



LIDCO, Pars SEE Zone, Assaluyeh,
Integrated Methanol and Ammonia
Plant 3000 MTPD MeOH / 900 MTPD NH3 PROJECT



Valve Data Sheets

Document No. 17735-48

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**Airpack B.V. - Air Compressor –
Integrated Methanol and Ammonia Plant
17735-COM Valve Data Sheets (K020)**

Code 2
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Valve Data Sheets

Document No. 17735-48

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19						44						69						1					
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Notes:

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03	LK	17-4-2024	For Approval		
02	LK	11-3-2024	For Approval		
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Rev	By	Date	Description	Based on P&ID Rev.08	



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					
	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					
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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		Alfa Valve	
	53	Model		A10N	
	54				
	55				
	56				
	57				

NOTES :

05	LK	8-7-2024	For Approval	VALVE DATASHEET Hand Ball Valve 	 Sheet 5 of 11
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		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.	SS 316	SS316
	26	Actuation	Material		Lever handle	CS
	27	Threaded connections if applicable		Metric		
	28					
	29					
	30					
	31					
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33						
34						
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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		Alfa Valve		
	53	Model		A10NF		
	54					
	55					
	56					
	57					

NOTES :

05	LK	8-7-2024	For Approval	VALVE DATASHEET Hand Ball Valve 	 شركة نوسنه 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					
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	33					
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	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		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
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		

- Control valve and all accessories catalogue(including order code) should be submitted .
 - sub-vendor control valve calculation to be added this document.
 - proper sub-vendor and order code selection is vendor responsibility.

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		
PROCESS CONDITIONS	7	Fluid		Air	Dry Gas	
	9	Pressure	Norm.	Max.	30 bar(g)	
	10	Temperature	Norm.	Max.	46 °C	
	11	Design	Press.	Temp.	39 bar(g)	
	12	Ambient Temp.	Min.	Max.	0 °C	
	BODY	13	Type Of Body		Globe valve	
14		Body Size		3/4" ANSI RF		
15		Conn. Type	End Conn. Rat.		RF	
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 M		Yes, 4-20 mA Transmitter, HART		
	36	Electric C		ISO M20 x 1,5		
	37	Cable Gl		Yes (Airpack scope)		
38	Actuator m		SS316			
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)	
	46	Pressure drop		17,96 bar @ 41% opening		
	47	Cv Selected		0,03		
CERTIFICATES	48	Cv required		0,101		
	49	3.1 Material certificate		Yes		
	50	Hydrotest certificate		Yes		
PURCHASE	51	Leakage class		Yes		
	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 :

DVC (not DCV) is correct, complete order code should be mentioned.

05	LK	8-7-2024	For Approval	VALVE DATASHEET Pressure Control Valve 	 Sheet 8 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		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				
	55				
	56				

NOTES :

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				
	32				
	33				
	34				
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	36				
	37				
	38				
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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		A025	
	55				
	56				
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NOTES :

05	LK	8-7-2024	For Approval	VALVE DATASHEET Y-Strainer 	 شركة لوان لصناعة التطوير 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				
	57				

NOTES :

05	LK	8-7-2024	For Approval	VALVE DATASHEET Y-Strainer 	 شرکت توسعه صنایع لاهوت 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 11 of 11 Based on P&ID Rev.08	