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KROMBACH® Check Valves





### **Check Valves Key Features**

# **TURK Steam Extraction Check Valves** (RK 500) Key Features

- Free swing disc design for minimal pressure drop and wear
- 2 Gravity, lever and weight, or pneumatic actuation packages available
- 3 Additional options available, including special end connections, reduced seat diameter, and special materials





### Tilting Disc Check Valves (RK 510) Key Features

- Double eccentric design with replaceable disc-mounted sealing element
- 2 Lever and counterweight operation available to minimize pressure drop
- Special design options such as hydraulic dampers or combined butterfly/check valve configurations



### **TURK Extraction Check Valve Overview and Applications**



#### **Overview**

**Size:** 3" - 36" (DN80 - DN900)

**Class:** ASME 150 - 600

(PN 16, 25, 40, 63, 100)

**Temperature:**  $-4^{\circ}F$  up to  $+ 1022^{\circ}F$ 

(-20°C up to 550°C)

Materials: Cast Carbon Steel A216-WCB

Cast Stainless Steel CF8M

Welded Carbon Steel and Stainless Steel and other materials available

### **Applications**

Power – sub-, super-, and ultra super-critical coal plants, gas-fired plants, combined cycle plants, nuclear plants, geothermal plants, and solar plants

Chemical – petrochemicals, fertilizers, pesticides, and peripheral circulations for storage and transport

Crude Oil and Natural Gas – offshore/onshore fields, processing, storage, transport and distribution, fuel production and petrochemical industry

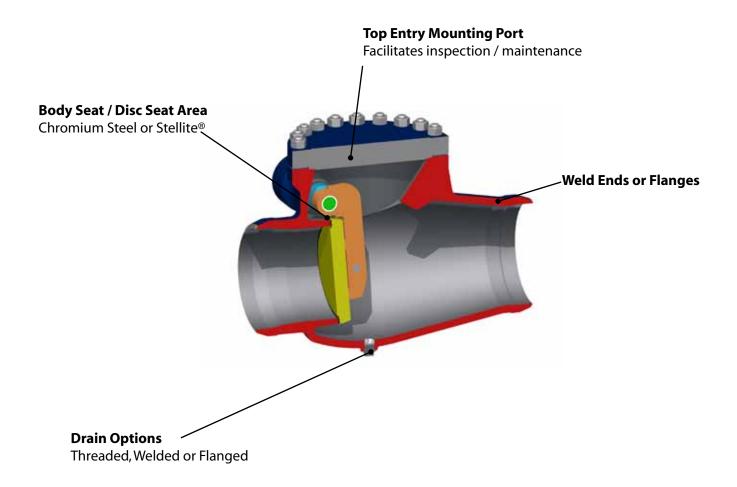
Water and Environmental Technology – water reservoirs, waste water, and desalination



### **TURK Extraction Check Valve Design Features**

### **Design Features**

- Swing disc designs
- Pneumatic or gravity operation
- · Lever and weight options
- Special actuations packages available
- Welded or double flanged ends
- ANSI B16.10 or DIN EN 558-1 face-to-face dimensions
- Special or adapted designs as per customer specifications



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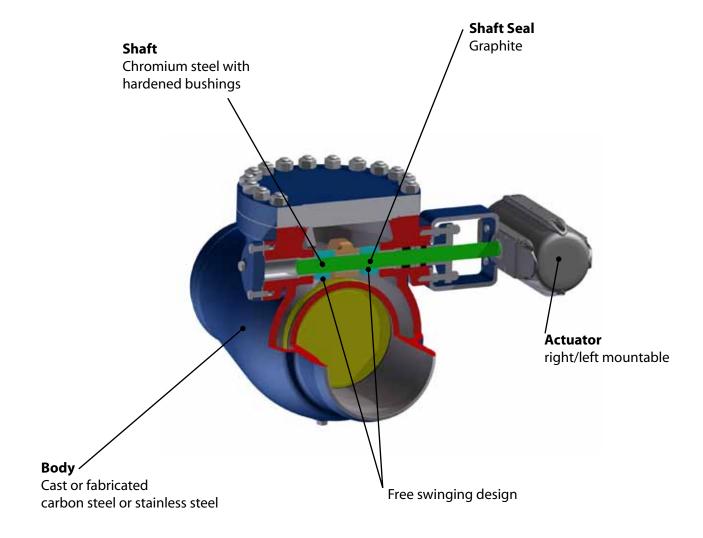
### **TURK Extraction Check Valve Technical Characteristics**

Seat: Chromium Steel (standard), Stellite® 21 (optional)

**Packing:** Pure graphite, live-loaded

**Actuation:** Pneumatic or Hydraulic packages available

**Body:** Cast or Fabricated designs





### **TURK Extraction Check Valve Additional Options**

### **Options**

**Connection For Sealing Water** 

**Water Discharge Connection** 

Differential Pressure Indicator

#### **Customized Face-to-Face Dimensions**

- · Greater piping design flexibility
- · Can replace competitors' valve without piping modifications

