



UOP N.V. Noorderlaan 147, B-2030 Antwerp, Belgium

AUTOMATIC GLOBE VALVE**PROJECT SPECIFICATION**

Number

Rev.

E-H6279-240

1

Sheet : 3 of 5

By : F. Heyman

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1	TAG NO.	U-XCV55013, 55023, 55033, 55043, 55053, 55063	
2		U-XCV55073, 55083, 55093, 55103, 55113, 55123	
3	QUANTITY	12	
4	SERVICE	PROVIDING PURGE	
5	MEDIUM COMPOSITION MOLECULAR WEIGHT	HYDROGEN / H ₂ / 2,02	
6	AMBIENT TEMPERATURE MIN. / MAX.	- 46 / + 36 °C ACTUATOR POSITIONER LIMIT SW (note 1)	①
7	MINIMUM DESIGN METAL TEMPERATURE	-34 °C FOR VALVE BODY AND SEALS	①
8	OPERATING TEMPERATURE MIN. / MAX.	38,0 / 43,0 °C	
9	OPERATING FLOW COND. 1 / 2 / 3	2082 / xxx / 6940 Nm ³ /h	
10	PRESSURE UPSTREAM COND. 1 / 2 / 3	4,1 / xxx / 1,95 kg/cm ² g	
11	DP COND. 1 / 2 / 3	3,75 / xxx / 1,6 kg/cm ²	
12	DP IN CLOSED POSITION	20,0 kg/cm ²	
13	REQUIRED C _v COND. 1 / 2 / 3	8,3 / xxx / 57,2 (REDUCED TRIM)	
14	VALVE BODY SIZE RATING STYLE	DN 80 / 300 lbs / FLANGED	①
15	SELECTED CV CHARACTERISTIC	TRIM 2,00 CV 78 / 82 / EQUAL PERCENTAGE	
16	BODY MATERIAL	ASTM A 352 LCC (-34°C)	①
17	FLANGE RATING FLANGE FACE FINISH	300 lbs / SMOOTH FINISH 3.2 - 6.3 µmRA	
18	FACE TO FACE STD. FACE TO FACE LENGTH	LARGE FEMALE FACE ANSI B16.5a / BY MFR	
19	VALVE SERVICE STANDARD	PSA HIGH CYCLING DUTY	
20	VALVE CYCLIC SERVICE UNI / BI-DIRECTIONAL	BI-DIRECTIONAL	
21	VALVE INITIAL CONTROL POSITION	0 - 25%	
22	FLOW OVER / UNDER PLUG	HEADER OVER PLUG	
23	SHAFT PACKING TYPE MATERIAL	STANDARD TWIN V-RINGS PTFE	
24	PLUG AND SHAFT MATERIAL	316 STAINLESS STEEL	
25	SEAT TYPE MATERIAL	SOFT PTFE	
26	LEAKAGE RATE (CLASS TO ANSI/FCI-70-2)	CLASS VI BUBBLE TIGHT	
27	ACTUATOR TYPE / MOUNTING POSITION	PISTON, SPRING RETURN / TOP MOUNTED	
28	ACTUATOR SIZE / AIR CONNECTION SIZE	50 SQIN	①
29	ACTUATOR ACTION	AIR TO OPEN	
30	AIR SUPPLY PRESSURE MIN. / NORM. / MAX. kg/cm ² g	3,5 / 4,5 / 6,0 kg/cm ² g	
31	SPRING TYPE / ACTION	DUAL SPRING / SPRING TO CLOSE	①
32	NUMBER OF CYCLES PER YEAR	+ / - 100000	
33	VALVE DUTY ON/OFF or CONTROL	HIGH CYCLE DUTY / CONTROL	
34	VALVE POSITIONER MODEL	METSO, SMART ND822, EEx ia IIC T6	①
35	POSITIONER TYPE	SMART ELECTRO / PNEUMATIC	
36	CALIBRATED RANGE	4 - 20 mA	
37	AIR SUPPLY PRESSURE / AIR CONNECTION	4,5 kg/cm ² g / 1/4" NPTF	①
38	AIR FILTER / REGULATOR	NOT REQUIRED	
39	BOOSTER	SMC Low temperature	①
40	PROXIMITY SWITCH / POSITION	INCORPORATED IN POSITIONER EEx ia IIC T6	①
41	TRAVEL STOP	STANDARD	
42	TUBING & FITTING MATERIAL / SIZE	FOR TUBE AND FITTINGS REFER TO E-H6279-241T	
43	VALVE SUPPLIER	FLOWERVE	①
44	VALVE TYPE NO.	VALTEK MARK ONE ND822 / -XT 1-AL	①
45	REMARKS :		
46		note 1: Electrical Certificate for -40°C. Functional	
47		operation shall be guaranteed for -46°C ambient	

