

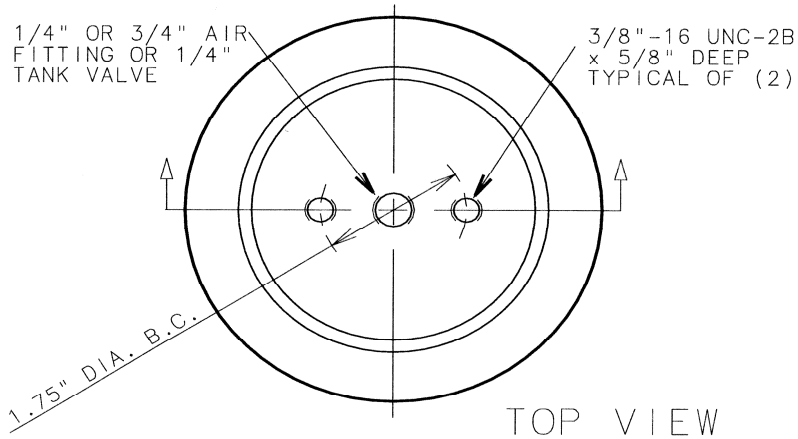
目 录

1B5-500/502/503 图纸.....	2
1B5-500/502/503 性能参数.....	3
1B5-510/512 图纸.....	4
1B5-510/512 性能参数.....	5
1B5-800 (579-91-2-800) 图纸.....	6
1B5-800 (579-91-2-800) 性能参数.....	7
1B6-833 (579-91-2-833) 图纸.....	8
1B6-833 (579-91-2-833) 性能参数.....	9
1B8-850 (579-91-2-850) 图纸.....	10
1B8-850 (579-91-2-850) 性能参数.....	11
1B12-313/301/304/305 图纸.....	12
1B12-313/301/304/305 性能参数.....	13
1B12-318 (579-91-2-318) 图纸.....	14
1B12-318 (579-91-2-318) 性能参数.....	15
2B9-223 图纸.....	16
2B9-223 性能参数.....	17
2B12-343 图纸.....	18
2B12-343 性能参数.....	19

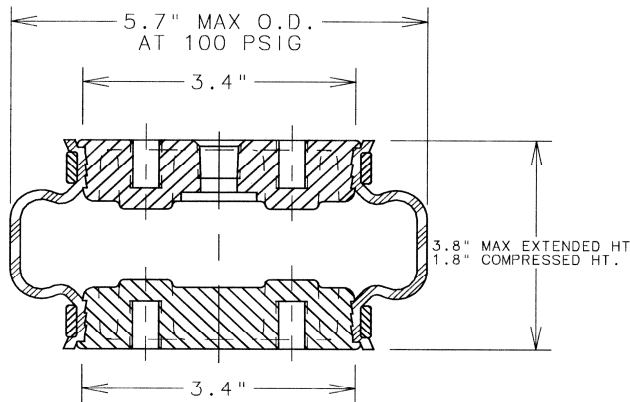
备注：1B12-318 是 1B12-313 公制版本



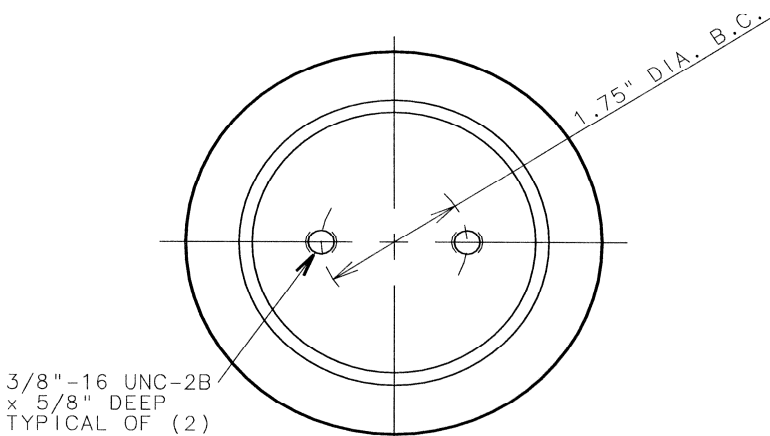
1B5-500



TOP VIEW



SIDE VIEW



BOTTOM VIEW

ASSEMBLY NUMBER	ELASTOMER	AIR FITTING	BUMPER INCLUDED
1B5-500	WINGPRENE®	1/4"-18 NPTF	NO
1B5-502	WINGPRENE®	3/4"-14 NPTF	NO
1B5-503	WINGPRENE®	1/4"-18 NPTF W/TANK VALVE INSTALLED	NO

SPRING FEATURES:

- LOAD RANGE (ISOLATOR).....210-1350 lb
- DESIGN HEIGHT RANGE (ISOLATOR).....2.5-3.0 in
- USEABLE STROKE (ACTUATOR).....2.0 in
- ASSEMBLY WEIGHT.....1.1 lb
- FORCE TO COMPRESS AT 0 PSIG (APPROX.).....9 lb
- NOMINAL FREE STANDING HT. AT 0 PSIG.....2.5 in

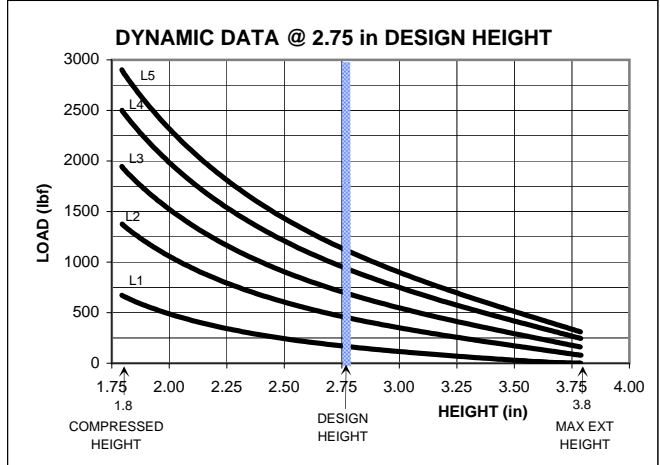
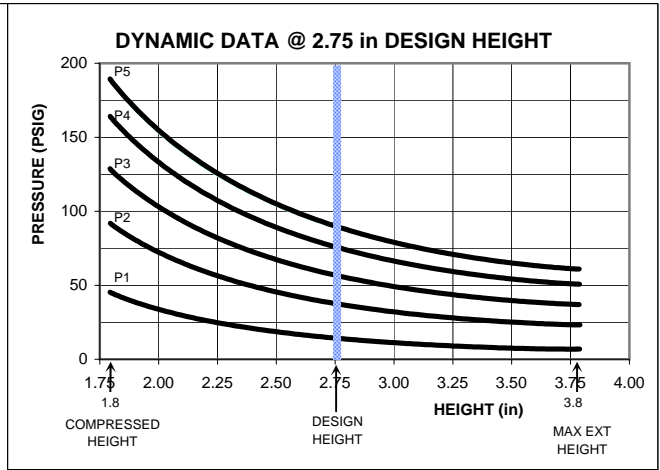
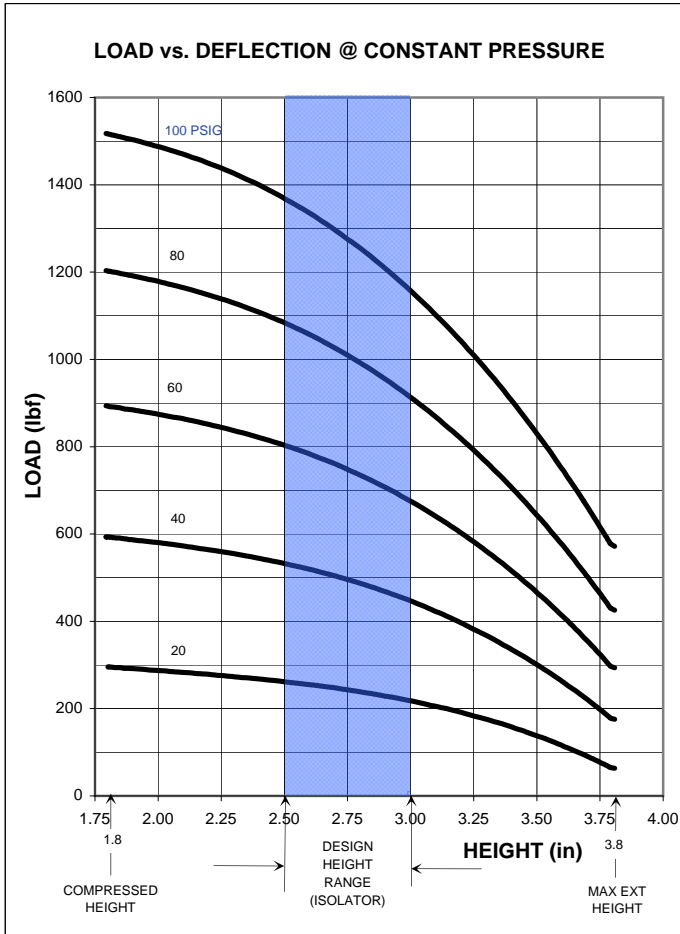
OTHER OPTIONS:

- SHOULDER STUD 3/8"-16 UNC-3A x 9/16" BY 1/2"-13 UNC-3A x 2-1/2" (578-92-9-056)

RECOMMENDED MAX. TORQUE VALUES

3/8"-16 UNC BLIND TAP TYP. OF (4)	1/4"-18 UNC AIR FITTING	3/4"-14 UNC AIR FITTING
240 in-lb 20 ft-lb	240 in-lb 20 ft-lb	240 in-lb 20 ft-lb

NOTE: SEE GUIDELINES FOR PROPER APPLICATION OF THIS PRODUCT



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

CONSTANT PRESSURE CHARACTERISTICS

Assembly Height (in)	Volume @ 100 PSIG (in ³)	Nominal Force (lb)				
		@ 20 PSIG	@ 40 PSIG	@ 60 PSIG	@ 80 PSIG	@ 100 PSIG
		3.8	51	60	170	280
3.5	48	130	280	440	620	800
3.0	41	210	420	660	850	1100
2.75	37	240	480	700	1000	1250
2.5	33	260	520	800	1050	1350
2.0	26	280	560	850	1150	1450
1.8	24	280	580	900	1200	1500

