

## Zero point clamping system **SPEEDY** easy click

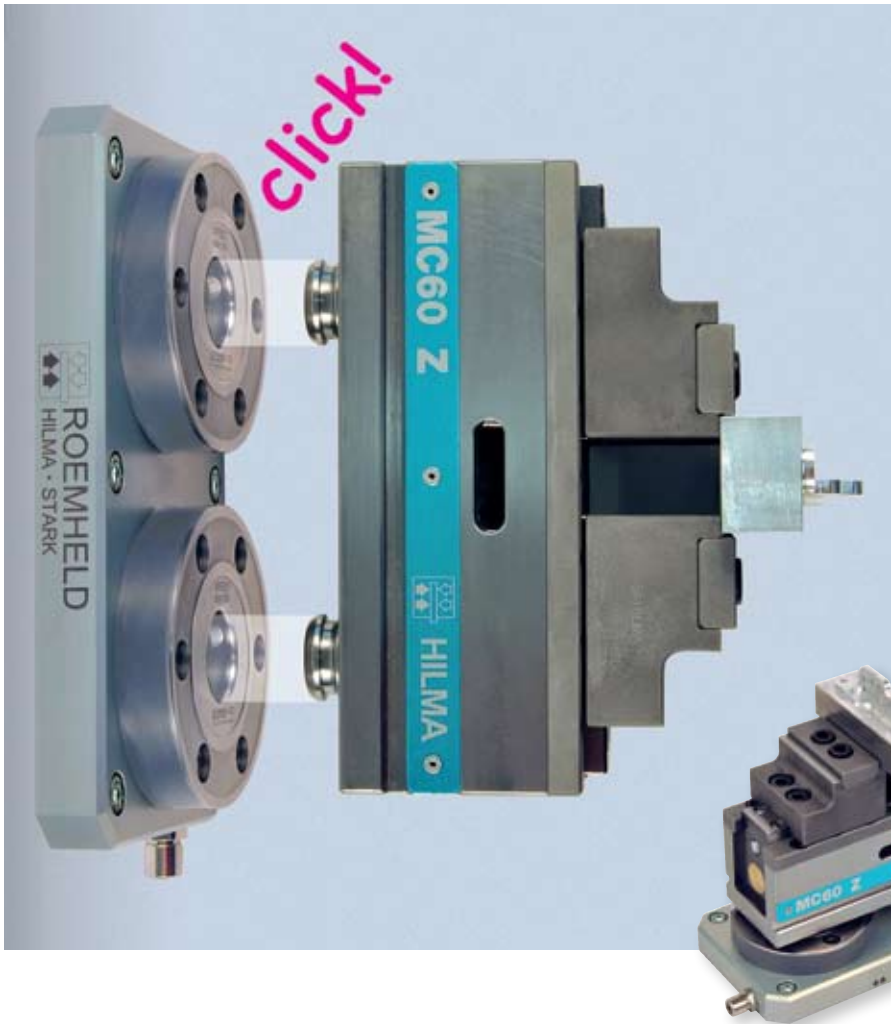
click  
tiny  
strong  
economical  
quick

- press in to clamp
- 85mm diameter and only 19mm high
- 5kN clamping force – 10kN retention force
- release at 3 – 8bar compressed air
- release time 0.1s





## SPEEDY easy click - engages immediately without an energy supply



### Click - and holds

The new SPEEDY easy click is a mechanical fast closing clamp that needs no energy supply to engage and hold immediately.

You require a supply of compressed air at 3-8 bar to release.

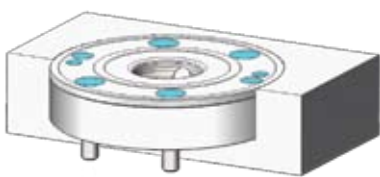
SPEEDY easy click is used in cutting and non-cutting multi-axis machining.

The short clamping time allows it to be used as a construction element in production lines.

A particularly compact design allows narrow spacings, retractable nipples only 12 mm long and short extraction distances.

Oil-free applications, e.g. in the food-stuff industry, medical or chemical sectors, extend the field of use.

