



AUSTRALIAN PIPELINE VALVE®
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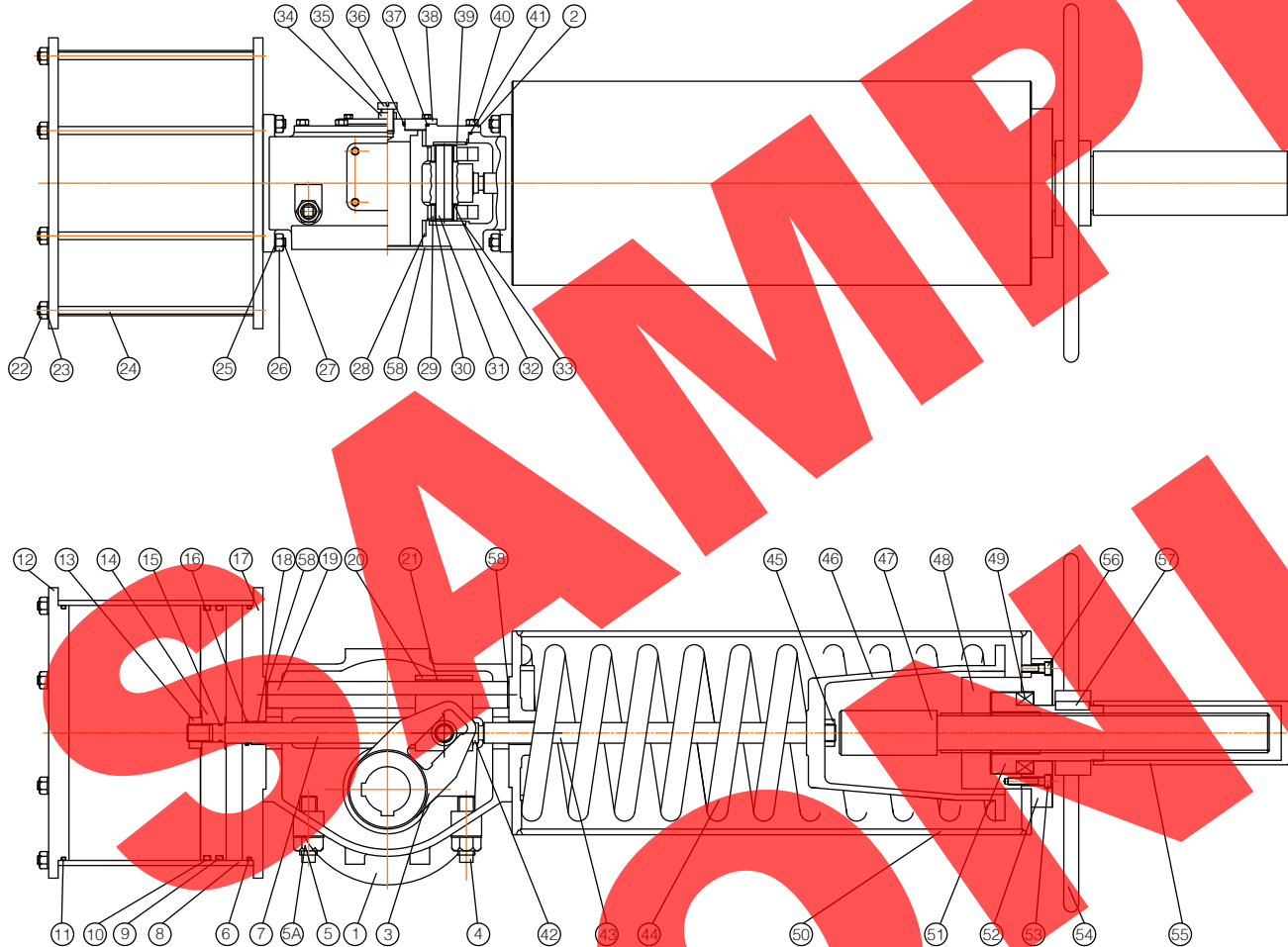
TORQTURN®



ISO 15848-1
Endurance Test Certified



SIL 2
SIL 3
Certified



WEIGHT: - 250kg

BILL OF MATERIALS

NO.	PART NAME	MATERIAL	QTY
1	BODY (1)	FCD450-DI (1)	1
2	CAP (1)	FCD450-DI (1)	1
3	PARA ARM - YOKE	FCD450-DI	1
4	TRAVEL STOP BOLT	AISI 4140+ENP	2
5	ADJUSTABLE NUT	2H+ENP	2
5A	WASHER	CARBON STEEL+VITON	1
6	O-RING	VITON	1
7	PISTON ROD	AISI 4140+HCr	1
8	CYLINDER (1)	ASTM A106 (1)+PTFE LINED	1
9	O-RING	VITON	1
10	GUIDE RING	PTFE	1
11	O-RING	VITON	1
12	CYLINDER COVER	FCD450-DI	1
13	NUT	2H ALLOY STEEL	1
14	PISTON	FCD450-DI	1
15	O-RING	VITON	1
16	O-RING	VITON	2
17	ADAPTOR	FCD450	1
18	BEARING	STEEL BAKED PTFE	2
19	GUIDE ROD	AISI 4140+HCr	1
20	GUIDE BLOCK	FCD450	1
21	BEARING	STEEL BAKED PTFE	1
22	TIE BAR NUT	2H ALLOY STEEL	4-12
23	WASHER	65Mn	4-12
24	TIE BAR STUD	B7	4-12
25	WASHER	65Mn	8-16
26	NUT	2H ALLOY STEEL	8-16
27	STUD	B7 ALLOY STEEL	8-16
28	BEARING	STEEL BAKED PTFE	2
29	ROLLER	AISI 4140	2
30	BEARING	STEEL BAKED PTFE	2
31	PIN	AISI 4140	1
32	THRUST BEARING	STEEL+PTFE COATED	2
33	GUIDE BAR	PTFE	1
34	NUT	304	1
35	POSITION INDICATOR	304	1
36	O-RING	VITON	1
37	O-RING	VITON	1
38	COVER	FCD450	1
39	GUIDE BAR	PTFE COATED STEEL	1
40	BOLT	S45C (AISI 1045)	4-12
41	O-RING	VITON	1
42	CONNECTING NUT	2H	2
43	SPRING TENSION ROD	AISI 4140+HCr	1
44	SPRING	60Si2Mn	1
45	NUT	2H	1
46	SPRING SEAT	FCD450	1
47	STEM SCREW	AISI 4140	1
48	ANTI ROTATING FLANGE	ASTM A515 Gr70	1
49	BEARING	BEARING STEEL	1
50	SPRING CASE	SS400 (1)	1
51	SCREW SLEEVE	FCD450	1
52	BEARING SEAT	SS400	1
53	BOLT	S45C	8
54	HAND WHEEL	SS400	1
55	STEM SCREW CAP	SS400	1
56	BOLT	S45C	8
57	KEY	S45C	1
58	O-RING	VITON	1

(1) 4 COAT PAINT SYSTEM PHI-.001

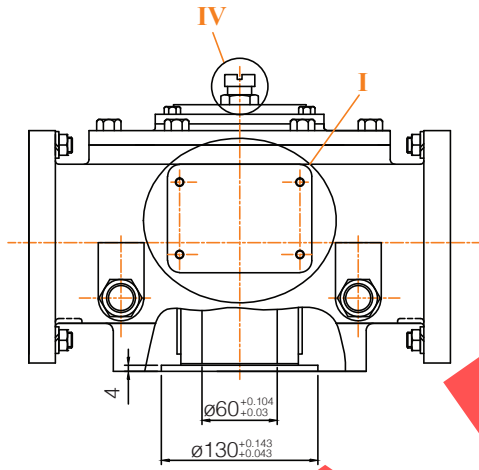
Actuator Pneumatic, 1/4 Turn SR Piston Model GP16S-300SR5.5V-STC-HW Spring Return c/w Handwheel	ORDER N°/ DWG N°	XXXXXX-99	APPROVED	B.T.
	REV.	00	CHECKED	S.Q.
Australian Pipeline Valve			DRAWN	C.C.



