

Steel Suction Line Accumulators

"U" Tube Style Accumulators

The Parker "U" tube accumulator design is a result of extensive laboratory testing plus detailed investigation of the various accumulators currently available. It takes into account all of the requirements essential for heat pump applications, including safe holding volume (relative to the system's total charge), protected flow control for positive refrigerant and oil return, and minimum pressure drop across the accumulator.

Parker offers standard accumulator models designed for application on heat pump and refrigeration systems from 1/4 through 12 tons. Liquid refrigerant holding requirements of suction accumulator may vary by application. Because of the diversity in heat pump systems, accumulator capacity selection should be determined by actual testing. Consult Parker for assistance if required.

Key Features & Benefits

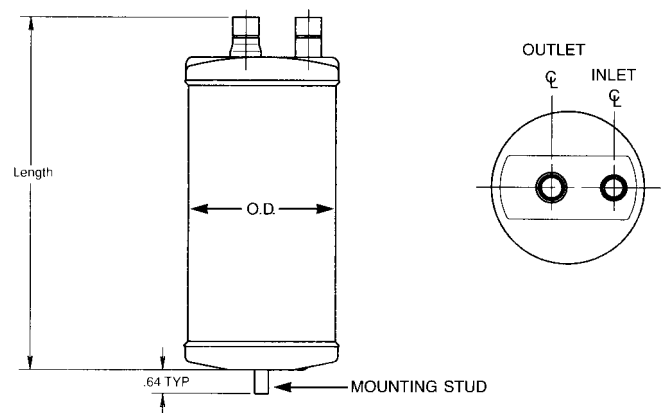
- Solid copper connections
- "U" tube design for maximum flow of refrigerant and minimum oil entrapment.
- Inlet flow deflector guides refrigerant toward wall for smooth tangential flow and gradual expansion.
- "U" tube entrance is positioned behind the inlet flow deflector to prevent unwanted liquid refrigerant from entering and damaging compressor.
- Metering orifice matched to system capacity assures optimum liquid refrigerant and oil flow back to compressor.
- Protective screen and orifice assembly on "U" tube protects against foreign particles and contaminants affecting metering function.
- Fittings and "U" tube are matched to accumulator holding capacity and total system charge for minimum pressure drop and maximum refrigerant flow.
- U.L. listed for 355 psig design pressure. File No. SA5172.
- Powder paint exterior coating surpasses 500 hour ASTM salt spray tests.
- Integral 430° F Fuse Plugs (U.L. File No. SA5441).



also available:

Heat Exchanger Accumulator

- Can be made in all models of Parker's standard accumulators.
- Copper heat exchange coil for superior heat exchange.
- Liquid line connections available in 3/8" I.D..



