



# TOTAL VALVE SOLUTIONS



ADELAIDE • BRISBANE • PERTH www.globalsupplyline.com.au

ANSI/API/BS/AS
Standard and Special
Service Valves Abrasive, High & Low
Temperature and
Special Alloys.

#### PROCESS & PIPELINE VALVES

ASME 150~2500 class. Carbon, Alloy, Stainless & Duplex Steel

- Quarter turn: Ball, Butterfly and Plug.
- Gate, Globe & Check, cast & forged.
- Wafer Check Valves, dual & single flap.

#### SPECIAL SERVICE & CONTROL VALVES

- CVS Canada: ED, ET, EWS, EWT Control Valves.
- Diaphragm and Knife Gate Valves.
- Parallel Slide & Geothermal Gate Valves.

# ACTUATORS & CONTROLS

- Pneumatic Scotch Yoke and Rack & Pinion.

#### SPECIALTY PRODUCTS

- ANSI Flanges and Butt Weld Fittings.
- Studs, Gaskets, Strainers, Sight Glasses.
- API6A Valves, Chokes and Wellheads.
- Hammer Unions and Swivels.



















# **VALVES, ACTUATORS & PIPELINE SUPPLIES**

Global Supply Line (GSL) holds the world's largest inventory range of valves, actuators & pipeline products in commodity and specialty materials. We are a proud member of the ASME (American Society of Mechanical Engineers), Achilles and the APGA (Australian Pipelines and Gas Association).

GSL is your total valve solution expert:

- ✓ \$50 Million Inventory: Valves, Actuators, Flanges & Fittings.
- ✓ Project Supply.
- ✓ Total Valve Management Contracts.
- ✓ In-house Valve Engineering Facility.
- ✓ Warehousing and Inventory Management.
- ✓ Hydrostatic & Gas Pressure Testing (up to 15,000 PSIG).
- ✓ Valve & Actuator Assembly Performance and Torque Testing.
- ✓ Non-destructive Testing.

Our 9001 accredited facility is official licensed service and automation test facility for APV, JC, Sferova, Air Torque & Starline.

Our Lloyd's accredited Quality Program ensures that the valves we supply continue to meet the stringent and ever-changing safety and quality requirements of the energy industry.

# **UPSTREAM VALVES**

GSL provides upstream valves for a variety of applications, including offshore production platforms, floating production, storage and off-loading, and land-based drilling rigs.

- API 6A Gate 1" to 7 1/16"
- API 6D Ball 15 NB to 1500 NB
- API 6D Modular Ball (DBB) 15 NB to 600 NB
- API 6A/6D Check 15 NB to 1500 NB
- API 6A/6D Plug 15 NB to 600 NB
- API 6A Choke 1" to 7 1/16"







# MIDSTREAM & GAS UTILITY VALVES

GSL provide midstream valves for all the processes between the wellhead and the refinery or city gate.

- API 6D Gate 50 NB to 1800 NB
- API 6D lubricated and expanding Plug 20 NB to 600 NB
- API 6D Ball 15 NB to 1500 NB





# **DOWNSTREAM & INDUSTRIAL VALVES**

In the downstream markets, GSL supplies valves, actuators and custom-engineering packages to perform specific functions in critical, unique flow control environments, such as refineries and petrochemical plants.

Our world-class distribution facility, backed by skilled, experienced customer service specialists, gives us the unique position to offer gate, ball, plug, butterfly, globe and check valves for the most demanding applications.

In addition to serving all sectors of the oil and gas energy industry, GSL is also a trusted supplier to the mining and industrial sectors. We specialise in both commodity and special products, ranging form low to high pressure applications.

- API 600/603 & BS/AS Gate, Globe and Check
   50 NB to 1500 NB
- API 602 Gate, Globe and Check 8 NB to 100 NB
- Flanged, threaded and socket-weld Ball 8 NB to 1500 NB
- Pressure seal Gate, Globe and Check 50 NB to 600 NB
- Wafer/Dual plate Check 40 NB to 1500 NB
- Resilient seated Butterfly 50 NB to 3600 NB
- Triple offset Butterfly 80 NB to 3000 NB
- High-performance Butterfly 65 NB to 1500 NB
- Instrumentation Valves 8 NB to 25 NB
- Cryogenic Ball, Butterfly, Gate, Globe and Check
   various sizes

# **ACTUATION & AUTOMATION**

GSL also provides customers with complete in-house valve automation packages, including pneumatic, hydraulic and electric automation for multi-turn, quarter-turn, and valve networking applications. Visit our Valve Actuation and Automation page for more information.

# FLANGES, FITTINGS & PIPELINE PRODUCTS

In the spirit of turn-key supply, GSL offer a one stop shop in also holding large stocks of ANSI/ ASME/ B16/ API6A flanges & fittings as well as studs, gaskets, strainers, etc.



# **IN-HOUSE ENGINEERING, TEST & PAINT**

GSL has a complete in-house valve engineering facility that can handle all re-engineering, modifications and accessories.

We can perform all testing in-house including hydrostatic, air, high pressure gas submerged tank test, etc. In addition we can perform in-house torque testing, PMI and have a complete blast & paint facility. Check out the Engineering section of our website.











# **STOCK RANGE SUMMARY**

GLOBAL SUPPLY LINE STOCK AND INDENT THE FOLLOWING RANGE OF VALVES AND PIPELINE PRODUCTS. SEE OUR WEBSITE FOR OUR FULL STOCK LIST AND WEBSITE.

A. **ACTUATORS**, PNEUMATIC, QUARTER TURN DOUBLE ACTING AND SPRING RETURN, SCOTCH YOKE AND RACK AND PINION, COMPACT AND PISTON TYPE, ACTREG, BETTIS, ROTORK, BIFFI, JC, AIR TORQUE, SFEROVA, TORQTURN, LEEDEN, ETC.

SIZE RANGE API6A (API6B) 1 13/16 INCH, 2 1/16 INCH, 2 9/16 INCH, 3 1/8 INCH, 3 1/16 INCH, 4 1/16 INCH, 7 1/16 INCH.

BODY MATERIAL: - 4130 (60K), API TYPE 2 (API-4), API TYPE 4, A487C.

SPECIFICATION: - PR1, PR2, PSL1, PSL2, TEMPU.

B. **BALL VALVES**, FLOATING BALL, FIRESAFE, FORGED AND CAST, PTFE AND METAL SEATED, 2 PIECE AND 3 PIECE BODY, WELD BODY, LEVER AND GEAR OPERATED AND WITH PNEUMATIC ACTUATOR.

ANSI END CONNECTIONS: - ANSI RTJ (RING JOINT) FLANGED, SOCKETWELD, ANSI RF FLANGED (SMOOTH FINISH), LONG EXTENDED PUP ENDS, NPT, BSP, PBE, BUTTWELD STANDARD WEIGHT.

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD SCHEDULE XXS.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE K (AS TABLE K), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

NACE MR-01-75, H2S SERVICE.

