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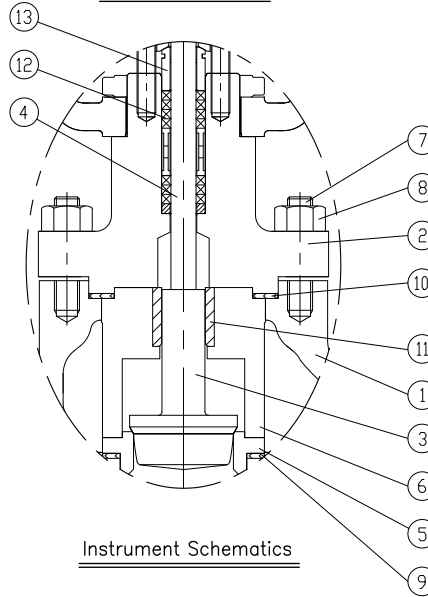
Oxygen Process Control Valve
Tag No. : 17PIC-008 / PCV

MODEL NO. V10-GL1131

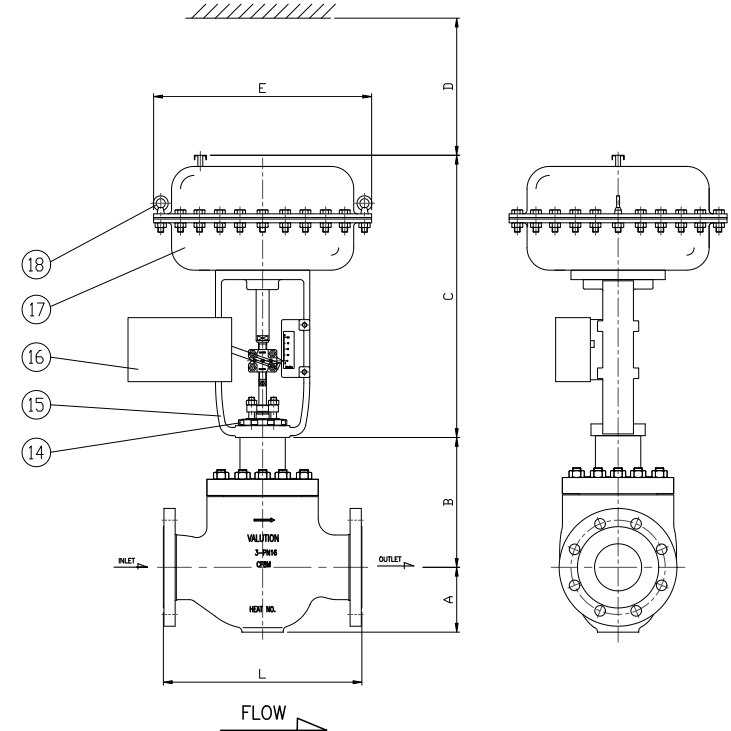
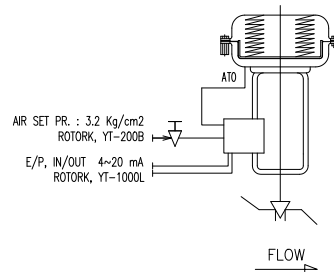
PARTS LIST

NO	NAME	MATERIAL	Q'TY	REMARKS
1	BODY	A351 CF8M	1	
2	BONNET	A351 CF8M	1	
3	VALVE PLUG	MONEL 400	1	
4	VALVE STEM	MONEL K-500	1	
5	VALVE SEAT	MONEL 400	1	
6	RETAINER	MONEL 400	1	
7	STUD BOLT	A193 Gr. B8	8	
8	NUT	A194 Gr. 8	8	
9	SEAT GASKET	PTFE	1	
10	BONNET GASKET	PTFE	1	
11	GUIDE BUSH	RTFE	1	
12	PACKING	PTFE	1 SET	
13	PACKING GLAND	316 SST	1	
14	YOKE NUT	CF8	1	
15	YOKE	A216 WCB	1	
16	E/P POSITIONER	ROTORK, YT-1000L	1	
17	ACTUATOR ASSY	VALUTION, V10-#4	1	
18	LIFTING BOLT	304 SST	2	

Trim Construction



Instrument Schematics



Dimensions(mm)

Dimensions(mm)						
Size & Ratings	L	A	B	C	D	E
3" DIN PN16 RF	311 ±1.6	110	221	468	APPROX. 680	ø375

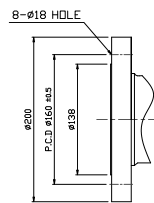
ENGINEERING DATA

BODY & TRIM	
PRESS.CLASS	PN16 (In) / PN16 (Out)
DESIGN PRESS. / DESIGN TEMP.	12 Kg/cm2g / 0° / 60°
HYDROTEST PRESSURE	18 BARG (Design Pressure x 1.5)
MAX Cv AT 100% STROKE	72
ACTUATOR	
TYPE	SPRING DIAPHRAGM
SET PRESSURE	3.2 KG/CM2
SIGNAL	IN/OUT 4~20 mA
INCREASING SIGNAL	OPEN
FAILURE POSITION / MECHANISM	CLOSE / SPRINGS
STROKE TIME(sec)	STD sec OPEN, STD sec CLOSE
POSITIONER	
ELECTRICAL CERTIFICATION	Ex dmb IIC T5 (KCs)
VALVE AND ACTUATOR WEIGHT	Approx. 100 kgs

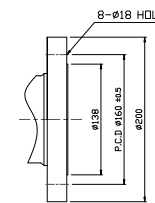
NOTES:

