

ACK Check Valve

For All Commercial AC & Refrigeration Applications

The Emerson® ACK Check Valve



Product Overview

- Magnetic Checking Action
- Near Zero Internal Leak Rate
- Hermetic Construction
- 1/4" through 2-5/8" Connections
- Built-in 30 Mesh Stainless Steel Strainer
- UL/CUL Approved (File # SA 5312)
- Can Be Installed in Any Position
- Installs with Hard or Soft Solder
- Drop-in Dimensions for Competitive Models



Applications

- Compressor Discharge Lines
 - Prevents flow from condenser to compressor during off-cycle
 - Prevents flow from operating compressor to idled compressor
- Liquid Lines
 - Prevents reverse flow through unused metering device on heat pump
 - Prevents backup in low pressure line of recirculating system during defrost

| Feature | Function | Benefit |
|--------------------------------------|--------------------------------|-----------------------------|
| Hermetic design | Provides a permanent seal | Will not leak |
| 100% copper construction | Improves system connection | Easier brazability |
| Identical lay-in to competition | Simplifies system installation | Interchangeability |
| 30 mesh stainless steel inlet screen | Captures system debris | Seat surface protection |
| Magnetic actuation | Closes valve securely | Operational in any position |

Ordering Information

| PCN | Description | Connection Size | A (in.) | B (in.) | C (in.) | D (in.) | Opening Pressure (oz./sq. in.) | MWP (psig) | Leak Rate CIM @ 60 psi | Nominal Tons R-22 Suction 40°F @ 1 psi | Nominal Tons R-22 Liquid 40°F @ 1 psi |
|--------|-------------|-----------------|---------|---------|--------------|---------|--------------------------------|------------|------------------------|--|---------------------------------------|
| 064985 | ACK-4 | 1/4 ODF | 4 | 7/8 | .254 ± .002 | 0.19 | 1.2 | 800 | 0.015 | 0.4 | 2.6 |
| 064986 | ACK-6 | 3/8 ODF | 4 | 7/8 | .379 ± .002 | 0.40 | 1.3 | 800 | 0.015 | 0.6 | 3.1 |
| 064987 | ACK-8 | 1/2 ODF | 5 | 1-1/8 | .504 ± .002 | 0.31 | 3.5 | 680 | 0.034 | 1.2 | 9.4 |
| 064988 | ACK-10 | 5/8 ODF | 5 | 1-1/8 | .629 ± .002 | 0.50 | 3.5 | 680 | 0.034 | 1.4 | 13 |
| 064989 | ACK-12 | 3/4 ODF | 7 | 1-5/8 | .754 ± .002 | 0.63 | 3.8 | 680 | 0.074 | 3.3 | 27 |
| 064990 | ACK-14 | 7/8 ODF | 7 | 1-5/8 | .879 ± .003 | 0.75 | 3.8 | 680 | 0.074 | 3.7 | 29 |
| 064991 | ACK-18 | 1-1/8 ODF | 8-3/8 | 2-1/8 | 1.130 ± .003 | 0.94 | 6.8 | 680 | 0.122 | 6.0 | 51 |
| 064992 | ACK-22 | 1-3/8 ODF | 9-3/8 | 2-5/8 | 1.380 ± .003 | 1.04 | 10.2 | 680 | 0.172 | 9.5 | 79 |
| 064993 | ACK-26 | 1-5/8 ODF | 10-1/2 | 3-1/8 | 1.630 ± .003 | 1.07 | 11.4 | 680 | 0.272 | 17.0 | 102 |
| 064994 | ACK-34 | 2-1/8 ODF | 12 | 3-5/8 | 2.130 ± .003 | 1.34 | 18.1 | 680 | 0.386 | 30.0 | 213 |
| 064995 | ACK-42 | 2-5/8 ODF | 13 | 4-1/8 | 2.630 ± .003 | 1.50 | 23.0 | 680 | 0.512 | 50.0 | 375 |

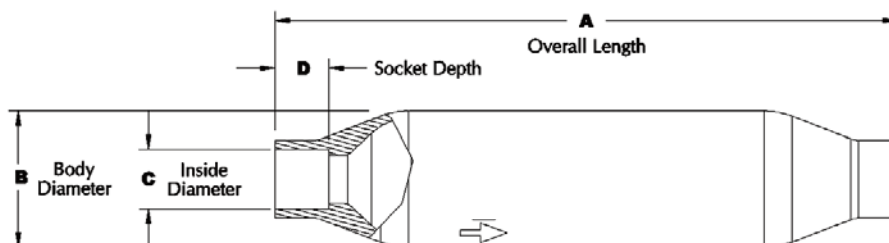
Cross Reference

| Emerson | A-1 Components | Superior |
|---------|----------------|----------|
| ACK-4 | MS-4 | 900M-4S |
| ACK-6 | MS-6 | 900M-6S |
| ACK-8 | MS-8 | 900M-8S |
| ACK-10 | MS-10 | 900M-10S |
| ACK-12 | MS-12 | 900M-12S |
| ACK-14 | MS-14 | 900M-14S |
| ACK-18 | MS-18 | N/A |
| ACK-22 | MS-22 | N/A |
| ACK-26 | MS-26 | N/A |
| ACK-34 | MS-34 | N/A |
| ACK-42 | MS-42 | N/A |

Nomenclature

| A | CK | 4 |
|--------|-------------|----------------------------|
| Series | Check Valve | Copper ODF Connection Size |

Dimensional Drawing



About Emerson Climate Technologies - Flow Controls division

Emerson Climate Technologies - Flow Controls division is a leading manufacturer of valves, controls and system protectors commonly applied in air conditioning and refrigeration systems worldwide. The company continues to pioneer the control of refrigerant flow through innovative, high performance components, such as thermostatic expansion valves and filter driers. Emerson Climate Technologies - Flow Controls division is headquartered in St. Louis. For more information, visit Emersonflowcontrols.com.

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