

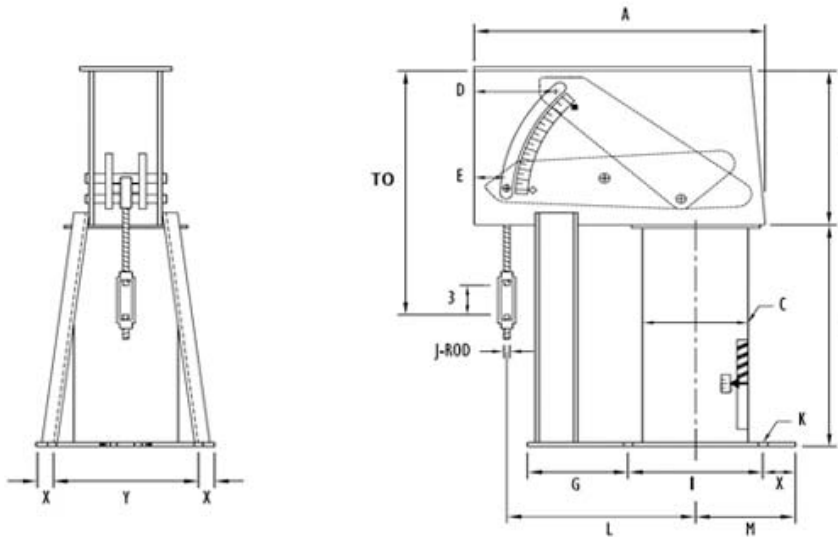


FIG. PTP 100-E

CONSTANT

www.pipingtech.com/ptp100-e

LAYOUT A



TO - Rod take out for up travel
 D - J-Rod position for down travel
 E - J-Rod position for up travel
 L - Maximum length for the load range
 WT - Maximum weight for the load range

ORDERING: Specify figure number, size, type, description, type, load, actual and direction of total travel. For load and travel not in the tables, please call for dimensions.

* Drawing shown for up travel

PTP figure 100 type E (Layout-A) is a vertical constant with a base plate which is bolted directly to the top of the steel. The rod take out (RTO) given in the tables below are maximum and made to not reach the supporting steel. The rod take out (RTO) can be specified to exceed the maximum. For load and travel not in the tables, please call for dimensions.

IMPORTANT NOTES:

All dimensions are in inches unless otherwise noted.

LOAD (lb.)	0	766	1492	2403	3869	5664	9122	13355	17776	23660	28628	38104	46105
	765	1491	2402	3868	5663	9121	13354	17775	23659	28627	38103	46104	60000
J-ROD	1/2	5/8	3/4	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4
K-HOLE	9/16	3/4	3/4	3/4	3/4	7/8	7/8	1 3/8	1 3/8	1 5/8	1 5/8	1 5/8	1 5/8

Total Travel 1 1/2 to 4 inches

LOAD RANGE (lb.)	J-ROD	RTO*	A	B	C	D	E	G	I	L	M	X	Y	WT (lb.)				
44 - 243	1/2	17 3/4	17	8	6 5/8	3 3/4	2	4	8	10 5/8	4 1/4	1	6 1/2	85				
244 - 1018	1/2	17 3/4	18	8 1/4	8 5/8	3 3/4	2	4 1/2	9 1/2	10 3/4	5 1/4	1	8	125				
	5/8	17 3/4																
1019 - 3516	5/8	17 7/8	18 1/8	9 1/8	8 5/8	3 3/4	2	5	9 1/2	10 3/4	5 3/4	1 1/2	8	245				
	3/4	17 7/8																
	1	19 7/8																
3517 - 7538	1	20 1/4	21 1/4	10 1/8	8 5/8	4 5/16	2 9/16	6 1/4	10	13 1/8	6 1/4	1 1/2	9	395				
	1 1/4	21 1/4																
	1 1/2	21 1/2																
7539 - 16159	1 1/2	22 1/2	24 5/8	12 1/2	12 3/4	5 9/16	3 7/8	7 1/4	15	13 1/8	8 7/8	1 1/2	15	1090				
	1 3/4	25																
	2	30																
16160 - 31490	2	32 1/8	26	16	12 3/4	6 3/4	5	9	15	13 1/8	9 3/8	1 3/4	17 1/2	1700				
	2 1/4	32 1/8																
	2 1/2	33 1/8																
	2 3/4	33 1/8																
LOAD (lb.)	44	244	358	476	633	842	1019	1986	2643	3517	4256	5664	7539	11038	14691	16160	19553	26,025
	243	357	475	632	841	1018	1985	2642	3516	4255	5663	7538	11037	14690	16159	19552	26024	31,490
F	13 1/2	14 3/4	15 3/4	13 3/4	14 3/4	16 3/4	19	21	23	25 1/4	28 1/4	32 1/4	33 1/2	37 1/2	42 1/2	44 1/2	47 1/2	58 1/2