MATERIAL: - WCB, A105N, LF2, CAST IRON, DUCTILE IRON, F22, F11, WC6, WC5, ALLOY 20 (A20), MONEL, DUPLEX (F51), LF2 (LOW TEMPERATURE), LCB, 304, CF8, CF8M, 316, 304L, 316L, CF3, CF3M, CF8G, 347, CE8M, S31803, SAF2205, F5.

BOLTS: - B7M, L7M, B8, B8M.

OPERATOR: - LOCKABLE, GEN-OPERATED, EXTENDED BONNET, EXTENDED STEM, CHAIN WHEEL OPERATED, PNEUMATIC ACTUATOR, ELECTRIC ACTUATOR, ESD.

SEATS: - TEFLON, RPTFE, PEEK, CARBON PTFE, GRAPHITE, DEVLON, NYLON, TEFZEL, METAL TO METAL.

LOW AND HIGH TEMPERATURE.

O-RINGS/SEALS/PACKING: - VITON B, VITON AED, BUNA GRAPHITE.

BODY OR BONNET SEALS: - GRAPHITE, VITON, 316SS SPIRAL WOUND, GRAPHITE FILLED, 316SS RING JOINT GASKET, TEFLON, PTFE, AND RPTFE.

DIMENSIONS TO ANSI B16.1, END CONNECTIONS TO ANSI B16.34.

Global Supply Line Pty Ltd ABN 86 008 134 512

ANSI CLASS 125, ANSI CLASS 150, ANSI CLASS 300, ANSI CLASS 600, ANSI CLASS 900, ANSI CLASS 1500, ANSI CLASS 2500, ANSI CLASS 2690.

LONG PATTERN, SHORT PATTERN.

FULL PORT (FULL BORE), REDUCED PORT (REDUCED BORE).

#### **SIZES**

.25 INCH (¼ INCH)	175MM NB	7 INCH
.375 INCH (¾ INCH)	200MM NB	8 INCH
.5 INCH (½ INCH)	250MM NB	9 INCH
.75 INCH (¾ INCH)	300MM NB	10 INCH
1 INCH	350MM NB	12 INCH
1.25 INCH (1¼ INCH)	375MM NB	14 INCH
1.5 INCH (1½ INCH)	400MM NB	16 INCH
2 INCH	450MM NB	18 INCH
2.5 INCH (2½ INCH)	600MM NB	22 INCH
3 INCH	700MM NB	26 INCH
4 INCH	750MM NB	30 INCH
5 INCH	800MM NB	36 INCH
6 INCH	900MM NB	40 INCH
	.375 INCH (¾ INCH) .5 INCH (½ INCH) .75 INCH (¾ INCH) 1 INCH 1.25 INCH (1¼ INCH) 1.5 INCH (1½ INCH) 2 INCH 2.5 INCH (2½ INCH) 3 INCH 4 INCH 5 INCH	.375 INCH (¾ INCH) 200MM NB .5 INCH (½ INCH) 250MM NB .75 INCH (¾ INCH) 300MM NB 1 INCH 350MM NB 1.25 INCH (1¼ INCH) 375MM NB 1.5 INCH (1½ INCH) 400MM NB 2 INCH 450MM NB 2.5 INCH (2½ INCH) 600MM NB 3 INCH 700MM NB 4 INCH 750MM NB 5 INCH 800MM NB

#### **SPECIALS**

CRYOGENIC, HIGH TEMPERATURE, LOW TEMPERATURE, ESD EMERGENCY SHUTDOWN.

#### **BRANDS**

AUSTRALIAN PIPELINE VALVE, SFEROVA ITALY, JC SPAIN, STARLINE ITALY.

#### **SMALL BORE**

NPT, BSP AND WELD ENDS IN: - 1000 PSI - (6900 KPA), 2000 PSI (800 CLASS) - (1400 KPA), 3000 PSI (API3000) - (2800 KPA), 5000 PSI (API5000) - (34500KPA), 6000 PSI - (41400 KPA), 10000 PSI - (69000 KPA).

C. BALL VALVES, TRUNNION MOUNTED, API6D, FULL THROUGH CONDUIT FIRESAFE, FORGED AND CAST, SELF-RELIEVING SEATS, EMERGENCY SEALANT INJECTION, SIDE ENTRY IN 3 PIECE AND 2 PIECE. ALSO TOP ENTRY AND ALL WELDED BODY, SOFT AND METAL SEATED, GEAR OPERATED, DOUBLE BLOCK AND BLEED, LEVER OPERATED, BURIED SERVICE ETC. ALSO TWIN BALL VALVES (TANDEM DOUBLE BLOCK AND BLEED). WE ALSO STOCK PNEUMATIC ACTUATORS, WHICH WE CAN SUPPLY, AND FIT.

ANSI END CONNECTIONS: - ANSI RTJ (RING JOINT) FLANGED, SOCKETWELD, ANSI RF FLANGED (SMOOTH FINISH), LONG EXTENDED PUP ENDS, NPT, BSP, PBE, BUTTWELD STANDARD WEIGHT.

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD SCHEDULE XXS

SIZE RANGE API6A (API6B) 1 13/16 INCH, 2 1/16 INCH, 2 9/16 INCH, 3 1/8 INCH, 3 1/16 INCH, 4 1/16 INCH, 7 1/16 INCH.

BODY MATERIAL: - 4130 (60K), API TYPE 2 (API-4), API TYPE 4, A487C.

SPECIFICATION: - PR1, PR2, PSL1, PSL2, TEMPU.

NACE MR-01-75, H2S SERVICE.

MATERIAL: - WCB, A105N, LF2, CAST IRON, DUCTILE IRON, F22, F11, WC6, WC5, ALLOY 20 (A20), MONEL, DUPLEX (F51), LF2 (LOW TEMPERATURE), LCB, 304, CF8, CF8M, 316, 304L, 316L, CF3, CF3M, CF8G, 347, CE8M, S31803, SAF2205, F5.

BOLTS: - B7M, L7M, B8, B8M.

OPERATOR: - LOCKABLE, GEN-OPERATED, EXTENDED BONNET, EXTENDED STEM, CHAIN WHEEL OPERATED, PNEUMATIC ACTUATOR, ELECTRIC ACTUATOR, ESD.

SEATS: - TEFLON, RPTFE, PEEK, CARBON PTFE, GRAPHITE, DEVLON, NYLON, TEFZEL, METAL TO METAL.

LOW AND HIGH TEMPERATURE.

O-RINGS/SEALS/PACKING: - VITON B, VITON AED, BUNA GRAPHITE.

BODY OR BONNET SEALS: - GRAPHITE, VITON, 316SS SPIRAL WOUND, GRAPHITE FILLED, 316SS RING JOINT GASKET, TEFLON, PTFE, AND RPTFE.

DIMENSIONS TO ANSI B16.1. END CONNECTIONS TO ANSI B16.34.

