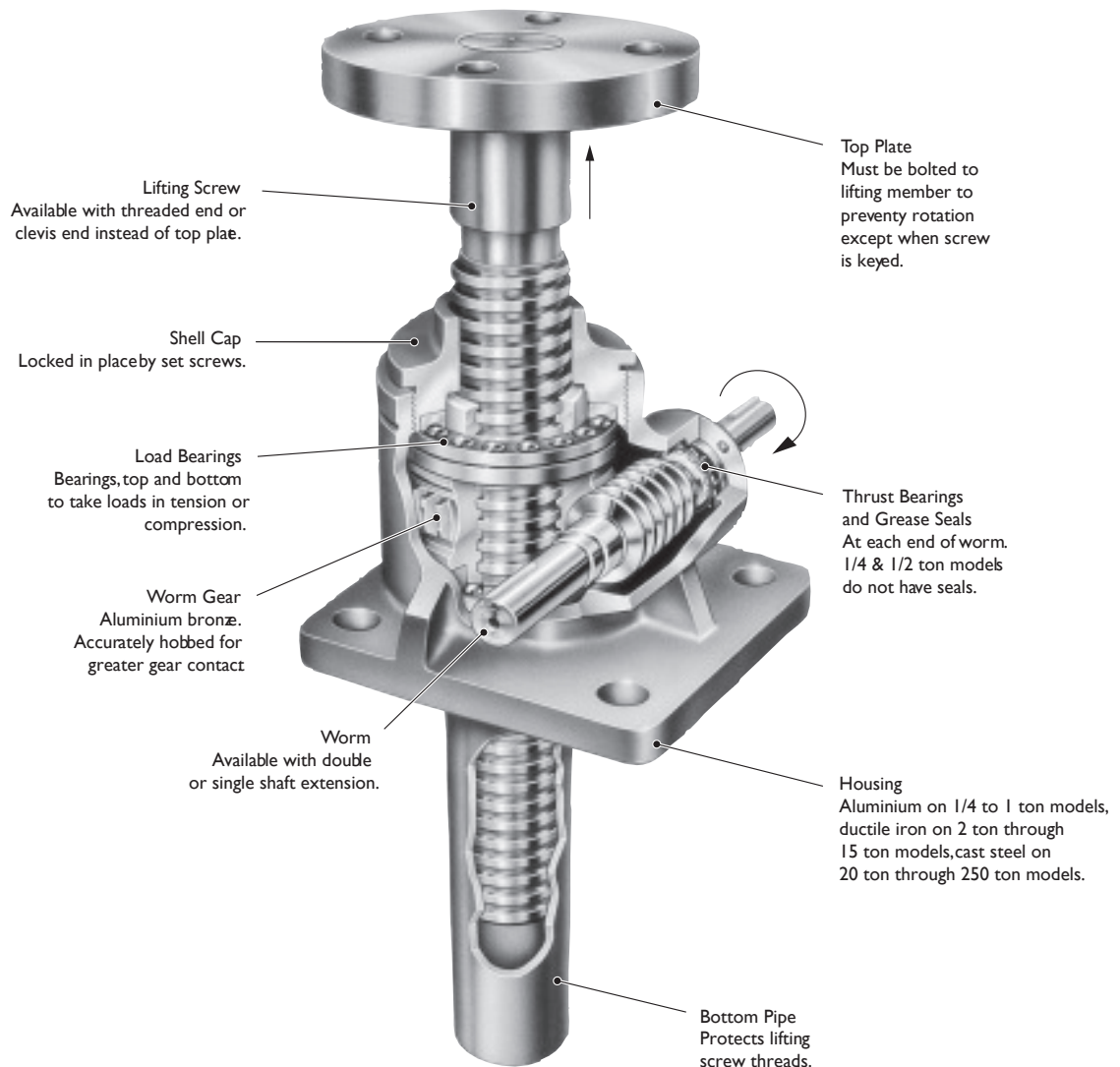


### Advantages

- Positive, Mechanical Positioning
- Uniform, Lifting Speed
- Multiple Arrangements
- Anti-Backlash Feature (optional)



Capacities from 1/4 Ton to 250 Ton  
Worm Gear Ratios from 5:1 to 50:1

The imperial machine screw jack range is produced in many standard models with a wide range of capabilities, there is a standard model for almost any requirement.

Operated manually or by motor units imperial jack models can be used singly, in tandem or in multiple arrangements. Since most capacities have a uniform lifting speed, added economy can be realized in raising unevenly distributed loads by operating the different capacities in unison.

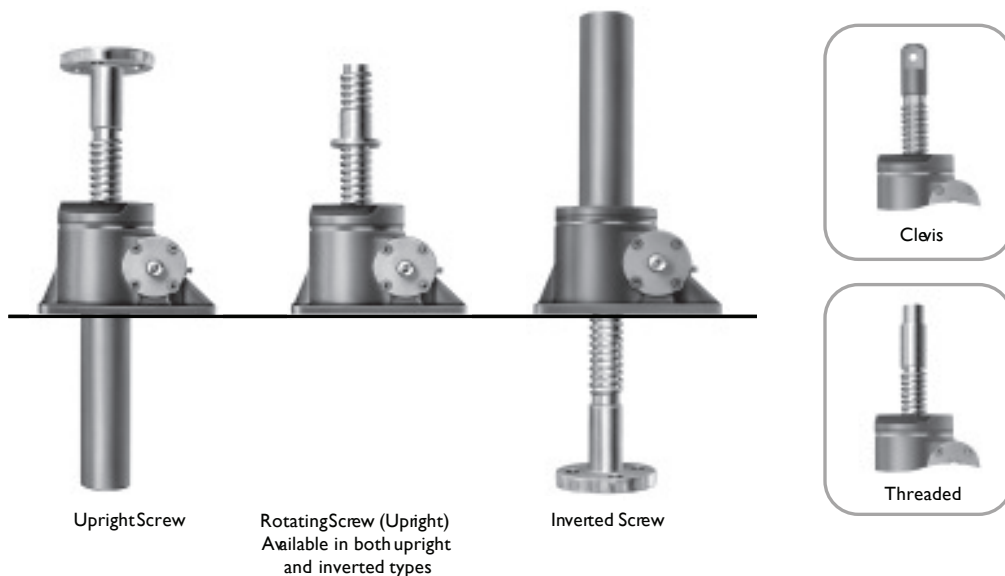
Most imperial machine screw jack models with higher ratios are self-locking and will hold heavy loads in position indefinitely without creep, in ideal conditions. However if self-locking is critical, a brake motor or other restraining device should be considered. They can be used to push, pull, apply pressure and as linear actuators. They are furnished with standard raises in increments of 1 inch. Depending upon size and type of load, models are available with raises up to 25 feet.

### Features

- **Precise Positioning** - Can be controlled accurately for positioning within thousandths of a millimetre
- **Self-Locking** - Will normally hold loads in position without creeping when using the higher ratio units, as long as the screw jack unit is not subject to vibration. If self-locking is critical a brake motor or other restraining device should be considered.
- **Uniform Lifting Speed** - Since many models have the same gear ratios, various capacities can be used in the same application to lift unevenly distributed loads with uniform speed.
- **Quick, Sure Operation** - Designed and built to be positive acting, for accurate response to motive power.

### Options

- **Anti-Backlash Option** - Reduces vertical backlash between the screw and the worm gear nut to a practical minimum for smooth, precise operation and minimum wear.
- **Keyed Option** - Stops a translating screw from rotating when the screw ends are free.
- **Bellows Boot Option** - Protects the screw from dust, dirt, moisture and corrosive contaminants.
- **Double Clevis End Option** - Incorporates a special clevis end bottom pipe and a standard clevis end on the lifting screw.



- Note** Clockwise rotation of worm raises load on all models (refer to previous page) - counter clockwise available at extra charge
- Unless a translating lifting screw is keyed, the top should be bolted to the lifting member to prevent the screw from rotating.
- Screw jacks are equipped with "Alemite" grease fittings.
- Recommended lubricants are listed in the installation and maintenance instructions.
- Screw jacks supplied complete with drive shaft keys.

### Attachments

Nema C-Face flanges, motors, gear boxes, reducers and couplings available for single screw jack drive or multiple screw jack arrangements

Motion control components include motor drives, Motion Controllers with operator interfaces, encoders, limit switches, potentiometers and meters with LCD display

Note: For loads from 25% to 100% of screw jack capacity, torque requirements are approximately proportional to the load.

Raises, measured in increments of one inch, are available up to 20 feet, depending on lifting screw diameter and available bar stock length.

