77 (45)	2.24 (57)	3.46 (88)	1.50 (38)	0.91 (23)	Pg 16	-	2.87 (1.30)
DRV-20	1"	1 5/16-12UN (SAE-16)	5.71 (145)	5.04 (128)	0.98 (25)	1.97 (50)	3.03 (77)	5.00 (127)	1.93 (49)	1.50 (38)	Pg 29	3/4 (19)	5.29 (2.40)
DRV-25	1 1/4"	1 5/8-12UN (SAE-20)	5.91 (150)	5.24 (133)	1.18 (30)	2.36 (60)	3.66 (93)	5.63 (143)	1.93 (49)	1.50 (38)	Pg 29	3/4 (19)	7.72 (3.50)
DRV-30	1 1/2"	1 7/8-12UN (SAE-24)	6.10 (155)	5.43 (138)	1.38 (35)	2.76 (70)	4.25 (108)	5.63 (143)	1.93 (49)	1.50 (38)	Pg 29	3/4 (19)	10.14 (4.60)

Panel Mount Kits

Size	Model Code	Part Number
6	Kit Panel Mount DV06	00705300
8/10	Kit Panel Mount DV08	00705310
12/16	Kit Panel Mount DV12	00705302

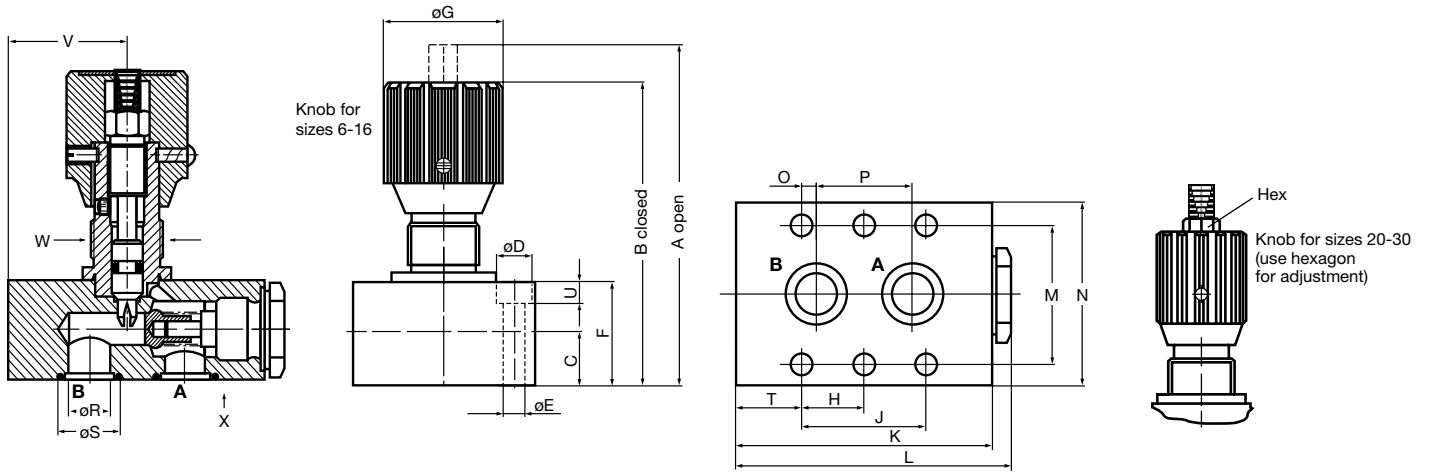
¹⁾ Pg style thread per DIN 40430

Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

Dimensions are in inches/(mm) and lbs./(kg.)

