

Gear Limit Switch  
GE 1 / GE 2



The Gear Limit Switch GE 1 / GE 2 is a rugged switching device designed for hoisting applications. The modular micro changeover contacts with positive opening operation. The device is programmed by means of stepless adjustment of double cam discs, which can be provided from 18° to 192° contact discs according to the switching program required.

The type GE 1 includes a double cam disc conjointly lockable.

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Technical data

|                         |                             |
|-------------------------|-----------------------------|
| Mechanical life GE1/GE2 | 10 million operating cycles |
| Operation temperature   | -40°C to +85°C              |
| Degree of protection    | IP65                        |
| Colour                  | RAL 7032 pebble grey        |

|              |                                                        | GE 1 | -10 | -4 | -P | Example                         |      |          |              |  |  |  |
|--------------|--------------------------------------------------------|------|-----|----|----|---------------------------------|------|----------|--------------|--|--|--|
| Basic unit   |                                                        |      |     |    |    |                                 |      |          |              |  |  |  |
| GE 1         | Gear Limit Switch GE 1 with mounting flange            |      |     |    |    |                                 |      |          |              |  |  |  |
| GE 2         | Gear Limit Switch GE 2 with mounting flange            |      |     |    |    |                                 |      |          |              |  |  |  |
| Gearing      |                                                        |      |     |    |    |                                 |      |          |              |  |  |  |
| Ratios:      | 2:1 to 10:1 example: 10:1 => 10                        |      |     |    |    |                                 |      |          |              |  |  |  |
|              | 11:1 to 20:1                                           |      |     |    |    |                                 |      |          |              |  |  |  |
|              | 21:1 to 40:1                                           |      |     |    |    |                                 |      |          |              |  |  |  |
|              | 41:1 to 80:1                                           |      |     |    |    |                                 |      |          |              |  |  |  |
|              | 81:1 to 160:1                                          |      |     |    |    |                                 |      |          |              |  |  |  |
|              | 161:1 to 320:1                                         |      |     |    |    |                                 |      |          |              |  |  |  |
| Limit switch |                                                        |      |     |    |    |                                 |      |          |              |  |  |  |
| 2            | 2 contacts                                             |      |     |    |    |                                 |      |          |              |  |  |  |
| 3            | 3 contacts                                             |      |     |    |    |                                 |      |          |              |  |  |  |
| 4            | 4 contacts                                             |      |     |    |    |                                 |      |          |              |  |  |  |
| 5            | 5 contacts                                             |      |     |    |    |                                 |      |          |              |  |  |  |
| 6            | 6 contacts                                             |      |     |    |    |                                 |      |          |              |  |  |  |
| 7            | 7 contacts                                             |      |     |    |    |                                 |      |          |              |  |  |  |
| 8            | 8 contacts                                             |      |     |    |    |                                 |      |          |              |  |  |  |
| 9            | 9 contacts                                             |      |     |    |    |                                 |      |          |              |  |  |  |
| 10           | 10 contacts                                            |      |     |    |    |                                 |      |          |              |  |  |  |
| 11           | 11 contacts                                            |      |     |    |    |                                 |      |          |              |  |  |  |
| 12           | 12 contacts                                            |      |     |    |    |                                 |      |          |              |  |  |  |
| 13           | 13 contacts                                            |      |     |    |    |                                 |      |          |              |  |  |  |
| 14           | 14 contacts                                            |      |     |    |    |                                 |      |          |              |  |  |  |
| 15           | 15 contacts                                            |      |     |    |    |                                 |      |          |              |  |  |  |
| 16           | 16 contacts                                            |      |     |    |    |                                 |      |          |              |  |  |  |
| (P)          | Possibility of mounting potentiometer (Gessmann-types) |      |     |    |    |                                 |      |          |              |  |  |  |
| P            | Potentiometer                                          |      |     |    |    | P451                            | PW70 | 0,5 kOhm | I max. 30 mA |  |  |  |
|              |                                                        |      |     |    |    | P452                            | PW70 | 1 kOhm   | I max. 30 mA |  |  |  |
|              |                                                        |      |     |    |    | P453                            | PW70 | 2 kOhm   | I max. 30 mA |  |  |  |
|              |                                                        |      |     |    |    | P454                            | PW70 | 5 kOhm   | I max. 30 mA |  |  |  |
|              |                                                        |      |     |    |    | P455                            | PW70 | 10 kOhm  | I max. 30 mA |  |  |  |
|              |                                                        |      |     |    |    | More potentiometers on request! |      |          |              |  |  |  |

