

 <p>شرکت توسعه صنایع گوارا Lavan Industry Development Company</p>	<p>LIDCO, Pars SEE Zone, Assaluyeh, Integrated Methanol and Ammonia Plant 3000 MTPD MeOH / 900 MTPD NH3 PROJECT</p>						
	<p>Valve Data Sheets</p>						
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**Airpack B.V. - Air Compressor –
Integrated Methanol and Ammonia Plant
17735-COM Valve Data Sheets (K020)**

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Valve Data Sheets

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GENERAL	1	Tag Number		320V-8201	
	2	Service		Hand Ball valve	
	3	P&ID No.		N278-VD-6019-PR-PID-0002	
	4	Location		Compressor Air Inlet	
	5	Line number		1"-IA-320-01-D42-N	
	6	Area classification		Safe area	
	7				
PROCESS CONDITIONS	8	Fluid	State	Air	Dry Gas
	9	Pressure	Norm. Max.	9,5 bar(g)	
	10	Temperature	Norm. Max.	46 °C	
	11	Design	Press. Temp.	12,5 bar(g)	75 °C
	12	Ambient Temp.	Min. Max.	0 °C	49 °C
	13	Oper. Flow		35 Nm³/hr	
	14				
BODY	16	Body Type		Ball valve, wafer type	
	17	Body Size	Bore	1"	Full bore
	18	Guiding	No. Of Ports	-	2
	19	Conn. Type	End Conn. Rat.	RF	300#
	20	Body Material		SS316	
	21	Packing Material		PTFE	
	22	Bonnet Type		Screwed	
	23	Form		Floating ball	
	24	Trim	Seat Mat.	PTFE	
	25		Ball Mat.	Shaft Mat.	
	26	Actuation	Material	SS 316	SS316
	27	Threaded connections if applicable		Lever handle	SS316
	28			Metric	
	29				
	30				
	31				
	32				
	33				
	34				
	35				
36					
37					
38					
39					
40					
41					
42					
43					
OPTIONS	44			Fire safe design (acc. API 607)	
	45				
	46				
CERTIFICATES	47	3.1 Material certificate		Yes	
	48	Hydrotest certificate		Yes	
	49				
	50				
	51				
PURCHASE	52	Manufacturer		Alfa valve	
	53	Model		A10N	
	54				
	55				
	56				
	57				

NOTES :

05	LK	8-7-2024	For Approval	VALVE DATASHEET Hand Ball Valve 	 شركة لوان للصناعة والتطوير لافان Industry Development Company
04	LK	23-5-2024	For Approval		
03	LK	17-4-2024	For Approval		
02	LK	11-3-2024	For Approval		
01	SK	9-11-2023	For Approval		
Rev	By	Date	Description	Sheet 4 of 11 Based on P&ID Rev.08	



GENERAL	1	Tag Number		320V-8202	
	2	Service		Hand Ball valve	
	3	P&ID No.		N278-VD-6019-PR-PID-0002	
	4	Location		Compressor Air Outlet	
	5	Line number		3/4"-IA-320-10-D42-N	
	6	Area classification		Safe area	
	7				
PROCESS CONDITIONS	8	Fluid	State	Air	Dry Gas
	9	Pressure	Norm. Max.	30 bar(g)	
	10	Temperature	Norm. Max.		60 °C
	11	Design	Press. Temp.	39 bar(g)	75 °C
	12	Ambient Temp.	Min. Max.	0 °C	49 °C
	13	Oper. Flow		35 Nm³/hr	
	14				
BODY	16	Body Type		Ball valve, wafer type	
	17	Body Size	Bore	3/4"	Full bore
	18	Guiding	No. Of Ports	-	2
	19	Conn. Type	End Conn. Rat.	RF	600#
	20	Body Material		SS316	
	21	Packing Material		PTFE	
	22	Bonnet Type		Screwed	
	23	Form		Floating ball	
	24	Trim	Seat Mat.	PTFE	
	25		Ball Mat.	Shaft Mat.	SS316 SS316
	26	Actuation	Material	Lever handle	SS316
	27	Threaded connections if applicable		Metric	
	28				
	29				
	30				
	31				
	32				
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
OPTIONS	44			Fire safe design (acc. API 607)	
	45				
	46				
CERTIFICATES	47	3.1 Material certificate		Yes	
	48	Hydrotest certificate		Yes	
	49				
	50				
	51				
PURCHASE	52	Manufacturer		Alfa Valve	
	53	Model		A10N	
	54				
	55				
	56				
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05	LK	8-7-2024	For Approval	VALVE DATASHEET Hand Ball Valve 	 Sheet 5 of 11
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03	LK	17-4-2024	For Approval		
02	LK	11-3-2024	For Approval		
01	SK	9-11-2023	For Approval		
Rev	By	Date	Description		



