



Dual use Dampers that Do. Flow flushes through. AND Pressure Pulsation is Intercepted
PULSE GUARD[®] Inc.
 Guard against Pulsation

In USA Toll Free. 1-888-DAMPERS (1-888-326-7377)
 For the Americas --01(1)910-270-2737 & 2738
 Faxes : B&W --01(1)910-270-2739 & 40, Color 0320
 Color Facsimile is 10 times faster than email attach, AND there are no viruses.



NOTES: Pre-Filling, To use any damper rated above 370 Bar / 5,350 psi, at a greater pressure, please specify Pre-Fill Valve Nbr. "M8-M28 f/ss", for use up to 750 Bar / 10,800 psi . Add 98 to the listed price of the damper, and 38mm / 1.5" to the length through C/L of the valve.

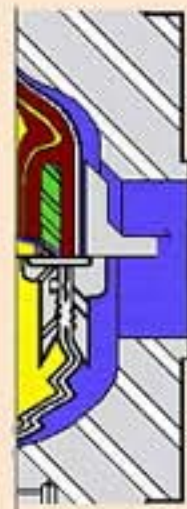
PART NUMBER LETTERING ABBREVIATIONS: "TW" - Twin Connection, is replaced by "FF" - for a single Flange Face at no charge, or by "+ Flg", where an added Flange by welding is required because the flange diameter is large than the damper; there is a cost for this. "O" denotes an "O" ring flange face, and is used with a piping base block for in place flush and pressure pulse interception, for quick release change out without disturbing pipe integrity. Part Number prefix "CE/" is used where pressure times volume, or dangerous nature of the liquid, requires certification within a specific danger class by the EC Pressure Equipment Directive. "U" - denotes use of ASME code, which itself states it is Unsuitable for "snubbers" aka dampers. "JKT" - specifies Jacketed for temperature control.

WETTED PARTS MATERIAL DESIGNATIONS:- Replace the "ss" in the part nbr. as follows, "DSS" - Duplex Stainless, SDSS- Super Duplex, A20 - Alloy 20, T2 - Titanium 2, H22 - Hasteloy 22, HC 276 - Gr. C276, H2- Gr B2. Tan - Tantalum.

CONNECTIONS:- "F" - Female, M - Male, B - BSP, N - NPT, TD - Single Thread, W - Weld Prep 37.5 Degree, SO - Socket for pipe. ("NB") - Nota Bene - Design Pressure "DP" at temperature, will vary by allowable stress for other than dual certified 316/316L "ss" material. The end user has the right to specify that DP is MAWP, at their own risk.

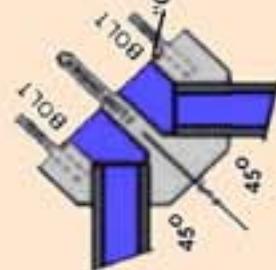
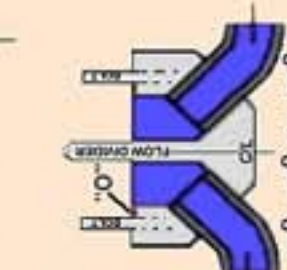
DIN 2501 "DN--PN--" flanges may imply the use of European Pressure Vessel codes. Be aware that they use higher allowable working stresses, so may be less safe than our 30 year proven standard, which has ensured no fatigue failure from strain fluctuation in this cyclic stress application..

OPTIONS, THAT SAVE INSTALLATION COSTS - UP TO 6 CONNECTIONS, THAT INTERCEPT PRESSURE PULSATION.

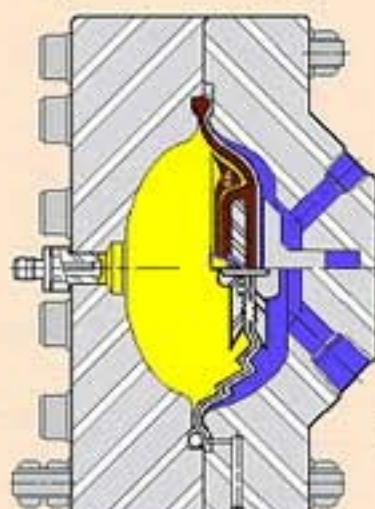


Single Flange Face, ANSI or DIN SUITABLE FOR FLOW FLUCTUATION REMOVAL

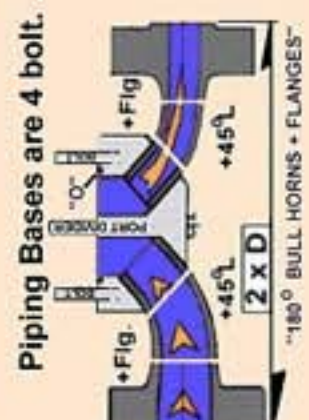
For Pressure Pulse Interception
 PIPING BASES ARE OFFERED, TO ORDER, WITH D.I.N "DN-PN" or ANSI B16.5, NPT, SAE BSP / ISO, METRIC thread, PLAIN or BEVEL END PIPE. With from 2 to 6 connections.