Dimensions

DRVP Series



Model Code	Nominal Size	A	B	C	øD	øE	F	øG	H ⁽¹⁾	J	K	L
DRVP-06	1/8"	2.48 (63)	2.28 (58)	0.31 (8)	0.43 (11)	0.26 (6.6)	0.63 (16)	0.94 (24)	-	7.48 (19)	1.63 (41.5)	1.81 (46)
DRVP-08	1/4"	3.11 (79)	2.83 (72)	0.39 (10)	0.43 (11)	0.26 (6.6)	0.79 (20)	1.14 (29)	-	1.378 (35)	2.50 (63.5)	2.64 (67)
DRVP-10	3/8"	3.31 (84)	3.03 (77)	0.49 (12.5)	0.43 (11)	0.26 (6.6)	0.98 (25)	1.14 (29)	-	1.319 (33.5)	2.76 (70)	2.91 (74)
DRVP-12	1/2"	4.17 (106)	3.78 (96)	0.63 (16)	0.43 (11)	0.26 (6.6)	1.26 (32)	1.50 (38)	-	1.496 (38)	3.15 (80)	3.33 (84.5)
DRVP-16	3/4"	5.04 (128)	4.65 (118)	0.89 (22.5)	0.55 (14)	0.35 (9)	1.77 (45)	1.50 (38)	1.496 (38)	2.992 (76)	4.09 (104)	4.31 (109.5)
DRVP-20	1"	6.69 (170)	6.02 (153)	0.98 (25)	0.55 (14)	0.35 (9)	1.97 (50)	1.93 (49)	1.870 (47.5)	3.740 (95)	5.00 (127)	5.24 (133)
DRVP-25	1 1/4"	6.89 (175)	6.22 (158)	1.08 (27.5)	0.71 (18)	0.45 (11.5)	2.16 (55)	1.93 (49)	2.362 (60)	4.744 (120.5)	6.50 (165)	6.77 (172)
DRVP-30	1 1/2"	7.68 (195)	7.01 (178)	1.48 (37.5)	0.79 (20)	0.55 (14)	2.95 (75)	1.93 (49)	2.815 (71.5)	5.630 (143)	7.32 (186)	7.72 (196)

Model Code	Nominal Size	M	N	O	P	øR	øS	T	U	V	W ⁽²⁾ thread	Hex	Weight
DRVP-06	1/8"	1.122 (28.5)	1.63 (41.5)	0.63 (1.6)	0.630 (16)	0.20 (5)	0.382 (9.7)	0.252 (6.4)	0.28 (7)	0.53 (13.5)	Pg 7	-	0.57 (0.26)
DRVP-08	1/4"	1.319 (33.5)	1.81 (46)	0.189 (4.8)	1.004 (25.5)	0.28 (7)	0.500 (12.7)	0.559 (14.2)	0.28 (7)	1.22 (31)	Pg 11	-	1.10 (0.50)
DRVP-10	3/8"	1.496 (38)	2.01 (51)	0.157 (4)	1.004 (25.5)	0.39 (10)	0.614 (15.6)	0.709 (18)	0.28 (7)	1.16 (29.5)	Pg 11	-	1.76 (0.80)
DRVP-12	1/2"	1.752 (44.5)	2.26 (57.5)	0.157 (4)	1.181 (30)	0.51 (13)	0.732 (18.6)	0.827 (21)	0.28 (7)	1.44 (36.5)	Pg 16	-	2.42 (1.10)
DRVP-16	3/4"	2.126 (54)	2.76 (70)	0.433 (11)	2.126 (54)	0.67 (17)	0.965 (24.5)	0.551 (14)	0.35 (9)	1.93 (49)	Pg 16	-	5.51 (2.50)
DRVP-20	1"	2.362 (60)	3.01 (76.5)	0.748 (19)	2.244 (57)	0.87 (22)	1.201 (30.5)	0.630 (16)	0.35 (9)	1.93 (49)	Pg 29	3/4 (19)	8.60 (3.90)
DRVP-25	1 1/4"	2.992 (76)	3.94 (100)	0.811 (20.6)	3.130 (79.5)	1.12 (28.5)	1.472 (37.4)	0.591 (15)	0.43 (11)	3.03 (77)	Pg 29	3/4 (19)	14.77 (6.70)
DRVP-30	1 1/2"	3.622 (92)	4.53 (115)	0.937 (23.8)	3.740 (95)	1.38 (35)	1.709 (43.4)	0.591 (15)	0.51 (13)	3.35 (85)	Pg 29	3/4 (19)	24.25 (11.0)

1) Only 4 mounting holes are used on sizes 06, 08, 10, & 12

2) Pg style thread per DIN 40430

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Dimensions are in inches/(mm) and lbs./(kg.)