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ZoomLock™

BRAZE-FREE FITTINGS

ZoomLock™ Braze-Free Fittings

Catalog K-1, Engineering Submittal, January 2016



ENGINEERING YOUR SUCCESS.

ZoomLock Braze-Free Fittings

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ATTENTION!

WARRANTY COULD BE VOID IF ZOOMLOCK IS NOT APPLIED PER USER INSTRUCTIONS!

Please read user instructions enclosed. It is recommended that you also watch the videos.

<http://mailserver.parker.com/zoomvid>

⚠ 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.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

OFFER OF SALE

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the detailed "Offer of Sale" available at www.parker.com.



ZoomLock™

BRAZE-FREE FITTINGS

ZoomLock™ fittings are specially designed to work without brazing, which automatically makes your job simpler and faster when joining copper tubes. In addition, the one-piece fittings are reliably secure, leak-proof and more repeatable than brazed connections — so there's no compromise on quality or performance. Professionals who have tried ZoomLock braze-free

couplings report that their time and labor costs on tube connections are typically reduced 40 – 60% on average by eliminating the need for brazing. The biggest benefit of that improved efficiency is more productivity and increased profit potential, but there are also many other exciting advantages to braze-free tube connecting.

The ZoomLock Advantage

- Less equipment and no gas needed
- Safer conditions, no fire hazards
- No hot work permits required
- More environment-friendly
- No solder-related quality issues
- More flexible access to job sites
- No need to nitrogen-purge



ZoomLock Braze-Free Fittings



Applications

- High Pressure HVAC/R

Product Parameters

- **Continuous Operating Temperature (COT):**
250°F / 121°C
- **O-Ring Temperature Rating:**
-40°F to +300°F
-40°C to +148.9°C
- **Maximum Rated Pressure (MRP):**
700 psi / 48 bar
- **Maximum Burst Pressure:**
3000 psi / 207 bar+
- **Vacuum Pressure Capability:**
20 Microns
- **External Leak Rate:**
<0.1 Ounces of Helium per Year at Operating Pressure Range
- **Vibration Resistance:**
Conforms to UL109
- **Size Availability (Inches):**
1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1-1/8, 1-3/8

Fitting Materials

- **Fitting Body:**
Refrigerant Grade Copper, per ASTM-B280
- **O-Ring:**
HNBR

Fitting Warranty

- 12 months from date of install.
Read page 21 for more details.

Compatibility

- **Approved Oils:**
Mineral Oil, POE, PVE, PAG
- **Approved Tubing Materials:**
Copper to Copper Connections
- **Approved Copper Tubing Types for Use with Klauke®**
Compatible Jaws:
Hard Copper (Drawn)
 - 1/4" – 1-1/8" Type ACR, M, L
 - Type K only up to 7/8"
 Soft Copper (Annealed)
 - 1/4" – 1-1/8" Type ACR, L
 - Type K only up to 7/8"
- **Approved Copper Tubing Types for Use with RIDGID®**
Compatible Jaws:
Hard Copper (Drawn)
 - 1/4" – 1-3/8" Type ACR, M, L
 - Type K only up to 1-1/8"
 Soft Copper (Annealed)
 - 1/4" – 1-3/8" Type ACR, L
 - Type K only up to 1-1/8"

Approved Refrigerants

- 1234yf
- 1234ze
- 125
- 32
- 134a
- 143A
- 404A
- 407A
- 407C
- 407F
- 410A
- 438A
- 447A
- 448A
- 449A
- 450A
- 452A
- 507
- 513A

Agency Approvals and Certifications

- UL 207, SA#33958, SDTW(7)
- ICC-ES, PMG-1296
 - 2015 IMC (International Mechanical Code)
 - 2015 IRC (International Residential Code)
 - 2012 UMC (Uniform Mechanical Code)