- Nominal Size & Rating : 3" DIN PN16
- End Connection : RF
- Seat Leakage Class : ANSI Class IV
- Body Material : A351 CF8M
- Rated Cv : 72
- Flow Characteristics : M-EQ%

INLET CONNECTION - 3" DIN PN16 RF



OUTLET CONNECTION - 3" DIN PN16 RF



25/05/13	HY Kim	YM Son	KC Kim	FOR APPROVAL
Rev.	Date	Drawn	Checked	Approved
END USER				Details of Revision

POSCO, Kwang-Yang Plant

Mr. valution VALUTION, INC.				PC
Project OXYGEN PROCESS CONTROL VALVE				UAS Code
Drawn	Date	Name	Scale : N/S	Model : GL-1131
Checked	25/05/13	HY Kim	Title	Unit Code
Approved	25/05/13	YM Son	POSCO-K	KKS Code
Oxygen Process Control VALVE				Rep. No
(3" DIN PN16 RF)				Rev.
Dept.	ENG. DEPT.			00
Tag No.	17PIC-008 / PCV			Page-No. 1/1
Drawing No.	V250513-01			

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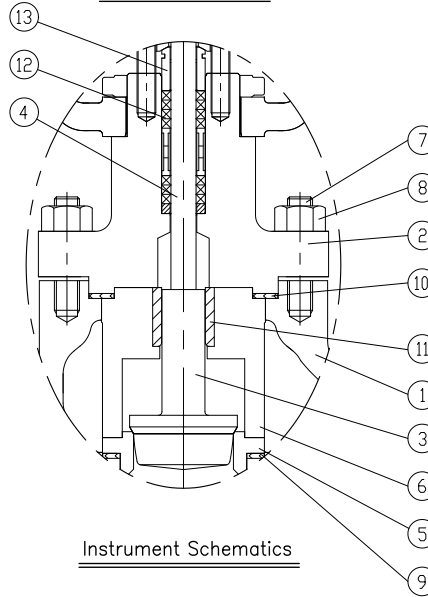
Oxygen Process Control Valve
Tag No. : 12FIC-012, 12FIC-013 / FCV

MODEL NO. V10-GL1131

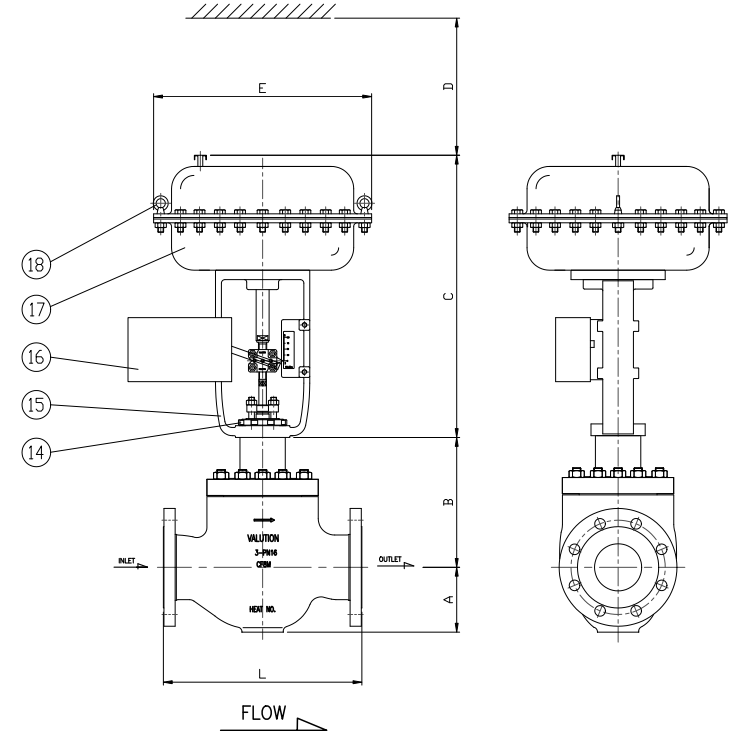
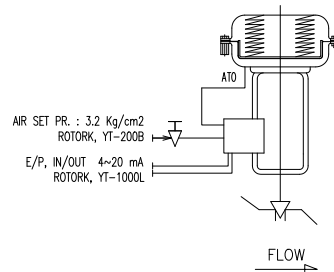
PARTS LIST

NO	NAME	MATERIAL	Q'TY	REMARKS
1	BODY	A351 CF8M	1	
2	BONNET	A351 CF8M	1	
3	VALVE PLUG	MONEL 400	1	
4	VALVE STEM	MONEL K-500	1	
5	VALVE SEAT	MONEL 400	1	
6	RETAINER	MONEL 400	1	
7	STUD BOLT	A193 Gr. B8	8	
8	NUT	A194 Gr. 8	8	
9	SEAT GASKET	PTFE	1	
10	BONNET GASKET	PTFE	1	
11	GUIDE BUSH	RTFE	1	
12	PACKING	PTFE	1 SET	
13	PACKING GLAND	316 SST	1	
14	YOKE NUT	CF8	1	
15	YOKE	A216 WCB	1	
16	E/P POSITIONER	ROTORK, YT-1000L	1	
17	ACTUATOR ASSY	VALUTION, V10-#4	1	
18	LIFTING BOLT	304 SST	2	

Trim Construction



Instrument Schematics



Dimensions(mm)

Dimensions(mm)						
Size & Ratings	L	A	B	C	D	E
3" DIN PN16 RF	311 ±1.6	110	221	468	APPROX. 680	ø375

