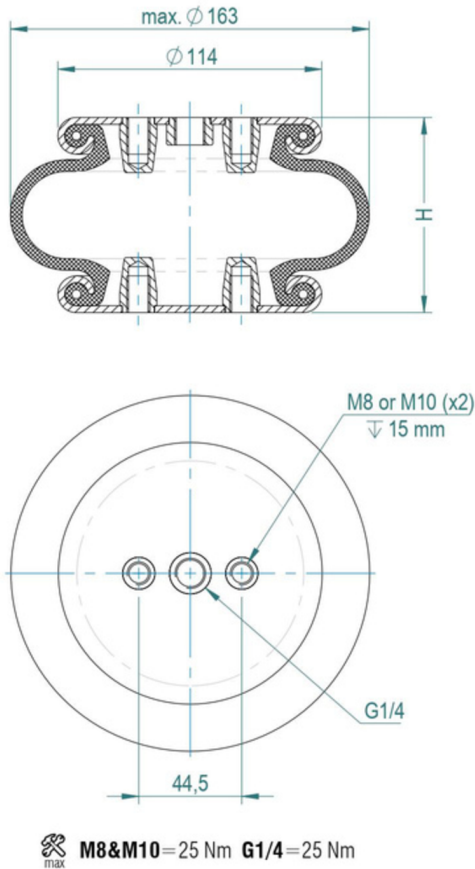


F SERIES
Crimped Design

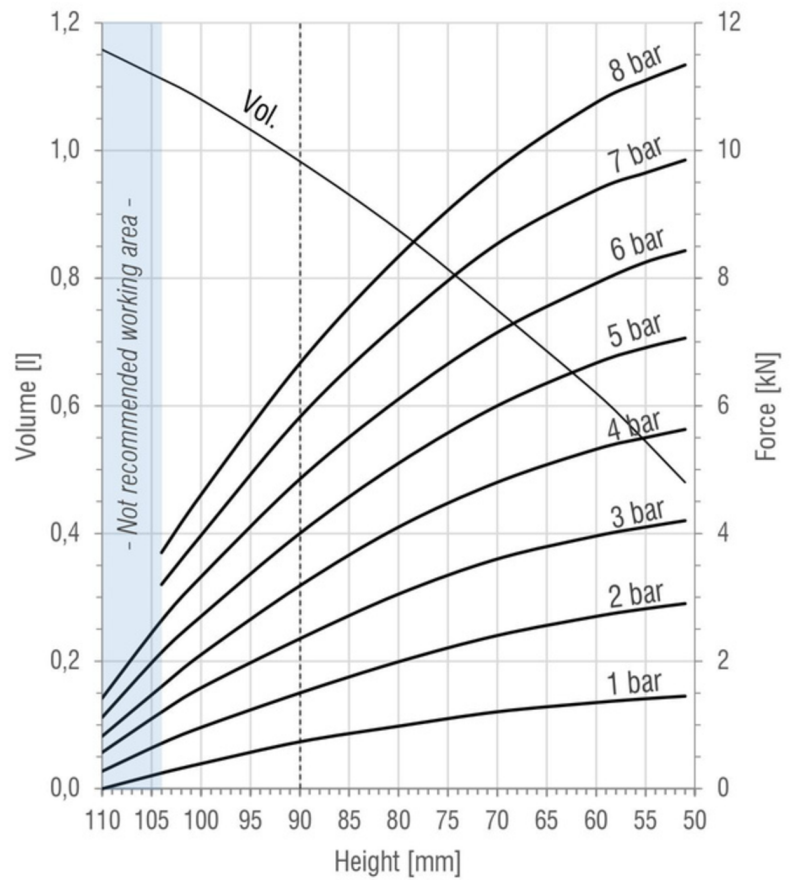
TV-20

SINGLE
CONVOLUTION

DRAWING



FORCE-HEIGHT CHART



TECHNICAL DATA

PRODUCT CHARACTERISTICS

Static diameter [mm]	155
Max. diameter [mm]	163
Required space diameter [mm]	180
Min. height [mm]	51
Static height [mm]	85
Design height [mm]	90
Max. usable height [mm]	104
Max. stroke [mm]	53
Force to compress to H_{min} at 0 bar [N]	147
Weight [kg]	1,37

REFERENCES

M-20_B	Rubber bellow only
M-20_C_G1/4	With crimped plates & G1/4 air inlet

Designs available with stainless steel and high temperature rubber compounds. Additional designs on request.

DYNAMIC CHARACTERISTICS FOR USE AS ISOLATOR

Pressure [bar]	3	4	5	6	7	Vol. [l]
Load [kN]	2,3	3,2	4,0	4,9	5,8	1,0
Spring rate [N/mm]	121	156	192	223	261	
Natural frequency [Hz]	3,61	3,50	3,46	3,39	3,35	
Isolation rate at 10 Hz	85,0%	86,0%	86,4%	87,0%	87,4%	

Values at recommended design height H: 90 mm - - - -

STATIC CHARACTERISTICS FOR USE AS ACTUATOR

Pressure [bar]		3	4	5	6	7	Vol. [l]
Height H [mm]	60	4,0	5,3	6,7	7,9	9,4	0,6
	70	3,6	4,8	6,0	7,2	8,5	0,8
	80	3,1	4,1	5,1	6,1	7,3	0,9
	90	2,4	3,2	4,0	4,9	5,8	1,0
	100	1,6	2,1	2,7	3,3	4,0	1,1

Force values [kN]

All Volume [l] values at 7 bar