Model	Upright	M2555	M2625	M2501	M1802 & M9002	M1805	M1810	M1815	M1820	M1825	M9035	M1850	M9075	M1899	M18150	M2250
	Inverted	M2554	M2624	M2500	M1801 & M9001	M1804	M1809	M1814	M1819	M1824	M9034	M1849	M9074	M1898	M18149	M2249
Capacity (Short Tons)		0.25	0.5	1	2	5	10	15	20	25	35	50	75	100	150	250
Lifting Screw	Diameter	0.5	0.625	0.75	1	1.5	2	2.25	2.5	3.375	3.75	4.5	5	6	7	9
	Pitch	0.25	0.125	0.2	0.25	0.375	0.5	0.5	0.5	0.666	0.666	0.666	0.666	0.75	1	1
	Form	Acme	Acme	Acme	Acme	Square	Square	Square	Square	Square	Acme	Square	Square	Square	Square	Square
Worm Gear Ratios	Standard	5:1	5:1	5:1	6:1	6:1	8:1	8:1	8:1	10 2 3:1	10 2 3:1	10 2 3:1	10 2 3:1	12:1	12:1	50:1
	Optional	-	-	20:1	24:1	24:1	24:1	24:1	24:1	32:1	32:1	32:1	32:1	36:1	36:1	-
Turns of Worm for 1" Raise	Standard	20	40	25	24	16	16	16	16	16	16	16	16	16	12	50
	Optional	-	-	100	96	64	48	48	48	48	48	48	48	48	36	-
Max. HP per Screw Jack	Standard	0.333	0.333	0.5	2	4	5	5	5	8	8	15	15	25	25	35
	Optional	-	-	0.25	0.5	0.75	1.5	1.5	1.5	2.5	2.5	6	6	11	11	-
Start-Up Torque at Full Load (in.lb)	Standard	13	21	55	120	450	950	1430	2050	3360	4000	7500	12000	16000	28100	20000
	Optional	-	-	25	50	185	490	820	1170	1900	2400	4200	6600	8600	15500	-
Screw Jack Efficiency	Standard	0.330	0.200	0.245	0.232	0.221	0.220	0.202	0.188	0.164	0.158	0.138	0.124	0.130	0.141	0.080
	Optional	-	-	0.140	0.133	0.121	0.140	0.129	0.120	0.092	0.089	0.083	0.075	0.080	0.086	-
Weight with Base Raise of 6" (lb)		2.33	2.33	5	17	35	52	66	93	181	240	410	650	1200	1350	2700
Weight for each Additional 1" Raise (lb)		0.1	0.1	0.27	0.33	0.85	1.4	1.5	2.6	3.5	3.7	5.5	6.5	9	12.6	23

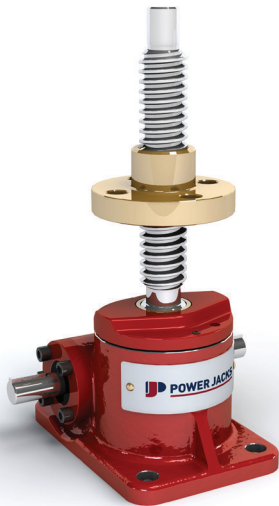
### Inch Screw Jacks with Numeric Controls Ratios

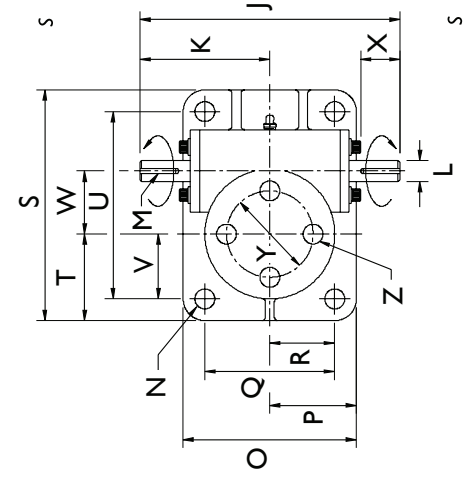
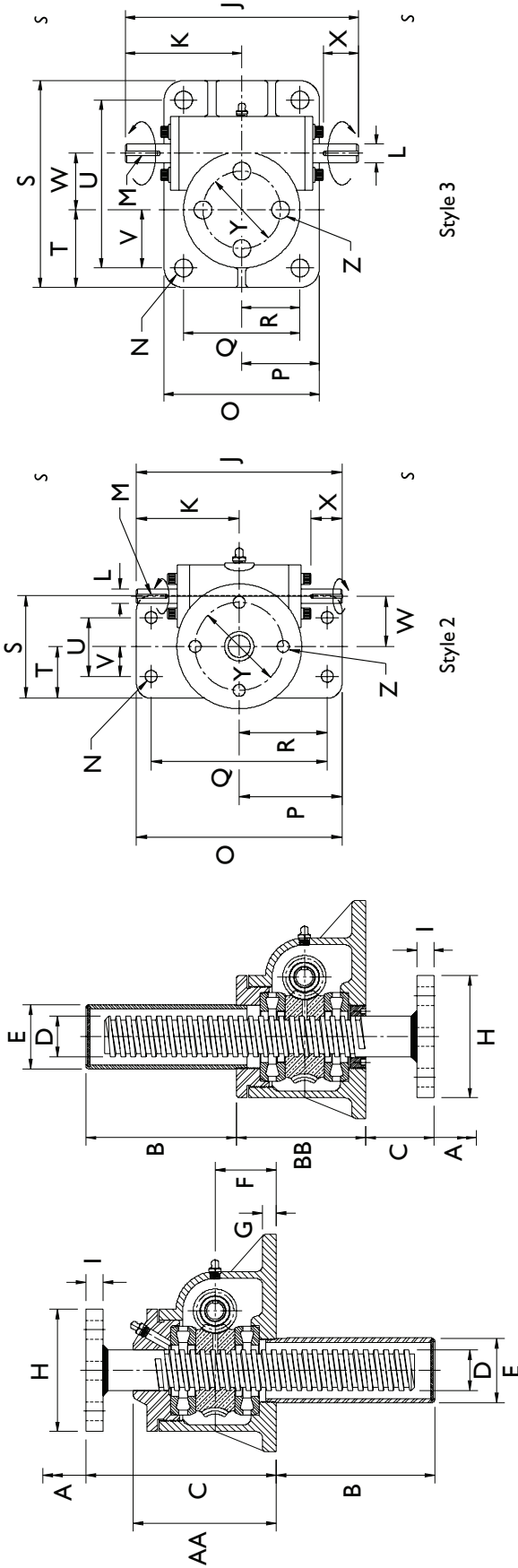
1 to 25 Ton screw jacks with Decimal Ratio at no extra cost.

Numeric Control Ratios → 100 Turns = 1" of Travel

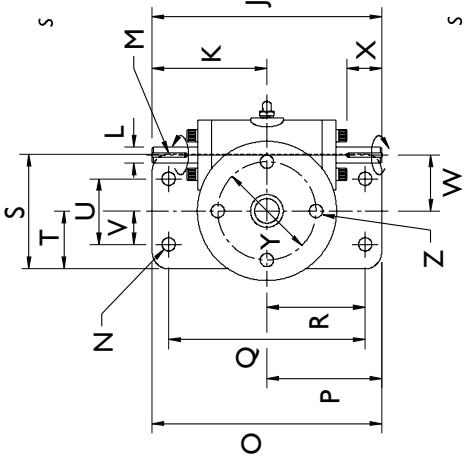
Model	Upright	M2501	M1802 & M9002	M1805	M1810	M1815	M1820	M1825
	Inverted	M2500	M1801 & M9001	M1804	M1809	M1814	M1819	M1824
Capacity (Short Tons)		1	2	5	10	15	20	25
Lifting Screw	Diameter	0.75	1	1.5	2	2.25	2.5	3
	Pitch	0.200	0.250	0.250	0.250	0.250	0.250	0.320
	Form	Acme	Acme	Acme	Acme	Acme	Acme	Acme
Worm Gear Ratios		20:1	25:1	25:1	25:1	25:1	25:1	32:1
Turns of Worm for 1" Raise		100	100	100	100	100	100	100
Start-Up Torque at Full Load (in.lb)		24	48	175	370	640	925	1500
Screw Jack Efficiency		0.133	0.132	0.091	0.086	0.075	0.069	0.053
Maximum HP per Screw Jack		0.25	0.5	0.75	1.5	1.5	1.5	2.5

- Note:
1. All other data for these models is the same as main performance table at the top of the page.
  2. For loads from 25% to 100% of screw jack capacity, torque requirements are approximately proportional to the load.