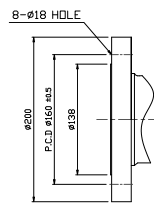
ENGINEERING DATA

BODY & TRIM	
PRESS.CLASS	PN16 (In) / PN16 (Out)
DESIGN PRESS. / DESIGN TEMP.	12 Kg/cm2g / 0° / 60°
HYDROTEST PRESSURE	18 BAR (Design Pressure x 1.5)
MAX Cv AT 100% STROKE	72
ACTUATOR	
TYPE	SPRING DIAPHRAGM
SET PRESSURE	3.2 KG/CM2
SIGNAL	IN/OUT 4~20 mA
INCREASING SIGNAL	OPEN
FAILURE POSITION / MECHANISM	CLOSE / SPRINGS
STROKE TIME(sec)	STD sec OPEN, STD sec CLOSE
POSITIONER	
ELECTRICAL CERTIFICATION	Ex dmb IIC T5 (KCs)
VALVE AND ACTUATOR WEIGHT	Approx. 100 kgs

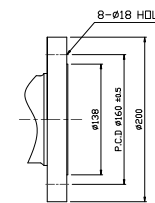
NOTES:

- Nominal Size & Rating : 3" DIN PN16
- End Connection : RF
- Seat Leakage Class : ANSI Class IV
- Body Material : A351 CF8M
- Rated Cv : 72
- Flow Characteristics : M-EQ%

INLET CONNECTION - 3" DIN PN16 RF



OUTLET CONNECTION - 3" DIN PN16 RF



25/05/13	HY Kim	YM Son	KC Kim	FOR APPROVAL
Rev.	Date	Drawn	Checked	Approved
END USER				Details of Revision

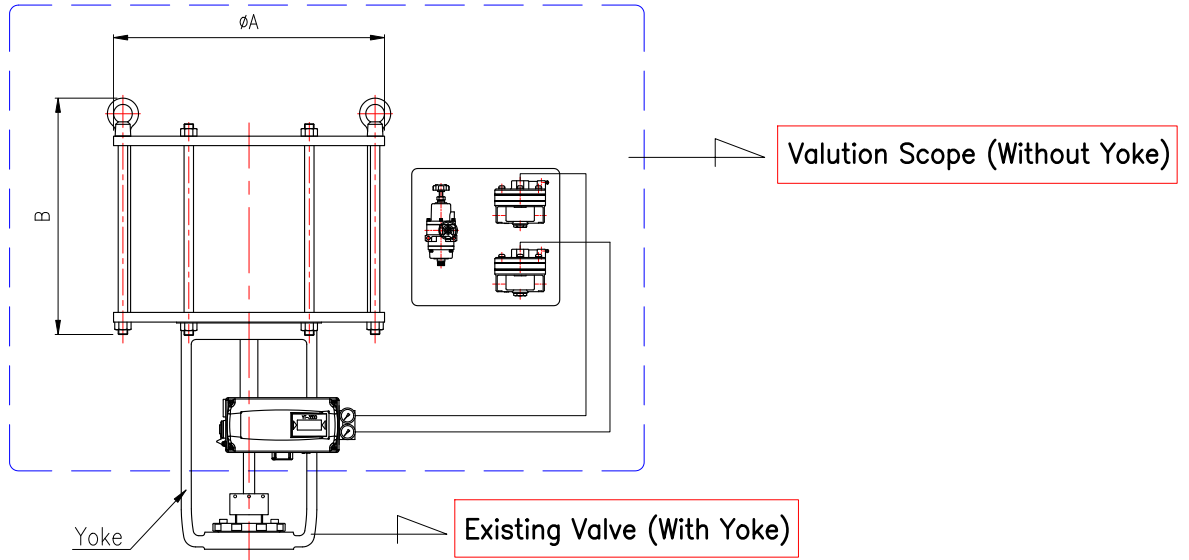
POSCO, Kwang-Yang Plant

Mr. valution VALUTION, INC.				PC
Project OXYGEN PROCESS CONTROL VALVE				UAS Code
Drawn	Date	Name	Scale : N/S	Model : GL-1131
250513	25/05/13	HY Kim		
Checked	250513	YM Son	POSCO-K	
Approved	250513	KC Kim	Oxygen Process Control Valve	
				Rep. No
				Rev. 00
Tag No. 12FIC-012, 12FIC-013 / FCV				Page-No. 1/1
Drawing No. V250513-02				

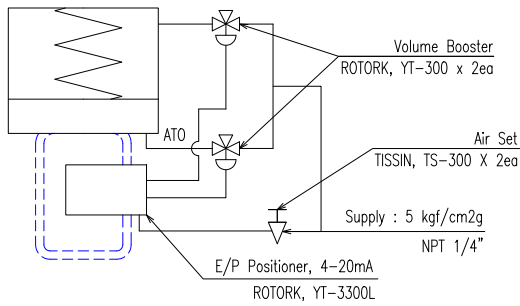
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DWG. NO. V240923-01

Model : V20-1L1001



* Air Piping Diagram



* Specification

- 1) Size & Rating : ANGLE 10"(250A) JIS 10K RF
- 2) Model : V20-1L1001
- 3) Thrust : 2,834 kgf
- 4) Body Material : A216 WCB
- 5) Action : AIR TO OPEN, FAIL CLOSE (BY SPRING)
- 6) Rated Kv : 650
- 7) Seat Leakage Class : ANSI/FCI CLASS 8
- 8) Stroke : 100 mm
- 9) Accessory :
 1. E/P Positioner : ROTORK, YT-3300L
 2. Volume Booster : ROTORK, YT-300 x 2ea
 3. Air Set : TISSIN, TS-300 X 2ea

* Dimensions(mm)

