



Simple
and accurate

The new
portable
clamp-on
flow meters

Portaflow PF330/PF220

Easy set-up and installation – perfectly tailored and pre-set for Georg Fischer Piping Systems.

The Portaflow range brings simplicity to the non-invasive measurement of liquid flow. Portaflow offers the user quick and accurate flow measurement with its easy to follow menu and simple set up. Results can be achieved within minutes of opening the case. Compact, rugged and reliable, the Portaflow range has been designed to provide sustained performance in industrial environments.



Industries

- Water
- Building Services
- Energy
- Chemical Industry
- Utilities
- Semiconductors

Recommended for

- Potable water
- River water
- Cooling water
- Demineralised water
- Water/glycol solutions
- Chemicals

Application / Use

- HVAC and energy system audits
- Pump verification
- Leak detection
- Filter sizing
- Ultrapure water measurement
- Condensate measurement
- Balancing systems
- Fire system testing
- Calibration of measurement systems

Hardware & Operation

The Portaflow electronics are housed in a specifically designed enclosure, which incorporates the graphic display, keypad, sensor and output facility connections. Programming the unit is carried out by selecting the options displayed in the main menu and by following the simple instructions in any of the user selectable languages. The use of rechargeable batteries allows the unit to be operated for a period in excess of 20 hours depending on the facilities used. Continuous operation via the PSU is also possible while recharging the battery pack. Battery status, signal strength, time and date, as well as flow information are all continuously displayed, keeping the user fully aware of the measurement process.

Flow Transducers

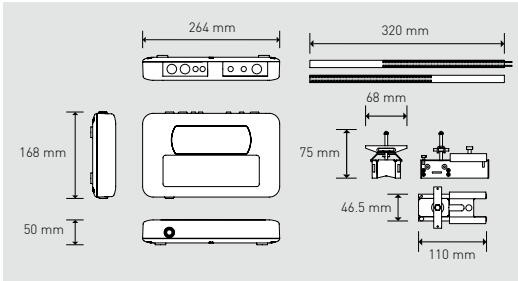
The Portaflow range is able to work with different transducer sets depending on the unit purchased and the application. Sensor mounting clamps are provided with each instrument, to ensure correct mounting and reliable operation on any size pipe, in either diagonal or reflex mode.

Data Logger (PF330 only)

The built in data logger in the PF330 allows site details and flow data to be recorded with a memory, that is able to log 98,000 separate readings. Data can be stored in 5 second to 1 hour intervals. The data for each site is stored in the memory until it has been cleared. The stored data can be displayed on the instrument in text or graph format. The instrument is also capable of downloading the stored data via the USB or RS232 output port and the Portagraph Software supplied with the unit.

System data

Transit time ultrasonic flow meter: a non-invasive way of measuring.



PF330 and PF220 Product Features

- Flow Range: 0.1m/sec to 20m/sec bi-directional
- Battery or mains operation, battery running time: up to 20h
- Power: 110 – 240VAC +/-10% supply via PSU
- Languages: DE, EN, FR, RU, SWE, IT, SP, P, NO, DEN
- Accuracy for flow rate >0.2m/s:
 - Pipes > DN75: ±0.5% to ±2% of flow reading
 - Pipes DN13-75: ±3% of flow reading



PF330

PF330 Specification

- A Transducers: d13 – d115 pipes
- B Transducers: d50 – d2000 pipes
- Transducer Operating Temp:
 - A & B -20°C to +135°C
- Outputs: Opto Isolated 0/4 –20mA; RS 232/USB; programmable pulse: 2ms – 500ms
- Data Logging: 98,000 data points
- Up to 20 named recording blocks
- Data displayed locally in text or graph format. Real time or stored. Can be downloaded via RS232 or USB port to Windows based PC



PF330 with case

PF220 Specification

- PF220A with A Transducers: d13 – d115 pipes or
- PF220B with B Transducers: d50 – d1000 pipes
- Transducer Operating Temp:
 - A & B -20°C to +135°C
- Outputs: – Opto Isolated 0/4 –20mA; Programmable Pulse – 2ms-500ms



