## HYMAX GRIP ${ }^{\circledR}$ ELBOW* (4" - $12^{\prime \prime} 45^{\circ}$ AND $90^{\circ}$ ) <br> Product Specifications

## FEATURES

- Joins and restrains a wide range of pipe types at angles of either $45^{\circ}$ or $90^{\circ}$
- Unique radial gripping system prevents pipe motion
- Universal gripping teeth fit metal and plastic pipes
- Ready to use, stab-fit design
- Allows $4^{\circ}$ dynamic deflection, 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, NSF 61 and NSF 372.


## SIZE

- Available in nominal diameter sizes $4^{\prime \prime}-12^{\prime \prime}$ at $45^{\circ}$ and $90^{\circ}$ angles.


## MATERIALS

END RINGS

- Ductile iron casting ASTM A536 Grade 60-40-18.


## CENTER RING

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


JOIN

RESTRAIN

TAP

## GASKETS

- EPDM compounded for water and sewage, 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.


## SPHERICAL SPACERS

- AISI 304 stainless steel.


## COATING

- $100 \%$ fusion bonded epoxy for enhanced corrosion protection.
- Nominal thickness 14 mm .


## NUTS AND BOLTS

- AISI 304 stainless steel. Rolled thread and anti-galling coating.
*Registered patent



## PRODUCT PERFORMANCE

WORKING TEMPERATURE

- EPDM: $-20^{\circ} \mathrm{F}$ up to $+125^{\circ} \mathrm{F}$

DYNAMIC DEFLECTION

- Up to $4^{\circ}$ per side


## MIN. PIPE INSERTION

- $3.6^{\prime \prime}$


## 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.

|  | $\begin{gathered} \text { Steel, DI, CI, PVC } \\ \& S S \end{gathered}$ | HDPE |  |
| :---: | :---: | :---: | :---: |
| ND (inch) | Working Pressure (psi) | Working Pressure (psi) | $\Delta T$ for HDPE SDR 9 ( ${ }^{\circ} \mathrm{F}$ ) |
| 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 DEG.

| HYMAX Part Number | Nominal Diameter (inch) | Overall Range (inch) | $\underset{\text { (inch) }}{\mathrm{L}}$ | $\begin{gathered} \mathrm{L} 1 \\ \text { (inch) } \end{gathered}$ | $\begin{gathered} \mathrm{L} 2 \\ \text { (inch) } \end{gathered}$ | 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 DEG.

| HYMAX Part <br> Number | Nominal Diameter (inch) | Overall Range (inch) | $\underset{(\text { inch })}{\mathrm{L}}$ | $\begin{gathered} \mathrm{L} 1 \\ \text { (inch) } \end{gathered}$ | $\begin{gathered} \mathrm{L} 2 \\ \text { (inch) } \end{gathered}$ | 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.

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