

ZoomLock® MAX

Press-to-Connect Refrigerant Fittings

Connect Copper in Seconds



ZoomLock® MAX press-to-connect refrigerant fittings, designed for the air conditioning and refrigeration markets, allow contractors to make secure leak-free connections in seconds. It means less time on the job and more money in the contractor's pocket.

ZoomLock MAX fittings provide clean, leak-proof connections for refrigerant lines up to 700 psi. By eliminating concerns about gas and flames, ZoomLock MAX fittings offer more flexibility in where and when you can work, plus there's no need to nitrogen-purge the lines.

ZoomLock MAX fittings are available in a wide range of types including caps, couplings, elbows, tees, reducers, SAE flares, and more. See fitting sizes on page 3.



*Secure, Leak-free
Refrigerant
Connections*



The ZoomLock MAX Advantage

- Hard, robust fittings made from refrigerant grade copper
- Proven three-point press technology providing a leak-free and secure joint
- Rated for pressures up to 700 psi, 48 bar
- 15-year warranty
- Hermetically sealed packaging for debris-free fittings
- No crimp gauge needed—connect the fitting with one complete cycle
- Jaws available for most professional brand crimping tools, both large and compact



ZoomLock. The Name You Know—The Brand You **TRUST.**

ZoomLockMAX.com

TECHNICAL DATA

Product Parameters

- **Applications:**
 - Refrigeration
 - Air Conditioning
 - Heat Pump (Refrigeration side)
 - VRF and VRV
- **Continuous Operating Temperature:**
-40°F to 250°F / -40°C to 121°C
- **O-ring Temperature Range:**
-40°F to 284°F / -40°C to 140°C
- **Maximum Rated Operating and Abnormal Pressure:**
700 psi / 48 bar / 4800 kPa
- **Burst Pressure:**
>3X Maximum operating and abnormal pressure
>2,100 psig / >14400 kPa / >144 bar
- **Vacuum Pressure Capability:**
200 Microns
- **Leak Tightness:**
Helium $\leq 7.5 \times 10^{-7}$ Pa.m³/s at +20°C, 10 bar
- **Size Availability (Inches):**
1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1-1/8, 1-3/8

Agency Approvals and Certifications

- UL Refrigerant Fitting File SA7511
 - UL Listed: Approved use for field and factory installations with A1 refrigerants
 - UL Recognized: Approved use for factory installations with A2, A2L, and A3 refrigerants
- UL 109 - 8 Vibration test, compliant
- UL 1963 - 79 Tests of gaskets and seals used in refrigerant systems, compliant
- ISO 5149-2:2014, Refrigerating systems and heat pumps - Safety and environmental requirements - Part 2: Design, construction, testing, marking and documentation compliant
- ISO 5149-2, 5.3.2.2.3 Strength pressure test, compliant
- ISO 14903 - 7.4 Tightness test, compliant
- ISO 14903 - 7.6 Pressure temperature vibration tests (PTV), compliant
- ISO 14903 - 7.8 Freezing test, compliant
- ASTM G85 salt spray (fog) compliant
- ASHRAE 15 - 2016 Safety Standard for Refrigeration Systems, compliant
- ASME B31.5 - 2016 Refrigeration Piping and Heat Transfer Components, compliant
- 2021, 2018, 2015, 2012, 2009 and 2006 International Mechanical Code (IMC), certified, ICC-ES, PMG-1440
- 2021, 2018, 2015, 2012, 2009 and 2006 International Residential Code (IRC), certified, ICC-ES, PMG-1440
- 2021, 2018, 2015, 2012, 2009 and 2006 Uniform Mechanical Code (UMC), certified, ICC-ES, PMG-1440

Fitting Materials

- **Fitting Body:**
Refrigerant Grade Copper
(UNS C12200 min 99.9% pure)
- **O-Ring:**
HNBR

Fitting Warranty

- 15-year warranty. Refer to Catalog K-3 for more details.

