

GLOSSARY OF TERMS proxistor®

Minimum operating distance

The lower limit of the specified sensing range of an ultrasonic or photoelectric proximity switch.

Maximum operating distance

The upper limit of the specified sensing range of an ultrasonic or photoelectric proximity switch.

Dead band/blind zone

The zone between the sensing face and the minimum operating distance, where no object can be detected.

Total beam angle

The solid angle around the reference axis of an ultrasonic proximity switch, where the sound level drops by 3 dB.

Repeat accuracy (R)

The value of variation of the effective operating distance (S_r) under specified conditions.

Hysteresis/differential travel (H)

The distance between the operating point when the target approaches the proximity switch and the release point when the target moves away.

Switching element characteristics**Switching element function****Normally open/make function**

A normally open or make function causes load current to flow when a target is detected and load current not to flow when a target is not detected.

Normally closed/break function

A break function causes load current not to flow when a target is detected and load current to flow when a target is not detected.

Changeover or makebreak function

A switching element combination which contains one make function and one break function.

Response time for a proximity switch

The time required for the device switching element to respond after the target enters or exits the sensing zone.

Turn on time for a photoelectric proximity switch

The time required for the switching element to respond after the target enters the sensing range.

Turn off time for a photoelectric proximity switch

The time required for the switching element to respond after the target exits the sensing range.

Independent (snap) action

A switching element function substantially independent from the velocity of the target.

Frequency of operating cycles (f)

Number of operating cycles performed by a proximity switch during a specified period of time.

Maximum switching frequency

Highest switching frequency available with a particular proximity switch.

Time delay before availability (t_v)

The time between the switching on of the supply voltage and the instant at which the proximity switch becomes ready to operate correctly.

Currents**Off-state current (I_o)**

The current which flows through the load circuit of the proximity switch in the OFF-state.

Minimum operational current (I_m)

The current which is necessary to maintain ON-state conduction of the switching element.

No-load supply current (I_e)

The current drawn by a three or four-terminal proximity switch from its supply when not connected to a load.

Ambient light for a photoelectric proximity switch

The light received by the receiver other than that originating from the emitter.



Deeter Electronics Ltd follows a policy of continual development of its products and reserves the right to change specifications and/or features without notice

Deeter Electronics Ltd. Deeter House, Valley Road, Hughenden Valley, Bucks. HP14 4LW

Tel: +44 (0) 1494 566046 Fax: +44 (0) 1494 563961 Email: sales@deeter.co.uk

www.deeter.co.uk