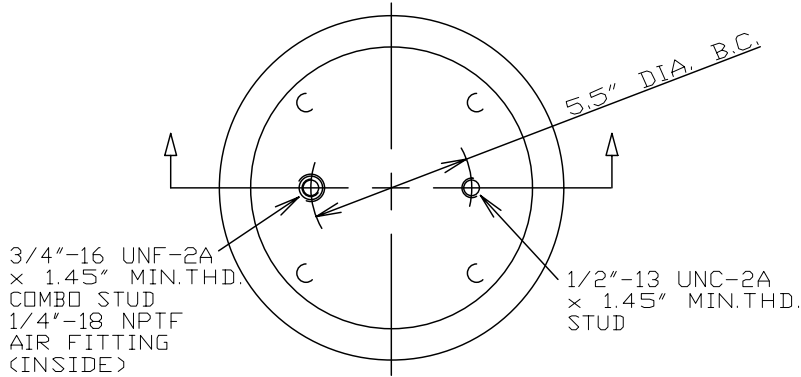
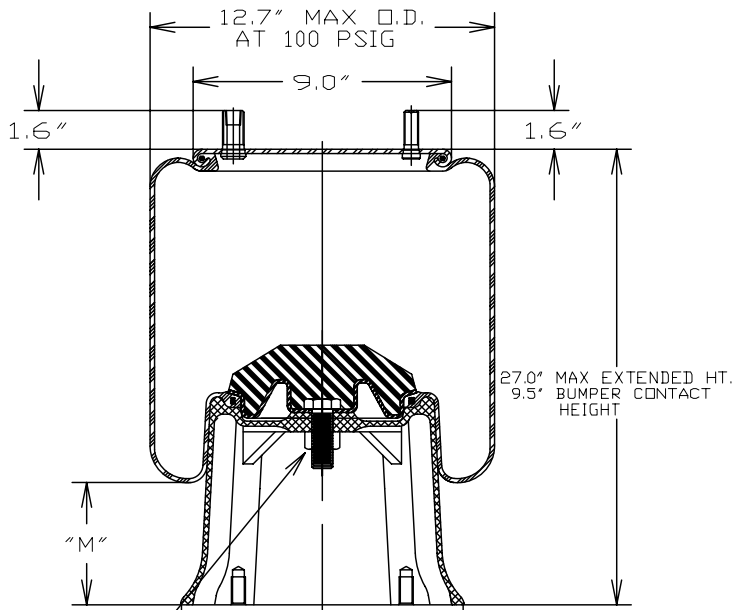


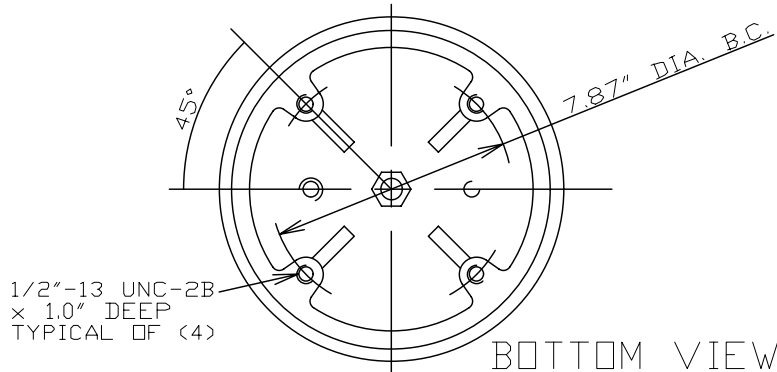
1R12-103



TOP VIEW



SIDE VIEW



BOTTOM VIEW

ASSEMBLY NUMBER	ELASTOMER	AIR FITTING	BUMPER INCLUDED
1R12-103	NAT.RUBBER	1/4"-18 NPTF COMBO STUD	YES

SPRING FEATURES:

- LOAD RANGE (ISOLATOR).....1300-7300 lb
- DESIGN HEIGHT RANGE (ISOLATOR)....15.0-20.0 in
- USEABLE STROKE (ACTUATOR).....17.5 in
- ASSEMBLY WEIGHT.....22.3 lb
- TEMPERATURE RANGE*.....
- ALUMINUM PISTON

* NOTE: PRODUCT LIFE MAY BE SHORTENED WHEN OPERATING AT OR NEAR EXTREME TEMPERATURES. SEE TEMPERATURE RANGE GUIDELINES SECTION.

OTHER OPTIONS:

- METRIC ATTACHMENTS

UPPER BEAD PLATE:

- ALTERNATE BOLT LENGTHS AND SPACINGS
- ALTERNATE AIR FITTING SIZES AND LOCATIONS
- NO BUMPER OR ALTERNATE BUMPER

PISTON:

