KF Industries Product Summary



Superior Fluid Control Products
A Brand of CIRCOR Energy Products, Inc.



Contents

Circor Energy Products, Inc.,
a leading Global manufacturer of
gas & oil pressure control
products. Applications range from
the Wellhead to the Pipeline both

KF Industries is a Brand of

onshore and offshore.

Products produced include ball,
check, gate, globe, needle,
butterfly valves and

pipeline closures.

Markets Served include

Oil & Gas, Petrochemical,

Power Generation and Industrial.

Ball Valves • Floating
Threaded, Grooved & Socket weld
Series A, AH, C, CH, CXH, CA, CAH, CB, CBH, E, EH & EC4
Commodity Ball Valves
Series HC-730, 740 & 710, HS-810 & 820 & HB-6005
Threaded Bolted Body
Series AF, AFH, CF, CFH & CFXH5
Threaded End, Series B, BH & W6
Flanged End, Series F
Ball Valves • Trunnion Mounted, Flanged
Top Entry, Series T7
Three-Piece, Series P37
Two-Piece, Series FA7
Check Valves
Wafer, Threaded, Flanged, Piston & Ball
Needle Valves
Packed & O-Ring Style9
Isolator Valves
Threaded & Flanged Series AIV9
Butterfly Valves
Wafer & Lug Series BG, One-Piece Series 220010
Specialty Ball Valves
Series K1 & K3 Ball Valves11
Gate, Globe & Check Valves
Rubber Seated Gate Valves, Series TG11
Forged & Cast Steel Gate, Globe & Check Valves11
Closures (Pipeline)
Series TC11

When quality counts, Specify KF Industries.



Our Quality Commitment

We're dedicated to providing our

customers with technically

superior products that are

designed, manufactured, and

tested to the exacting standards

of various qualifying authorities.

Other additional non-destructive

or destructive examination may

be performed to customer

requirements or specifications.

Please contact KF Industries

for additional information

and clarification.

Ask your KF Representative about our complete line of technically superior flow control products.

Specifications Conformance

KF valves are designed, manufactured and tested in accordance with API, ANSI and ASME requirements. The following list contains the most important applicable standards. KF valves may be produced in accordance with other standards on request.

ANSI-American National Standard Institute

B 1.20.1 Pipe threads, general purpose.

B 16.5 Steel pipe flanges and flanged fittings.

B 16.10 Face-to-face and end-to-end dimensions of ferrous valves.

B 16.25 Butt welding ends.

B 16.34 Steel valves-flanged and butt welding ends.

API-American Petroleum Institute

Spec. 6A Specification for wellhead valves.

Spec. 6D Specification for pipeline valves.

Spec. 6FA Specification for fire testing of valves.

Std. 607 Fire test for soft seated quarter-turn valves.

Spec. Q1 Quality program.

Spec. 5B EUE External upset tubing threads.

ISO 9001-International Organization for Standardization

ISO 9001 Quality systems-model for quality assurance in design, development, production, installation and servicing.

ISO 15156 Materials for use in H2S containing environments in

oil & gas production.

MSS-Manufacturers Standardization Society

SP 6 Standard finishes for contact faces of pipe flanges and

connecting-end flanges of valves and fittings.

SP 25 Standard marking system for valves, fittings, flanges

and unions.

SP 55 Quality standard for steel castings.

NACE-National Association of Corrosion Engineers

MR0175 Sulfide stress cracking resistant metallic materials for oilfield equipment.

KF Industries reserves the right to change designs, materials or specifications without notice or without obligation to furnish or install such changes on products previously or subsequently sold.



KF Threaded & Grooved-End Floating Ball Valves

Features

- Full & Reduced Port
- Threaded & Grooved End Connections
- External Grease Fitting For Stem Journal Lubrication
- Weather Seal (Stem)
- Firesafe API 607 4th Edition

Series A & AH

Ductile Iron Body Series A-1"FP-4"RP, 1000-1500 psi Series AH-1"FP-3"RP, 1500-2000 psi

- Blowout Proof Stem Design
- Heavy Duty Flatted Stem Design
- Metal-To-Metal Firesafe Sealing
- Integral Locking Device
- Manual Operation Handle

Optional Features

- AntiStatic Device
- Actuation & Square Nut Assemblies
- Enduro-Bond™ Coating For Corrosion Resistance
- Valves Specified with Stainless Steel Trim Meet NACE MR0175
- Anti-Freeze Design*
- *Available upon request.



