

Sealed Clamshell Bucket Gripper - Type SG03 -

Characteristics:

- ideal for gripping bulk good like granules or standard parts
- radial bucket movement
- 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)
- customized buckets available on request



Technical Specifications

Type		SG03
Drive		pneumatic
max. Grip Force (at 6 bar) *		34 N
max. Torque (at 6 bar) **		2,85 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		0,1 liter (at 6 bar)
Operating Temperature		-30 to +80°C
Mass		0,9 kg
Loading Capacity* per bucket with Gripping Mass and Acceleration	$Mx_{max.}$	25 Nm
	$My_{max.}$ (Gripping)	2,85 Nm
	$Fz_{max.}$	1.000 N
	$Mz_{max.}$	30 Nm

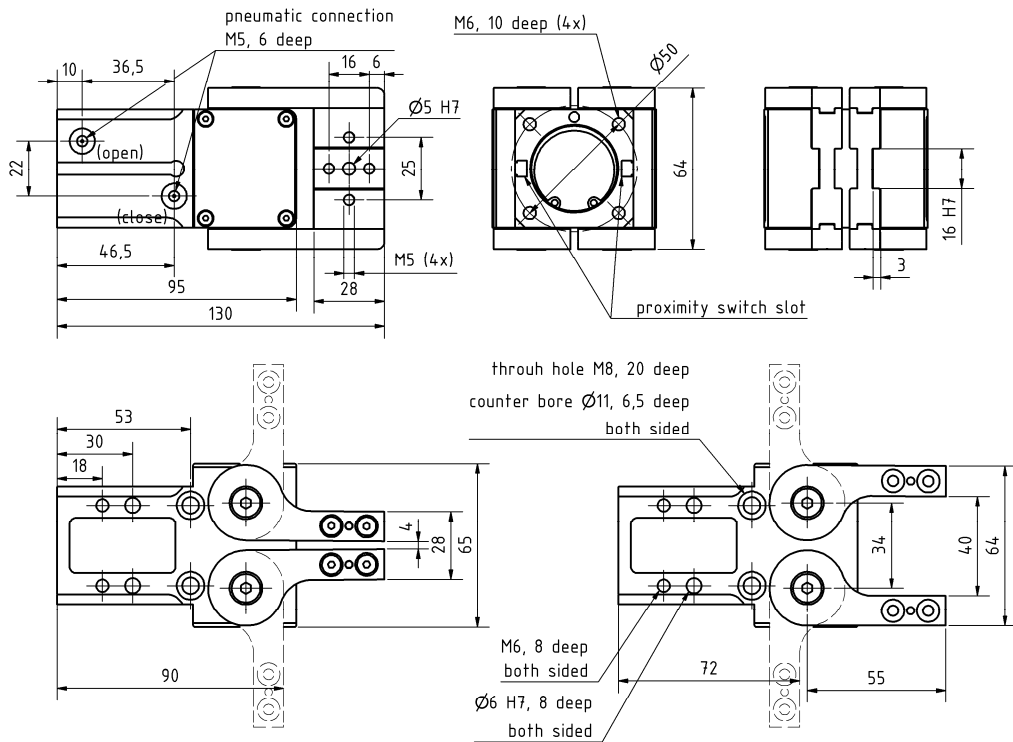
* At buckets outer edge in completely closed position

** Grip force per bucket is half of this torque divided by distance to the axis

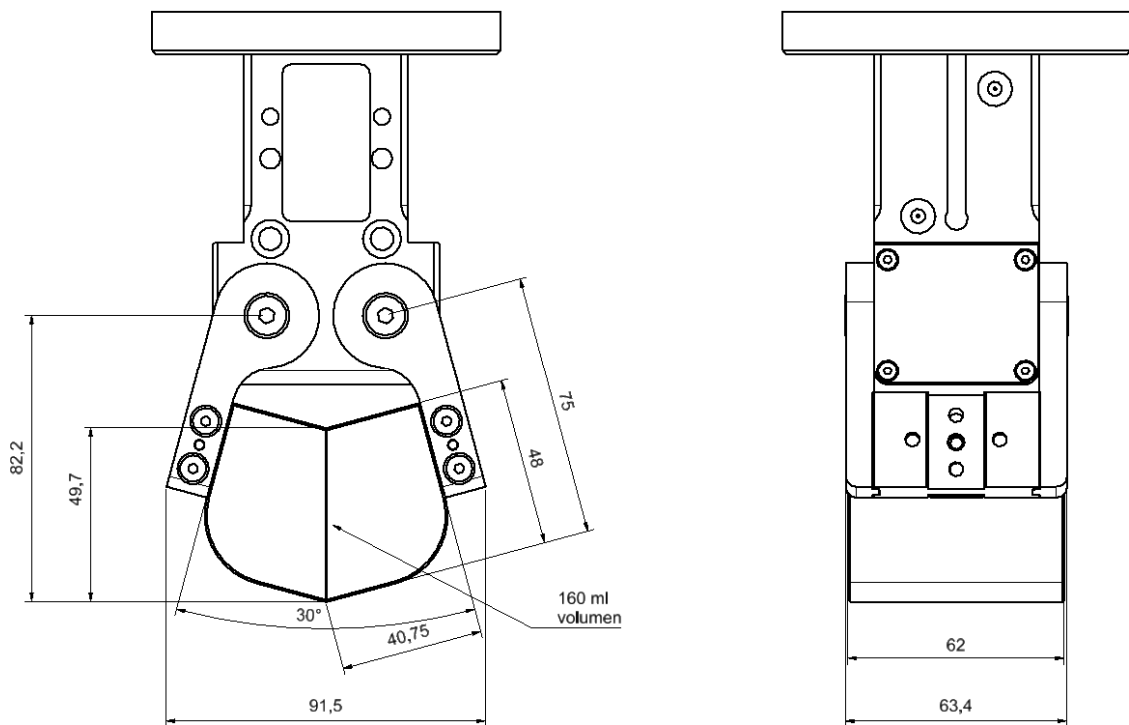
By using the given torque M [Nm], the required air pressure p_{req} can be calculated with the following formula when the buckets are closed:

$$0,5 \text{ bar} \leq p = \frac{M}{0,475 \text{ Nm}} \text{ bar} \leq 6 \text{ bar}$$

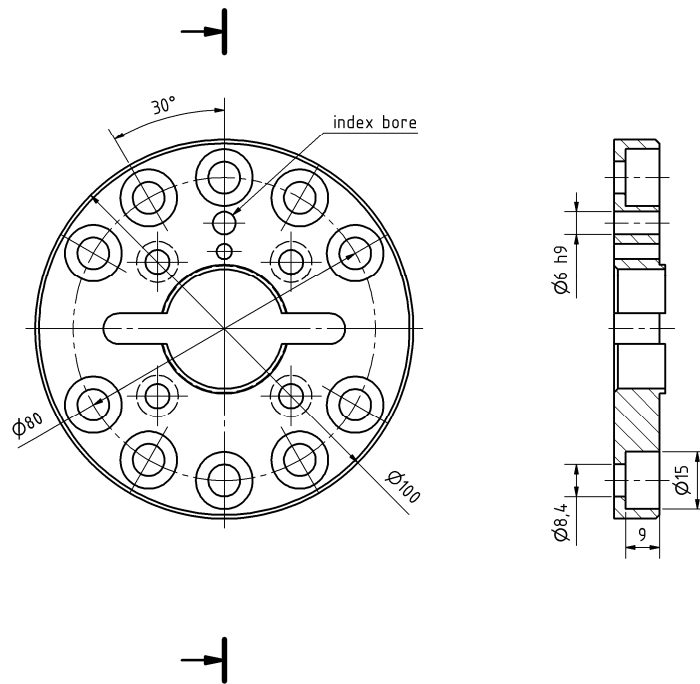
Type SG03 (Body)



Type SG03 (Standard Buckets)

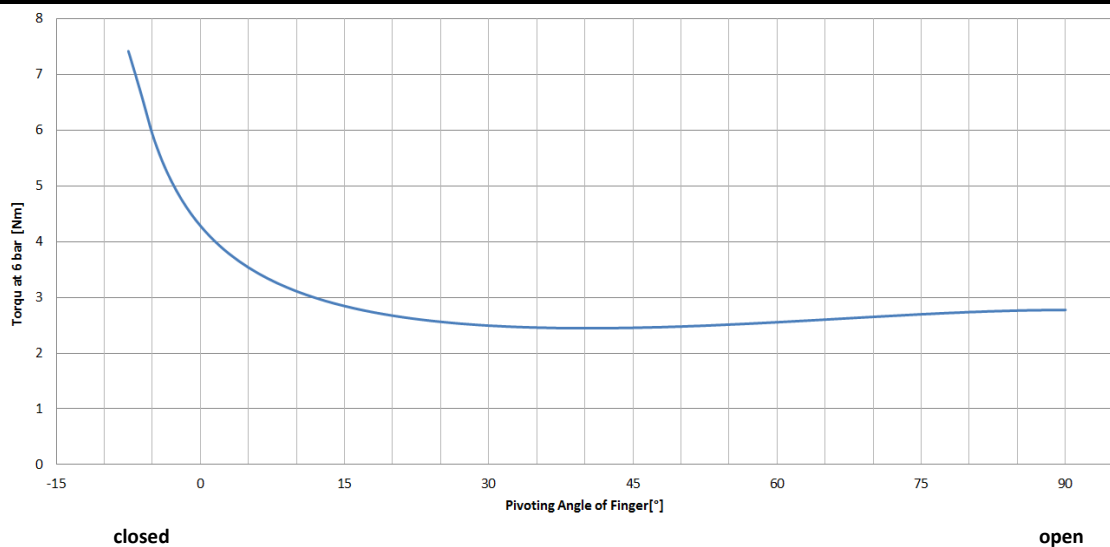


Flange



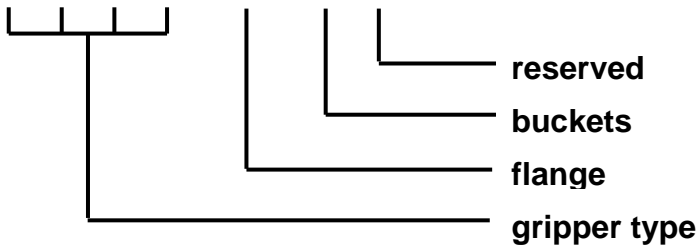
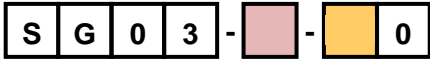
Used to mount the gripper to a robot

Diagram



Torque curve also available in mirrored version upon request.

Order Number



Flange	
style	ident
with flange	N
without flange	O

Buckets	
style	ident
with standard buckets	S
without standard buckets	O