

KUNKLE ASME BRONZE SAFETY VALVES

- Full Nozzle Design with Bronze/Brass Trim
- Operating Range: 3 to 300 PSIG
- Operating Temp: -60 ° to 406 ° F (51° to 208° C)
- Optional Viton Seats Available for Exceptional Leak Free Performance, Reduced Maintenance Cost, Multiple Cycles with Tight Shutoff, Improved Seating Integrity
- Other Kunkle Products Available - Consult Midwest Control



Side Venting

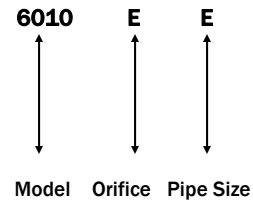


Top Venting

Side Venting Valve			
Inlet (In)	Outlet (In)	Metal to Metal Seat Model No.	Soft Seat Model No.
1/2	3/4	6010DC	6010DCV
3/4	3/4	6010DD	6010DDV
3/4	1	6010ED	6010EDV
1	1	6010EE	6010EEV
1	1-1/4	6010FE	6010FEV
1-1/4	1-1/4	6010FF	6010FFV
1-1/4	1-1/2	6010GF	6010GFV
1-1/2	1-1/2	6010GG	6010GGV
1-1/2	2	6010HG	6010HGV
2	2	6010HH	6010HHV
2	2-1/2	6010JH	6010JHV
2-1/2	2-1/2	6010JJ	6010JJV
Top Venting Valve			
1/2		6182DC	6182DCV
3/4		6182ED	6182EDV
1		6182FE	6182FEV
1-1/4		6182GF	6182GFV
1-1/2		6182HG	6182HGV
2		6182JH	6182JHV

Valve Selection: To Determine Valve Size

1. See Chart on Other Side
2. Locate Desired Pressure and SCFM
3. Intersect Orifice Size at the Top of the Chart
4. For Example 625 scfm @ 150 PSIG = An "E" Orifice
5. Model = 6010E, Select Desired Inlet Pipe Size
6. Add PSIG Setting to Part Number Suffix



