



Welding Tools for the Professional



Contents

FRK Kit

Introduction and Set-Up Overview	1
FRK9-20 KIT	2
FRK17-18-26 Kit	4

Wear Parts

Wedge Collets	6
Gas Lens	6
Stubby Gas Lens	6
Ceramic Cups	7
Quartz Cups	7
Filter Screens	8
Stubby Series Cup Insulator	9
Red Silicone Rubber 'O'- Ring	9
Filter Screen Installation Tool	9

Introduction



FRK wear parts are all purpose consumable items used in addition to a Standard Gas Lens Body set-up.

With a Secondary Replaceable Gauze set in the Nozzle these set-ups have a wider gas envelope for better weld protection and quality results.

Available as Standard Ceramic and High Performance Quartz.

The system allows for a longer stick out of the electrode giving both better access into more difficult to reach joints and improved visibility.

Traditionally used when welding more challenging and exotic materials, the system has now become more widely used as a result of giving the welder a greater degree of flexibility from a single set-up.

The Parker FRK series nozzles can be used on all materials and processes (including Pulse with Quartz set-ups) and have a simple and easy to replace front gauze set that pushes into place with a screen installation tool.

Set-Up Overview

Gas Lens Body Set-Up

Recommended Set-Up Parameters For Steel, Aluminum Stainless Steel, Chromoly, Titanium Inconel and other Space Grade Alloys.



Nozzle Size	Bore Size	Suggested Gas Flow Rate	Maximum Tungsten Stick-out	Ceramic Nozzle	Quartz Option	1.0	16	Tung 2.4	(mm)		4.8	6.4
-				1		1.0	1.0	2.7	3.2	4.0	4.0	0.4
10	17mm-5/8"	12 l/min	20mm	•	•		٠	•	٠			
12	20mm-3/4"	12-14 l/min	25mm	•	•		•	•	•			
14	23mm-15/16"	14-17 l/min	25mm	•	•		•	•	•			
16	25mm-1"	14-21 l/min	35mm	•	•		•	•	•			•

Note:

Maximum Recommended Tungsten for Quartz is 3.2mm

- Max Amps with 1/16"-1.6mm Tungsten 70-150A DC / 60-125A AC
- Max Amps with 3/32"-2.4mm Tungsten 150-250A DC / 120-210A AC
- Max Amps with 1/8"-3.2mm Tungsten 225-330A DC / 150-250A AC

A minimum electrode stick out of 5mm is recommended when using Aluminum processes to prevent clogging of gauze set from weld fume and spatter.

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19





Ceramic



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FRK9 / 20 Kit

FRK9/20 Kit Complete Kit Includes:

Part Number Description

1	P45V43QZ	Gas Lens Assembly 1/16"-1.6mm With 'O' Ring
2	P45V44QZ	Gas Lens Assembly 3/32"-2.4mm With 'O' Ring
3	P45V45QZ	Gas Lens Assembly 1/8"-3.2mm With 'O' Ring

4	P2CGS-16	Wedge Collet 1/16"-1.6mm
5	P2CGS-24	Wedge Collet 3/32"-2.4mm
6	P2CGS-32	Wedge Collet 1/8"-3.2mm

7	PJZ10C-F24	JZ10 Ceramic Cup-Bore 17mm With 2.4mm Filter Screen
8	PFP12C-F24	FP12 Ceramic Cup-Bore 20mm With 2.4mm Filter Screen
9	PMK14C-F24	MK14 Ceramic Cup-Bore 23mm With 2.4mm Filter Screen
10	PBBWC-F24	BBW Ceramic Cup-Bore 25mm With 2.4mm Filter Screen

15	PJZ10D16	JZ10 Cup Filter Screen 1/16"-1.6mm
	PJZ10D32	JZ10 Cup Filter Screen 1/8"-3.2mm
16	PFP12D16	FP12 Cup Filter Screen 1/16"-1.6mm
	PFP12D32	FP12 Cup Filter Screen 1/8"-3.2mm
Not		are not interchangeable with OEM Furick [®] systems
101		
17	PMK14D16	MK14 Cup Filter Screen 1/16"-1.6mm
	PMK14D32	MK14 Cup Filter Screen 1/8"-3.2mm
18	PBBWD16	BBW Cup Filter Screen 1/16"-1.6mm
	PBBWD32	BBW Cup Filter Screen 1/8"-3.2mm
10	P08\W/18	Red Silicone Rubber (O' Ring
	P98W18	Red Silicone Rubber 'O' Ring
	P98W18 PIT-D162432	Red Silicone Rubber 'O' Ring Filter Screen Installation Tool

