



BALANCED MOTOR VALVES

DIAPHRAGM BALANCED PRESSURE OPEN

APPLICATIONS:

As oil or water valve for separators, meters, water knock-outs where a reduced signal pressure is available.

FEATURES:

- Diaphragm balanced single seat.
- 10 psig minimum diaphragm pressure.
- Reinforced oil resistant synthetic rubber diaphragms and seats.
- Easy to service and repair.
- Available for pressure opening or pressure closing service.

SUPPLY PRESSURE:





10 to 100 psig.

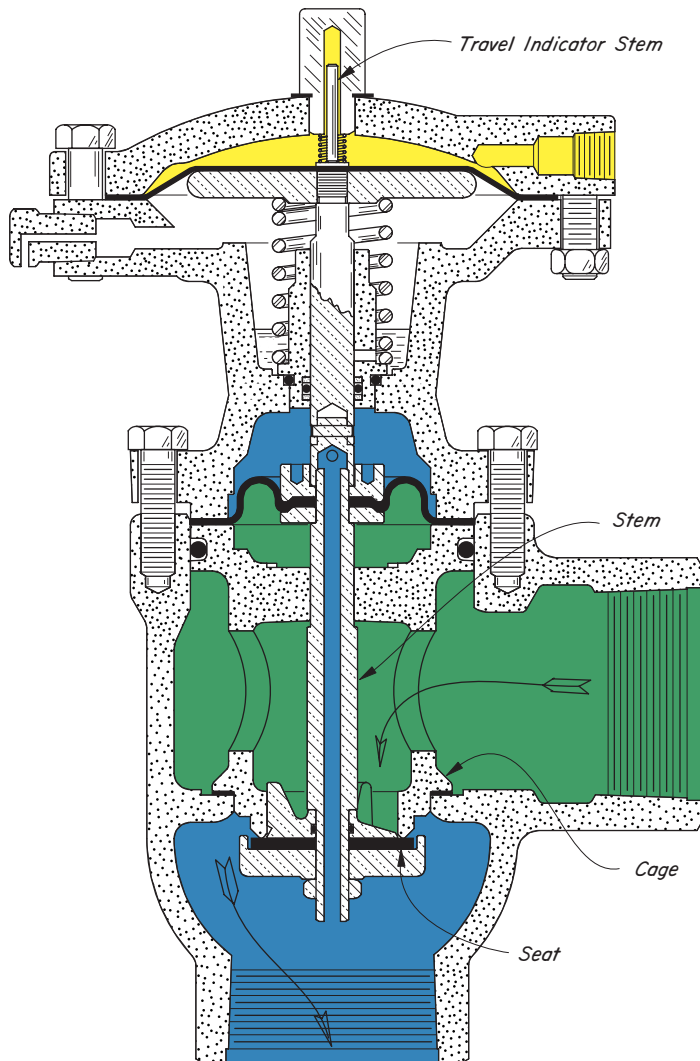
OPERATION TEMPERATURE:

Standard - 225°F. Max.
Heat Modified - 350°F. Max.