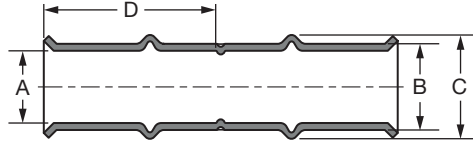


ZoomLock Braze-Free Fittings

Couplings



Dimensions

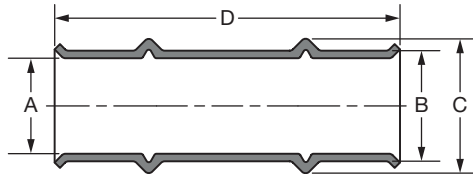


Size	Part Number	Description	Dimensions							
			A		B		C		D	
			Inch	mm	Inch	mm	Inch	mm	Inch	mm
1/4	770500	PZK-C4-HNBR	0.26	6.6	0.34	8.6	0.45	11.5	0.95	24.1
5/16	770501	PZK-C5-HNBR	0.32	8.2	0.40	10.2	0.52	13.1	0.93	23.6
3/8	770502	PZK-C6-HNBR	0.39	9.8	0.47	11.8	0.59	14.9	0.98	24.9
1/2	770503	PZK-C8-HNBR	0.51	13.0	0.59	15.0	0.73	18.6	1.25	31.8
5/8	770504	PZK-C10-HNBR	0.64	16.1	0.74	18.7	0.89	22.5	1.24	31.5
3/4	770505	PZK-C12-HNBR	0.76	19.3	0.88	22.4	1.07	27.2	1.29	32.8
7/8	770506	PZK-C14-HNBR	0.89	22.5	1.02	25.8	1.19	30.2	1.31	33.3
1-1/8	770507	PZK-C18-HNBR	1.14	28.8	1.29	32.6	1.44	36.7	1.29	32.8
1-3/8*	770508	PZK-C22-HNBR	1.39	35.3	1.54	39.1	1.57	39.9	1.75	44.5

Slip Couplings



Dimensions

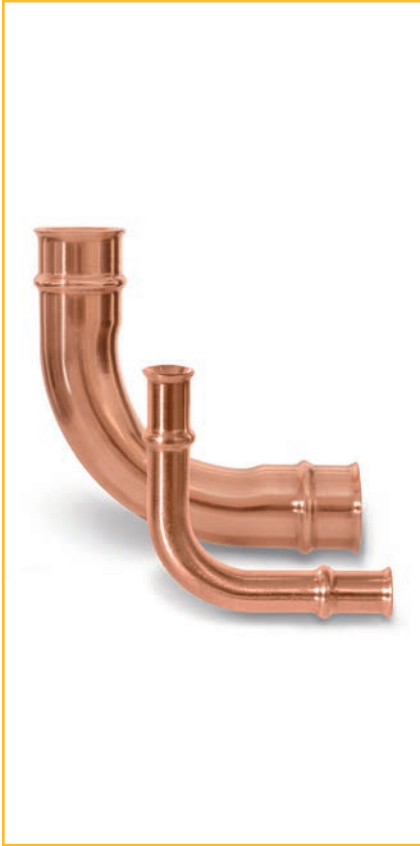


Size	Part Number	Description	Dimensions							
			A		B		C		D	
			Inch	mm	Inch	mm	Inch	mm	Inch	mm
1/4	770550	PZK-RC4-HNBR	0.26	6.6	0.34	8.6	0.45	11.5	2.00	50.8
5/16	770551	PZK-RC5-HNBR	0.32	8.2	0.40	10.2	0.52	13.1	2.01	51.1
3/8	770552	PZK-RC6-HNBR	0.39	9.8	0.47	11.8	0.59	14.9	2.05	52.1
1/2	770553	PZK-RC8-HNBR	0.51	13.0	0.59	15.0	0.73	18.6	2.74	69.6
5/8	770554	PZK-RC10-HNBR	0.64	16.1	0.74	18.7	0.89	22.5	2.75	69.9
3/4	770555	PZK-RC12-HNBR	0.76	19.3	0.88	22.4	1.07	27.2	2.75	69.9
7/8	770556	PZK-RC14-HNBR	0.89	22.5	1.02	25.8	1.19	30.2	2.74	69.9
1-1/8	770557	PZK-RC18-HNBR	1.14	28.8	1.29	32.6	1.44	36.7	2.77	70.4
1-3/8*	770558	PZK-RC22-HNBR	1.39	35.3	1.54	39.1	1.57	39.9	1.75	44.5

