



# HYDRAULIC & PNEUMATIC PTY LTD

INDUSTRIAL LEADER IN HYDRAULIC APPLICATION AND ENGINEERING

# Parker

PUMPS / MOTORS  
BUILD AND DISTRIBUTION  
CENTRE



F11



PGP511



T6/T7



P1/PD



F12



M3/ M4



QPM3

Email:

[info@hydraulicpneumatic.com.au](mailto:info@hydraulicpneumatic.com.au)

[www.hydraulicpneumatic.com.au](http://www.hydraulicpneumatic.com.au)

ENGINEERING CENTRE

54 Indian Drive,  
Keysborough, VIC, 3173  
Phone: (03) 7019 9351  
Fax: (03) 5133 9001

PUMP BUILD CENTRE

521 Princes Drive,  
Morwell, VIC, 3840  
Phone: (03) 5134 1300  
Fax: (03) 51339001

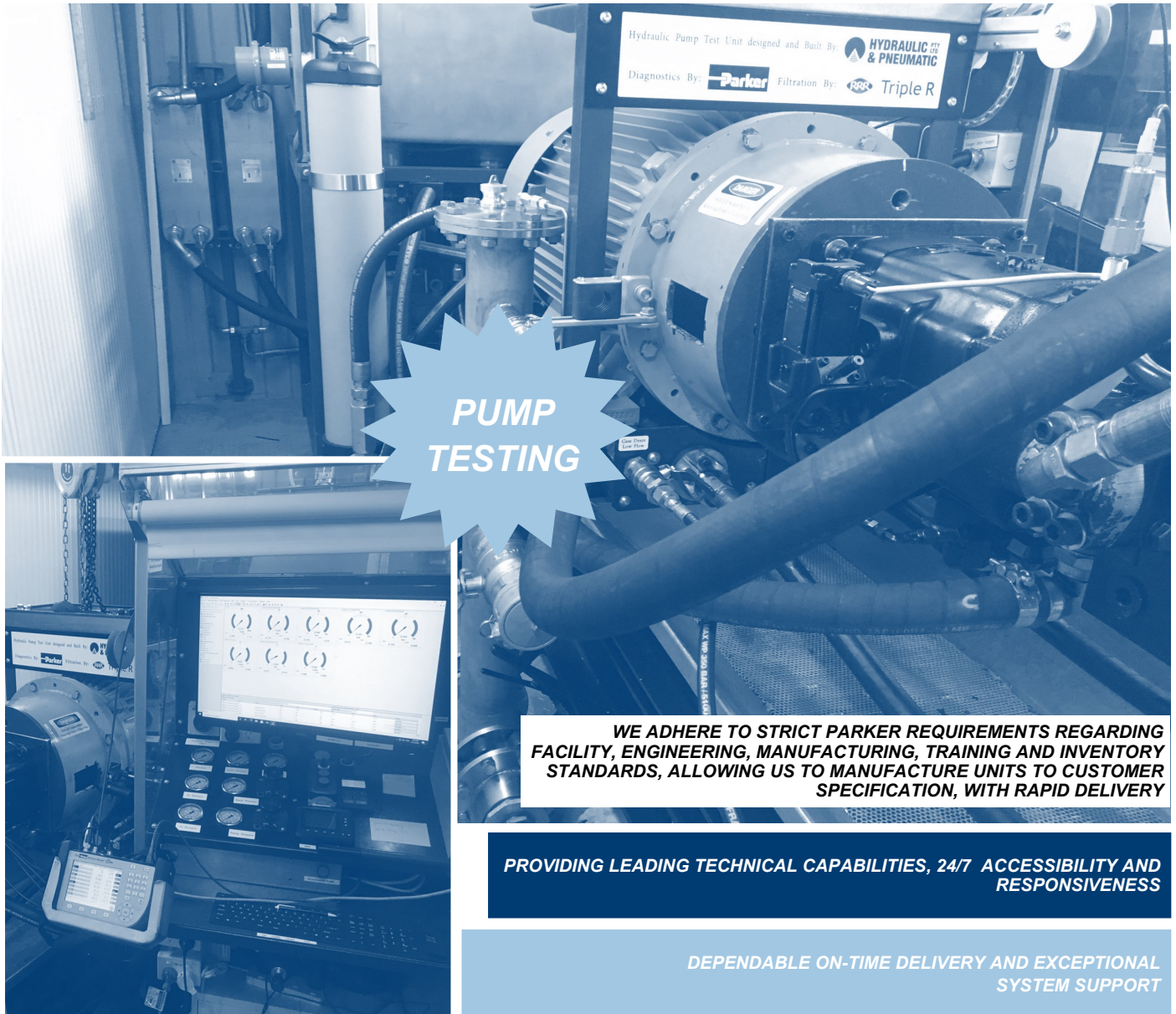




**HYDRAULIC & PNEUMATIC PTY LTD**

**Parker**

## AUTHORISED PUMP BUILD CENTRE!



- ⇒ Our Pump Testing Rig can be used for single, double and even triple pumps
- ⇒ Can handle up to 420Bar and 500L/min
- ⇒ Equipped with a range of advanced sensor equipment to monitor the health of your pump
- ⇒ Provides detailed reports on pump performance
- ⇒ Our experienced operators know how to safely test the full range and functionality of your pump
- ⇒ Tests the smallest to biggest pumps with ease
- ⇒ Can test and set simple to advanced pump controls
- ⇒ Able to set electronically and hydraulically actuated closed loop variable speed

**PUMP SPARES**

**RAPID BUILD  
& DELIVERY**

**COMPLETE  
UNITS**

**CONTACT OUR TEAM AT MORWELL TO GET YOUR PUMP TESTED TODAY!**





## P1/ PD

### MEDIUM PRESSURE (UP TO 280 BAR) VARIABLE DISPLACEMENT AXIAL PISTON PUMPS

HY28-2665-01/P1/EN | August 2021  
