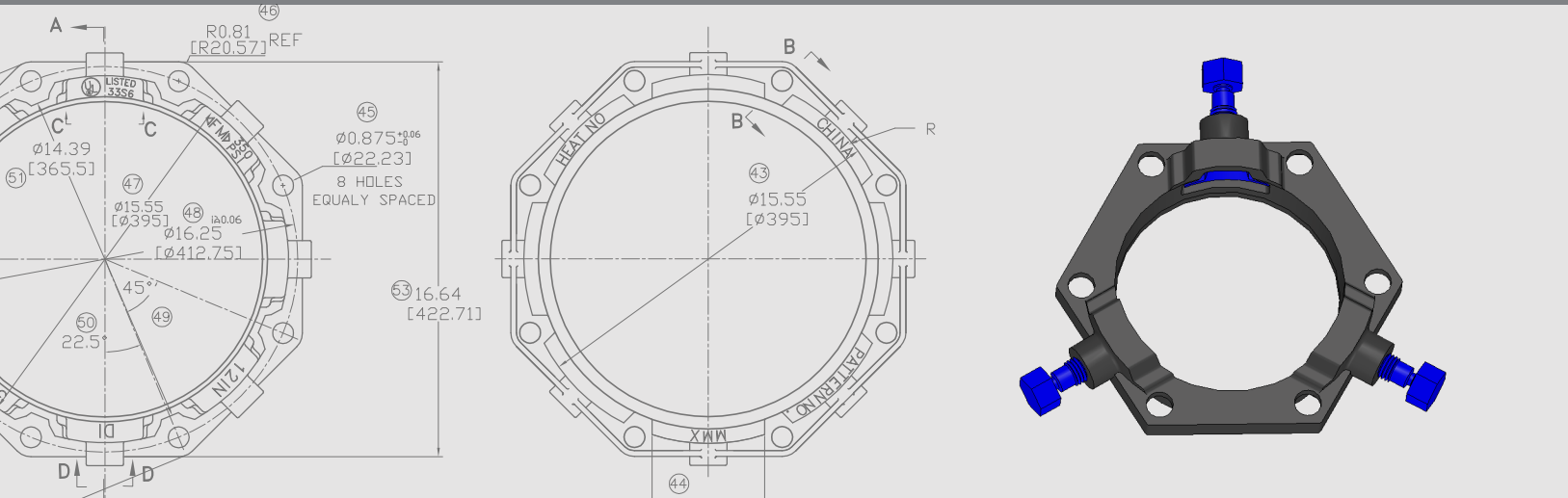


# ONE-LOK™ Series SLDM for Oversized Pipe



The SIGMA ONE-LOK™ Series SLDM modified wedge-action mechanical joint restraining gland is suitable for use on pit cast grey iron pipes with “oversized” C and D barrel dimensions. For pit cast pipes with A and B size outside diameters per AWWA C150/151, the standard ONE-LOK Series SLD or SLDE restrainer may be used without any modifications.

### Sample Specification

Restraint for standard mechanical joint fittings on oversized cast iron pipe shall be incorporated in the design of the follower gland and shall utilize multiple wedge segments that act against the pipe, increasing their resistance as the line pressure increases. The assembled joint shall maintain the maximum flexibility and deflection of all nominal pipe sizes after burial. Restraining gland, wedge segments, and actuating bolts shall be manufactured of high strength ductile iron conforming to the requirements of ASTM A536, Grade 65-45-12. Wedge segments shall be heat treated to a hardness of 370 BHN minimum. Dimensions shall be compatible with standardized mechanical joints conforming to the requirements AWWA C111/ANSI A21.11 and AWWA C153/ANSI 21.53 through 20". Breakaway tops shall be incorporated in the design of the actuating bolts to visually ensure proper torque. The manufacturing of the actuating bolt must incorporate a quality control procedure that is deemed acceptable by the specifier and positively assures precise and consistent operating torque of the breakaway top. The mechanical joint restraining devices shall have a working pressure rating of 250 psi (150 psi for 20") minimum and provide no less than a safety factor of 2:1. Restraining device shall be SIGMA ONE-LOK™ or approved equal.

### Materials:

- Gland body, wedge segments, & actuating bolts: ASTM A536 65-45-12 ductile iron.
- Wedge segments are heat treated to a minimum hardness of 370BHN
- T-head bolts & nuts: High strength, low alloy steel meeting AWWA/ANSI C111/ A21.11 with minimum 65,000psi tensile strength and 45,000psi yield strength.

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## ONE-LOK Series SLDM should only be installed after performing the following steps:

1. Measure/gauge the pipe to ensure it is within AWWA specifications for that classification.
2. Visually check for flat spots or voids along the pipe wall.
3. Visually inspect the internal and external surfaces of the pipe to ensure that there are no signs of breaking, cracking, corrosion or graphitization.
4. If the pipe does not meet all requirements listed above, move back along the pipe barrel to a location that does meet these requirements.

## INSTALLATION INSTRUCTIONS

1. Clean fitting socket and pipe end. Lubricate gasket and pipe end with soapy water (or approved pipe lubricant meeting AWWA C111). Install ONE-LOK restrainer on the pipe with the lip extension facing the pipe end, followed by the gasket, tapered side toward end of pipe.
2. Insert pipe into fitting outlet and seat the gasket firmly and evenly into the gasket cavity. Maintain a straight joint during assembly.
3. Slide the ONE-LOK gland toward the fitting and center it around the pipe with the lip evenly against the gasket. Insert the T-bolts and hand-tighten the nuts. If deflection is required, make up after joint assembly but before tightening T-bolts.
4. Tighten T-bolts in an alternating manner maintaining an even gap between the gland and the fitting face at all points around the socket. Repeat until all the T-bolts are within the recommended torque value of AWWA C111/C600.
5. Following proper assembly of the mechanical joint, hand tighten all actuating bolts until complete contact of each wedge segment is made with the pipe.
6. Tighten each actuating bolt in a clockwise direction, alternating between the bolts in a star pattern until the breakaway tops have been removed. Never tighten an actuating bolt more than 180 degrees before moving to the next bolt.

## Dimensions in Inches, Weights in Pounds

Size	Item No.	Pressure Rating	"C/D" O.D.	Weight
4	SLDM4	250	5.00	10
6	SLDM6	250	7.10	12
8	SLDM8	250	9.30	15
10	SLDM10	250	11.40	26
12	SLDM12	250	13.50	34
20	SLDM20	150	22.06	75