

APPLICATIONS:




As oil or water dump valves on separators, treaters, knock-outs, and other similar liquid accumulators. Designed for high pressure erosive service.

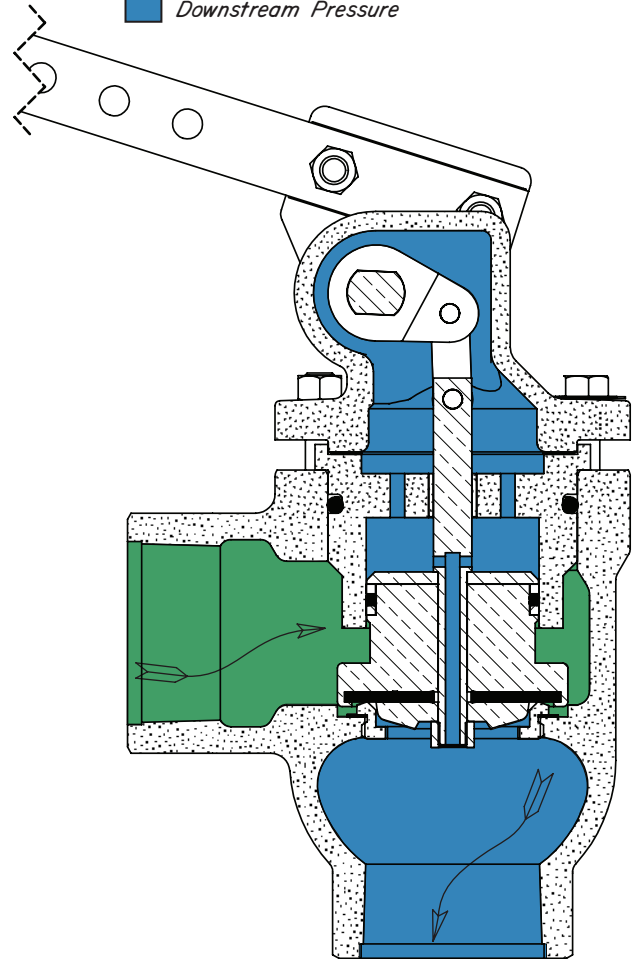
FEATURES:

- Class VI shut off
- Teflon packed, rotary stuffing box
- All internal parts can easily be removed with valve in line

CERTIFICATIONS:

Canadian Registration Number (CRN):
0C16234.24567890NTY (Ductile)
Kimray is an ISO 9001- certified manufacturer

-  Stem and Seat Assembly
-  Separator Fluid pressure
-  Downstream Pressure



Standard Configuration Code †	Order Code	Line Size	Connection Type	Body Type	Inner Valve Size	Max Δ P psig	Max. W.P. psig ††	Cv	Cf
DLP2SAADFLS	CAZ	2"	NPT	Angle	2"	250	500	47.0	0.75
DLP2SATDFLS	CXA5			Thru	1 1/2"			22.7	
DLP2ARADFLS	CGU			Angle	2"			47.0	
DLP2ARADFLS	CAK			150RF	250				
DLP3SAADFLS	CVA	3"	NPT	Angle	3"	250	500	89.0	
DLP3ARADFLS	CVB			150RF	250				

NOTES:

For standard & optional seals, metals, Cf Cv values, material specifications & dimensions see technical data on pages 03:1 - 03:VI

† For Corrosive service remove last "S" & replace with "C"

