

Models 230, 330, 330S and 333S

KUNKLEASME Section VIII, Gas, 'UV' National Board Certified.
Model 230 is Non-code.**Features**

- **Lightweight aluminum construction.** Resistant to environmental and internal corrosion.
- **Model 230** is direct spring-loaded design with synthetic disc insert.
- **Model 330** series incorporates a differential mechanism which maintains a predetermined seat-contact load.
- **The full spring load is never imparted** to synthetic disc insert (models 330, 330S, and 333S only).
- **Seat tightness increases to a maximum** as inlet pressure approaches the opening pressure.

Model Descriptions

Model 230: 1/4-inch Male NPT - 300/1500 psig.

Model 330: 1/4-inch Male NPT - 1000/5500 psig. Aluminum housing, SS trim (seat and disc with synthetic insert). Sidewall discharge.

Model 330S: Same as 330 except SS body suitable for 1000/6500 psig.

Model 333S: Same as 330S except 1/2-inch Female NPT side outlet. Pressure-tight cap.

Applications

- Multi-stage high pressure compressors, intercoolers and aftercoolers.
- High pressure receivers and storage bottles.
- Thermal expansion relief.



Model 330

Pressure and Temperature Limits

Model 230:
300 - 1500 psig
-20° - 185°F

Model 330:
1000 - 5500 psig
-20° - 185°F

Model 330S:
1000 - 6500 psig
-20° - 185°F

Model 333S:
1000 - 6500 psig
-20° - 185°F

Maximum back pressure 100 psig.

tyco / Flow Control

Total Flow Control Solutions™

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Models 230, 330, 330S and 333S

Parts and Materials

Model 230

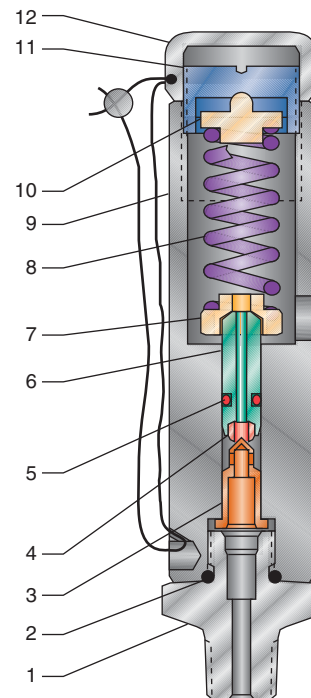
No.	Part Name	Materials
1	Nozzle	SS SA479-304
2	O-ring	Teflon®
3	Bottom Disc	SS A582-303
4	Insert	Kynar®
5	Seal	Teflon®
6	Top Disc	SS A582-303
7	Spring Step	Aluminum B211 Alloy 2024 T351
8	Spring	Steel A231, Aluminum Coated
9	Cap	Aluminum B211 Alloy 2024 T351
10	Top Spring Plate	Aluminum B211 Alloy 2024 T351
11	Compression Screw	Aluminum B211 Alloy 2024 T351
12	Hood	Aluminum B211 Alloy 2024 T351

Models 330 and 330S

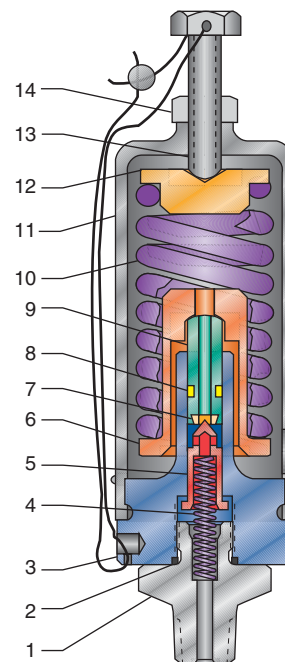
No.	Part Name	Materials
1	Nozzle	SS SA479-304
2	O-ring	Teflon®
3	Body	Aluminum SB211 Alloy 2024 T351 ¹
4	Bottom Spring	SS A313-302
5	Bottom Disc	SS A582-303
6	Bottom Spring Step	Aluminum B211 Alloy 2024 T351
7	Insert	Kynar®
8	Seal	Teflon®
9	Top Disc	SS A582-303
10	Top Spring	Steel A231 Aluminum Coated
11	Cap	Aluminum SB-211 Alloy 6061-T6
12	Top Spring Step	Aluminum B211 Alloy 2024 T351
13	Compression Screw	SS A582-303
14	Jam Nut	SS 18-8

Notes

1. Model 330S, SS SA479-304.
2. Teflon® is a registered trademark of E.I. du Pont de Nemours Company.
3. Kynar® is a registered trademark of the Pennwalt Chemical Corporation.



