

# SPRING-LOADED CHECK VALVES















FP Series (PTFE)

#### **FLANGE INSERT**

- · Installs between ANSI flanges<sup>1</sup>
- · B16.34 certification and marking available on most modles

SERIES	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>	PIPE SCHEDULE
F1 Series	1/2" - 20"	Alloys & Superalloys	Class 150 & 300	Sch. 40 Metal
F6 Series	1/2" - 4"	Alloys & Superalloys	Class 150, 300 & 600	Sch. 80 Metal
FP Series	1/2" - 6"	PTFE & PVC	up to 200 psi	Sch. 40 & 80 Metal



#### **WAFER INSERT**

Installs between ANSI flanges<sup>1</sup>

· API 594 and/or B16.34 certification and marking available on most modles

SERIES	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>
WV Series	1/2" - 2"	Alloys & Superalloys	Class 150 - 2,500



· Installs into most standard, and hammer type schedule 40 ground joint unions<sup>1</sup>

SERIES	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>	
UV Series	1/2" - 2"	Alloys & Superalloys	up to 3.000 psi	



(shown between flanges)







#### **VACUUM INSERT**

- · Installs between vacuum flanges<sup>1</sup>
- · Acts as both a check valve and a centering ring

SERIES	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>
VI Series	DN16, 25, 40, & 50	Alloys & Superalloys	Full vacuum



#### **FLANGE INSERT FOR LINED PIPE**

- · Installs between flanges on lined pipe systems<sup>1</sup>
- · Standard spring is alloy C-276

SERIES	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>
LP Series	1" - 3"	Alloy C-276 & PTFE	contact sales



#### STRAIGHT SIDED INSERT

· Designed to be installed into a threadless cavity where a check valve is required

SERIES	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>
SI Series	1/2" - 2"	Allovs & Superallovs	up to 3.000 psi



Insert series valves may not be visible after installation, contact sales for valve identification tags





**FEMALE THREADS** 

SERIES	DESCRIPTION	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>
U3 Series	FNPT	3/8" - 4"	Alloys & Superalloys	up to 3,000 psi
U1 Series	High Pressure FNPT	3/8" - 1-1/2"	Alloys & Superalloys	up to 10,000 psi

**MALE THREADS** 

SERIES	DESCRIPTION	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>
CN Series	MNPT x MNPT	1/2" - 4"	Alloys & Superalloys	up to 3,000 psi



ADAPTER (SAME SIZE INLET & OUTLET)

SERIES	DESCRIPTION	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>
AM Series	MNPT x FNPT	1/2" - 4"	Alloys & Superalloys	up to 3,000 psi
AF Series	FNPT x MNPT	1/2" - 4"	Alloys & Superalloys	up to 3,000 psi



AF Series BUSHING (INCREASER)

SERIES	DESCRIPTION	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING
BU Series	FNPT x MNPT	1/2" x 3/8" - 3" x 2-1/2"	Alloys & Superalloys	up to 3,000 psi



Mini Series

#### **MINI-CHECK**

SERIES	DESCRIPTION	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>
M Series	MNPT, FNPT, Tubing	1/8" - 3/8"	Alloys & Superalloys	up to 5,000 psi

ISO 7 "R" and "Rp" threads available on select series

#### TUBING SERIES

#### **COMPRESSION AND FLARED**

• Three piece body machined from bar stock with compression or 37° flare fittings

SERIES	DESCRIPTION	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>
TV Series	Compression	1/8" - 2"	Alloys	Up to 7,700 psi
TF Series	37° Flare	1/8" - 2"	Alloys	Up to 7,700 psi





## **FLANGED SERIES**

#### **FLANGED BODY**

· One piece body with ANSI/ASME B16.5 Class 150 flanged ends

SERIES	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>
HV Series	1" - 10"	316 Stainless & Carbon Steel	Class 150





SC Series

(shown inside ferrules)

#### PTFE LINED FLANGED BODY

· One piece carbon body with ANSI/ASME B16.5 Class 150 flanged ends

· Single piece, virgin PTFE lining machined to a minimum thickness of 3/32"

SERIES	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>
HT Series	1" - 2"	Carbon Steel	Up to 55 psi

#### WELDED SERIES

#### **SOCKET AND BUTT WELD**

· One piece body machined from bar stock

SERIES	DESCRIPTION	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>
US Series	Socket Weld	1/4" - 4"	Alloys & Superalloys	Up to 5,000 psi
B4 Series	Sch. 40 Butt Weld	1/4" - 4"	Alloys & Superalloys	Up to 5,000 psi
B8 Series	Sch. 80 Butt Weld	1/4" - 4"	Alloys & Superalloys	Up to 5,000 psi