ANSI CLASS 125, ANSI CLASS 150, ANSI CLASS 300, ANSI CLASS 600, ANSI CLASS 900, ANSI CLASS 1500, ANSI CLASS 2500, ANSI CLASS 2690.

API6A 200 LB (2000 PSI), 3000 LB (3000 PSI), 5000 LB (5000 PSI), 10000 LB (10000 PSI), 15000 LB (15000 PSI)

LONG PATTERN, SHORT PATTERN.

FULL PORT (FULL BORE), REDUCED PORT (REDUCED BORE).

## **SIZES**

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (% INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
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80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

#### **SPECIALS**

CRYOGENIC, HIGH TEMPERATURE, LOW TEMPERATURE, ESD EMERGENCY SHUTDOWN.

#### BRANDS

AUSTRALIAN PIPELINE VALVE, SFEROVA ITALY, JC SPAIN, STARLINE ITALY.

D. **BALL VALVES 3 WAY AND 4 WAY**, L PORT, T PORT, CAST IRON, A216 WCB CAST STEEL, A351 CF8 AND CF8M STAINLESS STEEL, LEVER OPERATED GEAR OPERATED AND WITH PNEUMATIC ACTUATOR.

ANSI END CONNECTIONS: - ANSI RTJ (RING JOINT) FLANGED, SOCKETWELD, ANSI RF FLANGED (SMOOTH FINISH), LONG EXTENDED PUP ENDS, NPT, BSP, PBE, BUTTWELD STANDARD WEIGHT.

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD SCHEDULE XXS.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE K (AS TABLE K), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

NACE MR-01-75, H2S SERVICE.

MATERIAL: - WCB, A105N, LF2, CAST IRON, DUCTILE IRON, F22, F11, WC6, WC5, ALLOY 20 (A20), MONEL, DUPLEX (F51), LF2 (LOW TEMPERATURE), LCB, 304, CF8, CF8M, 316, 304L, 316L, CF3, CF3M, CF8G, 347, CE8M, S31803, SAF2205, F5.

OPERATOR: - LOCKABLE, GEN-OPERATED, EXTENDED BONNET, EXTENDED STEM, CHAIN WHEEL OPERATED, PNEUMATIC ACTUATOR, ELECTRIC ACTUATOR, ESD.

SEATS: - TEFLON, RPTFE, PEEK, CARBON PTFE, GRAPHITE, DEVLON, NYLON, TEFZEL, METAL TO METAL.

LOW AND HIGH TEMPERATURE.

FULL PORT (FULL BORE), REDUCED PORT (REDUCED BORE)

#### **SIZES**

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (% INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
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65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

E. **BUTTERFLY VALVES**, RUBBER LINED API609, PTFE (TEFLON) LINED, HIGH PERFORMANCE WITH DOUBLE ECCENTRIC OFFSET DISC OR TRIPLE ECCENTRIC OFFSET DISC, PTFE OR METAL TO METAL SEATED CLASS V AND CLASS V1 SHUTOFF, FIRESAFE, LEVER OR GEAR OPERATED OR WITH PNEUMATIC ACTUATOR. BUNA (NBR SEAT), VITON SEAT, EPDM SEAT. ALSO AVAILABLE IN THE FOLLOWING LINERS: - 2100 KPA, 2500 KPA, 3000 KPA, 4000 KPA.

ANSI END CONNECTIONS: - ANSI RTJ (RING JOINT) FLANGED, SOCKETWELD, ANSI RF FLANGED (SMOOTH FINISH), LONG EXTENDED PUP ENDS, NPT, BSP, PBE, BUTTWELD STANDARD WEIGHT.

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD SCHEDULE XXS.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE K (AS TABLE K), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

NACE MR-01-75, H2S SERVICE.

MATERIAL: - WCB, A105N, LF2, CAST IRON, DUCTILE IRON, F22, F11, WC6, WC5, ALLOY 20 (A20), MONEL, DUPLEX (F51), LF2 (LOW TEMPERATURE), LCB, 304, CF8, CF8M, 316, 304L, 316L, CF3, CF3M, CF8G, 347, CE8M, S31803, SAF2205, F5.

OPERATOR: - LOCKABLE, GEN-OPERATED, EXTENDED BONNET, EXTENDED STEM, CHAIN WHEEL OPERATED, PNEUMATIC ACTUATOR, ELECTRIC ACTUATOR, ESD.

END CONNECTION STYLES: - LUGGED, FULLY LUGGED AND TAPPED, DUAL FLANGED, FLANGELESS.

ANSI CLASS 125, ANSI CLASS 150, ANSI CLASS 300, ANSI CLASS 600, ANSI CLASS 900, ANSI CLASS 1500, ANSI CLASS 2500, ANSI CLASS 2690.

#### **SIZES**

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (¾ INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
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125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

#### **SPECIALS**

CRYOGENIC, HIGH TEMPERATURE, LOW TEMPERATURE, ESD EMERGENCY SHUTDOWN.

#### **BRANDS**

AUSTRALIAN PIPELINE VALVE, SUPERSEAL, OMB FLUICON.

F. CHECK VALVES CAST AND FORGED, PISTON (LIFT) SWING, BALL TYPE, INLINE AND RIGHT ANGLE, VERTICAL SERVICE C/W SPRING, AXIAL DISC Y-TYPE, PIGGABLE. BS1868, API603, API602, ANSI B16.34. OPTIONAL COUNTERWEIGHT.

ANSI END CONNECTIONS: - ANSI RTJ (RING JOINT) FLANGED, SOCKETWELD, ANSI RF FLANGED (SMOOTH FINISH), LONG EXTENDED PUP ENDS, NPT, BSP, PBE, BUTTWELD STANDARD WEIGHT.

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD SCHEDULE XXS.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE K (AS TABLE K), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

NACE MR-01-75, H2S SERVICE.

MATERIAL: - WCB, A105N, LF2, CAST IRON, DUCTILE IRON, F22, F11, WC6, WC5, ALLOY 20 (A20), MONEL, DUPLEX (F51), LF2 (LOW TEMPERATURE), LCB, 304, CF8, CF8M, 316, 304L, 316L, CF3, CF3M, CF8G, 347, CE8M, S31803, SAF2205, F5.

BOLTS: - B7M, L7M, B8, B8M.

BODY OR BONNET SEALS: - GRAPHITE, VITON, 316SS SPIRAL WOUND, GRAPHITE FILLED, 316SS RING JOINT GASKET, TEFLON, PTFE, AND RPTFE.

DIMENSIONS TO ANSI B16.1. END CONNECTIONS TO ANSI B16.34.

ANSI CLASS 125, ANSI CLASS 150, ANSI CLASS 300, ANSI CLASS 600, ANSI CLASS 900, ANSI CLASS 1500, ANSI CLASS 2500, ANSI CLASS 2690.

WELDED BONNET, PRESSURE SEAL BONNET, BOLTED BONNET, BBOSY (RISING STEM, RISING SPINDLE), BBISY (NON RISING STEM, RISING SPINDLE).

