

## Double Eccentric Levers • with fulcrum pin

EH 23380.



## PRODUCT DESCRIPTION

Clamping on both sides.

## Material

## Fulcrum Pins

- Steel, case-hardened

## Lever

- Alloyed case-hardened steel, case-hardened, blackened

## Safety ring

- Spring steel

## MORE INFORMATION

## References

Can be used in combination with swing bolts DIN 444, M12 (EH 22980.).

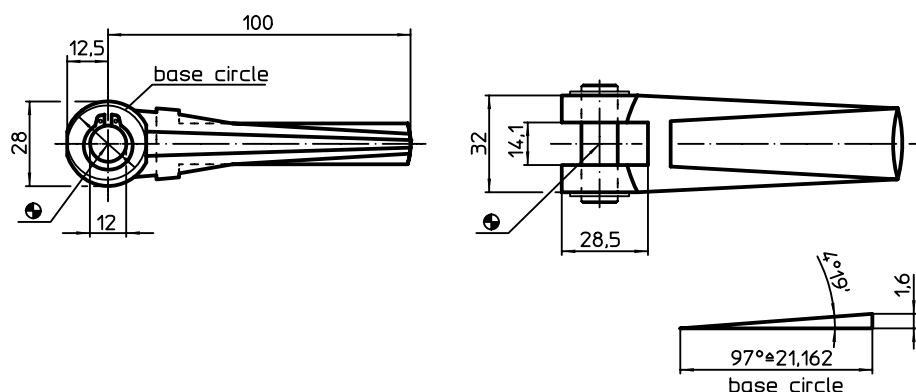
## Further products

Swing Bolts, DIN 444, form B . . . . . → p. 375

Swing Bolts, DIN 444, form B, quality

8.8 high precision design. . . . . → p. 376

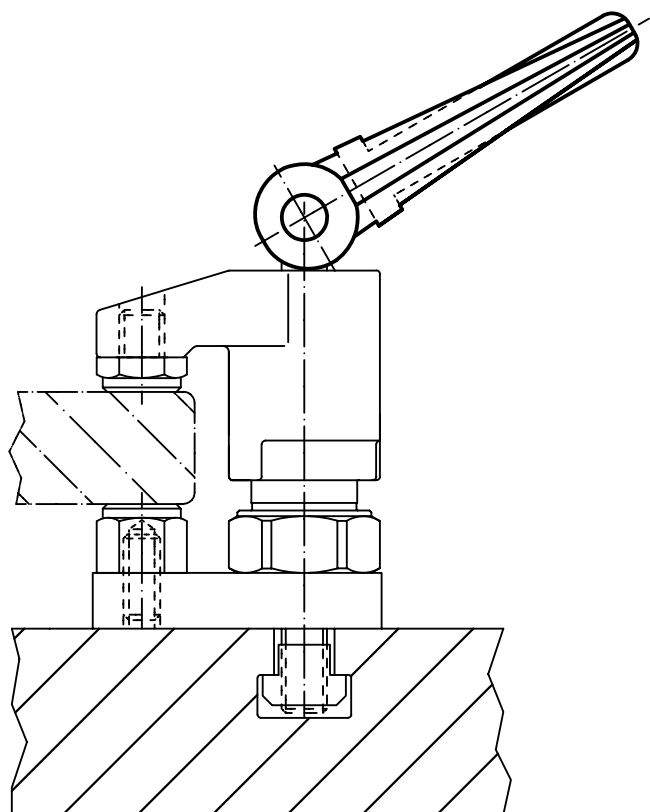
## DRAWING



## ORDER INFORMATION

| Dimensions<br>Bore Hole<br>[mm] | <br>[g] | Art. No.   |
|---------------------------------|----------------------------------------------------------------------------------------------|------------|
| 12                              | 341                                                                                          | 23380.0012 |

## APPLICATION EXAMPLE



## Eccentric Levers • with fulcrum pin

EH 23390.



### PRODUCT DESCRIPTION

The eccentric levers have an eccentric clamping range of 160°.

