

HYMAX[®]

Repair the past. Connect the future.

HYMAX GRIP[®]

Wide-Range Restraint Solutions



HYMAX GRIP. THE TEETH MAKE THE DIFFERENCE.

There are many situations that require couplings with additional restraining power. HYMAX restraint products combine the patented technology of the HYMAX[®] Coupling with a unique restraint system, joining pipe ends while preventing any possible movement. Designed using HYMAX' innovation and patented technology, our restraint solutions work with metal and plastic pipes and are suitable for a wide variety of applications.



* This product is protected under a registered patent. See Krausz website for details.



JOIN



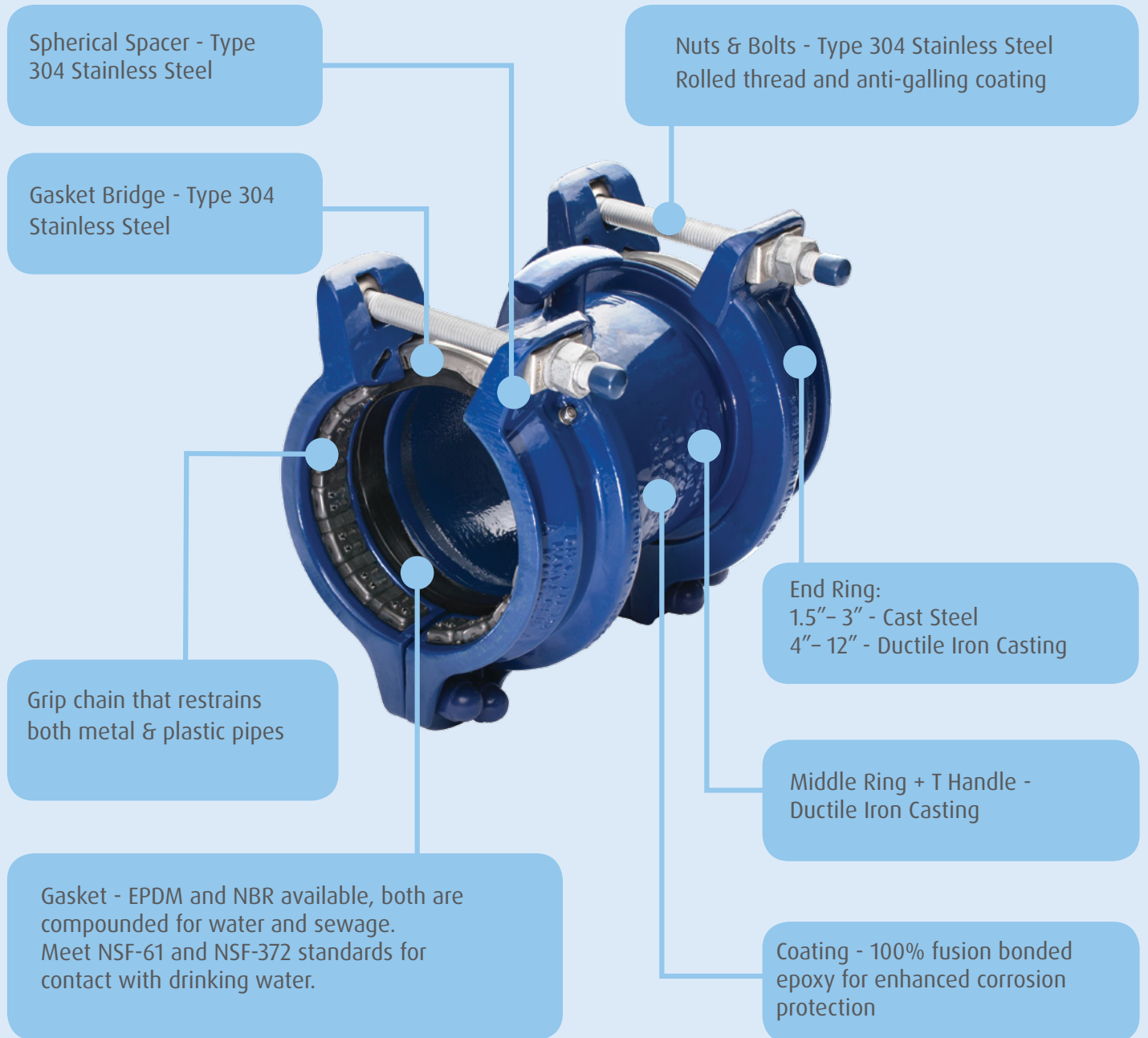
REPAIR



RESTRAIN

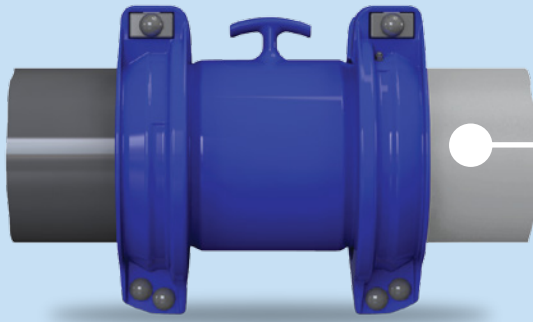
 **KRAUSZ** is the creator of HYMAX

HYMAX GRIP®



Picture is based on HYMAX GRIP 4" - features may vary between different product sizes.

PRODUCT SPECIFICATIONS



- Ductile Iron
- Cast Iron
- Steel
- Stainless Steel
- Copper
- PE
- PVC

HYMAX GRIP COUPLING RESTRAINT

Nominal Pipe Size 1.5" - 12"



PRESSURES AND 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.

ND (inch)	Standard Pressure GRIP				ΔT for HDPE SDR 9 (°F)
	Steel, DI, CI & PVC		HDPE		
	Working Pressure (PSI)	Rated Pressure (PSI)	Working Pressure (PSI)	Rated Pressure (PSI)	
1.5/2	232	350	232	350	85
2.5	232	350	232	350	85
3	232	350	232	350	85