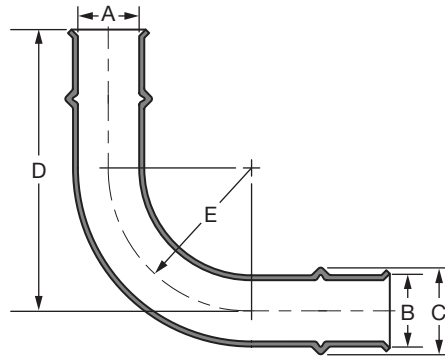
*ZoomLock 1-3/8" jaws are not available for the Klauke® tool at this time.

ZoomLock Braze-Free Fittings

Elbows



Dimensions

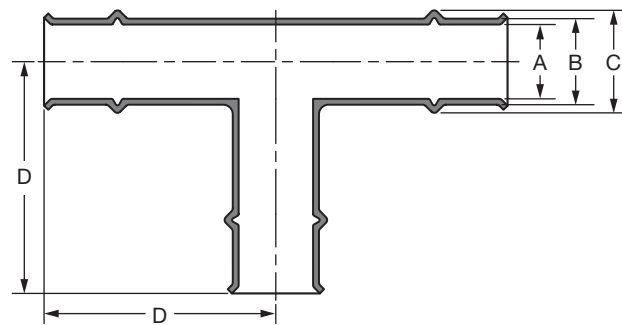


Size	Part Number	Description	Dimensions									
			A		B		C		D		E (Ref.)	
			Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
1/4	770600	PZK-90E4-HNBR	0.26	6.6	0.34	8.6	0.45	11.5	2.01	51.1	0.50	12.7
5/16	770601	PZK-90E5-HNBR	0.32	8.2	0.40	10.2	0.52	13.1	2.13	54.1	0.60	15.2
3/8	770602	PZK-90E6-HNBR	0.39	9.8	0.47	11.8	0.59	14.9	2.27	57.7	0.65	16.5
1/2	770603	PZK-90E8-HNBR	0.51	13.0	0.59	15.0	0.73	18.6	2.88	73.2	0.90	22.9
5/8	770604	PZK-90E10-HNBR	0.64	16.1	0.74	18.7	0.89	22.5	3.21	81.4	1.13	28.7
3/4	770605	PZK-90E12-HNBR	0.76	19.3	0.88	22.4	1.07	27.2	3.47	88.0	1.50	38.1
7/8	770606	PZK-90E14-HNBR	0.89	22.5	1.02	25.8	1.19	30.2	3.75	95.3	2.25	57.2
1-1/8	770607	PZK-90E18-HNBR	1.14	28.8	1.29	32.6	1.44	36.7	4.29	108.8	2.85	72.4
1-3/8*	770608	PZK-90E22-HNBR	1.39	35.3	1.54	39.1	1.75	44.5	4.54	115.3	3.05	77.5

Tees



Dimensions



Size	Part Number	Description	Dimensions							
			A		B		C		D	
			Inch	mm	Inch	mm	Inch	mm	Inch	mm
3/8	770702	PZK-T6-HNBR	0.39	9.8	0.47	11.8	0.59	14.9	1.63	41.4
1/2	770703	PZK-T8-HNBR	0.51	13.0	0.59	15.0	0.72	18.2	2.23	56.6
5/8	770704	PZK-T10-HNBR	0.64	16.1	0.74	18.7	0.87	22.0	2.29	58.2
3/4	770705	PZK-T12-HNBR	0.76	19.3	0.88	22.4	1.05	26.6	2.37	60.2
7/8	770706	PZK-T14-HNBR	0.89	22.5	1.02	25.8	1.19	30.2	2.44	62.0
1-1/8	770707	PZK-T18-HNBR	1.14	28.8	1.29	32.6	1.44	36.7	2.56	65.0
1-3/8*	770708	PZK-T22-HNBR	1.39	35.2	1.54	39.0	1.75	44.4	2.75	69.9