GENERAL	1	Tag Number		320V-8203	
	2	Service		Hand Ball valve	
	3	P&ID No.		N278-VD-6019-PR-PID-0002	
	4	Location		Cooling Water Inlet	
	5	Line number		3/4"-CWS-320-20-B24C-N	
	6	Area classification		Safe area	
	7				
PROCESS CONDITIONS	8	Fluid	State	Cooling Water	Liquid
	9	Pressure	Norm. Max.	4,5 bar(g)	
	10	Temperature	Norm. Max.	36 °C	
	11	Design	Press. Temp.	7 bar(g)	75 °C
	12	Ambient Temp.	Min. Max.	0 °C	49 °C
	13	Oper. Flow		1 m³/hr	
	14				
BODY	16	Body Type		Ball valve, wafer type	
	17	Body Size	Bore	3/4"	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	
	22	Bonnet Type		Screwed	
	23	Form		Floating ball	
	24	Trim	Seat Mat.	PTFE	
	25		Ball Mat.	Shaft Mat.	SS316
	26	Actuation	Material	SS 316	SS316
	27	Threaded connections if applicable		Lever handle	CS
	28			Metric	
	29				
	30				
	31				
	32				
33					
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38					
39					
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42					
43					
OPTIONS	44			Fire safe design (acc. API 607)	
	45				
	46				
CERTIFICATES	47	3.1 Material certificate		Yes	
	48	Hydrotest certificate		Yes	
	49				
	50				
	51				
PURCHASE	52	Manufacturer		Alfa Valve	
	53	Model		A10NF	
	54				
	55				
	56				
	57				

NOTES :

05	LK	8-7-2024	For Approval	VALVE DATASHEET Hand Ball Valve 	 شركة نوسه صنعت لوات Lavan Industry Development Company
04	LK	23-5-2024	For Approval		
03	LK	17-4-2024	For Approval		
02	LK	11-3-2024	For Approval		
01	SK	9-11-2023	For Approval		
Rev	By	Date	Description		
				Sheet 6 of 11	Based on P&ID Rev.08



GENERAL	1	Tag Number		320V-8204		
	2	Service		Hand Ball valve		
	3	P&ID No.		N278-VD-6019-PR-PID-0002		
	4	Location		Cooling Water Outlet		
	5	Line number		3/4"-CWR-320-26-B24C-N		
	6	Area classification		Safe area		
	7					
PROCESS CONDITIONS	8	Fluid	State	Cooling Water	Liquid	
	9	Pressure	Norm. Max.	4,4 bar(g)		
	10	Temperature	Norm. Max.		46 °C	
	11	Design	Press. Temp.	7 bar(g)	75 °C	
	12	Ambient Temp.	Min. Max.	0 °C	49 °C	
	13	Oper. Flow		1 Nm³/hr		
	14					
BODY	16	Body Type		Ball valve, wafer type		
	17	Body Size	Bore	3/4"	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		
	22	Bonnet Type		Screwed		
	23	Form	Floating ball			
	24	Trim	Seat Mat.	PTFE		
	25		Ball Mat.	Shaft Mat.	SS 316	SS316
	26	Actuation	Material		Lever handle	CS
	27	Threaded connections if applicable		Metric		
	28					
	29					
	30					
	31					
	32					
	33					
	34					
	35					
	36					
	37					
	38					
	39					
	40					
	41					
	42					
43						
OPTIONS	44			Fire safe design (acc. API 607)		
	45					
	46					
CERTIFICATES	47	3.1 Material certificate		Yes		
	48	Hydrotest certificate		Yes		
	49					
	50					
	51					
PURCHASE	52	Manufacturer		Alfa Valve		
	53	Model		A10NF		
	54					
	55					
	56					
	57					

NOTES :

05	LK	8-7-2024	For Approval	VALVE DATASHEET Hand Ball Valve 	 Sheet 7 of 11 Based on P&ID Rev.08
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03	LK	17-4-2024	For Approval		
02	LK	11-3-2024	For Approval		
01	SK	9-11-2023	For Approval		
Rev	By	Date	Description		



