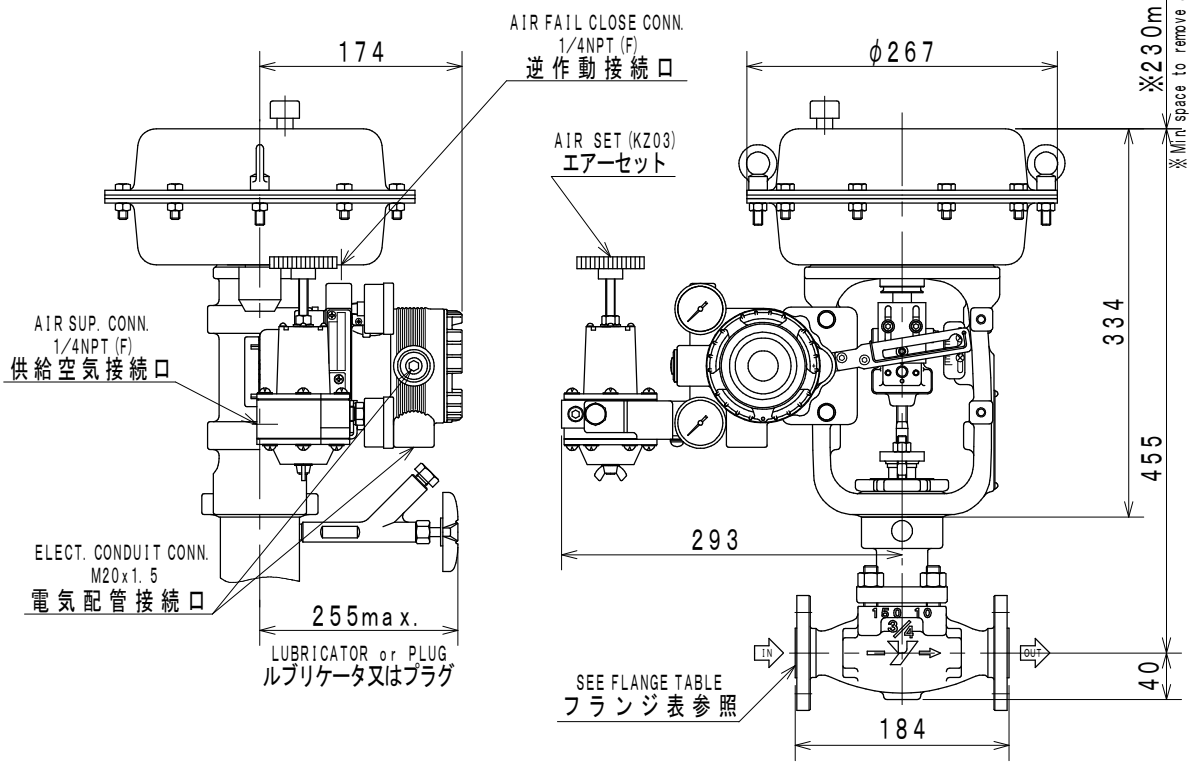


Item No. / Qty	1		1		Ref. No.	
Tag No.	FV0933				Purchaser	
Service					End user	
<Control valve>					Project	
<Control valve>					<Remarks>	
Model	HLS				SV0703-105 Indicating unit : "kgf/cm2"	
Description	Small-Port Single Seated Control Valves				SV0601-001 Air piping Connection: 1/4 NPT	
Body/Port size	3/4 in.		Cv=1.6		SV0602-009 Air piping: Stainless steel (304ss) tube. Joint: Double-bite Joint.(316ss)	
Conn. Size. / Rated CV			1.6		SV0006-002 Tag No. plate mounted on Diaphragm case (Plate size and description are Yamatake standard.)	
Rating / Conn. Type	ANSI150		RF		SV0801-E01 Material certificate in English. Scope: valve body and bonnet	
Body material	SCS13A				SV0201-003 Seat leakage: Less than 0.01%CV (Equivalent IEC, JIS Class IV)	
Trim material	SUS316				Old Production No : S-D5014-41-030 (1987)	
Flow characteristic	EQ%					
Bonnet	PLAIN (-17 to 230 degC)					
Actuator / Handle	HA2R		---			
Action	AIR TO OPEN					
Gland packing / Grease	V-PTFE		---			
Gasket	V543					
Air supply / Spring range	1.4kgf/cm2		0.2-1.0kgf/cm2			
Seat leakage	CLASS IV					
Color: Body/Diaph./Yoke	XXX		M10B5/10		M10B5/10	
Paint	Corrosion Resistant					
<Accessories>						
Positioner	AVP300-LSD1B-1DYT-X					
Structure	ATEX Intrinsically safe, 1/4 NPT, M20x1.5					
Input signal	4-20 mADC					
Regulator	KZ03-2B-XX		1			
Regulator2						
Limit switch						
Action						
Solenoid valve						
Action / Power						
Booster						
Air lock valve						
<Process data>						
Fluid name/Phase	WWA			LIQUID		
	MAX	NOR	MIN	Unit		
Flow rate	250	92.8		L/h		
Inlet pressure	5.2	5.2		kgf/cm2G		
Outlet pressure				kgf/cm2G		
Differential press.	0.2	0.2		kgf/cm2		
Shut-off press.		0.35		kgf/cm2		
Temperature	25	25		degC		
Density/Gravity(Liq)	0.96	0.96		water=1		
Density/Gravity(G,V)				MW		
Viscosity				mPa-s		
Flash				%		
Calculated CV	0.6394	0.2373				
Travel	74	47		%		
Inlet velocity	0.2516	0.09341		m/s		
Predictive SPL	50	50		dBA		
<Piping spec.>						
Strength Calc. Sheet						
Design					kgf/cm2G	
Temp.					degC	
Size			3/4 in.		3/4 in.	
Sch No.			40		40	
Thickness			2.9		2.9	
<b>Yamatake Corporation</b>						

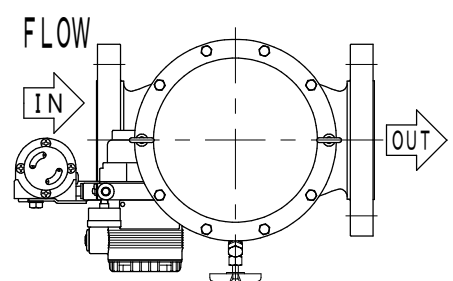
\* The drawing shall be handled as reference.  
 \* この図面は参考情報として取扱いをお願いします。

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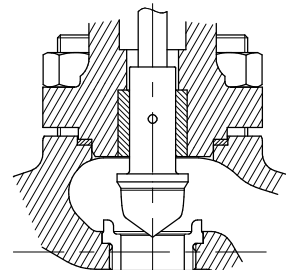


2

3



ORIENTATION  
 配管取付姿勢 No. 1



TRIM STRUCTURE (EXAMPLE)  
 トリム構成図 (参考)

4

PROD. No. :  
 工事番号 :  
 TAG No. : FV0933

UNIT : mm

NOMINAL SIZE(INCH) 口径 (B)	RATING 圧力定格 (フランジ規格年度)	END CONNECTION 接続形式	BONNET TYPE 上蓋形式	ACTUATOR 操作器	VALVE ACTION 弁作動	TRAVEL トラベル	WEIGHT 概算質量(kg)
3/4	ANSI 150 (1981)	RF	PLAIN TYPE 常温形	HA2R	AIR TO OPEN	14.3	31

5

Small-Port Single-Seated Control Valve  
 小口径形単座調節弁

MODEL No.  
 HLS

**Yamatake Corporation**

DRAWING No.  
 HLS-6A1R1E-VCR04C0

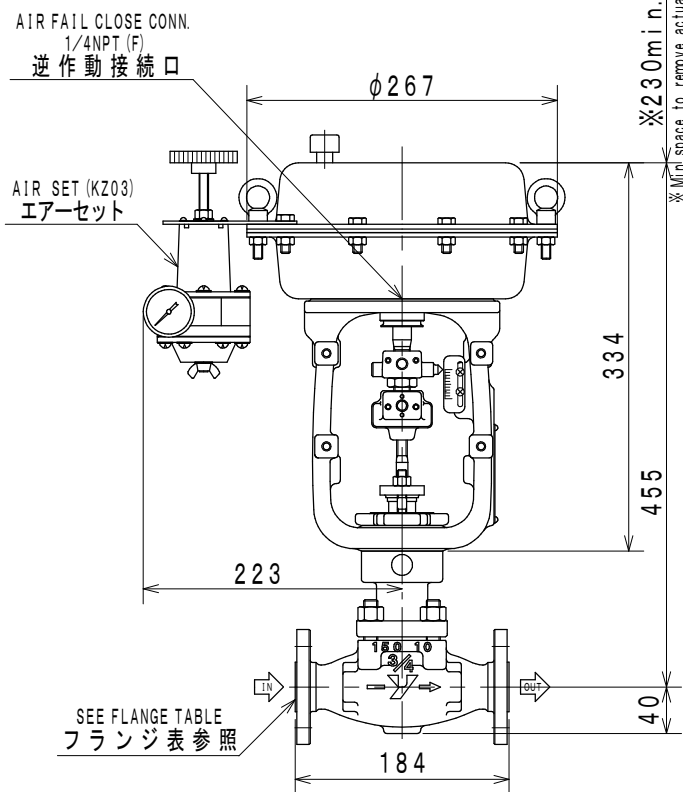
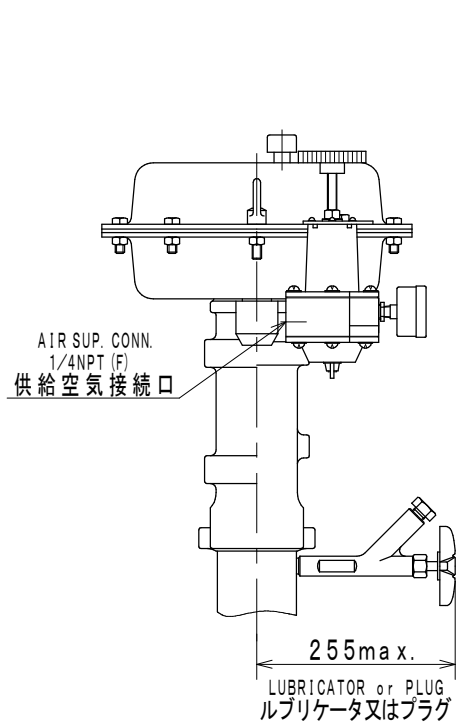
REV.  
 0

