

2-Finger Angular Gripper Type UWG, pneumatic Small universal angular gripper

Housing

lightest possible because made of hard-anodised, high-tensile aluminium alloy

Base jaws

for fitting the workpiece-specific gripper finger

Kinetics

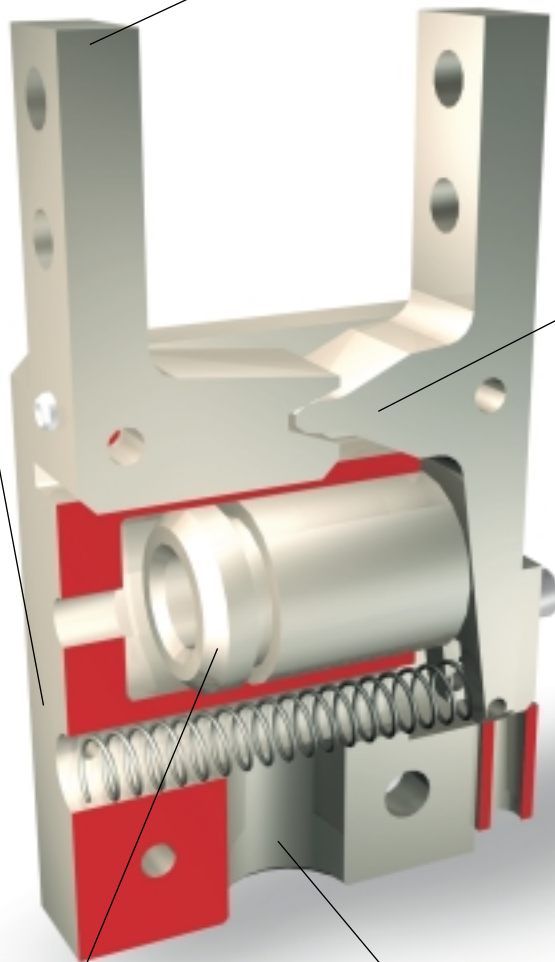
toggle system, for centric gripping

Drive

pneumatic, powerful, simple to use

Mounting options

gripper has universal mount





Benefits

- single actuated angular gripper with spring return
- small, compact design
- low weight
- strong gripping forces
- excellent repeatability
- very reliable and hard-wearing
- end position monitoring using proximity switch
- universal mounting options
- detailed operating and maintenance instructions
- 12 month guarantee

Technical data

Operating principle:

single actuated positively controlled crank drive with spring return

Material:

gripper made from high-tensile, hard-coated aluminium alloy

Operation:

pneumatic, filtered compressed air (10 µm), dry or lubricated

Operating pressure range:

from 3 to 8 bar

Maintenance:

maintenance free up to 2 million strokes

Installation:

in various positions

Operating temperature range:

from 5° C to 60° C (41° F to 140° F)

Parts supplied:

brackets for proximity switch, operating and maintenance instructions, manufacturer's declaration

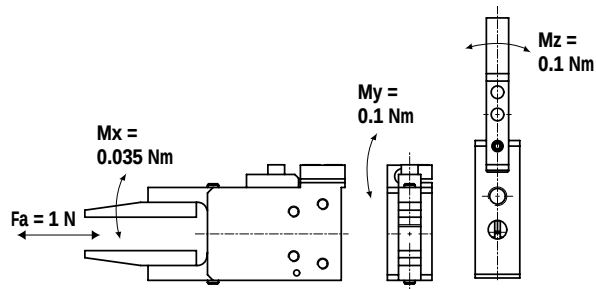
Gripping force safety in the event of a power failure:

by means of integrated pressure maintenance valve SDV-P

Accessories:

