

Shuttle Flow Switch (Reed Type)

BW2 General Purpose Shuttle Flow Switch



General Description

The BW2 Series is a durable, general-purpose shuttle-type flow switch designed for reliable flow detection in high-volume lubrication, cooling, and process systems. Featuring a straight-through flow path for minimal pressure drop, it is constructed from bronze or stainless steel for long service life in water or oil applications.

Key Features

Fixed Set Point: Pre-calibrated for precise flow detection.

High Accuracy: $\pm 1\%$ maximum deviation in set point repeatability.

Wide Flow Range: 0.5 to 100 GPM across multiple port sizes.

Robust Construction: Bronze or 316 stainless steel housing, Teflon® shuttle, 316 stainless steel spring.

Low Pressure Drop: Straight-through flow path design.

Broad Operating Temperature: -30°C to $+150^{\circ}\text{C}$

Application

- High-volume lubrication systems
- Cooling system flow monitoring
- Industrial process flow detection
- Pump protection
- HVAC and water treatment
- Oil circulation systems



Environmental & Mechanical Specifications

Item	Specification
Housing Material	Bronze or 316 Stainless Steel
Shuttle Material	Teflon®
Bonnet Material	Bronze or Stainless Steel
Spring Material	316 Stainless Steel
Max Operating Pressure	400 PSIG (27.6 bar) @ 38°C
Proof Pressure	800 PSIG (55.2 bar) @ 38°C
Operating Temperature	-30°C to +150°C
Set Point Accuracy	±1% maximum deviation
Set Point Differential	15% maximum
Repeatability	1% maximum
Filtration Recommendation	150 micron filter recommended
Minimum Line Pressure	5 PSI required

Electrical Specifications

Item	Specification
Switch Type	SPST (Single-Pole Single-Throw)
Switch Configuration	Form C (SPDT) – NC, Common, NO
Electrical Rating	20 VA
Electrical Termination	No. 18 AWG polymeric lead wires, 24" length
Wire Colors	Red (NC), Black (Common), Orange (NO)

Important Notes:

- 1, Flow settings are calibrated with water at +20°C in horizontal orientation (leads up).
- 2, Viscosity changes will affect setpoints (typically decreases with higher viscosity).
- 3, A 150-micron filter is recommended for extended service life.
- 4, Consult factory for fluids other than water or special calibration requirements.



Part Number Naming

BW2 – XXX – X – X

Code	Description
BW2	Shuttle Series
XXX	Flow Setting
X	Housing Material: B=Brass/ S=Stainless Steel/ P=Plastic
X	Contact Form: A = NO / B = NC / C = Changeover
XXX	Additional customize information

Part Number	Flow Setting (GPM)	Housing Material	Port Size
BW2-005-B-A	0.5	Bronze	1" NPT
BW2-005-S-A	0.5	Stainless Steel	1" NPT
BW2-010-B-A	1	Bronze	1" NPT
BW2-010-S-A	1	Stainless Steel	1" NPT
BW2-020-B-A	2	Bronze	1" NPT
BW2-005-S-A	2	Stainless Steel	1" NPT
BW2-015-B-A	1.5	Bronze	1½" NPT
BW2-030-B-A	3	Bronze	1½" NPT
BW2-020-B-A	2	Bronze	2" NPT
BW2-020-S-A	2	Stainless Steel	2" NPT
BW2-040-B-A	4	Bronze	2" NPT
BW2-040-B-A	4	Stainless Steel	2" NPT