

# HYMAX<sup>®</sup>

a **MUELLER** brand

## HYMAX VERSA<sup>®</sup> COUPLING (1.5" - 80")

### Product Specifications

#### FEATURES

- Unique versatile coupling, can be stab fit or wrapped around pipe
- Durable stainless steel, monoblock design
- Allows 3° dynamic deflection per end, potentially reducing future pipe damage
- Fast and easy to install
- Can substantially reduce inventory
- Durable under extreme conditions
- 1.5" - 24": One closing mechanism
- 26" - 80": Two closing mechanisms
- Available in standard and high-pressure versions

#### SPECIFICATIONS STANDARDS

- HYMAX Versa meets or exceeds standards AWWA C219, AWWA C227, NSF 61, NSF 372, EN 681.

#### SIZE LENGTH

- Available in nominal diameter range of 1.5" - 24" standard.
- 26" - 80" MTO (Made To Order).
- Sizes 1.5" - 3" are available in 5.5" and 11" lengths.
- Sizes 4" - 80" are available in 11" length.
- Sizes 16" - 80" are available in 18" length.
- Sizes 24" - 80" are available in 24" length.



#### MATERIALS BODY

- AISI 304 Stainless Steel. ASTM A240 / ASTM A480.

#### LUG MATERIAL

- 1.5" - 12": Polycarbonate.
- 14" - 80": Reg. Pressure retainers made of polycarbonate.
- 14" - 80": High Pressure retainers made of stainless steel casting type AISI 304 (ASTM A351 CF8).

#### COMPRESSION BEAM & ADJUSTING PIN

- Casting AISI 304 / 304L. ASTM A351 CF8.

#### GASKET

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

#### GASKET BRIDGE

- AISI 304 Stainless Steel. ASTM A240.

#### INNER PLATE

- AISI 304 Stainless Steel. ASTM A240.



JOIN



REPAIR



RESTRAIN



TAP



## INNER PLATE ATTACHMENT

- 1.5" - 24": Connected to the body by reinforced bolts manufactured of ultem resin 1000 with insert socket set screw AISI 316.
- 24" - 80": AISI 304 stainless steel (special bolts, nuts and washers).

## BOLTS, NUTS & WASHERS

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

## PRODUCT PERFORMANCE ( \*) WORKING TEMPERATURE

- -20° F up to +180° F

## DYNAMIC DEFLECTION

- 3° on each side

## TRANSITION CAPABILITY

- Up to 0.4". See submittal drawings for details.

## MIN. PIPE INSERTION

- From 1.8" - 4". See submittal drawings for details.

## MAX. WIDTH OF CRACK OR HOLE

Product Length (inch)	Width of Crack (inch)
5.5	2.5
11	8
18	13.5
24	19.6

## MAX. OUT OF ROUNDNESS

- ND 1.5" - ND 5": 0.24"
- ND 6" - ND 24": 0.31"
- ND 26" - ND 80": 0.2"

## MAXIMUM OFFSET FOR MISALIGNED PIPES

- Up to 0.25" in length 5.5"
- Up to 0.4" in length 11"

## PRODUCT TABLES

### HYMAX VERSA NOMINAL SIZES 1.5" - 3"/LENGTH 5.5"

HYMAX Part Number	Nominal Diameter (inch)	Overall Range (inch)	Bolt Qty. and Size (mm)	Torque (ft-lbs)	Working Pressure (PSI)
<b>111-56-0045-16</b>	1.5	1.77 - 2.24	2 - M12	35	232
<b>111-56-0052-16</b>	2	2.05 - 2.52	2 - M12	35	232
<b>111-56-0059-16</b>	2	2.32 - 2.79	2 - M12	35	232
<b>111-56-0071-16</b>	2.5	2.79 - 3.31	2 - M12	35	232
<b>111-56-0081-16</b>	3	3.19 - 3.67	2 - M12	35	232

### HYMAX VERSA NOMINAL SIZES 1.5" - 3"/LENGTH 5.5" HIGH PRESSURE

HYMAX Part Number	Nominal Diameter (inch)	Overall Range (inch)	Bolt Qty. and Size (mm)	Torque (ft-lbs)	Working Pressure (PSI)
<b>111-56-0045-24</b>	1.5	1.77 - 2.24	2 - M12	35	348
<b>111-56-0052-24</b>	2	2.05 - 2.52	2 - M12	35	348
<b>111-56-0059-24</b>	2	2.32 - 2.79	2 - M12	35	348
<b>111-56-0071-24</b>	2.5	2.79 - 3.31	2 - M12	35	348
<b>111-56-0081-24</b>	3	3.19 - 3.67	2 - M12	35	348