Series C, CH & CXH

Carbon or Stainless Steel Body Series C-1"FP-4"FP, 1000-2500 psi Series CH-1"FP-4"FP, 2000-3000 psi Series CXH-1"FP-2"RP, 5000 psi

Series CA & CAH

Carbon Steel Body, 2³/8 EUE X 2¹/16 Bore & 2⁷/8 EUE X 2⁹/16 Bore Series CA - 1000 - 2000 psi Series CAH - 3000 psi

Series C

Series CB & CBH

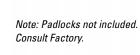
Nickel Aluminum Bronze Body 1"FP-2"FP Series CB-1000-2500 psi Series CBH - 3000 psi



Series E, EH & EC

Series E-Ductile Iron Body, 2"RP-4"RP, 750 CWP Series EH-Ductile Iron Body, 2"RP-4"RP, 1000 CWP Series EC-Stainless Steel Body, 2"RP-3"RP, 750 PSI







KF Commodity Ball Valves

Series HC-730, 740 & 710, Features HS-810 & 820 & HB-600

HC-730 - Carbon Steel Unibody, ¹/₂" - 2", 1500 - 2000 CWP HC-740 - Carbon Steel Two-Piece, ¹/₄" - 2", 1500 - 2000 CWP HC-710/HS-810 - Carbon & Stainless Steel Unibody, 1/4" - 2", 2000 CWP HS-820 - Stainless Steel Seal Welded Two-Piece, ¹/₄" - 2", 2000 CWP HB-600-Bronze Two-Piece ¹/₄" - 4", 400-600 CWP

- Two-Piece & Unibody, Cast, Investment Cast & Bar Stock Body
- Designed For Hydraulic Hook-Ups, Offshore Applications, Well Heads, Production Lines, Petroleum & **Chemical Plant Applications**
- Chrome Plate Ball
- Reinforced PTFE Seats
- Blowout Proof Stem
- Optional Locking Device



KF Floating Threaded Bolted Body Ball Valves

Features

- Full & Reduced Port
- Threaded End Connections
- Bolted Body Adapter Connection
- External Grease Fitting For **Stem Journal Lubrication**
- Weather Seal (Stem)
- Firesafe API 607 4th Edition

- Blowout Proof Stem Design
- Heavy Duty Flatted Stem Design
- Metal-To-Metal Firesafe Sealing
- Integral Locking Device
- Manual Operation Handle

Optional Features

- Antistatic Device
- Actuation & Square Nut Assemblies
- Enduro-Bond™ Coating For Corrosion Resistance
- Valves Specified With Stainless Steel Trim Meet NACE MR0175

Series AF & AFH

Ductile Iron Body Series AF - 2"RP - 4"RP, 1000-1500 psi Series AFH - 2"RP - 3"RP, 2000 psi





Series CF, CFH & CFXH

Carbon Steel Body Series CF - 2"RP - 4"FP, 1500 - 2500 psi Series CFH - 2"RP - 4"FP, 3000 psi Series CFXH - 2"RP & 2"FP, 5000 psi



KF Threaded End Floating Ball Valves

Features

- Full & Reduced Port
- Threaded End Connections
- Weather Seal (Stem)
- Blowout Proof Stem Design
- Heavy Duty Flatted Stem Design
- Metal-To-Metal Firesafe Sealing
- Manual Operation Handle

Optional Features

- Antistatic Device
- Actuation & Square Nut Assemblies
- Enduro-Bond™ Coating For Corrosion Resistance
- Valves Specified With Stainless Steel Trim Meet NACE MR0175

Series B & BH • 3-Piece Design

Carbon, Stainless or Low Temp Carbon Steel Body Series B - 1/4"FP - 2"RP, 2250 - 3000 psi Series BH - 1/4"FP - 1"FP, 5000 psi



Series W

Carbon or Stainless Steel Body ¹/₄"FP - 2"RP, 1500 - 2000 CWP



KF Flanged End Floating Ball Valves

Features

- NACE MR0175 (ISO 15156) (SS Ball/Stem Configuration)
- Weather Seal (Class 600 & Higher)
- Actuator Mounting Pad (4 Bolt Machined)
- API 6D Monogrammed, API 607 4th Edition* (0-Ring & Graphite)
- · Secondary Metal-to-Metal Sealing
- Full Rated Bi-Directional Dead End Service
- Antistatic Device
- Lockable Handle
- O-Ring Design (Std.)
- Graphite Or Teflon® Packing (Optional For Class 150 & 300)

*Not applicable to Teflon® packed.

