

Item No. / Qty	1	1	Ref. No.			
Tag No.	14-PV-007		Purchaser			
Service			End user			
			Project			
			Unit name			
<Control valve>	Model	ACN		<Remarks> SV0201-003 Seat leakage: Less than 0.01%CV (Equivalent IEC, JIS Class IV) SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap SV0003-001 Valve size indication: ' ' ' SV0601-001 Air piping Connection: 1/4 NPT SV0703-105 Indicating unit : "kgf/cm2" SV0705-001 Without by-pass cock for HTP positioner SV0101-004 Flange facing finish : Serration ANSI B16.5 (Spiral) SV0501-200 Actuator mounting position No.2 Be noted that: 1)OLD production No. :416-8303-3500 2)Model ACN(cage low noise type) has been offered instead of model VDN (low noise type) of existing valve, which was phased out in production so many years ago. * Air regulator with 4kgf/cm2 gauge		
	Description	Compressible Fluid Service Low-Noise Cage Type Control				
	Body/Port size (in.)	6	6			
	Conn. Size. / Rated CV		330			
	Rating / Conn. Type	ANSI150	RF			
	Body material	A216WCB				
	Trim material	A351CF8M/SUS316				
	Flow characteristic	LINEAR				
	Bonnet	PLAIN (-17 to 230 degC)				
	Actuator / Handle	HA3R	SIDE			
	Action	AIR TO OPEN				
	Gland packing / Grease	NP4519	---			
	Gasket	V543,V8590				
	Air supply / Spring range	2.8kgf/cm2	0.8-2.4kgf/cm2			
	Seat leakage	CLASS IV				
	Color: Body/Diaph./Yoke	SILVER	2.5Y8/12 2.5Y8/12			
	Paint	Standard				
<Accessories>	Positioner	HTP-1D				
	Structure					
	Input signal	0.2-1.0 kgf/cm2				
	Regulator	KZ03-2B-1B*	1			
	Regulator2					
	Limit switch					
	Action					
	Solenoid valve					
	Action / Power					
	Booster					
	Air lock valve					
	Action					
Action						
Action						
<Process data>	Fluid name/Phase	C3/C4 GAS	GAS	<Piping spec.> Strength Calc. Sheet Design Press. kgf/cm2G Temp. degC Pipe Up stream Down stream Size inch Sch No. 40 40 Thickness mm		
		MAX	NOR		MIN	Unit
	Flow rate	13619				m3/h(N)
	Inlet pressure	10				kgf/cm2A
	Outlet pressure					kgf/cm2A
	Differential press.	6.2				kgf/cm2
	Shut-off press.		10			kgf/cm2
	Temperature	75				degC
	Density/Gravity(Liq)					kg/m3
	Density/Gravity(G,V)	2.57				Air=1
	Viscosity	0.008				cP
	Flash					%
	Calculated CV	180.3				
Travel	54			%		
Outlet velocity	0.318			Mach		
Predictive SPL	80			dBA		
Yamatake Corporation						

Item No. / Qty	2	1	Ref. No.			
