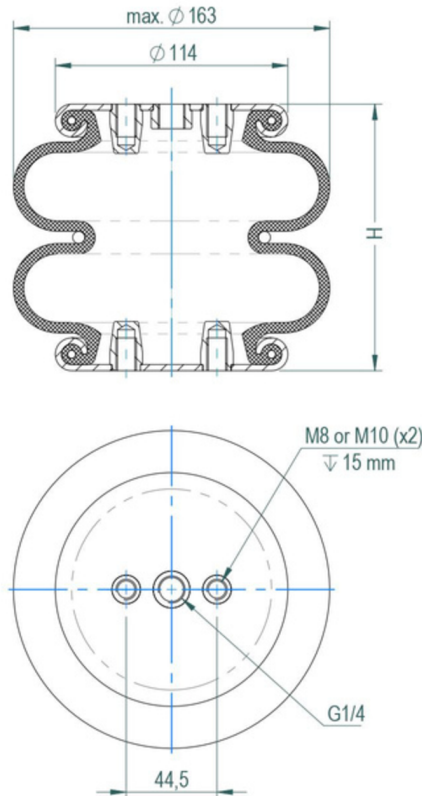


F SERIES  
Crimped Design

# TV-70

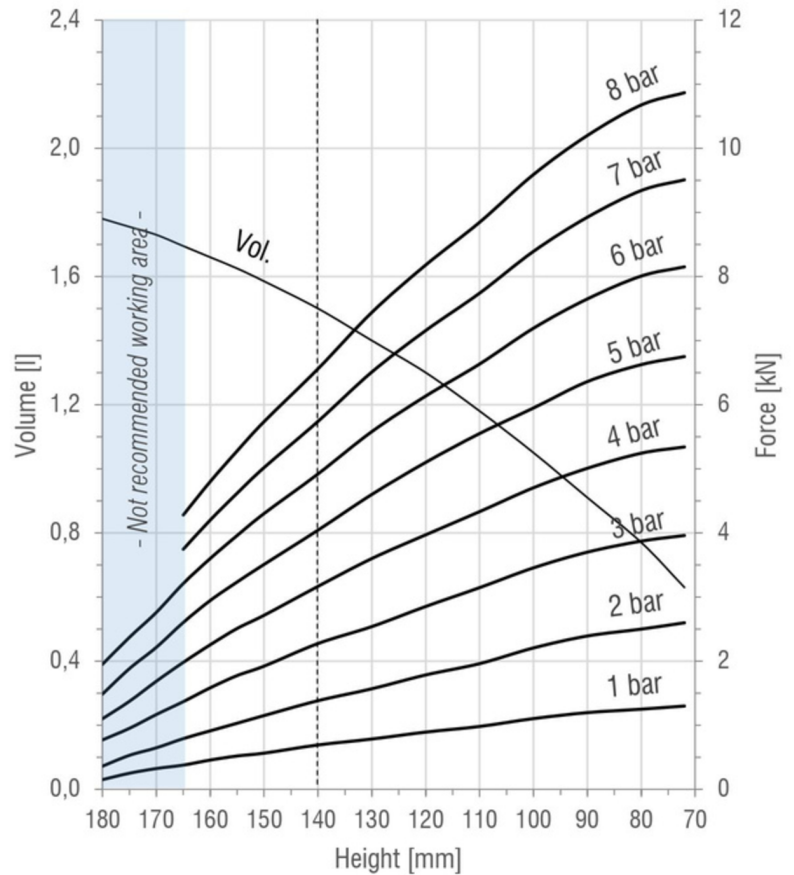
DOUBLE  
CONVOLUTION

## DRAWING



**M8&M10=25 Nm G1/4=25 Nm**

## FORCE-HEIGHT CHART



## TECHNICAL DATA

### PRODUCT CHARACTERISTICS

Static diameter [mm]	155
Max. diameter [mm]	163
Required space diameter [mm]	180
Min. height [mm]	72
Static height [mm]	130
Design height [mm]	140
Max. usable height [mm]	165
Max. stroke [mm]	93
Force to compress to $H_{min}$ at 0 bar [N]	150
Weight [kg]	1,57

### REFERENCES

<b>M-70_B</b>	Rubber bellow only
<b>M-70_C_G1/4</b>	With crimped plates & G1/4 air inlet
<b>M-70_R_SH</b>	With socket head bead rings
<b>M-70_R_TR</b>	With threaded 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]	2,3	3,2	4,0	4,9	5,7	1,5
Spring rate [N/mm]	57	79	98	115	133	
Natural frequency [Hz]	2,51	2,50	2,46	2,42	2,40	
Isolation rate at 10 Hz	93,3%	93,3%	93,6%	93,8%	93,9%	

Values at recommended design height H: 140 mm -----

### STATIC CHARACTERISTICS FOR USE AS ACTUATOR

Pressure [bar]	3	4	5	6	7	Vol. [l]	
Height H [mm]	80	3,9	5,2	6,6	8,0	9,3	0,8
	90	3,7	5,0	6,4	7,7	8,9	0,9
	100	3,5	4,7	5,9	7,2	8,4	1,1
	110	3,1	4,3	5,6	6,6	7,7	1,2
	120	2,9	4,0	5,1	6,1	7,2	1,3
	130	2,5	3,6	4,6	5,6	6,5	1,4
	140	2,3	3,2	4,0	4,9	5,7	1,5
	150	1,9	2,7	3,5	4,3	5,0	1,6
160	1,6	2,3	2,9	3,6	4,2	1,7	

Force values [kN]

All Volume [l] values at 7 bar