4	232	350	232	350	85
6	232	350	232	350	85
8	232	350	193	290	50
10	232	350	163	245	50
12	232	350	155	232	35

ND (inch)	High Pressure GRIP		
	Steel, DI, CI, PVC & HDPE		
	Working Pressure (PSI)	Rated Pressure (PSI)	ΔT for HDPE SDR 9 (°F)
4	250	500	100
6	250	500	100
8	250	500	100
10	250	500	100
12	250	500	70

PRODUCT CONFIGURATIONS

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

Part Number 890-XX

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 -

890-XX-015039-16 should be read as 890-56-015039-16 for EPDM gasket and 890-57-015039-16 for NBR gasket.

PRODUCT TABLES

HYMAX GRIP NOMINAL SIZE 1.5" - 3" (*)

Krausz Part Number	ND (inch)	Overall Range (inch)	Before Removing the Inner Layer (inch)	After Removing the Inner Layer (inch)
890-XX-015039-16	1.5/2	1.54 - 2.64	1.54 - 2.20	2.17 - 2.64
890-XX-025059-16	2.5	2.32 - 3.43	2.32 - 2.99	2.95 - 3.43
890-XX-030080-16	3	3.15 - 4.17	3.15 - 3.74	3.70 - 4.17

* NOTE: only configs 56 & 57 are relevant for 1.5" - 3" sizes

HYMAX GRIP NOMINAL SIZE 4" - 12"

Krausz Part Number	ND (inch)	Overall Range (inch)
890-XX-04111-16	4	4.40 - 5.10
890-XX-06165-16	6	6.50 - 7.20
890-XX-08216-16	8	8.50 - 9.40
890-XX-10270-16	10	10.65 - 11.55
890-XX-12322-16	12	12.68 - 13.39

PRODUCT SPECIFICATIONS

HYMAX GRIP FLANGE ADAPTOR

Nominal Pipe Size 1.5" - 12"



PRESSURES AND 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.