Tag No.	14-PV-008A		Purchaser			
Service			End user			
			Project			
			Unit name			
<Control valve>	Model	HCB		<Remarks> SV0201-002 Seat leakage: Less than 0.1%CV (Equivalent IEC, JI Class III) SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap SV0003-001 Valve size indication: ' ' ' SV0601-001 Air piping Connection: 1/4 NPT SV0703-105 Indicating unit : "kgf/cm2" SV0705-001 Without by-pass cock for HTP positioner SV0101-004 Flange facing finish : Serration ANSI B16.5 (Spiral) SV0501-200 Actuator mounting position No.2 SV0212 Cage plug with piston ring Be noted that: 1)OLD production No. :416-8303-3700 2)Model HCB (cage type) has been offered instead of model VD (double seated valve) of existing valve, which was phased out i production so many years ago. * Air regulator wit4kgf/cm2 gauge		
	Description	Pressure Balanced Cage Type Control Valves				
	Body/Port size (in.)	6	6			
	Conn. Size. / Rated CV		420			
	Rating / Conn. Type	ANSI150	RF			
	Body material	A216WCB				
	Trim material	SCS14A				
	Flow characteristic	EQ%				
	Bonnet	PLAIN (-17 to 230 degC)				
	Actuator / Handle	HA3R	SIDE			
	Action	AIR TO OPEN				
	Gland packing / Grease	NP4519	---			
	Gasket	V543,V8590				
	Air supply / Spring range	2.8kgf/cm2	0.8-2.4kgf/cm2			
	Seat leakage	CLASS III				
Color: Body/Diaph./Yoke	SILVER	2.5Y8/12 2.5Y8/12				
Paint	Standard					
<Accessories>	Positioner	HTP-3D				
	Structure					
	Input signal	0.6-1.0 kgf/cm2				
	Regulator	KZ03-2B-1B*	1			
	Regulator2					
	Limit switch					
	Action					
	Solenoid valve					
	Action / Power					
	Booster					
	Air lock valve					
	Action					
Action						
Action						
<Process data>	Fluid name/Phase	FUEL GAS		GAS	<Piping spec.> Strength Calc. Sheet Design Press. kgf/cm2G Temp. degC Pipe Up stream Down stream inch Size 6 6 Sch No. 40 40 Thickness 7.1 7.1 mm	
		MAX	NOR	MIN		Unit
	Flow rate	19067				m3/h(N)
	Inlet pressure	3.8				kgf/cm2A
	Outlet pressure					kgf/cm2A
	Differential press.	2.3				kgf/cm2
	Shut-off press.		4.0			kgf/cm2
	Temperature	75				degC
	Density/Gravity(Liq)					kg/m3
	Density/Gravity(G,V)	0.451				Air=1
	Viscosity					cP
	Flash					%
	Calculated CV	290.9				
	Travel	79				%
	Outlet velocity	0.4725				Mach
Predictive SPL	101			dBa		
Yamatake Corporation						

Item No. / Qty	3	1	Ref. No.			
Tag No.	14-PV-008B		Purchaser			
Service			End user			
			Project			
			Unit name			
<Control valve>	Model	HCB		<Remarks> SV0201-002 Seat leakage: Less than 0.1%CV (Equivalent IEC, JI Class III) SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap SV0003-001 Valve size indication: ' ' ' SV0601-001 Air piping Connection: 1/4 NPT SV0703-105 Indicating unit : "kgf/cm2" SV0705-001 Without by-pass cock for HTP positioner SV0101-004 Flange facing finish : Serration ANSI B16.5 (Spiral) SV0212 Cage plug with piston ring Be noted that: 1) The offered valve is based on the process data of production No. 416-8303-2100. 2) Offered the model HCB(CAGE TYPE) instead of the old model VDP (double seated valve) which was phased out in production s many years ago. *Air regulator with 4kgf/cm2 gauge		
	Description	Pressure Balanced Cage Type Control Valves				
	Body/Port size (in.)	3	3			
	Conn. Size. / Rated CV		99			
	Rating / Conn. Type	ANSI150	RF			
	Body material	A216WCB				
	Trim material	SCS14A				
	Flow characteristic	EQ%				
	Bonnet	PLAIN (-17 to 230 degC)				
	Actuator / Handle	HA2R	---			
	Action	AIR TO OPEN				
	Gland packing / Grease	NP4519				
	Gasket	V543,V8590				
	Air supply / Spring range	2.8kgf/cm2	0.8-2.4kgf/cm2			
	Seat leakage	CLASS III				
Color: Body/Diaph./Yoke	SILVER	2.5Y8/12 2.5Y8/12				
Paint	Standard					
<Accessories>	Positioner	HTP-2R				
	Structure					
	Input signal	0.2-0.6 kgf/cm2				
	Regulator	KZ03-2B-1B*	1			
	Regulator2					
	Limit switch					
	Action					
	Solenoid valve					
	Action / Power					
	Booster					
	Air lock valve					
	Action					
Action						
Action						
<Process data>	Fluid name/Phase	FUEL GAS		GAS	<Piping spec.> Strength Calc. Sheet Design Press. kPaG Temp. degC Pipe Up stream Down stream Size inch Sch No. 40 40 Thickness mm	
		MAX	NOR	MIN		Unit
	Flow rate	4086				m3/h(N)
	Inlet pressure	10.0				kgf/cm2A
	Outlet pressure					kgf/cm2A
	Differential press.	6.2				kgf/cm2
	Shut-off press.		4.0			kgf/cm2
	Temperature	75				degC
	Density/Gravity(Liq)					kg/m3
	Density/Gravity(G,V)	2.570				Air=1
	Viscosity					cP
	Flash					%
	Calculated CV	56.42				
	Travel	82				%
	Outlet velocity	0.3817				Mach
Predictive SPL	91			dBa		
Yamatake Corporation						

Item No. / Qty	4	1	Ref. No.			
