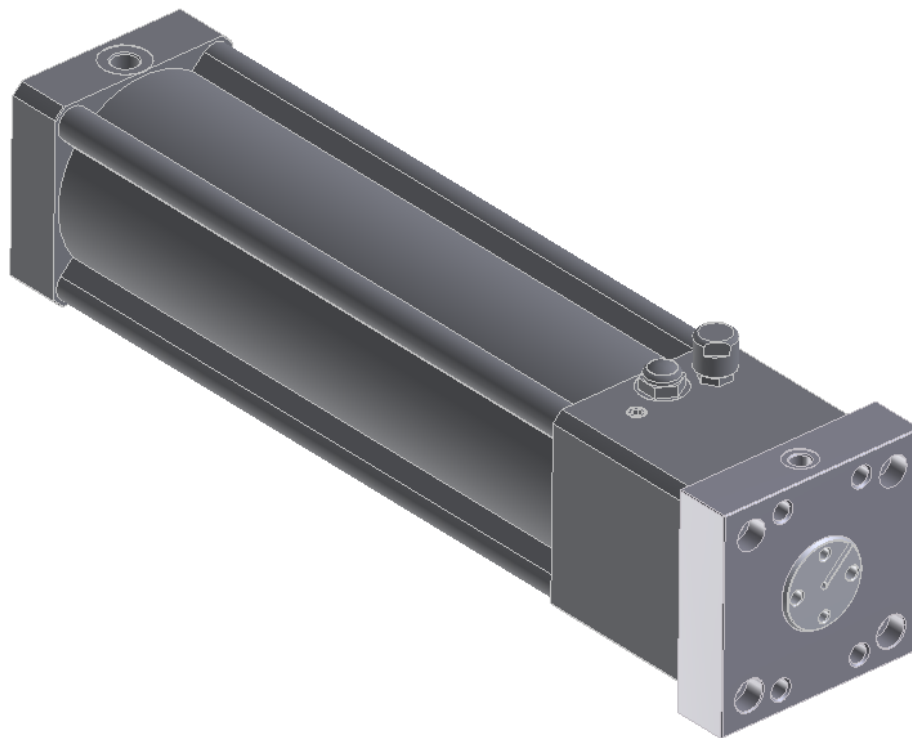
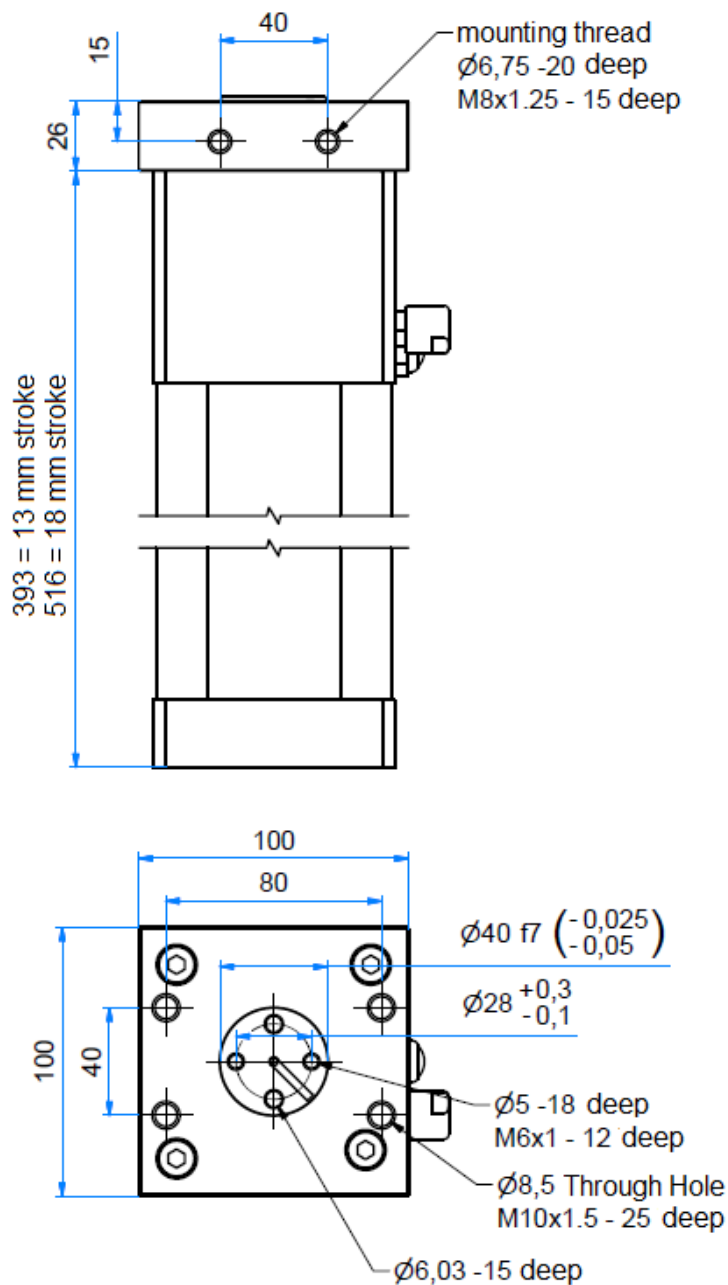


