



## TAPP OCH TRYCKKNAPP

AlSi 303 rostfritt stål.



## KULOR

AlSi 420C rostfritt stål.



## FJÄDER

AlSi 631 rostfritt stål.



## CYLINDRISKT KNOPPGREPP

Rostfritt stål.



## SÄKERHETSRING

Rostfritt stål.



## HÖGSTA ARBETSTEMPERATUR

250°C.



## KÄNNETECKEN OCH ANVÄNDNING

GN 113.3 kulspärrbult har mycket kompakt form och mått. De är lämpliga för användning i mycket trånga utrymmen, de används i allmänhet för snabb fixering eller anslutning av delar som ska bearbetas, särskilt för delar som måste tas bort och återställas kontinuerligt.



## TILLBEHÖR PÅ FÖRFRÅGAN

För att optimera användningen av kulspärrbultar har hjälpmedel utvecklats:

- kulkedja GN 111 (se sidan 611);
- kabelhållare GN 111.2 (se sidan 612);
- spiralkabel GN 111.4 (se sidan 613).



## SPECIALUTFÖRANDE PÅ FÖRFRÅGAN

Andra dimensioner.



## BRUKSANVISNING

Genom att trycka på knappen frigörs de två kulorna och tappen kan dras ut eller monteras in.



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28



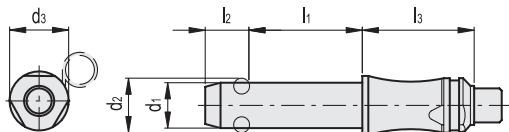
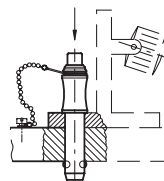
29



30



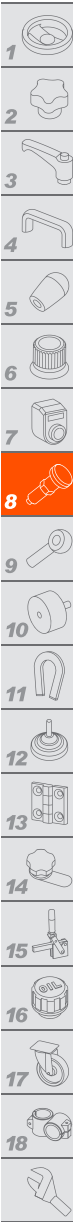
Applikationsexempel



| Kod      | Benämning     | d1-0.04-0.08 | d2  | d3 | l1+0.6 | l2±1 | l3+0.2 | Monteringshål<br>H11 | Dubbelsidig<br>klippkraft<br>[KN] | ⚖  |
|----------|---------------|--------------|-----|----|--------|------|--------|----------------------|-----------------------------------|----|
| GN.37981 | GN 113.3-5-10 | 5            | 5.5 | 10 | 10     | 6    | 22     | 5                    | 14                                | 17 |
| GN.37982 | GN 113.3-5-15 | 5            | 5.5 | 10 | 15     | 6    | 22     | 5                    | 14                                | 17 |
| GN.37983 | GN 113.3-5-20 | 5            | 5.5 | 10 | 20     | 6    | 22     | 5                    | 14                                | 17 |
| GN.37984 | GN 113.3-5-25 | 5            | 5.5 | 10 | 25     | 6    | 22     | 5                    | 14                                | 20 |
| GN.77401 | GN 113.3-5-30 | 5            | 5.5 | 10 | 30     | 6    | 22     | 5                    | 14                                | 17 |
| GN.77402 | GN 113.3-5-35 | 5            | 5.5 | 10 | 35     | 6    | 22     | 5                    | 14                                | 17 |
| GN.77403 | GN 113.3-5-40 | 5            | 5.5 | 10 | 40     | 6    | 22     | 5                    | 14                                | 17 |
| GN.77404 | GN 113.3-5-45 | 5            | 5.5 | 10 | 45     | 6    | 22     | 5                    | 14                                | 17 |
| GN.77405 | GN 113.3-5-50 | 5            | 5.5 | 10 | 50     | 6    | 22     | 5                    | 14                                | 17 |
| GN.77406 | GN 113.3-5-60 | 5            | 5.5 | 10 | 60     | 6    | 22     | 5                    | 14                                | 17 |
| GN.77407 | GN 113.3-5-70 | 5            | 5.5 | 10 | 70     | 6    | 22     | 5                    | 14                                | 17 |
| GN.77408 | GN 113.3-5-80 | 5            | 5.5 | 10 | 80     | 6    | 22     | 5                    | 14                                | 17 |
| GN.38011 | GN 113.3-6-10 | 6            | 7   | 10 | 10     | 7    | 22     | 6                    | 21                                | 29 |
| GN.38012 | GN 113.3-6-15 | 6            | 7   | 10 | 15     | 7    | 22     | 6                    | 21                                | 30 |
| GN.38013 | GN 113.3-6-20 | 6            | 7   | 10 | 20     | 7    | 22     | 6                    | 21                                | 31 |
| GN.38014 | GN 113.3-6-25 | 6            | 7   | 10 | 25     | 7    | 22     | 6                    | 21                                | 32 |
| GN.38015 | GN 113.3-6-30 | 6            | 7   | 10 | 30     | 7    | 22     | 6                    | 21                                | 33 |
| GN.77411 | GN 113.3-6-35 | 6            | 7   | 10 | 35     | 7    | 22     | 6                    | 21                                | 33 |
| GN.38016 | GN 113.3-6-40 | 6            | 7   | 10 | 40     | 7    | 22     | 6                    | 21                                | 35 |
| GN.77412 | GN 113.3-6-45 | 6            | 7   | 10 | 45     | 7    | 22     | 6                    | 21                                | 33 |
| GN.77413 | GN 113.3-6-50 | 6            | 7   | 10 | 50     | 7    | 22     | 6                    | 21                                | 33 |
| GN.77414 | GN 113.3-6-60 | 6            | 7   | 10 | 60     | 7    | 22     | 6                    | 21                                | 33 |
| GN.77415 | GN 113.3-6-70 | 6            | 7   | 10 | 70     | 7    | 22     | 6                    | 21                                | 33 |
| GN.77416 | GN 113.3-6-80 | 6            | 7   | 10 | 80     | 7    | 22     | 6                    | 21                                | 33 |

