

 <p>شرکت توسعه صنایع لوان Lavan Industry Development Company</p>	<p><b>LIDCO, Pars SEE Zone, Assaluyeh, Integrated Methanol and Ammonia Plant 3000 MTPD MeOH / 900 MTPD NH3 PROJECT</b></p>																				
	<p><b>Valve Data Sheets</b></p>																				
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Vendor Doc.	VD																				
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Document Type	DS																				
Serial No	0041																				
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**Airpack B.V. - Air Compressor –  
Integrated Methanol and Ammonia Plant  
17735-COM Valve Data Sheets (K020)**

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03	17-04-2024	Issued for Approval	L.K.	S.K.	J.J.
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REV.	DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED

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Valve Data Sheets

Document No. 17735-48

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**Notes:**

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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.	SS 316	SS316
	26	Actuation	Material		Lever handle	SS316
	27	Threaded connections if applicable		Metric		
	28					
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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		According to approved vendor list		
	53	Model		Supplier to advise		
	54					
	55					
	56					
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**NOTES :**

				VALVE DATASHEET		 شرکت توسعه صنایع لوان Lavan Industry Development Company
				Hand Ball Valve		
						
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		
	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						
15						
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	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.	SS316	SS316
	26	Actuation	Material		Lever handle	SS316
	27	Threaded connections if applicable		Metric		
	28					
	29					
	30					
	31					
	32					
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	35					
	36					
	37					
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	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		According to approved vendor list		
	53	Model		Supplier to advise		
	54					
	55					
	56					
	57					

**NOTES :**

				<b>VALVE DATASHEET</b> <b>Hand Ball Valve</b>		 <b>شركت توسعه صنایع گازی</b> <b>Lavan Industry Development Company</b>
04	LK	23-5-2024	For Approval	 Sheet 5 of 11 Based on P&ID Rev.08		
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		
	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.	SS 316	SS316
	26	Actuation	Material		Lever handle	CS
	27	Threaded connections if applicable		Metric		
	28					
	29					
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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		According to approved vendor list		
	53	Model		Supplier to advise		
	54					
	55					
	56					
	57					

**NOTES :**

				<b>VALVE DATASHEET</b>		 <p>شرکت توسعه صنایع لوان Lavan Industry Development Company</p>
				<b>Hand Ball Valve</b>		
						
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					
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	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		According to approved vendor list		
	53	Model		Supplier to advise		
	54					
	55					
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**NOTES :**

				<b>VALVE DATASHEET</b>		 <p>شرکت توسعه صنایع لوات Lavan Industry Development Company</p>
				<b>Hand Ball Valve</b>		
						
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			
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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	300#
	16	Flange face finish			VTA	
	17	Body Material			SS316	
	18	Packing Material			PTFE	
	19	Bonnet Type			Bolted, SS316	
	20	Trim	Form	Characteristics	Disc	VTA
	21		Seat Mat.	Cage mat.	PTFE	VTA
	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			VTA	VTA
	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			To be advised by the manufacturer	
	47	Cv Selected			To be advised by the manufacturer	
	48	Cv required			To be advised by the manufacturer	
CERTIFICATES	49	3.1 Material certificate			Yes	
	50	Hydrotest certificate			Yes	
	51	Leakage class			Yes	
PURCHASE	52	Valve Manufacturer			According to approved vendor list	
	53	Valve Model			Supplier to advise	
	54	Actuator Manufacturer			According to approved vendor list	
	55	Actuator Model			Supplier to advise	
	56	Positioner Manufacturer			According to approved vendor list	
57	Positioner Model			Supplier to advise		

**NOTES :**

				<b>VALVE DATASHEET</b>		 شركة توسعه صنعت لوان <b>Lavan</b> Industry Development Company
				Pressure Control Valve		
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			
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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	
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				
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		VTA	
	24	Inlet Connection	Outlet Conn.	RF	RF
	25	Inlet Rating	Outlet Rating	300#	300#
	26				
	27				
	28				
OPTIONS	41				
	42				
	43				
	44				
	45				
CERTIFICATES	46	3.1 Material certificate		Yes	
	47				
	48				
	49				
	50				
PURCHASE	52	Manufacturer		According to approved vendor list	
	53	Model		Supplier to advise	
	54				
	55				
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**NOTES :**

				<b>VALVE DATASHEET</b>		 شركة نوسان صناعات لافان <b>Lavan</b> Industry Development Company
				<b>Check Valve</b>		
						
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			3/4" 300# RF	
	22	Body Material			SS 316	
	23	Mesh Material			SS 316	
	24	Mesh Size			0,5 mm (Supplier to advise)	
	25					
	26					
	27					
	28					
	29					
	30					
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46						
CERTIFICATES	47	3.1 Material certificate			Yes	
	48					
	49					
	50					
	51					
	52					
PURCHASE	53	Manufacturer			According to approved vendor list	
	54	Model			Supplier to advise	
	55					
	56					
	57					

**NOTES :**

				<b>VALVE DATASHEET</b>		 <p>شرکت توسعه صنایع لافات  <b>Lavan</b>      Industry      Development      Company</p>
				Y-Strainer		
						
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			
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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		Carbon steel	
	23	Mesh Material		SS 316	
	24	Mesh Size		0,5 mm (Supplier to advise)	
	25				
	26				
	27				
	28				
	29				
	30				
	31				
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	34				
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42					
43					
44					
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46					
CERTIFICATES	47	3.1 Material certificate		Yes	
	48				
	49				
	50				
	51				
	52				
PURCHASE	53	Manufacturer		According to approved vendor list	
	54	Model		Supplier to advise	
	55				
	56				
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**NOTES :**

				<b>VALVE DATASHEET</b>		 <p>شرکت توسعه صنایع لوات Lavan Industry Development Company</p>
				<b>Y-Strainer</b>		
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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