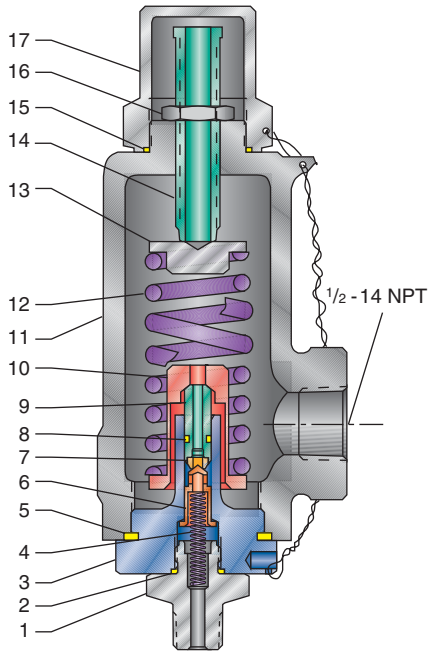
Model 230



Models 330 and 330S

Models 230, 330, 330S and 333S

Parts and Materials



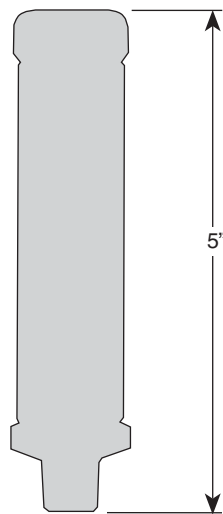
Model 333S

Model 333S

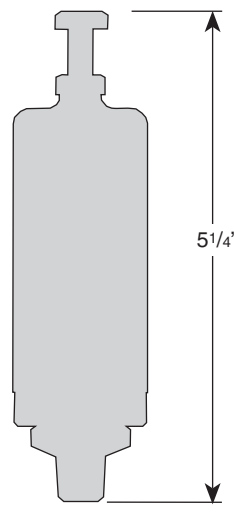
No.	Part Name	Material
1	Nozzle	SS SA479-304
2	O-ring	Teflon®
3	Body	SS SA479-304
4	Bottom Spring	SS A313-302
5	O-ring	BUNA-N
6	Bottom Disc	SS A582-303
7	Insert	Kynar®
8	Seal	Teflon®
9	Top Disc	SS A582-303
10	Spring Step - Bottom	Aluminum B211 Alloy 2024-T351
11	Bonnet	Aluminum SB26 Alloy 356-T6
12	Top Spring	Steel A231 Aluminum Coated
13	Spring Step - Top	Aluminum B211 Alloy 2024-T351
14	Compression Screw	SS A479-316
15	O-ring	BUNA-N
16	Jam Nut	SS A479-316
17	Cap	Aluminum B211 Alloy 2024-T351

Specifications

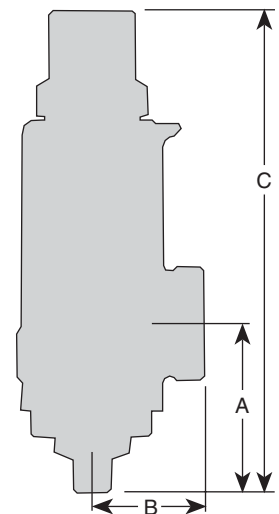
Size (Model 333S)		Dimensions, in			Weight (lb)
Inlet	Outlet	A	B	C	
1/4" and 1/2"	1/2" and 3/4"	27/8	17/8	711/16	1



Model 230



Models 330 and 330S



Model 333S

Models 230, 330, 330S and 333S

Model Number/Order Guide

Model Number Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Example	0	2	3	0	—	A	0	1	—	N	C	1	4	0	0
Model	0230			0330			330S			333S					
Inlet	A - 1/4-inch MNPT					C - 1/2-inch MNPT									
Variation (01 through 99)	01 - Catalog standard									01 - 1/2" MNPT x 1/2" FNPT (333S only)					
	02 - 1/2" MNPT x 3/4" FNPT (333S only)														
Design Revision	Indicates non-interchangeable revision Dash (-) if original design														
Valve Service	N - Non-code Air/Gas (Model 230 only) K - Gas ASME Section VIII (Models 330, 330S, and 333S only)														
Spring Material	C - Steel A231 with Coating (Polyester)														
Set Pressure	Model 230 - 300 psig (0300) through 1500 psig (1500) Model 330 - 1000 psig (1000) through 5500 psig (5500) Models 330S and 333S - 1000 psig (1000) through 6500 psig (6500)														

Model 230 Capacities

SCFM Air, 10% Accumulation

Set Pressure psig	Capacity (Non-code)
300	14
500	23
750	34
1000	45
1250	56
1500	67

Models 330, 330S, 333S Capacities

SCFM Air, 10% Accumulation

Set Pressure psig	Capacity
1000	29
1100	32
1200	35
1300	38
1400	40
1500	43
1750	50
2000	58
2250	65
2500	72
2750	79
3000	86
3500	100
4000	115
4500	129
5000	143
5500	158
6000	172
6500	186

Facility Phone: 828-669-3700

Tyco Valves & Controls

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