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C.B. Joxmatou

PROJECT SPECIFICATION

Number

Rev.

E-H6279-241

3

Sheet : 5 of 15

By : F. Heyman

AUTOMATIC BUTTERFLY VALVE

1	TAG NO.	U-XCV55014, 55024, 55034, 55044, 55054, 55064
2		U-XCV55074, 55084, 55094, 55104, 55114, 55124
3	QUANTITY	12
4	SERVICE	DUMP / PURGE
5	MEDIUM COMPOSITION MOLECULAR WEIGHT	OFF GAS / H ₂ , CO, CH ₄ , CO ₂ , H ₂ O / 28,75
6	AMBIENT TEMPERATURE MIN. / MAX.	- 46 /+ 36 °C ACTUATOR POSITIONER LIMIT SW (note 1)
7	MINIMUM DESIGN METAL TEMPERATURE	-34 °C FOR VALVE BODY AND SEALS
8	OPERATING TEMPERATURE MIN. / MAX.	28,0 / 28,0 °C
9	OPERATING FLOW COND. 1 / 2 / 3	2418 / 4610 / 8060 Nm ³ /h
10	PRESSURE UPSTREAM COND. 1 / 2 / 3	1,95 / 0,50 / 1,95 kg/cm ² g
11	DP COND. 1 / 2 / 3	1,6 / 0,008 / 1,6 kg/cm ²
12	DP IN CLOSED POSITION	20,0 kg/cm ²
13	REQUIRED C _v COND. 1 / 2 / 3	66,1 / 1819 / 221,7
14	VALVE BODY SIZE RATING STYLE	DN 200 / 300 lbs / DOUBLE FLANGED
15	SELECTED CV CHARACTERISTIC	1920 / EQUAL PERCENTAGE
16	BODY MATERIAL	ASTM 352 LCB (-34°C)
17	FLANGE RATING FLANGE FACE FINISH	300 lbs / SMOOTH FINISH 3.2 - 6.3 µmRA
18	FACE TO FACE STD. FACE TO FACE LENGTH	LARGE FEMALE FACE ANSI B16.5a / 230MM
19	VALVE SERVICE STANDARD	PSA HIGH CYCLING DUTY
20	VALVE CYCLIC SERVICE UNI / BI-DIRECTIONAL	UNIDIRECTIONAL
21	VALVE INITIAL CONTROL POSITION	0 - 25%
22	SHAFT POSITION FLOW DOWN / UPSTREAM	FLOW SHAFT DOWNSTREAM
23	BEARINGS AND EXCLUDER RING MATERIAL	FOR HIGH CYCLE BUTTERFLY VALVE
24	SHAFT PACKING TYPE MATERIAL	LIFE LOADED GLANDPACKING / PTFE
25	DISC PINS SHAFT MATERIAL	ASTM A487 CA 6 NM / MFR STD / ASME 420
26	SEAT TYPE MATERIAL	SOFT SEAT / FKM (VITON)
27	LEAKAGE RATE (CLASS TO B16.104)	CLASS VI BUBBLE TIGHT
28	ACTUATOR TYPE / MOUNTING POSITION	PISTON, SPRING RETURN / C-HU
29	ACTUATOR SIZE / AIR CONNECTION SIZE	B1JU16/55C / 1/2" NPT
30	AIR SUPPLY PRESSURE MIN. / NORM. / MAX.	3,5 / 4,5 / 6,0 kg/cm ² g
31	SPRING TYPE / ACTION	SINGLE SPRING / SPRING TO CLOSE
32	NUMBER OF CYCLES PER YEAR	+/- 100000
33	VALVE DUTY ON/OFF or CONTROL	HIGH CYCLE DUTY / CONTROL
34	VALVE POSITIONER MODEL	METSO, SMART ND8221/CXT EEx ia IIC T6
35	POSITIONER TYPE	SMART ELECTRO / PNEUMATIC
36	CALIBRATED RANGE	4 - 20 mA
37	AIR SUPPLY PRESSURE / AIR CONNECTION	4,5 kg/cm ² g / NPTF
38	AIR FILTER / REGULATOR	NOT REQUIRED
39	BOOSTER	YES VALTEK
40	VALVE POSITION TRANSMITTER	0-100 % INCORPORATED IN POSITIONER EEx ia IIC T6
41	TRAVEL STOP	STANDARD
42	TUBING & FITTING MATERIAL / SIZE	FOR TUBE AND FITTINGS REFER TO E-H6279-241T
43	VALVE SUPPLIER	METSO
44	VALVE TYPE NO.	8 " CL300 MAPAG AC25 B1JU16/55C ND8221/ CXT1S1Y-I-Instr
45	REMARKS :	
46		
47		

