







OWNER:  شرکت سست و سویی آوند ایرانیان (سهایی نظامی)	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT						EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	MC :  شرکت سست و سویی آوند ایرانیان موسسه آوند ایرانیان	CALCULATION & DATA SHEET OF CONTROL VALVES / ON-OFF VALVES FOR NITROGEN GAS BOOSTER						 Netherlands	
Project		Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-45A	BU	20	VD	303	IN	DSH	0041	Rev.:	Page
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Comments on hand valve:
 1- proper coating shall be considered for bolt & nut.
 2- Screwed bonnet is not accepted, bolted type shall be considered instead.

CALCULATION & DATA SHEET OF CONTROL VALVES / ON-OFF VALVES FOR NITROGEN GAS BOOSTER



  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT
Document Review	
Issue Purpose:	AFC
Result Code: AP,AN,CM,RE,NC	AN
Next Status : IFC,IFA,IFI,AFC,AB	AFC
Responsible Department	MECHANICAL
Commented Date	Feb/22/2022
Approval or review hereunder shall not be construed to relieve Vendor / Subcontractor of his responsibilities and liability under the contract.	

Rev	Date	Purpose of Issue	Prepared	Checked	Approved	AC Code
04	03/02/2022	Approved for Construction	TvT	KP	LdM	
03	07/01/2022	Approved for Construction	TvT	KP	LdM	
02	25/10/2021	Approved for Construction	TvT	KP	LdM	
01	20/09/2021	For approval	TvT	KP	LdM	
00	25/02/2021	For approval	TvT	KP	LdM	

Class: 1	Phase: P
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Notes:

				CALCULATION & DATA SHEET OF CONTROL VALVES / ON-OFF VALVES FOR NITROGEN GAS BOOSTER 	
04	TT	03/02/2022	For Construction		
03	TT	07/01/2022	For Construction		
02	TT	25/10/2021	For Construction		
01	TT	20/09/2021	For Approval		
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NL

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 : 04
 P&ID. No. : BU-20-VD-303-PR-WG-0013
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GENERAL	1	Tag Number		No Tag.no.: Qty 1 pc	
	2	Service		Hand Ball valve	
	3	P&ID No.		BU-20-VD-303-PR-WG-0013	
	4	Location		Compressor Inlet	
	5	Line/equip. No.		2"-INL-1001-511C(N)	
	6				
	7				
PROCESS CONDITIONS	8	Fluid	State	Nitrogen	Dry Gas
	9	Pressure	Norm. Max.	8 Bar(a)	9 Bar(a)
	10	Temperature	Norm. Max.	55°C	65°C
	11	Design	Press. Temp.	13.5 Bar(a)	85°C
	12	Ambient Temp.	Min. Max.	5 °C	52 °C
	13	Oper. Flow		707 Kg/hr / 565 Nm3/hr	
	14				
BODY	16	Body Type		Ball valve, 2-piece, split-body	
	17	Body Size	Bore	2"	Full bore
	18	Guiding	No. Of Ports	-	2
	19	Conn. Type	End Conn. Rat.	RF, ASME B16.5	150#
	20	Body Material		Carbon steel ASTM A 216 Gr. WCB / A105	
	21	Packing/ gasket Material		RPTFE / 304/graphite	
	22	Bonnet Type		Screwed	
	23	Form		Floating ball	
	24	Trim	Seat Mat.	RPTFE	
	25		Ball Mat.	SS 316	SS316
			Shaft Mat.		
	26	Actuation	Material	Lever handle	CS
	27	Bolts & Nuts		B7/2H	
	28	Shaft		Anti blow-out	
	29	Device		Anti static	
	30	Fire safe		Included	
	31				
	32				
	33				
	34				
	35	Leakage rate		API 598 TSO	
36					
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41					
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43					
OPTIONS	44				
	45				
	46				
CERTIFICATES	47	3.1 Material certificate		Yes	
	48	Hydrotest certificate		Yes	
	49				
	50				
	51				
PURCHASE	52	Manufacturer		According to aproved vendor list	
	53	Model		Supplier to advise	
	54				
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Bolted bonnet shall be used

NOTES :



04	TT	03/02/2022	For Construction	INSTRUMENT AND VALVE DATASHEET Hand Ball Valve 	
03	TT	07/01/2022	For Construction		
02	TT	25/10/2021	For Construction		
01	TT	20/09/2021	For Approval		
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Rev	By	Date	Description		

With reference to P&ID, PSV set pressure is 25 barg. How is it possible design pressure be less than PSV set pressure.