*Rod Take Out (RTO) is for up travel [Subtract 4 inches for down travel]

CONSTANTS_100.XLS-04/22/17



FIG. PTP 100-E

CONSTANT

LAYOUT A

www.pipingtech.com/ptp100-e

ENGINEERED PIPE SUPPORTS

Total Travel 4 1/2 to 6 inches

LOAD RANGE (lb.)	J-ROD	RTO*	A	B	C	D	E	G	I	L	M	X	Y	WT (lb.)				
34 - 183	1/2	19 3/4	19 1/2	10	6 5/8	4 1/2	1 7/8	5	8	13 3/8	4 1/4	1	6 1/2	95				
184 - 765	1/2	19 3/4	20 1/2	10 1/2	8 5/8	4 1/2	1 7/8	5 3/4	9 1/2	13 3/8	5 1/4	1	8	135				
766 - 2402	5/8	19 7/8	20 5/8	11 1/2	8 5/8	4 1/2	1 7/8	6	9 1/2	13 3/8	5 3/4	1 1/2	8	260				
	3/4	19 7/8																
2403 - 5663	1	22 1/4	23 7/8	12 3/8	8 5/8	5 1/4	2 5/8	7 1/2	10	15 3/4	6 1/4	1 1/2	9	420				
	1 1/4	23 1/4																
5664 - 12140	1 1/2	24	26 1/2	14 3/8	12 3/4	5 3/4	3 1/8	6 3/4	14	15 3/4	8 1/8	1 1/2	13 1/2	1,095				
	1 3/4	26 1/2																
12141 - 23659	1 3/4	28 5/8	28 1/8	17 3/4	12 3/4	7 1/4	4 5/8	9	15	15 3/4	9 3/8	1 3/4	17 1/2	1,715				
	2	33 5/8																
	2 1/4	34 5/8																
LOAD (lb.)	34	184	269	358	476	633	766	1492	1986	2403	3198	4681	5664	8293	11038	12141	14691	19,553
F	13 1/2	14 3/4	15 3/4	13 3/4	14 3/4	16 3/4	19	21	23	25 1/4	28 1/4	32 1/4	33 1/2	37 1/2	42 1/2	44 1/2	47 1/2	58 1/2

*Rod Take Out (RTO) is for up travel [Subtract 6 inches for down travel]

CONSTANTS_100.XLS-04/22/17

Total Travel 6 1/2 to 8 inches

LOAD RANGE (lb.)	J-ROD	RTO*	A	B	C	D	E	G	I	L	M	X	Y	WT (lb.)				
27 - 151	1/2	21 3/4	22 1/4	12 1/4	6 5/8	5 9/16	2	6 3/4	8	15 7/8	4 1/4	1	6 1/2	110				
152 - 632	1/2	21 3/4	23 1/4	12 3/4	8 5/8	5 9/16	2	7	9 1/2	15 7/8	5 1/4	1	8	150				
633 - 1985	1/2	25 7/8	23 3/8	13 5/8	8 5/8	5 9/16	2	7 1/2	9 1/2	15 7/8	5 3/4	1 1/2	8	285				
	5/8	25 7/8																
	3/4	25 7/8																
1986 - 4680	3/4	26 1/4	26 1/4	14	8 5/8	6 1/16	2 1/2	8 1/8	10	18 3/8	6 1/4	1 1/2	9	445				
	1	28 1/4																
4681 - 10033	1 1/4	29 3/4	29 1/4	16 3/4	12 3/4	6 13/16	3 1/4	8 1/2	14	18 3/8	8 1/8	1 1/2	13 1/2	1,150				
	1 1/2	30																
	1 3/4	31 1/2																
10034 - 19552	1 3/4	33 1/4	31 7/8	20	12 3/4	9 5/16	5 3/4	9	14 1/2	18 3/8	8 7/8	1 3/4	17 1/2	1,770				
	2	37 1/4																
	2 1/4	37 1/4																
LOAD (lb.)	27	152	222	296	393	476	633	1121	1641	1986	2643	3517	4681	6231	8293	10034	11038	14,691
F	14 1/2	14 3/4	15 3/4	13 3/4	14 3/4	16 3/4	19	21	23	25 1/4	28 1/4	32 1/4	33 1/2	37 1/2	42 1/2	44 1/2	47 1/2	58 1/2