ASME Rating is Only Applicable to Valves Set at 15 PSIG and Higher

Office Size	D			E			F			G			H			J		
Area	.121 Sq. In.			.216 Sq. In.			.338 Sq. In.			.554 Sq. In.			.863 Sq. In.			1.414 Sq. In.		
Set PSIG	LBS/HR Steam V	LBS/HR Steam VU	SCFM Air UV	LBS/HR Steam V	LBS/HR Steam VU	SCFM Air UV	LBS/HR Steam V	LBS/HR Steam VU	SCFM Air UV	LBS/HR Steam V	LBS/HR Steam VU	SCFM Air UV	LBS/HR Steam V	LBS/HR Steam VU	SCFM Air UV	LBS/HR Steam V	LBS/HR Steam VU	SCFM Air UV
10		152	50		271	89		424	139		695	228		1083	355		1775	582
15	173	179	64	309	319	114	484	500	178	793	819	292	1236	1276	454	2025	2091	744
20	201	206	73	358	368	131	560	576	205	918	944	336	1431	1471	524	2344	2410	858
25	228	234	83	407	417	148	637	653	232	1044	1070	381	1626	1666	593	2664	2730	972
30	255	261	93	456	466	166	713	729	259	1169	1195	425	1821	1861	663	2983	3050	1086
35	283	291	104	504	520	185	789	813	289	1294	1333	474	2015	2076	739	3302	3401	1211
40	310	321	114	553	573	204	866	897	319	1419	1470	523	2210	2291	815	3622	3753	1336
45	337	351	125	602	627	223	942	981	349	1544	1608	572	2405	2505	892	3941	4105	1461
50	365	381	136	651	681	242	1018	1065	379	1669	1746	621	2600	2720	968	4260	4456	1586
55	392	411	146	700	734	261	1095	1149	409	1794	1884	671	2795	2934	1045	4580	4808	1711
60	419	442	157	748	788	281	1171	1233	439	1919	2022	720	2990	3149	1121	4899	5160	1837
65	447	472	168	797	842	300	1247	1317	469	2045	2159	769	3185	3364	1197	5219	5511	1962
70	474	502	179	847	896	319	1325	1401	499	2172	2297	818	3384	3578	1274	5544	5863	2087
75	503	532	189	897	949	338	1404	1486	529	2301	2435	867	3585	3793	1350	5873	6215	2212
80	531	562	200	947	1003	357	1483	1570	559	2430	2573	916	3785	4008	1426	6202	6566	2337
85	559	592	211	998	1057	376	1561	1654	589	2559	2710	965	3986	4222	1503	6531	6918	2462
90	587	622	221	1048	1110	395	1640	1738	619	2688	2848	1014	4187	4437	1579	6860	7270	2588
95	615	652	232	1098	1164	414	1718	1822	648	2817	2986	1063	4388	4651	1656	7189	7621	2713
100	643	682	243	1148	1218	434	1797	1906	678	2946	3124	1112	4588	4866	1732	7518	7973	2838
105	671	712	254	1199	1272	453	1876	1990	708	3074	3262	1161	4789	5081	1808	7847	8325	2963
110	700	742	264	1249	1325	472	1954	2074	738	3203	3399	1210	4990	5295	1885	8176	8676	3088
115	728	773	275	1299	1379	491	2033	2158	768	3332	3537	1259	5191	5510	1961	8505	9028	3213
120	756	803	286	1349	1433	510	2112	2242	798	3461	3675	1308	5392	5725	2038	8834	9380	3339
125	784	833	296	1400	1487	529	2190	2326	828	3590	3813	1357	5592	5939	2114	9163	9731	3464
130	812	863	307	1450	1540	548	2269	2410	858	3719	3950	1406	5793	6154	2190	9492	10083	3589
135	840	893	318	1500	1594	567	2348	2494	888	3848	4088	1455	5994	6368	2267	9821	10434	3714
140	869	923	329	1550	1648	586	2426	2578	918	3977	4226	1504	6195	6583	2343	10150	10786	3839
145	897	953	339	1601	1701	606	2505	2662	948	4105	4364	1553	6395	6798	2420	10479	11138	3964
150	925	983	350	1651	1755	625	2583	2746	978	4234	4502	1602	6596	7012	2496	10808	11489	4090
160	981	1043	371	1751	1863	663	2741	2915	1037	4492	4777	1700	6998	7442	2649	11466	12193	4340
170	1037	1104	393	1852	1970	701	2898	3083	1097	4750	5053	1798	7399	7871	2802	12123	12896	4590
180	1094	1164	414	1952	2077	739	3055	3251	1157	5008	5328	1897	7801	8300	2954	12781	13599	4841
190	1150	1224	436	2053	2185	778	3212	3419	1217	5265	5604	1995	8202	8729	3107	13439	14303	5091
200	1206	1284	457	2153	2292	816	3370	3587	1277	5523	5879	2093	8604	9159	3260	14097	15006	5341
210	1263	1344	478	2254	2400	854	3527	3755	1337	5781	6155	2191	9005	9588	3413	14755	15709	5592
220	1319	1404	500	2354	2507	892	3684	3923	1396	6039	6430	2289	9407	10017	3566	15413	16413	5842
230	1375	1465	521	2455	2615	931	3842	4091	1456	6297	6706	2387	9808	10446	3718	16071	17116	6092
240	1432	1525	543	2555	2722	969	3999	4259	1516	6554	6981	2485	10210	10876	3871	16729	17819	6343
250	1488	1585	564	2656	2829	1007	4156	4428	1576	6812	7257	2583	10612	11305	4024	17387	18523	6593
260	1544	1645	586	2756	2937	1045	4313	4596	1636	7070	7533	2681	11013	11734	4177	18045	19226	6843
270	1600	1705	607	2857	3044	1084	4471	4764	1696	7328	7808	2779	11415	12163	4329	18703	19929	7094
280	1657	1766	628	2957	3152	1122	4628	4932	1756	7585	8084	2877	11816	12592	4482	19360	20632	7344
290	1713	1826	650	3058	3259	1160	4785	5100	1815	7843	8359	2975	12218	13022	4635	20018	21336	7594
300	1769	1886	671	3158	3367	1198	4942	5268	1875	8101	8635	3074	12619	13451	4788	20676	22039	7845

