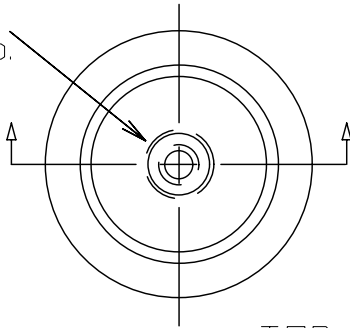


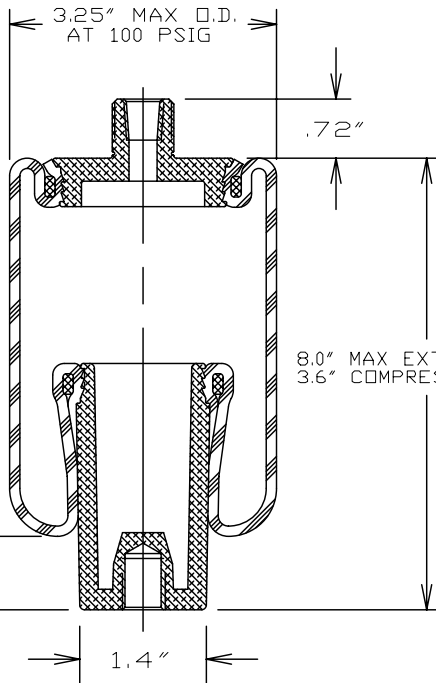
1S3-011

3/4"-16 UNF-2A
x 5/8" MIN. THD.
COMBO STUD
1/8"-27 NPTF
AIR FITTING
(INSIDE)



TOP VIEW

TOP AND BOTTOM
SURFACE TO BE
FULLY SUPPORTED
TO 2.75" DIA.

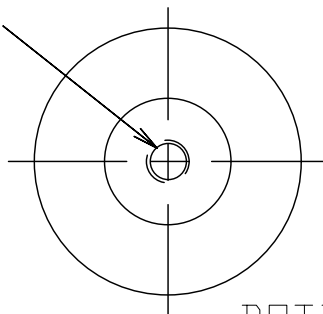


SIDE VIEW

NOTE: 10 PSIG MIN.
PRESSURE REQUIRED
TO OPERATE PROPERLY

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

1/2"-13 UNC-2B
x 5/8" DEEP



BOTTOM VIEW

ASSEMBLY NUMBER	ELASTOMER	AIR FITTING	BUMPER INCLUDED
1S3-011	WINGPRENE	1/8"-27 NPTF COMBO STUD	NO

SPRING FEATURES:

