

DPW Digital Paddlewheel

1% FS, Flow and Optional Temperature Readings, Programmable Output



The Series DPW Digital Paddlewheel is an economical choice for applications where liquid flow measurement is desired. The user-friendly interface allows for easy manipulation of the paddlewheel's many different programmable features including high/low flow and temperature alarms, totalizer and flow pulse outputs. Rugged, chemical resistant lower block material ensures high reliability and longevity for use in harsh environments. Supports up to 29 Engineering Units, including user defined ones, making the DPW suitable for any application. Flow meter parameters and functions can be programmed remotely via the RS-232/RS-485 interface or locally via optional LCD/ key pad.

FEATURES

- · Jewel bearings allow for very low minimum flow rates.
- Multiparameter: flow and optional temperature measurements.
- · Polypropylene and chemically resistant PVDF models.
- Supports up to 29 engineering units.
- · Two programmable totalizers and flow pulse output.
- Programmable high/low flow and optional temperature alarms with preset action delay interval.
- · Two sets of user-programmable optically isolated outputs.
- User-selectable (via jumpers) analog 0 to 5 VDC or 4 to 20 mA flow and optional temperature outputs.
- RS-232 or RS-485 Digital Interface with multi-drop capability of up to 256 units (RS- 485 option).
- Local key pad and 2x16 characters LCD display with adjustable back light (optional).
- Enclosure weather tight to IP65 standards.
- Free communication software with temperature and flow data log-in capability.

SPECIFICATIONS

Service: Liquids compatible with wetted materials.

Wetted Materials:

DPW-XP: Polypropylene; Seals (see options in model chart), PVDF and nickel tungsten carbide paddlewheel, acrylic lid; Bearings: PVDF sapphire; DPW-XT: PVDF; Seals (see options in model chart), PVDF and zirconia ceramic paddlewheel, PVDF lid; Bearings: PVDF sapphire.

Accuracy: ±1% FS.

Repeatability: ±0.25% FS.

Response Time: 1 second above 10% of FS, 2 seconds below 10% of FS. **Output Signal:** Linear 0 to 5 VDC (3000 Ω min. load impedance); 4 to 20 mA (500 Ω max. loop resistance) for flow and temperature option; Pulse output: 3.3 VDC, 3K min. load impedance.

Electrical Connection: 12 pin cable.

- Digital Interface: RS-232; RS-485.
- Temperature Limits: 14 to 140°F (-10 to 60°C).
- Pressure Limit: 10 bar (150 psig).
- Power Requirements: 11 to 26 VDC.
- Display: 2 row, 16 character LCD with backlight (optional).

Process Connections:

- DPW-05: 3/8" FNPT; DPW-10: 1/2" FNPT;
- DPW-17: 3/4" FNPT; DPW-35: 1" FNPT.
- Enclosure Rating: IP65.

Weight: 1.60 lb (0.73 kg).

Example	DPW	05	Р	E	L	N	A	2	DPW-05-P-E-L-N-A-2
Series	DPW								Flow Transmitter
Orifice Size		05							0.04 to 5 gal/min (0.15 to 18.9 L/min)
(Max. Flow Range)		10							0.08 to 10 gal/min (0.3 to 37.6 L/min)
		17							0.15 to 17 gal/min (0.6 to 64.4 L/min)
		35							0.35 to 35 gal/min (1.3 to 132.5 L/min)
Material Lower			Ρ						Polypropylene
Block			Т						PVDF
Seals				E					EPDM
				Т					PTFE
				В					Buna-N
				V					Fluoroelastomer
Display/Keypad					Ν				No Display/No Keypad
					L				LCD/Keypad
RTD Option						N			No RTD
						R			RTD
Output Signal							A		0 to 5 VDC
							В		4 to 20 mA
Digital Interface								2	RS-232
								5	RS-485

ACCESSORY

A-CBL12, 12 Pin Stripped End Cable, 10 ft

FLOW