

# Accumulators

Bottom Repairable

3000 PSI

◆ Type S3

Bladder Kits

Charging Accessories



**MP FILTRI (CANADA) INC.**

# Accumulators



## Safety Features

- ◆ Design factors exceeding the requirements of all standard domestic & international codes.
- ◆ Integrated pressure relief design.
- ◆ Cannot be disassembled while pressurized.
- ◆ Each vessel individually tested and registered.

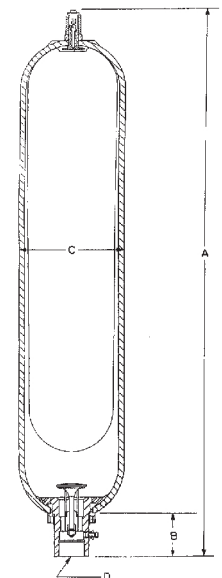
## Technical Data

- ◆ **Standard Material:** Shell: Chrome - moly steel, SA-372 Type V Grade 1 Class B  
Bladder: Buna-Nitrile  
Oil Port: AISI 4130
- ◆ **Material Options:** Shell: Electroless nickel plating. Various resin coatings. Stainless steel.  
Bladder: Low temperature, Butyl, Viton, EPR, Hydrin, Neoprene.  
Oil Port: Electroless nickel. Stainless steel. 304 and 316 L. Special materials also available.
- ◆ **Features and Design Options:** Shell: 4:1 safety design. One - piece seamless shell. Foreign and domestic codes available. Bottom repairable. 3000 PSI.  
Bladder: Fully enclosed moulded bladder. Temperature range -55°C to +250°C. Optional valve stem designs to match competitors' units.  
Oil Port: NPT, SAE, Metric, or BSP threads. All components are interchangeable with other manufacturers' parts.  
Top Repairable, High - Flo, Split Flange and custom designs available.

## Type S3

- ◆ Specifications: 3000 PSI (207 bar) bottom-repairable accumulator.

Size	Part No. NPT	A	B	C	D NPT	Threads 3 (SAE)	Gas Val. Thread	App. Wght.	Nominal Gas Vol.
1 quart	A1QT3100	11.4" 28.9cm	2.1" 5.4cm	4.5" 11.4cm	3/4"	1-1/16"-12	.302-32 UNEF gas- valve connection	9.5 lb 4.3 k	71 in <sup>3</sup> 1163 cm <sup>3</sup>
1 gallon	A13100	17.0" 43.2cm	3.5" 8.8cm	6.7" 17.0cm	1-1/4"	1-5/8"-12		32 lb 14.5 k	231 in <sup>3</sup> 3785 cm <sup>3</sup>
2.5 gallon	A2.53100	21.0" 53.3cm	3.5" 8.8cm	9.0" 22.9cm	2.0"	1-7/8"-12		76 lb 34 k	593 in <sup>3</sup> 9783 cm <sup>3</sup>
5 gallon	A53100	33.25" 84.5cm	3.5" 8.8cm	9.0" 22.9cm	2.0"	1-7/8"-12		116 lb 52 k	1199 in <sup>3</sup> 19648 cm <sup>3</sup>
10 gallon	A103100	54.1" 137.4cm	3.5" 8.8cm	9.0" 22.9cm	2.0"	1-7/8"-12		212 lb 96 k	2250 in <sup>3</sup> 36871 cm <sup>3</sup>
11 gallon	A113100	59.4" 150.8cm	3.5" 8.8cm	9.0" 22.9cm	2.0"	1-7/8"-12		230 lb 104 k	2541 in <sup>3</sup> 41623 cm <sup>3</sup>
15 gallon	A153100	76.9" 195.3cm	3.5" 8.8cm	9.0" 22.9cm	2.0"	1-7/8"-12		296 lb 134 k	3425 in <sup>3</sup> 66127 cm <sup>3</sup>



- ◆ Accumulator assembly and its components are fully interchangeable with competitors' units.
- ◆ Built-in pressure relief design.
- ◆ Complete gas/fluid separation.

