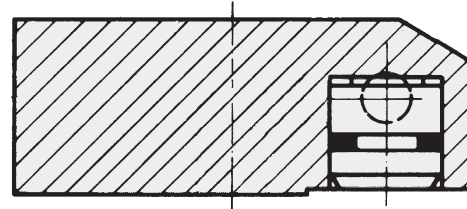
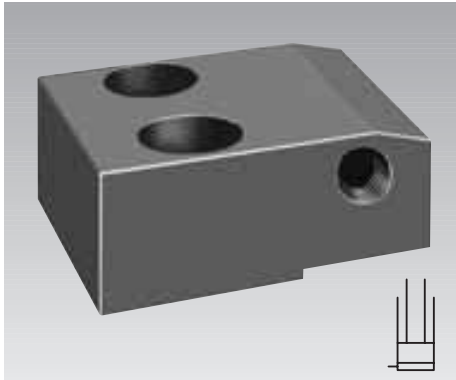


## Slideway Locking Cylinders single acting without spring return max. operating pressure 500 bar



### Slideway locking cylinder with 1 piston

|                     |         |      |      |
|---------------------|---------|------|------|
| Locking force       | 100 bar | [kN] | 4.9  |
| at                  | 500 bar | [kN] | 24.5 |
| Piston stroke, max. |         | [mm] | 2    |

### Slideway locking cylinder with 2 pistons

|                     |         |      |      |
|---------------------|---------|------|------|
| Locking force       | 100 bar | [kN] | 9.8  |
| at                  | 500 bar | [kN] | 49.0 |
| Piston stroke, max. |         | [mm] | 2    |

### Application

An economical solution to lock machine tool slideways is the direct locking method by means of hydraulic cylinders, powered from a central power system. Actuating controls of the various locking stations can be integrated with the machine tool control system.

### Advantages

- High locking forces with small dimensions
- Max. utilisation of available hydraulic pressure
- Locking pressure can be monitored
- Machine tool interlock as a function of the locking pressure

### Material

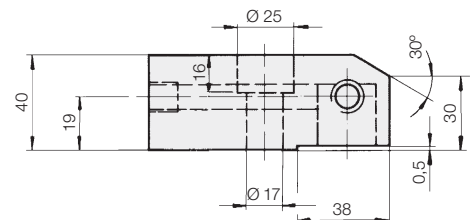
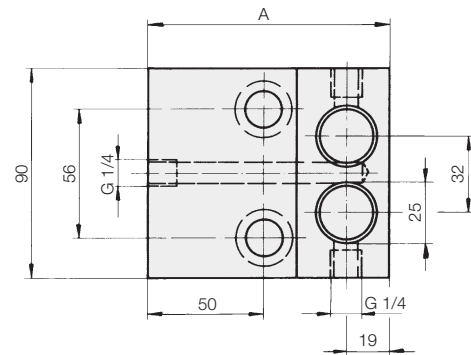
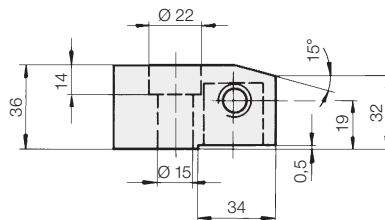
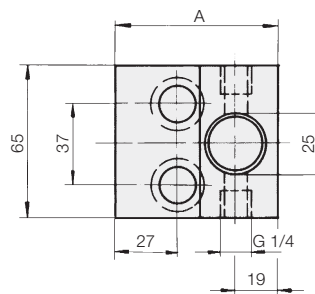
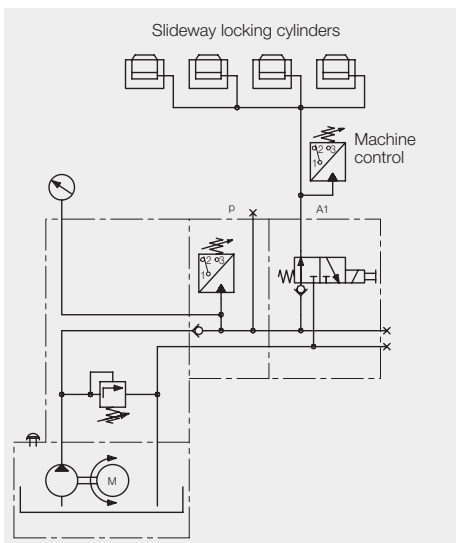
Piston material: Brass  
Cylinder body: free-cutting steel

### Important notes

There is no stop to prevent the piston from falling out. Do not pressurise the cylinder, if there is no workpiece for the piston to move against!

Operating conditions, tolerances and other data see data sheet A 0.100.

### Hydraulic circuit diagram



|                     |                                    |
|---------------------|------------------------------------|
| Dimension A = 69 mm | <b>Part-no.</b><br><b>1491-000</b> |
| Dimension A = 83 mm | <b>1492-000</b>                    |

|                      |                                    |
|----------------------|------------------------------------|
| Dimension A = 104 mm | <b>Part-no.</b><br><b>1493-000</b> |
| Dimension A = 119 mm | <b>1494-000</b>                    |

|                                |                 |
|--------------------------------|-----------------|
| <b>Spare parts</b><br>Seal kit | <b>0131-121</b> |
|--------------------------------|-----------------|

|                                |                 |
|--------------------------------|-----------------|
| <b>Spare parts</b><br>Seal kit | <b>0131-123</b> |
|--------------------------------|-----------------|

|   |                 |
|---|-----------------|
| <b>Accessory</b> , socket head cap screw DIN 912<br>M 14x40 – 8,8 | <b>3301-301</b> |
|---|-----------------|

|   |                 |
|---|-----------------|
| <b>Accessory</b> , socket head cap screw DIN 912<br>M 16x40 – 8,8 | <b>3300-404</b> |
|---|-----------------|

### Locking of a machine tool slideway

If the slideway locking cylinder cannot be connected to an already existing hydraulic system, we recommend to use one of our power units as per data sheet D 8.011. These power units are equipped to automatically monitor the locking force, i.e. the pump motor will be shut-off when the pressure in the hydraulic system

has reached a preset value, and cut-in again when pressure drops to 90% of the preset value. Additionally, machine tool operation can be controlled by a pressure switch such that it operates only when a pressure value preset on the locking cylinders has been reached.

