

Accumulators - Hydraulic

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General Description: Provide excellent gas and fluid separation ensuring maximum efficiency. Reduce shock during rapid cycling applications by regulating the performance of the hydraulic system. Dished piston profile provides extra gas capacity and a greater usable volume of fluid. PTFE glide rings eliminate metal-to-metal contact between the tube and piston, reducing wear. Fitted with a standard design gas valve for ease of pre-charging.

Applications: Reduce pump size and energy consumption, absorb hydraulic shock, provide auxiliary hydraulic pressure, minimize pump pulsations, and provide pressure compensation for system leakage.

- Features:**
- Nitrile seals.
 - Threaded on both ends.
 - SAE hydraulic ports.
 - Standard gas valves.
 - Aluminum pistons with patented, 5 blade V-O ring.
 - 3000 PSI maximum pressure.

Temperature Range: Mineral oil -20° to +165°F, water and water glycol +32° to +165°F.

Warning: Use an inert gas such as nitrogen for pre-charging piston or bladder accumulators. Do not use oxygen or shop air. Explosion could result.

REPAIR KITS

General Description: Rebuild accumulators and ensure that seals fit properly. V-O piston seal eliminates seal roll-over and ensures total separation of fluid and gas under the most severe conditions.

- Features:**
- Buna V-O-ring piston seals with two back-up washers.
 - Two PTFE rings.
 - Two end cap O-rings with two back-up washers.
 - One gas valve O-ring.

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PISTON ACCUMULATORS



Part No.	Repair Kit Part No.	Fluid Volume (gal.)	Gas Volume (cu.-in.)	Height (in.)	Dia. (in.)	Inlet SAE (in.)	System Connection SAE (in.)	Max. Flow GPM
A2N0029D1K	RK0200K000	0.13	30	14.19	2.38	1-1/16 - 12	SAE #12 (1-1/16-12)	100
A2N0058D1K	RK0200K000	0.25	59	23.19	2.38	1-1/16 - 12	SAE #12 (1-1/16-12)	100
A3N0058D1K	RK0300K000	0.25	63	14.34	3.56	1-1/16 - 12	SAE #12 (1-1/16-12)	220
A3N0116D1K	RK0300K000	0.50	121	22.56	3.56	1-1/16 - 12	SAE #12 (1-1/16-12)	220
A4N0116D1K	RK0400K000	0.50	126	16.19	4.75	1-5/8 - 12	SAE #20 (1-5/8-12)	397
A4N0231D1K	RK0400K000	1.00	241	25.19	4.75	1-5/8 - 12	SAE #20 (1-5/8-12)	397
A4N0347D1K	RK0400K000	1.50	357	34.31	4.75	1-5/8 - 12	SAE #20 (1-5/8-12)	397
A6N0231D1K	RK0600K000	1.00	266	17.38	6.88	1-7/8 - 12	SAE #24 (1-7/8-12)	818
A6N0578D1K	RK0600K000	2.50	613	30.63	6.88	1-7/8 - 12	SAE #24 (1-7/8-12)	818
A6N1155D1K	RK0600K000	5.00	1190	52.63	6.88	1-7/8 - 12	SAE #24 (1-7/8-12)	818
A6N2310D1K	RK0600K000	10.00	2345	96.63	6.88	1-7/8 - 12	SAE #24 (1-7/8-12)	818

Note: Mount vertically with hydraulic port down.

General Description: Bladder accumulators regulate hydraulic systems to ensure dependable, efficient performance and long life.

Applications: Storing energy under pressure, reduce pump size required, provide hydraulic pressure in case of emergency, absorbing hydraulic shocks, and dampening pump pulsation and flow fluctuations. Provides excellent gas and fluid separation, ensuring maximum efficiency.

Features:

- Chrome-molybdenum alloy steel (SA372) construction with forged ends to meet ASME standards.
- 1 gallon and larger sizes are ASME certified and fitted with 2-piece bladder stems with gas valve cartridge for easier service.
- 3000 PSI maximum pressure.

Temperature Range: Mineral oil -20° to +200°F, Water and water glycol: +32° to +200°F.

REPAIR KITS

General Description: Come with Buna N bladder, valve seal cap, seal kit, and gas core valve stem. Maintenance instructions for replacing the bladder and seals are also included.

Warning: Use an inert gas such as nitrogen for pre-charging piston or bladder accumulators. Do not use oxygen or shop air. Explosion could result.

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BLADDER ACCUMULATORS AND REPAIR KITS



Part No.	Repair Kit Part No.	Fluid Volume (gal.)	Gas Volume (cu. in.)	Height (in.)	Dia. (in.)	Inlet SAE (in.)
BA002B3T01A1	702928	0.25	66	11.13	4.50	SAE #12 (1-1/16-12)
BA01B3T01A1	702956	1.00	231	17.00	6.75	SAE #20 (1-5/8-12)
BA02B3T01A1	702970	2.50	556	21.38	9.06	SAE #24 (1-7/8-12)
BA05B3T01A1	702984	5.00	1124	33.38	9.06	SAE #24 (1-7/8-12)
BA10B3T01A1	702998	10.00	2097	54.38	9.06	SAE #24 (1-7/8-12)

Note: Install vertically at no more than a 25° slant, with the hydraulic port at the bottom.

