Low Pressure Safety Heads & Rupture Discs

BuTech safety head assemblies serve as holders for standard rupture discs (sold separately). Safety heads with rupture discs are used as simple and inexpensive overpressure relief devices. System pressure is relieved as a result of rupture of the replaceable disc.

The safety head assemblies shown are designed for use in high pressure systems up to 15,000 PSI (1030 bar). They can be installed directly into any of our standard couplings, elbows, tees, or crosses. Their versatility also allows direct installation into a standard 3-way valve. The result is a combination valve/safety head with beneficial cost and space advantages.

Standard material of construction is 316 stainless steel.

Safety head assemblies and rupture discs are available in two styles:

The **1/4A** style features a 1/4" blow-out diameter, an angular seat and can be ordered in pressures from 900 to 60,000 PSI (62 to 4140 bar)

The 1/2F style features a 1/2" blow-out diameter, a flat seat and can be ordered in pressures from 500 to 10,000 PSI (34 to 689 bar). This style also has a reversible hold-down ring which greatly reduces the possibility of premature disc failure associated with installation errors inherent in some designs.

Rupture discs are available in a wide range of burst ratings. Factors such as corrosion, fatigue and temperature may affect the burst pressure of the disc and cause premature failure. This problem may sometimes be overcome by frequent replacement of the disc. All discs rated over 500 PSI (34 bar) have a manufacturing tolerance of 3% under to 6% over the specified rupture pressure rating.

Rupture Discs are not included in the safety head assembly. To order discs separately, use the following part numbering system:

		
Style	Material	Pressure:
4=1/4" Angled	AL=Aluminum	List desired pressure at 72°F
8=1/2" Flat	IN=Inconel	(21°C) in KSI.
	MO=Monel	
	NI=Nickel	
	SI=Silver	
	SS=316SS	
	TI=Titanium	

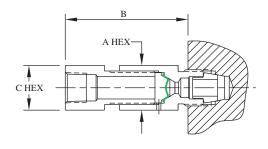
Examples:

An Inconel disc rated for 12,000 PSI in 1/4" Angled style would be ordered as 4IN12.00

An Aluminum disc rated for 750 PSI in 1/2" Flat style would be ordered as **8AL0.75**

SAFETY HEADS - 1/4" ANGLED DISC

Catalog Number	Connection	MAWP	A	В	C	Discharge
LPSH2-1/4A	1/8" L/P Tube	15,000 PSI 1030 bar	1.00" (25.4)	2.83" (71.9)	1.00" (25.4)	3/8" FNPT
LPSH4-1/4A	1/4" SL/P Tube	11,500 PSI 790 bar	1.00" (25.4)	2.81" (71.4)	1.00" (25.4)	3/8" FNPT
LPSH6-1/4A	3/8" SL/P Tube	7,500 PSI 520 bar	1.00" (25.4)	2.76" (70.1)	1.00" (25.4)	3/8" FNPT
LPSH8-1/4A	1/2" L/P Tube	5,500 PSI 380 bar	1.00" (25.4)	2.87" (72.9)	1.00" (25.4)	3/8" FNPT



SAFETY HEADS - 1/2" FLAT DISC

Catalog						
Number	Connection	MAWP	A	В	C	Discharge
LPSH2-1/2F	1/8" L/P	10,000 PSI	1.00"	2.62"	1.00"	3/8" FNPT
LI 3112-1/21	Tube	689 bar	(25.4)	(66.5)	(25.4)	
LPSH4-1/2F	1/4" SL/P	10,000 PSI	1.00"	2.87"	1.00"	3/8" FNPT
LF 3114-1/21	Tube	689 bar	(25.4)	(72.9)	(25.4)	
LPSH6-1/2F	3/8" SL/P	7,500 PSI	1.00"	2.87"	1.00"	3/8" FNPT
LI 3110-1/21	Tube	520 bar	(25.4)	(72.9)	(25.4)	
LPSH8-1/2F	1/2" L/P	5,500 PSI	1.00"	2.68"	1.00"	3/8" FNPT
LF 3110-1/21	Tube	380 bar	(25.4)	(68.1)	(25.4)	