V = Section 1
UV = Section VIII

1-15-2015 Subject to Change

KUNKLE SERIES 6000 SAFETY VALVES

SAFETY AND RELIEF PRODUCTS

MODELS OVERVIEW

- Model 6010: Side outlet. Full nozzle design with bronze/brass trim. Available with O-ring seats.
- Model 6021: As model 6010 with Teflon® (PFA) disc insert (use on steam only).
- Model 6030: As model 6010 except stainless steel (SS) trim (nozzle and disc). Available with O-ring seats.
- Model 6182: Top outlet. Full nozzle design with bronze/brass trim. O-ring seat available.
- Model 6121: As model 6182 with Teflon® (PFA) disc insert (use on steam only).
- Model 6130: As model 6182 except SS trim (nozzle and disc). Available with O-ring seats.
- Model 6186: Top outlet. Full nozzle design with bronze/brass trim. 150 psig (10.3 barg) maximum set pressure. Replaces Model 86 (original equipment only). For air service only.
- Model 6283: Over-sized side outlet. Full nozzle design bronze/brass trim.
- Model 6221: As model 6283 with Teflon® (PFA) disc insert (use on steam only).
- Model 6230: As model 6283 except SS trim (nozzle and disc).
- Model 6933: As model 6010 except certified for ASME code Section IV. Low pressure steam heating boilers set at 15 psig (1.0 barg) only.
- Model 6934: As model 6021 except certified for ASME code Section IV. Low pressure steam heating boilers set at 15 psig (1.0 barg) only.
- Model 6935: As model 6030 except certified for ASME code Section IV. Low pressure steam heating boilers set at 15 psig (1.0 barg) only.

NOTE

1. Resilient seats determine temperature range (see Specifications section).
2. Viton® and Teflon® are registered trademarks of E.I. du Pont de Nemours and Company.

PRESSURE AND TEMPERATURE LIMITS¹

Models 6010, 6021, 6182, 6121, 6283, 6221

- Steam service: 3 to 250 psig (0.2 to 17.2 barg) -60° to 406°F (-51° to 208°C)
- Air/gas service: 3 to 300 psig (0.2 to 20.7 barg) -60° to 406°F (-51° to 208°C)

Models 6030, 6130, 6230

- Steam and air/gas service: 3 to 300 psig (0.2 to 20.7 barg) -60° to 425°F (-51° to 218°C)

SPECIFICATIONS

SERVICE RECOMMENDATIONS FOR SERIES 6000 RESILIENT SEAT/SEAL MATERIALS

Seat/seal materials	Service recommendation
Viton® A (FKM) [-15 to 406°F [-26 to 208°C]]	Air and gas
Ethylene propylene [-70 to 425°F][-57 to 218°C]	Steam
Teflon® (PFA)	Steam