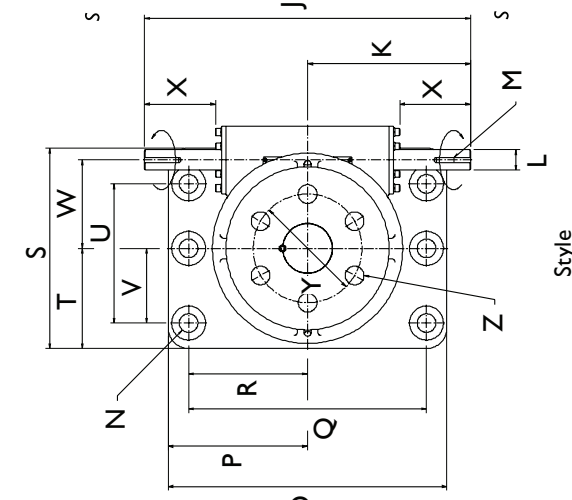




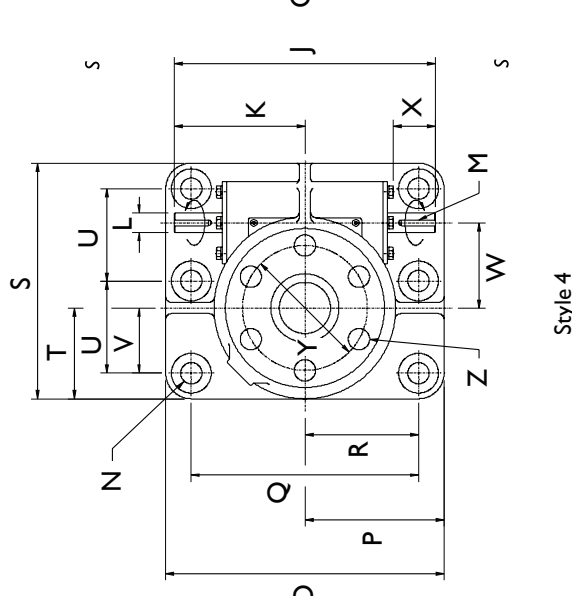
Style 3



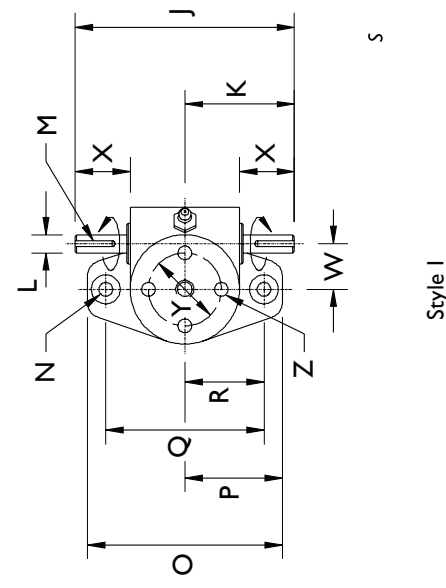
Style 2



Style 1



Style 4



Style 3

- 3. LHS = Left Hand Side
- 4. RHS = Right Hand Side

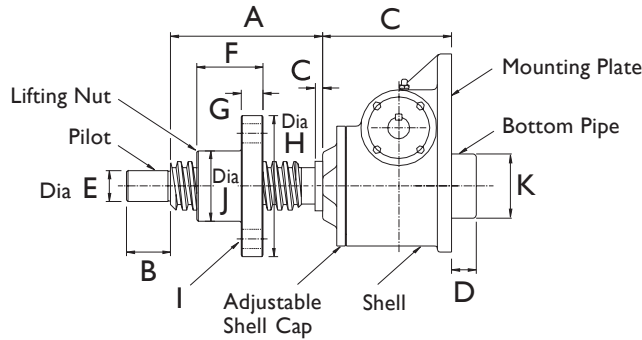
Note 1. All dimensions in inches  
2. Dimensions subject to change without notice

Model	Upright	M2501	M2625	M2555	M2624	M2500	M1801	M1802	M9002	M1805	M1810	M1815	M1820	M1824	M9034	M1850	M9074	M1898	M18150	M2250	
	Inverted	M1801	M2500	M2554	M2624	M2500	M1801	M1802	M9001	M1804	M1809	M1814	M1819	M1824	M9034	M1849	M9074	M1898	M18149	M2249	
Capacity (Short Tons)	2	1	1	0.25	0.5	1	2	2	2	5	10	15	20	25	35	50	75	100	150	250	
Style	2	1	1	1	1	1	2	2	3	3	3	3	3	3	3	2	2	4	4	5	
AS REQUIRED																					
A	RAISE																				
B	Upright	A	A+3/4	A+3/4	A+3/4	A	A-1/8	A-1/8	A-1/4	A-1/8	A-1/8	A-1/8	A-1/2	A	A	A-3/8	A-1/2	A+-1/4	A-1/2	A-2	
B	Inverted	A	A+3/4	A+3/4	A+3/4	A	A-1/8	A-1/8	A	A-1/8	A-1/8	A-1/8	A-1/2	A	A-1	A-3/8	A-1/2	A+-1/4	A-1/2	A+1/2	
C	Upright	4	4	4	4	4.5	5.25	5.25	5.25	7	7.25	8	9.25	11	12	13	16.5	24	24	30	
C	Inverted	2	2	2	2	1.25	1.75	1.75	1.75	2.5	2.75	2.75	3	3	4	3.5	5.5	12	12	12	
D	DIA	0.5	0.625	0.75	0.75	1	1	1	1	1.5	2	2.25	2.5	3.375	3.75	4.5	5	6	7	9	
E	Diameter	7/8	7/8	15/16	15/16	121/32	121/32	121/32	121/32	23/8	27/8	27/8	31/2	41/2	41/2	59/16	65/8	7	8	11	
F		1	1	1.5	1.5	1.75	1.75	1.75	1.75	2.25	2.25	2.75	3.25	4	4	4.75	5.5	6	6	9	
G		5/16	5/16	3/8	3/8	1/2	1/2	1/2	1/2	1/2	1/2	5/8	3/4	1	11/4	11/4	13/8	11/2	11/2	21/2	
H	DIA	21/4	21/4	31/2	31/2	41/4	41/4	41/4	41/4	41/2	53/4	53/4	53/4	81/2	101/2	111/4	111/4	14	14	24	
I		5/16	5/16	3/8	3/8	7/16	7/16	7/16	7/16	5/8	3/4	3/4	3/4	1	15/16	11/4	13/8	215/16	215/16	315/16	
J		41/2	41/2	6	6	7	7	7	7	9	11	11	11	14	14	22	24	23	23	48	
K		21/4	21/4	3	3	3.5	3.5	3.5	3.5	4.5	5.5	5.5	5.5	7	7	11	12	11.5	11.5	24	
L	DIA	0.375	0.375	0.500	0.500	0.500	0.500	0.500	0.500	0.75	1	1	1	1.375	1.375	1.5	1.75	1.75	1.875	3	
L		+0.000	+0.000	+0.000	+0.000	+0.000	+0.000	+0.000	+0.000	+0.000	+0.000	+0.000	+0.000	+0.000	+0.000	+0.000	+0.000	+0.000	+0.000	+0.000	
L		-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	
M		1/8 x 1/16	1/8 x 1/16	1/8 x 1/16	1/8 x 1/16	1/8 x 1/16	1/8 x 1/16	1/8 x 1/16	1/8 x 1/16	3/16 x 3/32	1/4 x 1/8	1/4 x 1/8	1/4 x 1/8	5/16 x 5/32	0.313 x 0.156	3/8 x 3/16	3/8 x 3/16	1/2 x 1/4	1/2 x 1/4	3/4 x 3/8	
M		3/4 LING	3/4 LING	1 LING	1 LING	1 LING	1 LING	1 LING	1 LING	11/4 LING	11/2 LING	11/2 LING	11/2 LING	2 LING	2 LING	21/4 LING	21/4 LING	3 LING	3 LING	5 LING	
N	DIA	9/32	9/32	13/32	13/32	13/32	13/32	13/32	13/32	11/16	13/16	13/16	11/8	13/8	15/8	17/8	21/8	17/8	17/8	23/4	
O		4	4	5	5	7	7	7	7	6	7.5	73/4	81/4	101/4	10.25	193/4	14	241/2	24.5	41	
P		2	2	21/2	21/2	3.5	3.5	3.5	3.5	3	33/4	37/8	41/8	51/8	51/8	97/8	7	121/4	121/4	201/2	
Q		31/4	31/4	4	4	6	6	6	6	41/2	53/4	6	6	71/2	71/2	16	10	20	20	35	
R		15/8	15/8	2	2	3	3	3	3	21/4	27/8	3	3	33/4	33/4	8	5	10	10	17.5	
S		-	-	-	-	31/2	31/2	31/2	31/2	8	83/4	91/4	11	133/4	151/2	93/4	23	203/4	203/4	291/2	
T		-	-	-	-	13/4	13/4	13/4	13/4	3	27/8	33/8	41/8	51/8	6	47/8	9.5	8	8	14.75	
U		-	-	-	-	2	2	2	2	61/2	7	71/2	83/4	11	12.5	6	19	81/8	81/8	201/2	
V		-	-	-	-	1	1	1	1	2.25	2	2.5	3	3.75	4.5	3	7.5	5.75	5.75	11	
W		0.938	0.938	1.25	1.25	1.703	1.703	1.703	1.703	2.188	2.598	2.598	2.598	3.75	3.75	5.313	5.313	7.5	7.5	13	
W		+0.003	+0.003	+0.003	+0.003	+0.001	+0.001	+0.001	+0.001	+0.002	+0.003	+0.003	+0.003	+0.005	+0.005	+0.003	+0.003	+0.003	+0.003	+0.005	
W		-0.000	-0.000	-0.003	-0.003	-0.001	-0.001	-0.001	-0.001	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	
X		11/8	11/8	17/16	17/16	11/8	11/8	11/8	11/8	111/32	123/32	123/32	13/8	23/16	23/16	45/16	41/8	37/16	41/4	101/2	
Y	PCD	1.5	1.5	2.5	2.5	3	3	3	3	3	4.13	4.13	4.13	6	7.75	8.75	10.25	11	11	16	
Z	DIA	9/32	9/32	7/16	7/16	13/32	13/32	13/32	13/32	11/16	13/16	13/16	13/16	11/16	15/8	13/8	1.5	17/8	17/8	23/4	
A-A	No of Holes	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6	
B-B		23/8	23/8	31/4	31/4	41/16	41/16	41/16	41/16	51/4	55/8	65/16	71/8	87/8	87/8	107/8	139/16	17	17	231/8	
B-B		23/8	23/8	31/4	31/4	33/4	33/4	33/4	33/4	43/4	5	51/2	71/8	87/8	87/8	107/8	139/16	17	17	231/8	

Note Dimensions are subject to change without notice.

