



# **Gear pumps**

## **Series GPA and GP1**

*Fixed displacement*

*Catalogue HY30-3400/UK*  
*February 2007*



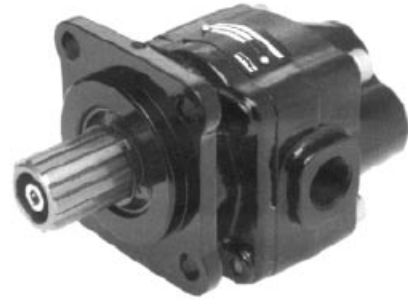
<b>Content</b>	<b>Page</b>
General Information.....	3
Light/medium duty pumps .....	3
Features .....	3
Dimensions, torque and flow diagrams.....	4
GPA-008/-012/-016/-019 3-bolt .....	4
GPA-008/-012/-016/-019 4-bolt .....	4
Dimensions, torque and flow diagrams.....	5
GP1-016/-019/-023/-029/-036/-041/-046 3-bolt...	5
GP1-016/-019/-023/-029/-036/-041/-046 4-bolt...	5
Dimensions, torque and flow diagrams.....	6
GP1-050/-060/-070/-080/-100 4-bolt .....	6
Ordering Information.....	7

**Conversion factors**

1 bar .....	14.5 psi
1 cm <sup>3</sup> .....	0.061 cu in
1 kg.....	2.20 lb
1 kW .....	1.34 hp
1 l.....	0.264 US gallons
1 mm.....	0.039 in
1 N.....	0.225 lbf
1 Nm .....	0.738 lbf ft
$\frac{9}{5} \text{ } ^\circ\text{C} + 32$ .....	$^\circ\text{F}$



Series GPA



Series GP1

**Light/medium duty pumps**

Parker's truck gear pumps are ideal for operators of light trucks for their hydraulic power needs.

The GPA/GP1 series gear pumps are available to suit most applications. They are light and compact, and can be installed in either rear or side mount configuration thanks to their unique dual port layout.

The smaller GPA series is built with an extruded aluminum housing for minimum weight.

The larger GP1 pumps are built with compact cast iron housings for strength.

The gear pumps complement our heavy duty piston pumps and vane pumps.

The performance and characteristics are ideal for many light and/or intermittent applications, including the famous Parker reliability, and they are engineered with a long, trouble-free service life.

**Features**

- Compact and light weight - easy to install even on small vehicles
- Quiet operation - low noise emissions are important in sensitive areas
- Robust and reliable - means a long, trouble-free service life
- Built for high rpm's - less sensitive to over-speeding
- Bi-directional - easy to install
- Side or rear mount - use the ports on the side or at the rear, whichever is most suitable for the application.

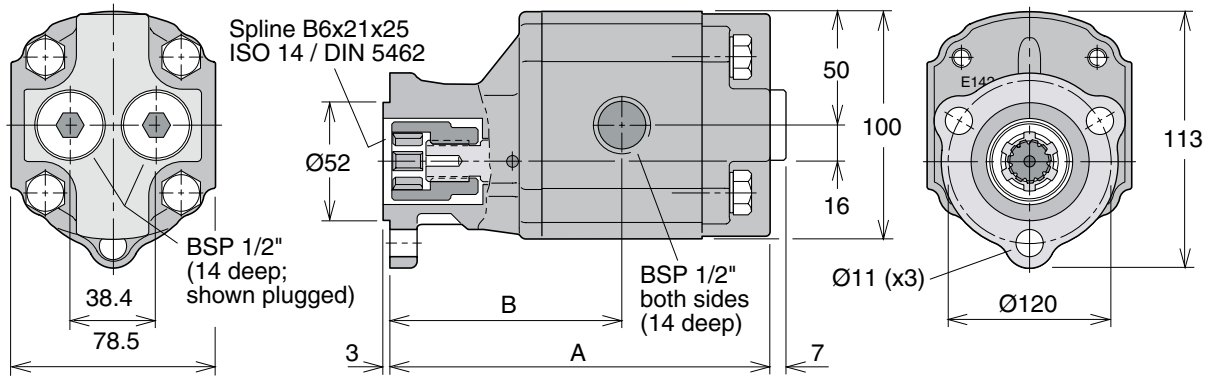
**Series GPA characteristics** (aluminum body; 3- and 4-bolt)

