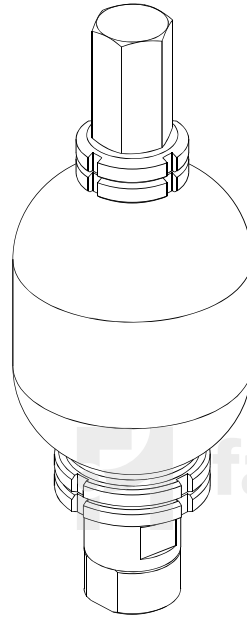
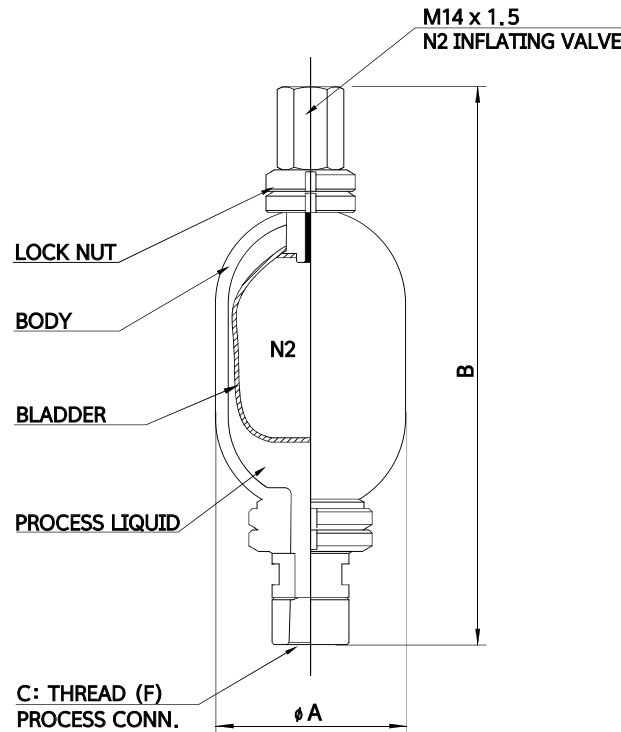


PULSATION DAMPENER BLADDER & METAL - HIGH PRESSURE (FMD-BH)



Order Code

FMD - BH - ☐ - ☐ ☐ ☐ ☐ - ☐ - ☐ - ☐
A B C D E

A : Body Material

- ☐ 6 : SUS316L*
☐ D : DUPLEX
☐ A : ALLOY
☐ O : OTHER

B : Capacity

- ☐ 0040 : 0.40L
☐ 0063 : 0.63L
☐ 0100 : 1.00L
☐ 0160 : 1.60L
☐ 0250 : 2.50L
☐ 0400 : 4.00L
☐ 0630 : 6.30L

Dimension (mm)

89	250	1/2" PT
89	320	3/4" PT
114	315	1" PT
152	355	1-1/4" PT
152	420	1-1/4" PT
152	530	1-1/2" PT
152	700	1-1/2" PT

C : Max Pressure

- ☐ 1 : 100 Bar.g @ 60°C
☐ 2 : 200 Bar.g @ 60°C
☐ 3 : 315 Bar.g @ 60°C

D: Bladder Material

- ☐ N : NBR
☐ E : EPDM
☐ B : BUTYL
☐ F : FKM

E: Connection

- ☐ T : Standard Thread
☐ F : Flanged

Table 1. Calculation of Dampener Volume

Formular for Calculation of Volume (Liter)

$$P_0 = K \times P_1 \quad V_0 = Q \times Z / S$$

Letter & Explanation

P_1 : Pump working Pressure
 P_0 : Set-up Pressure for Pulsation dampener
 V_0 : Min. Volume for Pulsation Dampener

Z : Coefficient Acc. To the acceptable residual pulsation
 K : Coefficient for P_1 calculation
 Q : Capacity required (Liter/min)
 S : Stroking speed (SPM)

K factor (Pump Type coefficient)

Simplex : 0.6
Duplex : 0.25
Triplex : 0.12

Z factor (Residual Pulsation as per pump type)

	Simplex	Duplex	Triplex
± 5 %	12	5	2
± 2.5 %	30	13	4
± 1.5 %	60	25	6

Table 2. Bladder & Oper. Temperature

Bladder Type	Min. Temp (°C)	Max. Temp (°C)
NBR	-15	80
EPDM	-25	120
FKM	-20	180
BUTYL	-30	100

Table 3. Oper. Temperature & Oper. Pressure

Oper. Temp (°C)	Oper. Pressure
80	0.87
100	0.82
130	0.78
200	0.68

Note

1. Dimension & Specific Detail can be changed without notification as per model update.
2. Nitrogen (N2) must be used for Charging purposes.
3. The use of air, compressed air, oxygen or other gases is strictly prohibited due to the risk of explosion.
4. Nitrogen is to be filled up as per setting pressure calculation. See P_0 calculation.
5. Other specification can be discussed.

MODEL NO.
FMD - BH - ☐ - ☐ ☐ ☐ ☐ - ☐ - ☐ - ☐

TITLE
PULSATION DAMPENER DRAWING

DOCUMENT CLASS DWG NO.: DWG-FMD-BH-001 REV.

SCALE NONE REV. DATE: 30. Jan. 2025

APPROVED BY: