

DUNLOP Type Air Springs

The DUNLOP Type Air Springs are designed and intended for the spring mounting of road and railway vehicles. They are also used for the resilient mounting of shock-creating and vibrating devices such as forging presses, power hammers, textile looms, conveyors, etc. They are suitable for insulation of laboratory devices from vibrations. They are also recommended for the resilient mounting of trailers and recreational vehicles. Other applications should be discussed with the manufacturer.

The complete DUNLOP Type Air Spring consists of a corrugated body made of rubberized fabric and reinforcing steel rings. The body is sealed with flanges. One of the flanges is provided with an air-intake branch. The flanges must be coaxial and are designed to be attached both to the fixed and the resilient-mounted parts of the vehicle or device.



The DUNLOP Type Air Springs can be mounted either individually or in panels (where the requested number of air springs is connected), depending on the vehicle (device) weight. The rubberized-fabric wall of the body must not come into contact with sharp or hot objects (iron scale, edges, exhausts, etc.). The Air Springs can be inflated either individually or centrally. It is recommended to connect them to the source of pressurized air via a control valve.



The Air Springs (air-spring bodies) may be used up to the maximum operating overpressure of 0.7 Mpa valid for the static (assembling) height H_{STAT} .

There must be sufficient room around the Air Spring to prevent the air-spring body wall from getting into contact with other parts of the machine or vehicle during operation. The Air Spring should be provided with a rubber stop to prevent the corrugated parts of rubberized fabric from being damaged by bearing against the metal supporting parts in case of a sudden air escape.

The rubber of the body is not resistant to crude-oil products such as oil, Diesel oil, petrol, kerosene, etc.). If contaminated, wash in with warm water and wipe dry.

THE DUNLOP TYPE AIR SPRINGS BODIES

DUNLOP Ref. Number (inches)	Dimensions of the Moulding in the Mould (mm)			Air spring Body Height (mm)			Diameter (mm) A _{max}	Effective Surface (cm ²)
	A	B	C	H _{Stat}	H _{min}	H _{max}		
2 3/4 x 2	70,0	68,0	35,0	90	65	115	78	25,5
2 3/4 x 3	70,0	95,0	35,0	115	80	145	78	23
4 1/2 x 1	114,0	50,0	51,0	65	40	90	125	65
4 1/2 x 2	114,0	90,0	51,0	100	60	145	125	67
4 1/2 x 3	114,0	130,0	51,0	145	100	200	125	80
6 x 1	152,5	69,8	72,0	80	45	105	162	135
6 x 2	152,5	127,0	72,0	140	75	215	165	130
6 x 3	152,5	184,2	72,0	190	102	255	162	350
8 x 1	203,2	77,0	99,0	89	50	125	222	200
8 x 2	203,2	139,7	99,0	160	70	260	222	208
8 x 3	203,2	203,2	99,0	220	120	320	222	205
9 1/4 x 2	235,0	152,4	110,2	160	75	280	254	272
10 x 1	254,0	89,0	123,0	95	50	135	280	350
10 x 2	254,0	155,3	123,0	170	75	300	280	340
10 x 3	254,0	241,6	123,0	250	100	420	280	325
12 x 1	304,0	89,0	178,5	95	50	145	330	510
12 x 2	304,0	165,3	178,5	170	75	315	330	485
12 x 3	304,0	241,6	178,5	250	100	430	330	480
14 1/2 x 1	368,3	101,6	222,5	110	50	165	395	750
14 1/2 x 2	368,3	190,5	222,5	200	75	350	395	710
14 1/2 x 3	368,3	279,4	222,5	285	100	480	395	790
16 x 2	406,4	190,5	232,0	200	75	400	430	900
16 x 3	406,4	279,4	232,0	290	125	500	430	825
21 1/2 x 2	546,1	191,0	404,2	200	90	390	570	1 950

LEGEND:

The real dimensions of the air-spring body differ from the mentioned moulding dimensions by the negative value of 1.5 to 2.5 % (rubber shrinkage).

A = Outside dimension of the body

B = Body height

C = Inside body diameter

H_{stat} = Static (assembling) height of the body