Part Number Description

ZAS

SMART TORCH SOLUTIONS

11 PJZ10Q-F24	JZ10 Quartz Cup-Bore 17mm With 2.4mm Filter Screen
12 PFP12Q-F24	FP12 Quartz Cup-Bore 20mm With 2.4mm Filter Screen
13 PMK14Q-F24	MK14 Quartz Cup-Bore 23mm With 2.4mm Filter Screen
14 PBBWQ-F24	BBW Quartz Cup-Bore 25mm With 2.4mm Filter Screen

FRK9 / 20 Kit Packaging



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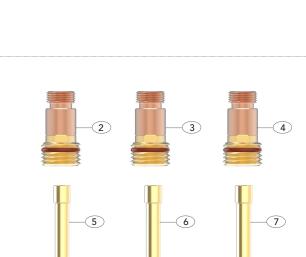
The O Ring is not needed when using Ceramic Cups

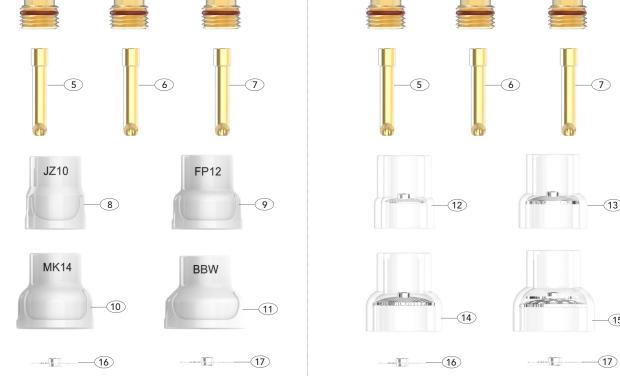
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21)



Ceramic

FRK17 / 18 / 26 Kit



FRK17/18/26 Kit Complete Kit Includes:

	Part Number	Description
1	PSTB80300236	Stubby Series Cup Insulator
2	PSTB45V43QZ	Stubby Gas Lens 1/16"-1.6mm With 'O' Ring
3	PSTB45V44QZ	Stubby Gas Lens 3/32"-2.4mm With 'O' Ring
4	PSTB45V45QZ	Stubby Gas Lens 1/8"-3.2mm With 'O' Ring

Wedge Collet 1/16"-1.6mm

Wedge Collet 3/32"-2.4mm

Wedge Collet 1/8"-3.2mm

Part Number	Description
16 PJZ10D16	JZ10 Cup Filter Screen 1/16"-1.6mm
PJZ10D32	JZ10 Cup Filter Screen 1/8"-3.2mm
17 PFP12D16	FP12 Cup Filter Screen 1/16"-1.6mm
PFP12D32	FP12 Cup Filter Screen 1/8"-3.2mm

Note:Filter Screens are not interchangeable with OEM Furick® systems

18 PMK14D16	MK14 Cup Filter Screen 1/16"-1.6mm
PMK14D32	MK14 Cup Filter Screen 1/8"-3.2mm
19 PBBWD16	BBW Cup Filter Screen 1/16"-1.6mm
PBBWD32	BBW Cup Filter Screen 1/8"-3.2mm

8 PJZ10C-F24	JZ10 Ceramic Cup-Bore 17mm With 2.4mm Filter Screen
9 PFP12C-F24	FP12 Ceramic Cup-Bore 20mm With 2.4mm Filter Screen
10 PMK14C-F24	MK14 Ceramic Cup-Bore 23mm With 2.4mm Filter Screen
11 PBBWC-F24	BBW Ceramic Cup-Bore 25mm With 2.4mm Filter Screen

20 P98W18	Red Silicone Rubber 'O' Ring
21 PIT-D162432	Filter Screen Installation Tool

12 PJZ10Q-F24	JZ10 Quartz Cup-Bore 17mm With 2.4mm Filter Screen
13 PFP12Q-F24	FP12 Quartz Cup-Bore 20mm With 2.4mm Filter Screen
14 PMK14Q-F24	MK14 Quartz Cup-Bore 23mm With 2.4mm Filter Screen
15 PBBWQ-F24	BBW Quartz Cup-Bore 25mm With 2.4mm Filter Screen