ND (inch)	Standard Pressure GRIP				ΔT for HDPE SDR 9 (°F)
	Steel, DI, CI & PVC		HDPE		
	Working Pressure (PSI)	Rated Pressure (PSI)	Working Pressure (PSI)	Rated Pressure (PSI)	
1.5/2	232	350	232	350	85
2.5	232	350	232	350	85
3	232	350	232	350	85
4	232	350	232	350	85
6	232	350	232	350	85
8	232	350	193	290	50
10	232	350	163	245	50
12	232	350	155	232	35

ND (inch)	High Pressure GRIP		
	Steel, DI, CI, PVC & HDPE		
	Working Pressure (PSI)	Rated Pressure (PSI)	ΔT for HDPE SDR 9 (°F)
4	250	500	100
6	250	500	100
8	250	500	100
10	250	500	100
12	250	500	70

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 130-XX

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 -

130-XX-04111-16 should be read as 130-56-04111-16 for Standard Pressure Grip with EPDM gasket and 130-57-04111-16 for Standard Pressure Grip with NBR gasket.

PRODUCT TABLES

HYMAX GRIP FLANGE ADAPTOR NOMINAL SIZE 1.5"-2.5" (*)

Krausz Part Number	ND (inch)	Flange Oval (inch)	Overall Range (inch)	Before Removing the Inner Layer (inch)	After Removing the Inner Layer (inch)
130-XX-015039-15-16	1.5/2	1.5	1.54 - 2.64	1.54 - 2.20	2.17 - 2.64
130-XX-015039-20-16	1.5/2	2	1.54 - 2.64	1.54 - 2.20	2.17 - 2.64
130-XX-025059-20-16	2.5	2	2.32 - 3.43	2.32 - 2.99	2.95 - 3.43

* NOTE: only configs 56 & 57 are relevant for 1.5" - 3" sizes

HYMAX GRIP FLANGE ADAPTOR NOMINAL SIZE 3" (*)

Krausz Part Number	ND (inch)	Overall Range (inch)	Before Removing the Inner Layer (inch)	After Removing the Inner Layer (inch)
130-XX-030080-16	3	3.15 - 4.17	3.15 - 3.74	3.70 - 4.17

* NOTE: only configs 56 & 57 are relevant for 1.5"-3" sizes

HYMAX GRIP FLANGE ADAPTOR NOMINAL SIZE 4" - 12"

Krausz Part Number	ND (inch)	Overall Range (inch)
130-XX-04111-16	4	4.40 - 5.10
130-XX-06165-16	6	6.50 - 7.20
130-XX-08216-16	8	8.50 - 9.40
130-XX-10270-16	10	10.65 - 11.55
130-XX-12322-16	12	12.68 - 13.39

HYMAX GRIP END CAP

Nominal Pipe Size 1.5" - 12"



PRESSURES

ND (inch)	Standard Pressure GRIP			
	Steel, DI, CI & PVC		HDPE	
	Working Pressure (PSI)	Rated Pressure (PSI)	Working Pressure (PSI)	Rated Pressure (PSI)
1.5/2	232	350	232	350
2.5	232	350	232	350
3	232	350	232	350
4	232	350	232	350
6	232	350	232	350
8	232	350	193	290
10	232	350	163	245
12	232	350	155	232

ND (inch)	High Pressure GRIP	
	Steel, DI, CI, PVC & HDPE	
	Working Pressure (PSI)	Rated Pressure (PSI)
4	250	500
6	250	500
8	250	500
10	250	500
12	250	500

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 867-XX

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 -

867-XX-025059-16 should be read as 867-56-025059-16 for EPDM gasket and 867-57-025059-16 for NBR gasket.