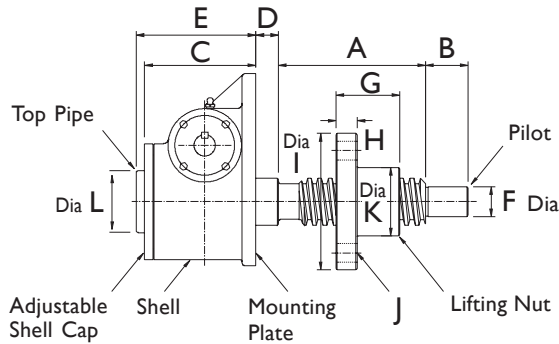
For other dimensions and performance data refer to translating screw model. All dimensions in inches.

Upright Rotating Screw



Model UM	Capacity (Short Tons)	Style	A	B	C	C'	D	E	F	G	H	I			J	K
												Holes	Dia.	P.C.D		
UM2556	0.25	1	Raise + 1.5	5/8	2 3/8	0	0	0.312	7/8	3/8	2.25	4	9/32	1.75	1	0
UM2626	0.5	1	Raise + 1 7/8	5/8	2 3/8	0	0	0.437	7/8	3/8	2.25	4	9/32	1.75	1	0
UM2502	1	1	Raise + 1.5	5/8	3 1/4	0	0	0.5	1.5	0.5	3.25	4	13/32	2 3/8	1.5	0
UM1803	2	2	Raise + 2 3/8	0.75	4 1/16	0	0	0.625	1.5	0.5	3.25	4	13/32	2 3/8	1.5	0
UM9003	2	3	Raise + 2 3/8	0.75	4 1/16	0	0	0.625	1.5	0.5	3.25	4	13/32	2 3/8	1.5	0
UM1806	5	3	Raise + 3	1	5 1/4	0	0	1	2.5	0.75	4	4	9/16	3	2	0
UM1811	10	3	Raise + 4	2	5 5/8	0	1	1.249	3	1	6	4	0.81	4.5	3	2 7/8
UM1816	15	3	Raise + 4	2	6 5/16	0	1	1.5	3	1	6.5	4	0.81	5	3.5	2 7/8
UM1821	20	3	Raise + 5	2.5	7 1/8	0	1.75	1.75	3	1	7.5	4	0.94	5.5	3.75	3 1/2
UM1826	25	3	Raise + 7	3	8 7/8	3 1/8	2	2.5	5.5	1.25	8.5	4	1 1/16	6.5	4.5	4.5
UM9036	35	3	Raise + 6	3.5	8 7/8	0	2	3	5.5	1.5	9	4	1 1/16	7	5	4.5
UM1851	50	2	Raise + 7	4	10 7/8	1 1/8	2.5	3.5	6	2	10	6	1 1/16	8	6	5.56
UM9076	75	2	Raise + 8.5	4.5	13 9/16	1 1/16	2.5	4	7.5	2	12.5	6	1 1/8	10	7	6 5/8
UM1897	100	4	Raise + 8	5	17	2	5	5	7	2	14	6	1 1/8	11	8	7
UM18151	150	4	Raise + 9.75	5.5	17	2	3.5	5.5	8.75	2.5	15.5	6	1.5	12.5	9	8

Inverted Rotating Screw

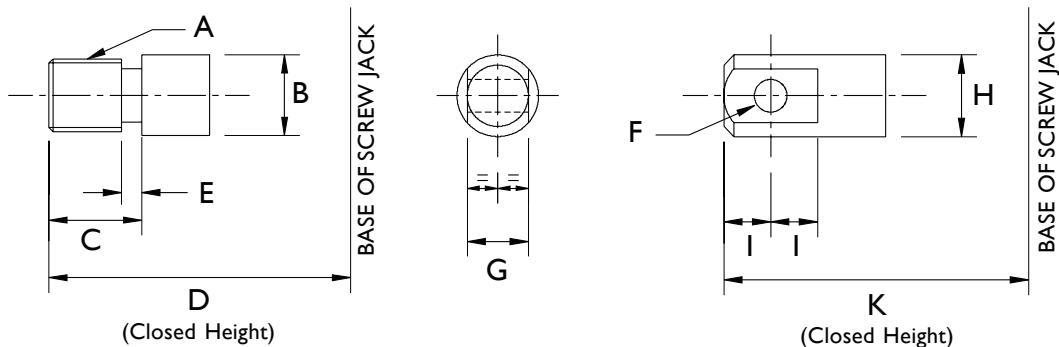


Model DM	Capacity (Short Tons)	Style	A	B	C	D	E	F	G	H	I	J			K	L
												Holes	Dia.	P.C.D		
DM2556	0.25	1	Raise + 1.5	5/8	2 3/8	3/8	2 3/8	0.312	7/8	3/8	2.25	4	9/32	1.75	1	0
DM2626	0.5	1	Raise + 1 7/8	5/8	2 3/8	3/8	2 3/8	0.437	7/8	3/8	2.25	4	9/32	1.75	1	0
DM2502	1	1	Raise + 1.5	5/8	3 1/4	0.25	3 1/4	0.5	1.5	0.5	3.25	4	13/32	2 3/8	1.5	0
DM1803	2	2	Raise + 2 3/8	0.75	4 1/16	5/8	4 1/16	0.625	1.5	0.5	3.25	4	13/32	2 3/8	1.5	0
DM9003	2	3	Raise + 2 3/8	0.75	4 1/16	5/8	4 1/16	0.625	1.5	0.5	3.25	4	13/32	2 3/8	1.5	0
DM1806	5	3	Raise + 3	1	5 1/4	2	5 1/4	1	2.5	0.75	4	4	9/16	3	2	0
DM1811	10	3	Raise + 4	2	5 5/8	1.13	5 5/8	1.249	3	1	6	4	0.81	4.5	3	0
DM1816	15	3	Raise + 4	2	6 5/16	0.81	6 1/2	1.5	3	1	6.5	4	0.81	5	3.503	2 7/8
DM1821	20	3	Raise + 5	2.5	7 1/8	0.63	7 7/8	1.75	3	1	7.5	4	0.94	5.5	3.75	4.5
DM1826	25	3	Raise + 7	3	8 7/8	1.5	9 7/8	2.5	5.5	1.25	8.5	4	1 1/16	6.5	4.5	4.5
DM9036	35	3	Raise + 6	3.5	8 7/8	0.88	9 7/8	3	5.5	1.5	9	4	1 1/16	7	5	4.5
DM1851	50	2	Raise + 7	4	10 7/8	2 5/8	11 1/2	3.5	6	2	10	6	1 1/16	8	6	5.56
DM9076	75	2	Raise + 8.5	4.5	13 9/16	3 5/8	15 1/16	4	7.5	2	12.5	6	1 1/8	10	7	6 5/8
DM1897	100	4	Raise + 8	5	17	2	18	5	7	2	14	6	1 1/8	11	8	7
DM18151	150	4	Raise + 9.75	5.5	17	2	17	5.5	8.75	2.5	15.5	6	1.5	12.5	9	8

Note: Dimensions subject to change without notice.

Model	Upright	M2555	M2625	M2501	M1802	M9002	M1805	M1810	M1815
	Inverted	M2554	M2624	M2500	M1801	M9001	M1804	M1809	M1814
Capacity (Short Tons)		0.25	0.5	1	2	2	5	10	15
Threaded End									
A		3/8-24 UNF-2A	3/8-24 UNF-2A	1/2-13 UNC-2A	3/4-10 UNC-2A	3/4-10 UNC-2A	1-8 UNC-2A	1 1/2-6 UNC-2A	1.75-5 UNC-2
B	DIA	0.5	5/8	0.75	1	1	1.5	2	2.25
C		0.75	1	0.75	1 1/8	1 1/8	1 1/8	1 5/8	2
D	Upright	4	4	5 3/8	6	6	8	8.75	9.75
	Inverted	2	2	2	2.5	2.5	3.5	4.25	4.25
E		1/8	1/8	1/8	1/8	0.19	0.19	0.25	0.25
Clevis End									
F		13/64	17/64	21/64	13/32	13/32	21/32	25/32	29/32
G		3/8	0.5	0.5	0.75	0.75	1	1.25	1.5
H		0.5	5/8	0.75	1	1	1.5	2	2.25
I		0.375	0.5	0.375	0.75	0.75	1	1.25	1.25
K	Upright	4	4	5	5.25	5.25	7	7.5	8.5
	Inverted	2	2	1 5/8	1.75	1.75	2.5	3	3