# Bladder Kits

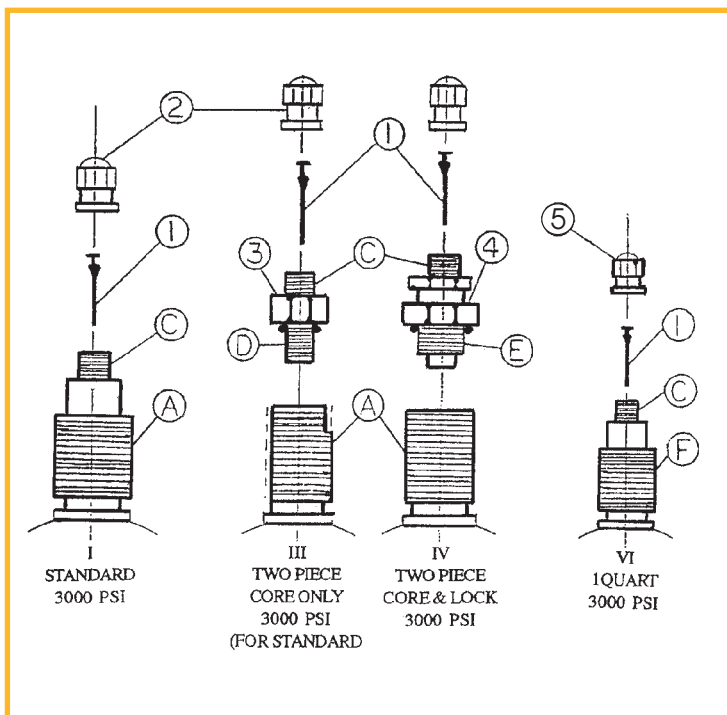
◆ 3000 PSI Bottom-repairable accumulator.

Size	Pressure	Buna-N	Butyl	EPR	Low Temp.	Viton	Hydrin
1 quart	3000 PSI	AI-1QT-3KT	AI-1QT-3KT-B	AI-1QT-3KT-E	AI-1QT-3KT-L	AI-1QT-3KT-V	AI-1QT-3KT-H
1 gallon	3000 PSI	AI-1-3KT	AI-1-3KT-B	AI-1-3KT-E	AI-1-3KT-L	AI-1-3KT-V	AI-1-3KT-H
2.5 gallon	3000 PSI	AI-2.5-3KT	AI-2.5-3KT-B	AI-2.5-3KT-E	AI-2.5-3KT-L	AI-2.5-3KT-V	AI-2.5-3KT-H
5 gallon	3000 PSI	AI-5-3KT	AI-5-3KT-B	AI-5-3KT-E	AI-5-3KT-L	AI-5-3KT-V	AI-5-3KT-H
10 gallon	3000 PSI	AI-10-3KT	AI-10-3KT-B	AI-10-3KT-E	AI-10-3KT-L	AI-10-3KT-V	AI-10-3KT-H
11 gallon	3000 PSI	AI-11-3KT	AI-11-3KT-B	AI-11-3KT-E	AI-11-3KT-L	AI-11-3KT-V	AI-11-3KT-H
15 gallon	3000 PSI	AI-15-3KT	AI-15-3KT-B	AI-15-3KT-E	AI-15-3KT-L	AI-15-3KT-V	AI-15-3KT-H

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◆ All kits include bladder, O-ring, valve core and back-up rings.

