

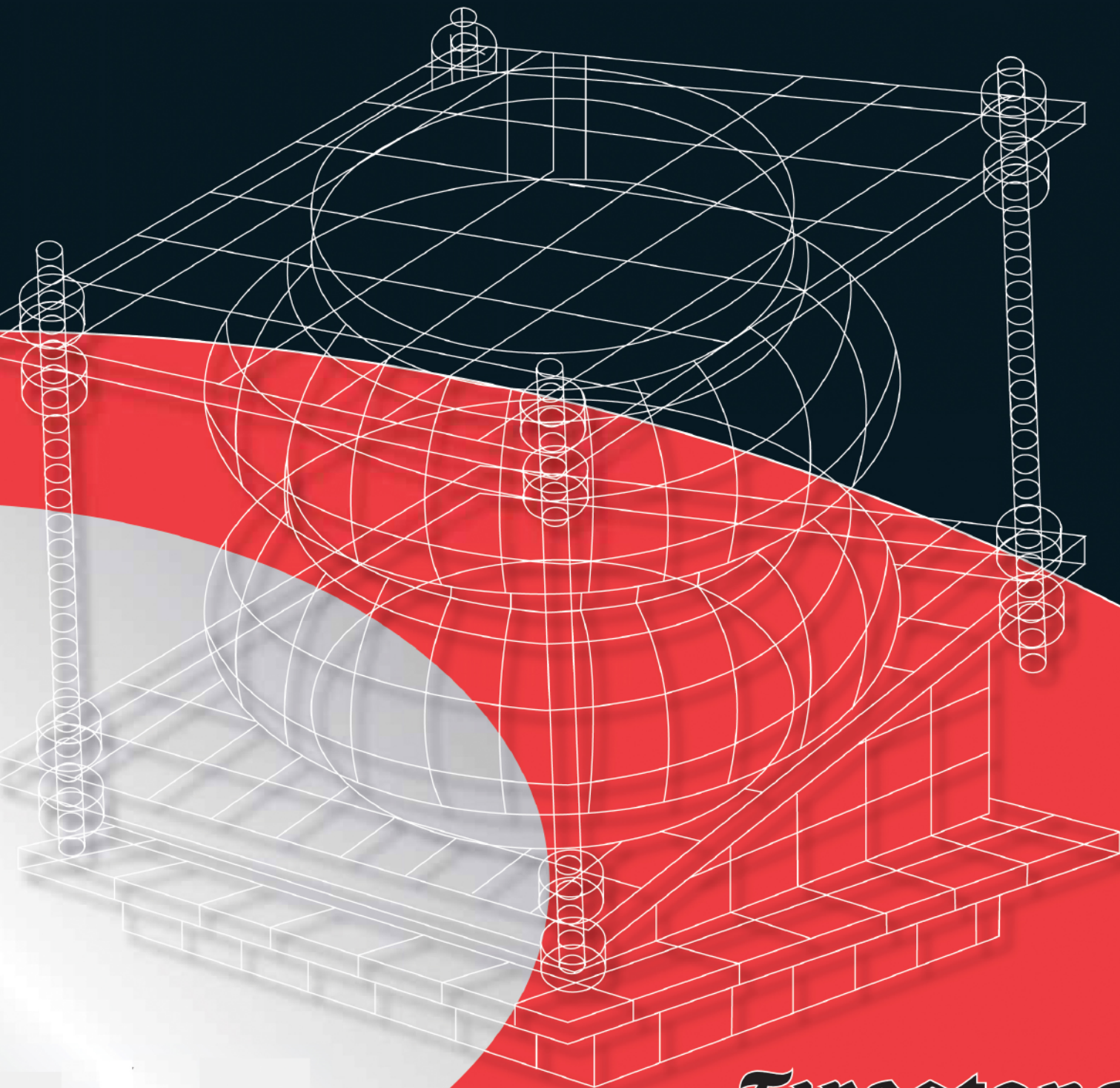
AIRSTROKE™

ACTUATORS

