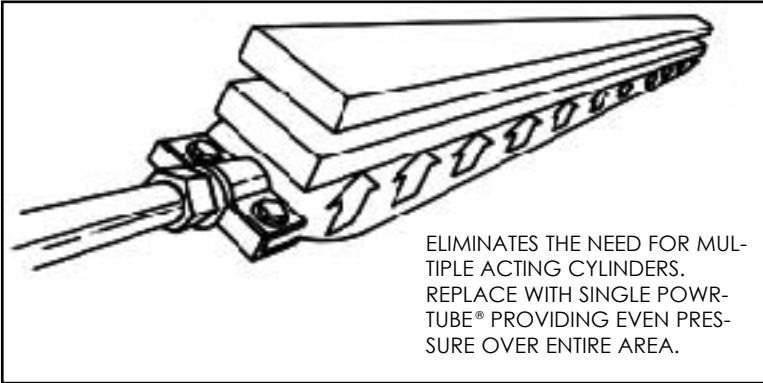
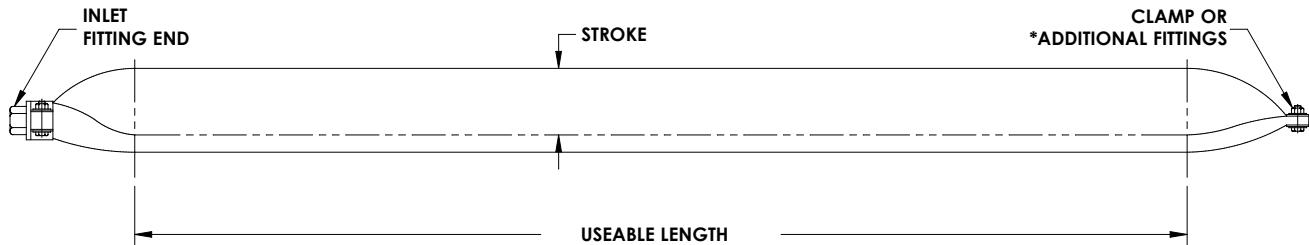




POWR-TUBE® provides a unique construction of a non-removable end fitting bonded to a tube (up to almost 100 ft. length) to give a leak proof, long-lasting, low-cost, short-stroke linear actuator. Pneumatic or hydraulic service.

- Light Weight
- Simple Construction, Easy to Mount
- Low Cost
- **NO** Maintenance

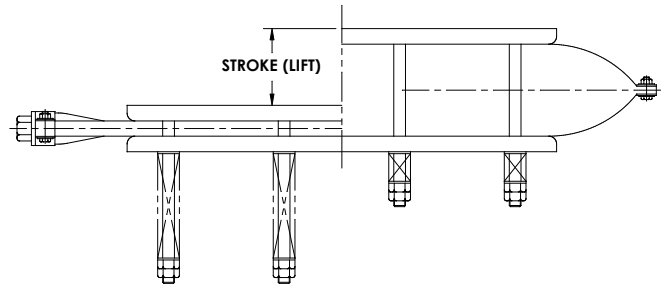
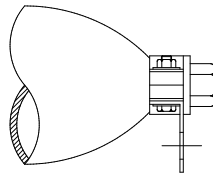
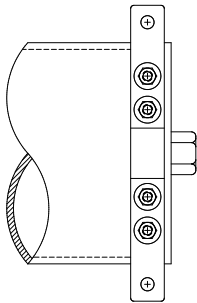
TEMP. RATING: 180°
MAXIMUM OPERATING
PRESSURE 100 PSI



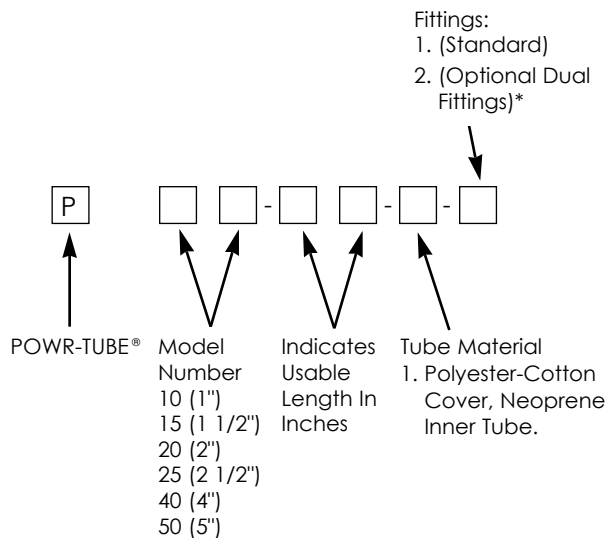
FUNCTIONS & APPLICATIONS - Lifting, Clamping, Positioning, Hold, Release and Cushioning

