

Duo-flow

DUO-PF Series

- All PFA and PTFE construction for use with high-purity liquids
- 4-20 mA, 1-5 or 1-10 VDC output of actual flow rate
- Full-scale flow ranges from as little as 15 mL/min to 1.5 L/min
- Compact design with convenient panel mounting
- Displays with dual programmable alarms available



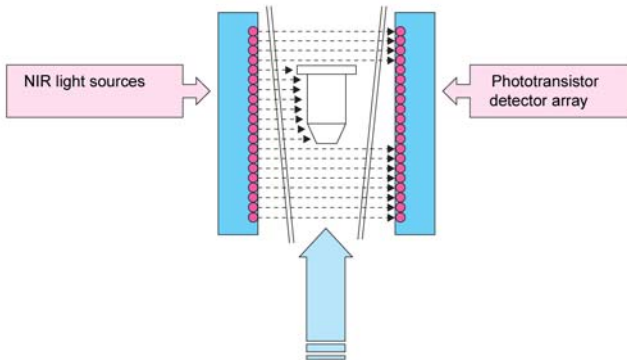
DUO	PF	200	-	Valve	Output	Liquid	-	Units	Range	-	Tube	-	Option	
													1-5V	Output 1 – 5 VDC for full range
													1-10V	Output 1 – 10 VDC for full range
													W	Plug in base of flow tube welded in place
											21			TV1/4 tubing
									MAX					List maximum flow rate – see table below
								A						mL/min
								B						L/min
								Z						List other units at end of Model Number
						1								Pure water
						9								List other liquids at end of Model Number
					9									4 – 20 mA output – specify other outputs in Option item
				0										No needle valve
				2										Upper needle valve
				9										For needle valve in other locations describe at end of Model Number

Example of Model Number

DUO - PF 200 - 0 9 1 - B 1 - 21 - W - List Special requirements

How it works

The PTFE float finds an equilibrium position where its weight is supported by the upward force of the flowing liquid. The float blocks the transmission of NIR radiation from 20 point sources from reaching detector elements in the shadow of the float. The position of the float is computed from the shadow location and the result converted to an electrical output proportional to flow rate.



Flow ranges

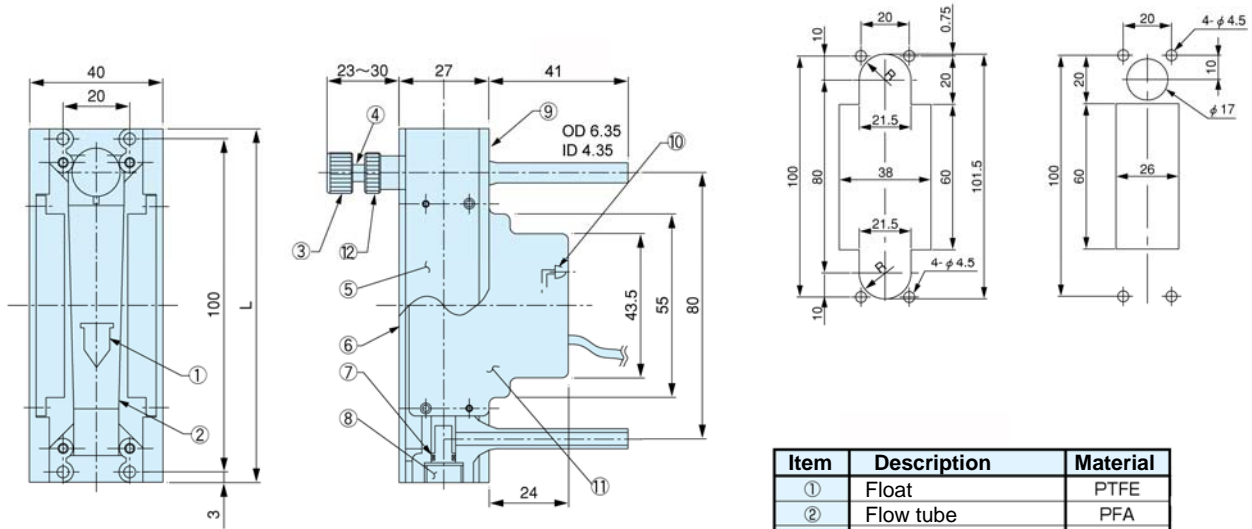
mL/min	L/min
5 ~ 15	0.1 ~ 1.0
10 ~ 40	0.2 ~ 1.5
10 ~ 100	
50 ~ 150	
50 ~ 250	
100 ~ 500	

All flow rates are stated for water at 20°C. For ranges for other fluids contact Tech@Proteusind.com or call 650 964 4163 and ask for Technical Support

Specifications

Flow Accuracy	± 5% of full scale
Output Accuracy	± 5% of full scale
Maximum operating pressure	50 psi 0.35 MPa
Maximum liquid temperature	40°C
Ambient temperature	0 ~ 40°C non-dewing
Output signals	4 – 20 mA, 1 – 5 V, 1 - 10 V
Output performance	Resolutions of ~ 150
Power Supply	12 ~ 24 VDC
Cable length	2m

Dimensional Drawings



Item	Description	Material
①	Float	PTFE
②	Flow tube	PFA
③	Knob	PCTFE
④	Needle valve	PFA
⑤	Side plate	PBT
⑥	Front plate	PVC
⑦	O-ring	PF
⑧	Plug	PFA
⑨	Back plate	PVC
⑩	Photodiode	
⑪	Case	PBT
⑫	Sealing glands	PCTFE

Exceptional flowmeters by **TOFCO**

World-class support by **Proteus**

Information in this document was correct at the time of printing however specifications are subject to alteration as continuous improvement processes establish new capabilities

© Proteus Industries Inc. May 2006 DS DUOFLO-001



Proteus Industries Inc.

340 Pioneer Way, Mountain View, CA 94041

www.proteusind.com sales@proteusind.com

tel (650) 964-4163 fax (650) 965-0304