PRODUCT TABLES

HYMAX GRIP END CAP NOMINAL SIZE 1.5" - 3" (*)

Krausz Part Number	ND (inch)	Overall Range (inch)	Before Removing the Inner Layer (inch)	After Removing the Inner Layer (inch)
867-XX-015039-16	1.5/2	1.54 - 2.64	1.54 - 2.20	2.17 - 2.64
867-XX-025059-16	2.5	2.32 - 3.43	2.32 - 2.99	2.95 - 3.43
867-XX-030080-16	3	3.15 - 4.17	3.15 - 3.74	3.70 - 4.17

HYMAX GRIP END CAP NOMINAL SIZE 4" - 12"

Krausz Part Number	ND (inch)	Overall Range (inch)
867-XX-04111-16	4	4.40 - 5.10
867-XX-06165-16	6	6.50 - 7.20
867-XX-08216-16	8	8.50 - 9.40
867-XX-10270-16	10	10.65 - 11.55
867-XX-12322-16	12	12.68 - 13.39

* NOTE: only configs 56 & 57 are relevant for 1.5" - 3" sizes

PRODUCT SPECIFICATIONS

HYMAX GRIP REDUCER

Nominal Pipe Size 1.5" - 12"



PRESSURES AND 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.

ND (inch)	Standard Pressure GRIP				ΔT for HDPE SDR 9 (°F)
	Steel, DI, CI & PVC		HDPE		
	Working Pressure (PSI)	Rated Pressure (PSI)	Working Pressure (PSI)	Rated Pressure (PSI)	
1.5/2	232	350	232	350	85
2.5	232	350	232	350	85
3	232	350	232	350	85
4	232	350	232	350	85
6	232	350	232	350	85
8	232	350	193	290	50
10	232	350	163	245	50
12	232	350	155	232	35

ND (inch)	High Pressure GRIP		
	Steel, DI, CI, PVC & HDPE		
	Working Pressure (PSI)	Rated Pressure (PSI)	ΔT for HDPE SDR 9 (°F)
4	250	500	100
6	250	500	100
8	250	500	100
10	250	500	100
12	250	500	70

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 GRIP REDUCER NOMINAL SIZES 1.5" - 12"(*)

Krausz Part Number	ND (inch)	Side 1			Side 2		
		Overall Range (inch)	Before Removing the Inner Layer (inch)	After Removing the inner Layer (inch)	Overall Range (inch)	Before Removing the Inner Layer (inch)	After Removing the inner Layer (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

* In sizes (1.5/2)X2.5, 2.5X3 and 3X4 only configs 56 & 57 are relevant

HYMAX GRIP ELBOW

Nominal Pipe Size 4" - 12" 45° AND 90°



PRESSURES AND 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.

ND (inch)	Standard Pressure GRIP				ΔT for HDPE SDR 9 (°F)
	Steel, DI, CI & PVC		HDPE		
	Working Pressure (PSI)	Rated Pressure (PSI)	Working Pressure (PSI)	Rated Pressure (PSI)	
4	232	350	232	350	85
6	232	350	232	350	85
8	232	350	193	290	50
10	232	350	163	245	50
12	232	350	155	232	35

PRODUCT TABLES

HYMAX GRIP ELBOW NOMINAL SIZES 4" - 12" 45°

Krausz Part Number	ND (inch)	Overall Range (inch)
893-56-04111-16	4	4.40 - 5.10
893-56-06165-16	6	6.50 - 7.20
893-56-08216-16	8	8.50 - 9.40
893-56-10270-16	10	10.65 - 11.55
893-56-12322-16	12	12.68 - 13.39

HYMAX GRIP ELBOW NOMINAL SIZES 4" - 12" 90°

Krausz Part Number	ND (inch)	Overall Range (inch)
894-56-04111-16	4	4.40 - 5.10
894-56-06165-16	6	6.50 - 7.20
894-56-08216-16	8	8.50 - 9.40
894-56-10270-16	10	10.65 - 11.55
894-56-12322-16	12	12.68 - 13.39

