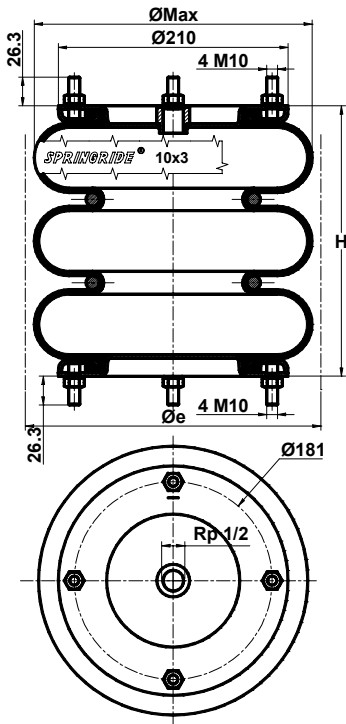


BELLOWS 10" x 3



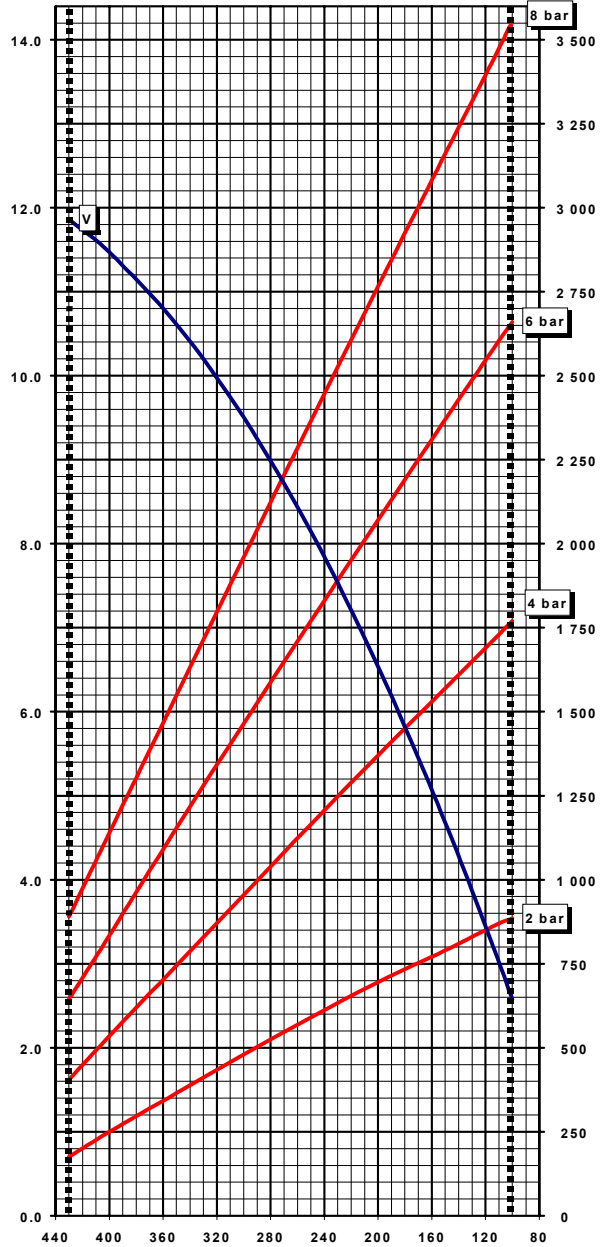
ASSEMBLED WITH 8 NUTS Hu10 AND 8 WASHERS GROWER WZ10.
FASTENING TORQUE 25 Nm

Heights (mm) (H)			Stroke (mm)
Maximum	Minimum	Design	
430	100	250	330
Diameters (mm)			Weight (kg)
Ø MAX	Overall		
270	300		5.9

Rubber Bellow	Features	Part Numbers
Standard	-Rubber Only	SP 258
-40 to 70°C	-Assembled Bellows	SP1539
Butyl	-Rubber Only	SP1480
-25 to 90°C	-Assembled Bellows	SP1669
Epichlore	-Rubber Only	SP2552
-20 to 115°C	-Assembled Bellows	SP2732

VOLUME V (dm³) at 6 bar

LOAD (daN)



HEIGHT (mm)

- Indicative value of force required to reach minimum height at atmospheric pressure : 19 daN

- Maximum pressure : 8 bar

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

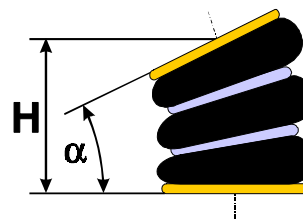
BELLOWS 10" x 3

FOR USE AS A PNEUMATIC ACTUATOR

CHARACTERISTICS IN STATIC CONDITION				
HEIGHT (mm)	LOAD (daN)			
	Pressure 2 bar	Pressure 4 bar	Pressure 6 bar	Pressure 8 bar
100	885	1770	2660	3555
150	790	1570	2370	3160
200	695	1370	2070	2765
250	590	1165	1770	2365
310	460	915	1400	1880
370	320	660	1025	1385
430	175	405	645	890

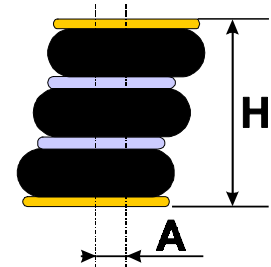
ANGULAR CAPABILITY

Maximum (α)	For H between	
	H mini (mm)	H maxi (mm)
5°	185	390
10°	245	370
15°	280	350



OUT OF ALIGNMENT

Maximum (A)	For H between	
	H mini (mm)	H maxi (mm)
10	165	390
20	200	380
30	220	365
40	230	350
50	240	345



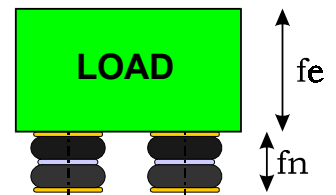
- Airsprings must not be pressurised unless they are restricted by an outside frame or by a suitable load.
- Strokes must be limited by the direct use of bump stops or external stops.
- When stacking airsprings, special cares must be taken to ensure the airsprings are guided and fixed.
- An Airspring 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).

FOR USE AS AN ISOLATOR

DYNAMIC CHARACTERISTICS AT H= 320 mm *				
	Pressure 2 bar	Pressure 4 bar	Pressure 6 bar	Pressure 8 bar
LOAD (daN)	435	875	1340	
VOLUME (dm³)	9.32	9.65	9.98	
STIFFNESS (daN/cm)	44	76	110	
NATURAL FREQUENCY (Hz)	1.58	1.47	1.43	
ISOLATION RATE at 10 Hz	97.4%	97.8%	97.9%	

- Isolation rate is given by the formula :

$$I = 1 - \frac{1}{\left(\frac{f_e}{f_n}\right)^2 - 1}$$



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

Warning : 3 convolutions bellows are laterally instable, when used as isolators, they need special guides.

* Recommended height for better isolation.