Frame size	008	012	016	019
Displacement [cm <sup>3</sup> /rev]	8	12	16	19
Max continuous pressure [bar]	250	250	250	230
Max intermittent pressure [bar]	270	270	270	250
Max peak pressure [bar]	290	290	290	270
Speed [rpm] (at max continuous pressure) min	500	—————		500
max	2000	—————		2000
Weight [kg]	4.6	4.8	5.1	5.3

**Series GP1 characteristics** (cast iron body; 3- and 4-bolt)

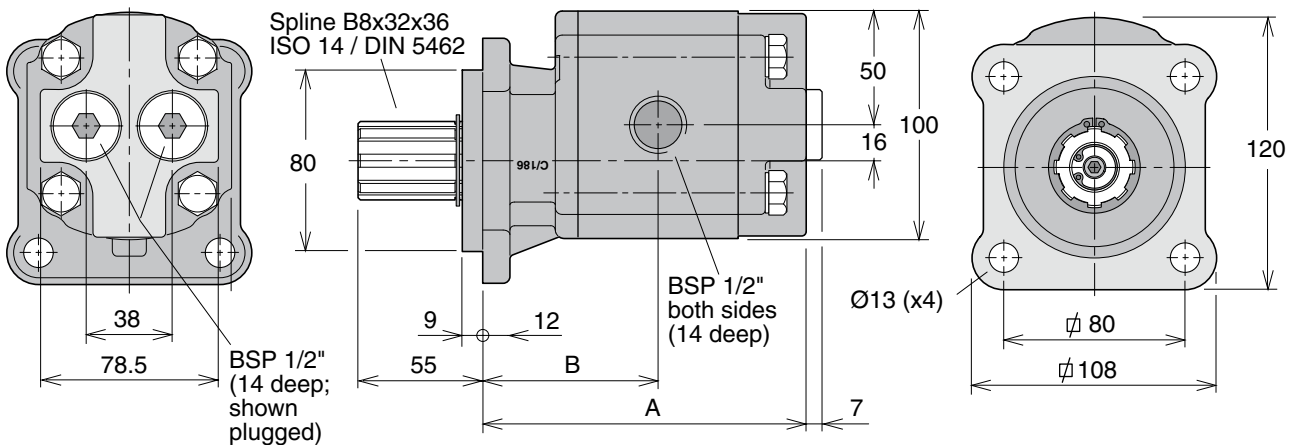
Frame size	016	019	023	029	036	041	046	050	060	070	080	100
Displacement [cm <sup>3</sup> /rev]	16	19	23	29	36	41	46	50	60	70	80	100
Max continuous pressure [bar]	270	260	250	240	230	210	200	300	280	240	200	170
Max intermittent pressure [bar]	300	300	300	290	270	260	250	310	290	250	210	180
Max peak pressure [bar]	300	300	300	290	270	260	250	320	300	260	220	190
Speed [rpm] (at max continuous pressure) min	500	—————										500
max	2000	—————						2000	1800	1700	1600	1400
Weight [kg]	6.0	6.3	6.7	7.1	7.5	7.8	8.1	12.5	13.0	13.5	14.0	15.0

**GPA-008/-012/-016/-019 3-bolt**

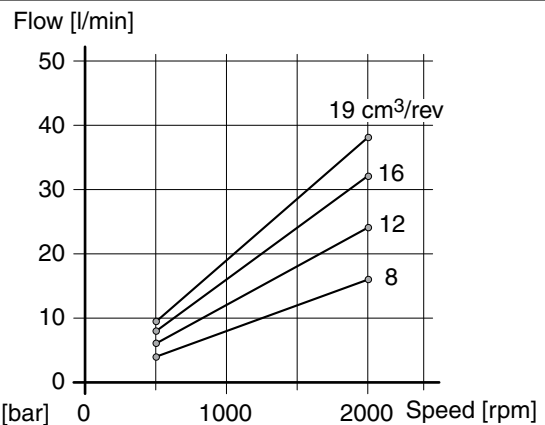
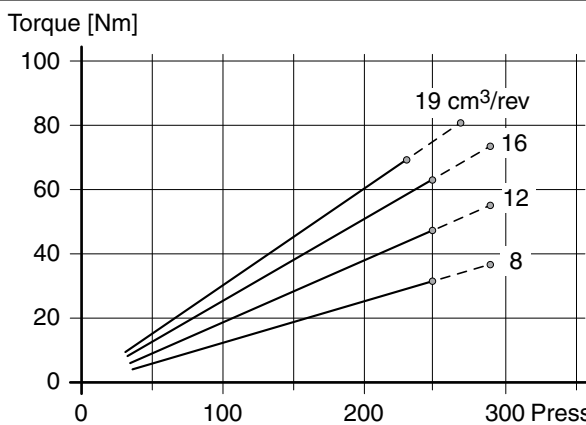