INOX STAINLESS STEEL

| Kod      | Benämning       | d1 -0.04 -0.08 | d2   | d3 | l1 +0.6 | l2 ±1 | l3 +0.2 | Monteringshål<br>H11 | Dubbelsidig<br>klippkraft<br>[kN] | ⚖   |
|----------|-----------------|----------------|------|----|---------|-------|---------|----------------------|-----------------------------------|-----|
| GN.77421 | GN 113.3-8-10   | 8              | 9.5  | 14 | 10      | 8.2   | 27      | 8                    | 38                                | 35  |
| GN.77422 | GN 113.3-8-15   | 8              | 9.5  | 14 | 15      | 8.2   | 27      | 8                    | 38                                | 35  |
| GN.38021 | GN 113.3-8-20   | 8              | 9.5  | 14 | 20      | 8.2   | 27      | 8                    | 38                                | 35  |
| GN.38022 | GN 113.3-8-25   | 8              | 9.5  | 14 | 25      | 8.2   | 27      | 8                    | 38                                | 37  |
| GN.38023 | GN 113.3-8-30   | 8              | 9.5  | 14 | 30      | 8.2   | 27      | 8                    | 38                                | 38  |
| GN.77423 | GN 113.3-8-35   | 8              | 9.5  | 14 | 35      | 8.2   | 27      | 8                    | 38                                | 35  |
| GN.38025 | GN 113.3-8-40   | 8              | 9.5  | 14 | 40      | 8.2   | 27      | 8                    | 38                                | 42  |
| GN.77424 | GN 113.3-8-45   | 8              | 9.5  | 14 | 45      | 8.2   | 27      | 8                    | 38                                | 35  |
| GN.77425 | GN 113.3-8-60   | 8              | 9.5  | 14 | 60      | 8.2   | 27      | 8                    | 38                                | 35  |
| GN.38027 | GN 113.3-8-50   | 8              | 9.5  | 14 | 50      | 8.2   | 27      | 8                    | 38                                | 46  |
| GN.77426 | GN 113.3-8-70   | 8              | 9.5  | 14 | 70      | 8.2   | 27      | 8                    | 38                                | 35  |
| GN.77427 | GN 113.3-8-80   | 8              | 9.5  | 14 | 80      | 8.2   | 27      | 8                    | 38                                | 35  |
| GN.77428 | GN 113.3-8-90   | 8              | 9.5  | 14 | 90      | 8.2   | 27      | 8                    | 38                                | 35  |
| GN.77429 | GN 113.3-8-100  | 8              | 9.5  | 14 | 100     | 8.2   | 27      | 8                    | 38                                | 35  |
| GN.77431 | GN 113.3-10-15  | 10             | 12   | 14 | 15      | 9.6   | 27      | 10                   | 60                                | 72  |
| GN.38031 | GN 113.3-10-20  | 10             | 12   | 14 | 20      | 9.6   | 27      | 10                   | 60                                | 72  |
| GN.38032 | GN 113.3-10-25  | 10             | 12   | 14 | 25      | 9.6   | 27      | 10                   | 60                                | 75  |
| GN.38033 | GN 113.3-10-30  | 10             | 12   | 14 | 30      | 9.6   | 27      | 10                   | 60                                | 78  |
| GN.77432 | GN 113.3-10-35  | 10             | 12   | 14 | 35      | 9.6   | 27      | 10                   | 60                                | 72  |
| GN.38035 | GN 113.3-10-40  | 10             | 12   | 14 | 40      | 9.6   | 27      | 10                   | 60                                | 84  |
