

EGP 40-IOL-GKS

Customer specific gripper for small components



Hand in hand for tomorrow



EGP 40-IOL-GKS

Electric 2-finger parallel gripper with gripping force maintenance, manual emergency release, smooth-running base jaws guided on roller bearings for the handling of sample tubes out of plastic in the field of Lab automation.

Your advantages and benefits

- **Integrated gripping force maintenance** for high process reliability
- **Manual emergency release** for detaching workpieces in the event of a voltage supply failure
- **Continuously adjustable gripping force** for optimum adaptation to the workpiece
- **Extended gripping stroke** for more flexible workpiece handling

Note

CAD-Daten via E-Mail: cad.cax.daten@de.schunk.com

Please contact us with your individual requirement.
You can reach the Team Mechatronics at:
Hotline Mechatronics +49-7133-103-2992
Email Mechatronics@de.schunk.com

Technical Data

Description		EGP 40-IOL-GKS
ID		1606122
Allgemeine Betriebsdaten		
Stroke per jaw	(mm)	6.5
Gripping force (at gripping force setting 75%, with fingers out of Steel with a cross section of 5,5mm x 11mm in point P)	(N)	105
Min./max gripping force setting	(%)	25/75
Gripping direction		outside
Min./max gripping force maintenance (with fingers out of Steel with a cross section of 5,5mm x 11mm in point P)	(%)	80/90
Max. permissible gripping height	(mm)	50
Max. permissible weight per finger	(kg)	0.05
Repeat accuracy (gripping)	(mm)	0.02
Closing/opening time	(s)	0.22/0.22
Weight	(kg)	0.450
Min./max. ambient temperature	(°C)	5/40
IP protection class		20
Noise emission	(dB(A))	<60
Dimensions X x Y x Z	(mm)	58.8 x 27.7 x 138.4
Service life data (at 75% gripping force setting, with fingers out of Steel with a cross section of 5,5mm x 11mm)		23.7 Mio. gripping cycles
Permissible number of actuations of the manual emergency release		<=2520
Repeat accuracy (positioning, unidirectional)	(mm)	±0.1
Repeat accuracy (positioning, bidirectional)	(mm)	±0.2

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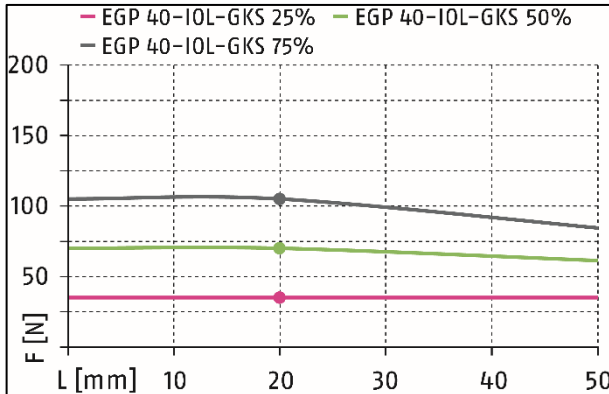
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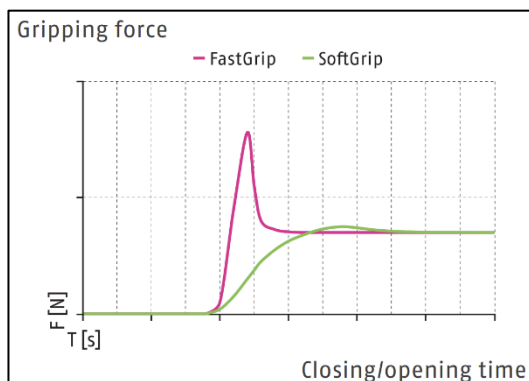
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Elektrische Betriebsdaten		
Nominal voltage	(V)	24 +/- 10%
Nominal current (Logic)	(A)	0.18
Max. current (Logic)	(A)	0.2
Nominal current at 75% BasicGrip (Load)	(A)	0.3
Max. current (Load)	(A)	1
Controller electronics		Integriert
Communication interface		IO-Link
Specification		V1.1
Transmission rate		COM2
Port		Class B
Gripping modes		BasicGrip, SoftGrip

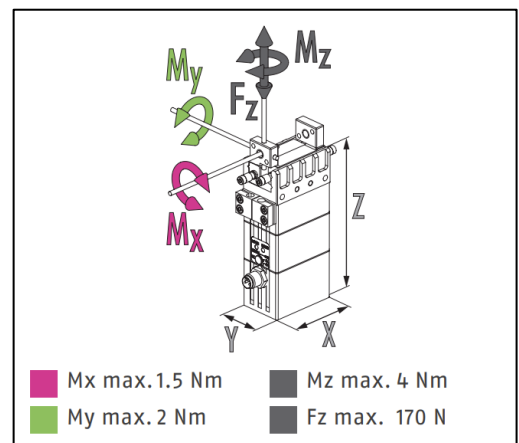
Gripping force



Gripping modes



Dimensions and maximum loads



- ① The indicated moments and forces are statical values, apply for each base jaw and may appear simultaneously. Loads may additionally occur to the moment produced by the gripping force itself.

General notes

Gripping force: is the arithmetic sum of the individual force applied to each jaw at distance P (see illustration).

Repeat accuracy (gripping): defined as the spread of the actual position during 100 consecutive closing or opening movements on a rigid workpiece or a fixed workpiece stop under constant conditions.

Repeat accuracy (positioning, unidirectional): defined as the spread of the actual position per base jaw during 100 consecutive movements to a target position from the same direction under constant conditions.

