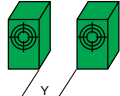
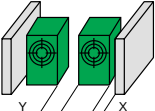
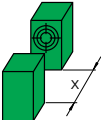
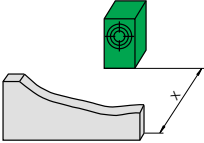


## Cuboid proximity switches

### Series -F9, -F10, -F11

| Type         | Installation    |           |     |           |     |      |     |           |     |     |
|--------------|-----------------|-----------|-----|-----------|-----|------|-----|-----------|-----|-----|
|              | Dimensions [mm] | A         | Y   | A         | Y   | Y    | X   | A         | Y   | X   |
| NBB5-F9...   | flush           | no effect | ≥ 0 | no effect | ≥ 0 | ≥ 34 | ≥ 0 | no effect | ≥ 0 | ≥ 0 |
| NBN10-F10... | not flush       | -         | -   | -         | -   | -    | -   | no effect | ≥ 0 | ≥ 1 |
| NBN15-F11... | not flush       | -         | -   | -         | -   | -    | -   | no effect | ≥ 0 | ≥ 7 |

### Series -F1 and -V3

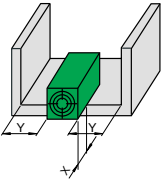
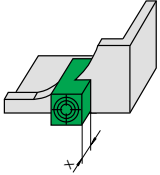
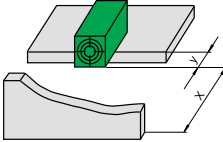
| Type       | Installation    |  |  |      |  |  |
|------------|-----------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|            | Dimensions [mm] | Y                                                                                 | Y                                                                                 | X    | X                                                                                  | X                                                                                   |
| NBB2-F1... | flush           | ≥ 0                                                                               | ≥ 0                                                                               | ≥ 0  | ≥ 15                                                                               | ≥ 6                                                                                 |
| NBB4-F1... | flush           | ≥ 0                                                                               | ≥ 0                                                                               | ≥ 0  | ≥ 20                                                                               | ≥ 12                                                                                |
| NBB2-V3... | flush           | ≥ 2                                                                               | ≥ 2                                                                               | ≥ 0  | ≥ 15                                                                               | ≥ 6                                                                                 |
| NBB3-V3... | flush           | ≥ 10                                                                              | ≥ 11                                                                              | ≥ 0  | ≥ 23                                                                               | ≥ 9                                                                                 |
| NBN8-F1... | not flush       | ≥ 45                                                                              | ≥ 45                                                                              | ≥ 15 | ≥ 70                                                                               | ≥ 24                                                                                |

### Series -F, -F41, -F29, -F79, -F17, -F33, -F76, -F148

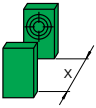
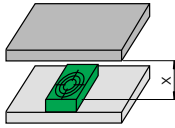
| Type          | Installation    |      |     |      |     |       |
|---------------|-----------------|------|-----|------|-----|-------|
|               | Dimensions [mm] | A    | Y   | A    | Y   | Y     |
| NJ6-F...      | flush           | ≤ 12 | ≥ 0 | ≤ 12 | ≥ 0 | ≥ 0   |
| NBB1,5-F41... | flush           | ≤ 8  | ≥ 0 | ≤ 8  | ≥ 0 | ≥ 0   |
| NBN4-F29...   | not flush       | ≤ 5  | ≥ 0 | ≤ 2  | ≥ 0 | ≥ 13  |
| NBB1,5-F79... | flush           | ≤ 5  | ≥ 0 | ≤ 5  | ≥ 0 | ≥ 0   |
| NBB10-F17...  | flush           | ≤ 7  | ≥ 0 | ≤ 7  | ≥ 0 | k. A. |
| NBB5-F33...   | flush           | ≤ 10 | ≥ 0 | ≤ 10 | ≥ 0 | ≥ 0   |
| NBB8-F33...   | flush           | ≤ 10 | ≥ 0 | ≤ 10 | ≥ 0 | ≥ 0   |
| NBB2-F76...   | flush           | ≤ 5  | ≥ 0 | ≤ 5  | ≥ 0 | ≥ 15  |
| NBB8-F148...  | flush           | ≤ 20 | ≥ 0 | ≤ 20 | ≥ 0 | ≥ 0   |
| NBB15-F148... | flush           | ≤ 50 | ≥ 0 | ≤ 50 | ≥ 0 | ≥ 0   |

In individual cases deviations are possible due to exemplary dispersion

Series -F9, -F10, -F11, continuation of page 1

|                                                                                   |          |           |                                                                                   |  |                                                                                    |          |              |
|-----------------------------------------------------------------------------------|----------|-----------|-----------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------|----------|--------------|
|  |          |           |  |  |  |          | Type         |
| <b>A</b>                                                                          | <b>Y</b> | <b>X</b>  | <b>X</b>                                                                          |  | <b>X</b>                                                                           | <b>Y</b> |              |
| no effect                                                                         | $\geq 0$ | $\geq 0$  | $\geq 0$                                                                          |  | $\geq 10$                                                                          | $\geq 0$ | NBB5-F9...   |
| no effect                                                                         | $\geq 0$ | $\geq 5$  | $\geq 5,5$                                                                        |  | $\geq 30$                                                                          | $\geq 1$ | NBN10-F10... |
| no effect                                                                         | $\geq 0$ | $\geq 12$ | $\geq 17$                                                                         |  | $\geq 45$                                                                          | $\geq 7$ | NBN15-F11... |