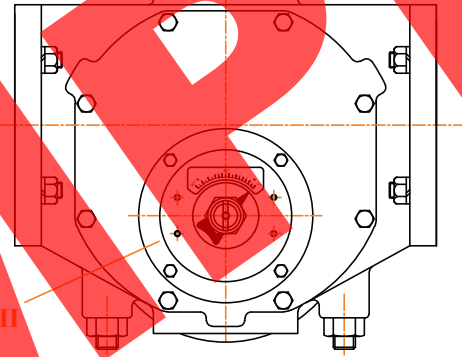
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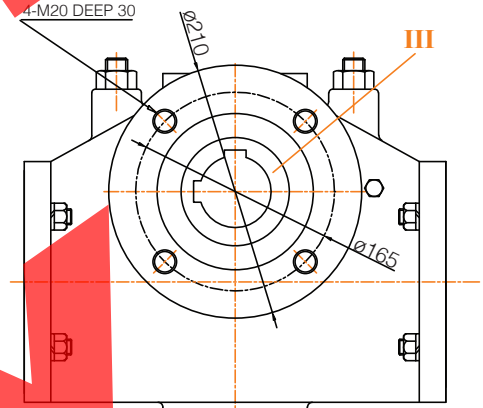
Body Dimensions



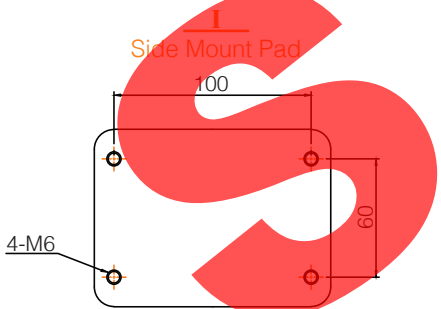
Body Side View



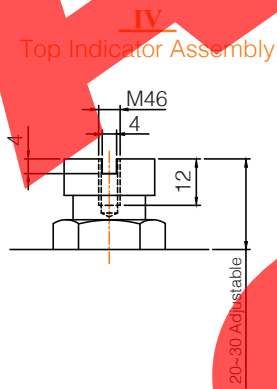
Body Top View



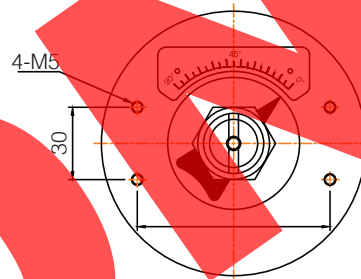
Body Bottom View
Mount Pad



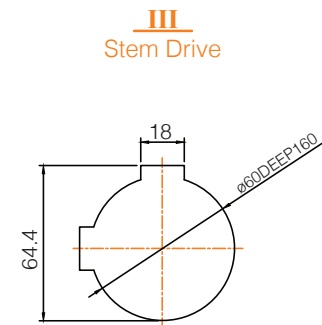
I
Side Mount Pad



IV
Top Indicator Assembly



II
Top Mount



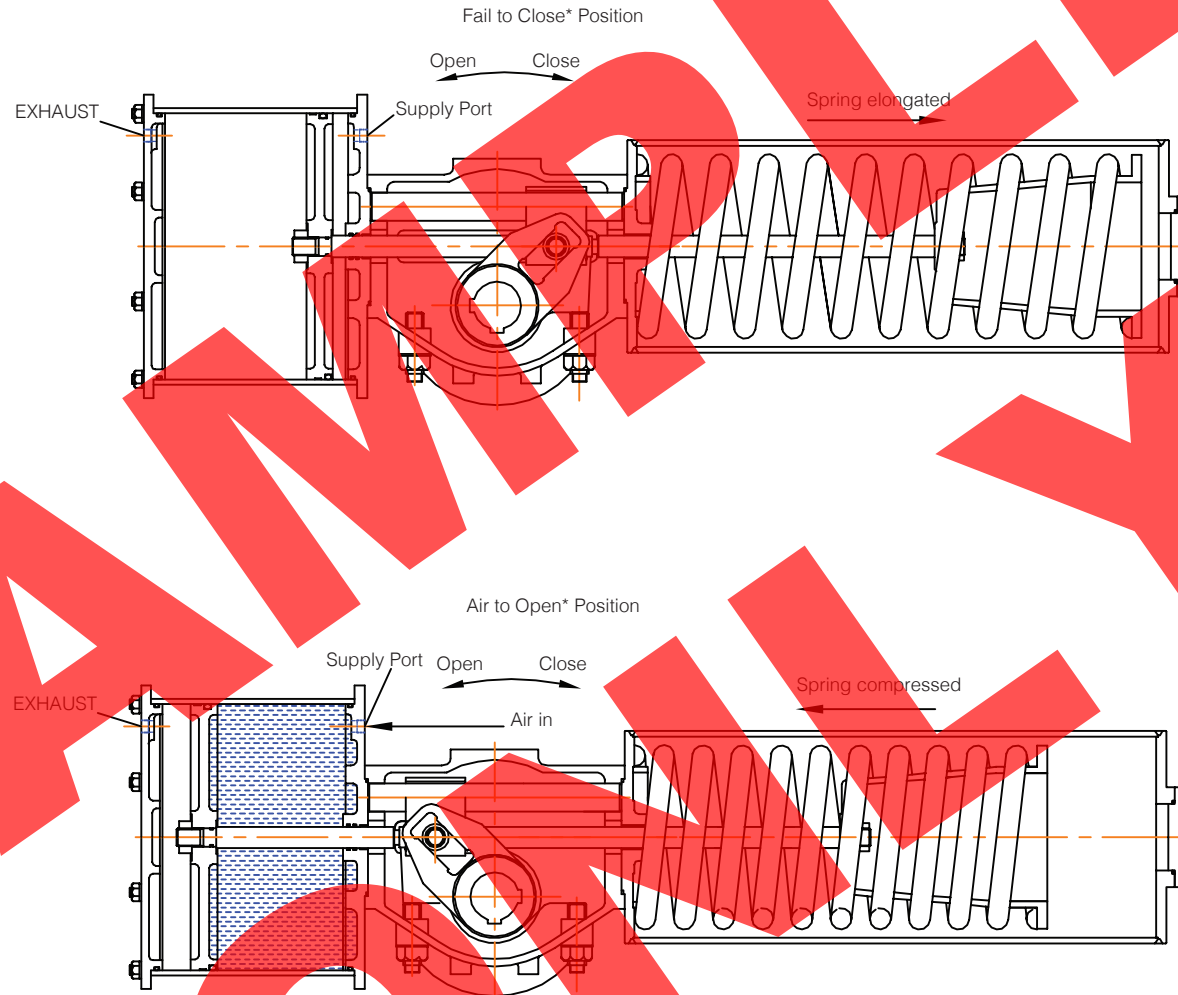
III
Stem Drive

Actuator Pneumatic, 1/4 Turn SR Piston Model GP16S-300SR5.5V-STC-HW Spring Return c/w Handwheel	ORDER N°/ DWG N°	XXXXXX-99	APPROVED	B.T.
	REV.	00	CHECKED	S.Q.
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* Open/Closed is relative to mounting on valve and assumes valve has actuator mounted to "fail closed". Valve/Actuator can also be mounted "fail open".

Actuator Pneumatic, 1/4 Turn SR Piston Model GP16S-300SR5.5V-STC-HW Spring Return c/w Handwheel	ORDER Nº/ DWG Nº	XXXXXX-99	APPROVED	B.T.
	REV.	00	CHECKED	S.Q.
Australian Pipeline Valve			DRAWN	C.C.

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 then drying in open air for 24 hours.
PROTECTION OF UNPAINTED PARTS	Protection with suitable plastic plugs and with sealing tape where applicable.
FINAL SURFACE PREPARATION	Machining to smoothness of $\leq 6,3\mu\text{m}$ where applicable. Prepare all surfaces to ensure proper adhesion of paint film by polishing and de-burring, removing any dust, rust, water, oil or other impurities.
PAINT APPLICATION	Spraying with a gun, drying in between coats as per manufacturer's specification. Painting performed at 5 ~ 30°C at less than 85% humidity. Allow at least 24 hours between coats for drying time. Dip coating allowed for some components.

NO. OF COATS	TYPE OF PROCESS	TYPE	FILM THICKNESS
Primer Coats Body (2 coats)	Anti-rust self curing Epoxy Zinc primer	Zinc-rich Epoxy Polyamide	60 μm
Top Coats Body (2 coats)	RAL5015 Acrylic Polyurethane	Resin	60 μm
TOTAL DRY FILM THICKNESS:			120 μm

NOTES:

Colour: Blue RAL5015. 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:
1	May 28th 2018	Second issue	GP
2	June 5th 2018	Third issue	GP

G RANGE - MODEL GP TORQUE CHARTS

SPRING RETURN ACTING TORQUES (Nm) - SPRING SIZE/AIR SUPPLY 5.5 BAR

Model	Max Torque of Drive Module	Air Start (BTO)	Run (Air)	Air End (ETO)	Spring Break (BTC)	Run (Spring)	Spring End (ETC)
GP12S-170 SR5.5	1000 Nm	550	298	380	530	266	356
GP12S-200 SR5.5		753	373	491	757	576	496
GP14S-200 SR5.5	2000 Nm	944	458	582	940	455	578
GP14S-250 SR5.5		1475	726	946	1433	701	904
GP14S-300 SR5.5		2089	1062	1450	1976	994	1337
GP16S-250 SR5.5	4000 Nm	1747	836	1078	1896	948	1227
GP16S-300 SR5.5		2707	1314	1808	2475	1215	1576
GP16S-350 SR5.5		3517	1763	2361	3469	1734	2313
GP25S-350 SR5.5	8000 Nm	4207	2111	2831	4165	2086	2604
GP25S-400 SR5.5		5529	2760	3673	5465	2722	3609
GP25S-450 SR5.5		7074	3456	4447	7119	3483	4492
GP30S-450 SR5.5	16000 Nm	8769	4264	5391	8745	4217	5312
GP30S-500 SR5.5		10912	5237	6544	10908	5234	6540
GP30S-550 SR5.5		13194	6289	7769	13348	6381	7924
GP35S-550 SR5.5	32000 Nm	16786	8053	10057	16820	8073	10092
GP35S-600 SR5.5		20090	9674	12158	19828	9517	11897
GP35S-700 SR5.5		27512	13581	17757	25780	12542	16025
GP40S-600 SR5.5	63000 Nm	24041	11554	14473	24368	11750	14800
GP40S-700 SR5.5		33087	16322	21320	31547	15398	19780
GP40S-800 SR5.5		43011	20546	25475	43576	20885	26040
GP48S-800 SR5.5	125000 Nm	50263	24359	30936	50301	24382	30974
GP48S-900 SR5.5		63321	30734	39126	63690	30955	39595
GP48S-1000 SR5.5		78760	39161	51777	75157	36999	48173
GP60S-800 SR5.5	250000 Nm	68043	33285	42906	66764	32517	41627
GP60S-900 SR5.5		83076	41892	56263	82539	41389	55726
GP60S-1000 SR5.5		107625	53261	69911	101449	49555	63736

BTO = Break To Open Torque (Air Start)
RUN = Running Minimum (Half-Stroke Torque)
ETO = End To Open Torque (Air End)
BTC = Break To Close Torque (Spring Start)
ETC = End To Close Torque (Spring End)

G RANGE HIGH TORQUE RANGE

G Range Scotch Heavy Duty Yoke actuators are available in hydraulic and pneumatic and provide a large torque range compact body design. G Range actuators are an improvement on the basic competitors scotch yoke concept and feature an improved reaction bar in addition to adding replaceable bearings, a highly efficient wear and corrosion resistant coating system and a tension rod compressed spring. This enhanced design greatly improves efficiency, reduces wear and extends the actuator's life. The combining of these technologies, enhancements, and superior quality control techniques ensures a high quality assembly which forms the heart of our extended service actuators - the G Range.

