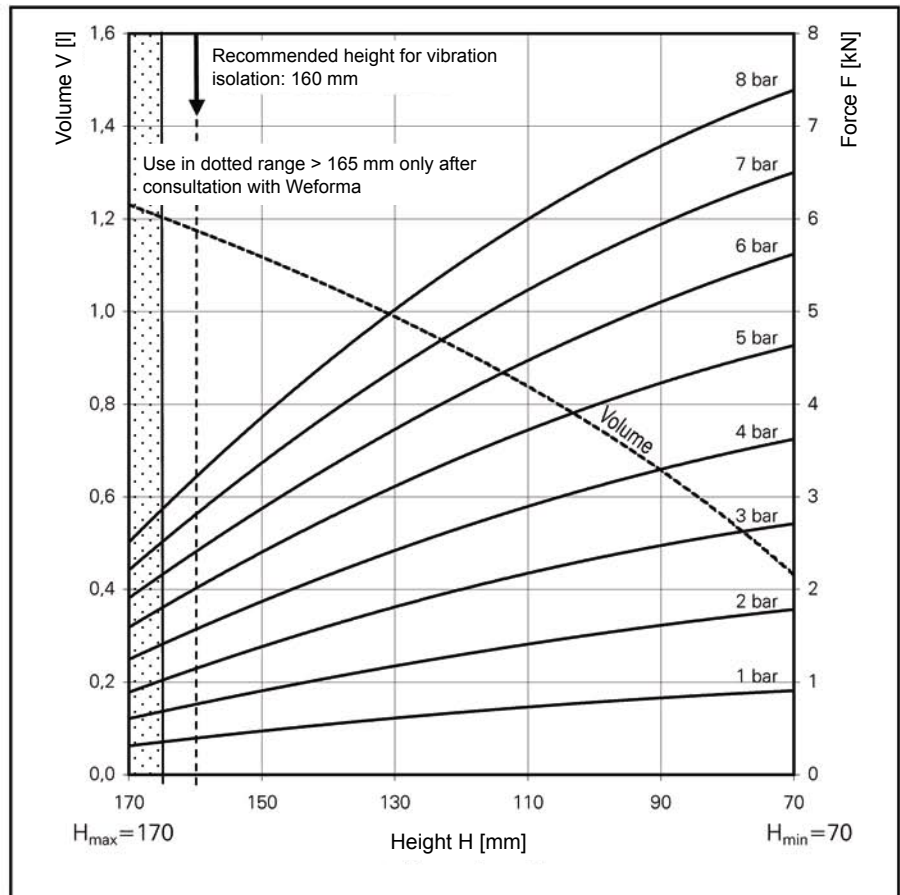
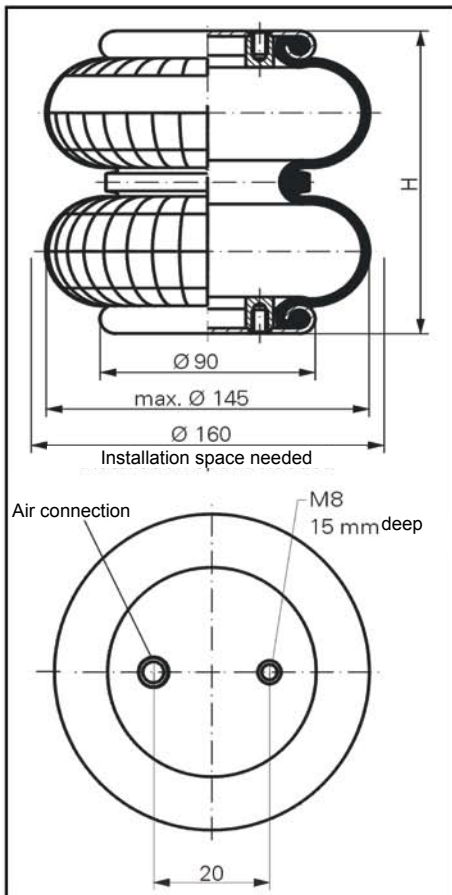


WBZ 100



Force-height diagramm

Air connection

WBZ 100-E1 G1/8

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 200 N
Overall weight with clamped plates	1.1 kg

Vibration isolation - dynamic characteristic values


Design height recommended 160mm, minimum 150mm

Pressure p [bar]	3	4	5	6	7	8	Vol.[l]
Force (Load) [kN]	1.1	1.5	2.0	2.4	2.8	3.2	1.2
Spring rate c [N/cm]	340	450	580	700	825	950	
Natural frequenz f0 [Hz]	2.8	2,8	2.7	2.7	2.7	2.7	

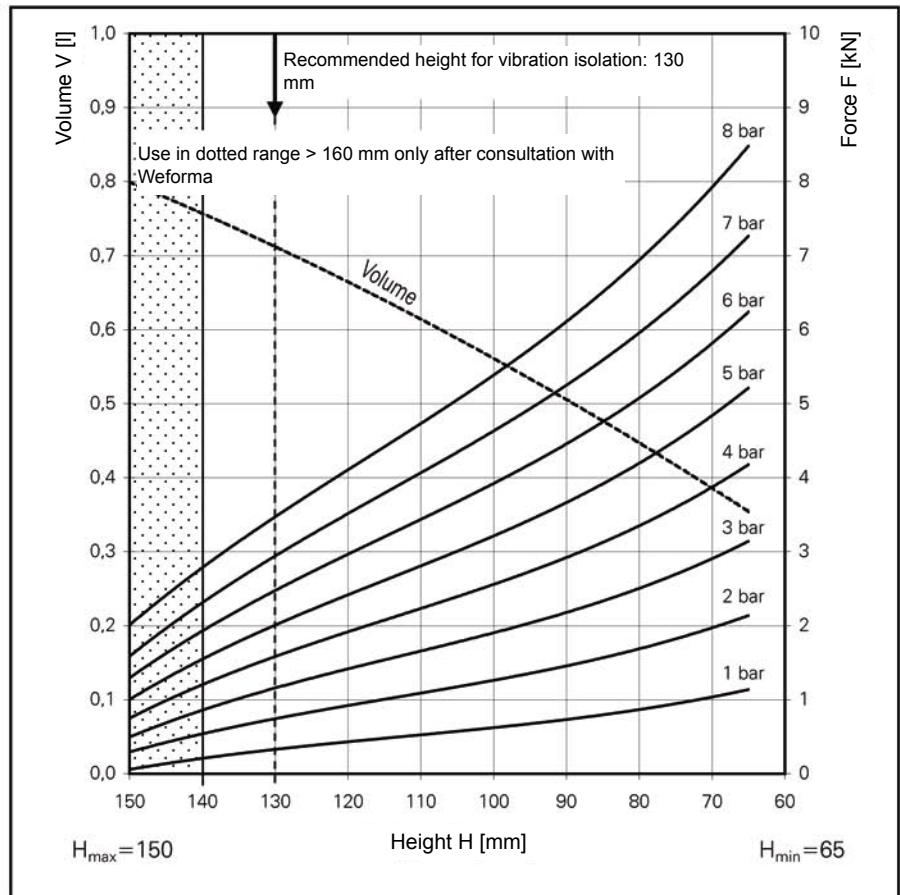
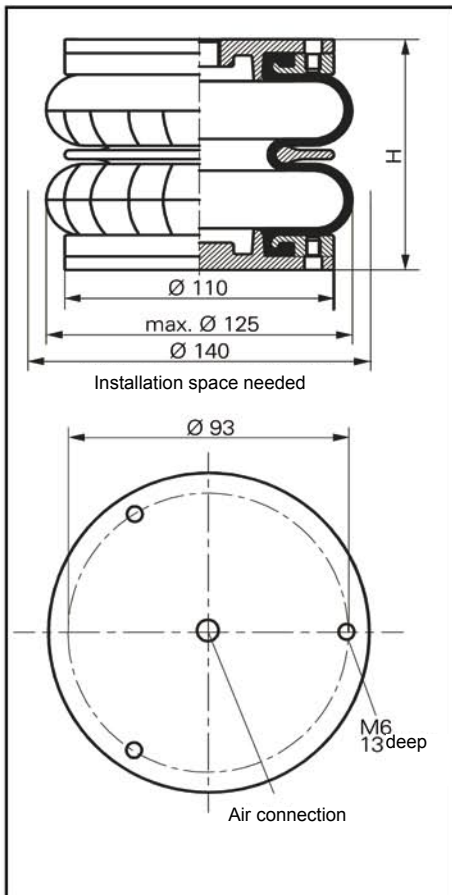
Pneumatic application - static characteristic values

Force F [kN]

Pressure p [bar]	3	4	5	6	7	8	Vol.[l]	
Height H [mm]	160	1.1	1.6	2.0	2.4	2.8	3.2	1.2
	140	1.6	2.2	2.8	3.3	3.9	4.5	1.1
	120	2.0	2.7	3.4	4.1	4.8	5.5	0.9
	100	2.3	3.1	4.0	4.8	5.6	6.4	0.7
	80	2.6	3.5	4.5	5.4	6.3	7.1	0.6

 Service instructions
M8 = 25 Nm
G 1/8 = 25 Nm

WBZ 140



Force-height diagramm

Air connection

WBZ 140-E1 G3/8

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 130 N
Overall weight with clamped plates	0.9 kg

Vibration isolation - dynamic characteristic values

Design height recommended 130mm, minimum 110mm

Pressure p [bar]	3	4	5	6	7	8	Vol. V[l]
Force (Load) [kN]	1.2	1.7	2.1	2.5	3.0	3.4	
Spring rate c [N/cm]	425	545	661	775	895	1010	
Natural frequenz f ₀ [Hz]	3.0	2.9	2.8	2.8	2.7	2.7	

Pneumatic application - static characteristic values

Force F [kN]