* DUAL FITTINGS
RECOMMENDED FOR
MAXIMUM AIR FLOW

TYPICAL MOUNTINGS (NOT PROVIDED)



HOW TO ORDER



* DUAL FITTINGS
RECOMMENDED FOR
MAXIMUM AIR FLOW

OUTPUT FORCE CALCULATION

OUTPUT FORCE TABLE IS COMPUTED FROM THE FOLLOWING FORMULA:

$$1.57 \times (\text{BORE} - \text{LIFT}) \times \frac{\text{EFFECTIVE LENGTH}}{\text{LIFT}} \times \text{INPUT AIR PRESSURE} = \text{OUTPUT FORCE}$$

where $F [\text{LB}] = 1.57 (D - l) LP$
 $d = \text{TUBE DIA. (INCHES) (BORE SIZE)}$
 $l = \text{LIFT (INCHES)}$
 $L = \text{USEABLE LENGTH (INCHES)}$
 $P = \text{INPUT PRESSURE (P.S.I.)}$

TYPICAL OUTPUT FORCES PER 10 INCHES OF EFFECTIVE LENGTH AT 100 PSI PRESSURE AT LIFT OF:

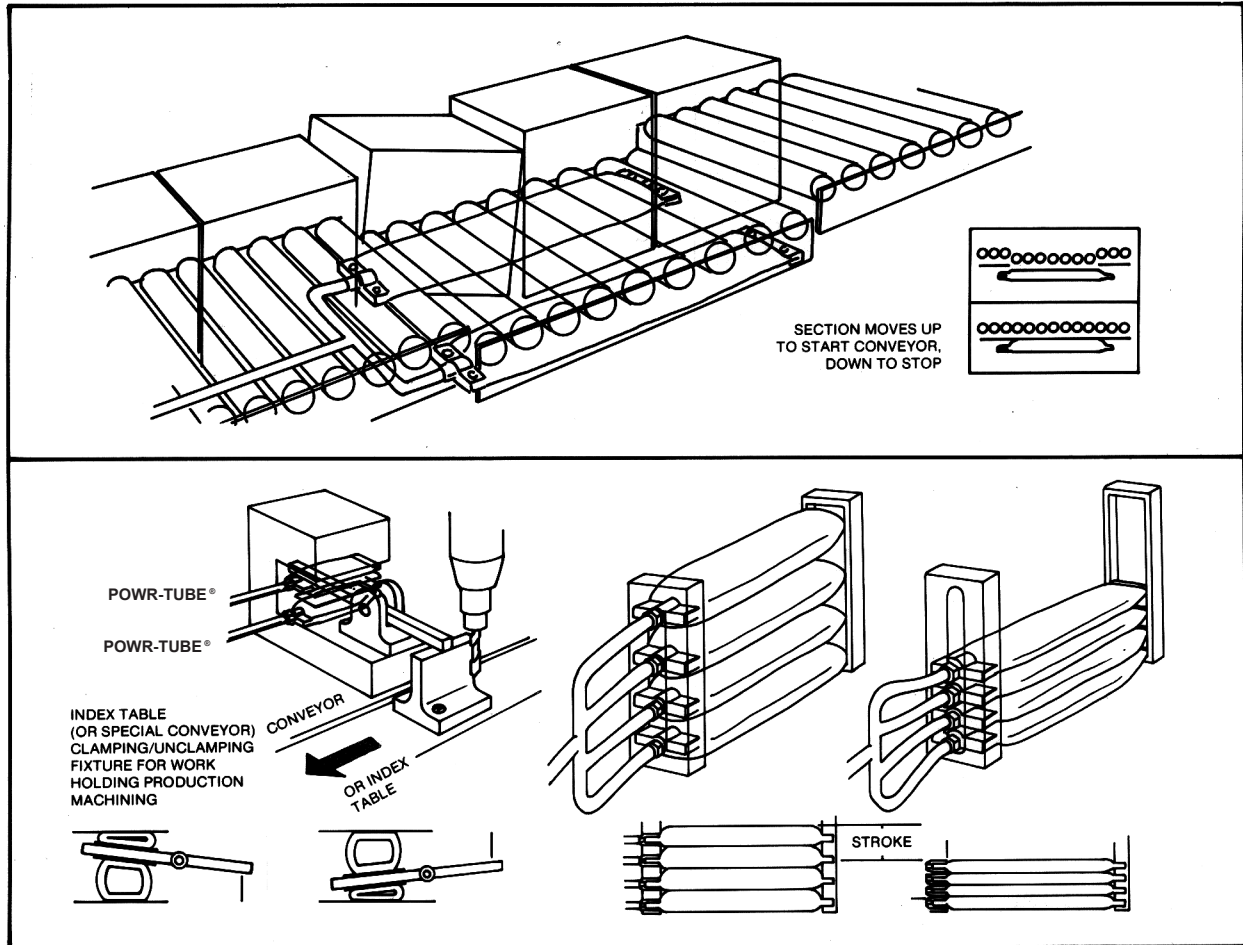
POWR-TUBE® MODEL	LIFT									
	.2"	.5"	1"	1.5"	2"	2.5"	3"	3.5"	4"	4.5"
P10-10 (1.0" Dia.)	1255	785								
P15-10 (1.5" Dia.)	2040	1570	785							
P20-10 (2.0" Dia.)	2825	2355	1570	785						
P25-10 (2.5" Dia.)	3610	3140	2355	1570	785					
P40-10 (4.0" Dia.)	5970	5500	4710	3925	3140	2355	1570	785		
P50-10 (5.0" Dia.)	7540	7070	6280	5500	4710	3925	3140	2355	1570	785