**P1/PD Model Ordering Code**

**Axial Piston Pumps  
P1/PD Series**

Pump Family	Displacement	Circuit Type	Mounting & Ports	Shaft Options	Single Shaft Seal	Rotation	Configuration	Fluorocarbon Seal Material	Design Series	Controls	Additional Control Options	Port Orientation	Displacement Stops	Work Port Type	Thru-Drive Mounting Pad & Coupling	Paint	Special Features

Pump Family	
P1	Mobile
PD	Industrial

Displacement	
018	18cc/rev
028	28cc/rev
045	45cc/rev
060	60cc/rev
075	75cc/rev
085	85cc/rev
100	100cc/rev
140	140cc/rev

Circuit Type	
P	Open Circuit - One Side of Center
X	Open Circuit - Overcenter (45-75, 100-140cc with P, T, S, U controls only)

Mounting & Ports	
S	SAE mount; SAE work & aux ports
A	SAE mount; Metric work ports; BSPP aux ports
M	ISO mount; Metric work & aux ports
B	ISO mount; Metric work ports; BSPP aux ports
C	2-bolt SAE C mount; SAE work & aux ports (60-85cc only)
D	2-bolt SAE C mount; metric work ports; BSPP aux ports (60-85cc only)
J	2-bolt SAE-B mount; SAE work & aux ports (60cc only)
K	2-bolt SAE-B mount; Metric work ports; BSPP aux ports (60cc only)

Shaft Options	
01	SAE Spline
02	SAE Keyed
04	ISO Keyed
06 <sup>1</sup>	SAE Spline (18 & 100cc only)
08	SAE-B 13T Spline (28 & 45cc only)
09	SAE-BB 15T Spline (60cc only)
10	SAE-B 13T Spline (60cc only; Not with thru drive)

<sup>1</sup> 18cc de-rated to 210 bar

Rotation	
R	Clockwise
L	Counterclockwise

Configuration	
M	Mobile (P1)
S	Industrial (PD)
U <sup>2</sup>	Universal (45-140cc only)