A B C D E

Item No. / Qty	2		1		Ref. No.	
Tag No.	XV0936				Purchaser	
Service					End user	
<Control valve>					Project	
					<Remarks>	
Model	HLS				SV0703-105 Indicating unit : "kgf/cm2"	
Description	Small-Port Single Seated Control Valves				SV0601-001 Air piping Connection: 1/4 NPT	
Body/Port size	3/4 in.		Cv=6.3		SV0602-009 Air piping: Stainless steel (304ss) tube. Joint: Double-bite Joint.(316ss)	
Conn. Size. / Rated CV			6.3		SV0006-002 Tag No. plate mounted on Diaphragm case (Plate size and description are Yamatake standard.)	
Rating / Conn. Type	ANSI150		RF		SV0801-E01 Material certificate in English. Scope: valve body and bonnet	
Body material	SCS13A				SV0506 On-Off action	
Trim material	SUS316+SOFT SEAT				SV0201-008 Seat leakage: IEC, JIS Class VI	
Flow characteristic	EQ%				Old Production No : S-D5014-41-140 (1987)	
Bonnet	PLAIN (-17 to 230 degC)					
Actuator / Handle	HA2R		---			
Action	AIR TO OPEN					
Gland packing / Grease	V-PTFE		---			
Gasket	V543					
Air supply / Spring range	1.4kgf/cm2		0.2-1.0kgf/cm2			
Seat leakage	CLASS VI					
Color: Body/Diaph./Yoke	XXX		M10B5/10		M10B5/10	
Paint	Corrosion Resistant					
<Accessories>						
Positioner						
Structure						
Input signal						
Regulator	KZ03-2B-1A		1			
Regulator2						
Limit switch	VCL5001		1			
Action	Full Close on					
Solenoid valve	JE38320G174		1			
Action / Power	En: Open, De: Close		AC220V 50Hz			
Booster						
Air lock valve						
<Process data>						
Fluid name/Phase	WWA			LIQUID		
	MAX	NOR	MIN	Unit		
Flow rate		250		L/h		
Inlet pressure		5		kgf/cm2G		
Outlet pressure				kgf/cm2G		
Differential press.				kgf/cm2		
Shut-off press.		5		kgf/cm2		
Temperature		25		degC		
Density/Gravity(Liq)				kg/m3		
Density/Gravity(G,V)				MW		
Viscosity				mPa-s		
Flash				%		
Calculated CV						
Travel				%		
Inlet velocity				m/s		
Predictive SPL				dBA		
<Piping spec.>						
Strength Calc. Sheet						
Design					kgf/cm2G	
Temp.					degC	
Size		3/4 in.		3/4 in.		
Sch No.		40		40		
Thickness		2.9		2.9		
<b>Yamatake Corporation</b>						

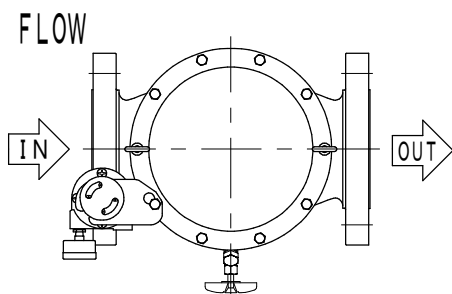
\* The drawing shall be handled as reference.  
 \* この図面は参考情報として取扱いをお願いします。

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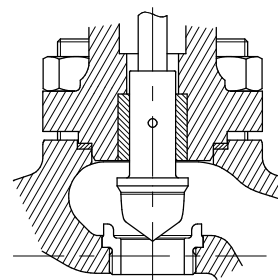


2

3



ORIENTATION  
配管取付姿勢 No. 1



TRIM STRUCTURE (EXAMPLE)  
トリム構成図 (参考)

4

PROD. No. :  
工事番号 :

TAG No. : XV0936

UNIT : mm

NOMINAL SIZE (INCH) 口径 (B)	RATING 圧力定格 (フランジ規格年度)	END CONNECTION 接続形式	BONNET TYPE 上蓋形式	ACTUATOR 操作器	VALVE ACTION 弁作動	TRAVEL トラベル	WEIGHT 概算質量 (kg)
3/4	ANSI 150 (1981)	RF	PLAIN TYPE 常温形	HA2R	AIR TO OPEN	14.3	29

5

Small-Port Single-Seated Control Valve  
小口径形単座調節弁

MODEL No.  
HLS

**Yamatake Corporation**

DRAWING No.  
HLS-6A1R1E-VCR0FB0

REV.  
0

A

B

C

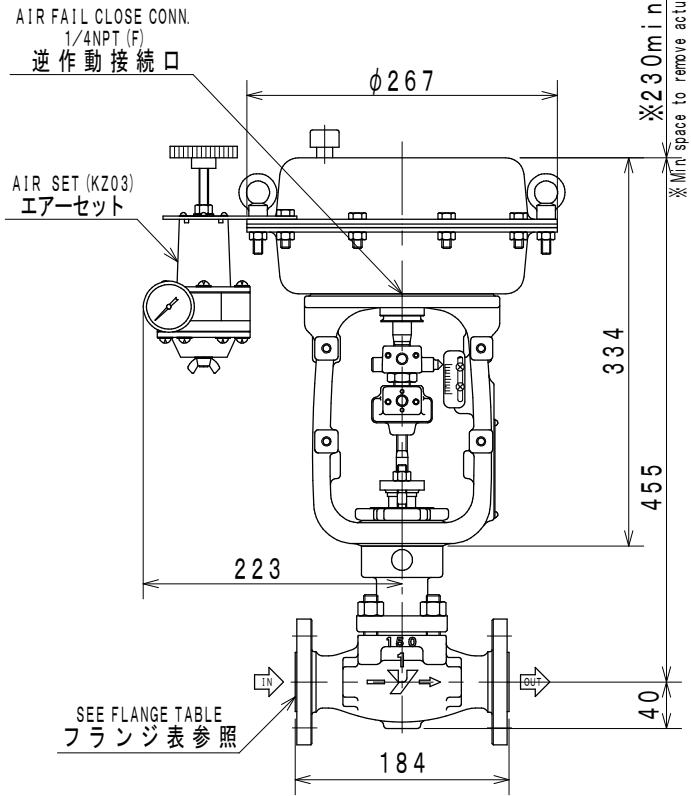
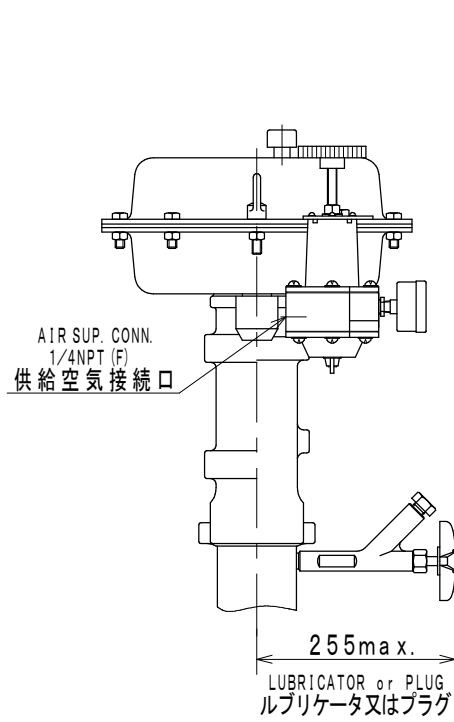
D

E

Item No. / Qty	3		1		Ref. No.	
Tag No.	XV0937				Purchaser	
Service					End user	
<Control valve>					Project	
					<Remarks>	
Model	HLS				SV0703-105 Indicating unit : "kgf/cm2"	
Description	Small-Port Single Seated Control Valves				SV0601-001 Air piping Connection: 1/4 NPT	
Body/Port size	1 in.		Cv=10		SV0602-009 Air piping: Stainless steel (304ss) tube. Joint: Double-bite Joint.(316ss)	
Conn. Size. / Rated CV			10		SV0006-002 Tag No. plate mounted on Diaphragm case (Plate size and description are Yamatake standard.)	
Rating / Conn. Type	ANSI150		RF		SV0801-E01 Material certificate in English. Scope: valve body and bonnet	
Body material	SCPH2				SV0201-003 Seat leakage: Less than 0.01%CV (Equivalent IEC, JIS Class IV)	
Trim material	SUS316 STELLITE				SV0506 On-Off action	
Flow characteristic	EQ%				Old Production No : S-D5014-41-150 (1987)	
Bonnet	PLAIN (-17 to 230 degC)					
Actuator / Handle	HA2R		---			
Action	AIR TO OPEN					
Gland packing / Grease	V-PTFE		---			
Gasket	V543					
Air supply / Spring range	1.4kgf/cm2		0.2-1.0kgf/cm2			
Seat leakage	CLASS IV					
Color: Body/Diaph./Yoke	M10B5/10	M10B5/10	M10B5/10			
Paint	Corrosion Resistant					
<Accessories>						
Positioner						
Structure						
Input signal						
Regulator	KZ03-2B-1A		1			
Regulator2						
Limit switch	VCL5001		1			
Action	Full Close on					
Solenoid valve	8320G174/104-094-15T		1			
Action / Power	En: Open, De: Close		AC220V 50Hz			
Booster						
Air lock valve						
<Process data>						
Fluid name/Phase	S4.5		STEAM			
	MAX	NOR	MIN	Unit		
Flow rate		93		kg/h		
Inlet pressure		4.5		kgf/cm2G		
Outlet pressure				kgf/cm2G		
Differential press.				kgf/cm2		
Shut-off press.		4.5		kgf/cm2		
Temperature		155		degC		
Density/Gravity(Liq)				kg/m3		
Density/Gravity(G,V)		2.882		kg/m3(A)		
Viscosity		0.01429		mPa-s		
Flash				%		
Calculated CV						
Travel				%		
Outlet velocity				Mach		
Predictive SPL				dBA		
<Piping spec.>						
Strength Calc. Sheet						
Design					kgf/cm2G	
Temp.					degC	
Size		1 in.		1 in.		
Sch No.		40		40		
Thickness		3.4		3.4		
<b>Yamatake Corporation</b>						

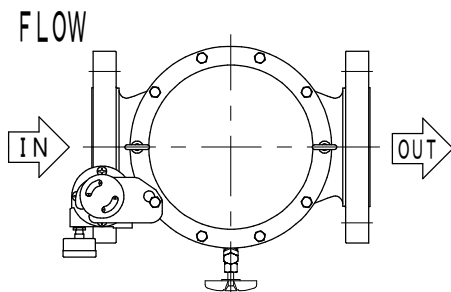
\* The drawing shall be handled as reference.  
 \* この図面は参考情報として取扱いをお願いします。

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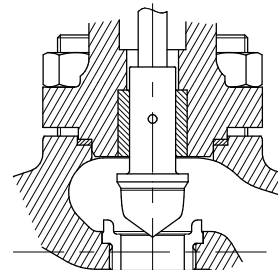


