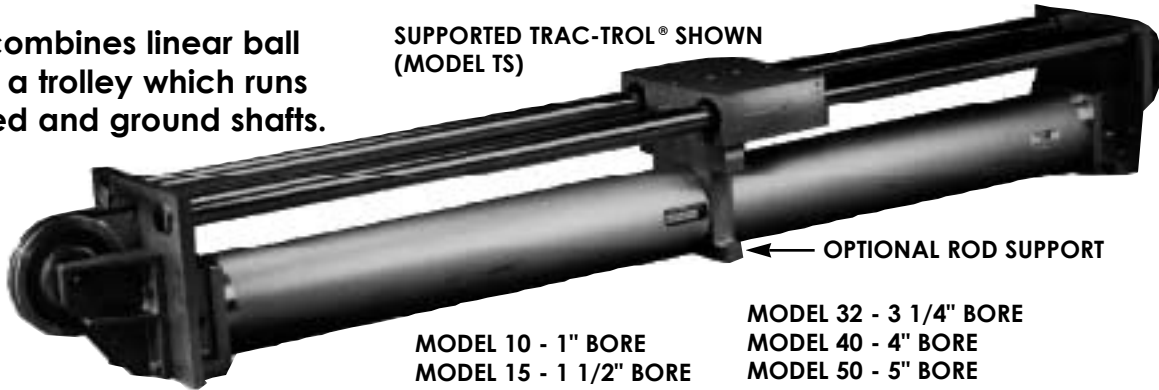


Trac-Trol® combines linear ball bearings in a trolley which runs on hardened and ground shafts.

SUPPORTED TRAC-TROL® SHOWN (MODEL TS)



MODEL 10 - 1" BORE  
MODEL 15 - 1 1/2" BORE  
MODEL 20 - 2" BORE  
MODEL 25 - 2 1/2" BORE

MODEL 32 - 3 1/4" BORE  
MODEL 40 - 4" BORE  
MODEL 50 - 5" BORE  
MODEL 20P - 2" BORE HIGH PRESSURE  
MODEL 25P - 2 1/2" BORE HIGH PRESSURE

### FEATURES

- Air or hydraulic service for smooth operation and precise control.
- Nylon-covered, aircraft-type cable for extra long life.
- Optional low cost rod & cable wipers.
- Extremely small effective sealing area compared to band cylinders for longer working life and ideal for use in "dusty" applications.
- Greater bearing surface for larger capacities.

- Reed switches available.
- Aluminum hardcoated tubes standard or optional steel tube (special plating available).
- Pre-delivery testing and "break-in" to insure customer satisfaction.

### LUBRICATION

Generally speaking TRAC-TROL® trolleys don't need lubrication. To insure maximum life, all pneumatic cylinders should be supplied with filtered and lubricated air.

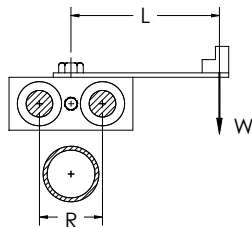
### LOADING

Many applications of the TRAC-TROL® cable cylinder involve mounting some of the weight off the side of the unit. To be certain the correct size TRAC-TROL® is used in your specific application use the following equations to compare the calculated load to the curves on the Load vs. Stroke graph which shows the maximum load allowed for a given stroke. Do not exceed the maximum load limit.

**LOAD =  $F_s + F_p$**  where  $F_s$  = Reaction force due to side loads.  
 $F_p$  = Reaction force due to push/pull loads.