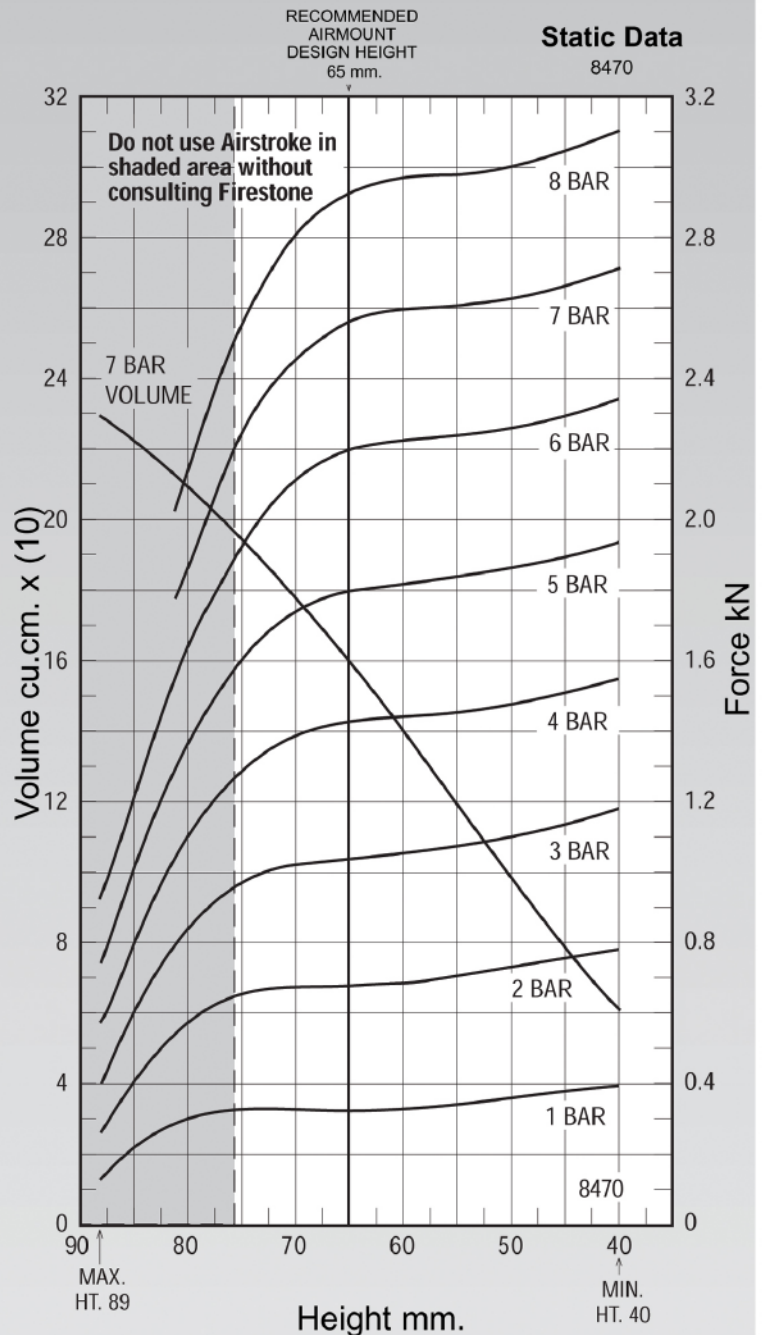
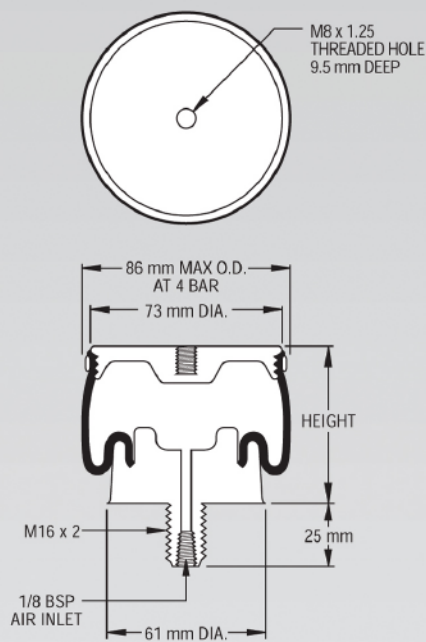
AIRMOUNT™