| GN.77433 | GN 113.3-10-45  | 10             | 12   | 14 | 45      | 9.6   | 27      | 10                   | 60                                | 72  |
| GN.38037 | GN 113.3-10-50  | 10             | 12   | 14 | 50      | 9.6   | 27      | 10                   | 60                                | 90  |
| GN.77434 | GN 113.3-10-60  | 10             | 12   | 14 | 60      | 9.6   | 27      | 10                   | 60                                | 72  |
| GN.77435 | GN 113.3-10-70  | 10             | 12   | 14 | 70      | 9.6   | 27      | 10                   | 60                                | 72  |
| GN.77436 | GN 113.3-10-80  | 10             | 12   | 14 | 80      | 9.6   | 27      | 10                   | 60                                | 72  |
| GN.77437 | GN 113.3-10-90  | 10             | 12   | 14 | 90      | 9.6   | 27      | 10                   | 60                                | 72  |
| GN.77438 | GN 113.3-10-100 | 10             | 12   | 14 | 100     | 9.6   | 27      | 10                   | 60                                | 72  |
| GN.77439 | GN 113.3-10-110 | 10             | 12   | 14 | 110     | 9.6   | 27      | 10                   | 60                                | 72  |
| GN.77440 | GN 113.3-10-120 | 10             | 12   | 14 | 120     | 9.6   | 27      | 10                   | 60                                | 72  |
| GN.77451 | GN 113.3-12-20  | 12             | 14.5 | 20 | 20      | 10.6  | 32      | 12                   | 87                                | 86  |
| GN.38041 | GN 113.3-12-25  | 12             | 14.5 | 20 | 25      | 10.6  | 32      | 12                   | 87                                | 86  |
| GN.38042 | GN 113.3-12-30  | 12             | 14.5 | 20 | 30      | 10.6  | 32      | 12                   | 87                                | 90  |
| GN.77452 | GN 113.3-12-35  | 12             | 14.5 | 20 | 35      | 10.6  | 32      | 12                   | 87                                | 86  |
| GN.38044 | GN 113.3-12-40  | 12             | 14.5 | 20 | 40      | 10.6  | 32      | 12                   | 87                                | 98  |
| GN.77453 | GN 113.3-12-45  | 12             | 14.5 | 20 | 45      | 10.6  | 32      | 12                   | 87                                | 86  |
| GN.38046 | GN 113.3-12-50  | 12             | 14.5 | 20 | 50      | 10.6  | 32      | 12                   | 87                                | 107 |
| GN.38047 | GN 113.3-12-60  | 12             | 14.5 | 20 | 60      | 10.6  | 32      | 12                   | 87                                | 115 |
| GN.77454 | GN 113.3-12-70  | 12             | 14.5 | 20 | 70      | 10.6  | 32      | 12                   | 87                                | 86  |
| GN.77455 | GN 113.3-12-80  | 12             | 14.5 | 20 | 80      | 10.6  | 32      | 12                   | 87                                | 86  |
| GN.77456 | GN 113.3-12-90  | 12             | 14.5 | 20 | 90      | 10.6  | 32      | 12                   | 87                                | 86  |
| GN.77457 | GN 113.3-12-100 | 12             | 14.5 | 20 | 100     | 10.6  | 32      | 12                   | 87                                | 86  |
| GN.77458 | GN 113.3-12-110 | 12             | 14.5 | 20 | 110     | 10.6  | 32      | 12                   | 87                                | 86  |
| GN.77459 | GN 113.3-12-120 | 12             | 14.5 | 20 | 120     | 10.6  | 32      | 12                   | 87                                | 86  |