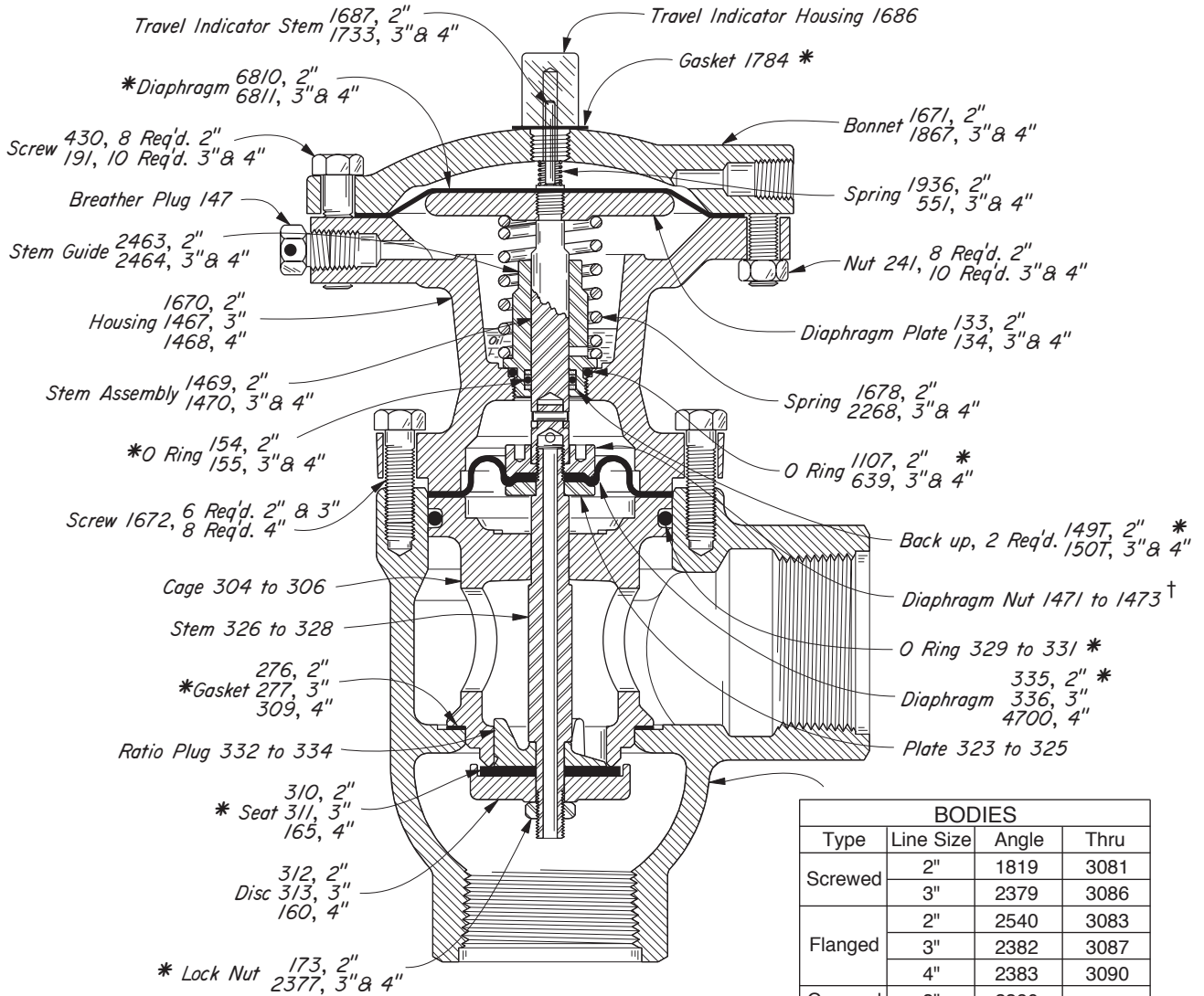
CAPACITY:

Refer to Table of Contents.

-  Stem and Seat Assembly
-  Motor Valve Diaphragm Pressure
-  Upstream Pressure
-  Downstream Pressure



**DIAPHRAGM BALANCED PRESSURE OPEN
DUCTILE IRON**



BODIES			
Type	Line Size	Angle	Thru
Screwed	2"	1819	3081
	3"	2379	3086
Flanged	2"	2540	3083
	3"	2382	3087
	4"	2383	3090
Grooved	3"	2380	-----

ANGLE VALVES AVAILABLE:

CAT. NO.	SIZE TYPE	MOTOR VALVE	OPER. PRES.	MAX W.P.	KIT
EKI	2" SCRD.	212 SMA DB PO-D w/TI	125	400	RFL
EKK	2" FLGD.	212 FMA DB PO-D w/TI	125	250	RFL
EKO	3" SCRD.	312 SMA DB PO-D w/TI	125	250	RFR
EKQ	3" FLGD.	312 FMA DB PO-D w/TI	125	250	RFR
EKS	3" GRVD.	312 GMA DB PO-D w/TI	125	250	RFR
EKU	4" FLGD.	412 FMA DB PO-D w/TI	125	250	RFW

THRU VALVES AVAILABLE:

CAT. NO.	SIZE TYPE	MOTOR VALVE	OPER. PRES.	MAX W.P.	KIT
EXI	2" SCRD.	212 SMT DB PO-D w/TI	125	400	RFL
EXK	2" FLGD.	212 FMT DB PO-D w/TI	125	250	RFL
EXO	3" SCRD.	312 SMT DB PO-D w/TI	125	250	RFR
EXQ	3" FLGD.	312 FMT DB PO-D w/TI	125	250	RFR
EXU	4" FLGD.	412 FMT DB PO-D w/TI	125	250	RFW

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

†To remove Diaphragm Nut 1471, use Spanner Wrench 1471SNW. To remove Diaphragm Nut 1472, use Spanner Wrench 1472SNW. Spanner Wrench not required, for removal of Diaphragm Nut 1473.
For dimensions refer to Table of Contents.

