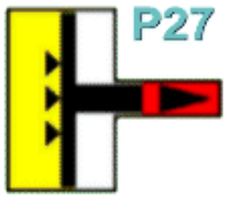
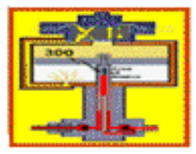
Pulsation Dampener Size Selection Tables for use in test and HP injection systems - & with reciprocating Intensifiers



1 *Dampers listed below are from 1000s of "off the shelf" inventory dampers, for preventing pipe systems from converting decompression shots into pressure pulsation. Prices are tabulated for you at www.pulseguard.com. Call toll free 1-888-DAMPERS(326-7377) for discounts etc. Choose a damper matching your pump connection size, for standard damping. Or allow us to calculate for you, from your smoothness required and your system data.*

When you see a damper or a pump of particular interest, please request literature dedicated to that subject.

2. *Where no OSHA requirement for in place flush before service, nor process need for 1st in 1st out, constant temp., change of liquid pumped, interception of pressure pulsation ; use second connection to save a "T" for RV. PI, or System Drain. 2 connection dampers are standard lowest cost. Decompression shot interceptors, & for frequencies above 10Hz, (from short pipes) must be FLOW-THROUGH*



PipeGuard UHP & HP With Super Duplex and Duplex Stainless bodies.
For Offshore and corrosive environment applications 100:1 Pumps

Please State Materials Number below when ORDERING :	Connections To Pump	to Sys.	Connct. Type	Length Without Pipes L Inch.	Diam D Inch	Weight Lbs.	Vol. In3	Pres. @93 C Lbs/In²	Wetted your choice Dims. For	Spares Kit	*
HpInt–Pig-HP-6	AutoClave / PPI		SF562	7.5	3.5	17	6	15,000	DSS	B44x75	?
HpInt–Pig-HP-15	AutoClave / PPI		SF750	10	4.0	26	15	11,250	DSS	B57x98	?
HpInt–Pig-HP-60	GrayTecLokHub		1GR5 1GR4	16	5.1	70	60	11,000	SDSS	B72x255	?
For use with 25:1 ratio pumps, flow smoothing PIPEGUARD MP to suit piping bases											
HpInt–Pig-MP-120	1"	x 1"	Sch 160	11.8	6.7	65	120	3,500	316 L	B139x105	?
HpInt–Pig-MP-240	1.5"	x 1.5"	Sch 160	15.7	6.7	81	240	3,500	316 L	B139x205	?
HpInt–Pig-MP-460	2"	x 2"	Sch 160	24	6.7	101	460	3,500	316 L	B139x420	?
HpInt–Pig-MP-693	2.5"	x 2.5"	Sch 160	24	8.62	212	693	3,100	316 L	B195x 360	?

PipeGuard LP *Fill the fast return stroke, stops lost motion, so smooth the discharge.*

Please State Material preferences and model Number below when ORDERING :	Connections To Pump	to Sys.	Cnct. Type	Length Without Pipes L Inch.	Diam D Inch	Weight Lbs.	Vol. In3	Pres. @93 C Lbs/In²	Wetted your choice Dims. For	Spares Kit	*
HpInt-Pig-Lp 1	/1/4"Fx1/8"F npt			4.1	1.4	2.6	/1.0i	/1000p/	316/	B25x50	?
HpInt-Pig-Lp 6	/3/8"Fx1/4"F npt			6.0	2.0	3.0	/6.0i	/700p	/ 316/	B44x75	?
HpInt-Pig-Lp 15	/1/2"Fx3/8"F npt			7.5	2.5	5.5	/15i	/600p	/ 316/	B57x98	?
HpInt-Pig-Lp 40	/3/4"Fx1/2"F npt			12.75	2.8	7.0	/ 40i	/600p	/ 316/	B63x207	?

Flexorber HP with FLEXFLON PTFE *For purity. For corrosive liquids.* 40:1

Please State Material preferences and model Number below when ORDERING :	Connections To Pump	to Sys.	Connct. Type	Length Without Pipes L Inch.	Diam D Inch	Weight in 316ss Lbs.	Vol. In3	Pres. @93 C Lbs/In²	Wetted your choice Dims. For	Spares Kit FlexFlon
Above 1" Pipe thread, and all Flexorbers above 40 In3					**MeterGuard Piping block**		Connections male & FROM A "METERGUARD"			
HpInt–Flo 61	1.0"	x 1.0"	Sch XX	10.0	12.5	300	61	5,500	316 L	DW 187tfe
HpInt–Flo 80	1.25"	x 1.0"	Sch XX	11.0	13.5	350	80	5,250	316 L	DW 200tfe
HpInt–Flo 122	1.5"	x 1.25"	Sch XX	11.5	14	400	122	5,000	316 L	DW 223tfe

Flexorber LP with FLEXFLON PTFE *For Puriy. For Corrosive Liquids*
Prevents lost volume on the fast return / suction stroke ; so stops discharge shock

Please State Material preferences and model Number below when ORDERING :	Connections To Pump	to Sys.	Connct. Type	Length Without Pipes L Inch.	Diam D Inch	Weight Lbs.	Vol. In3	Pres. @93 C Lbs/In²	Wetted your choice Dims. For	Spares Kit FlexFlon
HpInt–Sog8	/1/4x1//8" M npt/			4.5	6.5	10	/7.5i	/300p	/ 316/	DW113BF tfe
HpInt–Sog15	/3/8"x1/4" M npt/			6.0	6.5	15	/15i	/300p	/ 316 /	DW123BF tfe
HpInt–Sog30	/1/2"x3/8" M npt/			7.0	7.8	20	/30i	/300p	/ 316 /	DW143BF tfe
HpInt–Sog60	/3/4"x1/2" M npt/			8.0	8.2	19	/60i	/250p	/ 316 /	DW175BF tfe