PF220

PF330 / PF220

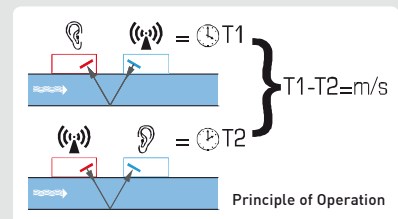
Selectable pipe materials:
 PVDF-SYGEF, PP-PROGEF, PE-ELGEF,
 PB-INSTAFLEX, ABS, PVC-U/PVC-C, Copper
 Mild Steel, Ductile Iron, S'less Steel 316, ...



PF220 with case

Working principle

It takes just a few minutes to install and there is no need to shut down flow or drain the system.



When ultrasound is transmitted between the transducers, the speed at which the sound travels through the liquid is accelerated slightly by the velocity of the liquid through the pipe. When ultrasound is transmitted in the opposite direction, the flow of the liquid causes the transmitted sound to decelerate. The subsequent time difference is directly proportional to the flow velocity in the pipe. Having measured the flow velocity and knowing the pipe cross-sectional area, the volumetric flow can be easily calculated.

GF Piping Systems – worldwide at home

Our sales companies and representatives ensure local customer support in over 100 countries.

www.piping.georgfischer.com



The technical data is not binding. They neither constitute expressly warranted characteristics nor guaranteed properties nor a guaranteed durability. They are subject to modification. Our General Terms of Sale apply.

Adding Quality to People's Lives

Argentina/Southern South America

Georg Fischer Central Plastics
Sudamérica S.R.L.
Buenos Aires, Argentina
Phone +5411 4512 02 90
gfccentral.ps.ar@georgfischer.com

Australia

George Fischer Pty Ltd
Riverwood NSW 2210 Australia
Phone +61(0)2 9502 8000
australia.ps@georgfischer.com
www.georgfischer.com.au

Austria

Georg Fischer
Rohrleitungssysteme GmbH
3130 Herzogenburg
Phone +43(0)2782 856 43-0
austria.ps@georgfischer.com
www.georgfischer.at

Belgium/Luxembourg

Georg Fischer NV/SA
1070 Bruxelles/Brüssel
Phone +32(0)2 556 40 20
be.ps@georgfischer.com
www.georgfischer.be

Brazil

Georg Fischer Sist. de Tub. Ltda.
04795-100 São Paulo
Phone +55(0)11 5525 1311
br.ps@georgfischer.com
www.georgfischer.com.br

Canada

Georg Fischer Piping Systems Ltd
Mississauga, ON L5T 2B2
Phone +1(905)670 8005
Fax +1(905)670 8513
ca.ps@georgfischer.com
www.georgfischer.ca

China

Georg Fischer
Piping Systems Ltd Shanghai
Pudong, Shanghai 201319
Phone +86(0)21 58 13 33 33
china.ps@georgfischer.com
www.georgfischer.cn

Denmark/Iceland

Georg Fischer A/S
2630 Taastrup
Phone +45 (0)70 22 19 75
info.dk.ps@georgfischer.com
www.georgfischer.dk

Finland

Georg Fischer AB
01510 VANTAA
Phone +358 (0)9 586 58 25
Fax +358 (0)9 586 58 29
info.fi.ps@georgfischer.com
www.georgfischer.fi

France

Georg Fischer SAS
95932 Roissy Charles de Gaulle Cedex
Phone +33(0)1 41 84 68 84
fr.ps@georgfischer.com
www.georgfischer.fr

Germany

Georg Fischer GmbH
73095 Albershausen
Phone +49(0)7161 302-0
info.de.ps@georgfischer.com
www.georgfischer.de

India

Georg Fischer Piping Systems Ltd
400 076 Mumbai
Phone +91 224007 2001
in.ps@georgfischer.com
www.georgfischer.in

Italy

Georg Fischer S.p.A.
20063 Cernusco S/N (MI)
Phone +3902 921 861
it.ps@georgfischer.com
www.georgfischer.it