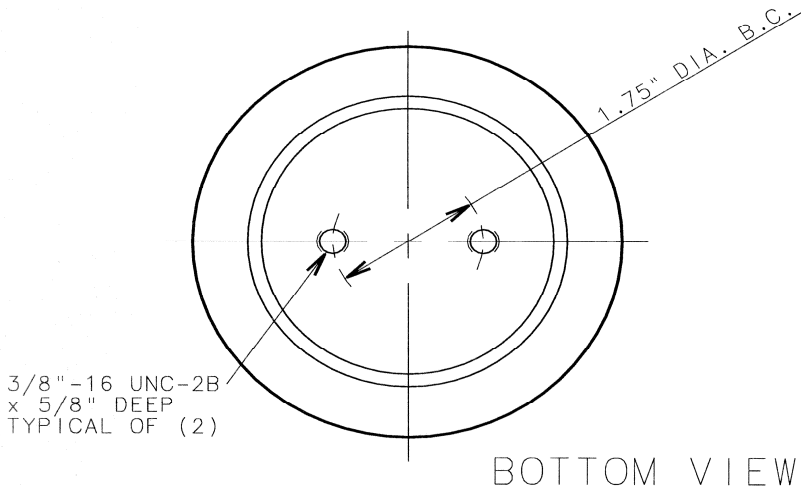
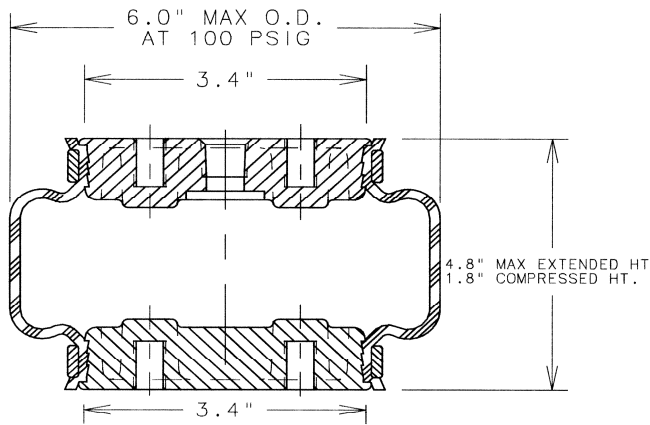
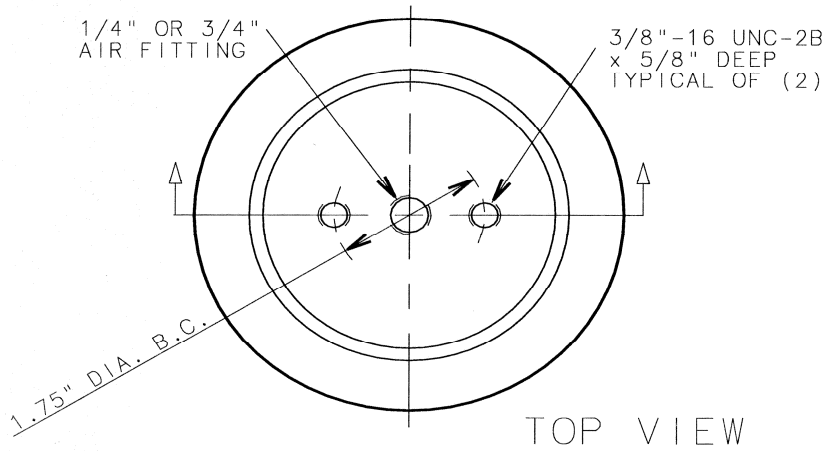
DYNAMIC CHARACTERISTICS

Design Height (in)	Load (lb)	Pressure (PSIG)	Spring Rate (lb/in)	Natural Frequency	
				cpm	Hz
3.0	200	18	275	223	3.72
	500	44	545	195	3.25
	750	64	750	188	3.13
	950	86	970	184	3.07
2.75	1150	100	1130	182	3.03
	200	16	275	220	3.67
	500	41	535	193	3.22
	750	60	745	186	3.10
2.5	950	80	950	182	3.03
	1150	94	1095	180	3.00
	200	15	295	228	3.80
	500	37	550	198	3.30
2.5	750	55	765	190	3.17
	950	74	975	185	3.08
	1150	89	1140	182	3.03

The GOODYEAR (and Winged Foot Design) trademark is used by Veyance Technologies, Inc. under license from The Goodyear Tire & Rubber Company. Goodyear Engineered Products are manufactured and sourced exclusively by Veyance Technologies, Inc. or its affiliates. The following trademarks are licensed to Veyance Technologies, Inc. by The Goodyear Tire & Rubber Company, including Compass, Eagle Pd, Flexten, Gatorback and GY Metric. ©2008 Veyance Technologies, Inc. All Rights Reserved.



1B5-510



ASSEMBLY NUMBER	ELASTOMER	AIR FITTING	BUMPER INCLUDED
1B5-510	WINGPRENE®	1/4"-18 NPTF	NO
1B5-512	WINGPRENE®	3/4"-14 NPTF	NO

SPRING FEATURES:

- LOAD RANGE (ISOLATOR).....190-1500 lb
- DESIGN HEIGHT RANGE (ISOLATOR).....2.5-4.0 in
- USEABLE STROKE (ACTUATOR).....3.0 in
- ASSEMBLY WEIGHT1.2 lb

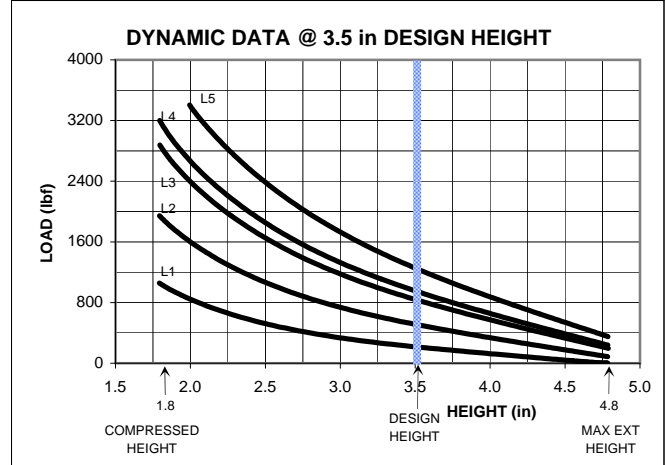
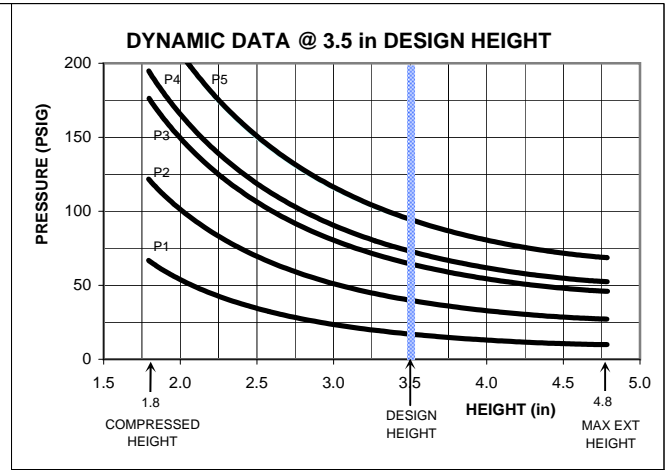
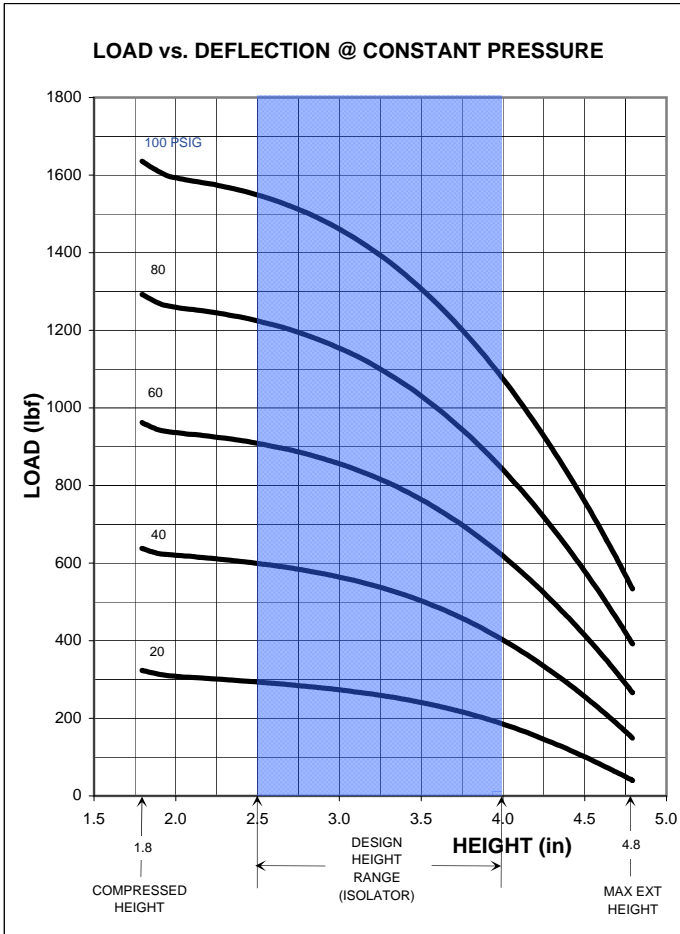
OTHER OPTIONS:

- SHOULDER STUD 3/8"-16 UNC-3A x 9/16" BY 1/2"-13 UNC-3A x 2-1/2" (578-92-9-056)

RECOMMENDED MAX. TORQUE VALUES

3/8"-16 UNC BLIND TAP TYP. OF (4)	1/4"-18 UNC AIR FITTING	3/4"-14 UNC AIR FITTING
240 in-lb 20 ft-lb	240 in-lb 20 ft-lb	240 in-lb 20 ft-lb

NOTE: SEE GUIDELINES FOR PROPER APPLICATION OF THIS PRODUCT



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

CONSTANT PRESSURE CHARACTERISTICS

Assembly Height (in)	Volume @ 100 PSIG (in ³)	Nominal Force (lb)				
		@ 20 PSIG	@ 40 PSIG	@ 60 PSIG	@ 80 PSIG	@ 100 PSIG
4.8	68	30	140	260	380	520
4.5	64	110	260	420	580	700
4.0	59	190	400	620	850	1050
3.5	52	250	500	750	1000	1250
3.0	45	280	560	850	1150	1450
2.5	37	300	600	900	1200	1500
2.0	30	300	620	900	1250	1600
1.8	25	320	620	950	1250	1600

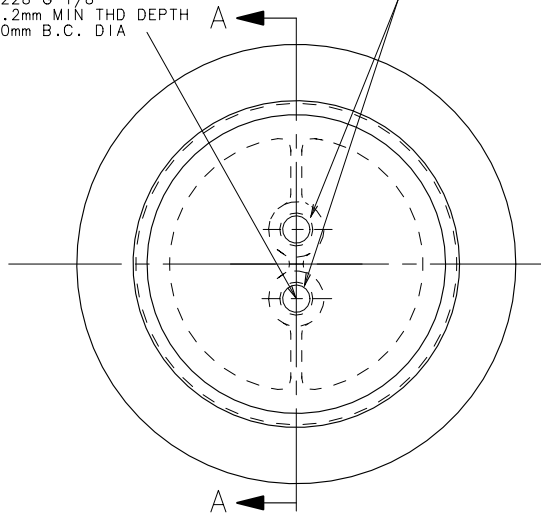
DYNAMIC CHARACTERISTICS

Design Height (in)	Load (lb)	Pressure (PSIG)	Spring Rate (lb/in)	Natural Frequency	
				cpm	Hz
4.0	250	24	265	194	3.23
	550	52	495	177	2.95
	850	80	715	170	2.83
	950	91	805	169	2.82
3.5	250	19	220	177	2.95
	550	42	415	163	2.72
	850	68	625	158	2.63
	950	76	695	156	2.60
	1250	98	865	153	2.55
2.5	250	16	275	199	3.32
	550	36	470	174	2.90
	850	57	670	165	2.75
	950	65	750	162	2.70
	1250	84	930	159	2.65

The GOODYEAR (and Winged Foot Design) trademark is used by Veyance Technologies, Inc. under license from The Goodyear Tire & Rubber Company. Goodyear Engineered Products are manufactured and sourced exclusively by Veyance Technologies, Inc. or its affiliates. The following trademarks are licensed to Veyance Technologies, Inc. by The Goodyear Tire & Rubber Company, including Compass, Eagle Pd, Flexten, Gatorback and GY Metric. ©2008 Veyance Technologies, Inc. All Rights Reserved.