PRODUCT SPECIFICATIONS

HYMAX GRIP CATHODIC

Nominal Pipe Size 1.5" - 12"



PRESSURES

ND (inch)	Steel, DI, CI	
	Working Pressure (PSI)	Rated Pressure (PSI)
1.5/2	232	350
2.5	232	350
3	232	350
4	232	350
6	232	350
8	232	350
10	232	350
12	232	350

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 889-XX

56 -> Standard Pressure Grip with EPDM gasket

57 -> Standard Pressure Grip with NBR gasket

For example -

889-XX-015039-16 should be read as 889-56-015039-16 for EPDM gasket and 889-57-015039-16 for NBR gasket.

PRODUCT TABLES

HYMAX GRIP CATHODIC NOMINAL SIZE 1.5" - 3"

Krausz Part Number	ND (inch)	Overall Range (inch)	Before Removing the Inner Layer (inch)	After Removing the inner Layer (inch)
889-XX-015039-16	1.5/2	1.54 - 2.64	1.54 - 2.20	2.17 - 2.64
889-XX-025059-16	2.5	2.32 - 3.43	2.32 - 2.99	2.95 - 3.43
889-XX-030080-16	3	3.15 - 4.17	3.15 - 3.74	3.70 - 4.17

HYMAX GRIP CATHODIC NOMINAL SIZE 4" - 12"

Krausz Part Number	ND (inch)	Overall Range (inch)
889-XX-04111-16	4	4.40 - 5.10
889-XX-06165-16	6	6.50 - 7.20
889-XX-08216-16	8	8.50 - 9.40
889-XX-10270-16	10	10.65 - 11.55
889-XX-12322-16	12	12.68 - 13.39

HYMAX GRIP SWIVELJOINT

Nominal Pipe Size 4" - 8"



PRESSURES AND ΔT

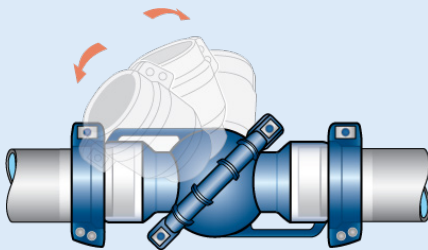
ΔT - HDPE pipe expands and contracts with changes in temperature and exerts large pull-load forces on the coupling. ΔT for HDPE pipe is the change in temperature the coupling can withstand when installed on HDPE pipe.

ND (inch)	Standard Pressure GRIP				ΔT for HDPE SDR 9 (°F)
	Steel, DI, CI & PVC		HDPE		
	Working Pressure (PSI)	Rated Pressure (PSI)	Working Pressure (PSI)	Rated Pressure (PSI)	
4	232	350	232	350	85
6	232	350	232	350	85
8	232	350	193	290	50

PRODUCT TABLES

HYMAX GRIP Swiveljoint nominal size 4" - 8"

Krausz Part Number	ND (inch)	Overall Range (inch)
892-56-04111-16	4	4.40-5.10
892-56-06165-16	6	6.50-7.20
892-56-08216-16	8	8.50-9.40



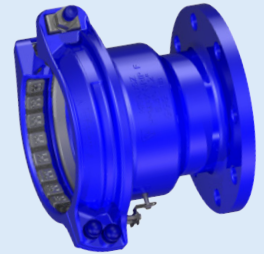
UNIQUE PRODUCT WITH ONE SWIVELING END

**JOINS AND RESTRAINS A WIDE RANGE OF PIPING TYPES
AND DIAMETERS, AT ANY ANGLE FROM 0° TO 90°**

PRODUCT SPECIFICATIONS

HYMAX GRIP FLANGE ADAPTOR WITH CATHODIC PROTECTION

Nominal Pipe Size 4" - 12"



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 129-XX

56 -> Standard Pressure Grip with EPDM gasket

57 -> Standard Pressure Grip with NBR gasket

For example -

129-XX-030080-16 should be read as 129-56-030080-16 for EPDM gasket and 129-57-030080-16 for NBR gasket.

