






OWNER 	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT							EPC CONTRACTOR:  Chagalesh-Enrechimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	
	Calculation & data sheet of control valves/ ON-OFF valves for reciprocating compressor								
MC :  شرکت سفت و سوی توسعه ایرانیان	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-45	BU	20	VD	303	IN	DSH	0041	Rev.:	Page
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1. Compressor tag number must be added.
2. Maximum ambient temperature must be considered 52 °C.




This document is checked only for compressor 7080. New document should be generated for compressor 1002.

-Please add data about only control / on off valve. There is no need to submit data sheet of manual valve or check valve
- Data about unloaders valve shall be added to IOM manual. Please confirm

Calculation & data sheet of control valves/ ON-OFF valves for reciprocating compressor

		BUSHEHR PETROCHEMICAL COMPANY MEG PLANT	
Document Review			
Issue Purpose:	FA		
Result Code: AP,AN,CM,RE,NC	CM		
Next Status : IFC,IFA,IFI,AFC,AB	IFA		
Responsible Department	MECHANICAL		
Commented Date	May.05.2021		
Approval or review hereunder shall not be construed to relieve Vendor / Subcontractor of his responsibilities and liability under the contract.			

00	25/02/2021	For approval	TvT	KP	PW	
Rev.	Date	Purpose of Issue	Prepared	Checked	Approved	AC Code
						Class: 1 Phase: p

OWNER  شرکت پتروشیمی بوته‌ر	BUSHEHR PETROCHEMICAL COMPANY MEG PLANT						EPC CONTRACTOR: 		
	Calculation & data sheet of control valves/ ON-OFF valves for reciprocating compressor								
MC :  شرکت سفت و سوی توسعه ایرانیان	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-45	BU	20	VD	303	IN	DSH	0041	Rev.:	Page
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8.	X				
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10.	X				
11.	X				
12.	X				
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Hand valve and check valve shall be deleted.

Only control valve and on-off valve shall be added to document.


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Notes:

				INSTRUMENT AND VALVE DATASHEET Index 		
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Rev	By	Date	Description	Sheet	3 of 19	
				Based on P&ID	Rev.B	

This item (Manual ball valve) is not related to the instrument devices and shall be mentioned in the valve list and remove from instrument data sheet.

GENERAL	2	Service		No Tag.no.: Qty 2 pcs		
	3	P&ID No.		Hand Ball valve		
	4	Location		17811-03		
	5			Compressor Inlet		
	6					
	7					
	PROCESS CONDITIONS	8	Fluid	State	Air / 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)	80°C	
12		Ambient Temp.	Min. Max.	5 °C	55 °C	
13		Oper. Flow		90 Nm3/hr		
14						
BODY	16	Body Type		Ball valve, bolted type		
	17	Body Size	Bore	2"	Full bore	
	18	Guiding	No. Of Ports	-	2	
	19	Conn. Type	End Conn. Rat.	RF	150#	
	20	Body Material		Carbon steel ASTM A 216 Gr. WCB / A105		
	21	Packing Material		PTFE / Graphite		
	22	Bonnet Type		Screwed		
	23	Form		Floating ball		
	24	Trim	Seat Mat.		PTFE / Graphite	
	25		Ball Mat.	Shaft Mat.	SS 316	SS316
	26	Actuation	Material	Lever handle	CS	
	27					
	28					
	29					
	30					
	31					
	32					
	33					
	34					
	35					
	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 :

				INSTRUMENT AND VALVE DATASHEET Hand Ball Valve 	
00	TT	25-2-2021	For Approval		Sheet 4 of 19
Rev	By	Date	Description		Based on P&ID Rev.B

This item (Manual ball valve) is not related to the instrument devices and shall be mentioned in the valve list and remove from instrument data sheet.