### HYMAX VERSA NOMINAL SIZES 1.5" - 3"/LENGTH 11"

HYMAX Part Number	Nominal Diameter (inch)	Overall Range (inch)	Bolt Qty. and Size (mm)	Torque (ft-lbs)	Working Pressure (PSI)
<b>113-56-0045-16</b>	1.5	1.77 - 2.24	4 - M12	35	232
<b>113-56-0052-16</b>	2	2.05 - 2.52	4 - M12	35	232
<b>113-56-0059-16</b>	2	2.32 - 2.79	4 - M12	35	232
<b>113-56-0071-16</b>	2.5	2.79 - 3.31	4 - M12	35	232
<b>113-56-0081-16</b>	3	3.19 - 3.67	4 - M12	35	232

# PRODUCT TABLES

## HYMAX VERSA NOMINAL SIZES 1.5" - 3"/LENGTH 11" HIGH PRESSURE

HYMAX Part Number	Nominal Diameter (inch)	Overall Range (inch)	Bolt Qty. and Size (mm)	Torque (ft-lbs)	Working Pressure (PSI)
113-56-0045-24	1.5	1.77 - 2.24	4 - M12	35	348
113-56-0052-24	2	2.05 - 2.52	4 - M12	35	348
113-56-0059-24	2	2.32 - 2.79	4 - M12	35	348
113-56-0071-24	2.5	2.79 - 3.31	4 - M12	35	348
113-56-0081-24	3	3.19 - 3.67	4 - M12	35	348

## HYMAX VERSA NOMINAL SIZES 3" - 5"/LENGTH 11"

HYMAX Part Number	Nominal Diameter (inch)	Overall Range (inch)	Bolt Qty. and Size (mm)	Torque (ft-lbs)	Working Pressure (PSI)
283-56-0087-16	3	3.42 - 4.3	4 - M14	50	232
283-56-0108-16	4	4.25 - 5.15	4 - M14	50	232
283-56-0113-16	4	4.44 - 5.35	4 - M14	50	232
283-56-0121-16	4	4.76 - 5.67	4 - M14	50	232
283-56-0138-16	5	5.43 - 6.3	4 - M14	50	232
283-56-0147-16	5	5.78 - 6.65	4 - M14	50	232

## HYMAX VERSA NOMINAL SIZES 3" - 5"/LENGTH 11" HIGH PRESSURE

HYMAX Part Number	Nominal Diameter (inch)	Overall Range (inch)	Bolt Qty. and Size (mm)	Torque (ft-lbs)	Working Pressure (PSI)
283-56-0087-24	3	3.42 - 4.3	4 - M14	60	348
283-56-0108-24	4	4.25 - 5.15	4 - M14	60	348
283-56-0113-24	4	4.44 - 5.35	4 - M14	60	348
283-56-0121-24	4	4.76 - 5.67	4 - M14	60	348
283-56-0138-24	5	5.43 - 6.3	4 - M14	60	348
283-56-0147-24	5	5.78 - 6.65	4 - M14	60	348

## HYMAX VERSA NOMINAL SIZES 6" - 12"/LENGTH 11"

HYMAX Part Number	Nominal Diameter (inch)	Overall Range (inch)	Before Removal of the Inner Layer (inch)	After Removal of the Inner Layer (inch)	Bolt Qty. and Size (mm)	Torque (ft-lbs)	Working Pressure (PSI)
283-56-0163-12	6	6.42 - 7.68	6.42 - 7.12	7.01 - 7.68	4 - M14	65	175
283-56-0190-12	7	7.48 - 8.74	7.48 - 8.11	8.07 - 8.74	4 - M14	65	175
283-56-0217-12	8	8.54 - 9.84	8.54 - 9.3	9.13 - 9.84	4 - M14	65	175
283-56-0248-12	10	9.76 - 11.02	9.76 - 10.39	10.35 - 11.02	4 - M16	65	175
283-56-0272-12	10	10.7 - 12	10.7 - 11.37	11.33 - 12	4 - M16	80	175
283-56-0278-12	10	10.96 - 12.26	10.96 - 11.63	11.59 - 12.26	4 - M16	80	175
283-56-0320-12	12	12.58 - 13.84	12.58 - 13.21	13.15 - 13.84	4 - M16	80	175
283-56-0334-12	12	13.15 - 14.41	13.15 - 13.78	13.74 - 14.41	4 - M16	80	175