Steel Suction Line Accumulator Dimensions and Flow Data

| Model No. | Solder Fitting Size | Dimensions (inches) | | Capacity ¹ (oz.) | Evap. Temp °F | Recommended capacity in tons of refrigeration | | | | | | | | | | | | | |
|---------------|---------------------|---------------------|------|-----------------------------|---------------|---|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|
| | | Length | O.D. | | | 22 & 404A | | 134a | | 401A | | 402A | | 407C | | 410A | | 502 & 507A | |
| | | | | | | Tons @ 1 psi | Min. Tons | Tons @ 1 psi | Min. Tons | Tons @ 1 psi | Min. Tons | Tons @ 1 psi | Min. Tons | Tons @ 1 psi | Min. Tons | Tons @ 1 psi | Min. Tons | Tons @ 1 psi | Min. Tons |
| PA3060-10-4 | 1/2" | 10.35 | 3 | 35 | 40 | 2.00 | 0.35 | 1.67 | 0.30 | 1.42 | 0.25 | 1.97 | 1.01 | 1.97 | 0.46 | 1.93 | 1.44 | 1.48 | 0.27 |
| PA3060-10-5 | 5/8" | 10.35 | 3 | 35 | 0 | 1.54 | 0.25 | 0.98 | 0.16 | 1.06 | 0.18 | 1.53 | 0.41 | 1.53 | 0.18 | 1.50 | 0.65 | 1.10 | 0.2 |
| | | | | | -20 | 1.33 | 0.21 | 0.69 | 0.11 | 0.90 | 0.15 | 1.32 | 0.25 | 1.32 | 0.11 | 1.30 | 0.42 | 0.93 | 0.16 |
| PA3060-15-5 | 5/8" | 15.05 | 3 | 55 | 40 | 2.10 | 0.35 | 1.75 | 0.30 | 1.49 | 0.25 | 2.07 | 1.01 | 2.07 | 0.46 | 2.02 | 1.44 | 1.55 | 0.27 |
| | | | | | 0 | 1.62 | 0.25 | 1.03 | 0.16 | 1.11 | 0.18 | 1.61 | 0.41 | 1.60 | 0.18 | 1.57 | 0.65 | 1.16 | 0.2 |
| | | | | | -20 | 1.40 | 0.21 | 0.73 | 0.11 | 0.95 | 0.15 | 1.39 | 0.25 | 1.39 | 0.11 | 1.36 | 0.42 | 0.98 | 0.16 |
| PA3060-15-6 | 3/4" | 15.05 | 3 | 54 | 40 | 2.30 | 0.35 | 1.92 | 0.30 | 1.63 | 0.25 | 2.27 | 1.01 | 2.27 | 0.46 | 2.22 | 1.44 | 1.70 | 0.27 |
| | | | | | 0 | 1.77 | 0.25 | 1.12 | 0.16 | 1.22 | 0.18 | 1.76 | 0.41 | 1.75 | 0.18 | 1.72 | 0.65 | 1.27 | 0.2 |
| | | | | | -20 | 1.53 | 0.21 | 0.8 | 0.11 | 1.04 | 0.15 | 1.52 | 0.25 | 1.52 | 0.11 | 1.49 | 0.42 | 1.07 | 0.16 |
| PA4065-9-5C | 5/8" | 9.62 | 4 | 60 | 40 | 2.96 | 0.35 | 2.47 | 0.30 | 2.10 | 0.25 | 2.92 | 1.01 | 2.92 | 0.46 | 2.85 | 1.44 | 2.19 | 0.27 |
| | | | | | 0 | 2.28 | 0.25 | 1.44 | 0.16 | 1.57 | 0.18 | 2.27 | 0.41 | 2.26 | 0.18 | 2.21 | 0.65 | 1.63 | 0.2 |
| | | | | | -20 | 1.98 | 0.21 | 1.03 | 0.11 | 1.34 | 0.15 | 1.97 | 0.25 | 1.96 | 0.11 | 1.93 | 0.42 | 1.39 | 0.16 |
| PA4065-9-6C | 3/4" | 9 5/8" | 4 | 58 | 40 | 3.00 | 0.35 | 2.53 | 0.30 | 2.10 | 0.25 | 2.96 | 1.01 | 2.96 | 0.46 | 2.89 | 1.44 | 2.20 | 0.28 |