FULL PORT (FULL BORE), REDUCED PORT (REDUCED BORE).

#### **SIZES**

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (¾ INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
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80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

G. CHECK WAFER, CHECK API594, DUAL FLAP AND SINGLE FLAP, METAL SEATED AND SOFT SEATED (BUNA, VITON, PTFE), INCONEL X750 SPRING, CONCENTRIC FLOATING, STELLITE SEAT AND DISC, SINGLE DISC.

RETAINER TYPE AND RETAINERLESS TYPE. EQUIVALENT TO GOODWIN®™, MISSION®™, STOCKHAM-CRANE®™.

ANSI END CONNECTIONS: - ANSI RTJ (RING JOINT) FLANGED, SOCKETWELD, ANSI RF FLANGED (SMOOTH FINISH), LONG EXTENDED PUP ENDS, NPT, BSP, PBE, BUTTWELD STANDARD WEIGHT.

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD SCHEDULE XXS.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE K (AS TABLE K), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

SIZE RANGE API6A (API6B) 1 13/16 INCH, 2 1/16 INCH, 2 9/16 INCH, 3 1/8 INCH, 3 1/16 INCH, 4 1/16 INCH, 7 1/16 INCH.

BODY MATERIAL: - 4130 (60K), API TYPE 2 (API-4), API TYPE 4, A487C.

SPECIFICATION: - PR1, PR2, PSL1, PSL2, TEMPU.

NACE MR-01-75, H2S SERVICE.

MATERIAL: - WCB, A105N, LF2, CAST IRON, DUCTILE IRON, F22, F11, WC6, WC5, ALLOY 20 (A20), MONEL, DUPLEX (F51), LF2 (LOW TEMPERATURE), LCB, 304, CF8, CF8M, 316, 304L, 316L, CF3, CF3M, CF8G, 347, CE8M, CD3MN, S31803, SAF2205, F5.

END CONNECTION STYLES: - LUGGED, FULLY LUGGED AND TAPPED, DUAL FLANGED, FLANGELESS.

ANSI CLASS 125, ANSI CLASS 150, ANSI CLASS 300, ANSI CLASS 600, ANSI CLASS 900, ANSI CLASS 1500, ANSI CLASS 2500, ANSI CLASS 2690.

API6A 200 LB (2000 PSI), 3000 LB (3000 PSI), 5000 LB (5000 PSI), 10000 LB (10000 PSI), 15000 LB (15000 PSI).

LONG PATTERN, SHORT PATTERN,

#### **SIZES**

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (¾ INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
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25MM NB	1 INCH	350MM NB	12 INCH
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65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

H. **CHECK VALVE SWING TYPE**, RUBBER DISC, AND NX AND N SAUNDERS STYLE. HARD AND SOFT RUBBER LINED, C/W BUTYL 'B' FLAPPER OR VITON.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE K (AS TABLE K), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

BODY OR BONNET SEALS: - GRAPHITE, VITON, 316SS SPIRAL WOUND, GRAPHITE FILLED, 316SS RING JOINT GASKET, TEFLON, PTFE, AND RPTFE.

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (% INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

I. DIAPHRAGM VALVE STYLE KB AND A2 SAUNDERS STYLE, STRAIGHT THROUGH AND WEIR, A15, A20, A25, A40, A50, A65, A70, A100, A150, A200, A250, A300, A350, KB15, KB20, KB25, KB40, KB50, KB65, KB80, KB100, KB150, KB200, KB250, KB300, KB350. HARD RUBBER LINED, SOFT RUBBER LINED, HALAR LINED, GLASS LINED C/W BUTYL RUBBER 'B' DIAPHRAGM OR PTFE OR VITON DIAPHRAGM. HANDWHEEL OPERATED OR PNEUMATIC ACTUATOR (ES60, ES64, ES69 ETC). DOUBLE ACTING OR SPRING RETURN.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE K (AS TABLE K), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

#### SIZES

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (¾ INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
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80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

J GATE VALVES FLEXIBLE AND SOLID WEDGE FORGED AND CAST, TYPE API600, API603, API602, ANSI B16.34, METAL SEAT, AND PFTE SEAT BLOCK AND BLEED TYPE.

ANSI END CONNECTIONS: - ANSI RTJ (RING JOINT) FLANGED, SOCKETWELD, ANSI RF FLANGED (SMOOTH FINISH), LONG EXTENDED PUP ENDS, NPT, BSP, PBE, BUTTWELD STANDARD WEIGHT.

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD SCHEDULE XXS.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE K (AS TABLE K), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

NACE MR-01-75, H2S SERVICE.

MATERIAL: - WCB, A105N, LF2, CAST IRON, DUCTILE IRON, F22, F11, WC6, WC5, ALLOY 20 (A20), MONEL, DUPLEX (F51), LF2 (LOW TEMPERATURE), LCB, 304, CF8, CF8M, 316, 304L, 316L, CF3, CF3M, CF8G, 347, CE8M, S31803, SAF2205, F5.

BOLTS: - B7M, L7M, B8, B8M, B16.

OPERATOR: - LOCKABLE, GEN-OPERATED, EXTENDED BONNET, EXTENDED STEM, CHAIN WHEEL OPERATED, PNEUMATIC ACTUATOR, ELECTRIC ACTUATOR, ESD.

BODY OR BONNET SEALS: - GRAPHITE, VITON, 316SS SPIRAL WOUND, GRAPHITE FILLED, 316SS RING JOINT GASKET, TEFLON, PTFE, AND RPTFE.

DIMENSIONS TO ANSI B16.1. END CONNECTIONS TO ANSI B16.34.

ANSI CLASS 125, ANSI CLASS 150, ANSI CLASS 300, ANSI CLASS 600, ANSI CLASS 900, ANSI CLASS 1500, ANSI CLASS 2500, ANSI CLASS 2690.

LONG PATTERN, SHORT PATTERN.

WELDED BONNET, PRESSURE SEAL BONNET, BOLTED BONNET, BBOSY (RISING STEM, RISING SPINDLE), BBISY (NON RISING STEM, RISING SPINDLE).

FULL PORT (FULL BORE), REDUCED PORT (REDUCED BORE).

#### **SIZES**

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (¾ INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

#### **SPECIALS**

CRYOGENIC, HIGH TEMPERATURE, LOW TEMPERATURE, ESD EMERGENCY SHUTDOWN.

#### **BRANDS**

AUSTRALIAN PIPELINE VALVE, JC SPAIN.

K. GATE VALVE API6D, PIPELINE TYPE, EXPANDING AND SLAB. FULL THROUGH CONDUIT.

ANSI END CONNECTIONS: - ANSI RTJ (RING JOINT) FLANGED, SOCKETWELD, ANSI RF FLANGED (SMOOTH FINISH), LONG EXTENDED PUP ENDS, NPT, BSP, PBE, BUTTWELD STANDARD WEIGHT.

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD SCHEDULE XXS.

NACE MR-01-75, H2S SERVICE.