Applications

Automation of any quarter-turn mechanism such as Ball, Plug and Butterfly Valves.

Features

Wear Resistance - The G Range tension rod is a high strength alloy steel treated to provide a highly corrosion and wear resistant finish. The superior surface finishes, and self-lubricating bearings maximise the transfer of input energy directly to the valve stem. The tension loaded spring minimises radial loads on the piston rod, further enhancing efficiency.

Service Rated - G Range models are qualified by accelerated wear testing. The actual service life may be predicted based upon specific application parameters and environmental conditions. Proper actuator selection, enhanced by proprietary data analysis methods, allows optimum performance and operating economy.

Replaceable Bearings - Low friction, permanently lubricated, high performance bearings protect sliding and rotating components, significantly extending actuator life.

Four Year Warranty - G Range actuators are backed by the industry's strongest materials and workmanship warranty.

Corrosion Resistance - G Range actuators incorporate protective internal and external coatings, assuring the actuator's reliable operation in the harshest of environments. The air cylinder is PTFE lined for further corrosion resistance which also reduces friction providing ease/smoothness of operation. The actuator exhibits excellent corrosion resistance, confirmed by Salt Spray Testing. Construction features prevent water ingress, allowing G Range actuators to meet IP 66 and IP 67M specifications.

Safety - The G Range facilitates safe installation and removal of the spring module. It allows for the removal of the spring module in a manner that eliminates accidental release of the spring force.

Interchangeability - The ease of interchanging the power and spring modules allows quick reversal of the "fail-safe" mode, while providing for the addition of over-rides, accessories and other modules.

Design - The G Range modular design features field serviceable modules. The available modules include the drive, power, spring and over-ride. These modules are removable, serviceable and interchangeable without removing the actuator from the valve. This procedure does not require special tools or disassembly of any module. This unique feature reduces required plant shutdown time for service. Modules may be replaced as an assembly or serviced at your maintenance facility.

Modular Inventory - All modules may be purchased separately or in any combination. This features allows reduced parts and spares inventory at the distribution facility, while substantially increasing the availability of different model configurations.

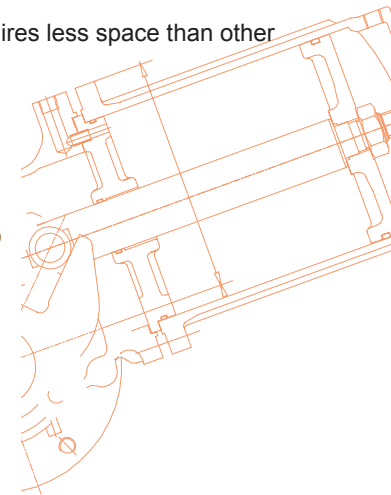
Namur - The shaft driven accessory interface conforms to the NAMUR standard and is identical on all G Range actuators, allowing for standardisation of accessory mounting hardware and installation practices.

MSS and ISO Mounting - The G Range valve interface meets the dimensional requirements of MSS SP-101 or ISO 5211 defined for each torque range.

Compact - The G Range design optimises the centre of gravity location, is significantly lighter, and requires less space than other actuators of equal or lesser torque output.



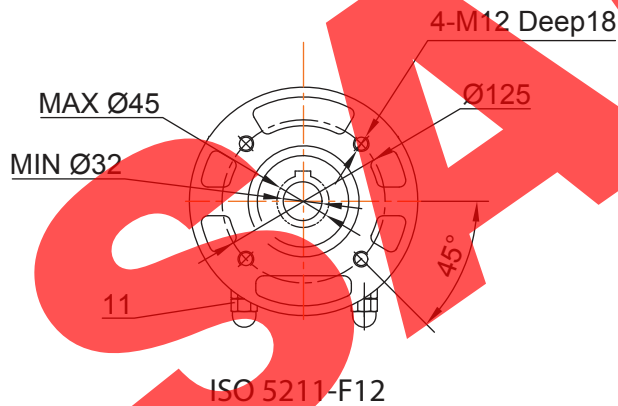
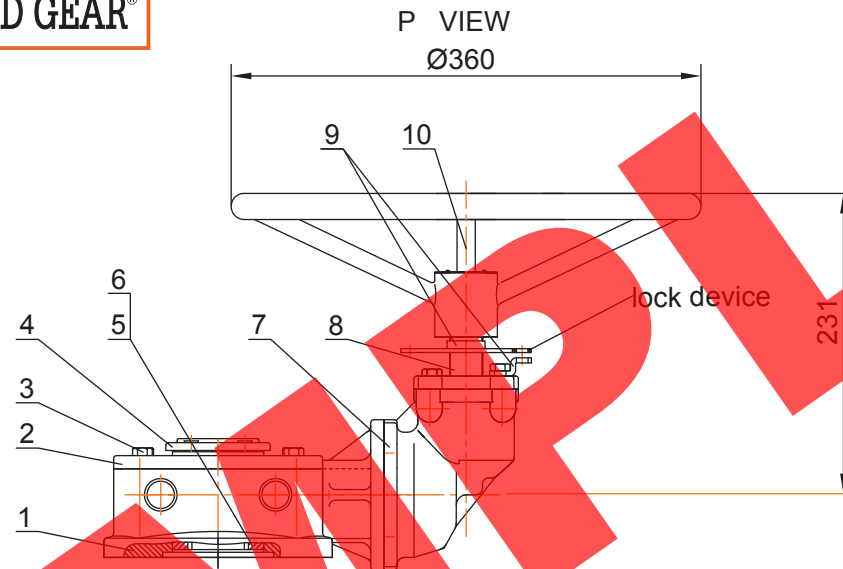
Model GP-Pneumatic



G Range High Torque Range - AS

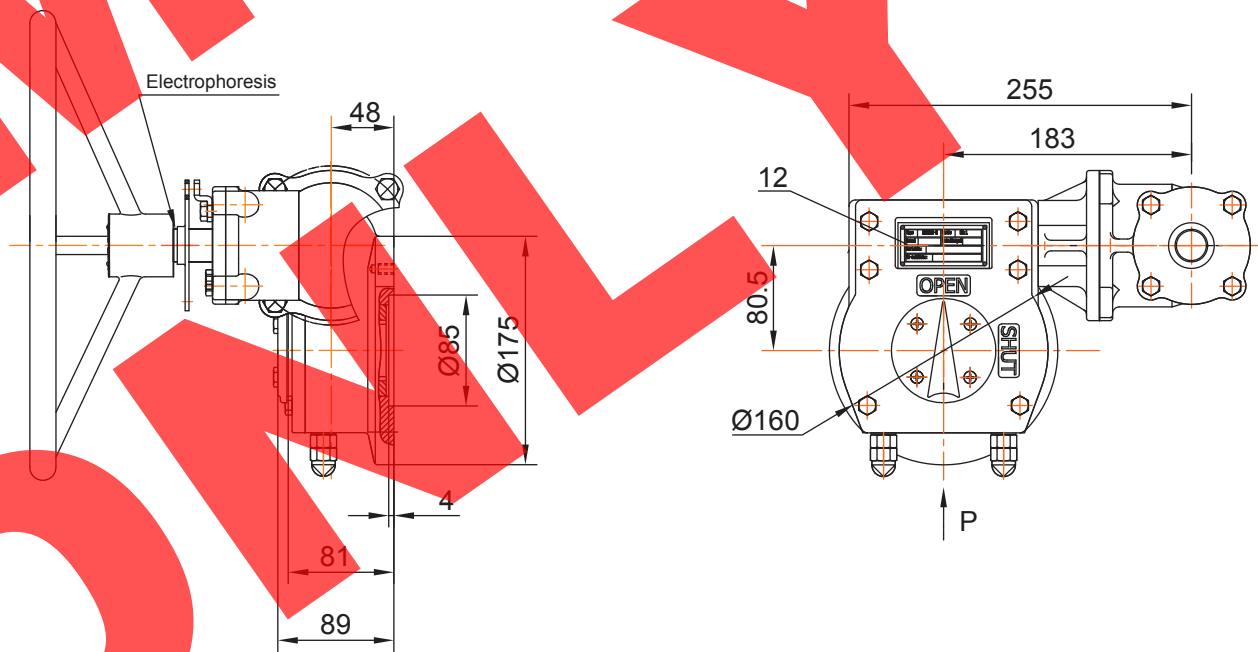


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BILL OF MATERIALS

NO.	PART NAME	MATERIAL	NOTES
1	GEAR BODY	QT450-10 (A536 65-45-12)	-
2	COVER	QT450-10 (A536 65-45-12)	-
3	BOLTING	8.8	-
4	POSITION INDICATOR	ALUMINIUM	-
5	GEAR	QT450-10 (A536 65-45-12)	-
6	SHAFT	40Cr (ASTM 5140)	-
7	CONNECTING BODY	QT45-10 (A536 65-45-12)	-
8	DIRECTION SHIFT SHAFT	45# (ASTM 1045)	NITRIDED
9	LOCKING DEVICE	Q235-A (ASTM 1025)	-
10	HANDWHEEL	Q235-A (ASTM 1025)	POWDER COATED
11	ADJUSTING SCREW	8.8	-
12	LABELS	ALUMINIUM LABELS	-



