

Sealed 180° Angular Gripper - Design W03 -



Characteristics:

- High Gripping Force
- Short Cycle Time
- Completely capsuled Mechanics
- User defined installation position
- Maintenance free up to 10 million movements
- Compact Design
- Modular Design
- multiple position monitoring through proximity switch, optional
- built-in end position damping when opening

By using the given torque M [Nm], the necessary air pressure P can be computed with the following formula in position where fingers are closed:

$$0,5 \text{ bar} \leq P = \frac{M}{1,25 \text{ Nm}} \leq 6 \text{ bar}$$

Technical Data

Type		 W103	 W203
Drive		pneumatic	
max. Gripping Force (at 6 bar) *		136 N	
max. Torque (at 6 bar) **		7,5 Nm	
Operating Air Pressure		0,3 to 6 bar	
Cycle Time	Open	0,15 s	
	Close	0,15 s	
Repeat Accuracy		0,1 mm	
Energy Consumption per Cycle		0,1 liter (at 6 bar)	
Operating Temperature		-30 to +80°C	
Mass		0,7 kg	1 kg
Loading Capacity* per Finger with Gripping Mass and Acceleration	Mx _{max.}	10 Nm	25 Nm
	My _{max.} (Gripping)	7,5 Nm	7,5 Nm
	Fz _{max.}	1.000 N	2.000 N
	Mz _{max.}	10 Nm	35 Nm

