



## KUNKLE MODELS 541/542/548 SAFETY VALVES

### SAFETY AND RELIEF PRODUCTS

Brass or stainless steel safety valves with a choice of Buna-N (NBR), Viton® (FKM) or stainless steel seats that meet ASME section VIII, 'UV', for air/gas and are National Board certified



#### FEATURES

- High capacity with small size.
- Top guided disc.
- Manual lift ring.
- Factory sealed to prevent tampering or disassembly.
- Each valve tested and inspected for pressure setting and leakage.
- Canadian registered.

#### MODELS OVERVIEW

- Model 541: 1/4" or 1/2" male inlet thread.  
Buna-N (NBR) flat seal.  
Exceptional seat tightness performance.
- Model 542: As model 541 except Viton® (FKM) flat seal.
- Model 548: As model 541 except stainless steel (SS) ball seat.

#### NOTE

1. Stainless steel construction temperature range -20° to 200°F (-29° to 93°C).

#### GENERAL APPLICATION

Suitable for use on small to medium size single and multi-stage air compressors, intercoolers, aftercoolers, instrument/control air lines and systems. Also for air tanks/receivers and pressurized equipment.

#### TECHNICAL DATA

Connections:	Threaded NPT or BSPT
Temperature range:	
Model 541 <sup>(1)</sup> :	-40°F to 200°F (-40°C to 93°C)
Model 542:	-10°F to 300°F (-23°C to 149°C)
Model 548:	-60°F to 400°F (-51°C to 204°C)
Pressure range:	
Model 541:	3 to 200 psig (0.2 to 13.8 barg)
Model 542:	3 to 200 psig (0.2 to 13.8 barg)
Model 548:	3 to 400 psig (0.2 to 27.6 barg)
Code:	ASME VIII



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### Parts and materials

#### MODELS 541, 542 AND 548

No.	Part name	Brass construction	SST construction
1	Body	Brass, B16	SST, SA479-316
2	Seat <sup>(1)</sup>	Model number changes with seat material	Model number changes with seat material
3	Disc holder	Brass, B16	SST, A582-303
4	Spring	SST, A313-631	SST, A313-631
5	Compression screw	Brass, B16	SST, A582-303
6	Lift ring	SST, A313	SST, A313

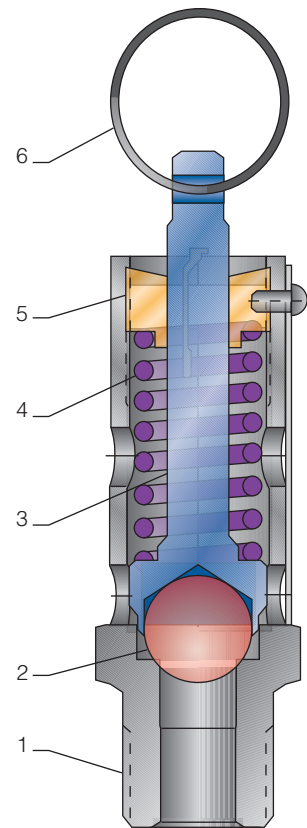
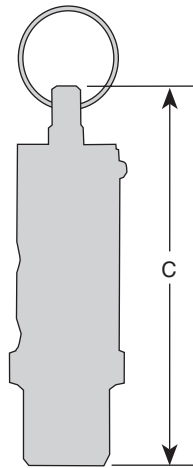
#### NOTES

1. Seat material: model 541 Buna-N (NBR), model 542 Viton® (FKM) and model 548 SS, A756 440C.
2. Viton® is a registered trademark of DuPont Performance Elastomers L.L.C.

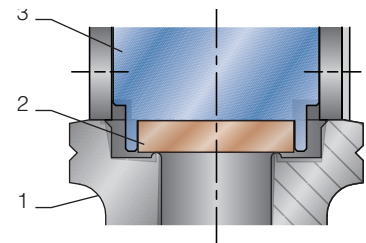
#### SPECIFICATIONS

Size inlet	Dimensions, inch (mm) C	Weight lb (kg)
¼" (7)	2.88 (73.2)	0.2 (0.1)
½" (15)	3.62 (91.9)	0.5 (0.23)

Dimensions are for reference only.



MODEL 548  
Seat configuration



MODELS 541 AND 542  
Seat configuration

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### Capacities

#### ASME SECTION VIII AIR (U.S.,SCFM)

Set pressure (psig)	Inlet	
	¼"	½"
3	14	29
5	18	37
10	26	51
15	33	65
20	38	75
25	43	85
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	
	7 mm	15 mm
1.7	68	136
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

### SELECTION GUIDE

**Example:** 0541 - A 01 A K M 0200

<b>Model</b>	0541	-	A	01	A	K	M	0200
<b>0541</b>								
<b>0542</b>								
<b>0548</b>								
<b>Inlet size</b>								
<b>A</b>	¼" (7 mm)							
<b>C</b>	½" (15 mm)							
<b>Variation</b>								
<b>01</b>	Brass construction with NPT threads							
<b>02</b>	Stainless steel construction with NPT threads (models 541 and 542 only)							
<b>60</b>	Brass construction with BSPT threads							
<b>62</b>	Stainless steel construction with BSPT threads (models 541 and 542 only)							
<b>Design revision</b>								
Indicates non-interchangeable revision								
<b>-</b>	Original design (model 548)							
<b>A</b>	Revision A, flat seat (models 541 and 542)							
<b>Service</b>								
<b>K</b>	ASME VIII air/gas							
<b>N</b>	Non-code air/gas (required for set pressures below 15 psig)							
<b>Spring material</b>								
<b>M</b>	SS							
<b>Set pressure</b>								
<b>548</b>	3 psig (0003) [0.2 barg] to 400 psig (0400) [27.5 barg]							
<b>541</b>	3 to 200							
<b>542</b>	3 to 200							

