

OPTIONS
Fill Valve
Connection for Air Tank
Vent etc.

We are able to warrant safety when following our own 30 year proven methods :-
We can not accept end user statement that design pressure is working pressure

Where Allowable Working Stress = S
Design Pressure P = MAWP + 10% + 15%
Joint Efficiency = E

E is 1.0 No Welds, or radiographed.
E is 0.7 Welded but not radiographed.

$$T = \frac{\text{Design Pressure} \times \text{Radius Internal}}{S(\text{From Pt. II D 1992}) \times E - (0.6P)}$$

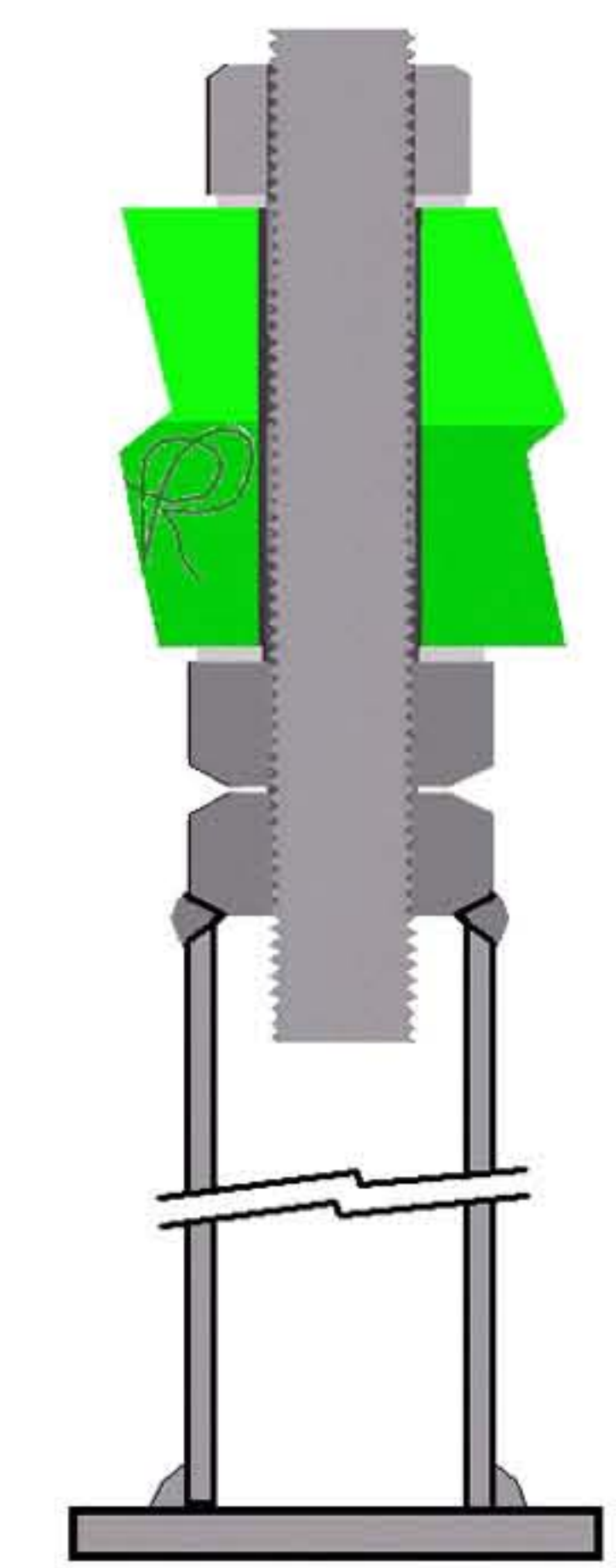
RV is for relief safety valve set pressure
RVacc for relief valve accumulation pressure

As the ASME have increased allowable working stress, enabling cheaper less safe vessels, so "U" certification business can be expanded competitively, and hence ASME income; and concurrently the European PED has no Safety Coefficients in its ESRs approved for cyclic duty snubber dampers, whilst allowing ductility as low as 14%, therefore we are unable to offer any suitability for purpose on "Coded" items, and must warn accordingly.

DECLARATION
as required by
PED Mandatory Essential
Safety Requirement "ESR"
- to use
"SAFETY COEFFICIENTS"
is not complied with
because neither EN 5500
EN 13445 have Safety
Coefficients.



Typical-Water-Hammer-Alleviator-BLO.bmp



Option, 4 Pipe Legs

Item Nbr	Description / function	Internal "Heat/Cast No" PURCHASE No
16	SS Data Plate	IDENTIFICATION / TRACEABILITY
15	Body pipe	
14	Seal Set - (White = PTFE, Brown = Elastomer)	
12	Closure bolting	
11	Bellows capsule mounting screws	
10	Vessel open end flange	
9	Service entry closure	
8	Bellows assembly capsule mounting plate.	
7	Static bellows guide for crush and snaking prevention	
6	Edge welded bellows assembly	
5	Bellows guide travel skirt	
4	Bellows guide travel glide rings	
3	Bellows guide travel head	
2	Bellows guide travel stop	
1	2:1 S.E. Head	
Item Nbr	Description / function	
↑ BILL OF MATERIALS ↓		

Scale : Please do not print without "MAINTAIN ASPECT RATIO" on, Use A3 paper on A3 paper. Landscape 420mm wide

Part Nbr. / Drawing Ref : _____ Date _____ th 200- Rev Nbr ▲

Blo / _____ Lt. / _____ bar / _____ y / '316L _____ Flange Designation 316L.

- SHOCKGUARD** <http://www.shockguard.co.uk>
- SHOCKGUARD** <http://www.shock-guard.com>
- SHOCKGUARD** Waermeausdehnung-Kompensator www.waermeausdehnung.com
- SHOCKGUARD** Druckschlagverhinderer www.schockabsorber.com
- SHOCKGUARD** Rohrleitungsschockabsorber
- SHOCKGUARD** suppressors & arrestors www.ShockGuard.us
- SHOCKGUARD** line shock alleviators Shock-alleviators.co.uk
- SHOCKGUARD** for pump start-up surge, Surge-alleviators.com
- SHOCKGUARD** noise caused by rapid valve closure www.water-hammer.com

ShockGuard is the USA registered trade mark of ShockGuard US Div.
ShockGuard is the UK registered trade mark of ShockGuard Ltd.