

Sealed 180° Angular Gripper

- Design W05 -



Characteristics:

- High grip forces
- Short cycle time
- Completely sealed mechanics
- User defined installation position
- Maintenance free up to 10 million movements
- Compact design
- Modular design
- Multiple position checks through proximity switches (optional)
- Built-in end position damping when opening

Using the given torque M [Nm], the required air pressure p_{req} can be computed with the following formula when the gripper fingers are closed:

$$0,5 \text{ bar} \leq p_{req} = \frac{M \text{ bar}}{10 \text{ Nm}} \leq 6 \text{ bar}$$

Technical Data

Type	 W105		 W205	
Drive	pneumatic			
max. Grip Force (at 6 bar) *	870 N			
max. Torque (at 6 bar) **	60 Nm			
Operating Air Pressure	0,5 to 6 bar			
Cycle Time	Open		0,15 s	
	Close		0,15 s	
Repeat Accuracy	0,1 mm			
Energy Consumption per Cycle	0,6 liter (at 6 bar)			
Operating Temperature	-30 to +80°C			
Mass	1,3 kg		1,5 kg	
Loading Capacity* per Finger with Gripping Mass and Acceleration	Mx _{max.}	32 Nm	80 Nm	
	My _{max.} (Gripping)	60 Nm	60 Nm	
	Fz _{max.}	8.000 N	16.000 N	
	Mz _{max.}	25 Nm	64 Nm	

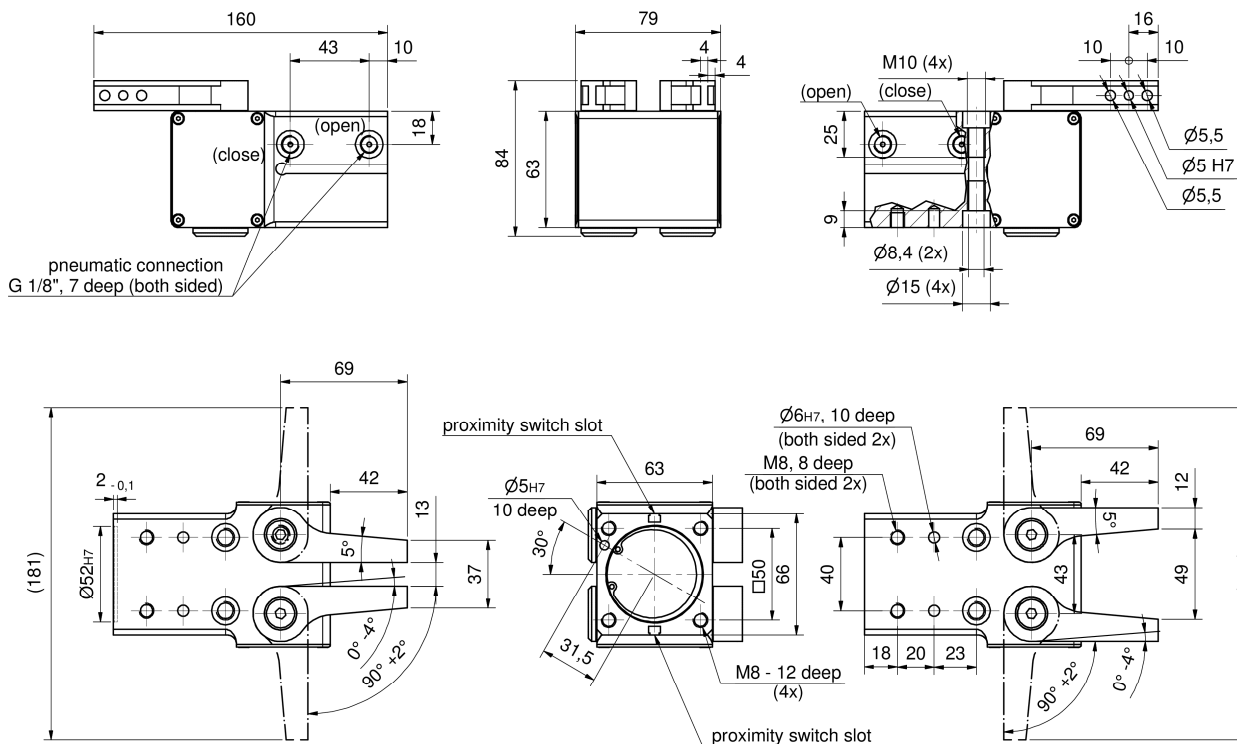
* At fingers outer edge when standard fingers (69mm) are closed