† For code builder see page 03:00.2

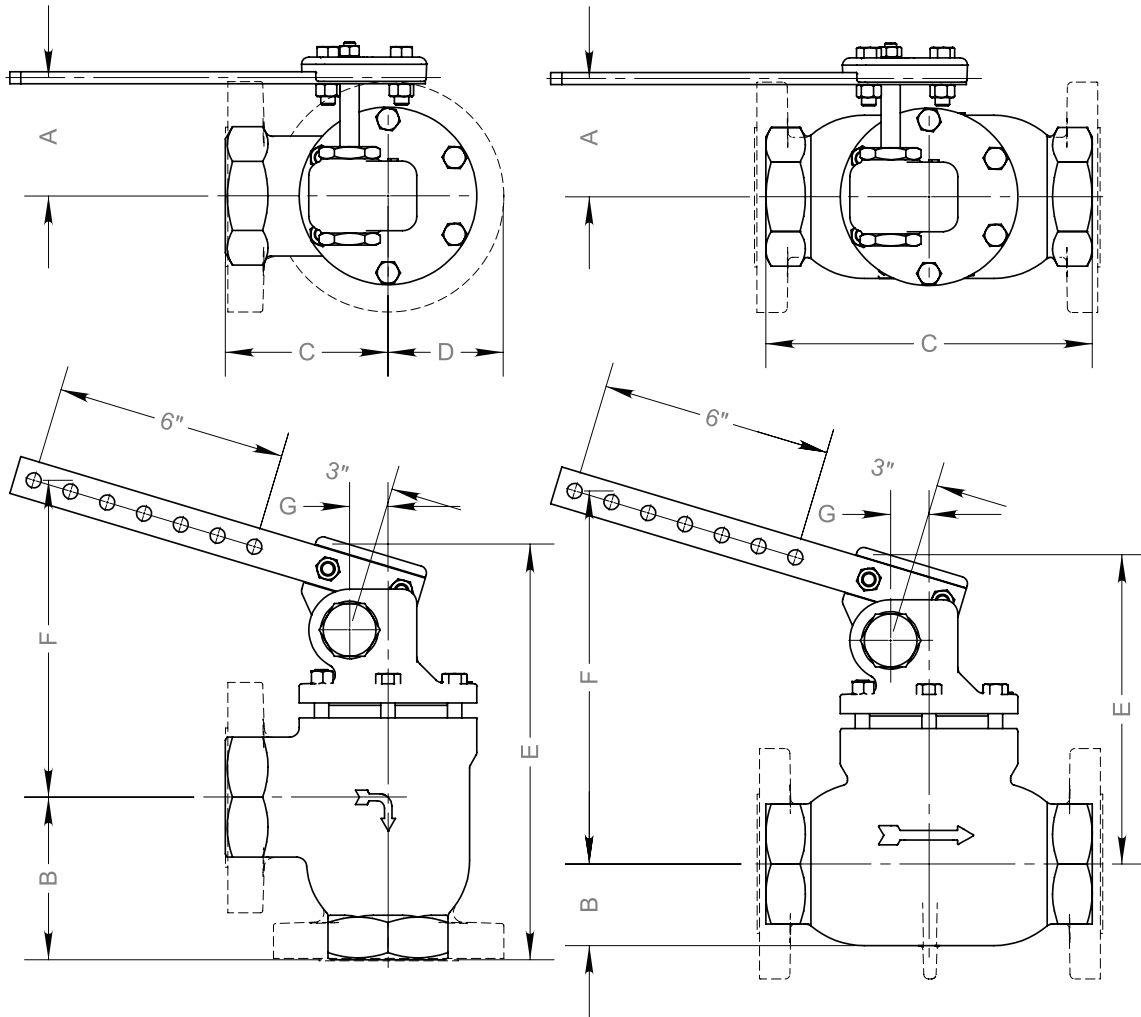
†† Max W.P. values based on -20°F to 100°F.