Compatibility

- **Approved Lubricants:** POE, PAO, PVE, AB and MO
- **Approved Connections:**
Copper to Copper
- **Approved Tube:**
Copper tube conforming to*
ASTM B280, ASTM-B88,
or ASTM B743
- **Approved Copper Tubing:**
Hard Copper (Drawn)
- Type ACR, L, K
Soft Copper (Annealed)
- Type ACR, L, K

Approved Refrigerants

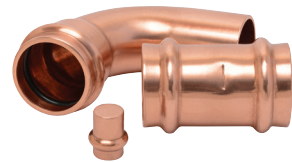
32**	422D	454A**
125	427A	454B**
134a	438A	454C**
290**	444A**	457A**
404A	447A**	459A**
407A	447B**	507A
407C	448A	513A
407F	449A	513B
407H	450A	600A**
410A	452A	718
417A	452B**	1234yf**
421A	452C	1234ze**
422B	HYCOOL 20	

* Please refer to ZoomLock MAX Tube Compatibility table, Catalog K-3.

** When using refrigerants classified A2L (lower flammability), A2 (flammable) and A3 (higher flammability) additional/ specific standards, local rules and regulations, codes of practice and by-laws may be applicable.

ZoomLock MAX fittings are NOT suitable for R-717, R-723, R-764, R-744 refrigerants. Refer to ZoomLockMAX.com for the latest approved refrigerants list.

ZoomLock MAX



ZoomLock MAX fittings are intended to be installed by HVAC/R professionals that have been trained specifically on ZoomLock MAX products. For product training visit www.zoomlocktraining.com.



Learn More

Point and scan with your phone's camera.

[Catalog K-3 ZoomLock MAX](#)

ZoomLock MAX PRESS-TO-CONNECT REFRIGERANT FITTINGS

FITTINGS AND JAW SETS

⚠ WARNING: ZoomLock MAX fittings can only be connected with jaws/tools designed for use with ZoomLock MAX products.

Size	Part Number	Bag Qty.	Description
COUPLINGS			
1/4	870508	5	MZK-C4-HNBR
3/8	870509	5	MZK-C6-HNBR
1/2	870503	5	MZK-C8-HNBR
5/8	870510	5	MZK-C10-HNBR
3/4	870505	2	MZK-C12-HNBR
7/8	870506	2	MZK-C14-HNBR
1-1/8	870507	2	MZK-C18-HNBR
1-3/8	870511	2	MZK-C22-HNBR



Size	Part Number	Bag Qty.	Description
SLIP COUPLINGS			
1/4	870550	5	MZK-RC4-HNBR
3/8	870552	5	MZK-RC6-HNBR
1/2	870553	5	MZK-RC8-HNBR
5/8	870554	3	MZK-RC10-HNBR
3/4	870555	2	MZK-RC12-HNBR
7/8	870556	2	MZK-RC14-HNBR
1-1/8	870557	1	MZK-RC18-HNBR
1-3/8	870559	1	MZK-RC22-HNBR



Size	Part Number	Bag Qty.	Description
ELBOWS - 90°			
1/4	870600	5	MZK-90E4-HNBR
3/8	870602	5	MZK-90E6-HNBR
1/2	870603	3	MZK-90E8-HNBR
5/8	870604	3	MZK-90E10-HNBR
3/4	870605	3	MZK-90E12-HNBR
7/8	870606	3	MZK-90E14-HNBR
1-1/8	870607	2	MZK-90E18-HNBR
1-3/8	870608	1	MZK-90E22-HNBR



Size	Part Number	Bag Qty.	Description
ELBOWS - 90° LONG RADIUS			
1/2	871613	3	MZK-90E8-LR-HNBR
5/8	871614	3	MZK-90E10-LR-HNBR
3/4	871610	2	MZK-90E12-LR-HNBR
7/8	871611	2	MZK-90E14-LR-HNBR
1-1/8	871612	1	MZK-90E18-LR-HNBR
1-3/8	871615	1	MZK-90E22-LR-HNBR



