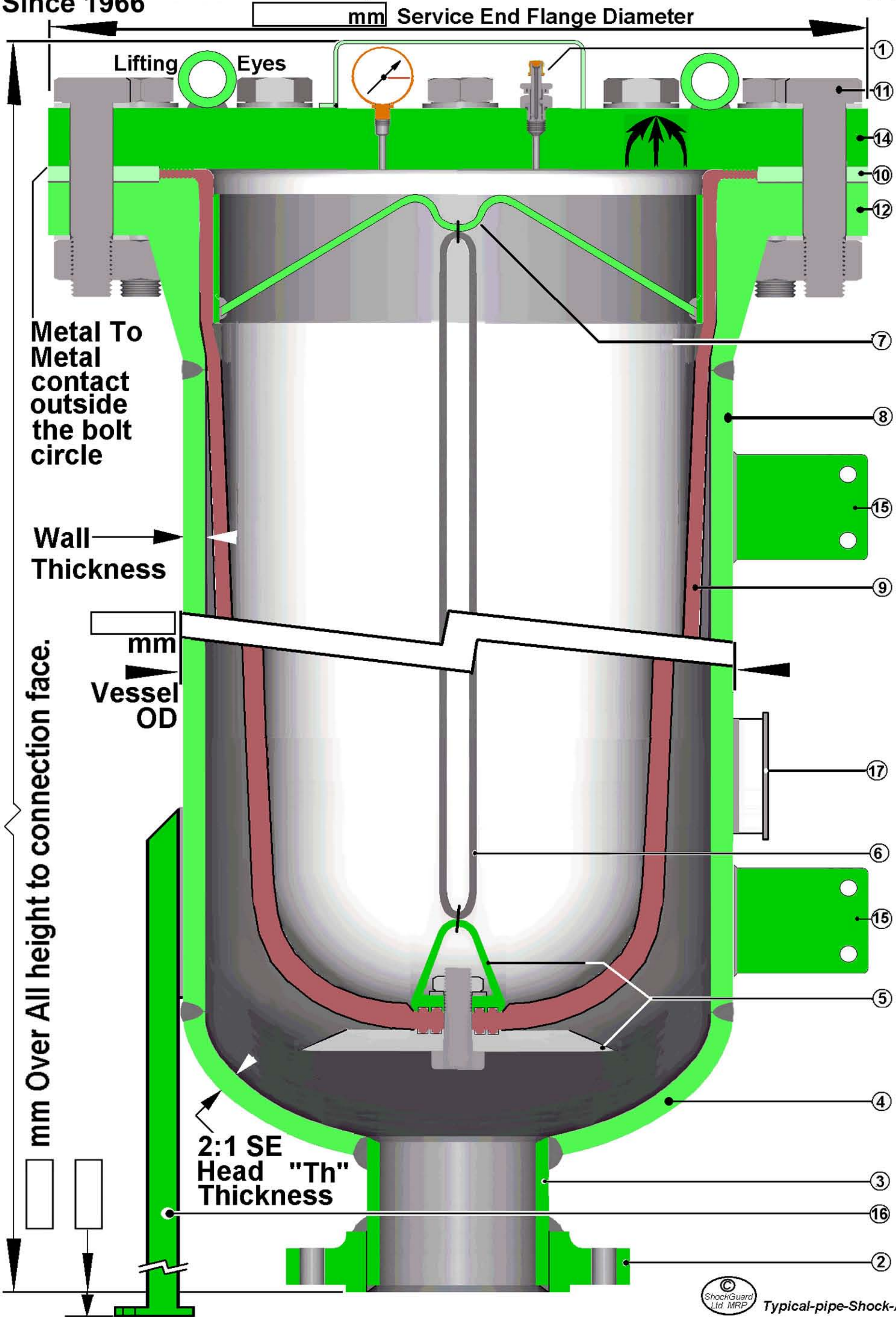


Typical "Jof cs" Series Shock Attenuator, Epoxy coated carbon steel housing + EP, Nitrile, Hypalon, Fluorel etc bladder. For non corrosive systems.



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.

Item Nbr	Description / function	Internal "Heat/Cast No" PURCHASE No
17	Stainless Steel Data Plate	IDENTIFICATION / TRACEABILITY
16	3 or 4 Legs & foot bolt holes, Opional	
15	Mounting Lugs Opional	
14	Closure / manway , Gas Bag loading	
12	Vessel open end flange	
11	Closure bolting	
10	Spacer Ring	
9	Gas Bag	
8	Vessel shell cylinder	
7	Suspension Ring and cross bar.	
6	Anti extrusion plate weight suspension	
5	Anti-Extrusion Plate with tension strap connection hoop	
4	2:1 S.E. Head	
3	System connection nozzle Max Diam. 0.3 x Vessel Diameter (Sch XXH smls)	
2	System Liquid Connection	
1	Cushion Gas Pre-Fill Inlet	

Item Nbr	Description / function	Internal "Heat/Cast No" PURCHASE No
↑ 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 ▲
 Jof /cs / _____ Lt./ _____ bar/ _____ y____ / SA 106 / _____ (eg, EX: DN300 PN 16 or 12" 150#)

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.

SHOCKGUARD <http://www.shockguard.co.uk>
<http://www.shock-guard.com>
SHOCKGUARD Waermeausdehnung-Kompensator www.waermeausdehnung.com
SHOCKGUARD Druckschlagverhinderer www.schockabsorber.com
 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
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