ITEM	QTY.	DESCRIPTION	PART NO.				
			STANDARD		CORROSIVE		
			2 INCH	3 INCH	2 INCH only		
1	1	O-Ring	* 154HSNPS	491HSNPS	154HSNPS		
2	1	Stuffing Box	7661	7593	7661S6		
3	2	O-Ring	* 2131HSN	5226HSN	2131HSN		
4	1	Bushing	* 7660	7592	7660		
5	(Qty)	Bolt	833 (4)	833 (5)	833 (4)		
6	2	Link Pin w/ Snap Ring (kit includes Snap Rings only)	◇ *	316	317	316SS6	
7	1	Packing	* 7662	355	7662		
8	1	Trunnion Plug	7522	7523	7522S6		
9	1	Shaft	Old Style	7404	7408	7404S6	
			New Style	7609	7610	7609S6	
10	1	Lever Bar	Standard	340		340	
			Optional	16 inches	340L16		340L16
				20 inches	340L20		340L20
				24 inches	340L24		340L24
				30 inches	340L30		340L30
				36 inches	340L36		340L36
11	2	Bolt	247		247		
12	2	Nut	241		241		
13	1	Lever Hub	7600	7601	7600		
14	1	Piston	Full Port	◇	6787S6	7138	6787S6
			Reduced	◇	7557	----	7557S6
15	2	Back Up	Full Port	◇ *	1458	772	1458
			Reduced	◇ *	7558	----	7558
16	1	O-Ring	Full Port	◇ *	774QHSN	329HSN	774QHSN
			Reduced	◇ *	808HSN	----	808HSN
17	1	Seal Retainer	Full Port	◇	5205	5206SS6	5205SS6
			Reduced	◇	----	----	----
18	1	O-Ring	◇ *	329HSN	330HSN	329HSN	
19	1	Stem	◇	7589	7887	7589SS6	
20	2	Link	◇	318SS6	319SS6	318SS6	
21	1	Bonnet		7164	296	7164 ‡	
22	1	Trunnion Hub	Old Style	◇	7403	7407	7403S6
			New Style		7613S6	7614S6	7613S6
23	(Qty)	Stud		5108 (2)	5108 (1)	5108	
24	2	Nut		5109 (2)	5109 (1)	5109	
25	(Qty)	Gasket	◇ *	5199	5223	5199	
26	1	Cylinder	Full Port	◇	6785	7137	6785
			Reduced	◇	7556	----	7556
27	1	Body					
		NPT Angle		6786	7139	6786 ‡	
		NPT Thru		7163	----	7163 ‡	
		Flanged Angle		7655	7319	7655	
28	1	Seat	Full Port	◇ *	311HSN	165HSN	311HSN
			Reduced	◇ *	7498HSN	----	7498HSN
29	1	Gasket	◇ *	276	277	276	
30	1	Removable Seat	Full Port	◇	6789	7140	6789
			Reduced	◇	7554	----	7554
31	1	Ratio Plug	Full Port	◇	177SS6	178	177SS6
			Reduced	◇	7553	----	7553S6
32	1	Lock Nut	◇ *	173SS6	906	173SS6	
33	1	Set Screw		7608		7608	
34	2	Lifting Ring (not shown)		----	7559	----	
				‡ Coated Parts available with "E" shell material			
Plug Assemblies		Full Port	CLC	CLD	CLCS6		
		Reduced	CLC5	----	CLC5S6		
				◇ These parts are stocked as Plug Assemblies.			
Repair Kits				RUV	RVU	RUV	

* These parts are recommended spare parts and are stocked as repair kits.

Table 1 - Flow Coefficient(Cv) for Lever Operated Dump Valves													
Line Size	Trim Size in. (mm)	Trim Type	Cf	Valve Opening Percentage									
				10	20	30	40	50	60	70	80	90	100
LD - Diaphragm Balanced													
2"	1 1/2 in (38mm)	Linear (Nominal)	0.79	5.0	8.5	11.7	14.6	17.0	19.0	20.5	21.6	22.6	23.3
3"	2 1/4 in (57 mm)		0.79	6.7	11.1	15.6	20.3	24.8	29.2	33.4	37.2	40.7	43.8
4"	3 in (76 mm)		0.79	12.0	18.9	25.8	32.8	39.9	46.9	53.7	60.0	65.7	70.1
6"	4.88 in (124 mm)		0.79	14.2	21.0	31.6	61.2	98.3	139.0	179.7	217.6	250.2	277.0
LP - Piston Balanced Throttling													
2"	1 1/2 in (38mm)	Linear (Nominal)	0.75	3.5	5.0	7.4	9.6	11.8	13.9	16.2	18.4	20.4	22.7
	2 in (51 mm)		0.75	6.6	12.3	18.4	24.2	29.5	34.1	38.0	41.2	44.0	47.0
3"	3 in (76 mm)		0.75	12.7	18.7	29.0	41.0	52.9	63.4	71.9	78.4	83.7	89.0
LB - Piston Balanced													
2"	2 in (51 mm)	Linear (Nominal)	0.79	5.0	8.5	11.7	14.6	17.0	19.0	20.5	21.6	22.6	23.3
3"	3 in (76 mm)		0.79	6.7	11.1	15.6	20.3	24.8	29.2	33.4	37.2	40.7	43.8
4"	4 in (76 mm)		0.79	12.0	18.9	25.8	32.8	39.9	46.9	53.7	60.0	65.7	70.1