Tag No.	14-PV-010A		Purchaser			
Service			End user			
			Project			
			Unit name			
<Control valve>	Model	HCB		<Remarks> SV0201-002 Seat leakage: Less than 0.1%CV (Equivalent IEC, JI Class III) SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap SV0003-001 Valve_size indication: ' ' ' SV0601-001 Air piping Connection: 1/4 NPT SV0703-105 Indicating unit : "kgf/cm2" SV0705-001 Without by-pass cock for HTP positioner SV0101-004 Flange facing finish : Serration ANSI B16.5 (Spiral) SV0212 Cage plug with piston ring Be noted that: 1) The offered valve is based on the process data of production No. 416-8303-2300. 2) Offered the model HCB(CAGE TYPE) instead of the old model VDP (double seated valve) which was phased out in production s many years ago. *Air regulator with 4kgf/cm2 gauge		
	Description	Pressure Balanced Cage Type Control Valves				
	Body/Port size (in.)	4	4			
	Conn. Size. / Rated CV		220			
	Rating / Conn. Type	ANSI150	RF			
	Body material	A216WCB				
	Trim material	SCS14A				
	Flow characteristic	EQ%				
	Bonnet	PLAIN (-17 to 230 degC)				
	Actuator / Handle	HA2R	TOP			
	Action	AIR TO OPEN				
	Gland packing / Grease	NP4519				
	Gasket	V543,V8590				
	Air supply / Spring range	2.8kgf/cm2	0.8-2.4kgf/cm2			
	Seat leakage	CLASS III				
	Color: Body/Diaph./Yoke	SILVER	2.5Y8/12 2.5Y8/12			
	Paint	Standard				
	<Accessories>	Positioner	HTP-3D			
Structure						
Input signal		0.6-1.0 kgf/cm2				
Regulator		KZ03-2B-XX	1			
Regulator2						
Limit switch						
Action						
Solenoid valve						
Action / Power						
Booster						
Air lock valve						
Action						
Action						
Action						
<Process data>	Fluid name/Phase	FUEL GAS	GAS	<Piping spec.> Strength Calc. Sheet Design Press. kPaG Temp. degC Pipe Up stream Down stream Size 4 4 inch Sch No. 40 40 Thickness 6 6 mm		
		MAX	NOR		MIN	Unit
	Flow rate	3450				m3/h(N)
	Inlet pressure	2.5				kgf/cm2A
	Outlet pressure					kgf/cm2A
	Differential press.	2.5				kgf/cm2
	Shut-off press.		4.0			kgf/cm2
	Temperature	75				degC
	Density/Gravity(Liq)					kg/m3
	Density/Gravity(G,V)	2.290				Air=1
	Viscosity	0.008				cP
	Flash					%
	Calculated CV	90.5				
	Travel					%
Outlet velocity				Mach		
Predictive SPL				dBA		
Yamatake Corporation						

Item No. / Qty	5	1	Ref. No.		