MATERIAL: - WCB, A105N, LF2, CAST IRON, DUCTILE IRON, F22, F11, WC6, WC5, ALLOY 20 (A20), MONEL, DUPLEX (F51), LF2 (LOW TEMPERATURE), LCB, 304, CF8, CF8M, 316, 304L, 316L, CF3, CF3M, CF8G, 347, CE8M, S31803, SAF2205, F5.

BOLTS: - B7M, L7M, B8, B8M.

ANSI CLASS 125, ANSI CLASS 150, ANSI CLASS 300, ANSI CLASS 600, ANSI CLASS 900, ANSI CLASS 1500, ANSI CLASS 2500.

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	375 INCH (% INCH)	200MM NB	8 INCH

15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

L. **GATE VALVE PARALLEL SLIDE TYPE**, TWIN DISC PARALLEL SPRING, ENERGISED DISCS AND EXPANDING DISCS. STEAM AND HIGH TEMPERATURE APV-STEAMCO.

ANSI END CONNECTIONS: - ANSI RTJ (RING JOINT) FLANGED, SOCKETWELD, ANSI RF FLANGED (SMOOTH FINISH), LONG EXTENDED PUP ENDS, NPT, BSP, PBE, BUTTWELD STANDARD WEIGHT.

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD SCHEDULE XXS.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE K (AS TABLE K), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

NACE MR-01-75, H2S SERVICE.

MATERIAL: - WCB, A105N, LF2, CAST IRON, DUCTILE IRON, F22, F11, WC6, WC5, ALLOY 20 (A20), MONEL, DUPLEX (F51), LF2 (LOW TEMPERATURE), LCB, 304, CF8, CF8M, 316, 304L, 316L, CF3, CF3M, CF8G, 347, CE8M, S31803, SAF2205, F5.

BOLTS: - B7M, L7M, B8, B8M.

ANSI CLASS 125, ANSI CLASS 150, ANSI CLASS 300, ANSI CLASS 600, ANSI CLASS 900, ANSI CLASS 1500, ANSI CLASS 2500, ANSI CLASS 2690.

WELDED BONNET, PRESSURE SEAL BONNET, BOLTED BONNET, BBOSY (RISING STEM, RISING SPINDLE), BBISY (NON RISING STEM, RISING SPINDLE).

FULL PORT (FULL BORE), REDUCED PORT (REDUCED BORE).

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (% INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
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50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

M. GATE API6A FULL THROUGH CONDUIT, WKM STYLE IN EXPANDING SLAB AND CAMERON®™ STYLE FC FLOATING SOLID SLAB, SOFT PTFE SEAT AND METAL SEAT, XMAS TREE TYPE.

END CONNECTIONS: - RTJ (RING JOINT)

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, NPT (LP) THREADED.

SIZE RANGE API6A (API6B) 1 13/16 INCH, 2 1/16 INCH, 2 9/16 INCH, 3 1/8 INCH, 3 1/16 INCH, 4 1/16 INCH, 7 1/16 INCH.

BODY MATERIAL: - 4130 (60K), API TYPE 2 (API-4), API TYPE 4, A487C.

SPECIFICATION: - PR1, PR2, PSL1, PSL2, TEMPU.

API6A 2000 LB (2000 PSI), 3000 LB (3000 PSI), 5000 LB (5000 PSI), 10000 LB (10000 PSI), 15000 LB (15000 PSI).

#### **BRANDS**

AUSTRALIAN PIPELINE VALVE, SC UZTEL.

N. **GATE-KNIFE**, METAL SEAT, PTFE SEAT, NBR/BUNA SEAT, VITON SEAT, GENERAL SLURRY AND ABRASIVE SERVICE, HANDWHEEL, GEAR OPERATED PNEUMATIC ACTUATOR. IRON AND STAINLESS BODY.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE K (AS TABLE K), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

OPERATOR: - LOCKABLE, GEN-OPERATED, EXTENDED BONNET, EXTENDED STEM, CHAIN WHEEL OPERATED, PNEUMATIC ACTUATOR, ELECTRIC ACTUATOR, ESD.

FULL PORT (FULL BORE).

#### **SIZES**

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (¾ INCH)	<b>200MM NB</b>	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (11/4 INCH)	<b>375MM NB</b>	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

O. **GATE VALVE IRON**, FIGURE 600, FIGURE 601, SLURRY AND WATER SERVICE. WEDGE GATE AND SLUICE, BRONZE AND STAINLESS TRIM. AS2129 B55150, MSS SP70, PN10, PN16, BS5163, PN10, PN16, 1400KPA, 2100KPA, JIS, JOHNS EQUIVALENT.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE K (AS TABLE K), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

OPERATOR: - LOCKABLE, GEN-OPERATED, EXTENDED BONNET, EXTENDED STEM, CHAIN WHEEL OPERATED, PNEUMATIC ACTUATOR, ELECTRIC ACTUATOR, ESD.

WELDED BONNET, PRESSURE SEAL BONNET, BOLTED BONNET, BBOSY (RISING STEM, RISING SPINDLE), BBISY (NON RISING STEM, RISING SPINDLE).

#### **SIZES**

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (% INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (11/4 INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
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80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

P. GLOBE VALVE, BS1873, API643, ANSI B16.34, API600, TAPERED V STYLE CONTROL DISC, PARABOLIC DISC.

ANSI END CONNECTIONS: - ANSI RTJ (RING JOINT) FLANGED, SOCKETWELD, ANSI RF FLANGED (SMOOTH FINISH), LONG EXTENDED PUP ENDS, NPT, BSP, PBE, BUTTWELD STANDARD WEIGHT.

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD SCHEDULE XXS.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

NACE MR-01-75, H2S SERVICE.

MATERIAL: - WCB, A105N, LF2, CAST IRON, DUCTILE IRON, F22, F11, WC6, WC5, ALLOY 20 (A20), MONEL, DUPLEX (F51), LF2 (LOW TEMPERATURE), LCB, 304, CF8, CF8M, 316, 304L, 316L, CF3, CF3M, CF8G, 347, CE8M, S31803, SAF2205, F5.

BOLTS: - B7M, L7M, B8, B8M.

OPERATOR: - LOCKABLE, GEN-OPERATED, EXTENDED BONNET, EXTENDED STEM, CHAIN WHEEL OPERATED, PNEUMATIC ACTUATOR, ELECTRIC ACTUATOR, ESD.

BODY OR BONNET SEALS: - GRAPHITE, VITON, 316SS SPIRAL WOUND, GRAPHITE FILLED, 316SS RING JOINT GASKET, TEFLON, PTFE, AND RPTFE.

DIMENSIONS TO ANSI B16.1. END CONNECTIONS TO ANSI B16.34.

ANSI CLASS 125, ANSI CLASS 150, ANSI CLASS 300, ANSI CLASS 600, ANSI CLASS 900, ANSI CLASS 1500, ANSI CLASS 2500, ANSI CLASS 2690.

LONG PATTERN, SHORT PATTERN.