proximity switches, pressure maintenance valve

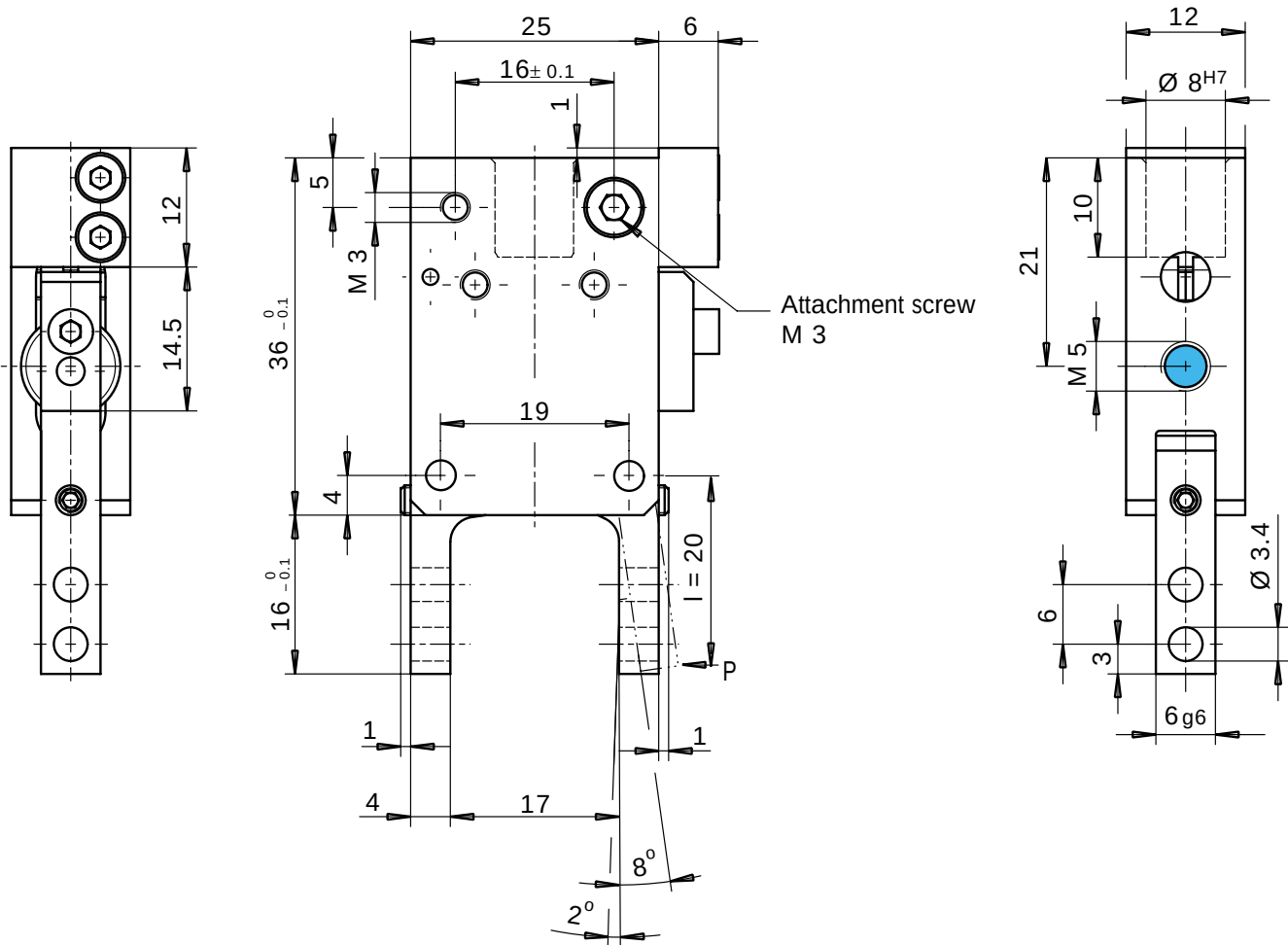
Max. admissible forces and moments at the gripper fingers *



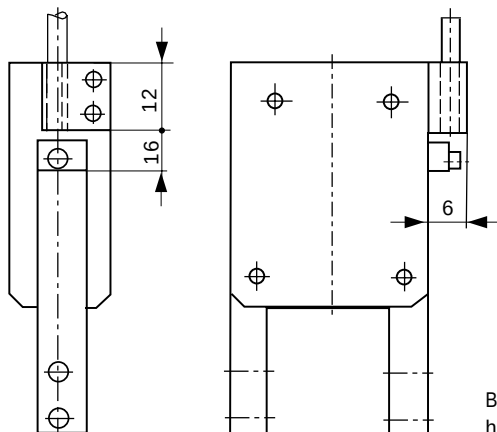
* which may occur in addition to the gripping force

