

## Stainless Steel-Ball lock pins

AISI 303, with plastic-knob

### SPECIFICATION

Pin Stainless Steel AISI 303

Knob

Plastic (Polyamide PA)

- black-grey / red
- temperature resistant up to 80 °C

Balls

Stainless Steel AISI 420C

Spring

German Material No. 1.4565



### INFORMATION

Stainless Steel-Ball lock pins GN 113.5 are used for quick fixing, connecting and locking of various parts and workpieces. A typical application is locating pins which have often to be removed and installed again.

By pressing the spring loaded push button both balls are unlocked and by releasing it, the balls are locked again.

The load values given in the above table at shear stress are theoretically obtained and indicative only. They are non-binding recommended values and rule out any liability. They constitute no general warranty of quality and condition. The user must determine from case to case whether a product is suitable for the intended use.

- Range of lock pins (see page 868)

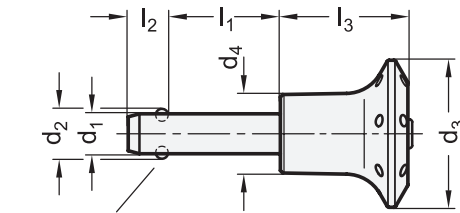
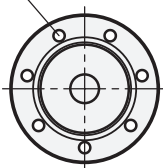
### ACCESSORY

- Ball chains GN 111 (see page 904)
- Stainless Steel-Ball chains GN 111.5 (see page 905)
- Retaining cables GN 111.2 (see page 906)
- Spiral retaining cables GN 111.4 (see page 908)

### TECHNICAL INFORMATION

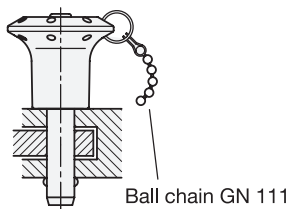
- ISO-Fundamental Tolerances (see page A21)
- Stainless Steel characteristics (see page A26)

Bore for key ring  
(ball chain)

