

HYMAX[®]

a **MUELLER** brand

HYMAX[®] 2 ELBOW 45° AND 90°* (2" - 12") Product Specifications

FEATURES

- Wide-range elbow of 45° or 90° angle
- Patented hydraulically-assisted gasket easily flips in or out to accommodate larger ND pipes
- Using the game-changing HYMAX technology, proven in over 1M installations in North America
- Connecting a large variety of pipe materials
- Joins two pipes of the same or different diameters and materials
- Fast and easy installation, two top-facing bolts
- Allows 4° dynamic deflection per side, potentially reducing future damage



SPECIFICATIONS STANDARDS

- HYMAX ELBOW meets or exceeds requirements of standards: AWWA C-219, NSF 61, NSF 372.

SIZE

- Available in nominal diameter from 2" - 12" standard.

MATERIALS END RINGS

- ASTM A283/A283M Grade C steel.

CENTER RING

- ASTM A53 Grade A steel.

* Registered Patent

GASKET

- EPDM Compounded for water and sewage in accordance to ASTM D2000, meets international standards for contact with drinking water.

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.
- Average thickness 14 mm.

BOLTS, NUTS & WASHERS

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



JOIN



REPAIR



RESTRAIN



TAP

MUELLER

PRODUCT PERFORMANCE (*)

WORKING TEMPERATURE

- -20° F up to +125° F

DYNAMIC DEFLECTION

- Up to 4° per side

MIN. PIPE INSERTION

- 2.25"

MAXIMUM OUT OF ROUNDNESS

- ND 2" - ND 3": 0.2"
- ND 4" - ND 12": 0.31"

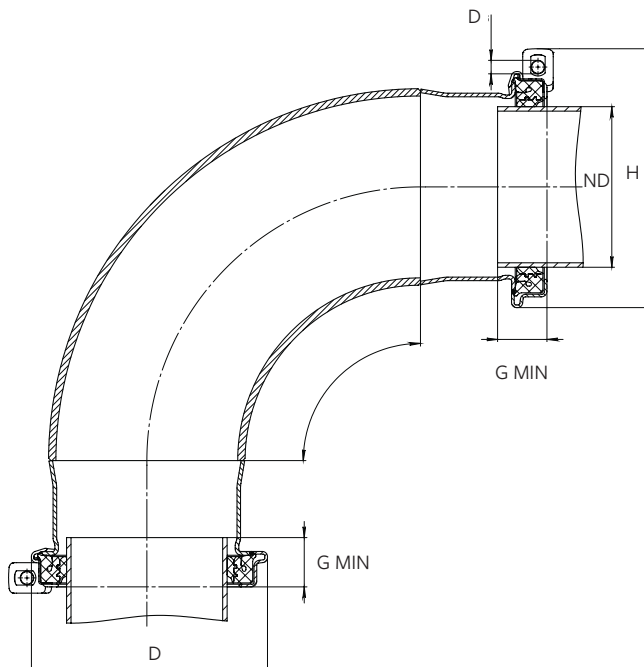
WORKING PRESSURE

- 260 psi

VACUUM TEST

- 12 psi

* See submittal drawings for details.



PRODUCT TABLES

HYMAX ELBOW 45° SIZES 2" - 12"

| HYMAX Part Number | Nominal Diameter | Overall Range (inch) | Range In Closed Gasket Position (inch) | Range In Open Gasket Position (inch) | Bolts Qty. - Size (mm) | Torque (ft-lbs) | Approx. Weight (lbs) |
|-------------------|------------------|----------------------|--|--------------------------------------|------------------------|-----------------|----------------------|
| 869-54-45054-16 | 2 | 2.10 - 3.03 | 2.10 - 2.60 | 2.56 - 3.03 | 2 - M12 | 50 | 8.5 |
| 869-54-45088-16 | 3 | 3.46 - 4.33 | 3.46 - 3.90 | 3.86 - 4.33 | 2 - M12 | 50 | 13.5 |
| 869-54-45108-16 | 4 | 4.25 - 5.63 | 4.25 - 5.00 | 4.92 - 5.63 | 2 - M14 | 75 | 27 |
| 869-54-45130-16 | 5 | 5.12 - 6.38 | 5.12 - 5.75 | 5.71 - 6.38 | 2 - M14 | 75 | 50 |
| 869-54-45163-16 | 6 | 6.42 - 7.68 | 6.42 - 7.05 | 7.01 - 7.68 | 2 - M14 | 75 | 71.5 |
| 869-54-45190-16 | 7 | 7.48 - 8.74 | 7.48 - 8.11 | 8.07 - 8.74 | 2 - M14 | 75 | 73 |
| 869-54-45217-16 | 8 | 8.54 - 9.84 | 8.54 - 9.17 | 9.13 - 9.84 | 2 - M14 | 75 | 76.5 |
| 869-54-45272-16 | 10 | 10.70 - 12.00 | 10.70 - 11.37 | 11.33 - 12.00 | 2 - M14 | 75 | 90 |
| 869-54-45278-16 | 10 | 10.96 - 12.26 | 10.96 - 11.63 | 11.59 - 12.26 | 2 - M14 | 75 | 110 |
| 869-54-45315-16 | 12 | 12.40 - 13.66 | 12.40 - 13.03 | 12.99 - 13.66 | 2 - M14 | 80 | 155 |
| 869-54-45334-16 | 12 | 13.15 - 14.41 | 13.15 - 13.78 | 13.74 - 14.41 | 2 - M14 | 80 | 190 |