## Power cylinder UNI POWER



### *Our power cylinders offer the following advantages:*

- The compact and closed design with a large oil reserve ensures a long and maintenance-free operation in any mounting position.
- Low weight due to the use of high-strength aluminum alloys
- High cutting force and punch-free punching by hydropneumatic translation
- Due to the high cutting and retraction force, various small tools can be picked up on the punch. To control a 5/2 way valve is required. For faster operation, a quick exhaust valve on the cylinder is recommended
- The moving parts are made of wear-resistant and corrosion-resistant or -protected materials. All aluminum parts are anodised and the tubes are hard-coded aluminum profile tubes. Operation is almost maintenance-free, it is only clean and dry air required



## Technical data:

<b>Transmission ratio:</b>	1 : 10,25	1 : 6,5
<b>Cutting force:</b>	87 KN at 6 bar	10,9 KN bei 6 bar
<b>Return stroke:</b>	3750 N at 6 bar, 5000 N at 8 bar	
<b>Power stroke:</b>	13 mm	18 mm
<b>Air consumption:</b>	at 6 bar 12.8 NL/ stroke	5,3 NL/ stroke
<b>Mounting:</b>	2 x M8 (see drawing)	
<b>Weight:</b>	approx. 7.2 kg	

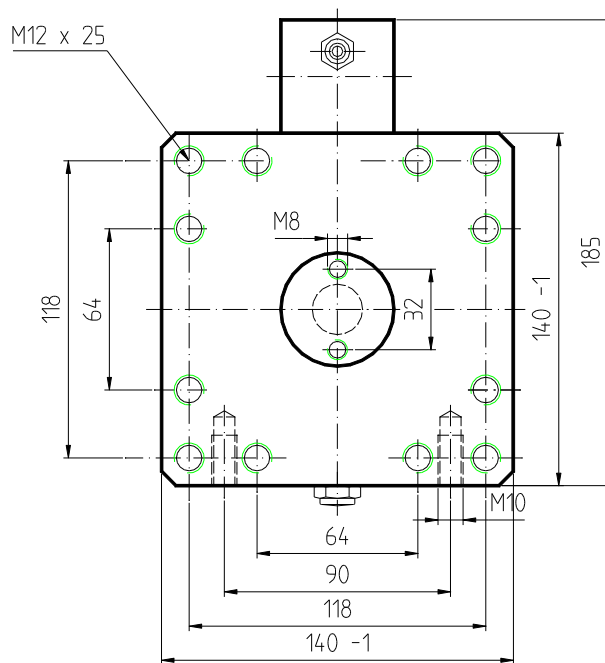
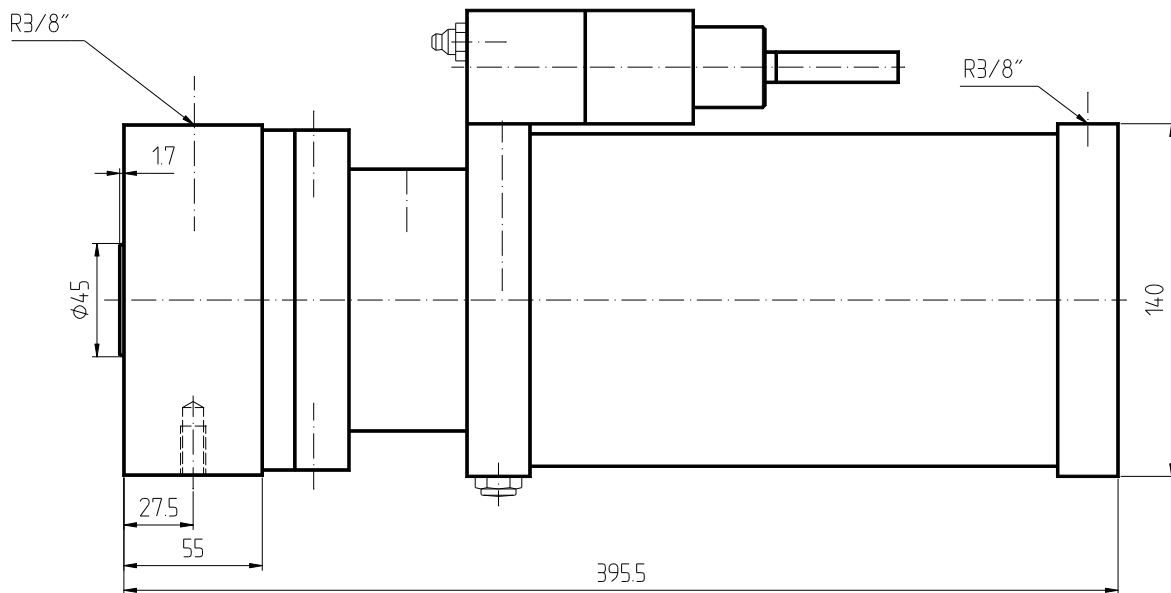