#### Material

- Stainless steel 1.4301

#### Fulcrum Pins

- Stainless steel 1.4021, heat-treated

#### Safety ring

- Stainless steel 1.4310

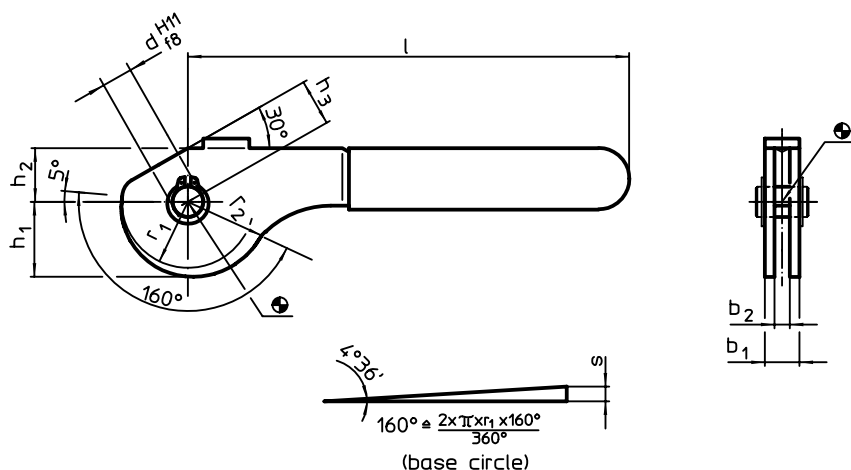
#### Eccentric part

- Steel St. 52-3, zinc phosphated

#### Plastic cap

- PVC, red

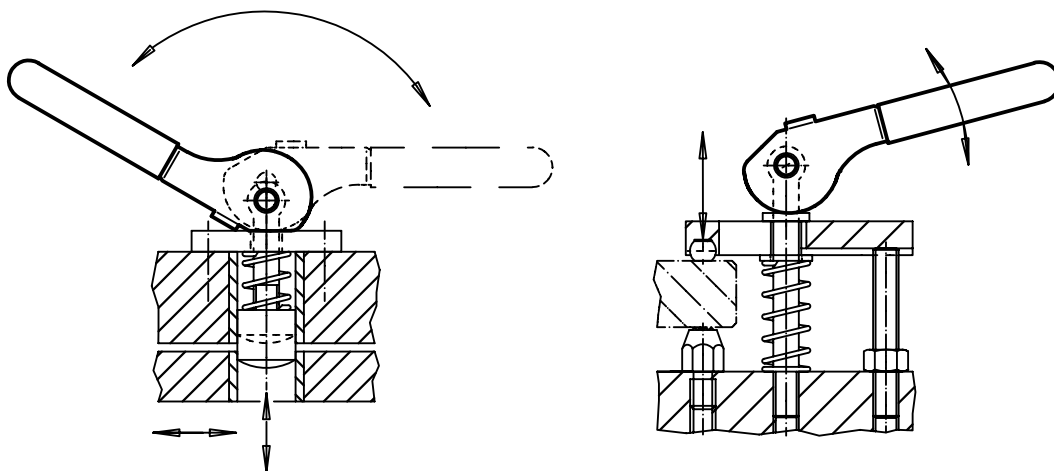
### DRAWING



### ORDER INFORMATION

| Dimensions             |          |     |                |                |                |                |                |                | Eccentric stroke s | Total stroke r <sub>2</sub> -h <sub>3</sub> | max. |     | Art. No.   |
|------------------------|----------|-----|----------------|----------------|----------------|----------------|----------------|----------------|--------------------|---------------------------------------------|------|-----|------------|
| b <sub>1</sub>         | d H11 f8 | l   | r <sub>1</sub> | r <sub>2</sub> | b <sub>2</sub> | h <sub>1</sub> | h <sub>2</sub> | h <sub>3</sub> | [mm]               | [mm]                                        | [°C] | [g] |            |
| <b>steel</b>           |          |     |                |                |                |                |                |                |                    |                                             |      |     |            |
| 13                     | 8        | 114 | 17.2           | 21.07          | 9              | 19.54          | 14             | 12             | 3.87               | 9.07                                        | 60   | 92  | 23390.0408 |
| 17                     | 10       | 138 | 21.6           | 26.45          | 12             | 24.54          | 17             | 15             | 4.85               | 11.45                                       | 60   | 179 | 23390.0410 |
| 20                     | 12       | 157 | 28.0           | 34.29          | 14             | 31.81          | 21             | 18             | 6.29               | 16.29                                       | 60   | 286 | 23390.0412 |
| <b>stainless steel</b> |          |     |                |                |                |                |                |                |                    |                                             |      |     |            |
| 13                     | 8        | 114 | 17.2           | 21.07          | 9              | 19.54          | 14             | 12             | 3.87               | 9.07                                        | 60   | 94  | 23390.0508 |
| 17                     | 10       | 138 | 21.6           | 26.45          | 12             | 24.54          | 17             | 15             | 4.85               | 11.45                                       | 60   | 179 | 23390.0510 |
| 20                     | 12       | 157 | 28.0           | 34.29          | 14             | 31.81          | 21             | 18             | 6.29               | 16.29                                       | 60   | 290 | 23390.0512 |

