

ZoomLock MAX

Press-to-Connect Refrigerant Fittings

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

Fitting Materials

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

Fitting Warranty

- 10-year warranty. Refer to page 26 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, page 18.

** 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.

Agency Approvals and Certifications

- UL Listed Refrigerant fitting SA7511
 - UL Listed: Approved use for field and factory installations
 - UL 109 - 7 Pull test, compliant
 - 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
 - 2018, 2015, 2012, 2009 and 2006 International Mechanical Code (IMC), certified, ICC-ES, PMG-1440
 - 2018, 2015, 2012, 2009 and 2006 International Residential Code (IRC), certified, ICC-ES, PMG-1440
 - 2018, 2015, 2012, 2009 and 2006 Uniform Mechanical Code (UMC), certified, ICC-ES, PMG-1440
- Mechanical joints shall not be used on annealed temper copper tube in sizes larger than 7/8 inch (22.2 mm) OD size per International Mechanical Code (IMC) and 3/4 inch nominal size per Uniform Mechanical Code (UMC).

ZoomLock MAX



Quality Assurance

ZoomLock MAX is manufactured in an ISO 9001 certified facility committed to providing quality products and support.

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PRESS TOOLS AND 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 ROTHENBERGER ZoomLock MAX jaws. See table below for tool compatibility.

Press Tools

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

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

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



**ROTHENBERGER
ROMAX 4000
32 kN**



**ROTHENBERGER
Twin Turbo US
24 kN**

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+	✓	—	—

ZoomLock MAX fittings are only compatible with ROTHENBERGER press jaws as shown on page 8.

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PRESS TOOLS AND JAWS (Continued)

Jaws

ZoomLock MAX fittings are only compatible with ROTHENBERGER press jaws as shown in the table below.



**32 kN
ROTHENBERGER
Jaw Set**



**24 kN
ROTHENBERGER
Jaw Set**



**19 kN
ROTHENBERGER
Jaw Set**

JAW SETS / PART NUMBERS

Jaw Sets

7 Piece

1/4, 3/8, 1/2, 5/8,
3/4, 7/8, 1-1/8

MZK-32KN JAW KIT (7 PIECE)
871408

MZK-24KN JAW KIT (7 PIECE)
871409

MZK-19KN JAW KIT (7 PIECE)
871410

INDIVIDUAL JAWS / PART NUMBERS

1/4"	MZK-32KN JAW-1/4" 871428	MZK-24KN JAW-1/4" 871419	MZK-19KN JAW-1/4" 871411
3/8"	MZK-32KN JAW-3/8" 871429	MZK-24KN JAW-3/8" 871420	MZK-19KN JAW-3/8" 871412
1/2"	MZK-32KN JAW-1/2" 871430	MZK-24KN JAW-1/2" 871421	MZK-19KN JAW-1/2" 871413
5/8"	MZK-32KN JAW-5/8" 871431	MZK-24KN JAW-5/8" 871422	MZK-19KN JAW-5/8" 871414
3/4"	MZK-32KN JAW-3/4" 871432	MZK-24KN JAW-3/4" 871423	MZK-19KN JAW-3/4" 871415
7/8"	MZK-32KN JAW-7/8" 871433	MZK-24KN JAW-7/8" 871424	MZK-19KN JAW-7/8" 871416
1-1/8"	MZK-32KN JAW-1 1/8" 871435	MZK-24KN JAW-1 1/8" 871426	MZK-19KN JAW-1 1/8 871418
1-3/8"*	MZK-32KN JAW-1 3/8" 871436	—	—

*Depth gauge (P/N 870517) is included with the 1-3/8" jaw.

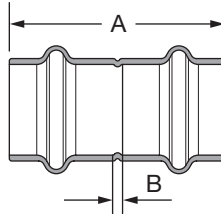
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COUPLINGS



Dimensions

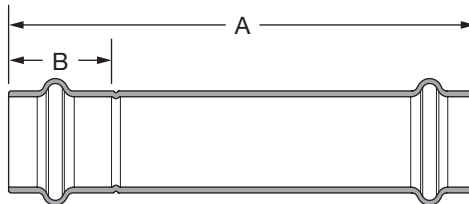


Size	Part Number	Description	Dimensions			
			A		B	
			Inch	mm	Inch	mm
1/4	870508	MZK-C4-HNBR	1.54	39.0	0.12	3.0
3/8	870509	MZK-C6-HNBR	1.50	38.0	0.12	3.0
1/2	870503	MZK-C8-HNBR	1.57	40.0	0.20	5.0
5/8	870510	MZK-C10-HNBR	1.77	45.0	0.12	3.0
3/4	870505	MZK-C12-HNBR	1.79	45.5	0.06	1.5
7/8	870506	MZK-C14-HNBR	2.22	56.5	0.33	8.5
1-1/8	870507	MZK-C18-HNBR	2.24	57.0	0.24	6.0
1-3/8	870511	MZK-C22-HNBR	2.80	71.0	0.11	3.0

SLIP COUPLINGS



Dimensions



Size	Part Number	Description	Dimensions			
			A		B	
			Inch	mm	Inch	mm
1/4	870550	MZK-RC4-HNBR	3.54	90.0	0.71	18.0
3/8	870552	MZK-RC6-HNBR	3.54	90.0	0.71	18.0
1/2	870553	MZK-RC8-HNBR	3.58	91.0	0.69	17.5
5/8	870554	MZK-RC10-HNBR	3.98	101	0.83	21.0
3/4	870555	MZK-RC12-HNBR	3.98	101	0.86	22.0
7/8	870556	MZK-RC14-HNBR	4.17	106	0.95	24.0
1-1/8	870557	MZK-RC18-HNBR	4.17	106	1.00	25.5
1-3/8	870559	MZK-RC22-HNBR	3.94	100	1.34	34.0