## Hydropneumatic power cylinder

### HPPZ-10

#### *Our power cylinders offer the following advantages:*

- Closed, compact design with oil reserve tank and oil level indicator
- Lightweight due to use of high-strength aluminum alloys
- Can be installed in any location due to the closed oil system
- High cutting power and shock-free punching through hydropneumatic boost
- Several small tools can be used on the punch due to the high cutting and retraction force. A 5/2 way valve is required for control purposes. A quick exhaust valve is recommended on the cylinder to run faster.
- All moving parts are made of frictionless and corrosion-resistant or corrosion-protected materials. All aluminium parts are anodized; hard-coded aluminium profile tubes are used. Operation is virtually maintenance free; it only needs clean, dry air.





## Technical data:

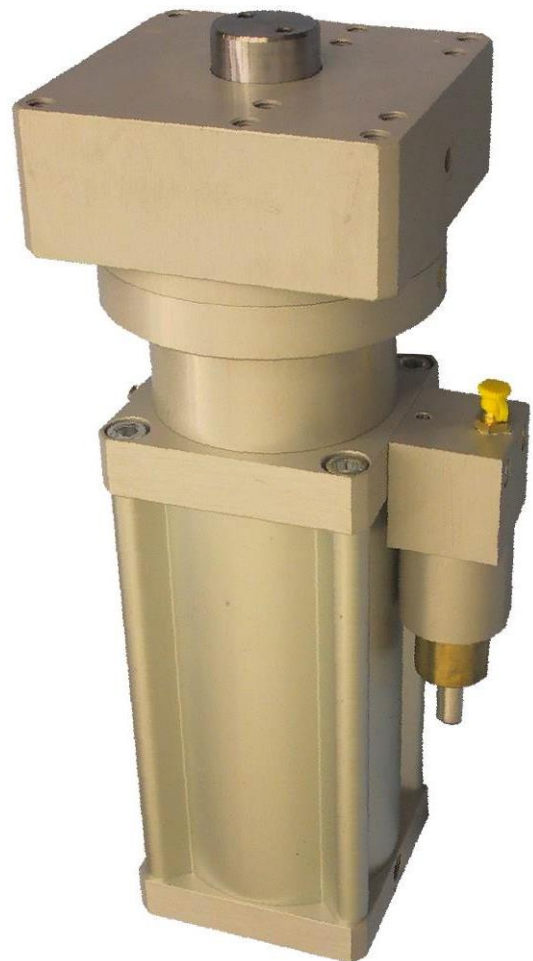
<b>Transmission ratio:</b>	1 : 38
<b>Cutting force:</b>	Up to 87 kN at 6 bar to 110 kN at 8 bar (or customised to customer specifications)
<b>Return stroke:</b>	3750 N at 6 bar, 5000 N at 8 bar
<b>Power stroke:</b>	10 mm at 87 kN and 6 bar (or customised to customer specifications)
<b>Air consumption:</b>	at 6 bar 12.8 NL/ stroke
<b>Weight:</b>	12 kg
<b>Mounting:</b>	see drawing