*Rod Take Out (RTO) is for up travel [Subtract 8 inches for down travel]

CONSTANTS_100.XLS-04/22/2017

Total Travel 8 1/2 to 10 inches

LOAD RANGE (lb.)	J-ROD	RTO*	A	B	C	D	E	G	I	L	M	X	Y	WT (lb.)				
22 - 125	1/2	24 7/8	25	14 1/8	6 5/8	6 5/8	2 1/8	9	8	18 1/2	4 1/4	1	6 1/2	120				
126 - 522	1/2	24 7/8	26	14 3/8	8 5/8	6 5/8	2 1/8	9 1/2	9 1/2	18 1/2	5 1/4	1	8	165				
523 - 1640	1/2	28 7/8	26 1/8	15 3/8	8 5/8	6 5/8	2 1/8	9	9 1/2	18 1/2	5 3/4	1 1/2	8	310				
	5/8	28 7/8																
	3/4	28 7/8																
1641 - 3868	3/4	29 7/8	28 5/8	15 3/4	8 5/8	6 7/8	2 3/8	10 3/4	10	20 3/4	6 1/4	1 1/2	9	470				
	1	31 7/8																
3869 - 8292	1 1/4	33 1/4	31 1/2	18 3/8	12 3/4	7 3/8	2 7/8	9 1/2	14	20 7/8	8 1/8	1 1/2	13 1/2	1,180				
	1 1/2	33 1/2																
8293 - 16159	1 1/2	34 1/2	32 7/8	20 3/8	12 3/4	8 5/8	4 1/8	9 3/4	14 3/4	20 7/8	8 7/8	1 1/2	17 1/2	1,790				
	1 3/4	36																
	2	40																
LOAD (lb.)	22	126	184	244	325	433	523	1019	1356	1641	2184	2907	3869	5149	6584	8293	9122	12,141
F	14 1/2	14 3/4	15 3/4	14 3/4	14 3/4	16 3/4	19	21	23	25 1/4	28 1/4	32 1/4	33 1/2	37 1/2	42 1/2	44 1/2	47 1/2	58 1/2

*Rod Take Out (RTO) is for up travel [Subtract 10 inches for down travel]