Dimensions(mm)		
Model Name	A	B
V20-1L1001 CYLINDER ACTUATOR	ø460	APPR. 400

MFR valution Valution Inc. Korea			
TITLE DIMENSIONAL DWG. FOR 'V20-1L1001' CYLINDER ACTUATOR			
PRODUCT NAME PNEUMATIC SPRING CYLINDER ACTUATOR		MODEL V20-1L1001	
SIZE(inch) -	RATING(lbs) -	Q'ty. 1 SET	DRAWING NO. V240923-01
DATE 2024/09/23	DWN HY KIM	CHE'D YM SON	APP'D KC KIM
REV. 00	SCALE N/S	SHEET NO. 1/1	PROJECTION 1st

Tag No : 5B/5A-TCV-221

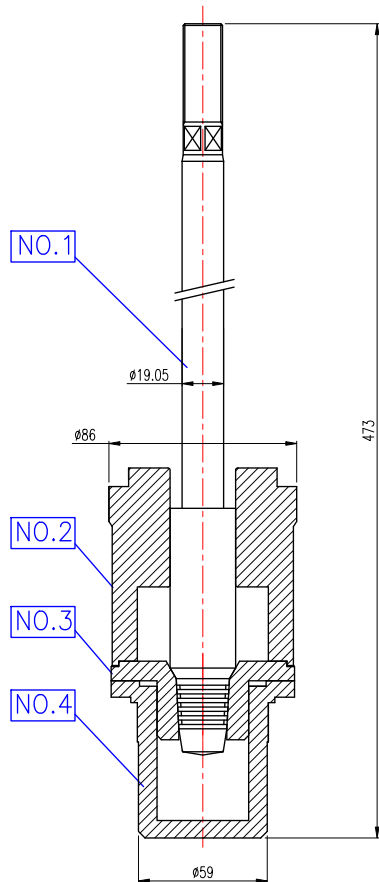
BILL OF MATERIALS DWG.

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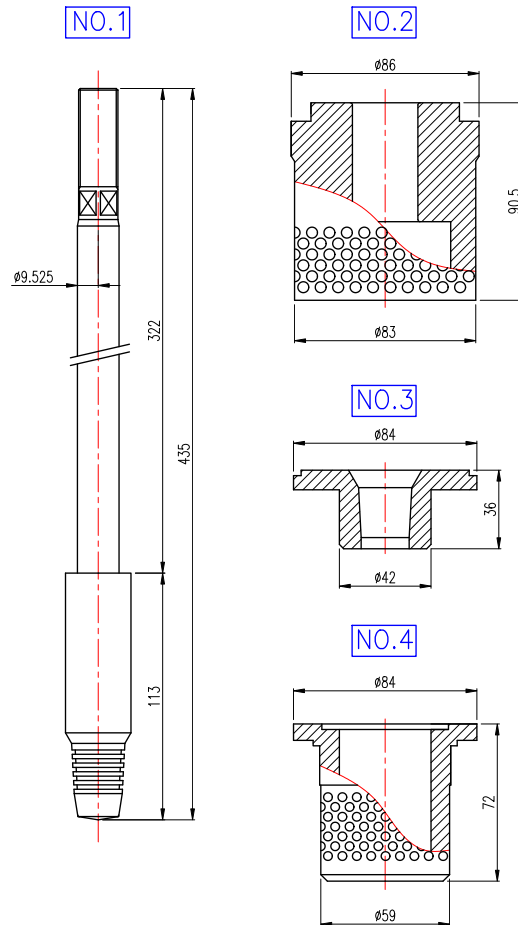
PARTS LIST


NO.	PART NO.	PART NAME	MATERIAL	Q'TY	DRAWING NO.
1	V2407G40A01PS	PLUG STEM SET	440C/630 SS	1 SET	V240715-02
2	V2407G40A02TC	TDP CAGE	440C SS	1 EA	
3	V2407G40A03SR	SEAT RING	440C SS	1 EA	
4	V2407G40A04SD	SEAT DIFFUSER	440C SS	1 EA	

<TRIM ASS'Y DWG.>



<TRIM PART DETAIL DWG.>



MFR	 Valution Inc. Korea		
TITLE	BILL OF MATERIALS DWG. FOR '5B/5A-TCV-221, TRIM PART' GL		
PRODUCT NAME	GLOBE VALVE TRIM SET	MODEL	V2407G40AT
SIZE(inch)	40A (1-1/2")	RATING(lbs)	ANSI 1500# SW
DATE	2024/07/15	DWN	HY KIM
REV.	00	SCALE	N/S
		DRAWING NO.	V240715-02
		Q'ty.	1 SET
		CHE'D	YM SON
		APP'D	KC KIM
		SHEET NO.	1/1
		PROJECTION	1st

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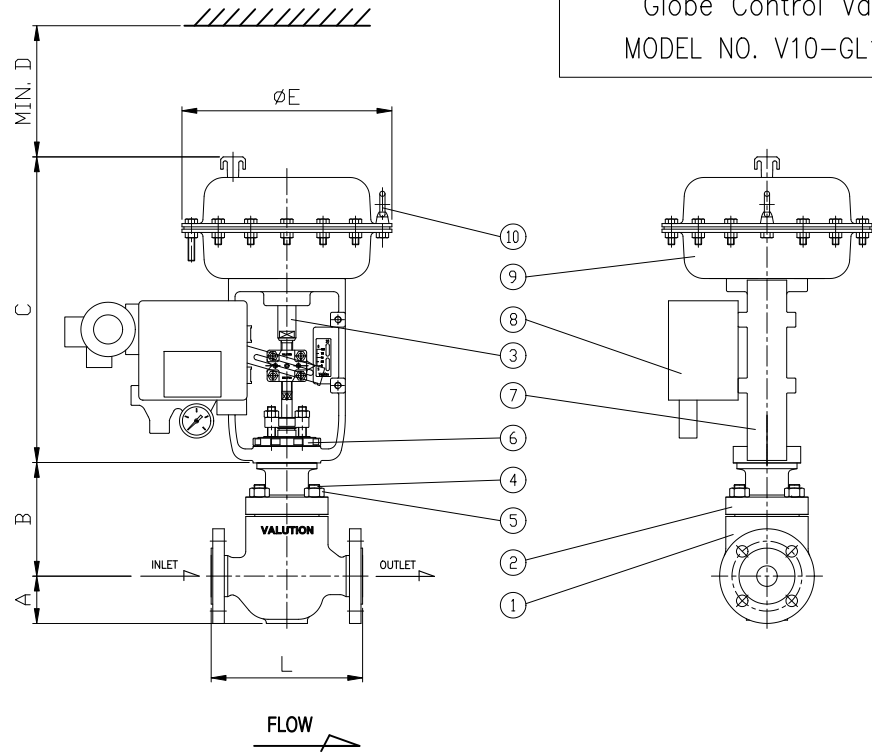
PARTS LIST