2

3



ORIENTATION  
 配管取付姿勢 No. 1



TRIM STRUCTURE (EXAMPLE)  
 トリム構成図 (参考)

4

PROD. No. :  
 工事番号 :  
 TAG No. : XV0937

UNIT : mm

NOMINAL SIZE(INCH) 口径 (B)	RATING 圧力定格 (フランジ規格年度)	END CONNECTION 接続形式	BONNET TYPE 上蓋形式	ACTUATOR 操作器	VALVE ACTION 弁作動	TRAVEL トラベル	WEIGHT 概算質量(kg)
1	ANSI 150 (1981)	RF	PLAIN TYPE 常温形	HA2R	AIR TO OPEN	14.3	29

5

Small-Port Single-Seated Control Valve  
 小口径形単座調節弁

MODEL No.  
 HLS

**Yamatake Corporation**

DRAWING No.  
 HLS-8A1R1E-VCR0FB0

REV.  
 0

A

B

C

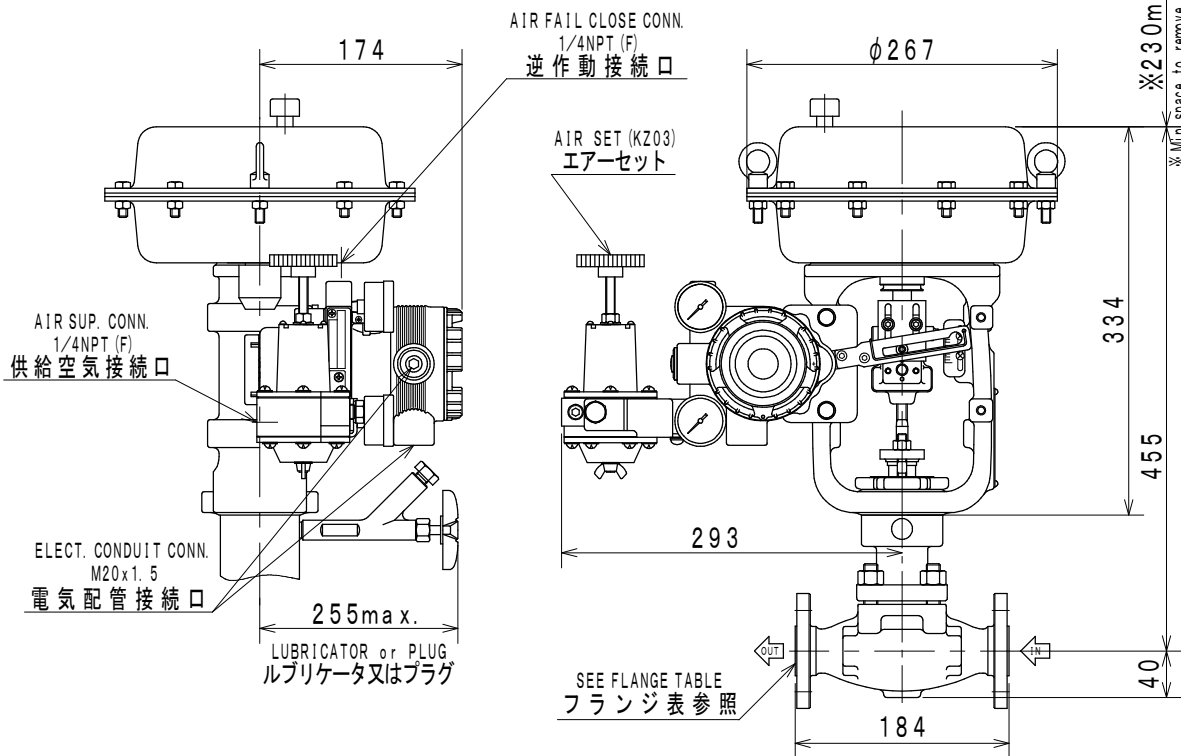
D

E

Item No. / Qty	4		1		Ref. No.	
Tag No.	FV0932				Purchaser	
Service					End user	
<Control valve>					Project	
					<Remarks>	
Model	HLS				SV0703-105 Indicating unit : "kgf/cm2"	
Description	Small-Port Single Seated Control Valves				SV0601-001 Air piping Connection: 1/4 NPT	
Body/Port size	3/4 in.		Cv=0.63		SV0602-009 Air piping: Stainless steel (304ss) tube. Joint: Double-bite Joint.(316ss)	
Conn. Size. / Rated CV			0.63		SV0006-002 Tag No. plate mounted on Diaphragm case (Plate size and description are Yamatake standard.)	
Rating / Conn. Type	ANSI150		RF		SV0801-E01 Material certificate in English. Scope: valve body and bonnet	
Body material	SCS13A				SV0201-003 Seat leakage: Less than 0.01%CV (Equivalent IEC, JIS Class IV)	
Trim material	SUS316				SV0501-200 Actuator mounting position No.2	
Flow characteristic	EQ%				Old Production No : S-D5014-41-020 (1987)	
Bonnet	PLAIN (-17 to 230 degC)					
Actuator / Handle	HA2R		---			
Action	AIR TO OPEN					
Gland packing / Grease	V-PTFE		---			
Gasket	V543					
Air supply / Spring range	1.4kgf/cm2		0.2-1.0kgf/cm2			
Seat leakage	CLASS IV					
Color: Body/Diaph./Yoke	XXX		M10B5/10		M10B5/10	
Paint	Corrosion Resistant					
<Accessories>						
Positioner	AVP300-LSD1B-1DYT-X					
Structure	ATEX Intrinsically safe, 1/4 NPT, M20x1.5					
Input signal	4-20 mADC					
Regulator	KZ03-2B-XX		1			
Regulator2						
Limit switch						
Action						
Solenoid valve						
Action / Power						
Booster						
Air lock valve						
<Process data>						
Fluid name/Phase	WWA1			LIQUID		
	MAX	NOR	MIN	Unit		
Flow rate	75.2	28.5		L/h		
Inlet pressure	5.2	5.2		kgf/cm2G		
Outlet pressure				kgf/cm2G		
Differential press.	0.2	0.2		kgf/cm2		
Shut-off press.		5.2		kgf/cm2		
Temperature	25	25		degC		
Density/Gravity(Liq)	0.792	0.792		water=1		
Density/Gravity(G,V)				MW		
Viscosity				mPa-s		
Flash				%		
Calculated CV	0.1747	0.06621				
Travel	64	38		%		
Inlet velocity	0.07569	0.02869		m/s		
Predictive SPL	50	50		dBA		
<Piping spec.>						
Strength Calc. Sheet						
Design					kgf/cm2G	
Temp.					degC	
Size		3/4 in.		3/4 in.		
Sch No.		40		40		
Thickness		2.9		2.9		
<b>Yamatake Corporation</b>						

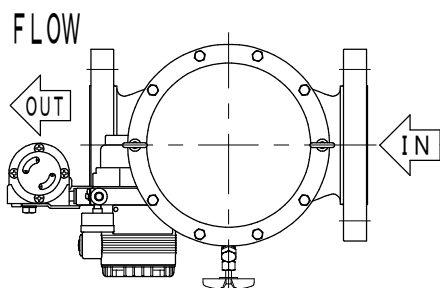
\* The drawing shall be handled as reference.  
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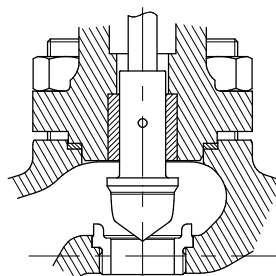


2

3



ORIENTATION  
配管取付姿勢 No. 2



TRIM STRUCTURE (EXAMPLE)  
トリム構成図 (参考)

4

PROD. No. :  
工事番号 :

TAG No. : FV0932

UNIT : mm

5

NOMINAL SIZE(INCH) 口径 (B)	RATING 圧力定格 (フランジ規格年度)	END CONNECTION 接続形式	BONNET TYPE 上蓋形式	ACTUATOR 操作器	VALVE ACTION 弁作動	TRAVEL トラベル	WEIGHT 概算質量(kg)
$\frac{3}{4}$	ANSI 150 (1981)	RF	PLAIN TYPE 常温形	HA2R	AIR TO OPEN	14.3	31

Small-Port Single-Seated Control Valve  
小口径形単座調節弁

MODEL No.

HLS

**Yamatake Corporation**

DRAWING No.

HLS-6A1R1E-VCR04C2

REV.