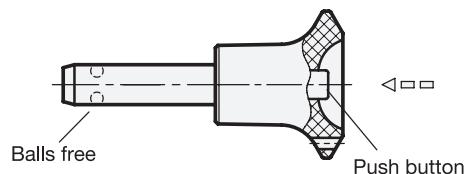


Balls in locking position

### Application example



Ball chain GN 111



Balls free

Push button

**GN 113.5**

**STAINLESS STEEL**

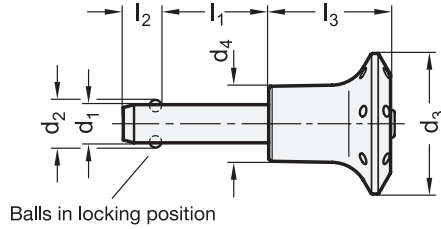
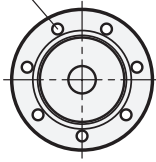
| Description     | d1 -0.04/-0.08 | l1 +0.6 | d2  | d3 | d4 | l2 ±1 | l3 -0.2 | Locating bore H11 | Load in kN ≈ Double sided shearing resistance according DIN 50141 (Breaking strength) | ⚖️ |
|-----------------|----------------|---------|-----|----|----|-------|---------|-------------------|---|----|
| GN 113.5-5-10   | 5              | 10      | 5.5 | 30 | 16 | 6     | 26      | 5                 | 14  | 17 |
| GN 113.5-5-15   | 5              | 15      | 5.5 | 30 | 16 | 6     | 26      | 5                 | 14  | 18 |
| GN 113.5-5-20   | 5              | 20      | 5.5 | 30 | 16 | 6     | 26      | 5                 | 14  | 19 |
| GN 113.5-5-25   | 5              | 25      | 5.5 | 30 | 16 | 6     | 26      | 5                 | 14  | 20 |
| GN 113.5-5-30   | 5              | 30      | 5.5 | 30 | 16 | 6     | 26      | 5                 | 14  | 22 |
| GN 113.5-5-35   | 5              | 35      | 5.5 | 30 | 16 | 6     | 26      | 5                 | 14  | 23 |
| GN 113.5-5-40   | 5              | 40      | 5.5 | 30 | 16 | 6     | 26      | 5                 | 14  | 25 |
| GN 113.5-5-45   | 5              | 45      | 5.5 | 30 | 16 | 6     | 26      | 5                 | 14  | 27 |
| GN 113.5-5-50   | 5              | 50      | 5.5 | 30 | 16 | 6     | 26      | 5                 | 14  | 29 |
| GN 113.5-5-60   | 5              | 60      | 5.5 | 30 | 16 | 6     | 26      | 5                 | 14  | 30 |
| GN 113.5-5-70   | 5              | 70      | 5.5 | 30 | 16 | 6     | 26      | 5                 | 14  | 31 |
| GN 113.5-5-80   | 5              | 80      | 5.5 | 30 | 16 | 6     | 26      | 5                 | 14  | 32 |
| GN 113.5-6-10   | 6              | 10      | 7   | 30 | 16 | 7.1   | 26      | 6                 | 21  | 18 |
| GN 113.5-6-15   | 6              | 15      | 7   | 30 | 16 | 7.1   | 26      | 6                 | 21  | 19 |
| GN 113.5-6-20   | 6              | 20      | 7   | 30 | 16 | 7.1   | 26      | 6                 | 21  | 20 |
| GN 113.5-6-25   | 6              | 25      | 7   | 30 | 16 | 7.1   | 26      | 6                 | 21  | 21 |
| GN 113.5-6-30   | 6              | 30      | 7   | 30 | 16 | 7.1   | 26      | 6                 | 21  | 23 |
| GN 113.5-6-35   | 6              | 35      | 7   | 30 | 16 | 7.1   | 26      | 6                 | 21  | 25 |
| GN 113.5-6-40   | 6              | 40      | 7   | 30 | 16 | 7.1   | 26      | 6                 | 21  | 26 |
| GN 113.5-6-45   | 6              | 45      | 7   | 30 | 16 | 7.1   | 26      | 6                 | 21  | 28 |
| GN 113.5-6-50   | 6              | 50      | 7   | 30 | 16 | 7.1   | 26      | 6                 | 21  | 30 |
| GN 113.5-6-60   | 6              | 60      | 7   | 30 | 16 | 7.1   | 26      | 6                 | 21  | 32 |
| GN 113.5-6-70   | 6              | 70      | 7   | 30 | 16 | 7.1   | 26      | 6                 | 21  | 33 |
| GN 113.5-6-80   | 6              | 80      | 7   | 30 | 16 | 7.1   | 26      | 6                 | 21  | 35 |