PRODUCT TABLES

HYMAX GRIP FLANGE ADAPTOR WITH CATHODIC PROTECTION 3"

Krausz Part Number	ND (inch)	Overall Range (inch)	Before Removing the Inner Layer (inch)	After Removing the inner Layer (inch)
129-XX-030080-16	3	3.15 - 4.17	3.15 - 3.74	3.70 - 4.17

HYMAX GRIP FLANGE ADAPTOR WITH CATHODIC PROTECTION 4" - 12"

Krausz Part Number	ND (inch)	Overall Range (inch)
129-XX-04111-16	4	4.40 - 5.10
129-XX-06165-16	6	6.50 - 7.20
129-XX-08216-16	8	8.50 - 9.40
129-XX-10270-16	10	10.65 - 11.55
129-XX-12322-16	12	12.68 - 13.39

THE HYMAX[®] GRIP



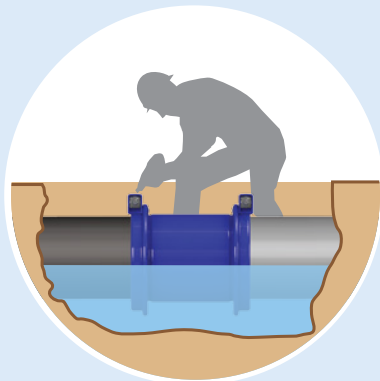
Unmatched performance

- Patented pipe grip – universal gripping system designed to restrain metal and plastic pipes.
- The unique patented radial closing mechanism holds pipes tightly in place during installation, allowing full control over the gap between pipes.
- The patented GRIP chain offers circular restraint around the pipe, unlike typical wedge - style restraints that point-load the pipe.
- As the pipe applies axial pressure, the GRIP chain increasingly tightens over the pipe, preventing pullout.



Multiple applications

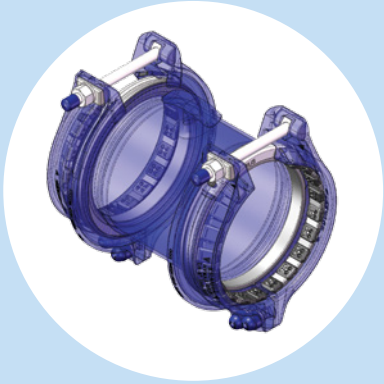
- Suits a wide range of pipe diameters, replacing the need to use dedicated products and thus reducing inventory costs and saving shelf space.
- The HYMAX GRIP fits different types of plastic and metal pipes and allows transition capability of up to 1.1".



Ease of use

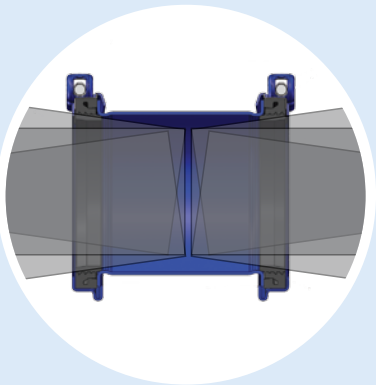
- Ready to use, stab-fit design features top-facing bolts for quick and easy installation, reducing time in the ditch and improving worker safety.
- Comfortably slides over the pipe before final positioning.

FAMILY FEATURES



Extremely durable design

- High-quality sealing solution – Patented hydraulically-assisted gasket features two-stage sealing: mechanical sealing that is effective under vacuum or non-pressure and self-inflated gasket using water pressure.
- Advanced anti-galling using unique dry treatment process on nuts and bolts, with Molecular Anti-Galling (MAG) based on embedded zinc, prevents galling and enables repeated bolt tightening; it also eliminates the need for grease, preventing dust and dirt build-up.
- Fusion-bonded epoxy coating enables an insulated product and prevents corrosion.
- Innovative radial closing design and sealing systems eliminate installation errors.