| | | | | | 0 | 2.30 | 0.25 | 1.48 | 0.16 | 1.60 | 0.18 | 2.29 | 0.41 | 2.28 | 0.18 | 2.23 | 0.65 | 1.70 | 0.2 |
| | | | | | -20 | 2.00 | 0.21 | 1.05 | 0.11 | 1.40 | 0.15 | 1.99 | 0.25 | 1.98 | 0.11 | 1.95 | 0.42 | 1.40 | 0.16 |
| PA5083-9-6C | 3/4" | 9.62 | 5 | 89 | 40 | 3.82 | 0.57 | 3.19 | 0.49 | 2.71 | 0.41 | 3.76 | 1.51 | 3.77 | 0.69 | 3.68 | 2.16 | 2.82 | 0.46 |
| | | | | | 0 | 2.95 | 0.41 | 1.86 | 0.27 | 2.03 | 0.30 | 2.94 | 0.61 | 2.92 | 0.27 | 2.86 | 0.98 | 2.10 | 0.33 |
| | | | | | -20 | 2.55 | 0.35 | 1.32 | 0.18 | 1.73 | 0.24 | 2.53 | 0.37 | 2.53 | 0.16 | 2.48 | 0.63 | 1.79 | 0.27 |
| PA5083-9-7C | 7/8" | 9.63 | 5 | 86 | 40 | 3.90 | 0.57 | 3.21 | 0.49 | 2.70 | 0.41 | 3.84 | 1.51 | 3.85 | 0.69 | 3.76 | 2.16 | 2.80 | 0.46 |
| | | | | | 0 | 3.00 | 0.41 | 1.88 | 0.27 | 2.00 | 0.30 | 2.98 | 0.61 | 2.97 | 0.27 | 2.91 | 0.98 | 2.10 | 0.33 |
| | | | | | -20 | 2.60 | 0.35 | 1.33 | 0.18 | 1.70 | 0.24 | 2.58 | 0.37 | 2.58 | 0.16 | 2.53 | 0.63 | 1.80 | 0.27 |
| PA5083-12-7C | 7/8" | 12.88 | 5 | 125 | 40 | 5.41 | 0.88 | 4.51 | 0.75 | 3.83 | 0.64 | 5.33 | 2.12 | 5.34 | 0.96 | 5.21 | 3.03 | 4.00 | 0.7 |
| | | | | | 0 | 4.17 | 0.64 | 2.64 | 0.42 | 2.87 | 0.45 | 4.15 | 0.86 | 4.13 | 0.38 | 4.05 | 1.37 | 2.98 | 0.51 |
| | | | | | -20 | 3.61 | 0.54 | 1.87 | 0.28 | 2.45 | 0.37 | 3.59 | 0.52 | 3.58 | 0.22 | 3.52 | 0.88 | 2.53 | 0.41 |
| PA5083-11-7C | 7/8" | 11.33 | 5 | 108 | 40 | 4.38 | 0.57 | 3.21 | 0.43 | 3.10 | 0.41 | 4.32 | 1.51 | 4.32 | 0.69 | 4.22 | 2.16 | 3.23 | 0.46 |
| | | | | | 0 | 3.37 | 0.41 | 1.88 | 0.24 | 2.32 | 0.30 | 3.35 | 0.61 | 3.34 | 0.27 | 3.27 | 0.98 | 2.41 | 0.33 |
| | | | | | -20 | 2.92 | 0.35 | 1.33 | 0.16 | 1.98 | 0.24 | 2.90 | 0.57 | 2.89 | 0.16 | 2.84 | 0.63 | 2.04 | 0.27 |
| PA5083-11-6C | 3/4" | 11.33 | 5 | 111 | 40 | 3.85 | 0.57 | 3.21 | 0.49 | 2.72 | 0.41 | 3.79 | 1.51 | 3.80 | 0.69 | 3.71 | 2.16 | 2.84 | 0.46 |
| | | | | | 0 | 2.97 | 0.41 | 1.88 | 0.27 | 2.04 | 0.30 | 2.96 | 0.61 | 2.94 | 0.27 | 2.88 | 0.98 | 2.12 | 0.33 |
| | | | | | -20 | 2.56 | 0.35 | 1.33 | 0.18 | 1.74 | 0.24 | 2.54 | 0.57 | 2.54 | 0.16 | 2.49 | 0.63 | 1.80 | 0.27 |
| PA5083-15-7C | 7/8" | 15.34 | 5 | 156 | 40 | 6.20 | 0.88 | 5.17 | 0.75 | 4.39 | 0.64 | 6.11 | 2.12 | 6.12 | 0.96 | 5.97 | 3.03 | 4.58 | 0.7 |
| | | | | | 0 | 4.78 | 0.64 | 3.03 | 0.42 | 3.29 | 0.45 | 4.76 | 0.86 | 4.73 | 0.38 | 4.64 | 1.37 | 3.41 | 0.51 |