0

A

B

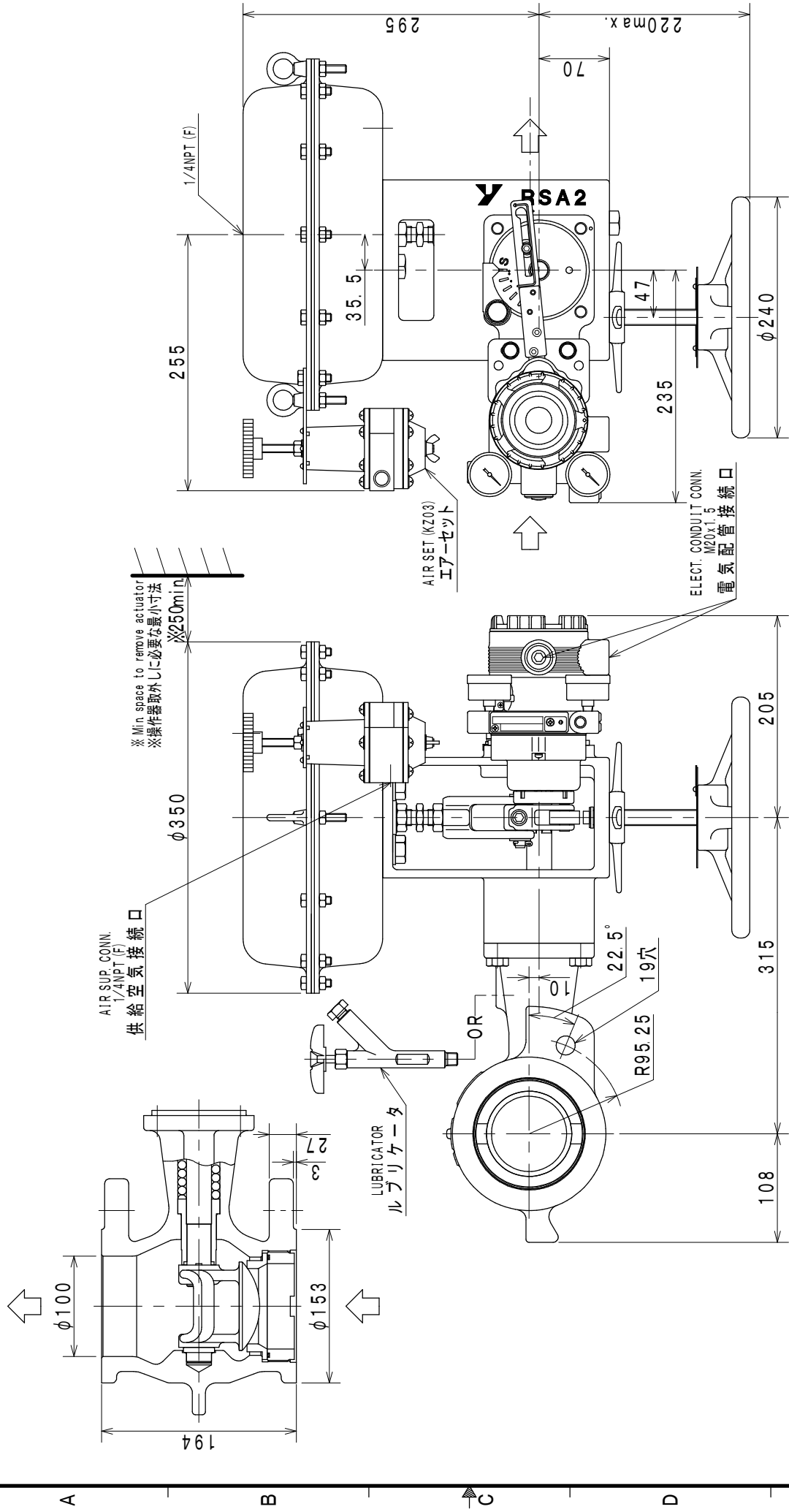
C

D

E

Item No. / Qty	5		1		Ref. No.	
Tag No.	FV0935				Purchaser	
Service					End user	
<Control valve>					Project	
<Control valve>					<Remarks>	
Model	VFR				SV0703-105 Indicating unit : "kgf/cm2"	
Description	FloWing Eccentric Rotary Control Valve				SV0601-001 Air piping Connection: 1/4 NPT	
Body/Port size	4 in.		100%		SV0602-009 Air piping: Stainless steel (304ss) tube. Joint: Double-bite Joint.(316ss)	
Conn. Size. / Rated CV			250		SV0006-002 Tag No. plate mounted on Diaphragm case (Plate size and description are Yamatake standard.)	
Rating / Conn. Type	ANSI150		WAFER		SV0801-E17 Material certificate in English. Scope: valve body and Bolts & nuts for piping	
Body material	SCPH2				SV0201-003 Seat leakage: Less than 0.01%CV (Equivalent IEC, JIS Class IV)	
Trim material	SCS24/SUS630				SV0512-801 Actuator mounting position No.801 for VFR (VPR, HEP, SVP positioner installed outdoors)	
Flow characteristic	LINEAR APPROX.				Old Production No : S-D5014-41-050 (1987)	
Bonnet	PLAIN (-29 to 230 degC)					
Actuator / Handle	RSA2R		BOTTOM			
Action	AIR TO OPEN					
Gland packing / Grease	V-PTFE+TK2006		---			
Gasket						
Air supply / Spring range	4.0kgf/cm2		0.8-2.4kgf/cm2			
Seat leakage	CLASS IV					
Color: Body/Diaph./Yoke	M10B5/10	M10B5/10	M10B5/10			
Paint	Corrosion Resistant					
<Accessories>						
Positioner	AVP300-CSD3B-2DYU-X					
Structure	ATEX Flameproof, 1/4 NPT, M20x1.5					
Input signal	4-20 mADC					
Regulator	KZ03-2B-XX		1			
Regulator2						
Limit switch						
Action						
Solenoid valve						
Action / Power						
Booster						
Air lock valve						
<Process data>						
Fluid name/Phase	CA		GAS			
	MAX	NOR	MIN	Unit		
Flow rate	700	200		m3/h(N)		
Inlet pressure	0.24	0.24		kgf/cm2G		
Outlet pressure				kgf/cm2G		
Differential press.	0.05	0.05		kgf/cm2		
Shut-off press.		0.24		kgf/cm2		
Temperature	25	25		degC		
Density/Gravity(Liq)				kg/m3		
Density/Gravity(G,V)	29	29		MW		
Viscosity				mPa-s		
Flash				%		
Calculated CV	125.9	35.94				
Travel	52	22		%		
Outlet velocity	0.06602	0.01886		Mach		
Predictive SPL	50	50		dBA		
<Piping spec.>						
Strength Calc. Sheet						
Design					kgf/cm2G	
Temp.					degC	
Size		4 in.		4 in.		
Sch No.		40		40		
Thickness		6		6		
<b>Yamatake Corporation</b>						

1 2 3 4 5



PROD. No. :  
工事番号 :

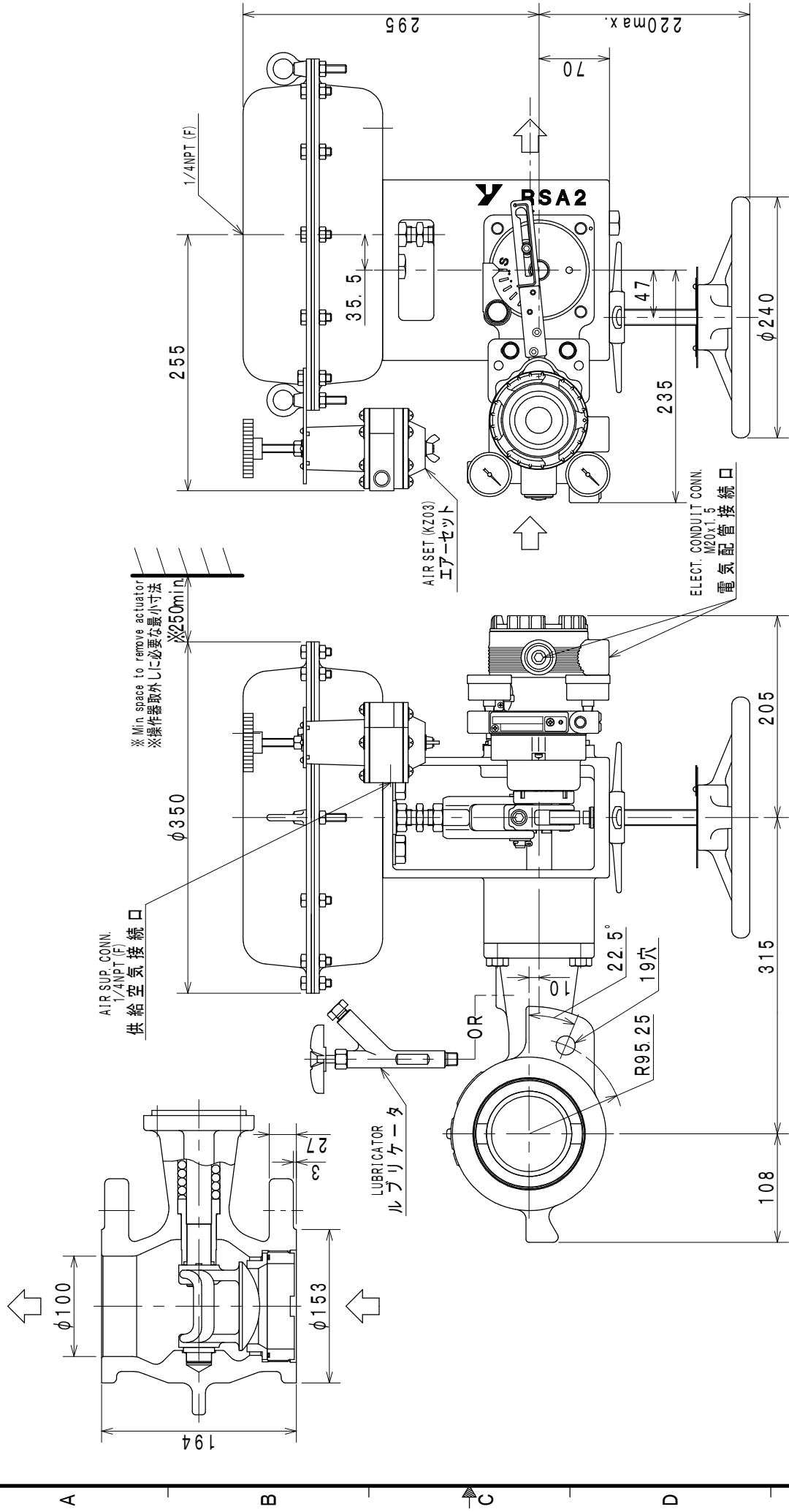
TAG No. : FV0935

UNIT : mm

NOMINAL SIZE (INCH) 口径 (B)	RATING 压力定格 (フランジ規格年度)	END CONNECTION 接続形式	BONNET TYPE 上蓋形式	ACTUATOR 操作器	VALVE ACTION 弁作動	TRAVEL トラベル	WEIGHT 概算質量 (kg)	MODEL No. VFR	DRAWING No. VFR-EA1C10-RCRB2C0	REV. 0
4	ANSI 150	WAFER	PLAIN TYPE 常温形	RSA2R BHM	AIR TO OPEN	60°	65	Flowing Eccentric Rotary Control Valve 偏心軸回転形調節弁	Yamatake Corporation	

Item No. / Qty	6		1		Ref. No.	
Tag No.	FV0934				Purchaser	
Service					End user	
<Control valve>					<Remarks>	
Model	VFR				SV0703-105 Indicating unit : "kgf/cm2"	
Description	FloWing Eccentric Rotary Control Valve				SV0601-001 Air piping Connection: 1/4 NPT	
Body/Port size	4 in.		100%		SV0602-009 Air piping: Stainless steel (304ss) tube. Joint: Double-bite Joint.(316ss)	
Conn. Size. / Rated CV			250		SV0006-002 Tag No. plate mounted on Diaphragm case (Plate size and description are Yamatake standard.)	
Rating / Conn. Type	ANSI150		WAFER		SV0801-E17 Material certificate in English. Scope: valve body and Bolts & nuts for piping	
Body material	SCPH2				SV0201-003 Seat leakage: Less than 0.01%CV (Equivalent IEC, JIS Class IV)	
Trim material	SCS24/SUS630				SV0512-801 Actuator mounting position No.801 for VFR (VPR, HEP, SVP positioner installed outdoors)	
Flow characteristic	LINEAR APPROX.				Old Production No : S-D5014-41-040 (1987)	
Bonnet	PLAIN (-29 to 230 degC)					
Actuator / Handle	RSA2R		BOTTOM			
Action	AIR TO OPEN					
Gland packing / Grease	V-PTFE+TK2006		---			
Gasket	---					
Air supply / Spring range	4.0kgf/cm2		0.8-2.4kgf/cm2			
Seat leakage	CLASS IV					
Color: Body/Diaph./Yoke	M10B5/10	M10B5/10	M10B5/10			
Paint	Corrosion Resistant					
<Accessories>						
Positioner	AVP300-CSD3B-2DYU-X					
Structure	ATEX Flameproof, 1/4 NPT, M20x1.5					
Input signal	4-20 mADC					
Regulator	KZ03-2B-XX		1			
Regulator2						
Limit switch						
Action						
Solenoid valve						
Action / Power						
Booster						
Air lock valve						
<Process data>						
Fluid name/Phase	CA			GAS		
	MAX	NOR	MIN	Unit		
Flow rate	387	240		m3/h(N)		
Inlet pressure	0.26	0.26		kgf/cm2G		
Outlet pressure				kgf/cm2G		
Differential press.	0.025	0.025		kgf/cm2		
Shut-off press.		0.26		kgf/cm2		
Temperature	25	25		degC		
Density/Gravity(Liq)				kg/m3		
Density/Gravity(G,V)	29	29		MW		
Viscosity				mPa-s		
Flash				%		
Calculated CV	96.74	59.98				
Travel	44	32		%		
Outlet velocity	0.0352	0.02183		Mach		
Predictive SPL	50	50		dBA		
<Piping spec.>						
Strength Calc. Sheet						
Design				kgf/cm2G		
Temp.				degC		
Size		4 in.		4 in.		
Sch No.		40		40		
Thickness		6		6		
<b>Yamatake Corporation</b>						

