

Item No. / Qty	1		1		Ref. No.	
Tag No.	PIC-1				Purchaser	
Service					End user	
					Project	
<Control valve>					<Remarks>	
Model	VBZ (VBH)				SV0703-105 Indicating unit : "kgf/cm2"	
Description	Heavy Duty Butterfly Valve				SV0601-001 Air piping Connection: 1/4 NPT	
Body/Port size	10 in.	60 deg			SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap	
Conn. Size. / Rated CV				1700	SV0101-004 Flange facing finish : Serration ANSI B16.5 (Spiral)	
Rating / Conn. Type	ANSI150	T&G(G) Wafer			SV0505-003 Minimum and maximum flow stopper for actuator	
Body material	BODY: SCS13A/ VANE: SCS13				Old Production No : 414-8107-6100 (1976)	
Trim material	STEM:SUS304					
Flow characteristic	EQ% APPROX.					
Bonnet	Low Temp					
Actuator / Handle	HA4D	SIDE				
Action	AIR TO OPEN					
Gland packing / Grease	V-PTFE + TK2006					
Gasket	V543					
Air supply / Spring range	2.6kgf/cm2	0.2-1.0kgf/cm2				
Seat leakage						
Color: Body/Diaph./Yoke	XXX	SILVER	SILVER			
Paint	Corrosion Resistant					
<Accessories>						
Positioner	HTP-1D					
Structure						
Input signal	0.2-1.0 kgf/cm2					
Regulator	KZ03-2B-XX			1		
Regulator2						
Limit switch						
Action						
Solenoid valve						
Action / Power						
Booster						
Air lock valve						
<Process data>						
Fluid name/Phase	Natural Gas			GAS		
	MAX	NOR	MIN	Unit		
Flow rate	41000	37200		m3/h(N)		
Inlet pressure	7	7		kgf/cm2A		
Outlet pressure				kgf/cm2A		
Differential press.	0.3	0.3		kgf/cm2		
Shut-off press.		17		kgf/cm2		
Temperature	-30	-30		degC		
Density/Gravity(Liq)				kg/m3		
Density/Gravity(G,V)	17.16	17.16		MW		kgf/cm2G
Viscosity				mPa-s		
Flash				%		
Calculated CV	894.2	811.4				
Travel				%		
Outlet velocity	0.07845	0.07118		Mach		
Predictive SPL	63	63		dBA		
					<Piping spec.>	
					Strength Calc. Sheet	
					Design	
					Temp. -30/20 degC	
					Size	
					Sch No.	
					Thickness	
Yamatake Corporation						

Item No. / Qty	2		1		Ref. No.	
Tag No.	PIC-24A				Purchaser	
Service					End user	
<Control valve>					Project	
<Control valve>					<Remarks>	
Model	VBH				SV0703-105 Indicating unit : "kgf/cm2"	
Description	Heavy Duty Butterfly Valve				SV0601-001 Air piping Connection: 1/4 NPT	
Body/Port size	20 in.		60 deg		SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap	
Conn. Size. / Rated CV			6800		SV0101-004 Flange facing finish : Serration ANSI B16.5 (Spiral)	
Rating / Conn. Type	ANSI150		RF Wafer		Old Production No : 414-8107-6800 (1976)	
Body material	BODY: SCPH2/ VANE: SCS13					
Trim material	STEM:SUS304					
Flow characteristic	EQ% APPROX.					
Bonnet	PLAIN (0 to 200 degC)					
Actuator / Handle	VA5D		SIDE			
Action	AIR TO CLOSE					
Gland packing / Grease	P4519		PS6			
Gasket	---					
Air supply / Spring range	2.6kgf/cm2		0.2-1.0kgf/cm2			
Seat leakage						
Color: Body/Diaph./Yoke	SILVER		SILVER		SILVER	
Paint	Corrosion Resistant					
<Accessories>						
Positioner	HTP-1D					
Structure						
Input signal	0.2-1.0 kgf/cm2					
Regulator	KZ03-2B-XX		1			
Regulator2						
Limit switch						
Action						
Solenoid valve						
Action / Power						
Booster						
Air lock valve						
<Process data>						
Fluid name/Phase	Carbon Dioxide			GAS		
	MAX	NOR	MIN	Unit		
Flow rate	49000	42600		m3/h(N)		
Inlet pressure	0.28	0.28		kgf/cm2G		
Outlet pressure				kgf/cm2G		
Differential press.	0.2	0.2		kgf/cm2		
Shut-off press.		1.75		kgf/cm2		
Temperature	66	66		degC		
Density/Gravity(Liq)				kg/m3		
Density/Gravity(G,V)	39.82	39.82		MW		kgf/cm2G
Viscosity				mPa-s		degC
Flash				%		
Calculated CV	6045	5220				
Travel	96	90		%		
Outlet velocity	0.2539	0.2207		Mach		
Predictive SPL	89	88		dBA		
<Piping spec.>						
Strength Calc. Sheet						
Design					kgf/cm2G	
Temp.					degC	
Size						
Sch No.						
Thickness						
Yamatake Corporation						