# KUNKLE

**Features** 

- O-ring seats available for exceptional leakfree performance, reduced maintenance cost, multiple cycles with tight shutoff, improved seating integrity.
- Wide hex on valve nozzle provides wrenching service clearance for easy installation.
- Dual control rings offer easy adjustability for precise opening with minimum preopen or simmer and exact blowdown control.
- Pivot between disc and spring corrects misalignment and compensates for spring side thrust.
- Grooved piston model disc reduces sliding area and friction.
- Each Kunkle valve is tested and inspected for pressure setting and leakage.

#### **Model Descriptions**

**Model 6010:** Side outlet. Full nozzle design with bronze/brass trim. Available with O-ring seats. For exceptional leak-free performance.

**Model 6021:** Same as model 6010 with Teflon® (PFA) disc insert. For exceptional leak-free performance (use on steam only).

**Model 6030:** Same as model 6010 except Stainless Steel (SS) trim (nozzle and disc). Available with O-ring seats for exceptional leak-free performance.

**Model 6182:** Top outlet. Full nozzle design with bronze/brass trim. O-ring seat available for exceptional leak-free performance.

**Model 6121:** Same as model 6182 with Teflon® (PFA) disc insert. For exceptional non-leak performance (use on steam only).

**Model 6130:** Same as model 6182 except SS trim (nozzle and disc). O-ring seat available for exceptional leak-free performance.

**Model 6186:** Top outlet. Full nozzle design with bronze/brass trim. 150 psig [10.3 barg] maximum set pressure. Replaces Model 86 (original equipment only).

**Model 6283:** Over-sized side outlet. Full nozzle design bronze/brass trim.

**Model 6221:** Same as model 6283 with Teflon® (PFA) disc insert. For exceptional leak-free performance (use on steam only).

**Model 6230:** Same as model 6283 except SS trim (nozzle and disc).

**Model 6933:** Same as model 6010 except certified for ASME code Section IV. Low pressure steam heating boilers set at 15 psig [1.0 barg] only.

**Model 6934:** Same as model 6021 except certified for ASME code Section IV. Low pressure steam heating boilers set at 15 psig [1.0 barg] only.

**tyco** Flow Control

ASME Section I and VIII, Steam, "V" and "UV,"
ASME Section VIII, Air/Gas "UV" National Board Certified.
Models 6933, 6934, and 6935 are ASME Section IV, "Steam"
"HV" National Board Certified.



**Model 6935:** Same as model 6030 except certified for ASME code Section IV. Low pressure steam heating boilers set at 15 psig [1.0 barg] only.

## **Applications**

- Steam Boilers and Generators.
- Air/Gas Compressors reciprocating or rotary - portable or stationary, intercoolers and aftercoolers.
- Pressure Vessels containing steam, air or non-hazardous gas. Including tanks, receivers, sterilizers and autoclaves.
- Pressure Reducing Stations protection of the discharge or low pressure side of system.

#### Pressure and Temperature Limits Models 6010, 6021, 6182, 6283, 6221 Steam Service

3 to 250 psig [0.2 to 17.2 barg] -60° to 406°F [-51° to 208°C]

## Air/Gas Service

3 to 300 psig [0.2 to 20.7 barg] -60° to 406°F [-51° to 208°C]

#### Models 6030, 6130, 6230 Steam and Air/Gas Service

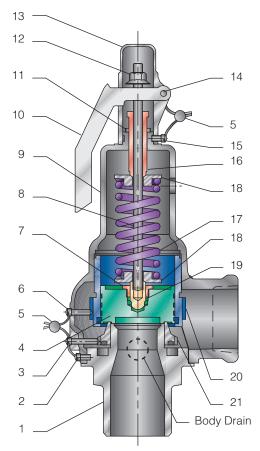
3 to 300 psig [0.2 to 20.7 barg] -60° to 425°F [-51° to 218°C]

#### Note

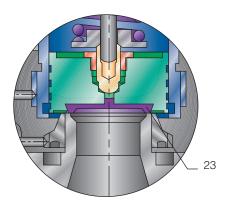
 Resilient seats determine temperature range (see page 11).

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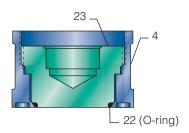
# **Parts and Materials**



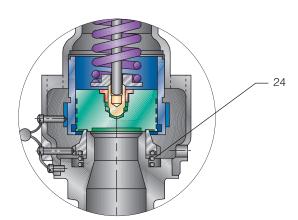
Models 6010, 6030, 6283, 6230, 6933, 6935



Models 6121, 6221, 6934 Teflon® Seat Configuration



Models 6010, 6030, 6283, 6230, 6933, 6935 Optional Soft Seat



Models 6182, 6121, 6130, 6186 Top Outlet Configuration

Parts and Materials		
No.	Part Name	Materials
1	Nozzle	BRS B283-C48500 or BRZ SB623
2	Body Set Screw	SS 18-8
3	Warn Ring Set Screw	SS 18-8
4	Disc	B21 C485004
5	Wire and Seal	SS Wire and Lead Seal
6	Guide Set Screw	SS 18-8
7	Retainer Nut <sup>2</sup>	Brass B16
8	Stem	SS, A582 TY416
9	Body	BRZ B584-C84400
10	Lever	STL A109 or JIS SPCC Equivalent/ZN Plated Yellow
11	Jam Nut	Brass B16
12	Lift Nut	STL A108-1018/ZN Plated
13	Cap	Aluminum, Anodized
14	Lever Pin	STL A108-12L14
15	Cap Set Screw	SS 18-8
16	Compression Screw	BRS B16
17	Spring	ASTM A-313 TY 631
18	Spring Step	BRS B16
19	Stem Retainer	BRS B16
20	Guide	BRS B16 for D and E Orifice BRZ B584-C84400 for F through J Orifice
21	Warn Ring <sup>7</sup>	BRS B16
22	Seat	Note 1
23	Seat Retainer	BRS B16⁵
24	Warn Ring Spring6	STL

# Notes

- Models 6021, 6121, 6221 and 6934 Teflon<sup>®</sup>, optional O-ring seat available for all others except models 6933 and 6935.
- 2. Section IV only.
- 3. Models 6030, 6130, 6230 and 6935 are SS SA351-CF8.
- Models 6030, 6130, 6230 and 6935 are SS SA479-304 (D through H Orifice) or SS SA479-316 (J Orifice).
- 5. Models 6030, 6130 and 6230 are SS SA479-304.
- 6. Variation 02 (vibration dampening) only.
- 7. Soft seat "D" and "E" orifice require special warn ring (notch on O.D. of fins).