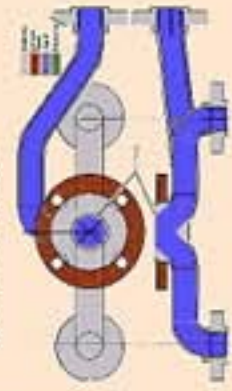
All angles are stated relative to the C/L of Piping Bases



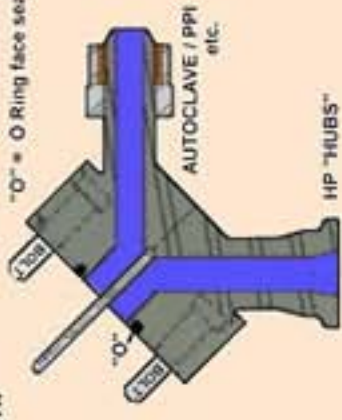
Direct connections, more expensive than in piping block.



Piping Bases are 4 bolt.

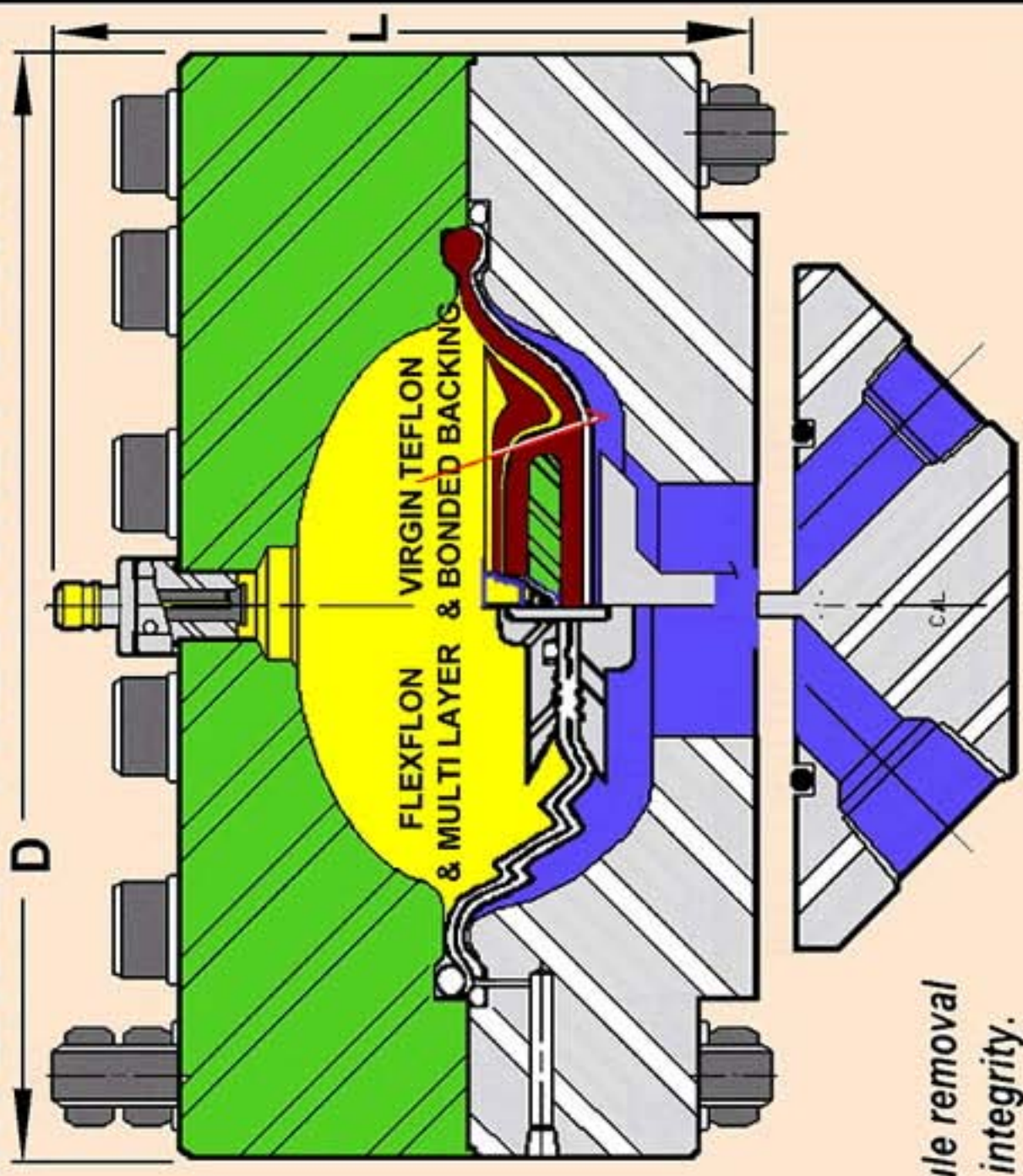


"O" - O Ring face seal



AUTOCLAVE / PPI etc.

HP "HUBS"



The Piping Base Block shown above, allows damper capsule removal from the pipe system for service without breaking system integrity.