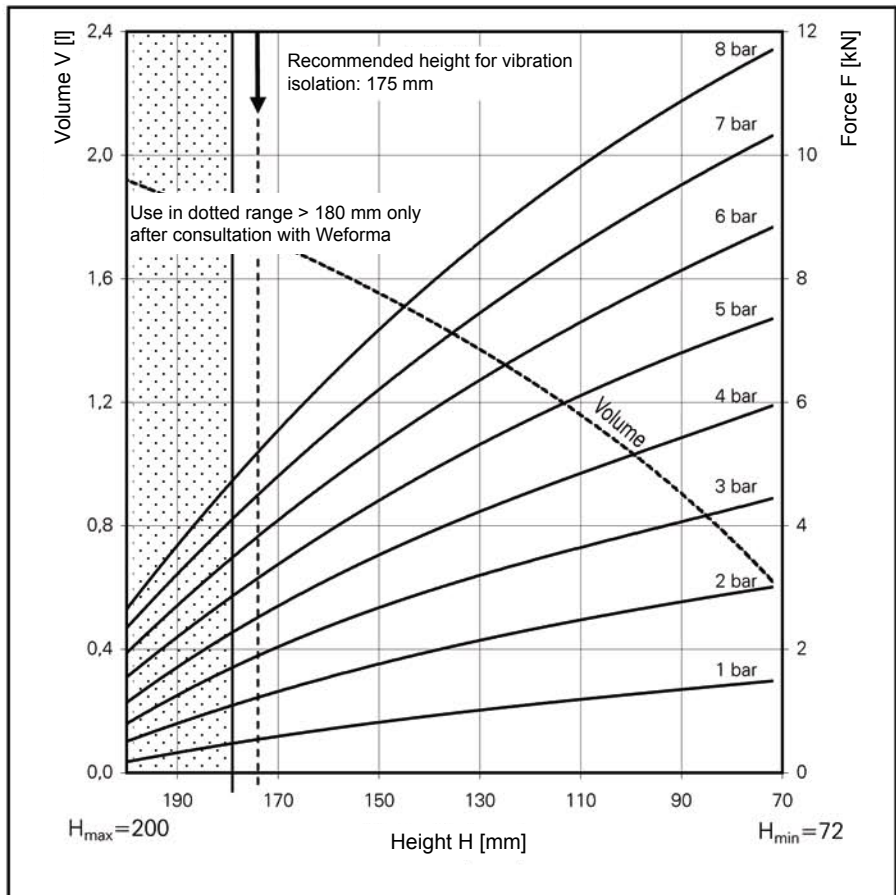
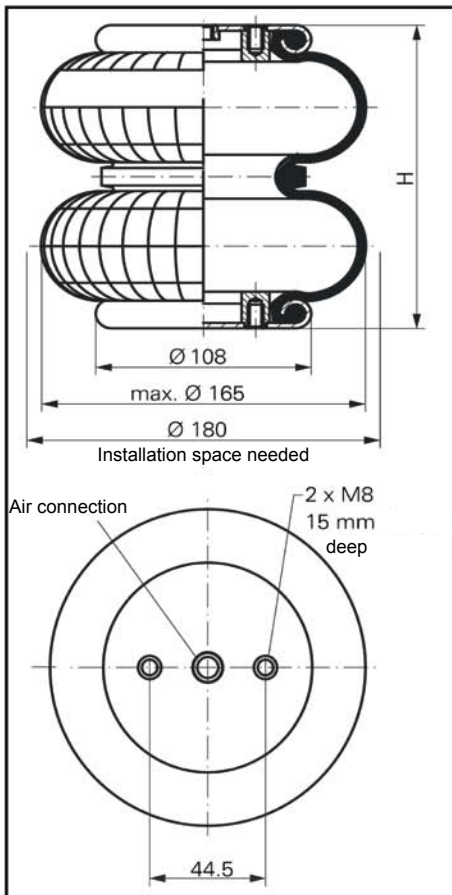
Pressure p [bar]	3	4	5	6	7	8	Vol.[l]	
Height H [mm]	140	0.9	1.2	1.6	1.9	2.3		0.76
	125	1.3	1.8	2.2	2.7	3.2		0.68
	110	1.7	2.2	2.8	3.5	4.1		0.61
	100	1.9	2.6	3.2	3.9	4.7		0.56
	90	2.2	2.9	3.7	4.5	5.3		0.51
	80	2.5	3.4	4.2	5.1	5.9		0.45
	70	2.9	3.8	4.8	5.8	6.7		0.39



Service instructions

M6 = 5 Nm
G 3/8 = 15 Nm

WBZ 200



Force-height diagramm

Air connection

WBZ 200-E1

G1/4

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 200 N
Overall weight with clamped plates	1.5 kg

Vibration isolation - dynamic characteristic values

Design height recommended 175mm, minimum 160mm

Pressure p	[bar]	3	4	5	6	7	8	Vol.[l]
Force (Load)	[kN]	1.9	2.5	3.2	3.8	4.5	5.2	1.7
Spring rate c	[N/cm]	460	595	730	860	995	1.125	
Natural frequenz f0	[Hz]	2.5	2.5	2.4	2.4	2.4	2.4	

Pneumatic application - static characteristic values

Force F [kN]

Pressure p	[bar]	3	4	5	6	7	8	Vol.[l]
Height H [mm]	180	1.6	2.3	2.9	3.5	4.1	4.7	1.8
	160	2.4	3.2	3.9	4.7	5.6	6.4	1.6
	140	2.9	3.9	4.8	5.8	6.8	7.8	1.5
	120	3.4	4.5	5.7	6.8	7.9	9.2	1.3
	100	3.9	5.2	6.5	7.8	9.1	10.4	1.1
	80	4.3	5.7	7.1	8.5	10.0	11.4	0.7

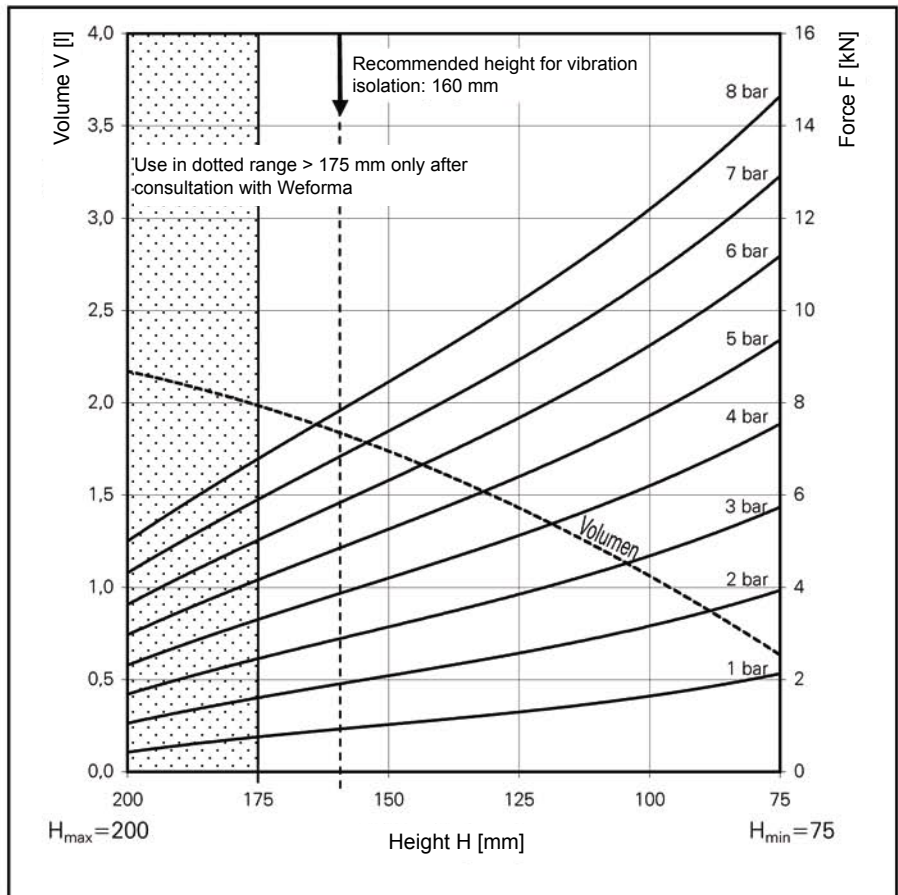
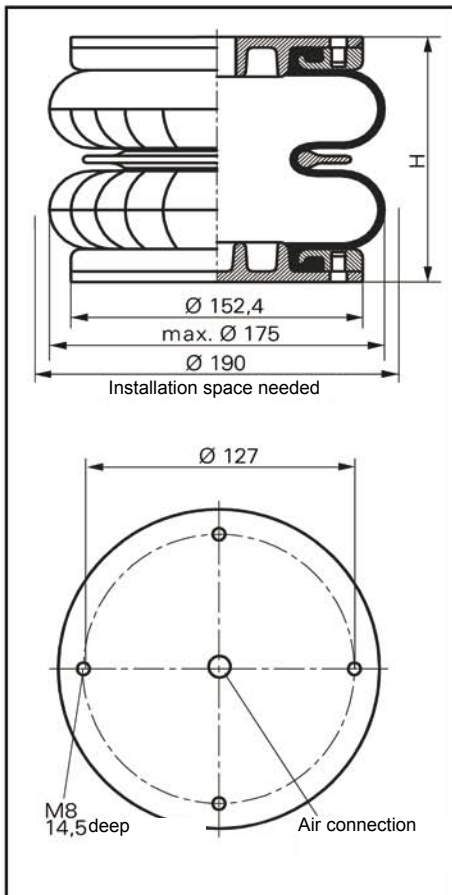


Service instructions

M8 = 25 Nm

G 1/4 = 25 Nm

WBZ 210



Air connection

WBZ 210-E1

G1/2

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 220 N
Overall weight with clamped plates	2 kg

Vibration isolation - dynamic characteristic values

Design height empf. 160 mm, minimal 150mm

Pressure p [bar]	3	4	5	6	7	8	Vol V[l]
Force (Load) [kN]	2,9	4,0	5,0	6,0	7,0	7,9	1,85
Spring rate c [N/cm]	595	760	910	1070	1245	1400	
Natural frequenz f0 [Hz]	2,3	2,2	2,2	2,1	2,1	2,1	

Pneumatic application - static characteristic values

Force F [kN]

Pressure p [bar]	3	4	5	6	7	8	Vol.[l]	
Height H [mm]	180	2,3	3,1	4,0	4,8	5,6	6,5	2,0
	160	2,9	3,9	4,9	5,8	6,8	7,8	1,9
	140	3,4	4,5	5,7	6,8	7,9	9,0	1,6
	120	4,0	5,3	6,6	7,9	9,2	10,5	1,4
	100	4,7	6,3	7,8	9,3	10,8	12,3	1,1

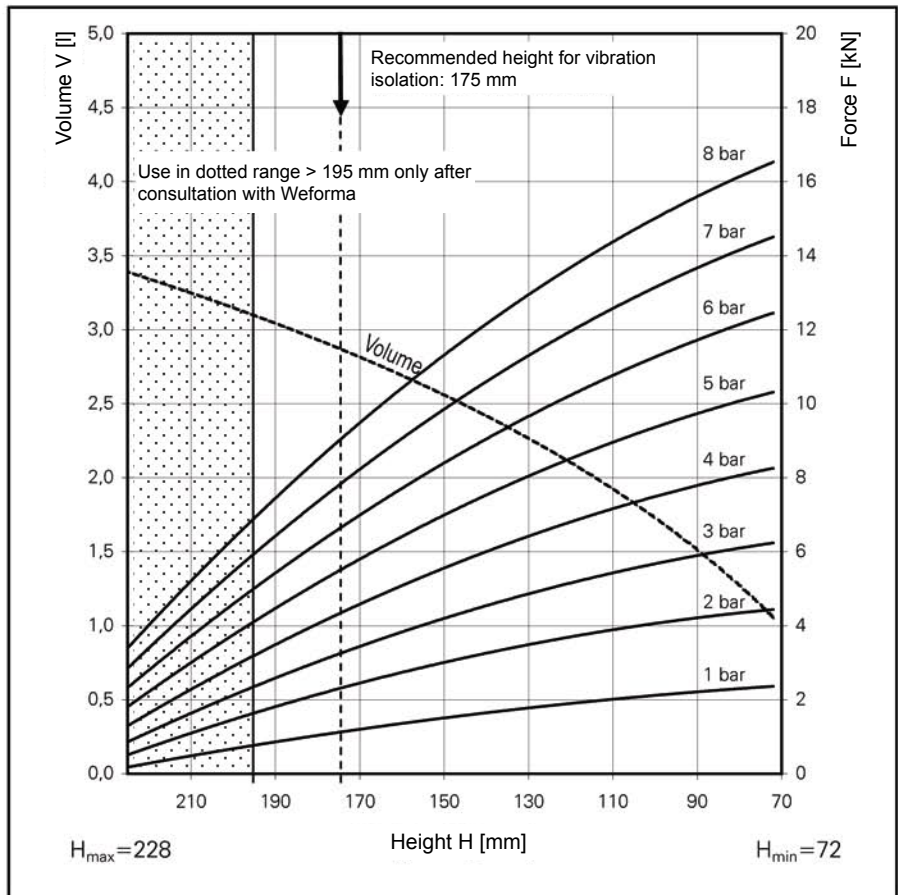
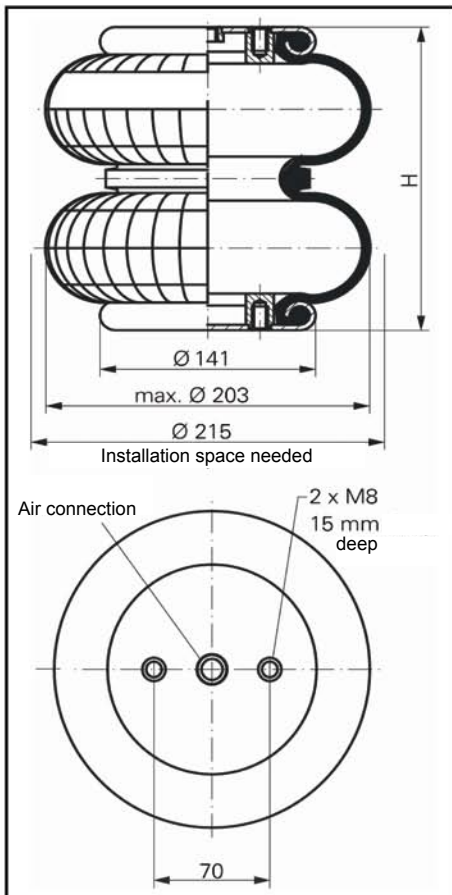


Service instructions

M8 = 20 Nm

G 1/2 = 25 Nm

WBZ 250



Force-height diagramm

Air connection

WBZ 250-E2 G1/4
WBZ 250-E1 G3/4

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 200 N
Overall weight with clamped plates	2.1 kg

Vibration isolation - dynamic characteristic values

Design height recommended 175mm, minimum 155mm

Pressure p [bar]	3	4	5	6	7	8	Vol.[l]
Force (Load) [kN]	3.3	4.5	5.6	6.8	8.0	9.2	2.9
Spring rate c [N/cm]	675	890	1110	1300	1470	1675	
Natural frequenz f ₀ [Hz]	2.3	2.2	2.2	2.2	2.1	2.1	

Pneumatic application - static characteristic values

Force F [kN]

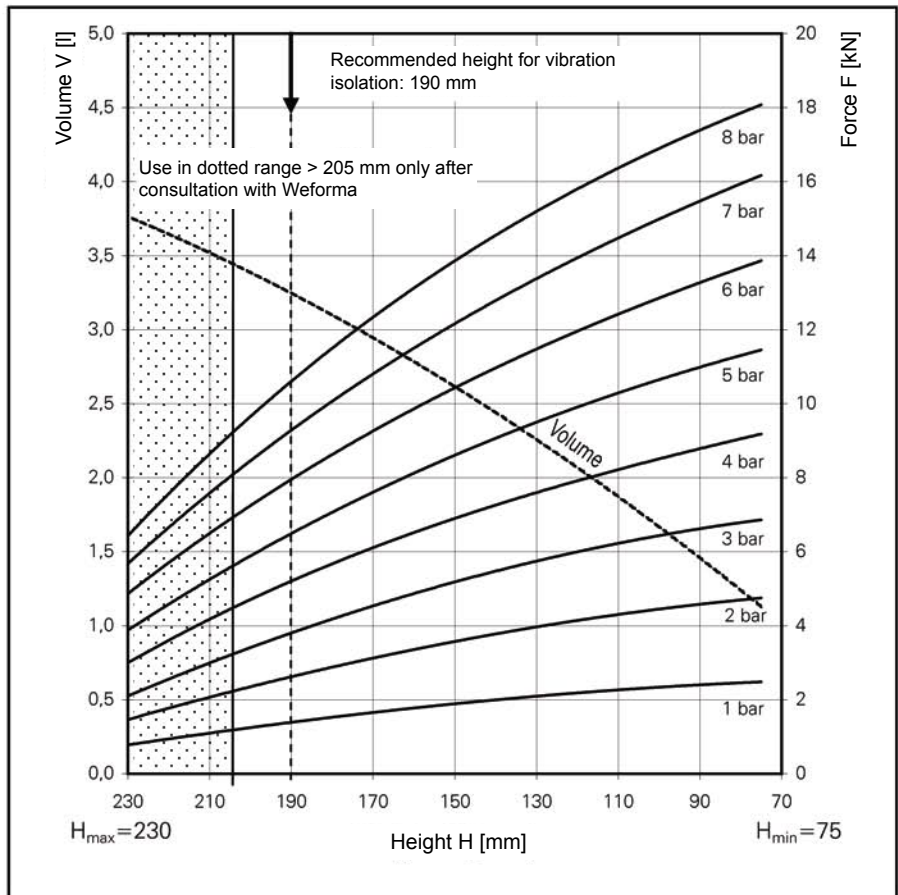
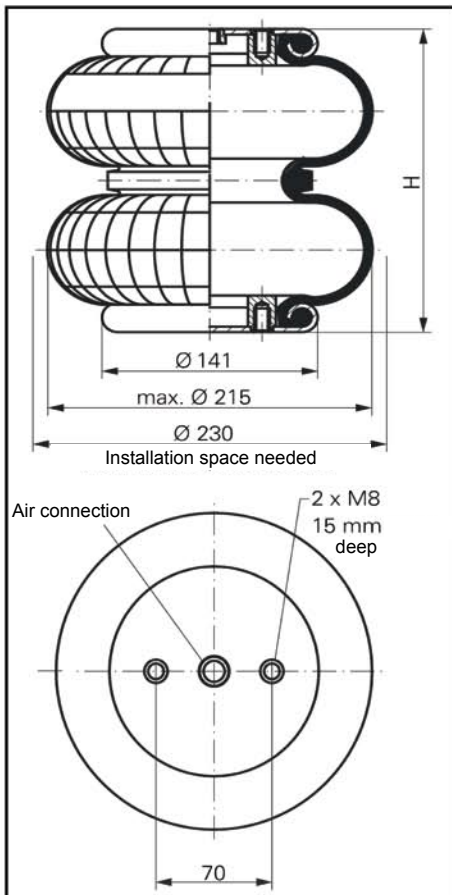
Pressure p [bar]	3	4	5	6	7	8	Vol.[l]
Height H [mm]	180	4.1	5.2	6.3	7.4	8.6	2.9
	160	3.9	5.1	6.5	7.8	9.1	2.7
	140	4.5	6.0	7.5	9.0	10.6	2.4
	120	5.0	6.7	8.4	10.1	11.8	2.1
	100	5.6	7.4	9.3	11.2	13.1	1.7
	80	6.1	8.1	10.1	12.2	14.2	1.3



Service instructions

M8 = 25 Nm
G 1/4 = 25 Nm
G 3/4 = 50 Nm

WBZ 300



Force-height diagramm

Air connection

WBZ 300-E1 G3/4
WBZ 300-E2 G1/4

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 200 N
Overall weight with clamped plates	2.3 kg

Vibration isolation - dynamic characteristic values

Design height recommended 190mm, minimum 175mm

Pressure p	[bar]	3	4	5	6	7	8	Vol.[l]
Force (Load)	[kN]	3.8	5.2	6.5	8.0	9.3	10.6	3.2
Spring rate c	[N/cm]	600	830	1060	1290	1520	1750	
Natural frequenz f0	[Hz]	2.1	2.0	2.0	2.0	2.0	2.0	

Pneumatic application - static characteristic values

Force F [kN]

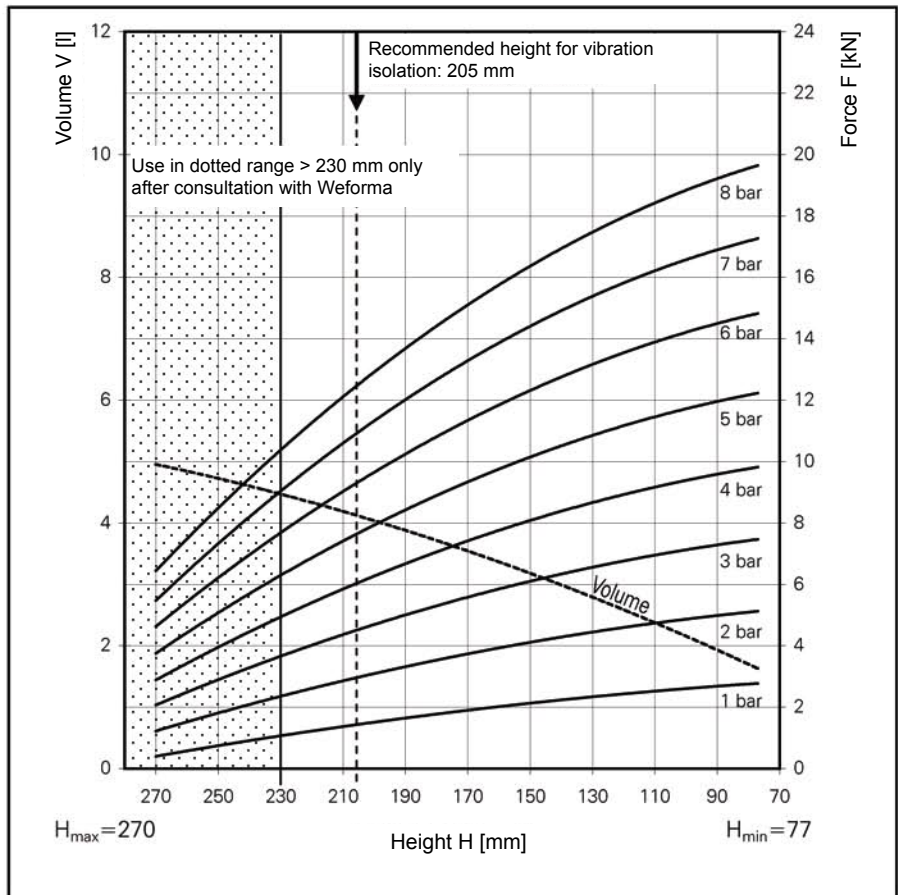
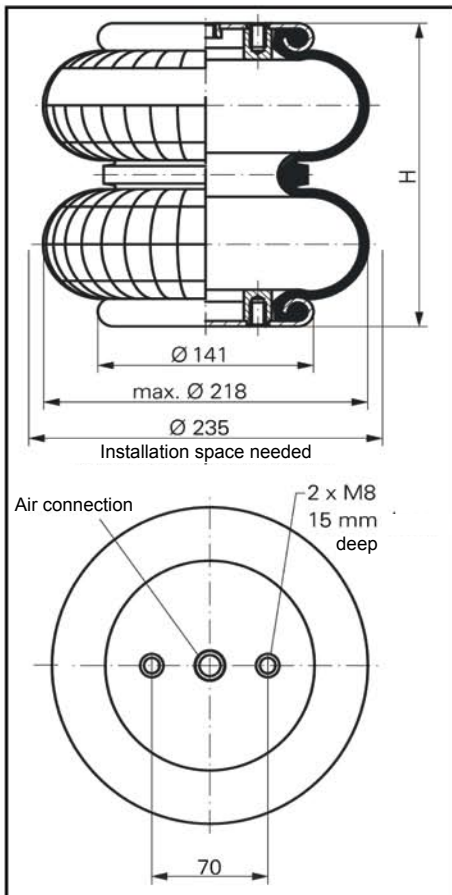
Pressure p	[bar]	3	4	5	6	7	8	Vol.[l]
Height H [mm]	200	3.4	4.8	5.9	7.3	8.5	9.7	3.4
	180	4.2	5.7	7.1	8.6	10.1	11.5	3.1
	160	4.9	6.5	8.1	9.9	11.5	13.1	2.8
	140	5.5	7.2	9.1	11.0	12.7	14.5	2.4
	120	6.0	7.9	9.9	12.0	14.0	15.8	2.1
	100	6.4	8.5	10.7	12.9	15.1	17.0	1.6
	80	6.8	9.1	11.3	13.7	16.0	17.9	1.2