CONSTANTS_100.XLS-04/22/2017



FIG. PTP 100-E

CONSTANT

LAYOUT A

www.pipingtech.com/ptp100-e

ENGINEERED PIPE SUPPORTS

Total Travel 10 1/2 to 12 inches

LOAD RANGE (lb.)	J-ROD	RTO*	A	B	C	D	E	G	I	L	M	X	Y	WT (lb.)				
20-103	1/2	27 7/8	27 3/4	16 3/8	6 5/8	7 5/8	2 1/4	11	8	21 1/8	4 1/4	1	6 1/2	145				
104-432	1/2	30 1/4	28 3/4	16 3/4	8 5/8	7 5/8	2 1/4	10 1/2	9 1/2	21 1/8	5 1/4	1	8	180				
433-1491	1/2	30 7/8	28 3/4	17 1/4	8 5/8	7 5/8	2 1/4	11	9 1/2	21 1/8	5 3/4	1 1/2	8	335				
	5/8	30 7/8																
1492-3197	3/4	33 7/8	31 1/4	17 3/4	8 5/8	7 5/8	2 1/4	12 1/2	10	23 1/2	6 1/4	1 1/2	9 1/2	520				
	1	35 7/8																
3198-6853	1	36 3/8	34 1/8	20 1/4	12 3/4	8 3/8	3	11 1/2	14	23 1/2	8 1/8	1 1/2	13 1/2	1,240				
	1 1/4	37 3/8																
	1 1/2	37 5/8																
6854-13354	1 1/2	38 1/2	35 1/2	22 3/8	12 3/4	9 5/8	4 1/4	12 1/4	14 3/4	23 1/2	8 7/8	1 1/2	17 1/2	1,825				
	1 3/4	40																
LOAD (lb.)	20 103	104 151	152 201	202 268	269 357	358 432	433 841	842 1120	1121 1491	1492 1640	1641 2401	2402 3197	3198 4680	4681 6230	6231 6853	6854 8292	8293 11037	11038 13354
F	15 5/8	15 3/4	15 3/4	15 3/4	15 3/4	16 3/4	19	21	23	25 1/4	28 1/4	32 1/4	33 1/2	37 1/2	42 1/2	44 1/2	47 1/2	58 1/2

*Rod Take Out (RTO) is for up travel [Subtract 12 inches for down travel]

CONSTANTS_100.XLS-04/22/2017

Total Travel 12 1/2 to 14 inches

LOAD RANGE (lb.)	J-ROD	RTO*	A	B	C	D	E	G	I	L	M	X	Y	WT (lb.)				
19-94	1/2	31 7/8	30 1/4	18	6 5/8	8 1/2	2 1/8	13	8	23 3/4	4 1/4	1	6 1/2	160				
95-392	1/2	32 3/8	31 1/4	18 1/2	8 5/8	8 1/2	2 1/8	13	9 1/2	23 3/4	5 1/4	1	8	200				
393-1232	1/2	33 7/8	31 3/8	19 1/2	8 5/8	8 1/2	2 1/8	13	9 1/2	23 3/4	5 3/4	1 1/2	8	365				
	5/8	33 7/8																
1233-2906	5/8	35 7/8	34	19 1/2	8 5/8	8 3/4	2 3/8	14 1/2	10	26 1/8	6 1/4	1 1/2	9 1/2	560				
	3/4	35 7/8																
	1	37 7/8																
2907-6230	1	40 3/8	36 3/8	22 1/4	12 3/4	9 1/4	2 7/8	13 1/2	14	26 1/8	8 1/8	1 1/2	13 1/2	1,300				
	1 1/4	41 3/8																
	1 1/2	41 5/8																
6231-12140	1 1/2	42	37 1/2	24	12 3/4	10	3 5/8	13 3/4	14 3/4	26 1/8	8 7/8	1 1/2	17 1/2	1,875				
	1 3/4	43 1/2																
LOAD (lb.)	19 94	95 137	138 183	184 221	222 295	296 392	393 695	696 1018	1019 1232	1233 1640	1641 2183	2184 2906	2907 3868	3869 5148	5149 6230	6231 6853	6854 9121	9122 12140
F	17 5/8	18 1/4	18 1/4	18 1/4	18 1/4	18 1/4	19	21	23	25 1/4	28 1/4	32 1/4	33 1/2	37 1/2	42 1/2	44 1/2	47 1/2	58 1/2

*Rod Take Out (RTO) is for up travel [Subtract 14 inches for down travel]

