

# Ultrasonic Sensors with Solid State Relay Output

P-1256-1  
819-0456

Technical Data Sheet

Model: UT30UP-DSS5-1016-CSHT  
Part Number: 7600-448-003

Model: UT30UP-DSS5-2032-CSHT  
Part Number: 7600-448-004



# Ultrasonic Sensors

## with Isolated Solid State Relay Outputs

fitted with Range and Hysteresis Control



Threaded plastic barrel  
M 30 x 1.5



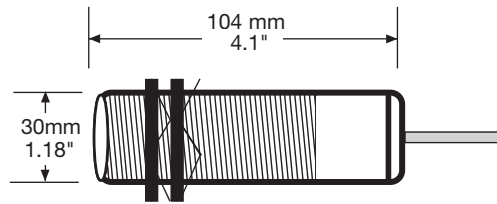
Threaded plastic barrel  
M 30 x 1.5

Sensing range		101..1016 mm (4-40")	203..2032 mm (8-80")
Switching functions/output		2 Solid State Relays	2 Solid State Relays
Ordering Information	Model description Part number	UT30UP-DSS5-1016-CSHT 7600-448-003	UT30UP-DSS5-2032-CSHT 7600-448-004
<b>Electrical data</b>			
Voltage range	min./max.	20-30V DC reverse polarity protected	20-30V DC reverse polarity protected
Input current		50mA	50mA
Transducer frequency		212 KHz	150 KHz
Short circuit protected		Yes	Yes
LED		Yes - green (not detecting), red (detecting)	Yes - green (not detecting), red (detecting)
Response time		30 mSec	50 mSec
Range control		Range and Hysteresis	Range and Hysteresis
<b>Mechanical data</b>			
Temperature range	min./max.	0°C/+60°C / 32°F/140°F	0°C/+60°C / 32°F/140°F
Degree of protection		IP 65/NEMA 12	IP 65/NEMA 12
Body material		Valox plastic	Valox plastic
Termination	cabl 2 m/6 ft. Plug/socket	PVC 4 x 22 gauge Versions available to order	PVC 4 x 22 gauge Versions available to order
Accessories		1) Brackets	1) Brackets
Humidity		0-95% non-condensing	0-95% non-condensing

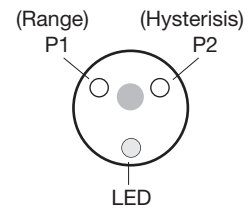
1) Brackets for M 30 x 1.5

**Ordering Information**  
 Plastic - BK5-D34PA  
 Part number 596-0223-041  
  
 Metal - M 30 ST  
 Part number 7430-448-003

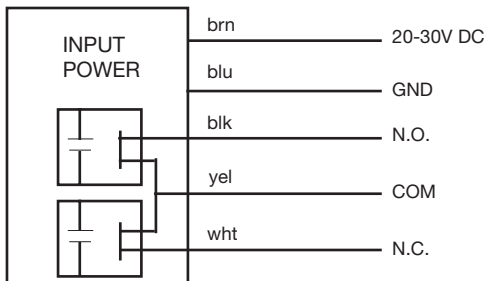
### Dimensions



### Adjustment Pots Detection and Hysteresis Control



### Wiring Data

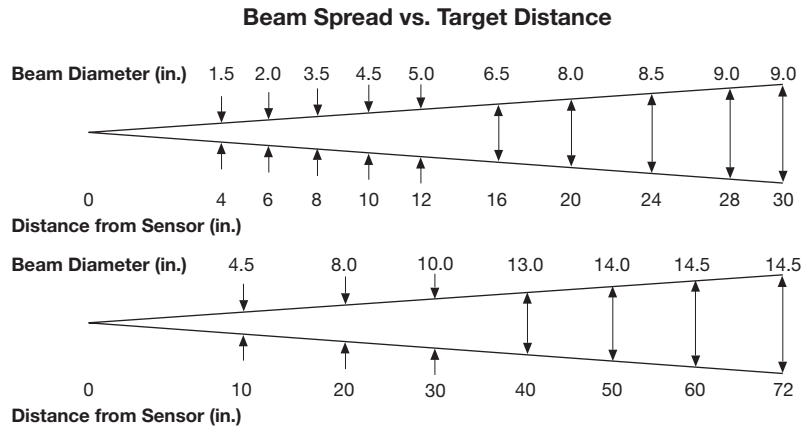
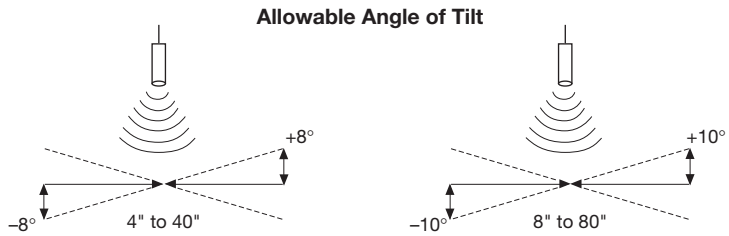