# PRODUCT TABLES

## HYMAX VERSA NOMINAL SIZES 6" - 12"/LENGTH 11" HIGH PRESSURE

HYMAX Part Number	Nominal Diameter (inch)	Overall Range (inch)	Before Removal of the Inner Layer (inch)	After Removal of the Inner Layer (inch)	Bolt Qty. and Size (mm)	Torque (ft-lbs)	Working Pressure (PSI)
283-56-0163-16	6	6.42 - 7.68	6.42 - 7.12	7.01 - 7.68	4 - M14	90	232
283-56-0190-16	7	7.48 - 8.74	7.48 - 8.11	8.07 - 8.74	4 - M14	90	232
283-56-0217-16	8	8.54 - 9.84	8.54 - 9.3	9.13 - 9.84	4 - M14	90	232
283-56-0248-16	10	9.76 - 11.02	9.76 - 10.39	10.35 - 11.02	4 - M16	100	232
283-56-0272-16	10	10.7 - 12	10.7 - 11.37	11.33 - 12	4 - M16	100	232
283-56-0278-16	10	10.96 - 12.26	10.96 - 11.63	11.59 - 12.26	4 - M16	100	232
283-56-0320-16	12	12.58 - 13.84	12.58 - 13.21	13.15 - 13.84	4 - M16	100	232
283-56-0334-16	12	13.15 - 14.41	13.15 - 13.78	13.74 - 14.41	4 - M16	100	232

## HYMAX VERSA NOMINAL SIZES 14" - 24"/LENGTH 11"

HYMAX Part Number	Nominal Diameter (inch)	Overall Range (inch)	Before Removal of the Inner Layer (inch)	After Removal of the Inner Layer (inch)	Bolt Qty. and Size (mm)	Torque (ft-lbs)	Working Pressure (PSI)
283-56-0387-12	14	15.22 - 16.48	15.22 - 15.85	15.84 - 16.48	4 - M16	90	175
283-56-0398-12	14	15.69 - 16.95	15.69 - 16.32	16.31 - 16.95	4 - M16	90	175
283-56-0435-12	16	17.11 - 18.37	17.11 - 17.74	17.73 - 18.37	4 - M16	90	175
283-56-0440-12	16	17.32 - 18.66	17.32 - 17.95	17.90 - 18.66	4 - M16	110	175
283-56-0481-12	16	18.93 - 20.20	18.93 - 19.56	19.55 - 20.20	4 - M16	110	175
283-56-0493-12	18	19.42 - 20.68	19.42 - 20.06	20.05 - 20.68	4 - M16	110	175
283-56-0531-12	18	20.90 - 22.16	20.90 - 21.53	21.52 - 22.16	4 - M16	110	175
283-56-0562-12	20	22.14 - 23.40	22.14 - 22.77	22.76 - 23.40	4 - M16	150	175
283-56-0599-12	20	23.60 - 24.86	23.60 - 24.24	24.22 - 24.86	4 - M16	150	175
283-56-0634-11	24	24.98 - 26.24	24.98 - 25.61	25.60 - 26.24	4 - M16	150	160
283-56-0653-11	24	25.72 - 26.98	25.72 - 26.37	26.35 - 26.98	4 - M16	150	160
283-56-0688-11	24	27.08 - 28.36	27.08 - 27.71	27.70 - 28.36	4 - M16	150	160

## HYMAX VERSA NOMINAL SIZES 14" - 24"/LENGTH 11" HIGH PRESSURE

HYMAX Part Number	Nominal Diameter (inch)	Overall Range (inch)	Before Removal of the Inner Layer (inch)	After Removal of the Inner Layer (inch)	Bolt Qty. and Size (mm)	Torque (ft-lbs)	Working Pressure (PSI)
283-56-0387-16S	14	15.22 - 16.48	15.22 - 15.85	15.84 - 16.48	4 - M16	105	232
283-56-0398-16S	14	15.69 - 16.95	15.69 - 16.32	16.31 - 16.95	4 - M16	105	232
283-56-0435-16S	16	17.11 - 18.37	17.11 - 17.74	17.73 - 18.37	4 - M16	105	232
283-56-0440-16S	16	17.32 - 18.66	17.32 - 17.95	17.90 - 18.66	4 - M16	125	232
283-56-0481-16S	16	18.93 - 20.20	18.93 - 19.56	19.55 - 20.20	4 - M16	125	232
283-56-0493-16S	18	19.42 - 20.68	19.42 - 20.06	20.05 - 20.68	4 - M16	125	232
283-56-0531-16S	18	20.90 - 22.16	20.90 - 21.53	21.52 - 22.16	4 - M16	125	232
283-56-0562-16S	20	22.14 - 23.40	22.14 - 22.77	22.76 - 23.40	4 - M16	160	232
283-56-0599-16S	20	23.60 - 24.86	23.60 - 24.24	24.22 - 24.86	4 - M16	160	232
283-56-0634-16S	24	24.98 - 26.24	24.98 - 25.61	25.60 - 26.24	4 - M16	160	232
283-56-0653-16S	24	25.72 - 26.98	25.72 - 26.37	26.35 - 26.98	4 - M16	160	232
283-56-0688-16S	24	27.08 - 28.36	27.08 - 27.71	27.70 - 28.36	4 - M16	160	200