Kimray flow equations conform to ANSI/ISA - 75.01.01-2002
 Kimray inherent flow characteristics conform to ANSI/ISA 75.11.01 -1985



LINE SIZE	MATERIAL	BODY TYPE & END CONNECTION	A	B	C	D	E	F	G
2 in	DUCTILE	NPT / ANGLE	3 3/4 in	4 1/4 in	4 1/4 in	2 5/16 in	11 in	7 15/16 in	1 in
		NPT / THRU	3 11/16 in	2 1/8 in	8 1/2 in	2 5/16 in	8 3/16 in	9 3/8 in	1 in
		FLANGED / ANGLE	3 11/16 in	4 1/4 in	4 1/4 in	3 in	8 3/16 in	9 3/8 in	1 in
3 in	DUCTILE	NPT / ANGLE	3 3/4 in	6 1/8 in	5 1/2 in	3 1/16 in	14 1/16 in	10 1/4 in	1 3/8 in
		FLANGED / ANGLE	3 3/4 in	5 1/2 in	5 1/2 in	3 3/4 in	13 3/16 in	10 1/4 in	1 3/8 in

FLANGE DIMENSIONS ARE ANSI 125/150 STANDARD.

Table 2 - Seal Options Dump Valves		
Part	Standard Material	Optional Material
O-rings	HSN	FKM
Diaphragm	HSN	FKM
Seat	HSN	FKM

Table 3 - Seal Options Trunnion Assemblies		
Part	Standard Material	Optional Material
O-rings	HSN	FKM

Table 4 - Seal Specifications			
		HIGHLY SATURATED NITRILE	FKM
Kimray Suffix		HSN	V
Resistance	Abrasion	G-E	G
	Acid	G-E	G-E
	Chemical	F	E
	Cold	G	P
	Flame	P	E
	Heat	E	E
	Oil	E	E
	Ozone	G	G-E
	Set	G	G-E
	Tear	F	F
	Water/Steam	E	P
	Weather	G	E
	CO2	G	G
	H2S	F	P
Methanol	E	P	
Properties	Dynamic	G	G
	Electrical	F	F
	Impermeability	G	G
	Tensile Strength	G-E	G
Temp. Range		-20° to +300°F	-15° to +400°F
		-29° to +149°C	-26° to +204°C
RATINGS: P-POOR, F-FAIR, G-GOOD, E-EXCELLENT			

Table 5 - Material Options Diaphragm Balanced Dump Valves		
Part Description	Standard Material	Corrosive Material
Body	Ductile (ASTM A395)	Ductile (ASTM A395) + Kimcoat
Ratio Plug	2 & 3 inch Delrin (ASTM D4181), 4 & 6 inch Ductile (ASTM A395)	316SS (ASTM A351)
Cage	2 & 3 inch Delrin (ASTM D4181), 4 & 6 inch Ductile (ASTM A395)	316SS (ASTM A351)
Stuffing Box	2 & 3 inch 303SS (ASTM A582), 4 & 6 inch Brass (ASTM B-16)	316SS (ASTM A479)
Bonnet	Ductile (ASTM A395)	Ductile (ASTM A395) + Kimcoat
Seat Disc	4 & 6 inch Ductile (ASTM A395)	4 inch 316SS (ASTM A351)
Stem	2, 3 & 4 inch 303SS (ASTM A582), 6 inch 316SS (ASTM A213)	316SS (ASTM A351)