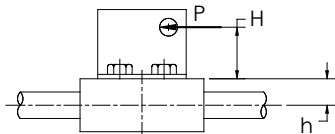
$$F_s = \frac{W(2L + R)}{R}$$

W: weight (lbs.)  
L: distance from trolley centerline to center of gravity of weight (inches)  
R: see chart below



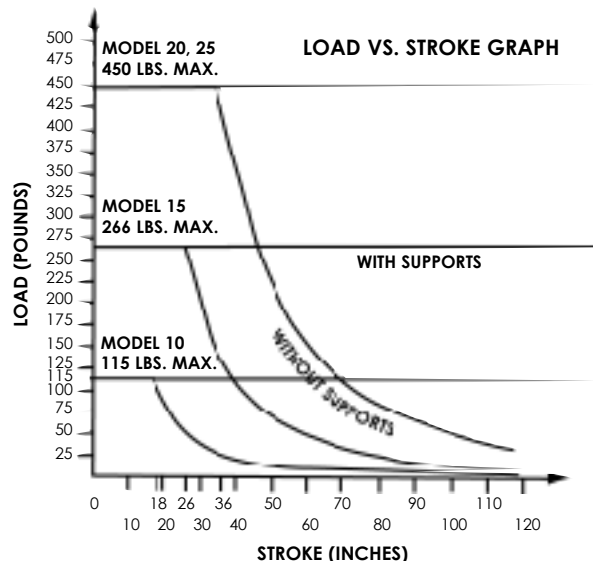
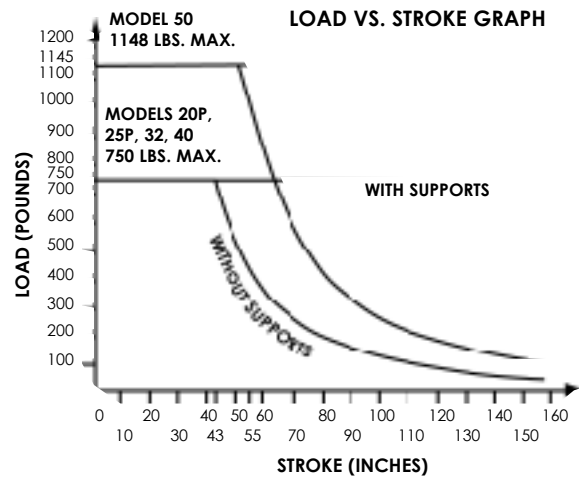
$$F_p = \frac{P(H + h)}{B}$$

P: push/pull force (lbs.)  
H: height from trolley surface.  
h, B: see chart below