CONSTANTS_100.XLS-04/22/2017



PTP 100-B TYPE INSTALLED CONSTANTS WITH DOWNWARD TRAVEL



PTP 100-F TYPE CONSTANT UNDERGOING LOAD TESTING



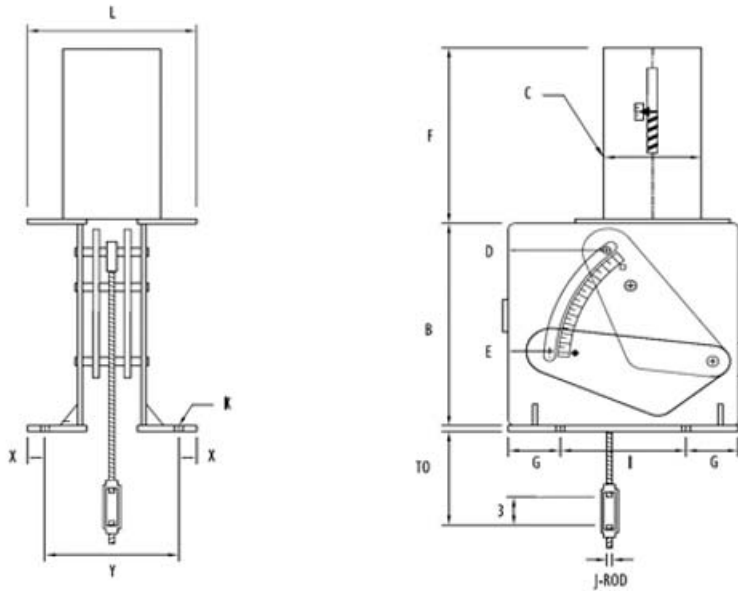
FIG. PTP 100-E

CONSTANT

LAYOUT B

www.pipingtech.com/ptp100-e

ENGINEERED PIPE SUPPORTS



- TO - Rod take out for down travel
- D - J-Rod position for down travel
- E - J-Rod position for up travel
- F - Maximum length for the load range
- WT - Maximum weight for the load range

ORDERING: Specify figure number, size, type, description, type, load, actual and direction of total travel. For load and travel not in the tables, please call for dimensions.

* Drawing shown for down travel

PTP figure 100 type E (Layout-B) is a vertical constant with a base plate which is bolted directly to the top of the steel. The rod take out (RTO) given in the tables below are maximum and made to not reach the supporting steel. The rod take out (RTO) can be specified to exceed the minimum. For load and travel not in the tables, PLEASE CALL FOR DIMENSIONS.

IMPORTANT NOTES: All dimensions are in inches unless otherwise noted.

J-Rod Selection

LOAD (lb.)	0	393	766	1492	2403	3869	5664	9122	13355	17776	23660	28628	38104	46105
	392	765	1491	2402	3868	5663	9121	13354	17775	23659	28627	38103	46104	60000
J-ROD	1/2	1/2	5/8	3/4	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4
K-HOLE	9/16	9/16	3/4	3/4	3/4	3/4	7/8	7/8	1 3/8	1 3/8	1 5/8	1 5/8	1 5/8	1 5/8
X	5/8	5/8	5/8	5/8	5/8	5/8	13/16	13/16	115/16	115/16	1 9/16	1 9/16	2 9/16	2 9/16
Y	5 15/16	8 1/8	8 1/8	8 1/8	10 3/16	10 3/16	12 3/8	12 3/8	14 11/16	14 11/16	14 15/16	14 15/16	14 15/16	14 15/16

Total Travel 1 1/2 to 4 inches

LOAD RANGE (lb.)	J-ROD	TO*	B	C	D	E	F	G	I	L	WT (lb.)
44 - 243	1/2	7 1/2	10	6 5/8	3 1/4	1 1/2	12	2	7	7 5/8	60
244 - 1018	1/2	7 1/4	10 1/2	8 5/8	3 1/2	1 3/4	15	1 1/2	8 1/2	11 5/8	100
	5/8	7 1/4									
1019 - 3516	5/8	7	11	8 5/8	4	2 1/4	22	2	9	11 5/8	220
	3/4	7									
	1	13									
3517 - 5663	1	12	14	8 5/8	3 3/4	2 1/2	33	2	12	11 5/8	360
	1 1/4	12									
	1 1/2	13 3/8									
5664 - 12140	1 3/4	13 3/8	15	12 3/4	4 3/4	3 15/16	44	2 1/2	14	18 3/8	965
	1 3/4	15 1/4									
	1 3/4	15 1/4									
12141 - 31490	2	15 1/4	16	12 3/4	5 1/4	4 7/16	61	2 1/2	16	18 3/8	1,500
	2 1/4	15 1/4									
	2 1/2	15 1/4									
	2 3/4	15 1/4									

*Take Out (TO) is for down travel [Add 4 inches for up travel]