Series F

Carbon, Stainless or Low Temp Carbon Steel Body 1"FP-12"RP, Class 150, 300, 600, 900 & 1500





KF Trunnion Supported Ball Valves

Features

- Double Block & Bleed
- Blowout Proof Stem Design
- Corrosion Resistant Low Friction Bearings
- Inconel Wave Springs Assist In Low Pressure Sealing
- Firesafe Trim
- 3 mil ENP Ball, Stem & Seat Carriers
- Stainless Steel Injection Fittings For Emergency Stem Or Seat Sealant & Lubrication Maintenance
- Minimized Torque Required To Open & Close Valve
- Antistatic Grounding Between Ball, Stem & Body
- NACE MR0175 (ISO 15156)

- Integral Topworks Direct Mounting Pad
- 8" & Larger Valves Are Equipped With Lifting Lugs
- Bi-Directional



Series T Top Entry (Inline Repairable)

Top Entry One-Piece Carbon Steel, Low Temp Carbon Steel or Stainless Steel Body 2"FP-16"FP, Class 600 2"FP-12"FP, Class 900, 1500 & 2500 2¹/₁₆"FP-7¹/₁₆"FP, API 2000, 3000 & 5000

Series P3 · 3-Piece Design

Three-Piece Carbon Steel, Low Temp Carbon Steel or Stainless Steel Body 14"FP-24"FP, Class 150 & 300 2"FP-36"FP, Class 600 2"FP-24"FP, Class 900 2"FP-12"FP, Class 1500 & 2500



Series FA • 2-Piece Design

Two-Piece Carbon Steel, Low Temp Carbon Steel or Stainless Steel Body 2"FP-14"RP, Class 150 & 300





KF Check Valves

Features

- Long Pattern
- Short Pattern
- Single Disc
- Internal Spring Assist
- No Spring Assist
- External Spring Assist
- Air Cushion

Specifications

ANSI B16.34 & B16.5 API 6D (Monogrammed) API 607 4th Edition API 594, 6A & 6FD

Certified

CE Mark (Optional) NACE MR0175 ISO 15156



Series 10 & 10S

2"-72", ANSI Class 150, 300, 600, 900, 500 & 2500, API 2000, 3000 & 5000 Wafer Long Pattern Single Disc, Internal Spring Assist NACE MR0175 (ISO 15156) & CE Mark

Series 12

2"-24", ANSI Class 150, 300, 600 & 900 Wafer Short Pattern Single Disc , No Spring Assist



Series 12

Series 18

4"-12", ANSI Class 125 & 150 Wafer Style, External Spring Assist w/Back Flush Lever ANSI B16.1 & B16.5



Series 18

Series 20

Series 20 & 22

2"-72", ANSI Class 125 & 150 Wafer Semi-Lug Single Disc External Spring Assist, Air Cushion (Series 22 only) ANSI B16.1 & B16.47



1"- 4", MOP 300, 750, 2200, 3000 & 5000 psi Threaded and Grooved Ends, Single Disc, No Spring Assist NACE MR0175 (ISO 15156)



Series 31



KF Check Valves (cont.)

Series 35

2"-24", ANSI Class 150, 300, 600, 900, 1500 & 2500, API 2000, 3000 & 5000 Flanged End, Weld-End, Long Pattern, Single Disc, Internal Spring Assist, No Spring Assist

ANSI B16.34, API 6A, 6D (Monogrammed), 594 & API 607 4th Edition,

CE Mark, NACE MR0175



Series 50

2"-8", ANSI Class 300, 600 & 900 Spring Assisted Closure, Precisely Metered Piston Orifice ANSI B16.34 & B16.5



Series 50

KF Needle & Isolator Valves

Features

Packed Bonnet Style

- Available In Hard & Soft Seat For Pressures Up To 10,000 psi.
- Stainless Steel Stem & Teflon® Or Grafoil® Packing
- Optional Graphoil® Packing For Temperatures Up To 1000°F
- NACE Conformance Available

O-Ring Style

- Accurate Regulation At Pressures Up To 6000 psi For Soft Seat & 10,000 psi For Metal Seat.
- Temperature Limit 400°F
- NACE Conformance Available

Packed Bonnet & O-Ring Style Needle Valves

Carbon or Stainless Steel Body Packed Bonnet - 1/4" - 1" NPT, Up to 10,000 psi O-Ring - 1/4" - 1/2" NPT, Soft Seated, Up to 6000 psi,

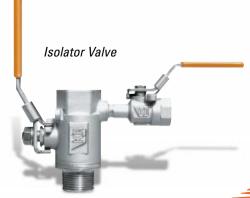


Features

- Enables Isolation Of The Safety Relief Carbon or Stainless Steel Body Valve From The Pressure Source For **Relieving Set Point Verification** Without Shutdown Or Removal
- Latch-Lock Handles On Isolator & Test Port Valve
- Seal Welded Body & Test Port Valve