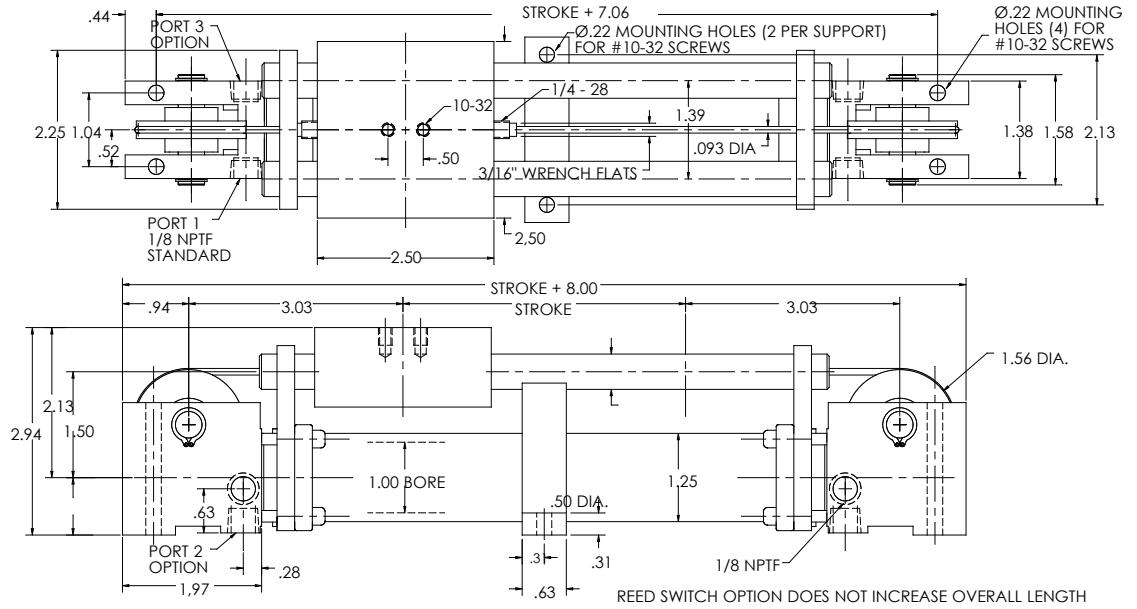


MODEL	R	h	B
T10	1.39	.63	1.25
T15	1.78	.75	1.63
T20, T25	2.50	1.00	2.31
T20P, T25P, T32, T40	3.25	1.25	2.63
T50	7.00	1.50	4.00

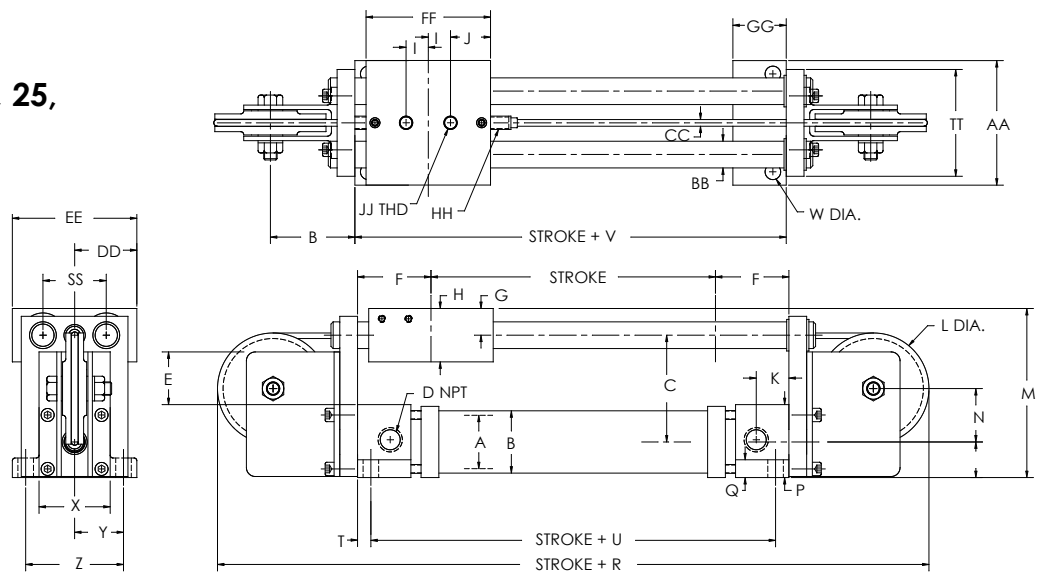
Dimensions in inches



### MODEL 10 TRAC-TROL® SUPPORTED



### MODEL 15, 20, 20P, 25, 25P, 32, 40 and 50



FOR MODEL 15 TRAC-TROL® REED SWITCH OPTION INCREASES OVERALL LENGTH BY 2".