579-91-2-800

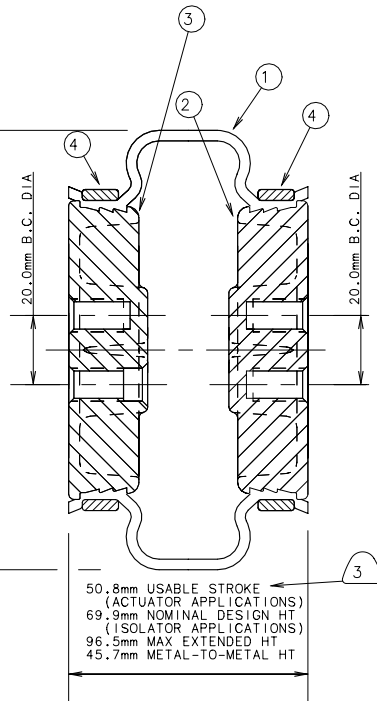
ISO-228 G 1/8
x 10.2mm MIN THD DEPTH
ON 20mm B.C. DIA



M8 x 1.25 6H x 15.88mm
MIN THD DEPTH (BLIND TAPS)
(TYP. 1 TOP, 2 BOTTOM)

(R2)

145mm MAX DIA @ D.H. & 6.9 bar



50.8mm USABLE STROKE
(ACTUATOR APPLICATIONS)
69.9mm NOMINAL DESIGN HT
(ISOLATOR APPLICATIONS)
96.5mm MAX EXTENDED HT
45.7mm METAL-TO-METAL HT

NOTES:

- CENTERLINES OF MOUNTING HOLE AND AIR FITTING OF UPPER RETAINER AND MOUNTING HOLES OF LOWER RETAINER ALIGNED WITHIN $\pm 2^\circ$.
- DO NOT INFLATE UNLESS FULLY SECURED IN THE SUSPENSION OR OTHER ADEQUATE STRUCTURE AT DESIGN HEIGHT.
DO NOT INFLATE TO MORE THAN 6.9 bar WITHOUT GOODYEAR APPROVAL.
PRESSURE NOT TO EXCEED 11 bar UNDER ANY CONDITION.
- USABLE STROKE STARTS AT MINIMUM HEIGHT.
- ASSEMBLY TO BE SUPPORTED TOP AND BOTTOM BY MINIMUM 95mm DIA PLATE.
- FASTENER TORQUE AT INSTALLATION NOT TO EXCEED 27N-m.

ITEM	NAME	DRAWING NO./SPEC	REQ
5			
4	CLAMP RING	ASA-08-4-018	2
3	UPPER RETAINER	ASC-92-8-280	1
2	LOWER RETAINER	ASC-92-6-081	1
1	FLEXIBLE MEMBER	579-91-3-500	1

BILL OF MATERIALS

INDICATES A KEY CRITICAL CHARACTERISTIC (KCC), WHICH MUST CONFORM TO GMS VI-010

1 REV. BY MS-477/98

L.R. WAS -099

REV. BY

MAX OD WAS 139.7mm

REV. BY

REV. BY

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

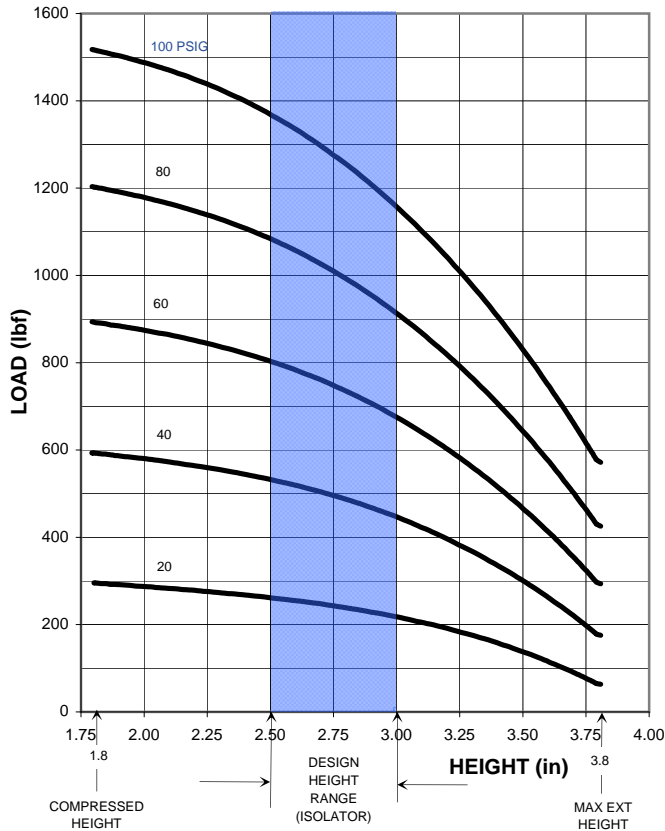
DATE

DATE

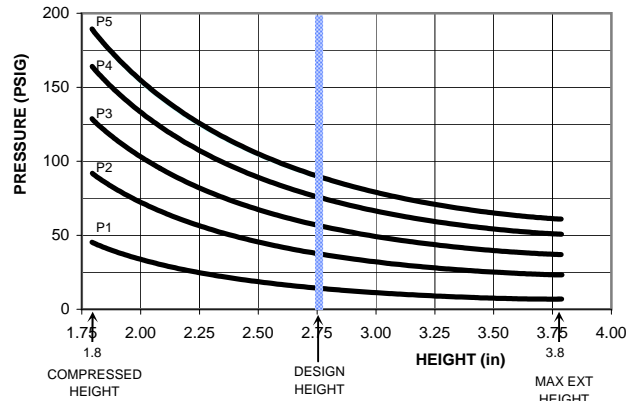
DATE

DATE</

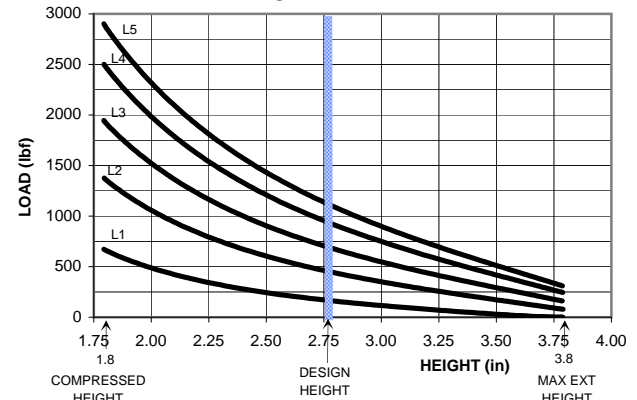
LOAD vs. DEFLECTION @ CONSTANT PRESSURE



DYNAMIC DATA @ 2.75 in DESIGN HEIGHT



DYNAMIC DATA @ 2.75 in DESIGN HEIGHT



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

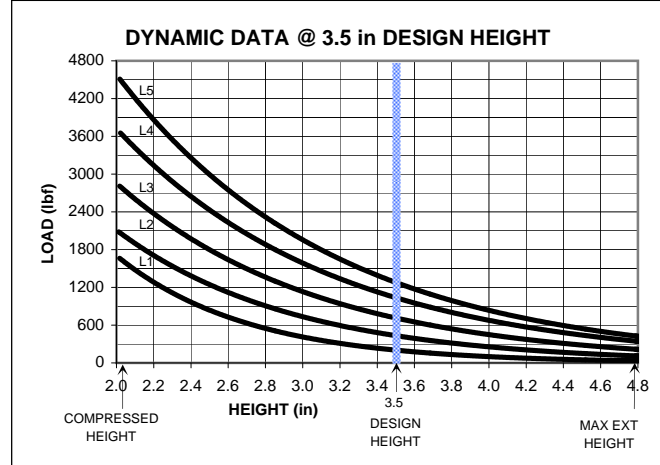
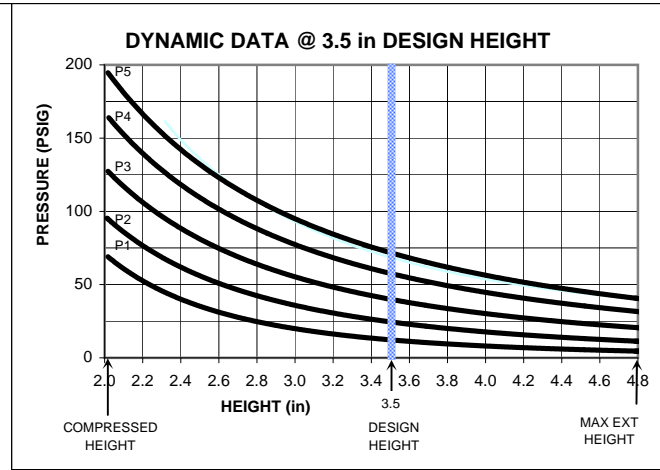
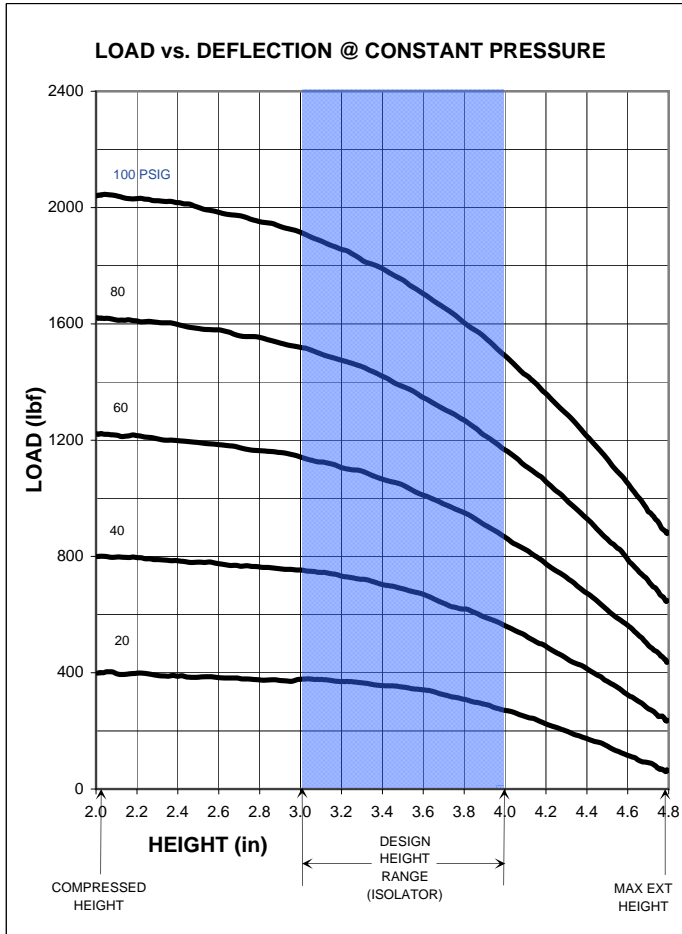
CONSTANT PRESSURE CHARACTERISTICS

Assembly Height (in)	Volume @ 100 PSIG (in ³)	Nominal Force (lb)				
		@ 20 PSIG	@ 40 PSIG	@ 60 PSIG	@ 80 PSIG	@ 100 PSIG
		3.8	51	60	170	280
3.5	48	130	280	440	620	800
3.0	41	210	420	660	850	1100
2.75	37	240	480	700	1000	1250
2.5	33	260	520	800	1050	1350
2.0	26	280	560	850	1150	1450
1.8	24	280	580	900	1200	1500

DYNAMIC CHARACTERISTICS

Design Height (in)	Load (lb)	Pressure (PSIG)	Spring Rate (lb/in)	Natural Frequency	
				cpm	Hz
3.0	200	18	275	223	3.72
	500	44	545	195	3.25
	750	64	750	188	3.13
	950	86	970	184	3.07
2.75	1150	100	1130	182	3.03
	200	16	275	220	3.67
	500	41	535	193	3.22
	750	60	745	186	3.10
2.5	950	80	950	182	3.03
	1150	94	1095	180	3.00
	200	15	295	228	3.80
	500	37	550	198	3.30
2.5	750	55	765	190	3.17
	950	74	975	185	3.08
	1150	89	1140	182	3.03

The GOODYEAR (and Winged Foot Design) trademark is used by Veyance Technologies, Inc. under license from The Goodyear Tire & Rubber Company. Goodyear Engineered Products are manufactured and sourced exclusively by Veyance Technologies, Inc. or its affiliates. The following trademarks are licensed to Veyance Technologies, Inc. by The Goodyear Tire & Rubber Company, including Compass, Eagle Pd, Flexten, Gatorback and GY Metric. ©2008 Veyance Technologies, Inc. All Rights Reserved.