Tag No.	14-PV-010B		Purchaser		
Service			End user		
			Project		
			Unit name		
<Control valve>	Model	ACN		<Remarks> SV0201-003 Seat leakage: Less than 0.01%CV (Equivalent IEC, JIS Class IV) SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap SV0003-001 Valve size indication: ' ' ' SV0601-001 Air piping Connection: 1/4 NPT SV0703-105 Indicating unit : "kgf/cm2" SV0705-001 Without by-pass cock for HTP positioner SV0101-004 Flange facing finish : Serration ANSI B16.5 (Spiral) SV0501-200 Actuator mounting position No.2 Be noted that: 1)OLD production No. :416-8303-3600 2)Model ACN(cage low noise type) has been offered instead of model VDN (low noise type) of existing valve, which was phased out in production so many years ago. * Air regulator with 4kgf/cm2 gauge	
	Description	Compressible Fluid Service Low-Noise Cage Type Control			
	Body/Port size (in.)	6	6		
	Conn. Size. / Rated CV		330		
	Rating / Conn. Type	ANSI150	RF		
	Body material	A216WCB			
	Trim material	A351CF8M/SUS316			
	Flow characteristic	LINEAR			
	Bonnet	PLAIN (-17 to 230 degC)			
	Actuator / Handle	HA3R	SIDE		
	Action	AIR TO OPEN			
	Gland packing / Grease	NP4519	---		
	Gasket	V543,V8590			
	Air supply / Spring range	2.8kgf/cm2	0.8-2.4kgf/cm2		
	Seat leakage	CLASS IV			
	Color: Body/Diaph./Yoke	SILVER	2.5Y8/12 2.5Y8/12		
	Paint	Standard			
<Accessories>	Positioner	HTP-2R			
	Structure				
	Input signal	0.2-0.6 kgf/cm2			
	Regulator	KZ03-2B-1B*	1		
	Regulator2				
	Limit switch				
	Action				
	Solenoid valve				
	Action / Power				
	Booster				
	Air lock valve				
	Action				
<Process data>	Fluid name/Phase	FUEL GAS	GAS		
		MAX	NOR	MIN	Unit
	Flow rate	13619			m3/h(N)
	Inlet pressure	10			kgf/cm2A
	Outlet pressure				kgf/cm2A
	Differential press.	6.0			kgf/cm2
	Shut-off press.		10		kgf/cm2
	Temperature	75			degC
	Density/Gravity(Liq)				kg/m3
	Density/Gravity(G,V)	2.57			Air=1
	Viscosity	0.008			cP
	Flash				%
	Calculated CV	181.2			
	Travel	54			%
	Outlet velocity	0.3021			Mach
Predictive SPL	79			dBA	
<Piping spec.>					
Strength Calc. Sheet					
Design	Press.			kgf/cm2G	
	Temp.			degC	
Pipe	Up stream	Down stream			
	Size			inch	
	Sch No.	40	40		
	Thickness			mm	
Yamatake Corporation					

Item No. / Qty	6	1	Ref. No.			
Tag No.	14-LV-009		Purchaser			
Service			End user			
			Project			
			Unit name			
<Control valve>	Model	HCB		<Remarks> SV0201-002 Seat leakage: Less than 0.1%CV (Equivalent IEC, JI Class III) SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap SV0003-001 Valve size indication: ' ' ' SV0601-001 Air piping Connection: 1/4 NPT SV0703-105 Indicating unit : "kgf/cm2" SV0212 Cage plug with piston ring SV0101-004 Flange facing finish : Serration ANSI B16.5 (Spiral) SV0501-200 Actuator mounting position No.2 Be noted that: 1) The offered valve is based on the process data of production No. 416-8303-3300. 2) Offered the model HCB(CAGE TYPE) instead of the old model VDP (double seated valve) which was phased out in production s many years ago.		