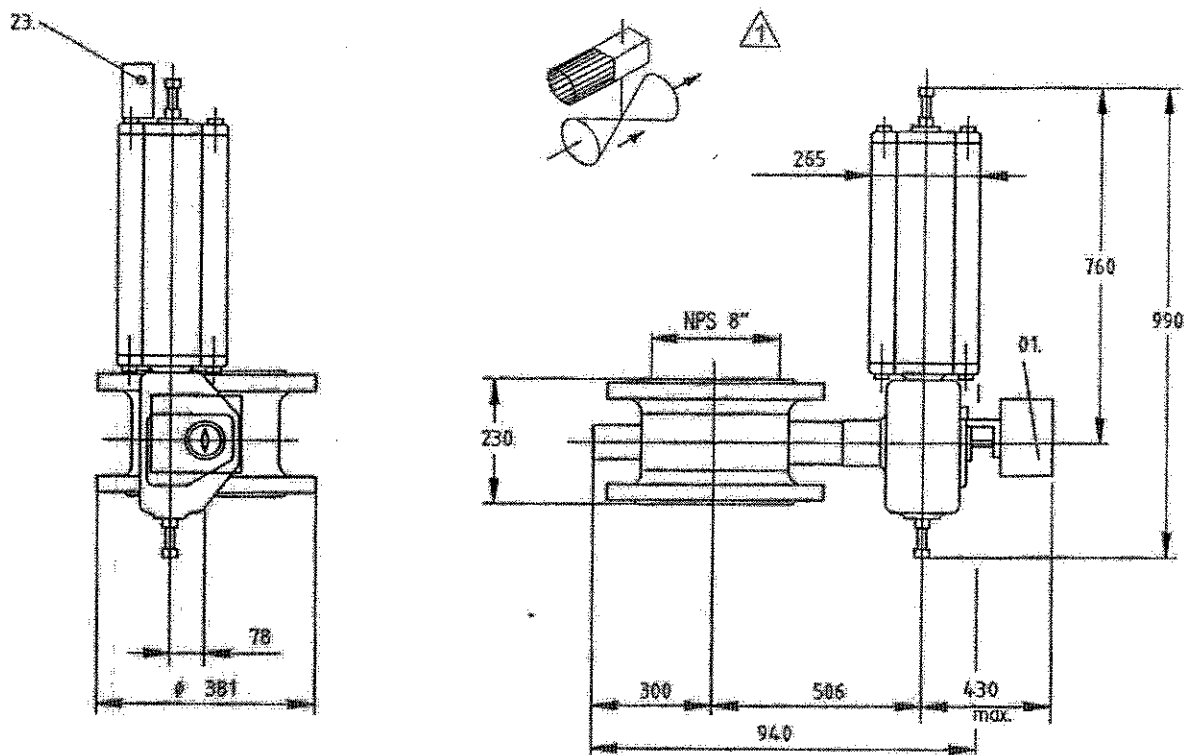
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C.B. HOXMATOV