#### **SIZES**

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (¾ INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
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80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

#### **SPECIALS**

CRYOGENIC, HIGH TEMPERATURE, LOW TEMPERATURE, ESD EMERGENCY SHUTDOWN.

#### **BRANDS**

AUSTRALIAN PIPELINE VALVE, MTM ITALY, JC SPAIN.

P1 **GLOBE VALVE, CAST IRON**, AS2129, PN10, PN16, MSS SP85, BS5152, JIS, JOHNS EQUIVALENTS, 2100KPA, 1400KPA.

BOLTED BONNET, BBOSY (RISING STEM, RISING SPINDLE), BBISY (NON RISING STEM, RISING SPINDLE), BELLOWS SEALED.

#### SIZES

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (% INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	<b>375MM NB</b>	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
<b>100MM NB</b>	4 INCH	750MM NB	30 INCH
<b>125MM NB</b>	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

Q. GLOBE – STOP CHECK (SCREWDOWN NON RETURN) IN LINE AND RIGHT ANGLE, APV STEAMCO.

ANSI END CONNECTIONS: - ANSI RTJ (RING JOINT) FLANGED, SOCKETWELD, ANSI RF FLANGED (SMOOTH FINISH), LONG EXTENDED PUP ENDS, NPT, BSP, PBE, BUTTWELD STANDARD WEIGHT.

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD SCHEDULE XXS.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE K (AS TABLE K), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

NACE MR-01-75, H2S SERVICE.

MATERIAL: - WCB, A105N, LF2, CAST IRON, DUCTILE IRON, F22, F11, WC6, WC5, ALLOY 20 (A20), MONEL, DUPLEX (F51), LF2 (LOW TEMPERATURE), LCB, 304, CF8, CF8M, 316, 304L, 316L, CF3, CF3M, CF8G, 347, CE8M, S31803, SAF2205, F5.

BOLTS: - B7M, L7M, B8, B8M.

ANSI CLASS 125, ANSI CLASS 150, ANSI CLASS 300, ANSI CLASS 600, ANSI CLASS 900, ANSI CLASS 1500, ANSI CLASS 2500, ANSI CLASS 2690.

WELDED BONNET, PRESSURE SEAL BONNET, BOLTED BONNET, BBOSY (RISING STEM, RISING SPINDLE),

BBISY (NON RISING STEM, RISING SPINDLE)

#### **SIZES**

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (¾ INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
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100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

R. **NEEDLE VALVES**, GLOBE PATTERN AND STRAIGHT THROUGH, SOCKET WELD, NPT AND BSP MALE X FEMALE, FEMALE X FEMALE, V-TIP, PLUG TYPE, NEEDLE POINT TIP, ROTATING AND FIXED PLUG, LARGE ORIFICE AND STANDARD ORIFICE, C/W SIDE PORT AND BLEEDER PLUG, BLOCK AND BLEED STYLE, ANDERSON GREENWOOD®™ EQUIVALENT, SIDE OUTLETS/MULTIPORT METAL SEAT, PTFE SOFT SEAT, NYLON OR DELRIN SOFT SEAT.

## **SIZES**

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (% INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
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50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

NPT, BSP AND WELD ENDS IN: -

1000 PSI (6900 KPA), 2000 PSI (800 CLASS) (1400 KPA), 3000 PSI (API3000) (2800 KPA),

5000 PSI (API5000) (34500KPA), 6000 PSI (41400 KPA), 10000 PSI (69000 KPA),

S. **PLUG VALVES LUBRICATED** API6D FIRESAFE, PRESSURE BALANCED (DYNAMIC BALANCED) AUDCO® AND NORDSTROM® STYLE, INVERTED PLUG, TAPERED PLUG, REGULAR PATTERN, SHORT PATTERN AND VENTURI PATTERN, (AND TRUE FULL CIRCULAR PORT FOR SLURRY SERVICE).

ANSI END CONNECTIONS: - ANSI RTJ (RING JOINT) FLANGED, SOCKETWELD, ANSI RF FLANGED (SMOOTH FINISH), LONG EXTENDED PUP ENDS, NPT, BSP, PBE, BUTTWELD STANDARD WEIGHT.

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD SCHEDULE XXS.

NACE MR-01-75, H2S SERVICE.

BOLTS: - B7M, L7M, B8, B8M.

OPERATOR: - LOCKABLE, GEN-OPERATED, EXTENDED BONNET, EXTENDED STEM, CHAIN WHEEL OPERATED, PNEUMATIC ACTUATOR, ELECTRIC ACTUATOR, ESD.

DIMENSIONS TO ANSI B16.1. END CONNECTIONS TO ANSI B16.34.

ANSI CLASS 125, ANSI CLASS 150, ANSI CLASS 300, ANSI CLASS 600, ANSI CLASS 900, ANSI CLASS 1500, ANSI CLASS 2500.

#### **SIZES**

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (% INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

T. **PLUG VALVES PTFE/PFA/TEFLON SLEEVED** AND LINED, NON-LUBRICATED, 2 WAY AND 3 WAY, TAPER STYLE, SHORT PATTERN, REGULAR PATTERN.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE K (AS TABLE K), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

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8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (% INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (11/4 INCH)	375MM NB	14 INCH

40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

- U. **STUD BOLTS** A193 GRADE 37, AND L7 UNC; HEX HEAVY NUTS A194 GRADE 2H AND L7, % INCH, % INCH (.75 INCH), 1 INCH, 1% INCH, 1% INCH, 1½ INCH (1.5 INCH), 1% INCH, 1¾ INCH (1.75 INCH), 1% INCH. IN ALL LENGTHS, EX STOCK.
- V. **GASKETS:** INSULATION KITS, 3.2MM NEOPRENE FAILED PHENOLIC, PHENOLIC SLEEVES, TYPE E FULL FACE, ANSI CLASS 150, 300, 600, 900, 1500, 25MM.

#### SIZES

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (¾ INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

- W. GASKETS: RING GASKETS BX AND R, SOFT IRON, LOW CARBON STEEL, 316 STAINLESS CAD PLATED, OVAL, OCTAGONAL, SUIT RTJ FLANGES ANSI 150, 300, 600, 900, 1500, 2500 AND API 2000, 3000, 5000, 10000, 15000, API6A, API6B, PSL1, PSL2, ANSI B16.20.
- X. **GASKETS**: 316SS/GRAPHITE FILLED SPIRAL WINDINGS, (EXPANDED GRAPHITE FILLED), CAD PLATED INNER AND OUTER RING, API601, ANSI B16.20, ANSI 150, 300, 600, 900, 1500.

#### **SIZES**

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (¾ INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	<b>250MM NB</b>	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

Y. GEAR BOXES – VALVES: - UP TO 33000NM NEWTON METRES TO SUIT BALL VALVE, PLUG VALVE ETC. UP TO 6000NM (NEWTON METRES) TO SUIT GATE VALVE, GLOBE VALVE ETC. EQUIVALENT TO ROTORK®™ IB.