1 2 3 4 5



PROD. No. :  
工事番号 :

TAG No. : FV0934

UNIT : mm

NOMINAL SIZE (INCH) 口径 (B)	4	RATING 压力定格 (フランジ規格年度)	ANSI 150	END CONNECTION 接続形式	WAFER	BONNET TYPE 上蓋形式	PLAIN TYPE 常温形	ACTUATOR 操作器	RSA2R BHM	VALVE ACTION 弁作動	AIR TO OPEN	TRAVEL トラベル	60°	WEIGHT 概算質量(kg)	65	MODEL No. VFR	Flowing Eccentric Rotary Control Valve 偏心軸回転形調節弁	DRAWING No. VFR-EA1C10-RCRB2C0	REV. 0
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**Yamatake Corporation**

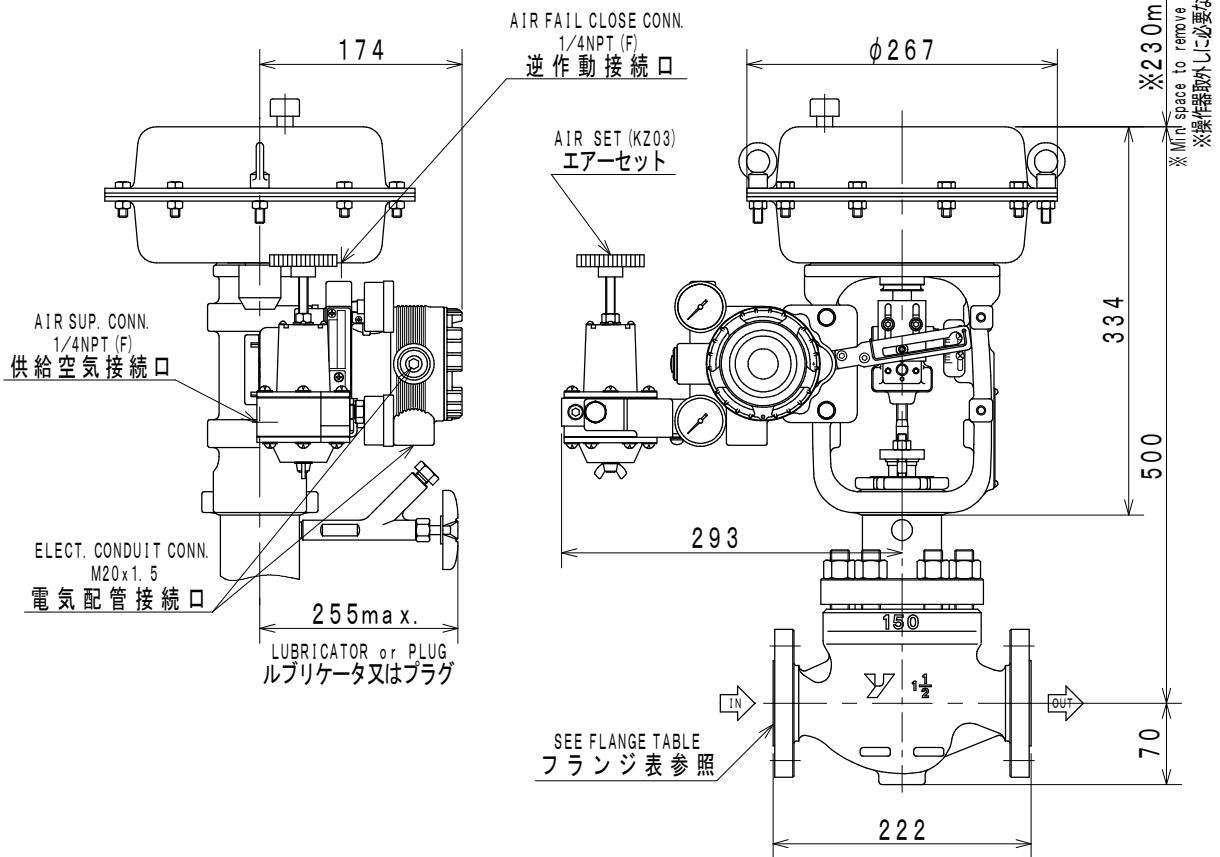
Item No. / Qty	7		1		Ref. No.	
Tag No.	PV0935				Purchaser	
Service					End user	
<Control valve>					Project	
					<Remarks>	
Model	VFR				SV0703-105 Indicating unit : "kgf/cm2"	
Description	FloWing Eccentric Rotary Control Valve				SV0601-001 Air piping Connection: 1/4 NPT	
Body/Port size	3 in.		100%		SV0602-009 Air piping: Stainless steel (304ss) tube. Joint: Double-bite Joint.(316ss)	
Conn. Size. / Rated CV			150		SV0006-002 Tag No. plate mounted on Diaphragm case (Plate size and description are Yamatake standard.)	
Rating / Conn. Type	ANSI150		WAFER		SV0801-E17 Material certificate in English. Scope: valve body and Bolts & nuts for piping	
Body material	SCPH2				SV0201-003 Seat leakage: Less than 0.01%CV (Equivalent IEC, JIS Class IV)	
Trim material	SCS24/SUS630				SV0512-201 Actuator mounting position No.201 for VFR (VPR, HEP, SVP positioner installed outdoors)	
Flow characteristic	LINEAR APPROX.				Old Production No : S-D5014-41-080 (1987)	
Bonnet	PLAIN (-29 to 230 degC)					
Actuator / Handle	RSA2D		BOTTOM			
Action	AIR TO CLOSE					
Gland packing / Grease	V-PTFE + TK2006		---			
Gasket	---					
Air supply / Spring range	4.0kgf/cm2		0.8-2.4kgf/cm2			
Seat leakage	CLASS IV					
Color: Body/Diaph./Yoke	M10B5/10	M10B5/10	M10B5/10			
Paint	Corrosion Resistant					
<Accessories>						
Positioner	AVP300-CSD3B-2DYU-X					
Structure	ATEX Flameproof, 1/4 NPT, M20x1.5					
Input signal	4-20 mADC					
Regulator	KZ03-2B-XX		1			
Regulator2						
Limit switch						
Action						
Solenoid valve						
Action / Power						
Booster						
Air lock valve						
<Process data>						
Fluid name/Phase	CA			GAS		
	MAX	NOR	MIN	Unit		
Flow rate	1180	500		m3/h(N)		
Inlet pressure	0.28	0.28		kgf/cm2G		
Outlet pressure				kgf/cm2G		
Differential press.	0.27	0.27		kgf/cm2		
Shut-off press.		0.28		kgf/cm2		
Temperature	25	25		degC		
Density/Gravity(Liq)				kg/m3		
Density/Gravity(G,V)	29	29		MW		
Viscosity				mPa-s		
Flash				%		
Calculated CV	97.94	41.25				
Travel	63	36		%		
Outlet velocity	0.232	0.0983		Mach		
Predictive SPL	72	65		dBA		
<Piping spec.>						
Strength Calc. Sheet						
Design					kgf/cm2G	
Temp.					degC	
Size			3 in.		3 in.	
Sch No.			40		40	
Thickness			5.5		5.5	
<b>Yamatake Corporation</b>						





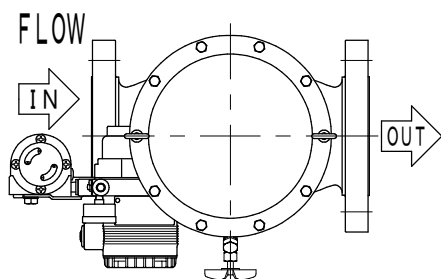
\* The drawing shall be handled as reference.  
 \* この図面は参考情報として取扱いをお願いします。

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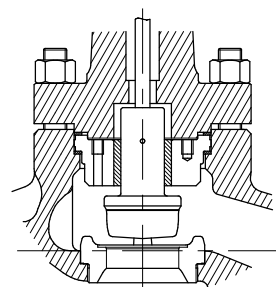


2

3



ORIENTATION  
配管取付姿勢 No. 1



TRIM STRUCTURE (EXAMPLE)  
トリム構成図 (参考)

4

PROD. No. :  
工事番号 :

TAG No. : FV0931

UNIT : mm

5

NOMINAL SIZE(INCH) 口径 (B)	RATING 圧力定格 (フランジ規格年度)	END CONNECTION 接続形式	BONNET TYPE 上蓋形式	ACTUATOR 操作器	VALVE ACTION 弁作動	TRAVEL トラベル	WEIGHT 概算質量(kg)
1 1/2	ANSI 150 (1981)	RF	PLAIN TYPE 常温形	HA2R	AIR TO OPEN	25	39

Top-Guide Single-Seated Control Valve  
トップガイド形単座調節弁

MODEL No.

HTS

**Yamatake Corporation**

DRAWING No.

HTS-AA1R1E-VCR04C0

REV.

