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VIEGA MEGAPRESS® CuNi SYSTEMS POCKET GUIDE



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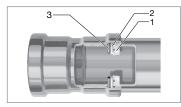
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Building on Tradition

Founded 125 years ago, Viega is a privately owned international group of companies. In the United States, Canada, Mexico, and Latin America, Viega specializes in plumbing, heating, and pipe-joining technologies. The values of Viega's founder, Franz-Anselm Viegener, are just as present today as they were when he started the company in 1899. Courage, passion, and innovative spirit are still the basics of Viega's foundation.

At Viega, Safety is Priority.

Safe, certain, and secure, Viega fittings are designed for peace of mind.



- In MegaPress CuNi fittings, the 420 stainless steel bite ring's teeth bite into the pipe and lock the fitting securely in place.
- 2. For ½" to 2" fittings, a 304 stainless steel separator ring protects the sealing element from damage by creating a positive physical separation during installation. For 2½" to 4" fittings, a PBT (Polybutylene Terephthalate) separator ring protects the sealing element.
- The FKM sealing element ensures watertight or airtight connections.

In all MegaPress CuNi fittings, Viega's unique Smart Connect® technology helps installers ensure that they have pressed all connections.



DANGER!

Read and understand all instructions for installing Viega MegaPress CuNi fittings. Failure to follow all instructions may result in extensive property damage, serious injury, or death.



It is the responsibility of the installer or any other parties to adhere to all applicable local rules and regulations governing the nature of the installation.



A white dot on a Viega MegaPress CuNi fitting indicates Smart Connect technology with an FKM sealing element. For a current list of applications, please see the <u>Applications Chart</u>.

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This document is subject to updates. For the most current Viega technical literature, please visit <u>www.viega.us</u>.



Viega products are designed to be installed by licensed and trained plumbing and mechanical professionals who are familiar with Viega products and their installation. **Installation by non-professionals may void Viega LLC's warranty.**



Viega MegaPress CuNi Systems

Viega MegaPress CuNi is a coppernickel, cold press system designed specifically to stand up to the harsh conditions found in marine environments.

Viega combines reliability and speed to complete a pipe-joining project quickly and efficiently, reducing rework and costly downtime. With Viega press technology, installers can make consistent, secure press connections in a matter of seconds without flame or heavy equipment. The fittings require no soldering or welding and are installed with electrohydraulic press tools (battery-powered or corded press tools).

With its 90/10 copper-nickel alloy and FKM sealing element, Viega MegaPress CuNi is approved for a variety of different applications, including:

Fresh water:

- Machinery cooling
- Fire main and water spray
- Sprinkler system
- Hot/cold potable water

Seawater:

- Bilge and ballast
- Wet or dry fire main
- Foam system
- Water spray
- Sprinkler system
- Cooling water systems

Flammable fluids:

- Cargo oil
- Fuel oil
- Lube oil
- Hydraulic oil

Miscellaneous:

- Compressed air system
- Condensate return
- Vacuum piping
- Sewage discharge

Smart Connect Technology – Security Under Pressure

Locating unpressed connections is an important step in the pressure-testing process. Viega MegaPress CuNi includes Smart Connect technology, providing quick and easy identification of unpressed connections during a pressure test.

Smart Connect technology is a design of the fitting, providing a path for liquids and/ or gases from inside the system past the sealing element of an unpressed connection. When pressed according to our Product Instructions, the fluid path is altered, creating a reliable, leakproof connection.

Unpressed connections are located by pressurizing the system with air or water. When testing with water, the proper pressure range is 15 to 85 psi. Pressure testing with air can be dangerous at high pressures. When testing with compressed air, the proper pressure range is ½ to 45 psi. Following a successful Smart Connect test, the system may be pressure tested up to 600 psi maximum for water and 200 psi maximum for air if required by local code requirements.



ldentify an unpressed connection during pressure testing when water flows past the sealing element.



Upon identification, use the press tool to press the fitting, making a secure, leakproof connection.



Viega MegaPress CuNi connections are fast, flameless, and reliable.

MegaPress CuNi Fittings

MegaPress CuNi is an IPS cold press fitting system made of a non-corrosive copper-nickel wrought alloy that provides an economical and reliable installation of Class 200 and Schedule 40 copper-nickel pipe. The MegaPress CuNi fitting system requires no threading or welding and poses no fire hazard, which is particularly important in restoration or retrofit work. The press fittings are installed with a batterypowered or corded pressing tool.

MegaPress CuNi fitting system is offered in configurations that allow for the installation of the vast majority of copper-nickel piping applications in the shipbuilding market. MegaPress CuNi fittings are available in sizes ranging from ½" to 4".

Advantages

- Up to 90% time savings
- Lowest overall installed cost
- Proven joining technology
- Technical field support
- No fire watch needed
- No special certification required

Components

- Alloy: 90/10 copper-nickel C70600
- FKM sealing element
- 420 stainless steel bite ring
- 304 stainless steel separator ring for ½" to 2" fittings
- PBT separator ring for 2½" to 4" fittings

Operating Parameters*

- Operating Pressure:
 ½" to 3" fittings: 232 psi maximum
 4" fittings: 181 psi maximum
- Test Pressure: 600 psi
- Operating Temperature: 23°F to 284°F (-5°C to 140°C) (with temperature spikes up to 356°F (180°C) 'Refer to your applicable type approval for exact parameters.

Compliant With

- ISO 19921, 19922 Fire Resistance Test
 IACS P2.11.5
- ISO 9001 Quality Management System Certification

Listings and Certificates

- ABS type approval
- ASTM F3226
- BV: Bureau Veritas
- DNV: Det Norske Veritag
- GL: Germanischer Lloyd
- Lloyd's Register
- RINA: Registro Italiano Navale
- USCG Acceptance Letter

Shipbuilding Rules

MegaPress CuNi system conforms to:

- International Association of Classification Societies
 - Requirements concerning pipes and pressure vessels
- United States Coast Guard
- ABS Steel Vessel Rules

For use in Class III pipe components for transporting sea water and other media in accordance with section 4.6.2, Table 9 and 10, of the ABS Steel Vessel Rules for compression couplings. The fittings are an approved fire-resistant type.