Dimensions are maximum values (given in millimeters). Weight is approximate value (given in kgs).

MOUNTING POSITION : C-HU



BUTTERFLY VALVE SIZE 200 (08")

RATING ACC. TO ANSI class 300

FLANGE DRILLING ACC. TO ANSI class 300

FACING : ASME B16.5 Large female (Ra 3.2-6.3)

ACTUATOR

TYPE : B1JU16/55C

ACCESSORIES

01. VALVE CONTROLLER/POSITION TRANSMITTER ND8221/CXT1S1Y-I, EExialICT6,
WITH SST GAUGES (HOUSING/INTERNAL) GRADUATED IN Kg/cm² /bar/psi ,
MOUNTED WITH ELBOWS TO HAVE VERTICAL READING SCALE, CABLE ENTRY M20x1.5

23. VOLUME BOOSTER 3/4"NPT VALTEK 76407-999

PIPING AND FITTINGS : CU/PVC mm - Swagelok Brass

TOTAL WEIGHT : 270 kg

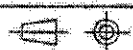
SO NO. : 113519-003

VENDOR / ORDER NO. : METSO AUTOMATION N.V. / OB-03113-P

CUSTOMER / ORDER NO. : UOP N.V. / H6279

TAG. NO. : U-XCV55014, U-XCV55024, U-XCV55034, U-XCV55044, U-XCV55054, U-XCV55064,
U-XCV75074, U-XCV75084, U-XCV75094, U-XCV75104, U-XCV75114, U-XCV75124

1	03.03.27	CK
ORIG	03.02.17	CK



APPROVED : CK



metso Metso Field Systems SA

WITTENHEIM
FRANCE

CERTIFIED DIMENSION DRAWING

CONTROL VALVE

DIM113519-003

8" CL300 MAPAG AC25-Z-B1JU16/55C-ND8221/CXT1S1Y-I-Instr.



