

AIR CUSHIONS

General description



This machine elements in the form of compressed-air cushions for damping, holding, lifting and pressing operations, etc. are increasingly being used in place of single acting compressed-air cylinders, particularly where high forces are required in conjunction with ultra-flat installation dimensions and short-lift movements.

Instead of having a point load on the structure, as in the case of cylinders, this air cushions generate a constant surface pressure of max. 6 bar.

Technical characteristics

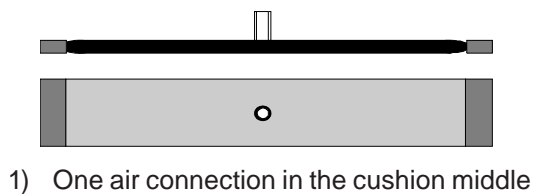
Width :	49 - 62 - 75 - 90 - 108 - 127 - 150 - 170 - 183 - 206 - 248 mm
Length :	100 - 2.000 mm
Lifting Force :	100 - 60.000 da N
Working Stroke :	max. 75 mm
Connection :	1/4" - 3/8" - 1/2" - 3/4"
Pressure :	max. 6 bar
Temperature :	-10° till +55° C

Example

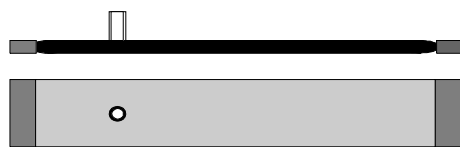
Air cushion with width 245 mm, length 2250 mm & height 17 mm gives
 12.5 ton by 6 bar with a course of 75 mm
 25.1 ton by 6 bar with a course of 15 mm

Technical modifications keep in reserve !

(2000/08)



1) One air connection in the cushion middle



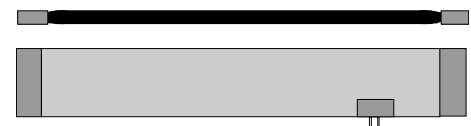
2) One air connection outside the cushion middle on the center line



3) Two air connections on the center line



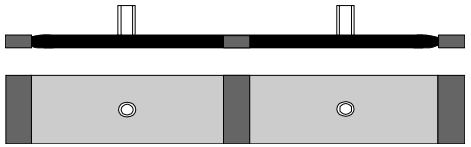
4) One air connection on the face end



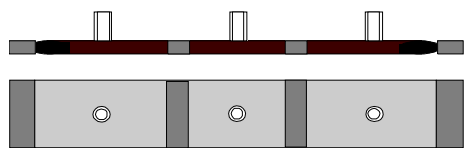
5) One air connection at the longitudinal side



6) Two fastening bolts & one air connection on face end

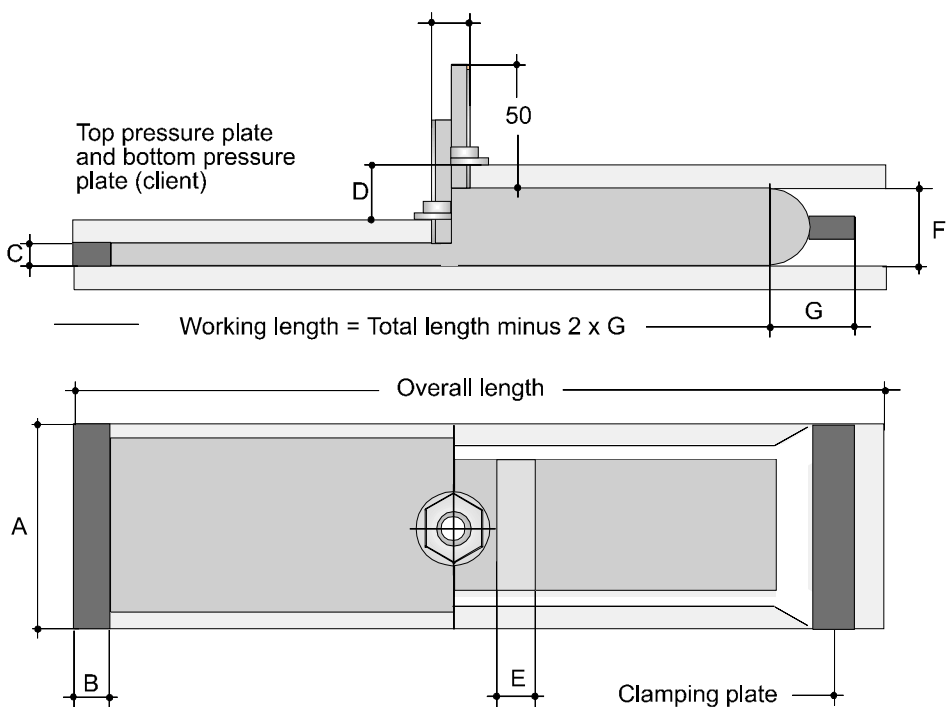


7) Two separate chambers



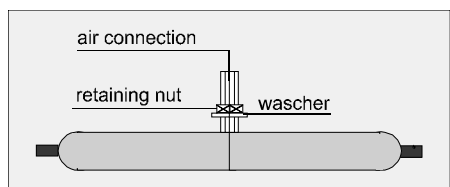
8) Three separate chambers

air connection in standard version
G 1/4a - NW 7



Cushion size (mm) -> -> -> -> ->		1	2	3	4	5	6	7	8	9	10	11
A	Maximum width of cushion	49	62	75	90	108	127	150	170	183	206	248
B	Width of clamping plates	20	20	20	20	20	20	25	30	30	35	40
C	Installation height of clamping plates	15	15	15	15	15	15	15	16	16	17	18
D	Recommended working stroke	7	15	20	25	27	30	35	50	55	60	75
E	Lifting force in daN per cm working length at 6 bar	7.5	6.6	6.6	16	26.4	33	42.4	40	42.4	51.8	61
F	Distance between pressure plates at full working stroke	22	30	35	40	45	45	50	65	71	76	91
G	Non carrying section	34	44	44	48	52	52	52	77	81	90	107

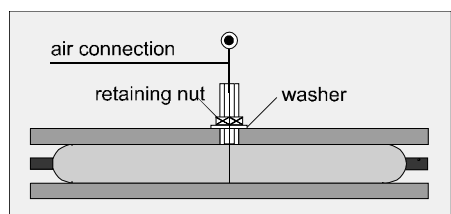
Delivery situation



Mounting instructions

- remove retaining nut
- remove washer
- fit the thread socket through the hole in the relevant pressure plate
- fit washer over the projecting part of the threaded socket
- screw on retaining nut and tighten only by hand

Situation after assembling



Compressed-air connection

- use oil-free compressed-air
- wrap teflon tape around the projecting part of the socket
- screw the feeder fitting (= nipple) by hand onto the socket and tighten only by hand
- carry out pressure test
- in case of leakage: retighten nut and nipple by hand

Technical modifications keep in reserve !

(99/08)