NO	NAME	MATERIAL	Q'TY	REMARKS
1	BODY	A216 WCB	1	
2	BONNET	A216 WCB	1	
3	VALVE STEM	304 SST	1	
4	STUD BOLT	A193 Gr. B7	4	
5	NUT	A194 Gr. 2H	4	
6	YOKE NUT	CF8	1	
7	YOKE	A216 WCB	1	
8	E/P POSITIONER	ROTORK, YT-1000L	1	
9	ACTUATOR ASSY	VALUTION, V10-#2	1	
10	LIFTING BOLT	304 SST	2	

BODY & TRIM	
PRESS.CLASS	PN16 (In) / PN16 (Out)
DESIGN PRESS. / DESIGN TEMP.	13 barG / 50°
HYDROTEST PRESSURE	19.5 barG (Design Pressure x 1.5)
MAX Cv AT 100% STROKE	12
ACTUATOR	
TYPE	SPRING DIAPHRAGM
SET PRESSURE	3.2 Kg/cm2g
SIGNAL	IN/OUT 4~20 mA
INCREASING SIGNAL	OPEN
FAILURE POSITION / MECHANISM	CLOSE / SPRINGS
STROKE TIME(sec)	STD sec OPEN, STD sec CLOSE

- NOTES:**
- Nominal Size & Rating : DN25 PN16
 - End Connection : RF
 - Seat Leakage Class : ANSI Class IV
 - Body Material : A216 WCB
 - Rated Cv : 12
 - Flow Characteristics : EQ%

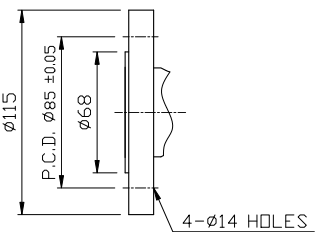
Globe Control Valve
MODEL NO. V10-GL1121



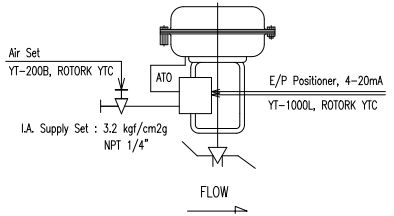
Dimensions(mm)

Dimensions(mm)						
Size & Ratings	L	A	B	C	D	E
DN25 PN16 RF	184 ±1.6	58	138	488	MIN. 300	Ø254

INLET & OUTLET FLANGE DIMENSION – DN25 PN16 RF



INSTRUMENT SCHEMATICS



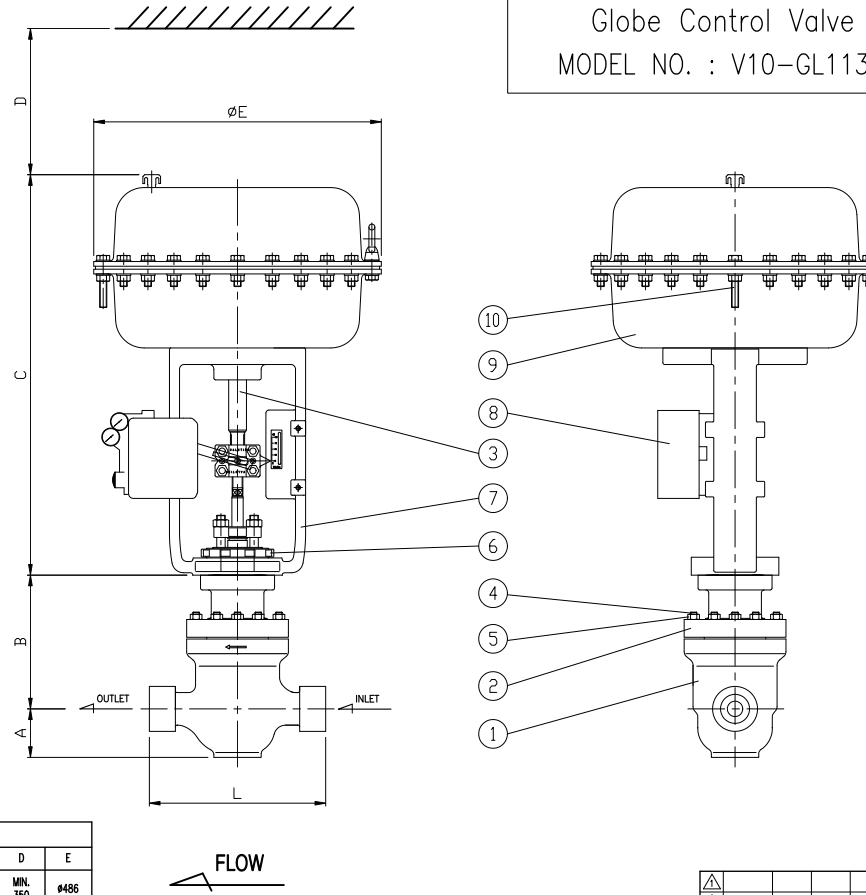
FOR APPROVAL				
Rev.	Date	Drawn	Checked	Approved
Details of Revision				
END USER				
POSCO, Kwang-Yang Plant				
E&C				
Mfr.				
VALUTION, INC.				PC
Project				Unit Code
Date	Name	Scale : N/S	Model NO.: V10-GL1121	Unit Code
Drawn	23/04/12	HY Kim		KKS Code
Checked	23/04/12	YM Son		
Approved	23/04/12	KC Kim		
Tag No. : FCV-1401				Rep. No
MODEL NO. V10-GL1121				Rev.
(DN25 PN16 RF)				00
Dept.	ENG. DEPT.			Page-No.
Top No.	FCV-1401			1/1
Drawing No. V230412-01				