GENERAL	1	Tag Number		No Tag.no.: Qty 2 pcs		
	2	Service		Hand Ball valve		
	3	P&ID No.		17811-03		
	4	Location		Compressor Outlet		
	5					
	6					
	7					
PROCESS CONDITIONS	8	Fluid	State	Air / Nitrogen	Dry Gas	
	9	Pressure	Norm. Max.	23,5 Bar(a)	26 Bar(a)	
	10	Temperature	Norm. Max.	40°C	55°C	
	11	Design	Press. Temp.	35.25 Bar(a)	60°C	
	12	Ambient Temp.	Min. Max.	5 °C	55 °C	
	13	Oper. Flow		90 Nm3/hr		
	14					
BODY	16	Body Type		Ball valve, bolted type		
	17	Body Size	Bore	2"	Full bore	
	18	Guiding	No. Of Ports	-	2	
	19	Conn. Type	End Conn. Rat.	RF	300#	
	20	Body Material		Carbon steel ASTM A 216 Gr. WCB / A105		
	21	Packing Material		PTFE / Graphite		
	22	Bonnet Type		Screwed		
	23	Form		Floating ball		
	24	Trim	Seat Mat.		PTFE / Graphite	
	25		Ball Mat.	Shaft Mat.	SS 316	SS316
	26	Actuation	Material	Lever handle	CS	
	27					
	28					
	29					
	30					
	31					
	32					
	33					
	34					
	35					
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 :

				INSTRUMENT AND VALVE DATASHEET Hand Ball Valve 	
00	TT	25-2-2021	For Approval		Sheet 5 of 19
Rev	By	Date	Description		Based on P&ID Rev.B

This item (Manual ball valve) is not related to the instrument devices and shall be mentioned in the valve list and remove from instrument data sheet.

GENERAL	1	Tag Number		No Tag.no.: Qty 4 pcs		
	2	Service		Hand Ball valve		
	3	P&ID No.		17811-03		
	4	Location		Compressor Cooling water		
	5					
	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.	6 Bar(g)	60°C	
	12	Ambient Temp.	Min. Max.	5 °C	55 °C	
	13	Oper. Flow	m3/hr		
	14					
BODY	16	Body Type		Ball valve, bolted type		
	17	Body Size	Bore	1 1/2"	Full bore	
	18	Guiding	No. Of Ports	-	2	
	19	Conn. Type	End Conn. Rat.	RF	150#	
	20	Body Material		Carbon steel ASTM A 216 Gr. WCB / A105		
	21	Packing Material		PTFE / Graphite		
	22	Bonnet Type		Screwed		
	23	Form		Floating ball		
	24	Trim	Seat Mat.		PTFE / Graphite	
	25		Ball Mat.	Shaft Mat.	SS 316	SS316
	26	Actuation	Material	Lever handle	CS	
	27					
	28					
	29					
	30					
	31					
	32					
	33					
	34					
	35					
	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 :

				INSTRUMENT AND VALVE DATASHEET Hand Ball Valve 	
00	TT	25-2-2021	For Approval		Sheet 6 of 19
Rev	By	Date	Description		Based on P&ID Rev.B

This item (Manual ball valve) is not related to the instrument devices and shall be mentioned in the valve list and remove from instrument data sheet.

GENERAL	1	Tag Number		No Tag.no.: Qty 4 pcs	
	2	Service		Hand Ball valve	
	3	P&ID No.		17811-03	
	4	Location		Compressor Oil sump drain & block valve	
	5				
	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	55 °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		PTFE / Graphite	
	22	Bonnet Type		Screwed	
	23		Form	Floating ball	
	24	Trim	Seat Mat.		PTFE / Graphite
	25		Ball Mat.	Shaft Mat.	SS 316 SS316
	26	Actuation	Material	Lever handle	CS
	27				
	28				
	29				
	30				
	31				
	32				
	33				
	34				
	35				
	36				
	37				
	38				
	39				
	40				
	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	
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NOTES :

				INSTRUMENT AND VALVE DATASHEET Hand Ball Valve 	
00	TT	25-2-2021	For Approval		Sheet 7 of 19
Rev	By	Date	Description		Based on P&ID Rev.B

This item (Manual ball valve) is not related to the instrument devices and shall be mentioned in the valve list and remove from instrument data sheet.