TECHNICAL PARAMETERS

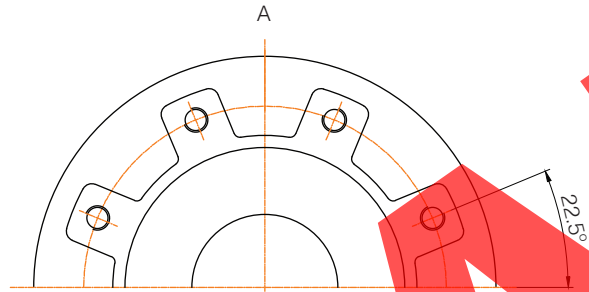
Model	Speed Ratio			Turns to Open	Torque N.m		Torque amplification factor ±10%
	Gear Box	Bevel Gear	Combined		Input	Output	
WG-DGAB41-G	52:1	1:1	52:1	13	102	1300	12.7

Dimensions in millimeters

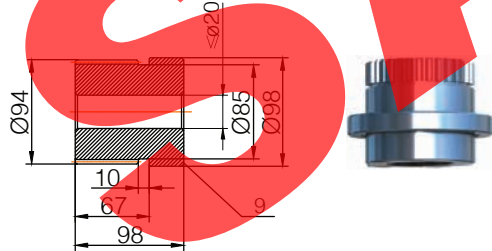
Worm Gear, Model WG-DGAB41-G-F12, c/w 90° Bevel Gear Direct Drive Mitre Box, RF, BB ASTM A536 65-45-12 Concave Assy Dwg	ORDER N°/ DWG N°	XXXXXX-99	APPROVED	B.T.
	REV.	00	CHECKED	S.Q.
	Australian Pipeline Valve		DRAWN	C.C.



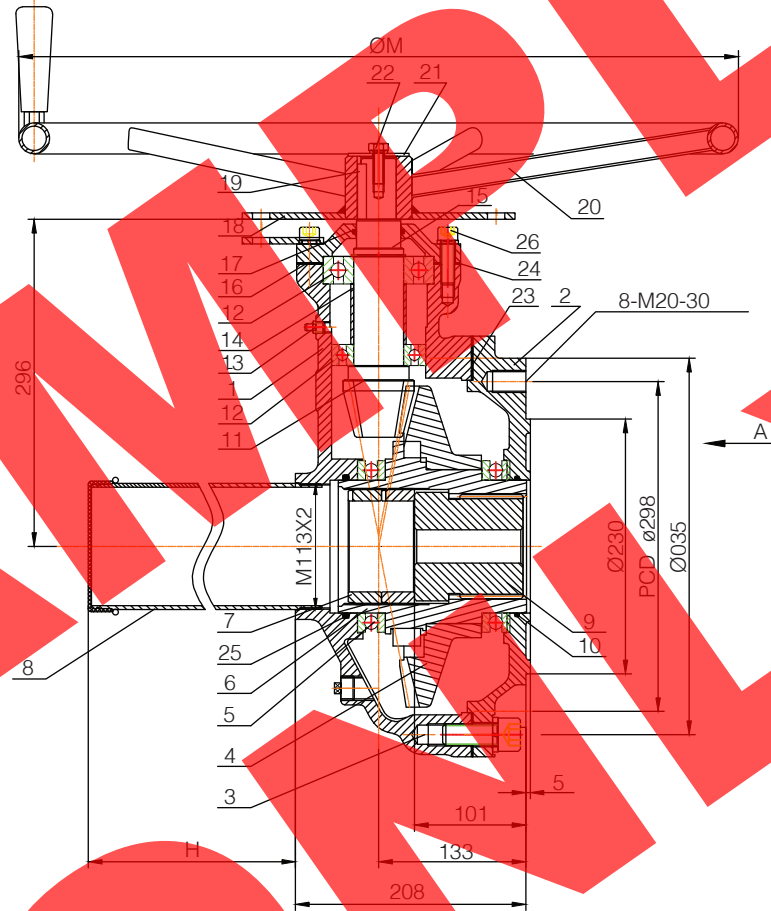
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MOUNTING BASE



SPLINED STEM DRIVE NUT



BILL OF MATERIALS

NO.	PART NAME	MATERIAL	NOTES
1	HOUSING	ASTM A216 WCB	BLACK EPOXY
2	BASE	ASTM A216 WCB	BLACK EPOXY
3	BOLT	AISI 1045	PHOSPHATED
4	BEVEL GEAR	AISI 1045	-
5	BEARING	GCR15	-
6	DRIVE SLEEVE	QT450 (DI)	-
7	LOCK NUT	AISI 1020	-
8	STEM PROTECTOR CAP	A3+ZP+EPOXY	-
9	STEM NUT	C95200 BRONZE	-
10	O-RING	NBR	-
11	PINION GEAR & STEM	AISI 1045+ENP	-
12	BEARING	GCR15	-
13	GREASE NIPPLE	AISI 1020+ZP	-
14	COLLAR	AISI 1020	-
15	SNAP RING	65Mn	-
16	END COVER	ASTM A216 WCB	-
17	O-RING	NBR	-
18	LOCKING DEVICE	A3 ZP+FBE	-
19	KEY	AISI 1045	-
20	HANDWHEEL	Q235+FBE	-
21	WASHER	304SS	-
22	BOLT	304SS	-
23	GASKET	CNAF	-
24	GASKET	CNAF	-
25	O-RING	NBR	-
26	BOLT	AISI 1045	PHOSPHATED

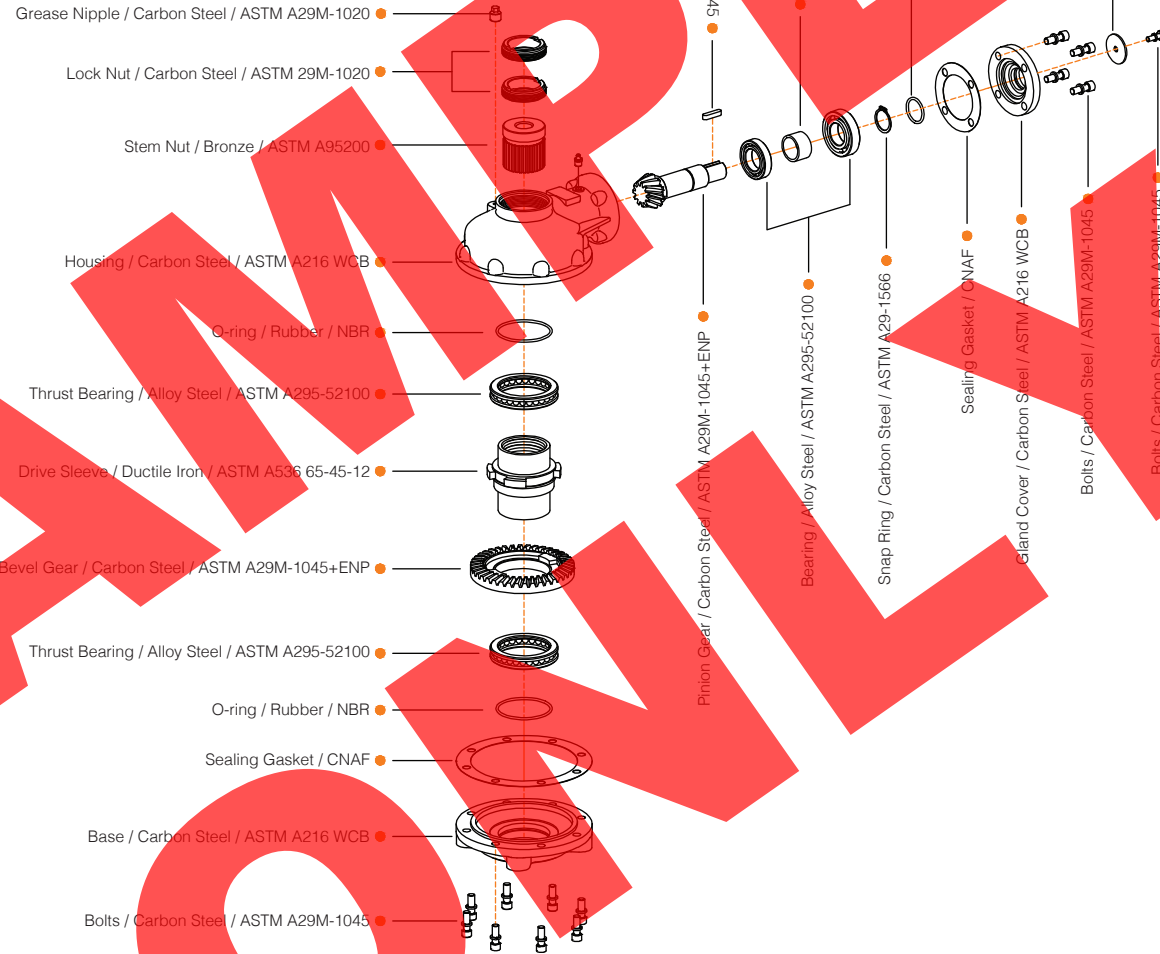
INPUT TORQUE	600Nm	TEMPERATURE	-29 TO 400 °C -20 TO 752 °F
OUTPUT TORQUE	2940Nm		
MAX THRUST	308KN		
M.A.	4.4±10%		
GEAR RATIO	5:2:1		
ENCLOSURE	IP65		