KF-AIV Isolator Valves

1"-2" NPT, 1500-5000 psi 1"-6" ANSI Flanged, 150-1500 psi



KF Butterfly Valves

Features

- Installs Between ANSI 125 Or 150 Flanges
- PTFE Bushings 2"-12"
- Bronze Bushings 14"-36"
- Lugged Style Valves Suitable For Bi-Directional Dead End Service At Full Rated Pressure
- Seats Available In Buna N & Viton® A
- One-Piece Shaft Through 24"
- Direct Mount Topworks (2"-10")
- 29" HG Vacuum Rating



Specifications

MSS SP-67

API 609

Series BG

2"-36", Wafer or Lug Ductile Iron Body 2"-12", 200 PSI 14"-36", 150 PSI

Features

- Lockable Handle, Easily Locked In Full Open Or Full Closed Position
- Maximum Size Stem Diameter Offers Greater Strength & Increases the Life Of The Valve
- Standard Polished Bronze Disc With Replaceable Buna N O-Ring

Series 2200

One-Piece Cast Iron Body (Electro Plated Nickel) 2"-6", 200 WOG

- Optional Fluoroelastomer O-Ring Material Is Available.
- Disc & Stem O-Rings Are Easily Replaced In The Field
- One-Piece Cast Iron, Nickel Plated **Body For Corrosion Resistance**
- Trim For Salt Water Is Available





KF Specialty Ball Valves

Features

- NACE MR0175
- Mounting Pad For Automation
- Locking Handle

Series K1

One-Piece Stainless Steel Investment Cast Body 1/4"-2" NPT, 2000 psi

Series K3

Rugged Three-Piece Forged Steel Design 1/4"-2" NPT

3000 & 6000 psi, A105 & A350-LF2 Material



TOP FLOW Rubber Seated Gate Valve

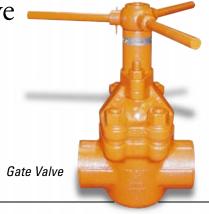
Features

• Engineered & Manufactured For Severe Oilfield Applications **Including Well Treating & Frac** Service, High Pressure Mud Mixing Lines, Production Manifolds & Standpipe Manifolds

Easy To Replace Seats For Positive Sealing

Series TG

Carbon Steel Body 4" ANSI 400 & API 3000



KF Gate, Globe & Check Valves

Forged Steel-In a wide range of steel materials including ASTM A105N, A350-LF2, A182-F11-F5-F304-F316 & F316L 1/4" - 2", ANSI Class 800 - 2500

Cast Steel - In a wide range of steel materials including ASTM A216-WCB, A352-LCC, A217-C5 & A351-CF8M 2" - 48", ANSI Class 150 - 2500





TOP FLOW Quick Opening Closures

Features

- Manufactured to ASME BPVC Section VIII Div 1 Specifications
- Each Closure Utilizes a Standard **O-Ring Size**

Series TC

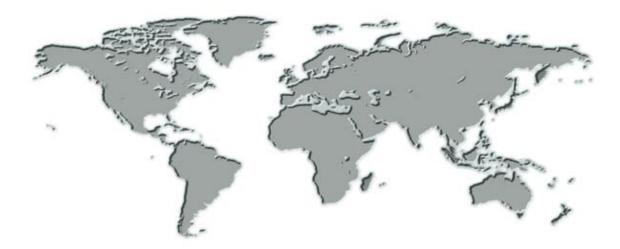
Low Temp Carbon Steel Body 2"- 12", ASME 275-2160 psi

- Provides Quick Access To Piping System Interiors
- Can Be Custom Manufactured To Suit Any Application In Vertical, Horizontal Or Angled Installations





Worldwide Sales Offices



KF Industries, a leading brand of CIRCOR Energy Products, Inc. reaches into every corner of the globe serving the oil & gas and industrial marketplace. Supplying an extensive range of product offerings through a worldwide network of manufacturer representatives and distributors, KF Industries is the right choice for all your flow control needs.

World Headquarters

KF Industries 1500 S.E. 89th Street Oklahoma City, OK 73149 USA

Phone: (405) 631-1533 Fax: (405) 631-5034

E-mail: sales@circorenergy.com www.circorenergy.com

US Industrial

KF Contromatics Industrial Products 1500 S.E. 89th Street Oklahoma City, OK 73149 USA Phone: (405) 631-1533 Fax: (405) 631-5034

E-mail: sales@circorenergy.com www.circorenergy.com

Canada

KF Industries Canada 9430-39th Avenue, Edmonton Alberta, Canada T6E 5T9 Phone: (780) 463-8633 Fax: (780) 461-1588 E-mail: kfinfo@circorenergy.com www.circorenergy.com





Registered to the ISO 9001 Quality System Standard, accredited by U.K., Dutch and German qualifying authorities.





www.circorenergy.com