	Description	Pressure Balanced Cage Type Control Valves				
	Body/Port size (in.)	6	6			
	Conn. Size. / Rated CV		420			
	Rating / Conn. Type	ANSI150	RF			
	Body material	A216WCB				
	Trim material	SCS14A STELLITE				
	Flow characteristic	EQ%				
	Bonnet	PLAIN (-17 to 230 degC)				
	Actuator / Handle	HA3R	SIDE			
	Action	AIR TO OPEN				
	Gland packing / Grease	NP4519				
	Gasket	V543,V8590				
	Air supply / Spring range	1.4kgf/cm2	0.2-1.0kgf/cm2			
	Seat leakage	CLASS III				
Color: Body/Diaph./Yoke	SILVER	2.5Y8/12 2.5Y8/12				
Paint	Standard					
<Accessories>	Positioner	HTP-1D				
	Structure					
	Input signal	0.2-1.0 kgf/cm2				
	Regulator	KZ03-2B-1B	1			
	Regulator2					
	Limit switch					
	Action					
	Solenoid valve					
	Action / Power					
	Booster					
Air lock valve						
Action						
Action						
Action						
<Process data>	Fluid name/Phase	LP STEAM	STEAM	<Piping spec.> Strength Calc. Sheet Design Press. kPaG Temp. degC Pipe Up stream Down stream Size 6 6 inch Sch No. 40 40 Thickness 7.1 7.1 mm		
		MAX	NOR		MIN	Unit
	Flow rate	7452				kg/h
	Inlet pressure	4.5				kgf/cm2A
	Outlet pressure					kgf/cm2A
	Differential press.	0.5				kgf/cm2
	Shut-off press.		5.0			kgf/cm2
	Temperature	225				degC
	Density/Gravity(Liq)					kg/m3
	Density/Gravity(G,V)	0.6335				Air=1
	Viscosity	0.01689				cP
	Flash					%
	Calculated CV	294				
Travel	79			%		
Outlet velocity	0.1199			Mach		
Predictive SPL	76			dBA		
Yamatake Corporation						

Item No. / Qty	7	1	Ref. No.			
Tag No.	14-PV-009		Purchaser			
Service			End user			
			Project			
			Unit name			
<Control valve>	Model	HCB		<Remarks> SV0201-002 Seat leakage: Less than 0.1%CV (Equivalent IEC, JI Class III) SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap SV0003-001 Valve size indication: ' ' ' SV0601-001 Air piping Connection: 1/4 NPT SV0703-105 Indicating unit : "kgf/cm2" SV0212 Cage plug with piston ring SV0101-004 Flange facing finish : Serration ANSI B16.5 (Spiral) Be noted that: 1) The offered valve is based on the process data of production No. 416-8303-2200. 2) Offered the model HCB(CAGE TYPE) instead of the old model VDP (double seated valve) which was phased out in production s many years ago. * Air regulator with 4kgf/cm2 gauge		
	Description	Pressure Balanced Cage Type Control Valves				
	Body/Port size (in.)	6	6			
	Conn. Size. / Rated CV		420			
	Rating / Conn. Type	ANSI150	RF			
	Body material	A216WCB				
	Trim material	SCS14A STELLITE				
	Flow characteristic	EQ%				
	Bonnet	PLAIN (-17 to 230 degC)				
	Actuator / Handle	HA3R	SIDE			
	Action	AIR TO OPEN				
	Gland packing / Grease	NP4519				
	Gasket	V543,V8590				
	Air supply / Spring range	1.4kgf/cm2	0.2-1.0kgf/cm2			
	Seat leakage	CLASS III				
Color: Body/Diaph./Yoke	SILVER	2.5Y8/12 2.5Y8/12				
Paint	Standard					
<Accessories>	Positioner	HTP-1D				
	Structure					
	Input signal	0.2-1.0 kgf/cm2				
	Regulator	KZ03-2B-1B*	1			
	Regulator2					
	Limit switch					
	Action					
	Solenoid valve					
	Action / Power					
	Booster					
	Air lock valve					
	Action					
Action						
Action						
<Process data>	Fluid name/Phase	LP STEAM	STEAM	<Piping spec.> Strength Calc. Sheet Design Press. kPaG Temp. degC Pipe Up stream Down stream Size 6 6 inch Sch No. 40 40 Thickness 7.1 7.1 mm Yamatake Corporation		
		MAX	NOR		MIN	Unit
	Flow rate	7452				kg/h
	Inlet pressure	4.5				kgf/cm2A
	Outlet pressure					kgf/cm2A
	Differential press.	0.5				kgf/cm2
	Shut-off press.		5.0			kgf/cm2
	Temperature	225				degC
	Density/Gravity(Liq)					kg/m3
	Density/Gravity(G,V)	0.6335				Air=1
	Viscosity	0.01689				cP
	Flash					%
	Calculated CV	294				
	Travel	79				%
	Outlet velocity	0.1199				Mach
Predictive SPL	76			dBA		