Service instructions

M8 = 25 Nm
G 1/4 = 25 Nm
G 3/4 = 50 Nm

WBZ 320



Force-height diagramm

Air connection

WBZ 320-E1

G3/4

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 200 N
Overall weight with clamped plates	2.3 kg

Vibration isolation - dynamic characteristic values

Design height recommended 205mm, minimum 190mm

Pressure p	[bar]	3	4	5	6	7	8	Vol V [l]
Force (Load)	[kN]	4.6	6.2	7.8	9.4	11.1	12.7	4.1
Spring rate c	[N/cm]	650	840	1030	1200	1390	1541	
Natural frequenz f0	[Hz]	1.9	1.8	1.8	1.8	1.8	1.7	

Pneumatic application - static characteristic values

Force F [kN]

Pressure p	[bar]	3	4	5	6	7	8	Vol.[l]
Height H [mm]	200	4.7	6.2	7.9	9.6	11.2	12.9	4.1
	160	5.8	7.8	9.8	11.9	13.9	15.8	3.4
	120	6.8	9.0	11.3	13.7	16.0	18.0	2.6
	80	7.3	9.7	12.1	14.7	17.1	19.5	1.7

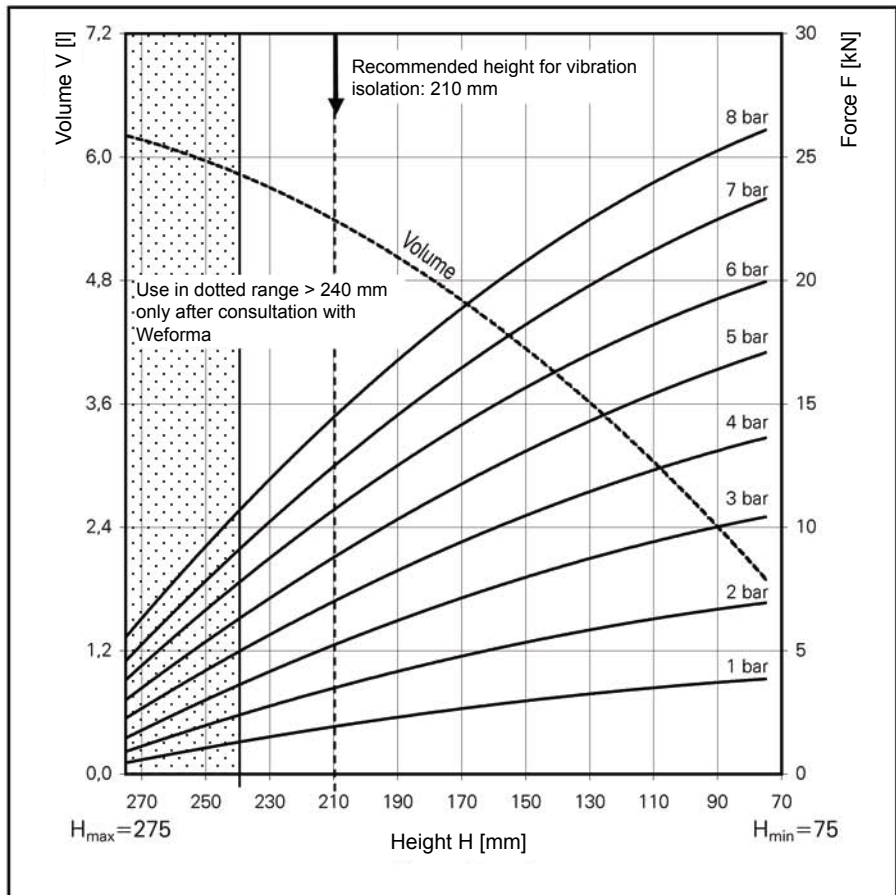
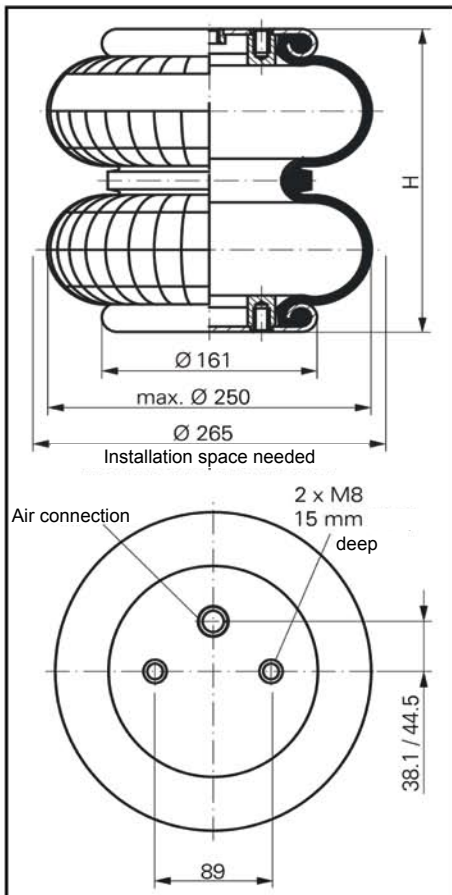


Service instructions

M 8 = 25 Nm

G 1/4 = 25 Nm

WBZ 400



Force-height diagramm

Air connection

WBZ 400-E1 G3/4
WBZ 400-E2 G1/4

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 200 N
Overall weight with clamped plates	3.0 kg

Vibration isolation - dynamic characteristic values

Design height recommended 210mm, minimum 195mm

Pressure p [bar]	3	4	5	6	7	8	Vol. V [l]
Force (Load) [kN]	5.2	7.1	9.0	10.7	12.4	14.5	5.2
Spring rate c [N/cm]	795	1030	1265	1500	1735	1970	
Natural frequenz f0 [Hz]	2.0	1.9	1.9	1.9	1.9	1.9	

Pneumatic application - static characteristic values

Force F [kN]

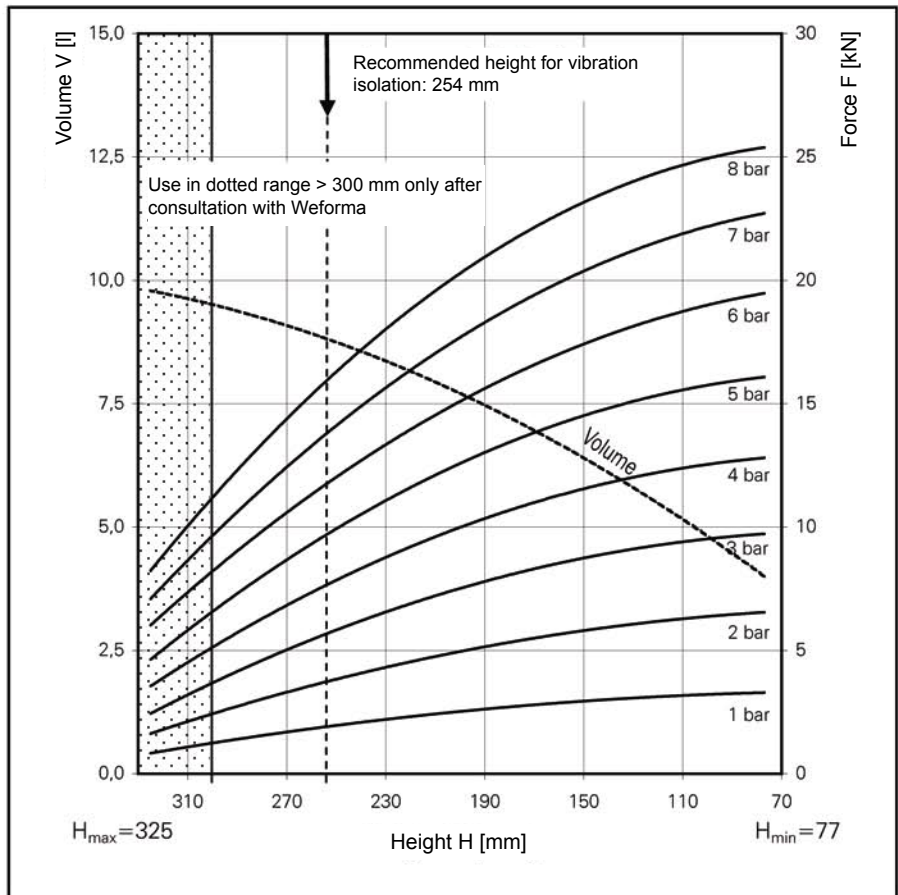
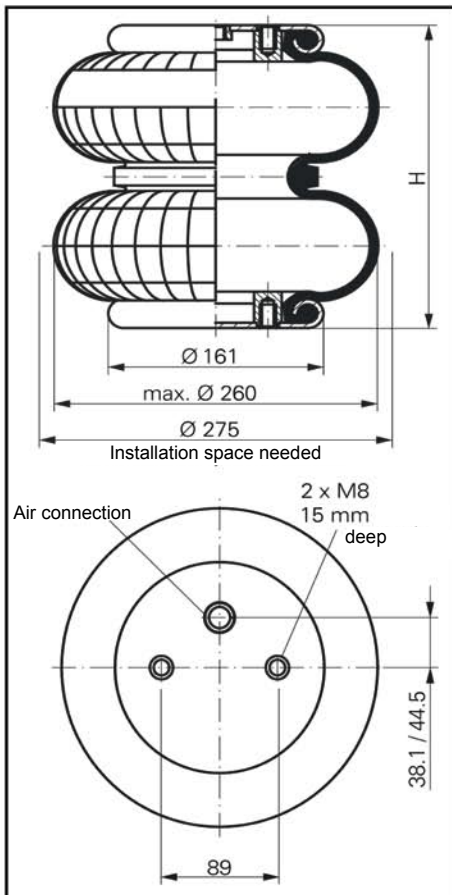
Pressure p [bar]	3	4	5	6	7	8	Vol.[l]	
Height H [mm]	230	4.1	5.6	7.2	8.8	10.1	12.0	5.8
	200	5.7	7.7	9.6	11.6	13.5	15.6	5.3
	170	7.2	9.4	11.7	14.2	16.5	18.9	4.6
	140	8.4	10.9	13.7	16.4	19.0	21.5	3.9
	110	9.4	12.4	15.4	18.3	21.3	24.1	3.0
	80	10.3	13.4	16.9	19.7	23.0	25.8	2.1



Service instructions

M8 = 25 Nm
G 1/4 = 25 Nm
G 3/4 = 50 Nm

WBZ 430



Force-height diagramm

Air connection

WBZ 430-E1 G3/4
WBZ 430-E2 G1/4

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 250 N
Overall weight with clamped plates	3.5 kg

Vibration isolation - dynamic characteristic values

Design height recommended 254mm, minimum 230mm

Pressure p [bar]	3	4	5	6	7	8	Vol. V[l]
Force (Load) [kN]	6.0	8.1	10.2	12.3	14.4	16.5	8.6
Spring rate c [N/cm]	730	930	1200	1390	1660	1840	
Natural frequenz f0 [Hz]	1.8	1.8	1.7	1.7	1.7	1.7	