<sup>2</sup> Comes with torque limiter ports drilled in the housing

Controls	
CO	Pressure Limiter
LO	Load sensing & pressure limiter
L2	Load sensing with bleed & pressure limiter
AM	Remote pressure limiter
AN	Remote pressure limiter with D03 interface
AE	Prop. Pressure limiter (Min default - 12VDC)
AF	Prop. Pressure limiter (Min default - 24VDC)
AG <sup>3</sup>	Prop. Pressure limiter (Max default - 24VDC)
AH <sup>3</sup>	Prop. Pressure limiter (Max default - 12VDC)

Electronic Displacement Controls	
PO	Min default; No Pmax override; 12 VDC
PM	Min default; No Pmax override; 24 VDC
TO	Max default; No Pmax override; 12 VDC
TM	Max default; No Pmax override; 24 VDC
SO	Min default; Pmax override; 12 VDC
SM	Min default; Pmax override; 24 VDC
UO	Max default; Pmax override; 12 VDC
UM	Max default; Pmax override; 24 VDC

<sup>3</sup> Requires application review. Consult factory.

Additional Control Options	
0	No other options
2	Cam sensor (mandatory with P, T, S, U controls)
3 <sup>4</sup>	Unload Valve - 12VDC (CO or LO control only)
6 <sup>4</sup>	Unload Valve - 24VDC (CO or LO control only)
4	210 bar pressure limit (AG or AH control only)
7	280 bar pressure limit (AG or AH control only)
T	Torque Limiter (45-140cc only; LO, AM, AN control only)

<sup>4</sup> Available on 28-140cc only

Port Orientation	
E	End Ports
S	Side Ports (60-140cc only)
R	Side Ports with ripple chamber (18-45cc only)
T	Side Ports with thru-drive

Displacement Stops <sup>5</sup>	
0	None
1	Adjustable maximum stop
2	Adjustable minimum stop
3	Adjustable maximum & minimum stop

<sup>5</sup> Not standard with thru drive. Contact factory

Work Port Type	
0	Flanged (Not with 18cc "E" or "R" ports)
2 <sup>6</sup>	Threaded (18-60cc only)

<sup>6</sup> On 60cc, only with SAE end ports

Thru-Drive Designation Description	
0	None
A	SAE 82-2 (A), 9T coupling
H	SAE 82-2 (A), 11T coupling
B	SAE 101-2 (B), 13T coupling (28-140cc only)
Q	SAE 101-2 (B), 15T coupling (28-140cc only)
C	SAE 127-4 (C), 14T coupling (60cc only) SAE 127-2/4 (C), 14T coupling (75-140cc only)
N	SAE 127-4 (C), 17T coupling (100 & 140cc only)
D	SAE 152-4 (D), 13T coupling (140cc only)

Paint	
00	No Paint
PB	Black Paint

Special Features	
00	Standard
M2	Special Designation

**REPLACEMENT  
OF  
REXROTH  
A10V**

#### FEATURES AND BENEFITS

- ⇒ Variable displacement, axial piston pump for open-circuit applications
- ⇒ Continuous operation at pressures up to 280 bar
- ⇒ High drive speed models for mobile markets and low noise models for industrial markets
- ⇒ Quiet and efficient control capability
- ⇒ Cam bearing design
- ⇒ Compact overall package size
- ⇒ High power density
- ⇒ Many different standard control options
- ⇒ Modular controls for easy conversions
- ⇒ Easy to service

- ⇒ High operating efficiency for lower power consumption and reduced heat generation
- ⇒ Elastomer seals that eliminate gaskets and external leakage
- ⇒ Simple hydraulic controls with "no-leak" adjustments
- ⇒ Fast and stable compensator response
- ⇒ SAE and ISO standard mounting flanges and ports
- ⇒ Long life, roller shaft bearings
- ⇒ Long life, low friction, hydrostatically balanced swash plate saddle bearings
- ⇒ Full power through-drive capability
- ⇒ Multiple case drain ports for various mounting orientations
- ⇒ Optional minimum and maximum displacement adjustments