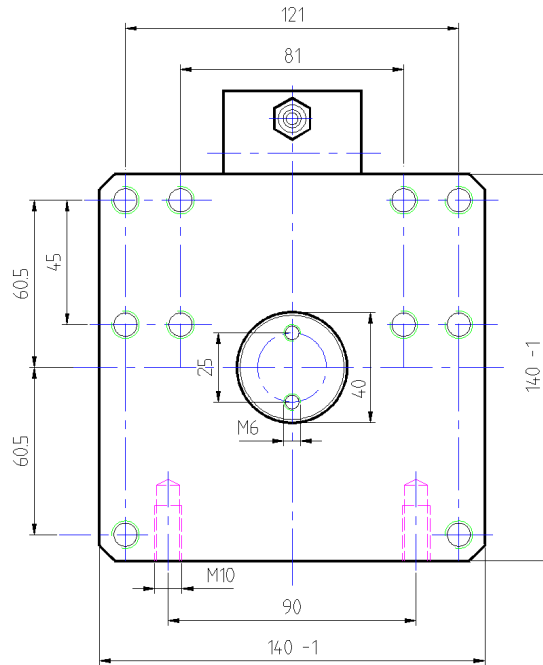
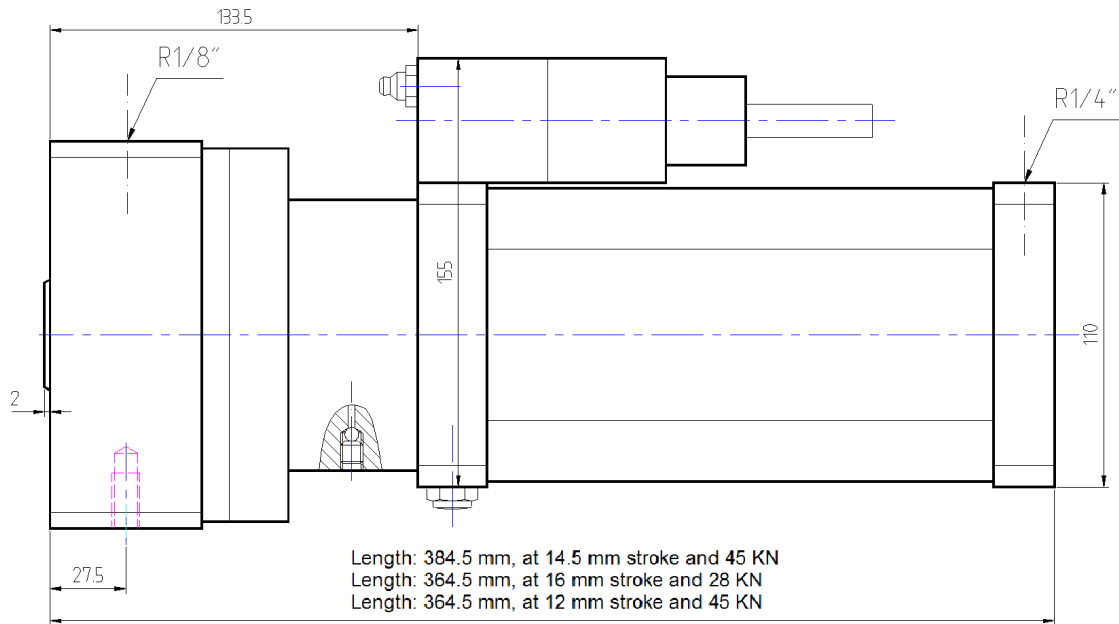
## Hydropneumatic power cylinder