DIMENSIONS (MM) & WEIGHT (KG)

H	ØM	Max Valve Stem	Weight
660	700	60	95

Dimensions in millimeters

Gearbox Multi-Turn Bevel, Model BA-2	ORDER Nº / DWG Nº	XXXXXX-99	APPROVED	B.T.
	REV.	00	CHECKED	S.Q.
Australian Pipeline Valve			DRAWN	C.C.



Gearbox Multi-Turn Bevel, Model BA-2	ORDER N° / DWG N°	XXXXXX-99	APPROVED	B.T.
	REV.	00	CHECKED	S.Q.
Australian Pipeline Valve			DRAWN	C.C.

BA SERIES BEVEL GEAR OPERATOR

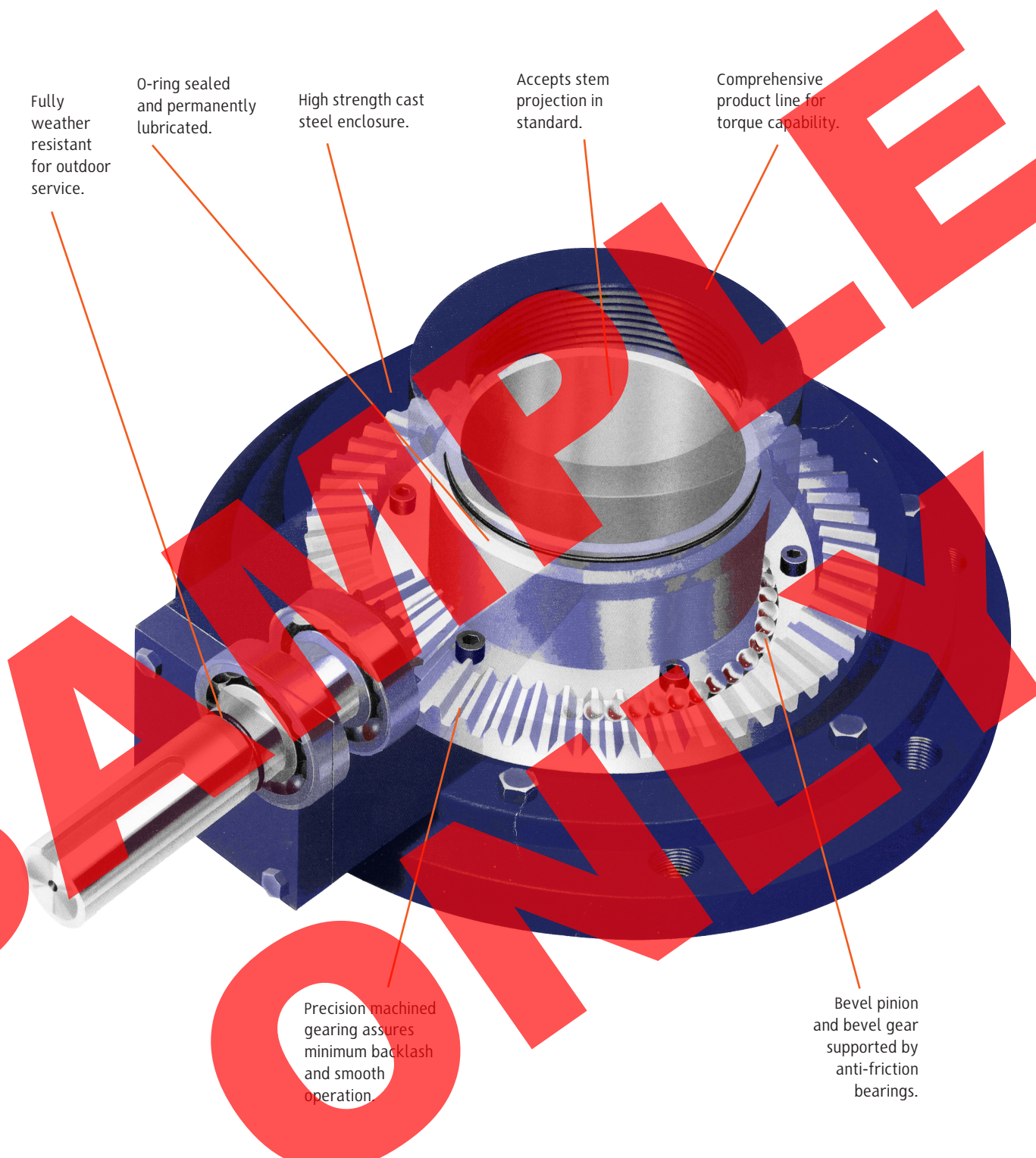
Fully weather resistant for outdoor service.

O-ring sealed and permanently lubricated.

High strength cast steel enclosure.

Accepts stem projection in standard.

Comprehensive product line for torque capability.



Precision machined gearing assures minimum backlash and smooth operation.

Bevel pinion and bevel gear supported by anti-friction bearings.

BEVEL GEAR

Rugged, dependable, precision performance for all multi-turn valve applications.



API 622 & ISO 15848-1, CL CO2
Endurance Test Certified

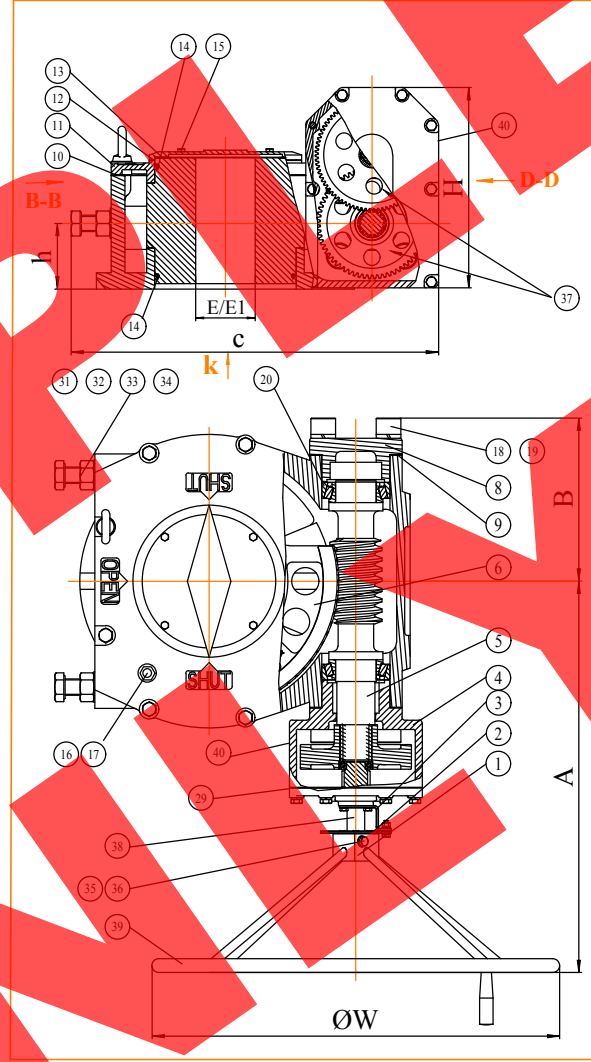
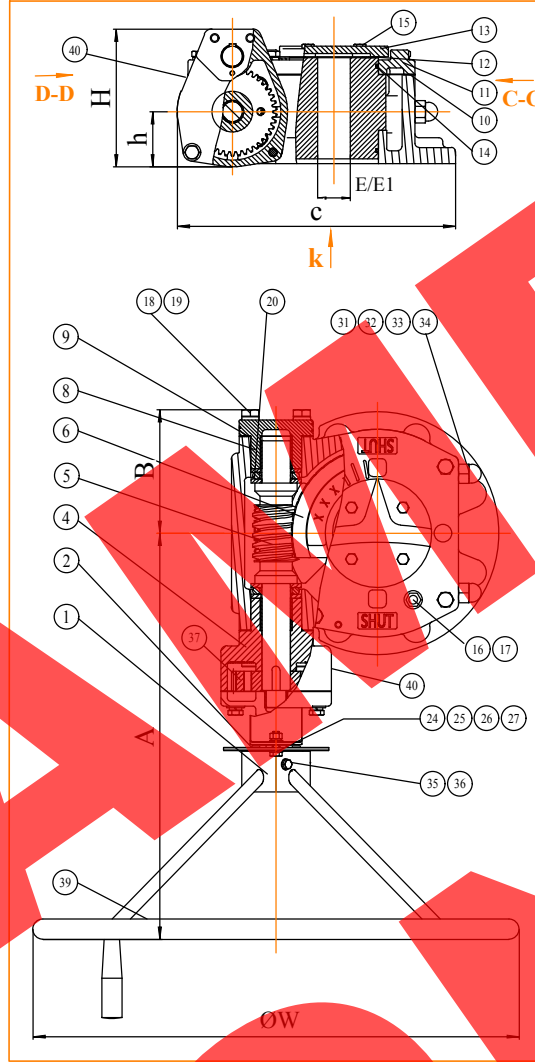
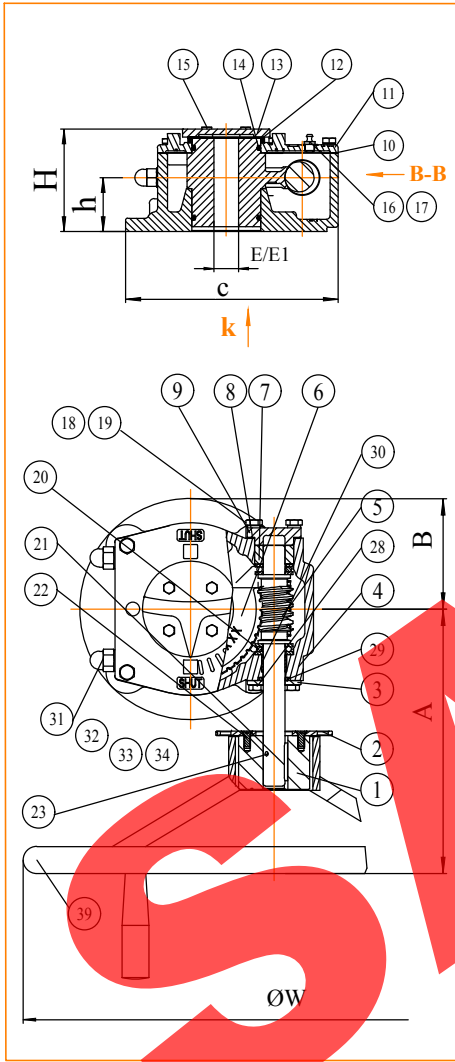
WORMGEAR GEARBOX QUARTER TURN WG SERIES