Dimensions for UWG 25

● = compressed air connection



Dimensions for monitoring



Bracket protrudes 1 mm beyond housing

2-Finger Angular Gripper UWG 25

Type	UWG 25
Id.-No.	305 100
Opening angle per finger	8°
Gripping force at 6 bar *	20 N
Gripping moment P · l	40 Ncm
Workpiece weight (recommended) **	130 g
Air consumption per double stroke	0.2 cm ³
Opening time	0.02 s
Closing time	0.013 s
Mass	29 g
Mass moment of inertia	0.05 kg cm ²
Repeatability ***	0.05 mm

* Gripping force is the arithmetic sum of the individual forces occurring at the jaws at distance "P" at 6 bar.

** Value at $\mu = 0.1$ and $v = 2$. Values can be higher if form-fit clamping.

*** After 100 consecutive strokes to end positions.

Gripping force safety

Gripping force safety for O.D. gripping is by means of pressure maintenance valve SDV-P. For technical details see catalogue "Accessories".

Accessories for UWG 25



Inductive proximity switches

Easy to fit with LED lamp. For technical details see catalogue "Accessories".

Type	Id.-No.
INW 40/S*	301 504 or 301 404

* S = Closer

System modules and additional accessories for UWG



Swivel units

For combinable swivel units and swivel heads see chapter "Swivel Units".



Linear units

For combinable linear units see chapter "Linear Units".



Custom solutions

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



Additional accessories

Gripper pads to increase friction factors, pressure maintenance valves or multiple connectors for proximity switches you will find in our catalogue "Accessories".



Gripper changing systems

For combinable gripper changing systems see catalogue "Robot Accessories".



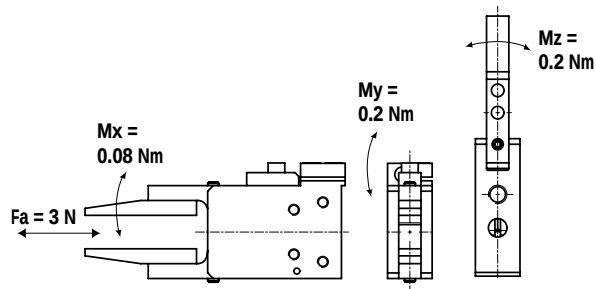
Compensation units

For combinable compensation units see catalogue "Robot Accessories".

