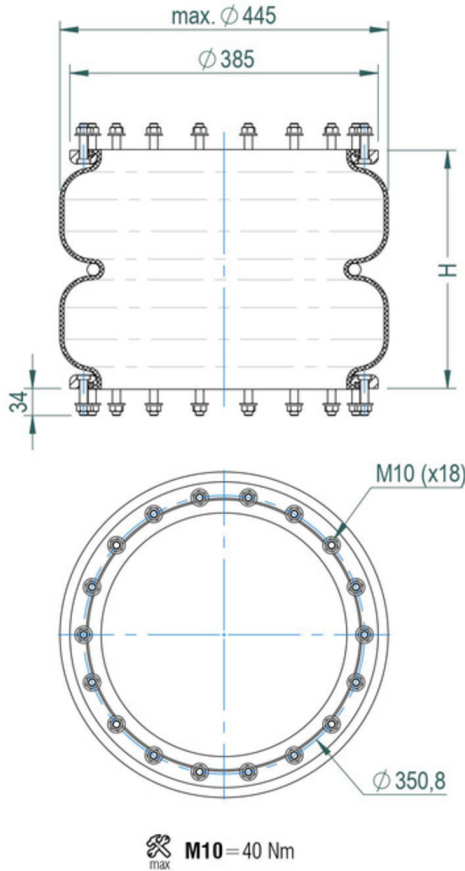


F SERIES
Socket Head Bead Ring Design

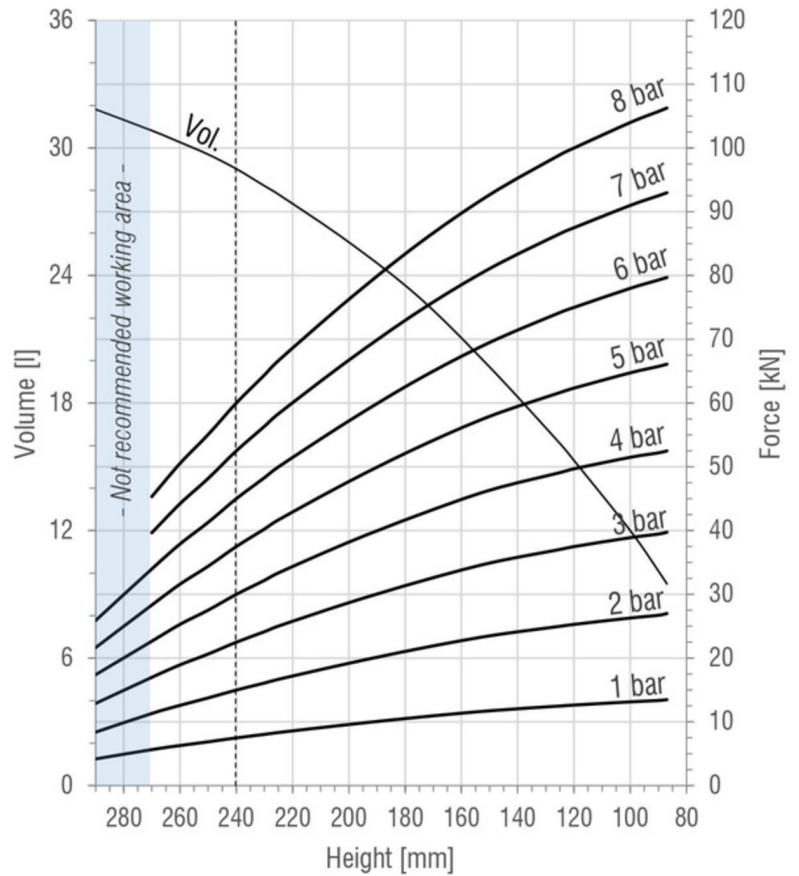
TV-110-E/4

DOUBLE
CONVOLUTION

DRAWING



FORCE-HEIGHT CHART



TECHNICAL DATA

PRODUCT CHARACTERISTICS

Static diameter [mm]	385
Max. diameter [mm]	445
Required space diameter [mm]	495
Min. height [mm]	87
Static height [mm]	270
Design height [mm]	240
Max. usable height [mm]	270
Max. stroke [mm]	183
Force to compress to H_{min} at 0 bar [N]	330
Weight [kg]	13,3

REFERENCES

M-110-E/4_B	Rubber bellow only
M-110-E/4_R_SH	With socket head bead rings
M-110-E/4_R_TR	With threaded bead rings
M-110-E/4_R_CS	With countersunk bead rings

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]	22,5	30,0	37,5	45,0	52,5	29,0
Spring rate [N/mm]	282	367	452	537	622	
Natural frequency [Hz]	1,77	1,75	1,74	1,73	1,72	
Isolation rate at 10 Hz	96,8%	96,8%	96,9%	96,9%	96,9%	

Values at recommended design height H: 240 mm -----

STATIC CHARACTERISTICS FOR USE AS ACTUATOR

Pressure [bar]	3	4	5	6	7	Vol. [l]
Height H [mm]	100	38,9	51,5	64,8	78,0	12,0
	125	37,1	49,1	61,7	74,2	16,1
	150	34,9	46,3	57,9	69,5	19,7
	175	32,0	42,5	53,2	63,8	23,0
	200	28,7	38,2	47,7	57,2	25,6
	225	25,0	33,4	41,7	50,0	27,8
250	20,7	27,5	34,4	41,3	29,7	

Force values [kN]

All Volume [l] values at 7 bar