| | | | | | -20 | 4.13 | 0.54 | 2.15 | 0.28 | 2.80 | 0.37 | 4.10 | 0.52 | 4.09 | 0.22 | 4.02 | 0.88 | 2.90 | 0.41 |
| PA5083-17-7C | 7/8" | 17.25 | 5 | 179 | 40 | 6.20 | 0.88 | 5.17 | 0.75 | 4.39 | 0.64 | 6.11 | 2.12 | 6.12 | 0.96 | 5.97 | 3.03 | 4.58 | 0.7 |
| | | | | | 0 | 4.78 | 0.64 | 3.03 | 0.42 | 3.27 | 0.45 | 4.76 | 0.86 | 4.73 | 0.38 | 4.64 | 1.37 | 3.41 | 0.51 |
| | | | | | -20 | 4.13 | 0.54 | 2.15 | 0.28 | 2.80 | 0.37 | 4.10 | 0.52 | 4.09 | 0.22 | 4.02 | 0.88 | 2.90 | 0.41 |
| PA6125-15-9C | 1 1/8" | 15.00 | 6 | 211 | 40 | 9.00 | 3.00 | 8.83 | 1.97 | 6.10 | 1.90 | 8.87 | 3.45 | 8.88 | 1.57 | 8.67 | 4.93 | 7.30 | 3 |
| | | | | | 0 | 5.60 | 2.00 | 5.62 | 0.82 | 3.70 | 1.20 | 5.57 | 1.40 | 5.55 | 0.62 | 5.44 | 2.23 | 4.50 | 2 |
| | | | | | -20 | 4.30 | 0.80 | 4.31 | 0.50 | 2.80 | 0.05 | 4.27 | 0.85 | 4.26 | 0.36 | 4.19 | 1.43 | 3.40 | 0.8 |
| PA6125-15-11C | 1 3/8" | 15.25 | 6 | 214 | 40 | 12.00 | 3.00 | 12.05 | 1.97 | 6.20 | 1.90 | 11.82 | 3.45 | 11.85 | 1.57 | 11.56 | 4.93 | 9.80 | 3 |
| | | | | | 0 | 7.50 | 2.00 | 7.52 | 0.82 | 5.00 | 1.20 | 7.46 | 1.40 | 7.43 | 0.62 | 7.28 | 2.23 | 6.00 | 2 |
| | | | | | -20 | 5.80 | 0.80 | 5.82 | 0.50 | 3.60 | 0.05 | 5.76 | 0.85 | 5.75 | 0.36 | 5.65 | 1.43 | 4.60 | 0.8 |
| PA6125-18-9C | 1 1/8" | 18.00 | 6 | 264 | 40 | 8.80 | 3.00 | 8.84 | 1.97 | 6.00 | 1.90 | 8.67 | 3.45 | 8.69 | 1.57 | 8.48 | 4.93 | 7.20 | 3 |
| | | | | | 0 | 5.50 | 2.00 | 5.52 | 0.82 | 3.70 | 1.20 | 5.47 | 1.4 | 5.45 | 0.62 | 5.34 | 2.23 | 4.40 | 2 |
| | | | | | -20 | 4.30 | 0.80 | 4.31 | 0.50 | 2.80 | 0.05 | 4.27 | 0.85 | 4.26 | 0.36 | 4.19 | 1.43 | 3.40 | 0.8 |
| PA6125-18-11C | 1 3/8" | 18.00 | 6 | 267 | 40 | 11.00 | 3.00 | 11.05 | 1.97 | 7.50 | 1.90 | 10.84 | 3.45 | 10.86 | 1.57 | 10.59 | 4.93 | 9.10 | 3 |
| | | | | | 0 | 7.00 | 2.00 | 7.02 | 0.82 | 4.60 | 1.20 | 6.96 | 1.4 | 6.93 | 0.62 | 6.8 | 2.23 | 5.50 | 2 |
| | | | | | -20 | 5.40 | 0.80 | 5.42 | 0.50 | 3.50 | 0.05 | 5.37 | 0.85 | 5.35 | 0.36 | 5.26 | 1.43 | 4.20 | 0.8 |
| PA6125-20-11C | 1 3/8" | 20.25 | 6 | 302 | 40 | 11.00 | 3.00 | 11.05 | 1.97 | 7.50 | 1.90 | 10.84 | 3.45 | 10.86 | 1.57 | 10.59 | 4.93 | 9.10 | 3 |
| | | | | | 0 | 7.00 | 2.00 | 7.02 | 0.82 | 4.60 | 1.20 | 6.96 | 1.4 | 6.93 | 0.62 | 6.8 | 2.23 | 5.50 | 2 |
| | | | | | -20 | 5.40 | 0.80 | 5.42 | 0.50 | 3.50 | 0.05 | 5.37 | 0.85 | 5.35 | 0.36 | 5.26 | 1.43 | 4.20 | 0.8 |

