K11 Level Switch



Application Description

K11 level switches are suitable for high pressure applications like pressurized vessels, HVAC and refrigeration, motors etc. They have bodies made of stainless steel and sensor dome made of glass. They are economical, dependable, and compact in size with overall dimensions of 59 x 27 mm and have no moving parts. These level switches use infrared technology for their operation. They have an operating temperature range of -40°C to 125°C. There is a programmable timer inside these K11 level switches that allows a delay time to be set for delaying the output switching. The output modes are closed in presence of liquids and open in air or vice versa.

The AC / DC output current is up to 100mA depending on model. These level switches can integrate electronic protections against transient over voltage, and reverse polarity (for DC models). They can withstand maximum pressure of 60 bar.

Operating Principle



The sensor contains an infrared-ray emitter and an optical receiver. In air (liquid not present), all the light emitted is reflected – internally – by the dome and then redirected to the receiver. When the liquid reaches the sensor dome, a big amount of the light emitted is lost in the liquid and the sensor senses its presence.

Technical Data

OPERATION MODE	Detect liquid presence with contact
REPEATABILITY	± 2 mm.
BODY MATERIALS	Stainless steel or Nickel plated steel
SENSIBLE DOME	Glass
ELECTRONIC PROTECTIONS	Transient over voltage, reverse polarity (for DC models)
MAX. TEMPERATURE RANGE	From –40°C up to +125°C
STORAGE TEMPERATURE	From –40°C up to +125°C
SUPPLY VOLTAGE	10 - 28 VDC or 24 VAC ± 10% 50 or 60 Hz
OUTPUT TYPE	AC output or NPN, NPN open collector, PNP for DC model
AC/DC OUTPUT CURRENT	Up to 100 mA Max (depending on temperature range)
OUTPUT MODE	Output Normally Open or Closed in the air
DELAY TIMES	Customizable depending on application needings
MAX PRESSURE	Up to 60 bar (burst 120 bar)
TORQUE TIGHTEN	15 Ntm

Electrical Connection



BN:BROWN BK: BLACK BU: BLUE



Mechanical Dimensions



Note. - Quotes in mm.



