



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



Control Valve Data Sheets

Document No. 17735-48

Project No.	Vendor Doc.	P.O. No.	Department	Document Type	Serial No	Revision	Page
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**Airpack B.V. - Air Compressor –  
Integrated Methanol and Ammonia Plant  
17735-COM Control Valve Data Sheets (K020)**

REV.	DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED
01	09-11-2023	Issued for Approval	T.T.	S.K.	J.J.

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Control Valve Data Sheets

Document No. 17735-48

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**Notes:**

GENERAL	1	Tag Number		320-V-8201	
	2	Service		Hand Ball valve	
	3	P&ID No.		17735-03	
	4	Location		Compressor Air Inlet	
	5				
	6				
	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)	65 °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				
PURCHASE	51				
	52	Manufacturer		According to approved vendor list	
	53	Model		Supplier to advise	
	54				
	55				
	56				
	57				



**NOTES :**

GENERAL	1	Tag Number		320-V-8202		
	2	Service		Hand Ball valve		
	3	P&ID No.		17735-03		
	4	Location		Compressor Air Outlet		
	5					
	6					
	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	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						
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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					
	56					
	57					

**NOTES :**



GENERAL	1	Tag Number		320-V-8203	
	2	Service		Hand Ball valve	
	3	P&ID No.		17735-03	
	4	Location		Cooling Water Inlet	
	5				
	6				
	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)	65 °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	Trim	Form	Floating ball	
	24		Seat Mat.	PTFE	
	25		Ball 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					
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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>		شرکت توسعه صنایع لوان <b>Lavan Industry Development Company</b> 	
01	SK	9-11-2023	For Approval			Sheet 5 of 10	
Rev	By	Date	Description			Based on P&ID Rev.01	

GENERAL	1	Tag Number		320-V-8204		
	2	Service		Hand Ball valve		
	3	P&ID No.		17735-03		
	4	Location		Cooling Water Outlet		
	5					
	6					
	7					
PROCESS CONDITIONS	8	Fluid	State	Cooling Water	Liquid	
	9	Pressure	Norm. Max.	5 bar(g)		
	10	Temperature	Norm. Max.		46 °C	
	11	Design	Press. Temp.	7 bar(g)	65 °C	
	12	Ambient Temp.	Min. Max.	0 °C	49 °C	
	13	Oper. Flow		1 Nm <sup>3</sup> /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					
PURCHASE	51					
	52	Manufacturer		According to approved vendor list		
	53	Model		Supplier to advise		
	54					
	55					
	56					
	57					

**NOTES :**

GENERAL	1	Tag Number			320-PCV-8201	
	2	Service			Compressor bypass (recycle) valve	
	3	P&ID No.			17735-03	
	4	Location			Bypass	
	5					
	6					
	7					
PROCESS CONDITIONS	8	Fluid	State		Air	Dry Gas
	9	Pressure	Norm.	Max.	9,5 bar(g)	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	Body Material			SS316	
	17	Packing Material			PTFE	
	18	Bonnet Type			Integral	
	19	Trim	Form		Disc	
	20		Seat Mat.		PTFE	
	21		Disc Mat.	Shaft Mat.	SS 316	SS316
	22	Required Seat Tightness			IV	
	23	Max. Allow. Sound Level (dBa)			85	
	24					
25						
26						
ACTUATOR	27	Positioner controller			Electro-pneumatic (I/P)	
	28	Interface			4 -20 mA , HART	
	29	Fail Position			FO (Fail Open)	
	30	Pneumatic Conn.			1/4" NPT-F	
	31	Instrument Supply Fluid			Instrument Air	
	32	Instrument Supply Fluid pressure			9,5 bar(g)	
	33	Position Monitor			Yes 24 VDC 4-20 mA Transmitter	
	34	Area Classification			Safe Area	
	35	Electric Connection			ISO M20 x 1,5	
	36	Cable Gland			Safe Area	
37						
ACCESSORIES	38	Filter Regulator			Yes	
	39	Gauges			Yes, Stainles steel	
	40					
SERVICE	41	Flow Rate			35 Nm³/h	
	42	Pressure	Inlet	outlet	9,5 bar(g)	30 bar(g)
	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	Hydrotest certificate			Yes	
	51					
	52					
PURCHASE	53	Valve Manufacturer			According to approved vendor list	
	54	Valve Model			Supplier to advise	
	55	Actuator Manufacturer			According to approved vendor list	
	56	Actuator Model			Supplier to advise	
	57					
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Rev	By	Date	Description			
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					Based on P&ID Rev.01	

GENERAL	1	Tag Number		320-CV-8201	
	2	Service		Check Valve	
	3	P&ID No.		17735-03	
	4	Location		Compressor Air Outlet	
	5				
	6				
	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		VTA	
	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				
PURCHASE	51				
	52	Manufacturer		According to approved vendor list	
	53	Model		Supplier to advise	
	54				
	55				
56					
  					
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Rev	By	Date	Description	Based on P&ID	Rev.01

GENERAL	1	Tag Number		320-ST-8201	
	2	Service		Y-strainer	
	3	P&ID No.		17735-03	
	4	Location		Compressor Air Inlet	
	5				
	6				
	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)	65 °C
	13	Ambient Temp.	Min. Max.	0 °C	49 °C
	14	Oper. Flow		35 Nm³/hr	
	15				
	16				
	17				
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				
	31				
	32				
	33				
	34				
	35				
	36				
	37				
	38				
	CERTIFICATES	47	3.1 Material certificate		Yes
48					
49					
50					
51					
PURCHASE	53	Manufacturer		According to approved vendor list	
	54	Model		Supplier to advise	
	55				
	56				
57					
  					
01	SK	9-11-2023	For Approval	Sheet 9 of 10	
Rev	By	Date	Description	Based on P&ID Rev.01	

GENERAL	1	Tag Number		320-ST-8202	
	2	Service		Y-strainer	
	3	P&ID No.		17735-03	
	4	Location		Cooling Water Inlet	
	5				
	6				
	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)	65 °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				
	32				
	33				
	34				
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	36				
	37				
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41					
42					
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44					
45					
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				

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