### Installation variants



#### Flush mount:

Positioned by Ø85



#### Flange:

Positioned by two pins Ø8  
Indexed by sword-shaped pin in pallet (single mounting)



#### Flange:

Positioned by two pins Ø8



#### Flange:

Positioned by two pins Ø8 Indexed by hole in pallet (single mounting)



#### Connection:

by threaded fitting M5



#### Connection:

O-ring

For data sheets and 3D data see [www.stark-inc.com](http://www.stark-inc.com)



## Technical data - Transparency from the start

SPEEDY easy click		
Order no.		7000 019
Maintenance interval Cycles	250,000	
Clamping force <sup>1</sup>	[ N ]	5,000
Retention force <sup>2</sup>	[ N ]	10,000
Click-on force	[ N ]	80
Repeatability <sup>3</sup>	[ mm ]	< 0.01
Release pressure	[ bar ]	3-8
Lateral forces max. permissible	[ N ]	2500
Max. operating pressure	[ bar ]	8
Preset clamping time	[ s ]	< 0.1
Preset release time	[ s ]	approx. 0.1
Nipple pre-positioning radial	[ mm ]	±1
Temperature range	[ °C ]	+10 to +80
Air volume	[ cm <sup>3</sup> ]	8 releases
Filter class		Quality class 4
Weight	[ kg ]	0.62
Automatic loading		at stop

- <sup>1</sup> Clamping force** Clamping force refers to the load up to which the zero point is guaranteed. The clamping force stated must not be exceeded. Due to the adjustable clamping force, there is a maximum, at the maximum clamping pressure (see table below).
- <sup>2</sup> Retention force** Retention force refers to the max. overload up to which the nipple will continue to be retained, but the zero point has already been left (designed for M10 screw).
- <sup>3</sup> Repeatability** Repeatability refers as a rule to the accuracy with which the same pallet in a specific orientation is changed on the same interface.



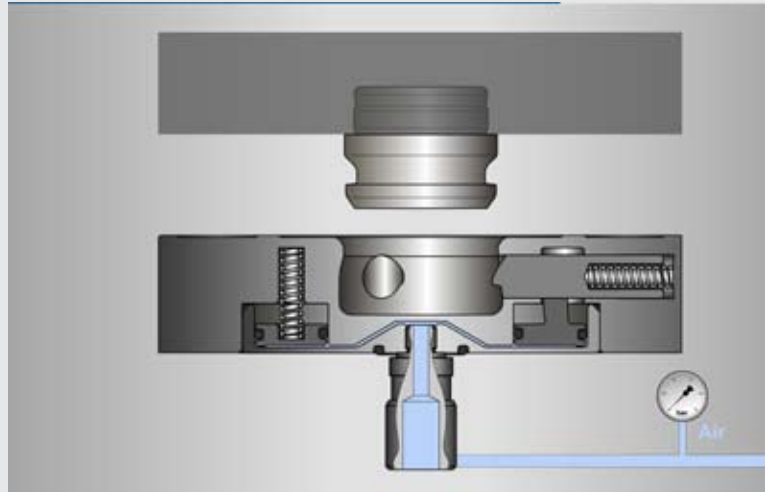
## Function description SPEEDY easy click – positioning and clamping in one function

**i**

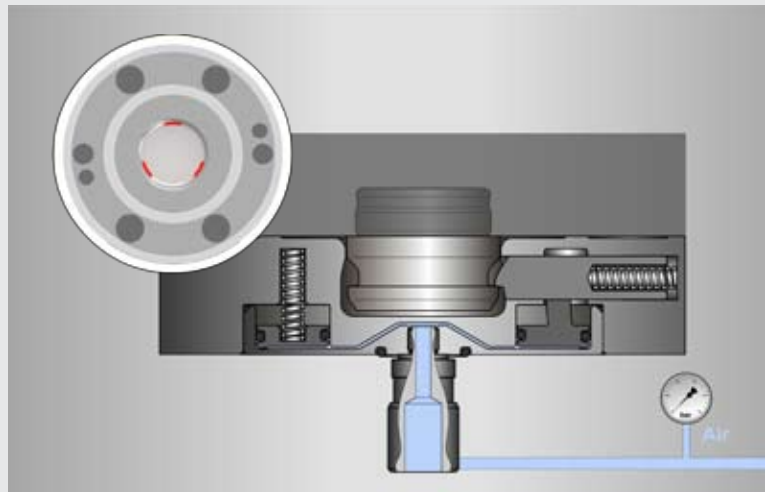
### Principle of operation:

See the whole process at  
[www.stark-inc.com](http://www.stark-inc.com)

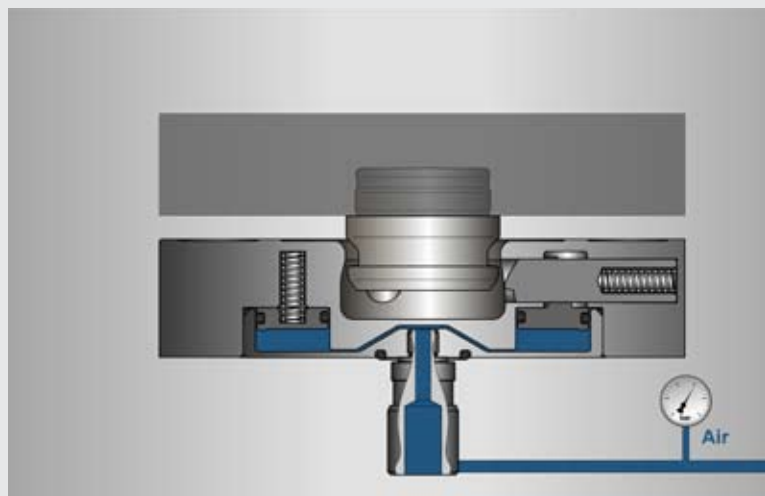
SPEEDY easy click basic setting:  
The system is depressurised.



SPEEDY easy click engage:  
The pallet is directly clicked on when it is fed in. It is also always possible to insert the nipple when the system is pressurised. When depressurised the pallet is clamped by spring force.



SPEEDY easy click release:  
Pressure (3-8 bar) is applied to the system and the pallet can be removed.



For data sheets and 3D data see [www.stark-inc.com](http://www.stark-inc.com)



## SPEEDY easy click

- Module
- Round
- Indexing



### Characteristics:

Flush Mount fast closing clamp module made of high-quality stainless tool steel.

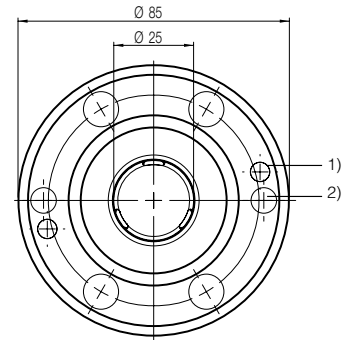
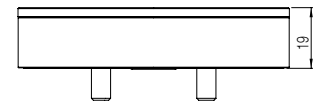
A mechanical fast closing clamp engages immediately without an energy supply and holds, release with 3-8 bar air pressure. Compact design requires little space and allows narrow spacings. SPEEDY easy click can be installed as a module in pallets or directly into the machine table. The mechanical engagement system makes SPEEDY easy click ideal as a robot gripper in automation engineering. Integrated query options and oil-free operation extend the range of applications.

### Application:

For flush mounting in machines, machine pallets, plates, angles, cubes, mounting towers and swivelling yokes.

### Machine element:

Can be used for all common machining tasks such as milling, grinding, eroding as well as on test stands and mounting devices.

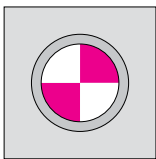


- 1) Draw-off thread M6 for demounting
- 2) Positioning through hole Ø8

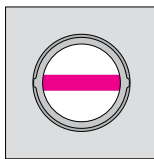
Order no.	Retention force	Clamping force	Pressure max. *	Weight	Datasheet
7000 019	10,000N	5,000N	3-8bar	0.62kg	D113

Fastening screws and screw covers are included items.