| GN 113.5-8-10   | 8              | 10      | 9.3 | 33 | 17 | 8.0   | 32.3    | 6                 | 38  | 37 |
| GN 113.5-8-15   | 8              | 15      | 9.4 | 34 | 18 | 8.1   | 32.4    | 7                 | 38  | 39 |
| GN 113.5-8-20   | 8              | 20      | 9.5 | 35 | 19 | 8.2   | 32.5    | 8                 | 38  | 42 |
| GN 113.5-8-25   | 8              | 25      | 9.5 | 35 | 19 | 8.2   | 32.5    | 8                 | 38  | 44 |
| GN 113.5-8-30   | 8              | 30      | 9.5 | 35 | 19 | 8.2   | 32.5    | 8                 | 38  | 46 |
| GN 113.5-8-35   | 8              | 35      | 9.5 | 35 | 19 | 8.2   | 32.5    | 8                 | 38  | 48 |
| GN 113.5-8-40   | 8              | 40      | 9.5 | 35 | 19 | 8.2   | 32.5    | 8                 | 38  | 51 |
| GN 113.5-8-45   | 8              | 45      | 9.5 | 35 | 19 | 8.2   | 32.5    | 8                 | 38  | 55 |
| GN 113.5-8-50   | 8              | 50      | 9.5 | 35 | 19 | 8.2   | 32.5    | 8                 | 38  | 57 |
| GN 113.5-8-60   | 8              | 60      | 9.5 | 35 | 19 | 8.2   | 32.5    | 8                 | 38  | 60 |
| GN 113.5-8-70   | 8              | 70      | 9.5 | 35 | 19 | 8.2   | 32.5    | 8                 | 38  | 62 |
| GN 113.5-8-80   | 8              | 80      | 9.5 | 35 | 19 | 8.2   | 32.5    | 8                 | 38  | 65 |
| GN 113.5-8-90   | 8              | 90      | 9.5 | 35 | 19 | 8.2   | 32.5    | 8                 | 38  | 69 |
| GN 113.5-8-100  | 8              | 100     | 9.5 | 35 | 19 | 8.2   | 32.5    | 8                 | 38  | 73 |
| GN 113.5-10-15  | 10             | 15      | 12  | 35 | 19 | 9.6   | 32.5    | 10                | 60  | 45 |
| GN 113.5-10-20  | 10             | 20      | 12  | 35 | 19 | 9.6   | 32.5    | 10                | 60  | 49 |
| GN 113.5-10-25  | 10             | 25      | 12  | 35 | 19 | 9.6   | 32.5    | 10                | 60  | 52 |
| GN 113.5-10-30  | 10             | 30      | 12  | 35 | 19 | 9.6   | 32.5    | 10                | 60  | 55 |
| GN 113.5-10-35  | 10             | 35      | 12  | 35 | 19 | 9.6   | 32.5    | 10                | 60  | 58 |
| GN 113.5-10-40  | 10             | 40      | 12  | 35 | 19 | 9.6   | 32.5    | 10                | 60  | 62 |
| GN 113.5-10-45  | 10             | 45      | 12  | 35 | 19 | 9.6   | 32.5    | 10                | 60  | 64 |
| GN 113.5-10-50  | 10             | 50      | 12  | 35 | 19 | 9.6   | 32.5    | 10                | 60  | 68 |
| GN 113.5-10-60  | 10             | 60      | 12  | 35 | 19 | 9.6   | 32.5    | 10                | 60  | 73 |
| GN 113.5-10-70  | 10             | 70      | 12  | 35 | 19 | 9.6   | 32.5    | 10                | 60  | 75 |
| GN 113.5-10-80  | 10             | 80      | 12  | 35 | 19 | 9.6   | 32.5    | 10                | 60  | 77 |
| GN 113.5-10-90  | 10             | 90      | 12  | 35 | 19 | 9.6   | 32.5    | 10                | 60  | 80 |
| GN 113.5-10-100 | 10             | 100     | 12  | 35 | 19 | 9.6   | 32.5    | 10                | 60  | 84 |
| GN 113.5-10-110 | 10             | 110     | 12  | 35 | 19 | 9.6   | 32.5    | 10                | 60  | 86 |
| GN 113.5-10-120 | 10             | 120     | 12  | 35 | 19 | 9.6   | 32.5    | 10                | 60  | 88 |