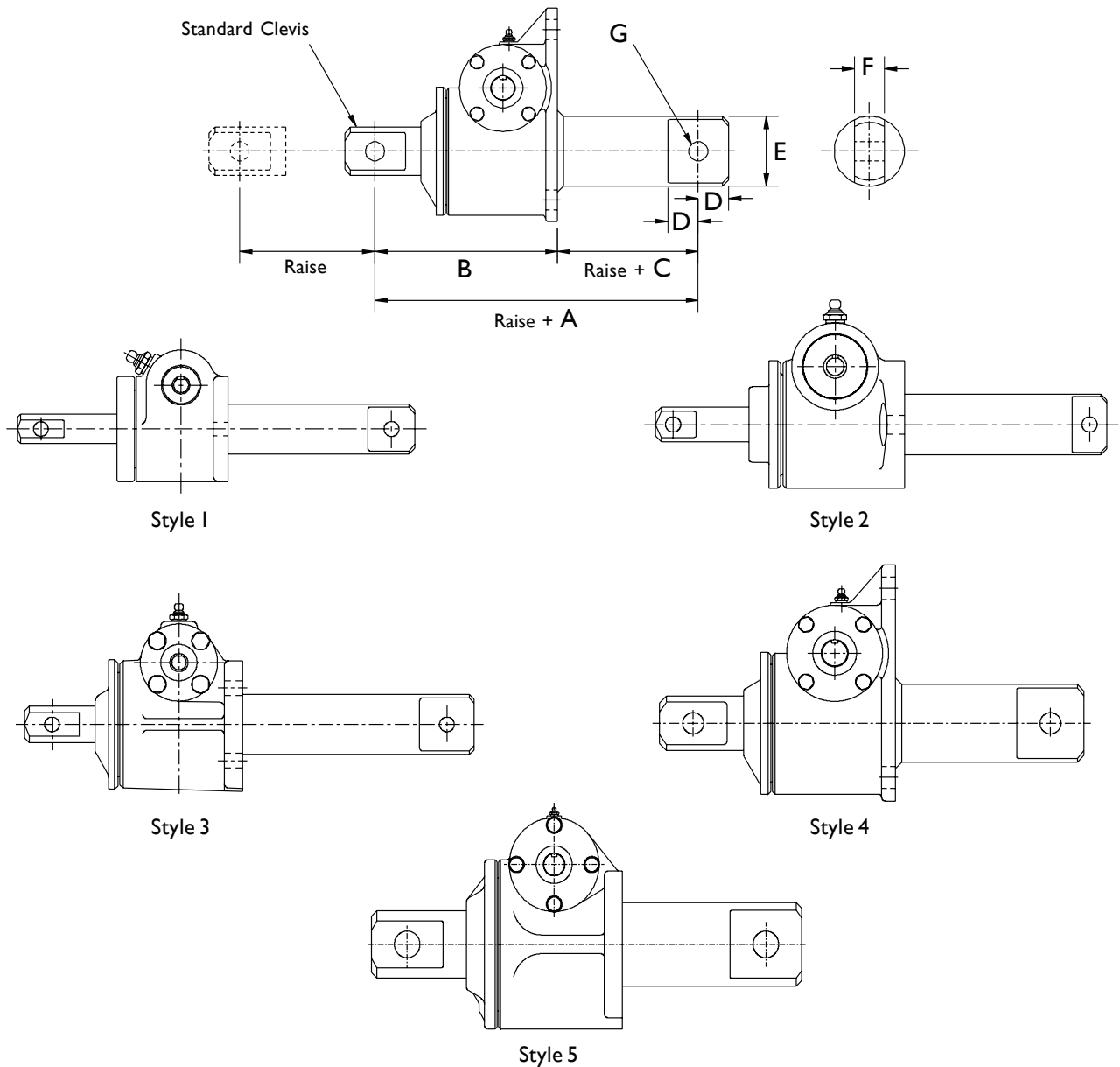
Model	Upright	M1820	M1825	M9034	M1850	M9075	M1899	M18150	M2250
	Inverted	M1819	M1824	M9034	M1849	M9074	M1898	M18149	M2249
Capacity (Short Tons)		20	25	35	50	75	100	150	250
Threaded End									
A		2-4.5 UNC-2A	3-4 UNC-2A	3.25-4 UNC-2A	4-4 UNC-2A	4-12 UNC-2A	4 1/2-12 UNC-2A	5-12 UNC-2A	8-12 UNC-2A
B	DIA	2.5	3.375	3.75	4.5	5	6	7	9
C		2.25	3.25	3.75	4.25	4.5	5	5	6
D	Upright	11.5	13.75	15	17.5	20.5	25	25	30
	Inverted	5	5.75	7	8	9.5	12	12	12
E		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Clevis End									
F		1 1/32	1 9/32	1 17/32	1 25/32	2 1/32	2 17/32	2 25/32	3 17/32
G		1.75	2.25	2.5	3.25	3.5	4.25	5.25	7
H		2.5	3.375	3.75	4.5	5	6	7	9
I		1.5	1.75	2	2.5	2.5	3	3	4
K	Upright	10	12	13	15	18	24	24	30
	Inverted	3.5	4	5	5.5	7	9	9	12



- Note
1. All dimensions in inches.
  2. Dimensions subject to change without notice.



Note For other performance and dimension information refer to translating screw models



Model	CCM 2555	CCM 2625	CCM 2501	CCM 1802	CCM 1805	CCM 1810	CCM 1815	CCM 1820	CCM 1825	CCM 9035	CCM 1850
Capacity (Short Tons)	0.25	0.5	1	2	5	10	15	20	25	35	50
Style	1	1	2	3	4	4	4	4	4	4	5
A	5.5	5.5	6.5	6.75	9	10.25	11.25	13.5	16	17	19
B	4	4	5	5.25	7	7.5	8.5	10	12	13	15
C	1.5	1.5	1.5	1.5	2	2.75	2.75	3.5	4	4	4
D	-	-	-	0.75	1	1.25	1.25	1.5	1.75	2	2.5
E	1 1/16	1 1/16	1 5/16	1 21/32	2.38	2.88	2.88	3.5	4.5	4.5	5 9/16
F	3/8	0.5	0.5	0.75	1	1.25	1.5	1.75	2.75	2.5	3.25
G	13/64	17/64	21/64	0.41	0.66	0.78	0.91	1.03	1.28	1.53	1 25/32
Max Allowable Raise (compression) at load (lb)	5.75 500	9.25 1000	9.75 1500	14.5 3000	22.5 6500	31 12000	37 3/8 16000	39.25 20000	54 38000	73.5 61000	94.5 98000
Max Raise at Rated Load (compression)	5.75	9.25	8.25	12 1/8	17	22 7/8	25 7/8	29.25	47	69	90.5

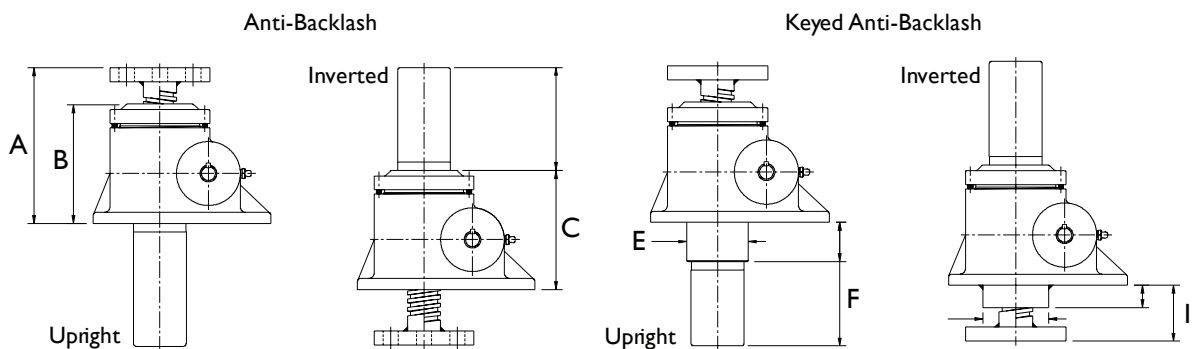
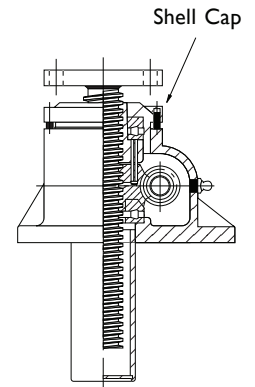
Note 1. All dimensions in inches unless otherwise stated.  
 2. Dimensions subject to change without further notice.

M-Series machine screw jacks with anti-backlash nuts for applications where a reversal of loading from tension to compression is encountered. These are based on the 1800 and 9000 series screw jacks and are designated 4800 and 9400 series.

Anti-Backlash Features

- Reduction in the vertical backlash between the screw and the worm gear nut to a practical minimum for smoother, more precise operation and minimum wear.
- Acts as a safety device, providing a dual nut load carrying unit, when the worm gear becomes worn.
- Wear indicator for critical applications.

The anti-backlash feature can be maintained by adjusting the shell cap until the desired amount of backlash is achieved. To avoid binding and excessive wear, do not adjust lifting screw backlash to less than 0.005".