HYMAX ELBOW 90° SIZES 2" - 12"

| HYMAX Part Number | Nominal Diameter | Overall Range (inch) | Range In Closed Gasket Position (inch) | Range In Open Gasket Position (inch) | Bolts Qty. - Size (mm) | Torque (ft-lbs) | Approx. Weight (lbs) |
|-------------------|------------------|----------------------|--|--------------------------------------|------------------------|-----------------|----------------------|
| 869-54-90054-16 | 2 | 2.10 - 3.03 | 2.10 - 2.60 | 2.56 - 3.03 | 2 - M12 | 50 | 11 |
| 869-54-90088-16 | 3 | 3.46 - 4.33 | 3.46 - 3.90 | 3.86 - 4.33 | 2 - M12 | 50 | 17.5 |
| 869-54-90108-16 | 4 | 4.25 - 5.63 | 4.25 - 5.00 | 4.92 - 5.63 | 2 - M14 | 75 | 35 |
| 869-54-90130-16 | 5 | 5.12 - 6.38 | 5.12 - 5.75 | 5.71 - 6.38 | 2 - M14 | 75 | 65 |
| 869-54-90163-16 | 6 | 6.42 - 7.68 | 6.42 - 7.05 | 7.01 - 7.68 | 2 - M14 | 75 | 92 |
| 869-54-90190-16 | 7 | 7.48 - 8.74 | 7.48 - 8.11 | 8.07 - 8.74 | 2 - M14 | 75 | 95 |
| 869-54-90217-16 | 8 | 8.54 - 9.84 | 8.54 - 9.17 | 9.13 - 9.84 | 2 - M14 | 75 | 99 |
| 869-54-90272-16 | 10 | 10.70 - 12.00 | 10.70 - 11.37 | 11.33 - 12.00 | 2 - M14 | 75 | 130 |
| 869-54-90278-16 | 10 | 10.96 - 12.26 | 10.96 - 11.63 | 11.59 - 12.26 | 2 - M14 | 75 | 142 |
| 869-54-90315-16 | 12 | 12.40 - 13.66 | 12.40 - 13.03 | 12.99 - 13.66 | 2 - M14 | 80 | 199 |
| 869-54-90334-16 | 12 | 13.15 - 14.41 | 13.15 - 13.78 | 13.74 - 14.41 | 2 - M14 | 80 | 247.5 |

To learn more, visit [HymaxUSA.com](https://www.hymaxusa.com).

Mueller refers to one or more of Mueller Water Products, Inc., a Delaware corporation ("MWP"), and its subsidiaries. MWP and each of its subsidiaries are legally separate and independent entities when providing products and services. MWP does not provide products or services to third parties. MWP and each of its subsidiaries are liable only for their own acts and omissions and not those of each other. MWP brands include Mueller®, Echologics®, Hydro Gate®, Hydro-Guard®, HYMAX®, Krausz®, Jones®, Mi.Net®, Milliken®, Pratt®, Pratt Industrial®, Sentryx™, Singer®, and U.S. Pipe Valve & Hydrant. Please see muellerwp.com/brands to learn more.

© 2023 Mueller Co., LLC. All Rights Reserved. The trademarks, logos and service marks displayed in this document are the property of Mueller Co., LLC, its affiliates or other third parties. Products above marked with a section symbol (§) are subject to patents or patent applications. For details, visit www.mwppat.com. These products are intended for use in potable water applications. Please contact your HYMAX Sales or Customer Service Representative concerning any other application(s).

F 14528 PS0057 06/23

