

KUNKLE SAFETY AND RELIEF PRODUCTS

DATA SUPPLEMENT

VALVE SELECTION GUIDE

(For specific minimum/maximum temperature/pressure ranges refer to individual product datasheets).

Model(s)	Material		Connections		Inlet Size Range		Min/Max ¹ Press.		Min/Max Temp.	
	Body	Trim	NPT	FLGD	in	[mm]	psig	[barg]	°F	[°C]
Steam (ASME Section I - Power Boilers)										
300, 600	CS	SS		X	1¼ - 6"	[31.75 - 152.4]	15/1000	[1.0/69]	-20/800	[-29/427]
920, 921, 927 [special use - 10% blowdown]	CS	SS	X	O	½ - 2"	[12.7 - 50.8]	15/1400	[1.0/96.5]	-20/800	[-29/427]
6010, 6021, 6121, 6182 6186, 6221, 6283	Bronze	Brass	X		½ - 2½"	[12.7 - 63.5]	3/250	[0.69/17.2]	-60/406	[-51/208]
6030, 6130, 6230	Bronze	SS	X		½ - 2½"	[12.7 - 63.5]	3/300	[0.69/20.7]	-60/425	[-51/219]
6252	Iron	SS	X	X	1½ - 6"	[38.1 - 152.4]	10/250	[0.69/17.2]	-20/406	[-29/208]
Steam (ASME Section VIII and XIII-UV - Unfired Steam Equipment)										
1 and 2	Bronze	Brass	X		½ - 1"	[12.7 - 25.4]	5/250	[0.34/17.2]	-60/406	[-51/208]
264, 265	CS	SS	X		½ - 1"	[12.7 - 25.4]	4/3300	[0.28/227.6]	-20/750	[-29/399]
266, 267	SS	SS	X		½ - 1"	[12.7 - 25.4]	4/3300	[0.28/227.6]	-20/750	[-29/399]
300, 600	CS	SS		X	1¼ - 6"	[31.75 - 152.4]	15/1000	[1.0/69]	-20/750	[-29/399]
910	CS	SS	X	O	½ - 2"	[12.7 - 50.8]	3/1400	[0.21/96.5]	-20/800	[-29/427]
911	SS	SS	X	O	½ - 2"	[12.7 - 50.8]	3/1400	[0.21/96.5]	-320/800	[-195/427]
912	Bronze	Brass	X		½ - 2"	[12.7 - 50.8]	3/250	[0.21/17.2]	-320/406	[-195/208]
913	Bronze	SS	X	O	½ - 2"	[12.7 - 50.8]	3/300	[0.21/20.7]	-320/425	[-195/219]
6010, 6021, 6121, 6182, 6186, 6221, 6283	Bronze	Brass	X		½ - 2½"	[12.7 - 63.5]	3/250	[0.21/17.2]	-60/406	[-51/208]
6030, 6130, 6230	Bronze	SS	X		½ - 2½"	[12.7 - 63.5]	3/300	[0.21/20.7]	-60/425	[-51/219]
6252	Iron	SS	X	X	1½ - 6"	[38.1 - 152.4]	10/250	[0.69/17.2]	-20/406	[-29/208]
Steam (ASME Section IV and XIII-HV - Low Pressure Steam Heating Boilers)										
930	Iron	Bronze	X		2 - 3"	[50.8 - 76.2]	15 only	[1.0]	250 only	[122]
6933, 6934	Bronze	Brass	X		½ - 2"	[12.7 - 50.8]	15 only	[1.0]	250 only	[122]
6935	Bronze	SS	X		½ - 2"	[12.7 - 50.8]	15 only	[1.0]	250 only	[122]
6254	Iron	SS	X	X	1½ - 6"	[38.1 - 152.4]	15 only	[1.0]	250 only	[122]
Steam (Non-code)²										
40R, 40RL	SS	SS	X		½ - ¾"	[12.7 - 19.05]	1/400	[0.07/27.6]	-60/850	[-51/454]

X = Standard O = Optional

NOTES

1. Set pressures less than 15 psig [1.0 barg] are non-code only.
2. See also ASME Section VIII and XIII-UV steam valves for non-code steam applications.

