



AUSTRALIAN PIPELINE VALVE®
 Adelaide, South Australia
 www.australianpipelinevalve.com.au
 admin@australianpipelinevalve.com.au

Material Test Certificate

EN 10204 3.1:2004

Traceability: Shot Mill/Pressure

CUSTOMER: GLOBAL SUPPLY LINE PTY LTD PO NO: 0016625PG PAGE NO: 1 OF 1 DATE: 24th January 2018

PRODUCT INFORMATION

PRODUCT: GATE VALVE CONFORMS: NACE MR 0175/MR 0103 ISO 15848
 DESIGN: API600, ASME B16.34 CONFORMS: ASME B16.34
 SPECIAL TEST: NOTES:

PRESSURE TEST AND INSPECTION

TEST ACCORDING TO API598/ISO 5208
 SHELL TEST (HYDROSTATIC) PRESSURE: 3.10 MPa DURATION: 120 SECONDS RESULTS: ACCEPTED DIMENSIONAL INSPECTION: OK
 HP CLOSURE TEST (HYDROSTATIC) PRESSURE: 2.24 MPa DURATION: 120 SECONDS RESULTS: ACCEPTED VISUAL INSPECTION: OK
 LP CLOSURE TEST (AIR) PRESSURE: 0.55 MPa DURATION: 120 SECONDS RESULTS: ACCEPTED OPERATIONAL INSPECTION: OK
 BACK SEAT TEST (HYDROSTATIC) PRESSURE: 2.24 MPa DURATION: 120 SECONDS RESULTS: ACCEPTED

DESCRIPTION/MATERIAL

ITEM	DESCRIPTION	QTY (PCS)	CLASS (PN)	INCH (DN)	MM (DN)	SEAT	DISC	BODY	DISC	STEM	SEAT	BOLTS
100	GATE VALVE, FB, BBOSY, HWOP Model No. AP15047XUNF, Graphite Packing	40	150	6"	150	510498/150	ASTM A216 WCB	ASTM A216 WCB	ASTM A216 WCB + ST#6	ASTM A182 F6A	ASTM A105N + ST#6	ASTM A193 B7M
101	GATE VALVE, FB, BBOSY, HWOP Model No. AP20047XUNF, Graphite Packing	30	150	8"	200	510498/150	ASTM A216 WCB	ASTM A216 WCB	ASTM A216 WCB + ST#6	ASTM A182 F6A	ASTM A105N+ ST#6	ASTM A193 B7M
102	GATE VALVE, FB, BBOSY, HWOP Model No. AP25047XUNF, Graphite Packing	20	150	8"	200	510498/150	ASTM A216 WCB	ASTM A216 WCB	ASTM A216 WCB + ST#6	ASTM A182 F6A	ASTM A105N + ST#6	ASTM A193 B7M

DESCRIPTION

CHEMICAL COMPOSITION

MECHANICAL PROPERTIES

PART NAME	HEAT NO.	MATERIAL	Si	Mn	C	Mo	Ni	Cu	V	Other	Other	CE	T.S MPa	Y.S MPa	E.L (%)	RA Ψ (%)	Hardn HB	Impact Test Temp. AKV(J)	
BODY	7019	ASTM A216 WCB	0.432	0.628	0.02	0.046	0.046	0.001	0.053	0.001	-	-	0.35	523	271	27.8	38.6	164	-
BONNET	7959	ASTM A216 WCB	0.39	0.39	0.021	0.21	0.042	0.03	0.017	0.003	-	-	0.33	502	345	31	51	154	-
DISC	7959	ASTM A216 WCB	0.39	0.39	0.021	0.21	0.042	0.03	0.017	0.003	-	-	0.33	502	345	31	51	154	-
STEM	Y16800	ASTM A182 F6a	0.02	0.02	0.021	0.006	11.87	-	0.216	-	-	-	-	678	468	22	57	218	-
SEAT	20	ASTM A105N	0.22	0.93	0.019	0.005	0.02	0.001	0.01	0.01	0.001	-	-	523	320	36	52	143	-

HEAT TREATMENT: Normalised, QUENCH & TEMPER 900°Cx4H Air cooled. **A182 F6a** QUENCH 970°Cx3H Water cooled, TEMPER 690°Cx3H Air cooled. **A182 F316** SOLID SOLUTION 1040°Cx2H Water cooled, TEMPER 920°Cx2H and QUENCH & TEMPER (690°Cx2H Air cooled) as per ASTM A961.
 3.0mm Corrosion allowed for investment casting.

WE HEREBY CERTIFY, THAT THE MATERIAL AND THE PRODUCT DESCRIBED ABOVE HAS BEEN TESTED AND COMPLIED WITH THE TERMS OF THE ORDER

SIGNED:

CONFIDENTIAL

QA MANAGER:

CONFIDENTIAL



GENERAL SERVICE APPLICATION	Carbon steel surfaces
SCOPE	Standard level protection against weathering, fresh & salt water, chemical atmosphere, petroleum products, alcohols and solvents
TEMPERATURE RESISTANCE	-46°C to 200°C
PRELIMINARY SURFACE PREPARATION	Blasting to Grade Sa 2.1/2. Cleaning with degreaser and washing with high pressure water at 100°C, and then drying in open air (over 8°C) 24 hours between coats
PROTECTION OF UNPAINTED PARTS	Protection with suitable plastic plugging and with sealing tape of: internal bore, flange sealing, and welding ends
FINAL SURFACE PREPARATION	Final clean all surfaces free of impurities such as dust etc. Machining to smooth finish (6,3µm Ra) before applying
PAINT APPLICATION	Spraying with air, dry, between coats. Drying time per manufacturer specifications. Painting performed at 5 ~ 30°C at 50 ~ 80% humidity

NO. OF COATS	TYPE OF PROCESS	PAINT TYPE	FILM THICKNESS
1st & 2nd Coat Body	Anti-rust self priming Zinc phosphate	Epoxy Resin Epoxide	40~50 µm total
3rd Coat Body	RAL9006 (Aluminium)	Acrylic Aluminium Resin	80 µm total
TOTAL DRY FILM THICKNESS (BODY):			120~130 µm

NOTE: Application temperature, drying times and other physical data of painting as per manufacturer specifications.

