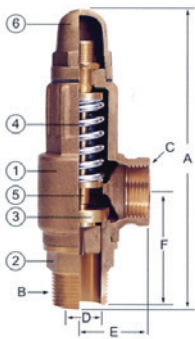
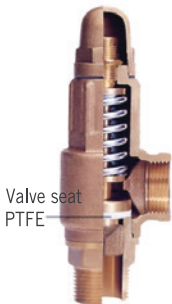


BRONZE SAFETY RELIEF VALVES N3/N3L



N3 Type
Sealing 1/2"~2"



N3P Type
Sealing 1/2"~2"



N3L Type
Lever 1/2"~2"

Technical Data

Low Lift Safety Valves

Material: Body– Cast Bronze; Valve Seat– Brass, PTFE Soft Seat available

Orifice Size: 1/2"(15mm), 3/4"(20mm), 1"(25mm), 1 1/4"(32mm), 1 1/2"(40mm), 2"(50mm)

Working Pressure: 0.3~10 kgf/cm² (4.3~150 psig) (Brass Seat) / 7~10 kgf/cm² (100~150 psig) (PTFE Seat)

Working Temperature: -45°C~+185°C

Working Fluid: Please refer to the table of "General Material List"

Dimensions Data

SEALING SERIES							
ITEM	SIZE	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A		138	150	180	206	231	265
Inlet B		1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Outlet C		1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Valve Seat Orifice D		15	20	25	32	40	50
E		29	36	40	50	54	67
F		50	58	70	82	93	102
Lift		0.52	0.76	1.00	1.28	1.52	2.00
Wt. kg		0.52	0.66	1.09	1.90	2.35	3.85

LEVER SERIES							
ITEM	SIZE	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A1		161	172	202	222	246	282
Wt. kg		0.59	0.74	1.19	1.94	2.39	4.11

(unit:mm)

General Material List

NO.	Type		N3 SEALING	N3L LEVER
	Parts Name			
1.	Valve Body		Cast Bronze	Cast Bronze
2.	Valve Seat		Forging Brass or PTFE	Forging Brass or PTFE
3.	Disc		Forging Brass	Forging Brass
4.	Spring		Steel	Steel
5.	Stem		Brass	Brass
6.	Cap		Forging Brass	Cast Bronze
Working Pressure		0.3~10 kgf/cm ² (Brass seat); 7.0~10 kgf/cm ² (PTFE seat)		
Working Temp.		-45°C~185°C		
Working Fluid		Noncorrosive gas, noncorrosive liquid, air, steam		Noncorrosive gas, air, steam

* The disc can be replaced with PTFE and those type N3P,N3LP.
* The valve seat can be also made of cast bronze on request.

Blowout Capacity

Please refer the Blowout Capacity Table on next page.

Ordering Information

N3 / N3L	Code	Valve Seat		
		0	P	PTFE (only for pressure rating 7.0~10 kg/cm ²)
↓	↓	Code		Pressure Rating
		1A	0.3~2 kg/cm ² (Brass Seat)	
		1B	2~10 kg/cm ² (Brass Seat)	
		2	7.0~10 kg/cm ² (PTFE Seat)	
↓	↓	Code		Size
		(A) 1/2"NPT (B) 3/4"NPT (C) 1"NPT (D) 1 1/4"NPT (E) 1 1/2"NPT (F) 2"NPT		
↓	↓	↓	↓	Complete Ordering Code

Blowout Capacity Table

– Air

orifice set press.	Air Blowout Capacity (kg/h)					
	½" (15)	¾" (20)	1" (25)	1¼" (32)	1½" (40)	2" (50)
1 kgf/cm ²	30	64	110	180	255	441
2 kgf/cm ²	45	97	168	275	388	671
3 kgf/cm ²	61	130	226	370	521	902
4 kgf/cm ²	77	164	283	464	654	1133
5 kgf/cm ²	92	197	341	559	788	1364
6 kgf/cm ²	108	230	399	653	921	1595
7 kgf/cm ²	123	264	456	748	1054	1825
8 kgf/cm ²	139	297	514	842	1188	2056
9 kgf/cm ²	155	330	572	937	1321	2287
10 kgf/cm ²	170	364	629	1031	1454	2518

– Water

orifice set press.	Water Blowout Capacity (L/Min)					
	½" (15)	¾" (20)	1" (25)	1¼" (32)	1½" (40)	2" (50)
1 kgf/cm ²	8.2	17.6	30.4	49.8	70.2	121.6
2 kgf/cm ²	11.6	24.8	43.0	70.4	99.3	171.9
3 kgf/cm ²	14.2	30.4	52.6	86.3	121.6	210.6
4 kgf/cm ²	16.4	35.1	60.8	99.6	140.5	243.2
5 kgf/cm ²	18.4	39.3	68.0	111.4	157.0	271.9
6 kgf/cm ²	20.1	43.0	74.5	122.0	172.0	297.8
7 kgf/cm ²	21.7	46.5	80.4	131.8	185.8	321.7
8 kgf/cm ²	23.2	49.7	86.0	140.9	198.6	343.9
9 kgf/cm ²	24.7	52.7	91.2	149.4	210.7	364.7
10 kgf/cm ²	26.0	55.5	96.1	157.5	222.1	384.5

– Steam

orifice set press.	Steam Blowout Capacity (kg/h)					
	½" (15)	¾" (20)	1" (25)	1¼" (32)	1½" (40)	2" (50)
1 kgf/cm ²	18.4	39.2	67.90	111.3	156.9	271.7
2 kgf/cm ²	27.7	59.1	102.4	167.7	236.6	409.5
3 kgf/cm ²	37.0	79.0	136.9	224.2	316.2	547.4
4 kgf/cm ²	46.3	98.9	171.3	280.7	395.8	685.2
5 kgf/cm ²	55.7	118.8	205.8	337.1	475.4	823.1
6 kgf/cm ²	65.0	138.7	240.2	393.6	555.0	960.9
7 kgf/cm ²	74.3	158.7	274.7	450.1	634.7	1099
8 kgf/cm ²	83.6	178.6	309.2	506.5	714.3	1237
9 kgf/cm ²	92.9	198.5	343.6	563.0	793.9	1374
10 kgf/cm ²	102.3	218.4	378.1	619.5	893.5	1512