0

A

B

C

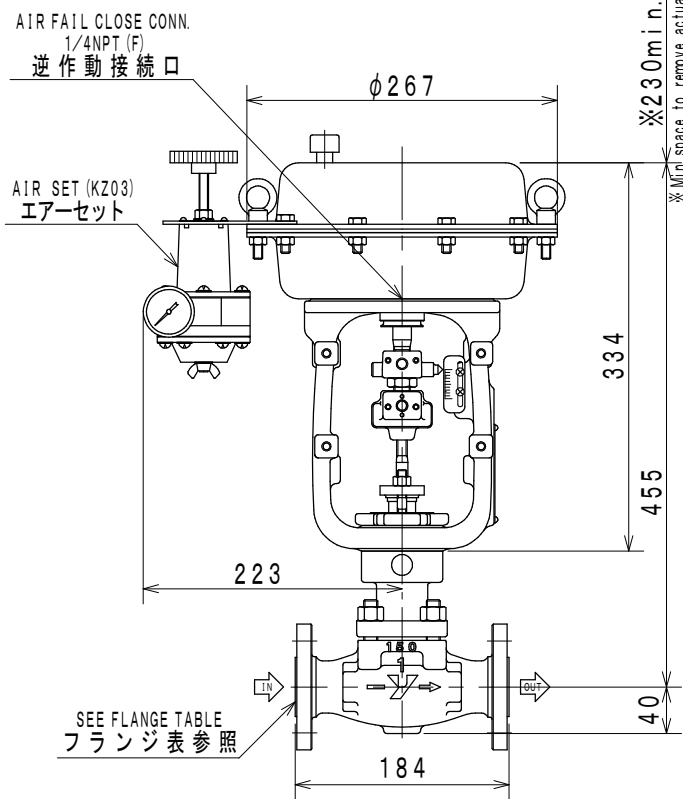
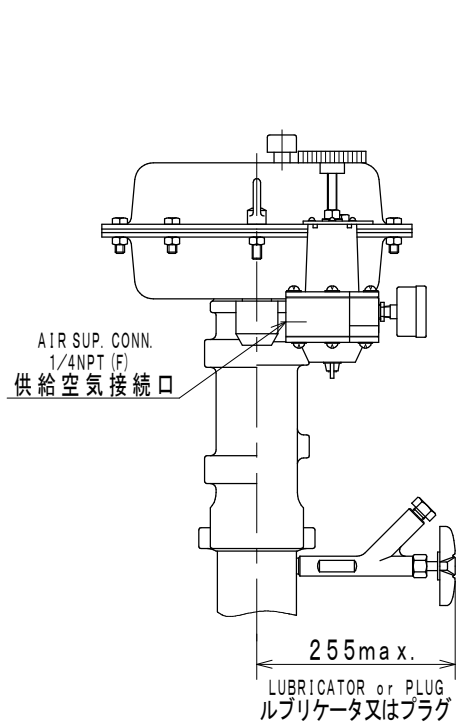
D

E

Item No. / Qty	9		1		Ref. No.	
Tag No.	XV0931				Purchaser	
Service					End user	
<Control valve>					Project	
					<Remarks>	
Model	HLS				SV0703-105 Indicating unit : "kgf/cm2"	
Description	Small-Port Single Seated Control Valves				SV0601-001 Air piping Connection: 1/4 NPT	
Body/Port size	1 in.		Cv=10		SV0602-009 Air piping: Stainless steel (304ss) tube. Joint: Double-bite Joint.(316ss)	
Conn. Size. / Rated CV			10		SV0006-002 Tag No. plate mounted on Diaphragm case (Plate size and description are Yamatake standard.)	
Rating / Conn. Type	ANSI150		RF		SV0801-E01 Material certificate in English. Scope: valve body and bonnet	
Body material	SCPH2				SV0506 On-Off action	
Trim material	SUS316+SOFT SEAT				SV0201-008 Seat leakage: IEC, JIS Class VI	
Flow characteristic	EQ%				Old Production No : S-D5014-41-090 (1987)	
Bonnet	PLAIN (-17 to 230 degC)					
Actuator / Handle	HA2R		---			
Action	AIR TO OPEN					
Gland packing / Grease	V-PTFE		---			
Gasket	V543					
Air supply / Spring range	1.4kgf/cm2		0.2-1.0kgf/cm2			
Seat leakage	CLASS VI					
Color: Body/Diaph./Yoke	M10B5/10	M10B5/10	M10B5/10			
Paint	Corrosion Resistant					
<Accessories>						
Positioner						
Structure						
Input signal						
Regulator	KZ03-2B-1A		1			
Regulator2						
Limit switch	VCL5001		1			
Action	Full Close on					
Solenoid valve	JE38320G174		1			
Action / Power	En: Open, De: Close		AC220V 50Hz			
Booster						
Air lock valve						
<Process data>						
Fluid name/Phase	LNG			GAS		
	MAX	NOR	MIN	Unit		
Flow rate		36		m3/h(N)		
Inlet pressure		0.35		kgf/cm2G		
Outlet pressure				kgf/cm2G		
Differential press.				kgf/cm2		
Shut-off press.		0.35		kgf/cm2		
Temperature		25		degC		
Density/Gravity(Liq)				kg/m3		
Density/Gravity(G,V)				MW		
Viscosity				mPa-s		
Flash				%		
Calculated CV						
Travel				%		
Outlet velocity				Mach		
Predictive SPL				dBA		
<Piping spec.>						
Strength Calc. Sheet						
Design					kgf/cm2G	
Temp.					degC	
Size		1 in.		1 in.		
Sch No.		40		40		
Thickness		3.4		3.4		
<b>Yamatake Corporation</b>						

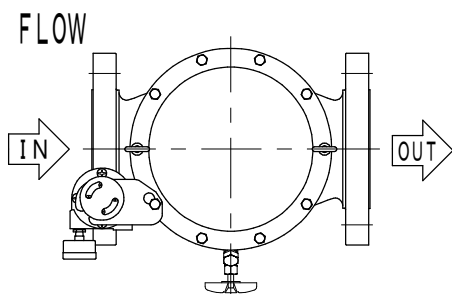
\* The drawing shall be handled as reference.  
 \* この図面は参考情報として取扱いをお願いします。

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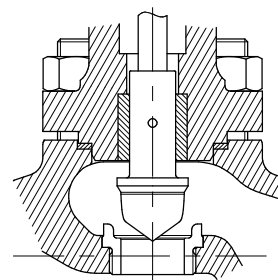


2

3



ORIENTATION  
配管取付姿勢 No. 1



TRIM STRUCTURE (EXAMPLE)  
トリム構成図 (参考)

4

PROD. No. :  
工事番号 :

TAG No. : XV0931

UNIT : mm

5

NOMINAL SIZE(INCH) 口径 (B)	RATING 圧力定格 (フランジ規格年度)	END CONNECTION 接続形式	BONNET TYPE 上蓋形式	ACTUATOR 操作器	VALVE ACTION 弁作動	TRAVEL トラベル	WEIGHT 概算質量(kg)
1	ANSI 150 (1981)	RF	PLAIN TYPE 常温形	HA2R	AIR TO OPEN	14.3	29

Small-Port Single-Seated Control Valve  
小口径形単座調節弁

MODEL No.

HLS

**Yamatake Corporation**

DRAWING No.

HLS-8A1R1E-VCR0FB0

REV.

0

A

B

C

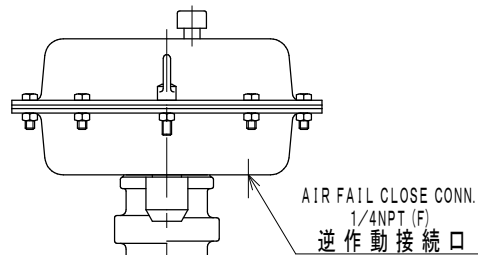
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E

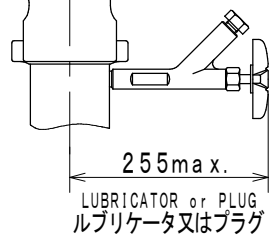
Item No. / Qty	10		1		Ref. No.	
Tag No.	XV0932				Purchaser	
Service					End user	
<Control valve>					Project	
					<Remarks>	
Model	HLS				SV0703-105 Indicating unit : "kgf/cm2"	
Description	Small-Port Single Seated Control Valves				SV0601-001 Air piping Connection: 1/4 NPT	
Body/Port size	1 in.		Cv=10		SV0602-009 Air piping: Stainless steel (304ss) tube. Joint: Double-bite Joint.(316ss)	
Conn. Size. / Rated CV			10		SV0006-002 Tag No. plate mounted on Diaphragm case (Plate size and description are Yamatake standard.)	
Rating / Conn. Type	ANSI150		RF		SV0801-E01 Material certificate in English. Scope: valve body and bonnet	
Body material	SCPH2				SV0506 On-Off action	
Trim material	SUS316+SOFT SEAT				SV0201-008 Seat leakage: IEC, JIS Class VI	
Flow characteristic	EQ%				Old Production No : S-D5014-41-100 (1987)	
Bonnet	PLAIN (-17 to 230 degC)					
Actuator / Handle	HA2R		---			
Action	AIR TO OPEN					
Gland packing / Grease	V-PTFE		---			
Gasket	V543					
Air supply / Spring range	1.4kgf/cm2		0.2-1.0kgf/cm2			
Seat leakage	CLASS VI					
Color: Body/Diaph./Yoke	M10B5/10	M10B5/10	M10B5/10			
Paint	Corrosion Resistant					
<Accessories>						
Positioner						
Structure						
Input signal						
Regulator						
Regulator2						
Limit switch	VCL5001		1			
Action	Full Close on					
Solenoid valve						
Action / Power						
Booster						
Air lock valve						
<Process data>						
Fluid name/Phase	LNG			GAS		
	MAX	NOR	MIN	Unit		
Flow rate		36		m3/h(N)		
Inlet pressure		0.35		kgf/cm2G		
Outlet pressure				kgf/cm2G		
Differential press.				kgf/cm2		
Shut-off press.		0.35		kgf/cm2		
Temperature		25		degC		
Density/Gravity(Liq)				kg/m3		
Density/Gravity(G,V)				MW		
Viscosity				mPa-s		
Flash				%		
Calculated CV				%		
Travel				%		
Outlet velocity				Mach		
Predictive SPL				dBA		
<Piping spec.>						
Strength Calc. Sheet						
Design					kgf/cm2G	
Temp.					degC	
Size		1 in.		1 in.		
Sch No.		40		40		
Thickness		3.4		3.4		
<b>Yamatake Corporation</b>						

