

# PR Parker Liquid Line Filter Driers



## Customer Value Proposition:

PARKER Liquid Line Filter Driers, PR ensure the protection of refrigeration and air conditioning systems from moisture, acids and solid particles.

PR liquid line filter driers contain solid cores made with 100% 3Å molecular sieve for a maximum efficiency of dehydration and to minimise the pressure drop in all thermodynamic systems.

PR liquid line filter driers are suitable for HCFC, HFC and CO<sub>2</sub> refrigerants and their associated oils, while respecting the maximum pressure allowable.

PR liquid line filter driers contribute to maintain the cleanliness of the circuits, the efficiency of the systems and extend their life expectancies.

This reduces both the running and maintenance costs thanks to a better protection of the main components like the compressor and the expansion valve.



## Product Family:

- Filter driers

## Applications:

- Refrigeration
- Air conditioning
- Heat pumps

## Advantages:

- PS: 45bar TS -40°C to 80°C
- Solid core 100% 3Å molecular sieve
- Solder fittings in copper (1/4" to 7/8")
- Flare fittings in nickel steel plated (1/4" to 5/8")
- Metric fittings in copper (6 mm to 16 mm)
- 100% leak tested at 41.3 bar
- Corrosion resistance >500 hours (ASTM B 117, ISO 9227)
- Suitable for HCFC, HFC and R744 subcritical
- PED 2014/68/EU
- REACH 2006/1907/EC



ENGINEERING YOUR SUCCESS.

# Technical Data

## Flare Connections

| Part Number | Fitting Type | Overall Length (L) | Shell Diam (D) | Weight | Master Box | Liquid Line Cooling Capacity (kW) <sup>1</sup> |            |       |           |                   |
|-------------|--------------|--------------------|----------------|--------|------------|------------------------------------------------|------------|-------|-----------|-------------------|
|             | SAE          | mm                 | mm             | kg     | Qty        | R134a                                          | R404A R507 | R407C | R410A R22 | R744 <sup>2</sup> |
| PR032FM     | 1/4"         | 102.9              | 50.8           | 0.3    | 10         | 6.0                                            | 4.4        | 6.2   | 6.5       | 8.7               |
| PR032       | 1/4"         | 110.8              | 50.8           | 0.3    | 10         | 6.0                                            | 4.4        | 6.2   | 6.5       | 8.7               |
| PR033       | 3/8"         | 122.0              | 50.8           | 0.3    | 10         | 15.5                                           | 11.4       | 16.0  | 16.9      | 23.3              |
| PR052FM     | 1/4"         | 112.5              | 50.8           | 0.3    | 10         | 6.5                                            | 4.7        | 6.7   | 7.0       | 9.5               |
| PR052       | 1/4"         | 120.4              | 50.8           | 0.3    | 10         | 6.5                                            | 4.7        | 6.7   | 7.0       | 9.5               |
| PR053       | 3/8"         | 131.6              | 50.8           | 0.3    | 10         | 16.9                                           | 12.2       | 17.3  | 18.2      | 25.3              |
| PR082       | 1/4"         | 142.5              | 63.5           | 0.6    | 10         | 7.1                                            | 5.1        | 7.2   | 7.6       | 10.7              |
| PR082FM     | 1/4"         | 134.6              | 63.5           | 0.6    | 10         | 7.1                                            | 5.1        | 7.2   | 7.6       | 10.7              |
| PR083FM     | 3/8"         | 144.9              | 63.5           | 0.6    | 10         | 17.4                                           | 12.5       | 17.8  | 18.7      | 26.1              |
| PR083       | 3/8"         | 153.7              | 63.5           | 0.6    | 10         | 17.4                                           | 12.5       | 17.8  | 18.7      | 26.1              |
| PR084       | 1/2"         | 160.3              | 63.5           | 0.6    | 10         | 26.3                                           | 19.0       | 26.9  | 28.3      | 39.3              |
| PR162       | 1/4"         | 161.5              | 63.5           | 0.7    | 10         | 7.1                                            | 5.1        | 7.2   | 7.6       | 10.7              |
| PR163       | 3/8"         | 172.7              | 63.5           | 0.7    | 10         | 19.2                                           | 13.9       | 19.7  | 20.7      | 29.0              |
| PR164       | 1/2"         | 179.3              | 63.5           | 0.7    | 10         | 34.6                                           | 25.1       | 35.6  | 37.4      | 52.0              |
| PR165       | 5/8"         | 186.9              | 63.5           | 0.8    | 10         | 46.6                                           | 33.7       | 47.8  | 50.3      | 69.9              |
| PR303       | 3/8"         | 251.2              | 76.2           | 1.5    | 10         | 19.7                                           | 14.2       | 20.2  | 21.2      | 29.0              |
| PR304       | 1/2"         | 257.8              | 76.2           | 1.6    | 10         | 38.0                                           | 27.4       | 38.9  | 40.9      | 57.0              |
| PR305       | 5/8"         | 265.4              | 76.2           | 1.6    | 10         | 48.4                                           | 35.0       | 49.5  | 52.1      | 72.1              |
| PR414       | 1/2"         | 259.9              | 88.9           | 2.2    | 10         | 39.8                                           | 28.8       | 40.8  | 43.0      | 59.1              |
| PR415       | 5/8"         | 267.5              | 88.9           | 2.2    | 10         | 51.5                                           | 37.2       | 52.8  | 55.6      | 77.4              |