FRK17 / 18 / 26 Kit Packaging

5 P4CGS-16

6 P4CGS-24

7 P4CGS-32

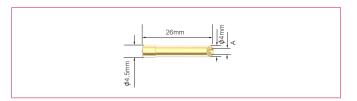




Wedge Collets

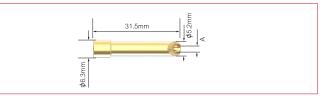
WP 9/20

Part No.	Description	В	Bore	
		mm	inch	
P2CGS-16	Wedge Collet	1.6	1/16	
P2CGS-24	Wedge Collet	2.4	3/32	
P2CGS-32	Wedge Collet	3.2	1/8	



WP 17/18/26

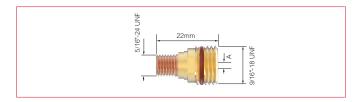
Part No.	Description	B	Bore	
		mm	inch	
P4CGS-16	Wedge Collet	1.6	1/16	
P4CGS-24	Wedge Collet	2.4	3/32	
P4CGS-32	Wedge Collet	3.2	1/8	



Gas Lens

WP 9/20

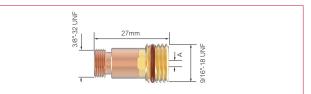
Part No.	Description	Bo	Bore	
		mm	inch	
P45V43QZ	Gas Lens With'O'- Ring	1.6	1/16	
P45V44QZ	Gas Lens With'O'- Ring	2.4	3/32	
P45V45QZ	Gas Lens With'O'- Ring	3.2	1/8	



Stubby Gas Lens

WP 17/18/26

Part No.	Description	Bo	Bore	
		mm	inch	
PSTB45V43QZ	Stubby Gas Lens With'O'- Ring	1.6	1/16	
PSTB45V44QZ	Stubby Gas Lens With'O'- Ring	2.4	3/32	
PSTB45V45QZ	Stubby Gas Lens With'O'- Ring	3.2	1/8	





Ceramic Cups

WP 9/17/18/20/26

Part No.	Description	В	ore
		mm	inch
PJZ10C-F16	JZ10 Ceramic Cup-Bore 17mm With Filter Screen	1.6	1/16
PJZ10C-F24	JZ10 Ceramic Cup-Bore 17mm With Filter Screen	2.4	3/32
PJZ10C-F32	JZ10 Ceramic Cup-Bore 17mm With Filter Screen	3.2	1/8



WP 9/17/18/20/26

Part No.	Description		ore
		mm	inch
PFP12C-F16	FP12 Ceramic Cup-Bore 20mm With Filter Screen	1.6	1/16
PFP12C-F24	FP12 Ceramic Cup-Bore 20mm With Filter Screen	2.4	3/32
PFP12C-F32	FP12 Ceramic Cup-Bore 20mm With Filter Screen	3.2	1/8



WP 9/17/18/20/26

Part No. Description		ore
	mm	inch
PMK14C-F16 MK14 Ceramic Cup-Bore 23mm With Filter Screen	1.6	1/16
PMK14C-F24 MK14 Ceramic Cup-Bore 23mm With Filter Screen	2.4	3/32
PMK14C-F32 MK14 Ceramic Cup-Bore 23mm With Filter Screen	3.2	1/8



WP 9/17/18/20/26

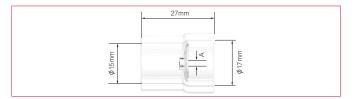
Part No.	Description Bo		ore
		mm	inch
PBBWC-F16	BBW Ceramic Cup-Bore 25mm With Filter Screen	1.6	1/16
PBBWC-F24	BBW Ceramic Cup-Bore 25mm With Filter Screen	2.4	3/32
PBBWC-F32	BBW Ceramic Cup-Bore 25mm With Filter Screen	3.2	1/8



Quartz Cups

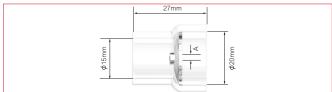
WP 9/17/18/20/26

Part No.	Description	Bore	
		mm	inch
PJZ10Q-F16	JZ10 Quartz Cup-Bore 17mm With Filter Screen	1.6	1/16
PJZ10Q-F24	JZ10 Quartz Cup-Bore 17mm With Filter Screen	2.4	3/32
PJZ10Q-F32	JZ10 Quartz Cup-Bore 17mm With Filter Screen	3.2	1/8



WP 9/17/18/20/26

Part No.	Description		Bore	
		mm	inch	
PFP12Q-F16	FP12 Quartz Cup-Bore 20mm With Filter Screen	1.6	1/16	
PFP12Q-F24	FP12 Quartz Cup-Bore 20mm With Filter Screen	2.4	3/32	
PFP12Q-F32	FP12 Quartz Cup-Bore 20mm With Filter Screen	3.2	1/8	