Size	Part Number	Bag Qty.	Description
ELBOWS - 90° STREET			
3/8	871302	3	MZK-90SE6-HNBR
1/2	871303	3	MZK-90SE8-HNBR
5/8	871304	3	MZK-90SE10-HNBR
3/4	871305	3	MZK-90SE12-HNBR
7/8	871306	3	MZK-90SE14-HNBR
1-1/8	871307	2	MZK-90SE18-HNBR
1-3/8	871308	1	MZK-90SE22-HNBR



Size	Part Number	Bag Qty.	Description
ELBOWS - 45°			
1/4	871401	3	MZK-45E4-HNBR
3/8	871402	3	MZK-45E6-HNBR
1/2	871403	3	MZK-45E8-HNBR
5/8	871404	3	MZK-45E10-HNBR
3/4	871405	3	MZK-45E12-HNBR
7/8	871406	3	MZK-45E14-HNBR
1-1/8	871407	2	MZK-45E18-HNBR
1-3/8	871399	2	MZK-45E22-HNBR



Size	Part Number	Bag Qty.	Description
SAE FLARES			
1/4	871000	4	MZK-F4-HNBR
3/8	871002	4	MZK-F6-HNBR
1/2	871003	2	MZK-F8-HNBR
5/8	871004	2	MZK-F10-HNBR
3/4	871005	2	MZK-F12-HNBR



Size	Part Number	Bag Qty.	Description
CAPS			
1/4	870900	3	MZK-CP4-HNBR
3/8	870902	3	MZK-CP6-HNBR
1/2	870903	3	MZK-CP8-HNBR
5/8	870904	2	MZK-CP10-HNBR
3/4	870905	2	MZK-CP12-HNBR
7/8	870906	2	MZK-CP14-HNBR
1-1/8	870907	1	MZK-CP18-HNBR
1-3/8	870908	1	MZK-CP22-HNBR



Size	Part Number	Bag Qty.	Description
REDUCERS			
3/8 x 1/4	870800	2	MZK-R64-HNBR
1/2 x 1/4	870808	2	MZK-R84-HNBR
1/2 x 3/8	870801	2	MZK-R86-HNBR
5/8 x 1/4	870809	2	MZK-R104-HNBR
5/8 x 3/8	870810	2	MZK-R106-HNBR
5/8 x 1/2	870802	2	MZK-R108-HNBR
3/4 x 1/2	870811	2	MZK-R128-HNBR
3/4 x 5/8	870803	2	MZK-R1210-HNBR
7/8 x 1/2	870812	2	MZK-R148-HNBR
7/8 x 5/8	870804	2	MZK-R1410-HNBR
7/8 x 3/4	870805	2	MZK-R1412-HNBR
1-1/8 x 5/8	870814	1	MZK-R1810-HNBR
1-1/8 x 3/4	870806	1	MZK-R1812-HNBR
1-1/8 x 7/8	870807	1	MZK-R1814-HNBR
1-3/8 x 7/8	870815	1	MZK-R2214-HNBR
1-3/8 x 1-1/8	870816	1	MZK-R2218-HNBR



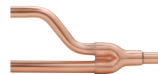
Size	Part Number	Bag Qty.	Description
TEES			
1/4	870701	3	MZK-T4-HNBR
3/8	870702	3	MZK-T6-HNBR
1/2	870703	3	MZK-T8-HNBR
5/8	870704	2	MZK-T10-HNBR
3/4	870705	2	MZK-T12-HNBR
7/8	870706	2	MZK-T14-HNBR
1-1/8	870707	1	MZK-T18-HNBR
1-3/8	870708	1	MZK-T22-HNBR