Note

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

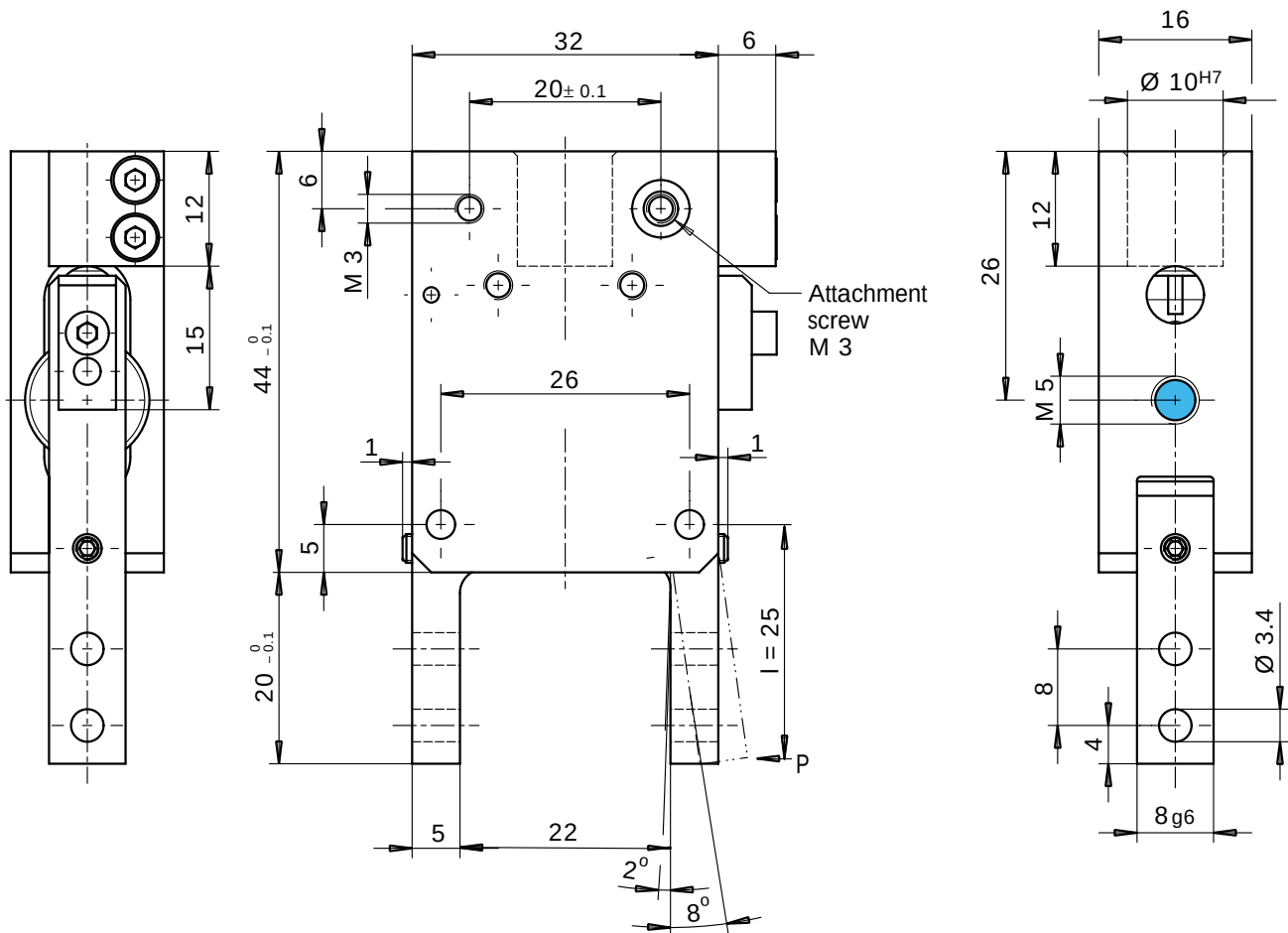
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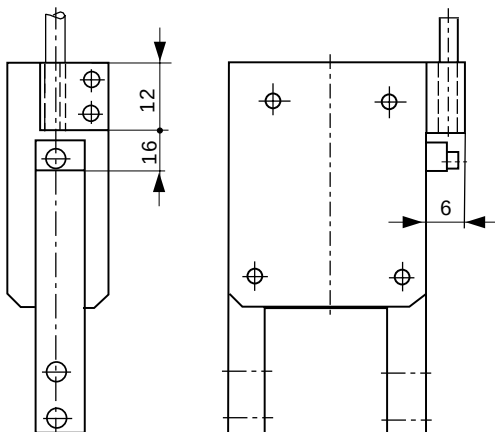
* which may occur in addition to the gripping force

Dimensions for UWG 32

● = compressed air connection



Dimensions for monitoring



2-Finger Angular Gripper UWG 32

Type	UWG 32
Id.-No.	305 101
Opening angle per finger	8°
Gripping force at 6 bar *	32 N
Gripping moment $P \cdot l$	80 Ncm
Workpiece weight (recommended) **	210 g
Air consumption per double stroke	0.3 cm ³
Opening time	0.03 s
Closing time	0.013 s
Mass	58 g
Mass moment of inertia	0.15 kg cm ²
Repeatability ***	0.05 mm

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*** After 100 consecutive strokes to end positions.

Gripping force safety

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Accessories for UWG 32



Inductive proximity switches

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Type	Id.-No.
INW 40/S*	301 504 or 301 404

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System modules and additional accessories for UWG



