



Vendor	ABT 360 KT/Y PP PLANT Project			Owner
	PSV data sheet			
	Vendor's Doc. No.: 23249-28	Rev.: 01		
	PPEC Doc. No.: L03-RE037-IN-DSH-004			

PPEC REQ. NO. : L03-RE037-IN-DSH-004

ITEM NO. :

TOTAL PAGES : 06

- **NO COMMENTS** : Documents/Drawings Were Checked By PPEC And Further Step Can Be Followed.
- **COMMENTED AS MARKED:** Documents/Drawings Were Checked By PPEC And Marked Comments Must Be Considered By Vendor. Vendor Shall Revise Documents/Drawing As Per Comments And The New Revision Of Documents/Drawings Must Be Revised Prior To Fabrication.
- **REJECTED:** Documents/Drawings Were Checked And It Is Not In Comply With Purchase Requisition Requirements.
- **ACCEPTABLE WITH COMMENTS:** Documents/Drawings Were Checked By PPEC And Comments Must Be Considered By Vendor. Fabrication Can Proceed Accordingly. Revised Document To Be Issued Either For Review Or As Final Certified. However PPEC Will Check The Revised Document For Proper Incorporation Of Comments.
- **NOT RETURNED:** Document Was Received For Information And Not Returned To The Vendor.



Name :
Signature:
Date :

Req. No. :

Seq. No.:

PPEC review & comments does not absolve the vendor of the responsibility for the corrected design, manufacturing and operation of the equipment

01	04-07-2025	Issue for Engineering	L.K.	S.K.	J.J.	
00	10-06-2025	Issue for Engineering	L.K.	S.K.	J.J.	
REV.	DATE	Description	Prepared by	Checked by	Approved by	Authorized by

Vendor 	ABT 360 KT/Y PP PLANT		Contractor (DEC)	Owner  سراج گستران رجال SERAJ GOSTARAN REJAL (سهایی خانی)
	PSV data sheet			
	Vendor's Doc. No.: 2 3 2 4 9 - 2 8 PPEC Doc. No.: L03-RE037-IN-DSH-004	Rev.: 01		

PAGE NO.		CHANGE INDEX DURING FORMAL ISSUE						REASON OF LATEST CHANGE
		FIRST ISSUE	SECOND ISSUE	THIRTH ISSUE	FOURTH ISSUE	FIFTH ISSUE	SIXTH ISSUE	
		REV.00	REV.01	REV.02	REV.03	REV.04	REV.05	
1		X	X					
2		X	X					
3		X	X					
4		X	X					
5		X	X					
6		X	X					
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
54								



Doc. No : 23249-28

Rev. No. : 01

Page : 2 of 5


INDEX			
No.	Device	Tag Number	Page
1	Pressure Safety Valve	PSV-PK6801-01, PSV-PK6801-02	3
2	Pressure Safety Valve	PSV-PK6801-03, PSV-PK6801-04	4
3	Pressure Safety Valve	PSV-PK6801-05, PSV-PK6801-06	5
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			

Notes:

				INSTRUMENT AND VALVE DATASHEET Index 	
01	LK	4-7-2025	For Approval		Sheet 2 of 5 Based on P&ID Rev.01
00	LK	10-6-2025	For Approval		
Rev	By	Date	Description		