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GENERAL	1	Tag Number	No Tag.no.: Qty 1 pcs		
	2	Service	Hand Ball valve		
	3	P&ID No.	BU-20-VD-303-PR-WG-0013		
	4	Location	Compressor Outlet		
	5	Line/equip. No.	2"-NL-1		
	6		Please delete this pressure.		
	7				
PROCESS CONDITIONS	8	Fluid	State	Nitrogen	Dry Gas
	9	Pressure	Norm. Max.	23,5 Bar(a)	25 Bar(a)
	10	Temperature	Norm. Max.	40°C	55°C
	11	Design	Press. Temp.	25 Bar(a)	85°C
	12	Ambient Temp.	Min. Max.	5 °C	52 °C
	13	Oper. Flow	707 Kg/hr / 565 Nm3/hr		
	14				
BODY	16	Body Type	Ball valve, 2-piece, split-body		
	17	Body Size	Bore	2"	Full bore
	18	Guiding	No. Of Ports	-	2
	19	Conn. Type	End Conn. Rat.	RF, ASME B16.5	300#
	20	Body Material	Carbon steel ASTM A 216 Gr. WCB / A105		
	21	Packing/ gasket Material	RPTFE / 304/graphite		
	22	Bonnet Type	Screwed		
	23	Trim	Form	Floating ball	
	24		Seat Mat.	RPTFE	
	25		Ball Mat.	SS 316	SS316
	26	Actuation	Material	Lever handle	CS
	27	Bolts & Nuts	B7/2H		
	28	Shaft	Anti blow-out		
	29	Device	Anti static		
	30	Fire safe	Included		
	31				
	32				
	33				
	34				
	35	Leakage rate	API 598 TSO		
	36				
37					
38					
39					
40					
41					
42					
43					
OPTIONS	44				
	45				
	46				
CERTIFICATES	47	3.1 Material certificate	Yes		
	48	Hydrotest certificate	Yes		
	49				
	50				
	51				
PURCHASE	52	Manufacturer	According to aproved vendor list		
	53	Model	Supplier to advise		
	54				
	55				
	56				
	57				

NOTES :

04	TT	03/02/2022	For Construction	INSTRUMENT AND VALVE DATASHEET Hand Ball Valve 	
03	TT	07/01/2022	For Construction		
02	TT	25/10/2021	For Construction		
01	TT	20/09/2021	For Approval		
00	TT	25/02/2021	For Approval		
Rev	By	Date	Description		
				Sheet 5 of 16	Based on P&ID rev.02



GENERAL	1	Tag Number		No Tag.no.: Qty 2 pcs	
	2	Service		Hand Ball valve	
	3	P&ID No.		BU-20-VD-303-PR-WG-0013	
	4	Location		Compressor Cooling water	
	5	Line/equip. No.		11/2"-CWS-1004-500C(N)/ 11/2"-CWR-1011-500C(N)	
	6				
	7				
PROCESS CONDITIONS	8	Fluid	State	Water	Liquid
	9	Pressure	Norm. Max.	4,5 Bar(g)	5 Bar(g)
	10	Temperature	Norm. Max.	35°C	45°C
	11	Design	Press. Temp.	7 Bar(g)	95°C
	12	Ambient Temp.	Min. Max.	5 °C	52 °C
	13	Oper. Flow		14,5 m3/hr	
	14				
BODY	16	Body Type		Ball valve, 2-piece, split-body	
	17	Body Size	Bore	1 1/2"	Full bore
	18	Guiding	No. Of Ports	-	2
	19	Conn. Type	End Conn. Rat.	RF, ASME B16.5	150#
	20	Body Material		Carbon steel ASTM A 216 Gr. WCB / A105	
	21	Packing/ gasket Material		RPTFE / 304/graphite	
	22	Bonnet Type		Screwed	
	23	Form		Floating ball	
	24	Trim	Seat Mat.	RPTFE	
	25		Ball Mat.	SS 316	SS316
	26	Actuation	Material	Lever handle	CS
	27	Bolts & Nuts		B7/2H	
	28	Shaft		Anti blow-out	
	29	Device		Anti static	
	30	Fire safe		Included	
	31				
	32				
	33				
	34				
	35	Leakage rate		API 598 TSO	
	36				
37					
38					
39					
40					
41					
42					
43					
OPTIONS	44				
	45				
	46				
CERTIFICATES	47	3.1 Material certificate		Yes	
	48	Hydrotest certificate		Yes	
	49				
	50				
	51				
PURCHASE	52	Manufacturer		According to aproved vendor list	
	53	Model		Supplier to advise	
	54				
	55				
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NOTES :