Swivel units

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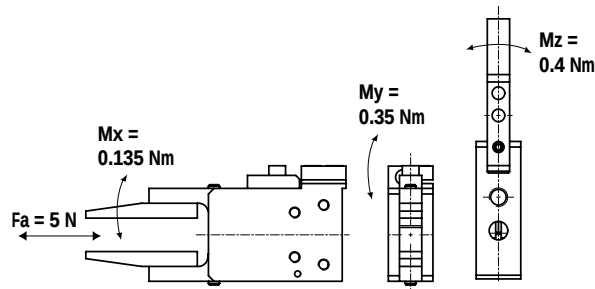
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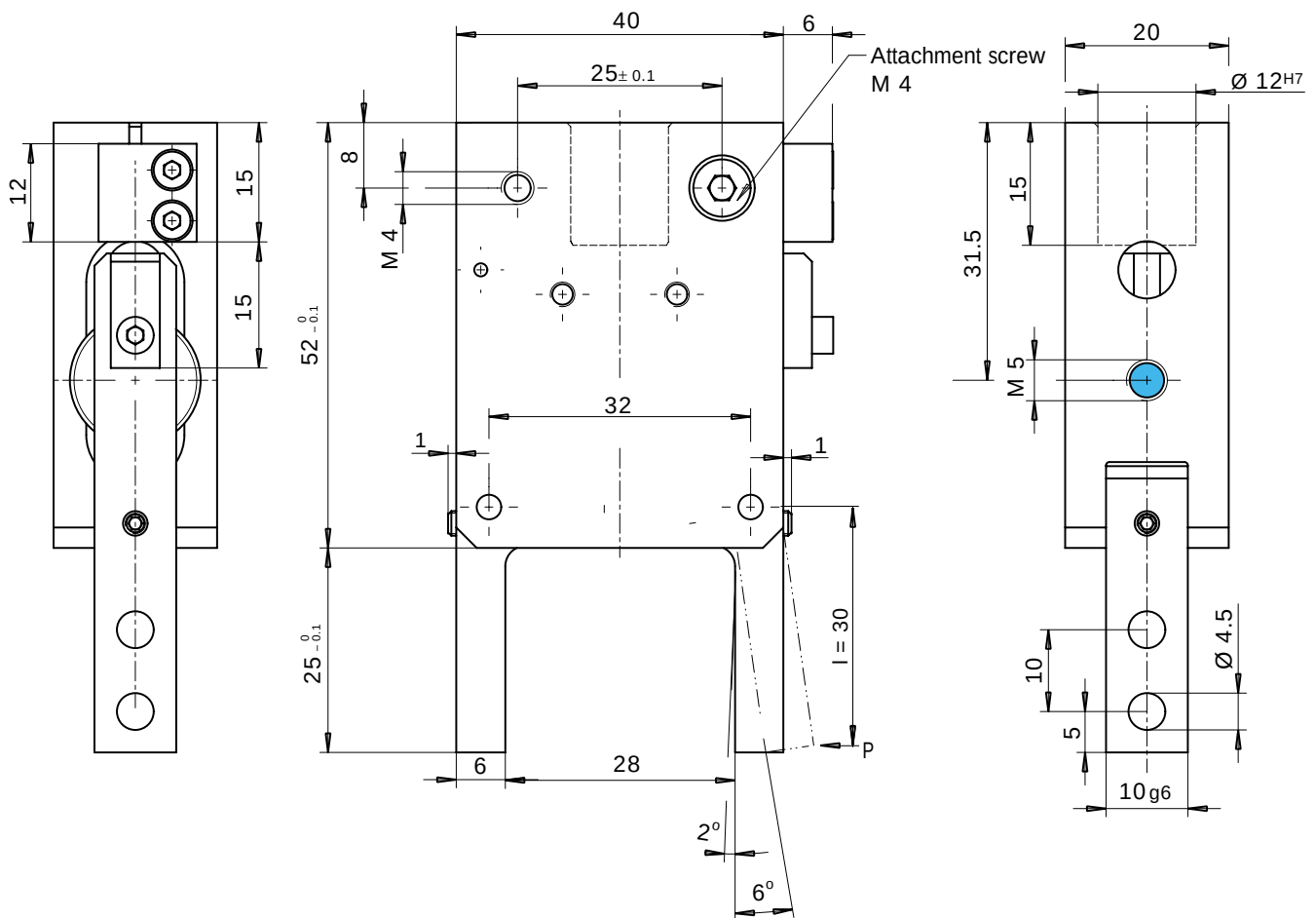
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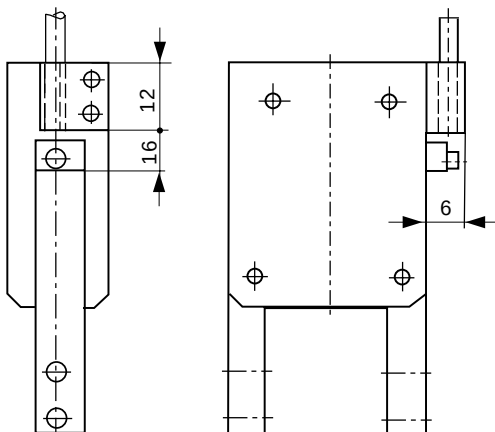
* which may occur in addition to the gripping force