ISOLATORS

METRIC Shaped Sleeve



	Description	Assembly Order No.
Style 1M1A-0	Blind nuts, 1/8 BSP, Plastic stud	W02-M58-3000
Two Ply Bellows	Blind nuts, 1/8 BSP, Brass stud	W02-M58-3001
Assembly weight		.23 kg.
Force to collapse to minimum height (@ 0 BAR)		89 N.



See page 12 for instructions on how to use chart.

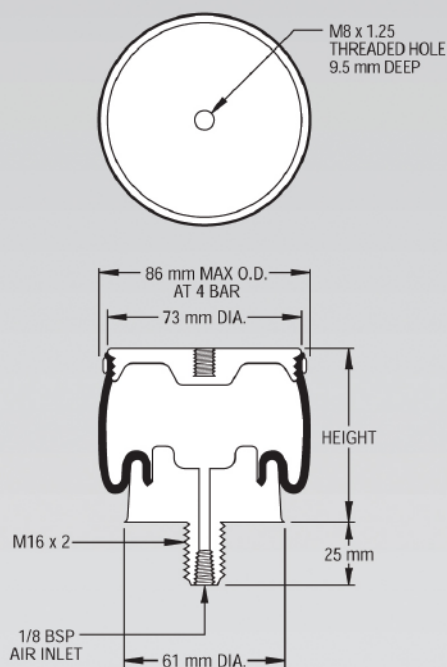
Dynamic Characteristics at 65 mm Design Height
(Required for Airmount isolator design only)

Gauge Pressure (BAR)	Load (kN)	Spring Rate (kN/m)	Natural Frequency Hz
3	1.04	53	3.58
4	1.42	70	3.49
5	1.79	86	3.45
6	2.19	103	3.42
7	2.55	118	3.40

Force Table (Use for Airstroke™ actuator design)

Assembly Height (mm)	Volume @ 7 BAR (cu cm)	EFF Area @ 7 BAR (cm sq)	kN Force				
			@ 3 BAR	@ 4 BAR	@ 5 BAR	@ 6 BAR	@ 7 BAR
70	180	35	1.02	1.38	1.72	2.09	2.42
65	161	36	1.04	1.42	1.79	2.19	2.55
60	144	37	1.05	1.44	1.82	2.22	2.59
55	123	37	1.07	1.45	1.83	2.23	2.60
50	103	37	1.10	1.47	1.85	2.25	2.62
45	81	38	1.13	1.50	1.89	2.29	2.65
40	64	39	1.17	1.54	1.93	2.33	2.70

Description		Assembly Order No.
Style 1M1A-1	Blind nuts, 1/8 BSP, Plastic stud	W02-M58-3006
Two Ply Bellows		
Assembly weight		.23 kg.
Force to collapse to minimum height (@ 0 BAR)		89 N.