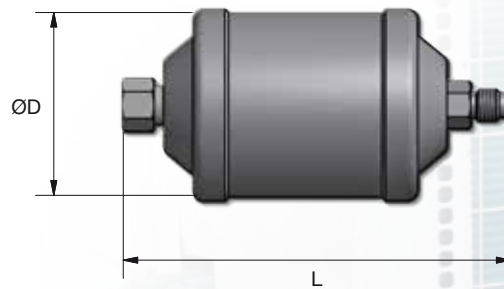
FM: Connections Inlet Female, Outlet Male

1. Cooling capacity in accordance with ARI 710-86 standard  
Te = -15°C, Tc = 30°C, Δp = 0.07 bar (1 psig)

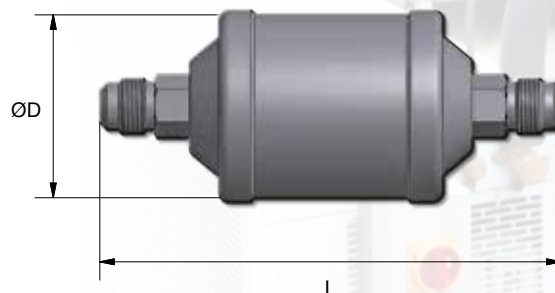
Other refrigerants, contact us.