NOTE: Cage and removable hard seat is available on new valves at extra cost. Refer to Table of Contents for Cage and Hard Seats available. When ordering specify valve model, then add "with removable seat."



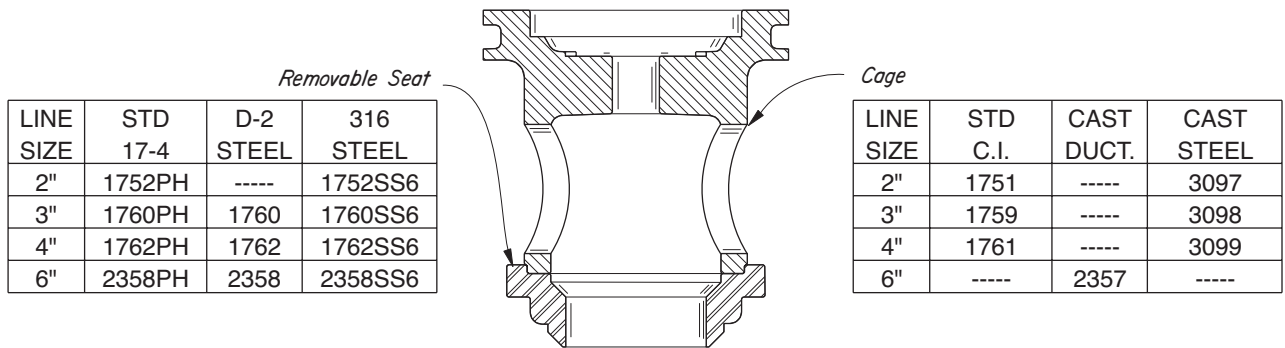
LIQUID CAPACITY CHARTS

300 psig Maximum W.P. Valves

CAPACITY-Bbbls. Water/Day, Steady Flow

PRESSURE DROP ACROSS VALVE PSIG	VALVE SIZE - INCHES			
	2	3	4	6
1	800	1,500	2,400	9,500
2	1,150	2,100	3,400	13,450
3	1,400	2,600	4,150	16,450
4	1,600	3,000	4,800	19,000
5	1,800	3,350	5,350	21,250
10	2,550	4,750	7,600	30,050
15	3,100	5,800	9,300	36,800
20	3,600	6,700	10,750	42,500
30	4,400	8,200	13,150	52,000
40	5,100	9,500	15,200	60,050
50	5,700	10,600	16,950	67,150
60	6,250	11,600	18,600	73,550
70	6,750	12,550	20,100	79,450
80	7,200	13,400	21,450	84,950
90	7,650	14,200	22,750	90,100
100	8,050	15,000	24,000	94,950
120	8,850	16,400	26,300	104,050
140	9,550	17,750	28,400	112,350
160	10,200	18,950	30,350	120,150
180	10,800	20,100	32,200	127,400
200	11,400	21,200	33,950	134,300
220	11,950	22,200	35,600	140,850
240	12,500	23,200	37,200	147,150
260	13,000	24,150	38,700	153,150
280	13,500	25,050	40,150	158,900
300	13,950	25,950	41,550	164,500
325	14,500	27,000	43,250	171,200
350	15,050	28,050	44,900	177,700
375	15,600	29,000	46,500	183,900
400	16,100	29,950	48,000	189,950