Rev.	Date	Remarks	Issued by:
2	August 13th 2018	Third issue	GP



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API607 5th, 6th & 7th
 Edition Firesafe Certified

ISO 15848-1
 Fugitive Emission Certified

Material Test Certificate

EN 10204 3.1:2004

Traceability: Shop Mill/Pressure

CUSTOMER: GLOBAL SUPPLY LINE PTY LTD PO NO: 503539PG PAGE NO: 1 OF 1 DATE: 24th January 2018

PRODUCT INFORMATION

PRODUCT: BALL VALVE – TRUNNION MOUNT CONFORMS: ANTI STATIC BS5351/ ISO17243
 DESIGN: API6D/ ISO 143138 CONFORMS: FIRE TEST 10497, API607 5th Edition
 SPECIAL TEST: -50°C CHARPIES IMPACT TEST, CT, DP CONFORMS: ASME B31.3 PRESSURE/ TEMP. CODE R0175

PRESSURE TEST AND INSPECTION

TEST ACCORDING TO API6D/ ISO 5208 RATE A
 SHELL TEST (HYDROSTATIC) PRESSURE: 15.3 MPa DURATION: 5 MINUTES RESULTS: ACCEPTED DIMENSIONAL INSPECTION: OK
 HP CLOSURE TEST (HYDROSTATIC) PRESSURE: 11.2 MPa DURATION: 5 MINUTES RESULTS: ACCEPTED VISUAL INSPECTION: OK
 LP CLOSURE TEST (AIR) PRESSURE: 0.6 MPa DURATION: 5 MINUTES RESULTS: ACCEPTED OPERATIONAL INSPECTION: OK
 BACK SEAT TEST (HYDROSTATIC) PRESSURE: MPa DURATION: SECONDS RESULTS:

DESCRIPTION/MATERIAL

ITEM	DESCRIPTION	QTY (PCS)	CLASS (PN)	FINISH	MIN. WALL THICKNESS (MM)	STANDARD	END CONNECTION	BODY	BALL	STEM	SEAT	BOLTS
32	TRUNNION BALL VALVE, RF, FB, 3P, F51, DBB, LOP	40	600	100	10.0	ASME B31.3	RF	ASTM A182 F51	ASTM A182 F51	ASTM A182 F51	CPTFE	ASTM A193 B8M-2
33	TRUNNION BALL VALVE, RF, FB, 3P, F51, DBB, LOP	30	600	100	10.0	ASME B31.3	RF	ASTM A182 F51	ASTM A182 F51	ASTM A182 F51	CPTFE	ASTM A193 B8M-2
34	TRUNNION BALL VALVE, RF, FB, 3P, F51, DBB, LOP	600	600	100	10.0	ASME B31.3	RF	ASTM A182 F51	ASTM A182 F51	ASTM A182 F51	CPTFE	ASTM A193 B8M-2

DESCRIPTION

PART NAME	HEAT NO.	MATERIAL	CHEMICAL ANALYSIS (MPC)										MECHANICAL PROPERTIES							
			C	Si	Mn	P	S	Fe	Mo	Ni	Cu	V	N	Other	CE	T.S MPa	Y.S MPa	E.L (%)	RAΨ (%)	Hardn HB
BODY	1232	ASTM A182 F51	0.019	0.565	0.014	0.013	22.121	3.034	5.208	-	-	0.168	-	-	630	475	30	56	168	-50°C 59 / 63 / 54
ENDS	1232	ASTM A182 F51	0.019	0.565	0.014	0.013	22.121	3.034	5.208	-	-	0.168	-	-	630	475	30	546	168	-50°C 59 / 63 / 54
BALL	2455	ASTM A182 F51	0.023	0.471	0.016	0.015	22.11	3.076	5.201	-	-	0.171	-	-	640	476	33	55	174	-
STEM	3571	ASTM A182 F51	0.020	0.505	0.014	0.014	22.10	2.917	5.106	-	-	0.172	-	-	635	460	30	52	174	-
TRUNNION	D501	ASTM A182 F51	0.020	0.652	0.015	0.016	22.09	2.832	5.095	-	-	0.168	-	-	633	484	29	50	171	-
SEAT	H890	ASTM A182 F51	0.020	0.012	0.010	0.010	22.096	3.075	5.423	-	-	0.169	-	-	640	495	32	53	169	-
RETAINER																				

* 54J AVERAGE MINIMUM

HEAT TREATMENT: QUENCHED 60°CX1H V... cooled.
 OTHER: - Cont... FACE ME... 3.0mm Co... allowance. Investment cast.

WE HEREBY CERTIFY THAT THE MATERIAL AND PRODUCT DESCRIBED ABOVE HAS BEEN TESTED AND COMPLIED WITH THE TERMS OF THE ORDER

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QA MANAGER: **CONFIDENTIAL**



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Liquid Penetrant Examination

CUSTOMER: GLOBAL SUPPLY LINE PTY LTD

PO NO: 503539BT

PAGE NO: 2 OF 4

PRODUCT INFORMATION

DESCRIPTION: BALL VALVE 3" 600LB RF ITEM 33

MATERIAL: F51

HEAT NUMBER: 1232

PARTS: BODY, PLUG
NUMBER OF PARTS: 2

SURFACE CONDITIONS

TEMPERATURE: 21°C

CASTING
MACHINED OVERLAY
AREA WELDED
100%
PRIOR CLEANING

PENETRANT APPLICATION

PENETRATION TIME: 10 MINUTES
INTERPRETATION TIME: 10 MINUTES
MARK: HP-CHECK

SPRAY
BRUSH
DIP

MARKING APPLICATION

MARK: HP-ST DYE-CHECK

SPRAY

EXAMINATION TYPE

COLOURED
FLORESCENT
DRYING VERIFICATION

REWORK

WORK
EMERGENCY
SPECIAL

ILLUMINATION

NATURAL
ARTIFICIAL

OBSERVATIONS: The surface condition of the area inspected conforms to the Quality Level Appendix III of ASME/ANSI B16.34.

RESULT: OK

SIGNED:

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QA MANAGER:

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Corrosion Test

CUSTOMER: GLOBAL SUPPLY LINE PTY LTD

PO NO: 503539BT

PAGE NO: 3 OF 4

PRODUCT INFORMATION

NAME OF SAMPLE: TEST BLOCK

MATERIAL: F51

STATE: SOLID SOLUTION TREATED

TEST PERFORMED: CORROSION TEST

TEST STANDARD: ASTM A

DESCRIPTION

1. THE TEST BLOCK BEEN SENSITISING TREATED, AT 675°C, FOR 1 HOUR.
2. GRIND, WASH AND DRY, THEN IMMERSE IN BOILING COPPER SULPHATE SOLUTION FOR 16 HOURS. REMOVE TEST BLOCK, CLEAN AND DRY.
3. PIN DIAMETER FOR THE TEST IS d=a. BENDING ANGLE IS 180°.