**HPPZ - 14,5 – 45 KN**

*Our power cylinders offer the following advantages:*

- reserve tank and oil level indicator
- Closed, compact design with oil
- Lightweight due to use of high-strength aluminium alloys
- Can be installed in any location due to the closed oil system
- High cutting power and shock-free punching through hydropneumatic boost
- Several small tools can be used on the punch due to the high cutting and retraction force. A 5/2 way valve is required for control purposes. A quick exhaust valve is recommended on the cylinder to run faster.
- All moving parts are made of frictionless and corrosion-resistant or corrosion-protected materials. All aluminium parts are anodized; hard-coded aluminium profile tubes are used. Operation is virtually maintenance free; it only needs clean, dry air.





## Technical data:

<b>Transmission ratio:</b>	1 : 38
<b>Cutting load:</b>	at $\varnothing 40 = 4770$ N je 1 bar, at 6 bar 28 KN, max. 38 KN at $\varnothing 50 = 7650$ N je 1 bar, at 6 bar 45 KN, max. 61 KN
<b>Return stroke:</b>	at 6 bar 3950 N
<b>Operating pressure:</b>	max. 8 bar
<b>Working stroke:</b>	at $\varnothing 40 = 16$ mm at $\varnothing 50 = 12$ mm (or 14,5)
<b>Mounting:</b>	2 x M10 (see drawing)
<b>Air consumption:</b>	at 6 bar 6.87 NL/ stroke
<b>Weight:</b>	approx. 9.8 kg

## Hydropneumatic power cylinder HPPZ-60

### *Our power cylinders offer the following advantages:*

Due to an innovative type of construction, with our power cylinders, it is possible to have the power stroke operate several times per working cycle. This results in a multitude of new possibilities other providers do not offer.

### *Other advantages:*

Its compact design, the closed oil system, its light weight because it is made of high-strength aluminium alloys, and its easy-to-see oil level indicator.

### *Applications:*

The power cylinder is used during

- Punching
- Stamping
- Riveting
- Resistance welding
- Deep-drawing
- Pressing and force fitting (by means of a greater stroke through repeated power stroke action)

### *Design:*

The power cylinder consists primarily of high-strength anodized aluminium, or rust-free or corrosion-resistant material. Operation is virtually maintenance free; it only needs clean, dry air.

