

## Vertical Toggle Clamps with angle base

EH 23330.



### Product Description

Due to their favourable power to movement ratio and their easy action the toggle clamps are versatile applicable for a wide range of uses.

These toggle clamps can be used in the metal working industry when drilling, welding, bending, grinding, testing and fitting as well as in the wood and plastic industry in glueing, drilling, cutting and milling jigs.

The "toggle" principle of the toggle clamp allows a large and quick opening of the clamp. If unclamped the workpieces are completely cleared for unimpeded removal. The large power transmission results maximum clamping force by low hand force. The clamps are self-arresting they remain locked, resisting the force produced when machining components.

The toggle clamps are manufactured from high quality components and are designed for continuous use.

A oil resistant ergonomic 2-component handle, with increased grip area with soft surface for high ease of use.

The quickly adjustable clamping screws are provided by a retainer.

### Material

#### Clamp

- Steel, zinc-plated by galvanization, passivated

#### Rivet

- stainless steel

#### Handle

- plastic

#### clamping screw

- Steel, tempered, zinc-plated by galvanization

#### Clamping cap

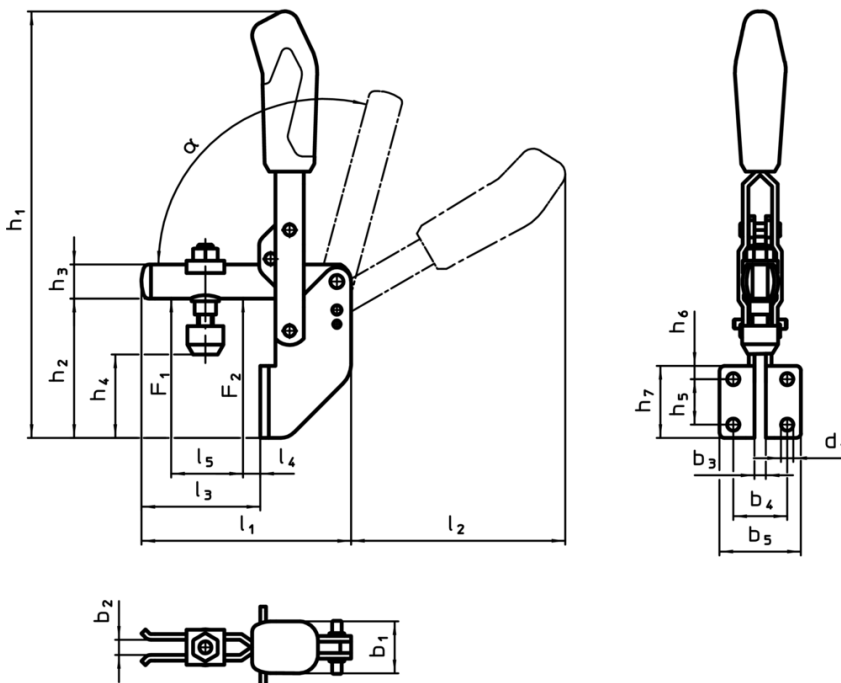
- Rubber, black

### More information

#### References

Replacement clamping screws are available as accessories in the online shop.


### Drawing



Order information

| Nominal size | clamping screw<br>[mm] | Dimensions<br>[mm] |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                | Holding force<br>[kN] |     | $\alpha$<br>[°] | min<br>[°C] | max<br>[°C] | [g] | RoHS | REACH          | Art. No.                   |            |  |  |  |  |  |  |  |  |
|--------------|------------------------|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------------|-----|-----------------|-------------|-------------|-----|------|----------------|----------------------------|------------|--|--|--|--|--|--|--|--|
|              |                        | d <sub>1</sub>     | b <sub>1</sub> | b <sub>2</sub> | b <sub>3</sub> | b <sub>4</sub> | b <sub>5</sub> | h <sub>1</sub> | h <sub>2</sub> | h <sub>3</sub> | h <sub>4</sub> | h <sub>4</sub> | h <sub>5</sub> | h <sub>6</sub> | h <sub>7</sub> | l <sub>1</sub> | l <sub>2</sub> | l <sub>3</sub> | l <sub>4</sub> | l <sub>5</sub>        |     |                 |             |             |     |      |                |                            |            |  |  |  |  |  |  |  |  |
| steel        |                        |                    |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                       |     |                 |             |             |     |      |                |                            |            |  |  |  |  |  |  |  |  |
| 3            | M6 x 35                | 5.5                | 21             | 6              | 5              | 25.5           | 37.0           | 176.5          | 60             | 12             | 34             | 41.5           | 20             | 6              | 32             | 77             | 81             | 41             | 6              | 25                    | 1.0 | 1.2             | 60°         | -10         | 80  | 231  | RoHS-compliant | contains no SVHC materials | 23330.0023 |  |  |  |  |  |  |  |  |
| 4            | M8 x 45                | 6.5                | 27             | 8              | 6              | 28.5           | 42.5           | 223.0          | 71             | 18             | 40             | 48.5           | 24             | 7              | 38             | 111            | 112            | 63             | 11             | 37                    | 1.4 | 2.5             | 60°         | -10         | 80  | 483  | RoHS-compliant | contains no SVHC materials | 23330.0024 |  |  |  |  |  |  |  |  |
| 5            | M8 x 65                | 8.5                | 35             | 10             | 8              | 32.0           | 52.0           | 280.0          | 102            | 20             | 53             | 81.5           | 32             | 54             | 96             | 141            | 129            | 84             | 11             | 54                    | 2.0 | 3.0             | 60°         | -10         | 80  | 802  | RoHS-compliant | contains no SVHC materials | 23330.0025 |  |  |  |  |  |  |  |  |

Accessories

|   | d <sub>2</sub><br>[mm] | [g] | RoHS           | REACH                      | Art. No.   |
|---|------------------------|-----|----------------|----------------------------|------------|
| Accessories   |                        |     |                |                            |            |
|  | M6 x 35                | 16  | RoHS-compliant | contains no SVHC materials | 23330.9003 |
|   | M8 x 45                | 38  | RoHS-compliant | contains no SVHC materials | 23330.9005 |
|   | M8 x 65                | 57  | RoHS-compliant | contains no SVHC materials | 23330.9006 |