DESCRIPTION

BODY & END CAPS – 600LB-3"

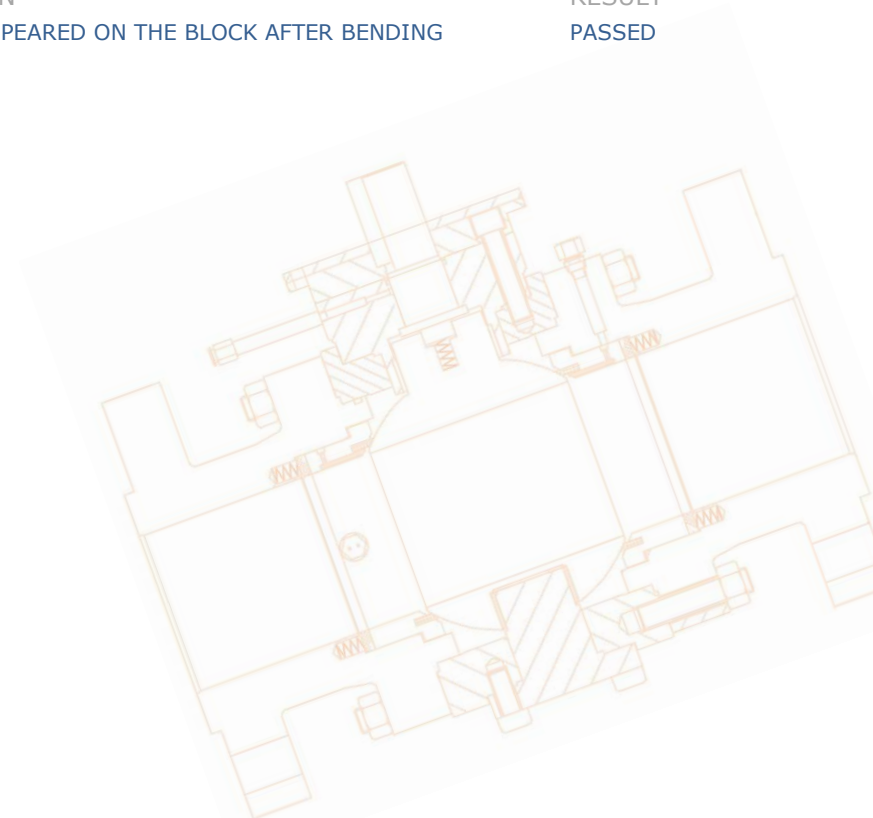
NO CORROSION

NO CORROSION APPEARED ON THE BLOCK AFTER BENDING

RESULT

PASSED

EXAMPLE



FINAL INSPECTION REPORT

Ball Valves – Trunnion Mounted - API 6D

Date :
 Cert No. :
 Order No. :
 Page No. :

I. ASSEMBLY

- 1) Check proper alignment of pipe flange holes or weld ends/ schedule to ANSI B16 or ANSI B16.25.
- 2) For flange connections check finish & that both faces are clean & unmarked.
- 3) Check the overall length of the valve against the appropriate specification.
- 4) Check that all stop devices have been set correctly.

II. FITTINGS

- 1) Check for studs for correct height & appearance.
- 2) Check these fittings, drilled for tightness.

III. GENERAL APPEARANCE

- 1) Check that the paint finish is free from defects & cover external markings.
- 2) Check the nameplate is complete & legibly fastened.
- 3) Check the labels and tags are correct & securely attached.
- 4) For blasting finish 100% visual (MSS SP-55).
- 5) 100% Dimensional inspection API6D/ B16.34
- 6) Marking/ tagging to MSS SP-25.

IV. STANDARD

- 1) Testing to: API6D (ISO 5208-A)
- 2) Dimensions: ANSI B16.10
- 3) Ends to: ANSI B16.5
- 4) Manufactured to: API6D
- 5) Firesafe to: API607 5th & 6th Edition
- API6FA 3rd Edition
- To NACE MR-0175 (where shown)

Inspector's Signature: *G Peric*



API607 5th & API6FA 3rd
Edition Firesafe Certified

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Material Test Certificate

EN 10204 3.1:2004

Traceability: Shop Mill/Pressure

CUSTOMER: GLOBAL SUPPLY LINE PTY LTD PO NO: 0016625PG PAGE NO: 1 OF 1 DATE: 24th January 2018

PRODUCT INFORMATION

PRODUCT: PLUG VALVE CONFORMS TO: ANTI STATIC BS5959:2010
DESIGN: API6D/ ISO 143138 CONFORMS TO: FIRESAFE ISO 10490:2014 API6FA
SPECIAL TEST: ≥.08MM MINIMUM NITRIDING, ENP SURFACING HARDNESS PLUG/ STEM 900VHN (67RC) FREE OF POROSITY CONFORMS TO: PRESS/TEMP. ASME B31.3, NACE MR-01-75

PRESSURE TEST AND INSPECTION

TEST ACCORDING TO API6D/ ISO 5208 RATE A

SHELL TEST (HYDROSTATIC) PRESSURE: 3.10 MPa DURATION: 5 MINUTES RESULTS: ACCEPTED DIMENSIONAL INSPECTION: OK
 HP CLOSURE TEST (HYDROSTATIC) PRESSURE: 2.24 MPa DURATION: 5 MINUTES RESULTS: ACCEPTED VISUAL INSPECTION: OK
 LP CLOSURE TEST (AIR) PRESSURE: 0.55 MPa DURATION: 5 MINUTES RESULTS: ACCEPTED OPERATIONAL INSPECTION: OK
 BACK SEAT TEST (HYDROSTATIC) PRESSURE: MPa DURATION: SECONDS RESULTS: -

DESCRIPTION/MATERIAL

ITEM	DESCRIPTION	QTY (PCS)	CLASS (PN)	INCH (DN)	MM (DN)	MATERIAL	BONNET	PLUG	STEM	SEAT	BOLTS
100	PRESSURE BALANCED PLUG VALVE, RF, WCB, LOP Model No. SSCR-RHG63WFBN, Firesafe, VITON AED O-ring, NACE MR-01-75	40	150	2"	50	ASTM A216 WCB	ASTM A216 WCB	ASTM A216 WCB +NITRIDING ≥.08mm	ASTM A182 F6A +.076mm ENP	LUBRICATED	ASTM A193 B7+ZP
101	PRESSURE BALANCED PLUG VALVE, RF, WCB, LOP Model No. SSCR-RHG63WFBN, Firesafe, VITON AED O-ring, NACE MR-01-75	30	150	3"	76	ASTM A216 WCB	ASTM A216 WCB	ASTM A216 WCB +NITRIDING ≥.08mm	ASTM A182 F6A +.076mm ENP	LUBRICATED	ASTM A193 B7+ZP
102	PRESSURE BALANCED PLUG VALVE, RF, WCB, LOP Model No. SSCR-RHG63WFBN, Firesafe, VITON AED O-ring, NACE MR-01-75	20	150	4"	100	ASTM A216 WCB	ASTM A216 WCB	ASTM A216 WCB +NITRIDING ≥.08mm	ASTM A182 F6A +.076mm ENP	LUBRICATED	ASTM A193 B7+ZP