### APPLICATION EXAMPLE



## Eccentric Quick Clamps • with female thread

EH 23390.



## PRODUCT DESCRIPTION

For quick and easy clamping and releasing of workpieces.  
When using the "adjustable" design (picture 2) the lever position can be moved.

## Material

## Support washer

- Thermoplastic PA, glass-fiber reinforced
- Thermoplastic POM, glass-fiber reinforced

## Lever

- Zinc die-cast, plastic coated, black, similar to RAL 9005

## Threaded part

- Steel, zinc-plated by galvanization
- Stainless steel 1.4305

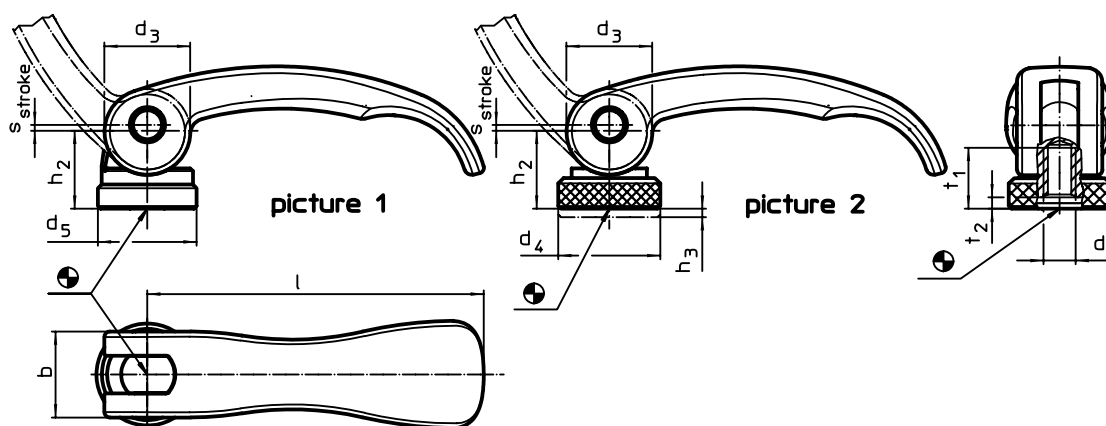
## Inner parts

- Steel, zinc-plated by galvanization
- Stainless steel 1.4305

## Adjusting nut

- Steel, zinc-plated by galvanization
- Stainless steel 1.4305

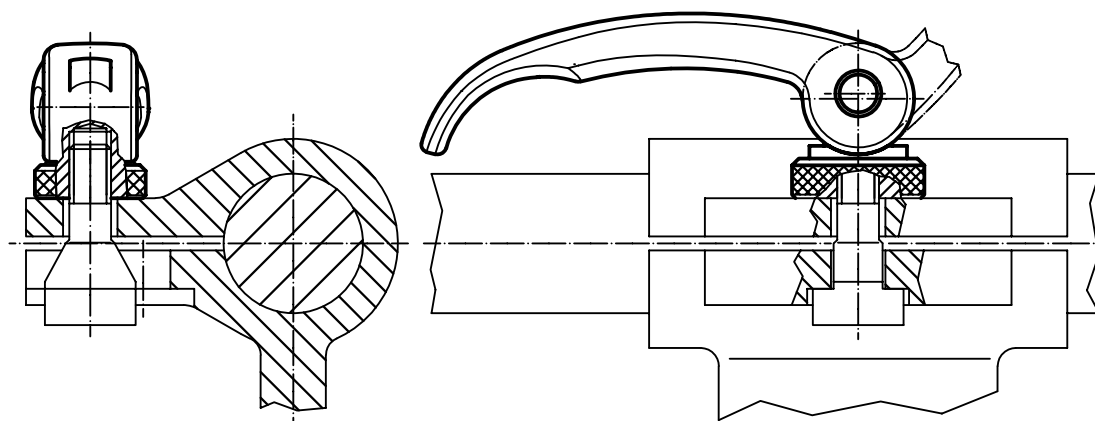
## DRAWING



## ORDER INFORMATION

| Dimensions                                 |                |                |                |                |                        |                                                |    |                |                                                           | Stroke<br>s<br>at 90°<br>lever<br>position | max. |     | Art. No.   |                    |
|--------------------------------------------|----------------|----------------|----------------|----------------|------------------------|------------------------------------------------|----|----------------|-----------------------------------------------------------|--------------------------------------------|------|-----|------------|--------------------|
| l                                          | d <sub>1</sub> | d <sub>3</sub> | d <sub>4</sub> | d <sub>5</sub> | h <sub>2</sub><br>max. | Regulating-<br>range<br>h <sub>3</sub><br>min. | b  | t <sub>1</sub> | t <sub>2</sub><br>min.<br>in<br>clamp-<br>ing<br>position | [mm]                                       | [°C] | [g] | Steel      | Stainless<br>steel |
| [mm]                                       |                |                |                |                |                        |                                                |    |                |                                                           |                                            |      |     |            |                    |
| with female thread – picture 1             |                |                |                |                |                        |                                                |    |                |                                                           |                                            |      |     |            |                    |
| 63                                         | M5             | 16             | –              | 18.5           | 16.4                   | –                                              | 16 | 13             | 3.0                                                       | 0.75                                       | 80   | 60  | 23390.0003 | 23390.0203         |