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PARTS LIST

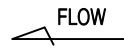
NO	NAME	MATERIAL	Q'TY	REMARKS
1	BODY	A351 CF8M	1	
2	BONNET	A351 CF8M	1	
3	VALVE STEM	630 SST	1	
4	STUD BOLT	A193 Gr. BB	8	
5	NUT	A194 Gr. 8	8	
6	YOKE NUT	CF8	1	
7	YOKE	A216 WCB	1	
8	E/P POSITIONER	SMC, IP-8000	1	
9	ACTUATOR ASSY	VALUTION, V10-#5	1	
10	LIFTING BOLT	304 SST	2	

Globe Control Valve
MODEL NO. : V10-GL1134



Dimensions(mm)

Size & Ratings	L	A	B	C	D	E
40A(1-1/2") ANSI 1500# SW	298 ±1.6	82	226	679	MIN. 350	ø486



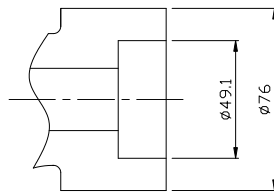
ENGINEERING DATA

BODY & TRIM	
PRESS.CLASS	ANSI 1500# (In) / ANSI 1500# (Out)
DESIGN PRESS. / DESIGN TEMP.	160 Kg/cm2g / 180°
HYDROTEST PRESSURE	240 Kg/cm2g (Design Pressure x 1.5)
MAX Cv AT 100% STROKE	17
ACTUATOR	
TYPE	SPRING DIAPHRAGM
SET PRESSURE	3.2 Kg/cm2g
SIGNAL	IN/OUT 4~20 mA
INCREASING SIGNAL	OPEN
FAILURE POSITION / MECHANISM	CLOSE / SPRINGS
STROKE TIME(sec)	STD sec OPEN, STD sec CLOSE

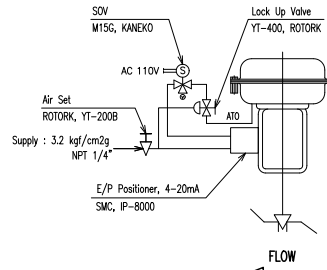
NOTES:

- Nominal Size & Rating : 40A (1-1/2") ANSI 1500#
- End Connection : SW
- Seat Leakage Class : ANSI Class IV
- Body Material : A351 CF8M
- Rated Cv : 17
- Flow Characteristics : MODIFIED EQ%

INLET & OUTLET FLANGE DIMENSION



INSTRUMENT SCHEMATICS



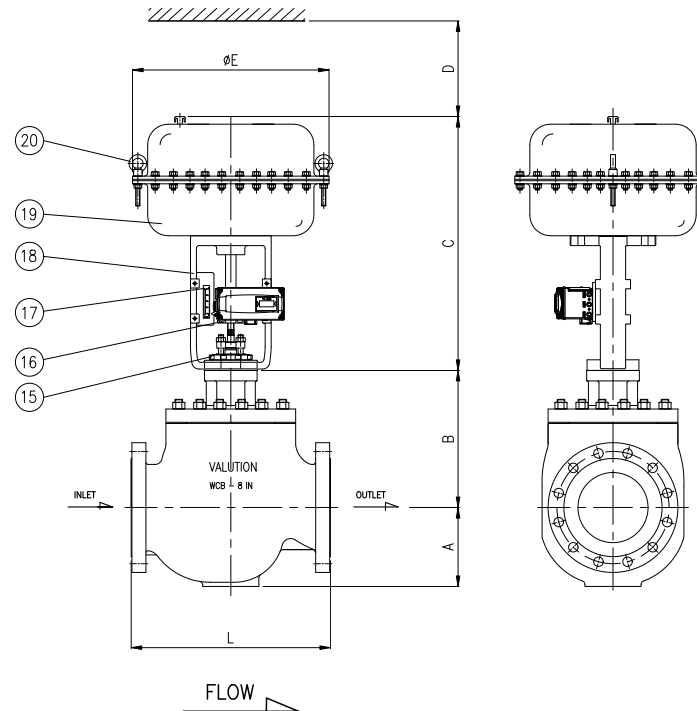
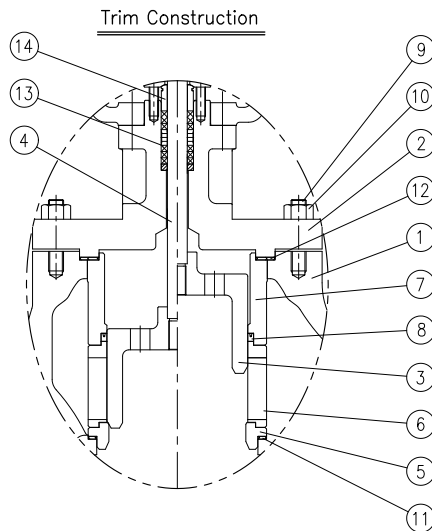
23/04/04	HY Kim	YM Son	KC Kim	FOR APPROVAL
Rev.	Date	Drawn	Checked	Approved
Details of Revision				
END USER				
POSCO, Kwang-Yang Plant				
E&C				
Mfr. VALUTION, INC.				
Project				PC
				Unit Code
Drawn	230404	HY Kim	Title	POSCO-K
Checked	230404	YM Son		Tag No. : TCY-221
Approved	230404	KC Kim		MODEL NO. : V10-GL1134
				Rev. No. 00
				Rev. 1/1
Dept.	ENG. DEPT.			
Tag No.	TCY-221			Page-No. 1/1
Drawing No.	V230404-03			