DESCRIPTION

CHEMICAL COMPOSITION

MECHANICAL PROPERTIES

PART NAME	HEAT NO.	MATERIAL	Si	Mn	P	S	Fe	Ni	Cu	V	Other	Other	CE	T.S MPa	Y.S MPa	E.L (%)	RA Ψ (%)	Hardn HB	Impact Test Temp. AKV(J)
BODY	B00008	ASTM A216 WCB	0.37	0.70	0.025	0.005	0.010	0.005	0.02	0.01	-	-	0.36	531	306	32	49	159	-
BONNET	B00008	ASTM A216 WCB	0.37	0.70	0.022	0.018	0.010	0.005	0.02	0.01	-	-	0.36	531	306	32	49	159	-
STEM	V5108	ASTM A182 F6A	0.660	0.830	0.019	12.5	-	0.160	-	-	-	-	-	640	530	42	68	203	-
PLUG	B29655	ASTM A216 WCB	0.37	0.70	0.013	0.090	0.020	0.026	0.029	0.006	-	-	-	530	320	29	55	156	-
BOLTS	510452	ASTM A193 B7+ZP	0.013	0.004	0.94	0.017	-	-	-	-	-	-	-	932	836	25	62	286	-
NUT	OC027	ASTM A194 2HM +ZP	0.014	0.006	-	-	-	-	-	-	-	-	-	-	-	-	-	195	-

HEAT TREATMENT: A16 WCB NORMALISED, QUENCHED & TEMPER 920°x4H Air cooled. A182 F6A QUENCHED 970°Cx3H Water Cooled, TEMPERED 690°Cx3H Water Cooled.
OTHER: - 3.0mm surface finish. Investment casting.

WE HEREBY CERTIFY THAT THE MATERIAL AND THE PRODUCT DESCRIBED ABOVE HAS BEEN TESTED AND COMPLIED WITH THE TERMS OF THE ORDER

SIGNED:

CONFIDENTIAL

QA MANAGER:

CONFIDENTIAL

FINAL INSPECTION REPORT

Lubricated Plug Valves

Date : 00-00-0000
 Cert No. : 000000
 Order No. : 00000000
 Page No. : 1 of 2

I. ASSEMBLY

- 1) Check proper alignment of pipe flange holes or weld ends/ schedule to ANSI B16 or ANSI B16.25.
- 2) For flange or weld connections check finish & that both faces are clean & unmarked.
- 3) Check the overall length of the valve against the appropriate specification.
- 4) Check that all stops have been set correctly.

II. FITTINGS

- 1) Check body & bonnet flanges, height & appearance.
- 2) Check gasket fittings, plug tightness & appearance (where applicable).
- 3) For plug valves check that the plug bolt have been provided, never operated, covered.

III. GENERAL APPEARANCE

- 1) Check that the paint is free from defects & that the metal surface is clean.
- 2) Check that the valve is correct, complete & sealed.
- 3) Check that all labels & tags are legible & properly fastened.
- 4) Check the finish (MSS SP-55).

IV. STANDARD

- Testing to: API6D/ISO 14313 (ISO 5208 Leakage Rate A)
- 2) Dimensions: ANSI B16.1
- 3) Ends to: ANSI B16.5/B16.25/B1.20.1
- 4) manufactured to: API6D
- 5) Firesafe to: API607 5th Edition
 API6FA 3rd Edition

Inspector's Signature: *GPeric*



Firesafe Certified
 API 607 5th Edition,
 API 6FA 3rd Edition

ELECTROLESS NICKEL PLATING CONFORMITY DECLARATION

Customer:	Global Supply Line Pty Ltd	Reference:	
Order Number:	XXXXXXXX	Date:	XX-XX-XXXX
Item Numbers:	XXX		

All ENP surfaces (Stem) hardened to thickness 0.75mm (.003”) minimum 746 HV hardness.

WE HEREBY CERTIFY THAT THE MATERIAL SUPPLIED IS CONFORMANT WITH THE APPLICABLE ORDER.

STANDARD METHODS OF NICKEL PLATING INSPECTION

- VISUAL INSPECTION ON 100% OF PLATED SURFACE
- THICKNESS VERIFICATION;
- ADHESION INSPECTION WITH IMPACT TEST ON PLATED COMPONENTS;
- REFERENCE STANDARD ASTM B733.

NOTES

Covers: - Stem

INSPECTOR

ISSUED BY

GP



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Material Test Certificate

EN 10204 3.1:2004

Traceability: Shot Mill/Pressure

CUSTOMER: GLOBAL SUPPLY LINE PTY LTD PO NO: 0016628PG PAGE NO: 1 OF 1 DATE: 24th January 2018

PRODUCT INFORMATION

PRODUCT: GATE VALVE CONFORMS: AS4087 & 1092-2 PN16/AS2001
 DESIGN: EN 558, BSEN1171/BS5163 & AS 2638.1 CONFORMS: DRILLING 129 TABLE E
 SPECIAL TEST: OTHER: FUSION WELDED EPOXY PAINTED

PRESSURE TEST AND INSPECTION

TEST ACCORDING TO EN12266-1 PN16 & ISO 5208 & AS2001 CLASS 16
 SHELL TEST (HYDROSTATIC) PRESSURE: 2.40 MPa DURATION: 60 SECONDS RESULTS: ACCEPTED DIMENSIONAL INSPECTION: OK
 HP CLOSURE TEST (HYDROSTATIC) PRESSURE: 1.76 MPa DURATION: 60 SECONDS RESULTS: ACCEPTED VISUAL INSPECTION: OK
 LP CLOSURE TEST (AIR) PRESSURE: MPa DURATION: SECONDS RESULTS: OPERATIONAL INSPECTION: OK
 BACK SEAT TEST (HYDROSTATIC) PRESSURE: MPa DURATION: SECONDS RESULTS:

DESCRIPTION/MATERIAL

ITEM	DESCRIPTION	QTY (PCS)	CLASS (PN)	INCH (DN)	MM (DN)	SEAT	BOLTS	DISC	STEM	SEAT	BOLTS
100	GATE VALVE Model No. SL601	40	150	4"	100	511147/130	A3+ZP	ENGJL-250 (GG25)	ASTM A276-316	BRONZE	A3+ZP
101	GATE VALVE Model No. SL601	30	150	6"	150	511147/130	A3+ZP	ENGJL-250 (GG25)	ASTM A276-316	BRONZE	A3+ZP
102	GATE VALVE Model No. SL601	20	150	4"	100	511147/130	A3+ZP	ENGJL-250 (GG25)	ASTM A276-316	BRONZE	A3+ZP

DESCRIPTION

PART NAME	HEAT NO.	MATERIAL	CHEMICAL COMPOSITION										MECHANICAL PROPERTIES								
			Si	Mn	C	Mo	Ni	Cu	V	Other	Other	CE	T.S MPa	Y.S MPa	E.L (%)	RA (%)	Hardn HB	Impact Test Temp. AKV(J)			
BODY & BONNET	2026	CAST IRON GG25	1.52	0.99	0.103	-	-	-	-	-	-	-	-	-	-	258	178	0.85	-	-	-
GATE	6439	CAST IRON GG25	1.49	0.97	0.100	-	-	-	-	-	-	-	-	-	-	260	176	0.82	-	-	-
STEM	01710-5	ASTM A193	0.05	0.94	0.012	16.24	2.45	10.25	-	-	-	-	-	-	-	525	231	34	55	-	-

HEAT TREATMENT: 76 F31 TO SOLUTION 1050°Cx2H Water Cooled. A351 CF8M Normalised, QUENCH & TEMPER 1050°Cx1.5H Water cooled.

OTHER: - 2.0mm max. Investment

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QA MANAGER:

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Material Test Certificate

ASME B16.34 EN 10204 3.1:2004

Traceability: Shop Mill/Pressure

CUSTOMER: GLOBAL SUPPLY LINE PTY LTD PO NO: 510496BT PAGE NO: 1 OF 1 DATE: 24th January 2018

PRODUCT INFORMATION

PRODUCT: GATE VALVE CONFORMS: NACE MR0175/MR0103 ISO 15848
 DESIGN: API600/ASME B16.34/AS2129/AS4087 PN35 CONFORMS: ANSI CLASS FLANGED & DISC ASME B16.34 TABLE H & AS4087
 SPECIAL TEST:

PRESSURE TEST AND INSPECTION

TEST ACCORDING TO ISO 5208

SHELL TEST (HYDROSTATIC) PRESSURE: 7.75 MPa DURATION: 120 SECONDS RESULTS: ACCEPTED DIMENSIONAL INSPECTION: OK
 HP CLOSURE TEST (HYDROSTATIC) PRESSURE: 5.61 MPa DURATION: 120 SECONDS RESULTS: ACCEPTED VISUAL INSPECTION: OK
 LP CLOSURE TEST (AIR) PRESSURE: 0.55 MPa DURATION: 120 SECONDS RESULTS: ACCEPTED OPERATIONAL INSPECTION: OK
 BACK SEAT TEST (HYDROSTATIC) PRESSURE: 5.61 MPa DURATION: 120 SECONDS RESULTS: ACCEPTED

DESCRIPTION/MATERIAL

ITEM	DESCRIPTION	QTY (PCS)	CLASS (PN)	FINISH (D)	NO. OF DISCS	BODY	DISC	STEM	SEAT	BOLTS
100	PARALLEL SLIDE GATE VALVE, FF, FB, BBOSY, HWOP, AST-H Model No. AP-316SUS, INCONEL X750 SPRING	40	300	100	104 ~ 140	FF A216 WCB	ASTM A105 + ST#6	ASTM A182 F6A	ASTM A105N + ST#6	A193 B7
101	PARALLEL SLIDE GATE VALVE, FF, FB, BBOSY, HWOP, AST-H Model No. AP-316SUS, INCONEL X750 SPRING	30	300	100	96/101 ~ 71	FF A216 WCB	ASTM A105 + ST#6	ASTM A182 F6A	ASTM A105N + ST#6	A193 B7
102	PARALLEL SLIDE GATE VALVE, FF, FB, BBOSY, HWOP, AST-H Model No. AP-316SUS, INCONEL X750 SPRING	300	300	200	96/167/72 ~ 92	FF A216 WCB	ASTM A105 + ST#6	ASTM A182 F6A	ASTM A105N + ST#6	A193 B7

DESCRIPTION

CHEMICAL COMPOSITION

MECHANICAL PROPERTIES

PART NAME	HEAT NO.	MATERIAL	Si	Mn	C	Mo	Ni	Cu	V	Other	Other	CE	T.S MPa	Y.S MPa	E.L (%)	RA (%)	Hardn HB	Impact Test Temp. AKV(J)	
BODY	A9202	ASTM A216 WCB	0.41	0.92	0.012	0.087	0.012	0.033	0.023	0.003	-	-	0.39	524	300	27	52	152	-
BONNET	A9204	ASTM A216 WCB	0.40	1.00	0.013	0.107	0.024	0.050	0.024	0.003	-	-	0.40	511	297	28	54	154	-
DISC	16-102332	ASTM A105	0.40	0.91	0.004	0.030	0.010	0.010	0.010	0.04	-	-	0.379	512	282	29	46	172	-
STEM	Y16800928	ASTM A182 F6a	0.40	0.91	0.021	0.006	11.87	-	0.216	-	-	-	678	468	22	57	218	-	
SEAT	204844	ASTM A105N+ST#6	0.40	0.93	0.019	0.005	0.02	0.001	0.01	0.01	0.001	-	523	320	36	52	143	-	

HEAT TREATMENT: **A16 WCB** NORMALISE 920°Cx2H Water cooled and QUENCH & TEMPER 900°Cx4H Air cooled. **A182 F6a** QUENCH 970°Cx3H Water cooled, TEMPER 690°Cx3H Air cooled. **A182 F316** SOLID SOLUTION 1040°Cx2H Water cooled and QUENCH & TEMPER (690°Cx2H Air cooled) as per ASTM A961.
 OTHER: - 3.0mm wall thickness. Invalve time least.