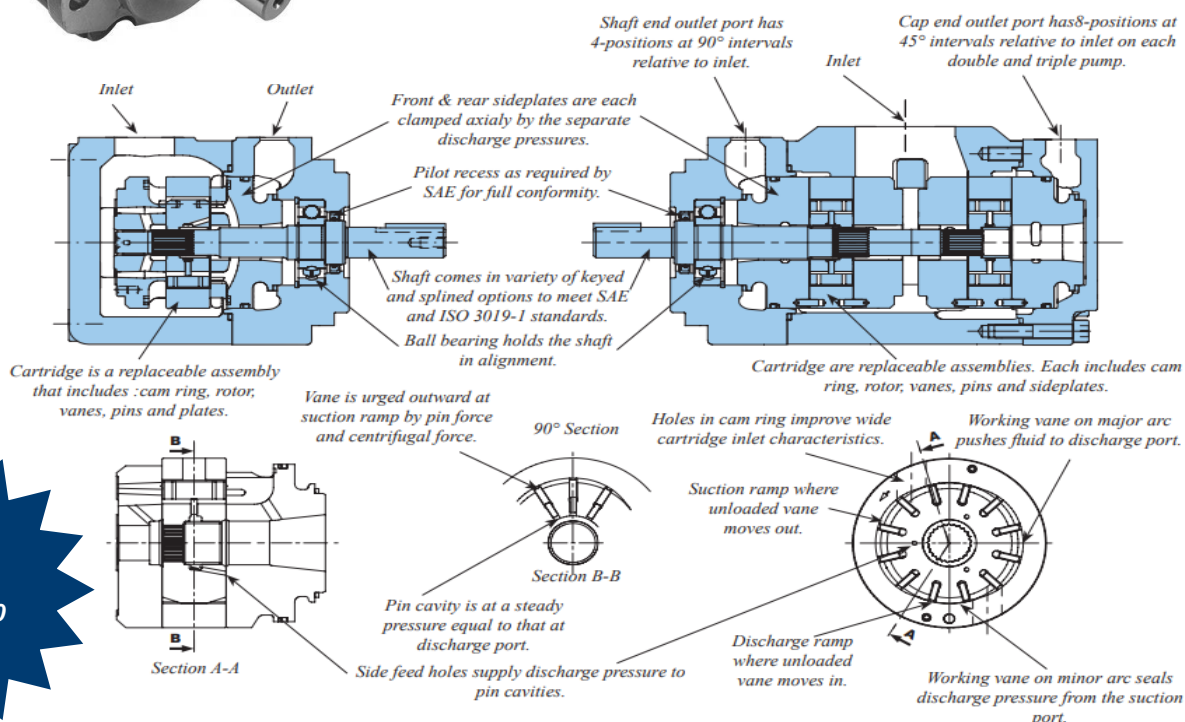
**WE HAVE A COMPREHENSIVE RANGE OF PARKER P1 PISTON PUMPS IN STOCK!**



# PARKER-DENISON T6/T7 VANE PUMPS



- ⇒ These vane pumps have been specially designed for high/low circuits
- ⇒ The combination of different cartridges in double and triple pumps allows low flow at high pressure (300 bar max.) and high flow at lower pressure
- ⇒ This is a clever way to optimize your circuit design
- ⇒ This pump feature will also allow a very fast pressure cycle change with a very precise flow repeatability



**5.8 TO  
268.7 CC  
UP TO 320  
BAR!**

- ⇒ The high pressure capability up to 320 bar, in the small envelope, reduces installation costs and provides extended life at reduced pressure
- ⇒ The high volumetric efficiency, reduces heat generation, and allows speeds down to 600 RPM at full pressure
- ⇒ The high mechanical efficiency, typically better than 94%, reduces energy consumption
- ⇒ The wide speed range (600 RPM at 3600 RPM), combined with large size cartridge displacements will optimize operation for the lowest noise level in the smallest envelope
- ⇒ The low speed (600 RPM), low pressure, high viscosity (860 cSt) allows application in cold environment with a minimum energy consumption and without risk of seizure
- ⇒ The low ripple pressure ( $\pm 2$  bar) reduces piping noise and increases lifetime of the other components in the circuit
- ⇒ The high resistance to particle contamination, thanks to the double lip technology increasing the pump lifetime
- ⇒ The large variety of options (cam displacement, shaft, porting) allows customised installation
- ⇒ Noise: Specially designed to optimise the low noise level characteristics
- ⇒ Cartridge Concept: Drops maintenance costs



