

The design pressure is shown as part of the damper part number code:
EXAMPLES:

Damper type Pipe Hugger	"O" Ring Faced for Piping Base	Nominal Volume	Cubic inches	Design Pressure PSI	Diaphragm	Diameter mm	Elastomer "EPDM"	metal Wetted Pts.	Pipe Base Block	2 connections	Connections size	Orientation relative Damper center line.
PHr/"O"/1000i/474p/D450E/316L + PB/2x 6" Sch 40/90°x90°												

Where "i" is replaced by "Lt" the preceding figure is Liters

Where the "p" is replaced by "Br" The preceding figures are in Bars.

Flexorber	"O"	122i	2 Liters	Design Pressure 345 Bar	Diaphragm waveform	mm Diam	DW223MTFE/ + PB/3x 1" Sch 160 45°x 45°x 0°	Etc.
--/--/--/2 Lt./345 Br/--/--								

DESIGN PRESSURE

Design pressure is as used in the stress calculations for the damper capsule or "vessel" and is derived as follows :-
 Where for example, it is disclosed to PulseGuard, that the system is "a 150# flanged system at 200 Degrees F and the ANSI B16.5 flange tables state that the Max Allowable Working Pressure for a 150# flange at 200 F is say 375 psi, then PulseGuard can assume that the system Relief Valve static set pressure can typically be up to 412 psi. Further more, without special knowledge of the relief valve characteristics, it may be assumed that the "accumulation pressure" to fully open such a valve is typically an additional 15%, then the design pressure would become 474 psi.

The above procedure for establishing "design pressure", allowing a compound 27% overage is not mandatory, the end user may purchase on the basis of stating that MAWP and Design Pressure are the same figure, but such practice, though often the result of ASME VIII and other code practice, is at the end users own risk. PulseGuard advises that using MAWP = Dp is inadvisable without an investment in a full fatigue analysis.

ANSI B16.5, tables. Allowable pressure ratings for schedules of pipe, the DN-PN European flange norms, the results of Shock analysis like LDi "SHOCKVIEW" and "PULSEVIEW" are all useful guides, however there is no real substitute, to the 40 year track record, and PROOF testing every design change to destruction, of our predecessor licencees Liquid Dynamics International Inc. & Ltd. DN-PN Is Diameter Norm, - Pressure Norm

NOTE: Code Requirements specified by Engineering contractors.
 Where the setting of Design Pressure and the choice of allowable working stress figures are from current European PRESSURE EQUIPMENT DIRECTIVE "good practice" codes, which do NOT even require adequate ductility, nor do they qualify weldments by bend tests, OR ASME new higher stress tables, PulseGuard accepts no responsibility for the resultant strength nor fatigue life. Generally the new practices are only safe for equipment that is not subjected to "pulsation" -(in some codes called "SNUBBING" or use as a "SNUBBER")