Pneumatic/hydraulic short-stroke clamping element KSE-PH

The DATRON short-stroke clamping element is a smart high-tech time-saving element. It is used everywhere where high flexibility, high operating comfort and short conversion times are required. The clamping element is designed for operation on a T-slot plate, but can also be used stationary.

Properties:
- Clamping jaw as easy-to-exchange wear part
- Variable clamping jaw design possible
- Horizontal clamping movement
- Functions "Release clamping", "Clamp" and "Retract clamping jaw"
- Safe one-hand operation via push-buttons; with this, minimised re-clamping times
- Reliable clamping by means of pneumatic/hydraulic solution with integrated pressure intensifier
- Can be continuously shifted in the T-slot
- Clamping jaw can be easily exchanged
- Chip-tight

Scope of delivery:
- Short-stroke clamping element
- Compressed air hose

Options/accessories:
- Fixed clamping jaw

Technical data

<table>
<thead>
<tr>
<th>Technical data</th>
<th>Pneumatic/hydraulic short-stroke clamping element KSE-PH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (L x W x H)</td>
<td>130 mm x 110 mm x 65 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>1.6 kg</td>
</tr>
<tr>
<td>Operating pressure</td>
<td>1 to 8 bar</td>
</tr>
<tr>
<td>Clamping force</td>
<td>100 - 600 N</td>
</tr>
<tr>
<td>Clamping path</td>
<td>4 mm</td>
</tr>
<tr>
<td>Range of rotation</td>
<td>360°</td>
</tr>
</tbody>
</table>

Order specification | Article number  
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Pneumatic/hydraulic short-stroke clamping element KSE-PH | 0A01084A

Advantages:
- One-hand operation
- Fast conversion
- Adjustable clamping pressure
- Compact design

Application:
- Flexible clamping of different workpieces
Short-stroke clamping element for automatic clamping operation **KSE-AS**

The short-stroke clamping element KSE-AS allows for automatic clamping operation. The clamping element is designed for operation on a T-slot plate, but can also be installed in devices so that it is fixed.

**Properties:**
- Clamping jaw as easy-to-exchange wear part
- Variable clamping jaw design possible
- Chip-tight
- An external valve is necessary for activation (e.g. pneumatic activation unit)

**Scope of delivery:**
- Short-stroke clamping element
- Compressed air hose

**Options/accessories:**
- Fixed clamping jaw
- Pneumatic control unit

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**Advantages:**
- Automatic opening and closing
- Fast conversion
- Adjustable clamping pressure
- Compact design

**Application:**
- Flexible clamping of different workpieces
- for small batch and series production

<table>
<thead>
<tr>
<th>Technical data</th>
<th>Short-stroke clamping element for automatic clamping operation KSE-AS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (L x W x H)</td>
<td>125 mm x 110 mm x 65 mm</td>
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<tr>
<td>Weight</td>
<td>1.2 kg</td>
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<tr>
<td>Operating pressure</td>
<td>1 to 6 bar</td>
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<tr>
<td>Clamping force</td>
<td>100 - 600 N</td>
</tr>
<tr>
<td>Clamping path</td>
<td>4 mm</td>
</tr>
</tbody>
</table>

**Order specification**
- Short-stroke clamping element for automatic clamping operation KSE-AS

<table>
<thead>
<tr>
<th>Article number</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OA010643</td>
<td></td>
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</table>
Wedge clamping element **KSE**

The wedge clamping elements can be configured for single as well as for multiple clappings. Due to their clamping screw and the T-nut, they can be flexibly used on the DATRON T-slot plate.

The compact design allows the work area to be optimally used.

<table>
<thead>
<tr>
<th>Technical data</th>
<th>KSE 21-8</th>
<th>KSE 21-G8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaw width</td>
<td>21 mm</td>
<td>21 mm</td>
</tr>
<tr>
<td>Clamping force (per jaw)</td>
<td>15,000 N for 25 Nm</td>
<td>15,000 N for 25 Nm</td>
</tr>
<tr>
<td>Clamping screw</td>
<td>M8</td>
<td>M8</td>
</tr>
<tr>
<td>L min.-max.</td>
<td>40 – 44.5 mm</td>
<td>25 – 39.5 mm</td>
</tr>
<tr>
<td>H1</td>
<td>15 mm</td>
<td>15 mm</td>
</tr>
<tr>
<td>H2</td>
<td>19 mm</td>
<td>19 mm</td>
</tr>
<tr>
<td>B</td>
<td>21 mm</td>
<td>21 mm</td>
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**Order specification**

<table>
<thead>
<tr>
<th>Description</th>
<th>Article number</th>
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<tbody>
<tr>
<td>Wedge clamping element KSE 21-8 with smooth clamping surface</td>
<td>0078930</td>
</tr>
<tr>
<td>Wedge clamping element KSE G21-8 with rippled clamping surface</td>
<td>0078931</td>
</tr>
</tbody>
</table>

**Advantages:**
- Simple handling
- Pull-down clamping
- Flexible
- Fast conversion
- High clamping force
- Stable design thanks to special guides

**Application:**
- Clamping of mechanical parts
Pneumatic control unit PA-8

The pneumatic control unit is suitable for controlling the short-stroke clamping elements in automatic clamping mode, for example. Up to eight elements can be controlled individually from the program or via the hand-held control unit or keyboard.