Frame size	008	012	016	019
Dim. "A"	147	153	159	163
Dim. "B"	99	102	105	107

**GPA-008/-012/-016/-019 4-bolt**



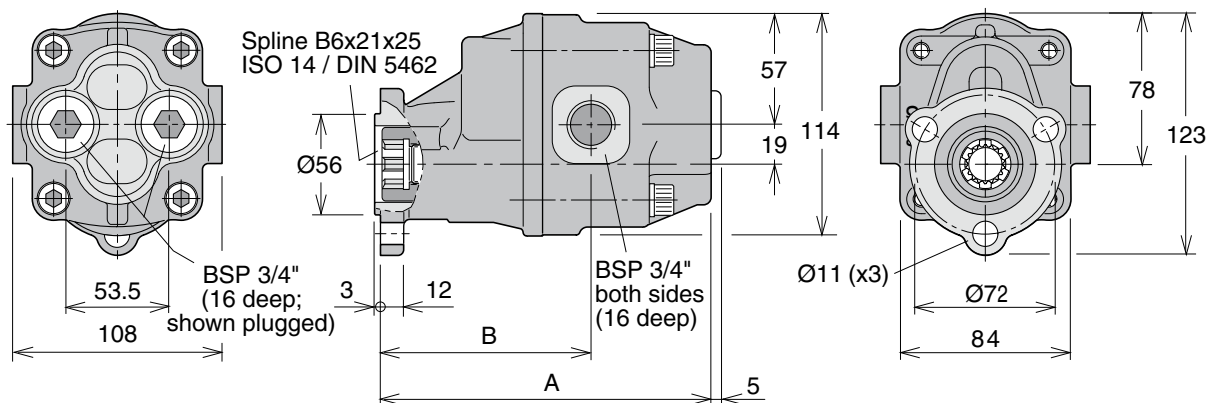
Frame size	008	012	016	019
Dim. "A"	117	123	129	133
Dim. "B"	69	72	75	77



Diagrams reflect theoretical values  
 Direction of rotation: Bi-directional  
 Input pressure: 0.7 to 3.0 bar (absolute)

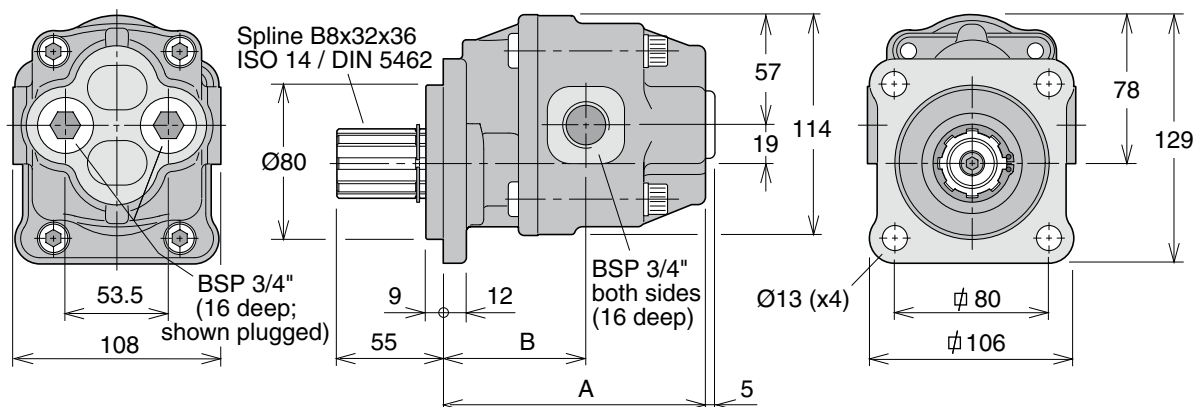
Fluid temperature: -25 °C to +80 °C  
 Recommended viscosity: 12 to 100 mm<sup>2</sup>/s (cSt)  
 Max viscosity: 750 mm<sup>2</sup>/s (cSt)