Recommended Tools

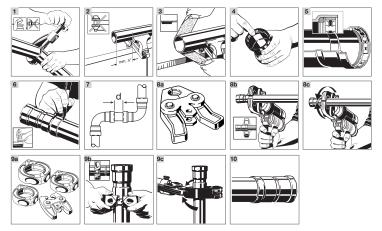
- Standard-size press tool (minimum hydraulic ram output of 7,200 lbs.)
- #56013 MegaPress jaw/ring kit (½" to 2")
- #26200 MegaPress XL PressBooster with 2½" press ring
- #57078 MegaPress XL 3" and 4" press ring kit
- #57081 Z3 Actuator with 2½" press ring (must be used with press gun with minimum 80mm press stroke)
- #56310 MegaPress Marine press jaw set ½" to 2"
- #56360 MegaPress Marine press ring set 1/2" and 3/4" with V2 Actuator
- #56365 MegaPress Marine press ring set 1" to 2" with V2 Actuator

Smart Connect Technology

MegaPress fittings are manufactured with Viega's unique Smart Connect technology. A design of the fitting, Smart Connect technology allows identification of an unpressed fitting during pressure testing.

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Viega MegaPress CuNi 1/2" to 2" Fittings



- 1 Cut piping at right angles using displacement-type cutter.
- 2 Keep end of pipe a minimum of 4" away from the contact area of the vise to prevent possible damage to the pipe.
- 3 Deburr inside and outside of the pipe and prep to proper insertion depth using a preparation tool or fine-grit sandpaper.
- 4 Check seal, separator ring, and grip ring for correct fit. Do not use oils or lubricants.
- 5 Illustration demonstrates proper fit of grip ring, separator ring, and sealing element.
- 6 Mark proper insertion depth. Improper insertion depth may result in an improper seal. It is recommended that the depth marking be visible on the completed assembly.

Minimum Insertion Depth for MegaPress						
Pipe Size	1⁄2"	3⁄4 "	1"	1¼"	1½"	2"
Insertion Depth	1 1⁄16"	1 ³⁄16"	1%"	1 ¹³ ⁄16"	1%"	2"

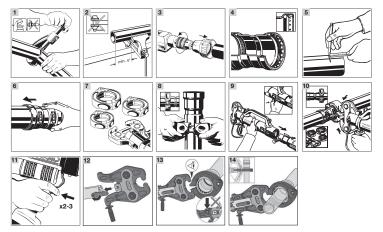
7 Refer to chart on page 9 for minimum distance between fittings. Failure to provide this distance may result in an improper seal. While turning slightly, slide fitting onto pipe to the marked depth. End of pipe must contact stop. 8a Viega MegaPress CuNi ½" to 1" fitting connections must be performed with MegaPress jaws.

WARNING!

Keep extremities and foreign objects away from press tool during pressing operation to prevent injury or incomplete press.

- **8b** Open the MegaPress jaw and place at right angles on the fitting. Visually check insertion depth using mark on piping.
- **8c** Start pressing process and hold the trigger until the jaw has engaged the fitting.
- **9a** MegaPress CuNi 1¼" to 2" fitting connections must be performed with MegaPress rings and V2 actuator.
- 9b Open MegaPress ring and place at right angles on the fitting. MegaPress ring must be engaged on the fitting bead. Check insertion depth.
- 9c Place V2 actuator onto MegaPress ring and start pressing process. Hold the trigger until the actuator has engaged the MegaPress ring.
- 10 Remove MegaPress jaw from fitting or release V2 actuator from MegaPress ring and then remove MegaPress ring from the fitting. Remove control label to indicate press has been completed.

Viega MegaPress CuNi 21/2" to 4" Fittings



- 1 Cut pipe at right angles using displacement-type cutter.
- 2 Keep end of pipe a minimum of 4" away from the contact area of the vise to prevent possible damage to the pipe in the press area.
- **3** Remove burr from inside and outside of piping and prep to proper insertion depth using a preparation tool or finegrit sandpaper.
- 4 Check seal, separator ring, and grip ring for correct fit. Do not use oils or lubricants. Illustration demonstrates proper fit.
- 5 Mark proper insertion depth. Improper insertion depth may result in an improper seal. It is recommended that the depth marking be visible on the completed assembly.

Minimum Insertion Depth for MegaPress 2½" to 4"					
Pipe Size 2½" 3" 4"					
Insertion Depth 113/16" 25/16" 31/8"					

- 6 While turning slightly, slide fitting onto pipe to the marked depth. End of pipe must contact stop.
- 7 Viega MegaPress CuNi 2½" to 4" fitting connections must be made using MegaPress XL rings and either the MegaPress XL PressBooster or the MegaPress Z3 actuator.

WARNING!

Keep extremities and foreign objects away from press tool during pressing operation to prevent injury or incomplete press.

8 Open MegaPress ring and place at right angles on the fitting. The MegaPress XL ring must be engaged on the fitting bead. Check insertion depth.

Product Instructions



Pressing with MegaPress XL PressBooster

- 9 Remove the retaining bolt of the press machine. Slide the PressBooster in via the press jaw fixture. Slide the retaining bolt of the press machine in as far as it will go.
- To open the PressBooster jaw, pull back the handle at the hinged adapter jaw. Place PressBooster onto the MegaPress XL ring by inserting the ball heads of the hinged adapter jaw into the contact points of the XL ring. Push the handle forward to close the hinged adapter jaw.
- Hold the trigger until the actuator has engaged the MegaPress XL ring. The PressBooster requires two presses of the trigger to execute a complete press. A third press may be needed to initiate a release cycle to reset the rollers back to the original position.

Pressing with MegaPress Z3 Actuator

- 12 On the press tool, rotate the retaining pin handle 180 degrees and pull it out to open the slot for the actuator. Insert the Viega Z3 actuator into the slot on the press tool. On the press tool, push the retaining pin back in and rotate it 180 degrees.
- 13 Open the Viega Z3 actuator by pulling the handle back. Place the open Viega Z3 actuator onto the MegaPress XL ring by inserting the ball heads of the actuator into the contact points of the XL ring. Close the Z3 actuator.
- 14 Start the pressing process by holding the press tool trigger until the actuator has engaged the XL ring. When the press cycle is complete, the actuator will stop and release.