General Description: Diaphragm accumulators provide an affordable means of enhancing the performance of a hydraulic system. They are suitable for storing energy under pressure, absorbing hydraulic shock, and dampening pump pulsation. Supplied with an M28 X 1.5 gas valve. Non-repairable design rated at minimum 4 to 1 design factors. Nitrile membrane provides excellent gas and fluid separation. Never exceed 8 to 1 compression ratio on 5 cubic inch through 85 cubic inch and 4 to 1 on 120 cubic inch and larger. Compression ratio (max. working pressure/precharge). Exceed 4 to 1 compression ratio.

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DIAPHRAGM ACCUMULATORS

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Gas Volume in Cubic In.	Gas Volume in Liters	Height (In.)	Diameter (In.)	Hydraulic Port Size	Max. Flow Rate (GPM)	Pressure Rating (PSI)	Part No. With M28 X 1.5 Gas Valve	Part No. With US Gas Valve	Weight (lbs.)
5	0.075	4.37	2.52	SAE#6	11	3600	AD007A25T1A1	AD007B25T1A1	1.4
10	0.16	4.72	2.95	SAE#6	11	3600	AD016A25T1A1	AD016B25T1A1	2.2
20	0.35	5.35	3.62	SAE #8	26	2300	AD032A16T1A1	AD032B16T1A1	2.9
30	0.50	5.87	4.06	SAE #8	26	2300	AD050A16T1A1	AD050B16T1A1	3.3
45	0.75	6.81	5.00	SAE #8	26	3600	AD075A25T1A1	AD075B25T1A1	7.1
60	1.00	7.09	5.35	SAE #8	26	2900	AD100A20T1A1	AD100B20T1A1	7.7
85	1.40	7.80	6.10	SAE #8	26	3600	AD140A25T1A1	AD140B25T1A1	13
120	2.00	9.88	6.10	SAE #8	42	3600	AD200A25T1A1	AD200B25T1A1	17
170	2.80	10.6	6.85	SAE #8	42	3600	AD280A25T1A1	AD280B25T1A1	22

General Description: The Inline Pulse-Tone reduces pump pulsations and shock. When you stop pump pulsation and vibration, you reduce noise, and stop the cause of component wear and leakage. Lab test show that pump noise levels are increased by 2-3 dB(A) just by adding 12' of outlet and return lines. An Inline Pulse-Tone is located as close to the pump as possible, usually directly at the pump outlet, to stop pulsations and noise before they travel through the piping and radiate off other structural components. It is easy to size just match the port size to the hydraulic line size. The Inline Pulse-Tone is usually charged with nitrogen (only) to 50% to 60% of the hydraulic operating pressure. Maximum Pressure rating is 3,000 PSI Hydrin Bladder is standard with a temperature rating of -50F to 300F.

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INLINE PULSE-TONE



Diameter	Lenth	Height	Max. Flow GPM 15'/sec	SAE Port Both Ends	Part No.	Weight (lbs.)
2.50	6.88	8.63	11.3	SAE #10	PT250D1HTI	6.5
2.62	8.13	9.88	24.1	SAE #16	PT262D1HTE	8
4.00	8.88	10.63	68.9	SAE #20	PT400D1HTF	24.5
4.75	10.50	12.25	128	SAE # 32	PT475D1HTH	31

Diameter	Lenth	Height	Max. Flow GPM 15'/sec	Code 61 Flange Port Both Ends	Part No.	Weight
2.62	10.12	9.88	24.1	1"	PT262D1HTE	8
4.00	13.12	10.63	68.9	1 1/2"	PT400D1HTF	24.5
4.75	15.00	12.25	128	2"	PT475D1HTH	31

ACCUMULATOR MOUNTING U-BOLTS

General Description: Engineered specifically for accumulators and durable enough to handle the most rugged applications. Use to fasten accumulator ends in place.

- Features:**
- Lightweight and easy to install.
 - Made of galvanized steel for corrosion resistance.
 - Two jam nuts supplied with each U-bolt.

Part No.	Use with Accumulator	Inside Dia. (in.)
0854370000	A2N	2.44
0862090000	A3N	3.69
0864960000	A4N	5.00
0864970000	A6N	7.13



1

General Description: Engineered specifically for accumulators, to ensure proper fit and durability. Durable, lightweight brackets are made of zinc-plated steel with a vibration-absorbing rubber insert to help reduce noise.

ACCUMULATOR BRACKETS



Part No.	Inside Dia. (in.)	For Use With
1466230000	4.5 (Clamp Bracket)	BA002
1449080000	6.8 (Clamp Bracket)	BA01
1449070000	9.0 (Clamp Bracket)	BA02, BA05, BA10
1449100000	4.75 (Base Bracket)	BA002
1448720000	6.75 (Base Bracket)	BA01, BA02, BA05, BA10

General Description: Can be used for charging either a bladder or piston actuator.

- Kits Include:**
- 10 ft. charging hose with standard right hand thread nitrogen fittings.
 - Adapter incorporating gas valve.
 - Bleeder valve.
 - Gas chuck.
 - 3000 PSI pressure gauge.
- Packed in a convenient plastic storage case.

HYDRAULIC

CHARGING AND GAUGING KIT



Part No.

144953000