

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	DRAWN BY
	A	INITIAL RELEASED	04-FEB-2019	MSK
(B)	B	UPDATED MOD FRAME DIM & NOTES	17-MAY-21	ABW
(C)	C	UPDATED FLANGE INSTALLATION NOTES	20-JUN-2022	ASK



FLANGE CONNECTION COMPLIANCE TABLE				
FLANGE STD	FLANGE TBL	PCD	NO. BOLTING HOLES	THREAD SIZE
ASME B16.5	150	6.00 in	4	5/8-11 UNC
EN1092	PN10	160 mm	8	M16 X 2.0
EN1092	PN16	160 mm	8	M16 X 2.0
AS2129	D	146 mm	4	M16 X 2.0
AS2129	E	146 mm	4	M16 X 2.0
SANS 1123	T1000	160 mm	8	M16 X 2.0

PIPE/FLANGE SPECIFICATIONS:

1. MINIMUM GAP IN PIPELINE REQUIRED FOR INSTALLATION
2. INSTALLED FACE-TO-FACE DIMENSION SHOWN WITH COMPRESSED RETAINER FLANGE PROVIDING A GASKET SEAL
3. WHERE PIPEWORK HAS INSUFFICIENT AXIAL MOVEMENT TO ACCOUNT FOR MINIMUM GAP IN PIPELINE REQUIRED FOR INSTALLATION - AN EXPANSION JOINT SHOULD BE CONSIDERED
4. USE OF FLANGE GASKETS IS NOT REQUIRED OR RECOMMENDED - RUBBER-LINED RETAINER FLANGES OR SLEEVES (SEE NOTE 9) ACT AS FLANGE GASKET BETWEEN VALVE AND PIPE FLANGE
5. FLANGE BOLT TORQUE REQUIREMENTS
  - a. 25 FT-LBS (34 Nm) MINIMUM FLANGE BOLT TORQUE REQUIRED TO INSTALL VALVE
  - b. 97 FT-LBS (132 Nm) MAXIMUM FLANGE BOLT TORQUE TO PREVENT DAMAGE TO VALVE AND FOR EFFECTIVE VALVE OPERATION
6. PIPE FLANGE DIMENSIONS
  - a. MAXIMUM INSIDE DIAMETER FOR METAL FLANGE NO GREATER THAN ASME B16.5 TABLE 8 COLUMN 11
  - b. WHEN INSIDE DIAMETER PIPE FLANGE IS GREATER THAN VALVE INLET DIAMETER - SLEEVE AND RETAINER FLANGE MAY BE SUBJECT TO ADDITIONAL WEAR
  - c. MAXIMUM OUTSIDE DIAMETER TO BE PER ASME B16.5
7. RUBBER LINING ON PIPE FLANGE FACE TO HAVE A MINIMUM HARDNESS OF 40 SHORE A AND MAXIMUM THICKNESS 1/4" (6mm) AND CONSIDER THE FOLLOWING
  - a. BASED ON TESTING WITH CLEAN WATER AND LEGACY USE OF EMERSON VALVES
  - b. SOFT RUBBER LINING MUST BE USED WITHIN MANUFACTURER'S RECOMMENDATIONS FOR COMPRESSION AND THERE IS AN EFFECTIVE BOND BETWEEN RUBBER LINING AND PIPE FLANGE
  - c. THICK SOFT RUBBER LINING MAY CAUSE FLANGE BOLT TORQUE TO REDUCE OVER-TIME - WHICH MAY CAUSE LOSS OF ISOLATION PERFORMANCE AND OR DAMAGE TO RESILIENT VALVE PARTS
  - d. RE-TORQUE MAINTENANCE INTERVAL IS REQUIRED TO MAINTAIN MINIMUM FLANGE BOLT TORQUE
8. CONSULT EMERSON FOR ADVICE IF ANY REQUIREMENT CANNOT BE MET AS DEVIATIONS MAY BE POSSIBLE DEPENDING ON APPLICATION
9. SHOWN WITH OPTIONAL RETAINER FLANGES FOR NPS 8" (DN200) AND SMALLER - RETAINER FLANGES ARE STANDARD FOR NPS 10" (DN250) AND LARGER - CONSULT EMERSON FOR ADVICE ON INSTALLING VALVES WITHOUT RETAINER FLANGES

NOTES:

1. MAXIMUM ALLOWABLE WORKING PRESSURE IS 100 PSI [690 kPa] - HIGHER OPTIONAL PRESSURE RATING POSSIBLE WITH SELECTED GATE MATERIALS VALVE PRESSURE RATING MAY BE LIMITED TO LOWER VALUE BY SELECTED FLANGE PATTERN
2. MINIMUM REQUIRED HYDRAULIC CYLINDER SUPPLY PRESSURE TO OPERATE VALVE IS 900 PSI [6205 kPa], MAXIMUM 1000 PSI [6895 KPa]
3. RECOMMENDED MAXIMUM LINEAR GATE TRAVEL SPEED IS 1 INCH/SECOND
4. APPROXIMATE WEIGHT OF ASSEMBLY IS 72 LBS
5. ENVELOPE DIMENSION TOLERANCES ARE WITHIN +/- 10%
6. VALVES ARE NORMALLY SHIPPED WITH GATE IN FULLY OPEN POSITION - VALVES MUST BE INSTALLED WITH GATE IN FULLY OPEN POSITION
7. OPTIONAL DRAIN PLATE AND DRAIN BUCKET AS SHOWN
8. FRAMES AND GATES CONTAIN MOUNTING HOLES (NOT PICTURED) FOR INSTALLATION OF ANY STANDARD ACCESSORY USING HAND TOOLS

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