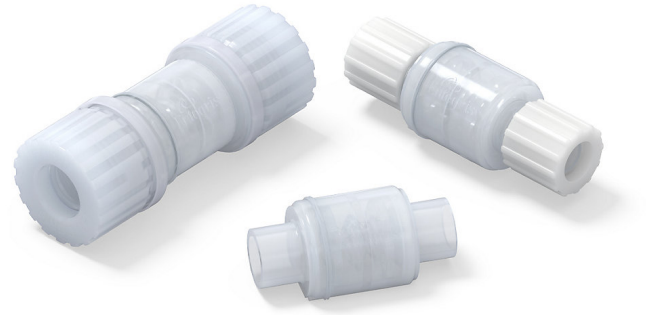


Galtek® Check Valves, 3/4" Orifice, O-ring Free Design

Excel in bulk chemical distribution, chemical dispense, and wet process applications



Corrosion-resistant Galtek® check valves reduce contamination potential in your high-purity chemical applications and provide clean delivery of sophisticated chemicals. An O-ring-free design provides a simple, clean, compact valve with a high flow rate and increased reliability. We offer a full range of 3/4" orifice check valves with a variety of industry standard end connections including PrimeLock®, Flaretek®, and PureBond®.

Provide clean delivery of sophisticated chemicals.

APPLICATIONS

- Bulk chemical distribution
- Wet processing
- Chemical dispensing

FEATURES & BENEFITS

| | |
|--|---|
| O-ring free design | Reduces potential contamination |
| Simple, clean, compact valve | Provides high flow chemical delivery |
| All wetted parts are molded PFA and machined PTFE | Provides corrosion resistance and a cleaner overall process |
| No metal parts | Will not corrode or contribute to contamination |
| Poppet design | Allows a high flow through rate and maximizes rinsability |

SPECIFICATIONS

| | |
|------------------------------------|---|
| Pressure range | 100 psig (690 kPa) up to 150°F (65°C) To calculate the maximum pressure rating, subtract 1 psig (6.9 kPa) from 100 psig (690 kPa) for every 1°F/0.5°C temperature rise above 150°F (65°C). |
| Temperature range | 0° to 212°F (-18° to 100°C) |
| Cracking pressure (opening) | Minimum of 1 psig (6.9 kPa) to achieve full open |
| Sealing pressure (closing) | Minimum of 5 psig (34.5 kPa) back pressure |
| Materials | All wetted parts, including the spring are molded PFA and PTFE |

Valve Reliability Test Results

Valve Qualification Testing

Extensive qualification testing ensures products meet all design requirements for use in even the most demanding environments. Whenever possible, this testing is carried out in actual or simulated customer-use conditions.

Burst Pressure – quantifies the maximum pressure the valve can safely contain media, providing confidence in the product design.

| Test conditions | | Acceptance criteria | Test results |
|-----------------|---|--|--------------|
| Burst test | Hydraulic oil pressure increased until leakage detected; test performed @ 23°C (73°F) | Burst pressure must be >3 times rated pressure | PASS |

Safety Pressure – determines the duration the valve can safely operate under pressure, assuring long-term product performance and safety.

| | Test conditions | Acceptance criteria | Test results |
|----------------------------------|-------------------------------------|--|--------------|
| Pressure envelope cyclic testing | 1034 kPa (150 psig) @ 23°C (73°F) | No external media leakage for 1 million cycles @ 1.5 times rated pressure applied to each media port | PASS |
| Pressure envelope cyclic testing | 1034 kPa (150 psig) @ 100°C (212°F) | No external media leakage for 1 million cycles @ 1.5 times rated pressure applied to each media port | PASS |

Accelerated Life Cycle – determines how many cycles the valve can perform reliably and safely in various process environments, including high temperatures, vacuum conditions, and with corrosive chemicals.

| | Test conditions | Acceptance criteria | Test results |
|--------------------------|---------------------------------------|---|--------------|
| Accuation cyclic testing | 275 kPa (40 psig) water @ 23°C (73°F) | No external media leakage. Port-to-port seal <0.05 cc H ₂ O/hr for over 1.0 million cycles | PASS |

Production Performance Evaluation

One hundred percent of 3/4" check valves undergo manufacturing performance testing and validation to assure product performance, functionality, and safety – before the product ever arrives on site.

| Test | Test conditions | Acceptance criteria |
|-------------------------|------------------------|---|
| External media seal | 689 kPa (100 psig) CDA | Zero bubbles per minute through 1/32" ID tube immersed in water |
| Port-to-port valve seal | 34 kPa (5 psig) CDA | <4 bubbles per minute through 1/32" ID tube immersed in water |