Pneumatic application - static characteristic values

Force F [kN]

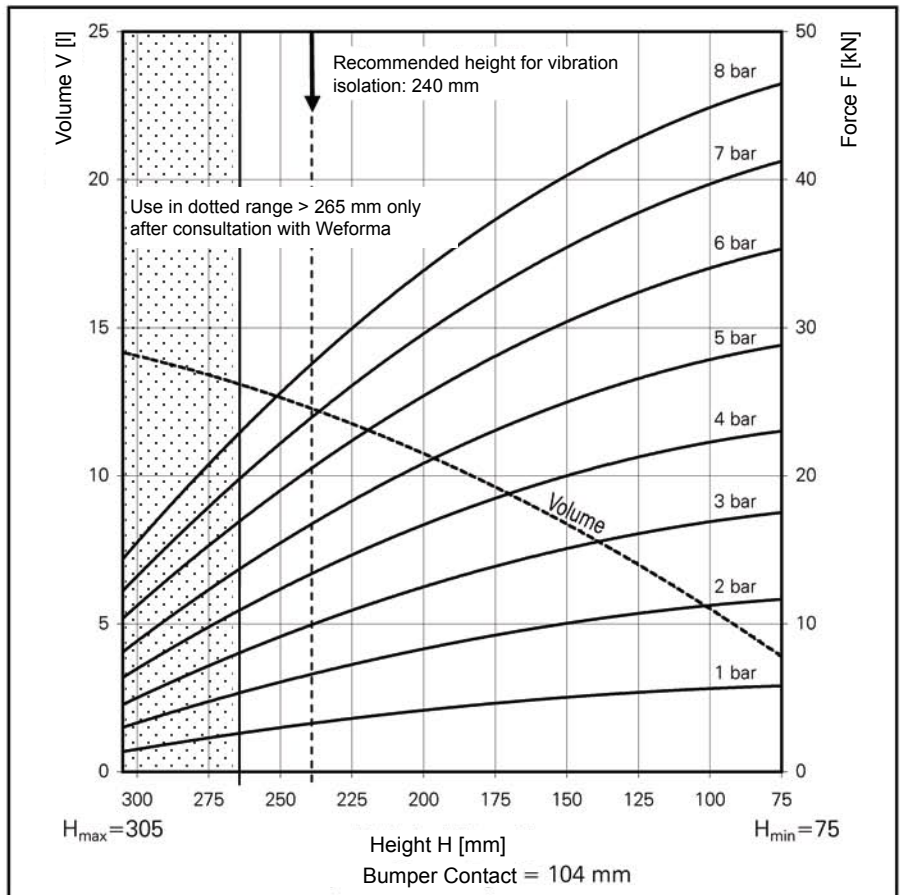
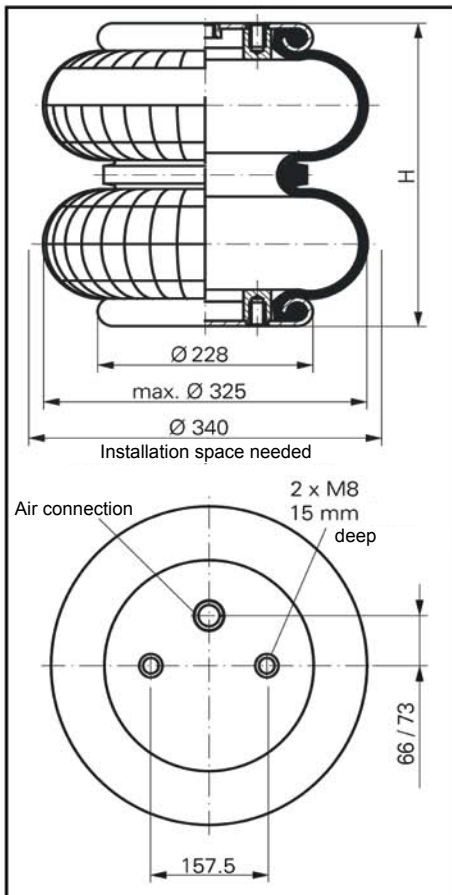
Pressure p [bar]	3	4	5	6	7	8	Vol.[l]	
Height H [mm]	290	4.1	5.6	7.3	9.0	10.5	12.4	9.4
	260	5.6	7.3	9.4	11.3	13.4	15.4	8.9
	230	6.6	8.8	11.1	13.4	15.8	18.1	8.4
	200	7.5	9.9	12.5	15.0	17.6	20.2	7.7
	170	8.3	11.0	13.8	16.6	19.4	22.2	7.0
	140	8.9	11.8	14.8	17.7	20.7	23.6	6.1
	110	9.3	12.3	15.6	18.7	21.9	24.6	5.1



Service instructions

M 8 = 25 Nm
G 1/4 = 25 Nm
G 3/4 = 50 Nm

WBZ 500



Force-height diagramm

Air connection

WBZ 500-E1 G1
WBZ 500-E2 G1/4

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 300 N
Overall weight with clamped plates	4.8 kg

Vibration isolation - dynamic characteristic values


Design height recommended 240mm, minimum 220mm

Pressure p [bar]	3	4	5	6	7	8	Vol V[l]
Force (Load) [kN]	10.0	13.3	16.7	20.6	24.1	27.6	12.0
Spring rate c [N/cm]	1590	1900	2210	2520	2830	3140	
Natural frequenz f0 [Hz]	2.0	1.9	1.8	1.8	1.7	1.7	

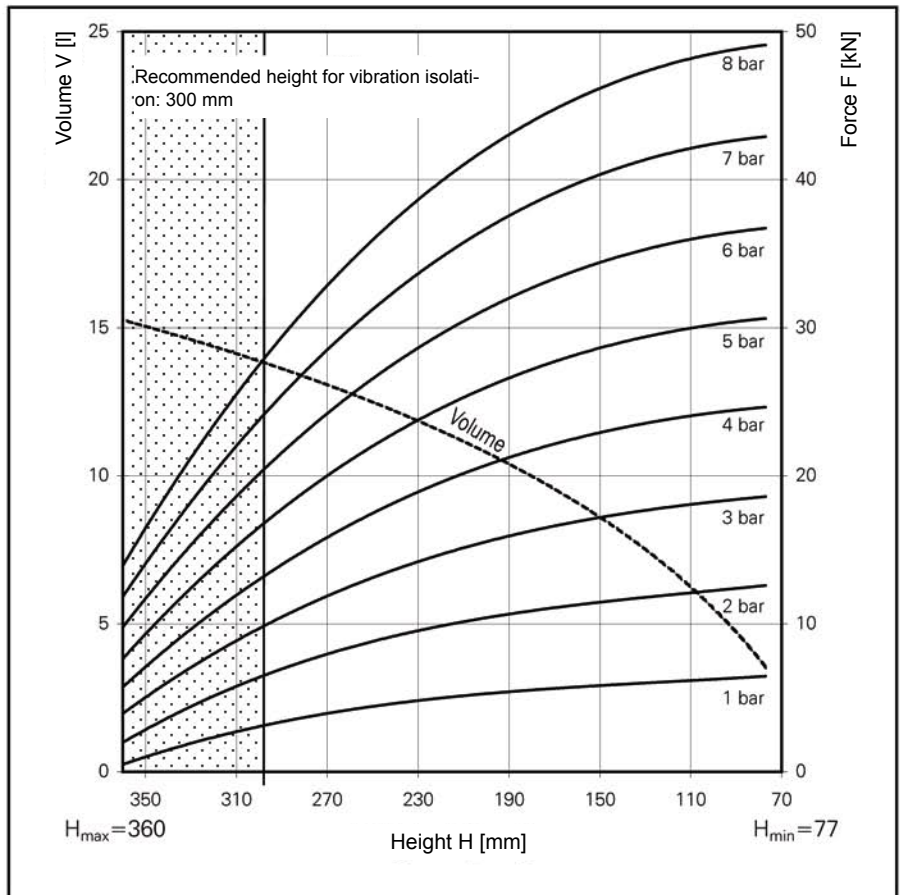
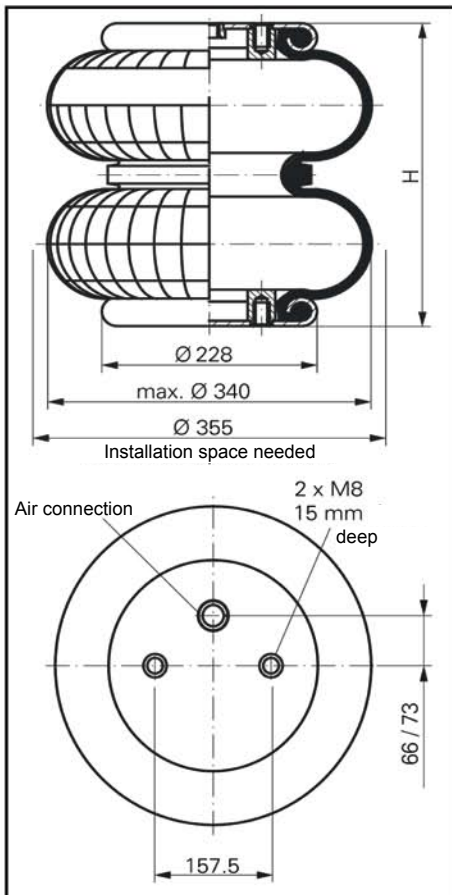
Pneumatic application - static characteristic values

Force F [kN]

Pressure p [bar]	3	4	5	6	7	8	Vol.[l]	
Height H [mm]	240	10.0	13.3	16.7	20.6	24.1	27.6	12.3
	220	11.3	15.2	18.9	23.1	26.9	30.8	11.6
	200	12.5	16.7	20.8	25.3	29.5	33.8	10.8
	180	13.6	18.2	22.7	27.5	32.0	36.5	9.9
	160	14.6	19.4	24.3	29.5	34.3	39.1	8.9
	140	15.4	20.5	25.5	31.1	36.3	41.3	7.8
	120	16.3	21.4	26.7	32.7	38.2	43.4	6.7
	100	16.8	22.1	27.8	34.1	39.8	45.0	5.5

 Service instructions
M 8 = 25 Nm
G 1/4 = 25 Nm
G 3/4 = 50 Nm

WBZ 520



Force-height diagramm

Air connection

WBZ 520-E1 G1
WBZ 520-E2 G1/4

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 300 N
Overall weight with clamped plates	5.1 kg

Pneumatic application - static characteristic values

Force F [kN]

