

# **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)

3 to 400 psig

Model 548: (0.2 to 27.6 barg)

Code: ASME VIII

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### Parts and materials

#### **MODELS 541, 542 AND 548**

Part name	Brass construction	SST construction			
Body	Brass, B16	SST, SA479-316			
Seat <sup>[1]</sup> Model number changes with		Model number changes with			
	seat material	seat material			
Disc holder	Brass, B16	SST, A582-303			
Spring	SST, A313-631	SST, A313-631			
Compression screw	Brass, B16	SST, A582-303			
Lift ring	SST, A313	SST, A313			
	Body Seat <sup>(1)</sup> Disc holder Spring Compression screw	Body Brass, B16 Seat <sup>[1]</sup> Model number changes with seat material Disc holder Brass, B16 Spring SST, A313-631 Compression screw Brass, B16			

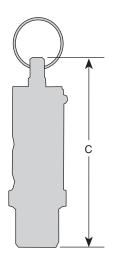
#### NOTES

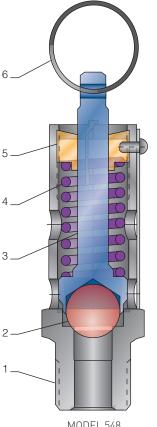
- 1. Seat material: model 541 Buna-N (NBR), model 542 Viton  $^{\circ}$  (FKM) and model 548 SS, A756 440C.
- 2.  $Viton^{\odot}$  is a registered trademark of DuPont Performance Elastomers L.L.C.

# **SPECIFICATIONS**

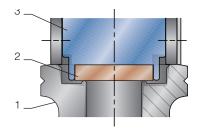
Size	Dimensions, inch (mm)	Weight				
inlet	С	lb (kg)				
1/4" [7]	2.88 (73.2)	0.2 (0.1)				
1/2" (15)	3.62 (91.9)	0.5 (0.23)				

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	Inlet					
(psig)	1/4"	1/2"				
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				

Set pressure	Inlet			
(psig)	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**

Exa	imple:	0541	-	Α	01	Α	K	М	0200
Mod	del								
054	<b>51</b>								
054	32								
054	48								
Inle	et size								
Α	½" (7 mm)								
С	½" (15 mm)								
Var	riation								
01	Brass construction with NPT threads								
02	2 Stainless steel construction with NPT threads (models 541 and 542 only)								
60	D Brass construction with BSPT threads								
62	Stainless steel construction with BSPT threa	ds (mode	ls 541	and 542	only)				
Des	sign revision								
Indi	icates non-interchangeable revision								
-	Original design (model 548)								
Α	Revision A, flat seat (models 541 and 542)								
Ser	vice								
K	ASME VIII air/gas								
N	Non-code air/gas (required for set pressures	below 15	psig)						
Spr	ring material								
М	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