### Output Specification

- 2 x Solid state relays N.O. / N. C.
- 160V AC or V DC 100mA continuous
- Short circuit protected
- 1500 volts RMS isolation

# Ultrasonic Sensors

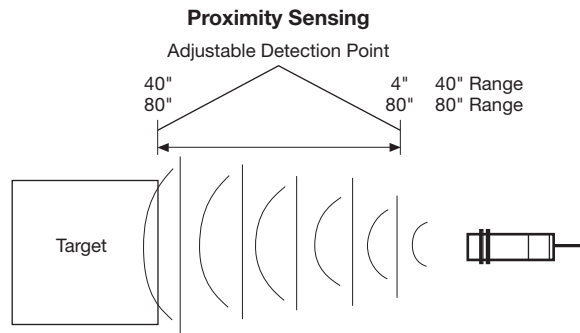
## Operation and Set-Up



## Proximity Sensing

Proximity detection is the detection of an object at a set distance. The sensing range is controlled by the "Range Control" potentiometer. Any object within the desired range is detected while objects beyond the set range are ignored. The sensing distance is dependent upon the sensor chosen, 40" or 80".

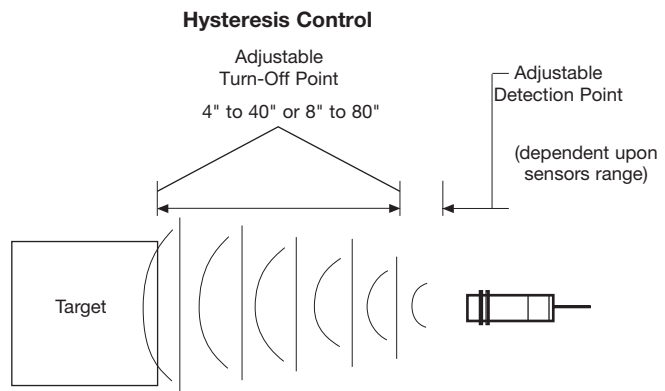
In the proximity mode of operation, the hysteresis potentiometer must be turned to 'off' by turning the pot counterclockwise.



## Hysteresis Control

The sensor is also fitted with a hysteresis control potentiometer. This control allows you to adjust the turn off point while the detection potentiometer sets the "turn on" point.

(Example: Range pot set for 10", hysteresis pot set for 20". With these settings the sensor will detect when the target reaches 10" and stays on as the target moves away to 20".) This hysteresis can be adjusted from .5" to 40" from the detect point with the 40" sensor and 1" to 80" with the 80" sensor.



## Sensors, Industrial Switches and Safety Technology Products

Warner Electric has many years of experience in applying sensors in motion control applications. Warner Electric's broad range of innovative and technologically advanced product range offers our customers the exact solution to satisfy their sensing applications.

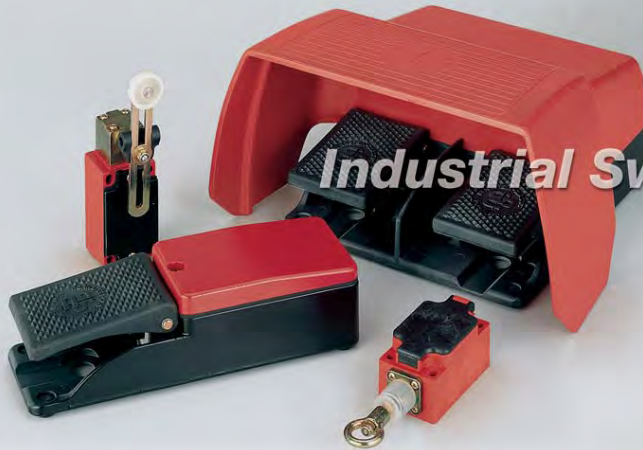
Our full product range is available through more than 800 distributor locations, throughout the United States, Canada and Mexico.

Local Sales Support is provided by a well trained sales force that is backed up by Application Engineering providing immediate technical support.

### Non-Contact Sensors



### Industrial Switches



#### **Non-Contact Sensors**

- Photoelectric Sensors
- Ultrasonic Sensors
- Inductive Proximity Sensors
- Capacitive Sensors
- Magnetic Sensors

#### **Industrial Switches**

- Limit Switches
- Foot Switches
- Cable Pull Switches

#### **Safety Technology Products**

- Safety Interlocks
- Cable Pull Switches
- Coded Magnetic Monitoring Systems

### Safety Technology Products



#### **Approvals and Certification**

Each model is individually identified with its own certification. Documentation is available upon request.



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