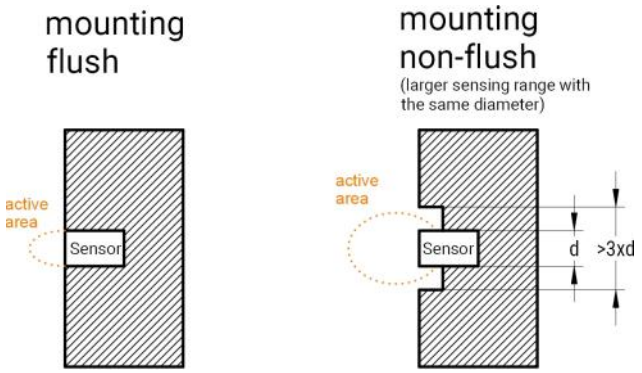
# Assembly informations

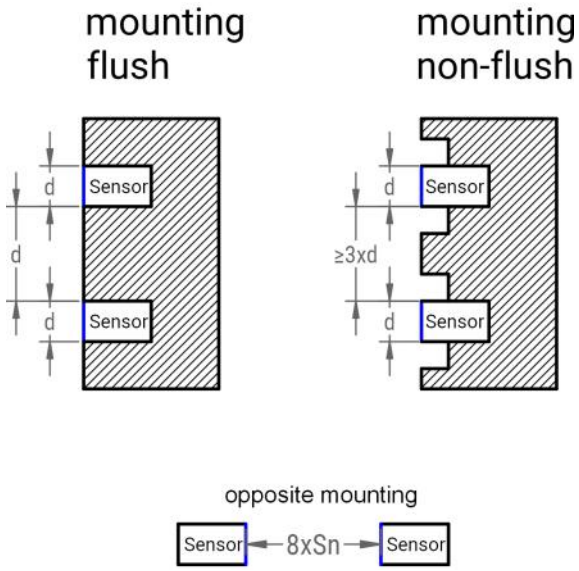



## flush mounting:

The sensor can be installed flush and is not affected by the surrounding material, which means that these sensors are mechanically protected and less sensitive than non-flush sensors. The switching distance is smaller than with non-flush mounting.

## non-flush mounting:

The sensor is not installed flush, which has the advantage that it has a higher switching distance because it is not shielded from the outside.




## Mutual influence:

If you want to use several proximity switches of the same type next to each other, certain minimum distances between the devices must also be observed. The minimum distances shown in the following figure should be observed as a rule of thumb.

**flush mounting sensor:**
Minimum distance should correspond to (d).

**non-flush mounting sensor:**
Minimum distance should correspond to (3xd) .

**opposite mounting:;**
Minimum distance should correspond to (8xSn) .

(d) = diameter
(Sn) = sensing range

## reduction factor / correction factor sensing range

### inductive sensors

| material | reduction factor |
|---|---|
| steel | 1,00 |
| cast iron | 0,93 ... 1,05 |
| stainless steel | 0,60 ... 1,00 |
| nickel | 0,65 ... 0,75 |
| brass | 0,35 ... 0,50 |
| aluminum | 0,30 ... 0,45 |
| cooper | 0,25 ... 0,45 |

### capacitive sensors

| material | dielectric constant | reduction factor |
|---|---|---|
| steel (St37) | > 100 ... 10 000 | 1 |
| water | 80 | 1 |
| alcohol | 22 | 0,75 |
| glas | 5 ... 16 | 0,6 |
| ceramic | 4 ... 7 | 0,5 |
| PVC | 2,3 ... 3,4 | 0,45 |
| wood (dry) | 3 ... 7 | 0,3 |
| oil | 2,6 ... 2,9 | 0,28 |
| paper (dry) | 1,6 ... 2,6 | 0,25 |
| air | 1 | 0 |

**Safety instructions:**
Do not look permanently into the beam of laserlight. Installation, electrical connection, operation and maintenance of the unit must be carried out by qualified personnel authorised by the machine operator.Eickmann sensors are not to be used for safety applications in which safety of persons depends on proper operation of the instruments.

We reserve the right to make technical alterations without prior notice.