Standard Dimensions (inches)

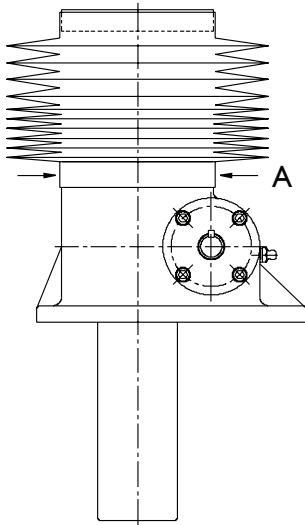
Anti-Backlash					Keyed Anti-Backlash						
Model	A	B	C		Model	E	F			I	
M4555	4	2.38	2.38	Raise + 0.75	M4555-K	1.5	Raise + 0.75	0.75	1.5	2	0.75
M4625	4	2.88	2.43	Raise + 0.75	M4625-K	1.25	Raise + 0.75	0.81	1.25	2	0.81
M4501	5	3.84	3.38	Raise + 1.63	M4501-K	1.06	Raise + 1.13	0.75	1.5	2	0.75
M4802	5.25	3.88	3.88	Raise + 0.75	M4802-K	2.25	Raise - 0.13	1.25	2.25	1.75	0.63
M4805	7	5.43	5.43	Raise - 0.25	M4805-K	2.75	Raise + 0.38	1.75	2.75	2.5	0.88
M4810	7.25	5.75	5.75	Raise	M4810-K	3.38	Raise	2	3.38	2.75	1.13
M4815	8	6.13	6.13	Raise	M4815-K	3.63	Raise	2	3.63	2.75	1.25
M4820	9.5	7.75	7.75	Raise + 0.75	M4820-K	4.0	Raise + 0.75	1.5	4	3	1.0
M4825	12	9.69	9.69	Raise + I	M4825-K	5.5	Raise	2.25	5.5	3	1.25
M9435	13	9.44	9.44	Raise + 1.75	M9435-K	6.5	Raise + 0.69	2.38	6.5	4	1.25
M4850	14	11.75	11.75	Raise + 1.75	M4850-K	7.0	Raise + 0.75	3	7.0	5	3.0
M9475	18.5	15.25	15.25	Raise + I	M9475-K	7.5	Raise + I	4	7.5	6.5	4.0
M4899	26.5	18.06	18.06	Raise + 0.5	M4899-K	8.5	Raise + I	5	8.5	12	5.0
M48150	26.5	18.06	18.06	Raise + 0.5	M48150-K	10	Raise + I	5.56	10	12	5.56

Torque and Efficiencies for Standard Anti-Backlash Screw Jacks

Model	Upright	M4555	M4625	M4501	M4802	M4805	M4810	M4815	M4820	M4825	M9435	M4850	M9475	M4899	M48150
	Inverted	M4554	M4624	M4500	M4801	M4804	M4809	M4814	M4819	M4824	M9434	M4849	M9474	M4898	M48149
Capacity, Short Tons		0.25	0.5	1	2	5	10	15	20	25	35	50	75	100	150
Start-Up Torque at Full Load (in.lb)	Std Ratio	15	24	60	135	500	1005	1658	2261	3712	5083	8022	13204	17004	31330
	Option I	-	-	27	56	228	526	904	1228	1997	3014	4542	7314	9210	17225
Efficiency Rating	Std Ratio	0.277	0.168	0.212	0.196	0.199	0.198	0.180	0.176	0.134	0.137	0.124	0.113	0.117	0.127
	Option I	-	-	0.117	0.119	0.109	0.126	0.110	0.108	0.083	0.077	0.073	0.068	0.072	0.077
Weight with Base Raise of 6" (lbs)		2.5	2.5	6	18	37	55	70	101	197	250	440	750	1325	1475

Note For loads from 25% to 100% of screw jack capacity, torque requirements are proportional to the load.

- Protects the screw from dust and dirt.
- Helps maintain the proper lubrication.
- Guards against moisture and corrosive contaminants.
- Boots are made of neoprene-coated nylon with sewn construction. Other materials are available for applications involving high temperatures, highly corrosive atmospheres and other special conditions.



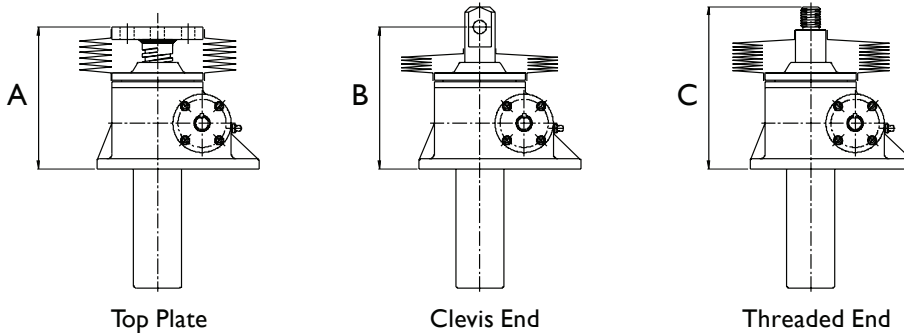
Boot Installation Data

Capacity	500 lb	1000 lb	1 Ton	2 Ton	5 Ton	10 Ton	15 Ton	20 Ton
Shell Cap Diameter "A"	2.25	2.25	2.75	3.5	4.5	5.25	5.625	6

Capacity	25 Ton	35 Ton	50 Ton	75 Ton	100 Ton	150 Ton	250 Ton
Shell Cap Diameter "A"	7.5	7.875	11.25	13.25	10	10	16

Note: For horizontal installation exceeding 18" of travel, internal boot guides are recommended.

Upright Imperial Machine Screw Jacks with Bellows Boots

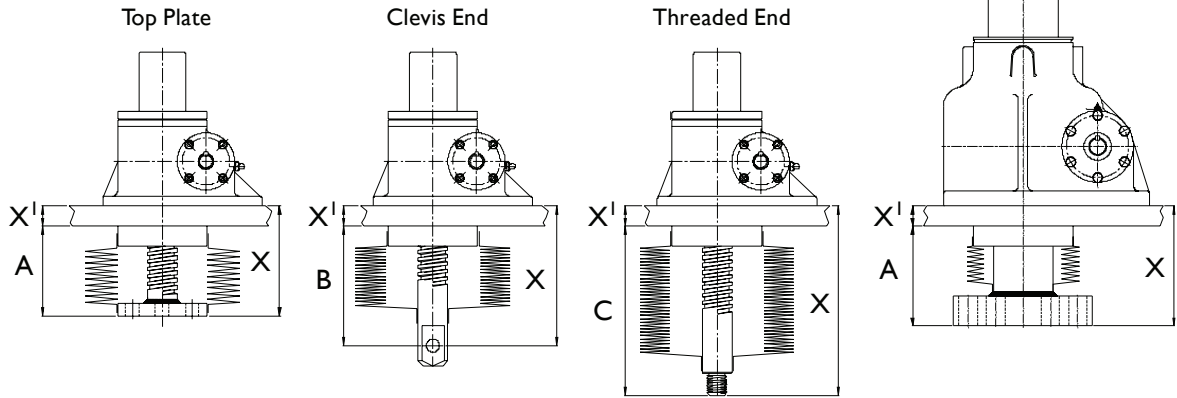


Model No	Boot O.D.	Raise																							
		0-12"			12"-18"			18"-24"			24"-30"			30"-36"			36"-48"			48"-60"			60"-72"		
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
M2555	4.25	4	4	4 1/4	4 3/4	4 5/8	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M2625	4.25	4	4	4 1/2	4 1/4	4 5/8	4 1/2	4 1/4	4 5/8	4 1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M2501	6.0	4 1/2	5	5 3/8	5 1/8	5 5/8	6	5 1/2	5 3/4	6 1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M1802	7.75	5 1/4	6 1/2	7 1/4	5 3/4	7 1/2	8 1/4	5 3/4	7 1/2	8 1/4	5 3/4	7 1/2	8 1/4	6 1/4	8 1/2	9 1/4	-	-	-	-	-	-	-	-	-
M9002	7.75	5 1/4	6 1/2	7 1/4	5 1/4	7 1/2	8 1/4	5 3/4	7 1/2	8 1/4	5 3/4	7 1/2	8 1/4	6 1/4	8 1/2	9 1/4	-	-	-	-	-	-	-	-	-
M1805	7.75	7	7	8	7	8 1/2	9 1/2	7	8 1/2	9 1/2	8	8 1/2	9 1/2	8	10	11	9	10	11	-	-	-	-	-	-
M1810	9.0	7 1/4	8 1/2	9 3/4	7 1/4	8 1/2	9 3/4	7 1/4	9 1/2	10 3/4	8 1/2	9 1/2	10 3/4	8 1/2	9 1/2	10 3/4	9 1/2	10 1/2	11 3/4	10 1/2	11 1/2	12 3/4	11 1/2	12 1/2	13 3/4
M1815	9.0	8	8 1/2	9 3/4	8	10	11 1/4	8	10	11 1/4	9	10	11 1/4	9	10	11 1/4	11	12	12 1/4	11	12	13 1/4	12	13	14 1/4
M1820	9.0	9 1/4	10	11 1/2	9 1/4	11	12 1/2	9 1/4	11	12 1/2	10 1/2	12	13 1/2	10 1/2	12	13 1/2	11 1/2	13	14 1/2	12 1/2	14	15 1/2	13 1/2	15	16 1/2
M1825	10.75	11	12	13 3/4	11	12	13 3/4	11	13 1/4	15	12	13 1/4	15	12	14 1/2	16 1/4	13	15 3/4	17 1/2	14	15 3/4	17 1/2	15	16 3/4	18 1/2
M9035	11.0	12	13	15	12	13	-	12	13	15	12	13 3/4	15 3/4	12	13 3/4	15 3/4	12 7/8	14 3/4	16 3/4	13 3/4	15 1/2	17 1/2	14 3/4	16 1/2	18 1/2
M1850	14.5	13	15	17 1/2	13	16	18 1/2	13	16	18 1/2	14	16	18 1/2	14	17	19 1/2	15	18	20 1/2	16	18	20 1/2	17	19	21 1/2
M9075	16.5	17 1/2	19	21 1/2	17 1/2	19	21 1/2	17 1/2	19	21 1/2	17 1/2	19	21 1/2	17 1/2	19	21 1/2	18 1/2	20	20 1/2	19 1/2	21	23 1/2	20 1/2	22	24 1/2
M1899	11.25	24	24	25	24	24	25	24	24	25	24	24	25	24 1/2	24 1/2	25 1/2	25	25 1/2	26 1/2	26	26 1/2	27 1/2	27	27 1/2	28 1/2
M18150	12.25	24	24	25	24	24	25	24	24	25	24	24	25	24 1/2	24 3/8	25 3/8	25	25 1/8	26 1/8	26	26 7/8	26 7/8	27	26 5/8	27 5/8
M2250	16.0	30	-	-	30	-	-	30	-	-	30 1/2	-	-	30 1/2	-	-	31 1/2	-	-	31 1/2	-	-	32	-	-

