

## 3-Jaw Insertion Gripper Type UFG, hydraulic

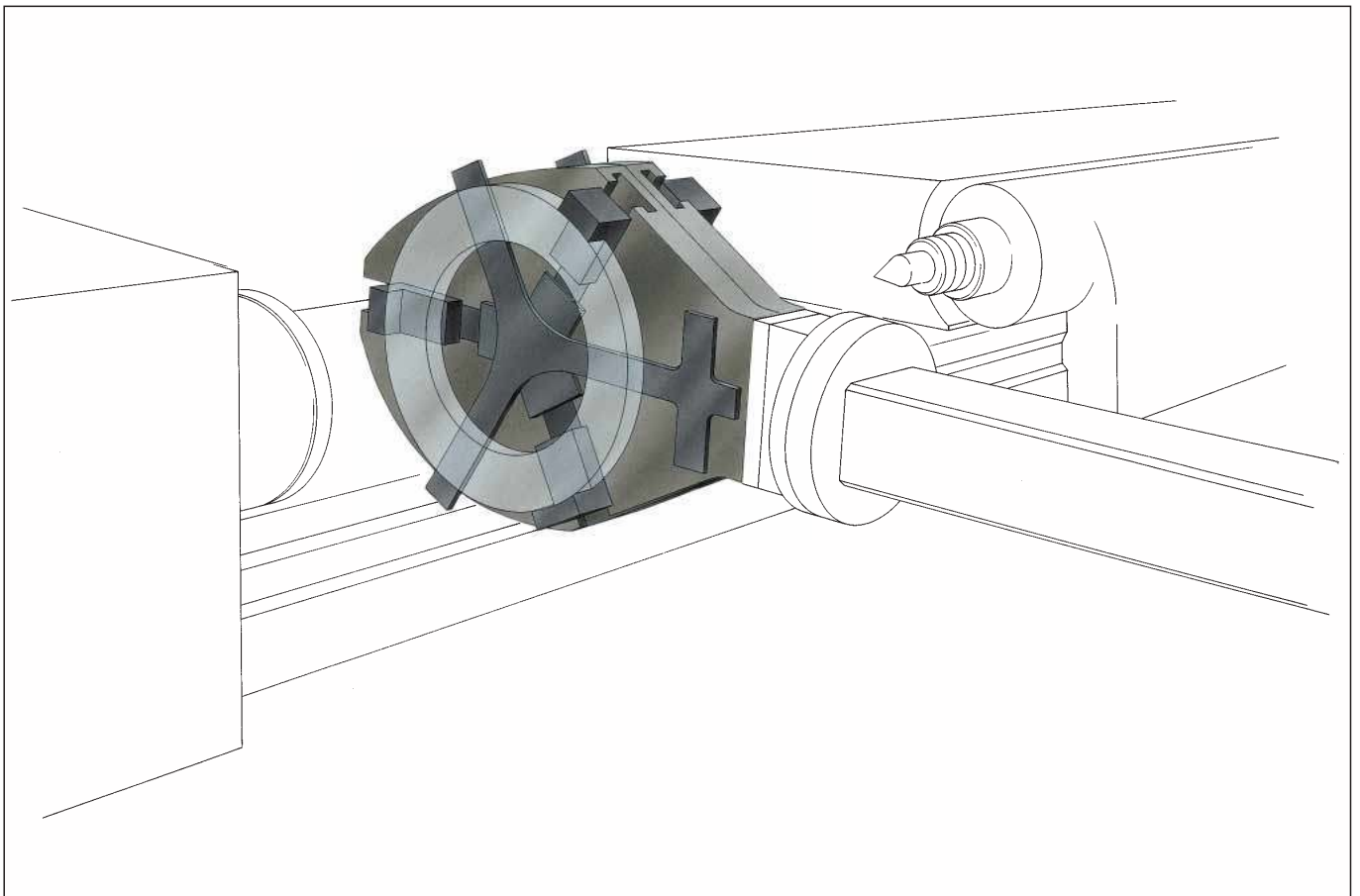




Figure with special top jaws



UFG 26

UFG 32

## Benefits

- Very large clamping range
- Extremely flat and light construction
- High clamping force
- Stroke control
- Pressure device can be supplied upon request
- Universally applicable gripper e.g. for loading machine tools
- Minimal space required in the machine
- To be used as double gripper without rework. Two grippers are screwed »back to back«
- Your workpiece is kept pressed against the flat work surface by the axial pressure device
- Serrated base jaws for unproblematic attachment of workpiece-specific top jaws
- Very flat construction
- High clamping forces
- Large jaw stroke
- Robust design

## Technical data

### Actuation:

hydraulic, hydraulic oil, filtered (10 µm)

