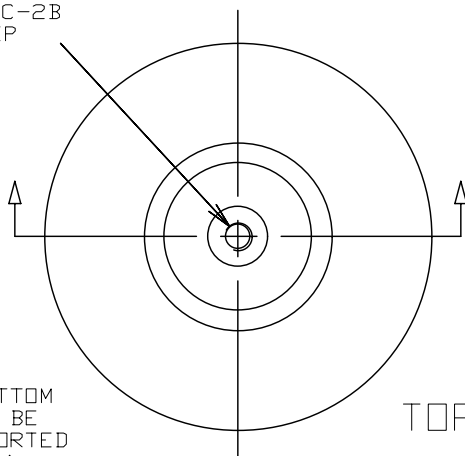
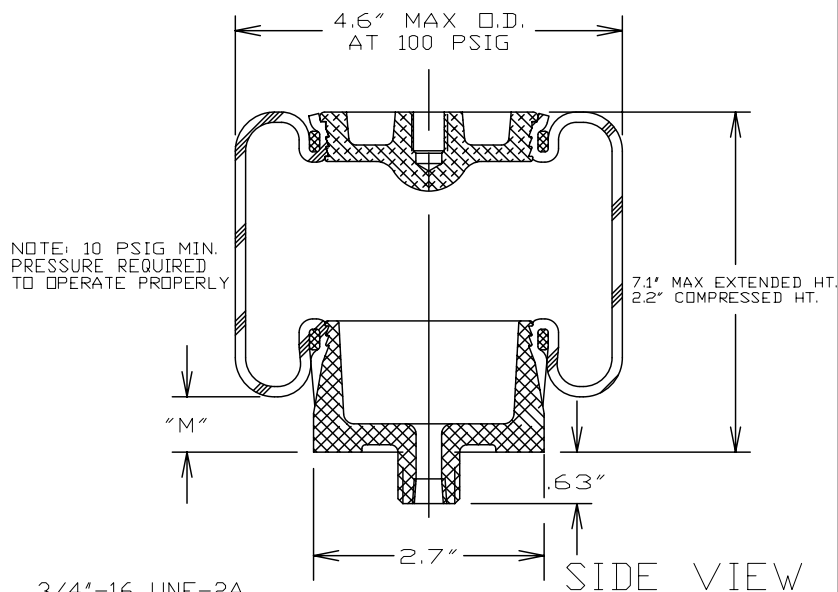


3/8"-16 UNC-2B  
x 1/2" DEEP



TOP AND BOTTOM  
SURFACE TO BE  
FULLY SUPPORTED  
TO 4.1" DIA.

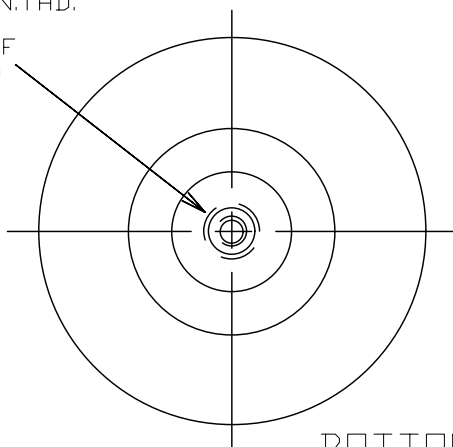
TOP VIEW



NOTE: 10 PSIG MIN.  
PRESSURE REQUIRED  
TO OPERATE PROPERLY

SIDE VIEW

3/4"-16 UNF-2A  
x 9/16" MIN. THD.  
COMBO STUD  
1/8"-27 NPTF  
AIR FITTING  
(INSIDE)



BOTTOM VIEW

ASSEMBLY NUMBER	ELASTOMER	AIR FITTING	BUMPER INCLUDED
1S4-007	WINGPRENE	1/8"-27 NPTF COMBO STUD	NO

## SPRING FEATURES:

- LOAD RANGE (ISOLATOR).....160-850 lb
- DESIGN HEIGHT RANGE (ISOLATOR).....3.8-4.4 in
- USEABLE STROKE (ACTUATOR).....4.9 in
- ASSEMBLY WEIGHT.....1.9 lb
- TEMPERATURE RANGE\*
- DIECAST END COMPONENTS