GENERAL	1	Tag Number		No Tag.no.: Qty 14 pcs	
	2	Service		Hand Ball valve	
	3	P&ID No.		17811-03	
	4	Location		Compressor block valve	
	5				
	6				
	7				
PROCESS CONDITIONS	8	Fluid	State	Air / Nitrogen/ water	Dry Gas
	9	Pressure	Norm. Max.	23,5 Bar(a)	26 Bar(a)
	10	Temperature	Norm. Max.	40°C	55°C
	11	Design	Press. Temp.	35.25 Bar(a)	60°C
	12	Ambient Temp.	Min. Max.	5 °C	55 °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		PTFE / Graphite	
	22	Bonnet Type		Screwed	
	23		Form	Floating ball	
	24	Trim	Seat Mat.		PTFE / Graphite
	25		Ball Mat.	Shaft Mat.	SS 316 SS316
	26	Actuation	Material	Lever handle	CS
	27				
	28				
	29				
	30				
	31				
	32				
	33				
	34				
	35				
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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				
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	57				

NOTES :

				INSTRUMENT AND VALVE DATASHEET Hand Ball Valve 	
00	TT	25-2-2021	For Approval		Sheet 8 of 19
Rev	By	Date	Description		Based on P&ID Rev.B

GENERAL	1	Tag Number		XV-10002 XV-70002	
	2	Service		Ball valve	
	3	P&ID No.		17811-03	
	4	Location		Compressor Cooling water Inlet	
	5				
	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.	6 Bar(g)	60°C
	12	Ambient Temp.	Min. Max.	5 °C	55 °C
	13	Oper. Flow	m3/hr	
BODY	15	Body Type		Ball valve, bolted type	
	16	Body Size	Bore	1 1/2"	Full bore
	17	Guiding	No. Of Ports	-	2
	18	Conn. Type	End Conn. Rat.	RF	150#
	19	Body Material		Carbon steel ASTM A 216 Gr. WCB/ A105	
	20	Packing Material		PTFE / Graphite	
	21	Bonnet Type		Screwed	
	22	Trim	Form	Floating ball	
	23		Seat Mat.	PTFE / Graphite	
	24		Ball Mat.	SS 316	SS316
ACTUATOR	27	Type		Rack & Pinion, single acting	
	28	Close At	Open At	Spring return	Air supply
	29	Flow Action To		FTC	
	30	Fail Position		FC	
	31	Pneumatic connection		2 x 1/4" NPT-F	
	32	Instrument Supply Fluid		Instrument Air / Nitrogen	
	33	Instrument Supply Fluid pressure		6.0 bar(g)	
	34	Brackets	Coupling	SS316	SS316
	35	Housing material		Aluminium, epoxy coated	
	POSITION MONITOR	38	Type		N/A
39		Power supply		N/A	
40		Type of switch/transmitter		N/A	
41		Area Classification		N/A	
42		Cable Gland		N/A	
OPTIONS	<p>- Related solenoid valve data shall be mentioned in this section. - Solenoid valves signals shall be Ex ia.</p>				
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		According to aproved vendor list	
	55	Actuator Model		Supplier to advise	
	56	Position Monitor Manufacturer		According to aproved vendor list	
57	Position Monitor Model		Supplier to advise		


NOTES :

				INSTRUMENT AND VALVE DATASHEET	
				Pneumatic Actuated Valve	
					
00	TT	25-2-2021	For Approval	Sheet	9 of 19
Rev	By	Date	Description	Based on P&ID	Rev.B

This item (Manual ball valve) is not related to the instrument devices and shall be mentioned in the valve list and remove from instrument data sheet.