Indexing elements

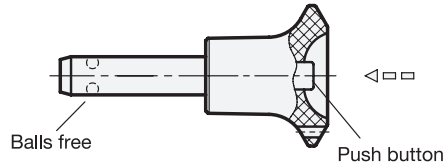
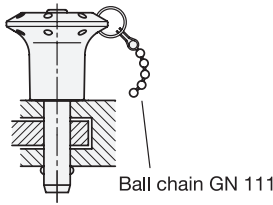


Bore for key ring  
(ball chain)



Balls in locking position

Application example



Balls free

Push button

GN 113.5

STAINLESS STEEL

| Description     | d1 -0.04/-0.08 | l1 +0.6 | d2   | d3 | d4 | l2 ±1 | l3 -0.2 | Locating bore H11 | Load in kN ≈<br>Double sided<br>shearing resistance<br>according DIN 50141<br>(Breaking strength) | ⚖   |
|-----------------|----------------|---------|------|----|----|-------|---------|-------------------|---|-----|
| GN 113.5-12-20  | 12             | 20      | 14.5 | 42 | 25 | 10.6  | 39      | 12                | 87  | 90  |
| GN 113.5-12-25  | 12             | 25      | 14.5 | 42 | 25 | 10.6  | 39      | 12                | 87  | 100 |
| GN 113.5-12-30  | 12             | 30      | 14.5 | 42 | 25 | 10.6  | 39      | 12                | 87  | 104 |
| GN 113.5-12-35  | 12             | 35      | 14.5 | 42 | 25 | 10.6  | 39      | 12                | 87  | 108 |
| GN 113.5-12-40  | 12             | 40      | 14.5 | 42 | 25 | 10.6  | 39      | 12                | 87  | 113 |
| GN 113.5-12-45  | 12             | 45      | 14.5 | 42 | 25 | 10.6  | 39      | 12                | 87  | 117 |
| GN 113.5-12-50  | 12             | 50      | 14.5 | 42 | 25 | 10.6  | 39      | 12                | 87  | 121 |
| GN 113.5-12-60  | 12             | 60      | 14.5 | 42 | 25 | 10.6  | 39      | 12                | 87  | 123 |
| GN 113.5-12-70  | 12             | 70      | 14.5 | 42 | 25 | 10.6  | 39      | 12                | 87  | 138 |
| GN 113.5-12-80  | 12             | 80      | 14.5 | 42 | 25 | 10.6  | 39      | 12                | 87  | 148 |
| GN 113.5-12-90  | 12             | 90      | 14.5 | 42 | 25 | 10.6  | 39      | 12                | 87  | 154 |
| GN 113.5-12-100 | 12             | 100     | 14.5 | 42 | 25 | 10.6  | 39      | 12                | 87  | 159 |
| GN 113.5-12-110 | 12             | 110     | 14.5 | 42 | 25 | 10.6  | 39      | 12                | 87  | 162 |
| GN 113.5-12-120 | 12             | 120     | 14.5 | 42 | 25 | 10.6  | 39      | 12                | 87  | 169 |
| GN 113.5-16-30  | 16             | 30      | 19   | 42 | 25 | 14    | 39      | 16                | 155   | 126 |
| GN 113.5-16-35  | 16             | 35      | 19   | 42 | 25 | 14    | 39      | 16                | 155   | 130 |
| GN 113.5-16-40  | 16             | 40      | 19   | 42 | 25 | 14    | 39      | 16                | 155   | 151 |
| GN 113.5-16-45  | 16             | 45      | 19   | 42 | 25 | 14    | 39      | 16                | 155   | 158 |
| GN 113.5-16-50  | 16             | 50      | 19   | 42 | 25 | 14    | 39      | 16                | 155   | 167 |
| GN 113.5-16-60  | 16             | 60      | 19   | 42 | 25 | 14    | 39      | 16                | 155   | 183 |
| GN 113.5-16-70  | 16             | 70      | 19   | 42 | 25 | 14    | 39      | 16                | 155   | 198 |
| GN 113.5-16-80  | 16             | 80      | 19   | 42 | 25 | 14    | 39      | 16                | 155   | 213 |
| GN 113.5-16-90  | 16             | 90      | 19   | 42 | 25 | 14    | 39      | 16                | 155   | 215 |
| GN 113.5-16-100 | 16             | 100     | 19   | 42 | 25 | 14    | 39      | 16                | 155   | 220 |
| GN 113.5-16-110 | 16             | 110     | 19   | 42 | 25 | 14    | 39      | 16                | 155   | 226 |
| GN 113.5-16-120 | 16             | 120     | 19   | 42 | 25 | 14    | 39      | 16                | 155   | 230 |
| GN 113.5-16-130 | 16             | 130     | 19   | 42 | 25 | 14    | 39      | 16                | 155   | 242 |
| GN 113.5-16-140 | 16             | 140     | 19   | 42 | 25 | 14    | 39      | 16                | 155   | 250 |
| GN 113.5-16-150 | 16             | 150     | 19   | 42 | 25 | 14    | 39      | 16                | 155   | 262 |

Indexing elements