04	TT	03/02/2022	For Construction	INSTRUMENT AND VALVE DATASHEET Hand Ball Valve 	
03	TT	07/01/2022	For Construction		
02	TT	25/10/2021	For Construction		
01	TT	20/09/2021	For Approval		
00	TT	25/02/2021	For Approval		
Rev	By	Date	Description		
				Sheet 6 of 16	Based on P&ID rev.02

GENERAL	1	Tag Number		No Tag.no.: Qty 2 pcs	
	2	Service		Hand Ball valve	
	3	P&ID No.		BU-20-VD-303-PR-WG-0013	
	4	Location		Compressor Oil sump drain & block valve	
	5	Line/equip. No.		N/A	
	6				
	7				
PROCESS CONDITIONS	8	Fluid	State	Oil	Liquid
	9	Pressure	Norm. Max.	3 Bar(a)	3,5 Bar(a)
	10	Temperature	Norm. Max.	45°C	65°C
	11	Design	Press. Temp.	5 Bar(a)	80°C
	12	Ambient Temp.	Min. Max.	5 °C	52 °C
	13	Oper. Flow			
	14				
BODY	16	Body Type		Ball valve, screwed type	
	17	Body Size	Bore	1/2"	Full bore
	18	Guiding	No. Of Ports	-	2
	19	Conn. Type	End Conn. Rat.	NPT-F	800#
	20	Body Material		SS316	
	21	Packing Material		RPTFE / Graphite	
	22	Bonnet Type		Screwed	
	23	Form		Floating ball	
	24	Trim	Seat Mat.	RPTFE	
	25		Ball Mat.	Shaft Mat.	SS 316 SS316
	26	Actuation	Material	Lever handle	CS
	27	Leakage rate		API 502, zero	
	28				
	29				
	30				
	31				
	32				
	33				
	34				
	35				
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43					
OPTIONS	44				
	45				
	46				
CERTIFICATES	47	3.1 Material certificate		No	
	48	Hydrotest certificate		No	
	49				
	50				
	51				
PURCHASE	52	Manufacturer		According to aproved vendor list	
	53	Model		Supplier to advise	
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04	TT	03/02/2022	For Construction	INSTRUMENT AND VALVE DATASHEET Hand Ball Valve 	 Sheet 7 of 16 Based on P&ID rev.02
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00	TT	25/02/2021	For Approval		
Rev	By	Date	Description		



With reference to P&ID, PSV set pressure is 25 barg. How is it possible design pressure be less than PSV set pressure.

Please delete this pressure.