GENERAL	1	Tag Number		PSV-PK6801-01, PSV-PK6801-02	
	2	Service		Pressure Safety Valve	
	3	P&ID No.		23249-03	
	4	Location		Pulsation damper 1st stage inlet	
	5	Nozzle		Full nozzle	
	6	Design type		Safety	
	7	Conv., Bellows, Pilot op.		Conventional type	
	8	Bonnet Type		Closed	
	9	Bonnet connection		Bolted	
PROCESS CONDITIONS	10	Fluid	State	Mixed gas (see notes)	Dry gas
	11	Pressure	Inlet Max.	2,8 bar(g)	3,5 bar(g)
	12	Temperature	Norm. Max.	0 °C	60 °C
	13	Design	Press. Temp.	5 bar(g)	75 °C
	14	Ambient Temp.	Min. Max.	1 °C	55 °C
BASIS AND SELECTION	15	Flow		1100-1200 kg/h	
	16	Set Pressure		4 bar(g)	
	17	Molecular Weight	Oper. Sp. Gr.	Case 1: 42,56 kg/kmol Case 2: 42,124 kg/kmol	1
	18	Back Pres. (bar(g))		0,6 bar(g)	
	19	Allowable Overpressure (%)		10 %	
	20	Compressibility Factor (Z)		1	
	21	Ratio of Specific Heat (Cp/Cv)		1.4	
	22	Operating Viscosity (cP)		-	
	23	Barometric Pressure		1,013 bar(a)	
	24	Max. Allowable Relief Pressure		5,413 bar(a)	
	25	Design Code		API 520, API 521	
	26	Size Basis		Blocked discharge	
	27	Calculated Area (sq.mm)		321,13 mm²	
	28	Selected Area (sq.mm)		397,61 mm²	
	29	Orifice Designation		G	
CONNECTIONS	30				
	31	Inlet Size	Outlet Size	1 1/2"	3"
	32	Inlet Connection	Outlet Conn.	RF	RF
	33	Inlet Rating	Outlet Rating	150#	150#
MATERIAL	34				
	35				
	36	Body and Bonnet		Carbon steel ASTM A 216 Gr. WCB / A105 (VTA)	
	37	Seat and Disc		To be advised by supplier	
	38	Guide and Rings		To be advised by supplier	
	39	Spring		To be advised by supplier	
	40	Nozzle		To be advised by supplier	
OPTIONS	41				
	42				
	43	Lever: Plain or Packed		N/A	
	44	Test Gag		N/A	
CERTIFICATES	45				
	46				
	47				
	48	3.1 Material certificate		Yes	
CALCULATIONS	49	Calibration certificate		No	
	50	Leakage test acc to API STD 527		No	
	51	Functional test		No	
	52	Sizing calculation		Yes	
PURCHASE	53				
	54				
	55	Manufacturer		According to approved vendor list	
	56	Model		Supplier to advise	
	57				

Note					
Case 1:			Case 2:		
- 77% propylene			- 70,2% propylene		
- 23% propane			- 26,2% propane		
			- 3,3% ethylene		
			- 0,3% ethane		

				INSTRUMENT AND VALVE DATASHEET	
				Pressure Safety Valve	
					
01	LK	4-7-2025	For Approval		
00	LK	10-6-2025	For Approval		
Rev	By	Date	Description	Sheet 3 of 5 Based on P&ID Rev.01	


GENERAL	1	Tag Number			PSV-PK6801-03, PSV-PK6801-04	
	2	Service			Pressure Safety Valve	
	3	P&ID No.			23249-03	
	4	Location			Pulsation damper 1st stage outlet	
	5	Nozzle			Full nozzle	
	6	Design type			Safety	
	7	Conv., Bellows, Pilot op.			Conventional type	
	8	Bonnet Type			Closed	
	9	Bonnet connection			Bolted	
PROCESS CONDITIONS	10	Fluid	State	Mixed gas (see notes)	Dry gas	
	11	Pressure	Inlet	Max.	10,5 bar(g)	
	12	Temperature	Norm.	Max.	52 °C	
	13	Design	Press.	Temp.	16 bar(g)	75 °C
	14	Ambient Temp.	Min.	Max.	1 °C	55 °C
BASIS AND SELECTION	15	Flow			1100-1200 kg/h	
	16	Set Pressure			11,5 bar(g)	
	17	Molecular Weight	Oper. Sp. Gr.		Case 1: 42,56 kg/kmol Case 2: 42,124 kg/kmol	1
	18	Back Pres. (bar(g))			0,6 bar(g)	
	19	Allowable Overpressure (%)			10 %	
	20	Compressibility Factor (Z)			1	
	21	Ratio of Specific Heat (Cp/Cv)			1.4	
	22	Operating Viscosity (cP)			-	
	23	Barometric Pressure			1,013 bar(a)	
	24	Max. Allowable Relief Pressure			13,663 bar(a)	
	25	Design Code			API 520, API 521	
	26	Size Basis			Blocked discharge	
	27	Calculated Area (sq.mm)			124,84 mm²	
	28	Selected Area (sq.mm)			153,94 mm²	
	CONNECTIONS	29	Orifice Designation			E
30						
31		Inlet Size	Outlet Size		1"	2"
32		Inlet Connection	Outlet Conn.		RF	RF
33		Inlet Rating	Outlet Rating		300#	150#
34						
35						
MATERIAL	36	Body and Bonnet			Carbon steel ASTM A 216 Gr. WCB / A105 (VTA)	
	37	Seat and Disc			To be advised by supplier	
	38	Guide and Rings			To be advised by supplier	
	39	Spring			To be advised by supplier	
	40	Nozzle			To be advised by supplier	
	41					
	42					
OPTIONS	43	Lever: Plain or Packed			N/A	
	44	Test Gag			N/A	
	45					
	46					
	47					
CERTIFICATES	48	3.1 Material certificate			Yes	
	49	Calibration certificate			No	
	50	Leakage test acc to API STD 527			No	
	51	Functional test			No	
CALCULATIONS	52	Sizing calculation			Yes	
	53					
	54					
PURCHASE	55	Manufacturer			According to approved vendor list	
	56	Model			Supplier to advise	
	57					