Z. MONOLITHIC INSULATION JOINTS (EXPANSION JOINTS). X52/API5LB ENDS, BUTTWELD, SCHEDULE 40, 80, 160 ETC, ANSI CLASS 150, 300, 800, 900, 1500, 2500. STOCK AND SHORT LEAD TIME INDENT, PUP ENDS.

2 INCH (50MM NB)
3 INCH (80MM NB)
4 INCH (100MM NB)
6 INCH (150MM NB)
12 INCH (350MM NB)
14 INCH (350MM NB)
16 INCH (400MM NB)
18 INCH (450MM NB)
20 INCH (500 MM NB)
10 INCH (250MM NB)

Z1. **OILFIELD WELLHEAD GATE VALVES AND CHRISTMAS TREES** (XMAS TREES), MUD GATE VALVES DEMO EQUIVALENT, EXPANDING SLAB GATE VALVE WKM®™ 'M' EQUIVALENT AND CAMERON®™ FC EQUIVALENT FLOATING SLAB.

**END CONNECTIONS: - RTJ (RING JOINT)** 

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, NPT (LP) THREADED.

SIZE RANGE API6A (API6B) 1 13/16 INCH, 2 1/16 INCH, 2 9/16 INCH, 3 1/8 INCH, 3 1/16 INCH, 4 1/16 INCH, 7 1/16 INCH.

BODY MATERIAL: - 4130 (60K), API TYPE 2 (API-4), API TYPE 4, A487C.

SPECIFICATION: - PR1, PR2, PSL1, PSL2, TEMPU.

API6A 2000 LB (2000 PSI), 3000 LB (3000 PSI), 5000 LB (5000 PSI), 10000 LB (10000 PSI), 15000 LB (15000 PSI)

Z2. **OILFIELD CHOKES** RIGHT ANGLE AND INLINE, VARIABLE FIXED, BARREL TYPE BODY, MERLA®™ AND CAMERON®™ H2 EQUIVALENT, NEEDLE AND SEAT AND MULTIPLE ORIFICE TYPE, WATERFLOOD TYPE. 1 INCH ORIFICE, 1.5 INCH ORIFICE ETC. 1 INCH 64/64 INCH TRIM AND ALL OTHER SIZES. FCV-2 T TYPE ETC.

END CONNECTIONS: - RTJ (RING JOINT)

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, NPT (LP) THREADED.

SIZE RANGE API6A (API6B) 1 13/16 INCH, 2 1/16 INCH, 2 9/16 INCH, 3 1/8 INCH, 3 1/16 INCH, 4 1/16 INCH, 7 1/16 INCH.

BODY MATERIAL: - 4130 (60K), API TYPE 2 (API-4), API TYPE 4, A487C.

SPECIFICATION: - PR1, PR2, PSL1, PSL2, TEMPU.

API6A 200 LB (2000 PSI), 3000 LB (3000 PSI), 5000 LB (5000 PSI), 10000 LB (10000 PSI), 15000 LB (15000 PSI).

Z3. **SIGHT GLASSES**: - SINGLE SIDED, DOUBLE SIDED.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE K (AS TABLE K), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

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8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (% INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
<b>100MM NB</b>	4 INCH	750MM NB	30 INCH
<b>125MM NB</b>	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

Z4. STRAINERS Y TYPE, T-TYPE, BASKET TYPE (BUCKET TYPE), SIMPLEX DUPLEX TYPE.

ANSI END CONNECTIONS: - ANSI RTJ (RING JOINT) FLANGED, SOCKETWELD, ANSI RF FLANGED (SMOOTH FINISH), LONG EXTENDED PUP ENDS, NPT, BSP, PBE, BUTTWELD STANDARD WEIGHT.

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD SCHEDULE XXS.

OTHER END CONNECTIONS: - FLANGED BS TABLE D (AS TABLE D), FLANGED BS TABLE E (AS TABLE E), FLANGED BS TABLE F (AS TABLE F), FLANGED BS TABLE H (AS TABLE H), FLANGED BS TABLE J (AS TABLE J), FLANGED BS TABLE K (AS TABLE K), FLANGED BS TABLE R (AS TABLE R).

FLANGED: - PN16, PN10, PN25, JIS10, DIN10, DIN16, ANSI 125 CLASS, ANSI 150 CLASS, ANSI 300 CLASS.

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#### SIZES

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (% INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	<b>750MM NB</b>	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

Z5. **FITTINGS 3000 LB AND 6000 LB** (3000 PSI, 6000 PSI) A105N. CARBON STEEL, NPT, SOCKET WELD AND WELD END. ELBOWS 90 DEGREE, ELBOWS 45 DEGREE, COUPLINGS, FULL COUPLINGS, EQUAL TEES, REDUCING TEES, NIPPLES, HEX NIPPLES, RIPE NIPPLES, PLUGS, BULL PLUGS, THREADOLETS, REDUCING BUSHES, SWAGES, UNIONS. WELDOLETS AND SOCKOLETS IN STANDARD WEIGHT, SCHEDULE 40, SCHEDULE 80, SCHEDULE 160, XXS.

15MM NB	.5 INCH (½ INCH)
20MM NB	.75 INCH (¾ INCH)
25MM NB	1 INCH
32MM NB	1.25 INCH (11/4 INCH
40MM NB	1.5 INCH (1½ INCH)
50MM NB	2 INCH
65MM NB	2.5 INCH (2½ INCH)

80MM NB 3 INCH 100MM NB 4 INCH

Z6. **BUTTWELD FITTING** A234 WPB SEAMLESS CARBON STEEL, ANSI B16.9, END CAPS, CROSSES, 45 DEGREE ELBOWS, LONG RADIUS 90 DEGREE ELBOWS, SHORT RADIUS 90 DEGREE ELBOWS, CONCENTRIC REDUCERS, ECCENTRIC REDUCERS, EQUAL TEES, REDUCING TEES, STANDARD IN EIGHT SCHEDULE 40, SCHEDULE 80, SCHEDULE 100, SCHEDULE 120, SCHEDULE 160, XXS.

#### **SIZES**

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (% INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

#### Z6A. **FLANGES** ANSI B16, ASTM A105N.

RF (RAISED FACE) BLIND, RF (RAISED FACE) WELDNECK (RFWN), RF (RAISED FACE) SCREWED (NPT), RF (RAISED FACE) SLIP ON (RFSO), RF (RAISED FACE) SOCKETWELD (RFSW).

RTJ BLIND (RING JOINT), RTJ SOCKETWELD (RING JOINT), RTJ SCREWED (RING JOINT) NPT, RTJ COMPANION (RING JOINT) NPT, EVE, RTJ WELDNECK (RING JOINT) RTJWN.

SIZE RANGE API6A (API6B) 1 13/16 INCH, 2 1/16 INCH, 2 9/16 INCH, 3 1/8 INCH, 3 1/16 INCH, 4 1/16 INCH, 7 1/16 INCH.