* At fingers outer edge when standard fingers' (55mm) position closed

** Gripping Force per finger is half of this torque divided by length of finger



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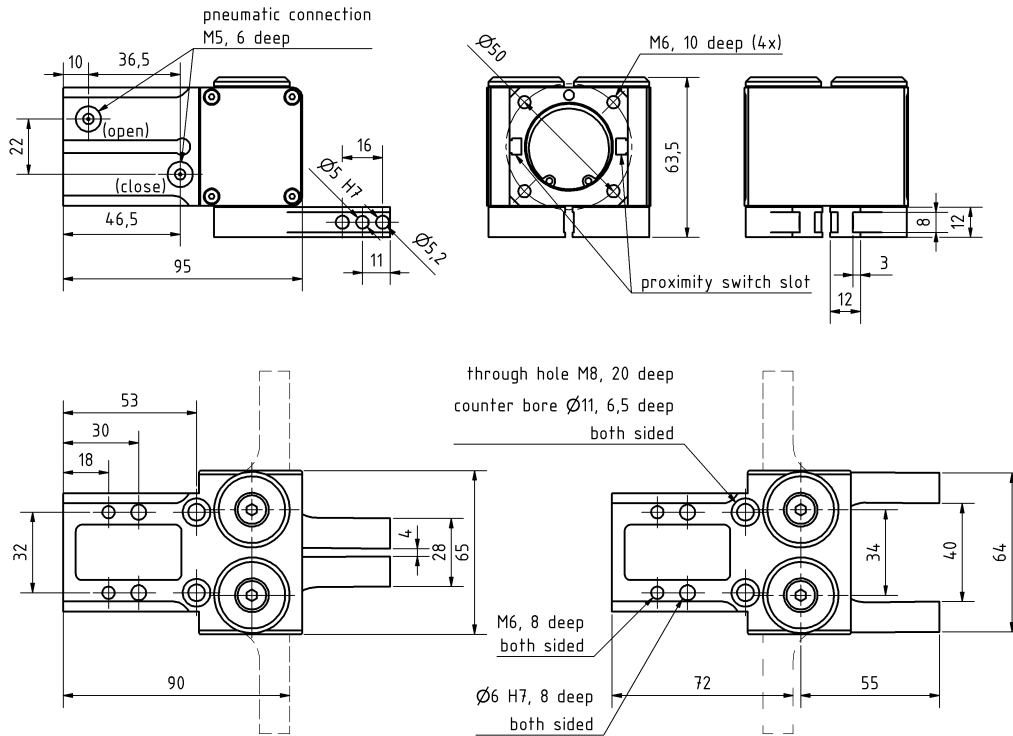
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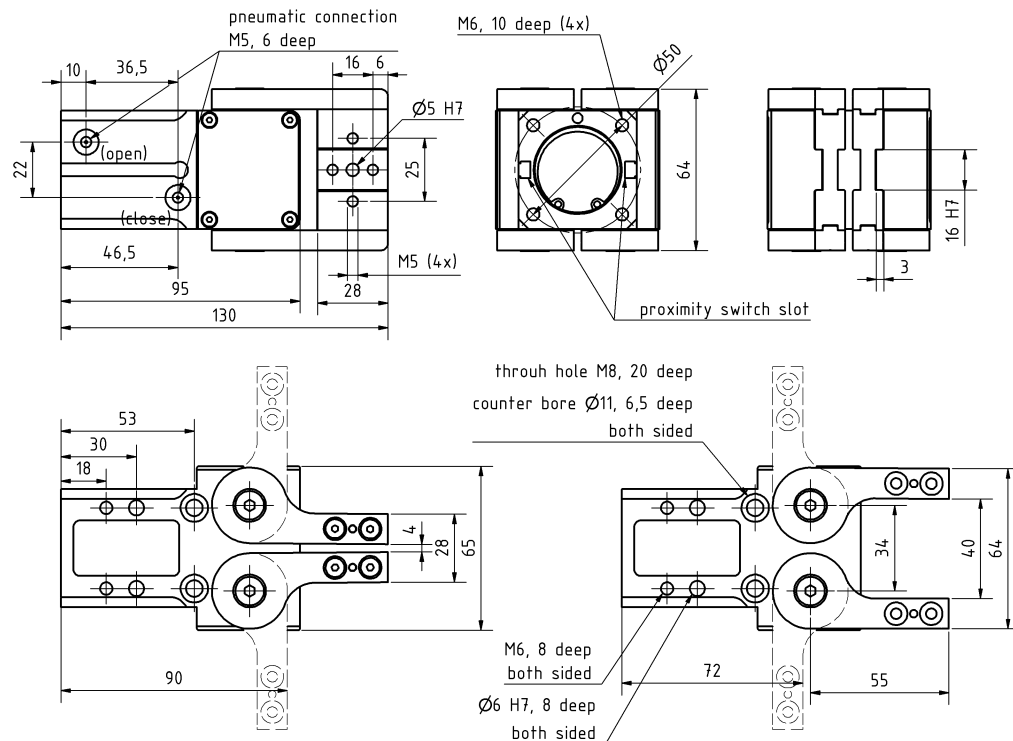


W03

Type W103 (Single Finger)



Type W203 (Double Finger)



