



BOSS™ 957 KUKreg4 & WRAS Safety Valve

Data Sheet



General Description

A KUKreg4 & WRAS approved bronze safety relief valve in sizes DN15 to DN50.

Product Codes: Dependent on pressure, see below

Size Range

DN15 to DN50 BSP

Technical Specification

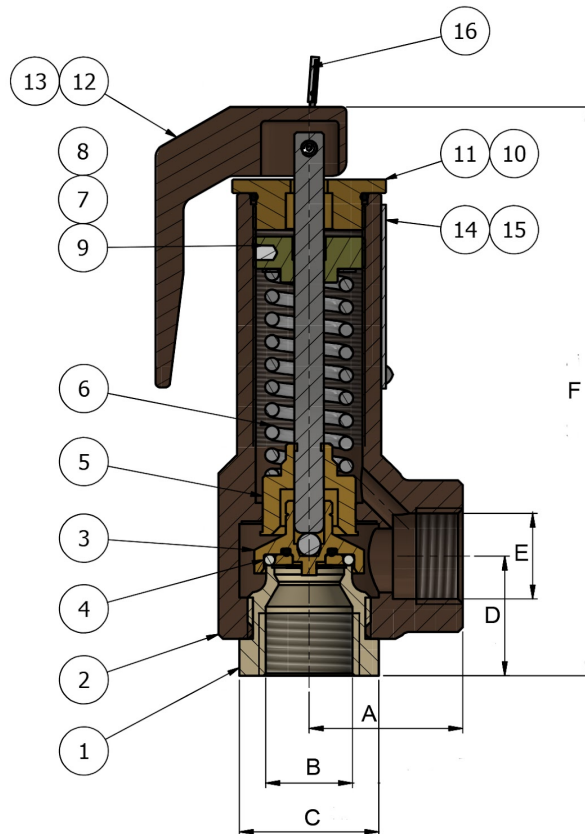
Standards:	BS EN ISO 4126 Part 1 Fully compliant with 2014/68/EU (Pressure Equipment Directive) Category IV Safety Accessory
Connections:	DN15 to DN50 BSP Parallel Female
Temperature Rating:	-60°C to +200°C
Pressure Ratings:	0.2 to 24 Barg Steam up to 14 Barg

Materials of Construction

No.	Part	Material
1	Seat	Brass BS EN 12164 CW602N
2	Body	Bronze
3	Plunger Sub Assembly	
4	Seal	PTFE
5	Piston Sub Assembly	
6	Spring	Stainless Steel BS EN 10270-3 1.4310
7	Skid Washer	Stainless Steel
8	Adjuster	Brass BS EN 12164 CW602N
9	Locking Slug	Nylon
10	O Ring	EPDM
11	Cap	Brass BS EN 12164 CW602N
12	Lever	Bronze
13	Seal Lock Pin	Stainless Steel
14	Nameplate	Aluminium
15	Hammerdrive	Stainless Steel
16	Wire Locking	Wire and lead seal

Dimensions (mm unless otherwise stated)

Size (Inlet x Outlet)	Dimensions					
DN	A	B	C	D	E	F
15 (½" x ½")	33	½"	30	26	½"	124
20 (¾" x ¾")	37	¾"	38.1	32	¾"	130
25 (1" x 1")	42	1"	50.8	37	1"	156
32 (1-¼" x 1-¼")	50	1-¼"	60	42	1-¼"	174
40 (1-½" x 1-½")	59	1-½"	65	50	1-½"	222.5
50 (2" x 2")	69	2"	75	59	2"	257.5



Product Codes

DN15 (all pressures in bar)

3.0 preset	3.1 preset	0.2-0.7	0.7-1.55	1.55-2.0	2.0-2.8	2.8-4.7
66511104	66511115	66511126	66511137	66511148	66511159	66511170
4.7-6.3	6.3-10.0	10.0-17.0	17.0-24.0			
66511181	66511192	66511200	66511211			

DN20 (all pressures in bar)

3.0 preset	3.1 preset	3.5 preset	4.0 preset	5.0 preset	6.0 preset	0.2-0.8
66511222	66511233	66511244	66511255	66511277	66511266	66511288
0.8-1.6	1.6-2.0	2.0-3.1	3.1-4.6	4.6-9.5	9.5-15.5	15.5-24.0
66511299	66511307	66511318	66511329	66511340	66511351	66511362

DN25 (all pressures in bar)

3.0 preset	3.1 preset	3.5 preset	6.0 preset	0.2-0.9	0.9-1.5	1.5-2.2
66511927	66511373	66511384	66511395	66511403	66511414	66511425
2.2-4.6	4.6-5.7	5.7-8.5	8.5-12.1	12.1-16.0	16.0-24.0	
66511436	66511458	66511469	66511480	66511491	66511510	

DN32 (all pressures in bar)

3.1 preset	0.2-0.9	0.9-1.6	1.6-2.4	2.4-3.1	3.1-4.5	4.5-5.5	5.5-7.3
66511521	66511532	66511543	66511554	66511565	66511576	66511587	66511598
7.3-8.3	8.3-9.2	9.2-11.8	11.8-13.0	13.0-16.2	16.2-18.0	18.0-24.0	
66511606	66511628	66511639	66511650	66511661	66511672	66511683	