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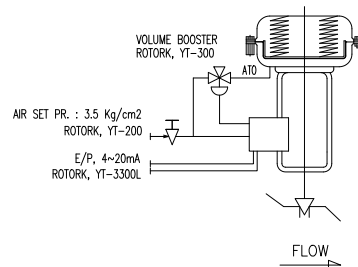
Steam Pressure Control Valve
Tag No. : PCV-1002

PARTS LIST

NO	NAME	MATERIAL	Q'TY	REMARKS
1	BODY	A216 WCB	1	
2	BONNET	A216 WCB	1	
3	VALVE PLUG	410 SST	1	
4	VALVE STEM	630 SST	1	
5	VALVE SEAT	410 SST	1	
6	BOTTOM CAGE	410 SST	1	
7	TOP CAGE	410 SST	1	
8	CAGE SEAL RING	PTFE + GRAPHITE	1	
9	STUD BOLT	A193 Gr. B7	12	
10	NUT	A194 Gr. 2H	12	
11	SEAT GASKET	316 SST + GRAPHITE	1	
12	BONNET GASKET	316 SST + GRAPHITE	1	
13	PACKING	PTFE + GRAPHITE	1 SET	
14	PACKING GLAND	316 SST	1	
15	YOKE NUT	CF8	1	
16	STEM CLAMP	CF8	1	
17	INDICATOR	304 SST	1	
18	YOKE	A216 WCB	1	
19	ACTUATOR ASSY	VALUTION, V10-#6	1	
20	LIFTING BOLT	304 SST	2	



Instrument Schematics



Dimensions(mm)

Size & Ratings	L	A	B	C	D	E
8" JIS 30K RF	568 ±2	230	391	728	APPROX. 950	Ø565

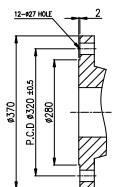
ENGINEERING DATA

BODY & TRIM	
PRESS.CLASS	JIS 30K (In) / JIS 30K (Out)
DESIGN PRESS. / DESIGN TEMP.	25 BARG / 250°
HYDROTEST PRESSURE	37.5 BARG (Design Pressure x 1.5)
MAX Cv AT 100% STROKE	375
ACTUATOR	
TYPE	SPRING DIAPHRAGM
SET PRESSURE	3.5 KG/CM2
SIGNAL	IN 4~20 mA
INCREASING SIGNAL	OPEN
FAILURE POSITION / MECHANISM	CLOSE / SPRINGS
STROKE TIME(sec)	STD sec OPEN, STD sec CLOSE
VALVE AND ACTUATOR WEIGHT	Approx. 640 kgs

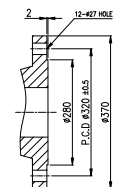
NOTES:

- Nominal Size & Rating : 8"(200A) JIS 30K
- End Connection : RF
- Seat Leakage Class : ANSI Class IV
- Body Material : A216 WCB
- Rated Cv : 375
- Flow Characteristics : EQ%

INLET CONNECTION - 8"JIS 30K RF



OUTLET CONNECTION - 8"JIS 30K RF



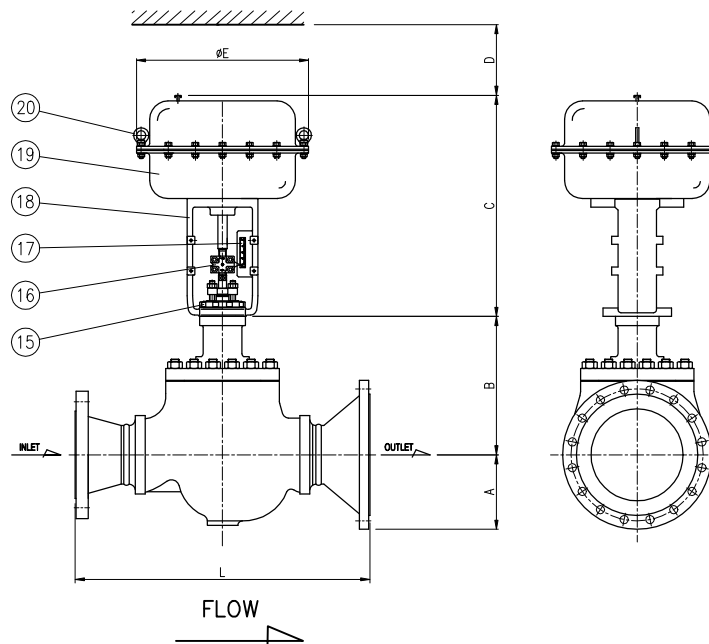
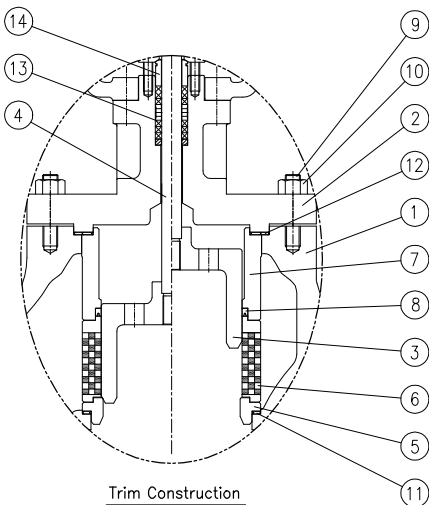
23/02/06		HY Kim	YM Son	KC Kim	FOR APPROVAL	
Rev.	Date	Drawn	Checked	Approved	Details of Revision	
END USER						
POSCO, Kwang-Yang Plant						
E&C						
Mfr. VALUTION, INC.						
Project						
2계강 1.2RH 전공 UNIT Pr. CONTROL VALVE					PC	
					UAS Code	
Drawn	Date	Name	Scale : N/S	Model : GL-1332	Unit Code	
230206		HY Kim			KKS Code	
Checked	230206	YM Son	POSCO-K			Rep. No
Approved	230206	KC Kim	Steam Pressure Control Valve			Rev.
						00
Tag No. PCV-1002						Page-No. 1/1
Drawing No. V23026-01						