Flexible connection

- Allows up to 4° angular deflection on each end.
- Absorbs post-installation dynamic pipe deflection of up to 4° on each end, reducing the risk of damage and cracking due to ground shifts and temperature changes.
- Adapts to out-of-round pipe shape (up to 0.16”), for optimum fit on both ends.

The HYMAX GRIP provides the best join and restraint solution for:

- Section replacement near angle, T or dead-ends
- Replaces old restraint section/product
- Dead-end pressure testing
- A restraint system currently in use or being installed



HYMAX® GRIP Product information

1. HYMAX GRIP meets or exceeds all specifications of AWWA Standard C219, NSF-61 and NSF-372.
2. End rings:
 - 1.5" - 3": Steel Casting ASTM A216 WCB.
 - 4" - 12": Ductile Iron Casting ASTM A536 grade 60-40-18.
3. Body / Center Ring:
 - Ductile Iron Casting ASTM A536 grade 65-45-12.
 - HYMAX GRIP Flange Adapter - flange compatible with AWWA Class D, ANSI Class 125/150.
 - Sizes 1.5", 2", and 2.5" without handle or lifting eye.
4. Bolts, Nuts and Washers: ASIS 304 Stainless Steel impregnated with zinc via the MAG process.
5. Gasket: EPDM and NBR available, both are compounded for water and sewage.
Meet NSF-61 and NSF-372 standards for contact with drinking water.
6. Gasket bridge: AISI 304 Stainless Steel.
7. Spherical spacers: AISI 304L Stainless Steel.
8. Coating: 100% fusion bonded epoxy for enhanced corrosion protection NSF-61 and NSF-372.
 - Average thickness 14 mil.
9. Working temperature: EPDM: -20°F UP TO +125°F
NBR: -4°F UP TO +125°F
10. Min. Pipe Insertion of 3.6".
11. Dynamic deflection up to 4° per side.
12. Vacuum test: 12 PSI.

* Data may vary according to product type and size. For product specification sheet please refer to our website: www.krauszusa.com

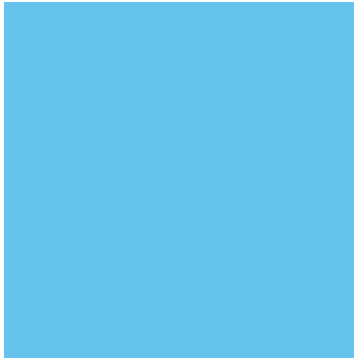
90 YEARS OF INNOVATIVE PIPE JOIN AND REPAIR SOLUTIONS



For 90 years, Krausz, the creator of HYMAX, has developed and manufactured market-leading products for the repair and connection of different pipe types in the potable water and sewerage markets.

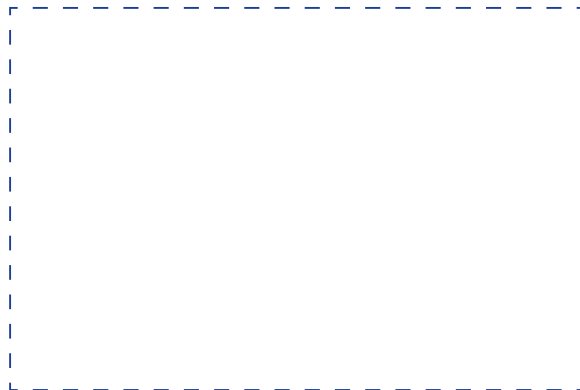
We have a solid reputation selling a wide variety of innovative, easy-to-use, durable products that save time and reduce inventory.





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KRAUSZ is the creator of HYMAX