KUNKLE SERIES 6000 SAFETY VALVES

SAFETY AND RELIEF PRODUCTS

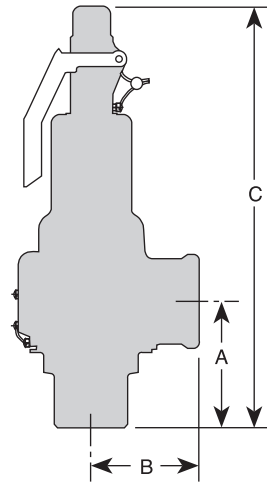
SPECIFICATIONS

Model number ¹	Orifice	Connections ANSI standard				Valve dimensions inch (mm)						Approximate weight	
		Inlet		Outlet		A		B		C		lb	(kg)
		inch	(mm)	inch	(mm)								
60**DC#	D	1/2	(12.7)	3/4	(19.0)	2 1/8	(54)	1 5/8	(41)	6 1/2	(165)	1 1/2	(0.7)
60**DD# ²	D	3/4	(19.0)	3/4	(19.0)	2 1/8	(54)	1 5/8	(41)	6 1/2	(165)	1 3/4	(0.8)
61**DC#	D	1/2	(12.7)	-	-	-	-	-	-	6 1/2	(165)	1 1/4	(0.6)
60**ED#	E	3/4	(19.0)	1	(25.4)	2 3/8	(60)	1 3/4	(44)	7 1/2	(191)	2 1/2	(1.1)
60**EE# ²	E	1	(25.4)	1	(25.4)	2 1/2 ⁴	(64)	1 3/4	(44)	7 5/8 ⁵	(194)	2 3/4	(1.2)
61**ED#	E	3/4	(19.0)	-	-	-	-	-	-	7 1/2	(191)	2 1/4	(1.0)
62**ED#	E	3/4	(19.0)	1 1/4	(31.75)	2 7/8	(73)	1 3/4	(44)	7 1/2	(191)	2 3/4	(1.2)
60**FE#	F	1	(25.4)	1 1/4	(31.8)	2 5/8	(67)	2	(51)	8 1/2	(216)	3 1/2	(1.6)
60**FF# ²	F	1 1/4	(31.8)	1 1/4	(31.8)	2 7/8	(73)	2	(51)	8 3/4	(222)	3 3/4	(1.7)
61**FE#	F	1	(25.4)	-	-	-	-	-	-	8 1/2	(222)	3 1/4	(1.5)
62**FE#	F	1	(25.4)	1 1/2	(38.0)	2 7/8	(73)	2	(51)	8 1/2	(222)	3 3/4	(1.7)
60**GF#	G	1 1/4	(31.8)	1 1/2	(38.0)	3 1/8	(79)	2 3/8	(60)	9 5/8	(244)	5 1/2	(2.5)
60**GG# ²	G	1 1/2	(38.0)	1 1/2	(38.0)	3 3/8	(86)	2 3/8	(60)	10	(254)	5 3/4	(2.6)
61**GF#	G	1 1/4	(31.8)	-	-	-	-	-	-	9 5/8	(244)	5	(2.3)
62**GF#	G	1 1/4	(31.8)	2	(51.0)	3 3/8	(86)	2 1/4	(57)	9 5/8	(244)	5 3/4	(2.6)
60**HG#	H	1 1/2	(38.0)	2	(51.0)	3 5/8	(92)	2 3/4	(70)	10 5/8	(270)	7 3/4	(3.5)
60**HH# ²	H	2	(51.0)	2	(51.0)	4 1/8	(105)	2 3/4	(70)	11 1/8	(283)	8	(3.6)
61**HG#	H	1 1/2	(38.0)	-	-	-	-	-	-	10 5/8	(270)	7 1/4	(3.3)
62**HG#	H	1 1/2	(38.0)	2 1/2	(64.0)	3 7/8	(98)	3	(76)	10 5/8	(270)	8	(3.6)
60**JH#	J	2	(51.0)	2 1/2	(64.0)	4 1/4	(108)	3 3/8	(86)	13 3/8	(346)	15 1/2	(7.0)
60**JJ# ²	J	2 1/2	(64.0)	2 1/2	(64.0)	4 1/2	(114)	3 3/8	(86)	14	(356)	15 3/4	(7.2)
61**JH#	J	2	(51.0)	-	-	-	-	-	-	13 3/8	(346)	15	(6.8)
62**JH#	J	2	(51.0)	3	(76.0)	4 5/8	(117)	3 3/8	(86)	13 3/8	(345)	15 1/2	(7.0)

Dimensions are for reference only.

NOTES

1. Replace asterisks with desired model number.
Replace # with desired seat material.
2. Model 6030 and 6935 available only 1/2 x 3/4"
(12.7 x 19 mm), 3/4 x 1" (19 x 25.4 mm), 1 x 1 1/4"
(25.4 x 31.8 mm), 1 1/4 x 1 1/2" (31.8 x 38 mm), 1 1/2 x 2"
(38 x 51 mm) and 2 x 2 1/2" (51 x 64 mm).
3. Models 6933, 6934 and 6935 have same dimensions as model 6010.
4. 2 1/4" for BSP (57).
5. 7 5/8" for BSP (192.5).