- Note
1. (-) indicates "not applicable".
  2. For lengths of raise not detailed in the above table consult PowerJacks Ltd.
  3. Dimensions subject to change without notice.
  4. All dimensions in inches

Inverted Machine Screw Jacks with Bellows Boots

1898 - 18149 only

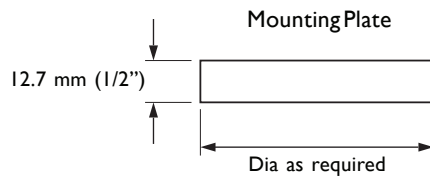


Finding minimum closed dimensions

- Add your structure thickness  $X^1$  to A, B, or C from the appropriate chart to find the minimum closed dimension.
- Other styles and sizes of boots can be supplied.
- In order to use a standard boot, make the mounting plate diameter the same as the shell cap diameter of the appropriate screw jack
- When boots are required for rotating screw jacks, consult Power Jacks Ltd.

Model No	Raise (Inches)											
	1"-6"			7"-12"			13"-18"			19"-24"		
	A	B		A	B	C	A	B		A	B	
M2554	2	2 3/8	2	2	2 3/8	2	2 1/8					
M2624	2	2 5/8	2 1/8	2	2 5/8	2 1/8	2 1/8	3 1/4	2 3/4			
M2500	2 1/16	3	2 5/8	2 1/16	3	2 5/8	2 11/16	3 5/8	3 1/4	3 1/16	4	3
M1801 & M9001	2 3/8	4 3/8	3 5/8	2 3/8	4 3/8	3 5/8	2 7/8	5 3/8	4 5/8	3	5 3/8	4 5/8
M1804	3 3/16	4 3/16	3 3/16	3 3/16	4 3/16	3 3/16	3 3/16	5 11/16	4 11/16	3 1/2	5 11/16	4 11/16
M1809	3 1/4	5 3/4	4 1/2	3 1/4	5 3/4	4 1/2	3 1/4	5 3/4	4 1/2	3 9/16	7	5 3/4
M1814	3 1/4	5 1/4	4	3 1/4	5 1/4	4	3 1/4	6 3/4	5 1/2	3 9/16	6 3/4	5 1/2
M1819	3 1/4	5 9/16	4 1/16	3 1/4	5 9/16	4 1/16	3 1/4	6 9/16	5 1/16	3 1/4	6 9/16	5 1/16
M1824	3 3/8	6 3/4	5	3 3/8	6 3/4	5	3 3/8	6 3/4	5	3 3/8	7 3/4	6
M9034	4 1/2	7 1/2	5 1/2	4 1/2	7 1/2	5 1/2	4 1/2	7 1/2	5 1/2	4 1/2	7 1/2	5 1/2
M1849	4 7/8	9 5/16	6 13/16	4 7/8	9 5/16	6 13/16	4 7/8	1 5/16	7 13/16	4 7/8	1 5/16	7 13/16
M9074 a,b,c	2 3/8	6 7/8	4 7/8	2 3/4	7 1/4	5 1/4	3	7 1/2	5 1/2	3 3/8	7 7/8	5 7/8
M1898	* 7 11/16	* 8 11/16	** 7 11/16	* 7 11/16	* 8 11/16	** 7 11/16	* 7 11/16	* 8 11/16	** 7 11/16	* 7 11/16	* 8 11/16	** 7 11/16
M18149	* 7 11/16	* 8 11/16	** 7 11/16	* 7 11/16	* 8 11/16	** 7 11/16	* 7 11/16	* 8 11/16	** 7 11/16	* 7 11/16	* 8 11/16	** 7 11/16

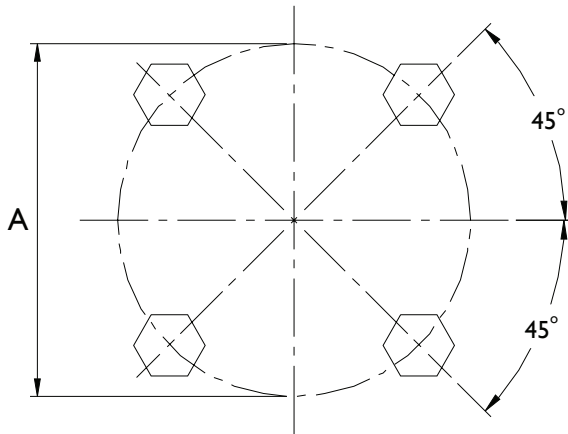
Value of X = a) If  $A+X^1$  is less than 5 1/2",  $X = 5 1/2"$  b) If  $B+ X^1$  is less than 9 1/2",  $X = 9 1/2"$  c) If  $C+ X^1$  is less than 7",  $X = 7"$   
 \*If  $A+X^1$  and  $B+ X^1$  are less than 12",  $X = 12"$ . If greater than 12", use dimensions shown.  
 \*\* If  $C+ X^1$  is less than 9",  $X = 9"$ . If greater than 9", use dimensions shown.



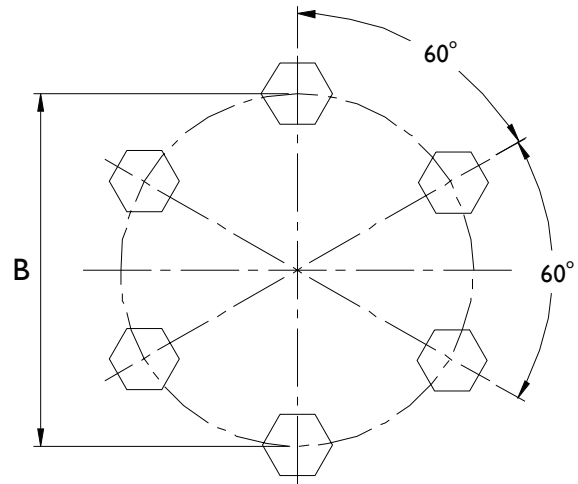
Note Same values can be used for M4800 Series Screw Jacks Units.

- Note
1. For lengths of raise not detailed in the above table consult Power Jacks Ltd.
  2. Dimensions subject to change without notice.
  4. All dimensions in inches

Note For other performance and dimension information refer to translating screw models.



Configuration A



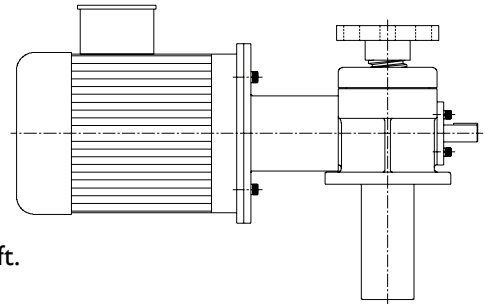
Configuration B

Model	'B' Bolt P.C.D. (inch)	Bolt Information	Configuration
M2555	-	No Flange Bolts	-
M2625	-	No Flange Bolts	-
M2501	-	No Flange Bolts	-
M1802 & M9002	1 11/16	1/4 - 20 x 3/4" Long	A
M1805	2 3/8	5/16 - 18 x 3/4" Long	A
M1810	2 3/4	5/16 - 18 x 3/4" Long	A
M1815	2 3/4	5/16 - 18 x 1" Long	A
M1820	3 1/2	3/8 - 16 x 1 1/4" Long	A
M1825	4 1/8	3/8 - 16 x 1 1/4" Long	A
M9035	4 1/4	1/2 - 13 x 1 1/4" Long	A
M1850	5 1/4	5/8 - 11 x 1 1/2" Long	A
M9075	5 3/4	5/8 - 11 x 1 1/2" Long	B
M1899	6 1/4	5/8 - 11 x 1 1/2" Long	B
M18150	6 1/4	5/8 - 11 x 1 1/2" Long	B
M2250	8 1/4	3/4 - 10 x 2" Long	B

- Note
1. All dimensions in inches unless otherwise stated.
  2. Dimensions are subject to change without notice.