WE HEREBY CERTIFY THAT THE MATERIAL AND THE PRODUCT DESCRIBED ABOVE HAS BEEN TESTED AND COMPLIED WITH THE TERMS OF THE ORDER

SIGNED: **CONFIDENTIAL**

QA MANAGER: **CONFIDENTIAL**



Material Test Certificate

To EN 10204 3.1:2004
Traceability Sheets/Mill/Pressure

CUSTOMER: GLOBAL SUPPLY LINE PTY LTD

PO NO: 0016625PG

PAGE NO: 1 OF 1

DATE: 24th January 2018**PRODUCT INFORMATION**PRODUCT: CHECK VALVE WAFER STYLE
DESIGN: API594
SPECIAL TEST:CONFORMS: NACE MR0175/MR0103 ISO 15156
CONFORMS: PRESSURE/ TEMPERATURE ASME B16.34
OTHER: ASME B16.10, B16.5**PRESSURE TEST AND INSPECTION**

TEST ACCORDING TO API598

<input checked="" type="checkbox"/> SHELL TEST (HYDROSTATIC)	PRESSURE: 3.10 MPa	DURATION: 120 SECONDS	RESULTS: ACCEPTED	DIMENSIONAL INSPECTION: <input checked="" type="checkbox"/> OK
<input checked="" type="checkbox"/> HP CLOSURE TEST (HYDROSTATIC)	PRESSURE: 2.24 MPa	DURATION: 120 SECONDS	RESULTS: ACCEPTED	VISUAL INSPECTION: <input checked="" type="checkbox"/> OK
<input type="checkbox"/> LP CLOSURE TEST (AIR)	PRESSURE: MPa	DURATION: SECONDS	RESULTS:	OPERATIONAL INSPECTION: <input checked="" type="checkbox"/> OK
<input type="checkbox"/> BACK SEAT TEST (HYDROSTATIC)	PRESSURE: MPa	DURATION: SECONDS	RESULTS:	

DESCRIPTION/MATERIAL

ITEM	DESCRIPTION	QTY (PCS)	CLASS (PN)	INCH (DN)	MM (DN)	SERIAL NO.	ENDS	BODY	DISC	HINGE PIN	SEAT	SPRING
100	WAFER CHECK VALVE, RF, Dual Flap Model No. 100ASG15SPF-N94-42B	40	150	4"	100	511147/158/1 ~ 40	RF LUGGED	ASTM A216 WCB	ASTM A351 CF8M	ASTM A276-316	ST#6	X750
101	WAFER CHECK VALVE, RF, Dual Flap Model No. 150ASG15SPF-N94-42B	30	150	6"	150	511147/158/41 ~ 71	RF LUGGED	ASTM A216 WCB	ASTM A351 CF8M	ASTM A276-316	ST#6	X750
102	WAFER CHECK VALVE, RF, Dual Flap Model No. 200ASG15SPF-N94-42B	20	150	8"	200	511147/158/72 ~ 92	RF LUGGED	ASTM A216 WCB	ASTM A351 CF8M	ASTM A276-316	ST#6	X750

DESCRIPTION**CHEMICAL COMPOSITION %****MECHANICAL PROPERTIES**

PART NAME	HEAT NO.	MATERIAL	C	Si	Mn	P	S	Cr	Mo	Ni	Cu	V	Other	Other	CE	T.S MPa	Y.S MPa	E.L (%)	RA Ψ (%)	Hardn HB	Impact Test Temp. AKV(J)
BODY	2026	ASTM A216 WCB	0.193	0.432	0.847	0.038	0.021	0.067	0.009	0.035	0.014	0.006	-	-	0.35	565	291	25	41	158	
DISC	6439	ASTM A351 CF8M	0.047	0.78	1.160	0.036	0.008	18.51	2.082	9.13	-	-	-	-	-	580	350	47	-	169	
HINGE PIN	01710-5	ASTM A276-316	0.054	0.45	0.94	0.016	0.012	16.24	2.45	10.25	-	-	-	-	-	525	231	34	55	156	

HEAT TREATMENT: - **A216 WCB** Normalised, QUENCH & TEMPER 900°x4H Air cooled. **A276 F316** SOLID SOLUTION 1040°x2H Water Cooled. **A351 CF8M** Normalised, QUENCH & TEMPER 1050°x1.5H Water cooled.

OTHER: - 2.0mm Corrosion allowance. Investment cast.

WE HEREBY CERTIFY, THAT THE MATERIAL AND THE PRODUCT DESCRIBED ABOVE HAS BEEN TESTED AND COMPLIED WITH THE TERMS OF THE ORDER

SIGNED:



QA MANAGER:





API607 5th & 6th Ed. ISO 10497
Firesafe Certified

API622
Endurance Test Certified

Material Test Certificate

EN 10204 3.1:2004

Traceability: Shot Mill/Pressure

CUSTOMER: GLOBAL SUPPLY LINE PTY LTD

PO NO: 0016625PG

PAGE NO: 1 OF 1

DATE: 24th January 2018

PRODUCT INFORMATION

PRODUCT: BUTTERFLY VALVE
DESIGN: API609-B, ANSI B16.34
SPECIAL TEST:

CONFORMS: NACE MR0175/MR0103
CONFORMS: FIRE TEST 607/ ISO 10497
OTHER: ASME B16.5

PRESSURE TEST AND INSPECTION

TEST TYPE	TEST ACCORDING TO	TEST RESULTS	INSPECTION RESULTS
<input checked="" type="checkbox"/> SHELL TEST (HYDROSTATIC)	API598 ISO 5208 RATE A	PRESSURE: 15.3 MPa DURATION: 120 SECONDS	ACCEPTED DIMENSIONAL INSPECTION: <input checked="" type="checkbox"/> OK
<input checked="" type="checkbox"/> HP CLOSURE TEST (HYDROSTATIC)		PRESSURE: 2.24 MPa DURATION: 120 SECONDS	ACCEPTED VISUAL INSPECTION: <input checked="" type="checkbox"/> OK
<input checked="" type="checkbox"/> LP CLOSURE TEST (AIR)		PRESSURE: 0.55 MPa DURATION: 120 SECONDS	ACCEPTED OPERATIONAL INSPECTION: <input checked="" type="checkbox"/> OK
<input type="checkbox"/> BACK SEAT TEST (HYDROSTATIC)		PRESSURE: MPa DURATION: SECONDS	RESULTS:

DESCRIPTION/MATERIAL

ITEM	DESCRIPTION	QTY (PCS)	CLASS (PN)	INCH (DN)	MM (DN)	SEAT	DISC	STEM	SEAT	BOLTS
100	BUTTERFLY VALVE, RF, LUGGED, HP, LO Model No. SLHBFFS-CLABRG,	40	600	2"	50	511145/101	ASTM A216 WCB	ASTM A351 CF8M	ASTM A564 T630	SS316+RPTFE
101	BUTTERFLY VALVE, RF, LUGGED, HP, LO Model No. SLHBFFS-CLABRG,	30	600	3"	80	511145/101	ASTM A216 WCB	ASTM A351 CF8M	ASTM A564 T630	SS316+RPTFE
102	BUTTERFLY VALVE, RF, LUGGED, HP, LO Model No. SLHBFFS-CLABRG,	20	600	4"	100	511145/101	ASTM A216 WCB	ASTM A351 CF8M	ASTM A564 T630	SS316+RPTFE