|                                            | M6             | 16             | –              | 18.5           | 16.4                   | –                                              | 16 | 13             | 3.0                                                       | 0.75                                       | 80   | 58  | 23390.0001 | 23390.0201         |
| 82                                         | M8             | 20             | –              | 22.5           | 19.5                   | –                                              | 20 | 15             | 3.7                                                       | 1.00                                       | 80   | 118 | 23390.0002 | 23390.0202         |
| with female thread, adjustable – picture 2 |                |                |                |                |                        |                                                |    |                |                                                           |                                            |      |     |            |                    |
| 63                                         | M5             | 16             | 19             | –              | 16.4                   | 1.5                                            | 16 | 13             | 3.0                                                       | 0.75                                       | 80   | 66  | 23390.0103 | 23390.0303         |
|                                            | M6             | 16             | 19             | –              | 16.4                   | 1.5                                            | 16 | 13             | 3.0                                                       | 0.75                                       | 80   | 65  | 23390.0101 | 23390.0301         |
| 82                                         | M8             | 20             | 25             | –              | 19.5                   | 2.5                                            | 20 | 15             | 3.7                                                       | 1.00                                       | 80   | 131 | 23390.0102 | 23390.0302         |

## APPLICATION EXAMPLE



## Eccentric Quick Clamps • with screw

EH 23390.



## PRODUCT DESCRIPTION

For quick and easy clamping and releasing of workpieces.  
When using the "adjustable" design (picture 2) the lever position can be moved.

## Material

## Support washer

- Thermoplastic PA, glass-fiber reinforced
- Thermoplastic POM, glass-fiber reinforced

## Lever

- Zinc die-cast, plastic coated, black, similar to RAL 9005

## Inner parts

- Steel, zinc-plated by galvanization
- Stainless steel 1.4305

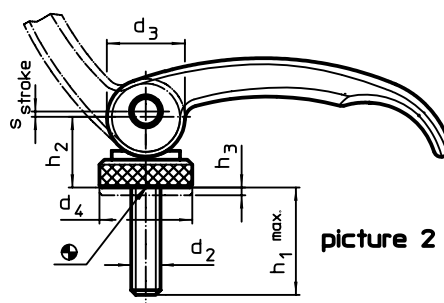
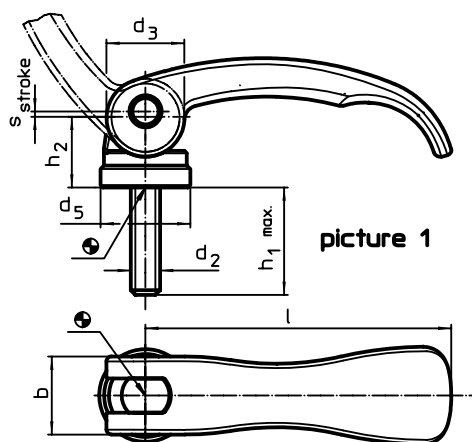
## Screw