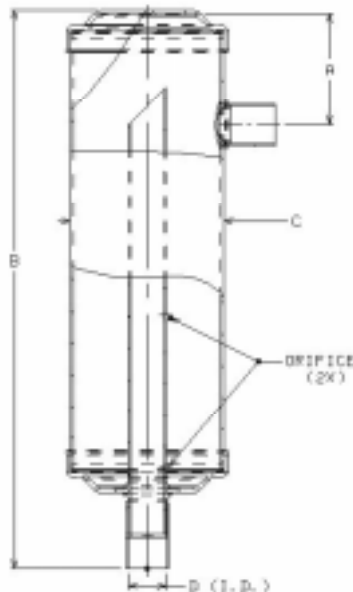
¹ Holding capacity of R-22 at 40° F. Divide by .7 to obtain recommended maximum system charge on fixed orifice systems. Consult Parker for availability.



Stand Pipe Style Accumulators

Key Features and Benefits

- Available in 2 1/2", 3" and 4" diameters.
- Copper and copper plated steel fittings
- Standard fitting sizes: 3/4" and 7/8".
Other sizes available upon request.
- Dual, screened orifice design. Various orifice sizes available.
- U.L. listed file no. SA5172, CSA certified.



Stand Pipe Style Accumulator Dimensions

| Part No. | Model No. | "A" | "B" | "C" | "D" I.D. | | Orifice (2x 's) | Effective Volume |
|-----------|-------------|------|-------|------|----------|--------|-----------------|----------------------|
| | | | | | Inlet | Outlet | | |
| 070332-00 | P3060-11-6C | 2.25 | 11.00 | 3.00 | 3/4 | 3/4 | 0.060 typ. | 41.5 in ³ |
| 070333-00 | P3060-13-7C | 2.25 | 13.00 | 3.00 | 7/8 | 7/8 | 0.060 typ. | 50.0 in ³ |
| 070342-00 | P3060-13-7C | 2.25 | 13.00 | 3.00 | 7/8 | 7/8 | 0.035 typ. | 50.0 in ³ |

Inlet fitting/connection available on top. Contact Parker.

Copper Accumulators

Copper accumulators are used extensively in low temperature refrigeration systems, heat pump applications, and in some residential air conditioning systems. Copper accumulators can be designed with a standpipe with an orifice to meter liquid oil and refrigerant return to the compressor or without. If the accumulator is used on a system utilizing a rotary compressor, the accumulator should include a standpipe with an orifice and a full diameter filter screen.

Parker copper accumulators come in diameters ranging from 1-1/8" to 2-1/4". The size and design of a copper accumulator is based on several factors:

- Compressor type and design.
- System charge or volume.
- System metering device.
- System operating pressure.

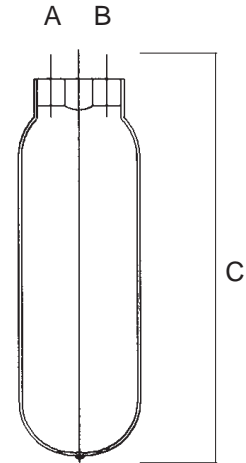
The design of a copper accumulator is different for every compressor application. Parker Engineering can offer assistance with customer specific design requirements. Parker copper accumulators are U.L. and CSA recognized.

1-1/8" Copper Accumulator

| Part No. | Design Working Pressure PSIG | Standard Nominal Sizes (Inches) | | Overall Length Inches (C) | Internal Volume (Cu. In.) |
|-----------|------------------------------|---------------------------------|------------|---------------------------|---------------------------|
| | | Inlet (A) | Outlet (B) | | |
| 032185-00 | 500 | 3/8 | 1/4 | 8.25 | 1.97 |

1-3/16" Copper Accumulator

| Part No. | Design Working Pressure PSIG | Standard Nominal Sizes (Inches) | | Overall Length Inches (C) | Internal Volume (Cu. In.) |
|-----------|------------------------------|---------------------------------|------------|---------------------------|---------------------------|
| | | Inlet (A) | Outlet (B) | | |
| 056268-00 | 400 | 3/8 | 3/8 | 5 | 4.41 |
| 051639-03 | 400 | 3/8 | 3/8 | 6.5 | 5.88 |
| 056039-01 | 400 | 3/8 | 5/16 | 6.5 | 5.88 |
| 056039-02 | 400 | 5/16 | 5/16 | 6.5 | 5.88 |