GENERAL	1	Tag Number			320PCV-8201	
	2	Service			Compressor bypass (recycle) valve	
	3	P&ID No.			N278-VD-6019-PR-PID-0002	
	4	Location			Bypass	
	5	Line number			3/4"-IA-320-11-D42-N	
	6	Area classification			Safe area	
	7					
PROCESS CONDITIONS	8	Fluid	State		Air	Dry Gas
	9	Pressure	Norm.	Max.	30 bar(g)	
	10	Temperature	Norm.	Max.	46 °C	60 °C
	11	Design	Press.	Temp.	39 bar(g)	75 °C
	12	Ambient Temp.	Min.	Max.	0 °C	49 °C
	13	Type Of Body			Globe valve	
BODY	14	Body Size			3/4" ANSI RF	
	15	Conn. Type	End Conn. Rat.		RF	600#
	16	Flange face finish			VTA	
	17	Body Material			SS316	
	18	Packing Material			PTFE	
	19	Bonnet Type			Bolted, SS316	
	20	Trim	Form	Characteristics	Disc	Micro Flow 4 Deg 39 Min
	21		Seat Mat.	Cage mat.	CF3M SST	N/A
	22		Disc Mat.	Shaft Mat.	SS 316	SS316
	23	Required Seat Tightness			IV	
	24	Max. Allow. Sound Level (dBA)			85	
Positioner	25	Positioner controller			Electro-pneumatic (I/P)	
	26	Interface			4 -20 mA , HART	
	27	Supply / output pressure gauge			Yes, SS316	
	28	Positioner material			SS316	
	29	Enclosure class			IP65	
ACTUATOR	31	Fail Position			FO (Fail Open)	
	32	Pneumatic Conn.			1/4" NPT-F	
	33	Instrument Supply Fluid			Instrument Air	
	34	Instrument Supply Fluid pressure			Min. 4 bar(g)	
	35	Position Monitor			Yes, 4-20 mA Transmitter, HART	
	36	Electric Connection			ISO M20 x 1,5	
	37	Cable Gland			Yes (Airpack scope)	
	38	Actuator material			SS316	
	39					
ACCESSORIES	40	Filter Regulator			Yes, Stainles steel	
	41	Filter Regulator manufacturer, model			Fisher	67CFR
	42	Gauges			Yes, Stainles steel	
	43	Tubing, Fitting			SS316 (Airpack scope)	
SERVICE	44	Flow Rate			35 Nm³/h	
	45	Pressure	Inlet	outlet	9,5 bar(g)	30 bar(g)
	46	Pressure drop			17,96 bar @ 41% opening	
	47	Cv Selected			0-0,3	
	48	Cv required			0,101	
CERTIFICATES	49	3.1 Material certificate			Yes	
	50	Hydrotest certificate			Yes	
	51	Leakage class			Yes	
PURCHASE	52	Valve Manufacturer			Fisher	
	53	Valve Model			NPS 3/4 GX	
	54	Actuator Manufacturer			Fisher	
	55	Actuator Model			GX/225	
	56	Positioner Manufacturer			Fisher	
57	Positioner Model			DCV6200		

NOTES :

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03	LK	17-4-2024		For Approval		
02	LK	11-3-2024		For Approval		
01	SK	9-11-2023		For Approval		
Rev	By	Date		Description		