#### **Special Flanges**

Accommodates special customer requirements

#### **Body with Conical Extension/Reductions**

Allows matching to existing piping sizes/schedules

#### **Special Materials**

To meet customer requirements

#### Flush Ports

For ease of maintenance

#### Earthquake Safety Design

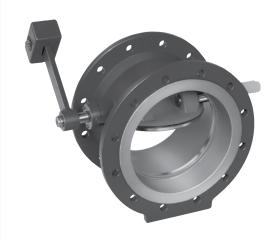
Meets special safety requirements where needed

#### **Special Approvals**

ASME, PED, GOST-R, and others; complies with multiple International standards for EPCs/OEMs



### **Tilting Disc Check RK 510 Overview and Applications**



#### **Overview**

**Size:** 6" - 72" (DN150 - DN1800)

**Class:** ASME 150 - 300

(PN 6, 10, 16, 25)

**Temperature:** 158°F (+70° C) standard

Maximum

580.2 psi (40 bar)

**Pressure:** 

**Body Types:** Double Flange and Buttweld

Standard Materials:

Carbon Steel, Stainless Steel and other materials available

### **Applications**

Power – super-critical and ultra super-critical coal plants, gas-fired plants, combined cycle plants, nuclear plants, geothermal plants, and solar plants

Water and Environmental Technology – water reservoirs, waste water, and desalination

Crude Oil and Natural Gas – offshore/onshore fields, processing, storage, transport and distribution, fuel production and petrochemical industry

Chemical – petrochemicals, fertilizers, pesticides, and peripheral circulations for storage and transport



### **Tilting Disc Check RK 510 Design Features**

### **Design Features**

- · Tilting disc design
- Double flange face-face according to EN 558, Series 14 and ANSI B16.10
- Welded Ends available
- Soft sealing element carried by the disc
- Temperature +70°C (158°F) standard

#### **Shaft Sealing Detail**

O-rings give shaft seal extended life.

#### **Actuation**

Counter Weight and Hydraulic Oil Brake (shown); other packages available on request.

#### **Sealing Detail**

The sealing element is carried by the disc, resulting in reduced wear and consistent bi-directional sealing.





## **Tilting Disc Check RK 510 Key Technical Characteristics**

**Sealing Geometry:** Double-Eccentric

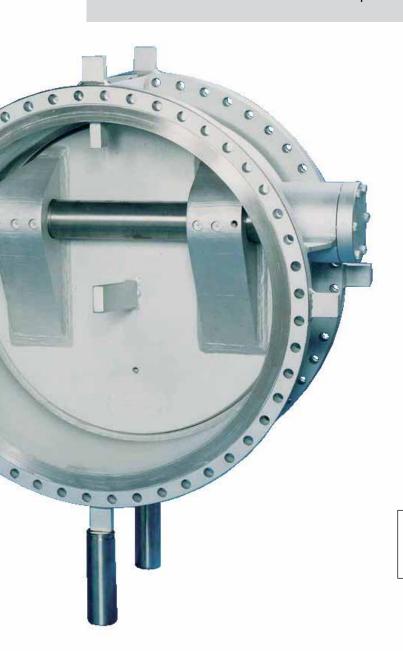
**Disc Sealing:** Buna seal ring carried on disc

**Seat:** Steel body seat

**Face-To-Face** EN 558-2 (Series 14)

**ANSI B16.10** 

Customized on request



#### **Double-Eccentric Design**

Double offset geometry reduces friction and wear, improving sealing performance, reliability and lifetime.

#### Design

Available in Metal and Soft-seated.



### **Tilting Disc Check RK 510 Additional Options**

### **Options**

#### **Actuation Packages**

Lever and Weight, Pneumatic, Electric and Hydraulic packages available

### **Special Designs**

Combined Butterfly/Check valve

#### Special Face-to-Face Dimensions

- · Greater piping design flexibility
- · Can replace competitors' valve without piping modifications

#### **Special Flanges**

Accommodates special customer requirements

### **Special Materials**

To meet customer requirements

#### **Special Approvals**

ASME, PED, GOST-R, and others; complies with multiple International standards for EPCs/OEMs

#### **Accessories**

Additional Accessories available on request



### **Check Valve Standards & Certificates**

Design: Swing or tilting disc type check

Face-To-Face

Dimension: EN 558, basic line 1

End

Connections: Weld or Flange Ends

Testing: EN 12266 part 1 and 2, API 598

Marking: PED 97/23/EC, AD2000-A4

Quality

Assurance: DIN EN ISO 9001:2008

Approvals: PED 97/23/EC

AD2000-A4 GOST-R

API-Specification 6D





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**NUCLEAR** 

**VALVE SERVICES** 

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