KUNKLE SERIES 6000 SAFETY VALVES

SAFETY AND RELIEF PRODUCTS

Capacities

NON-CODE¹ AND ASME SECTION VIII AIR (SCFM) Flow Coefficient = 0.878

Set pressure (psig)	Orifice area, in ²					
	D (0.121)	E (0.216)	F (0.336)	G (0.554)	H (0.863)	J (1.414)
3	28	50	77	127	198	325
4	32	57	89	146	228	374
6	39	70	108	178	278	456
8	45	80	124	205	319	523
10	50	89	138	228	355	582
15	64	114	177	292	454	744
20	73	131	204	336	524	858
25	83	148	231	381	593	972
30	93	166	258	425	663	1086
35	104	185	288	474	739	1211
40	114	204	317	523	815	1336
45	125	223	347	572	892	1461
50	136	242	377	621	968	1586
55	146	261	407	671	1045	1711
60	157	281	436	720	1121	1837
65	168	300	466	769	1197	1962
70	179	319	496	818	1274	2087
75	189	338	526	867	1350	2212
80	200	357	555	916	1426	2337
85	211	376	585	965	1503	2462
90	221	395	615	1014	1579	2588
95	232	414	645	1063	1656	2713
100	243	434	674	1112	1732	2838
105	254	453	704	1161	1808	2963
110	264	472	734	1210	1885	3088
115	275	491	764	1259	1961	3213
120	286	510	793	1308	2038	3339
125	296	529	823	1357	2114	3464
130	307	548	853	1406	2190	3589
135	318	567	883	1455	2267	3714
140	329	586	912	1504	2343	3839
145	339	606	942	1553	2420	3964
150	350	625	972	1602	2496	4090
160	371	663	1031	1700	2649	4340
170	393	701	1091	1798	2802	4590
180	414	739	1150	1897	2954	4841
190	436	778	1210	1995	3107	5091
200	457	816	1269	2093	3260	5341
210	478	854	1329	2191	3413	5592
220	500	892	1388	2289	3566	5842
230	521	931	1448	2387	3718	6092
240	543	969	1507	2485	3871	6343
250	564	1007	1567	2583	4024	6593
260	586	1045	1626	2681	4177	6843
270	607	1084	1686	2779	4329	7094
280	628	1122	1745	2877	4482	7344
290	650	1160	1805	2975	4635	7594
300	671	1198	1864	3074	4788	7845

NOTE

1. No code stamp or 'NB' on nameplate below 15 psig set.

KUNKLE SERIES 6000 SAFETY VALVES

SAFETY AND RELIEF PRODUCTS

Capacities - metric units

NON-CODE¹ AND ASME SECTION VIII AIR (Nm³/h) Flow Coefficient = 0.878

Set pressure (barg)	Orifice area, cm ²					
	D (0.781)	E (1.394)	F (2.168)	G (3.574)	H (5.567)	J (9.123)
0.2	44	78	121	199	311	509
0.3	53	95	148	243	379	621
0.4	61	109	170	280	436	715
0.6	74	133	206	340	530	869
1.0	95	169	263	433	675	1106
1.5	123	219	340	561	874	1433
2.0	145	259	403	664	1035	1696
2.5	170	303	471	777	1210	1982
3.0	195	347	540	890	1386	2272
3.5	219	391	609	1004	1563	2562
4.0	244	436	678	1117	1740	2851
4.5	269	480	746	1231	1917	3141
5.0	294	524	815	1344	2094	3431
5.5	319	569	884	1458	2270	3721
6.0	343	613	953	1571	2447	4010
6.5	368	657	1022	1685	2624	4300
7.0	393	701	1091	1798	2801	4590
7.5	418	746	1160	1912	2978	4880
8.0	443	790	1228	2025	3154	5169
8.5	467	834	1297	2139	3331	5459
9.0	492	878	1366	2252	3508	5749
9.5	517	923	1435	2366	3685	6039
10.0	542	967	1504	2479	3862	6328
10.5	567	1011	1573	2593	4038	6618
11.0	591	1056	1642	2706	4215	6908
11.5	616	1100	1710	2820	4392	7197
12.0	641	1144	1779	2933	4569	7487
12.5	666	1188	1848	3047	4746	7777
13.0	691	1233	1917	3160	4922	8067
13.5	715	1277	1986	3274	5099	8356
14.0	740	1321	2055	3387	5276	8646
14.5	765	1365	2124	3501	5453	8936
15.0	790	1410	2192	3614	5630	9226
16.0	839	1498	2330	3841	5983	9805
17.0	889	1587	2468	4068	6337	10385
18.0	939	1675	2605	4295	6690	10964
19.0	988	1764	2743	4522	7044	11543
20.0	1038	1852	2881	4749	7398	12123