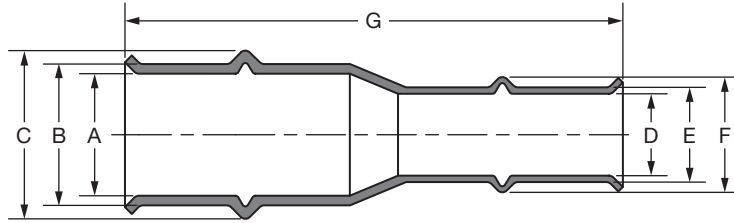
*ZoomLock 1-3/8" jaws are not available for the Klauke® tool at this time.

ZoomLock Braze-Free Fittings

Reducers



Dimensions

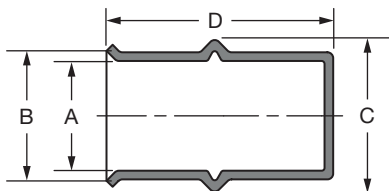


Size	Part Number	Description	Dimensions													
			A		B		C		D		E		F		G	
			Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
3/8 in to 1/4	770800	PZK-R64-HNBR	0.39	9.8	0.47	11.8	0.59	14.9	0.26	6.6	0.34	8.6	0.45	11.5	2.20	55.9
1/2 in to 1/4	770808	PZK-R84-HNBR	0.51	13.0	0.59	15.0	0.73	18.6	0.26	6.6	0.34	8.6	0.45	11.5	2.63	66.8
1/2 in to 3/8	770801	PZK-R86-HNBR	0.51	13.0	0.59	15.0	0.73	18.6	0.39	9.8	0.47	11.8	0.59	14.9	2.63	66.8
5/8 in to 1/4	770809	PZK-R104-HNBR	0.64	16.1	0.74	18.7	0.89	22.5	0.26	6.6	0.34	8.6	0.45	11.5	2.70	68.6
5/8 in to 3/8	770810	PZK-R106-HNBR	0.64	16.1	0.74	18.7	0.89	22.5	0.39	9.8	0.47	11.8	0.59	14.9	2.70	68.6
5/8 in to 1/2	770802	PZK-R108-HNBR	0.64	16.1	0.74	18.7	0.87	22.0	0.51	13.0	0.59	15.0	0.72	18.2	3.00	76.2
3/4 in to 1/2	770811	PZK-R128-HNBR	0.76	19.3	0.88	22.4	1.05	26.6	0.51	13.0	0.59	15.0	0.72	18.2	3.10	78.7
3/4 in to 5/8	770803	PZK-R1210-HNBR	0.76	19.3	0.88	22.4	1.05	26.6	0.64	16.1	0.74	18.7	0.87	22.0	3.00	76.2
7/8 in to 1/2	770812	PZK-R148-HNBR	0.89	22.5	1.02	25.8	1.19	30.2	0.51	13.0	0.59	15.0	0.72	18.2	3.05	77.5
7/8 in to 5/8	770804	PZK-R1410-HNBR	0.89	22.5	1.02	25.8	1.19	30.2	0.64	16.1	0.74	18.7	0.87	22.0	3.05	77.5
7/8 in to 3/4	770805	PZK-R1412-HNBR	0.89	22.5	1.02	25.8	1.19	30.2	0.76	19.3	0.88	22.4	1.05	26.6	3.11	79.0
1-1/8 in to 1/2	770813	PZK-R188-HNBR	1.14	28.8	1.29	32.6	1.44	36.7	0.51	13.0	0.60	15.0	0.72	18.2	3.25	82.6
1-1/8 in to 5/8	770814	PZK-R1810-HNBR	1.14	28.8	1.29	32.6	1.44	36.7	0.64	16.1	0.74	18.7	0.87	22.0	3.25	82.6
1-1/8 in to 3/4	770806	PZK-R1812-HNBR	1.14	28.8	1.29	32.6	1.44	36.7	0.76	19.3	0.88	22.4	1.05	26.6	3.25	82.6
1-1/8 in to 7/8	770807	PZK-R1814-HNBR	1.14	28.8	1.29	32.6	1.44	36.7	0.89	22.5	1.02	25.8	1.12	28.4	3.11	79.0