UOP N.V. Noorderlaan 147, B-2030 Antwerp, Belgium

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Sheet : 3 of 15

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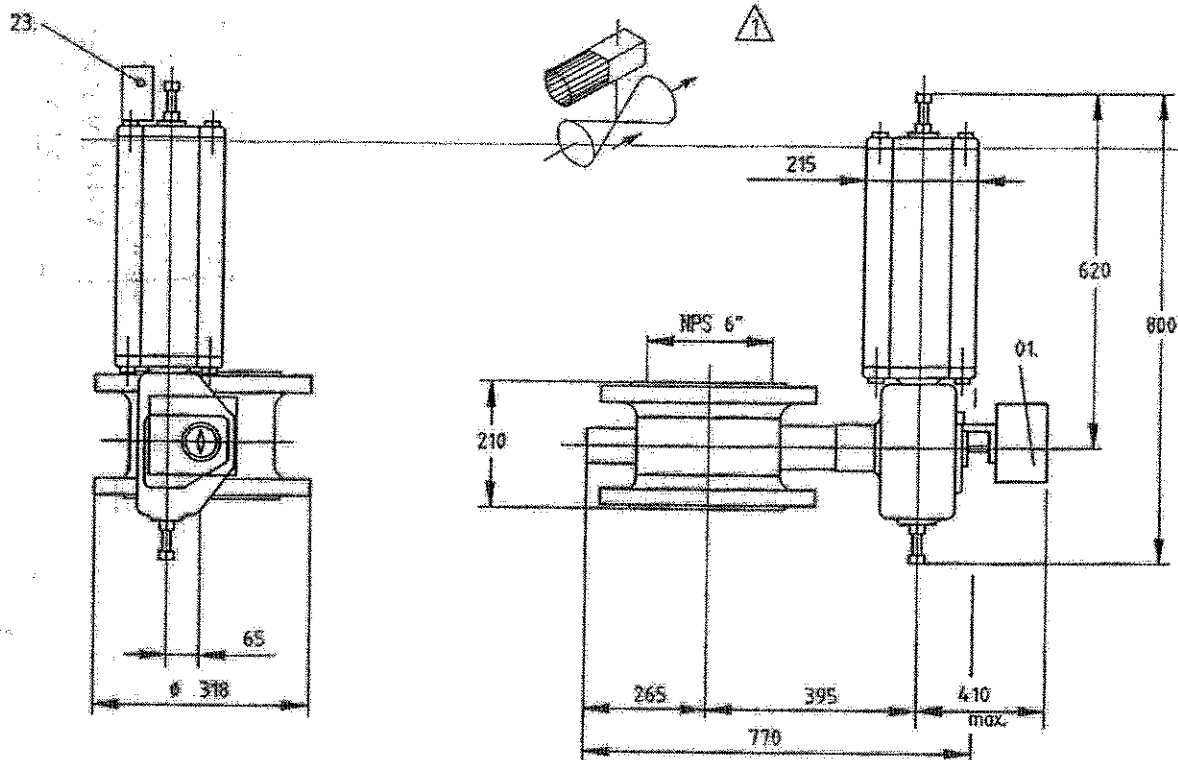
1	TAG NO.	U-XCV55011, 55021, 55031, 55041, 55051, 55061
2		U-XCV55071, 55081, 55091, 55101, 55111, 55121
3	QUANTITY	12
4	SERVICE	FEED / REPRESSURISATION
5	MEDIUM COMPOSITION MOLECULAR WEIGHT	FEED GAS / H ₂ , CO, CH ₄ , CO ₂ , H ₂ O / 12,03
6	AMBIENT TEMPERATURE MIN. / MAX.	- 46 / + 36 °C ACTUATOR POSITIONER LIMIT SW (note 1)
7	MINIMUM DESIGN METAL TEMPERATURE	-34 °C FOR VALVE BODY AND SEALS
8	OPERATING TEMPERATURE MIN. / MAX.	38,0 / 38,0 °C
9	OPERATING FLOW COND. 1 / 2 / 3	4989 / 16630 / 27738 Nm ³ /h
10	PRESSURE UPSTREAM COND. 1 / 2 / 3	19.8 / 19.8 / 19.8 kg/cm ² g
11	DP COND. 1 / 2 / 3	5,02 / 5,02 / 0,053 kg/cm ²
12	DP IN CLOSED POSITION	20,0 kg/cm ²
13	REQUIRED C _v COND. 1 / 2 / 3	15,4 / 51,4 / 730
14	VALVE BODY SIZE RATING STYLE	DN 150 / 300 lbs / DOUBLE FLANGED
15	SELECTED CV CHARACTERISTIC	920 / EQUAL PERCENTAGE
16	BODY MATERIAL	ASTM 352 LCB (-34°C)
17	FLANGE RATING FLANGE FACE FINISH	300 lbs / SMOOTH FINISH 3.2 - 6.3 µmRA
18	FACE TO FACE STD. FACE TO FACE LENGTH	LARGE FEMALE FACE ANSI B16.5a / 210MM
19	VALVE SERVICE STANDARD	PSA HIGH CYCLING DUTY
20	VALVE CYCLIC SERVICE UNI / BI-DIRECTIONAL	UNIDIRECTIONAL
21	VALVE INITIAL CONTROL POSITION	0 - 25%
22	SHAFT POSITION FLOW DOWN / UPSTREAM	FLOW SHAFT DOWNSTREAM
23	BEARINGS AND EXCLUDER RING MATERIAL	FOR HIGH CYCLE BUTTERFLY VALVE
24	SHAFT PACKING TYPE MATERIAL	LIFE LOADED / PTFE
25	DISC PINS SHAFT MATERIAL	ASTM A487 CA 6 NM / MFR STD / ASME 420
26	SEAT TYPE MATERIAL	SOFT SEAT / FKM (VITON)
27	LEAKAGE RATE (CLASS TO B16.104)	CLASS VI BUBBLE TIGHT
28	ACTUATOR TYPE / MOUNTING POSITION	PISTON, SPRING RETURN / C-HU
29	ACTUATOR SIZE / AIR CONNECTION SIZE	B1JU12/55C / 1/2" NPT
30	AIR SUPPLY PRESSURE MIN. / NORM. / MAX.	3,5 / 4,5 / 6,0 kg/cm ² g
31	SPRING TYPE / ACTION	SINGLE SPRING / SPRING TO CLOSE
32	NUMBER OF CYCLES PER YEAR	+ / - 100000
33	VALVE DUTY ON/OFF or CONTROL	HIGH CYCLE DUTY / CONTROL
34	VALVE POSITIONER MODEL	METSO, SMART ND8221/CXT EEx ia IIC T6
35	POSITIONER TYPE	SMART ELECTRO / PNEUMATIC
36	CALIBRATED RANGE	4 - 20 mA
37	AIR SUPPLY PRESSURE / AIR CONNECTION	4,5 kg/cm ² g / NPTF
38	AIR FILTER / REGULATOR	NOT REQUIRED
39	BOOSTER	YES MOORE 61H 1/4" NPT
40	VALVE POSITION TRANSMITTER	0-100 % INCORPORATED IN POSITIONER EEx ia IIC T6
41	TRAVEL STOP	STANDARD
42	TUBING & FITTING MATERIAL / SIZE	FOR TUBE AND FITTINGS REFER TO E-H6279-241T
43	VALVE SUPPLIER	METSO
44	VALVE TYPE NO.	6 " CL300 MAPAG AC25 B1JU12/5C ND8221/ CXT1S1Y-I-Instr
45	REMARKS :	
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Dimensions are maximum values (given in millimeters). Weight is approximate value (given in kgs).