Sealing Element Description

FKM Sealing Element

MegaPress CuNi press fittings are manufactured with an FKM sealing element installed at the factory. FKM is well known for its excellent resistance to petroleum products and solvents as well as for its exceptional hightemperature performance, which makes it ideal for seals and gaskets in solar, district heating, low-pressure steam, and compressed-air systems.

Definition: FKM

Fluoroelastomer, dull black in color

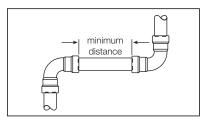
Maximum Pressure: 232 psi

Operating Temperature: 23°F to 284°F (with temperature spikes up to 356°F)

The FKM sealing element is a specialpurpose elastomer typically installed where higher temperatures are required. It possesses excellent resistance to aging, ozone, sunlight, weathering, environmental influences, and oils and petroleum-based additives.

Viega MegaPress CuNi			
Pipe Diameter (in)	Minimum Clearance (in)	Minimum Clearance (mm)	
1/2	1⁄4	7	
3⁄4	1⁄4	7	
1	1⁄4	7	
11⁄4	1/2	13	
1½	1/2	13	
2	1/2	13	
21/2	1/2	13	
3	1/2	13	
4	1/2	13	

Minimum Clearance Between Two Viega Press Connections





Viega MegaPress CuNi Pipe Marking Guide

Guide to the ANSI A13.1 Standard for the Identification of Pipes

Viega MegaPress CuNi ½" to 4" fittings are compatible with class 200 and schedule 40 copper-nickel pipe manufactured in accordance with the following standards: ASTM B466 standard specification for seamless copper-nickel pipe and tube ASTM B467 standard specification for welded copper-nickel pipe

MIL-T-16420K military specification, tube, copper-nickel alloy, seamless, and welded

All Viega MegaPress CuNi piping systems should be continuously marked in accordance with ANSI A13.1 or as required by the local authority having jurisdiction.

Usage	Material Properties	Type of Application (typical)	Color Scheme
Hazardous Materials	 Flammable or Explosive Chemically Active or Toxic Radioactive Extreme Temperature/ Pressure 	 Process Piping High-Pressure Steam Acids/Corrosives 	YELLOW ON BLACK
Low Hazard Materials (Liquid)	 Liquid Liquid Admixture 	Cooling WaterGrey WaterChilled Water	WHITE ON GREEN
Low Hazard Materials (Gas)	GasGas Admixture	 Compression Air Nitrogen (N2) Argon (Ar) 	WHITE ON BLUE
Fire Suppression	LiquidGasFoam	 Sprinklers (Wet/Dry) CO₂ Foam (AFFF) 	WHITE ON RED

Marker Placement

- At all changes in direction
- At both sides of any penetrations (valves, flanges, tees, etc.)
- At frequent intervals on straight run (50 feet is typical)
- Locate pipe markers so they are readily visible
- Provide arrows indicating direction of flow

Note: This guide is for general information purposes only. Pipe markings shall be in accordance with local code requirements.

Pipe O.D. Including Covering		ring Minimum Length of Field Color			Height of ters
(in)	(mm)	(in)	(mm)	(in)	(mm)
34 to 11/4	19 to 32	8	203	1/2	13
1½ to 2	38 to 51	8	203	3⁄4	19
2½ to 4	64 to 102	12	305	11⁄4	32

Technical Information



No-Stop Couplings

No-stop couplings are often used to conduct repairs. Without a stop, these couplings can slide completely onto a pipe and allow a connection to be made in tighter spaces. Unlike fittings with an integrated stop that have a minimum insertion depth, no-stop couplings have minimum and maximum allowable insertion depths. The minimum and the maximum insertion depths should be marked and a line should connect the two marks.



Viega MegaPress CuNi No-Stop Couplings				
Pipe		Minimum		mum
Diameter		rtion	Inse	
(in)	(in)	(mm)	(in)	(mm)
1/2	1 1/16	27	1%	41
3⁄4	13/16	30	1 ¹³ /16	46
1	1%	35	1 ¹⁵ /16	49
11⁄4	1 ¹³ /16	46	21⁄2	64
1½	1 7/8	48	2¾	70
2	2	51	2¾	70
21/2	1 ¹³ /16	46	31/8	79
3	25/16	59	311/16	94
4	31⁄8	80	4%	111

Welding

The following requirements must be considered when welding in the same vicinity as Viega MegaPress CuNi fittings.

Welding Requirements

The installer should take precautions to keep the MegaPress CuNi connection cool:

- Wrap the connection with a cold, wet rag.
- Protect the connection with a weld blanket.
- Prefabricate solder connections/welded fittings prior to installing the press fitting. (Ensure pipe has cooled before installing the press fitting.)
- Apply heat sink gel or spray or spot freezing.

Welding Adjacent to a Press Fitting

To prevent damage to the sealing element, maintain proper welding distances from the fitting. If welding adjacent to the connection, weld a minimum of four inches away.

Welding in Line With a Press Fitting

To prevent damage to the sealing element, maintain proper welding distances from the fitting. If welding in line with the connection, weld a minimum of three feet away from the connection to protect the sealing element.

General Installation Notes

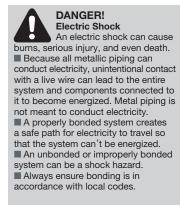
Expansion

Thermal expansion in installed systems generates stress on pipes and appliance connectors. Compensation must be allowed for expansion and contraction that may occur within the piping system. Expansion joints or mechanical expansion compensators may be used to alleviate these stresses.

Electrical Bonding

When properly installed, MegaPress CuNi fittings comply with Section 1211.15 Electrical Bonding and Grounding of the Uniform Plumbing Code.

The mechanical press provides continuous metal-to-metal contact between fitting and pipe. The press ensures the continuity of the bonding through this contact.



Exposure to Freezing Temperatures

In the Viega MegaPress CuNi system, the FKM sealing element can be installed in ambient temperatures down to 23°F (-5°C). Piping systems exposed to freezing temperatures must be protected per acceptable engineering practices, rules, and as required by the governing authority.

