

Quote No: MM24710				Project:			
Customer:				End User: CHASHMA SUGAR MILLS (PRIVATE) LIMIT			
RFQ No:				Revision:			
CustomerPO:				End User Location: PAKISTAN			
				ValSpeQ v 3.91.2			
Tag:	FIC-302			Service	Process Water to R305		
General	Item No 01	Item Revision		Serial No	Quote-1		
	Quantity 1						
Area Class / PED 97/23 CE Pass / Category -				/ /			
Leakage Class / NACE				ANSI Class IV			
Line Size - Schedule - OD - Wall Inlet / Outlet				80 mm - 40 - 88.9 - 5.4864 / 80 mm - 40 - 88.9 - 5.4864			
Process Fluid / Fluid State				Water / Liquid			
Design Press / Design Temp				5 bar g / 0/100 deg C			
Service Inputs	Sizing Conditions		Units	Min	Norm	Max	Other
	Flow Rate	kg/h		17000	33000	40000	40000
	Inlet Pressure	bar a		3	3	3	5
	Outlet Pressure	bar a		2.5	2.5	2.5	4.5
	Temperature	deg C		75	75	75	100
	Critical pressure	bar a		221.1	221.1	221.1	221.1
	Vapor Pressure	bar a		0.7018	0.7018	0.7018	0.7018
	Viscosity	centipoise		0.5	0.5	0.5	0.5
	Liquid Gf			0.97	0.97	0.97	0.97
Service Results	Flowing Cond. required Cv		Subcritical	28.28	sigma ok	66.53	Subcritical
	Sound Level, IEC	dBa		< 70	< 70	< 70	< 70
	% lift			26.05	44.28	50.71	50.71
	FL			0.8918	0.8172	0.7979	0.7979
	33 ft/s dia.	mm		24.82	34.58	38.07	38.07
	Valve velocity	ft/s [I]nlet [O]utlet		3.503 [O]	6.799 [O]	8.241 [O]	8.241 [O]
Body Bonnet	Model No	35-35212		Body & Bonnet Matl	A351 gr CF8M (316 st. st.)		
	Body Type	Globe, Rotary		Bonnet Type / Bellows	Integral/		
	Size (In x Body x Out)	80	mm	Packing Type	Braided PTFE/Carbon or aramid core		
	Rating / End Conn /sch	CL 150 / Flangeless		Body Studs	A193 gr B8 cl 1		
	Face Finish	3.2 - 6.3 MICRON		Body Nuts	A194 gr 8		
Trim	Rated Cv	145		Plug Type	Eccentric		
	Trim Type	Eccentric plug		Plug:Ball:Disk Matl	316L St.St.Hard Faced		
	Characteristic	Linear		Seat Ring Mtl	316 St. St.		
	Flow Action	Flow to Close		Cage:Retnr / Guide Matl	316 St. St. / Stellite #6		
Actuator	Type	Spring-diaphragm		Model / Size	35 / 6		
	Fail Position	Closed		Shutoff Pressure	5 bar a		
	Manual Override	Side Mounted		Bench Range	7-15 psi g		
	Limit Stop	2 / Vertical Line, Up Flow		Supply / set Pressure	20 psi g / 0 psi g		
Positioner	Model	4700E		Type	Electropneumatic		
	Input Signal / Characteristic	4-20 mA / Linear		Agency / Approval	ATEX / Weather Proof		
	Diagnostics Level	-		Approval Description:	None		
	Air Connection /Elect Conn Tag	.25 NPT / .5 Inch NPTF		Enclosure Rating	IP66 per EN 60529		
Tubing Mat l / Fitting Type / Tubing Size(min.) / Gauge scale:				stainless steel / st.st. double Ferrule / 0.25 inch / psi-kPa-bar-kg/cm2			
FN Notes							
ITP: ITP-1				Nameplate Lang: English			
Notes to Customer:							
Revisions	Item Revision	Description	Date	By	Contact		
					M. Hisham Mirza Phone: +92 21 32213449		
Accessory Sheet <input type="checkbox"/>				Notes Sheet <input type="checkbox"/>			
Seller, at its option and at no expense to the customer, may make design changes to goods or materials not impacting form, fit, or function							

Monday, April 15, 2013

# Masoneilan Valves

# Calculation Sheet

Quote No: MM24710	Revision:	Project:
Customer:	Revision:	End User: CHASHMA SUGAR MILLS (PRIVATE) LIMITEC
RFQ No:		End User Location: PAKISTAN
CustomerPO:		ValSpeQ v 3.91.2      Size v 3.91.1

Tag	<b>FIC-302</b>	Service	Process Water to R305
General	Item No 01 Quantity 1	PID No	
	Item Revision	Serial No	Quote-1

Sizing Data	Size (In x Body x Out):	80 mm ASME CL 150							
	Model No:	35-35212							
	Rated Cv:	145							
	Trim Type:	Eccentric plug							
	Inlet Pipe Size / Sch / OD / Wall:	80	mm	/	40	/	88.9	/	5.4864
	Outlet Pipe Size / Sch / OD / Wall:	80	mm	/	40	/	88.9	/	5.4864

Fluid	Process Fluid / Design Press	Water	/	5 bar g
	Fluid State / Min / Max Design Temp:	Liquid	/	0/100 deg C

Service Conditions	Sizing Conditions	Units	Min	Norm	Max	Other
	Flow Rate	kg/h	17000	33000	40000	40000
Inlet Pressure	bar a	3	3	3	5	
Outlet Pressure	bar a	2.5	2.5	2.5	4.5	
Pressure Drop	bar	0.5	0.5	0.5	0.5	
Temperature	deg C	75	75	75	100	
Vapor Pressure	bar a	0.7018	0.7018	0.7018	0.7018	
critical pressure	bar a	221.1	221.1	221.1	221.1	
Viscosity	centipoise	0.5	0.5	0.5	0.5	
Liquid Gf		0.97	0.97	0.97	0.97	
flowing cond.		Subcritical	sigma ok	sigma ok	Subcritical	
required Cv.		28.28	54.89	66.53	66.53	
oversize req Cv.	Cv x 1	28.28	54.89	66.53	66.53	
sound level, IEC	dBA	< 70	< 70	< 70	< 70	
% lift		26.05	44.28	50.71	50.71	
% Cv		19.5	37.86	45.88	45.88	
FL		0.8918	0.8172	0.7979	0.7979	
critical FL		0.4625	0.4625	0.4625	0.3395	
33 ft/s dia.	mm	24.82	34.58	38.07	38.07	
valve velocity	ft/s [I]Inlet [O]Outlet	3.503 [O]	6.799 [O]	8.241 [O]	8.241 [O]	
% Flashing		0	0	0	0	

Sizing Warning: Note: Actuator is sized based on the shutoff pressure provided

Notes to Customer

Restrictor Sheet