DN40 (all pressures in bar)

3.0 preset	3.5 preset	6.0 preset	0.2-0.6	0.6-1.2	1.2-1.75	1.75-2.8
66511938	66511949	66511694	66511702	66511713	66511724	66511735
2.8-4.8	4.8-9.0	9.0-16.0	16.0-24.0			
66511746	66511757	66511768	66511779			

DN50 (all pressures in bar)

5.0 preset	0.2-0.6	0.6-1.6	1.6-2.5	2.5-4.0	4.0-5.0	5.0-6.4
66511790	66511809	66511820	66511831	66511842	66511853	66511864
6.4-10.0	10.0-12.5	12.5-16.0	16.0-19.7	19.7-24.0		
66511875	66511886	66511897	66511905	66511916		

Discharge capacity for WATER at 10% over pressure
Kdr = 0.26

Valve Size	DN15	DN20	DN25	DN32	DN40	DN50
Set Pressure bar g.	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr
0.2	849.7	1097.2	1950.6	3047.8	4993.4	7802.3
1.0	1899.9	2453.4	4361.6	6815.0	11165.7	17446.4
2.0	2686.9	3469.6	6168.2	9637.9	15790.7	24672.9
4.0	3799.8	4906.8	8723.2	13630.0	22331.4	34892.8
6.0	4653.8	6009.6	10683.7	16693.3	27350.2	42734.7
8.0	5373.8	6939.3	12336.5	19275.7	31581.3	49345.8
10.0	6008.0	7758.3	13792.6	21550.9	35309.0	55170.3
12.0	6581.5	8498.8	15109.0	23607.8	38679.1	60436.0
15.0	7358.3	9502.0	16892.4	26394.4	43244.5	67569.6
20.0	8496.7	10971.9	19505.7	30477.6	49934.5	78022.6
24.0	9307.6	12019.1	21367.4	33386.5	54700.5	85469.5

Discharge capacity for HOT WATER at 10% over pressure

Kdr = 0.38

Valve Size	DN15	DN20	DN25	DN32	DN40	DN50
Set Pressure bar g.	kW	kW	kW	kW	kW	kW
0.2	21.1	27.2	48.4	75.7	124.0	193.7
1.0	36.2	46.7	83.0	129.7	212.5	332.0
2.0	55.0	71.0	126.2	197.2	323.1	504.8
4.0	92.6	119.6	212.6	332.2	544.3	850.4
6.0	130.2	168.2	299.0	467.2	765.5	1196.0
8.0	167.9	216.8	385.4	602.2	986.7	1541.7
10.0	205.5	265.4	471.8	737.2	1207.9	1887.3
12.0	174.0	230.5	297.6	529.1	826.7	1354.5
15.0	299.6	386.9	687.8	1074.8	1760.9	2751.4
20.0	393.7	508.4	903.9	1412.3	2313.9	3615.5
24.0	469.0	605.6	1076.7	1682.3	2756.3	4306.7

Discharge capacity for AIR at 10% over pressure

Kdr = 0.38

Valve Size	DN15	DN20	DN25	DN32	DN40	DN50
Set Pressure bar g.	l/sec	l/sec	l/sec	l/sec	l/sec	l/sec
0.2	12.5	16.1	28.6	44.7	73.2	114.4
1.0	21.4	27.6	49.0	76.6	125.5	196.1
2.0	32.5	41.9	74.5	116.5	190.8	298.2
4.0	54.7	70.6	125.6	196.2	321.5	502.3
6.0	76.9	99.3	176.6	276.0	452.1	706.5
8.0	99.2	128.1	227.7	355.7	582.8	910.6
10.0	121.4	156.8	278.7	435.5	713.5	1114.8
12.0	143.6	185.5	329.7	515.2	844.1	1318.9
15.0	177.0	228.5	406.3	634.8	1040.1	1625.2
20.0	290.0	300.3	533.9	834.2	1366.8	2135.6
24.0	277.0	357.7	636.0	993.7	1628.1	2543.9

Discharge capacity for SATURATED STEAM at 10% over pressure
Kdr = 0.38

Valve Size	DN15	DN20	DN25	DN32	DN40	DN50
Set Pressure bar g.	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr	kg/hr
0.2	29.1	37.6	66.9	104.5	171.3	267.6
1.0	59.7	77.1	137.0	214.1	350.8	548.1
2.0	89.7	115.8	205.9	321.7	527.1	823.6
4.0	148.8	192.1	341.5	533.7	874.4	1366.2
6.0	207.3	267.6	475.8	743.4	1218.0	1903.1
8.0	265.4	342.7	609.2	951.9	1559.5	2436.8
10.0	323.3	417.5	742.3	1159.8	1900.3	2969.2
12.0	381.1	492.1	874.8	1366.9	2239.5	3499.2
14.0	438.9	566.7	1007.5	1574.2	2579.2	4030.0