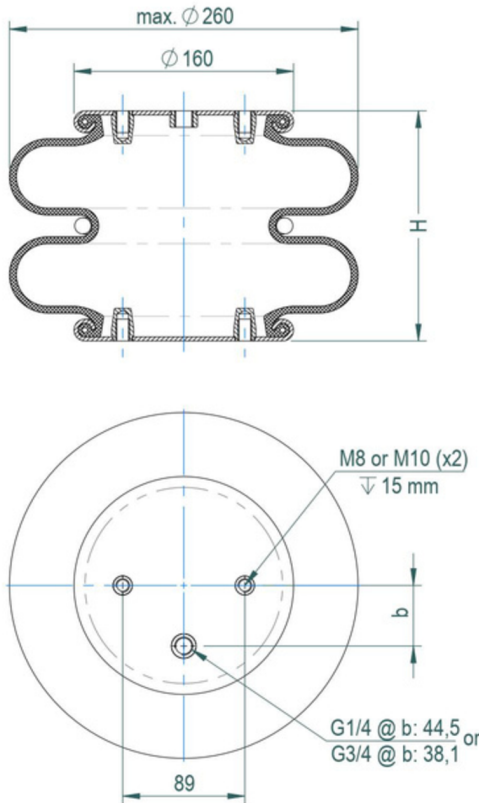


F SERIES  
Crimped Design

# TV-85

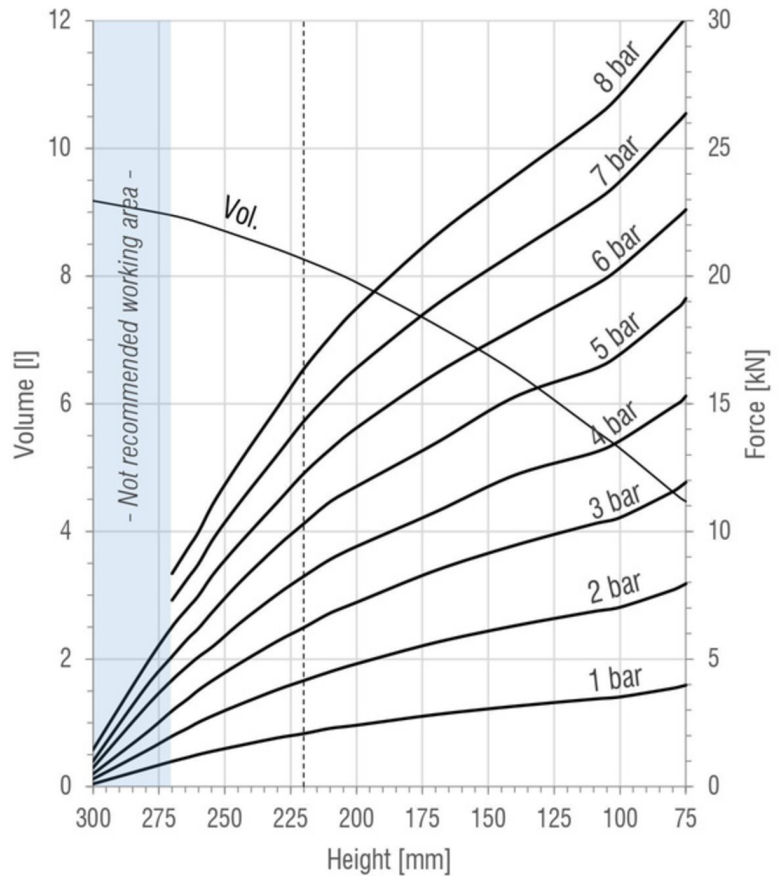
DOUBLE  
CONVOLUTION

## DRAWING



**M8&M10**=25 Nm **G1/4**=25 Nm **G3/4**=50 Nm

## FORCE-HEIGHT CHART



## TECHNICAL DATA

### PRODUCT CHARACTERISTICS

|   |     |
|---|-----|
| Static diameter [mm]                        | 252 |
| Max. diameter [mm]                          | 260 |
| Required space diameter [mm]                | 270 |
| Min. height [mm]                            | 75  |
| Static height [mm]                          | 150 |
| Design height [mm]                          | 220 |
| Max. usable height [mm]                     | 270 |
| Max. stroke [mm]                            | 195 |
| Force to compress to $H_{min}$ at 0 bar [N] | 40  |
| Weight [kg]                                 | 3,3 |

### REFERENCES

|                    |                                      |
|--------------------|--------------------------------------|
| <b>M-85_B</b>      | Rubber bellow only                   |
| <b>M-85_C_G1/4</b> | With crimped plates & G1/4 air inlet |
| <b>M-85_C_G3/4</b> | With crimped plates & G3/4 air inlet |
| <b>M-85_R_SH</b>   | With socket head bead rings          |
| <b>M-85_R_TR</b>   | With threaded bead rings             |
| <b>M-85_R_CS</b>   | 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]               | 6,2   | 8,2   | 10,3  | 12,3  | 14,3  | 8,3      |
| Spring rate [N/mm]      | 79    | 98    | 121   | 143   | 166   |          |
| Natural frequency [Hz]  | 1,78  | 1,73  | 1,72  | 1,71  | 1,70  |          |
| Isolation rate at 10 Hz | 96,7% | 96,9% | 97,0% | 97,0% | 97,0% |          |

Values at recommended design height H: 220 mm - - - -

### STATIC CHARACTERISTICS FOR USE AS ACTUATOR

| Pressure [bar] | 3   | 4    | 5    | 6    | 7    | Vol. [l] |     |
|----------------|-----|------|------|------|------|----------|-----|
| Height H [mm]  | 80  | 11,6 | 14,9 | 18,6 | 22,1 | 25,8     | 4,6 |
|                | 110 | 10,3 | 13,1 | 16,4 | 19,6 | 22,9     | 5,6 |
|                | 140 | 9,5  | 12,2 | 15,3 | 17,9 | 20,9     | 6,5 |
|                | 170 | 8,5  | 10,8 | 13,5 | 16,2 | 18,9     | 7,2 |
|                | 200 | 7,2  | 9,4  | 11,8 | 14,1 | 16,4     | 7,9 |
|                | 210 | 6,9  | 8,9  | 11,2 | 13,2 | 15,4     | 8,1 |
|                | 230 | 5,7  | 7,5  | 9,4  | 11,1 | 13,0     | 8,4 |
|                | 254 | 4,2  | 5,5  | 6,9  | 8,4  | 9,8      | 8,8 |
| 260            | 3,8 | 5,1  | 6,4  | 7,5  | 8,7  | 8,9      |     |

Force values [kN]

All Volume [l] values at 7 bar