NOTE

1. No code stamp or 'NB' on nameplate below 1.0 barg set.

KUNKLE SERIES 6000 SAFETY VALVES

SAFETY AND RELIEF PRODUCTS

Capacities

NON-CODE¹ AND ASME SECTION VIII STEAM (lb/h) Flow Coefficient = 0.878

Set pressure (psig)	Orifice area, in ²					
	D (0.121)	E (0.216)	F (0.336)	G (0.554)	H (0.863)	J (1.414)
3	87	155	242	398	621	1017
4	100	178	277	457	711	1166
6	121	215	335	552	860	1409
8	137	245	382	629	980	1606
10	152	271	422	695	1083	1775
15	179	319	497	819	1276	2091
20	206	368	573	944	1471	2410
25	234	417	649	1070	1666	2730
30	261	466	725	1195	1861	3050
35	291	520	808	1333	2076	3401
40	321	573	892	1470	2291	3753
45	351	627	975	1608	2505	4105
50	381	681	1059	1746	2720	4456
55	411	734	1143	1884	2934	4808
60	442	788	1226	2022	3149	5160
65	472	842	1310	2159	3364	5511
70	502	896	1393	2297	3578	5863
75	532	949	1477	2435	3793	6215
80	562	1003	1560	2573	4008	6566
85	592	1057	1644	2710	4222	6918
90	622	1110	1727	2848	4437	7270
95	652	1164	1811	2986	4651	7621
100	682	1218	1895	3124	4866	7973
105	712	1272	1978	3262	5081	8325
110	742	1325	2062	3399	5295	8676
115	773	1379	2145	3537	5510	9028
120	803	1433	2229	3675	5725	9380
125	833	1487	2312	3813	5939	9731
130	863	1540	2396	3950	6154	10083
135	893	1594	2479	4088	6368	10434
140	923	1648	2563	4226	6583	10786
145	953	1701	2647	4364	6798	11138
150	983	1755	2730	4502	7012	11489
160	1043	1863	2897	4777	7442	12193
170	1104	1970	3064	5053	7871	12896
180	1164	2077	3232	5328	8300	13599
190	1224	2185	3399	5604	8729	14303
200	1284	2292	3566	5879	9159	15006
210	1344	2400	3733	6155	9588	15709
220	1404	2507	3900	6430	10017	16413
230	1465	2615	4067	6706	10446	17116
240	1525	2722	4234	6981	10876	17819
250	1585	2829	4401	7257	11305	18523
260	1645	2937	4569	7533	11734	19226
270	1705	3044	4736	7808	12163	19929
280	1766	3152	4903	8084	12592	20632
290	1826	3259	5070	8359	13022	21336
300	1886	3367	5237	8635	13451	22039