- Steel, zinc-plated by galvanization
- Stainless steel 1.4305

## Adjusting nut

- Steel, zinc-plated by galvanization
- Stainless steel 1.4305

## DRAWING



## ORDER INFORMATION

| l                      | Dimensions     |                                                      |                |                |                |                        |                                                | Stroke<br>s<br>at 90°<br>lever<br>position | <br>max. | <br>[g] | Art. No. |                            |                            |
|------------------------|----------------|------------------------------------------------------|----------------|----------------|----------------|------------------------|------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------|----------------------------|----------------------------|
|                        | d <sub>2</sub> | h <sub>1</sub><br>max.<br>in<br>clamping<br>position | d <sub>3</sub> | d <sub>4</sub> | d <sub>5</sub> | h <sub>2</sub><br>max. | Regulating-<br>range<br>h <sub>3</sub><br>min. |                                            |                                                                                               |                                                                                              | b        | Steel                      | Stainless<br>steel         |
|                        | [mm]           |                                                      |                |                |                |                        |                                                |                                            |                                                                                               |                                                                                              | [mm]     | [°C]                       |                            |
| with screw – picture 1 |                |                                                      |                |                |                |                        |                                                |                                            |                                                                                               |                                                                                              |          |                            |                            |
| 63                     | M5             | 16                                                   | 16             | –              | 18.5           | 16.4                   | –                                              | 16                                         | 0.75                                                                                          | 80                                                                                           | 62       | <a href="#">23390.0030</a> | <a href="#">23390.0230</a> |
|                        |                | 20                                                   | 16             | –              | 18.5           | 16.4                   | –                                              | 16                                         | 0.75                                                                                          | 80                                                                                           | 63       | <a href="#">23390.0031</a> | <a href="#">23390.0231</a> |
|                        |                | 25                                                   | 16             | –              | 18.5           | 16.4                   | –                                              | 16                                         | 0.75                                                                                          | 80                                                                                           | 63       | <a href="#">23390.0032</a> | <a href="#">23390.0232</a> |
|                        |                | 30                                                   | 16             | –              | 18.5           | 16.4                   | –                                              | 16                                         | 0.75                                                                                          | 80                                                                                           | 65       | <a href="#">23390.0033</a> | <a href="#">23390.0233</a> |
|                        |                | 35                                                   | 16             | –              | 18.5           | 16.4                   | –                                              | 16                                         | 0.75                                                                                          | 80                                                                                           | 65       | <a href="#">23390.0034</a> | <a href="#">23390.0234</a> |
|                        |                | 40                                                   | 16             | –              | 18.5           | 16.4                   | –                                              | 16                                         | 0.75                                                                                          | 80                                                                                           | 65       | <a href="#">23390.0035</a> | <a href="#">23390.0235</a> |
|                        | M6             | 50                                                   | 16             | –              | 18.5           | 16.4                   | –                                              | 16                                         | 0.75                                                                                          | 80                                                                                           | 67       | <a href="#">23390.0036</a> | <a href="#">23390.0236</a> |
|                        |                | 16                                                   | 16             | –              | 18.5           | 16.4                   | –                                              | 16                                         | 0.75                                                                                          | 80                                                                                           | 63       | <a href="#">23390.0009</a> | <a href="#">23390.0209</a> |
|                        |                | 20                                                   | 16             | –              | 18.5           | 16.4                   | –                                              | 16                                         | 0.75                                                                                          | 80                                                                                           | 65       | <a href="#">23390.0010</a> | <a href="#">23390.0210</a> |
|                        |                | 25                                                   | 16             | –              | 18.5           | 16.4                   | –                                              | 16                                         | 0.75                                                                                          | 80                                                                                           | 65       | <a href="#">23390.0011</a> | <a href="#">23390.0211</a> |
|                        |                | 30                                                   | 16             | –              | 18.5           | 16.4                   | –                                              | 16                                         | 0.75                                                                                          | 80                                                                                           | 65       | <a href="#">23390.0012</a> | <a href="#">23390.0212</a> |
|                        |                | 35                                                   | 16             | –              | 18.5           | 16.4                   | –                                              | 16                                         | 0.75                                                                                          | 80                                                                                           | 66       | <a href="#">23390.0013</a> | <a href="#">23390.0213</a> |
| 82                     | M8             | 40                                                   | 16             | –              | 18.5           | 16.4                   | –                                              | 16                                         | 0.75                                                                                          | 80                                                                                           | 68       | <a href="#">23390.0014</a> | <a href="#">23390.0214</a> |
|                        |                | 50                                                   | 16             | –              | 18.5           | 16.4                   | –                                              | 16                                         | 0.75                                                                                          | 80                                                                                           | 69       | <a href="#">23390.0016</a> | <a href="#">23390.0216</a> |
|                        |                | 20                                                   | 20             | –              | 22.5           | 19.5                   | –                                              | 20                                         | 1.00                                                                                          | 80                                                                                           | 128      | <a href="#">23390.0019</a> | <a href="#">23390.0219</a> |
|                        |                | 25                                                   | 20             | –              | 22.5           | 19.5                   | –                                              | 20                                         | 1.00                                                                                          | 80                                                                                           | 129      | <a href="#">23390.0020</a> | <a href="#">23390.0220</a> |
|                        |                | 30                                                   | 20             | –              | 22.5           | 19.5                   | –                                              | 20                                         | 1.00                                                                                          | 80                                                                                           | 132      | <a href="#">23390.0021</a> | <a href="#">23390.0221</a> |
|                        |                | 35                                                   | 20             | –              | 22.5           | 19.5                   | –                                              | 20                                         | 1.00                                                                                          | 80                                                                                           | 134      | <a href="#">23390.0022</a> | <a href="#">23390.0222</a> |
|                        |                | 40                                                   | 20             | –              | 22.5           | 19.5                   | –                                              | 20                                         | 1.00                                                                                          | 80                                                                                           | 136      | <a href="#">23390.0023</a> | <a href="#">23390.0223</a> |
|                        |                | 50                                                   | 20             | –              | 22.5           | 19.5                   | –                                              | 20                                         | 1.00                                                                                          | 80                                                                                           | 138      | <a href="#">23390.0025</a> | <a href="#">23390.0225</a> |
|                        |                | 60                                                   | 20             | –              | 22.5           | 19.5                   | –                                              | 20                                         | 1.00                                                                                          | 80                                                                                           | 142      | <a href="#">23390.0027</a> | <a href="#">23390.0227</a> |