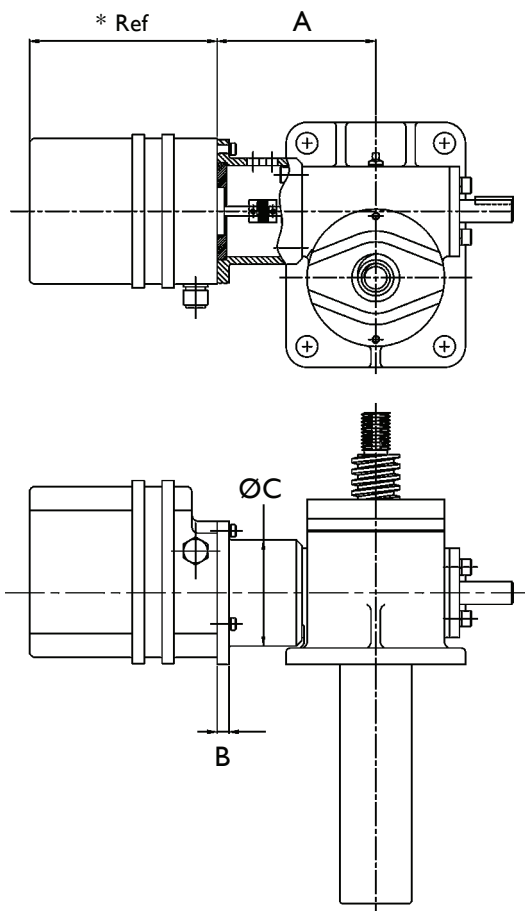
### Motor Adaptors for Inch Screw Jacks

- Standard adaptors for inch screw jacks available on request.
- Designed for standard IEC frame sizes.
- Allows direct motor coupling on either side of the screw jack input shaft.
- Complete with drive coupling and mounting hardware.
- NEMA frame size versions available on request.
- Adaptors for other mounting arrangements available on request.



Note: When direct coupling a motor to an a screw jack , it is necessary to match motor power to screw jack load so the motor does not exceed the maximum screw jack power.

### RLS-51 Rotary Limit Switch Adapters

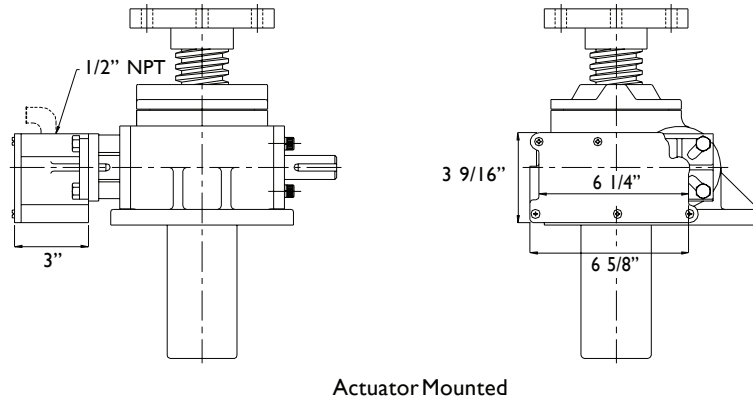


Rotary limit switches can be used as end of travel limit switches with the option of intermediate switches as well. These units are mounted onto a screw jacks free worm shaft and offer an alternative where bottom pipe mounted limit switches are not possible e.g. rotating screw jacks. Up to 8 limit switches can be accommodated in one unit.

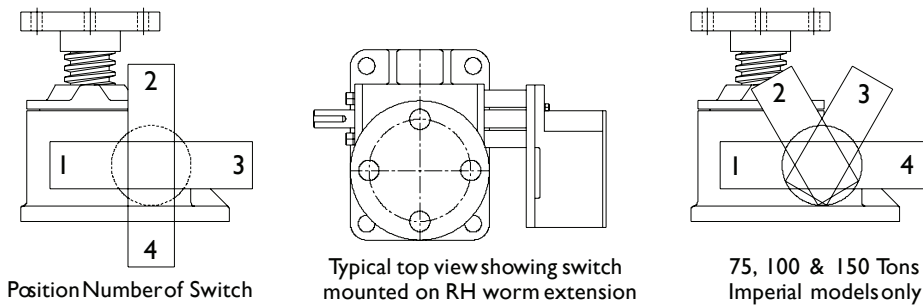
For mounting details please consult Power Jacks.

The mounting kit includes the flexible coupling and drive adaptor.

The SKA rotary limit switch is a compact 2-position limit switch designed for screw jack and linear actuator applications.



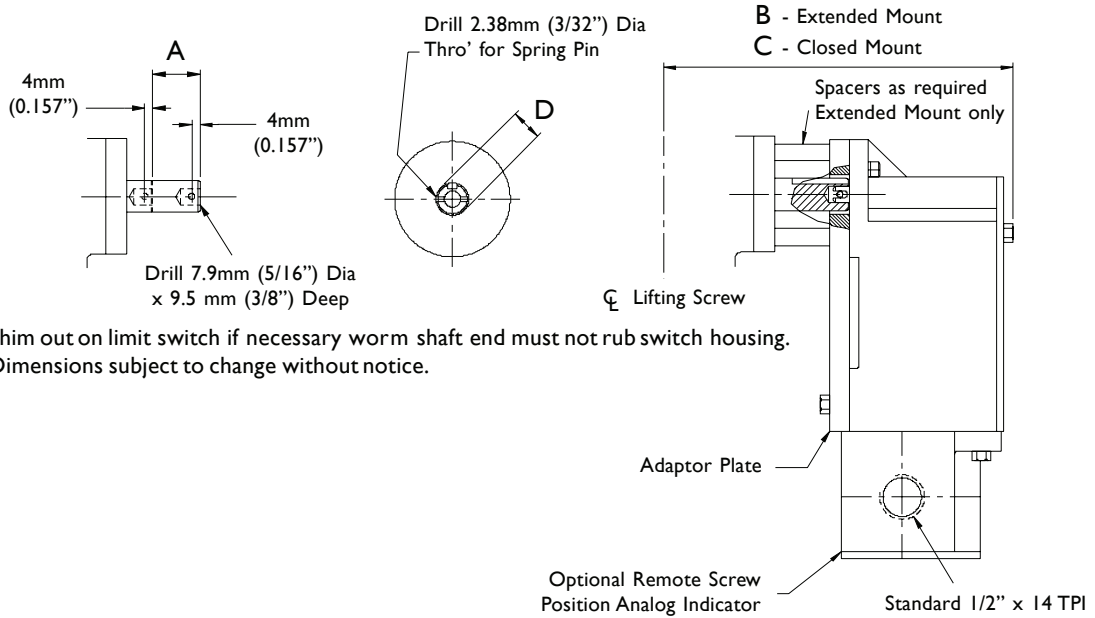
- Note
1. All dimensions are in inches unless otherwise stated.
  2. Dimensions are subject to change without notice.



Screw Jack Capacity (Short Ton)	Extended Mount								Closed Mount							
	RH				LH				RH				LH			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
2 & 3	C	A & B	B & D	-	B & D	A & B	C	-	-	-	3	4	-	-	-	-
5	✓	A	D	C	D	A	✓	C	✓	A & B	D	-	D	A & B	✓	-
10	✓	A	D	C	D	A	✓	C	✓	A & B	D	-	D	A & B	✓	-
15	✓	A	D	C	D	A	✓	C	-	A & B	D	-	D	A & B	-	-
20	✓	A	✓	C	✓	A	✓	C	✓	A & B	✓	-	✓	A & B	✓	-
25	✓	✓	✓	C	✓	✓	✓	C	✓	B	✓	-	✓	B	✓	-
35	✓	✓	✓	C	✓	✓	✓	C	✓	B	✓	-	✓	B	✓	-
50	✓	✓	✓	C	✓	✓	✓	C	-	✓	✓	-	-	✓	✓	-
75	✓	✓	✓	C	✓	✓	✓	C	-	✓	✓	-	-	✓	✓	-
100	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	-	✓	✓	✓
150	✓	✓	✓	✓	✓	✓	✓	✓	-	✓	✓	✓	-	✓	✓	✓

- Note
- For 2 & 3 Ton inverted position, extended mount position (2) is the only one practical.
  - (A) Special Closed Height. (B) Boot Interference Unit. (C) Rotary Limit Switch extends below base of screw jack. (D) Sealed electric elbow would extend below base of screw jack (✓) Recommended. (-) Not Recommended
  - Extended Mount is Standard.

SKA Limit Switch Field Installation Dimensions



Note Shim out on limit switch if necessary worm shaft end must not rub switch housing. Dimensions subject to change without notice.

Model (Short Ton)	A Cut-off Closed Mount (inch)	B Extended Mount (inch)	C Closed Mount (inch)	D Worm Shaft Dia. (inch)
2	-	6.75	-	0.500
3	1 9/32	6.75	5.5	0.625
5	1 17/32	7.75	6.25	0.750
10	1 21/32	8.75	7 1/8	1.000
15	1 29/32	8.75	6 7/8	1.000
20	1 3/8	8.75	7 13/32	1.000
25	2 7/32	10.25	8 1/16	1.375
35	2 7/32	10.25	8 1/16	1.375
50	4 21/32	14.25	9 5/8	1.500
75	4.5	15.25	10.75	1.750
100	3.75	14.75	11 1/32	1.750
150	3.75	14.75	11 1/32	1.875

Note 1. All dimensions are in inches unless otherwise stated.  
 2. Dimensions are subject to change without notice.