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

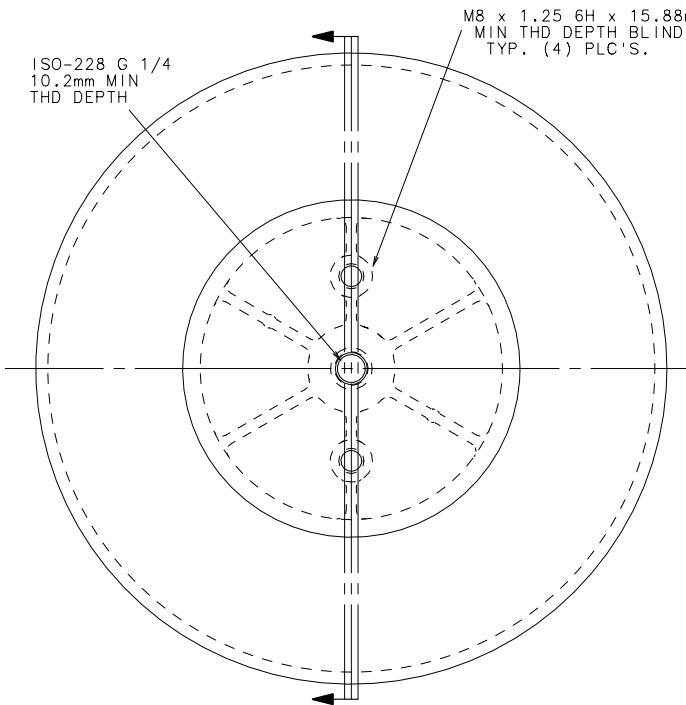
CONSTANT PRESSURE CHARACTERISTICS

Assembly Height (in)	Volume @ 100 PSIG (in ³)	Nominal Force (lb)				
		@ 20 PSIG	@ 40 PSIG	@ 60 PSIG	@ 80 PSIG	@ 100 PSIG
4.8	85	60	230	440	620	850
4.5	80	160	380	640	850	1150
4.0	71	280	580	850	1200	1500
3.5	62	360	700	1050	1400	1700
3.0	52	400	750	1150	1500	1900
2.5	42	400	800	1200	1600	2000
2.0	33	420	800	1200	1600	2000

DYNAMIC CHARACTERISTICS

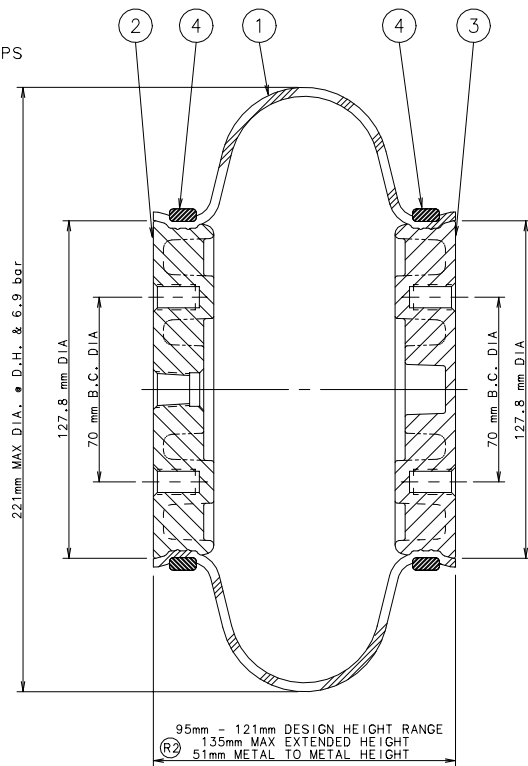
Design Height (in)	Load (lb)	Pressure (PSIG)	Spring Rate (lb/in)	Natural Frequency	
				cpm	Hz
4.0	200	21	375	206	3.43
	450	37	525	185	3.08
	750	57	730	173	2.88
	1050	78	940	166	2.77
3.5	1300	96	1115	163	2.72
	200	16	300	190	3.17
	450	31	445	169	2.82
	750	48	640	164	2.73
3.0	1050	67	840	156	2.60
	1300	83	1020	155	2.58
	200	15	325	192	3.20
	450	28	465	173	2.88
3.0	750	44	645	164	2.73
	1050	61	860	158	2.63
	1300	76	1005	154	2.57

The GOODYEAR (and Winged Foot Design) trademark is used by Veyance Technologies, Inc. under license from The Goodyear Tire & Rubber Company. Goodyear Engineered Products are manufactured and sourced exclusively by Veyance Technologies, Inc. or its affiliates. The following trademarks are licensed to Veyance Technologies, Inc. by The Goodyear Tire & Rubber Company, including Compass, Eagle Pd, Flexten, Gatorback and GY Metric. ©2008 Veyance Technologies, Inc. All Rights Reserved.



ISO-228 G 1/4
10.2mm MIN
THD DEPTH

M8 x 1.25 6H x 15.88mm
MIN THD DEPTH BLIND TAPS
TYP. (4) PLC'S.



95mm - 121mm DESIGN HEIGHT RANGE
135mm MAX EXTENDED HEIGHT
51mm METAL TO METAL HEIGHT

NOTES:

- CENTERLINE OF MOUNTING HOLE OF UPPER AND LOWER RETAINERS ALIGNED WITHIN 2°.
- DO NOT INFLATE TO MORE THAN 6.9 BAR WITHOUT GOODYEAR APPROVAL.
- FASTENER TORQUE NOT TO EXCEED 27 N-m.
- ASSEMBLY TO BE SUPPORTED, TOP AND BOTTOM, BY MINIMUM 140mm DIAMETER PLATE. EXTERNAL LIMITS MUST BE PROVIDED IN MOUNTING STRUCTURE TO PREVENT SPRING FROM EXCEEDING MIN AND MAX HEIGHTS.

5			
4	STEEL CLAMP RING	ASB-08-4-023	2
3	UPPER RETAINER	ASC-92-8-282	1
2	LOWER RETAINER	ASC-92-6-083	1
1	FLEXIBLE MEMBER	579-91-3-530	1
ITEM	NAME	DRAWING NO./SPEC. NO/REQ.	

BILL OF MATERIALS

▽ INDICATES A KEY CRITICAL CHARACTERISTIC (KCC), WHICH MUST CONFORM TO GMS VI-010

THE GOODYEAR TIRE & RUBBER COMPANY GREEN, OHIO

THIS DRAWING AND THE PARTS IDENTIFIED THEREON ARE THE PROPERTY OF THE COMPANY, TIRE & RUBBER COMPANY. ALL RIGHTS ARE RESERVED. NO PART OF THIS DRAWING OR THE PARTS IDENTIFIED THEREON MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE COMPANY. APPROVED FOR ISSUANCE: [Signature] DATE: [Date] PART APPROVAL: [Signature] DATE: [Date] SPECIAL INSTRUCTIONS WILL BE RETURNED OR DEMONSTRATED ON REQUEST.

DESIGN BY: [Signature]

DEPT NO: 021

SCALE:

1/16" 1B8-850 METRIC ASSEMBLY

DATE:

REV. APPROVAL:

TOLERANCE ON FINISHED SURFACES, UNLESS OTHERWISE SHOWN:

INCH 10
X .XX ± .030
X .40, 7 .XXX ± .010
ANGLES ± 1.0°

REFERENCE:

1 rev. HBA - 2/13/96
A/F WAS G 3/4

2 rev. HBA - 3/6/2004
MAX. WALL THICKNESS
MIN. WALL THICKNESS

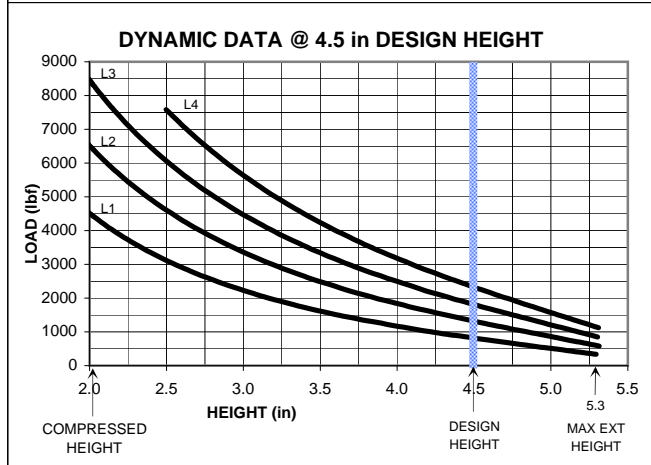
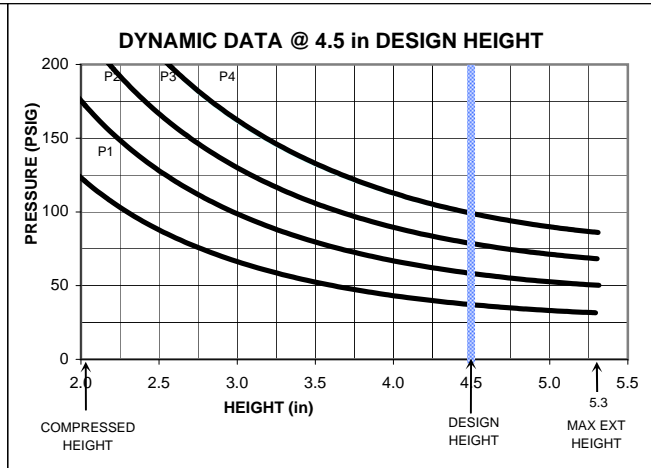
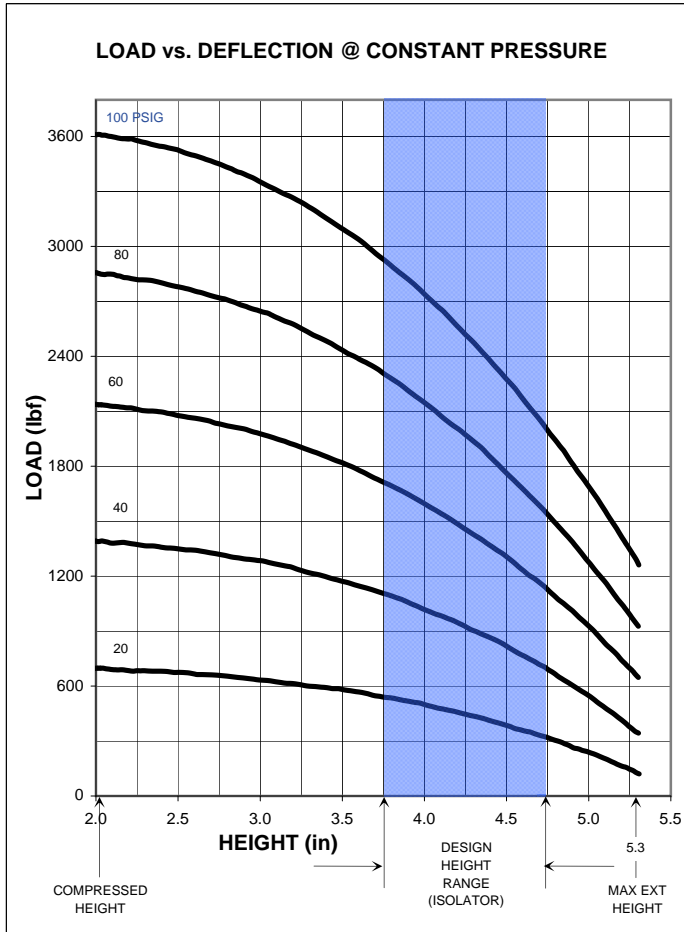
9