Fulcrum Pins  
EH 23400.



PRODUCT DESCRIPTION

Material

Fulcrum Pins

- Stainless steel 1.4021, heat-treated

Safety ring

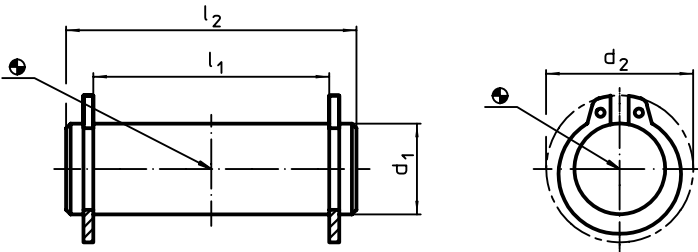
- Stainless steel 1.4310

MORE INFORMATION

References

Suitable for eccentric levers EH 23390. and similar applications.

DRAWING



ORDER INFORMATION

| d <sub>1</sub><br>f8 | Dimensions                     |                |                | <br>[g] | Art. No.                   |
|----------------------|--------------------------------|----------------|----------------|--------------------------------------------------------------------------------------------|----------------------------|
|                      | l <sub>1</sub><br>-0.5<br>[mm] | d <sub>2</sub> | l <sub>2</sub> |                                                                                            |                            |
| 8                    | 14                             | 14.7           | 18             | 9.8                                                                                        | <a href="#">23400.0082</a> |
|                      | 21                             | 14.7           | 27             | 12.0                                                                                       | <a href="#">23400.0085</a> |
| 10                   | 18                             | 17.0           | 24             | 19.0                                                                                       | <a href="#">23400.0102</a> |
|                      | 29                             | 17.0           | 35             | 21.0                                                                                       | <a href="#">23400.0105</a> |
| 12                   | 21                             | 19.0           | 27             | 26.0                                                                                       | <a href="#">23400.0122</a> |
|                      | 31                             | 19.0           | 37             | 34.0                                                                                       | <a href="#">23400.0125</a> |

APPLICATION EXAMPLE