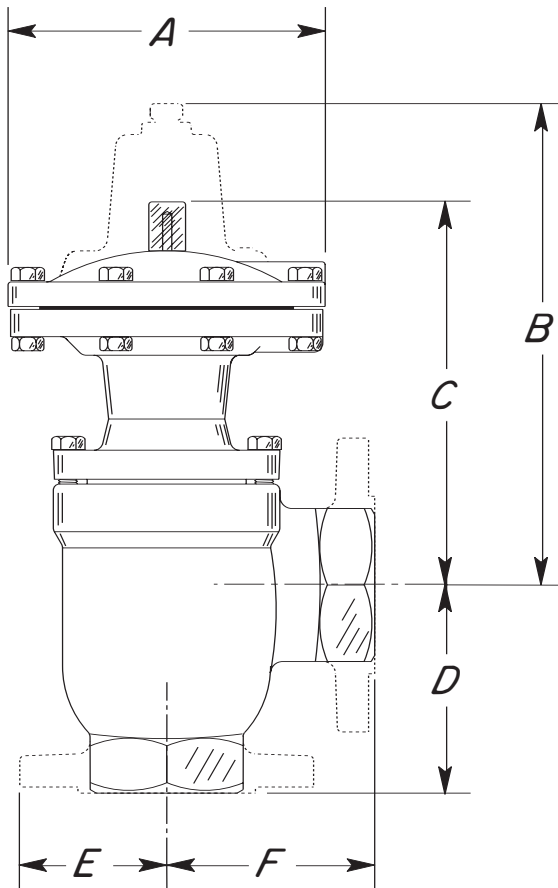
For gravity correction, multiply the above figures by $\sqrt{\frac{1}{G}}$
 Where "G" is the specific gravity of the flowing liquid.
 NOTE: Flow rates are for steady flow conditions
 over a 24 hour period. Corrections should be made
 to deal with intermittent flow conditions.



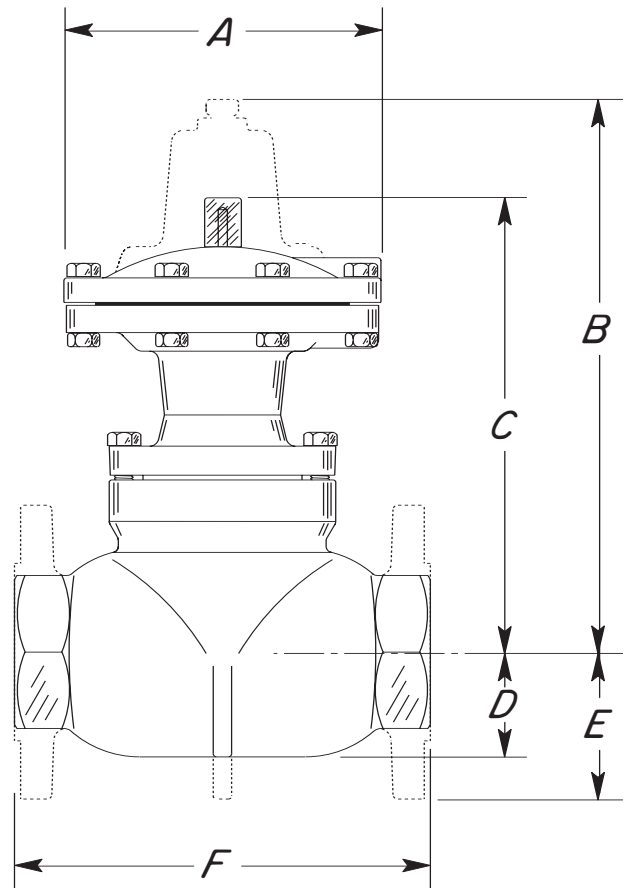
NOTES:

Removable seat and cage is standard in Piston Balanced Motor Valves. But is optional in Diaphragm Balanced Motor Valve. To order specify valve model, then add "with removable seat."

ANGLE DIMENSIONS



THRU DIMENSIONS



VALVE	A	B	C	D	E	F
2" S/FMA	6 1/2	9	8 1/2	4 1/4	3	4 1/4
3" S/FMA	8 1/2	11 3/4	10 1/4	5 1/2	3 3/4	5 1/2
4" FMA	8 1/2	12 1/2	11	6 1/2	4 1/2	6 1/2
6" FMA	10 3/4	—	19 3/4	10 1/4	5 1/2	7 11/16

VALVE	A	B	C	D	E	F
2" SMT	6 1/2	10 3/8	9 7/8	2 1/8	—	8 1/2
2" FMT	6 1/2	10 3/8	9 7/8	—	3	9
3" SMT	8 1/2	13 5/16	11 9/16	2 7/8	—	12
3" FMT	8 1/2	13 5/16	11 9/16	—	3 3/4	12 3/16
4" FMT	8 1/2	14 7/8	13 3/8	—	4 1/2	15 1/8
6" FMT	10 3/4	—	19 3/4	—	5 1/2	22