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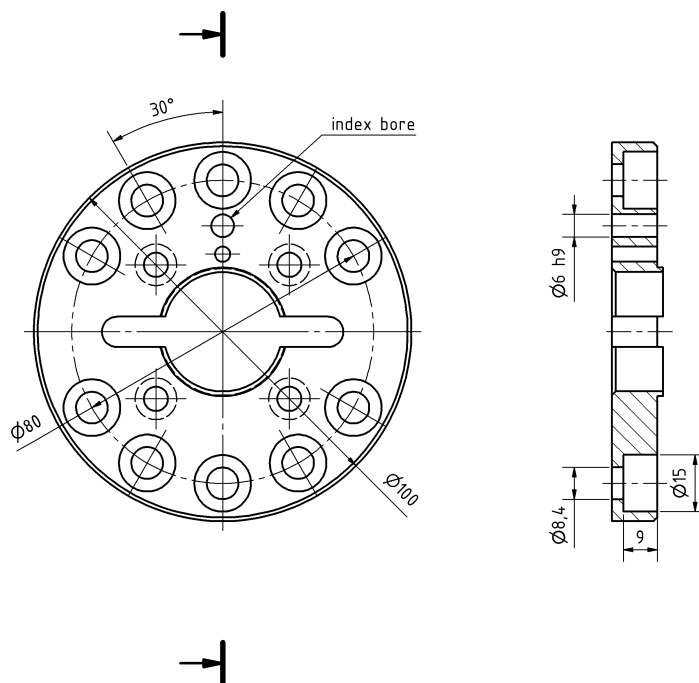
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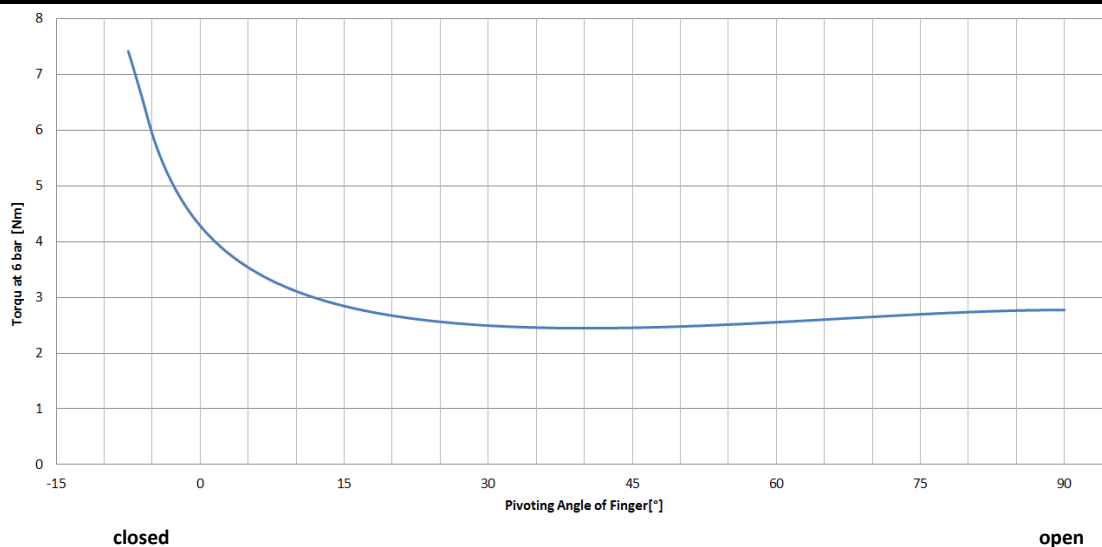
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Flange



Used to mount the gripper to a robot

Diagram



Torque curve also available in mirrored version upon request.



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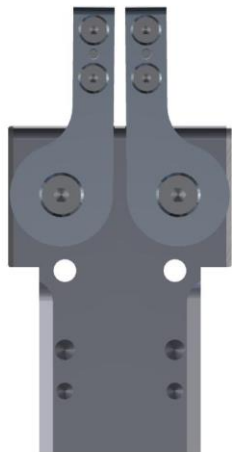
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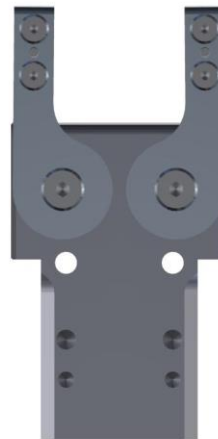


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Finger Position

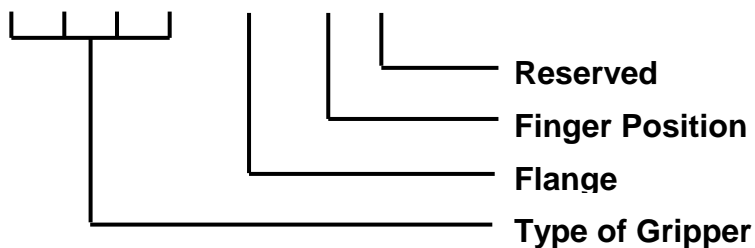
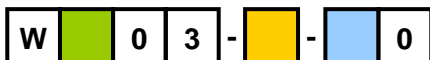


Inside Fingers



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



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