

# HYMAX<sup>®</sup>

a **MUELLER** brand

## HYMAX GRIP<sup>®</sup> ELBOW\* (4" - 12" 45° AND 90°)

### Product Specifications

#### FEATURES

- Joins and restrains a wide range of pipe types at angles of either 45° or 90°.
- Unique radial gripping system.
- Universal gripping teeth fit many pipe types. Check with your local salesperson for pipe material verification.
- Ready to use, stab-fit design.
- Allows 4° dynamic deflection per side, potentially reducing future damage.
- Durable ductile iron body.
- Patented hydraulically-assisted gasket with 2-stage sealing.

#### SPECIFICATIONS STANDARDS

- All products meet or exceed standards AWWA C219 and C116; NSF61 and NSF372.

#### SIZE

- Available in nominal diameter sizes 4" - 12" at 45° and 90° angles.

#### MATERIALS

##### END RINGS

- Ductile iron casting ASTM A536 Grade 65-45-12.

##### CENTER RING

- Ductile iron casting ASTM A536 Grade 65-45-12. All product sizes with lifting eye.

\*Registered patent



JOIN



REPAIR



RESTRAIN



TAP



#### GASKETS

- EPDM compounded for water and sewage in accordance with ASTM D2000, meets international standards for contact with drinking water. NBR is available as MTO product upon request (made to order).

#### GRIP CHAIN

- AISI 420.

#### BRIDGE

- AISI 304 stainless steel. ASTM A240.

#### SPHERICAL SPACERS

- AISI 304 stainless steel. ASTM A351 CF8.

#### COATING

- 100% fusion bonded epoxy for enhanced corrosion protection.
- Nominal thickness 14 mm.
- Meets AWWA C116 standards.

#### BOLTS, NUTS & WASHERS

- AISI 304 stainless steel. Rolled thread and anti-galling coating. ASTM F593, ASTM F594, ASTM A240 respectively.

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## PRODUCT PERFORMANCE

### WORKING TEMPERATURE

- EPDM: -20°F up to +125°F

### DYNAMIC DEFLECTION

- Up to 4° per side

### MIN. PIPE INSERTION

- 3.6"

### PRESSURES & $\Delta T$

- $\Delta T$  - HDPE pipe expands and contracts with changes in temperature and exerts large pull-load forces on the coupling.  $\Delta T$  for HDPE pipe is the change in temperature the coupling can withstand when installed on HDPE pipe.
- Stiffeners required when installing on HDPE pipe.

### MAXIMUM OUT OF ROUNDNESS

- 0.16"

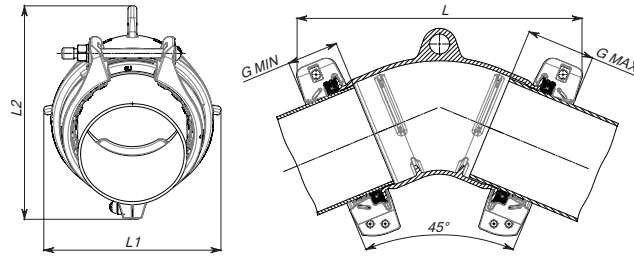
### VACUUM TEST

- 12 psi

Standard Pressure GRIP

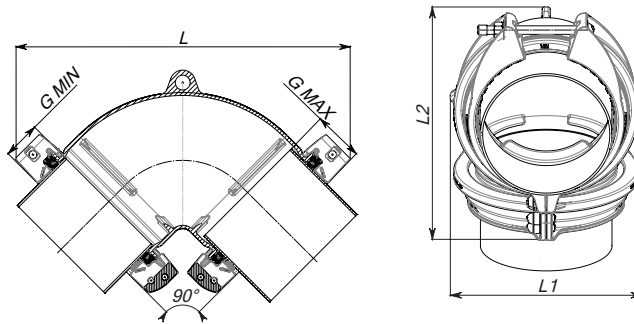
ND (inch)	Steel, DI, CI, PVC & SS	HDPE	
	Working Pressure (psi)	Working Pressure (psi)	$\Delta T$ for HDPE SDR 9 (°F)
4	232	232	85
6	232	232	85
8	232	193	50
10	232	163	50
12	232	155	35

## PRODUCT TABLES



### HYMAX GRIP ELBOW NOMINAL SIZES 4" - 12" 45 DEGREE

HYMAX Part Number	Nominal Diameter (inch)	Overall Range (inch)	L (inch)	L1 (inch)	L2 (inch)	G - Max (inch)	Torque (ft-lb)	Bolts Qty.-Size (inch)	Approx. Weight (lbs)
893-56-04111-16	4	4.40 - 5.10	17.2	9.8	12.1	4.7	90	2 - 5/8	39.9
893-56-06165-16	6	6.50 - 7.20	19.7	11.9	14.3	4.7	110	2 - 5/8	53
893-56-08216-16	8	8.50 - 9.40	22.4	14.1	16.9	4.9	200	2 - 3/4	89.4
893-56-10270-16	10	10.65 - 11.55	25.2	16.2	19.3	4.9	200	2 - 3/4	121.1
893-56-12322-16	12	12.68 - 13.39	27.5	17.4	21.1	4.9	200	2 - 3/4	139.1



### HYMAX GRIP ELBOW NOMINAL SIZES 4" - 12" 90 DEGREE

HYMAX Part Number	Nominal Diameter (inch)	Overall Range (inch)	L (inch)	L1 (inch)	L2 (inch)	G - Max (inch)	Torque (ft-lb)	Bolts Qty.-Size (inch)	Approx. Weight (lbs)
894-56-04111-16	4	4.40 - 5.10	19.9	9	13.6	4.7	90	2 - 5/8	42.8
894-56-06165-16	6	6.50 - 7.20	24.3	10.4	15.9	4.7	110	2 - 5/8	55.7
894-56-08216-16	8	8.50 - 9.40	28.3	12.6	18.5	4.9	200	2 - 3/4	97.9
894-56-10270-16	10	10.65 - 11.55	31.1	16.6	20.9	4.9	200	2 - 3/4	132.1
894-56-12322-16	12	12.68 - 13.39	34.1	18.5	22.4	4.9	200	2 - 3/4	150.1

To learn more, visit [HymaxUSA.com](http://HymaxUSA.com).

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