BODY MATERIAL: - 4130 (60K), API TYPE 2 (API-4), API TYPE 4, A487C.

SPECIFICATION: - PR1, PR2, PSL1, PSL2, TEMPU.

API6A 200 LB (2000 PSI), 3000 LB (3000 PSI), 5000 LB (5000 PSI), 10000 LB (10000 PSI), 15000 LB (15000 PSI).

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (% INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (1/2 INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

- Z7. TUBE COMPRESSION FITTINGS, GENUINE SWAGELOK®™, PARKER®™, TWIN FERRULE, SEE OUT STOCKLIST (STAINLESS FITTINGS). ALSO INDENTING ALL TYPES, 316S ONLY, ADAPTOR, CONNECTOR, COUPLING, ELBOW, MALE ELBOW, TEE, FILTER TEE, TEE UNION.
- Z8. CHIKSAN®™ STYLE SWIVELS 600 PSI, 10000 PSI (6000 LB, 10000 LB), EXACT EQUIVALENT TO FMC. H&S, NACE, STYLE 10, STYLE 30, STYLE 40, STYLE 50, SHORT SWEEP, LONG SWEEP CODE SILVER, OLIVE GREEN ETC. AISI 4130, 4140. NPT AND BUTTWELD ENDS, 1 INCH, 2 INCH, 3 INCH, 4 INCH.

API6A 200 LB (2000 PSI), 3000 LB (3000 PSI), 5000 LB (5000 PSI), 10000 LB (10000 PSI), 15000 LB (15000 PSI)

Z9. HAMMER UNIONS FMC®™ WECO®™ STYLE, NACE, H2S, 1000 PSI, 2000 PSI, 6000 PSI

FIGURE 100, FIGURE 200, FIGURE 206, FIGURE 400, FIGURE 602, FIGURE 1002, FIGURE 1502.

NPT, BUTTWELD, SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD SCHEDULE XXS.

1 INCH, 1½ INCH (1.5 INCH), 2 INCH, 3 INCH, 4 INCH, 5 INCH, 6 INCH, 10 INCH, 12 INCH.

Z10. **WELLHEAD EQUIPMENT.** OCT (FMC®™) AND CAMERON®™ (CIW) STYLES, BRADEN HEADS (CASING HEADS), CASING SPOOLS, TUBING SPOOLS, CHRISTMAS TREES, ADAPTER FLANGES, ADAPTOR SPOOLS, VALVES AND CHOKES. X-BUSHINGS, FBBEN AND TCIA TUBING HANGERS, CA AND CW CASING SLIPS, NIPPLES, LUBRICATES BPV VALVES ETC.

1 13/16 INCH, 2 1/16 INCH 2 9/16 INCH, 3 1/8 INCH, 3 1/16 INCH, 4 1/16 INCH, 7 1/16 INCH, 9 INCH, 11 INCH, 13 5/8 INCH, 16 3/4 INCH, 21 1/4 INCH, 20 3/4 INCH.

API6A 200 LB (2000 PSI), 3000 LB (3000 PSI), 5000 LB (5000 PSI), 10000 LB (10000 PSI), 15000 LB (15000 PSI).

Z11. **OILFIELD PLUG VALVES**. FMC®™/SPM®™/HALLIBURTON®™ STYLE. LUBRICATED OILFIELD PLUG VALVE, VITON SLEEVED/SEGMENTS, WECO UNION ENDS 1002, 15002 AND NPT/LP THREADED ENDS.

END CONNECTIONS: - RTJ (RING JOINT)

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, NPT (LP) THREADED.

SIZE RANGE API6A (API6B) 1 13/16 INCH, 2 1/16 INCH, 2 9/16 INCH, 3 1/8 INCH, 3 1/16 INCH, 4 1/16 INCH, 7 1/16 INCH.

BODY MATERIAL: - 4130 (60K), API TYPE 2 (API-4), API TYPE 4, A487C.

SPECIFICATION: - PR1, PR2, PSL1, PSL2, TEMPU.

API6A 200 LB (2000 PSI), 3000 LB (3000 PSI), 5000 LB (5000 PSI), 10000 LB (10000 PSI), 15000 LB (15000 PSI).

Z12. SAFETY RELIEF VALVES. FARRIS®™ STYLE.

ANSI END CONNECTIONS: - ANSI RTJ (RING JOINT) FLANGED, SOCKETWELD, ANSI RF FLANGED (SMOOTH FINISH), LONG EXTENDED PUP ENDS, NPT, BSP, PBE, BUTTWELD STANDARD WEIGHT.

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD, SCHEDULE XXS.

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NSI CLASS 125, ANSI CLASS 150, ANSI CLASS 300, ANSI CLASS 600, ANSI CLASS 900, ANSI CLASS 1500, ANSI CLASS 2500, ANSI CLASS 2690.

#### SIZES

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	.375 INCH (¾ INCH)	200MM NB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	300MM NB	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
50MM NB	2 INCH	450MM NB	18 INCH
65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
100MM NB	4 INCH	750MM NB	30 INCH
125MM NB	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH

Z13. **CONTROL VALVES:** - GLOBE TYPE, PNEUMATIC ACTUATED FISHER®™ STYLE, V PORT CONTROL VALVES, BUTTERFLY CONTROL VALVES.

ANSI END CONNECTIONS: - ANSI RTJ (RING JOINT) FLANGED, SOCKETWELD, ANSI RF FLANGED (SMOOTH FINISH), LONG EXTENDED PUP ENDS, NPT, BSP, PBE, BUTTWELD STANDARD WEIGHT.

BUTTWELD SCHEDULE 40, BUTTWELD SCHEDULE 80, BUTTWELD SCHEDULE 160, BUTTWELD SCHEDULE XXS.

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ANSI CLASS 125, ANSI CLASS 150, ANSI CLASS 300, ANSI CLASS 600, ANSI CLASS 900, ANSI CLASS 1500, ANSI CLASS 2500, ANSI CLASS 2690.

8MM NB	.25 INCH (¼ INCH)	175MM NB	7 INCH
10MM NB	, ,	200MM NB	8 INCH
TOIMINI INB	.375 INCH (¾ INCH)	ZUUIVIIVI INB	8 INCH
15MM NB	.5 INCH (½ INCH)	250MM NB	9 INCH
20MM NB	.75 INCH (¾ INCH)	<b>300MM NB</b>	10 INCH
25MM NB	1 INCH	350MM NB	12 INCH
32MM NB	1.25 INCH (1¼ INCH)	375MM NB	14 INCH
40MM NB	1.5 INCH (1½ INCH)	400MM NB	16 INCH
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65MM NB	2.5 INCH (2½ INCH)	600MM NB	22 INCH
80MM NB	3 INCH	700MM NB	26 INCH
<b>100MM NB</b>	4 INCH	750MM NB	30 INCH
<b>125MM NB</b>	5 INCH	800MM NB	36 INCH
150MM NB	6 INCH	900MM NB	40 INCH