**Bladder Materials**

Not all fluids are compatible with every elastomer at all temperatures. Therefore, HYDAC offers the following choice of elastomers:

- NBR (Standard Nitrile)
- LT-NBR (Low Temperature Nitrile)
- ECO (Epichlorohydrin)
- IIR (Butyl)
- FPM (Fluorelastomer)
- others (available upon request)

To determine which material is appropriate...

**ALWAYS REFER TO FLUID MANUFACTURER’S RECOMMENDATION**

**Corrosion Protection**

For use with certain aggressive or corrosive fluids, or in a corrosive environment, HYDAC offers protective coatings and corrosive resistant materials (i.e. stainless steel) for the accumulator parts that come in contact with the fluid, or are exposed to the hostile environment.

**Mounting Position**

HYDAC bladder accumulators can be installed vertically, at any angle, or horizontally depending upon the application. When installing vertically or at an angle, the fluid port must be at the bottom. On certain applications listed below, specific positions are preferable:

- Energy Storage: vertical
- Pulsation Damping: any position from vertical to horizontal
- Maintaining Constant Pressure: any position from vertical to horizontal
- Volume Compensation: any position from vertical to horizontal

**System Mounting**

HYDAC bladder accumulators are designed to be screwed directly onto the system. We also recommend the use of our mounting components, which are detailed on page 43, to minimize risk of failure due to system vibrations.

**Applications**

Some common applications of bladder accumulators are:

- Agricultural Machinery & Equipment
- Forestry Equipment
- Oil Field & Offshore
- Machine Tools
- Mining Machinery & Equipment
- Mobile & Construction Equipment
- Off- Road Equipment

For specific examples of applications using bladder accumulators, please see page 52.
## Model Code

### Series
- SB 330 = Bladder accumulator (3000 psi)
- SB 600 = Bladder accumulator (5000 psi)

### Design
- (omit) = Standard (bottom repairable)
- N = Modified Flow (396 gpm)
- H = High Flow (480 gpm)
- TR = Standard (top repairable)
- NTR = Modified Flow (396 gpm) (top repairable)

### Size
(see dimension tables on following pages for most common sizes)
- 1 = 1 quart
- 4 = 1 gallon
- 6 = 1.5 gallons
- 10 = 2.5 gallons
- 20 = 5 gallons
- 32 = 10 gallons
- 42 = 11 gallons
- 54 = 15 gallons

### Line Connection
- A = Threaded
- F = Flanged

### Gas Port
- 1 = Standard model, HYDAC gas valve version 4 (8V1 - ISO 4570)

### Material Code
- Depending on Application
- 112 = Standard for oil service (mineral oil)

### Fluid Port
- 0 = Synthetic coated carbon steel (internal & external for water service)
- 1 = Carbon steel
- 2 = Stainless steel (high strength)
- 3 = Stainless steel (corrosion resistance)
- 4 = Chemically plated carbon steel (internal & external for water service)
- 6 = Low temperature carbon steel (<-40°F)

### Shell
- 0 = Synthetic coated carbon steel (internal & external for water service)
- 1 = Carbon steel
- 2 = Chemically plated carbon steel (internal & external for water service)
- 6 = Low temperature carbon steel (<-40°F)
- 7 = Others available on request

### Bladder Compound
- 2 = NBR (Buna N)
- 3 = ECO (Hydrin)
- 4 = IIR (Butyl)
- 5 = LT-NBR (low temp. Buna)
- 6 = FPM (Fluoro-elastomer)
- 7 = Others (available on request)

### Country of Installation
- S = USA
- S1 = Canada (CRN certified)
- W1 = ABS Type Approval
- W3 = DNV Type Approval
- U = PED/CE

### Maximum Working Pressure
- 210 = 3000 psi
- 345 = 5000 psi

### Fluid Port Connection
- A = BSPP (ISO 228)
- B = Metric (DIN 13)
- C = SAE (ANSI B1.1)
- D = NPT (ANSI B1.2)
- E = SAE 2" - 3000 psi (Code 61)
- F = SAE 1 1/2" - 6000 psi (Code 62)
- G = SAE 1 1/4" - 3000 psi (Code 61) (only available in sizes 4 liters & 6 liters)
- H = SAE 1" - 6000 psi (Code 62) (only available in sizes 1 liter & 4 liters)

Model Codes containing RED selections are non-standard items – Contact HYDAC for information and availability
Not all combinations are available

Note: For Oil, Gas & Marine specific bladder accumulators please refer to page 48
### SB 330... (3000 psi)

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### SB 600... (5000 psi)

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### Split Flange Connection (sizes 10 - 54)

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Dimensions are for general information only, all critical dimensions should be verified.
Dimensions are in inches/(mm) and lbs/(kg)

**NOTE:** Higher pressure may be available. Please consult HYDAC for more information.
1) Applies to SAE thread type only. For Split Flange, see separate chart and illustration.
2) Maximum discharge flow rate recommended for vertically mounted accumulators.
3) sizes 20 to 54 only.
### SB 330 TR... (3000 psi)

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### SB 600 TR... (5000 psi)

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### SB 330 NTR... (3000 psi, High Flow)

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Dimensions are for general information only, all critical dimensions should be verified.
Dimensions are in inches/(mm) and lbs/(kg).
1) Applies to SAE thread type only. For Split Flange, see chart and illustration on previous page.
2) Maximum discharge flow rate recommended for vertically mounted accumulators.