# PRODUCT TABLES

## HYMAX VERSA NOMINAL SIZES 26" - 80"/LENGTH 11"

Made to Order Request	Nominal Diameter (inch)	Bolt Qty. and Size (mm)	Torque (ft-lbs)	Working Pressure (psi)
<b>Available in all size variations while keeping a range of 0.4"</b>	26 - 28	8 - M16	100	100
	28 - 38	8 - M16	165	100
	38 - 48	8 - M16	200	72
	48 - 54	8 - M16	200	58
	54 - 66	8 - M16	200	43
	66 - 80	8 - M16	200	29

## HYMAX VERSA NOMINAL SIZES 26" - 80"/LENGTH 11" HIGH PRESSURE

Made to Order Request	Nominal Diameter (inch)	Bolt Qty. and Size (mm)	Torque (ft-lbs)	Working Pressure (psi)
<b>Available in all size variations while keeping a range of 0.4"</b>	26 - 28	8 - M16	115	232
	28 - 30	8 - M16	190	203
	30 - 34	8 - M16	190	174
	34 - 38	8 - M16	190	150
	38 - 42	8 - M16	210	150
	42 - 50	8 - M16	210	116
	50 - 54	8 - M16	210	87
	54 - 66	8 - M16	210	72
	66 - 80	8 - M16	210	58

# PRODUCT TABLES

## HYMAX VERSA NOMINAL SIZES 16" - 80"/LENGTH 18"

HYMAX Part Number	Nominal Diameter (inch)	Overall Range (inch)	Bolt Qty. and Size (mm)	Torque (ft-lbs)	Working Pressure (PSI)
356-56-0440-16S	16	17.32-18.19	M16 - 12	150	232
356-56-0451-16S	16	17.75-18.62	M16 - 12	150	232
356-56-0547-16S	20	21.52-22.39	M16 - 12	150	232
356-56-0565-16S	20	22.23-23.10	M16 - 12	150	232
356-56-0653-16S	24	25.72-26.59	M16 - 12	150	232
156-56-0701-14S	28	27.60-28.20	M16 - 13	150	203
156-56-0755-12S	30	29.72-30.32	M16 - 13	150	174
156-56-0808-12S	30	31.81-32.41	M16 - 12	150	174
156-56-0909-10S	36	35.79-36.39	M16 - 12	150	150
156-56-0968-10S	38	38.11-38.71	M16 - 12	150	150
156-56-1059-08S	42	41.69-42.29	M16 - 12	150	120
156-56-1125-08S	44	44.28-44.88	M16 - 12	150	120
156-56-1212-08S	48	47.72-48.32	M16 - 12	150	120
156-56-1285-06S	50	50.60-51.20	M16 - 12	150	87
156-56-1519-05S	50	59.79-60.39	M16 - 12	150	72
156-56-1595-05S	50	62.79-63.39	M16 - 12	150	72

All other sizes and high-pressure requirements are available as Made-To -Order.

## HYMAX VERSA NOMINAL SIZES 24" - 80"/LENGTH 24"

HYMAX Part Number	Nominal Diameter (inch)	Overall Range (inch)	Bolt Qty. and Size (mm)	Torque (ft-lbs)	Working Pressure (PSI)
357-56-0653-16S	24	25.72-26.59	M16 - 16	150	232
157-56-0755-12S	30	29.72-30.32	M16 - 16	150	174
157-56-0808-12S	30	31.81-32.41	M16 - 16	150	174
157-56-0909-10S	36	35.79-36.39	M16 - 16	150	150
157-56-0968-10S	36	38.11-38.71	M16 - 16	150	150
157-56-1125-08S	42	44.28-44.88	M16 - 16	150	120
157-56-1285-06S	48	50.59-51.19	M16 - 16	150	87
157-56-1519-05S	60	59.79-60.39	M16 - 16	150	72

All other sizes and high-pressure requirements are available as Made-To -Order.

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

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