Dimensions for UWG 40

● = compressed air connection



Dimensions for monitoring



2-Finger Angular Gripper UWG 40

Type	UWG 40
Id.-No.	305 102
Opening angle per finger	6°
Gripping force at 6 bar *	45 N
Gripping moment $P \cdot l$	135 Ncm
Workpiece weight (recommended) **	300 g
Air consumption per double stroke	0.8 cm ³
Opening time	0.015 s
Closing time	0.005 s
Mass	110 g
Mass moment of inertia	0.4 kg cm ²
Repeatability ***	0.05 mm

* Gripping force is the arithmetic sum of the individual forces occurring at the jaws at distance "P" at 6 bar.

** Value at $\mu = 0.1$ and $v = 2$. Values can be higher if form-fit clamping.

*** After 100 consecutive strokes to end positions.

Gripping force safety

Gripping force safety for O.D. gripping is by means of pressure maintenance valve SDV-P. For technical details see catalogue "Accessories".

Accessories for UWG 40



Inductive proximity switches

Easy to fit with LED lamp. For technical details see catalogue "Accessories".

Type	Id.-No.
INW 40/S*	301 504 or 301 404

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System modules and additional accessories for UWG



Swivel units

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Linear units

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Gripper changing systems

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Compensation units

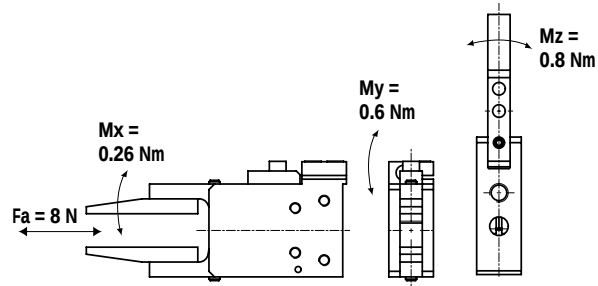
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UWG 50