**GP1-016/-019/-023/-029/-036/-041/-046 3-bolt**

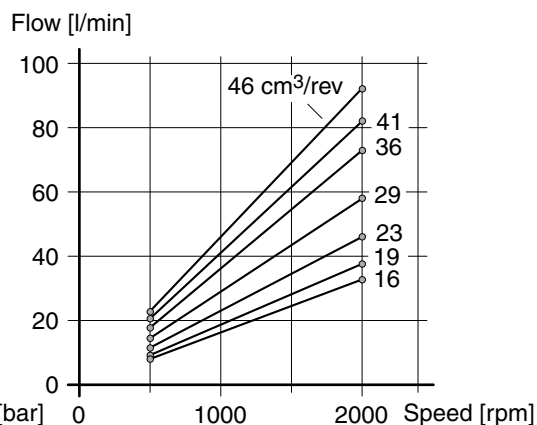
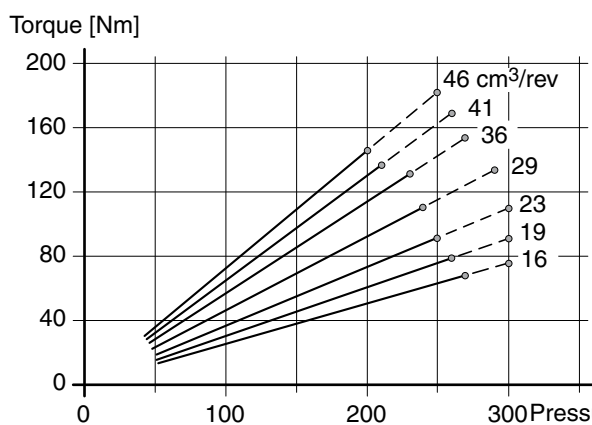


Frame size	016	019	023	029	036	041	046
Dim. "A"	156	160	166	171	181	188	196
Dim. "B"	104	108	102	109	109	115	119

**GP1-016/-019/-023/-029/-036/-041/-046 4-bolt**



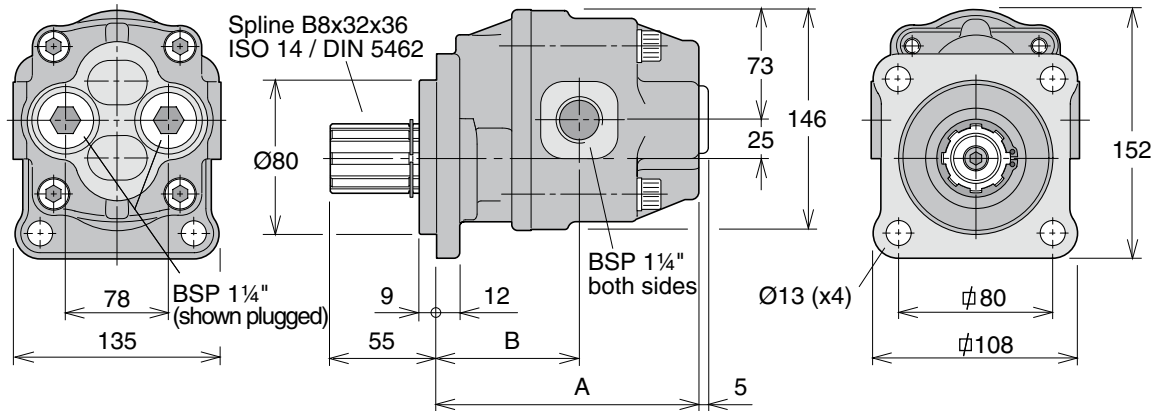
Frame size	016	019	023	029	036	041	046
Dim. "A"	121	125	131	136	146	153	161
Dim. "B"	69	73	67	74	74	80	84