2. Cooling capacity based on  
Te = -30°C, Tc = -5°C, Δp = 0.07 bar (1 psig)

### Female/Male Flare



### Flare



# Technical Data

## Solder Connections

| Part Number | Fitting Type | Overall Length (L) | Lay in Length (A) | Shell Diam (D) | Weight | Master Box | Liquid Line Cooling Capacity (kW) <sup>1</sup> |            |       |           |                   |
|-------------|--------------|--------------------|-------------------|----------------|--------|------------|------------------------------------------------|------------|-------|-----------|-------------------|
|             |              |                    |                   |                |        |            | R134a                                          | R404A R507 | R407C | R410A R22 | R744 <sup>2</sup> |
| PR032S      | 1/4"         | 99.1               | 80.3              | 50.8           | 0.3    | 10         | 6.1                                            | 4.4        | 6.3   | 6.6       | 8.8               |
| PR033S      | 3/8"         | 102.7              | 80.3              | 50.8           | 0.3    | 10         | 15.8                                           | 11.6       | 16.2  | 17.1      | 23.7              |
| PR052S      | 1/4"         | 108.7              | 89.9              | 50.8           | 0.3    | 10         | 6.6                                            | 4.7        | 6.8   | 7.1       | 9.6               |
| PR053S      | 3/8"         | 112.3              | 89.9              | 50.8           | 0.3    | 10         | 17.1                                           | 12.4       | 17.5  | 18.4      | 25.4              |
| PR082S      | 1/4"         | 130.8              | 112               | 63.5           | 0.3    | 10         | 7.2                                            | 5.2        | 7.3   | 7.7       | 10.5              |
| PR083S      | 3/8"         | 134.4              | 112               | 63.5           | 0.3    | 10         | 17.6                                           | 12.7       | 18.0  | 19.0      | 26.0              |
| PR084S      | 1/2"         | 137.4              | 112               | 63.5           | 0.3    | 10         | 26.7                                           | 19.3       | 27.3  | 28.7      | 39.9              |
| PR162S      | 1/4"         | 149.8              | 131               | 63.5           | 0.7    | 10         | 7.2                                            | 5.2        | 7.3   | 7.7       | 10.5              |
| PR163S      | 3/8"         | 153.4              | 131               | 63.5           | 0.7    | 10         | 19.5                                           | 14.1       | 20.0  | 21.0      | 28.8              |
| PR164S      | 1/2"         | 156.4              | 131               | 63.5           | 0.7    | 10         | 35.1                                           | 25.4       | 36.1  | 37.9      | 52.5              |
| PR165S      | 5/8"         | 162.5              | 131               | 63.5           | 0.7    | 10         | 47.0                                           | 34.0       | 48.2  | 50.7      | 70.4              |
| PR303S      | 3/8"         | 231.9              | 209.5             | 76.2           | 1.5    | 10         | 20.0                                           | 14.4       | 20.5  | 21.5      | 25.6              |
| PR304S      | 1/2"         | 234.9              | 209.5             | 76.2           | 1.5    | 10         | 38.5                                           | 27.8       | 39.4  | 41.5      | 57.5              |
| PR305S      | 5/8"         | 241                | 209.5             | 76.2           | 1.5    | 10         | 48.8                                           | 35.3       | 49.9  | 52.6      | 73.0              |
| PR307SC     | 7/8"         | 258.8              | 220.6             | 76.2           | 1.5    | 10         | 59.3                                           | 42.8       | 60.7  | 63.9      | 88.3              |
| PR414S      | 1/2"         | 237                | 211.6             | 88.9           | 2.1    | 10         | 40.4                                           | 29.1       | 41.4  | 43.6      | 54.2              |
| PR415S      | 5/8"         | 243.1              | 211.6             | 88.9           | 2.1    | 10         | 52.0                                           | 37.5       | 53.3  | 56.1      | 78.4              |
| PR417S      | 7/8"         | 260.9              | 222.7             | 88.9           | 2.1    | 10         | 73.4                                           | 53.1       | 75.2  | 79.2      | 110.1             |
| PR757S      | 7/8"         | 346.7              | 308.5             | 88.9           | 3.0    | 10         | 78.2                                           | 56.5       | 80.1  | 84.3      | 118.2             |