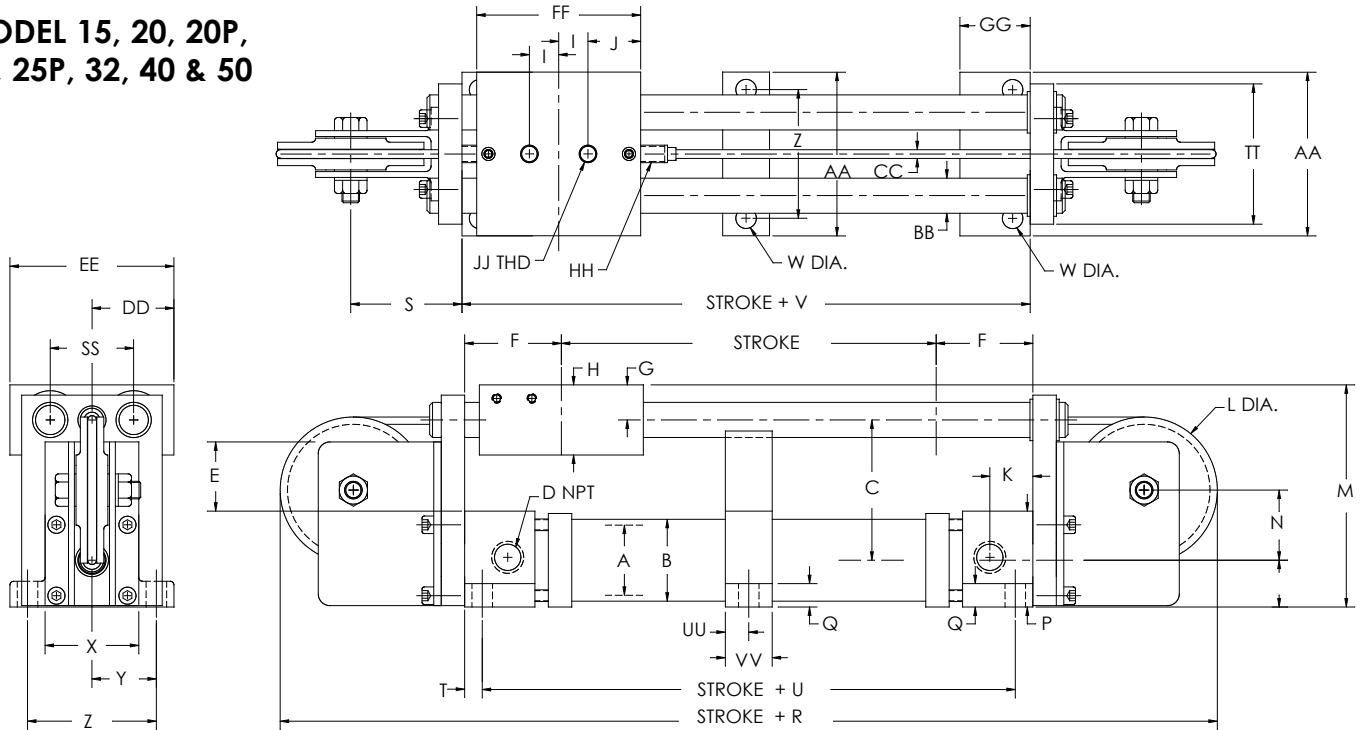
MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
T15	1.50	1.75	3.00	3/8	1.48	2.06	.75	1.50	.63	1.13	.92	3.13	4.75	1.50	1.00	2.00	.50	12.00	2.38	.38	3.38	4.13	.44	2.00	1.38	2.75
T20	2.00	2.25	4.25	3/8	1.88	3.09	1.00	2.00	1.00	1.50	.91	4.50	6.56	2.13	1.25	2.50	.50	16.88	3.13	.38	5.38	6.13	.44	2.50	1.62	3.25
T20P	2.00	2.25	4.00	3/8	1.38	3.06	1.25	2.50	1.00	2.00	.91	4.25	6.49	2.00	1.25	2.50	.50	17.88	3.75	.38	5.38	6.13	.44	2.50	1.62	3.25
T25	2.50	2.75	4.25	3/8	1.50	3.06	1.00	2.00	1.00	1.50	.91	4.50	6.80	2.13	1.50	3.00	.50	16.88	3.13	.38	5.38	6.13	.44	3.00	1.88	3.75
T25P	2.50	2.75	5.31	3/8	2.13	3.78	1.25	2.50	1.00	2.00	1.03	5.68	8.06	2.66	1.50	3.00	.50	21.38	4.06	.38	6.82	7.57	.44	3.00	1.88	3.75
T32	3.25	3.50	5.31	1/2	1.80	3.72	1.25	2.50	1.00	2.00	1.03	5.50	8.44	2.66	1.86	3.75	.75	21.19	4.06	.50	6.44	7.44	.56	3.75	2.38	4.75
T40	4.00	4.25	6.00	1/2	2.35	3.72	1.25	2.50	1.00	2.00	1.03	6.38	9.50	3.00	2.24	4.50	1.00	23.06	4.63	.50	6.44	7.44	.56	4.50	2.75	5.50
T50	5.00	5.25	6.00	1/2	1.25	4.00	1.50	3.00	1.00	2.88	1.03	6.38	10.25	3.00	2.75	5.50	1.00	23.88	4.75	.68	6.63	8.00	.81	5.50	3.44	6.87