Size	Part Number	Bag Qty.	Description
P-TRAPS			
1/2	771203	N/A	MZK-PT8-NA
5/8	771204	N/A	MZK-PT10-NA
3/4	771205	N/A	MZK-PT12-NA
7/8	771206	N/A	MZK-PT14-NA
1-1/8	771207	N/A	MZK-PT18-NA
1-3/8	771208	N/A	MZK-PT22-NA



Size	Part Number	Bag Qty.	Description
Y-JOINTS			
3/8	771102	N/A	MZK-Y6-NA
1/2	771103	N/A	MZK-Y8-NA
5/8	771104	N/A	MZK-Y10-NA
3/4	771105	N/A	MZK-Y12-NA
7/8	771106	N/A	MZK-Y14-NA
1-1/8	771107	N/A	MZK-Y18-NA



Includes foam insulation.

Force	Part Number	Bag Qty.	Description
JAW SETS - 7 PIECE*			
19 kN	871410	N/A	MZK-19KN JAW KIT
24 kN	871409	N/A	MZK-24KN JAW KIT
32 kN	871408	N/A	MZK-32KN JAW KIT



*7 piece ROTHENBERGER jaw set contains a 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", and 1-1/8" size jaw. 1-3/8" jaw sold separately.

1-3/8" JAW – For use with 32 kN press tools only. Includes depth gauge. **Part Number: 871436, Description: MZK-32KN JAW-1-3/8"**

ZoomLock MAX PRESS-TO-CONNECT REFRIGERANT FITTINGS

PRESS TOOLS

ZoomLock MAX fittings can only be connected with ZoomLock MAX jaws.

Parker Hannifin recommends the use of ROTHENBERGER press tools in combination with ZoomLock MAX ROTHENBERGER jaws. However other press tools may be used in combination with ZoomLock MAX ROTHENBERGER jaws. See table below for tool compatibility.



ROTHENBERGER ROMAX 4000

ROTHENBERGER ROMAX 4000

Includes the ROTHENBERGER ROMAX® 32 kN press tool, 2 batteries and battery charger.

- **Description:** MZK-TK-R4000
- **Part Number:** 871441



ROTHENBERGER Twin Turbo US

ROTHENBERGER Twin Turbo US

Includes the ROTHENBERGER Twin Turbo US 24 kN press tool, 2 batteries and battery charger.

- **Description:** MZK-TK-RCTT
- **Part Number:** 871439

COMPATIBLE PRESS TOOLS		32 kN	24 kN	19 kN
ROTHENBERGER	ROMAX® 3000	✓	—	—
	ROMAX® 3000 AC	✓	—	—
	ROMAX® 4000	✓	—	—
	ROMAX® AC ECO	✓	—	—
	Twin Turbo US (TT US)	—	✓	—
	ROMAX® Compact TT	—	—	✓
	ROMAX® Compact	—	—	✓
DEWALT	DCE200	✓	—	—
KLAUKE	UAP2/UNP2	✓	—	—
	UAP3L/UAP4L	✓	—	—
	UP2EL14	✓	—	—
	MAP2L19	—	—	✓
	MAP219	—	—	✓
MILWAUKEE	M12 Force Logic	—	✓	—
	M18 Force Logic	✓	—	—
HILTI	NPR 019	—	—	✓
NIBCO	PC-100	✓	—	—
	PC-280	✓	—	—
REMS	Power-Press	✓	—	—
	Akku-Press	✓	—	—
RIDGID	320-E	✓	—	—
	CT400	✓	—	—
	RP 241	—	✓	—
	RP 240	—	✓	—
	RP 210-B	—	✓	—
	RP 200-B	—	✓	—
	RP 330-B	✓	—	—
	RP 330-C	✓	—	—
	RP 340	✓	—	—
RP 350	✓	—	—	
VIRAX	Viper® P25+	✓	—	—
	Viper® P25+	✓	—	—

⚠ WARNING – USER RESPONSIBILITY

Failure or improper selection or improper use of the products described herein or related items can cause death, personal injury and property damage.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

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