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Steam Pressure Control Valve
Model : GL-1932

PARTS LIST

NO	NAME	MATERIAL	Q'TY	REMARKS
1	BODY	A216 WCB	1	
2	BONNET	A216 WCB	1	
3	VALVE PLUG	410 SST	1	
4	VALVE STEM	630 SST	1	
5	VALVE SEAT	410 SST	1	
6	BOTTOM CAGE	410 SST	1	
7	TOP CAGE	410 SST	1	
8	CAGE SEAL RING	GRAPHITE	1	
9	STUD BOLT	A193 Gr. B7	12	
10	NUT	A194 Gr. 2H	12	
11	SEAT GASKET	316 SST + GRAPHITE	1	
12	BONNET GASKET	316 SST + GRAPHITE	1	
13	PACKING	GRAPHITE	1 SET	
14	PACKING GLAND	316 SST	1	
15	YOKE NUT	CF8	1	
16	STEM CLAMP	CF8	1	
17	INDICATOR	304 SST	1	
18	YOKE	A216 WCB	1	
19	ACTUATOR ASSY	VALUTION, V10	1	
20	LIFTING BOLT	304 SST	2	



BODY & TRIM

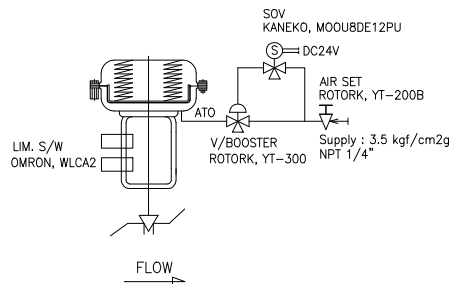
PRESS.CLASS	ASME 600 (In) / ASME 300 (Out)
DESIGN PRESS. / DESIGN TEMP.	43 BARG / 255°
MAX. PRESS AT 100°F	102.1 BARG

HYDROTEST PRESSURE	64.5 BARG (Design Pressure x 1.5)
MAX Cv AT 100% STROKE	450
MAX SEAT LEAKAGE	ANSI/FCI CLASS V
BONNET FLG. NUT TORQUE	550-620 Nm

ACTUATOR

TYPE	SPRING DIAPHRAGM
SET PRESSURE	3.5 KG/CM2
SIGNAL	IN DC 24V
INCREASING SIGNAL	OPEN
FAILURE POSITION / MECHANISM	CLOSE / SPRINGS
NOMINAL STROKE	80 MM
STROKE TIME(sec)	STD sec OPEN, STD sec CLOSE
VALVE AND OPERATOR WEIGHT	Approx. 1140kg

Instrument Schematics



Dimensions(mm)

Size & Ratings	L	A	B	C	D	E
8"X12" ASME 600# X 300# PN63 RF X PN25 RF	960±5	243	451	721	950	9560

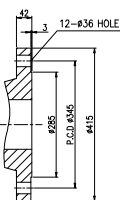
21/05/03	HY Kim	DaisyKim	KC Kim	FDR APPROVAL	
Rev.	Date	Drawn	Checked	Approved	Details of Revision

END USER
E&C

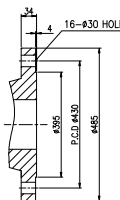
NOTES:

- Nominal Size & Rating : 8" ASME 600# X 12" ASME 300#
- End Connection : DIN 8"(DN200) PN63 RF X 12"(DN300) PN25 RF
- Seat Leakage Class : ANSI Class V
- Body Material : A216 WCB
- Rated Cv : 450
- Flow Characteristics : Modified EQ-%

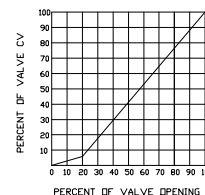
INLET CONNECTION - 8"/PN63/RF



OUTLET CONNECTION - 12"/PN25/RF



FLOW CHART



Mfr. **VALUTION, INC.**

Project: **REPLACEMENT** / IC

Date	Name	Scale	N/S	Model	GL-1932	Unit Code
210503	HY Kim					UAS Code
Checked	210503	Daisy Kim				KIS Code
Approved	210503	KC Kim				Rep. No.

Steam Pressure Control Valve
(8IN X 12IN, PN63 RF X PN25 RF)

Dept. ENG. DEPT. / Rev. 0

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Drawing No. V210503-11