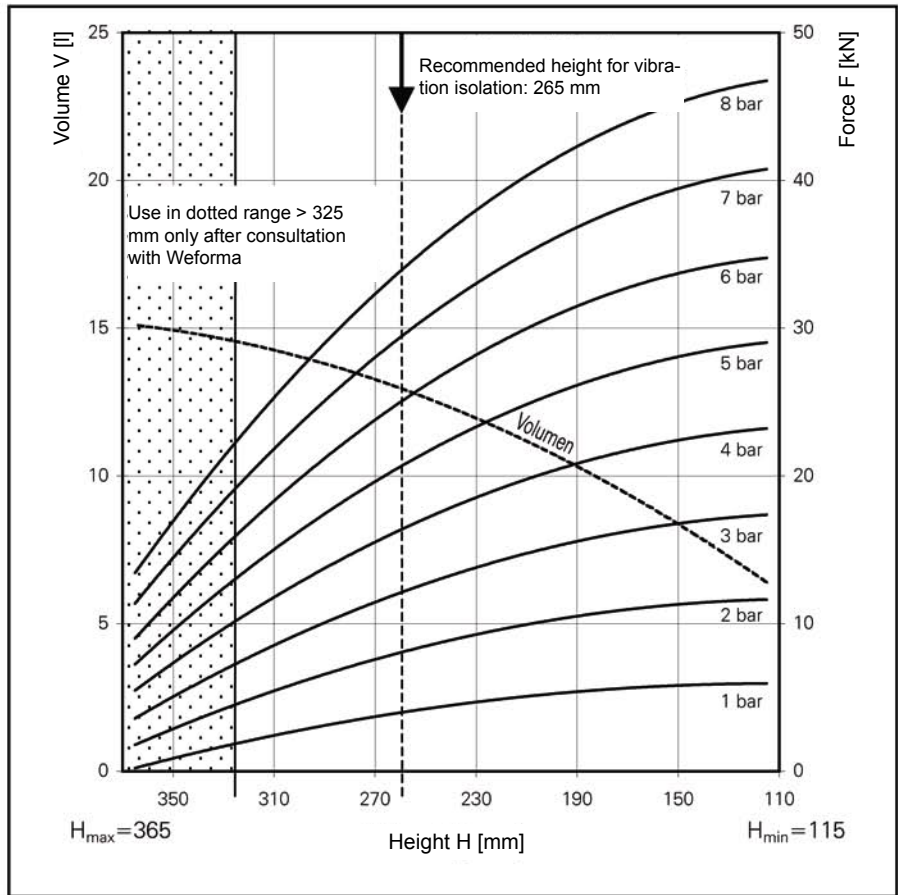
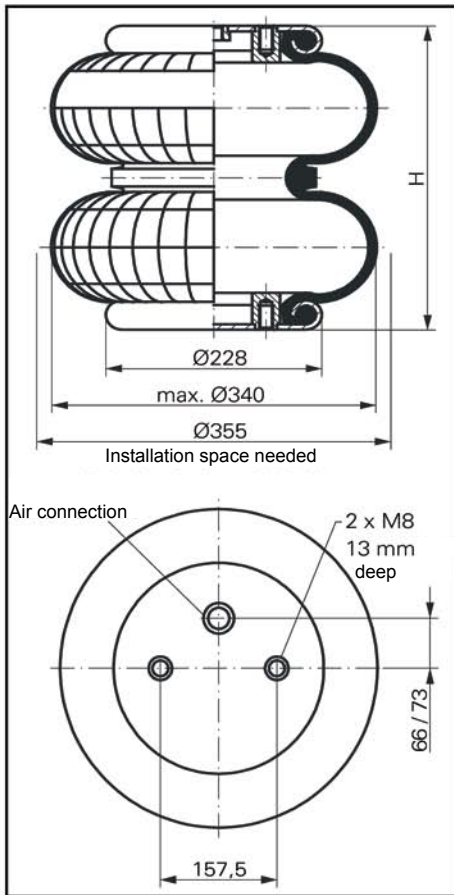
Pressure p [bar]	3	4	5	6	7	8	Vol.[l]
Height H [mm]							
	300	9.8	13.1	16.7	20.3	24.0	14.0
	260	12.5	16.7	21.0	25.4	29.9	13.0
	220	14.6	19.4	24.4	29.4	34.5	11.6
	180	16.2	21.6	27.0	32.5	38.2	9.9
	140	17.6	23.4	29.3	35.2	41.3	7.8
	100	18.3	24.4	30.3	36.3	42.4	5.5



Service instructions

M8 = 25 Nm
G 1 = 50 Nm
G 1/4 = 25 Nm

WBZ 530



Force-height diagramm

Air connection

WBZ 530-E1 G1
WBZ 530-E2 G1/4

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 300 N
Overall weight with clamped plates	4,8 kg

Vibration isolation - dynamic characteristic values

Design height empf. 265, minimal 220mm

Pressure p [bar]	3	4	5	6	7	8	Vol V[l]
Force (Load) [kN]	11,8	16,0	20,2	24,5	28,8	33,2	12
Spring rate c [N/cm]	1240	1570	1930	2260	2570	2840	
Natural frequenz f ₀ [Hz]	1,6	1,6	1,6	1,5	1,5	1,5	

Pneumatic application - static characteristic values

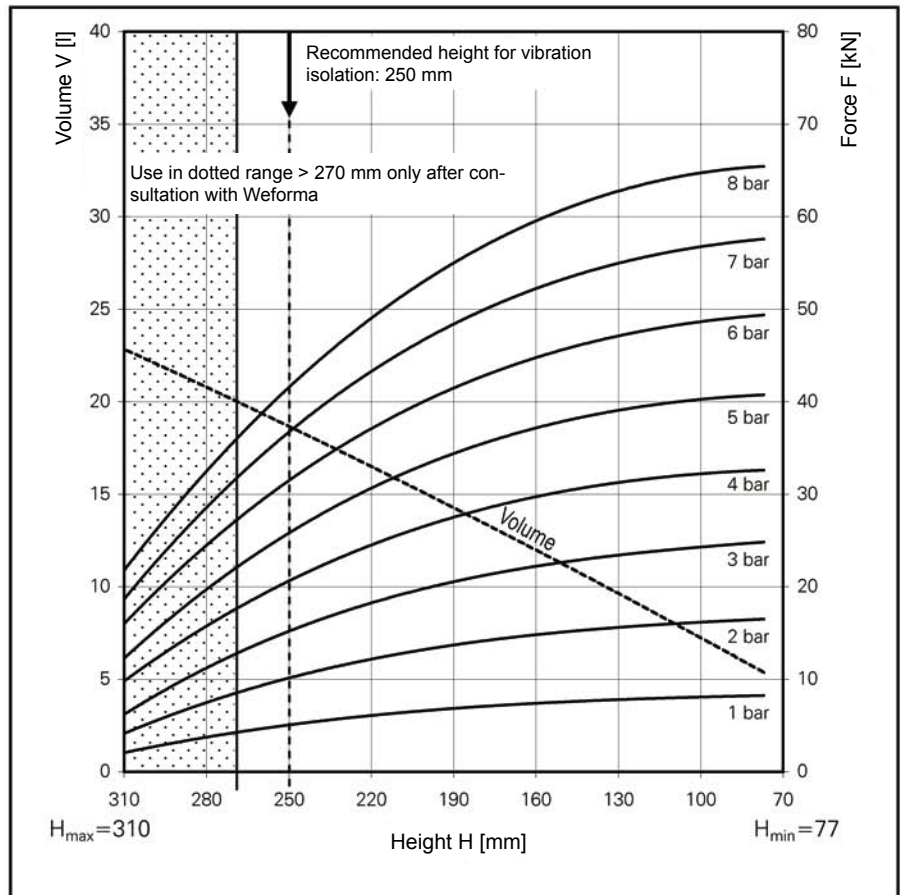
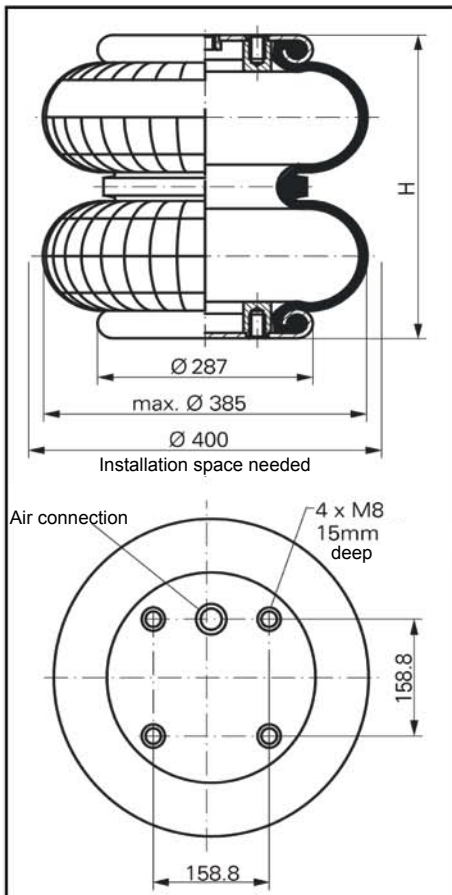
Force F [kN]

Pressure p [bar]	3	4	5	6	7	8	Vol.[l]
Height H [mm]	325	7,6	10,5	13,5	16,6	19,8	14,5
	265	11,8	16,0	20,2	24,5	28,8	13,1
	205	14,8	19,8	24,8	29,9	35,0	11,0
	145	16,9	22,6	28,3	34,0	39,8	8,1



Service instructions
M8 = 25 Nm
G 1/4 = 25 Nm
G 1 = 50 Nm

WBZ 600



Force-height diagramm

Air connection

WBZ 600-E1 G1
WBZ 600-E2 G1/4

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 400 N
Overall weight with clamped plates	6.9 kg

Vibration isolation - dynamic characteristic values

Design height recommended 250mm, minimum 225mm

Pressure p [bar]	3	4	5	6	7	8	Vol V [l]
Force (Load) [kN]	15.2	20.7	25.8	31.5	36.8	42.0	18.7
Spring rate c [N/cm]	2225	2860	3495	4130	4765	5400	
Natural frequenz f0 [Hz]	1.9	1.8	1.8	1.8	1.8	1.7	

Pneumatic application - static characteristic values

Force F [kN]