80 °C



GENERAL	1	Tag Number				
	2	Service				
	3	P&ID No.				
	4	Location				
	5	Line/equip. No.				Compressor block valve
	6					
	7					
PROCESS CONDITIONS	8	Fluid	State	Nitrogen/ water		Dry Gas
	9	Pressure	Norm. Max.	23,5 Bar(a)		25 Bar(a)
	10	Temperature	Norm. Max.	40°C		55°C
	11	Design	Press. Temp.	25 Bar(a)		60°C
	12	Ambient Temp.	Min. Max.	5 °C		52 °C
	13	Oper. Flow				
	14					
BODY	16	Body Type			Ball valve, screwed type	
	17	Body Size	Bore	1/2"		Full bore
	18	Guiding	No. Of Ports	-		2
	19	Conn. Type	End Conn. Rat.	NPT-F		800#
	20	Body Material			SS316	
	21	Packing Material			RPTFE / Graphite	
	22	Bonnet Type			Screwed	
	23	Trim	Form	Floating ball		
	24		Seat Mat.	RPTFE		
	25		Ball Mat.	Shaft Mat.	SS 316	SS316
	26	Actuation	Material	Lever handle		CS
	27	Leakage rate			API 502, zero	
	28					
	29					
	30					
	31					
	32					
	33					
	34					
	35					
36						
37						
38						
39						
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41						
42						
43						
OPTIONS	44					
	45					
	46					
CERTIFICATES	47	3.1 Material certificate				No
	48	Hydrotest certificate				No
	49					
	50					
	51					
PURCHASE	52	Manufacturer			According to aproved vendor list	
	53	Model			Supplier to advise	
	54					
	55					
	56					
	57					

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04	TT	03/02/2022	For Construction	INSTRUMENT AND VALVE DATASHEET Hand Ball Valve 	
03	TT	07/01/2022	For Construction		
02	TT	25/10/2021	For Construction		
01	TT	20/09/2021	For Approval		
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Rev	By	Date	Description		



GENERAL	1	Tag Number		XV-10152	
	2	Service		Ball valve	
	3	P&ID No.		BU-20-VD-303-PR-WG-0013	
	4	Location		Compressor Cooling water Inlet	
	5	Line/equip. No.		1 1/2"-CWS-1004-501C(N)	
	6				
	7				
PROCESS CONDITIONS	8	Fluid	State	Water	Liquid
	9	Pressure	Norm. Max.	4,5 Bar(g)	5 Bar(g)
	10	Temperature	Norm. Max.	35°C	45°C
	11	Design	Press. Temp.	7 Bar(g)	95°C
	12	Ambient Temp.	Min. Max.	5 °C	52 °C
	13	Oper. Flow		14,5 m3/hr	
	14				
BODY	15	Body Type		Ball valve, 2-piece, split-body	
	16	Body Size	Bore	1 1/2"	Full bore
	17	Guiding	No. Of Ports	-	2
	18	Conn. Type	End Conn. Rat.	RF, ASME B16.5	150#
	19	Body Material		Carbon steel ASTM A 216 Gr. WCB/ A105	
	20	Packing/ gasket Material		RPTFE / 304/graphite	
	21	Bonnet Type		Screwed	
	22	Form		Floating ball	
	23	Trim	Seat Mat.	RPTFE	
	24	Ball Mat.	Shaft Mat.	SS 316	SS316
	25	Bolts & Nuts		B7/2H	
	26	Shaft		Anti blow-out	
	27	Device		Anti static	
	28	Fire safe		Included	
ACTUATOR	29	Type		Rack & Pinion, single acting	
	30	Close At	Open At	Spring return	Air supply
	31	Flow Action To		FTC	
	32	Fail Position		FC	
	33	Pneumatic connection		2 x 1/4" NPT-F	
	34	Instrument Supply Fluid		Instrument Air / Nitrogen	
	35	Instrument Supply Fluid pressure		6.0 bar(g)	
	36	Brackets	Coupling	SS316	SS316
	37	Housing material		Aluminium, epoxy coated	
38					
POSITION MONITOR	39	Type		N/A	
	40	Power supply		N/A	
	41	Type of switch/transmitter		N/A	
	42	Area Classification		N/A	
	43	Cable Gland		N/A	
OPTIONS	44	Solenoid valves		see instrument datasheet Tag. XY-10152	
	45	Leakage rate		API 598 TSO	
	46				
CERTIFICATES	47	3.1 Material certificate		Yes	
	48	Hydrotest certificate		Yes	
	49	ATEX		No	
	50	SIL certificate	Level	No	
	51	IP certificate		No	
PURCHASE	52	Valve Manufacturer		According to aproved vendor list	
	53	Valve Model		Supplier to advise	
	54	Actuator Manufacturer			
	55	Actuator Model		Supplier to advise	
	56				
	57				

NOTES :