Underground Installations

Viega MegaPress CuNi fitting systems with copper pipe are approved for underground installations. However, installations must meet all state and local codes, including those for underground. Proper authorization must be obtained from the Authority Having Jurisdiction prior to installation.

Concealed Spaces

The Viega MegaPress CuNi fitting system has been approved for use in concealed spaces. Specific performance tests were conducted to evaluate the fittings for use in concealed spaces. Concealed pipe and fittings shall be protected from puncture threats.

Corrosion Protection

Viega MegaPress CuNi fittings exposed to corrosive conditions must be protected in an approved manner in accordance with NACE Standard RP0169-2002 Section 5, and in a manner satisfactory to the governing official.

Transition Fittings – Threaded

Viega MegaPress CuNi systems can be joined with off-the-shelf threaded fittings made of non-ferrous metals. In this regard: The threaded connection is made first. The press connection is made second. This process avoids unnecessary torsion on the press fitting.

Transition Fittings – Flange

When using Viega flanges, bolt the flange end in place prior to pressing the fitting to the pipe.

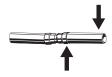
Technical Information

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Deflection

The pressing process can cause deflection (angular misalignment) to occur. When pressing Viega MegaPress CuNi fittings in a system, the deformation of the fitting is constant. This allows for a consistent leak-free joint every time and is a result of the pressing technique.

Deflection occurs in the same way for every fitting. The fitting being pressed will move in the direction of the jaw or ring opening.



- Since the fitting will deflect toward the opening of the jaw or ring, the pipe end will deflect in the opposite direction.
- By counteracting the fitting movement, one can minimize the deflection of the fitting and ultimately the pipe.
- When using strut and clamps, deflection is minimized and nearly eliminated, depending on clamp spacing.

Controlling Deflection

Deflection while pressing can be minimized by utilizing the following installation practices.



Alternate Press Directions

 Press one end of fitting.
 Make second press on other end of fitting from the opposite side.

Push-Pull Method

- Rings = Push on press tool.
- Jaws = Pull on press tool. The press tool can be feathered using the trigger as needed to apply pulling or pushing force to control deflection.



Re-Press

- Press the fitting, once on each side (that is, re-press the fitting a second time on the opposite side).
- Pressing the same connection from the opposite side will usually straighten misalignment between the pipe and fitting.



- When pressing overhead piping, it may be inconvenient to alternate sides for each press.
- The natural weight of the piping plus pressing on opposite sides at a 45-degree angle should adequately eliminate deflection.
- This technique can also be used for any horizontal piping and when working above the piping.

Technical Information

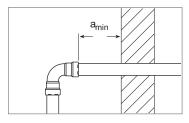
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Tool Clearances

Minimum distances should be taken into consideration during planning in order to avoid space constraints during installation.

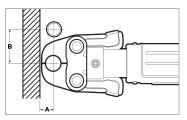
Ensure that the space required for pressing tools is available if Viega MegaPress CuNi fittings will be installed immediately upstream or downstream from wall or floor penetrations.

MegaPress Distance Requirements for Press Jaws Between Pipes and Walls



Pipe Diameter	Minimum space requirement, a _{min} for press tools
	RIDGID RP 330-B, 330-C, and 340-B Press Tools
1⁄2" to 1"	1 1%"
1¼" to 2"	3/4 "
21⁄2" to 4"	3/4 "

MegaPress Standard Jaws Clearance



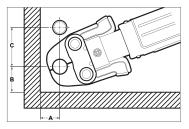
Pipe Diameter	A minimum	B minimum
1⁄2"	1	2%"
3⁄4 "	1¼"	31⁄8"
1"	1¾"	3%"

MegaPress Compact Jaws Clearance

Pipe Diameter	A minimum	B minimum
1⁄2"	11⁄4"	2%"
3⁄4 "	11⁄8"	3"



MegaPress Standard Jaws Clearance Between Pipe, Wall, and Floor

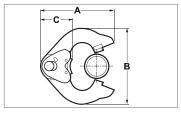


Pipe Diameter	A minimum	B minimum	C minimum
1⁄2"	1¼"	1%"	3"
3⁄4 "	1½"	21⁄8"	31⁄2"
1"	2"	21⁄2"	4"

MegaPress Compact Jaws Clearance Between Pipe, Wall, and Floor

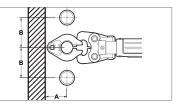
Pipe Diameter	A minimum	B minimum	C minimum
1/2"	11⁄2"	21⁄8"	31⁄8"
3⁄4 "	1%"	21⁄8"	3%"

MegaPress Rings Dimensions



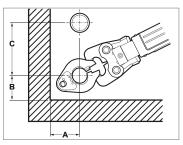
Pipe Diameter	A minimum	B minimum	C minimum
1¼"	6"	61⁄4"	21⁄2"
1½"	6"	6¾"	2%"
2"	6"	6%"	21⁄2"
21⁄2"	6%"	7%"	21⁄2"
3"	7½"	8%"	21⁄2"
4"	81⁄2"	10%"	2%"

MegaPress Rings with V2/V3 Actuator Clearance



Pipe Diameter	A minimum	B minimum
1¼"	3¾"	4%"
1½"	4"	51⁄8"
2"	4"	5%"
21⁄2"	41⁄2"	5%"
3"	4¾"	6¾"
4"	5%"	81⁄4"

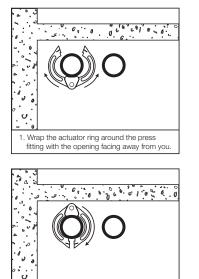
MegaPress Rings with V2/V3 Actuator Clearance Between Pipe, Wall, and Floor

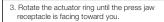


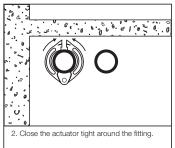
Pipe Diameter	A minimum	B minimum	C minimum
1¼"	3¾"	3¾"	4%"
1½"	4"	4"	51⁄8"
2"	4"	4"	5%"
21⁄2"	41⁄2"	4"	5%"
3"	4¾"	4¾"	6¾"
4"	5%"	51⁄2"	81⁄4"

