

**NOTE:** All pressure ratings for BLACOH products are determined using *gauge pressure* gauges. This means that when the gauge needle reads zero it is at atmospheric pressure. BLACOH does not use *absolute pressure* gauges which would read approximately 14.7 psi at atmospheric pressure.

**CAUTION:** Stated max pressure is for ambient temperatures; max pressure not available on all models. Temperature ranges based on available materials. Consult BLACOH for specific ratings.

### Plastic

<b>Max Pressure:</b> 100 – 200 psi (6.9 -17.2 bar)	<b>Temperature:</b> -20°F to +250°F (-29°C to +121°C)
<b>Capacity:</b> 4 cu in – 5 gal (.066 – 19L)	<b>Inlet Ports:</b> Threaded: FNPT, BSP Flanged: ANSI, DIN, Socket
<b>Materials:</b> Polypropylene PVC and CPVC PVDF	Conductive Polypropylene Conductive Acetal Machined PTFE

### Metal

<b>Max Pressure:</b> 300 psi (20.7 bar)	<b>Temperature:</b> -60°F to +400°F (-51°C to +204°C)
<b>Capacity:</b> 4 cu in – 100 gal (.066 – 379L)	<b>Inlet Ports:</b> Threaded: FNPT, BSP Flanged: ANSI, DIN, Socket
<b>Materials:</b> Aluminum Carbon Steel Alloy 20	316L Stainless Steel Hastelloy C Epoxy, PVDF and PTFE Coated Steel

### High Pressure

<b>Max Pressure:</b> 10,000 psi (689.4 bar)	<b>Temperature:</b> -60°F to +225°F (-51°C to +107°C)
<b>Capacity:</b> 8 – 24 cu in (.13 – .39L)	<b>Inlet Ports:</b> Threaded: FNPT Flanged: ANSI (Custom ports available on request)
<b>Materials:</b> Carbon Steel Alloy 20	316L Stainless Steel Hastelloy C

### Sanitary

<b>Max Pressure:</b> 1,000 psi (68.9 bar)	<b>Temperature:</b> -20°F to +350°F (-29°C to +177°C)
<b>Capacity:</b> 4 cu in – 10 gal (.066 – 38L)	<b>Inlet Ports:</b> Tri-Clamp Sanitary Fitting
<b>Shell Materials:</b> 30 or better RA Polished 316L Stainless Steel Bead Blasted 316L Stainless Steel	

### CIP Sanitary Flow Through Dampener with USP Class VI Silicone Bladder

<b>Max Pressure:</b> 150 psi (10.3 bar)	<b>Temperature:</b> -20°F to +300°F (-29°C to +149°C)
<b>Capacity:</b> 275 cu in (4.5L)	<b>Inlet Ports:</b> 2.5" Tri-Clamp Sanitary Fitting
<b>Shell Materials:</b> 30 or better RA Polished 316L Stainless Steel	

## PTFE

**Max Pressure:**

100 psi (6.9 bar)

**Capacity:**

4 - 370 cu in (.07 - 6L)

**Shell Materials:**

Machined PTFE

**Temperature:**

+40°F to +220°F (+4°C to +104°C)

**Inlet Ports:**

Threaded: FNPT, BSP

Flanged: ANSI, DIN, Metric Flare Type

## Tef-Guard HP II Unique PTFE Diaphragm Design

**Max Pressure:**

2,000 psi (137.9 bar)

**Capacity:**

14 cu in (.23L)

**Materials:**

316L Stainless Steel

Carbon Steel

Alloy 20

Hastelloy C

**Temperature:**

+40°F to +220°F (+4°C to +104°C)

**Inlet Ports:**

Threaded: FNPT

Flanged: ANSI

## Bladder Options

Alfas	0°F to +400°F (-18°C to +204°C)	High temperature, petroleum based chemicals, strong acids and bases.
Buna-N	+10°F to +180°F (-12°C to +82°C)	Good flex life; use with petroleum, solvents and oil-based fluids.
FDA Buna-N	+10°F to +180°F (-12°C to +82°C)	FDA-approved food grade; similar characteristics of regular Buna-N.
EPDM	-60°F to +280°F (-51°C to +138°C)	Use in extreme cold; good chemical resistance with ketones, caustics.
FDA EPDM	-50°F to +225°F (-45°C to +107°C)	FDA-approved food grade; similar characteristics of regular EPDM.
Hypalon	-20°F to +275°F (-29°C to +135°C)	Excellent abrasion resistance; good in aggressive acid applications.
Neoprene	0°F to +200°F (-18°C to +93°C)	Good abrasion resistance and flex; use with moderate chemicals.
PTFE Diaphragm	+40°F to +220°F (+4°C to +104°C)	Use with highly aggressive fluids.
PTFE Bellows	-20°F to +220°F (-29°C to +104°C)	Exclusive bellows design with excellent flex life; use with highly aggressive fluids.
Santoprene	-20°F to +225°F (-29°C to +107°C)	Excellent choice as a low cost alternative for PTFE in many applications.
FDA Silicone	-20°F to +300°F (-29°C to +149°C)	FDA-approved food grade material; for use in food and pharmaceutical processing.
USP Class VI Silicone	-20°F to +300°F (-29°C to +149°C)	Pharmaceutical grade material; for use in food and pharmaceutical processing.
Viton®	-10°F to +350°F (-23°C to +177°C)	Use in hot and aggressive fluids; good with aromatics, solvents, acids and oils.

Although BLACOH provides certain generic information concerning operating pressures in ambient temperatures (i.e. 72°F or 22°C) and certain generic information concerning chemical compatibility, the user is solely responsible for determining whether this generic information is correct and applicable for the customer's intended use of a dampener. Additional information can be found on BLACOH's website at <http://blacoh.com/disclaimer.aspx>.

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