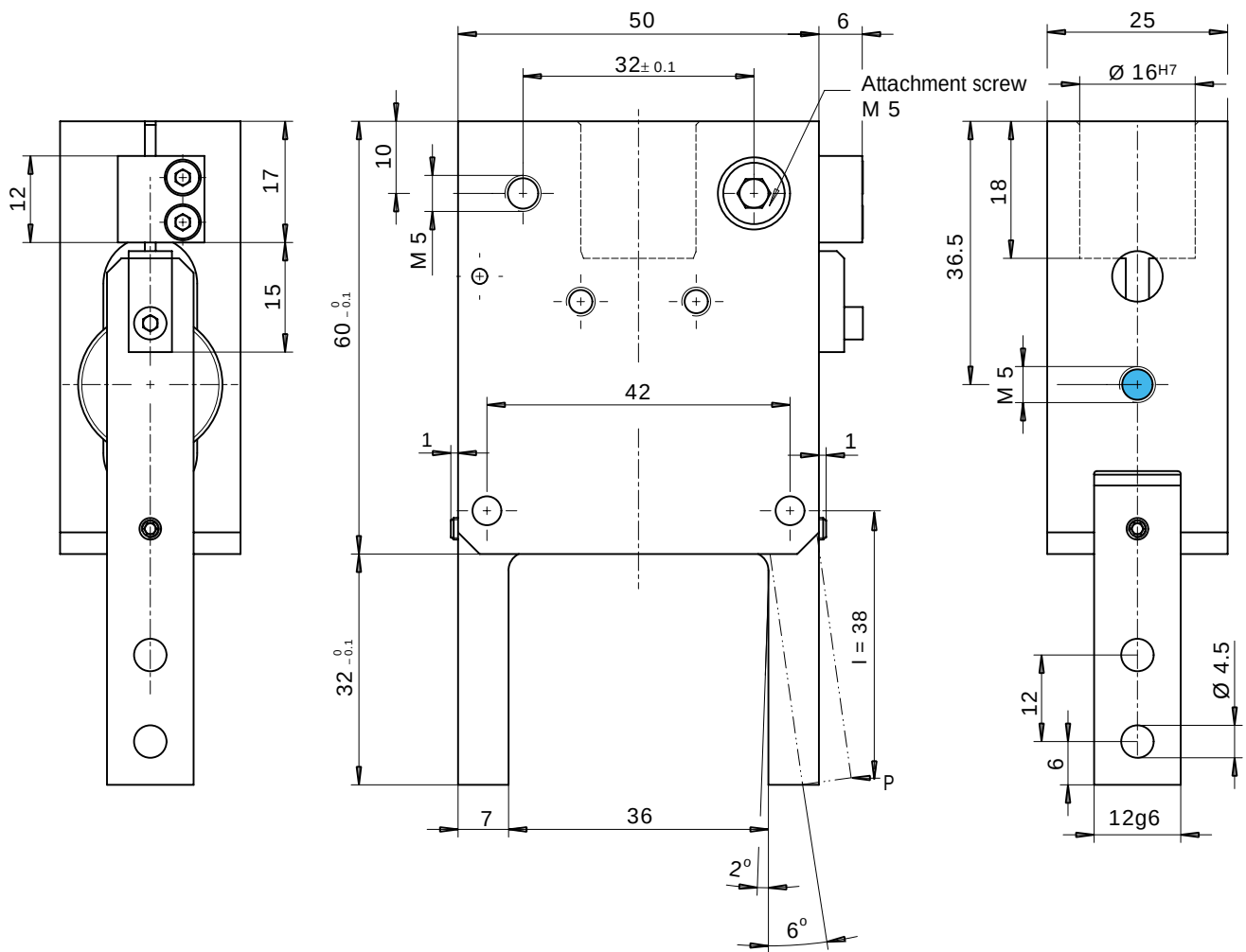
Max. admissible forces and moments at the gripper fingers *



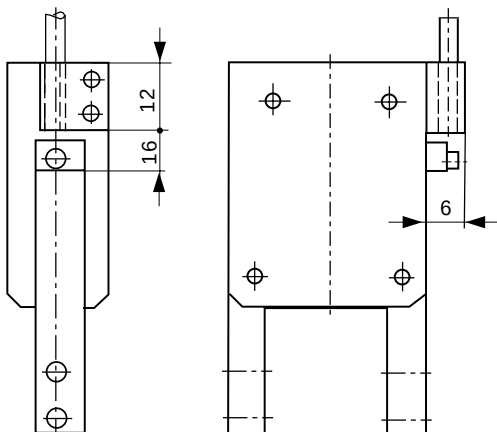
* which may occur in addition to the gripping force

Dimensions for UWG 50

● = compressed air connection



Dimensions for monitoring



2-Finger Angular Gripper UWG 50

Type	UWG 50
Id.-No.	305 103
Opening angle per finger	6°
Gripping force at 6 bar *	70 N
Gripping moment $P \cdot l$	266 Ncm
Workpiece weight (recommended) **	460 g
Air consumption per double stroke	1.3 cm ³
Opening time	0.026 s
Closing time	0.005 s
Mass	196 g
Mass moment of inertia	1.0 kg cm ²
Repeatability ***	0.05 mm

* Gripping force is the arithmetic sum of the individual forces occurring at the jaws at distance "P" at 6 bar.

** Value at $\mu = 0.1$ and $v = 2$. Values can be higher if form-fit clamping.

*** After 100 consecutive strokes to end positions.

Gripping force safety

Gripping force safety for O.D. gripping is by means of pressure maintenance valve SDV-P. For technical details see catalogue "Accessories".

Accessories for UWG 50



Inductive proximity switches

Easy to fit with LED lamp. For technical details see catalogue "Accessories".

Type	Id.-No.
INW 40/S*	301 504 or 301 404

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System modules and additional accessories for UWG



Swivel units

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Gripper changing systems

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Compensation units

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