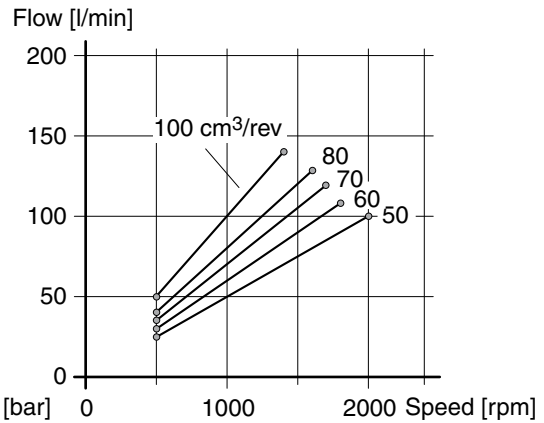
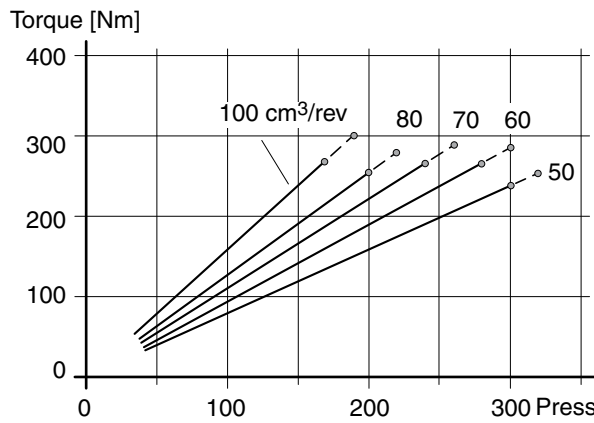
Diagrams reflect theoretical values  
 Direction of rotation: Bi-directional  
 Input pressure: 0.7 to 3.0 bar (absolute)

Fluid temperature: -25 °C to +80 °C  
 Recommended viscosity: 12 to 100 mm<sup>2</sup>/s (cSt)  
 Max viscosity: 750 mm<sup>2</sup>/s (cSt)

**GP1-050/-060/-070/-080/-100 4-bolt**



Frame size	050	060	070	080	100
Dim. "A"	167	174	180	187	200
Dim. "B"	97	104	101	107	111



Diagrams reflect theoretical values  
 Direction of rotation: Bi-directional  
 Input pressure: 0.7 to 3.0 bar (absolute)

Fluid temperature: -25 °C to +80 °C  
 Recommended viscosity: 12 to 100 mm<sup>2</sup>/s (cSt)  
 Max viscosity: 750 mm<sup>2</sup>/s (cSt)

Product	Code	Part numbers
Aluminium 3 bolt	GPA-008-3	334 9113 921
	GPA-012-3	334 9113 922
	GPA-016-3	334 9113 923
	GPA-019-3	334 9113 924

Product	Code	Part numbers
Aluminium 4 bolt	GPA-008-4	334 9113 911
	GPA-012-4	334 9113 912
	GPA-016-4	334 9113 913
	GPA-019-4	334 9113 914

Product	Code	Part numbers
Cast iron 3 bolt	GP1-016-3	702 9113 921
	GP1-019-3	702 9113 922
	GP1-023-3	702 9113 923
	GP1-029-3	702 9113 924
	GP1-036-3	702 9113 925
	GP1-041-3	702 9113 926
	GP1-046-3	702 9113 927

Product	Code	Part numbers
Cast iron 4 bolt	GP1-016-4	702 9113 911
	GP1-019-4	702 9113 912
	GP1-023-4	702 9113 913
	GP1-029-4	702 9113 914
	GP1-036-4	702 9113 915
	GP1-041-4	702 9113 916
	GP1-046-4	702 9113 917
	GP1-050-4	704 9113 911
	GP1-060-4	704 9113 912
	GP1-070-4	704 9113 913
	GP1-080-4	704 9113 914
GP1-100-4	704 9113 915	



## WARNING

**FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS 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 and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure, and review the information concerning the product or system in the current product catalogue. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

## Offer of Sale

Please contact your Parker representation for a detailed "Offer of Sale".