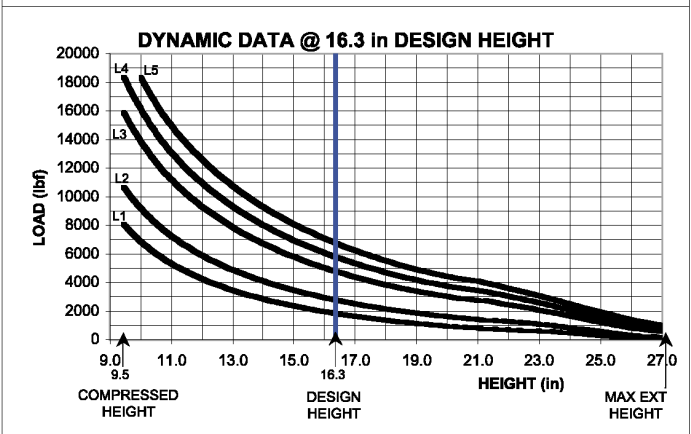
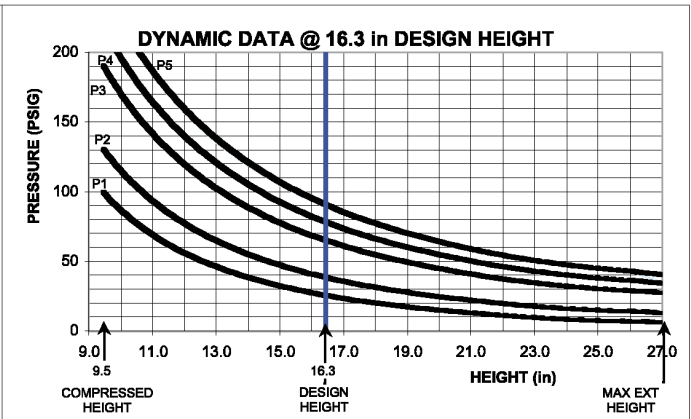
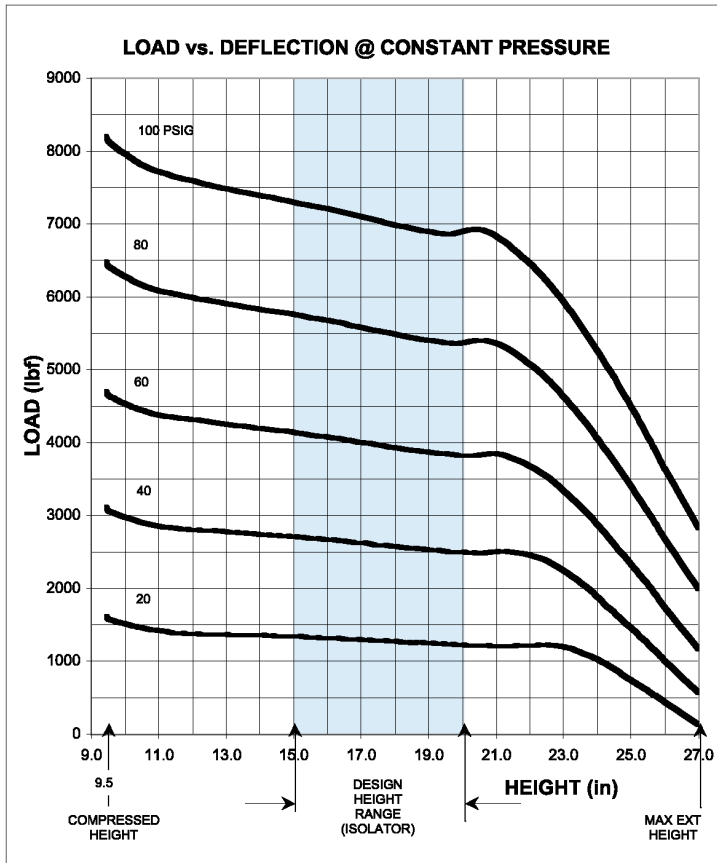
- ALTERNATE HEIGHTS
- STEEL PISTON WITH GREATER EFFECTIVE AREA

RECOMMENDED MAX. TORQUE VALUES

3/4"-16 UNF COMBO STUD	1/2"-13 UNC TOP STUD	1/2"-13 UNC BLIND TAP TYP. OF (4)	1/4"-18 UNC AIR FITTING
600 in-lb 50 ft-lb	300 in-lb 25 ft-lb	600 in-lb 50 ft-lb	240 in-lb 20 ft-lb
3/4"-10 UNC HEX LOCKNUT			
900 in-lb 75 ft-lb			

NOTE: SEE GUIDELINES FOR PROPER APPLICATION OF THIS PRODUCT

GRAPHS FOR REFERENCE ONLY - USE THE CHART DATA BELOW FOR DESIGN WORK



****NOTE: MAXIMUM INFLATION PRESSURE IS 100 PSIG. MAXIMUM JOUNCE PRESSURE IS 200 PSIG. IF YOUR APPLICATION WILL EXCEED THESE LIMITS, CONSULT A GOODYEAR REPRESENTATIVE FOR APPLICATION ASSISTANCE.**

CONSTANT PRESSURE CHARACTERISTICS

Assembly Height (in)	Meniscus Height "M" Dim. @ 100 PSIG (in)	Volume @ 100 PSIG (in ³)	Nominal Force (lb)				
			@ 20 PSIG	@ 40 PSIG	@ 60 PSIG	@ 80 PSIG	@ 100 PSIG
27.0	7.6	1680	100	400	980	1800	2600
24.0	7.3	1506	1050	1900	2900	4100	5300
22.0	7.1	1358	1300	2500	3800	5200	6500
20.0	6.1	1200	1300	2500	3800	5400	6900
18.0	5.0	1047	1350	2600	3900	5500	7000
16.3	4.1	922	1450	2600	3900	5500	7200
15.0	3.3	800	1450	2700	4100	5700	7300
13.0	2.9	689	1450	2800	4200	5900	7500
11.0	1.0	557	1500	2900	4400	6100	7700
9.5	0.4	455	1600	3100	4700	6500	8200

DYNAMIC CHARACTERISTICS

Design Height (in)	Load (lb)	Pressure (PSIG)	Spring Rate (lb/in)	Natural Frequency	
				cpm	Hz
20.0	2000	30	285	70	1.17
	3000	44	315	60	1.00
	5000	71	430	55	0.92
	6000	83	465	54	0.90
16.3	2000	27	355	79	1.32
	3000	41	460	74	1.23
	5000	68	670	69	1.15
	6000	82	780	68	1.13
15.0	2000	27	370	81	1.35
	3000	40	505	77	1.28
	5000	68	755	72	1.20
	6000	80	865	71	1.18
15.0	7000	93	980	70	1.17