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Model(s)	Material		Connections		Inlet Size Range		Min/Max ³ Press.		Min/Max ⁴ Temp.	
	Body	Trim	NPT	FLGD	in	[mm]	psig	[barg]	°F	[°C]
Air/Gas (ASME Section VIII) and XIII-UV										
1 and 2	Brass	Brass	X		½ - 1"	[12.7 - 25.4]	5/250	[0.34/17.2]	-60/406	[-51/208]
30	Brass	Brass	X		¼"	[6.35]	60/4000	[4.1/275.8]	20/300	[-6.6/150]
189	Bronze	SS	X		½ - ¾"	[12.7 - 19.05]	1000/2500	[69/344.8]	-320/350	[-195/177]
264, 265	CS	SS	X		½ - 1"	[12.7 - 25.4]	4/3300	[0.28/227.6]	-20/750	[-29/399]
266, 267	SS	SS	X		½ - 1"	[12.7 - 25.4]	4/3300	[0.28/227.6]	-20/750	[-29/399]
300, 600	CS	SS		X	1¼ - 6"	[31.75 - 152.4]	15/1000	[1.0/69]	-20/800	[-195/427]
330	Aluminum	SS	X ⁵		¼ - ½"	[6.35 - 12.7]	1000/5500	[69/379.3]	-20/185	[-29/85]
330S, 333S	Aluminum	SS	X ⁵		¼ - ½"	[6.35 - 12.7]	1000/7500	[69/517.1]	-20/185	[-29/85]
337	Iron	Bronze	X		2 - 3"	[50.8 - 76.2]	1/60	[0.07/4.14]	-20/406	[-29/208]
338	Aluminum	Brass	X		2"	[50.8]	5/30	[0.3/2.07]	-30/400	[-34/204]
363	Bronze	SS	X		½ - ¾"	[12.7 - 19.05]	50/1000	[3.4/69]	-320/350	[-195/177]
389	SS	SS	X		½ - ¾"	[12.7 - 19.05]	50/2500	[3.4/172.4]	-320/350	[-195/177]
541 (Buna disc), 542 (Viton [®] disc), 548 (SS disc)	Brass	Brass	X		¼ - ½"	[6.35 - 12.7]	3/400	[0.21/27.6]	-20/400	[-29/204]
541 (Buna disc), 542 (Viton [®] disc)	SS	SS	X		¼ - ½"	[6.35 - 12.7]	3/200	[0.21/13.8]	-20/300	[-29/149]
910, 916 (soft seat) ⁴	CS	SS	X	O	½ - 2"	[12.7 - 50.8]	3/1400	[0.21/96.5]	-20/800	[-29/427]
911, 917 (soft seat) ⁴	SS	SS	X	O	½ - 2"	[12.7 - 50.8]	3/1400	[0.21/96.5]	-320/800	[-195/427]
912, 918 (soft seat) ⁴	Bronze	Brass	X		½ - 2"	[12.7 - 50.8]	3/300	[0.21/20.7]	-320/406	[-195/208]
913, 919 (soft seat) ⁴	Bronze	SS	X	O	½ - 2"	[12.7 - 50.8]	3/1400	[0.21/96.5]	-320/425	[-195/219]
6010, 6121, 6182 6186, 6221, 6283 ¹	Bronze	Brass	X		½ - 2½"	[12.7 - 63.5]	3/250	[0.21/17.2]	-60/406	[-51/208]
6030, 6130, 6320	Bronze	SS	X		½ - 2½"	[12.7 - 63.5]	3/300	[0.21/20.7]	-60/425	[-51/219]
6252	Iron	SS	X	X	1½ - 6"	[38.1 - 152.4]	10/250	[0.69/17.2]	-20/406	[-29/208]
Air/Gas² (Non-code)										
230	Aluminum	SS	X ⁵		¼ - ½"	[6.35 - 12.7]	300/1500	[20.7/103.4]	-20/185	[-29/85]
Air/Gas (Vacuum) in Hg [mm Hg]										
215V	Iron	Bronze	X		2 - 3"	[50.8 - 76.2]	2/29	[50/736]	-20/406	[-29/208]
910, 916 (soft seat) ⁴	CS	SS	X	O	½ - 2"	[12.7 - 50.8]	6/29	[152/736]	-20/800	[-29/427]
911, 917 (soft seat) ⁴	SS	SS	X	O	½ - 2"	[12.7 - 50.8]	6/29	[152/736]	-320/800	[-195/427]
912, 918 (soft seat) ⁴	Bronze	Brass	X		½ - 2"	[12.7 - 50.8]	6/29	[152/736]	-320/406	[-195/208]
913, 919 (soft seat) ⁴	Bronze	SS	X	O	½ - 2"	[12.7 - 50.8]	6/29	[152/736]	-320/425	[-195/219]

X = Standard O = Optional

NOTES

- Soft seat available on some models.
- See also Section VIII air valves for non-code air/gas applications.
- Set pressures less than 15 psig [1.0 barg] are non-code only.
- Temperature limits of soft seats determine operating limits of valve.
- SAE inlet thread available
- Viton[®] and Teflon[®] are registered trademarks of the Chemours Company.