04	TT	03/02/2022	For Construction	INSTRUMENT AND VALVE DATASHEET Pneumatic Actuated Valve 	
03	TT	07/01/2022	For Construction		
02	TT	25/10/2021	For Construction		
01	TT	20/09/2021	For Approval		
00	TT	25/02/2021	For Approval		
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GENERAL	1	Tag Number		No Tag.no: Qty 2 pcs		
	2	Service		Globe valve		
	3	P&ID No.		BU-20-VD-303-PR-WG-0013		
	4	Location		Compressor Cooling water		
	5	Line/equip. No.		1 1/2"-CWS-1006-501C(N)		
	6					
	7					
PROCESS CONDITIONS	8	Fluid	State	Water	Liquid	
	9	Pressure	Norm. Max.	4,5 Bar(g)	5 Bar(g)	
	10	Temperature	Norm. Max.	35°C	45°C	
	11	Design	Press. Temp.	7 Bar(g)	95°C	
	12	Ambient Temp.	Min. Max.	5°C	52°C	
	13	Oper. Flow		14,5 m3/hr		
	14					
BODY	15	Body Type		Globe valve, OS&Y, BB		
	16	Body Size		1 1/2 "		
	17	Guiding	No. Of Ports	-	2	
	18	Conn. Type	End Conn. Rat.	RF	150#	
	19	Body Material		Carbon steel ASTM A 216 Gr. WCB/WCC / A105		
	20	Packing Material		PTFE / Graphite		
	21	Bonnet Type		Bolted		
	22	Form		Disc		
	23	Trim	Seat Mat.		PTFE / Graphite	
	24		Disc Mat.	Shaft Mat.	SS 316	SS316
	25					
	26					
	27					
	28					
	29					
	30					
	31					
	32					
	33					
	34					
35						
36						
37						
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41						
42						
43						
OPTIONS	44					
	45					
	46					
CERTIFICATES	47	3.1 Material certificate		Yes		
	48	Hydrotest certificate		Yes		
	49					
	50					
	51					
PURCHASE	52	Manufacturer		According to aproved vendor list		
	53	Model		Supplier to advise		
	54					
	55					
	56					
	57					

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04	TT	03/02/2022	For Construction	INSTRUMENT AND VALVE DATASHEET Hand Globe Valve 	
03	TT	07/01/2022	For Construction		
02	TT	25/10/2021	For Construction		
01	TT	20/09/2021	For Approval		
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				Sheet 11 of 16	Based on P&ID rev.02

Tag no shall be specified,
also mentioned in P&ID too.

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GENERAL	1	Tag Number		No Tag.no: Qty 1 pcs		
	2	Service		Pressure Control Valve		
	3	P&ID No.		BU-20-VD-303-PR-WG-0013		
	4	Location		Compressor Inlet & actuator cooling inlet		
	5	Line/equip. No.		N/A		
	6					
	7					
PROCESS CONDITIONS	8	Fluid	State	Nitrogen	Dry Gas	
	9	Pressure	Norm. Max.	8 Bar(a)	9 Bar(a)	
	10	Temperature	Norm. Max.	55°C	65°C	
	11	Design	Press. Temp.	13.5 Bar(a)	85°C	
	12	Ambient Temp.	Min. Max.	5 °C	52 °C	
BODY	13	Valve Type		Pressure reducing valve		
	14	Body Material		Aluminium		
	15	Diaphragm Material		Will be informed later		
	16	Form		Disc / Plug / Globe		
	17	Trim	Seat Mat.		Will be informed later	
	18		Spring Mat.	Disc Mat.	Will be informed later	Will be informed later
	19					
	20					
	21					
22						
23						
ACTUATOR	25	Type		Mechanical, spring type		
	26	Fail Position		FC		
	27					
	28					
	29					
CONNECTIONS	31	Inlet Size	Outlet Size	1/4"	1/4"	
	32	Inlet Connection	Outlet Conn.	Threaded NPT-F	Threaded NPT-F	
	33	Inlet Rating	Outlet Rating	800#	800#	
	34					
SIZING CONDITIONS	35	Flow Rate		10 Nm ³ /hr		
	36	Pressure drop		To be advised by the manufacturer		
	37	Pressure setpoint		6,0 bar(g)		
	38					
	39					
OPTIONS	41	Pressure Gauge		Yes		
	42	Material		Aluminium		
	43	Range		0...11 bar(g)		
	44	Filter Regulator and drip well		Yes(Mesh 40)		
CERTIFICATES	45	3.1 Material certificate for body		No		
	46	3.1 Material certificate for stem		No		
	47					
CALCULATIONS	48					
	49	Sizing calculation		No		
	50					
	51					
	52					
PURCHASE	53					
	54	Manufacturer		According to aproved vendor list		
	55	Model		Supplier to advise		
	56					
57						

