

Ajax

Series **XP** FLAMEPROOF ELECTRIC FLOW INDICATORS



CE
0518



I M2 / II 2G
EExd I / IIB + H₂ T6

- **SIRA** Certificate No: 03ATEX1507 Issue 1
EU Directive 94/9/EC (ATEX Directive)
CENELEC BS EN 60079-0, BS EN 60079-1
(Zones 1 and 2 Hazardous Areas)
- **Weatherproof Enclosure in BS EN 1982 LG2/LG4 or Stainless Steel BS 3100 316C16.**
Environmental Protection Approval to IP66 according to IEC-144.
- **Versatility of Switching Circuits.**
- **Rugged Construction, Vibration and Shock Resistant.**
- **Range ¾" to 16" bore**
Flow range 25 litres/min to 20,000 litres/min.
- **Low pressure drop**
- **Visual indication of flow.**

The Bamford Ajax XP series of Flameproof Electric Flow Indicators are a proven generation of ruggedly constructed devices for automatic control and reliable protection of plant and machinery in hazardous areas. The units can be mounted in horizontal, vertically upward or downward attitudes. The functionally designed enclosure is standard on all models to meet the arduous conditions experienced in the petro-chemical, offshore, and mining industries. The certified enclosure is available with one or two cable entries for fitting with approved glands and contains a precision snap-action microswitch of the single pole, double throw type. However, one or two microswitches with silver plated noble metal contacts may be fitted to provide versatility of switching circuits, which may be factory set or field adjustable.

The flow indicator is specifically designed to warn instantly of a failure or change of flow in a liquid system. Based on simple principles, the flow induced movement of a hinged flap is converted by eccentrically mounted bearings into a rocking motion of a vertical rod, which, pivoted about a special double seal, operates at its upper end the adjustable microswitch, or switches. The materials of construction cater for the majority of liquids, with the toughened glass viewing windows offering a visual indication of flow.

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Specifications

Screwed connections -

¾" to 3" nom. bore female
BSP parallel or taper, NPT.

Flanged connections -

¾" to 16" BST 'D', BST 'E', ASME B16.24,
Class 150 & 300.
BS EN 1092-3; NP6, NP10, NP16 or NP40.

Maximum working pressure standard version

all models - 7 BAR G

Maximum working pressures high pressure version (screwed connections) -

¾" to 2½" nom. bore - 28 BAR G
3" nom. bore - 21 BAR G.

Maximum working pressures high pressure version (flanged connections) -

¾" to 2½" - 28 BAR G
3" - 21 BAR G
4" - 17.5 BAR G
5" to 6" - 14 BAR G
8" to 16" - 7 BAR G

Ambient temperature range of switch enclosure:

-20°C to +40°C

Maximum operating temperature range of working medium:

-10°C to +93°C

SWITCH RATING (STANDARD)

VOLTS	DC		AC	
	RES	IND	RES	IND
30	10A	10A	10A	10A
125	0.5A	0.07A	10A	10A
250	0.25A	0.03A	10A	10A

Alternative switches may be fitted for 440 volts or intrinsic safe circuits.

Cable entry:

Either one or two M16, M20 or M25 x 1.5 pitch

Connector size - 0.5mm² - 2.5mm²

Earthing screws M5.

Materials of construction:

- **Switch housings:**

Gunmetal BS EN 1982 LG2/LG4, or
Stainless Steel BS 3100 316C16.

- **Indicator Body and Flap:**

Gunmetal BS EN 1982 LG2/LG4, or
Stainless Steel BS 3100 316C16.

- **Wetted parts:**

Stainless Steel 316 or
Manganese Bronze BS2874 CZ114

- **Window glass:**

Toughened soda lime BS 3463

- **Window joint:**

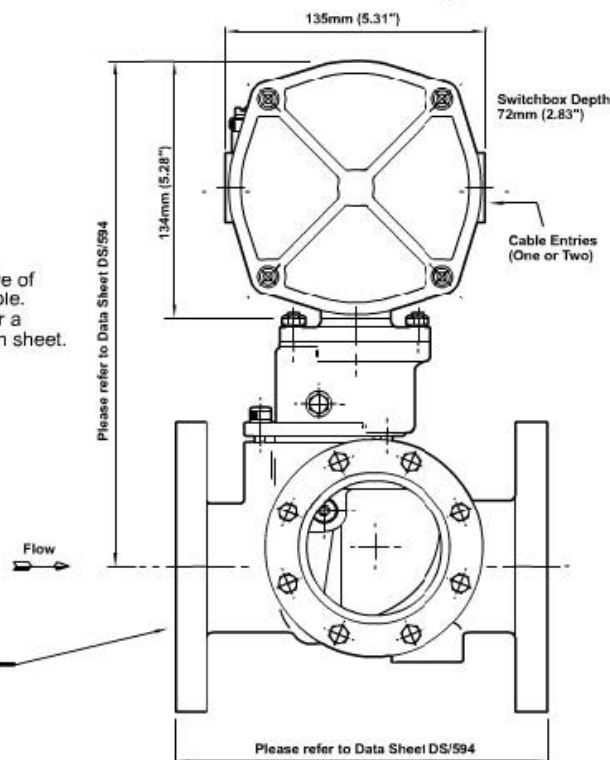
Non-asbestos fibre BS 7531 Grade Y

- **Internal seals:** Viton

(Other materials available to special order)

Dimension Drawing

This drawing is representative of the range of switches available. Please consult the factory for a detailed drawing/specification sheet.



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