800 COMPACT LOW-COST PVDF FLOW SENSOR
FOR CHEMICALS AND FOOD & BEVERAGE LIQUIDS

standard version with Ø8 / Ø12mm hose tails

push-in fittings version Ø3/8 (9,5mm) and M12 connector

1/8"BSP threaded connection version

DESCRIPTION

800 Series flow sensors are designed to offer high performance at a competitive price, featuring six flow ranges from a minimum of 0.05 to a maximum of 15 l/min. Their entirely non-metallic wetted components make them the ideal choice for measuring aggressive chemicals, including ultra-pure water. The sensor is NSF certified, making it suitable for food and beverage dispensing. The bearings are made of sapphire to ensure long life and reliability; the body is made of molded PVDF as standard, and the O-ring seal is standard in Viton® but other materials are also available. The standard version, which is the most cost-effective, features direct connections with Ø8 and Ø12 mm hose tails. 800 Series sensors are also available with 1/8"BSP female threaded connections or a Ø3/8" (9.5mm) suitable for John Guest-type push-in fittings.

GENERAL SPECIFICATIONS

Range	min.0,05 max 15 l/min
Linearity	±1% - 1,5% - 2% F.S.
Repeatability	±0,1%
Connections	Hose tails Ø8/Ø12 mm; option 1/8"BSP female; Ø38" (9,5mm)
Body materials	PVDF; option PP
Rotor materials	PVDF with over-moulded protected magnets
Bearings materials	Zapphire
O.ring materials	Viton®; EPDM; NBR; Silicone; Kalrez®
Pressure	10 bar
Temperature	-25°C…125°C; (max 60°C PNP+NPN M12 connector version)
Output	NPN pulses; PNP+NPN with 2 leds
Power supply	4,5…24Vdc
Protection grade	IP67
Weight	0,05 Kg

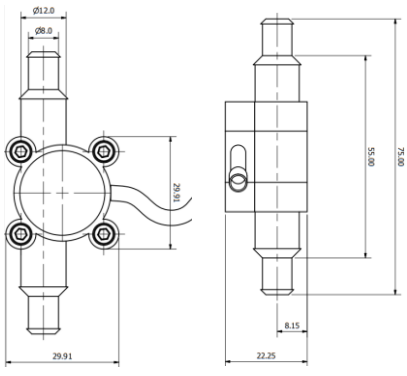
IDEAL FOR

- **Liquid batching / dosing**
- **Food and beverage**
- **Laboratory tests**
- **Cooling equipment**
- **Active flow alarms**
- **Semiconductor plant**

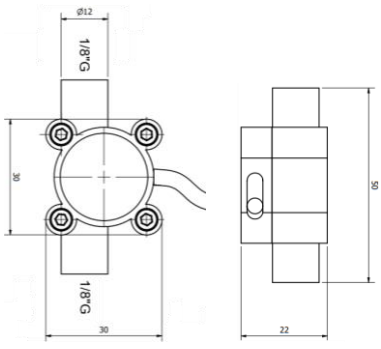
THECNICAL SPECIFICATIONS

Model	Orifice	Range l/min	Range l/h	Linearity	Frequency	K factor
803	1 mm	0,05…0,5 l/min	3…30 l/h	± 2% F.S.	142 Hz	17000
815	2 mm	0,12…1,5 l/min	7,2…90 l/h	± 2% F.S.	175 Hz	7000
845	3 mm	0,20…4,5 l/min	12…270 l/h	± 1,5% F.S.	260 Hz	3500
865	4 mm	0,25…6,5 l/min	15…390 l/h	± 1,5% F.S.	230 Hz	2100
810	5 mm	0,30…10 l/min	18…600 l/h	± 1% F.S.	235 Hz	1420
824	6 mm	0,50…15 l/min	30…900 l/h	± 1% F.S.	245 Hz	980