SPECIFICATIONS

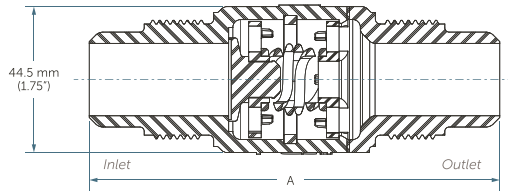
Minimum cracking pressure

7 kPa (1 psig) CDA

Valve must open and allow flow

DIMENSIONS

Molded 3/4" Check Valve



| Part Number | Flow Factor | Inlet | Outlet | Dimension A |
|----------------|--|-----------------------------|----------------------------|------------------|
| CKM12-12F-12F* | 6.1 C _v (87.1 K _v) | 3/4" Flaretek® | 3/4" Flaretek | 4.45" (113.0 mm) |
| CKM12-12F-12P* | 6.1 C _v (87.1 K _v) | 3/4" Flaretek | 3/4" PureBond fusible pipe | 3.95" (100.3 mm) |
| CKM12-12K-12K | 6.1 C _v (87.1 K _v) | 3/4" PrimeLock® | 3/4" PrimeLock | 4.46" (113.3 mm) |
| CKM12-12K-12P | 6.1 C _v (87.1 K _v) | 3/4" PrimeLock | 3/4" PureBond fusible pipe | 3.95" (100.3 mm) |
| CKM12-12P-12P | 7.9 C _v (112.8 K _v) | 3/4" PureBond® fusible pipe | 3/4" PureBond fusible pipe | 3.44" (87.4 mm) |
| CKM12-16F-12P* | 7.9 C _v (112.8 K _v) | 1" Flaretek | 3/4" PureBond fusible pipe | 4.19" (106.4 mm) |
| CKM12-16F-16F* | 8.7 C _v (124.2 K _v) | 1" Flaretek | 1" Flaretek | 4.93" (125.2 mm) |
| CKM12-16K-12P | 7.9 C _v (112.8 K _v) | 1" PrimeLock | 1" PureBond fusible pipe | 4.13" (104.9 mm) |
| CKM12-16K-16K | 8.7 C _v (124.2 K _v) | 1" PrimeLock | 1" PrimeLock | 4.82" (122.4 mm) |

*Dimensions for PVDF, -3 (PFA), -6 (CPFA), and -II (FlareLock II) nuts

ORDERING INFORMATION

| PART NUMBER | INLET | OUTLET | NUT OPTION |
|------------------|----------------|---------------------|-----------------------|
| CKM12-12F-12F | 3/4" Flaretek® | 3/4" Flaretek® | PVDF Flaretek® nut |
| CKM12-12F-12F-3 | 3/4" Flaretek® | 3/4" Flaretek® | PFA Flaretek® nut |
| CKM12-12F-12F-6 | 3/4" Flaretek® | 3/4" Flaretek® | CPFA Flaretek® nut |
| CKM12-12F-12F-II | 3/4" Flaretek® | 3/4" Flaretek® | PFA FlareLock® II nut |
| CKM12-12F-12P | 3/4" Flaretek® | 3/4" PureBond® pipe | PVDF Flaretek® nut |
| CKM12-12F-12P-3 | 3/4" Flaretek® | 3/4" PureBond® pipe | PFA Flaretek® nut |
| CKM12-12F-12P-6 | 3/4" Flaretek® | 3/4" PureBond® pipe | CPFA Flaretek® nut |

ORDERING INFORMATION

| PART NUMBER | INLET | OUTLET | NUT OPTION |
|------------------|---------------------|---------------------|-----------------------|
| CKM12-12F-12P-II | 3/4" Flaretek® | 3/4" PureBond® pipe | PFA FlareLock® II nut |
| CKM12-12K-12K | 3/4" PrimeLock® | 3/4" PrimeLock® | PFA PrimeLock® nut |
| CKM12-12K-12P | 3/4" PrimeLock® | 3/4" PureBond® pipe | PFA PrimeLock® nut |
| CKM12-12P-12P | 3/4" PureBond® pipe | 3/4" PureBond® pipe | N/A |
| CKM12-16F-12P | 1" Flaretek® | 1" PureBond® pipe | PVDF Flaretek® nut |
| CKM12-16F-12P-3 | 1" Flaretek® | 1" PureBond® pipe | PFA Flaretek® nut |
| CKM12-16F-12P-6 | 1" Flaretek® | 1" PureBond® pipe | CPFA Flaretek® nut |
| CKM12-16F-12P-II | 1" Flaretek® | 1" PureBond® pipe | PFA FlareLock® II nut |
| CKM12-16F-16F | 1" Flaretek® | 1" Flaretek® | PVDF Flaretek® nut |
| CKM12-16F-16F-3 | 1" Flaretek® | 1" Flaretek® | PFA Flaretek® nut |
| CKM12-16F-16F-6 | 1" Flaretek® | 1" Flaretek® | CPFA Flaretek® nut |
| CKM12-16F-16F-II | 1" Flaretek® | 1" Flaretek® | PFA FlareLock® II nut |
| CKM12-16K-12P | 1" PrimeLock® | 3/4" PureBond® pipe | PFA PrimeLock® nut |
| CKM12-16K-16K | 1" PrimeLock® | 1" PrimeLock® | PFA PrimeLock® nut |

FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you. Visit [entegris.com](https://www.entegris.com) and select the [Contact Us](#) link to find the customer service center nearest you.

TERMS AND CONDITIONS OF SALE

All purchases are subject to Entegris' Terms and Conditions of Sale. To view and print this information, visit [entegris.com](https://www.entegris.com) and select the [Terms & Conditions](#) link in the footer.



Corporate Headquarters
129 Concord
Billerica, MA 01821
USA

Customer Service
Tel +1 952 556 4181
Fax +1 952 556 8022
Toll Free 800 394 4083

Entegris®, the Entegris Rings Design®, and other product names are trademarks of Entegris, Inc. as listed on [entegris.com/trademarks](https://www.entegris.com/trademarks). All third-party product names, logos, and company names are trademarks or registered trademarks of their respective owners. Use of them does not imply any affiliation, sponsorship, or endorsement by the trademark owner.

©2022 Entegris, Inc. | All rights reserved. | Printed in the USA | 3210-11676ENT-0122