MODEL: WG007/WG008/WG158

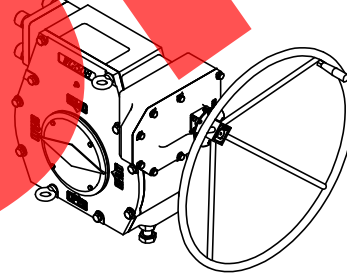
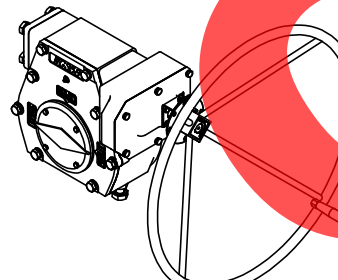
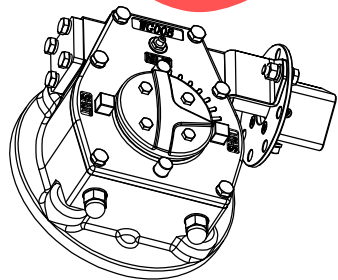
MODEL: WG238

MODEL: WG308/WG358/WG408/WG448/WG508

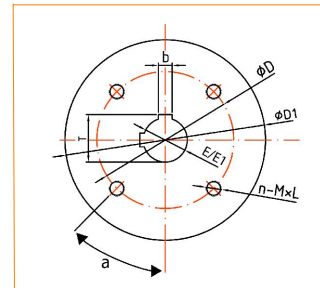
BILL OF MATERIALS WG007-508



POS	PARTSNAME	QTY	MATERIAL	REMARKS
40	REDUCTION GEAR	1	ASSY	SEE PAGE 3
39	HANDWHEEL	1	DI-Q235A	
38	INPUT GEAR SHAFT	1	AISI 1045	ENP
37	SPUR GEAR	1~4	AISI 1045	PHOSPHATED
36	FLAT WASHER	1	CARBON STEEL	Zn PLATED
35	HEX BOLT	1	CARBON STEEL	Zn PLATED
34	SET SCREW	2	CARBON STEEL	Zn PLATED
33	FLAT WASHER	2	DI-Q235A	Zn PLATED
32	O-RING	2	NBR	
31	BOLT	2	CARBON STEEL	PHOSPHATED
30	OILLESS BEARING	1	COMMERCIAL	
29	O-RING	1	NBR	
28	HEX BOLT	4	CARBON STEEL	PHOSPHATED
27	HEX BOLT	1	CARBON STEEL	Zn PLATED
26	HEX NUT	1	CARBON STEEL	Zn PLATED
25	SPRING WASHER	1	65Mn	Zn PLATED
24	FLAT WASHER	2	CARBON STEEL	Zn PLATED
23	STEM KEY	1	CARBON STEEL	PHOSPHATED
22	SLOTTED SUNK SCREW	4	CARBON STEEL	Zn PLATED
21	FLAT KEY	1	AISI 1045	
20	BEARING	2	COMMERCIAL	
19	HEX BOLT	10	CARBON STEEL	PHOSPHATED
18	SPRING WASHER	10	65Mn	PHOSPHATED
17	OIL SEAL	1	NYLON PA66	
16	GREASE NIPPLE	1	COMMERCIAL	Zn PLATED
15	HEX BOLT	4	CARBON STEEL	PHOSPHATED
14	O-RING	2	NBR	
13	INDICATOR PLATE	1	CI-HT250	
12	INDICATOR PLATE SEAL	1	NBR	
11	BODY CAP	1	CI-HT250	
10	BODY CAP SEAL	1	NBR	
9	LEFT END COVER SEAL	1	NBR	
8	LEFT END COVER	1	DI-Q235A	
7	BEARING SLEEVE	1	FZ1360	Fe-BASE ALLOY
6	WORM GEAR	1	DI-QT500-7	HEAT TREATED
5	WORM/INPUT SHAFT	1	AISI 1045	ENP
4	BODY	1	CI-HT250	
3	LOCK PLATE SUPPORT	1	DI-Q235A	
2	LOCK PLATE	1	DI-Q235A	Zn PLATED
1	DRIVE HEAD	1	Fe-BASE ALLOY	Zn PLATED



k VIEW ALL MODELS



NOTES

1. MAXIMUM TRAVEL: 90°
2. ADJUSTMENT LIMIT: ±5°
3. WEATHER PROOF: IP65



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MODEL: WG007/WG008/WG108/WG238

MODEL: WG308/WG358/WG408/WG448

MODEL: WG508

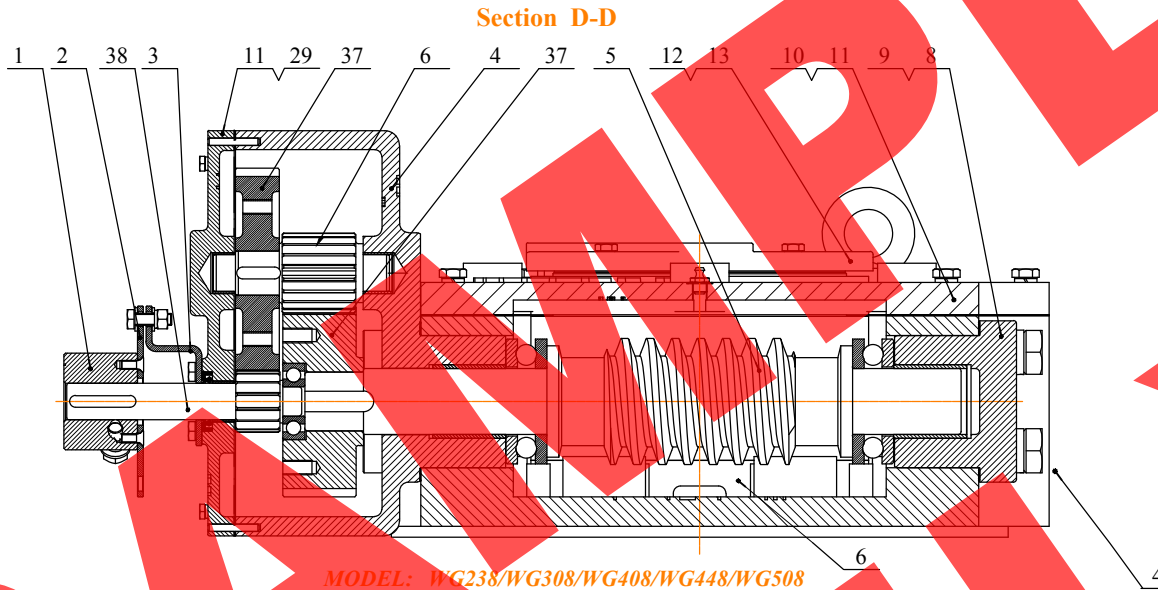


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BILL OF MATERIALS - REDUCTION GEAR WG238-508