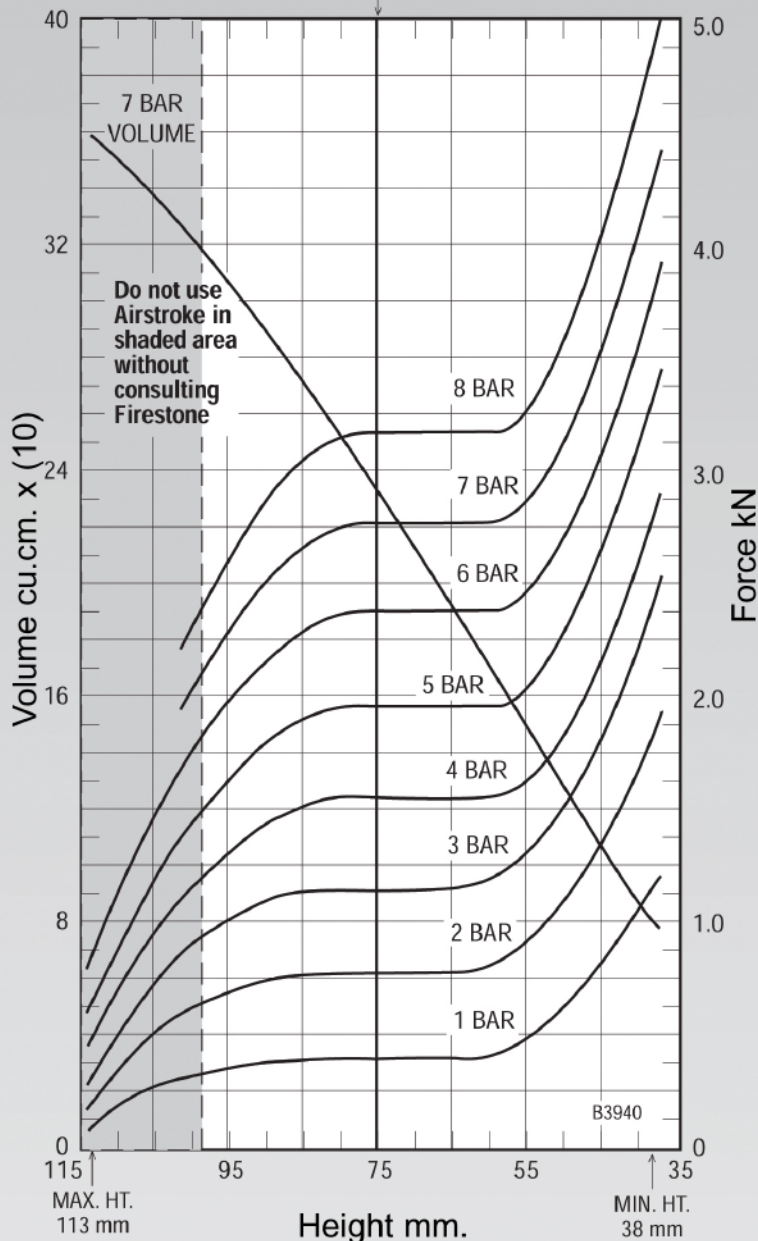


NOTE: The dotted line on the static data chart shows the force capabilities of the 1M1A-1 when attaching an additional 12 mm pedestal, provided by the customer, to the base of the air spring. If an additional pedestal is not used, the air spring will behave as the solid line depicts. Without a pedestal the rubber part will contact the ground at the height of 53 mm and could cause the rubber part to wear prematurely.

CONSULT FIRESTONE
BEFORE USING AS
AIRMOUNT

RECOMMENDED
AIRMOUNT
DESIGN HEIGHT
75 mm.

Static Data
A9618



See page 12 for instructions on how to use chart.

Dynamic Characteristics at 75 mm Design Height
(Required for Airmount isolator design only)

Gauge Pressure (BAR)	Load (kN)	Spring Rate (kN/m)	Natural Frequency Hz
3	1.16	38.66	2.88
4	1.57	49.85	2.81
5	1.97	60.30	2.76
6	2.39	71.66	2.73
7	2.78	81.97	2.71

Force Table (Use for Airstroke™ actuator design)