\* The drawing shall be handled as reference.  
 \* この図面は参考情報として取扱いをお願いします。

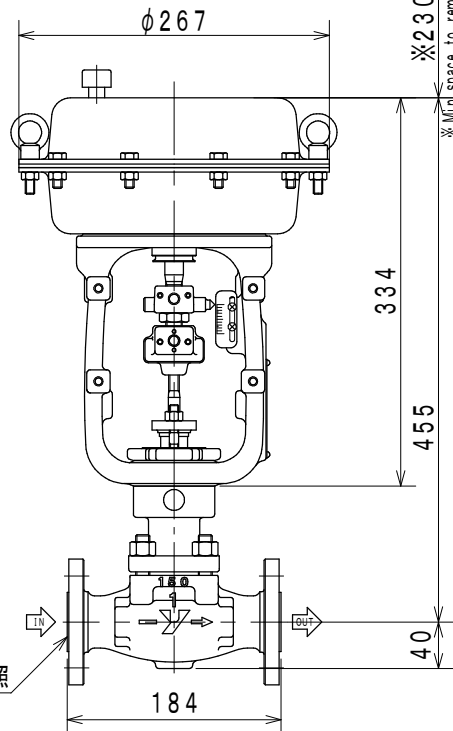
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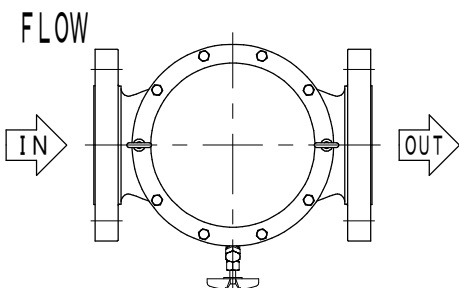
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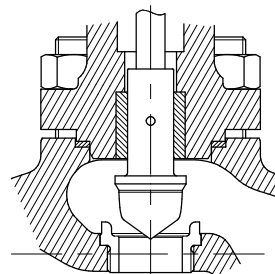
SEE FLANGE TABLE  
 フランジ表参照



3



ORIENTATION  
 配管取付姿勢 No. 1



TRIM STRUCTURE (EXAMPLE)  
 トリム構成図 (参考)

4

PROD. No. :  
 工事番号 :

TAG No. : XV0932

UNIT : mm

5

NOMINAL SIZE(INCH) 口径 (B)	RATING 圧力定格 (フランジ規格年度)	END CONNECTION 接続形式	BONNET TYPE 上蓋形式	ACTUATOR 操作器	VALVE ACTION 弁作動	TRAVEL トラベル	WEIGHT 概算質量(kg)
1	ANSI 150 (1981)	RF	PLAIN TYPE 常温形	HA2R	AIR TO OPEN	14.3	28

Small-Port Single-Seated Control Valve  
 小口径形単座調節弁

MODEL No.

HLS

**Yamatake Corporation**

DRAWING No.

HLS-8A1R1E-VCR00B0

REV.

0

A

B

C

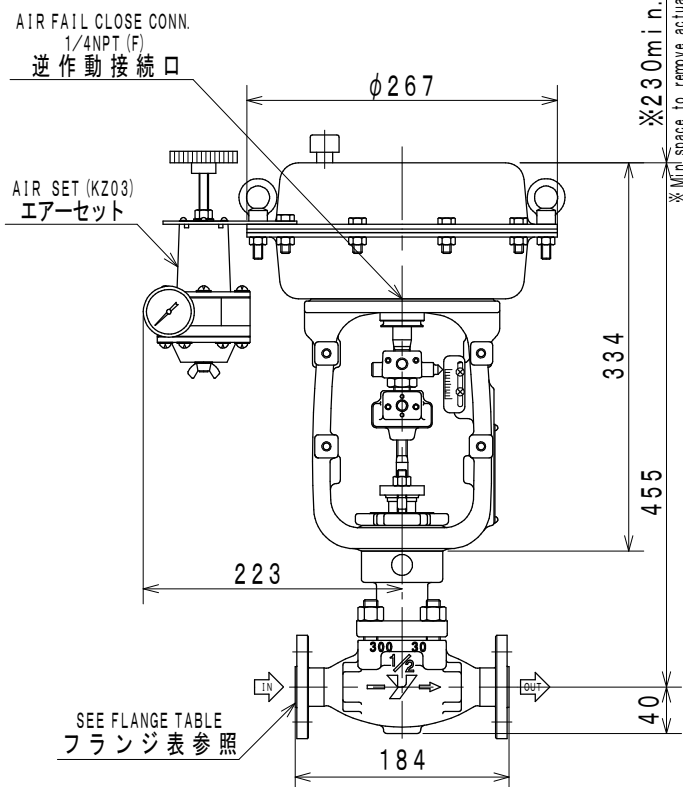
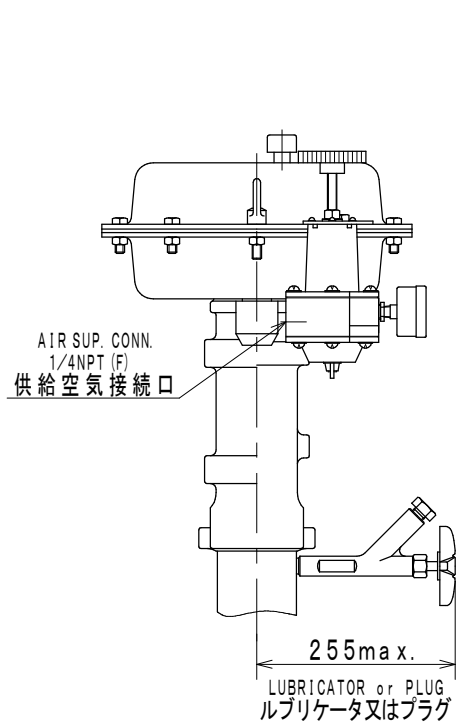
D

E

Item No. / Qty	11	1	Ref. No.	
Tag No.	XV0933		Purchaser	
Service			End user	
<Control valve>			Project	
<Control valve>			<Remarks>	
Model	HLS		SV0703-105 Indicating unit : "kgf/cm2"	
Description	Small-Port Single Seated Control Valves		SV0601-001 Air piping Connection: 1/4 NPT	
Body/Port size	1/2 in.	Cv=4.0	SV0602-009 Air piping: Stainless steel (304ss) tube. Joint: Double-bite Joint.(316ss)	
Conn. Size. / Rated CV		4.0	SV0006-002 Tag No. plate mounted on Diaphragm case (Plate size and description are Yamatake standard.)	
Rating / Conn. Type	ANSI150	RF	SV0801-E01 Material certificate in English. Scope: valve body and bonnet	
Body material	SCPH2		SV0506 On-Off action	
Trim material	SUS316+SOFT SEAT		SV0201-008 Seat leakage: IEC, JIS Class VI	
Flow characteristic	EQ%		Old Production No : S-D5014-41-110 (1987)	
Bonnet	PLAIN (-17 to 230 degC)			
Actuator / Handle	HA2R	---		
Action	AIR TO OPEN			
Gland packing / Grease	V-PTFE	---		
Gasket	V543			
Air supply / Spring range	1.4kgf/cm2	0.2-1.0kgf/cm2		
Seat leakage	CLASS VI			
Color: Body/Diaph./Yoke	M10B5/10	M10B5/10	M10B5/10	
Paint	Corrosion Resistant			
<Accessories>				
Positioner				
Structure				
Input signal				
Regulator	KZ03-2B-1A			1
Regulator2				
Limit switch	VCL5001			1
Action	Full Close on			
Solenoid valve	JE38320G174			1
Action / Power	En: Open, De: Close	AC220V 50Hz		
Booster				
Air lock valve				
<Process data>				
Fluid name/Phase	LNG		GAS	
	MAX	NOR	MIN	Unit
Flow rate		2		m3/h(N)
Inlet pressure		0.35		kgf/cm2G
Outlet pressure				kgf/cm2G
Differential press.				kgf/cm2
Shut-off press.		0.35		kgf/cm2
Temperature		25		degC
Density/Gravity(Liq)				kg/m3
Density/Gravity(G,V)				MW
Viscosity				mPa-s
Flash				%
Calculated CV				
Travel				%
Outlet velocity				Mach
Predictive SPL				dBA
<Piping spec.>				
Strength Calc. Sheet				
Design			kgf/cm2G	
Temp.			degC	
Size	1/2 in.		1/2 in.	
Sch No.	40		40	
Thickness	2.8		2.8	
<b>Yamatake Corporation</b>				

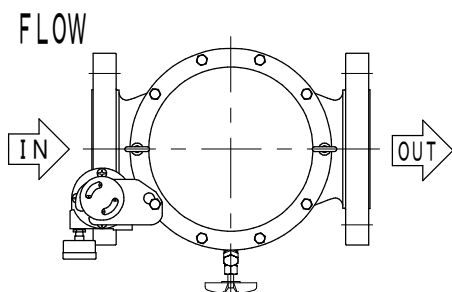
\* The drawing shall be handled as reference.  
 \* この図面は参考情報として取扱いをお願いします。

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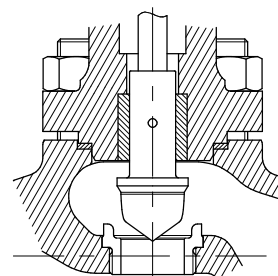


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3



ORIENTATION  
配管取付姿勢 No. 1



TRIM STRUCTURE (EXAMPLE)  
トリム構成図 (参考)

4

PROD. No. :  
工事番号 :

TAG No. : XV0933

UNIT : mm

5

NOMINAL SIZE(INCH) 口径 (B)	RATING 圧力定格 (フランジ規格年度)	END CONNECTION 接続形式	BONNET TYPE 上蓋形式	ACTUATOR 操作器	VALVE ACTION 弁作動	TRAVEL トラベル	WEIGHT 概算質量(kg)
1/2	ANSI 150 (1981)	RF	PLAIN TYPE 常温形	HA2R	AIR TO OPEN	14.3	28

Small-Port Single-Seated Control Valve  
小口径形単座調節弁

MODEL No.

HLS

**Yamatake Corporation**

DRAWING No.

HLS-4A1R1E-VCR0FB0

REV.