### Metric Fittings

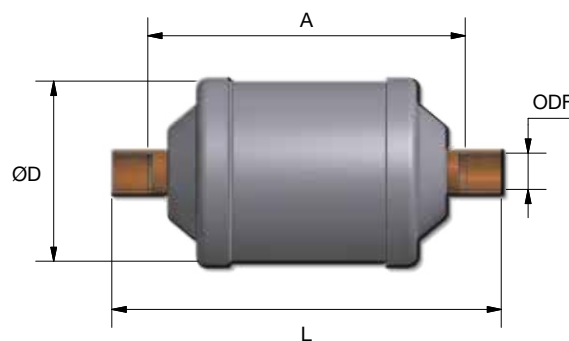
|           |       |       |       |      |     |    |      |      |      |      |      |
|-----------|-------|-------|-------|------|-----|----|------|------|------|------|------|
| PR0306MMS | 6 mm  | 99.1  | 85.1  | 50.8 | 0.3 | 10 | 5.8  | 4.2  | 6.0  | 6.3  | 8.3  |
| PR0308MMS | 8 mm  | 102.7 | 80.3  | 50.8 | 0.3 | 10 | 15.8 | 11.6 | 16.2 | 17.1 | 22.6 |
| PR0506MMS | 6 mm  | 108.7 | 94.7  | 50.8 | 0.3 | 10 | 6.3  | 4.5  | 6.5  | 6.8  | 9.1  |
| PR0510MMS | 10 mm | 112.3 | 89.9  | 50.8 | 0.3 | 10 | 17.4 | 12.6 | 17.9 | 18.8 | 25.9 |
| PR0806MMS | 6 mm  | 130.8 | 116.8 | 63.5 | 0.6 | 10 | 6.8  | 4.9  | 6.9  | 7.3  | 9.9  |
| PR0810MMS | 10 mm | 134.4 | 112   | 63.5 | 0.6 | 10 | 18.0 | 12.9 | 18.4 | 19.3 | 26.5 |
| PR0812MMS | 12 mm | 137.4 | 113   | 63.5 | 0.6 | 10 | 25.6 | 18.5 | 26.2 | 27.6 | 42.4 |
| PR1610MMS | 10 mm | 153.4 | 131   | 63.5 | 0.7 | 10 | 17.7 | 12.7 | 18.1 | 19.1 | 26.2 |
| PR1612MMS | 12 mm | 156.4 | 132   | 63.5 | 0.7 | 10 | 33.7 | 24.4 | 34.6 | 36.4 | 50.5 |
| PR1616MMS | 16 mm | 162.5 | 131   | 63.5 | 0.7 | 10 | 49.9 | 36.1 | 51.1 | 53.8 | 86.2 |
| PR3016MMS | 16 mm | 241   | 209.5 | 76.2 | 1.5 | 10 | 51.7 | 37.4 | 52.9 | 55.7 | 77.5 |
| PR4116MMS | 16 mm | 243.1 | 211.6 | 88.9 | 2.1 | 10 | 55.1 | 39.8 | 56.5 | 59.4 | 82.7 |

1. Cooling capacity in accordance with ARI 710-86 standard  
Te = -15°C, Tc = 30°C, Δp = 0.07 bar (1 psig)

Other refrigerants, contact us.

2. Cooling capacity based on  
Te = -30°C, Tc = -5°C, Δp = 0.07 bar (1 psig)

### Solder



# Parker Worldwide

## **United Arab Emirates**

### **Middle East**

**Sarkis OHANNESSIAN**

Tel +961 3334622

sohannessian@parker.com

## **Germany and German speaking part of Switzerland**

**Francesco GALANTE**

Tel +49 (0)175 5756 032

francesco.galante@parker.com

## **Spain and Portugal**

**Alberto PEÑA**

Tel +34 609 153 154

alberto.pena@parker.com

## **France, Belgium, French speaking part of Switzerland**

**Goska WARNECK**

Tel + 33 (0)6 73 89 36 08

gwarneck@parker.com

## **Italy, Greece, Malta, Cyprus Italian speaking part of Switzerland**

**Andrea BRAGA**

Tel +39 334 6944386

abraga@parker.com

## **Baltic Countries, East/Central Europe, Africa**

**Eliane EMERIT-BONNOT**

Tel +33 (0)6 73 89 36 01

ebonnot@parker.com

## **Turkey**

parker.turkey@parker.com

## **Ireland**

**Sean BRETT**

Tel +353 (0) 1 868 9606

sbrett@parker.com

## **UK, Northern Europe**

**Kenny ADAMSON**

Tel +44 (0)77853 71229

kadamson@parker.com

## **Customer Service:**

### **Parker Hannifin Ltd**

*Instrumentation Group*

*Refrigeration and*

*Air Conditioning Europe*

Manvers House

Office 21

Pioneer Close

Wath Upon Dearne

Rotherham S63 7JZ

United Kingdom

Tel +44 (0) 1709 774600

Fax +44 (0) 1709 774601

racecustomerservice@parker.com

www.parker.com/race

Your local authorized Parker distributor