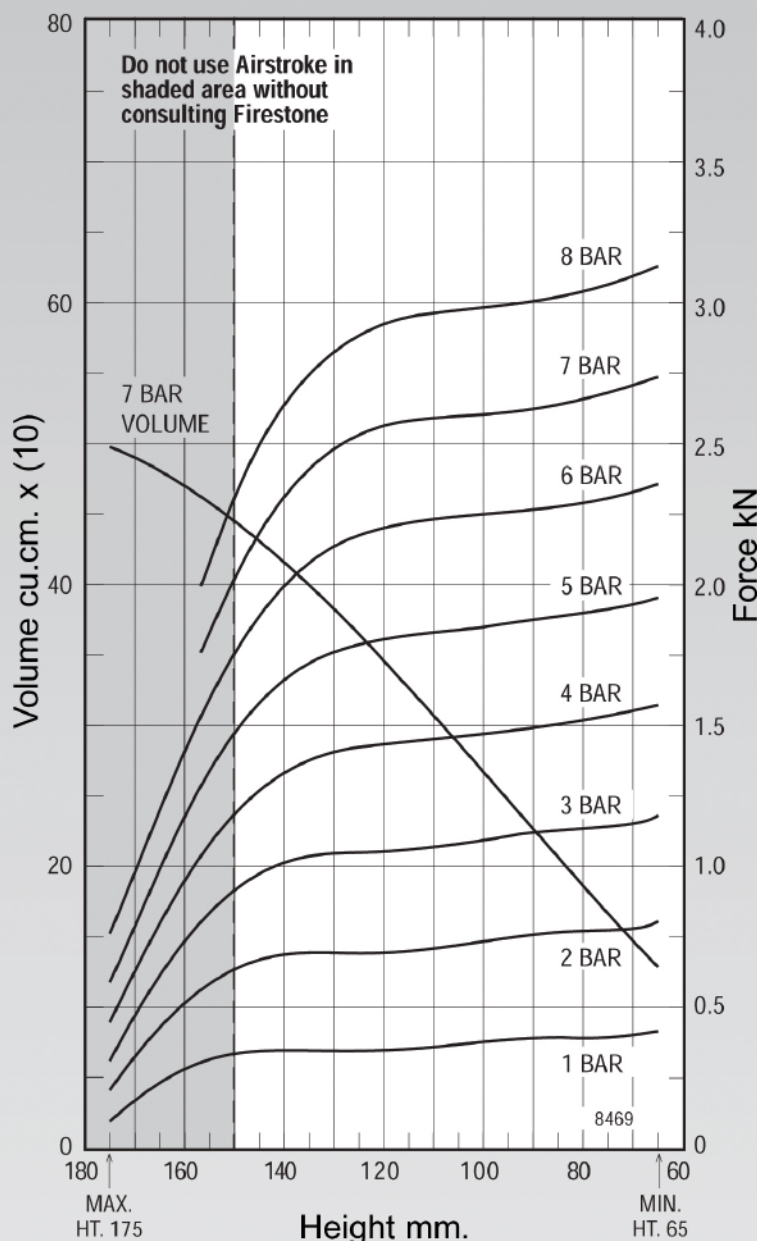
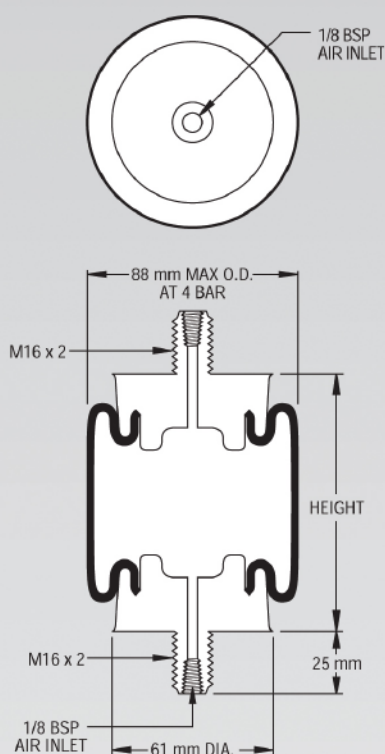
Assembly Height (mm)	Volume @ 7 BAR (cu cm)	EFF Area @ 7 BAR (cm sq)	kN Force				
			@ 3 BAR	@ 4 BAR	@ 5 BAR	@ 6 BAR	@ 7 BAR
85	272	38.07	1.14	1.52	1.95	2.30	2.66
75	235	39.67	1.16	1.57	1.97	2.39	2.78
65	194	39.67	1.16	1.57	1.97	2.39	2.78
55	152	40.83	1.31	1.63	2.04	2.46	2.86
45	110	50.25	1.79	2.17	2.63	3.06	3.52

