

## Toggle clamps

**Steel / Stainless Steel, Operating lever horizontal, with horizontal mounting base**

### SPECIFICATION

#### Types

- Type **M**: U-bar version, with two flanged washers
- Type **MC**: U-bar version, with two flanged washers and clamping screw GN 708.1 (see page 1625)
- Type **O**: Solid bar version, with clasp

#### Version in Steel

- Case-hardened steel C10, zinc plated, blue passivated
- Bearing pins tempered
- Bearing rivets (for size 355 and up), case-hardened

All moving parts lubricated with special grease

Hand grip

High quality, oil resistant red plastic

Clamping screw GN 708.1, type A (see page 1625)

- Steel, zinc plated
- Rubber tip 85 Shore A

#### Version in Stainless Steel NI

Stainless Steel AISI 304

All moving parts lubricated with special grease

Hand grip

High quality, oil resistant red plastic

Clamping screw GN 708.1, Type A (see page 1625)

- Stainless Steel AISI 304
- Rubber tip 85 Shore A

### TECHNICAL INFORMATION

- Stainless Steel characteristics (see page A26)

### ACCESSORY

- Spindle assemblies (see page 1623)
- Holders for clamping screws GN 801 (for type M) (see page 1629)
- Holders for clamping screws GN 809 (for type O) (see page 1630)
- Clamping arm extenders GN 801.1 (for type M) (see page )
- Clamping arm extenders GN 801.2 (for type M) (see page )
- Clamping arm extenders GN 809.1 (for type O) (see page )



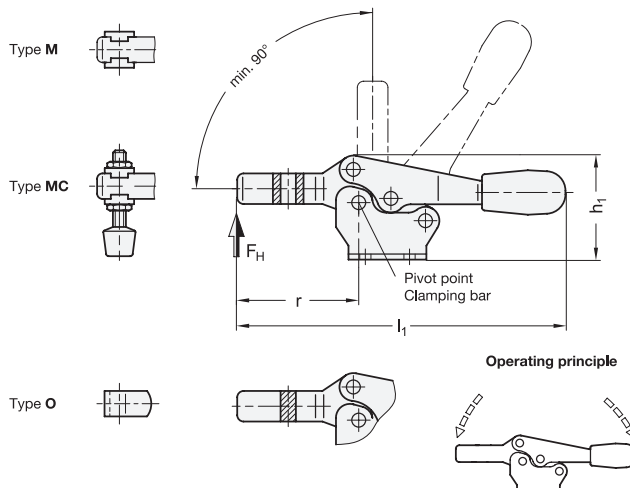
### INFORMATION

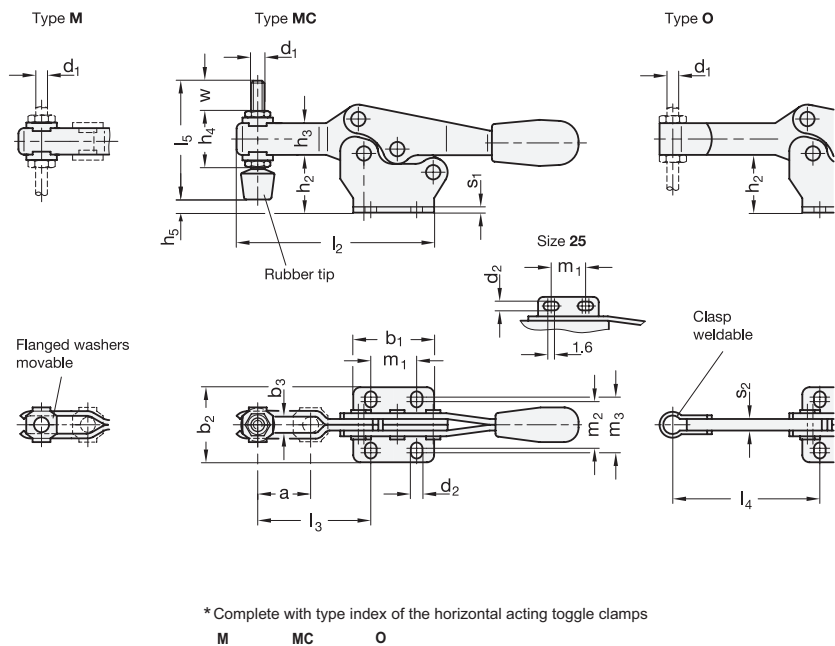
GN 820 Toggle clamps work according to the toggle principle: lever and clamping bar move in the opposite direction.

They require less space for the clamping action. In the clamped position the operating lever is in its horizontal position.

Toggle clamps in the U-bar version with two flanged washers (type M) can accommodate an application specific clamping screw. A clamping screw with neoprene rubber tips also included for type MC. Toggle clamps in the type O version can either be utilized by welding the clasp which can then accommodate an application specific hold-down fastener component, or by utilizing the bar in conjunction with the GN 809 (see page) holders for clamping screws to hold the work piece in place.

- General information for toggle clamps (see page 1560)





\* Complete with type index of the horizontal acting toggle clamps

M      MC      O

GN 820

| Description  | Size | FH in N | a ≈ | b1 | b2   | b3   | d1   | d2  | h1 ≈ | h2   | h3 | h4   | h5 max. | l1 ≈ | l2 ≈ | l3 ≈ | l4 max. | l5  | m1   | m2   | m3   | r     | s1  | s2 | w    |      |
|--------------|------|---------|-----|----|------|------|------|-----|------|------|----|------|---------|------|------|------|---------|-----|------|------|------|-------|-----|----|------|------|
| GN 820-25-*  | 25** | 400     | 10  | 24 | 24.5 | 4.3  | M 4  | 4.3 | 23   | 12   | 7  | 13.5 | -       | 69   | 43   | 20   | -       | 30  | 15   | 16   | 16   | 24.5  | 1.2 | -  | 10.5 | 25   |
| GN 820-75-*  | 75   | 900     | 20  | 28 | 26   | 5.5  | M 5  | 4.5 | 37   | 20   | 11 | 19   | 5       | 118  | 67   | 40   | 49.5    | 45  | 13.5 | 16   | 19   | 43    | 2   | 4  | 15   | 85   |
| GN 820-130-* | 130  | 1000    | 32  | 36 | 40   | 6.5  | M 6  | 5.5 | 51   | 30.5 | 16 | 25.5 | 14      | 168  | 92   | 53   | 64      | 55  | 26   | 22.4 | 28.4 | 62    | 2.5 | 5  | 17.5 | 203  |
| GN 820-230-* | 230  | 1700    | 37  | 44 | 42   | 8.5  | M 8  | 6.5 | 61.5 | 36.5 | 18 | 30   | 12.5    | 196  | 110  | 63.5 | 78      | 68  | 26   | 26   | 31.5 | 72    | 3   | 6  | 20   | 329  |
| GN 820-355-* | 355  | 1800    | 58  | 60 | 56   | 10.4 | M 10 | 8.5 | 83   | 50   | 22 | 37   | 23.5    | 270  | 161  | 96   | 115     | 77  | 41   | 38.8 | 43   | 108.5 | 3.5 | 7  | 19   | 700  |
| GN 820-455-* | 455  | 3200    | 65  | 70 | 65   | 12.4 | M 12 | 8.5 | 98.5 | 60   | 26 | 43   | 27.5    | 309  | 186  | 116  | 135     | 100 | 41.5 | 40   | 43   | 126   | 4   | 10 | 33   | 1200 |

GN 820-NI

STAINLESS STEEL

| Description     | Size | FH in N | a ≈ | b1 | b2   | b3  | d1  | d2  | h1 ≈ | h2   | h3 | h4   | h5 max. | l1 ≈ | l2 ≈ | l3 ≈ | l4 max. | l5 | m1   | m2   | m3   | r    | s1  | s2 | w    |     |
|-----------------|------|---------|-----|----|------|-----|-----|-----|------|------|----|------|---------|------|------|------|---------|----|------|------|------|------|-----|----|------|-----|
| GN 820-25-*-NI  | 25** | 400     | 10  | 24 | 24.5 | 4.3 | M 4 | 4.3 | 23   | 12   | 7  | 13.5 | -       | 69   | 43   | 20   | -       | 30 | 15   | 16   | 16   | 24.5 | 1.2 | -  | 10.5 | 20  |
| GN 820-75-*-NI  | 75   | 900     | 20  | 28 | 26   | 5.5 | M 5 | 4.5 | 37   | 20   | 11 | 19   | 5       | 118  | 67   | 40   | 49.5    | 45 | 13.5 | 16   | 19   | 43   | 2   | 4  | 15   | 80  |
| GN 820-130-*-NI | 130  | 1000    | 32  | 36 | 40   | 6.5 | M 6 | 5.5 | 51   | 30.5 | 16 | 25.5 | 14      | 168  | 92   | 53   | 64      | 55 | 26   | 22.4 | 28.4 | 62   | 2.5 | 5  | 17.5 | 202 |
| GN 820-230-*-NI | 230  | 1700    | 37  | 44 | 42   | 8.5 | M 8 | 6.5 | 61.5 | 36.5 | 18 | 30   | 12.5    | 196  | 110  | 63.5 | 78      | 68 | 26   | 26   | 31.5 | 72   | 3   | 6  | 20   | 330 |

\*\* Size 25 only available as type M and MC

Weight type M

