

KUNKLE SAFETY AND RELIEF PRODUCTS
 MODELS 541, 542 AND 548

ASME Section VIII, Air/Gas, "UV" National Board Certified Safety Valve


Model descriptions

Model 541: 1/4" or 1/2" Male NPT inlet. Brass body and seat with BUNA-N flat seal. Exceptional seat tightness performance.

Model 542: Same as model 541 except Viton® flat seal.

Model 548: Same as model 541 except Stainless Steel (SS) ball seal.

Features

- High capacity with small size.
- Factory sealed to prevent tampering or disassembly.
- Each Kunkle valve is tested and inspected for pressure setting and leakage.

Technical data
Pressure and Temperature Limits

Model 541:
 3 to 200 psig [0.2 to 13.8 barg]
 -40° to 200°F [-40° to 93°C]

Model 542:
 3 to 200 psig [0.2 to 13.8 barg]
 -10° to 300°F [-23° to 149°C]

Model 548:
 3 to 400 psig [0.2 to 27.6 barg]
 -60° to 400°F [-34° to 204°C]

Applications

- Small to medium size, single and multi-stage, air compressors, intercoolers, aftercoolers, instrument/control air lines and systems.
- Air tanks/receivers and pressurized equipment.

Code:

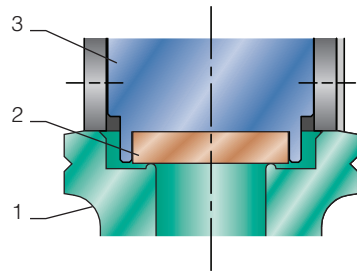


Parts and Materials

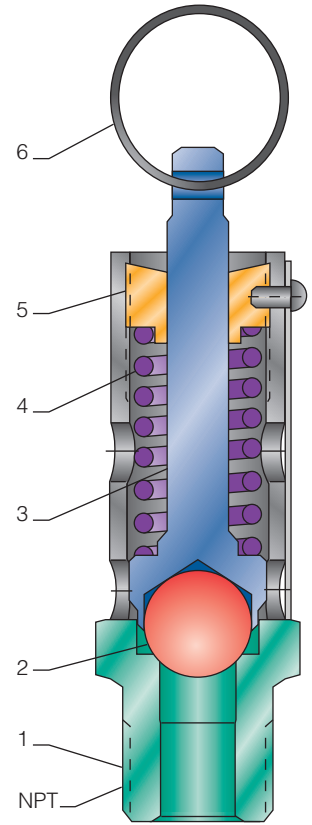
Models 541, 542 and 548		
No.	Part Name	Materials
1	Body	Brass, B16
2	Seat ¹	Model number changes with seat material
3	Disc Holder	Brass, B16
4	Spring	SS, A313-631
5	Compression Screw	Brass, B16
6	Lift Ring	SS, A313

Note:

1. Seat material: Model 541 BUNA-N, Model 542 Viton® A, and Model 548 SS, A756 440C.



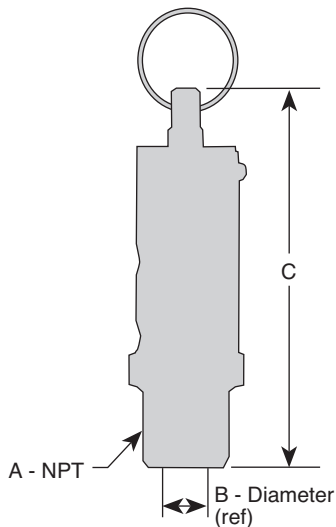
Models 541 and 542
 Seat Configuration



Model 548
 Seat Configuration

Size Inlet	Dimensions, in [mm]			Weight lb (kg)
	A	B	C	
1/4"	1/4 - 18	0.295 [7.5]	2.88 [73.2]	0.2 (0.1)
1/2"	1/2 - 14	0.422 [10.7]	3.62 [91.9]	0.5 (0.23)

Dimensions are for reference only.



KUNKLE SAFETY AND RELIEF PRODUCTS

MODELS 541, 542 AND 548

Capacities

ASME Section VIII Air, [U.S., SCFM]

Set Pressure (psig)	Inlet	
	1/4"	1/2"
3	12	23
5	16	31
10	23	47
15	31	62
20	37	73
25	42	84
50	70	139
75	97	194
100	125	249
125	152	304
150	180	359
175	207	414
200	235	469
225	262	524
250	290	579
275	317	634
300	345	689
325	372	744
350	400	799
375	427	854
400	455	909

ASME Section VIII Air, [Metric, Nm³/h]

Set Pressure (psig)	Inlet	
	7mm	15mm
1.7	67	135
3.5	114	227
5.0	152	304
7.0	203	407
9.0	255	509
13.0	357	715
15.0	409	818
17.0	460	920
19.0	511	1023
21.0	563	1126
23.0	614	1228
25.0	665	1331
27.0	717	1434
27.5	730	1459

KUNKLE SAFETY AND RELIEF PRODUCTS

MODELS 541, 542 AND 548

Model Number/Order Guide

Model Number Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Example	0	5	4	1	—	A	0	1	A	K	M	0	2	5	0	
Model	0541		0542		0548											
Inlet Size	A - 1/4"				C - 1/2"											
Variation	01 - Catalog standard						60 - BSP threads									
Design Revision	Indicates non-interchangeable revision															
	- - Original design (Model 548)															
	A - Revision A, Flat Seat (Models 541 and 542)															
Service	K - ASME VIII Air/Gas															
	N - Non-code Air/Gas (required for set pressures below 15 psig)															
Spring Material	M - SS															
Set Pressure	548 - 3 psig (0003) [0.2 barg] to 400 psig (0400) [27.5 barg]															
	541 - 3 to 200															
	542 - 3 to 200															



VALVES & CONTROLS

5500 WAYZATA BLVD # 800, MINNEAPOLIS, MN 55416 WWW.PENTAIR.COM/VALVES

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