** Grip force per finger is half of this torque divided by length of finger

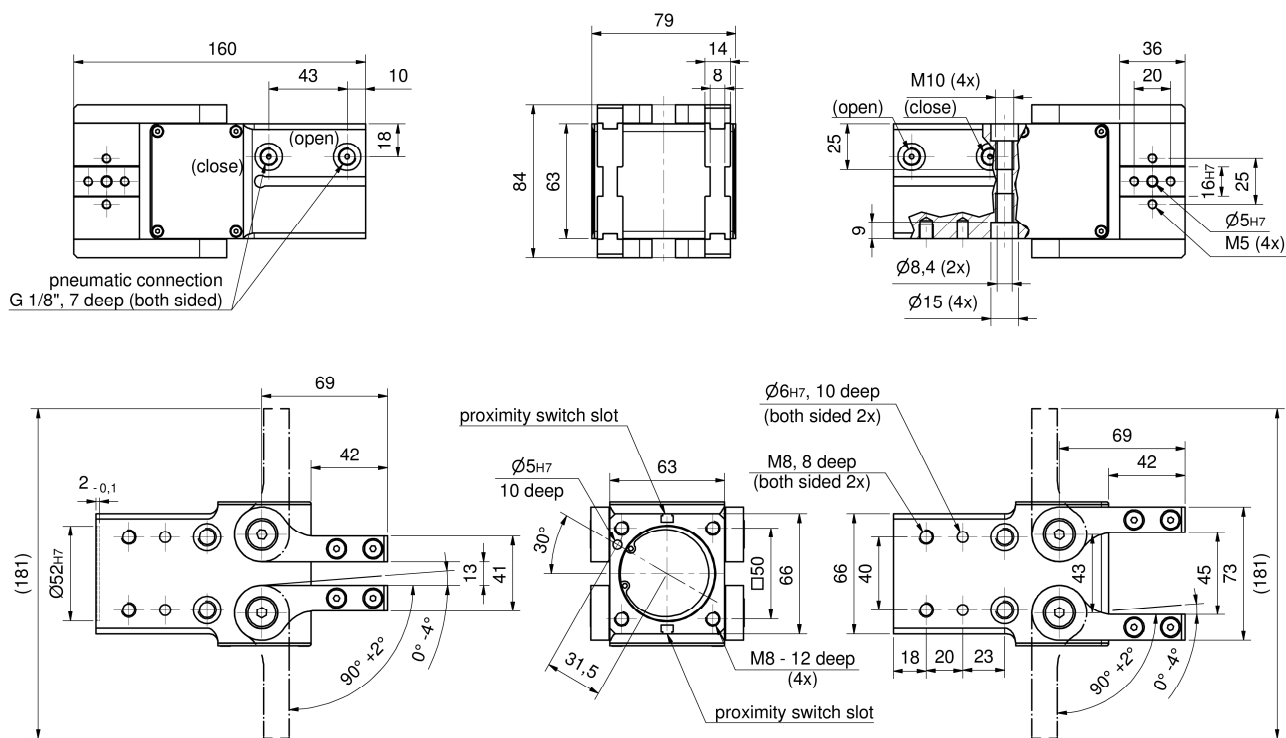


W05

Type W105 (Single Finger)



Type W205 (Double Finger)



address:
GMG – Gesellschaft fuer modulare
 Greifersysteme mbH
 Coesterweg 45c
 D-59494 Soest
 Germany