CONSTANTS_100.XLS-04/22/17



FIG. PTP 100-E

CONSTANT

LAYOUT B

www.pipingtech.com/ptp100-e

ENGINEERED PIPE SUPPORTS

Total Travel 4 1/2 to 6 inches

LOAD RANGE (lb.)	J-ROD	TO*	B	C	D	E	F	G	I	L	WT (lb.)
34 - 183	1/2	7 1/4	12 1/2	6 5/8	4 3/8	1 3/4	12	2	10	7 7/8	70
184 - 765	1/2	7 1/8	12 1/2	8 5/8	4 1/2	1 7/8	15	2	10 1/2	11 5/8	110
766 - 2402	5/8	6 7/8	13 1/2	8 5/8	5 1/8	2 1/2	22	2	12	11 5/8	225
	3/4	6 7/8									
2403 - 4680	1	9 3/4	16	8 5/8	5	3	33	2	15	11 5/8	380
	1 1/4	9 3/4									
4681-10033	1 1/4	12 7/8	17	12 3/4	5	3	44	2 1/2	17	18 3/8	1,020
	1 1/2	12 7/8									
	1 3/4	12 7/8									
10034-23659	1 3/4	13 7/8	18	12 3/4	5 1/2	3 1/2	61	2 1/2	17	18 3/8	1,515
	2	13 7/8									
	2 1/4	13 7/8									

*Take Out (TO) is for down travel [Add 6 inches for up travel]

CONSTANTS_100.XLS-04/22/17

Total Travel 6 1/2 to 8 inches

LOAD RANGE (lb.)	J-ROD	TO*	B	C	D	E	F	G	I	L	WT (lb.)
25 - 151	1/2	7 1/8	15	6 5/8	5 1/2	1 5/16	12	2 1/2	12	7 5/8	85
152 - 632	1/2	7	15	8 5/8	5 1/2	1 5/16	15	2 1/2	12	11 5/8	125
633 - 1985	1/2	6 5/8	16	8 5/8	5 7/8	2 5/16	22	2 1/2	13	11 5/8	245
	5/8	6 5/8									
	3/4	6 5/8									
1986 - 4680	3/4	4 1/2	18	8 5/8	6 3/8	2 13/16	33	2 1/2	14	11 5/8	390
	1	5 1/8									
4681 - 10033	1 1/4	14 1/2	19	12 3/4	7	3 7/16	44	2 1/2	19	18 3/8	1,050
	1 1/4	14 3/4									
	1 1/2	16 1/4									
	1 3/4	16 1/4									
10034 - 19552	1 3/4	10 3/4	20	12 3/4	6 1/2	3 11/16	61	2 1/2	19	18 3/8	1,535
	2	10 3/4									
	2 1/4	10 3/4									

*Take Out (TO) is for down travel [Add 8 inches for up travel]

CONSTANTS_100.XLS-04/22/17

Total Travel 8 1/2 to 10 inches

LOAD RANGE (lb.)	J-ROD	TO*	B	C	D	E	F	G	I	L	WT (lb.)
21 - 125	1/2	7 1/8	17	6 5/8	6 1/2	2	12	2 1/2	15	7 5/8	100
126 - 522	1/2	7	17	8 5/8	6 1/2	2	15	2 1/2	15	11 5/8	140
523 - 1640	1/2	6 1/2	18	8 5/8	6 3/4	2 1/4	22	2 1/2	16	11 5/8	270
	5/8	6 1/2									
	3/4	6 1/2									
1641 - 3868	3/4	4 3/4	20	8 5/8	7 1/4	2 3/4	33	2 1/2	17	11 5/8	420
	1	10 3/4									
3869 - 8292	1 1/4	10 1/2	21	12 3/4	8	3 1/2	44	3	17	18 3/8	1,030
	1 1/2	10 3/4									
8293 - 16159	1 1/2	16 1/4	22	12 3/4	9	4 1/2	61	3 1/2	21	18 3/8	1,595
	1 3/4	16 1/4									
	2	16 1/4									

*Take Out (TO) is for down travel [Add 10 inches for up travel]