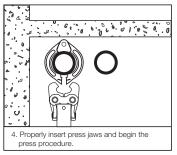


Pressing with Ring and Actuator in Tight Quarters









Dimensional Documentation MegaPress CuNi Fittings



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Part No.	Size (in)	A (in)		L	(in)
	1	Dec	Frac	Dec	Frac
88000	1/2	1.17	1 ¾ ₁₆	2.24	21⁄4
88005	3⁄4	1.36	1%	2.52	21/2
88010	1	1.72	1¾	3.07	31/16
88015	1¼	2.02	2	3.84	313/16
88020	1½	2.26	21⁄4	4.13	41⁄8
88025	2	2.80	213/16	4.76	4¾

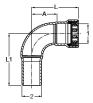
MegaPress CuNi 90° Elbow P x P - Model 0516

MegaPress CuNi 90° Elbow P x P - Model 0516XL



Part No.	Size (in)	A (in)		L	(in)
	1	Dec	Frac	Dec	Frac
88030	21/2	4.15	41⁄8	5.94	515/16
88035	3	4.76	4¾	7.09	71/16
88040	4	6.00	6	9.17	9 ¾ ₁₆

MegaPress CuNi 90° Elbow P x FTG - Model 0516.1



Part No.	Size (in)	A (in)		L (in)		L1 (in)	
	12	Dec	Frac	Dec	Frac	Dec	Frac
88045	1⁄2 x 1⁄2	1.17	1 ¾16	2.24	21⁄4	2.56	2%16
88050	3⁄4 x 3⁄4	1.36	1%	2.52	21/2	2.80	213/16
88055	1 x 1	1.72	1¾	3.07	31/16	3.39	3%
88060	1¼ x 1¼	2.02	2	3.84	313/16	4.03	41/16
88065	1½ x 1½	2.26	21⁄4	4.13	41⁄8	4.21	43⁄16
88070	2 x 2	2.80	213/16	4.76	4¾	5.08	51/16

MegaPress CuNi 90° Street Elbow P x FTG - Model 0516.1XL

<	Part No.	Size (in)	Α	(in)	L	(in)	L1	(in)
		12	Dec	Frac	Dec	Frac	Dec	Frac
· · · · · · · · · · · · · · · · · · ·	88075	2½ x 2½	4.15	41⁄8	5.94	515/16	6.06	61/16
	88080	3 x 3	4.78	4¾	7.09	71/16	6.81	613/16
	88085	4 x 4	6.00	6	9.17	9 ¾ ₁₆	8.78	8¾
• 2 →								



MegaPress CuNi 45° Elbow P x P - Model 0526



Part No.	Size (in)	A (in)		L (in)		
	1	Dec	Frac	Dec	Frac	
88090	1/2	0.60	5⁄8	1.67	1 11/16	
88095	3⁄4	0.71	11/16	1.87	1%	
88100	1	0.86	7⁄8	2.20	23/16	
88105	1¼	1.00	1	2.81	2 ¹³ / ₁₆	
88110	1½	1.12	11/8	2.99	3	
88115	2	1.32	1 5⁄16	3.29	35/16	

MegaPress CuNi 45° Elbow P x P - Model 0526XL



Part No.	Size (in)	A (in)		L	(in)
	1	Dec	Frac	Dec	Frac
88120	21/2	2.10	21/8	3.90	3%
88125	3	2.26	21⁄4	4.56	4%16
88130	4	2.74	2¾	5.89	5%

MegaPress CuNi 45° Elbow P x FTG - Model 0526.1



Part No.	Size (in)	A (in)		L (in)		L1 (in)	
	12	Dec	Frac	Dec	Frac	Dec	Frac
88135	1⁄2 x 1⁄2	0.60	5⁄8	1.67	1 ¹¹ / ₁₆	1.97	1 ¹⁵ / ₁₆
88140	3⁄4 x 3⁄4	0.71	11/16	1.87	1%	2.13	21/8
88145	1 x 1	0.86	7⁄8	2.20	23/16	2.52	21/2
88150	1¼ x 1¼	1.00	1	2.81	213/16	3.00	3
88155	1½ x 1½	1.12	11/8	2.99	3	3.07	31/16
88160	2 x 2	1.32	1 5⁄16	3.29	3 5⁄16	3.58	3%16

MegaPress CuNi 45° Street Elbow P x FTG - Model 0526.1XL

← L→ ←A→	Part No.	Size (in)	A (in)		L (in)		L1 (in)	
-		12	Dec	Frac	Dec	Frac	Dec	Frac
	88165	2½ x 2½	2.10	21/8	3.90	37⁄8	3.95	315/16
	88170	3 x 3	2.26	21⁄4	4.56	4%16	4.34	45/16
	88175	4 x 4	2.74	2¾	5.89	5%	5.62	5%

MegaPress CuNi Fittings





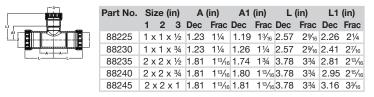
MegaPress CuNi Tee P x P x P - Model 0518

Part No.	Size (in)	Α	(in)	A1	(in)	L	(in)	L1	(in)
	1	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
88180	1/2	0.97	1	0.97	1	2.04	21/16	2.04	21/16
88185	3⁄4	1.08	1 ½16	1.05	1 ½16	2.23	21⁄4	2.20	2¾16
88190	1	1.23	1¼	1.23	1¼	2.57	2%16	2.57	2%16
88195	11⁄4	1.41	11/16	1.38	1%	3.23	3¼	3.20	3¾16
88200	1½	1.57	1 %16	1.57	1 %16	3.44	31/16	3.44	31/16
88205	2	1.81	1 ¹³ / ₁₆	1.84	1 ¹³ / ₁₆	3.78	3¾	3.81	313/16

