

HYMAX[®]

a **MUELLER** brand

HYMAX GRIP[®] REDUCER* (1.5" - 12")

Product Specifications

FEATURES

- Joins and restrains a wide range of pipe types and diameters
- Unique radial gripping system
- Universal gripping teeth suitable for many pipe types. Check with your local salesperson for pipe material verification
- Ready to use, stab-fit design
- Allow 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 1.5" - 12".

MATERIALS

END RINGS

- 1.5" - 3": Made of cast steel ASTM A216 WCB.
- 4" - 12": Ductile iron casting ASTM A536 Grade 65-45-12.

CENTER RING

- 1.5" - 12": Ductile iron casting ASTM A536 Grade 65-45-12.
- Product sizes 1.5" - 12" with handle.

*Registered patent



GASKETS

- EPDM and NBR available. Both are compounded for water and sewage in accordance with ASTM D2000, meet international standards for contact with drinking water. Products with NBR are MTO (made to order).

GRIP CHAIN

- Size 1.5" - 3": Fe4Ni05Mo.
- Sizes 4" - 12": AISI 420.
- Sizes 4" - 12" High Pressure: Fe4Ni05Mo.

BRIDGE

- AISI 304 stainless steel. ASTM A240.

SPHERICAL SPACERS

- AISI 304 stainless steel. ASTM A351 CF8 (equivalent to AISI 304).

COATING

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

BOLTS, NUTS & WASHERS

- Bolts - AISI 304 stainless steel. Rolled thread and anti-galling coating. ASTM F593.
- Nuts and Washers - AISI 316 stainless steel. ASTM F594, ASTM A240 respectively.



JOIN



REPAIR



RESTRAIN



TAP

MUELLER

PRODUCT PERFORMANCE

WORKING TEMPERATURE

- EPDM: -20°F up to +125°F
- NBR: -4°F up to +125°F

DYNAMIC DEFLECTION

- Up to 4° per side

MIN. PIPE INSERTION

- 3.6"

MAXIMUM OFFSET FOR MISALIGNED PIPES

- 0.25"

PRESSURES & ΔT

- ΔT - HDPE pipe expands and contracts with changes in temperature and exerts large pull-load forces on the coupling. ΔT for HDPE pipe is the change in temperature the coupling can withstand when installed on HDPE pipe.
- Stiffeners are required when installing this product on HDPE pipe.

MAXIMUM OUT OF ROUNDNESS

- ND 1.5" - ND 3": 0.12"
- ND 4" - ND 12": 0.16"

VACUUM TEST

- 12 psi

Standard Pressure GRIP

ND (inch)	Steel, DI, CI, PVC & SS	HDPE	ΔT for HDPE SDR 9 (°F)
	Working Pressure (psi)	Working Pressure (psi)	
(1.5/2) x 2.5	232	NA	NA
2.5 x 3	232	NA	NA
3 x 4	232	NA	NA
4 x 6	232	232	85
6 x 8	232	193	50
8 x 10	232	163	50
10 x 12	232	155	35

High Pressure GRIP

ND (inch)	Steel, DI, CI, PVC, SS & HDPE	
	Working Pressure (psi)	ΔT for HDPE SDR 9 (°F)
4 x 6	250	100
6 x 8	250	100
8 x 10	250	100
10 x 12	250	70

PRODUCT TABLES

TORQUE

ND (inch)	EPDM (ft-lb)		NBR (ft-lb)	
	Side 1	Side 2	Side 1	Side 2
(1.5/2) x 2.5	50	50	50	50
2.5 x 3	50	50	50	50
3 x 4	50	50	50	105
4 x 6	90	110	105	110
6 x 8	110	200	110	200
8 x 10	200	200	200	200
10 x 12	200	200	200	200

PRODUCT CONFIGURATIONS

The product is offered in several different configurations. Note that the "xx" marking in the Cat. no. should be replaced as directed:

Part Number 863XX

56 - Standard Pressure Grip with EPDM gasket

57 - Standard Pressure Grip with NBR gasket

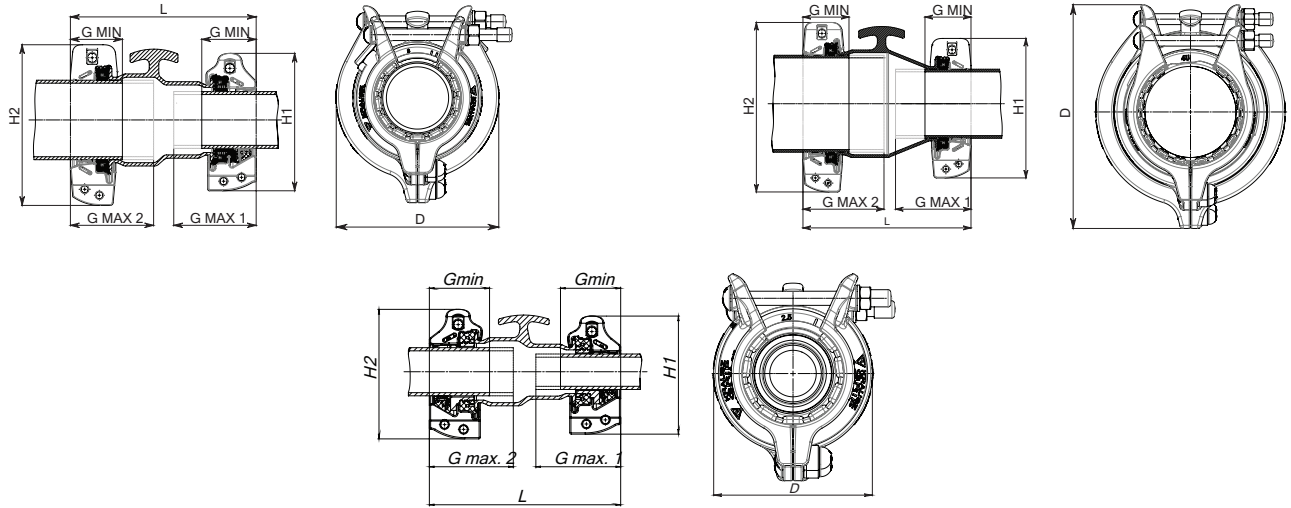
58 - High Pressure Grip with EPDM gasket

59 - High Pressure Grip with NBR gasket

For example -

863XX0039005916 should be read as 863560039005916 for EPDM gasket and 863570039005916 for NBR gasket.

PRODUCT TABLES



HYMAX Part Number	ND (inch)	Side 1			Side 2		
		Overall Range (inch)	Before Removal of the Inner Layer 1 (inch)	After Removal of the Inner Layer 2 (inch)	Overall Range (inch)	Before Removal of the Inner Layer 1 (inch)	After Removal of the Inner Layer 2 (inch)
863XX0039005916	(1.5/2) x 2.5	1.54 - 2.64	1.54 - 2.20	2.17 - 2.64	2.32 - 3.43	2.32 - 2.99	2.95 - 3.43
863XX0059008016	2.5 x 3	2.32 - 3.43	2.32 - 2.99	2.95 - 3.43	3.15 - 4.17	3.15 - 3.74	3.70 - 4.17
863XX0080011116	3 x 4	3.15 - 4.17	3.15 - 3.74	3.70 - 4.17	4.40 - 5.10	NA	NA
863XX0111016516	4 x 6	4.40 - 5.10	NA	NA	6.50 - 7.20	NA	NA
863XX0165021616	6 x 8	6.50 - 7.20	NA	NA	8.50 - 9.40	NA	NA
863XX0216027016	8 x 10	8.50 - 9.40	NA	NA	10.65 - 11.55	NA	NA
863XX0270032216	10 x 12	10.65 - 11.55	NA	NA	12.68 - 13.39	NA	NA

HYMAX Part Number	L (inch)	H1 (inch)	H2 (inch)	G - Max Stab Depth Side 1 (inch)	G - Max Stab Depth Side 2 (inch)	Bolts Qty. - Size Side 1 (inch)	Bolts Qty. - Size Side 2 (inch)	Approx. Weight (lbs)
863XX0039005916	11.89	7.48	8.05	5.5	5.5	1 - M14	1 - M14	2.95 - 3.43
863XX0059008016	11.89	8.05	9.05	5.5	5.5	1 - M14	1 - M14	3.70 - 4.17
863XX0080011116	12.24	9.05	10.6	5.9	5.3	1 - 5/8	1 - 5/8	NA
863XX0111016516	12.8	10.6	12.9	6.1	6.1	1 - 5/8	1 - 5/8	NA
863XX0165021616	13.0	12.9	15.7	6.1	6.3	1 - 5/8	1 - 3/4	NA
863XX0216027016	13.4	15.7	18.2	5.9	5.9	1 - 3/4	1 - 3/4	NA
863XX0270032216	13.5	18.2	19.8	6.7	5.9	1 - 3/4	1 - 3/4	NA

** In sizes (1.5/2) x 2.5, 2.5 x 3 and 3 x 4 only configs 56 & 57 are relevant

To learn more, visit HymaxUSA.com.

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