CONSTANTS_100.XLS-04/22/17



FIG. PTP 100-E

CONSTANT

LAYOUT B

www.pipingtech.com/ptp100-e

ENGINEERED PIPE SUPPORTS

Total Travel 10 1/2 to 12 inches

LOAD RANGE (lb.)	J-ROD	TO*	B	C	D	E	F	G	I	L	WT (lb.)
17-103	1/2	5 1/8	19	6 5/8	7	1 5/8	12	2 1/2	17	7 5/8	115
104-432	1/2	5	19	8 5/8	7	1 5/8	15	2 1/2	17	11 5/8	155
433-1491	1/2	4 1/2	20	8 5/8	7 1/2	2 1/8	22	2 1/2	18	11 5/8	290
	5/8	4 1/2									
1492-3197	3/4	2 1/2	22	8 5/8	8	2 5/8	33	3	18	11 5/8	460
	1	8 1/2									
3198-6853	1	8 3/4	23	12 3/4	8	2 5/8	44	3	19	18 3/8	1,075
	1 1/4	8 3/4									
	1 1/2	8 3/4									
6854-13354	1 1/2	11 1/4	24	12 3/4	9	3 5/8	61	3 1/2	20	18 3/8	1,575
	1 3/4	11 1/4									

*Take Out (TO) is for down travel [Add 12 inches for up travel]

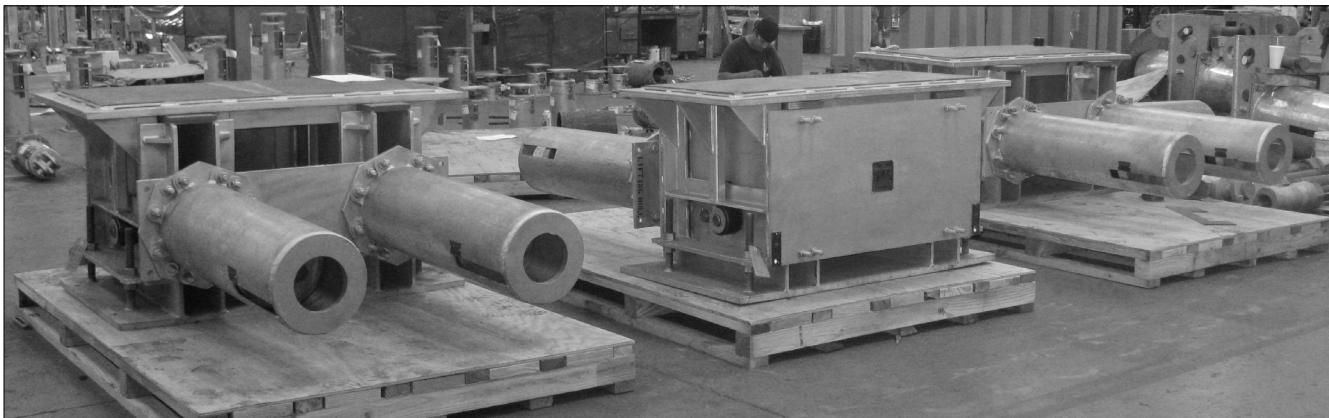
CONSTANTS_100.XLS-04/22/17

Total Travel 12 1/2 to 14 inches

LOAD RANGE (lb.)	J-ROD	TO*	B	C	D	E	F	G	I	L	WT (lb.)
17-94	1/2	5 1/8	21	6 5/8	8	1 11/16	12	3 1/2	18	7 5/8	130
95-392	1/2	5	21	8 5/8	8	1 11/16	15	3 1/2	18	11 5/8	170
393-1232	1/2	4 1/2	22	8 5/8	8 1/2	2 3/16	22	3 1/2	19	11 5/8	320
	5/8	4 1/2									
1233-2906	5/8	2 5/8	24	8 5/8	9	2 11/16	33	4	19	11 5/8	495
	3/4	2 5/8									
	1	2 5/8									
2907-6230	1	8 3/8	25	12 3/4	9	2 11/16	44	4	20	18 3/8	1,130
	1 1/4	8 3/8									
	1 1/2	8 3/8									
6231-12140	1 1/2	11 1/2	26	12 3/4	10	3 11/16	61	4	21	18 3/8	1,620
	1 3/4	11 1/2									

*Take Out (TO) is for down travel [Add 14 inches for up travel]

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U-TYPE CONSTANT LOAD SUPPORT SYSTEM FOR A FLUID TANK (105,000 LB. / 4" TOTAL TRAVEL UPWARD)