GENERAL	1	Tag Number		No Tag.no: Qty 2 pcs		
	2	Service		Globe valve		
	3	P&ID No.		17811-03		
	4	Location		Compressor Cooling water		
	5					
	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.	6 Bar(g)	60°C	
	12	Ambient Temp.	Min. Max.	5 °C	55 °C	
	13	Oper. Flow	m3/hr		
BODY	15	Body Type		Globe valve type, OS&Y		
	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	Trim	Form		Disc	
	23		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						
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 :

				INSTRUMENT AND VALVE DATASHEET	
				Hand Globe Valve	
					
00	TT	25-2-2021	For Approval	Sheet 11 of 19 Based on P&ID Rev.B	
Rev	By	Date	Description		

Please clarify it is not found in PID

GENERAL	1	Tag Number		No Tag.no: Qty 2 pcs		
	2	Service		Pressure Control Valve		
	3	P&ID No.		17811-03		
	4	Location		Compressor Inlet & actuator cooling inlet		
	5					
	6					
	7					
PROCESS CONDITIONS	8	Fluid	State	Air / 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)	80°C	
	12	Ambient Temp.	Min. Max.	5 °C	55 °C	
BODY	13	Valve Type		Pressure reducing valve		
	14	Body Material		Aluminium		
	15	Diaphragm Material		Will be informed later		
	16	Trim	Form		Disc / Plug / Globe	
	17		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					
	30					
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 Nm³/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					
	48					
CALCULATIONS	49	Sizing calculation		No		
	50					
	51					
	52					
	53					
PURCHASE	54	Manufacturer		According to aproved vendor list		
	55	Model		Supplier to advise		
	56					
	57					

NOTES :

				INSTRUMENT AND VALVE DATASHEET	
				Pressure Reducing Valve	
					
00	TT	25-2-2021	For Approval	Sheet	12 of 19
Rev	By	Date	Description	Based on P&ID Rev.B	

GENERAL	1	Tag Number			PCV-10001	
	2	Service			Pressure control valve	
	3	P&ID No.			17811-03	
	4	Location			Compressor bypass (recycle) valve	
	5					
	6					
	7					
PROCESS CONDITIONS	8	Fluid	State		Nitrogen	Dry Gas
	9	Pressure	Norm.	Max.	23,5 Bar(a)	26 Bar(a)
	10	Temperature	Norm.	Max.	40°C	55°C
	11	Design	Press.	Temp.	35.25 Bar(a)	60°C
	12	Ambient Temp.	Min.	Max.	5 °C	55 °C
BODY	13	Type Of Body			Globe valve	
	14	Body Size			(1"/VTA) ANSI	
	15	Conn. Type	End Conn. Rat.		RF	300#
	16	Body Material			Carbon steel	
	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
	ACTUATOR	22	Positioner			IV
23		Fail Safe			-	
24		Fail Position			FC	
25		Pneumatic Conn.			1/4" NPT-F	
26		Instrument Supply Fluid			Nitrogen	
27		Instrument Supply Fluid pressure			6,0 bar(g)	
28		Position Monitor			No,	
29		Area Classification			Zone 2, Eex'ia	
30		Electric Connection			ISO M20 x 1,5	
31		Cable Gland			Yes, Eex 'de' certified (Airpack scope)	
ACCESSORIES	32	Filter Regulator			Yes	
	33	Gauges			Yes	
	34					
SERVICE	35	Flow Rate			90 Nm³/hr	
	36	Pressure	Inlet	outlet	23,5 bar(a)	8 bar(a)
	37	Pressure drop			To be advised by the manufacturer	
	38	Cv Selected			To be advised by the manufacturer	
	39					
	40					
CERTIFICATES	41	3.1 Material certificate			Yes	
	42	ATEX			No	
	43	SIL certificate	Level		No	
	44					
PURCHASE	45	Valve Manufacturer			According to aproved vendor list	
	46	Valve Model			Supplier to advise	
	47	Actuator Manufacturer			According to aproved vendor list	
	48	Actuator Model			Supplier to advise	
	49					

- Related positioner data shall be mentioned in this section.
 - Positioner signals shall be Ex ia.
 - Valve travel shall be specified.
 - Noise level shall be specified.