REV. BY:

REV. NO.:

REV. BY:

REV. NO.:



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

CONSTANT PRESSURE CHARACTERISTICS

Assembly Height (in)	Volume @ 100 PSIG (in ³)	Nominal Force (lb)				
		@ 20 PSIG	@ 40 PSIG	@ 60 PSIG	@ 80 PSIG	@ 100 PSIG
5.3	145	100	300	550	800	1100
5.0	138	240	540	900	1000	1600
4.75	133	320	680	1100	1500	2000
4.5	128	380	800	1300	1700	2200
3.75	110	540	1100	1700	2300	2900
3.5	104	580	1150	1900	2500	3100
3.0	90	620	1250	2000	2700	3300
2.5	78	640	1300	2100	2800	3500
2.0	60	660	1350	2100	2800	3600

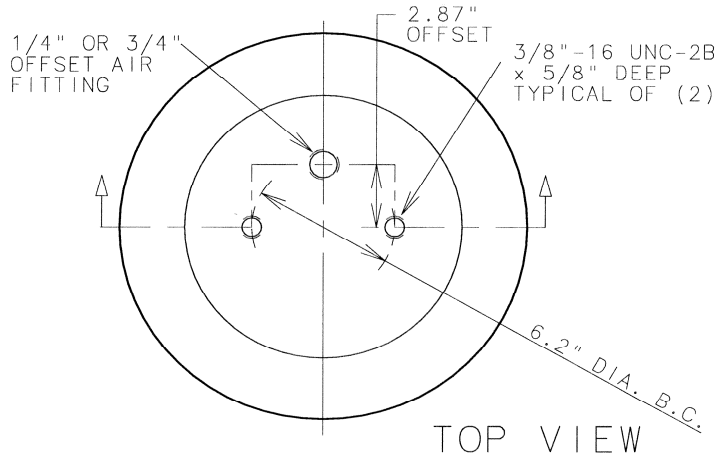
DYNAMIC CHARACTERISTICS

Design Height (in)	Load (lb)	Pressure (PSIG)	Spring Rate (lb/in)	Natural Frequency	
				cpm	Hz
4.75	850	43	740	176	2.93
	1350	66	1100	170	2.83
	1850	88	1420	165	2.75
4.5	850	38	675	168	2.80
	1350	60	1010	162	2.70
	1850	80	1315	158	2.63
	2400	100	1610	155	2.58
3.75	850	30	620	160	2.67
	1350	47	895	153	2.55
	1850	63	1170	149	2.48
	2400	80	1425	146	2.43

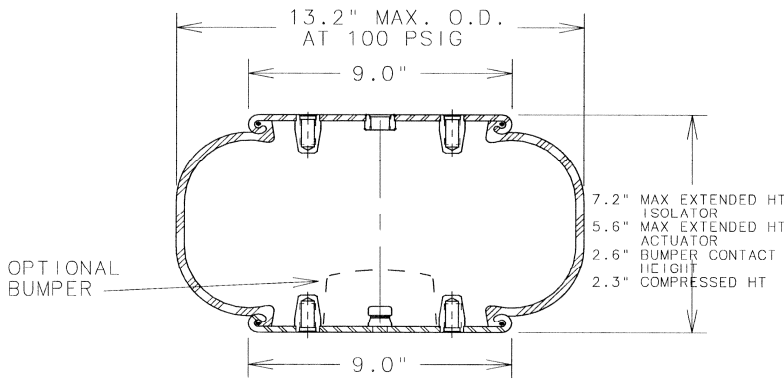
The GOODYEAR (and Winged Foot Design) trademark is used by Veyance Technologies, Inc. under license from The Goodyear Tire & Rubber Company. Goodyear Engineered Products are manufactured and sourced exclusively by Veyance Technologies, Inc. or its affiliates. The following trademarks are licensed to Veyance Technologies, Inc. by The Goodyear Tire & Rubber Company, including Compass, Eagle Pd, Flexten, Gatorback and GY Metric. ©2008 Veyance Technologies, Inc. All Rights Reserved.



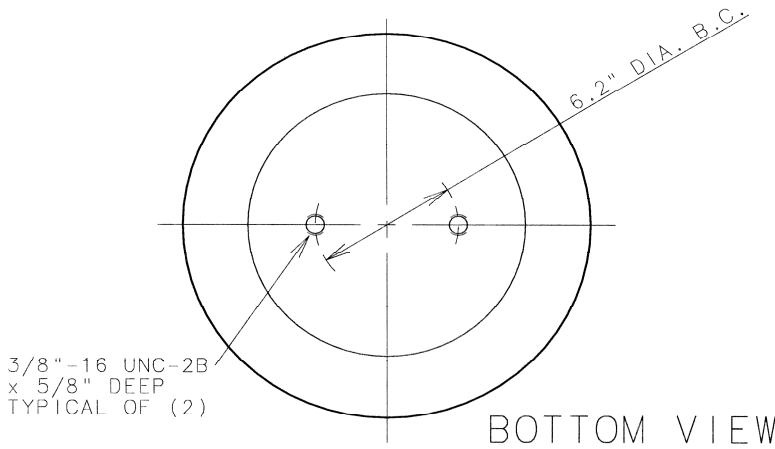
1B12-313



TOP VIEW



SIDE VIEW



BOTTOM VIEW

ASSEMBLY NUMBER	ELASTOMER	AIR FITTING	BUMPER INCLUDED
1B12-313	NAT. RUBBER	1/4"-18 NPTF OFFSET 2.87"	NO
1B12-301	NAT. RUBBER	1/4"-18 NPTF OFFSET 2.87"	YES
1B12-304	NAT. RUBBER	3/4"-14 NPTF OFFSET 2.87"	NO
1B12-305	NAT. RUBBER	3/4"-14 NPTF OFFSET 2.87"	YES
578913301 FLEXMEMBER ONLY	NAT. RUBBER	----	---

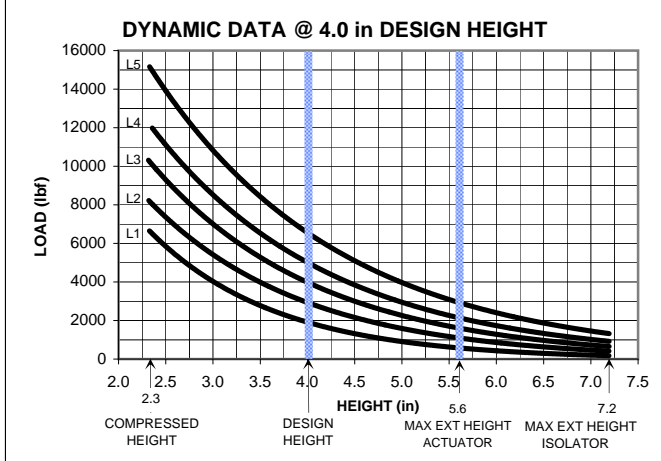
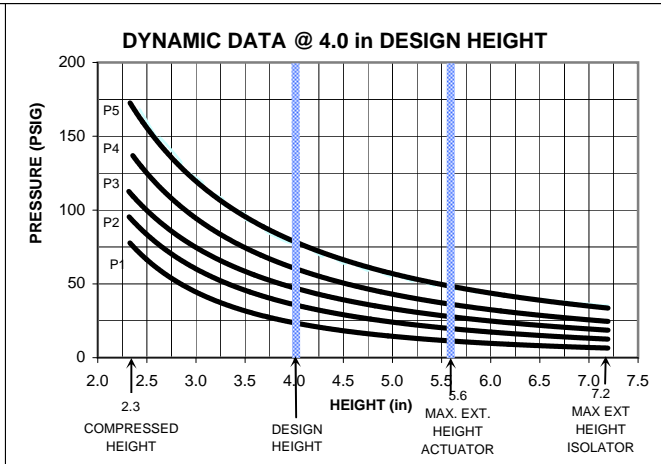
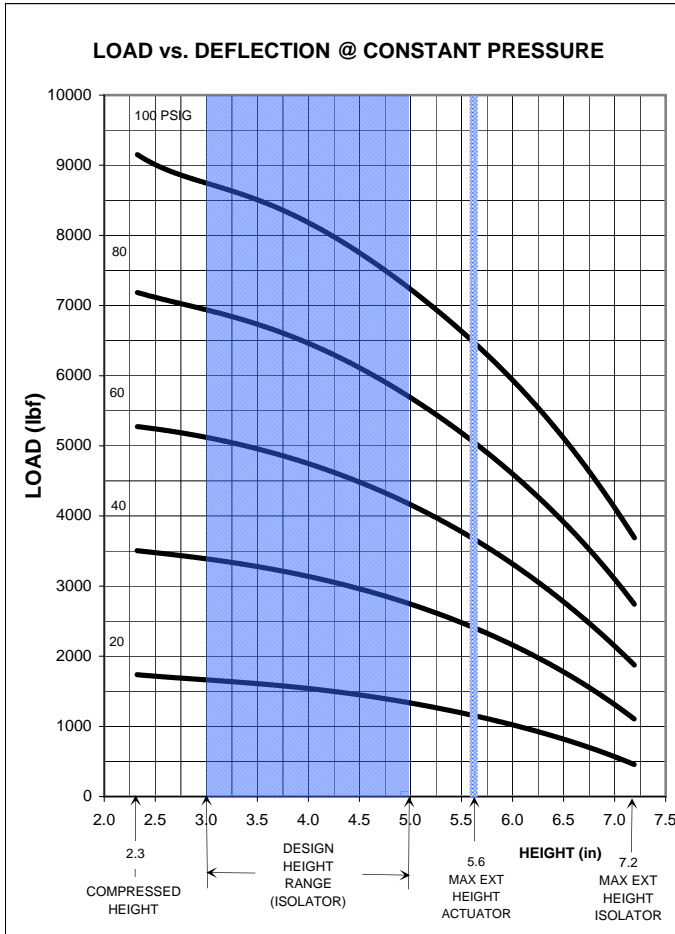
SPRING FEATURES:

- LOAD RANGE (ISOLATOR).....1350-8800 lb
- DESIGN HEIGHT RANGE (ISOLATOR).....3.0-5.0 in
- USEABLE STROKE w/o BUMPER (ACTUATOR)....3.3 in
- USEABLE STROKE WITH BUMPER (ACTUATOR)...3.0 in
- ASSEMBLY WEIGHT.....10.6 lb
- FORCE TO COMPRESS AT 0 PSIG (APPROX.)...35 lb
- NOMINAL FREE STANDING HT. AT 0 PSIG....4.8 in

RECOMMENDED MAX. TORQUE VALUES

3/8"-16 UNC BLIND TAP TYP. OF (4)	1/4"-18 UNC AIR FITTING	3/4"-14 UNC AIR FITTING
300 in-lb 25 ft-lb	240 in-lb 20 ft-lb	240 in-lb 20 ft-lb

NOTE: SEE GUIDELINES FOR PROPER APPLICATION OF THIS PRODUCT



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

CONSTANT PRESSURE CHARACTERISTICS

Assembly Height (in)	Volume @ 100 PSIG (in ³)	Nominal Force (lb)				
		@ 20 PSIG	@ 40 PSIG	@ 60 PSIG	@ 80 PSIG	@ 100 PSIG
		7.2	618	440	1050	1800
6.5	569	800	1800	2800	3900	5100
6.0	531	1050	2200	3100	4600	6000
5.6	497	1150	2450	3650	5050	6550
5.5	489	1200	2500	3800	5200	6700
5.0	445	1350	2800	4200	5700	7300
4.5	400	1450	3000	4500	6100	7800
4.0	354	1500	3100	4800	6500	8200
3.5	311	1600	3300	5000	6800	8500
3.0	263	1700	3400	5100	7000	8800
2.3	190	1700	3500	5300	7100	9100