**ALSO AVAILABLE IS THE T6CM SPRING LOADED VANE PUMP FOR LOW PRESSURE APPLICATIONS**

**INTERCHANGABLE REPLACEMENT  
OF VICKERS VANE PUMPS**

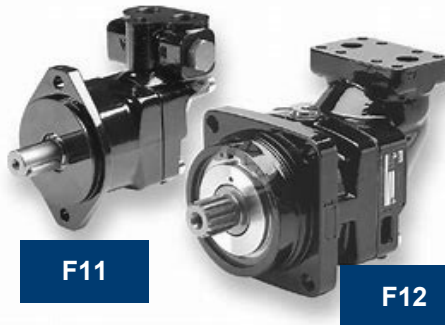
**WE CAN CUSTOMISE, BUILD AND TEST COMPLETE PUMPS TO FIT YOUR REQUIREMENTS!**

# F11/ F12 SERIES

## BENT AXIS, FIXED DISPLACEMENT MOTOR/PUMP

*SPECIALLY DESIGNED FOR DEMANDING APPLICATIONS, BEING ABLE TO WITHSTAND EXTREME CONDITIONS. PERFECTLY SUITED FOR A WIDE RANGE OF MOBILE APPLICATIONS*

- ⇒ Max intermittent pressure up to 420 bar and continuous operating pressure up to 350 bar
- ⇒ Thanks to low weight pistons and a compact design of the rotating parts, the F11 tolerates very high speeds, up to 14000 rpm
- ⇒ CETOP, ISO, SAW and SAE versions
- ⇒ \*Available in sizes 5, 6, 10, 12, 14 and 19cc



- ⇒ Max intermittent pressure up to 480 bar and continuous operating pressure up to 420 bar
- ⇒ The 7 or 9 piston design provides high start-up torque and smooth motor operation
- ⇒ SO, Cartridge, SAW and SAE versions
- ⇒ Available in sizes 30, 40, 60, 80, 90, 110, 125, 152, 162, 182 and 250cc

### General Features

- The laminated piston ring offers important advantages such as unbeatable efficiency and thermal shock resistance.
- High allowable speeds and operating pressures means high output power.
- The unique piston locking, timing gear and bearing set-up as well as the limited number of parts add up to a very robust design with long service life and, above all, proven reliability.
- The 40° angle between shaft and cylinder barrel allows for a very compact, lightweight motor/ pump.
- Small envelop size and a high power-to-weight ratio.
- The motor version has highly engineered valve plates for high speed and low noise.
- The pump version has highly engineered valve plates for increased self priming speed and low noise, available with left and right hand rotation.
- The F11's and F12's have simple and straight forward design with very few moving parts, making them very reliable motors/pumps.
- Our unique timing gear design synchronises shaft and cylinder barrel, making the F11/F12 very tolerant to high 'G' forces and torsional vibrations.
- Heavy duty roller bearings permit substantial external axial and radial shaft loads.

## PGP511 ALUMINIUM GEAR PUMPS WITH INTEGRATED RELIEF VALVE



**PRESSURE ADJUSTMENTS AVAILABLE**

Pump Displacement	Code	0060	0100	0140	0190	0330
	cm <sup>3</sup> /rev	6.0	10.0	14.0	19.0	33.0
Max. Continuous Pressure	bar	250	250	250	250	155
Minimum Speed @ 0 Inlet & Max. outlet pressure	rpm	500	500	500	500	500
Maximum Speed @ 0 Inlet & Max. outlet pressure	rpm	3500	3500	3500	3250	2000
Pump Input Power @ Max. Pressure and 1500 rpm	kW	4.5	7.5	10.5	14.3	17.3
Dimension "L"	mm	50.1	56.5	62.8	70.6	92.6
Approximate Weight <sup>1)</sup>	kg	3.40	3.55	3.71	3.91	4.45