Repeat accuracy (positioning, bi-directional): defined as the distribution of the actual position per base jaw during 100 consecutive movements to a target position from both directions under constant conditions.

Finger length: is measured from the reference surface as the distance P in direction to the main axis.

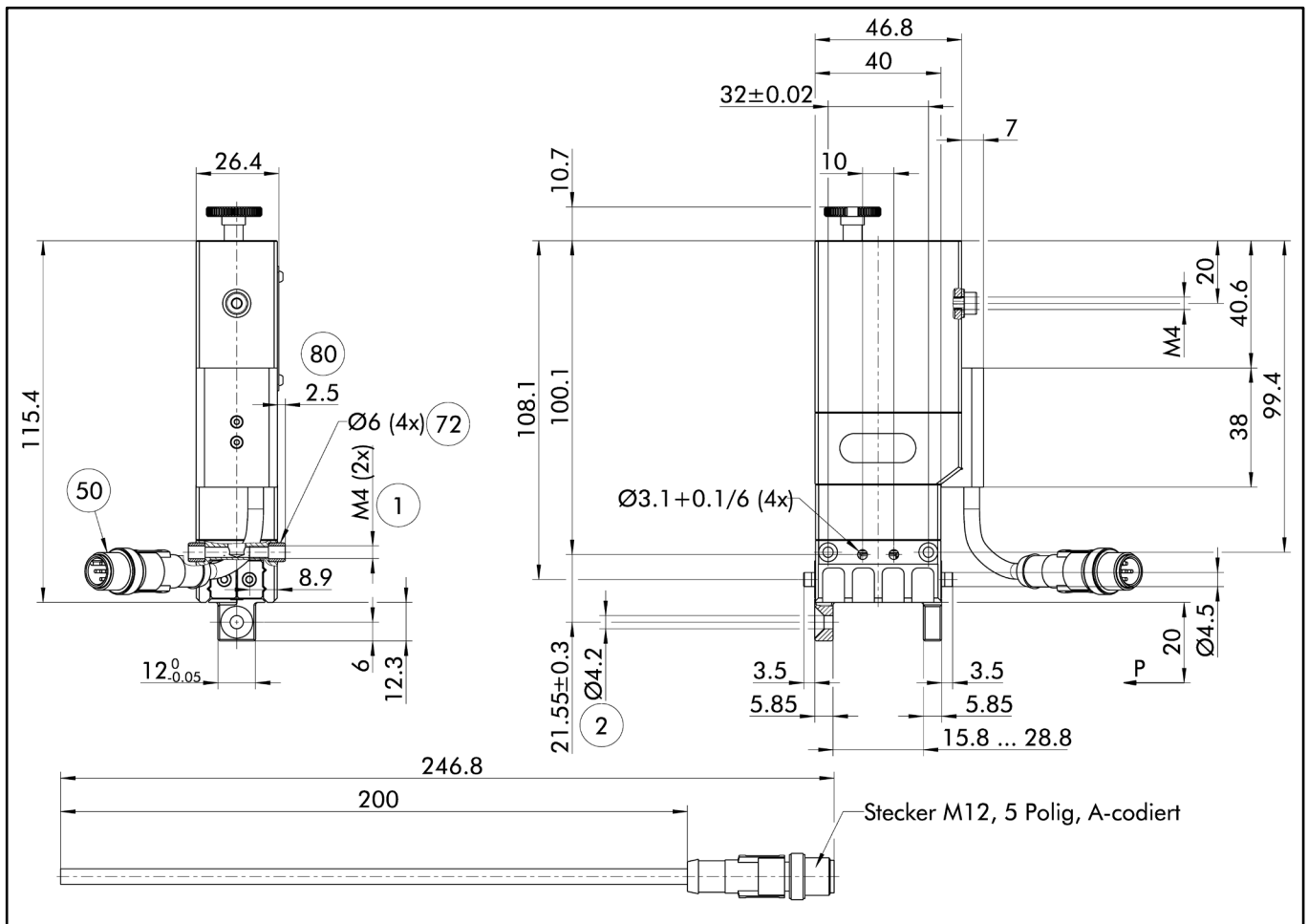
Closing and opening times (positioning): Closing and opening times are only the movement times of the fingers at max. speed, as well as max. acceleration with observance of the max. permissible mass per finger and refer to the traverse path per jaw and the nominal stroke.

Gripping modes: The BasicGrip and SoftGrip gripping modes are available. The gripping speed is automatically optimized to the gripping force setting with BasicGrip. With SoftGrip, fracture-sensitive workpieces can be gripped particularly gently by reducing the impulse forces to a minimum when they hit the workpiece.

Gripping force maintenance: In the event of an emergency stop or a voltage drop, more than 80% of the originally applied gripping force can be reliably maintained due to a combination of an electric holding brake and the initial tension of the elastic element. If the gripping force and position maintenance is activated preventatively, 90% of the originally applied gripping force can be maintained.

Food-grade lubrication: The product contains food-compliant lubricants as standard. The requirements of standard EN 1672-2:2020 are not fully met. The relevant NSF certificates are available at <https://info.nsf.org/USDA/Listings.asp> using the lubricant information in the operating manual. Components such as rolling bearings, linear guides, or shock absorbers are not provided with food-compliant lubricants.

Main view



- | | |
|---------------------------------|--|
| 1 Gripper connection | 72 Fit for centering sleeves |
| 2 Finger connection | 80 Depth of the centering sleeve hole in the counter part |
| 50 Electrical connection | |