No	Parts Coding	Parts Name	Qty	Material
1	B029049001	Lock Plate Seat	1	Steel
2	B027057001	Connecting Plate	1	Q235A
3	B026028001	Stop Block	1	Q235A
4	B010028001	Gear Body	1	HT250
5	B025028002A	Gear Shaft	1	AISI 1045+ENP
6	B002028256	Worm Gear	1	QT500-7 (Heat Treated)
8	B008028001	Left End Cover	1	HT200
9	B019028001	Left End Cover Seal	2	NBR
10	B018028001	Bonnet Cap Seal	1	NBR
11	B005028001	Bonnet Cap	1	HT250
12	B022028001	Indicator Plate Seal	1	NBR
13	B006028001	Indicator Plate	1	HT250
29	B044028001	Gear Cap Seal	1	NBR
37	B014028001	Gear	1	AISI 1045
37	B014028002	Gear	1	AISI 1045
38	B025028001	Gear Shaft	1	AISI 1045



MODEL: WG238/WG308/WG408/WG448/WG508

DIMENSIONS (MM) / SPECIFICATIONS WG007-WG508

MODEL	A	B	C	D	D1	E*	E1(Max)	H	h	n-MxL	a	ØW	ISO	Max Keyway Bore Size (mm)	Input Torque (N.m)	Output Torque (N.m)	Gear Ratio	Turns to Open 90°	Efficiency %	Weight (KG)
WG007	242	78.8	174	125	150	20	41	91.5	39	4-M12X18	45°	465	F12	41	75	720	42:1	18	23	12.1
WG008	245	102.5	216.5	140	205	25	48	104.5	55	4-M16X24	45°	465	F14	48	115	1200	50:1	12	21	17
WG108	380	112.4	262	165	210	30	58	109.5	51	4-3/4-10UNCX26	45°	600	F16	58	120	2500	70:1	18	23	23
WG238	501	152.4	343	254	300	40	88	201.5	64	5-5/8-11UNCX26	22.5°	600	F25	87	170	6250	175:1	44	23	61
WG308	544	159.05	387	254	340	50	111	245	77	8-M16X24	22.5°	750	F25	111	150	9800	275:1	69	23	92
WG358	602.3	175.3	442.3	298	350	55	130	262	86	8-M20X30	22.5°	750	F30	130	170	18000	532:1	132	23	130
WG408	639	233.2	540	356	420	70	156	276	92.5	8-1-5/8-8UNCX35	22.5°	750	F35	156	180	32000	700:1	175	25	215
WG448	671	239	556.5	356	415	70	167	353	83	8-1-5/8-8UNCX35	22.5°	750	F35	166.8	165	42000	1233:1	308	23	230
WG508	719.8	300.3	675.7	406	475	110	253	368.5	120.5	8-M36X50	22.5°	750	F40	252.8	190	60000	1254:1	313.5	25	350

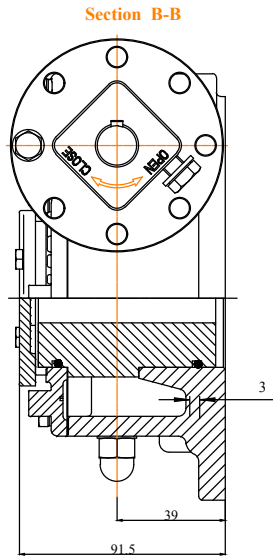
* E=Pilot hole pre-drilled in bore to facilitate boring keyway. E1(Max) = maximum stem size the keyway can be bored.



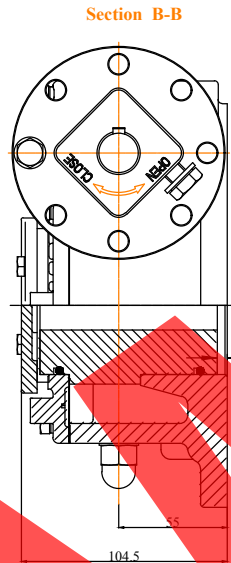
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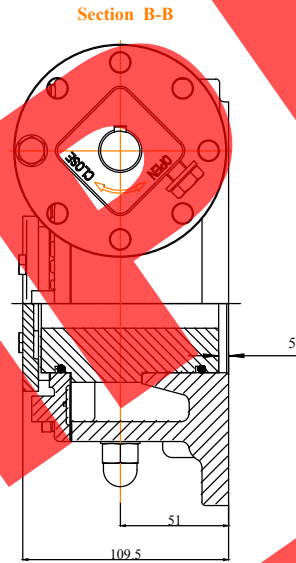
**SIDE VIEW
REDUCTION GEAR VERSIONS**



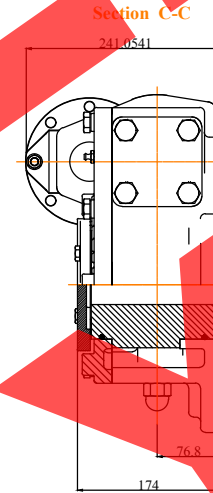
MODEL: WG007



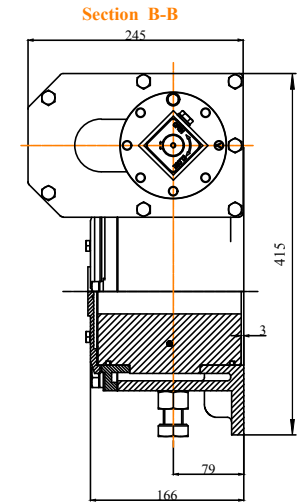
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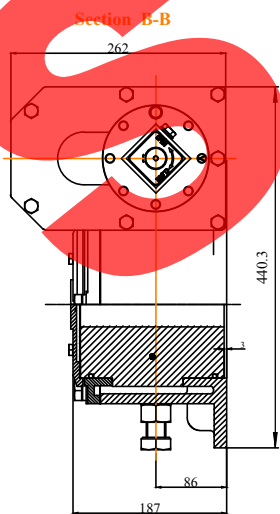
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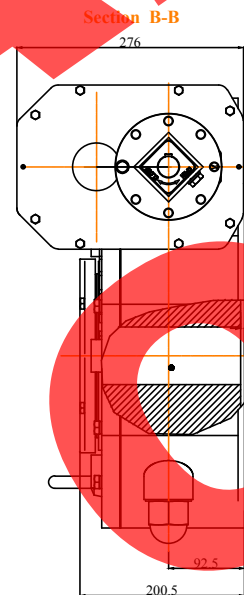
MODEL: WG238



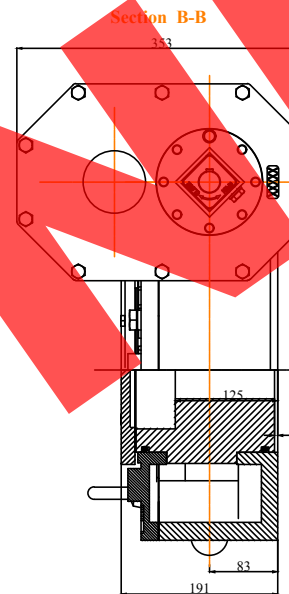
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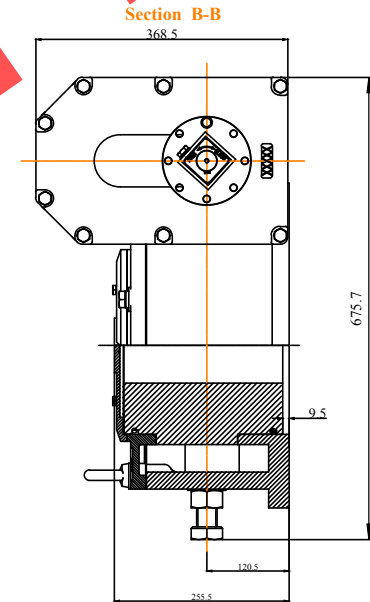
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MODEL: WG408