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Model(s)	Material		Connections		Inlet Size Range		Min/Max ¹ Press.		Min/Max ² Temp.	
	Body	Trim	NPT	FLGD	in	[mm]	psig	[barg]	°F	[°C]
Liquid (ASME Section I)										
928, 929	CS	SS	X	O	½ - 2"	[12.7 - 50.8]	15/1400	[1.0/96.5]	-20/800	[-29/427]
Liquid (ASME Section IV and XIII-HV - Hot Water Boilers)										
537 (soft seat)	Iron/Bronze	Brass	X		¾ - 2"	[19.05 - 50.8]	15/160	[1.0/11]	-20/250	[-29/121]
Liquid (ASME Section VIII and XIII-UV)										
910, 916 (soft seat) ²	CS	SS	X	O	½ - 2"	[12.7 - 50.8]	3/1400	[0.21/96.5]	-20/800	[-29/427]
911, 917 (soft seat) ²	SS	SS	X	O	½ - 2"	[12.7 - 50.8]	3/1400	[0.21/96.5]	-320/800	[-195/427]
912, 918 (soft seat) ²	Bronze	Brass	X		½ - 2"	[12.7 - 50.8]	3/300	[0.21/20.7]	-320/406	[-195/208]
913, 919 (soft seat) ²	Bronze	SS	X	O	½ - 2"	[12.7 - 50.8]	3/1400	[0.21/96.5]	-320/425	[-195/219]
Liquid (Non-code)										
19, 20	Bronze	Bronze	X	O	½ - 3"	[12.7 - 76.2]	1/300	[0.07/20.7]	-60/406	[-51/208]
19M, 20M	Bronze	SS	X	O	2½ - 3"	[63.5 - 76.2]	1/500	[0.07/34.5]	-60/406	[-51/208]
71S	Iron	SS	X		½ - 2"	[12.7 - 50.8]	1/250	[0.07/17.2]	-20/406	[-29/208]
171, 171P	CS	SS	X		½ - 2"	[12.7 - 50.8]	1/400	[0.07/27.6]	-20/550	[-29/288]
171S	SS	SS	X		½ - 2"	[12.7 - 50.8]	1/400	[0.07/27.6]	-20/550	[-29/288]
91	Iron	Bronze	X	X	1½ - 6"	[38.1 - 152.4]	5/400	[0.34/27.6]	-20/406	[-29/208]
218, 228	Iron	Bronze	X	X	3, 4, and 6"	[76.2 - 152.4]	60/200	[4.1/13.8]	-20/406	[-29/208]
140	SS	SS	X		¾ - ½"	[9.5 - 12.7]	10/300	[0.69/20.7]	-60/406	[-51/208]
264, 265	CS	SS	X		½ - 1"	[12.7 - 25.4]	4/3300	[0.28/227.6]	-20/750	[-29/399]
266, 267	SS	SS	X		½ - 1"	[12.7 - 25.4]	4/3300	[0.28/227.6]	-20/750	[-29/399]
910, 916 (soft seat) ²	CS	SS	X	O	½ - 2"	[12.7 - 50.8]	3/1400	[0.21/96.5]	-20/800	[-29/427]
911, 917 (soft seat) ²	SS	SS	X	O	½ - 2"	[12.7 - 50.8]	3/1400	[0.21/96.5]	-320/800	[-195/427]
912, 918 (soft seat) ²	Bronze	Brass	X		½ - 2"	[12.7 - 50.8]	3/300	[0.21/20.7]	-320/406	[-195/208]
913, 919 (soft seat) ²	Bronze	SS	X	O	½ - 2"	[12.7 - 50.8]	3/1400	[0.21/96.5]	-320/425	[-195/219]
Liquid - Underwriters Laboratories (UL) For Oil Services										
200A	Bronze	Brass	X		¾ - 1½"	[19.05 - 38.1]	1/200	[0.07/13.8]	-60/406	[-51/208]
200H	Bronze	SS	X	O	¾ - 2"	[19.05 - 50.8]	1/200	[0.07/13.8]	-60/406	[-51/208]
Liquid - Underwriters Laboratories (UL) and Factory Mutual Research (FM) For Fire Pump Water Relief										
218, 228	Iron	Bronze	X	X	3, 4 and 6"	[76.2 - 152.4]	60/200	[4.1/13.8]	-20/406	[-29/208]
918 (soft seat) ^{2,3}	Bronze	Brass	X		¾ - 1"	[19.05 - 25.4]	60/250	[4.1/17.2]	-20/406	[-29/208]
Other - Drip Pan Elbow										
299	Iron	N/A	X	X	2 - 8"	[50.80 - 203.2]	N/A	N/A	-20/406	[-29/208]

X = Standard O = Optional

NOTES

1. Set pressures below 15 psig [1.0 barg] are non-code only.
2. Temperature limits of soft seats determine operating limits of valve.
3. FM Approved only.