Properties:
- Up to 8 valves can be individually actuated
- "Pressure on", "Pressure off" controllable via
  - Programme
  - Keyboard
  - Hand-held control unit
- Actuation via program, keyboard or hand-held control unit

Scope of delivery:
- 8x pneumatic control unit
- Digital in-/output Module

Options/accessories:
- Short-stroke clamping element for automatic clamping operation KSE-AS

Advantages:
- 8 valves can be individually actuated
- Controllable from the program
- Controllable from the hand-held control unit

Application:
- Control of automatic short-stroke clamping elements
- Control of customised clamping fixtures

<table>
<thead>
<tr>
<th>Technical data</th>
<th>Pneumatic control unit PA-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (L x W x H)</td>
<td>170 mm x 80 mm x 60 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>1.0 kg</td>
</tr>
<tr>
<td>Operating pressure</td>
<td>1 to 6 bar</td>
</tr>
<tr>
<td>Flow per connection</td>
<td>70 l/min at 6 bar</td>
</tr>
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</table>

Order specification
- Pneum. control unit, 8x, including digital I/O module, 8 in/8 out

Article number: DA01604P
Pneumatic vertical clamping system PV

The pneumatic short-stroke clamping system for DATRON machines with table cut-out is especially suited for the fast and easy clamping of housings. The clamping plate equipped with T-slots is vertically fastened in the cut-out of the machine table. Fitted with several pneumatic short-stroke cylinders, the vertical clamping beam is easily held via groove wedges. The adjustable cylinders are continuously actuated individually via pneumatic valves.

Properties:
- The clamping force changes linearly with the operating pressure

Scope of delivery:
- Clamping fixture
- Short-stroke cylinders according to table below
- Compressed air hose
- Pneumatic valve

Options/accessories:
- Short-stroke cylinder

<table>
<thead>
<tr>
<th>Article designation</th>
<th>Article number</th>
<th>Clamping range in X and Y</th>
<th>Number of short-stroke cylinders</th>
<th>Height stop</th>
<th>Operating Pressure</th>
<th>Clamping force per cylinder</th>
</tr>
</thead>
</table>
| Pneumatic vertical clamping system for M8/M26/M10 | 0A01087D | X = 575 mm
Y = 215 mm | 3 | - | 1 - 6 bar | 750 N at 6 bar |
| Pneumatic vertical clamping system for M8 | 0A01087C | X = 610 mm
Y = 215 mm | 3 | - | 1 - 6 bar | 750 N at 6 bar |
| Pneumatic vertical clamping system for M8 with height stop | 0A01087D | X = 610 mm
Y = 207 mm | 8 | yes, adjustable | 1 - 6 bar | 750 N at 6 bar |
| Pneumatic vertical clamping system for M8 with height stop | 0A01087E | X = 610 mm
Y = 207 mm | 3 | yes, adjustable | 1 - 6 bar | 750 N at 6 bar |
| Pneumatic vertical clamping system for M8 with height stop, tiltable by 3 degrees | 0A01087F | X = 610 mm
Y = 207 mm | 3 | yes, adjustable | 1 - 6 bar | 750 N at 6 bar |
| Pneumatic vertical clamping system for MV | 0A01087G | X = 660 mm
Y = 310 mm | 4 | - | 1 - 6 bar | 750 N at 6 bar |

Order specification
- Pneumatic vertical clamping system for M8/M26/M10
- Pneumatic vertical clamping system for M8, clamping width Y = 215 mm
- Pneumatic vertical clamping system for M8 with height stop
- Pneumatic vertical clamping system for M8 with height stop
- Pneumatic vertical clamping system for M8 with height stop, tiltable by 3 degrees
- Pneumatic vertical clamping system for MV

Advantages:
- Quick and easy clamping
- Vertical clamping of long parts
- Short-stroke cylinders which can be continuously shifted
- Minimisation of the danger of injury

Application:
- Front-sided machining of workpieces
- Clamping of housings
Flat clamping system Qwik-Lok

DATRON puts its trust in innovation when it comes to manual clamping technology. In order to overcome the limits of conventional workpiece clamping and to completely exploit the technical capabilities of DATRON milling machines, the flat clamping system offers very good solutions. Both single-part clamping as well as double-clamping are possible.

Properties:
- Compact design
- Closed system
- Simple maintenance
- Clamping operation made of Stainless Steel, corrosion-resistant
- Optimised pull-down effect despite the flat design
- Centre jaw/fix jaw for single part clamping
- Precision positioning by means of diamond-shaped and round adapter
- Maximum reproducibility
- Plastic bearings prevent the jaws from blocking when lifting
- Quick-changing jaws
- Very quickly converted thanks to “click” mechanism
- Jaws can be used on both sides

Scope of delivery:
- Five QL 1040 flat clamping system mounted on 280 mm x 380 mm module plate (which fits on all standard DATRON machine tables)

Options/accessories:
- Standard set of jaws, (article No. 0069082E)
- Set of high jaws, (article No. 0069082H)
- Set of wide jaws, (article No. 0069080F)
- Set of oversized jaws, (article No. 0069082I)

<table>
<thead>
<tr>
<th>Technical data</th>
<th>Flat clamping system Qwik-Lok 1040</th>
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<tbody>
<tr>
<td>Dimensions (L x W x H)</td>
<td>400 mm x 100 mm x 55 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>11 kg</td>
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<tr>
<td>Maximum clamping capacity,</td>
<td>180 mm</td>
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<tr>
<td>double-clamping (2 clamping stations)</td>
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<tr>
<td>Maximum clamping capacity,</td>
<td>380 mm</td>
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<td>single-clamping (1 clamping station)</td>
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</table>

Order specification
- Flat clamping system Qwik-Lok 1040

<table>
<thead>
<tr>
<th>Article number</th>
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