MOUNTING POSITION : C-HU



BUTTERFLY VALVE SIZE 150 (06")

RATING ACC. TO ANSI class 300

FLANGE DRILLING ACC. TO ANSI class 300

FACING : ASME B16.5 Large female (Ra 3.2-6.3)

ACTUATOR

TYPE : B1JU12/55C

ACCESSORIES

01. VALVE CONTROLLER/POSITION TRANSMITTER ND8221/CXT1S1Y-I, EExdIICT6,
WITH SST GAUGES (HOUSING/INTERNAL) GRADUATED IN Kg/cm² /bar/psi ,
MOUNTED WITH ELBOWS TO HAVE VERTICAL READING SCALE, CABLE ENTRY M20x1.5

23. VOLUME BOOSTER 1/4"NPT MOORE 6IH

PIPING AND FITTINGS : CU/PVC mm - Swagelok Brass

TOTAL WEIGHT : 180 kg

SO NO. : 113519-001

VENDOR / ORDER NO. : METSO AUTOMATION N.V. / OB-03113-P

CUSTOMER / ORDER NO. : UOP N.V. / H6279

TAG. NO. : U-XCV55011, U-XCV55021, U-XCV55031, U-XCV55041, U-XCV55051, U-XCV55061,
U-XCV55071, U-XCV55081, U-XCV55091, U-XCV55101, U-XCV55111, U-XCV55121

1	03.03.27	CK
ORIG	03.02.17	CK



APPROVED : CK

[Signature]

Metso Metso Field Systems SA

WITTENHEIM
FRANCE

CERTIFIED DIMENSION DRAWING

CONTROL VALVE

DIM113519-001

6" CL300 MAPAG AC25-Z-B1JU12/55C-ND8221/CXT1S1Y-I-Instr.