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

## OTHER OPTIONS:

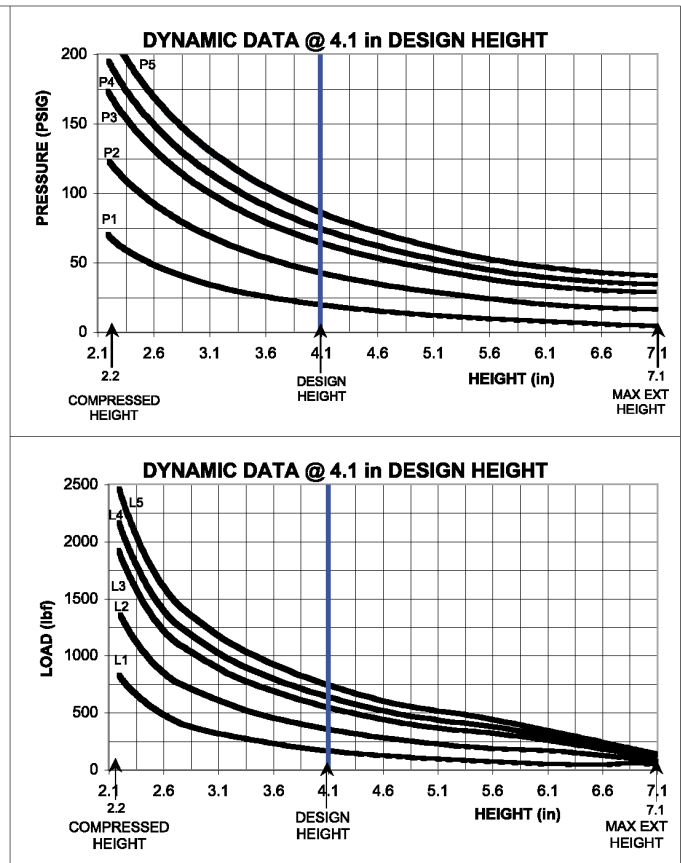
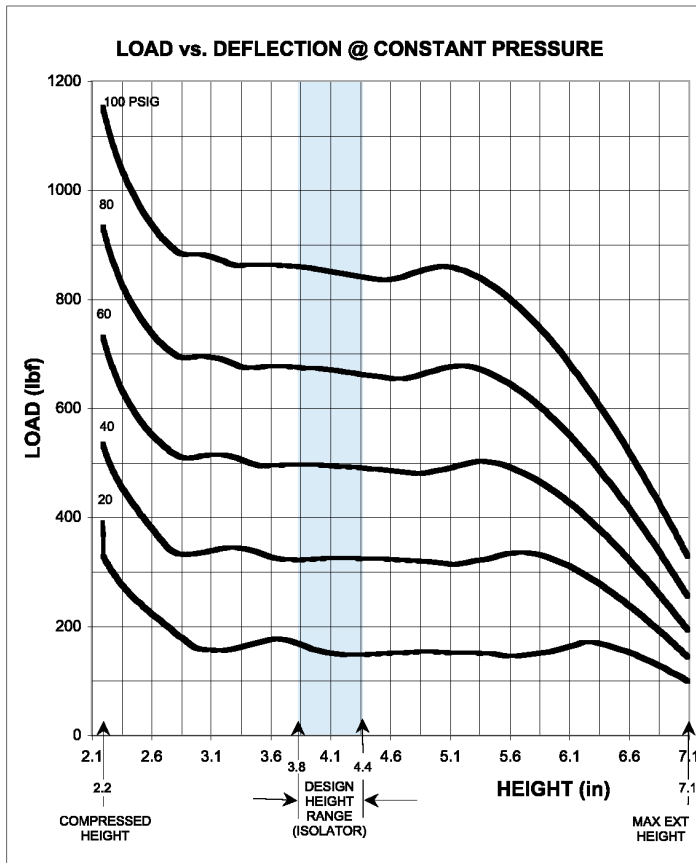
- COMPOSITE END COMPONENTS
- INTEGRAL QUICK CONNECT FITTINGS
- SMOOTH MOUNTING STUDS FOR USE WITH STAR CLIPS (SPEEDS ASSEMBLY)
- AIR FITTING IN TOP

## RECOMMENDED MAX. TORQUE VALUES

3/8"-16 UNC BLIND TAP	3/4"-16 UNF COMBO STUD	1/8"-27 UNC AIR FITTING
360 in-lb 30 ft-lb	360 in-lb 30 ft-lb	180 in-lb 15 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	Volume @ 100 PSIG (in <sup>3</sup> )	Nominal Force (lb)				
			@ 20 PSIG	@ 40 PSIG	@ 60 PSIG	@ 80 PSIG	@ 100 PSIG
7.1	1.5	60	80	130	180	240	310
6.5	1.5	55	160	250	340	460	540
6.0	1.4	50	170	320	440	580	700
5.5	1.3	46	160	320	500	660	800
5.0	1.2	42	160	320	500	680	850
4.4	0.7	37	160	340	500	680	850
4.1	0.5	34	160	340	500	680	850
3.8	0.4	31	160	340	500	680	850
3.0	0.0	24	160	340	520	700	850
2.2	0.0	16	340	520	700	900	1100

## DYNAMIC CHARACTERISTICS

Design Height (in)	Load (lb)	Pressure (PSIG)	Spring Rate (lb/in)	Natural Frequency	
				cpm	Hz
4.4	160	23	100	134	2.23
	350	47	175	124	2.07
	525	70	240	118	1.97
	625	79	265	116	1.93
4.1	725	90	285	112	1.87
	160	24	105	136	2.27
	350	46	185	127	2.12
	525	69	255	122	2.03
3.8	625	79	290	121	2.02
	725	91	330	120	2.00
	160	23	125	149	2.48
	350	46	195	131	2.18
3.0	525	67	275	128	2.13
	625	78	310	126	2.10
	725	90	355	125	2.08