Fixturdetaljer



Fixturdetaljer

4

INOX STAINLESS STEEL

| Kod      | Benämning       | d1 -0.04 -0.08 | d2   | d3 | l1 +0.6 | l2 ±1 | l3 +0.2 | Monteringshål<br>H11 | Dubbelsidig<br>klippkraft<br>[KN] | ⚖   |
|----------|-----------------|----------------|------|----|---------|-------|---------|----------------------|-----------------------------------|-----|
| GN.37985 | GN 113.3-16-30  | 16             | 19   | 20 | 30      | 14    | 32      | 16                   | 155                               | 120 |
| GN.77461 | GN 113.3-16-35  | 16             | 19   | 20 | 35      | 14    | 32      | 16                   | 155                               | 120 |
| GN.37986 | GN 113.3-16-40  | 16             | 19   | 20 | 40      | 14    | 32      | 16                   | 155                               | 130 |
| GN.77462 | GN 113.3-16-45  | 16             | 19   | 20 | 45      | 14    | 32      | 16                   | 155                               | 120 |
| GN.37987 | GN 113.3-16-50  | 16             | 19   | 20 | 50      | 14    | 32      | 16                   | 155                               | 160 |
| GN.37988 | GN 113.3-16-60  | 16             | 19   | 20 | 60      | 14    | 32      | 16                   | 155                               | 160 |
| GN.77463 | GN 113.3-16-70  | 16             | 19   | 20 | 70      | 14    | 32      | 16                   | 155                               | 120 |
| GN.77464 | GN 113.3-16-80  | 16             | 19   | 20 | 80      | 14    | 32      | 16                   | 155                               | 120 |
| GN.77465 | GN 113.3-16-90  | 16             | 19   | 20 | 90      | 14    | 32      | 16                   | 155                               | 120 |
| GN.77466 | GN 113.3-16-100 | 16             | 19   | 20 | 100     | 14    | 32      | 16                   | 155                               | 120 |
| GN.77467 | GN 113.3-16-110 | 16             | 19   | 20 | 110     | 14    | 32      | 16                   | 155                               | 120 |
| GN.77468 | GN 113.3-16-120 | 16             | 19   | 20 | 120     | 14    | 32      | 16                   | 155                               | 120 |
| GN.77469 | GN 113.3-16-130 | 16             | 19   | 20 | 130     | 14    | 32      | 16                   | 155                               | 120 |
| GN.77470 | GN 113.3-16-140 | 16             | 19   | 20 | 140     | 14    | 32      | 16                   | 155                               | 120 |
| GN.77471 | GN 113.3-16-150 | 16             | 19   | 20 | 150     | 14    | 32      | 16                   | 155                               | 120 |
| GN.77481 | GN 113.3-20-50  | 20             | 25   | 28 | 50      | 20.5  | 39      | 20                   | 244                               | 323 |
| GN.37989 | GN 113.3-20-60  | 20             | 25   | 28 | 60      | 20.5  | 39      | 20                   | 244                               | 323 |
| GN.77482 | GN 113.3-20-70  | 20             | 25   | 28 | 70      | 20.5  | 39      | 20                   | 244                               | 323 |
| GN.37990 | GN 113.3-20-80  | 20             | 25   | 28 | 80      | 20.5  | 39      | 20                   | 244                               | 350 |
| GN.77483 | GN 113.3-20-90  | 20             | 25   | 28 | 90      | 20.5  | 39      | 20                   | 244                               | 323 |
| GN.37991 | GN 113.3-20-100 | 20             | 25   | 28 | 100     | 20.5  | 39      | 20                   | 244                               | 420 |
| GN.77484 | GN 113.3-20-110 | 20             | 25   | 28 | 110     | 20.5  | 39      | 20                   | 244                               | 323 |
| GN.77485 | GN 113.3-20-120 | 20             | 25   | 28 | 120     | 20.5  | 39      | 20                   | 244                               | 323 |
| GN.77486 | GN 113.3-20-130 | 20             | 25   | 28 | 130     | 20.5  | 39      | 20                   | 244                               | 323 |
| GN.77487 | GN 113.3-20-140 | 20             | 25   | 28 | 140     | 20.5  | 39      | 20                   | 244                               | 323 |
| GN.77488 | GN 113.3-20-150 | 20             | 25   | 28 | 150     | 20.5  | 39      | 20                   | 244                               | 323 |
| GN.77491 | GN 113.3-25-50  | 25             | 30.8 | 28 | 50      | 22    | 39      | 25                   | 244                               | 323 |
| GN.77492 | GN 113.3-25-60  | 25             | 30.8 | 28 | 60      | 22    | 39      | 25                   | 244                               | 323 |
| GN.77493 | GN 113.3-25-70  | 25             | 30.8 | 28 | 70      | 22    | 39      | 25                   | 244                               | 323 |
| GN.77494 | GN 113.3-25-80  | 25             | 30.8 | 28 | 80      | 22    | 39      | 25                   | 244                               | 323 |
| GN.77495 | GN 113.3-25-90  | 25             | 30.8 | 28 | 90      | 22    | 39      | 25                   | 244                               | 323 |
| GN.77496 | GN 113.3-25-100 | 25             | 30.8 | 28 | 100     | 22    | 39      | 25                   | 244                               | 323 |
| GN.77497 | GN 113.3-25-110 | 25             | 30.8 | 28 | 110     | 22    | 39      | 25                   | 244                               | 323 |
| GN.77498 | GN 113.3-25-120 | 25             | 30.8 | 28 | 120     | 22    | 39      | 25                   | 244                               | 323 |
| GN.77499 | GN 113.3-25-130 | 25             | 30.8 | 28 | 130     | 22    | 39      | 25                   | 244                               | 323 |
| GN.77500 | GN 113.3-25-140 | 25             | 30.8 | 28 | 140     | 22    | 39      | 25                   | 244                               | 323 |
| GN.77501 | GN 113.3-25-150 | 25             | 30.8 | 28 | 150     | 22    | 39      | 25                   | 244                               | 323 |