DESCRIPTION

PART NAME	HEAT NO.	MATERIAL	CHEMICAL COMPOSITION										MECHANICAL PROPERTIES						
			Si	Mn	P	S	Ni	Cu	V	Other	Other	CE	T.S MPa	Y.S MPa	E.L (%)	RAΨ (%)	Hardn HB	Impact Test Temp. AKV(J)	
BODY	J78G5	ASTM A216 WCB	0.35	0.87	0.009	0.013	0.01	0.02	0.01	0.006	-	-	0.35	546	302	29	55	167	
DISC	J79L1	CF8M	0.89	1.03	0.013	18.62	2.19	9.55	-	-	-	-	535	282	61	-	166		
STEM	N07087	ASTM A182 F316	0.311	0.692	0.002	15.43	0.130	4.079	3.142	-	-	-	162	157	20	64	35	-46°C 30 / 30 / 33	

HEAT TREATMENT: WCB Normalised, QUENCH & TEMPER 900°Cx4H Air cooled. **ASTM A564 T630** QUENCH 970°Cx3H Water cooled, TEMPER 690°Cx3H Air cooled. **A182 F316** SOLID SOLUTION 1050°Cx1.5H Water cooled, QUENCH & TEMPER 920°Cx2H and QUENCH & TEMPER (690°Cx2H Air cooled) as per ASTM A961. **A351 CF8M** Normalise, QUENCH & TEMPER 1050°Cx1.5H Water cooled.

OTHER: - 2.0mm max surface. Investment cast.

WE HEREBY CERTIFY THAT THE MATERIAL AND THE PRODUCT DESCRIBED ABOVE HAS BEEN TESTED AND COMPLIED WITH THE TERMS OF THE ORDER

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TORQTURN



ISO 15848-1
Endurance Test Certified

**AUSTRALIAN
PIPELINE VALVE®**

Adelaide, South Australia
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admin@australianpipelinevalve.com.au
Fax: +61-(0)8-8285 0044

Customer: Global Supply Line Australia (Pty. Ltd.)
Purchase Order No.: 000157BT

MATERIAL TEST CERTIFICATE according to EN 10204.3.1

1. SUPPLY DESCRIPTION

Item	Qty	Tag No.	Actuator Model	Part No.
11	1	Not Applicable	GP14S-200SR5.5V-S	C-170883-1
	1	Not Applicable	GP14S-200SR5.5V-S	C-170883-2
	1	Not Applicable	GP14S-200SR5.5V-S	C-170883-3
	1	Not Applicable	GP14S-200SR5.5V-S	C-170883-4
	1	Not Applicable	GP14S-200SR5.5V-S	C-170883-5
	1	Not Applicable	GP14S-200SR5.5V-S	C-170883-6
	1	Not Applicable	GP14S-200SR5.5V-S	C-170883-7
	1	Not Applicable	GP14S-200SR5.5V-S	C-170883-8
	1	Not Applicable	GP14S-200SR5.5V-S	C-170883-9
	1	Not Applicable	GP14S-200SR5.5V-S	C-170883-10

2. MATERIAL SPECIFICATION

Part Name	Material	Reference Standard
BODY & COVER	Ductile Iron	FCD45
THROTTLE VALVE	Ductile Iron	FCD45
THROTTLE VALVE SEAT	PTFE	PTFE
SPRING	Alloy Steel	60Si2Mn
SPRING	Carbon Steel	A106
PNEUMATIC CYLINDER	Carbon Steel	A106
PISTON	Ductile Iron	FCD45
ACTUATOR ROD	Alloy Steel	AISI 4140
HEAD & BOTTOM FLANGES	Ductile Iron	FCD45
GUIDE ROD	Alloy Steel	AISI 4140

* PTFE lined

Australian Pipeline Valve certifies the above listed supply complies with your purchase order and relevant technical specifications.

Date: 17-05-2018



FACTORY ACCEPTANCE TEST CERTIFICATE - QUARTER TURN ACTUATOR - SERIES G RANGE

CUSTOMER: Global Supply Line (Pty. Ltd.)	AMBIENT TEMP.: -20/+ 80°C
PURCHASE ORDER NO.: 00015741BT	NORM.: NAMUR
DATE: 17-05-2018	TABLE LANGUAGE: English
TAG NO.: Not Available	MECHANICAL PROTECTION: IP65
ACTUATOR MODEL: GP14S-200SR5.5V-STC	PAINTING SPEC.: APV PHI - .001
SERIAL NO.: C-170883-1	COMP. LABEL: ENGLISH
OPERATED VALVE: Quarter Turn Type	

HAZARDOUS AREA PROTECTION FOR ELECTRICAL APPARATUS

LIMIT SWITCH ENCLOSURE	Not Applicable
LIMIT SWITCHES	Not Applicable
SOLENOID VALVE	Not Applicable
JUNCTION BOX	Not Applicable
CABLE GLAND	Not Applicable

INTERMEDIATE TESTING

PRESSURE TEST OF CYLINDER WITH DRY AIR a/o HYDRAULIC FLUID AT 8.3 BarG	OK
PISTON SEALS TEST WITH DRY AIR a/o HYDRAULIC FLUID AT 6 BarG	OK

ACTUATOR PERFORMANCE TESTING

START TORQUE TO 1.0 OPEN WITH 5.5 BarG	995	1.0 OPEN WITH SPRING:	969 N.m
RUNNING TORQUE TO 2.0 OPEN WITH 5.5 BarG	700	2.1 OPEN WITH SPRING:	470 N.m
END TORQUE IN 3.0 OPEN WITH 5.5 BarG	600	3.1 CLOSED WITH SPRING:	598 N.m
OPERATING TIME TO 4.0 OPEN WITH 5.5 BarG	< 5	4.1 CLOSED WITH SPRING:	< 4 Sec.