NOTES :

04	TT	03/02/2022	For Construction		
03	TT	07/01/2022	For Construction		
02	TT	25/10/2021	For Construction		
01	TT	20/09/2021	For Approval		
00	TT	25/02/2021	For Approval		
Rev	By	Date	Description	Based on P&ID rev.02	

Repeated Comment

- Following items shall be specified for control valve
- Required CV
- Travel %
- Trim characteristic (EQ%) (this items shall be specified by Airpack)

With reference to P&ID, PSV set pressure is 25 barg. How is it possible design pressure be less than PSV set pressure.

Please delete this pressure.

GENERAL	2	SERVICE				
	3	P&ID No.			BU-20-VD-303-PR-WG-0013	
	4	Location			Compressor bypass	
	5					
	6					
	7					
	PROCESS CONDITIONS	8	Fluid	State	Nitrogen	Dry Gas
9		Pressure	Norm. Max.	23.5 Bar(a)	25 Bar(a)	
10		Temperature	Norm. Max.	40°C	55°C	
11		Design	Press. Temp.	25 Bar(a)	85°C	
12		Ambient Temp.	Min. Max.	5 °C	52 °C	
13		Type Of Body			Globe valve	
BODY	14	Body Size			1" ANSI RF	
	15	Conn. Type	End Conn. Rat.	RF	300#	
	16	Body Material			Carbon steel ASTM A216 WCB/WCC	
	17	Packing Material			PTFE / Graphite	
	18	Bonnet Type			Integral	
	19	Trim	Form		Disc	
	20		Seat Mat.		PTFE / Graphite	
	21		Disc Mat.	Shaft Mat.	SS 316	SS316
	22	Required Seat Tightness			IV	
	23	Max. Allow. Sound Level (dBA)			85 dBA	
	24					
ACTUATOR	27	Positioner controller			Electro-pneumatic (I/P)	
	28	Interface			4 -20 mA , HART	
	29	Fail Position			FO	
	30	Pneumatic Conn.			1/4" NPT-F	
	31	Instrument Supply Fluid			Instrument Air	
	32	Instrument Supply Fluid pressure			6.0 bar(g)	
	33	Position Monitor			No,	
	34	Area Classification			Zone 2, Eex'ia	
	35	Electric Connection			ISO M20 x 1,5	
	36	Cable Gland			Yes, Eex 'de' certified (Airpack scope)	
ACCESSORIES	37	Ingress Protection			IP65	
	38	Filter Regulator			Yes	
	39	Gauges			Yes	
	40					
SERVICE	41	Flow Rate			707 Kg/hr / 565 Nm3/hr	
	42	Pressure	Inlet outlet	23.5 bar(a)	8 bar(a)	
	43	Pressure drop			VTA	
	44					
	45					
	46					
	47					
	48					
CERTIFICATES	49	3.1 Material certificate			Yes	
	50	ATEX			No	
	51	SIL certificate	Level		No	
	52					
PURCHASE	53	Valve Manufacturer			According to aproved vendor list	
	54	Valve Model			Supplier to advise	
	55	Actuator Manufacturer			According to aproved vendor list	
	56	Actuator Model			Supplier to advise	
57						

				INSTRUMENT AND VALVE DATASHEET			
04	TT	03/02/2022	For Construction			Sheet 13 of 16 Based on P&ID rev.02	
03	TT	07/01/2022	For Construction				
02	TT	25/10/2021	For Construction				
01	TT	20/09/2021	For Approval				
00	TT	25/02/2021	For Approval				
Rev	By	Date	Description				