Series -F, -F41, -F29, -F79, -F17, -F33, -F76, -F148 continuation of page 1

|                                                                                     |                                                                                     |               |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------|
|  |  | Type          |
| <b>X</b>                                                                            | <b>X</b>                                                                            |               |
| $\geq 63$                                                                           | $\geq 18$                                                                           | NJ6-F...      |
| $\geq 13$                                                                           | $\geq 5$                                                                            | NBB1,5-F41... |
| $\geq 25$                                                                           | $\geq 12$                                                                           | NBN4-F29...   |
| $\geq 11$                                                                           | $\geq 5$                                                                            | NBB1,5-F79... |
| k. A.                                                                               | $\geq 30$                                                                           | NBB10-F17...  |
| $\geq 40$                                                                           | $\geq 15$                                                                           | NBB5-F33...   |
| $\geq 64$                                                                           | $\geq 24$                                                                           | NBB8-F33...   |
| $\geq 20$                                                                           | $\geq 6$                                                                            | NBB2-F76...   |
| $\geq 50$                                                                           | $\geq 24$                                                                           | NBB8-F148...  |
| $\geq 100$                                                                          | $\geq 45$                                                                           | NBB15-F148... |

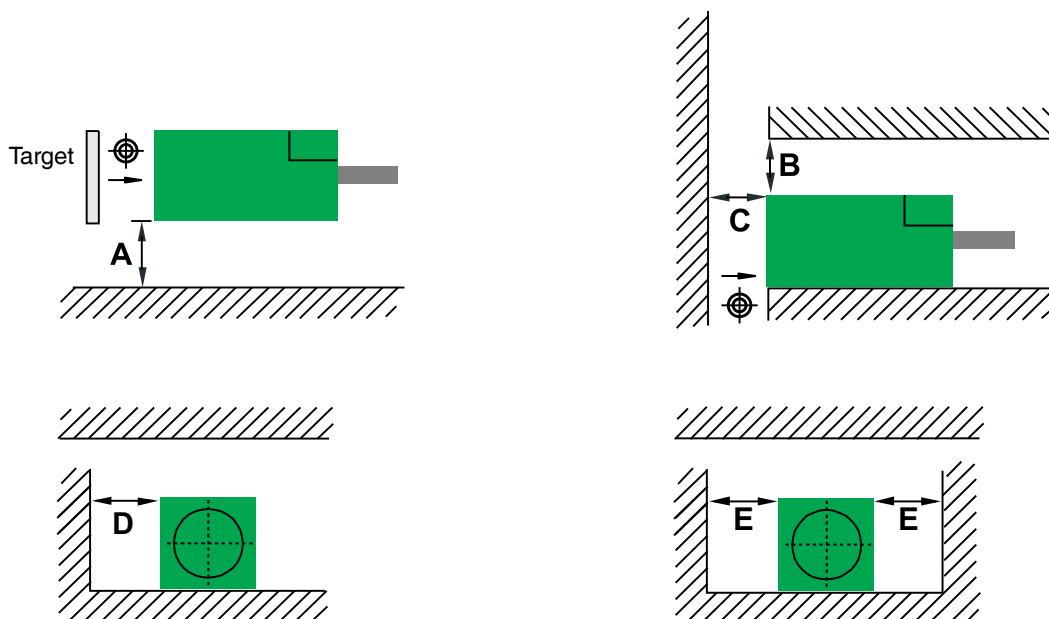


## Screw-on proximity switches

| Type          | Installation | Distance [mm] |    |    |    |    |    |    |
|---------------|--------------|---------------|----|----|----|----|----|----|
|               |              | A             | B  | C  | D  | E  | F  | G  |
| NJ2-F1-       | flush        | 0             | 0  | 6  | 0  | 0  | 12 | 16 |
| NBB2-V3-      | flush        | 0             | 0  | 6  | 0  | 0  | 0  | 10 |
| NJ4-F1        | not flush    | 0             | 12 | 12 | 18 | 24 | 24 | 32 |
| NBB5-F9-...   | flush        | 0             | 0  | 15 | 0  | 0  | 16 | 20 |
| NBN5-F7-...   | not flush    | 0             | 0  | 15 | 0  | 0  | 17 | 20 |
| NBN8-F7-...   | not flush    | 0             | 0  | 24 | 0  | 0  | 30 | 32 |
| NJ6-F-...     | flush        | 0             | 0  | 18 | 0  | 0  | 22 | 25 |
| NBB7-F10-...  | flush        | 0             | 0  | 20 | 0  | 0  | 25 | 30 |
| NBN10-F10-... | not flush    | 0             | 0  | 30 | 0  | 5  | 25 | 40 |
| NCB10-F17...  | flush        | 7,5           | 0  | 30 | 0  | 0  | 40 | 40 |
| NBN15-F11-... | not flush    | 0             | 0  | 45 | 0  | 10 | 30 | 60 |

### Note:

Not flush installed proximity switches must not be surrounded by metal on all sides.



## Mutual interference

To prevent the mutual interference between two similar sensors the minimum distances specified in these tables must be kept.

For applications where these distances cannot be maintained proximity switches with offset frequencies are available upon request. These can then be installed directly adjacent.

Please talk to our product specialist.