# Hydraulics Group Sales Offices

## Europe

### **Austria**

#### **Wiener Neustadt**

Tel: +43 (0)2622 23501  
Fax: +43 (0)2622 66212

### **Austria**

#### **Wiener Neustadt**

#### **(Resp for East Europe)**

Tel: +43 (0)2622 23501-970  
Fax: +43 (0)2622 23501-977

### **Belgium**

#### **Nivelles**

Tel: +32 (0)67 280 900  
Fax: +32 (0)67 280 999

### **Czech Republic**

#### **Klecany**

Tel: +420 284 083 111  
Fax: +420 284 083 112

### **Denmark**

#### **Ballerup**

Tel: +45 4356 0400  
Fax: +45 4373 3107

### **Finland**

#### **Vantaa**

Tel: +358 20 753 2500  
Fax: +358 20 753 2200

### **France**

#### **Contamine-sur-Arve**

Tel: +33 (0)450 25 80 25  
Fax: +33 (0)450 25 24 25

### **Germany**

#### **Kaarst**

Tel: +49 (0)2131 4016 0  
Fax: +49 (0)2131 4016 9199

### **Ireland**

#### **Dublin**

Tel: +353 (0)1 466 6370  
Fax: +353 (0)1 466 6376

### **Italy**

#### **Corsico (MI)**

Tel: +39 02 45 19 21  
Fax: +39 02 4 47 93 40

### **The Netherlands**

#### **Oldenzaal**

Tel: +31 (0)541 585000  
Fax: +31 (0)541 585459

### **Norway**

#### **Ski**

Tel: +47 64 91 10 00  
Fax: +47 64 91 10 90

### **Poland**

#### **Warsaw**

Tel: +48 (0)22 573 24 00  
Fax: +48 (0)22 573 24 03

### **Portugal**

#### **Leca da Palmeira**

Tel: +351 22 9997 360  
Fax: +351 22 9961 527

### **Slovakia**

#### **Ref. Czech Republic**

### **Spain**

#### **Madrid**

Tel: +34 91 675 73 00  
Fax: +34 91 675 77 11

### **Sweden**

#### **Spånga**

Tel: +46 (0)8 597 950 00  
Fax: +46 (0)8 597 951 10

### **United Kingdom**

#### **Warwick**

Tel: +44 (0)1926 317 878  
Fax: +44 (0)1926 317 855

## International

### **Australia**

#### **Castle Hill**

Tel: +61 (0)2-9634 7777  
Fax: +61 (0)2-9842 5111

### **Canada**

#### **Milton, Ontario**

Tel: +1 905-693-3000  
Fax: +1 905-876-0788

### **China**

#### **Shanghai**

Tel: +86 21 5031 2525  
Fax: +86 21 5834 8975

### **Asia Pacific Group**

#### **Hong Kong**

Tel: +852 2428 8008  
Fax: +852 2425 6896

### **India**

#### **Mumbai**

Tel: +91 22 5613 7081/82-85  
Fax: +91 22 2768 6841/6618

### **Japan**

#### **Tokyo**

Tel: +(81) 3 6408 3900  
Fax: +(81) 3 5449 7201

### **Latin America Group**

#### **Brazil**

Tel: +55 51 3470 9144  
Fax: +55 51 3470 9281

### **South Africa**

#### **Kempton Park**

Tel: +27 (0)11-961 0700  
Fax: +27 (0)11-392 7213

### **USA**

#### **Cleveland (industrial)**

Tel: +1 216-896-3000  
Fax: +1 216-896-4031

#### **Lincolnshire (mobile)**

Tel: +1 847-821-1500  
Fax: +1 847-821-7600

**Parker Hannifin is the world's premier supplier of motion and control systems and solutions, with sales and manufacturing facilities throughout the world. For product information and details of your nearest Parker sales office, visit us at [www.parker.com](http://www.parker.com) or call free on 00800 2727 5374.**



Catalogue HY30-3400/UK  
PDF 02/2007

© Copyright 2007  
Parker Hannifin Corporation  
All rights reserved.