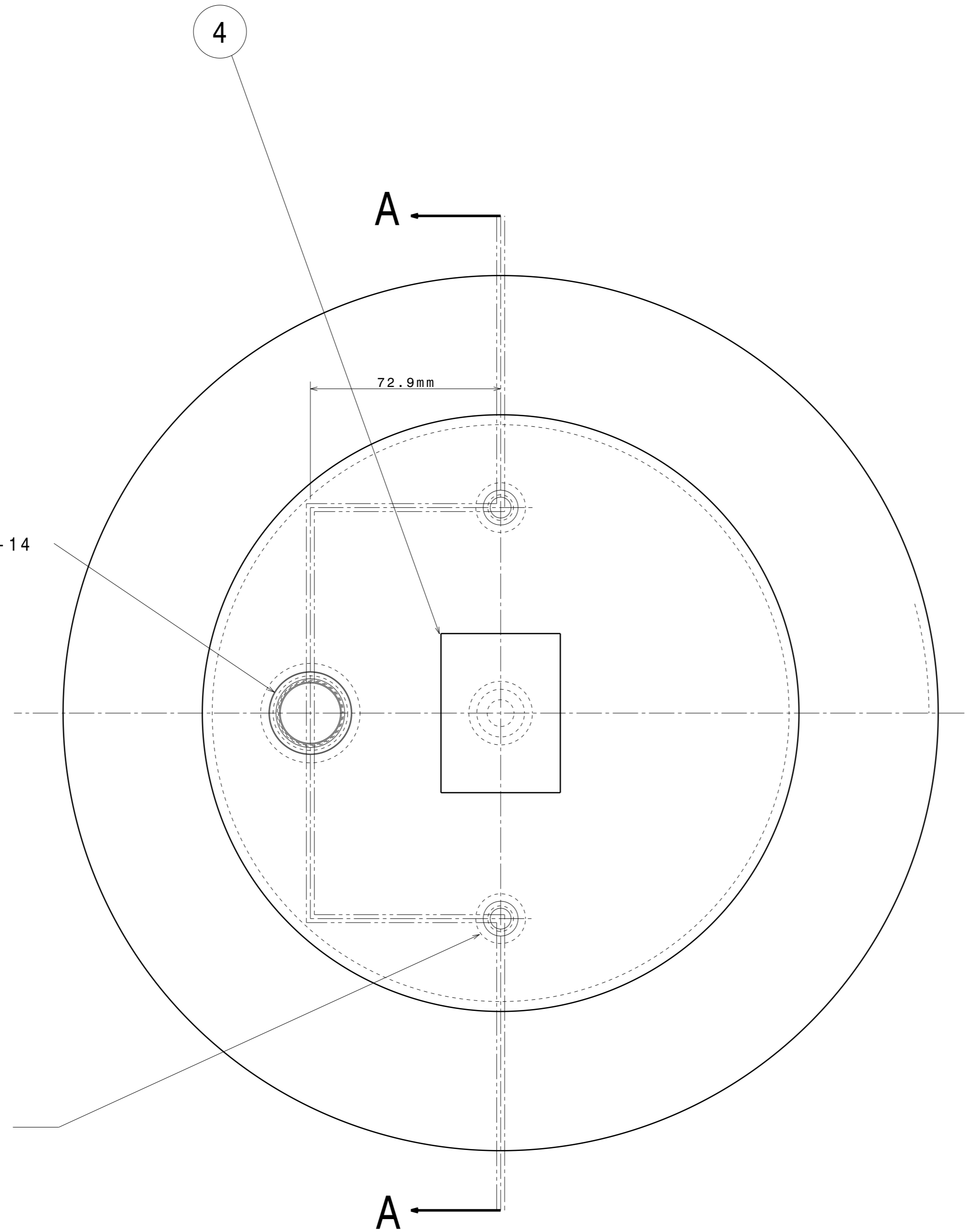
DYNAMIC CHARACTERISTICS

Design Height (in)	Load (lb)	Pressure (PSIG)	Spring Rate (lb/in)	Natural Frequency	
				cpm	Hz
5.0	2000	28	1040	135	2.25
	3000	42	1415	129	2.15
	4000	55	1810	127	2.12
	5000	69	2175	124	2.07
	6500	89	2725	121	2.02
4.0	2000	25	1225	147	2.45
	3000	37	1640	139	2.32
	4000	49	2055	135	2.25
3.0	5000	61	2475	132	2.20
	6500	79	3070	129	2.15
	2000	23	1570	167	2.78
	3000	34	2120	158	2.63
	4000	46	2600	151	2.52
3.0	5000	57	3425	148	2.47
	6500	74	3895	145	2.42

The GOODYEAR (and Winged Foot Design) trademark is used by Veyance Technologies, Inc. under license from The Goodyear Tire & Rubber Company. Goodyear Engineered Products are manufactured and sourced exclusively by Veyance Technologies, Inc. or its affiliates. The following trademarks are licensed to Veyance Technologies, Inc. by The Goodyear Tire & Rubber Company, including Compass, Eagle Pd, Flexten, Gatorback and GY Metric. ©2008 Veyance Technologies, Inc. All Rights Reserved.

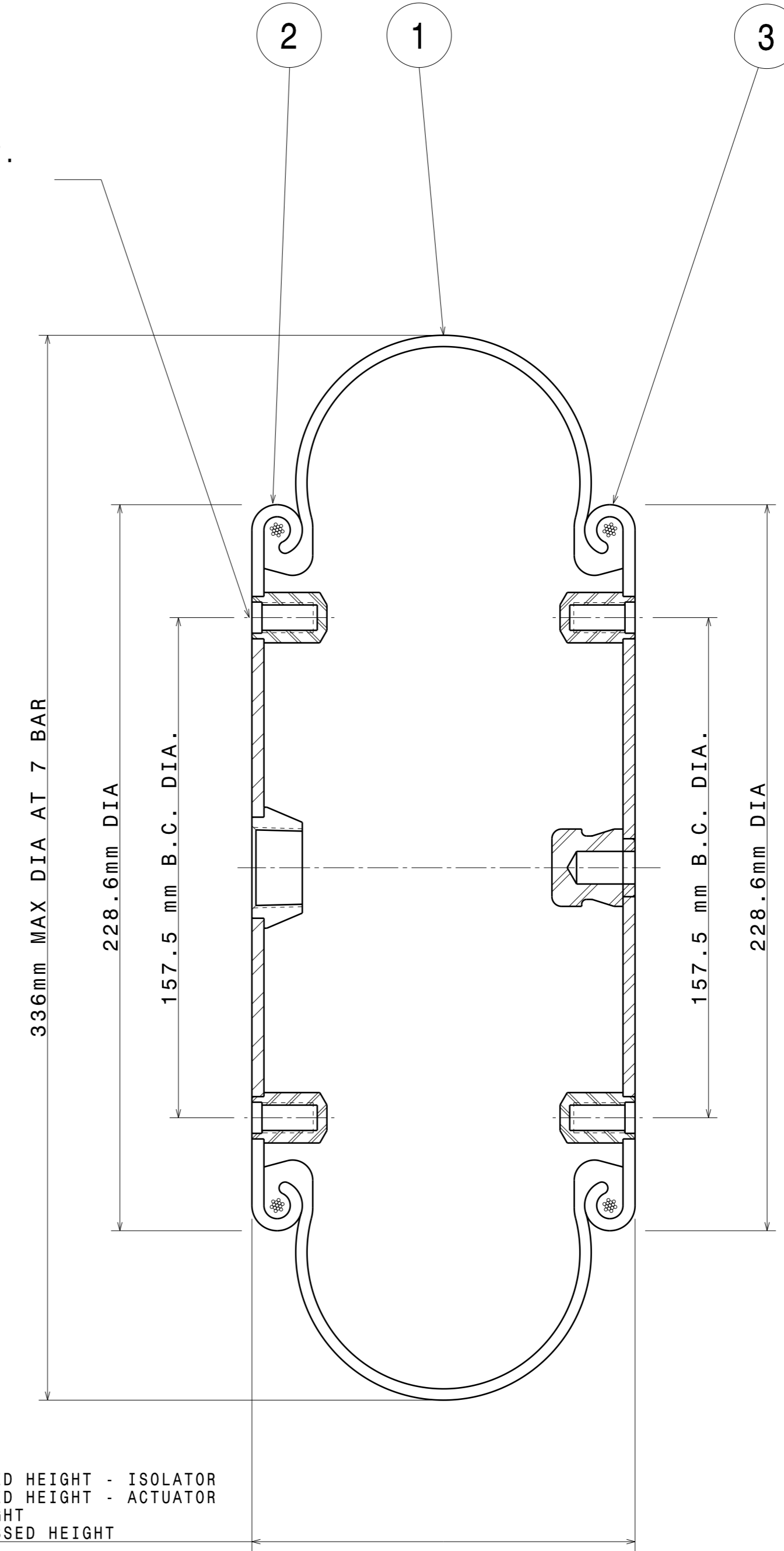
BLIND TAPS IN BOTH RETAINERS
ARE TO BE $0^\circ \pm 3^\circ$.

ISO228-G3/4-14



M8-1.25 6H X 15.9MM M.E.T.
TYP (4) PLACES AS SHOWN

183mm MAX EXTENDED HEIGHT - ISOLATOR
142mm MAX EXTENDED HEIGHT - ACTUATOR
125mm DESIGN HEIGHT
59mm MIN COMPRESSED HEIGHT



NOTES:

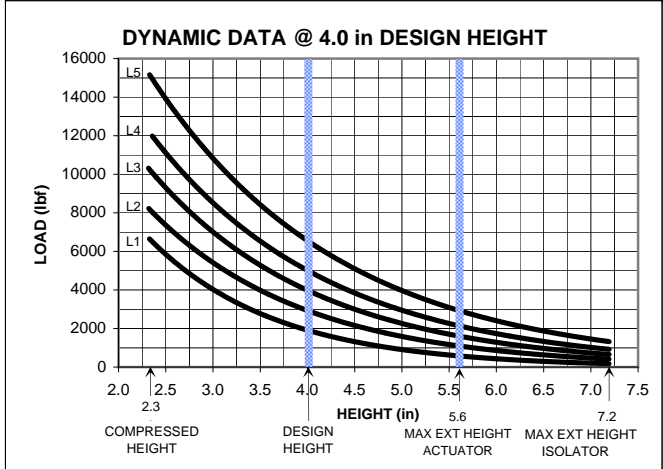
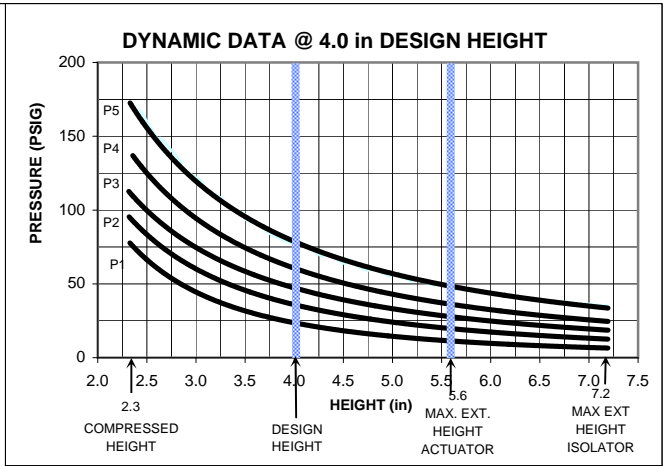
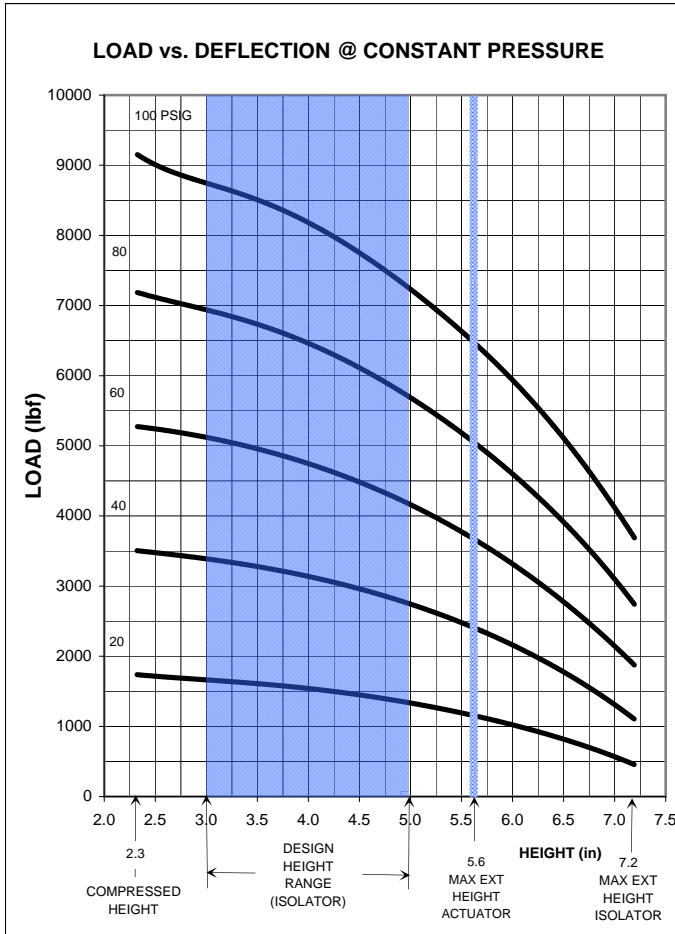
1. ALL DIMENSIONS ARE IN METRIC UNLESS OTHERWISE NOTED.
2. ASSEMBLY DESIGNED TO OPERATE BETWEEN -67°F AND $+158^\circ\text{F}$.
3. MINIMUM PRESSURE AT MAXIMUM EXTENSION IS NOT TO BE LESS THAN 5 PSIG.
4. ASSEMBLY PRESSURE TESTED PER GMS XIII-301.
5. CUSTOMER TO PROVIDE MECHANICAL DEVICE TO LIMIT EXTENSION TO MAXIMUM EXTENDED HEIGHT AND COMPRESSION TO METAL TO METAL HEIGHT.

ITEM	NAME	DRAWING NUMBER	REQ.
4	WARNING & IDENT. LABEL	566-00-9-269	1
3	LOWER BEAD PLATE	ASA-92-6-101	1
2	UPPER BEAD PLATE	ASA-92-8-323	1
1	FLEXIBLE MEMBER	ASD-91-3-301	1

BILL OF MATERIALS

INDICATES A KEY CRITICAL CHARACTERISTIC(KCC), WHICH MUST CONFORM TO GMS VI-010

VEYANCE TECHNOLOGIES, INC. FAIRLAWN OHIO		TOLERANCE ON FINISHED SURFACES, UNLESS OTHERWISE SHOWN	
This drawing and the subject matter therein are the property of The Goodyear Tire & Rubber Company. It is to be used for the production of parts and may not be copied, used or divulged without express written consent of Goodyear.		INCH X .10 .XX \pm .030 Feet .XX \pm 0.2 .XXX \pm .010 ANGLES \pm 1.0°	
DESIGNED BY: JP WISE	DATE: 02/03/98	DEPT NO: 021	SCALE: HALF
DRAWN BY: [Blank]		DATE: [Blank]	
TITLE: AIR SPRING ASSEMBLY		PART NUMBER: 1B12-318	
REV. 1		DWR_06-17-03	
REV. 2		ADDED ACTUATOR HEIGHT 142mm.	
REV. 3		[Blank]	
REV. 4		[Blank]	
REV. 5		[Blank]	
REV. 6		[Blank]	
REV. 7		[Blank]	
REV. 8		[Blank]	
REV. 9		[Blank]	
REV. 10		[Blank]	
REV. 11		[Blank]	
REV. 12		[Blank]	



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

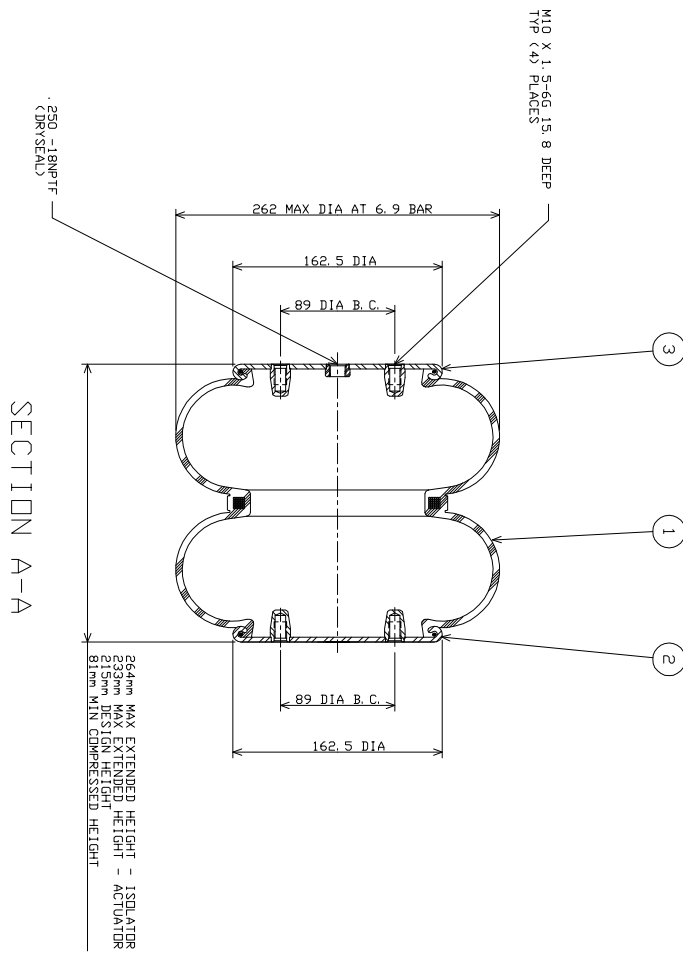
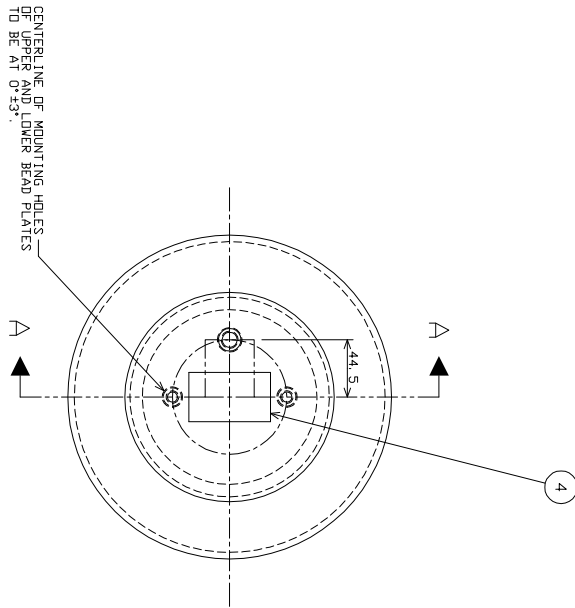
CONSTANT PRESSURE CHARACTERISTICS

Assembly Height (in)	Volume @ 100 PSIG (in ³)	Nominal Force (lb)				
		@ 20 PSIG	@ 40 PSIG	@ 60 PSIG	@ 80 PSIG	@ 100 PSIG
		7.2	618	440	1050	1800
6.5	569	800	1800	2800	3900	5100
6.0	531	1050	2200	3100	4600	6000
5.6	497	1150	2450	3650	5050	6550
5.5	489	1200	2500	3800	5200	6700
5.0	445	1350	2800	4200	5700	7300
4.5	400	1450	3000	4500	6100	7800
4.0	354	1500	3100	4800	6500	8200
3.5	311	1600	3300	5000	6800	8500
3.0	263	1700	3400	5100	7000	8800
2.3	190	1700	3500	5300	7100	9100

DYNAMIC CHARACTERISTICS

Design Height (in)	Load (lb)	Pressure (PSIG)	Spring Rate (lb/in)	Natural Frequency	
				cpm	Hz
5.0	2000	28	1040	135	2.25
	3000	42	1415	129	2.15
	4000	55	1810	127	2.12
	5000	69	2175	124	2.07
	6500	89	2725	121	2.02
4.0	2000	25	1225	147	2.45
	3000	37	1640	139	2.32
	4000	49	2055	135	2.25
3.0	5000	61	2475	132	2.20
	6500	79	3070	129	2.15
	2000	23	1570	167	2.78
	3000	34	2120	158	2.63
	4000	46	2600	151	2.52
3.0	5000	57	3425	148	2.47
	6500	74	3895	145	2.42

The GOODYEAR (and Winged Foot Design) trademark is used by Veyance Technologies, Inc. under license from The Goodyear Tire & Rubber Company. Goodyear Engineered Products are manufactured and sourced exclusively by Veyance Technologies, Inc. or its affiliates. The following trademarks are licensed to Veyance Technologies, Inc. by The Goodyear Tire & Rubber Company, including Compass, Eagle Pd, Flexten, Gatorback and GY Metric. ©2008 Veyance Technologies, Inc. All Rights Reserved.

