

PULSEGUARD "PUMPGUARD"

Since 1978



Licensed M. Packer
Since 1963

Pug/ss/ Lt/ Br/ T...x...x...x.../Tri Tri

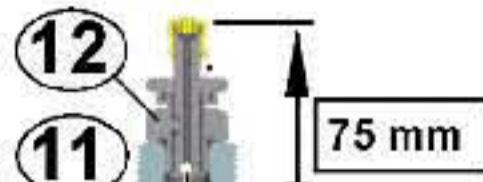
Typical-Food-Pug.bmp

DAMPER "CLEAR-FLOW" FLEXTUBE FOR HIGH VISCOSITY FOOD PASTES, TUBE SYSTEMS.

PULSATION DAMPER, FROM SEAMLESS PIPE BODY AND NO WELDS. PUMPGUARD PULSE DAMPERS DESIGNED FOR HOSE PERISTALTIC PUMP SUCTION & DISCHARGE USE.

N

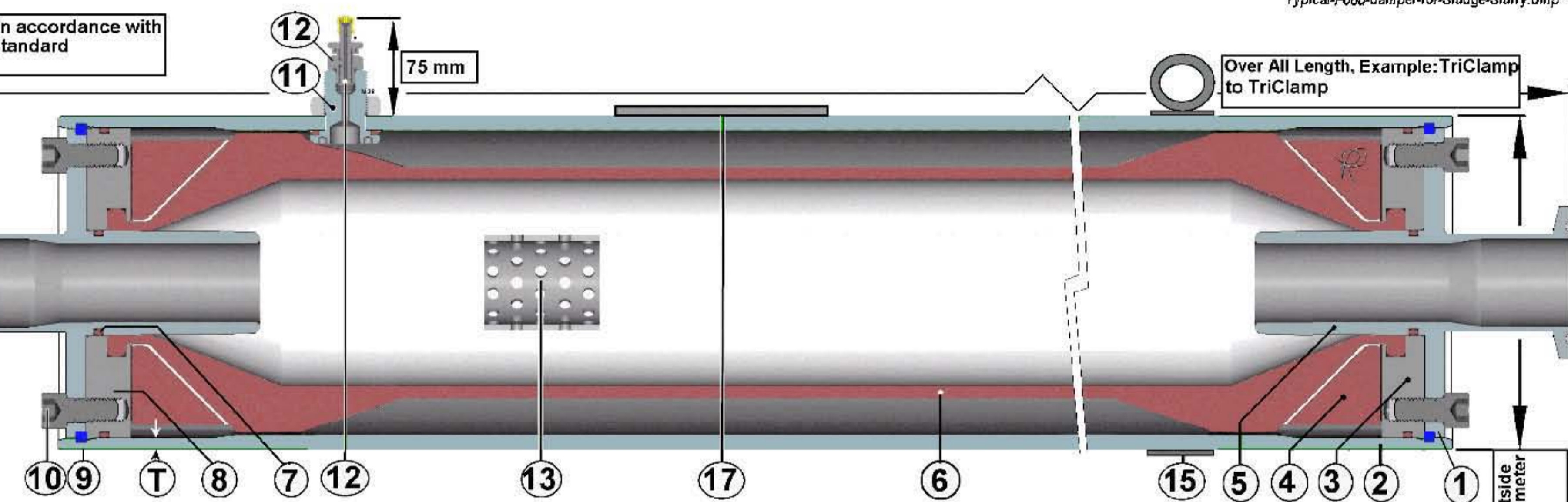
Dimensions in accordance with connection standard