VISUAL INSPECTION OF CONTROL SYSTEMS

PNEUMATIC CONTROL SYSTEM/ OPERATING DIAGRAM	Not Applicable
HYDRAULIC CONTROL SYSTEM/ OPERATING DIAGRAM	Not Applicable
ELECTRIC CONTROL SYSTEM/ PROGRAM No.:	Not Applicable
PNEUMATIC a/o HYDRAULIC CONTROL SYSTEM/ ACTUATOR	Not Applicable
Serial No.:	Pressure Test: Barg


FINAL CHECKING AND TESTING

GENERAL DIMENSIONS CHECK	According to DWG No. 115690/1
WELDING & JOINT CHECK	According to DWG No. 115690/1
TIGHTENING OF PNEUMATIC & HYDRAULIC PIPING AT 5.5 BarG	OK
RUNNING TEST	OK
CONTROL SYSTEM FUNCTIONAL TEST	Not Applicable
MANUAL EMERGENCY OPERATION TEST	Not Applicable
LIMIT SWITCHES OPERATION TEST	Not Applicable

INSPECTION

FINAL VISUAL INSPECTION	OK	x
PAINTING CHECK	According to APV standard painting, orange colour	x
PACKING CHECK	According to APV standard packing	x

NOTE: ALL TEST ARE PERFORMED AT THE TEMPERATURE OF ABOUT 25°C

QUALITY CONTROL	CUSTOMER INSPECTOR
Signed by: 	Signed by: 

CONFIDENTIAL

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TORQTURN®



ISO 15848-1
Endurance Test Certified

AUSTRALIAN PIPELINE VALVE®
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Material Test Certificate

EN 10204 3.1:2004

Traceability: Shot Mill/Pressure

CUSTOMER: GLOBAL SUPPLY LINE PTY LTD PO NO: 00015741BT ITEM NO: 11 17th May 2018

PRODUCT INFORMATION

PRODUCT: PNEUMATIC ACTUATOR SPRING RETURN SERIAL NO: C170887-10
MODEL: GP14S-200SR5.5V-STC NOTES: -
QUANTITY: 10 NOTES: -

DESCRIPTION			CHEMICAL COMPOSITION %										MECHANICAL PROPERTIES			
PART NAME	HEAT NO.	MATERIAL	C	Si	Mn	P	S	Cr	Mo	Ni	Yield TREAT	Pa	Y.S MPa	E.L (%)	RA Ψ (%)	Hardn HB
CYLINDER*	105-04842	A106	0.21	0.18	0.42	0.02	0.01	0.26	-	0.28	1000	430	270	38	-	175
PISTON	170415	FCD45	3.68	2.56	0.28	0.32	0.01	-	-	-	ANNEAL	457	312	13	-	168
BODY	170503	FCD45	3.61	2.51	0.34	0.04	0.01	-	-	-	ANNEAL	497	371	14	-	176
CAP	170706	FCD45	3.68	2.56	0.28	0.03	0.01	-	-	-	ANNEAL	463	332	13	-	168
SPRING CASE*	105-02006	A106	0.2	0.18	0.47	0.02	0.01	-	-	0.29	1000	445	270	32	-	176
POSITION INDICATOR	160301054	304SS	0.073	0.62	1.57	0.04	0.01	-	-	0.15	SOLID SOLUTION	567	357	43	-	-
HEAD & BOTTOM FLANGES	170706	FCD45	3.68	2.56	0.28	0.03	0.01	-	-	-	ANNEAL	463	332	13	-	168

*+PTFE Lined

WE HEREBY CERTIFY, THAT THE MATERIAL AND THE PRODUCT DESCRIBED ABOVE ARE UNDEFECTIVE AND COMPLIED WITH THE TERMS OF THE ORDER

SIGNED:

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QA MANAGER:

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EXAMPLE



**AUSTRALIAN
PIPELINE VALVE®**
Adelaide, South Australia
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ACTUATOR DATA SHEET

ACKNOW NO.		REV. 1		ITEM 11	
QTY 10		CLIENT			
Ambient temp. -20/+ 80 °C		Mechanical Protection IP65			
Norm. NAMUR		Painting Spec: APV standard painting			
Lable Language: ENGLISH		Comp.Label: ENGLISH			
Valve mark		Type			
Top mounting NAMUR		Size/Class		Medium	
Spool piece type N/A		Fluid type			
supply					
Actuator type: PNEUMATIC		Model: GP14S-200SR5.5V-STC			
Manual override N/A		Series "GP"			
Displ.(it)		Cylinder axis			
Valve stem					
Oper.Time(sec)		Open		Close	
Adjustable oper. Time					
Min/Norm/Max Press. ///		5.5Bar		Supply fluid	
Oper. Diagram NA		Wiring diagram		N/A	
Press Regulator		Setting Value		Barg	
Separate Junction Box NO		Electric conn. Size			
Limit switch box NO		Maker			
Type		Protection			
L/S maker		Qty			
Type		Model			
Electric conn. size					
Air tank		Initial charge pressure/final			
Accord to		Volume(it)			
Strokes No.		Setting value		Barg	
Relief valve					
Valve/Actuator Torque Figure		N.m		Pr.Supply 5.5 Barg	
Safety F	Valve	Actuator	Tag No.		
Break to open 0°		944			
Running to open 45°		458			
End to open 90°		582			
Break to close 90°		940			
Running to close 45°		455			
End to close 0°		578			
M.A.S.T./M.O.T.		944			
Notes:					



GENERAL SERVICE APPLICATION	Carbon steel and Ductile Iron surfaces
SCOPE	Standard industrial level protection against weathering, brackish water, etc. for petroleum plants, pipelines & refineries.
TEMPERATURE RESISTANCE	-20°C ~ 150°C
PRELIMINARY SURFACE PREPARATION	Blasting to Grade Sa 2.1/2 then cleaning with degreaser and washing with high pressure water at 100°C, and drying in open air for 24 hours.
PROTECTION OF UNPAINTED PARTS	Protection with suitable plastic material and with sealing tape where applicable.
FINAL SURFACE PREPARATION	Machining to smoothness of ≤ 6.3 where applicable. Prepare all surfaces by proper removal of scale, rust, oil or other contaminants by polishing and removing water.
PAINT APPLICATION	Spraying with suitable nozzle between coats as per manufacturer's instructions. Painting performed at 5 ~ 25°C and humidity less than 85%. Allow at least 24 hours between coats for drying. Dip coating allowed for some applications.

NO. OF COATS	TYPE OF PRODUCT	TYPE	FILM THICKNESS
Primer Coats Body (2 coats)	Self curing primer	Zinc Rich Epoxy Polyamide	60 µm
Top Coats Body (2 coats)	Acrylic	Resin	60 µm
TOTAL DRY FILM THICKNESS:			120 µm

NOTE: Color Orange RAL2001. Application temperature, drying times and other physical data of painting as per manufacturer specifications. Spring case is also tropicalised internally with grease.

Rev.	Date	Remarks	Issued by:
2	June 5th 2018	Third issue	GP