### APPLICATIONS

- ⇒ Sizes from 3-33cc
- ⇒ Operating pressures up to 250 bar (3,625psi)
- ⇒ Speeds up to 4,000 rpm
- ⇒ CW, CCW, and bio-rotational pumps available
- ⇒ SAE shafts, flanges and porting available
- ⇒ Extensive valve options available— pressure relief, anti-cavitation, cross port relief, solenoid unloading, proportional relief, and reversing

## QPM GEROTOR PUMPS LOW PRESSURE OIL PUMPS FOR INDUSTRIAL AND MARINE APPLICATIONS

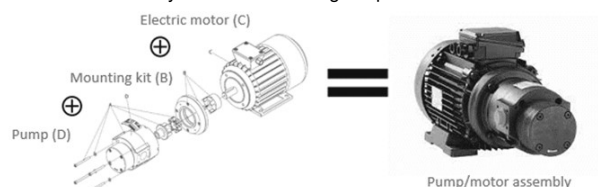


### SPECIFICATIONS

20 l/min	40 l/min	60 l/min	80 l/min
RELIEF VALVE 10 BAR OR 5 BAR		DIRECT COUPLING TO ELECTRIC MOTOR	

### ⇒ APPLICATIONS

- ⇒ Circulation of oil in cooling and oil filter systems
- ⇒ Circulation of oil in industrial hydraulic systems
- ⇒ Filling and draining of oil in tanks
- ⇒ Transfer of oil in stationary or mobile oil storage depots



**WE HAVE A WIDE RANGE OF STOCK AVAILABLE IN MELBOURNE TO SUPPORT YOU!**





# HYDRAULIC & PNEUMATIC PTY LTD

WE ARE AUSTRALIA'S LEADING SUPPLIER OF HYDRAULIC & PNEUMATIC PRODUCTS & SERVICES. WITH OVER 40 YEARS EXPERIENCE IN THE FLUID POWER INDUSTRY.  
OPERATING FROM GIPPSLAND & MELBOURNE.

WE PROVIDE  
LEADING  
TECHNICAL  
CAPABILITIES, 24/7  
ACCESSIBILITY &  
RESPONSIVENESS

- ⇒ COMPREHENSIVE RANGE OF P1 PISTON PUMPS AND MOTORS
- ⇒ COMPREHENSIVE RANGE OF DENISON VANE PUMPS AND MOTORS
- ⇒ PGP511 ALUMINIUM GEAR PUMPS WITH INTEGRATED RELIEF VALVE QPM3 GEROTOR PUMPS
- ⇒ HYDRAULIC MOTOR/ PUMP F11/F12 FIXED DISPLACEMENT

- ⇒ LARGE STOCK OF COMPLETE UNITS
- ⇒ RAPID BUILD AND DELIVERY OF COMPLETE P1, PD, DENISON VANE RANGE AND F11/F12
- ⇒ APPLICATION AND ENGINEERING SUPPORT & SERVICE
- ⇒ CATERING FOR OUR CUSTOMERS AUSTRALIA WIDE

PLEASE CONTACT OUR EXPERIENCED TEAM FOR FURTHER TECHNICAL INFORMATION AND PRICING!

**Email:**

[info@hydraulicpneumatic.com.au](mailto:info@hydraulicpneumatic.com.au)

[www.hydraulicpneumatic.com.au](http://www.hydraulicpneumatic.com.au)

**ENGINEERING CENTRE**

54 Indian Drive,  
Keysborough, VIC, 3173  
Phone: (03) 7019 9351  
Fax: (03) 5133 9001

**PUMP BUILD CENTRE**

521 Princes Drive,  
Morwell, VIC, 3840  
Phone: (03) 5134 1300  
Fax: (03) 51339001