0

A

B

C

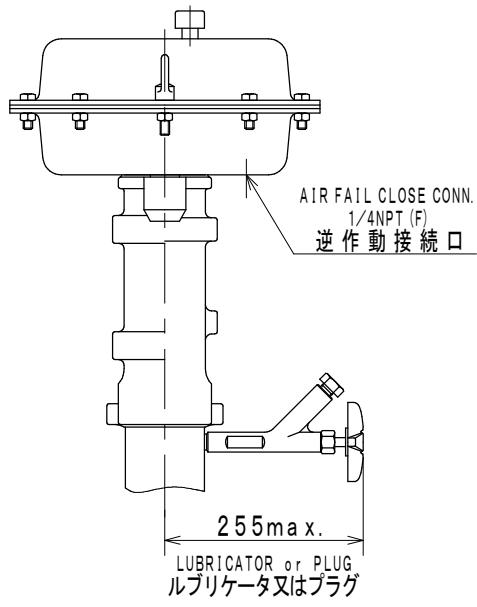
D

E

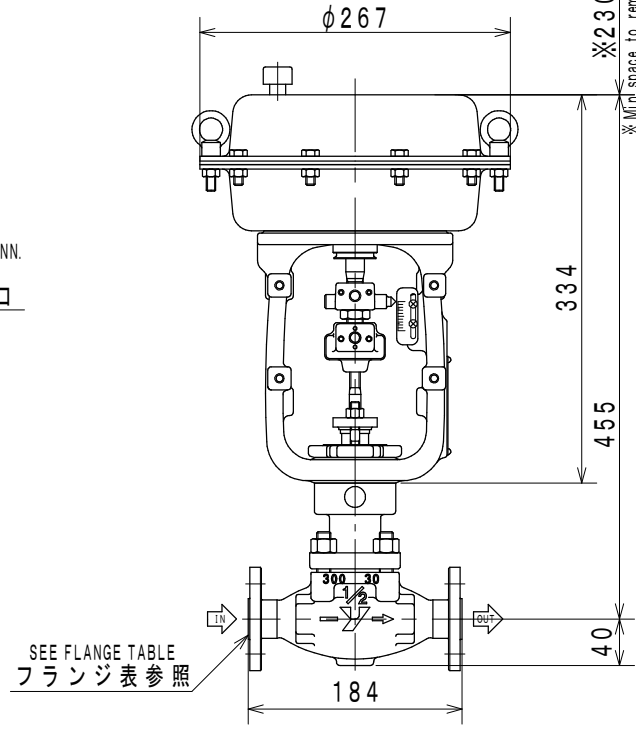
Item No. / Qty	12		1		Ref. No.	
Tag No.	XV0934				Purchaser	
Service					End user	
					Project	
<b>&lt;Control valve&gt;</b>					<b>&lt;Remarks&gt;</b>	
Model	HLS				SV0703-105 Indicating unit : "kgf/cm2"	
Description	Small-Port Single Seated Control Valves				SV0601-001 Air piping Connection: 1/4 NPT	
Body/Port size	1/2 in.		Cv=4.0		SV0602-009 Air piping: Stainless steel (304ss) tube. Joint: Double-bite Joint.(316ss)	
Conn. Size. / Rated CV			4.0		SV0006-002 Tag No. plate mounted on Diaphragm case (Plate size and description are Yamatake standard.)	
Rating / Conn. Type	ANSI150		RF		SV0801-E01 Material certificate in English. Scope: valve body and bonnet	
Body material	SCPH2				SV0506 On-Off action	
Trim material	SUS316+SOFT SEAT				SV0201-008 Seat leakage: IEC, JIS Class VI	
Flow characteristic	EQ%				Old Production No : S-D5014-41-120 (1987)	
Bonnet	PLAIN (-17 to 230 degC)					
Actuator / Handle	HA2R		---			
Action	AIR TO OPEN					
Gland packing / Grease	V-PTFE		---			
Gasket	V543					
Air supply / Spring range	1.4kgf/cm2		0.2-1.0kgf/cm2			
Seat leakage	CLASS VI					
Color: Body/Diaph./Yoke	M10B5/10	M10B5/10	M10B5/10			
Paint	Corrosion Resistant					
<b>&lt;Accessories&gt;</b>						
Positioner						
Structure						
Input signal						
Regulator						
Regulator2						
Limit switch	VCL5001		1			
Action	Full Close on					
Solenoid valve						
Action / Power						
Booster						
Air lock valve						
<b>&lt;Process data&gt;</b>						
Fluid name/Phase	LNG			GAS		
	MAX	NOR	MIN	Unit		
Flow rate		2		m3/h(N)		
Inlet pressure		0.35		kgf/cm2G		
Outlet pressure				kgf/cm2G		
Differential press.				kgf/cm2		
Shut-off press.		0.35		kgf/cm2		
Temperature		25		degC		
Density/Gravity(Liq)				kg/m3		
Density/Gravity(G,V)				MW		
Viscosity				mPa-s		
Flash				%		
Calculated CV				%		
Travel				%		
Outlet velocity				Mach		
Predictive SPL				dBA		
<b>&lt;Piping spec.&gt;</b>						
Strength Calc. Sheet						
Design					kgf/cm2G	
Temp.					degC	
Size		1/2 in.		1/2 in.		
Sch No.		40		40		
Thickness		2.8		2.8		
<b>Yamatake Corporation</b>						

\* The drawing shall be handled as reference.  
 \* この図面は参考情報として取扱いをお願いします。

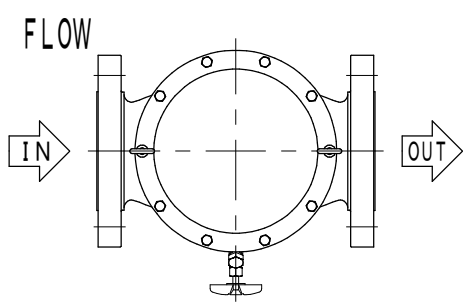
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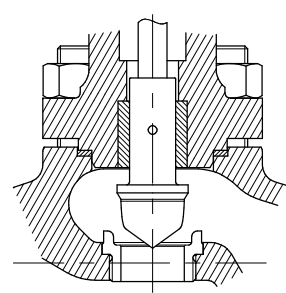
2



3



ORIENTATION  
 配管取付姿勢 No. 1



TRIM STRUCTURE (EXAMPLE)  
 トリム構成図 (参考)

4

PROD. No. :  
 工事番号 :  
 TAG No. : XV0934

UNIT : mm

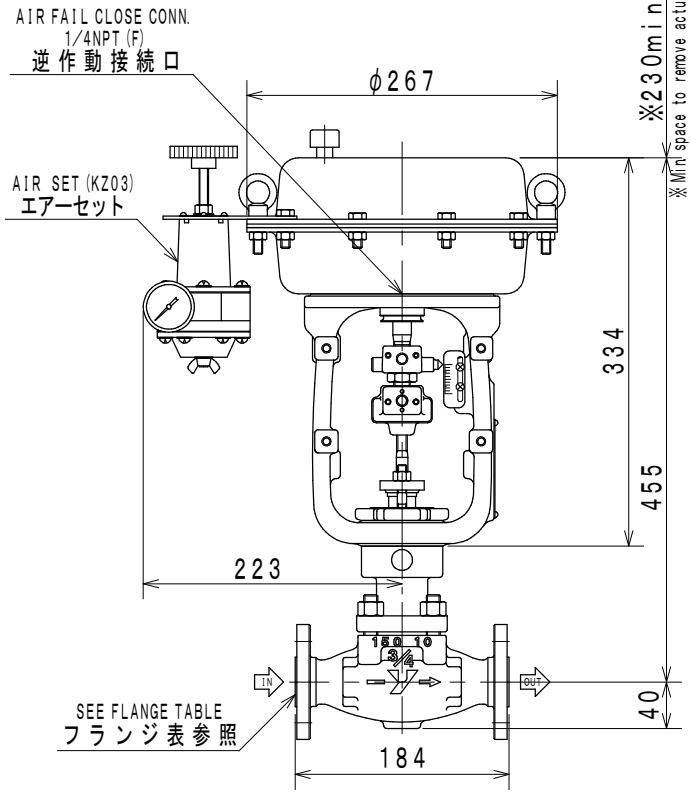
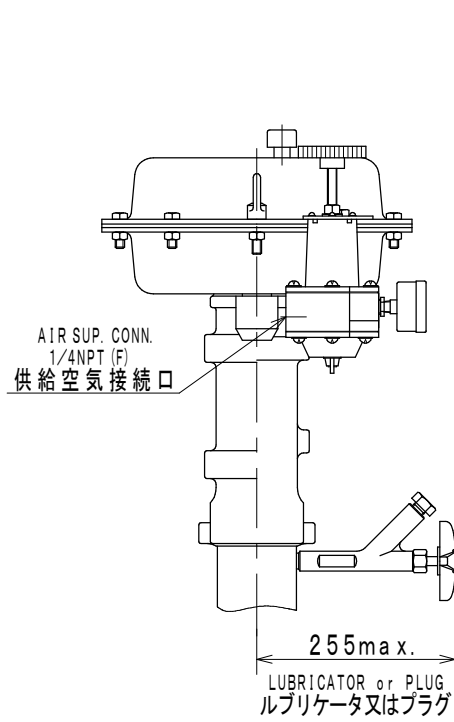
NOMINAL SIZE(INCH) 口径 (B)	RATING 圧力定格 (フランジ規格年度)	END CONNECTION 接続形式	BONNET TYPE 上蓋形式	ACTUATOR 操作器	VALVE ACTION 弁作動	TRAVEL トラベル	WEIGHT 概算質量(kg)
1/2	ANSI 150 (1981)	RF	PLAIN TYPE 常温形	HA2R	AIR TO OPEN	14.3	27
Small-Port Single-Seated Control Valve 小口径形単座調節弁					MODEL No. HLS		
Yamatake Corporation					DRAWING No. HLS-4A1R1E-VCR00B0		REV. 0

A B C D E



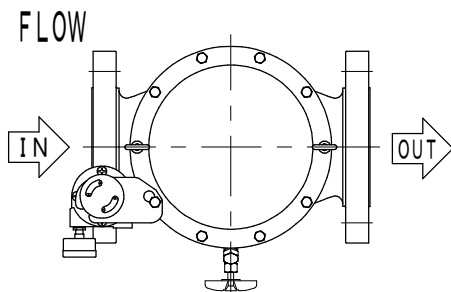
\* The drawing shall be handled as reference.  
 \* この図面は参考情報として取扱いをお願いします。

1

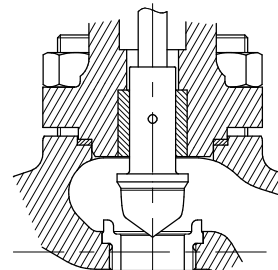


2

3



ORIENTATION  
配管取付姿勢 No. 1



TRIM STRUCTURE (EXAMPLE)  
トリム構成図 (参考)

4

PROD. No. :  
 工事番号 :  
 TAG No. : XV0935

UNIT : mm

NOMINAL SIZE(INCH) 口径 (B)	RATING 圧力定格 (フランジ規格年度)	END CONNECTION 接続形式	BONNET TYPE 上蓋形式	ACTUATOR 操作器	VALVE ACTION 弁作動	TRAVEL トラベル	WEIGHT 概算質量(kg)
3/4	ANSI 150 (1981)	RF	PLAIN TYPE 常温形	HA2R	AIR TO OPEN	14.3	29

5

Small-Port Single-Seated Control Valve  
 小口径形単座調節弁

MODEL No.  
 HLS

**Yamatake Corporation**

DRAWING No.  
 HLS-6A1R1E-VCR0FB0

REV.  
 0

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