

		REVISIONS		
ZONE	REV.	DESCRIPTION	DATE	DRAWNBY
	A	INITIAL RELEASED	21-MAY-2020	ASK
ⓑ	B	UPDATED MOD FRAME DIM & NOTES	21-MAY-21	ABW
ⓒ	C	UPDATED FLANGE INSTALLATION NOTES	20-JUN-2022	ASK

FLANGE CONNECTION COMPLIANCE TABLE					
FLANGE STD	FLANGE TBL	PCD	NO. BOLTING HOLES	CLEARANCE HOLE SIZE	THREAD SIZE
ASME B16.5	150	17.00 in	12	1.00 in	-
ASME B16.5	150	17.00 in	12	-	7/8-9 UNC
EN1092	PN10	400 mm	12	-	M20 X 2.5
EN1092	PN16	410 mm	12	-	M24 X 3.0
AS2129	D	406mm	12	-	M20 X 2.5
AS2129	E	406mm	12	-	M24 X 3.0
SANS1123	T1000	400 mm	12	-	M20 X 2.5

ⓐ 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

a. 65 FT-LBS (88 Nm) MINIMUM FLANGE BOLT TORQUE REQUIRED TO INSTALL VALVE

b. 186 FT-LBS (252 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. 150 FLANGE WITH THREADED FLANGE HOLES - AVAILABLE AS OPTION

NOTES:

1. MAXIMUM ALLOWABLE WORKING PRESSURE IS 100 PSI [690 kPa] - HIGHER OPTIONAL PRESSURE RATING POSSIBLE WITH SELECTED GATE MATERIALS
2. VALVE PRESSURE RATING MAY BE LIMITED TO LOWER VALUE BY SELECTED FLANGE PATTERN
3. MINIMUM REQUIRED HYDRAULIC CYLINDER SUPPLY PRESSURE TO OPERATE VALVE IS 900 PSI [6205 kPa], MAXIMUM 1000 PSI [6895 kPa]
4. RECOMMENDED MAXIMUM LINEAR GATE TRAVEL SPEED IS 1 INCH/SECOND
5. APPROXIMATE WEIGHT OF ASSEMBLY IS 409 LBS
6. ENVELOPE DIMENSION TOLERANCES ARE WITHIN +/- 10%
7. VALVES ARE NORMALLY SHIPPED WITH GATE IN FULLY OPEN POSITION - VALVES MUST BE INSTALLED WITH GATE IN FULLY OPEN POSITION
8. APPROXIMATE WEIGHT OF ASSEMBLY IS 409 LBS
9. OPTIONAL DRAIN PLATE AND DRAIN BUCKET AS SHOWN
10. FRAMES AND GATES CONTAIN MOUNTING HOLES (NOT PICTURED) FOR INSTALLATION OF ANY STANDARD ACCESSORY USING HAND TOOLS

		Size: D	First Issue: 21-MAY-20	Drawing Release Location:
		Units: Inch	Latest Issue: 20-JUN-22	RENO
		Drawn By: ASK	CLARKSON, KGA+ 12", 100 PSI, KGV HC ACTUATOR	
		Checked By: NBP		
		Approved By: JG		
Sheet: 1 OF 1		Drawing No.		
Scale: NTS		KGA+-12-01-1003		
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