Table 6 - Material Options Piston Balanced Throttling Dump Valves		
Part Description	Standard Material	Corrosive Material
Body	Ductile (ASTM A395)	Ductile (ASTM A395) + Kimcoat
Ratio Plug Full Port	2 inch 316 Powder Metal (ASTM 316-N1-25), 3 inch Powder Metal (F-008)	316 Powder Metal (ASTM 316-N1-25)
Stuffing Box	303SS (ASTM A582)	316SS (ASTM A479)
Bonnet	Ductile (ASTM A395)	Ductile (ASTM A395) + Kimcoat
Stem	303SS (ASTM A582)	316SS (ASTM A484)
Piston	2 inch 316SS (ASTM A484) , 2 inch reduced & 3 inch 303SS (ASTM A582)	316SS (ASTM A484)
Cylinder	303SS (ASTM A582)	316SS (ASTM A484)

Table 7 - Material Options Piston Balanced Dump Valves		
Part Description	Standard Material	Corrosive Material
Body	Ductile (ASTM A395)	Ductile (ASTM A395) + Kimcoat
Ratio Plug	2 & 3 inch Delrin (ASTM D4181), 4 inch Ductile (ASTM A395)	316SS (ASTM A351)
Cage	Ductile (ASTM A395)	316SS (ASTM A351)
Stuffing Box	2 & 3 inch 303SS (ASTM A582), 4 inch Brass (ASTM B-16)	316SS (ASTM A479)
Bonnet	Ductile (ASTM A395)	Ductile (ASTM A395) + Kimcoat
Seat Disc	4 inch Ductile (ASTM A395)	4 inch 316SS (ASTM A351)
Stem	303SS (ASTM A582)	316SS (ASTM A479)
Piston	316SS (ASTM A351)	316SS (ASTM A351)
Cylinder	2 & 3 inch 303SS (ASTM A582), 4 inch 316SS (ASTM A351)	316SS (ASTM A249)

Table 8 - Material Options Trunion Assemblies		
Part Description	Standard Material	Corrosive Material
Bonnet	Ductile (ASTM A395)	
Plate	Steel SA515 Grade 70 Plate	
Stuffing Box	Brass B-16 C-36000 HO2	316SS (ASTM A479)
Union Nut	Ductile (ASTM A395)	
Weld Neck	Schedule 100 Pipe ASTM A-106 grade C	

LIQUID DUMP VALVES LEVER OPERATED



CODE BUILDER D SERIES

Series:

D = Dump Valve

Model:

LD = Lever Operated Diaphragm Balanced
 LP = Lever Operated Piston Balanced Throttle (2 & 3 inch only)
 LB = Lever Operated Piston Balanced

Line Size:

2 = 2 NPS
 3 = 3 NPS
 4 = 4 NPS
 6 = 6 NPS

End Connection:

SA = FNPT (2 & 3 NPS only)
 AR = 150RF

Body Type:

A = Angle
 T = Thru

Shell Material:

D = Ductile Iron
E = Ductile Iron w/Coating

Inner Valve Size:

F = Full Port
 R = Reduced Port (LP only)

Actuator:

L = Lever Operated

Service Type:

S = Standard
 C = Corrosive

D LD 2 SA A D F L S

Options: Additional cost and lead times will apply
 If multiple options required input in sequential order
 Leave blank if no options required

1 = NACE Certification (Corrosive Option Only)
 2 = Hydrostatic Test Certification
 3 = MTR (Shell Components)
 H = HSN Elastomers
 V = FKM Elastomers
 X = Export (Hydrostatic test, MTR & 3.1)

Not all selections available on all products listed.
 See product pages 03:10.1 - 03:20.7 for available options