

Support elements for machines

Air Spring type FS



The air springs offer wide and robust solutions both as actuators and as anti-vibration mounts.

Air Actuators

- can be used instead of pneumatic or hydraulic cylinders in a wide range of applications
- can execute strokes from 60 mm up to 134mm
- maintenance-free
- highly durable and high operational safety
- low design height
- lateral misalignment possible: max. 20 mm
- tilt capability: max. 20°

Applications

- vehicle applications
- materials handling equipment
- agricultural machinery
- food industry
- paper and textile equipment
- punch and forming presses
- sawmill machinery

Anti-vibration

- allow to damp vibrations at very low frequencies between 0.5 and 3.5 Hz according to the model used
- wide range of load capacity
- constant working height regardless of load
- load-independent isolation properties
- excellent lateral stability, up to 100% of the vertical rigidity
- low design height

Applications

- diesel engines, generators
- foundation mounts
- heavy machinery
- measuring instruments
- power looms
- vehicle test rigs
- washing machines



Code - P2FS....

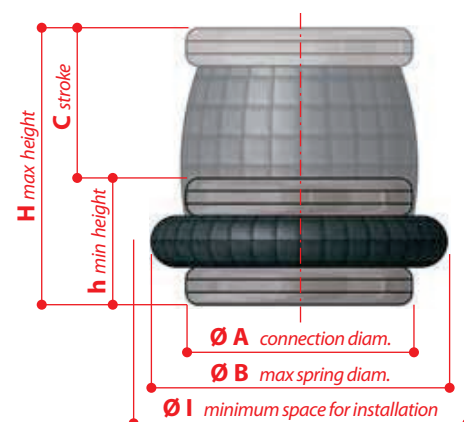
Material - NBR/Metal

Pressure - 0,0 ÷ 8,0 bar

Temperature - -40 ÷ +70 °C

Dimensions Spring

Code	Connection type	Ø A	Ø B	Ø I	H	h	C	Weight
		mm	mm	mm	mm	mm	mm	kg
FS 40-6 CI	A	145	145	160	110	50	60	0,90
FS 50-5 CI	B	150	150	165	95	51	44	1,20
FS 70-7 CI	B	165	165	180	115	51	64	1,20
FS 100-10 CI	B	210	210	225	145	51	94	1,40
FS 120-9 CI	B	215	215	230	135	50	85	2,00
FS 120-10 CI	B	231	231	245	150	51	99	1,90
FS 120-12 CI	B	235	235	250	170	51	119	1,90
FS 200-10 CI	C	250	250	265	140	51	89	2,30
FS 330-11 CI	C	325	325	340	150	51	99	4,10
FS 330-14 CI	C	343	343	360	180	51	129	4,30
FS 530-11 CI	D	385	385	400	175	51	124	5,90
FS 530-14 CI	D	405	405	420	185	51	134	6,10



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Performance Table (referring to the Max operating pressure of 8 bar)

Code	Connection type	Anti-Vibration			Actuators			
		h recomm.	h min	Load	Stroke max	Force F at the point of stroke		
		mm	mm	Kn	mm	Kn	Kn	Kn
FS 40-6 CI	A	90	70	4,4	60	6,9	5,2	2,4
FS 50-5 CI	B	75	65	6,1	44	9,0	5,4	2,2
FS 70-7 CI	B	90	70	7,7	64	9,9	7,5	5,2
FS 100-10 CI	B	115	100	8,8	94	14,7	11,0	1,6 *
FS 120-9 CI	B	110	90	10,9	85	17,7	12,4	6,6
FS 120-10 CI	B	115	100	15,3	99	19,5	15,0	4,6
FS 120-12 CI	B	140	125	12,0	119	18,7	15,9	7,2
FS 200-10 CI	C	110	90	15,7	89	23,8	17,5	9,1
FS 330-11 CI	C	130	100	29,0	99	43,9	36,7	22,4
FS 330-14 CI	C	140	120	31,2	129	47,3	37,8	13,0
FS 530-11 CI	D	145	110	42,2	124	68,4	53,0	20,8
FS 530-14 CI	D	150	120	50,8	134	69,6	60,2	35,2

* value refers to the pressure P of 7 bar

Dimensions Connection

Code	Connection type	A	Ø D	Air Inlet 1		Air Inlet 2	
		mm	mm	Ø d1	B1	Ø d2	B2
					mm		mm
FS 40-6 CI	A	20,0	M8	G1/8	---	---	---
FS 50-5 CI	B	44,5	M8	G1/4	---	---	---
FS 70-7 CI	B	44,5	M8	G1/4	---	---	---
FS 100-10 CI	B	44,5	M8	G1/4	---	---	---
FS 120-9 CI	B	70,0	M8	G3/4	---	G1/4	---
FS 120-10 CI	B	70,0	M8	G3/4	---	G1/4	---
FS 120-12 CI	B	70,0	M8	G3/4	---	G1/4	---
FS 200-10 CI	C	89,0	M8	G3/4	38,1	G1/4	44,5
FS 330-11 CI	C	157,5	M8	G1	66,0	G1/4	73,0
FS 330-14 CI	C	157,5	M8	G1/4	73,0	G1	66,0
FS 530-11 CI	D	158,8	M8	G1	158,8	G1/4	158,8
FS 530-14 CI	D	158,8	M8	G1	158,8	G1/4	158,8

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