MODEL	AA	BB	CC	DD	EE	FF	GG	HH	JJ	SS	TT
T15	3.50	.75	.19	1.75	3.50	3.50	1.50	3/8-24 X 1.68	3/8-24	1.78	3.00
T20	4.00	1.00	.25	2.25	4.50	5.00	1.50	5/8-18 X 1.68	3/8-24	2.50	4.00
T20P	4.00	1.25	.25	2.88	5.75	6.00	1.50	3/4-16 X 2.25	1/2-13	3.25	5.00
T25	4.50	1.00	.25	2.25	4.50	5.00	1.50	5/8-18 X 1.63	3/8-24	2.50	4.00
T25P	4.50	1.25	.38	2.88	5.75	6.00	1.50	3/4-16 X 2.50	1/2-13	3.25	5.00
T32	5.75	1.25	.31	2.88	5.75	6.00	1.75	3/4-16 X 2.25	1/2-13	3.25	5.00
T40	6.50	1.25	.38	2.88	5.75	6.00	1.75	3/4-16 X 2.50	1/2-13	3.25	5.00
T50	8.25	1.50	.38	5.00	10.00	7.75	1.75	3/4-16 X 2.50	5/8-18	7.00	10.00

**NOTE:** Dimension TT may be larger than dimension AA. Dimension Z is mounting hole location.

Dimensions in inches  
Tolerance on Overall Length is ± 1/16"

### MODEL 15, 20, 20P, 25, 25P, 32, 40 & 50



MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
TS15	1.50	1.75	3.00	3/8	1.48	2.06	.75	1.50	.63	1.13	.91	3.13	4.75	1.50	1.00	2.00	.50	12.00	2.38	.38	3.38	4.13	.44	2.00	1.38	2.75
TS20	2.00	2.25	4.25	3/8	1.88	3.09	1.00	2.00	1.00	1.50	.91	4.50	6.53	2.13	1.25	2.50	.50	16.88	3.13	.38	5.38	6.13	.44	2.50	1.62	3.25
TS20P	2.00	2.25	4.00	3/8	1.38	3.06	1.25	2.50	1.00	2.00	.91	4.25	6.49	2.00	1.25	2.50	.50	17.88	3.75	.38	5.38	6.13	.44	2.50	1.62	3.25
TS25	2.50	2.75	4.25	3/8	1.50	3.06	1.00	2.00	1.00	1.50	.91	4.50	6.80	2.13	1.50	3.00	.50	16.88	3.13	.38	5.38	6.13	.44	3.00	1.88	3.75
TS25P	2.50	2.75	5.31	3/8	2.13	3.78	1.25	2.50	1.00	2.00	1.03	5.68	8.06	2.66	1.50	3.00	.50	21.38	4.06	.38	6.82	7.57	.44	3.00	1.88	3.75
TS32	3.25	3.50	5.31	1/2	1.80	3.72	1.25	2.50	1.00	2.00	1.03	5.63	8.44	2.66	1.86	3.75	.75	21.19	4.06	.50	6.44	7.44	.56	3.75	2.38	4.75
TS40	4.00	4.25	6.00	1/2	2.35	3.72	1.25	2.50	1.00	2.00	1.03	6.38	9.50	3.00	2.24	4.50	1.00	23.06	4.63	.50	6.44	7.44	.56	4.50	2.75	5.50
TS50	5.00	5.25	6.00	1/2	1.25	4.00	1.50	3.00	1.00	2.88	1.03	6.38	10.25	3.00	2.75	5.50	1.00	23.88	4.75	.68	6.68	8.00	.81	5.50	3.44	6.87

