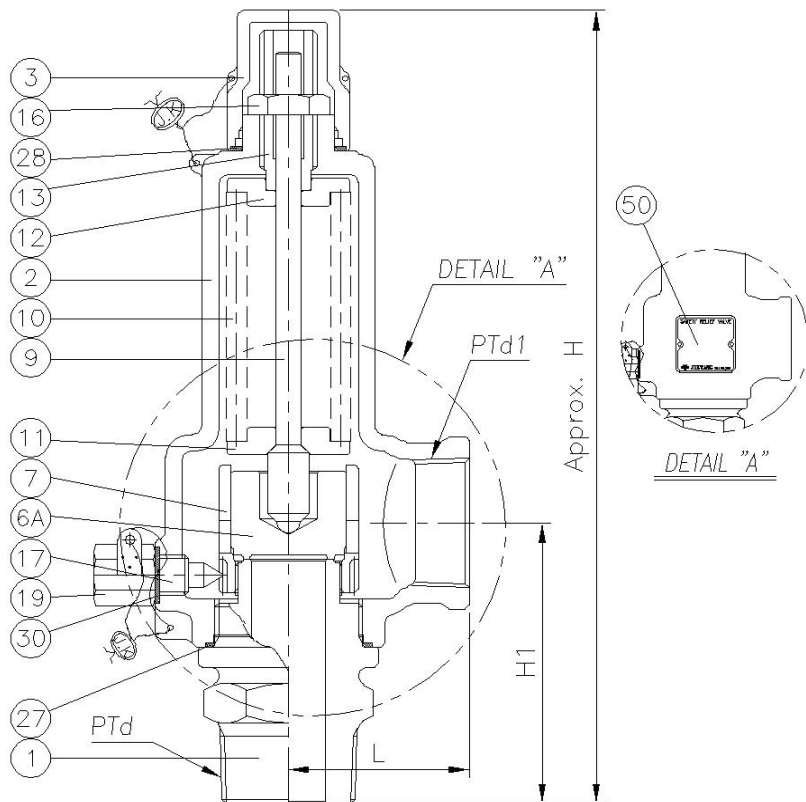


JOKWANG ILI	Pressure Safety & Relief Valve Specification and Calculation Sheet			
	Sheet No.	1 of 1	Rev . No	0
	Project Name			
	Project No.			
	Date	2025-08-11	By	S.Y.YOON
	Checked	NONE	Approved	NONE

GENERAL	P&ID No.	1	-		
	Tag No.	2	-		
	Service Line	3	-		
	Model No.	4	JSV-HT41	Calculation	
	Quantity	5	2		
TYPE	Nozzle Type	6	Full Nozzle	Calculation of Area	
	Design Type	7	Conventional	$A1 = 11.78 * W1 * \sqrt{(G / (1.25P - Pb)) / (Kd * Kb * Kc * Kv * Kp)}$ $= 11.78 * 0 * (\sqrt{1 / (1.25 * 646.8 - 0)}) / (0.62 * 1 * 1 * 1 * 0.6)$ $= 0 \text{ mm}^2$	
	Bonnet Type	8	Close		
	Lever Type	9	None		
	Cap Type	10	Screwed		
CONN	Size. Inlet / Outlet	11	015X020		
	Inlet. Rating / Facing	12	JIS PT (Male)		
	Outlet. Rating / Facing	13	JIS PT (Female)		
MATERIALS	Body (Base)	14	A276 304 -st.	Calculation of Capacity	
	Bonnet	15	B62 C83600 or BC6(CAC406)		
	Seat	16	304 SS-st.	$W = A * Kd * Kb * Kc * Kv * Kp / (11.78 * \sqrt{(G / (1.25P - Pb))})$ $= 43.982 * 0.62 * 1 * 1 * 1 * 0.6 / (11.78 * \sqrt{(1 / (1.25 * 646.8 - 0))})$ $= 39.50 \text{ l/min}$ $= 2.4 \text{ m}^3/\text{h}$	
	Disc	17	304 SS-st.		
	Guide	18	-		
	Gasket (Bonnet)	19	PTFE		
	Spring	20	Chrome Alloy(SWOSC-B)		
BASIS	Bellows	21	-		
	Approved by	22	-	W	Valve Capacity
	Comply with NACE	23	-	W1	Required Capacity
	EN 10204	24	No	P	Set Pressure
	Code	25	API RP 520		
	Fire	26	No		
	Sizing Basis	27	-		
SERVICE CONDITION	Rupture Disk	28	No		
	Fluid / State	29	Water / LIQUID	A1	Calculated Area
	Mol. Weight / Specific Gravity	30	1	A	Selected Area
	Compressibility Factor	31	-	Kd	Coefficient of Discharge
	Ratio of Specific Heat	32	-	G	Specific Gravity
	Viscosity	33	-	Pb	Back Pressure
	Operating / Relieving Temp.	34	/ 20 °C	Kb	Correction Factor Due to Back Pressure
	Design Min. / Design Max. Temp.	35	- °C	Kc	Correction Factor for a rupture disk
	Operating / Set Pressure	36	/ 6.6 Kgf/cm ² g	Kv	Correction Factor due to Viscosity
	Design Pressure / C.D.T.P	37	- / 6.6 Kgf/cm ² g	Kp	Correction Factor due to Overpressure
	Back Pressure	Superimposed - Constant	38	- Kgf/cm ² g	
		Superimposed - Variable	39	- Kgf/cm ² g	
		Built-up	40	- Kgf/cm ² g	
		Total	41	0 Kgf/cm ² g	
	Allowable Overpressure	42	10 %	Remarks	
	Closing Pressure / Blowdown	43	Min. 4.95 Kgf/cm ² g / 25%		
SIZING & SELECTION	Required Capacity	44	0 m ³ /h		
	Valve Actual Capacity	45	2.4 m ³ /h		
	Calculated Orifice Area	46	0.0 mm ²		
	Selected Orifice Area	47	43.982 mm ²		
	Orifice Dia.(mm)	48	13		
			-		
			-		
ETC	Paint System & Color	49	None		
	Test Gag	50	No		
	Bug screen	51	No		

TAG NO.



DIMENSION

SIZE	L	H1	H	PtD	PtD1	Wt(kg)
15x20A	42	62	178	1/2"	3/4"	1.4

UNIT: mm

50	NAME PLATE	304 SS	1	
30	GASKET (SET SCREW)	PTFE	1	
28	GASKET (CAP)	PTFE	1	
27	GASKET (BODY)	PTFE	1	
19	CAP NUT	316 SS	1	
17	SET SCREW (LOW)	316 SS	1	
16	LOCK NUT	Brass(C36000)	1	
13	ADJUST SCREW	Brass(C36000)	1	
12	SPRING SEAT (UPP)	Carbon Steel	1	
11	SPRING SEAT (LOW)	Carbon Steel	1	
10	SPRING	Chrome Alloy(SWOSC-B)	1	
9	STEM	304 SS	1	
7	ADJUST RING (LOW)	304 SS	1	
6A	DISC	304 SS -st	1	
3	CAP	Copper Alloy	1	
2	BONNET	B62 C83600 or BC6(CAC406)	1	
1	BODY	A276 304-st. or SUS 304-st.	1	
NO	PART NAME	MATERIAL	QTY	REMARK
DWG NO	JKS-SLQ081333-10	Designed	Checked	Approved
MODEL	JSV-HT41			
DATE	2025-08-11	JK YOON	HMMUN	SYPARK
HIGH LIFT TYPE SAFETY RELIEF VALVE				REV
JOKWANG ILI				0