Two outer o-rings seal on

ferrule ID, eliminating

need for clamp gasket

PTFE ring replaces

clamp gasket

**SANITARY INSERT** 

#### **3-A SANITARY INSERT**

- · Patented design installs between sanitary ferrules<sup>1</sup>, sealing on the ID of the ferrules
- · 32 Ra electropolished standard internal finish, finer finish available
- · Designed for quick disassembly, repair and cleaning
- · Uses 3-A and USP Class VI seat and outer o-rings

SERIES	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>
3S Series	1" - 4"	Electropolished 316 Stainless	Up to 1,000 psi

#### **SANITARY CARTRIDGE**

- · Compact design installs between sanitary ferrules<sup>1</sup>, sealing on the ID of the ferrules
- · Uses FDA and USP Class VI seat and outer o-rings

SERIES	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>
SC Series	3/4" - 4"	316 Stainless & Allov C-276	Up to 1.000 psi





SC Sprips

**SANITARY INSERT** 

- · Compact design installs between sanitary ferrules with outer PTFE ring replacing the clamp gasket
- · Uses FDA & USP Class VI seat and outer o-rings

SERIES	SIZE	BODY MATERIALS <sup>2</sup>	PRESSURE RATING <sup>3</sup>
TC Series	3/4"	PTFE	Up to 55 psi



(shown inside ferrules)

Installs in sanitary ferrules.

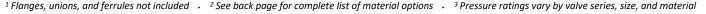
requiring no additional space

#### OM CHECK VALVES

For those truly unique applications with unusual configurations or connections, our engineering team is here to help design a custom valve specific to your needs. Whether it's a small change to a standard valve design or a completely custom design, our engineering and production teams can help you minimize

- ASME B16.5 RTJ Flange Connection
- SAE J518 Code 61 & 62 Flange Connection
- DIN Flange Connection
- AWWA C-606 Grooved Connection
- **Press Connection**
- Cartridge Valve (Outer O-Ring Seal)
- · SAE J1926-1 Threaded Connection
- ASME B1.20.3 Dryseal Threaded Connection
- API 5CT Threaded Connection
- MIL MS33649 & MS16142 Threaded Connection
- ISO 6149-1 Metric Threaded Connection





# **BODY MATERIALS**<sup>1</sup>

Alloys	Superalloys	Plastics
316 Stainless	Alloy 20	PTFE
Brass	Alloy B <sup>2</sup>	PVC
Carbon Steel	Alloy C-276	
	Monel® 400	
	Titanium <sup>2</sup>	

<sup>&</sup>lt;sup>1</sup>Body material options vary by valve series

# SEAT MATERIALS<sup>3</sup>

<u>Standard</u>	Non-Standard
Buna-N	Aflas®
EPDM	Fluorez®(FFKM)
Metal	Kalrez® (FFKM)
FKM	
PTFE	
Neoprene	
Silicone	

<sup>&</sup>lt;sup>3</sup>FDA, 3-A, & USP Class VI options available

## SPRING MATERIALS<sup>4</sup>

Standard	Non-Standard
316 Stainless <sup>5</sup>	17-7PH Stainless Alloy B Alloy C-276 Alloy X-750 (Inconel®) Monel® 400
	Alloy B
	Alloy C-276
	Alloy X-750 (Inconel®)
	Monel® 400
	Titanium

<sup>&</sup>lt;sup>4</sup>FEP encapsulation available on select valves

Other material options may be available, contact sales for more information

## **CERTIFICATIONS & STANDARDS**

#### ISO 9001

International quality standard -- Certificate FM 40858 issued by The British Standards Institute

#### 3-A Sanitary Standard

The Check-All® 3S Series is compliant with 3-A Sanitary Standards for Vacuum Breakers and Check Valves

#### **B16.34 Certification**

Many Check-All® valves can be supplied with B16.34 certification

#### CE (PED 2014/68/EU) Conformance

Many Check-All® products can conform to the Pressure Equipment Directive (PED 2014/68/EU)

#### **NACE Standards**

Check-All® can supply valves that conform to the requirements of NACE MR0175/ISO 15156 and NACE MR0103/ISO 17495-1

#### **Canadian Registration Number**

Many Check-All® products are registered for use in pressure applications -- CRN 0C16301.2CL

Additional testing and/or markings may be required, consult the factory for more information

## **DID YOU KNOW**

Because of the unique design of our spring-loaded check valves, when sized correctly, can also be used as a low pressure or vacuum relief valve. Contact sales for sizing assistance.

#### TRADEMARKS USED IN THIS CATALOG

FLUOREZ® - Fluorez Technology Ltd.

Administered by 3-A SSI

INCONEL® - Special Metals Family of Companies

KALREZ® - E.I. du Pont de Nemours and Company

MONEL® - Special Metals Family of Companies







(515) 224-2301







<sup>&</sup>lt;sup>2</sup>Subject to availability at the time of request

<sup>&</sup>lt;sup>5</sup>Standard spring material and cracking pressure may vary by valve series and body material