NOTE

1. No code stamp or 'NB' on nameplate below 15 psig set.

KUNKLE SERIES 6000 SAFETY VALVES

SAFETY AND RELIEF PRODUCTS

Capacities - metric units

NON-CODE¹ AND ASME SECTION VIII STEAM (kg/h) Flow Coefficient = 0.878

Set pressure (barg)	Orifice area, cm ²					
	D (0.781)	E (1.394)	F (2.168)	G (3.574)	H (5.567)	J (9.123)
0.2	39	69	108	177	276	453
0.3	47	84	131	215	335	549
0.4	54	96	149	246	383	628
0.6	65	115	180	296	461	756
1.0	81	144	224	370	576	944
1.5	98	175	272	448	698	1144
2.0	116	207	322	530	826	1354
2.5	135	242	376	620	966	1582
3.0	155	277	431	711	1107	1814
3.5	175	312	486	801	1248	2045
4.0	195	348	541	892	1389	2276
4.5	215	383	596	982	1530	2508
5.0	234	419	651	1073	1671	2739
5.5	254	454	706	1164	1812	2970
6.0	274	489	761	1254	1954	3201
6.5	294	525	816	1345	2095	3433
7.0	314	560	871	1435	2236	3664
7.5	333	595	926	1526	2377	3895
8.0	353	631	981	1617	2518	4127
8.5	373	666	1036	1707	2659	4358
9.0	393	701	1091	1798	2800	4589
9.5	413	737	1146	1888	2942	4820
10.0	432	772	1201	1979	3083	5052
10.5	452	807	1255	2070	3224	5283
11.0	472	843	1310	2160	3365	5514
11.5	492	878	1365	2251	3506	5746
12.0	512	913	1420	2341	3647	5977
12.5	531	949	1475	2432	3788	6208
13.0	551	984	1530	2523	3929	6439
13.5	571	1019	1585	2613	4071	6671
14.0	591	1055	1640	2704	4212	6902
14.5	611	1090	1695	2795	4353	7133
15.0	630	1125	1750	2885	4494	7365
16.0	670	1196	1860	3066	4776	7827
17.0	710	1267	1970	3248	5059	8290
18.0	749	1337	2080	3429	5341	8752
19.0	789	1408	2190	3610	5623	9215
20.0	828	1479	2300	3791	5905	9678

NOTE

1. No code stamp or 'NB' on nameplate below 1.1 barg set.

KUNKLE SERIES 6000 SAFETY VALVES

SAFETY AND RELIEF PRODUCTS

Capacities

ASME SECTION I STEAM (lb/h) Flow Coefficient = 0.878

Set pressure (psig)	Orifice area, in ²					
	D (0.121)	E (0.216)	F (0.336)	G (0.554)	H (0.863)	J (1.414)
15	173	310	482	794	1237	2027
20	201	358	558	919	1432	2346
25	228	407	634	1045	1627	2666
30	256	456	710	1170	1822	2986
35	283	505	785	1295	2017	3306
40	310	554	861	1420	2213	3625
45	338	603	937	1546	2408	3945
50	365	651	1013	1671	2603	4265
55	392	700	1089	1796	2798	4584
60	420	749	1165	1921	2993	4904
65	447	798	1241	2047	3188	5224
70	475	848	1319	2174	3387	5550
75	503	898	1397	2303	3588	5879
80	531	948	1475	2432	3789	6208
85	559	999	1553	2561	3990	6538
90	588	1049	1632	2690	4191	6867
95	616	1099	1710	2819	4392	7196
100	644	1150	1788	2948	4593	7525
105	672	1200	1866	3077	4794	7855
110	700	1250	1945	3206	4995	8184
115	728	1300	2023	3335	5196	8513
120	757	1351	2101	3464	5397	8842
125	785	1401	2179	3593	5598	9172
130	813	1451	2258	3722	5799	9501
135	841	1502	2336	3851	6000	9830
140	869	1552	2414	3980	6201	10160
145	898	1602	2492	4109	6402	10489
150	926	1653	2571	4238	6603	10818
160	982	1753	2727	4497	7004	11477
170	1038	1854	2884	4755	7406	12135
180	1095	1954	3040	5013	7808	12794
190	1151	2055	3197	5271	8210	13452
200	1208	2156	3353	5529	8612	14111
210	1264	2256	3510	5787	9014	14769
220	1320	2357	3666	6045	9416	15428
230	1377	2457	3823	6303	9818	16087
240	1433	2558	3979	6561	10220	16745
250	1489	2659	4136	6819	10622	17404
260	1546	2759	4292	7077	11024	18062
270	1602	2860	4448	7335	11426	18721
280	1658	2960	4605	7593	11828	19379
290	1715	3061	4761	7851	12230	20038
300	1771	3162	4918	8109	12632	20696

