

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 and XIII, '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: ¼" or ½" 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.

CALIFORNIA PROPOSITION 65 WARNING

This product can expose you to chemicals including nickel, which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

TECHNICAL DATA

Connections: Threaded NPT or BSPT

Temperature range:
Model 541^[1]: -40 to 200°F

(-40 to 93°C)

Model 542: -10 to 300°F

(-23 to 149°C)

Model 548: -60 to 400°F (-51 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 Section VIII and XIII

(UV Designator)



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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 ^[1]	Model number changes with	Model number changes with
		seat material	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

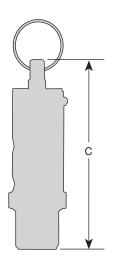
NOTES

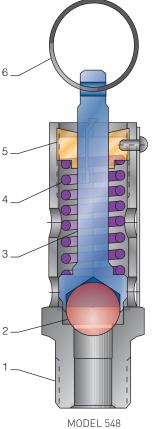
- 1. Seat material: model 541 Buna-N (NBR), model 542 Viton $^{\circ}$ (FKM) and model 548 SS, A756 440C.
- 2. Viton^{\otimes} is a mark owned by E.I. du Pont de Nemours and Co.

SPECIFICATIONS

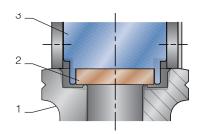
Size	Dimensions, inch (mm)	Weight			
inlet	С	lb (kg)			
1/4" [7]	2.88 (73.2)	0.2 (0.1)			
1/2" (15)	3.62 (91.9)	0.5 (0.23)			

Dimensions are for reference only.





MODEL 548 Seat configuration



MODELS 541 AND 542 Seat configuration

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Capacities

ASME SEC	TION VIII	VND XIII	AIR (II S	SCEMI

ASME SECTION VI						
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				

ASME SECTION VIII AND XIII AIR (Metric, Nm³/h)

ASME SECTION VIII AND AIR (MECHIC, MITT/II)						
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	cample: 0	541	-	Α	01	Α	K	М	0200
Мо	odel								
054	541								
054	542								
054	548								
Inle	let size								
Α	½" (7 mm)								
С	½" (15 mm)								
Var	ariation								
01	Brass construction with NPT threads								
02	Stainless steel construction with NPT threads (models 541 and 542 only)								
60	Brass construction with BSPT threads								
62	Stainless steel construction with BSPT threads (models 541 and 542 only)								
Des	esign revision								
Indi	dicates non-interchangeable revision								
-	Original design (model 548)								
Α	Revision A, flat seat (models 541 and 542)								
Ser	ervice								
K	ASME VIII and XIII air/gas								
N	Non-code air/gas (required for set pressures be	low 15	psig)						
Spring 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

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