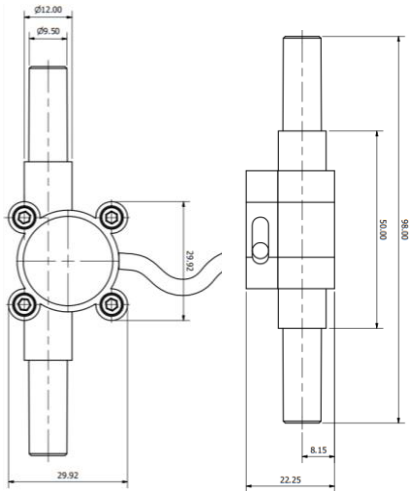
DRAWINGS AND DIMENSIONS



standard version with Ø8 / Ø12mm hose tails

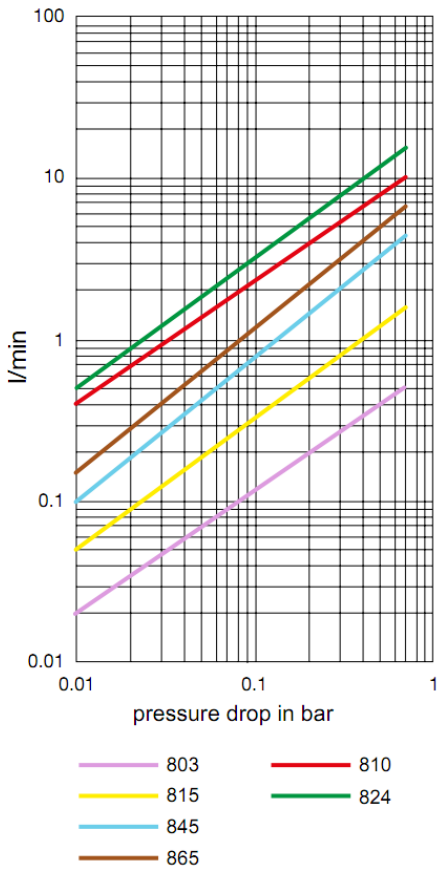


1/8"BSP female threaded version



Ø3/8" (9,5mm) for push-in fittings

PRESSURE DROP CHART



ORDER CODES

803	0,05…0,5 l/min (3…30 l/h)
815	0,12…1,5 l/min (7,2…90 l/h)
845	0,20…4,5 l/min (12…270 l/h)
865	0,25…6,5 l/min (15…390 l/h)
810	0,30…10 l/min (18…600 l/h)
824	0,50…15 l/min (30…900 l/h)
	O.RING
V	Viton® *(standard)*
E	EPDM
N	Nitrile
S	Silicone
K	Kalrez®
	OUTPUT
0	NPN (Temp. max 125°C) with 1,8 m cable *(standard)*
2	NPN + PNP (Temp. max 60°C) with M12 connector and 2 leds
	MATERIAL
P	PVDF
	CALIBRATION
U	Uncalibrated *(standard)*
O	With calibration report
	OPTIONS
JG	Ø3/8" (9,5 mm) connections for push-in fittings
S	1/8"BSP female threaded ports
POLY	Polipropilene body

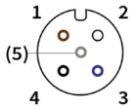
815-VOP-U = *0,12-1,5 l/min, o.ring Viton, out NPN, 1,8m cable, PVDF body, no calibration*

ELECTRICAL CONNECTIONS

standard version with 1,8 cable and 3 lead wires

Red	+Vdc
Blue	NPN
Screen	-Vdc

M12 version

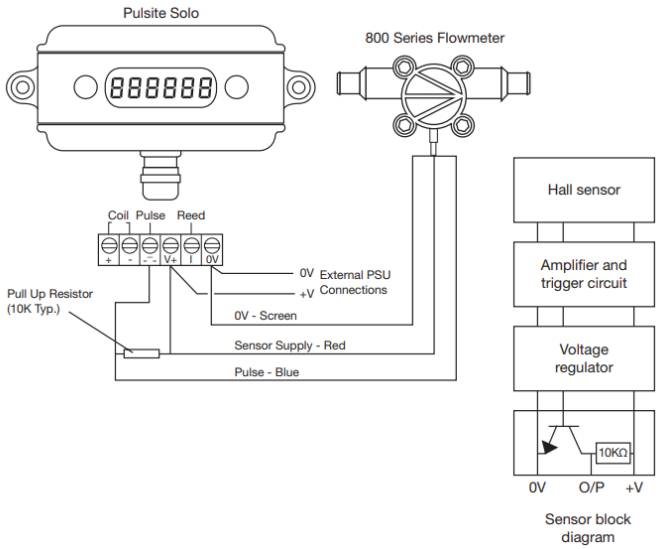


1	+Vdc
2	PNP
3	-Vdc
4	NPN

It is recommended that all signal cables are screened and run separately to power lines and switched inductive loads and are located well away from inverters and other noisy apparatus. Always use sound wiring practice. Hall effect sensors (NPN or PNP) require an external pull-up resistor connected between the output and a suitable power supply to attain a pulse.

Do not use compressed air to test the sensor.

WIRING EXAMPLE



Wiring example with a digital flow-totalizer indicator "Pulsite Solo" (to order separately)