MODEL	AA	BB	CC	DD	EE	FF	GG	HH	JJ	SS	TT	UU	VV
TS15	3.50	.75	.19	1.75	3.50	3.50	1.50	3/8-24 X 1.68	3/8-24	1.78	3.00	.50	1.00
TS20	4.00	1.00	.25	2.25	4.50	5.00	1.50	5/8-18 X 1.68	3/8-24	2.50	4.00	.63	1.25
TS20P	4.00	1.25	.25	2.88	5.75	6.00	1.50	3/4-16 X 2.25	1/2-13	3.25	5.50	.63	1.25
TS25	4.50	1.00	.25	2.25	4.50	5.00	1.50	5/8-18 X 1.63	3/8-24	2.50	4.00	.63	1.25
TS25P	4.50	1.25	.38	2.88	5.75	6.00	1.50	3/4-16 X 2.25	1/2-13	3.25	5.50	.63	1.25
TS32	5.75	1.25	.31	2.88	5.75	6.00	1.75	3/4-16 X 2.25	1/2-13	3.25	5.00	.75	1.50
TS40	6.50	1.25	.38	2.88	5.75	6.00	1.75	3/4-16 X 2.50	1/2-13	3.25	5.00	.75	1.50
TS50	8.25	1.50	.38	5.00	10.00	7.75	1.75	3/4-16 X 2.50	5/8-18	7.00	10.00	.75	1.50

**NOTE:** Dimension TT may be larger than dimension AA. Dimension Z is mounting hole location.

FOR MODEL 15 TRAC-TROL® REED SWITCH OPTION INCREASES OVERALL LENGTH BY 2"

Dimensions in inches  
Tolerance on overall length  $\pm 1/16"$

**LOADING — MAXIMUM LOADS —**  
Horizontal Mounting  
MODEL TS15 - 266 lbs. MODEL TS20 & 25 - 450 lbs.  
MODEL TS20P, 25P, 32 & 40 - 750 lbs.

**IMPORTANT!** With inverted mounting, maximum load is one half the horizontal mounting maximum load.

**SUPPORT SPACING (All Other Models)** — Determine the number of supports for given stroke length by subtracting "KK" from the stroke length, then divide by 24.

$$(\text{Stroke} - \text{"KK"}) \div 24 = \text{number of supports}$$

(Round to nearest whole number)

From the head mounting holes, the first support is located by the following:  
Stroke + U - ((number of supports - 1) x 24) = Hole location of first support

Other supports are spaced 24" apart.

**SUPPORT SPACING (Model TS10 only)** — Determine the number of supports for given stroke length by subtracting "KK" from the stroke length, then divide by 12.

$$(\text{Stroke} - \text{"KK"}) \div 12 = \text{number of supports}$$

(Round to nearest whole number)

From the head mounting holes, the first support is located by the following:  
Stroke + U - ((number of supports - 1) x 12) = Hole location of first support

Other supports are spaced 12" apart.

MODEL	KK	U
TS10	1.94	7.06
TS15	1.94	3.38
TS20	.81	5.38
TS20P	.81	5.38
TS25	.81	5.38
TS25P	.81	6.82
TS32	.69	6.44
TS40	.69	6.44
TS50	.69	6.63

Many applications of the TRAC-TROL® cable cylinder involve mounting some of the weight off the side of the unit. To be certain the correct size TRAC-TROL® is used in your specific application use the Fs + Fp equations to see if the calculated load falls beneath (under) the maximum load limit. Do not exceed the maximum load limit.