AIRSTROKE ACTUATOR ONLY

Static Data

8469

	Description	Assembly Order No.
Style 2M1A	1/8 BSP, each end	W02-M58-3002
Two Ply Bellows		
Assembly weight..... .27 kg.		
Force to collapse to minimum height (@ 0 BAR) . 133.5 N.		



See page 12 for instructions on how to use chart.

NOTE: This Airstroke actuator must be guided throughout the stroke.

NOTE: Do not use as an Airmount isolator.

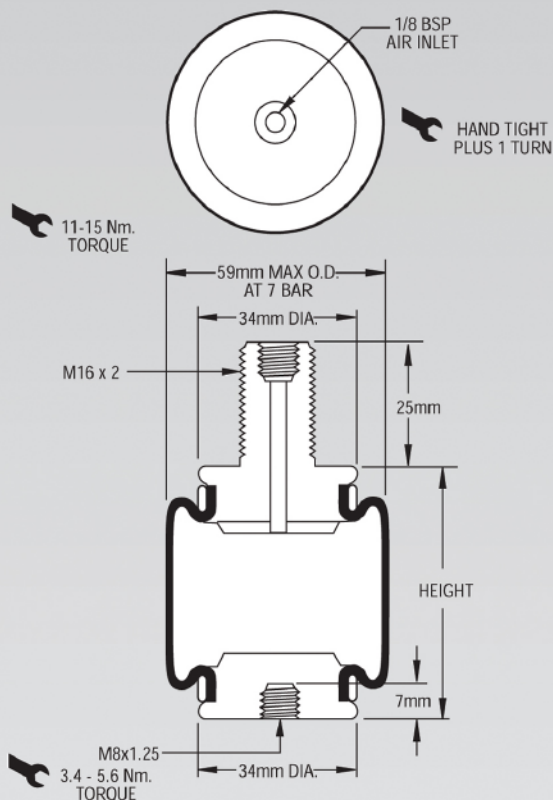
NOTE: Plug off one end. (This part is single acting)

NOTE:
Do not use as an Airmount isolator

Force Table (Use for Airstroke™ actuator design)

Assembly Height (mm)	Volume @ 7 BAR (cu cm)	EFF Area @ 7 BAR (cm**2)	kN Force				
			@ 3 BAR	@ 4 BAR	@ 5 BAR	@ 6 BAR	@ 7 BAR
140	413	33	1.01	1.33	1.65	1.98	2.29
130	379	35	1.04	1.41	1.76	2.13	2.47
120	344	37	1.05	1.44	1.81	2.20	2.56
110	306	37	1.07	1.45	1.83	2.23	2.60
100	268	37	1.09	1.48	1.85	2.25	2.61
90	227	38	1.12	1.50	1.87	2.27	2.63
80	189	38	1.13	1.52	1.90	2.30	2.66
70	150	39	1.15	1.54	1.93	2.33	2.71

	Description	Assembly Order No.
Style 2M2A	Blind Nut, 1/8 BSP, plastic studs	W02-M58-3019
Two Ply Bellows		
Assembly weight0.07 kg.		
Force to collapse to minimum height (@ 0 BAR) 22 N.		