GENERAL	1	Tag Number			
	2	Service		Qty 2 pcs	
	3	P&ID No.		valve	
	4	Location		R-WG-0013	
	5	Line/equip. No.		r Outlet	
	6			Z-NE-1003-539D	
	7				
	8				
PROCESS CONDITIONS	9	Fluid	State	Nitrogen	Dry Gas
	10	Pressure	Norm. Max.	23.5 Bar(a)	25 Bar(a)
	11	Temperature	Norm. Max.	40°C	55°C
	12	Design	Press. Temp.	25 Bar(a)	60°C
	13	Ambient Temp.	Min. Max.	5 °C	52 °C
	14	Oper. Flow		707 Kg/hr / 565 Nm3/hr	
	15				
	16				
	17				
	18				
BODY	20	Type Of Body		Wafer type	
	21	Type Of valve		Disc style, pulsation service	
	21	Body Size		DN 50 (Process line = 2" ANSI 300# RF)	
	22	Body Material		Carbon steel	
	23	Cracking Pressure		To be stated by supplier	
	24	Inlet Connection	Outlet Conn.	RF	RF
	25	Inlet Rating	Outlet Rating	300#	300#
	26				
	27				
	28				
	29				
	30				
	31				
	32				
	33				
	34				
35					
36					
37					
38					
39					
40					
OPTIONS	41				
	42				
	43				
	44				
	45				
CERTIFICATES	46	3.1 Material certificate		Yes	
	47				
	48				
	49				
	50				
	51				
PURCHASE	52	Manufacturer		Hoerbigger	
	53	Model		Supplier to advise	
	54				
	55				
	56				



With reference to P&ID, PSV set pressure is 25 barg. How is it possible design pressure be less than PSV set pressure.

Please delete this pressure.

80 oC

WCB



trim material shall be specified

04	TT	03/02/2022	For Construction		
03	TT	07/01/2022	For Construction		
02	TT	25/10/2021	For Construction		
01	TT	20/09/2021	For Approval		
00	TT	25/02/2021	For Approval		
Rev	By	Date	Description	Sheet 15 of 16 Based on P&ID rev.02	

GENERAL	1	Tag Number		No Tag.no.: Qty 1 pcs	
	2	Service		Check Valve	
	3	P&ID No.		BU-20-VD-303-PR-WG-0013	
	4	Location		Compressor Cooling water inlet	
	5	Line/equip. No.		1 1/2"-CWS-1004-501C(N)	
	6				
	7				
	8				
PROCESS CONDITIONS	9	Fluid	State	Water	Liquid
	10	Pressure	Norm. Max.	4,5 Bar(g)	5 Bar(g)
	11	Temperature	Norm. Max.	35°C	45°C
	12	Design	Press. Temp.	7 Bar(g)	95°C
	13	Ambient Temp.	Min. Max.	5 °C	52 °C
	14	Oper. Flow		14,5 m3/hr	
	15				
	16				
	17				
	18				
BODY	20	Type Of Body		Flanged bolted type	
	21	Type Of valve		Swing disc	
	21	Body Size		1 1 /2" ANSI	
	22	Body Material		Carbon steel	
	23	Cracking Pressure		To be stated by supplier	
	24	Inlet Connection	Outlet Conn.	RF	RF
	25	Inlet Rating	Outlet Rating	150#	150#
	26				
	27				
	28				
	29				
	30				
	31				
	32				
33					
34					
35					
36					
37					
38					
39					
40					
OPTIONS	41				
	42				
	43				
	44				
	45				
CERTIFICATES	46	3.1 Material certificate		Yes	
	47				
	48				
	49				
	50				
	51				
PURCHASE	52	Manufacturer		According to aproved vendor list	
	53	Model		Supplier to advise	
	54				
	55				
	56				

WCB

trim material shall be specified

04	TT	03/02/2022	For Construction		
03	TT	07/01/2022	For Construction		
02	TT	25/10/2021	For Construction		
01	TT	20/09/2021	For Approval		
00	TT	25/02/2021	For Approval		
Rev	By	Date	Description		
				Sheet	16 of 16
				Based on P&ID rev.02	