phone:
 +49 (0)2921 - 4062

fax:
 +49 (0)2921 - 4042

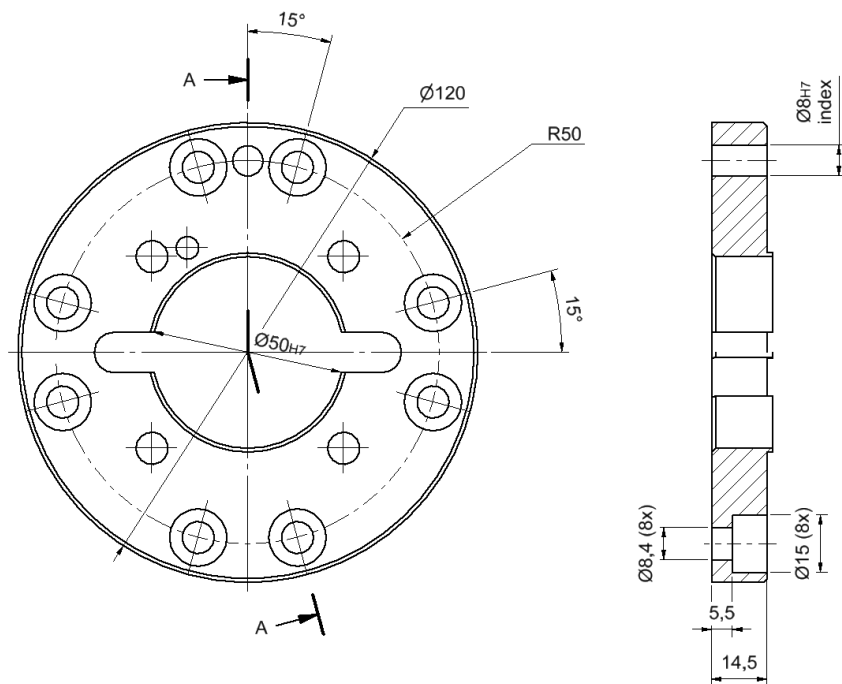
e-mail:
 info@gmg-system.com

homepage:
 http://www.gmg-system.com



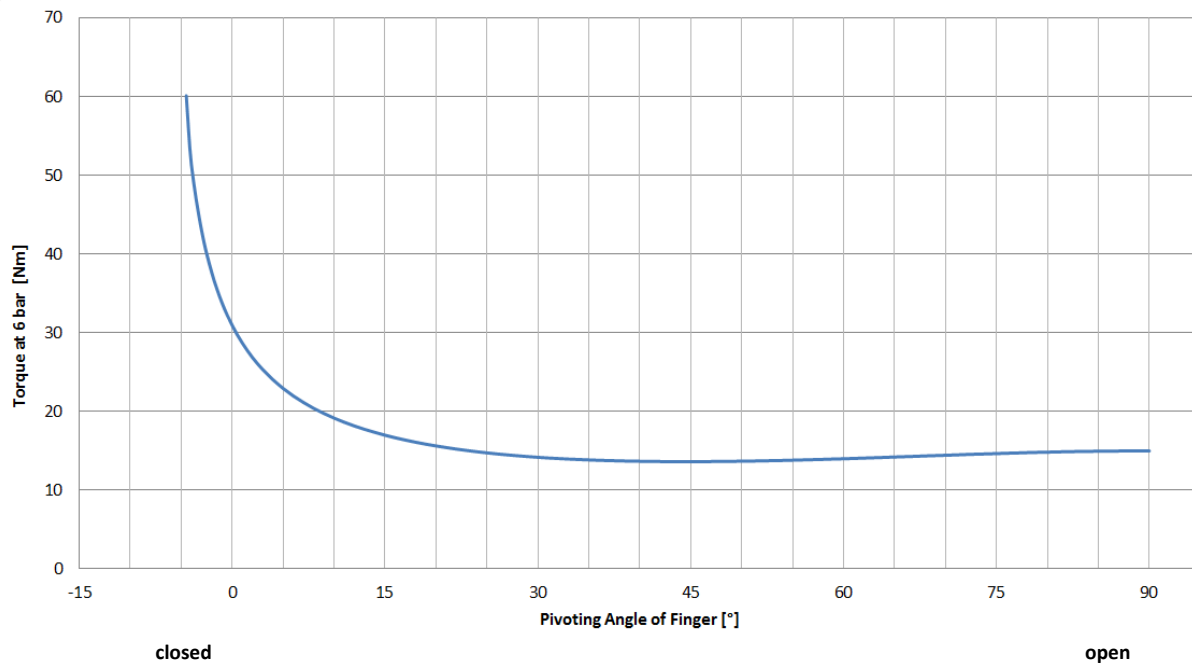
W05

Flange



Used to mount the gripper to a robot

Diagram



Torque curve also available in mirrored version upon request.

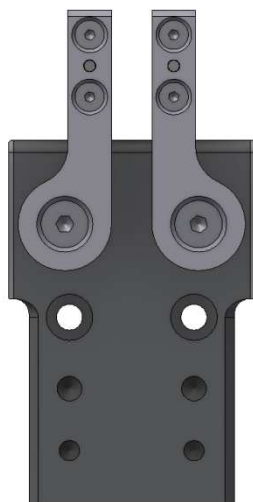


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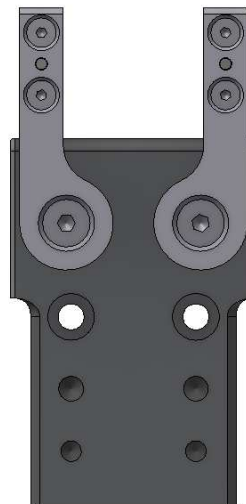
phone:
+49 (0)2921 - 4062
fax:
+49 (0)2921 - 4042

e-mail:
info@gmg-system.com
homepage:
<http://www.gmg-system.com>

Finger Position

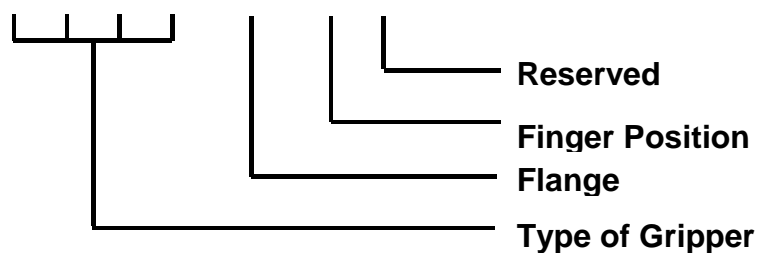
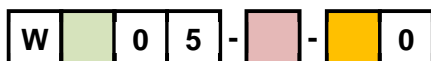


Inside Fingers



Outside Fingers

Order Number



Type of Gripper	
Style	Ident.
Single Finger W103	1
Double Finger W 203	2

Finger Position	
Style	Ident.
Inside Fingers	I
Outside Fingers	A

Flange	
Style	Ident.
With Flange	N
Without Flange	O