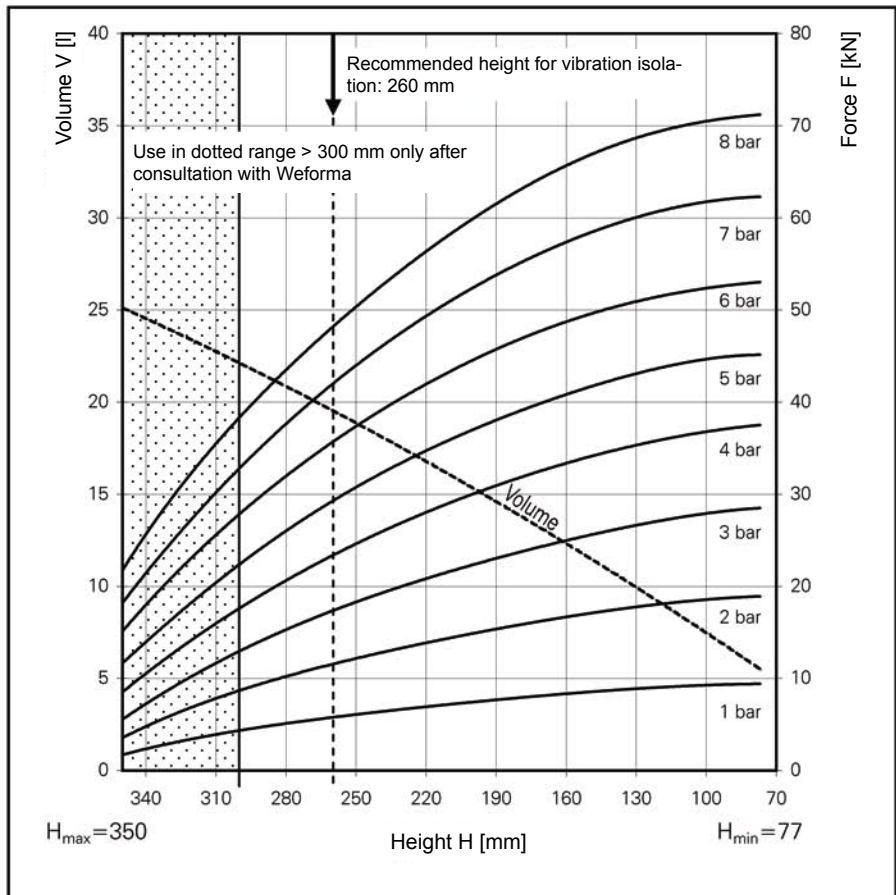
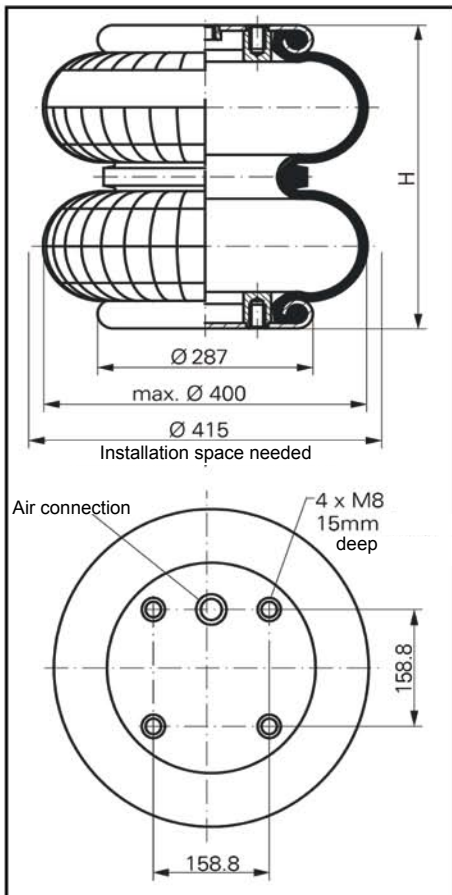
Pressure p [bar]	3	4	5	6	7	8	Vol. [l]	
Height H [mm]	240	220	200	180	160	140	120	100
	16.3	18.2	19.6	21.0	22.3	23.1	23.9	24.4
	22.1	24.4	26.4	28.2	29.8	31.0	31.7	32.3
	27.6	30.5	33.1	35.3	37.2	38.7	39.6	40.4
	33.5	37.0	39.8	42.6	44.9	46.5	47.7	48.7
	39.1	43.2	46.5	49.7	52.4	54.3	55.7	56.8
	44.6	49.1	52.9	56.8	59.5	61.9	63.5	64.7
	17.8	16.5	15.0	13.6	12.0	10.5	8.8	7.2



Service instructions

M8 = 25 Nm
G 1/4 = 25 Nm
G 1 = 50 Nm

WBZ 630



Force-height diagramm

Air connection

WBZ 630-E1 G1
WBZ 630-E2 G1/4

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 400 N
Overall weight with clamped plates	7.3 kg

Vibration isolation - dynamic characteristic values

Design height recommended 260mm, minimum 245mm

Pressure p	[bar]	3	4	5	6	7	8	Vol V [l]
Force (Load)	[kN]	17.3	23.4	29.3	35.9	42.3	48.2	19.6
Spring rate c	[N/cm]	1880	2350	2875	3390	3850	4450	
Natural frequenz f0	[Hz]	1.6	1.6	1.6	1.5	1.5	1.5	

Pneumatic application - static characteristic values

Force F [kN]

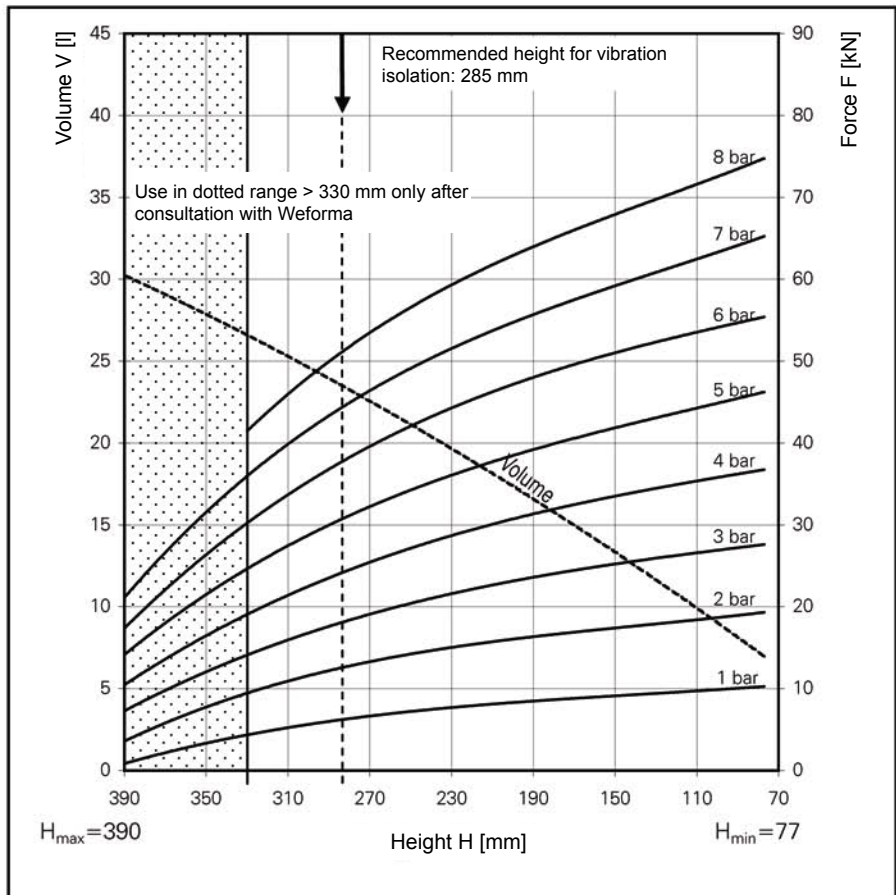
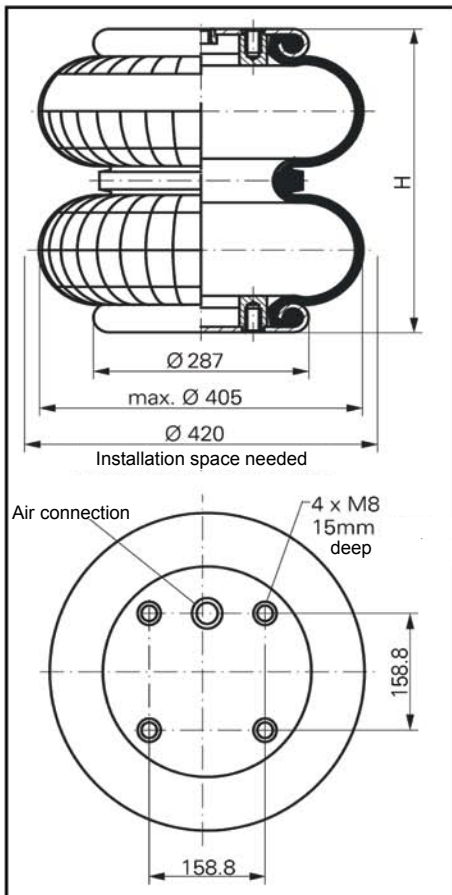
Pressure p	[bar]	3	4	5	6	7	8	Vol.[l]
Height H [mm]	300	13.0	17.7	22.2	27.7	32.8	38.4	22.0
	260	17.3	23.4	29.3	35.9	42.3	48.2	19.6
	220	20.9	28.0	34.8	42.0	49.3	56.4	17.0
	180	23.7	31.9	39.0	46.9	55.1	63.2	14.0
	140	26.1	34.6	42.3	50.2	59.3	67.8	10.6
	100	27.9	36.8	44.7	52.4	61.7	70.5	7.4



Service instructions

M 8 = 25 Nm
G 1/4 = 25 Nm
G 1 = 50 Nm

WBZ 640



Force-height diagramm

Air connection

WBZ 640-E1 G1
WBZ 640-E2 G1/4

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 400 N
Overall weight with clamped plates	7.7 kg

Vibration isolation - dynamic characteristic values

Design height recommended 285mm, minimum 265mm

Pressure p [bar]	3	4	5	6	7	8	Vol V [l]
Force (Load) [kN]	18.7	25.1	31.6	38.2	44.6	51.2	23.5
Spring rate c [N/cm]	1770	2250	2700	3180	3640	4100	
Natural frequenz f0 [Hz]	1.5	1.5	1.5	1.4	1.4	1.4	

Pneumatic application - static characteristic values

Force F [kN]

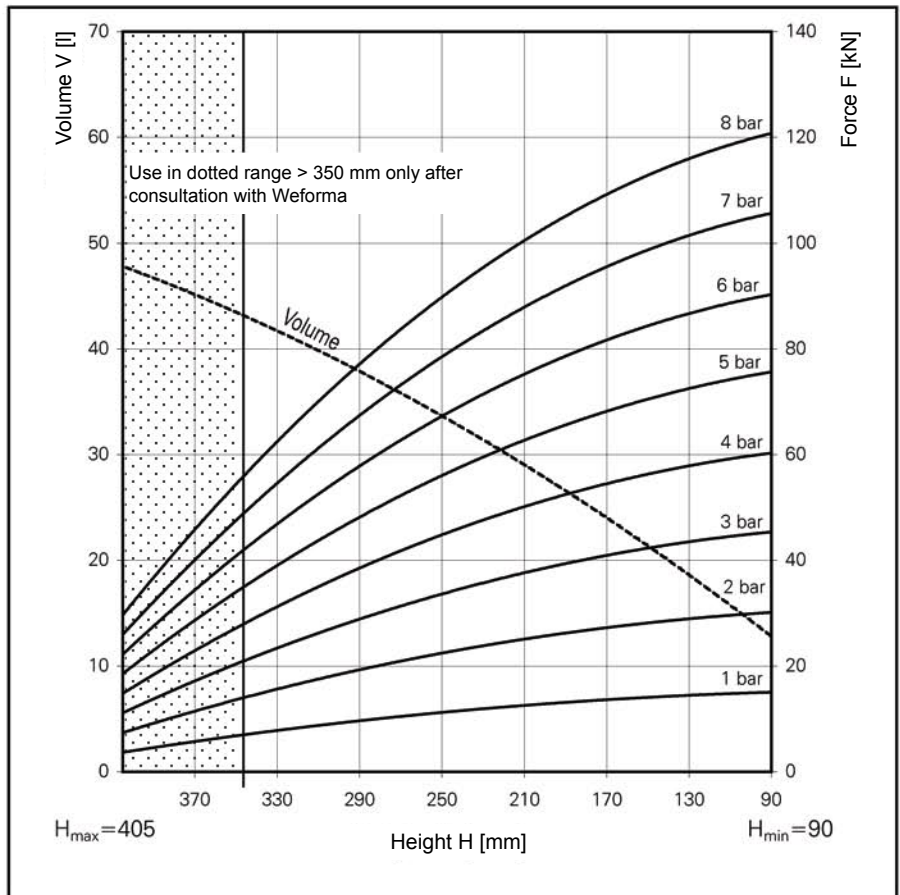
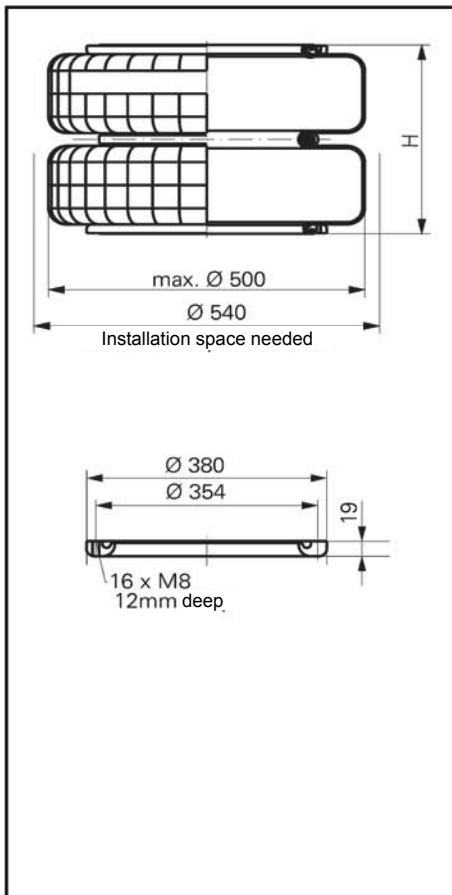
Pressure p [bar]	3	4	5	6	7	8	Vol. (l)
Height H [mm]	320	20.4	25.9	32.0	37.6	43.7	26.0
	280	18.5	24.5	31.0	38.1	45.0	23.2
	240	21.1	28.0	35.5	43.3	50.3	20.5
	200	23.1	30.7	38.5	47.1	54.8	17.5
	160	24.8	33.1	41.3	50.4	58.4	14.1
	120	26.2	34.8	43.4	52.9	61.5	10.8