GENERAL	1	Tag Number		320CV-8201	
	2	Service		Check Valve	
	3	P&ID No.		N278-VD-6019-PR-PID-0002	
	4	Location		Compressor Air Outlet	
	5	Line number		3/4"-IA-320-09-D42-N	
	6	Area classification		Safe area	
	7				
	8				
PROCESS CONDITIONS	9	Fluid	State	Air	Dry Gas
	10	Pressure	Norm. Max.	30 bar(g)	
	11	Temperature	Norm. Max.		60 °C
	12	Design	Press. Temp.	39 bar(g)	75 °C
	13	Ambient Temp.	Min. Max.	0 °C	49 °C
	14	Oper. Flow		35 Nm³/hr	
	15				
	16				
	17				
	18				
BODY	20	Type Of Body		Wafer type	
	21	Type Of valve		Plate type	
	21	Body Size		DN 20 (Process line = 3/4" ANSI 300# RF)	
	22	Body Material		SS316	
	23	Cracking Pressure		0,2 bar	
	24	Inlet Connection	Outlet Conn.	RF	RF
	25	Inlet Rating	Outlet Rating	600#	600#
	26				
	27				
	28				
	29				
	30				
	31				
	32				
OPTIONS	41				
	42				
	43				
	44				
	45				
	46	3.1 Material certificate		Yes	
	47				
	48				
	49				
	50				
PURCHASE	52	Manufacturer		Hoerbiger	
	53	Model		RVB 19R	
	54				
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05	LK	8-7-2024	For Approval	VALVE DATASHEET Check Valve 	 Sheet 9 of 11 Based on P&ID Rev.08
04	LK	23-5-2024	For Approval		
03	LK	17-4-2024	For Approval		
02	LK	11-3-2024	For Approval		
01	SK	9-11-2023	For Approval		
Rev	By	Date	Description		



GENERAL	1	Tag Number		320ST-8201	
	2	Service		Y-strainer	
	3	P&ID No.		N278-VD-6019-PR-PID-0002	
	4	Location		Compressor Air Inlet	
	5	Line number		1"-IA-320-01-D42-N	
	6	Area classification		Safe area	
	7				
	8				
PROCESS CONDITIONS	9	Fluid	State	Air	Dry Gas
	10	Pressure	Norm. Max.	9,5 bar(g)	
	11	Temperature	Norm. Max.	46 °C	
	12	Design	Press. Temp.	12,5 bar(g)	75 °C
	13	Ambient Temp.	Min. Max.	0 °C	49 °C
	14	Oper. Flow		35 Nm³/hr	
	15				
	16				
	17				
	18				
BODY	20	Type Of Body		Y-strainer	
	21	Connection		1" 300# RF	
	22	Body Material		SS 316	
	23	Mesh Material		SS 316	
	24	Mesh Size		0,57 mm	
	25				
	26				
	27				
	28				
	29				
	30				
	31				
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44					
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46					
CERTIFICATES	47	3.1 Material certificate		Yes	
	48				
	49				
	50				
	51				
	52				
PURCHASE	53	Manufacturer		Barton Firtop	
	54	Model		A025	
	55				
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NOTES :

05	LK	8-7-2024	For Approval	VALVE DATASHEET Y-Strainer 	 شركة لوان صناعات لوان Industry Development Company
04	LK	23-5-2024	For Approval		
03	LK	17-4-2024	For Approval		
02	LK	11-3-2024	For Approval		
01	SK	9-11-2023	For Approval		
Rev	By	Date	Description	Sheet 10 of 11 Based on P&ID Rev.08	

GENERAL	1	Tag Number		320ST-8202	
	2	Service		Y-strainer	
	3	P&ID No.		N278-VD-6019-PR-PID-0002	
	4	Location		Cooling Water Inlet	
	5	Line number		3/4"-CWS-320-20-B24C-N	
	6	Area classification		Safe area	
	7				
	8				
PROCESS CONDITIONS	9	Fluid	State	Cooling Water	Liquid
	10	Pressure	Norm. Max.	4,5 bar(g)	
	11	Temperature	Norm. Max.	36 °C	
	12	Design	Press. Temp.	7 bar(g)	75 °C
	13	Ambient Temp.	Min. Max.	0 °C	49 °C
	14	Oper. Flow		1 Nm³/hr	
	15				
	16				
	17				
	18				
BODY	20	Type Of Body		Y-strainer	
	21	Connection		3/4" 150# RF	
	22	Body Material		ASTM A216 WCB	
	23	Mesh Material		SS 316	
	24	Mesh Size		0,57 mm	
	25				
	26				
	27				
	28				
	29				
	30				
	31				
	32				
	33				
	34				
	35				
	36				
	37				
	38				
	39				
40					
41					
42					
43					
44					
45					
46					
CERTIFICATES	47	3.1 Material certificate		Yes	
	48				
	49				
	50				
	51				
	52				
PURCHASE	53	Manufacturer		Barton Firtop	
	54	Model		A020	
	55				
	56				
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NOTES :

05	LK	8-7-2024	For Approval	VALVE DATASHEET Y-Strainer 	
04	LK	23-5-2024	For Approval		
03	LK	17-4-2024	For Approval		
02	LK	11-3-2024	For Approval		
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