### Repeat clamping precision:

0.05 mm

### Hydraulic connections:

R 1/4" or optionally M 6 on the rear to the hose-free connection

### Gripping force safety device:

with bladder-type accumulator and safety valves possible

### Maintenance:

permanently lubricated, re-lubrication recommended after 2,000,000 cycles

### Type of gripping:

centric, mechanical, positively guided

### Method of functioning:

via pinion and gear rods

### Installation position:

application-dependent

### Material:

Housing: High-strength, hard-coated aluminium

Functional components: Hardened steel

### Stroke control:

possible using installable proximity switches. Monitoring point can be adjusted continuously

### Pressure piece:

upon separate order

### Pressure force:

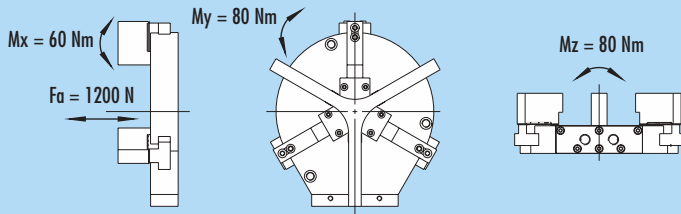
UFG 26: ~ 105 N (210 N on order)

UFG 32: ~ 165 N (330 N on order)

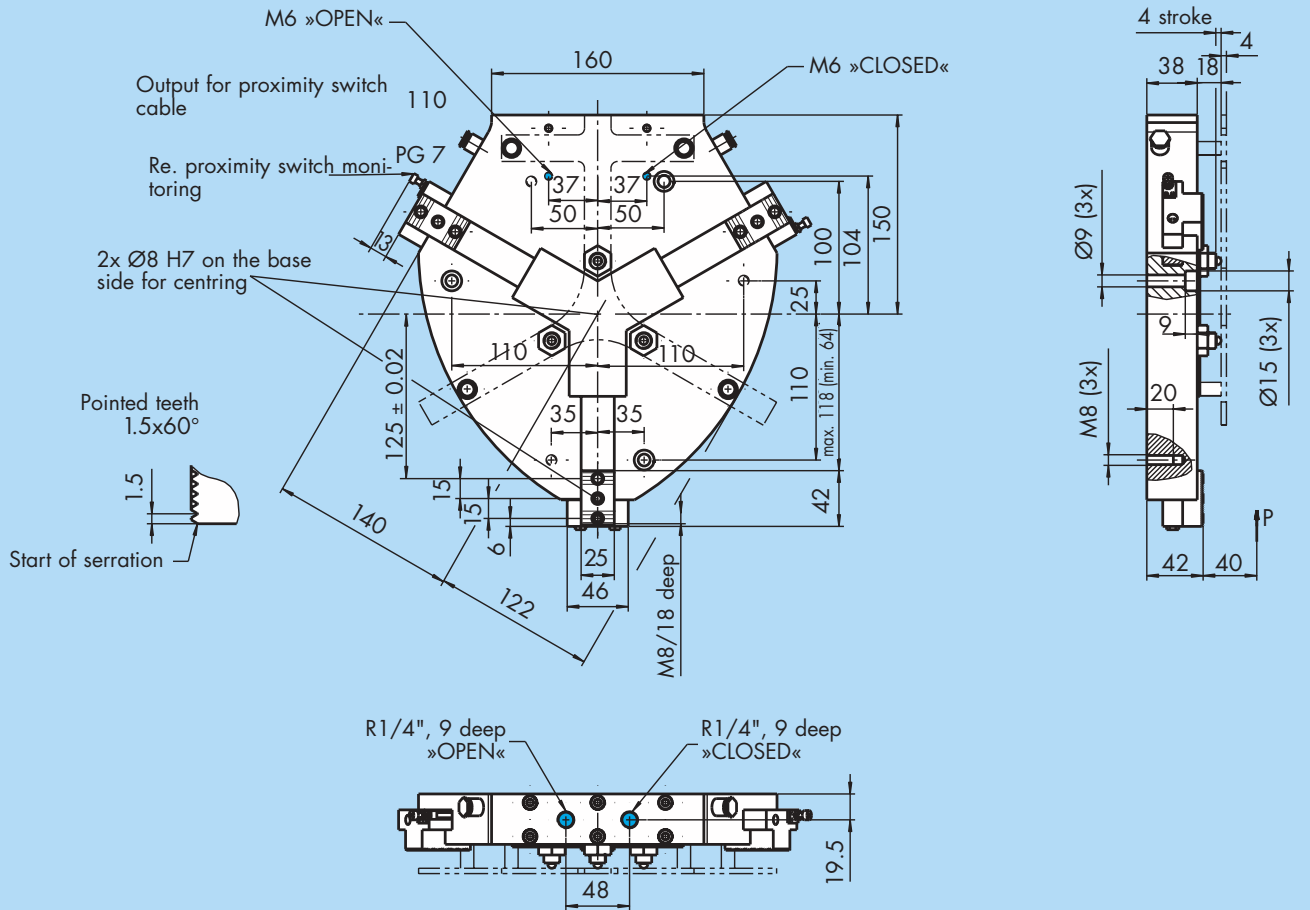
### Operating temperature:

5 °C - 60 °C

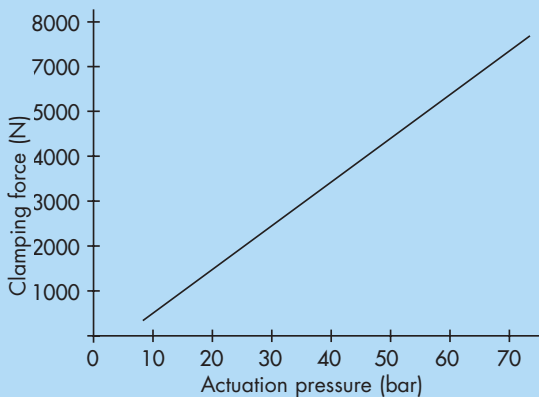
## Maximum permissible forces and torques at the gripper jaws



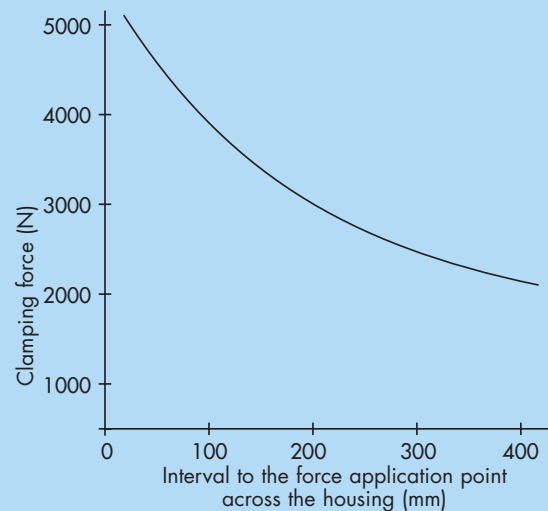
## Dimensions for UFG 32



Gripping force diagram UFG 32 (external clamping)



Gripping force diagram UFG 32 (external clamping) with diff. intervals at 40 bar



## 3-Jaw Insertion Gripper UFG 32

Type	UFG 32
Gripper ID. no.	302 716
Gripping force at P and 60 bar*	6240 N
Workpiece weight** (recommended)	30 kg
Stroke per jaw	54 mm
Oil volume open / closed	87 / 78 cm <sup>3</sup>
Opening time	2.1 s
Closing time	2.0 s
Mass of gripper / pressure piece	8.5
Mass moment of inertia	1050 kg cm <sup>2</sup>
Operating pressure range	6 – 70 bar
Repeat accuracy***	0.1 mm
Max. finger length	120 mm

\* Gripping force is the arithmetic sum of the individual forces occurring at the gripper jaws at P  
 \*\* Values at 40 or 50 bars and 40 mm jaw length as well as  $\mu = 0.1$  and safety factor  $v = 2$   
 \*\*\* Variation of end positions after 100 consecutive strokes.

### Accessories for UFG 32



#### Finger blanks

For dimensions and details see the »Accessories« catalogue.

Type	ID. no.
ASB 32	302 704
SBR 32	302 708



#### Inductive proximity switches

In easy-to-assemble version with LED display. For technical details see the »Accessories« catalogue.

Type	ID. no.
INK 80/S	301 550



#### Spring-loaded pressure piece

For the precise positioning of the workpiece (against stop) after opening the gripper, particularly for the loading of lathes.

Type	ID. no.
A-UFG 32	302 706

Pressure force approx. 160 N, mass approx. 0.5 kg

### System modules and further accessories for HGN



#### Swivel units

Combineable swivel units and heads are featured on Pages 40-47.



#### Special solutions

We can quickly supply cost-effective custom solutions, customised fingers, attachment plates and complete units to suit your specialised requirements.



#### Further accessories

For gripper pads to increase friction factors, pressure maintenance valves or distributors for proximity switches, see the »Accessories« catalogue.

### Note

Please note that the lifespan of these units can be reduced considerably if they are used in extreme conditions (e.g. where coolant is used or dust from casting or grinding processes is present). We cannot be held responsible in such cases. Solutions do exist for many problems – please contact us to find out more.