Caps



Dimensions



Size	Part Number	Description	Dimensions							
			A		B		C		D	
			Inch	mm	Inch	mm	Inch	mm	Inch	mm
1/4	770900	PZK-CP4-HNBR	0.26	6.6	0.34	8.6	0.45	11.5	1.11	28.2
5/16	770901	PZK-CP5-HNBR	0.32	8.2	0.40	10.2	0.52	13.1	1.11	28.2
3/8	770902	PZK-CP6-HNBR	0.39	9.8	0.47	11.8	0.57	14.5	1.13	28.7
1/2	770903	PZK-CP8-HNBR	0.51	13.0	0.59	15.0	0.72	18.2	1.47	37.3
5/8	770904	PZK-CP10-HNBR	0.64	16.1	0.74	18.7	0.87	22.0	1.56	39.6
3/4	770905	PZK-CP12-HNBR	0.76	19.3	0.88	22.4	1.05	26.6	1.57	39.9
7/8	770906	PZK-CP14-HNBR	0.89	22.5	1.02	25.8	1.19	30.2	1.60	40.6
1-1/8	770907	PZK-CP18-HNBR	1.14	28.8	1.29	32.6	1.44	36.7	2.05	52.1
1-3/8*	770908	PZK-CP22-HNBR	1.39	35.2	1.54	39.0	1.75	44.4	2.11	53.6

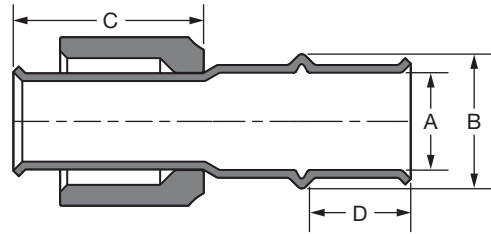
*ZoomLock 1-3/8" jaws are not available for the Klauke® tool at this time.

ZoomLock Braze-Free Fittings

SAE Flare



Dimensions



Size	Part Number	Description	Dimensions							
			A		B		C		D	
			Inch	mm	Inch	mm	Inch	mm	Inch	mm
1/4	771000	PZK-FP4-HNBR	0.26	6.6	0.45	11.5	1.38	35.1	0.56	14.2
3/8	771002	PZK-FP6-HNBR	0.39	9.8	0.59	14.9	1.38	35.1	0.58	14.7
1/2	771003	PZK-FP8-HNBR	0.51	13.0	0.72	18.2	1.13	28.7	0.75	19.1
5/8	771004	PZK-FP10-HNBR	0.64	16.1	0.87	22.1	1.48	37.6	0.75	19.1
3/4	771005	PZK-FP12-HNBR	0.76	19.3	1.05	26.7	1.48	37.6	0.80	20.3

Tool Kits



0 Jaw Tool Kit

Includes the crimping tool and the tool kit contents, listed below.

- **Description:** PZK-TK0
- **Part Number:** 770000



3 Jaw Tool Kit

Includes the crimping tool, 3 jaws, and tool kit contents, listed below.

- **Description:** PZK-TK3
- **Part Number:** 770001
- **Jaw Sizes:** 3/8", 1/2", 7/8"



5 Jaw Tool Kit

Includes the crimping tool, 5 jaws and tool kit contents, listed below.