MegaPress CuNi Tee P x P x P - Model 0518XL

←L1	Part No.	Siz	ze (in)	Α ((in)	A1	(in)	L ((in)	L1	(in)
≪ -AI-→		1	2	3	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
1 Barret Land	88210	2½ x	21⁄2	x 2½	2.16	23/16	2.24	21⁄4	3.96	315/16	4.04	41⁄16
	88250	3 >	<3>	(2	2.11	21/8	2.30	25/16	4.41	41/16	4.26	41⁄4
	88255	3 x	3 x	21/2	2.32	25⁄16	2.49	21⁄2	4.63	4%	4.29	45⁄16
	88215	3 >	<3>	3	2.58	2%16	2.52	21⁄2	4.88	41%	4.82	413/16
	88260	4 >	<4>	(2	2.18	23⁄16	2.87	21%	5.35	5%	4.84	413/16
	88265	4 x	4 x	21/2	2.37	2%	3.08	31/16	5.55	5%16	4.88	41%
	88270	4 >	<4>	3	2.63	2%	3.09	31/16	5.81	5¾	5.39	3%
	88220	4 >	<4>	κ4	3.22	31⁄4	3.08	31/16	6.40	6%	6.26	6¼

MegaPress CuNi Reducing Tee P x P x P - Model 0518



MegaPress CuNi Reducing Tee P x P x FPT - Model 0517.2

Part No.
88275
88280
88285

Part No.	Siz	ii) e	ר)	Α(in)	A1	(in)	L ((in)	L1	(in)
	1	2	3	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
88275	1⁄2 X	½ x	1⁄2	0.97	1	0.91	¹⁵ / ₁₆	2.04	21/16	1.45	11/16
88280	1 x	1 x	1⁄2	1.23	1¼	1.19	1 ¾ ₁₆	2.57	2%16	1.73	1¾
88285	1 x	1 x	3⁄4	1.23	1¼	1.18	1 ¾16	2.57	2%16	1.73	1¾
88290	2 x	2 x	1⁄2	1.81	1 ¹³ / ₁₆	1.75	1 ¾	3.78	3¾	2.28	21⁄4
88295	2 x	2 x	3⁄4	1.81	1 ¹³ / ₁₆	1.72	1¾	3.78	3¾	2.28	21⁄4



MegaPress CuNi Tee P x P x FPT - Model 0517.2XL

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512C (II	IJ,	- A (in)	AI	(in)	L (in)	L.I.	(in)	
2	3	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	
хЗх	1⁄2	1.44	1 7⁄16	2.24	21⁄4	3.74	3¾	2.78	2¾	
x 3 x 3	3⁄4	1.44	1 7⁄16	2.25	21⁄4	3.74	3¾	2.78	2¾	
x 4 x	1⁄2	1.45	17/16	2.77	2¾	4.63	4%	3.28	3¼	
x 4 x 3	3⁄4	1.55	1 %16	2.78	2¾	4.72	4¾	3.34	35/16	
	2 x 3 x x 3 x x 4 x	2 3 x 3 x ½ x 3 x ¾ x 4 x ½	2 3 Dec x 3 x ½ 1.44 x 3 x ¾ 1.44 x 4 x ½ 1.45	2 3 Dec Frac x 3 x ½ 1.44 1% x 3 x ¾ 1.44 1% x 4 x ½ 1.45 1%	2 3 Dec Frac Dec x 3 x ½ 1.44 1½ 2.24 x 3 x ¾ 1.44 1½ 2.25 x 4 x ½ 1.45 1½ 2.77	2 3 Dec Frac Dec Frac x 3 x ½ 1.44 1% 2.24 2¼ x 3 x ¾ 1.44 1% 2.25 2¼ x 4 x ½ 1.45 1% 2.77 2¾	2 3 Dec Frac Dec Frac Dec x 3 x ½ 1.44 1% 2.24 2¼ 3.74 x 3 x ¾ 1.44 1% 2.25 2¼ 3.74 x 4 x ½ 1.45 1% 2.27 2¾ 4.63	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Size (in) A (in) A (in) E (in) <th (<="" i="" td=""></th>	

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MegaPress CuNi Adapter P x MPT - Model 0511

	Part No.	Size (in)	1	A (in)		L (in)
· 2		12	Dec	Frac	Dec	Frac
The factor is	88320	1⁄2 x 1⁄2	1.46	17/16	2.53	21/2
-—A—+	88325	3⁄4 x 3⁄4	1.47	1½	2.63	2%
L	88330	1 x 1	1.66	1 11/16	3.00	3
	88335	1¼ x 1¼	1.89	1 7/8	3.70	311/16
	88340	1½ x 1½	1.93	1 ¹⁵ / ₁₆	3.80	313/16
	88345	2 x 2	1.94	1 ¹⁵ / ₁₆	3.91	315/16

MegaPress CuNi Adapter P x FPT - Models 0512



Part No.	Size (in)	A (in)		L	(in)
	12	Dec	Frac	Dec	Frac
88350	1⁄2 x 1⁄2	0.70	11/16	2.31	25/16
88355	3⁄4 X 3⁄4	0.74	3⁄4	2.40	2%
88360	1 x 1	0.71	11/16	2.72	2¾
88365	1¼ x 1¼	0.77	3⁄4	3.27	3¼
88370	1½ x 1½	0.73	3⁄4	3.28	31⁄4
88375	2 x 2	0.73	3⁄4	3.42	31/16

MegaPress CuNi Coupling with Stop P x P - Model 0515

	Part No.	Size (in)	Α	(in)	L	(in)
		1	Dec	Frac	Dec	Frac
	88380	1/2	0.56	9/16	2.70	211/16
l₊L▶	88385	3⁄4	0.63	5⁄8	2.94	215/16
	88390	1	0.59	9/16	3.28	35/16
	88395	1¼	0.70	11/16	4.34	45/16
	88400	1½	0.89	7⁄8	4.63	4%
	88405	2	0.77	3⁄4	4.75	4¾

+	Part No.	Size (in)	А	(in)	L	(in)
1 +++		1	Dec	Frac	Dec	Frac
+	88410	21/2	1.32	1 5⁄16	4.92	415/16
→ A -	88415	3	1.38	1%	5.98	6
l ← L → →	88420	4	1.52	1½	7.87	7%