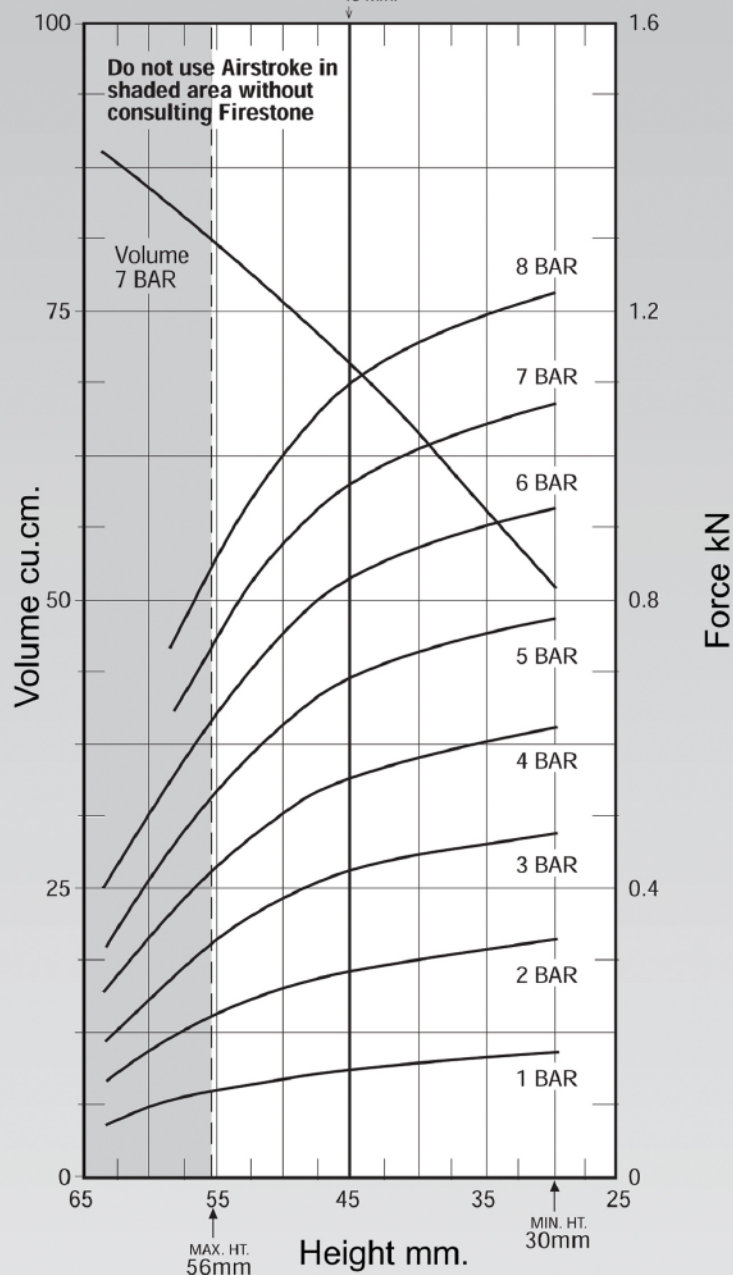
NOTE: This Airstroke actuator must be guided throughout the stroke.

NOTE: The 2M2A must be supported laterally when used as an isolator. Contact Firestone for use in isolation applications.

Dynamic Characteristics at 51 mm Design Height (Required for Airmount isolator design only)			
Gauge Pressure (BAR)	Load (kN)	Spring Rate (kN/m)	Natural Frequency Hz
3	0.42	18	3.27
4	0.55	23	3.23
5	0.68	29	3.25
6	0.82	34	3.22
7	0.95	39	3.20

RECOMMENDED
AIRMOUNT
DESIGN HEIGHT
45 mm.

Static Data
B6575



See page 12 for instructions on how to use chart.

Force Table (Use for Airstroke™ actuator design)							
Assembly Height (mm)	Volume @ 7 BAR (cu cm)	EFF Area @ 7 BAR (cm**2)	kN Force				
			@ 3 BAR	@ 4 BAR	@ 5 BAR	@6 BAR	@7 BAR
55	80.30	10.4	0.32	0.41	0.52	0.62	0.73
45	70.46	13.6	0.42	0.55	0.68	0.82	0.95
35	58.99	14.8	0.45	0.60	0.75	0.90	1.04
25	40.56	15.6	0.49	0.64	0.79	0.94	1.09