PVDF / TFE coated / lined liquid side shells are available.- these have an ANSI B16.5 face to accept your Kynar or other connection blocks

PipeHugger HP *With an Elastomer Bladder. Large diameter relative to port holes enables dissipation of the pressure wave from pump cylinder de-compression. For 40:1 pumps.*

Please State Material preferences and model Number below when ORDERING :	Connections To Pump	to Sys.	Connct. Type	Length Without Pipes L Inch.	Diam D Inch	Weight Lbs.	Vol In3	Pres. @93 C Lbs/In²	Wetted your choice Dims. For	Spares Kit	*
HpInt -Phr-40	1/2"	x 3/8"	F NPT	11	5.9	52	40	5,250	316 L	D100L	?
HpInt -Phr-61	3/4"	x 1/2"	F NPT	11.2	7.0	75	61	4,300	316 L	D125L	?
HpInt -PhrO-122	1.25"	x 1.0"	Sch 160	13	7.9	112	122	3,950	316 L	D145L	?

PipeHugger LP *Large diameter Bladder ensures sensitive response at low pressure.*
Prevents lost volume on the fast return / suction stroke ; so stops discharge shock

Please State Material preferences and model Number below when ORDERING :	Connections To Pump	to Sys.	Connct. Type	Length Without Pipes L Inch.	Diam D Inch	Weight Lbs.	Vol. In3	Pres. @93 C Lbs/In²	Wetted your choice Dims. For	Spares Kit	*
HpInt-Peg10	/ 1/8"F x1/8" F npt			/ 5.4	3.0	5	/ 10i	/750p/	316 /	D64 L	?
HpInt-Peg20	/3/8"F x3/8" F npt			/ 5.4	4.0	10	/ 20i	/650p/	316 /	D85 L	?
HpInt-Peg40	/1/2"F x3/8" F npt			/ 6.3	4.0	12	/ 40i	/600p/	316 /	D115L	?

3. ***The question mark "?"* = Letters, showing your choice of compatible elastomer, add the letter to ordering Pt. Nbr: - N=Buna N, E=EP, H=Hypalon,x V=Fluoro-Carbon,x x= addition to cost***

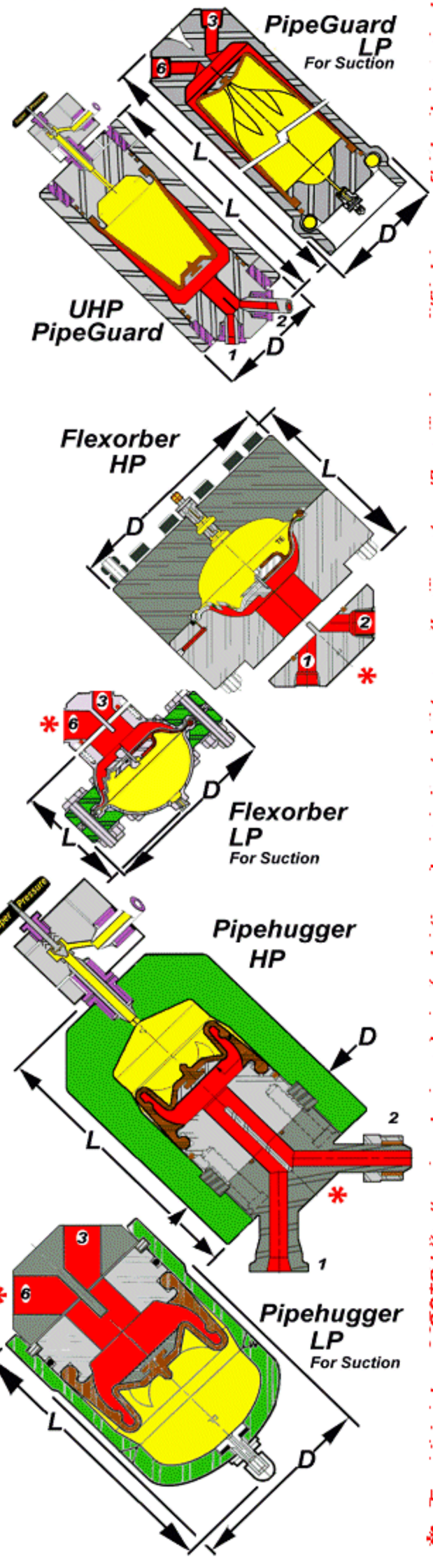
A20 =Alloy 20, H22 =Hasteloy 22, Ti2 =Titanium 2, Tan =Tantalum, Zir Zirconium, DSS = Duplex Stainless, SDSS =Super Duplex.

PUMPS make FLOW, SYSTEMS cause PRESSURE, pressure pulsation is a system response, AND a system responsibility NOT a pump manufacturers liability

DAMPERS TO INTERCEPT SHOCK FROM INTENSIFIERS

Licensed M. Packer since '63

CAPACITANCE + DIRECTION CHANGE IMPEDANCE



* For piping bases GOTO http://www.pulseguard.com/pulsation_dampening/select_smooth_percentage/flow_or_pressure/find_pump_ficalc_damper_volume/select_pipe_method/pipe_method.htm

To make your own size selections, instead of using the preceding tables. please ask for "*An Anatomy of Pulsation*"; which is page 28 through 36.