MegaPress CuNi Coupling with Stop P x P - Model 0515XL

MegaPress CuNi Coupling No Stop P x P - Model 0515.5



Part No.	Size (in)		L (in)
	1	Dec	Frac
88425	1/2	2.70	211/16
88430	3⁄4	2.94	2 ¹⁵ /16
88435	1	3.29	35/16
88440	11⁄4	4.33	45/16
88445	1½	4.63	4%
88450	2	4.71	411/16

MegaPress CuNi Coupling No Stop P x P - Model 0515.5XL



Part No.	Size (in)	L (in)	
	1	Dec	Frac
88455	21⁄2	4.92	4 ¹⁵ /16
88460	3	5.98	6
88465	4	7.87	7 7/8

MegaPress CuNi Reducer P x P - Model 0515.2



Part No.	Size (in)	A (in)		L	(in)
	12	Dec	Frac	Dec	Frac
88470	3⁄4 x 1⁄2	1.14	11/8	3.37	3%
88475	1 x ½	1.34	1 5⁄16	3.76	3¾
88480	1 x ¾	1.17	1 ¾16	3.67	311/16
88485	1¼ x ¾	1.28	1¼	4.26	4¼
88490	1¼ x 1	1.21	1 ¾16	4.38	4%
88495	1½ x 1	1.35	1%	4.57	4%16
88500	1½ x 1¼	1.23	1¼	4.92	415/16
88505	2 x 1¼	1.44	1 7⁄16	5.23	5¼
88510	2 x 1½	1.40	1%	5.24	5¼

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MegaPress CuNi Reducer P x P - Model 0515.2XL

	Part No.	Size (in)	A	(in)	L (in)
		12	Dec	Frac	Dec	Frac
	88515	2½ x 1½	2.13	21/8	5.80	5 ¹³ / ₁₆
	88520	21⁄2 x 2	1.81	1 ¹³ / ₁₆	5.58	5%16
→ A →	88525	3 x 2	2.13	21/8	6.40	6%
	88530	3 x 2½	2.06	21/16	6.16	6¾16
	88535	4 x 2½	2.58	21/16	7.56	7%16
	88540	4 x 3	2.33	25/16	7.81	713/16

MegaPress CuNi Reducer FTG x P - Model 0515.1

	Part No.	Size (in)	Α ((in)) L (in)			
		12	Dec	Frac	Dec			
	88545	3⁄4 x 1⁄2	1.92	1 ¹⁵ / ₁₆	2.99			
lLl	88550	1 x ½	2.25	21⁄4	3.32			
	88555	1 x ¾	2.18	23/16	3.34			
	88560	1¼ x ¾	2.80	213/16	3.96			
	88565	1¼ x 1	2.81	213/16	4.15			
	88570	1½ x 1	2.81	213/16	4.15			
	88575	1½ x 1¼	2.80	213/16	4.62			
	88580	2 x 1¼	3.18	3 ¾16	5.00			
	88585	2 x 1½	2.97	3	4.84			

MegaPress CuNi Reducer FTG x P - Model 0515.1XL

	Part No.	Size (in)	A	(in)	L	(in)
2		12	Dec	Frac	Dec	Frac
	88590	2½ x 1½	3.32	35/16	5.19	5¾ ₁₆
	88595	2½ x 2	3.03	3	5.00	5
•	88600	3 x 2	3.80	313/16	5.77	5¾
	88605	3 x 2½	3.77	3¾	5.57	5%16
	88610	4 x 2½	5.25	5¼	7.05	71/16
	88615	4 x 3	5.04	51/16	7.34	75/16

Frac

35/16 35/16 315/16 41/8 41/8 4% 5 413/16

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MegaPress CuNi Union P x P - Model 0560

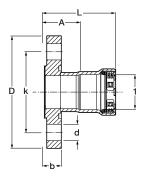


Part No.	Size (in)	A (in))	L (in))
	1	Dec	Frac	Dec	Frac
88620	1/2	2.36	2%	4.50	41⁄2
88625	3⁄4	2.63	2%	4.94	415/16
88630	1	2.61	2%	5.30	51/16
88635	1¼	2.80	213/16	6.44	61/16
88640	1½	2.89	2%	6.63	6%
88645	2	3.63	3%	7.56	7%16

MegaPress CuNi Union P x MPT - Model 0565

	Part No.	Size (in)	A (in))	L (in)	1
2		12	Dec	Frac	Dec	Frac
	88650	1⁄2 X 1⁄2	2.43	21/16	3.50	31⁄2
-A	88655	3⁄4 x 3⁄4	2.69	211/16	3.85	37⁄8
	88660	1 x 1	2.84	213/16	4.19	4¾16
	88665	1¼ x 1¼	3.01	3	4.83	413/16
	88670	1½ x 1½	3.10	31⁄8	4.97	5
	88675	2 x 2	3.92	315/16	5.89	5%

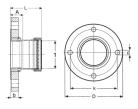
MegaPress CuNi Flange P x BP - Model 0559.5



Part No.	Size (in)	A (in)	L	(in)	b	(in)	k	(in)	D	(in)	d (in)
	1	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
88680	1	1.38	1%	2.72	2¾	0.63	5⁄8	3.11	31⁄8	4.33	41/16	0.61	5⁄8
88685	1¼	1.39	1%	3.21	3 ¾16	0.63	5⁄8	3.50	3½	4.53	41⁄2	0.63	5⁄8
88690	1½	1.48	1½	3.35	3%	0.71	11/16	3.86	3%	4.92	415/16	0.63	5⁄8
88695	2	1.54	1 %16	3.51	31⁄2	0.79	¹³ / ₁₆	4.76	4¾	5.91	5 ¹⁵ /16	0.75	3⁄4

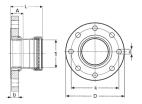


MegaPress CuNi Adapter Flange P - Model 0559XL



Part No.	Size (in)	Α(in)	L (in)	b ((in)	k (in)	D	(in)	d (in)
	1	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
88700	21/2	1.48	1½	3.28	3¼	0.89	7⁄8	5.51	5½	7.09	71/16	0.75	3⁄4
88705	3	1.61	1%	3.91	315/16	0.96	15/16	5.98	6	7.48	7½	0.75	3⁄4

MegaPress CuNi Adapter Flange P - Model 0559XL



Part No. Size (in)		A (in) L	. (in)	b (i	in)	k (ii	n)	D (ii	n)	d (in)
	1 [Dec F	Frac Dec	c Frac	Dec	Frac	Dec	Frac	Dec	Frac De	ec Frac
88710 4	4 1	.57	1% 4.7	5 43/4	0.96	¹⁵ /16	7.52	71⁄2	9.06	91/16 0.7	75 3/4

Q What is Smart Connect technology? A Smart Connect technology provides a quick and easy way to identify unpressed connections during the pressure-testing process. Unpressed connections are located by pressurizing the system with air or water. When testing with water, the pressure range is 15 psi to 85 psi maximum. When testing with air, the pressure range is ½ psi to 45 psi maximum. The flow path is removed during the pressing process, creating a leakproof, reliable connection. Guaranteed.

