



"Setting The Standard For Supplier Excellence"

Proximity Switch Model PAC-30U & PDC-30

- ▼ Solid State Operation
- ▼ 30mm Industry Standard Housing
- ▼ Available in AC or DC
- ▼ Easy Installation & Calibration
- ▼ 2-year Warranty



The models PAC-30U and PDC-30 proximity switches are solid state point level devices used to detect the absence or presence of bulk solids. The compact configuration makes this product ideal for tight spaces or low cost level detection. As material comes in contact with, or in close proximity to, the PAC-30U or PDC-30, an internal solid state switch is activated. The PAC-30U is AC operated (20-265 VAC) and is universal in that it is switch selectable for either normally open or normally closed operation. The PDC-30 is DC operated (10-40 VDC) and is available in either PNP or NPN configuration, each of which can be wired in either a normally open or normally closed operation mode.

PRINCIPLE OF OPERATION

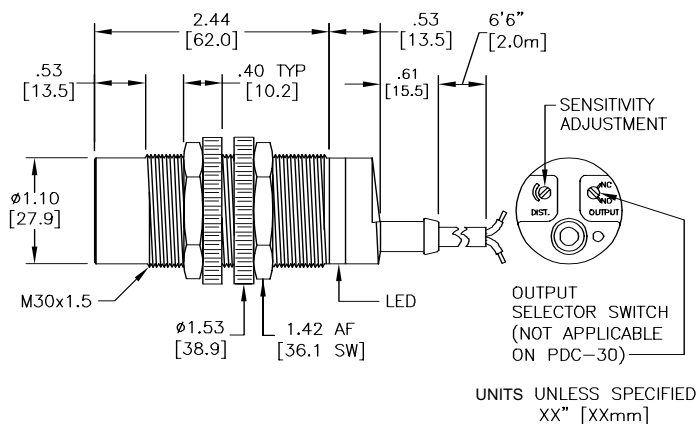
The PAC-30U and PDC-30 are RF capacitance-type level controls, which operate by detecting the electrical effect of the surrounding material such as air, plastic pellets or powders. A radio frequency is applied to the proximity switch sensing region and is continually analyzed to determine the influence of the surrounding environment. Since all materials have dielectric constants and conductance values that are different from that of air, the resultant impedance seen by the radio frequency changes whenever material approaches or contacts the sensing region. This influence is measured within the circuitry and compared with the reference point set by the sensitivity adjustment, which determines how much influence must be present before the output changes.



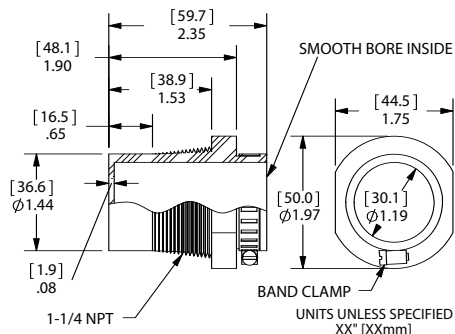
MECHANICALS

DIMENSIONS ARE SHOWN IN INCHES WITH MILLIMETER EQUIVALENT IN BRACKETS

PAC-30U/PDC-30



Mounting Well (Optional)



ORDERING INFORMATION

13 - 8 X X 1

OPERATING VOLTAGE

2 = PDC-30 (10-40 VDC)
3 = PAC-30U (20-265 VAC)

SWITCHING

3 = NPN (PDC-30 Only)
4 = PNP (PDC-30 Only)
5 = NO/NC Switchable (PAC-30U Only)

Sensor Mounting Well

13-2011 Mounting Well (Delrin®)
Pipe-Tapered Smooth-Bore, 1-1/4 x 11.5 NPT Outside Thread

SPECIFICATIONS

Model PAC-30U

Housing: Thermoplastic Polyester
Enclosure Protection: IP67 (NEMA 4 equivalent)
Power Requirement: 20-265 VAC, 45-65 Hz
Mounting Thread Size: M30 x 1.5
Sensing Distance: 4 to 25 mm adjustable
Indicator: LED, yellow
Output: Normally Closed or Normally Open, Switch Selectable

Leakage Current: < 2.5 mA
Load Current: 10-500 mA
Frequency of Operating Cycle: 25 Hz
Operating Temperature: -13° to 176° F (-25° to 80° C)
Max. Pressure: 1.4 psi
Max. Pressure (with mounting well): 125 psi
Electrical Connections: Cable, 6ft (1.8m), 18-20 AWG
Approvals: UL/CSA General Purpose; CE Mark

Model PDC-30

Housing: Thermoplastic Polyester
Enclosure Protection: IP67 (NEMA 4 equivalent)
Power Requirement: 10-40 VDC
Mounting Thread Size: M30 x 1.5
Sensing Distance: 4 to 25 mm adjustable
Indicator: LED, yellow
Output: 13-8231, NPN (sinking)
13-8241, PNP (sourcing)

Consumption: < 10.0 mA
Load Current: 0-200 mA
Frequency of Operating Cycle: 100 Hz
Operating Temperature: -13° to 176° F (-25° to 80° C)
Max. Pressure: 1.4 psi
Max. Pressure (with mounting well): 125 psi
Electrical Connections: Cable, 6ft (1.8m), 18-20 AWG
Approvals: CE Mark

WARRANTY

Monitor Technologies warrants each proximity switch it manufactures to be free from defects in material and workmanship under normal use and service within two (2) years from the date of purchase. The purchaser must give notify Monitor of any defects within the warranty period, return the product intact, and prepay transportation charges. The obligation of Monitor Technologies LLC under this warranty is limited to repair or replacement at its factory. This warranty does not apply to any product which is repaired or altered outside of Monitor Technologies' factory, or which has been subject to misuse, negligence, accident, incorrect wiring by others, or improper installation.