Service instructions

M 8 = 25 Nm
G 1/4 = 25 Nm
G 1 = 50 Nm

WBZ 700



Force-height diagramm

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 1800 N
Overall weight with clamped plates	14.4 kg

Pneumatic application - static characteristic values

Force F [kN]

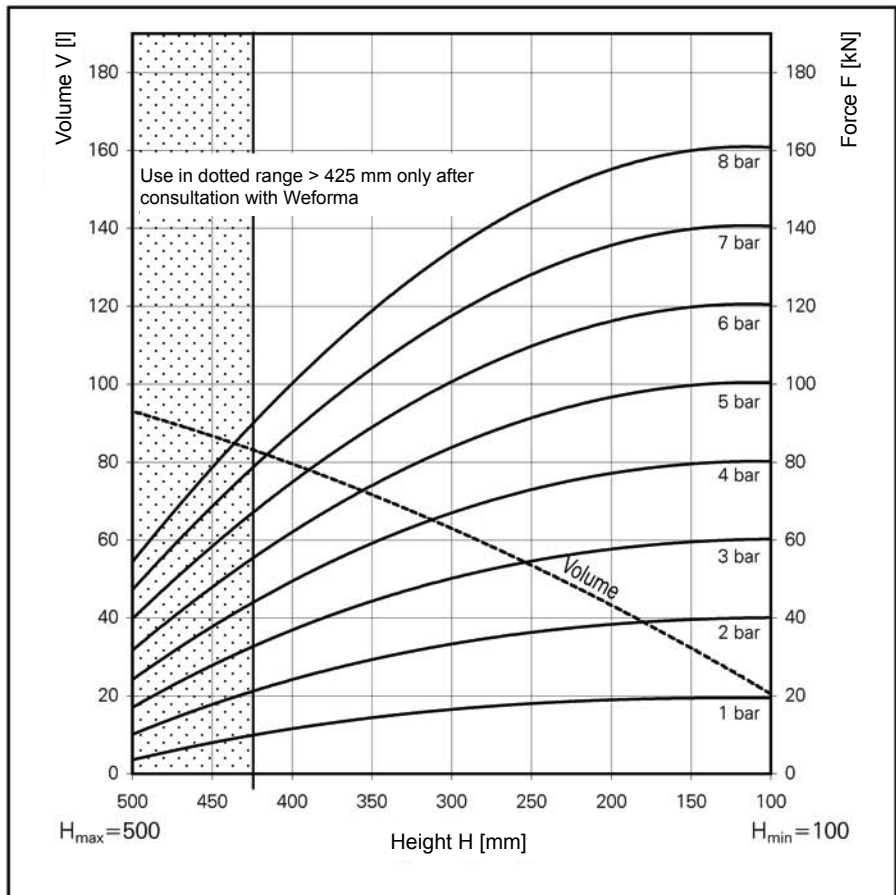
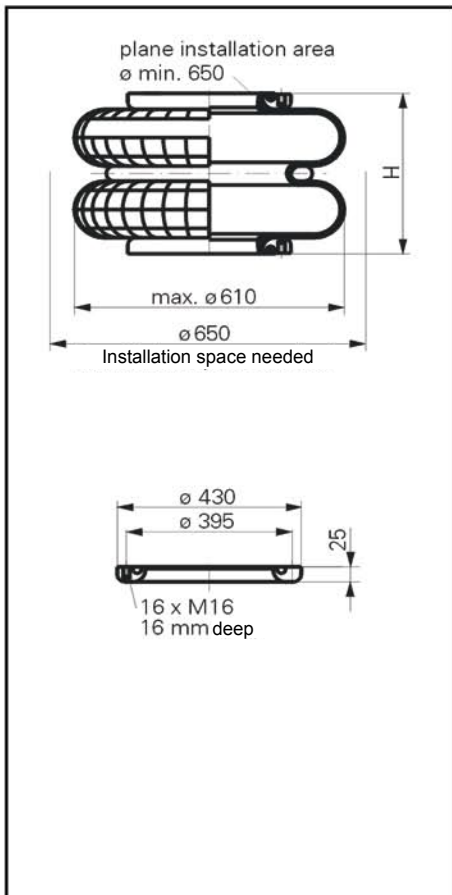
Pressure p	[bar]	3	4	5	6	7	8	Vol.[l]
Height H [mm]	330	23.5	31.3	39.0	47.0	54.8	62.7	41.6
	270	31.3	41.7	52.2	62.6	73.0	83.6	35.8
	210	37.5	50.0	63.0	75.0	87.6	100.2	28.5
	150	42.5	56.7	71.0	85.0	99.17	113.3	22.0
	90	45.0	60.0	75.0	90.0	105.0	120.0	12.0



Service instructions

M8 = 25 Nm

WBZ 800



Force-height diagramm

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 400 N
Overall weight with clamped plates	16.7 kg

Pneumatic application - static characteristic values

Force F [kN]

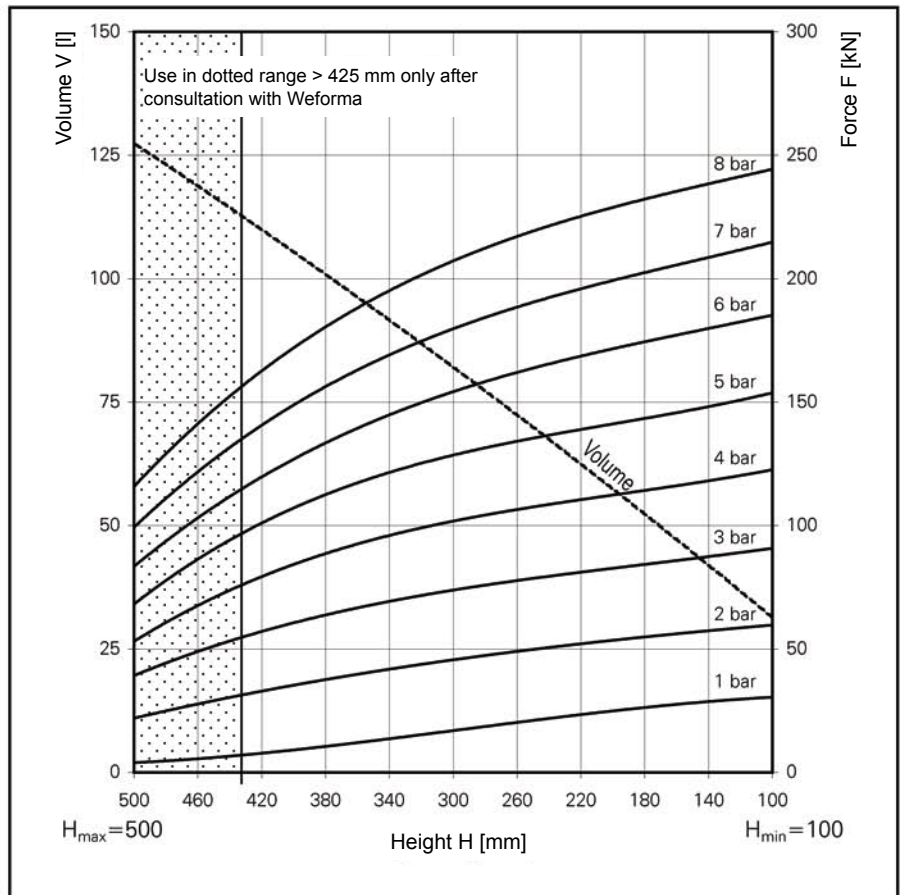
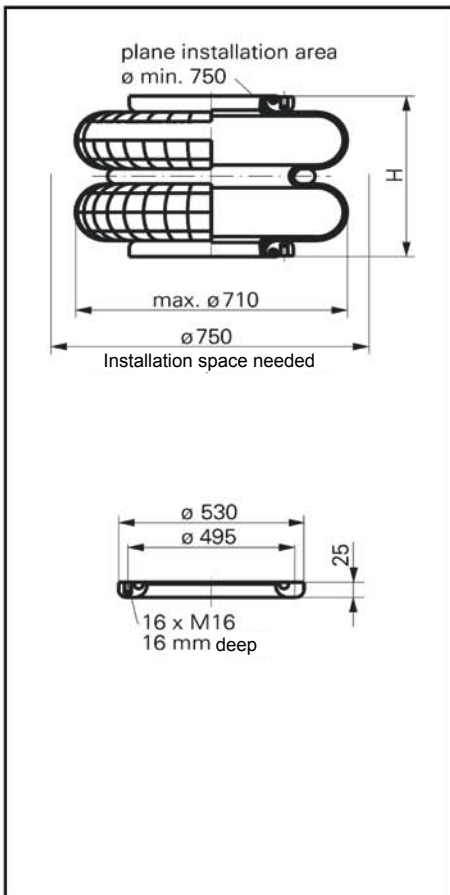
Pressure p	[bar]	3	4	5	6	7	8	Vol.[l]
Height H [mm]	450	28.0	37.8	48.1	58.8	69.5	80.1	86.0
	350	43.4	58.6	73.3	88.5	103.7	118.8	71.0
	250	54.6	73.1	92.0	110.7	129.3	148.0	52.0
	150	59.4	79.3	99.3	119.3	139.4	159.4	31.0



Service instructions

M16 = 100 Nm

WBZ 900



Force-height diagramm

Technical data

Min. pressure	0 bar
Return force to min. height	≤ 400 N
Overall weight with clamped plates	18.2 kg

Pneumatic application - static characteristic values

Force F [kN]

Pressure p	[bar]	3	4	5	6	7	8	Vol.[l]
Height H [mm]	500	39.0	53.0	68.0	84.0	100.0	117.0	127.0
	400	62.0	85.0	109.0	126.2	148.0	170.0	106.0
	300	74.0	102.0	128.0	155.0	181.0	209.2	82.0
	200	83.0	113.0	142.0	171.0	199.0	226.8	57.0
	100	91.0	123.0	154.0	186.0	216.0	246.0	32.0



Service instructions

M16 = 100 Nm