Over All Length, Example: TriClamp to TriClamp

Typical-Food-damper-for-Sludge-Slurry.bmp

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



WARNING: DO NOT DISCONNECT MATING FLANGE BEFORE RELEASING PRESSURE AT 12 CUSHION GAS FILLING & VENTING VALVE

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 RV RVacc

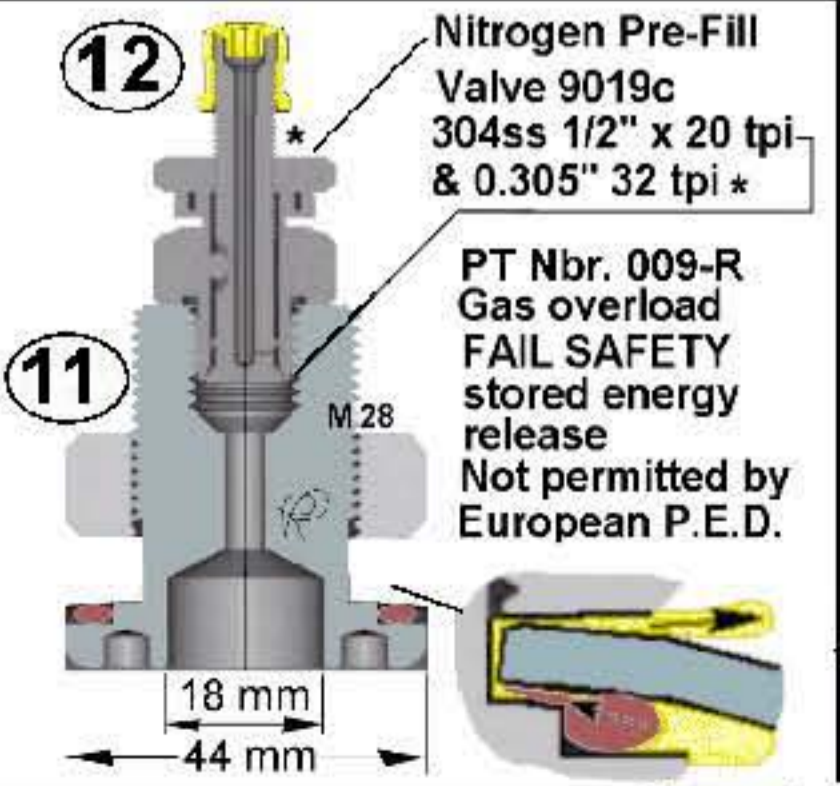
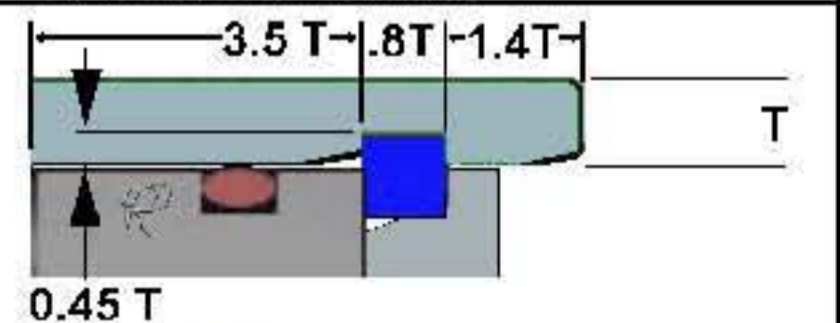
E is 1.0 No Welds, or radiographed.
E is 0.7 Welded but not radiographed.

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

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

The ASME have increased allowable working stress, enabling cheaper less safe vessels, so "U" certification business can be expanded competitively, and hence ASME income. Concurrently the European PED has no Safety Coefficients in its ESRs approved for cyclic duty snubber dampers, whilst allowing ductility as low as 14%. So no one is able to give a guarantee of suitability for purpose on "Coded" pulsation dampers.

NOTE: For pipe line loading back onto the PUMPGUARD, there is a "Bolt-Ring" series of these Flow-Thru Pulsation Dampers.



- 17 Stainless Steel Data Plate.
- 15 Girth Bands with lifting eyes, at ends.
- 14
- 13 Preforated support tube for flex tube, Used with high Pre-Fill Pressures.
- 12 Pre-Fill Gas Cushion Valve and Vent
- 11 Safety Overload Release
- 10 Socket Head Cap Screws hold flange/cvr.
- 9 3 Segments form a Lock Ring
- 8 End Plug "O" Seal
- 7 Push-in Tube "O" seal
- 6 FlexTube, with ends to prevent extrusion.
- 5 Push-in tube with Triclover connection
- 4 Corner filling ring.
- 3 End Plug with seal groove, (tamper-proof)
- 2 Pipe Body, ends bored & grooved
- 1 End cover - also see 5 above.

IDENTIFICATION / TRACEABILITY

PulseGuard <http://www.PulseGuard.com>
PulseGuard für Deutschland <http://www.PulseGuard.co.uk>
PulseGuard, de langue Francaise www.amortisseurs-de-pulsations.com
PulseGuard, en Espanol/ sud Amerique www.amortiguador-de-pulsaciones.com
PulseGuard, dlya Russkogovoryaschih [pulsations-dampfer.com](http://www.pulsations-dampfer.com)

PulseGuard is the USA registered trade mark of PulseGuard Inc.
 PulseGuard is the UK registered trade mark of PulseGuard Ltd.

UK --44(0)161-480-9625 USA ---1910-270-2737

Item Nbr Description / function
↑ BILL OF MATERIALS ↓

Internal "Heat/Cast No" PURCHASE No