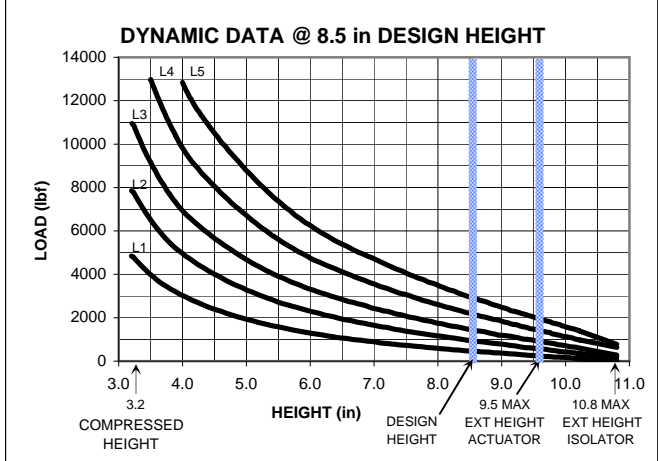
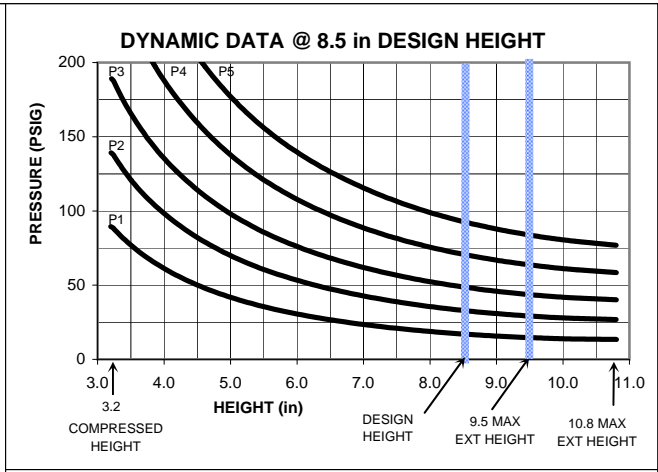
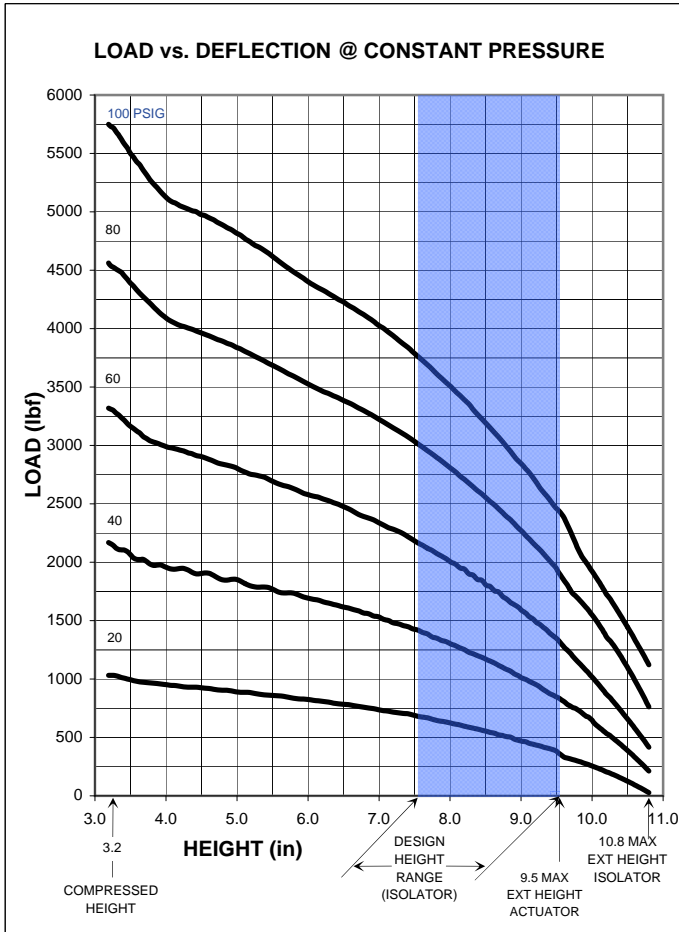


- NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
 2. ASSEMBLY DESIGNED TO OPERATE BETWEEN -55°C AND +70°C.
 3. ASSEMBLY PRESSURE TESTED PER GMS XIII1-301.
 4. MINIMUM PRESSURE AT MAXIMUM EXTENSION NOT BE LESS THAN 0.4 BAR.
 5. CUSTOMER TO PROVIDE MECHANICAL DEVICE TO LIMIT MAXIMUM EXTENSION TO MAXIMUM EXTENDED HEIGHT.

4	WARNING & IDENT. LABEL	566-00-9-269	1
3	UPPER BEAD PLATE	ASA-92-8-707	1
2	LOWER BEAD PLATE	ASA-92-8-772	1
1	FLEXIBLE MEMBER	578-92-3-211	1
ITEM	NAME	DRAWING NUMBER	REQ.

BILL OF MATERIALS

9	10	11	12
8	7	6	5
1	2	3	4
MS 12/30/99 MAX. EXT. HT. WAS 292	DWR 06-17-03 ADDED ACTUATOR HEIGHT 241mm.	MEA 05-05-05 FM was 578-92-2-202 UBP was ASA-92-8-217 LBP was ASA-92-6-067	
C. B. GIRT/JEA 5-04-94	HALF		
578-92-2-223	AIR SPRING ASSEMBLY PART NO. 289-223		



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

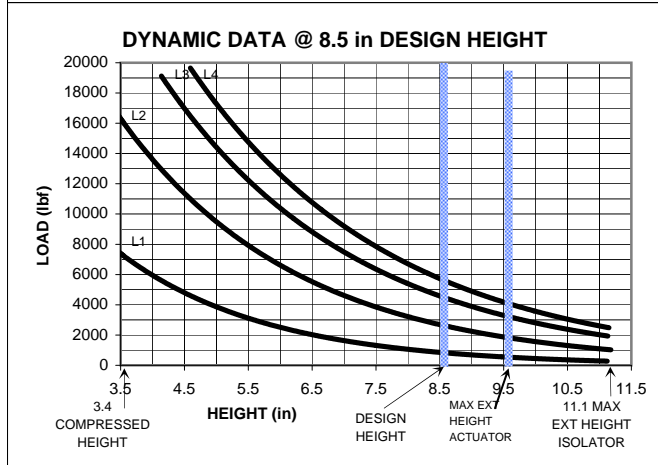
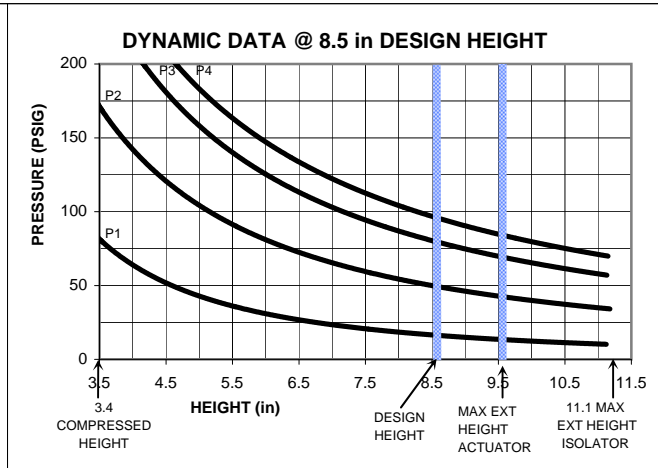
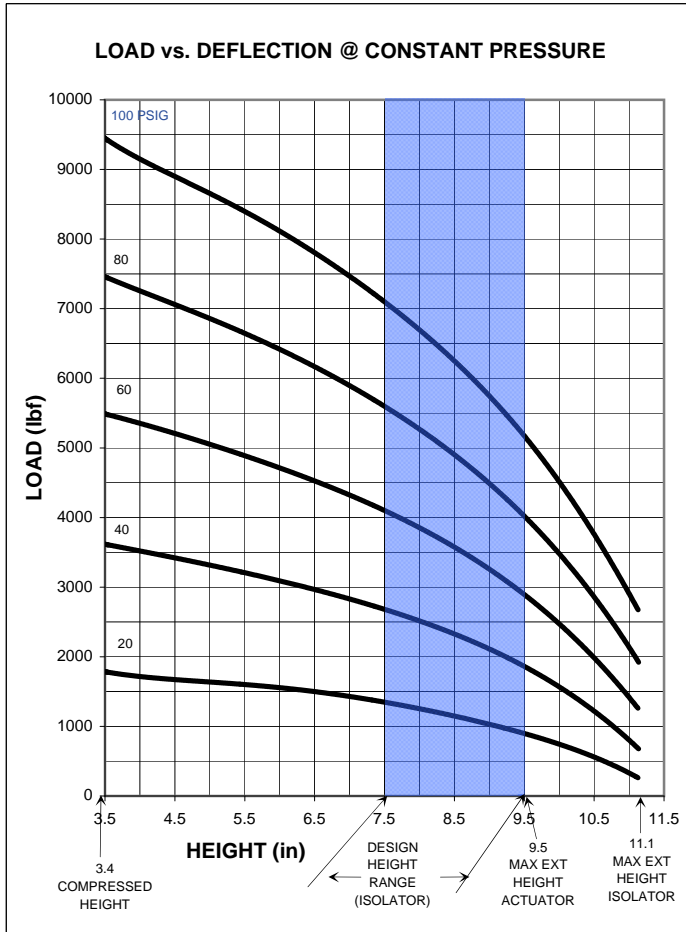
CONSTANT PRESSURE CHARACTERISTICS

Assembly Height (in)	Volume @ 100 PSIG (in ³)	Nominal Force (lb)				
		@ 20 PSIG	@ 40 PSIG	@ 60 PSIG	@ 80 PSIG	@ 100 PSIG
10.8	475	20	200	400	700	1100
10.0	442	250	620	1000	1500	1900
9.5	429	340	800	1300	1800	2300
8.5	399	540	1150	1700	2400	3100
7.5	363	660	1400	2100	2900	3700
6.5	321	750	1600	2400	3300	4200
5.5	274	850	1700	2600	3600	4500
4.5	223	900	1900	2800	3900	4900
3.5	169	950	2000	3100	4300	5400
3.2	155	1000	2100	3300	4500	5700

DYNAMIC CHARACTERISTICS

Design Height (in)	Load (lb)	Pressure (PSIG)	Spring Rate (lb/in)	Natural Frequency	
				cpm	Hz
9.5	500	24	320	150	2.50
	1000	45	480	130	2.17
	1500	64	705	129	2.15
	2250	90	980	124	2.07
8.5	500	18	255	133	2.22
	1000	34	400	119	1.98
	1500	50	570	116	1.93
	2250	72	755	110	1.83
	3000	94	1010	109	1.82
7.5	500	15	230	127	2.12
	1000	29	395	117	1.95
	1500	43	540	113	1.88
	2250	62	750	109	1.82
	3000	81	950	106	1.77

The GOODYEAR (and Winged Foot Design) trademark is used by Veyance Technologies, Inc. under license from The Goodyear Tire & Rubber Company. Goodyear Engineered Products are manufactured and sourced exclusively by Veyance Technologies, Inc. or its affiliates. The following trademarks are licensed to Veyance Technologies, Inc. by The Goodyear Tire & Rubber Company, including Compass, Eagle Pd, Flexten, Gatorback and GY Metric. ©2008 Veyance Technologies, Inc. All Rights Reserved.



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

CONSTANT PRESSURE CHARACTERISTICS

Assembly Height (in)	Volume @ 100 PSIG (in ³)	Nominal Force (lb)				
		@ 20 PSIG	@ 40 PSIG	@ 60 PSIG	@ 80 PSIG	@ 100 PSIG
11.1	821	240	660	1200	1900	2700
10.5	779	580	1200	2000	2900	3800
9.5	751	900	1900	2900	4000	5200
9.0	717	1000	2200	3300	4500	5800
8.5	684	1150	2300	3600	4900	6300
7.5	612	1350	2700	4100	5600	7200
6.5	536	1500	3100	4500	6200	7900
5.5	463	1600	3200	4900	6700	8400
4.5	377	1700	3400	5200	7100	9000
3.5	285	1700	3500	5500	7400	9400
3.4	277	1600	3400	5500	7400	9400

DYNAMIC CHARACTERISTICS

Design Height (in)	Load (lb)	Pressure (PSIG)	Spring Rate (lb/in)	Natural Frequency	
				cpm	Hz
9.5	1000	20	420	123	2.05
	3000	59	1095	114	1.90
	5000	95	1720	110	1.83
8.5	1000	17	395	118	1.97
	3000	49	965	106	1.77
	5000	79	1490	103	1.72
	6000	95	1760	102	1.70
7.5	1000	15	415	121	2.02
	3000	43	940	106	1.77
	5000	72	1480	102	1.70
	6000	85	1735	101	1.68
	7000	99	1985	100	1.67

The GOODYEAR (and Winged Foot Design) trademark is used by Veyance Technologies, Inc. under license from The Goodyear Tire & Rubber Company. Goodyear Engineered Products are manufactured and sourced exclusively by Veyance Technologies, Inc. or its affiliates. The following trademarks are licensed to Veyance Technologies, Inc. by The Goodyear Tire & Rubber Company, including Compass, Eagle Pd, Flexten, Gatorback and GY Metric. ©2008 Veyance Technologies, Inc. All Rights Reserved.