1-3/8" Copper Accumulator

| Part No. | Design Working Pressure PSIG | Standard Nominal Sizes (Inches) | | Overall Length Inches (C) | Internal Volume (Cu. In.) |
|-----------|------------------------------|---------------------------------|------------|---------------------------|---------------------------|
| | | Inlet (A) | Outlet (B) | | |
| 057375-00 | 300 | 3/8 | 3/8 | 7.06 | 2.77 |
| 056380-01 | 300 | 3/8 | 3/8 | 6 | 6.86 |

1-5/8" Copper Accumulator

| Part No. | Design Working Pressure PSIG | Standard Nominal Sizes (Inches) | | Overall Length Inches (C) | Internal Volume (Cu. In.) |
|-----------|------------------------------|---------------------------------|------------|---------------------------|---------------------------|
| | | Inlet (A) | Outlet (B) | | |
| 056238-01 | 400 | 5/16 | 1/4 | 4 | 6.54 |
| 056689-02 | 400 | 3/8 | 3/8 | 4 | 6.54 |
| 057337-00 | 400 | 1/2 | 1/2 | 5 | 8.40 |
| 057302-00 | 400 | 5/16 | 5/16 | 5.13 | 8.65 |
| 057203-00 | 400 | 1/2 | 5/8 | 6 | 10.27 |
| 057995-00 | 500 | 3/8 | 3/8 | 5.5 | 2.61 |
| 056326-02 | 400 | 1/4 | 1/4 | 7 | 12.14 |
| 056472-01 | 400 | 3/8 | 3/8 | 8 | 14.00 |
| 056463-01 | 400 | 1/2 | 1/2 | 10 | 17.74 |
| 056463-02 | 400 | 3/8 | 3/8 | 10 | 17.74 |



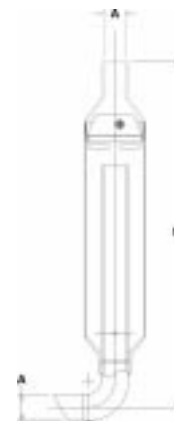
2-1/4" Copper Accumulator

| Parker Part No. | Design Working Pressure PSIG | Standard Nominal Sizes (Inches) | | Overall Length Inches (C) | Internal Volume (Cu. In.) |
|-----------------|------------------------------|---------------------------------|------------|---------------------------|---------------------------|
| | | Inlet (A) | Outlet (B) | | |
| 032237-00 | 325 | 5/8 | 5/8 | 7.81 | 7.41 |

Copper Tube Accumulators

1-1/8" Copper Stand Pipe Accumulator

| Part No. | Design Working Pressure PSIG | Standard Nominal Sizes (Inches) | | Overall Length Inches (C) | Internal Volume (Cu. In.) |
|-----------|------------------------------|---------------------------------|------------|---------------------------|---------------------------|
| | | Inlet (A) | Outlet (B) | | |
| 032014-00 | 325 | 3/8 | 0.477 | 6.44 | 2.48 |
| 071440-00 | 325 | 1/2 | 0.589 | 7.25 | 2.14 |



1-7/8" Copper Stand Pipe Accumulator

| Part No. | Design Working Pressure PSIG | Standard Nominal Sizes (Inches) | | Overall Length Inches (C) | Internal Volume (Cu. In.) |
|-----------|------------------------------|---------------------------------|------------|---------------------------|---------------------------|
| | | Inlet (A) | Outlet (B) | | |
| 071442-00 | 325 | 3/8 | 3/8 | 10.2 | 14.98 |



2-1/4" Copper Stand Pipe Accumulator

| Part No. | Design Working Pressure PSIG | Standard Nominal Sizes (Inches) | | Overall Length Inches (C) | Internal Volume (Cu. In.) |
|-----------|------------------------------|---------------------------------|------------|---------------------------|---------------------------|
| | | Inlet (A) | Outlet (B) | | |
| 032236-00 | 325 | 1/2 | 0.616 | 8.19 | 14.87 |