EXAMPLE:

2" POWR-TUBE® with 1" total lift, 10" effective length at 100 psi

Model Number

P2010-1-1 $1.57 \times (2.0 - 1.0) \times 10 \times 100 = 1570 \text{ lbs.}$



MODEL	A	B	C	D	F	G	J	K
P10	1.67	-	1.06	.64	.88	#8-32 X .75	4 1/2	.10
P15	2.30	-	1.50	.75	1.25	1/4-20 X 1.00	6 1/8	.11
P20	3.20	-	2.25	.72	1.25	3/8-16 X 1.25	7 5/16	.11
P25	3.86	-	2.50	.72	1.25	3/8-16 X 1.25	8	.12
P40	6.75	5.00	2.50	1.00	1.25	3/8-24 X 1.75	11 3/4	.16
P50	8.00	6.50	4.12	1.00	1.25	3/8-24 X 1.75	14 3/4	.25

MODEL	L	N	P	Q	R	S	T	U	V
P10	2 5/8	.88	1.25	-	2.00	.89	.75	.52	1 1/4
P15	4	1.25	1.75	-	2.75	1.14	.88	.64	1 7/8
P20	5 1/8	1.25	2.25	-	3.63	1.40	1.12	.66	2 1/8
P25	5 7/8	1.25	3.00	-	4.38	1.67	1.12	.71	2 5/8
P40	9 1/2	1.25	2.50	5.00	6.50	2.13	1.38	2.13	4 1/2
P50	12 1/2	1.25	3.38	6.75	8.38	2.13	1.38	2.13	6

MODEL	X	Y	Z	DD	FF	PORT (NPT)	ORIFICE
P10	1.25	1 3/8	#8-32 X .38	.33	.78	1/4-18 FEMALE	.24
P15	1.75	2 1/8	1/4-20 X .75	.39	1.14	3/8-18 FEMALE	.37
P20	2.33	3	3/8-16 X 1.00	.40	1.32	1/2-14 FEMALE	.47
P25	2.88	3 1/4	3/8-16 X 1.00	.41	1.33	1/2-14 FEMALE	.47
P40	4.48	5	3/8-24 X 1.00	.49	1.41	3/4-14 MALE	.65
P50	5.50	6 1/2	3/8-24 X 1.25	.68	1.60	3/4-14 MALE	.65

Tolerances: $\pm 1/4"$ on Fractions

$\pm .03$ on 2-Place Decimals

Dimensions in inches

NOTES: DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE

J, L, V, X & Y DIMENSIONS: STANDARD TUBE / NEOPRENE TUBE

ENGINEERING SPECIFICATIONS