- **Description:** PZK-TK5
- **Part Number:** 770002
- **Jaw Sizes:** 3/8", 1/2", 5/8", 7/8", 1-1/8"

Tool Kit Contents:

- Klauke® Crimping Tool
- Tubing Cutter
- Deburring Tool
- RLS Crimp Gauge
- Stainless Steel Brush
- Abrasive Pad
- Permanent Marker
- Battery Charger
- (2) Lithium-Ion Rechargeable Batteries



Crimping Tool

- **Available in Tool Kits:**
PZK-TK0, Part Number 770000
PZK-TK3, Part Number 770001
PZK-TK5, Part Number 770002
- **Not Sold Separately**

- Short pressing cycle, 5-7 seconds
- Compact design and 350° jaw rotation allows technician to install in tight spaces
- Lightweight design increases productivity
- Tool service indicated via imbedded LEDs, illuminates at 10,000 cycles
- Automatic piston return
- Safety feature that allows crimp cycle to be interrupted
 - Feature allows manual release of piston, if needed
- High-quality, powerful Makita Li-Ion technology for lasting, battery-powered pressing
 - 100-150 Crimps per Charge
 - Extremely short charging time of just 15 minutes (1.5 Ah)
 - Makita i-Press batteries and chargers available worldwide.

Tool Specifications

- **Crimping Force:**
Linear thrust of approx. 15 kN
- **Number of Crimps:**
1.5 Ah approx. 150 (for NS20)
- **Battery Capacity:**
High-power Makita 1.5 Ah Li-Ion battery
- **Charging Time:**
1.5 Ah 15 min.
- **Weight including Battery:**
Without jaw 1.7 kg
Including jaw 2.3 kg
- **Dimensions:**
377 x 75 x 116 mm
- **Revolving/Rotatable:**
Approx. 350° rotating pressing jaw holder
- **Tool Warranty:**
24 months from date of purchase

Replacement Parts and Accessories



**Klauke®
Compatible
Jaw**



**RIDGID®
Compatible
Jaw**

Pressing Jaw Kits

8 piece Klauke jaw kit in rigid plastic carrying case. Includes jaw sizes 1/4" through 1-1/8".

- **Description:** J4-J18 Klauke
- **Part Number:** 770208

9 piece RIDGID compatible jaw kit in hard plastic carrying case. Includes jaw sizes 1/4" through 1-3/8". Jaws are designed for use with the RIDGID RP 200-B, RP 210-B, and RP 100-B press tools.

- **Description:** RJ4-RJ22 RIDGID
- **Part Number:** 770219

Pressing Jaws

Pressing jaws, ranging in sizes from 1/4" through 1-3/8", may be purchased individually.

Size (Inches)	Klauke Compatible Jaw		RIDGID Compatible Jaw*	
	Part Number	Description	Part Number	Description
1/4	770200	PZK-J4	770210	PZK-RJ4
5/16	770201	PZK-J5	770211	PZK-RJ5
3/8	770202	PZK-J6	770212	PZK-RJ6
1/2	770203	PZK-J8	770213	PZK-RJ8
5/8	770204	PZK-J10	770214	PZK-RJ10
3/4	770205	PZK-J12	770215	PZK-RJ12
7/8	770206	PZK-J14	770216	PZK-RJ14
1-1/8	770207	PZK-J18	770217	PZK-RJ18
1-3/8	—	—	770218	PZK-RJ22



Jaw Carrying Case

Empty rigid carrying case with firm foam insert. Holds up to 8 Klauke jaws.

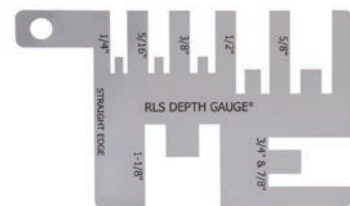
- **Description:** Jaw Carrying Case Only
- **Part Number:** 770209



RLS Crimp Gauge

Confirms the measurement of the finished crimp band diameter.

- **Description:** PZK-GNG1
- **Part Number:** 770005



RLS Depth Gauges

Depth gauge confirms the proper insertion depth of the tubing.

- **Metal Depth Gauge**
- **Description:** PZK-IDGM
- **Part Number:** 770014

- **Plastic Depth Gauge**
- **Description:** PZK-IDGP
- **Part Number:** 770015