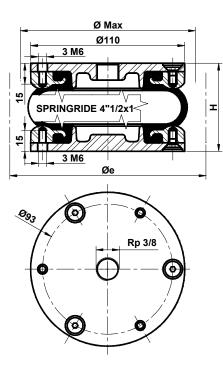
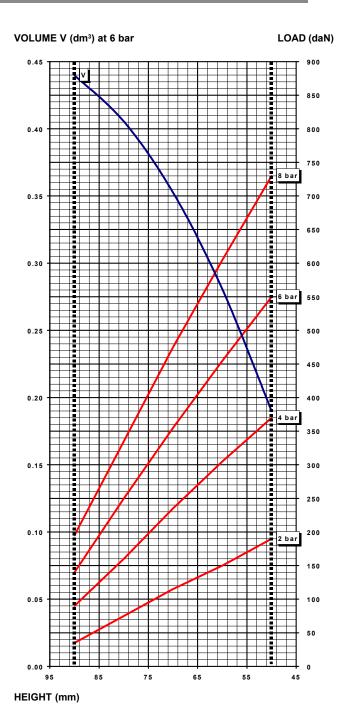


BELLOWS 4¹/₂" x 1 ALUMINIUM



AS	ASSEMBLED WITH 2x3 SCREWS Fhc/90 M6x100 LENGTH 12m FASTENING TORQUE 5 Nm							
	Heig	ghts (mm)	Stroke					
	Maximum	Minimum	Design	(mm)				
	90	50 70		40				
	Di	Diameters (mm)						
	Ø MAX	Ove	(kg)					
	125	14	0.75					

Rubber Bellow	Features	Part Numbers	
<u>Standard</u>	-Rubber Only	SP2008	
-40 to 70°C	-Assembled Bellows	SP2334	
<u>Butyl</u>	-Rubber Only	SP2009	
-25 to 90°C	-Assembled Bellows	SP2372	
Epichlore	-Rubber Only	SP2580	
-20 to 115°C	-Assembled Bellows	SP2581	



- Indicative value of force required to reach minimum height at atmospheric pressure : 12 daN

- Maximum pressure : 8 bar

- The datas presented on this document are liable to evolution and don't constitute a commitment from DUN-LOP AIRSPRINGS (see page 5-7).





BELLOWS 41/2" x 1 ALUMINIUM

FOR USE AS A PNEUMATIC ACTUATOR

CHARACTERISTICS IN STATIC CONDITION							
HEIGHT	LOAD (daN)						
(mm)	Pressure 2 bar	Pressure 4 bar	Pressure 6 bar	Pressure 8 bar			
50	190	370	550	730			
60	150	305	455	605			
70	115	235	355	475			
80	75	160	250	335			
90	35	90	140	195			

ANGULAR CAPABILITY

H mini

(mm)

Maximum

(α)

5°

OUT OF ALIGNMENT

For H between		Maximum	For H between		
l mini H maxi (mm) (mm)		(A) H mini (mm) (mm)		H maxi (mm)	
60	75	5	60	80	



- Airsprings must not be pressurised unless they are restricted by an outside frame or by a suitable load. - Strokes must be limited by the direct use of bump stops or external stops.

- When stacking airsprings, special cares must be taken to ensure the airsprings are guided and fixed.

- An Airspring is a single acting air actuator and must not be used below atmospheric pressure.

- Please check the over-pressure in case of quick compression.

- The datas presented on this document are liable to evolution and don't constitute a commitment from **DUNLOP AIRSPRINGS (see page 5-7).**

DYNAMIC CHAR	DYNAMIC CHARACTERISTICS AT				
	Pressure 2 bar	Pressure 4 bar	Pressure 6 bar	Pressure 8 bar	
LOAD (daN)	105	220	335		
VOLUME (dm ³)	0.316	0.340	0.365		
STIFFNESS (daN/cm)	74.9	131.8	184.9		
NATURAL FREQUENCY (Hz)	4.21	3.87	3.71		
ISOLATION RATE at 10 Hz	78.4%	82.4%	84.0%		

FOR USE AS AN ISOLATOR

- Isolation rate is given by the formula :

$$I = 1 - \frac{1}{\left(\frac{fe}{fn}\right)^2 - 1}$$
LOAD
$$fe$$

fe = Exciting frequency (Hz) fn = Airspring natural frequency (Hz)

* Recommanded height for better isolation.