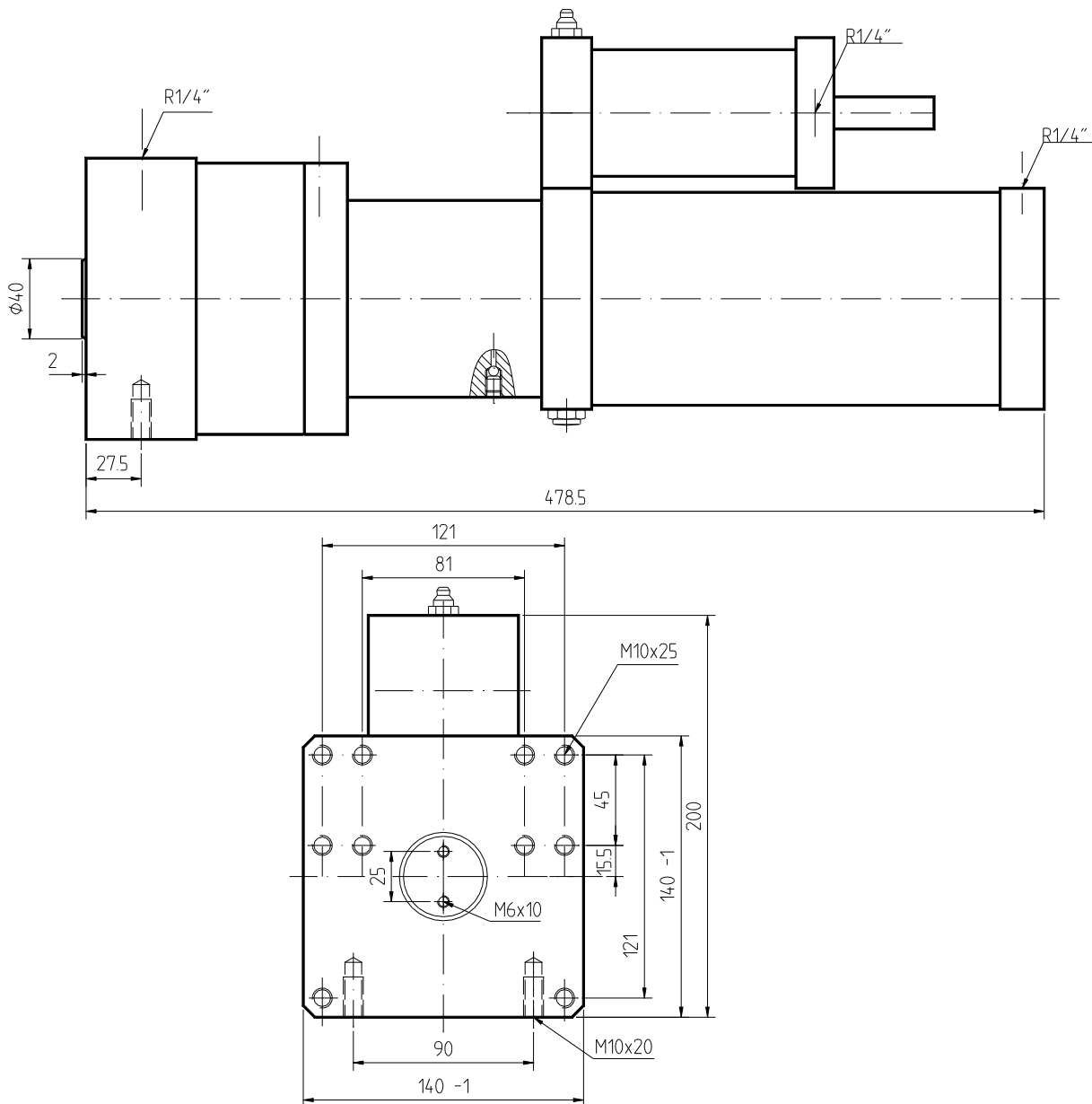
### *Equipment:*

The power cylinder comes standard equipped with all of the required quick-exhaust valves. The valve used for controlling the power stroke comes ready to be connected to the cylinder. The 5/2 way valve used for operating the cylinder is not included in the accessories.

### *Special equipment:*

- Contactless sensing of the power stroke cylinder with vibration-free electronic cylinder switches (needed for cyclically repeating the power stroke)
- Control for clocking the power stroke
- Pressure reducer for regulating the power stroke
- C – Rack for mounting the power cylinder





## Technical data:

<b>Transmission ratio:</b>	1 : 38
<b>Cutting load:</b>	up to 45 KN at 6 bar to 61 KN at 8 bar (or customised to customer specifications)
<b>Return stroke:</b>	3750 N at 6 bar, 5320 N at 8 bar
<b>Application force:</b>	117 N at cutting load 45 KN
<b>Overall stroke:</b>	20 to 60 mm (or customised to customer specifications)
<b>Power stroke:</b>	14.5 mm (or customised to customer specifications)
<b>Air consumption:</b>	at 6 bar 10.7 NL/ stroke
<b>Weight:</b>	13.5 kg
<b>Mounting:</b>	see drawing