GENERAL	1	Tag Number			PCV-70001	
	2	Service			Pressure control valve	
	3	P&ID No.			17811-03	
	4	Location			Compressor bypass (recycle) valve	
	5					
	6					
	7					
PROCESS CONDITIONS	8	Fluid	State		Air	Dry Gas
	9	Pressure	Norm.	Max.	21 Bar(a)	26 Bar(a)
	10	Temperature	Norm.	Max.	40°C	55°C
	11	Design	Press.	Temp.	35.25 Bar(a)	60°C
	12	Ambient Temp.	Min.	Max.	5 °C	55 °C
BODY	13	Type Of Body			Globe valve	
	14	Body Size			(1"/VTA) ANSI	
	15	Conn. Type	End Conn. Rat.		RF	300#
	16	Body Material			Carbon steel	
	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)			-	
	24					
	25					
26						
ACTUATOR	27				Electro-pneumatic (I/P)	
	28				4 -20 mA , HART	
	29				FC	
	30	Pneumatic Conn.			1/4" NPT-F	
	31	Instrument Supply Fluid			Nitrogen	
	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)	
37						
ACCESSORIES	38	Filter Regulator			Yes	
	39	Gauges			Yes	
	40					
SERVICE	41	Flow Rate			43 Nm³/hr	
	42	Pressure	Inlet	outlet	21 bar(a)	8 bar(a)
	43	Pressure drop			To be advised by the manufacturer	
	44	Cv Selected			To be advised by the manufacturer	
	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					


- Related positioner data shall be mentioned in this section.
 - Positioner signals shall be Ex ia.
 - Valve travel shall be specified.
 - Noise level shall be specified.

This item is not related to the instrument devices and shall be mentioned in the valve list and remove from instrument data sheet.

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GENERAL	1	Tag Number		No Tag.no.: Qty 2 pcs		
	2	Service		Check Valve		
	3	P&ID No.		17811-03		
	4	Location		Compressor Outlet		
	5					
	6					
	7					
	8					
PROCESS CONDITIONS	9	Fluid	State		Nitrogen	Dry Gas
	10	Pressure	Norm.	Max.	23,5 Bar(a)	26 Bar(a)
	11	Temperature	Norm.	Max.	40°C	55°C
	12	Design	Press.	Temp.	35.25 Bar(a)	60°C
	13	Ambient Temp.	Min.	Max.	5 °C	55 °C
	14	Oper. Flow		90 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					

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00	TT	25-2-2021	For Approval	INSTRUMENT AND VALVE DATASHEET Check Valve 			Sheet	17 of 19	
Rev	By	Date	Description				Based on P&ID	Rev.B	

This item is not related to the instrument devices and shall be mentioned in the valve list and remove from instrument data sheet.

GENERAL	1	Tag Number		No Tag.no.: Qty 2 pcs	
	2	Service		Check Valve	
	3	P&ID No.		17811-03	
	4	Location		Compressor Outlet	
	5				
	6				
	7				
	8				
PROCESS CONDITIONS	9	Fluid	State	Air	Dry Gas
	10	Pressure	Norm. Max.	21 Bar(a)	26 Bar(a)
	11	Temperature	Norm. Max.	40°C	55°C
	12	Design	Press. Temp.	35.25 Bar(a)	60°C
	13	Ambient Temp.	Min. Max.	5 °C	55 °C
	14	Oper. Flow		43 Nm3/hr	
	15				
	16				
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				

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This item is not related to the instrument devices and shall be mentioned in the valve list and remove from instrument data sheet.

GENERAL	1	Tag Number		No Tag.no.: Qty 2 pcs		
	2	Service		Check Valve		
	3	P&ID No.		17811-03		
	4	Location		Compressor Cooling water inlet		
	5					
	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.	6 Bar(g)	60°C
	13	Ambient Temp.	Min.	Max.	5 °C	55 °C
	14	Oper. Flow		... m3/hr		
	15					
	16					
BODY	20	Type Of Body		Flanged bolted type		
	21	Type Of valve		Swing disc		
	21	Body Size		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					

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