KUNKLE SERIES 6000 SAFETY VALVES

SAFETY AND RELIEF PRODUCTS

Capacities - metric units

ASME SECTION I STEAM (kg/h) Flow Coefficient = 0.878

Set pressure (barg)	Orifice area, cm ²					
	D (0.781)	E (1.394)	F (2.168)	G (3.574)	H (5.567)	J (9.123)
1.5	95	170	265	437	680	1115
2.0	113	202	315	519	809	1325
2.5	131	235	365	601	937	1535
3.0	149	267	415	684	1065	1746
3.5	167	299	465	766	1193	1956
4.0	185	331	515	849	1322	2166
4.5	203	363	565	931	1450	2376
5.0	222	396	616	1015	1581	2592
5.5	240	429	667	1100	1714	2808
6.0	259	462	719	1185	1846	3025
6.5	277	495	770	1270	1978	3241
7.0	296	528	822	1355	2110	3458
7.5	315	561	873	1440	2242	3675
8.0	333	595	925	1524	2374	3891
8.5	352	628	976	1609	2507	4108
9.0	370	661	1028	1694	2639	4324
9.5	389	694	1079	1779	2771	4541
10.0	407	727	1131	1864	2903	4757
10.5	426	760	1182	1949	3035	4974
11.0	444	793	1233	2033	3167	5191
11.5	463	826	1285	2118	3300	5407
12.0	481	859	1336	2203	3432	5624
12.5	500	892	1388	2288	3564	5840
13.0	519	925	1439	2373	3696	6057
13.5	537	959	1491	2458	3828	6273
14.0	556	992	1542	2542	3960	6490
14.5	574	1025	1594	2627	4092	6707
15.0	593	1058	1645	2712	4225	6923
15.5	611	1091	1697	2797	4357	7140
16.0	630	1124	1748	2882	4489	7356
16.5	648	1157	1800	2967	4621	7573
17.0	667	1190	1851	3052	4753	7789
18.0	704	1256	1954	3221	5018	8223
19.0	741	1323	2057	3391	5282	8656
20.0	778	1389	2160	3561	5546	9089

Capacities

ASME SECTION IV STEAM, LB/H (kg/h) - Models 6933, 6934 and 6935

Set pressure psig (barg)	Orifice, area in ² (cm ²)					
	D 0.121 (0.781)	E 0.216 (1.394)	F 0.336 (2.168)	G 0.554 (3.574)	H 0.863 (5.567)	J 1.414 (9.123)
15 (1.0)	190 (86)	339 (153)	527 (239)	869 (394)	1353 (613)	2217 (1004)

KUNKLE SERIES 6000 SAFETY VALVES

SAFETY AND RELIEF PRODUCTS

ASME section I and VIII, steam, ASME section VIII, air/gas National Board Certified. Models 6933, 6934, 6935 ASME section IV, National Board Certified

SELECTION GUIDE

Example:	6010	H	G	M	01	-	A	M	0015
Model									
6010	6130	6230							
6021	6186	6933							
6030	6283	6934							
6182	6221	6935							
6121									
Orifice									
D	G								
E	H								
F	J								
Inlet size									
C	½" [12.7]	G	1 ½" [38.1]						
D	¾" [19.0]	H	2" [50.8]						
E	1" [25.4]	J	2 ½" [63.5]						
F	1 ¼" [31.8]								
Seat material									
M	Metal								
E	EPR								
V	Viton® (FKM)								
T	Teflon® (PFA) (models 6021, 6121, 6221, 6934 only)								
Variation [01 to 99]									
01	Plain lever								
02	Plain lever with vibration dampener								
03	Plain lever with gag								
60	BSP threads								
Design revision									
	Indicates non-interchangeable revision								
	Dash (-) if original design								
Valve service									
A	Steam ASME section I								
K	Air/gas ASME section VIII								
L	Steam ASME section VIII								
G	Steam ASME section IV (models 6933, 6934, 6935 only)								
P	Steam, non-code								
N	Air, non-code								
Spring material									
M	SS								
Set pressure									
0015	15 psig (1.0 barg) only for models 6933, 6934, 6935								

