SENTRY™

TECHNICAL SPECIFICATIONS

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

Max Pressure:
100 – 200 psi (6.9 -17.2 bar)

Temperature:
-20°F to +250°F (-29°C to +121°C)

Capacity:
4 cu in – 5 gal (.066 – 19L)

Inlet Ports:
Threaded: FNPT, BSP Flanged: ANSI, DIN, Socket

Materials:

Polypropylene	Conductive Polypropylene
PVC and CPVC	Conductive Acetal
PVDF	Machined PTFE

Metal

Max Pressure:
300 psi (20.7 bar)

Temperature:
-60°F to +400°F (-51°C to +204°C)

Capacity:
4 cu in – 100 gal (.066 – 379L)

Inlet Ports:
Threaded: FNPT, BSP Flanged: ANSI, DIN, Socket

Materials:

Aluminum	316L Stainless Steel
Carbon Steel	Hastelloy C
Alloy 20	Epoxy, PVDF and PTFE Coated Steel

High Pressure

Max Pressure:
11,500 psi (793 bar)

Temperature:
-60°F to +225°F (-51°C to +107°C)

Capacity:
8 – 24 cu in (.13 – .39L)

Inlet Ports:
Threaded: FNPT Flanged: ANSI
(Custom ports available on request)

Materials:

Carbon Steel	316L Stainless Steel
Alloy 20	Hastelloy C

Sanitary

Max Pressure:
1,000 psi (68.9 bar)

Temperature:
-20°F to +350°F (-29°C to +177°C)

Capacity:
4 cu in – 10 gal (.066 – 38L)

Inlet Ports:
Tri-Clamp Sanitary Fitting

Shell Materials:
30 or better RA Polished 316L Stainless Steel
Bead Blasted 316L Stainless Steel

CIP Sanitary Flow Through Dampener with USP Class VI Silicone Bladder

Max Pressure:
150 psi (10.3 bar)

Temperature:
-20°F to +300°F (-29°C to +149°C)

Capacity:
275 cu in (4.5L)

Inlet Ports:
2.5” Tri-Clamp Sanitary Fitting

Shell Materials:
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

Elastomers	Temperature Limits	Applications
Aflas	0°F to +400°F (-18°C to +204°C)	High temperature, petroleum based chemicals, strong acids and bases.
Buna	+10°F to +180°F (-12°C to +82°C)	Good flex life; use with petroleum, solvents and oil-based fluids.
FDA Buna	+10°F to +180°F (-12°C to +82°C)	FDA-approved food grade; similar characteristics of regular Buna.
EPDM	-60°F to +280°F (-51°C to +138°C)	Use in extreme cold; good chemical resistance with ketones, caustics.
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	+40°F to +220°F (+4°C to +104°C)	Bellows design; 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.

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