Q Why is Smart Connect technology so valuable? A Smart Connect technology gives the user strong peace of mind. It allows for faster testing procedures since use do not here to obt down and drain

allows for faster testing procedures since you do not have to shut down and drain the system. Costly damages and possible insurance claims and premiums can be avoided because it identifies unpressed connections before they can become a problem. Because of the time savings, projects stay on track.

Q Do I need additional equipment to install Viega MegaPress CuNi Systems?

A No. Viega designed Viega MegaPress CuNi fittings to be compatible with the same jaws, rings, and press tools that are used for the Viega MegaPress Carbon Steel and Viega MegaPress Stainless systems.

Q If a leak is discovered, is it necessary to drain the system prior to pressing the connection? No. It is not necessary to drain the system when making a repair.

A How would an inspector know they are looking at a good connection? Good connections can be proven by performing a pressure test, using the same procedure for a fitting system. Q What is the lubrication used on the sealing elements? The sealing elements are lubricated with a USDA approved H1 lubricant, meeting the requirement of FDA 21CFR. If it is necessary to lubricate the seals in the field, use water only. Do not use petroleum-based lubricants.

A How long will the FKM seal last? When properly installed, the FKM seal and connection will last as long as the piping system.

Q How do I fabricate a system in tight places when using Viega MegaPress?

A If necessary, prefabricate connections that are in tight places and then install.

What is the warranty for Viega MegaPress CuNi fittings? Viega MegaPress CuNi fittings carry a two-year warranty against defects

in material and workmanship from Viega.

Q How do Viega MegaPress connections hold up to freezing temperatures?

A Precautions should be taken for any piping system to protect the system from below-freezing temperatures.

Q What level of turbulence occurs in Viega MegaPress CuNi fittings and will it cause premature wear in the piping?

The long radius of Viega MegaPress CuNi elbows reduces turbulence typically experienced with traditional short-radius fittings. Not rearning the ID of the pipe is the largest contributing factor to turbulence and premature wear of any piping system.

Viega Marine Applications Marine applications are defined as mobile structures used to navigate water or stationary structures in water.

Subject to the terms and conditions of this Limited Warranty, Viega LLC (Viega) warrants to end users, installers, and distribution houses that its Viega metal press products (Viega Product), when properly installed in approved marine applications, and other products sold by Viega LLC, when properly installed in marine applications in accordance with our listings, shall be free from failure caused by manufacturing defects for a period of two (2) years from date of installation. This warranty applies only to approved applications. Installations that are not approved shall not be covered by this warranty and shall not be the responsibility of Viega LLC.

Under this Limited Warranty, you only have a right to a remedy if the failure or leak resulted from a manufacturing defect in the Viega Product and the failure or leak occurs during the warranty period. You do not have a remedy under this warranty and the warranty remedy does not apply if the failure or any resulting damage is caused by (1) components other than those sold by Viega: (2) not designing. installing, inspecting, testing, or maintaining the Viega Product in accordance with Viega's installation and product instructions in effect at the time of installation and other specifications and approvals applicable to the installation; (3) improper handling and protection of the Viega Product prior to, during, and after installation; inadequate freeze protection; or exposure to environmental or operating conditions not recommended for the application; or (4) acts of nature, such as, but not limited to, earthquakes, fire, or weather damage. Final approval as to use compatibility to a specific process or fluid application is the responsibility of the engineer of record or responsible design/facilities personnel, and this Limited Warranty only applies to manufacturing defects in the Viega Product.

In the event of a leak or other failure in the Viega Product covered by this warranty, it is the responsibility of the end user to take appropriate measures to diminish any damage, to include making timely repairs. Only if the warranty applies will Viega be responsible for the remedy under this warranty. The part or parts which you claim failed should be kept and Viega contacted by writing to the address on the back page or telephoning 1-800-976-9819 within thirty (30) calendar days after the leak or other failure and identifying yourself as having a warranty claim. You should be prepared to ship, at your expense, the product which you claim failed due to a manufacturing defect; and document the date of installation and the amount of the repair or replacement if performed by you. Within a reasonable time after receiving the product, Viega will investigate the reasons for the failure, which includes the right to inspect the product at a Viega location and reasonable access to the site of damage. Viega will notify you in writing as to the results of its review.

In the event that Viega determines that the failure or leak was the result of a manufacturing defect in the Viega Product covered by this warranty and to which this warranty applies, the EXCLUSIVE AND ONLY REMEDY under this warranty shall be the reimbursement for reasonable charges for repair or replacement of the Viega Product itself. VIEGA SHALL NOT BE LIABLE FOR CONSEQUENTIAL OR OTHER DAMAGE (FOR EXAMPLE, ECONOMIC LOSS OR WATER, PROPERTY, OR MOLD REMEDIATION) UNDER ANY LEGAL THEORY AND WHETHER ASSERTED BY DIRECT ACTION, FOR CONTRIBUTION OR INDEMNITY OR OTHERWISE.

THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR ANY STATUTE OF LIMITATIONS RELATING TO SUCH WARRANTIES. Other than this Limited Warranty, Viega does not authorize any person or firm to create for it any other obligation or liability in connection with its products.

This Limited Warranty gives you specific legal rights, and you also may have other rights, which may vary from state to state. This warranty shall be interpreted and applied under the law of the state in which the product is installed and is intended as a Commercial Warranty.



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PG-MP 724999 0324 MegaPress CuNi Systems