Japan

Georg Fischer Ltd
556-0011 Osaka,
Phone +81(0)6 6635 2691
jp.ps@georgfischer.com
www.georgfischer.jp

Korea

Georg Fischer Piping Systems
271-3 Seohyeon-dong Bundang-gu
Seongnam-si, Gyeonggi-do
Seoul 463-824
Phone +82 31 8017 1450
Fax +82 31 8017 1454
kor.ps@georgfischer.com
www.georgfischer.kr

Malaysia

George Fischer (M) Sdn. Bhd.
40460 Shah Alam, Selangor Darul Ehsan
Phone +60 (0)3 5122 5585
my.ps@georgfischer.com
www.georgfischer.my

Mexico/Northern Latin America

Georg Fischer S.A. de C.V.
Apodaca, Nuevo Leon
CP66636 Mexico
Phone +52 (81)1340 8586
Fax +52 (81)1522 8906
mx.ps@georgfischer.com
www.georgfischer.mx

Middle East

Georg Fischer
Piping Systems [Switzerland] Ltd.
Dubai, United Arab Emirates
Phone +971 4 289 49 60
gcc.ps@georgfischer.com
www.export.georgfischer.com

Netherlands

Georg Fischer N.V.
8161 PA Epe
Phone +31(0)578 678 222
nl.ps@georgfischer.com
www.georgfischer.nl

Norway

Georg Fischer AS
1351 Rud
Phone +47(0)67 18 29 00
no.ps@georgfischer.com
www.georgfischer.no

Poland

Georg Fischer Sp. z o.o.
05-090 Sekocin Nowy
Phone +48(0)22 31 31 0 50
poland.ps@georgfischer.com
www.georgfischer.pl

Romania

Georg Fischer
Piping Systems (Switzerland) Ltd.
020257 Bucharest - Sector 2
Phone +40(0)21 230 53 80
ro.ps@georgfischer.com
www.export.georgfischer.com

Russia

Georg Fischer
Piping Systems (Switzerland) Ltd.
Moscow 125047
Tel. +7 495 258 60 80
ru.ps@georgfischer.com
www.georgfischer.ru

Singapore

George Fischer Pte Ltd
528 872 Singapore
Phone +65(0)67 47 06 11
sgp.ps@georgfischer.com
www.georgfischer.sg

Spain/Portugal

Georg Fischer S.A.
28046 Madrid
Phone +34(0)91 781 98 90
es.ps@georgfischer.com
www.georgfischer.es

Sweden

Georg Fischer AB
117 43 Stockholm
Phone +46(0)8 506 775 00
info.se.ps@georgfischer.com
www.georgfischer.se

Switzerland

Georg Fischer
Rohrleitungssysteme [Schweiz] AG
8201 Schaffhausen
Phone +41(0)52 631 30 26
ch.ps@georgfischer.com
www.piping.georgfischer.ch

Taiwan

Georg Fischer Co., Ltd.
San Chung Dist., New Taipei City
Phone +886 2 8512 2822
Fax +886 2 8512 2823
www.georgfischer.tw

United Kingdom/Ireland

Georg Fischer Sales Limited
Coventry, CV2 2ST
Phone +44(0)2476 535 535
uk.ps@georgfischer.com
www.georgfischer.co.uk

USA/Caribbean

Georg Fischer LLC
Tustin, CA 92780-7258
Phone +1(714) 731 88 00
Toll Free 800 854 40 90
us.ps@georgfischer.com
www.gfpiping.com

Vietnam

Georg Fischer Pte Ltd
136E Tran Vu, Ba Dinh District, Hanoi
Phone +84 4 3715 3290
Fax +84 4 3715 3285

International

Georg Fischer
Piping Systems [Switzerland] Ltd.
8201 Schaffhausen/Switzerland
Phone +41(0)52 631 30 03
Fax +41(0)52 631 28 93
info.export@georgfischer.com
www.export.georgfischer.com