

RESISTANCE TO MECHANICAL SHOCKS AND VIBRATIONS

Shock by EN 60068-2-27

- Max acceleration: 50 gn
- Impulse time: 11 ms

Vibrations by EN 60068-2-6

- Frequency range: 10 ÷ 55 Hz
- Width: ± 2 mm.

DEGREE OF PROTECTION by EN60529

- IP 65: spouting water from all directions.
- IP 67: immersion for 30 min. in 1 m. depth of water
- IP 68: extended immersion in water at conditions agreed between user and manufacturer.
Please contact our technical office for further details.

DESCRIPTION OF THE TECHNICAL TERMS IN THE CATALOGUE

RATED OPERATING DISTANCE (S_n)

The rated operating distance is a conventional quantity used to designate the operating distance. Manufacturing tolerances and external factors are not taken in account. In fig. 1 we can see the relation between the operating distance (S_n, S_r, S_u) and the hysteresis (H).

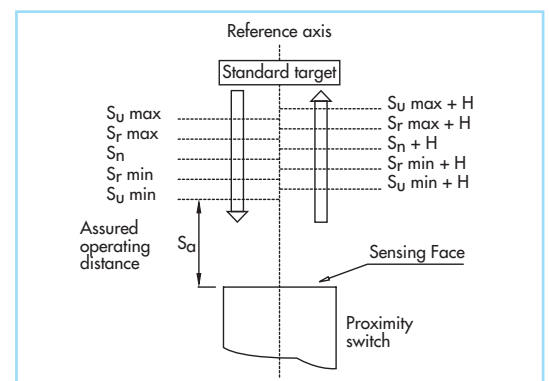


Fig. 1

STANDARD TARGET

The target used for the distance survey is built with an FE360 square steel sheet 1mm thick and on the side it is like the diameter of the circle on the active surface of the sensing face, or either three times the rated operating distance S_n if this is more than the diameter. If the object to survey is of a different material, you can have the rated operating distance by multiplying the effective operating distance (S_r) by one of these reduction factors:

Inductive Sensors

- stainless steel 0,3 ÷ 0,4
- brass 0,35 ÷ 0,50
- aluminum 0,35 ÷ 0,50
- copper 0,25 ÷ 0,45

Capacitive Sensors

- metal 1
- water 1
- PVC 0,5
- wood 0,25
- clothes 0,15
- paper 0,1

These reductions are not valid for the slot types, on which the switching point is almost independent by the metal used.