## Stem Types



◆ Thread Specifications:

A 7/8"-14 UNF-2A

C .305"-32 UNEF

D .375"-24 UNF

E .500"-20 UNF-2A

F 5/8"-18 UNF-2A

◆ Component:

- |   |            |
|---|------------|
| 1 Valve Core:                               | AI-S-304   |
| 2 Valve Cap:                                | AI-S-303   |
| 3 Gas Valve-3000 PSI (Core only):           | AI-GT3-309 |
| 4 Gas Valve-3000 PSI (AN-6287) Core & Lock: | AI-S3-309  |
| 5 1QT Valve Cap:                            | AI-1QT-303 |

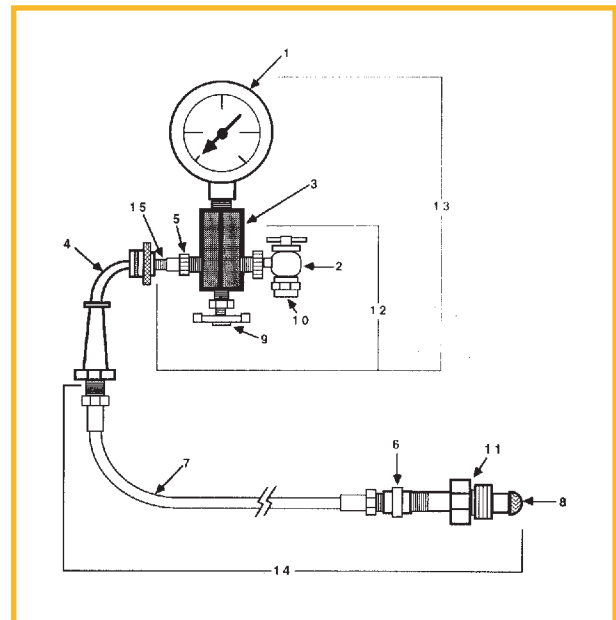
# Oil Port Assemblies For 3000 PSI

Port Option	1 Qt. Accumulators	1 Gal. Accumulators	2-25 Gal. Accumulators
<b>NPT</b>	AI-1QT-400 (3/4"-11 1/2)	AI-1-400 (1-1/4" - 11-1/2)	AI-S3-400 (2"-11-1/2)
<b>SAE</b>	AI-1QT-400-3 (1-1/16"-12 UNF-2A)	AI-1-400-3 (1-5/8"-12 UN-2B)	AI-S3-400-3 (1-7/8"-12 UN-2B)
<b>Split Flange</b>	AI-1QT-400-4 (-4FL 12 SF)	AI-1-400-4 (-4FL 20 SF)	AI-S3-400-4 (-4FL 32 SF)

- ◆ Other types and sizes available. Add suffix "WS" for water service, and "SS" for special service. Consult our office for availability, part numbers and bleed port specifications. Some options at extra cost.

## Accessories

- ◆ Charging and Gauging Assembly  
(Warning: always use dry Nitrogen Gas)
- ◆ The use of an adjustable nitrogen gas regulator is recommended when precharging.



- ◆ Complete Assembly AI-CG3-3KTSS

#	Description	Part #
1	Gauge	AI-CG3-001
2	Air chuck	AI-CG-002
3	Adapter block	AI-CG-003
4	Swivel connector	AI-CG-004
5	Tank valve	AI-CG-005
6	Coupler	AI-CG-006
7	Hose	AI-CG-007-SS
8	Gland	AI-CG-008
9	Bleed valve	AI-CG-009
10	Copper washer	AI-CG-020
11	Nut	AI-CG-011
12	Head assembly	AI-CG-014
13	Gauging & head assy	AI-CG3-313
14	Hose assembly	AI-CG-017-SS

Tools & Supplies	Part #
Valve core tool	AI-506
Spanner Wrench	AI-505
Gas Charging Valve Extension	AI-TR-015
Bladder pull rod (1QT-2.5 gal)	AI-501
Bladder pull rod (5 gal)	AI-502
Bladder pull rod (10-11 gal)	AI-503
Bladder pull rod (15 gal)	AI-504
Gas regulator (10-200)	AI-CG-030
Gas regulator (100-1500)	AI-CG-031
Gas regulator (200-3000)	AI-CG-032
Accumulator mounting kit (1QT)	AI-1QT-507-kit
Accumulator mounting kit (1 gal)	AI-1-507-kit
Accumulator mounting kit (2.5-15 gal)	AI-5-507-kit