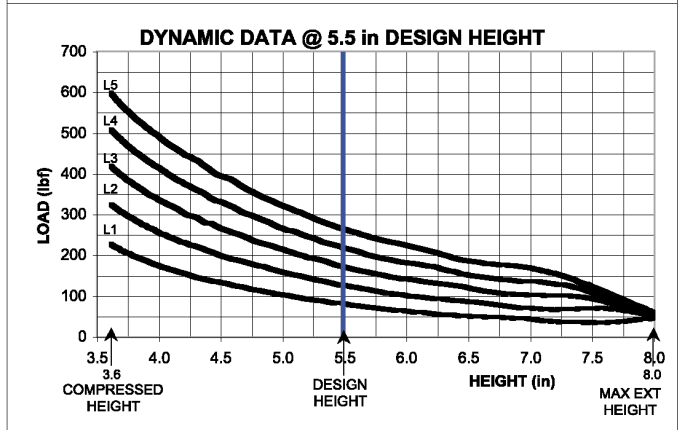
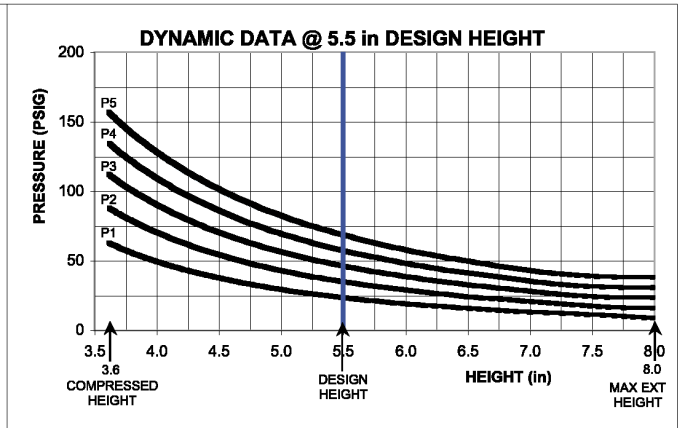
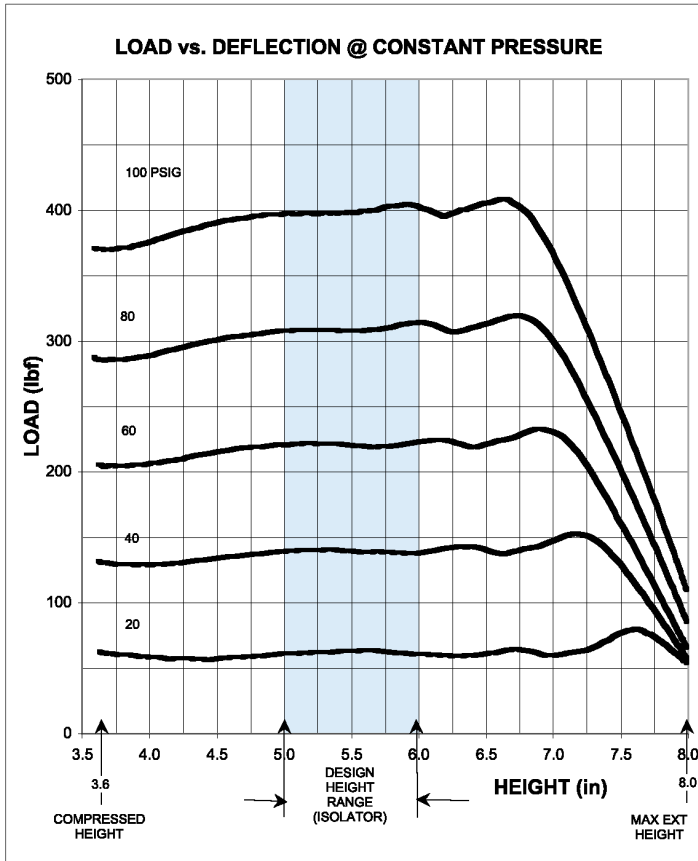
- LOAD RANGE (ISOLATOR).....70-400 lb
- DESIGN HEIGHT RANGE (ISOLATOR).....5.0-6.0 in
- USEABLE STROKE (ACTUATOR).....4.4 in
- ASSEMBLY WEIGHT.....1.4 lb
- TEMPERATURE RANGE*.....
- DIECAST END COMPONENTS

RECOMMENDED MAX. TORQUE VALUES

1/2"-13 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 ³)	Nominal Force (lb)				
			@ 20 PSIG	@ 40 PSIG	@ 60 PSIG	@ 80 PSIG	@ 100 PSIG
8.0	3.0	28	40	50	60	80	110
6.5	2.7	21	70	150	230	320	400
6.0	2.2	18	70	150	240	320	400
5.75	2.2	17	70	150	230	320	400
5.5	2.0	16	70	150	230	320	400
5.25	1.9	15	70	150	230	320	400
5.0	1.7	14	70	150	230	320	400
4.5	1.4	13	60	140	220	300	400
4.0	0.8	11	60	130	210	300	380
3.6	0.3	10	60	130	200	280	360

DYNAMIC CHARACTERISTICS

Design Height (in)	Load (lb)	Pressure (PSIG)	Spring Rate (lb/in)	Natural Frequency	
				cpm	Hz
6.0	80	25	35	111	1.85
	125	37	55	114	1.90
	170	48	70	111	1.85
	215	60	85	110	1.83
5.5	80	26	45	124	2.07
	125	38	60	119	1.98
	170	50	75	114	1.90
	215	62	85	111	1.85
5.0	80	26	45	125	2.08
	125	39	65	123	2.05
	170	50	85	122	2.03
	215	62	100	120	2.00
4.5	80	26	45	118	1.97
	125	39	65	116	1.94
	170	50	85	115	1.92
	215	62	100	114	1.90