MODEL: WG448



MODEL: WG508

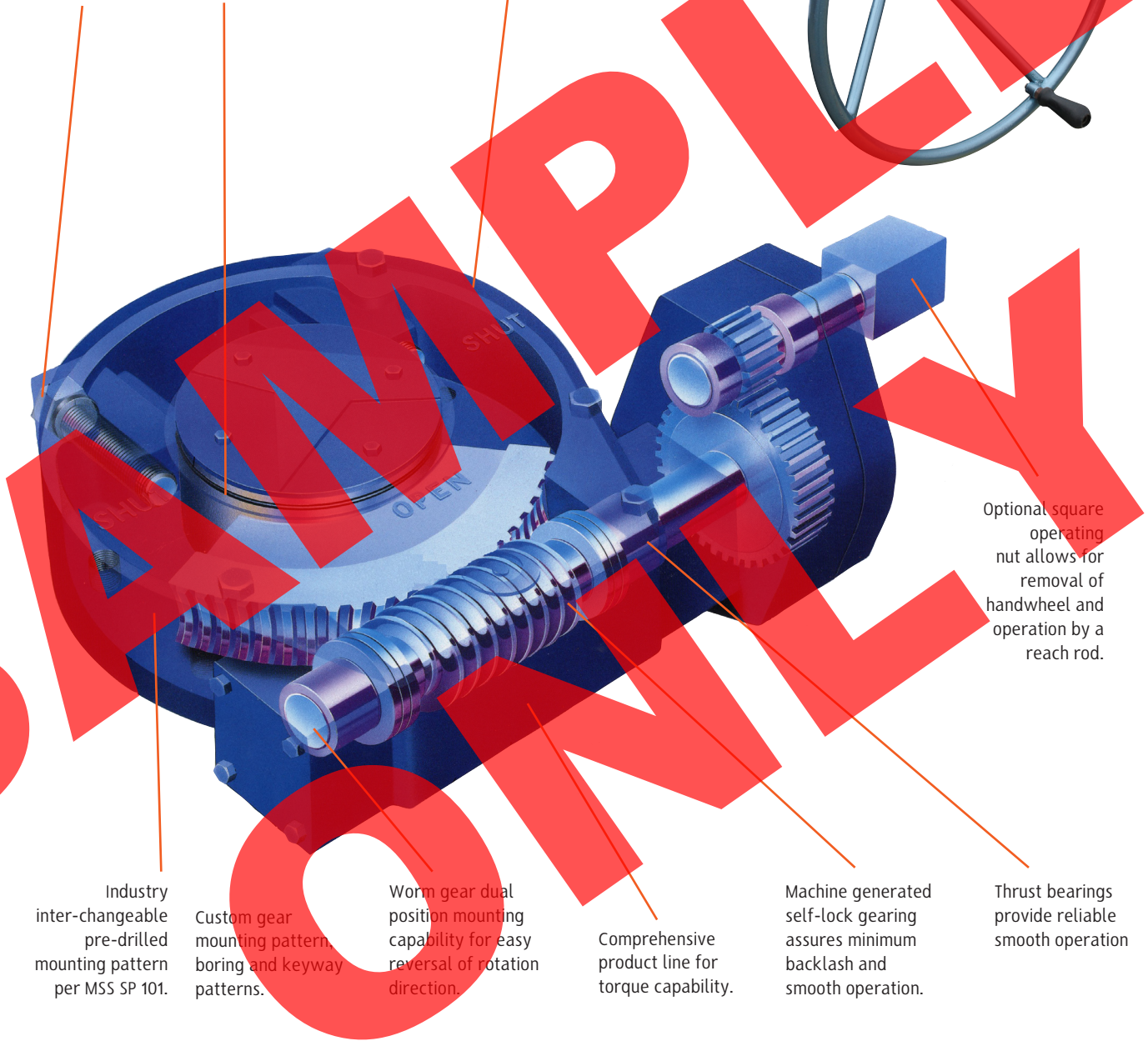
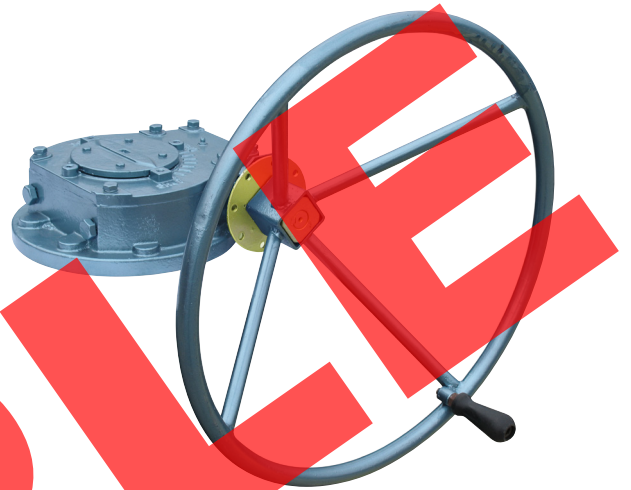
WORM GEAR OPERATOR

External mechanical stops allow +/-5° travel.

Fully weather resistant for outdoor service.

O-ring sealed and permanently lubricated along with gears and bearings.

High strength cast iron enclosure.



Optional square operating nut allows for removal of handwheel and operation by a reach rod.

Industry inter-changeable pre-drilled mounting pattern per MSS SP 101.

Custom gear mounting pattern, boring and keyway patterns.

Worm gear dual position mounting capability for easy reversal of rotation direction.

Comprehensive product line for torque capability.

Machine generated self-lock gearing assures minimum backlash and smooth operation.

Thrust bearings provide reliable smooth operation



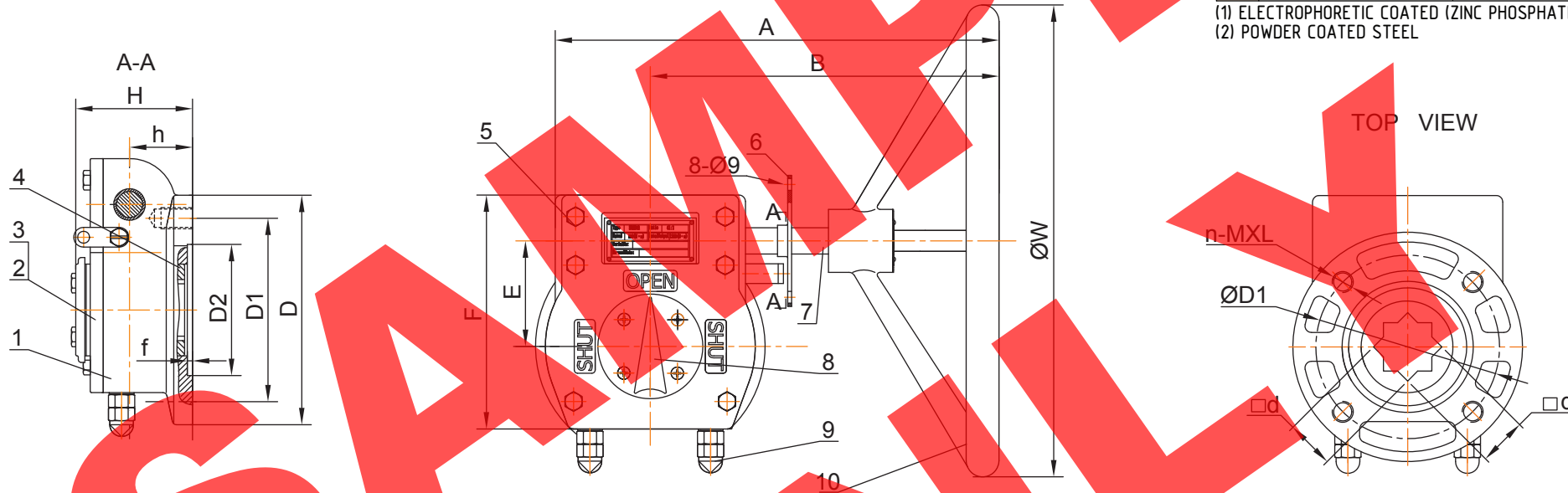
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BILL OF MATERIALS

NO.	PART NAME	MATERIAL	NOTES
1	GEAR BODY	ASTM A536 65-45-12	-
2	COVER	ASTM A536 65-45-12	-
3	O-RING	NBR	-
4	GEAR	ASTM A536 65-45-12	-
5	BOLT	8.8	-
6	LOCKING DEVICE	1025	-
7	SHAFT	1045 COATED	(1)
8	POSITION INDICATOR	A36	-
9	ADJUSTING SCREW	8.8	-
10	HANDWHEEL	ASTM A536 65-45-12	(2)

(1) ELECTROPHORETIC COATED (ZINC PHOSPHATE PRE TREATMENT)
(2) POWDER COATED STEEL



DIMENSIONS (MM) & WEIGHT (KG)

Model	D	D1	D2	f	n-MXL	d	ISO5211	A	B	E	F	H	h	w	Weight	Matching APV Ball Valve Size (Full Port 2P SLFSBV01)	
																150 LB	300 LB
WGDGAB24 F07 □14	90	70	55	3	4-M8X12	14	F07 Concave									50NB	
WGDGAB24 F10 □17	125	102	70	3	4-M10X15	17	F10 Concave	256	211	44.5	116	67	31	250	4.5	65/80NB	
WGDGAB24 F10 □22	125	102	70	3	4-M10X15	22	F10 Concave									100NB	
WGDGAB36 F12 □27	150	125	85	3	4-M12X18	27	F12 Concave	273	218	61.5	138	80	41	320	6.5	125/150NB	125NB
WGDGAB41 F12 □27	175	125	85	3	4-M12X18	27	F12 Concave	338	266	80.5	179	90	48	360	11.5	200NB	150NB
WGDGAB47 F12 □27	175	125	85	3	4-M12X18	27	F12 Concave	338	266	89.5	185	95	54	460	12.5		200NB
WGDGAB36 F10 □22	125	102	70	3	4-M10X15	22	F10 Concave	273	220	61.5	138	80	41	320	6.5		
WGDGAB41 F14 □36	175	140	100	4	4-M16X24	36	F14 Concave	338	266	80.5	179	90	54	320	11.5		
WGDGAB47 F14 □36	175	140	100	4	4-M16X24	36	F14 Concave	338	266	89.5	185	95	54	320	12.5		
WGDGAB47 F14 □36*	175	140	100	4	4-M16X24	36	F14 Concave	410	340					320	12.7		

Dimensions in millimeters

TECHNICAL PARAMETERS

Model	Speed Ratio	Torque Nm		Torque amplification factor ±10%
		Input	Output	
WGDGAB24	24:1	60	430	7.2
WGDGAB36	36:1	70	800	10.7
WGDGAB41	41:1	110	1350	12.3
WGDGAB47	47:1	160	2000	12.5

Worm Gear, WGDGA Series Double Square Connection	ORDER N° / DWG N°	XXXXXX-99	APPROVED	B.T.
	REV.	00	CHECKED	S.Q.
Australian Pipeline Valve			DRAWN	C.C.