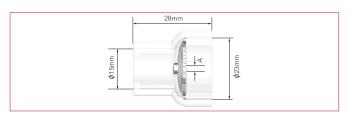




Quartz Cups

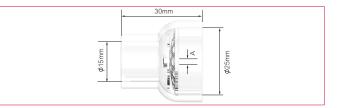
WP 9/17/18/20/26

Part No.	Description Bo		ore
		mm	inch
PMK14Q-F16	MK14 Quartz Cup-Bore 23mm With Filter Screen	1.6	1/16
PMK14Q-F24	MK14 Quartz Cup-Bore 23mm With Filter Screen	2.4	3/32
PMK14Q-F32	MK14 Quartz Cup-Bore 23mm With Filter Screen	3.2	1/8



WP 9/17/18/20/26

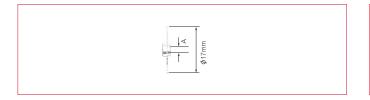
Part No.	Description	B	ore
		mm	inch
PBBWQ-F16	BBW Quartz Cup-Bore 25mm With Filter Screen	1.6	1/16
PBBWQ-F24	BBW Quartz Cup-Bore 25mm With Filter Screen	2.4	3/32
PBBWQ-F32	BBW Quartz Cup-Bore 25mm With Filter Screen	3.2	1/8



Filter Screens

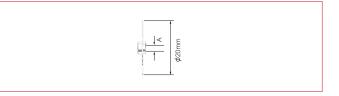
WP 9/17/18/20/26

Part No.	Description	Bore	
		mm inch	
PJZ10D16	JZ10 Cup Filter Screen	1.6 1/16	3
PJZ10D24	JZ10 Cup Filter Screen	2.4 3/32	2
PJZ10D32	JZ10 Cup Filter Screen	3.2 1/8	3



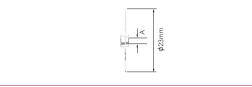
WP 9/17/18/20/26

Part No.	Description	Bore
		mm inch
PFP12D16	FP12 Cup Filter Screen	1.6 1/16
PFP12D24	FP12 Cup Filter Screen	2.4 3/32
PFP12D32	FP12 Cup Filter Screen	3.2 1/8



WP 9/17/18/20/26

Part No.	Description	Bore
		mm inch
PMK14D16	MK14 Cup Filter Screen	1.6 1/16
PMK14D24	MK14 Cup Filter Screen	2.4 3/32
PMK14D32	MK14 Cup Filter Screen	3.2 1/8



WP 9/17/18/20/26

Part No.	Description	Bore
		mm inch
PBBWD16	BBW Cup Filter Screen	1.6 1/16
PBBWD24	BBW Cup Filter Screen	2.4 3/32
PBBWD32	BBW Cup Filter Screen	3.2 1/8





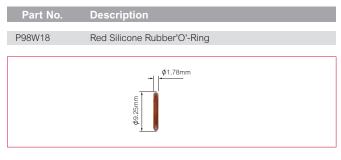
Stubby Series Cup Insulator

WP 17/18/26

Part No.	Description
PSTB80300236	Stubby Series Cup Insulator
	φ 9mm

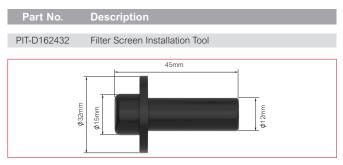
Red Silicone Rubber 'O'-Ring

WP 9/17/18/20/26

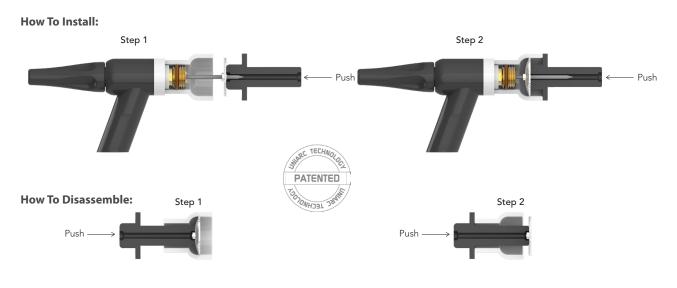


Filter Screen Installation Tool

WP 9/17/18/20/26



Filter Screen Installation Guide





JINAN UNIARC WELDING TECHNOLOGY CO., LTD

13A Zhangjin Comprehensive Bonded Zone 33688, Jing Shi Dong Road Jinan Area of China (Shandong) Pilot Free Trade Zone Jinan 250102, P.R. China

> Tel: +86 531 88239823 Website: www.parkertorchology.com.cn Email: info@parkertorchology.com V.2023.03