

Support elements for machines

Air Spring type FD



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 - P2FD....

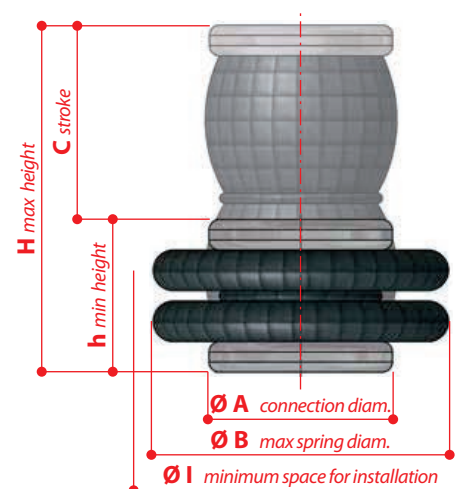
Material - NBR/Metal

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
FD 40-10 CI	A	90	145	160	170	70	100	1,10
FD 70-13 CI	B	108	165	180	203	75	128	1,50
FD 110-15 CI	B	141	203	215	227	72	155	2,10
FD 120-17 CI	B	141	215	230	230	75	155	2,40
FD 120-20 CI	B	141	218	235	270	77	193	2,30
FD 200-19 CI	C	161	250	265	275	75	200	3,00
FD 200-22 CI	C	161	255	265	295	77	218	3,20
FD 200-25 CI	C	161	260	275	325	77	248	3,50
FD 330-22 CI	C	228	325	340	305	75	230	4,80
FD 330-30 CI	C	228	340	355	360	77	283	5,10
FD 530-22 CI	D	287	385	400	310	77	233	6,90
FD 530-30 CI	D	287	400	415	360	77	283	7,30
FD 530-35 CI	D	287	405	420	390	77	313	7,70



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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
FD 40-10 CI	A	160	150	3,2	100	7,4	5,5	2,5
FD 70-13 CI	B	175	160	5,2	128	11,6	7,8	2,6
FD 110-15 CI	B	175	155	9,2	155	16,5	10,5	2,9
FD 120-17 CI	B	190	175	10,6	155	18,0	13,1	6,3
FD 120-20 CI	B	205	190	12,70	193	19,6	14,4	6,6
FD 200-19 CI	C	210	195	14,5	200	26,1	18,3	5,7
FD 200-22 CI	C	220	205	16,5	218	26,2	17,6	7,0
FD 200-25 CI	C	254	230	16,5	248	25,4	18,8	8,2
FD 330-22 CI	C	240	220	27,6	230	46,4	33,8	14,3
FD 330-30 CI	C	---	---	---	283	49,0	39,6	13,7
FD 530-22 CI	D	250	225	42,0	233	65,5	52,9	21,8
FD 530-30 CI	D	260	245	48,2	283	71,2	56,4	21,6
FD 530-35 CI	D	285	265	51,0	313	75	58	21,0 *

* 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		mm		mm
FD 40-10 CI	A	20,0	M8	G1/8	---	---	---
FD 70-13 CI	B	44,5	M8	G1/4	---	---	---
FD 110-15 CI	B	70,0	M8	G3/4	---	G1/4	---
FD 120-17 CI	B	70,0	M8	G3/4	---	G1/4	---
FD 120-20 CI	B	70,0	M8	G3/4	---	G1/4	---
FD 200-19 CI	C	89,0	M8	G3/4	38,1	G1/4	44,5
FD 200-22 CI	C	89,0	M8	G3/4	38,1	G1/4	44,5
FD 200-25 CI	C	89,0	M8	G3/4	38,1	G1/4	44,5
FD 330-22 CI	C	157,5	M8	G1	66,0	G1/4	73,0
FD 330-30 CI	C	157,5	M8	G1/4	73,0	G1	66,0
FD 530-22 CI	D	158,8	M8	G1	158,8	G1/4	158,8
FD 530-30 CI	D	158,8	M8	G1	158,8	G1/4	158,8
FD 530-35 CI	D	158,8	M8	G1	158,8	G1/4	158,8

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