



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	DRAWN BY
	A	INITIAL RELEASED	06-FEB-19	MSK
ⓑ	B	UPDATED FLANGE INSTALLATION NOTES ADDED EN1092 TABLE PN16 FLANGE PATTERN	20-JUN-2022	ASK

FLANGE CONNECTION COMPLIANCE TABLE					
FLANGE STD.	FLANGE TBL.	PCD	NO. BOLTING HOLES	CLEARANCE HOLE SIZE	THREAD SIZE
ASME B16.47	150	38.50 in	28	1.62 in	-
Ⓐ ASME B16.47	150	38.50 in	28	-	1-1/2-6 UNC
EN1092	PN10	950 mm	24	-	M30 X 3.5
ⓑ EN1092	PN16	950 mm	24	-	M36 X 4.0
SANS1123	T1000	950 mm	24	-	M30 X 3.5

ⓑ 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 ACT AS FLANGE GASKET BETWEEN VALVE AND PIPE FLANGE
5. FLANGE BOLT TORQUE REQUIREMENTS
 - 320 FT-LBS (434 Nm) MINIMUM FLANGE BOLT TORQUE REQUIRED TO INSTALL VALVE
 - 610 FT-LBS (827 Nm) MAXIMUM FLANGE BOLT TORQUE TO PREVENT DAMAGE TO VALVE AND FOR EFFECTIVE VALVE OPERATION
6. PIPE FLANGE DIMENSIONS
 - MAXIMUM INSIDE DIAMETER FOR METAL FLANGE NO GREATER THAN 30.25"
 - WHEN INSIDE DIAMETER PIPE FLANGE IS GREATER THAN VALVE INLET DIAMETER - SLEEVE AND RETAINER FLANGE MAY BE SUBJECT TO ADDITIONAL WEAR
 - MAXIMUM OUTSIDE DIAMETER TO BE PER ASME B16.47 SERIES A
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
 - BASED ON TESTING WITH CLEAN WATER AND LEGACY USE OF EMERSON VALVES
 - SOFT RUBBER LINING MUST BE USED WITHIN MANUFACTURER'S RECOMMENDATIONS FOR COMPRESSION AND THERE IS AN EFFECTIVE BOND BETWEEN RUBBER LINING AND PIPE FLANGE
 - 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
 - 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. 150 FLANGE WITH THREADED FLANGE HOLES - AVAILABLE AS OPTION

	Size: D	First Issue: 06-FEB-19	Drawing Release Location: RENO	
	Units: Inch	Latest Issue: 20-JUN-22		
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	Checked By: NBP			
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Scale: NTS				
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NOTES:

1. MAXIMUM ALLOWABLE WORKING PRESSURE IS 75 PSI [517 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 1800 PSI [12410 kPa], MAXIMUM 3000 PSI [20684 kPa]
3. RECOMMENDED MAXIMUM LINEAR GATE TRAVEL SPEED IS 1 INCH/SECOND
4. APPROXIMATE WEIGHT OF ASSEMBLY IS 2691 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