Note					
Case 1:			Case 2:		
- 77% propylene			- 70,2% propylene		
- 23% propane			- 26,2% propane		
			- 3,3% ethylene		
			- 0,3% ethane		

				INSTRUMENT AND VALVE DATASHEET	
				Pressure Safety Valve	
					
01	LK	4-7-2025	For Approval		
00	LK	10-6-2025	For Approval		
Rev	By	Date	Description	Sheet 4 of 5 Based on P&ID Rev.01	

GENERAL	1	Tag Number		PSV-PK6801-05, PSV-PK6801-06	
	2	Service		Pressure Safety Valve	
	3	P&ID No.		23249-03	
	4	Location		Pulsation damper 2nd stage outlet	
	5	Nozzle		Full nozzle	
	6	Design type		Safety	
	7	Conv., Bellows, Pilot op.		Conventional type	
	8	Bonnet Type		Closed	
	9	Bonnet connection		Bolted	
PROCESS CONDITIONS	10	Fluid	State	Mixed gas (see notes)	Dry gas
	11	Pressure	Inlet Max.	21 bar(g)	
	12	Temperature	Norm. Max.	85 °C	97 °C
	13	Design	Press. Temp.	30 bar(g)	120 °C
	14	Ambient Temp.	Min. Max.	1 °C	55 °C
	15	Flow		1100-1200 kg/h	
BASIS AND SELECTION	16	Set Pressure		23,5 bar(g)	
	17	Molecular Weight	Oper. Sp. Gr.	Case 1: 42,56 kg/kmol Case 2: 42,124 kg/kmol	1
	18	Back Pres. (bar(g))		0,6 bar(g)	
	19	Allowable Overpressure (%)		10 %	
	20	Compressibility Factor (Z)		1	
	21	Ratio of Specific Heat (Cp/Cv)		1.4	
	22	Operating Viscosity (cP)		-	
	23	Barometric Pressure		1,013 bar(a)	
	24	Max. Allowable Relief Pressure		26,863 bar(a)	
	25	Design Code		API 520, API 521, API 526	
	26	Size Basis		Blocked discharge	
	27	Calculated Area (sq.mm)		118,79 mm²	
	28	Selected Area (sq.mm)		153,94 mm²	
	29	Orifice Designation		D	
	30				
CONNECTIONS	31	Inlet Size	Outlet Size	1"	2"
	32	Inlet Connection	Outlet Conn.	RF	RF
	33	Inlet Rating	Outlet Rating	600#	150#
	34				
MATERIAL	36	Body and Bonnet		Carbon steel ASTM A 216 Gr. WCB / A105 (VTA)	
	37	Seat and Disc		To be advised by supplier	
	38	Guide and Rings		To be advised by supplier	
	39	Spring		To be advised by supplier	
	40	Nozzle		To be advised by supplier	
	41				
	42				
	43	Lever: Plain or Packed		N/A	
OPTIONS	44	Test Gag		N/A	
	45				
	46				
CERTIFICATES	48	3.1 Material certificate		Yes	
	49	Calibration certificate		No	
	50	Leakage test acc to API STD 527		No	
	51	Functional test		No	
CALCULATIONS	52	Sizing calculation		Yes	
	53				
	54				
PURCHASE	55	Manufacturer		According to approved vendor list	
	56	Model		Supplier to advise	
	57				

Note				Case 2:	
Case 1:					
- 77% propylene				- 70,2% propylene	
- 23% propane				- 26,2% propane	
				- 3,3% ethylene	
				- 0,3% ethane	

				INSTRUMENT AND VALVE DATASHEET	
				Pressure Safety Valve	
					
01	LK	4-7-2025	For Approval	Sheet 5 of 5 Based on P&ID Rev.01	
00	LK	10-6-2025	For Approval		
Rev	By	Date	Description		