Technical details may vary based on configuration or application! Technical data subject to change without notice!

# Gear Limit Switch

## GE 1 / GE 2



GE 1   -10   -4   -P   -U7   -P   -18   -30   -60   -90   -X

### Aluminium housing

|    |                                                                   |
|----|-------------------------------------------------------------------|
| U5 | U17/13 170 x 130 mm (max. 8 contacts GE 1)                        |
| U6 | U16/16 160 x 160 mm (max. 12 contacts GE 1/ max. 6 contacts GE 2) |
| U7 | U16/20 160 x 200 mm (max. 16 contacts GE 1/max. 10 v GE 2)        |
| U8 | U16/26 160 x 260 mm (max. 16 contacts GE2)                        |
| U9 | U16/35 160 x 350 mm                                               |

### Program-disc

Following program-discs are available :

18°, 24°, 30°, 36°, 45°, 60°, 75°, 90°, 110°, 120°, 176°, 192°

Example:

Contact 1: program-discs pair 18° (adjustment range 18°-36°)

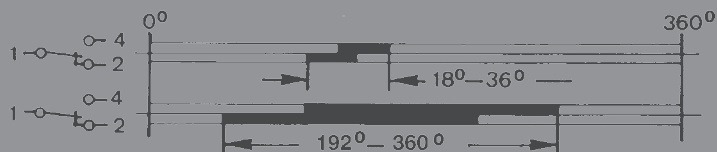
Contact 2: program-discs pair 30° (adjustment range 30°-60°)

Contact 3: program-discs pair 60° (adjustment range 60°-120°)

Contact 4: program-discs pair 90° (adjustment range 90°-180°)

Contact n:

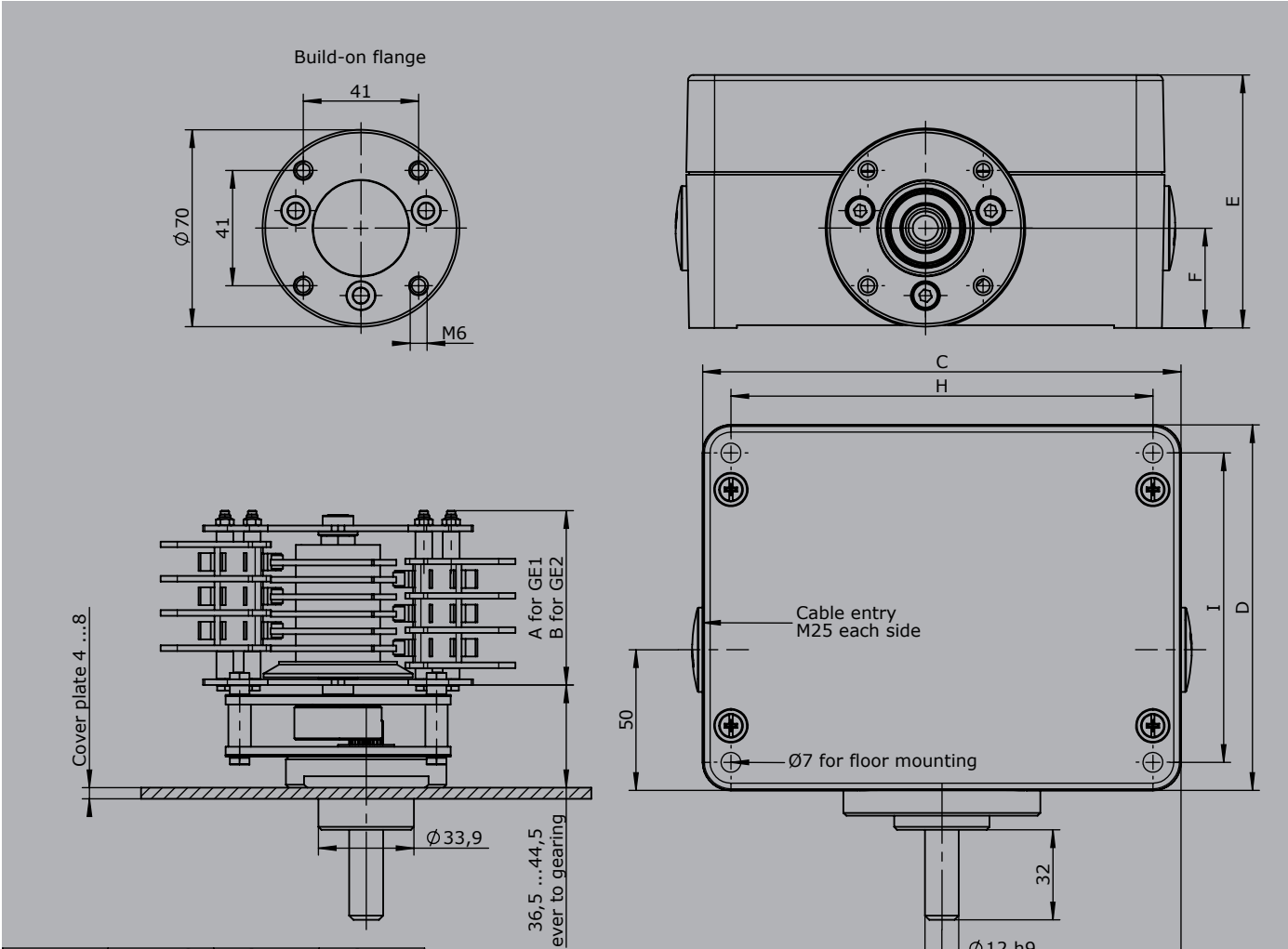
Illustration



The programm-discs are infinitely adjustable within 360°

### Special model

X Special / customer specified



| Type | No. of contacts | Dim. A (GE1) | Dim. B (GE2) |
|------|-----------------|--------------|--------------|
| 1    | 1               | 32           | 35,5         |
| 2    | 2               | 38,5         | 42           |
| 3    | 3               | 44,5         | 48           |
| 4    | 4               | 50,5         | 54           |
| 5    | 5               | 56,5         | 60           |
| 6    | 6               | 63           | 66,5         |
| 7    | 7               | 69           | 72,5         |
| 8    | 8               | 75           | 78,5         |
| 9    | 9               | 81           | 84,5         |
| 10   | 10              | 87           | 90,5         |
| 11   | 11              | 93           | 96,5         |
| 12   | 12              | 99           | 102,5        |
| 13   | 13              | 105,5        | 109          |
| 14   | 14              | 111,5        | 115          |
| 15   | 15              | 117,5        | 121          |
| 16   | 16              | 123,5        | 127          |

| Type   | Dim. C | Dim. D | Dim. E | Dim. F | Dim. G | Dim. H | Dim. I |
|--------|--------|--------|--------|--------|--------|--------|--------|
| U17/13 | 170    | 130    | 90     | 35,5   | 75     | 150    | 110    |
| U16/16 | 160    | 160    | 91     | 45     | 70     | 110    | 140    |
| U16/20 | 160    | 200    | 100    | 45     | 70     | 140    | 180    |
| U16/26 | 160    | 260    | 91     | 45     | 70     | 110    | 240    |
| U16/35 | 160    | 350    | 100    | 45     | 70     | 140    | 330    |