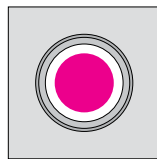
## Zero point mounting



1)



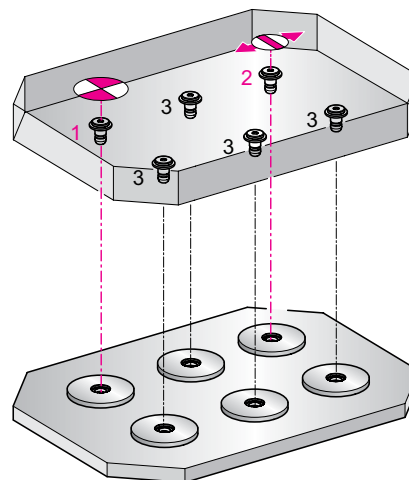
2)



3)

- 1) Retractable nipple with zero point
- 2) Retractable nipple with equaliser
- 3) Retractable nipple

### Retractable nipple with zero point on the top left corner of the pallet



### Application:

Equalisation of thermal expansion and manufacturing tolerances.



## Retractable nipple

### • With zero point

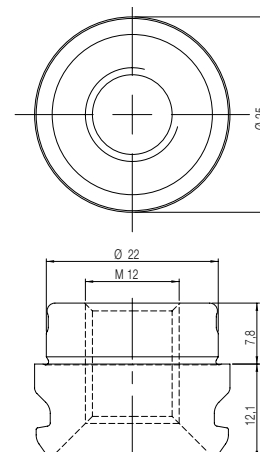


#### Characteristics:

Retractable nipple with zero point.

#### Application:

For positioning and clamping on machine pallets, machine vices, chucks, jigs, direct workpiece clamping.



Order no.	Screw quality	Tightening torque M10 DIN 7991	Tightening torque M12 DIN 912	Weight	Datasheet
7000 100	min. 10.9	45Nm	60Nm	0.046kg	D110

## Retractable nipple

### • With equaliser

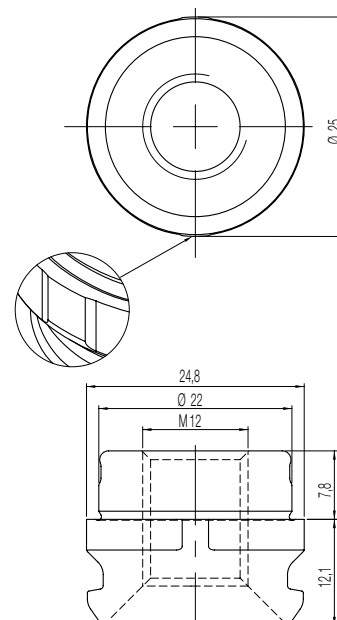


#### Characteristics:

Retractable nipple with equaliser on one axis (sword shape).

#### Application:

For positioning and clamping on machine pallets, machine vices, chucks, jigs, direct workpiece clamping.



Order no.	Screw quality	Tightening torque M10 DIN 7991	Tightening torque M12 DIN 912	Weight	Data sheet
7000 101	min. 10.9	45Nm	60Nm	0.046kg	D110

## Retractable nipple

### • without centring

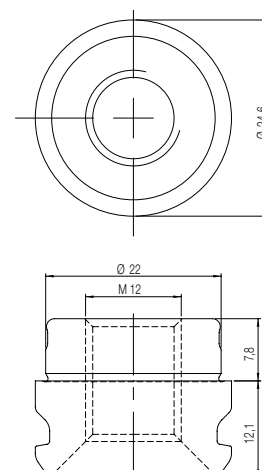


#### Characteristics:

Retractable nipple without centring.

#### Application:

For positioning and clamping on machine pallets, machine vices, chucks, jigs, direct workpiece clamping.



Order no.	Screw quality	Tightening torque M10 DIN 7991	Tightening torque M12 DIN 912	Weight	Datasheet
7000 102	min. 10.9	45Nm	60Nm	0.046kg	D110

For data sheets and 3D data see [www.stark-inc.com](http://www.stark-inc.com)



## STARK zero point clamping systems



*Consultation, planning, design, production, mounting, service – everything from a single source!*

Cost savings in manufacturing are increasingly only possible during machine set-up and by shortening the process times.

Production will be significantly faster by using zero point clamping systems.

Key aspects such as focusing on bottlenecks (TOC), shortening of cycle times, batch sizes and inventory reduction, to name but a few advantages, are implemented quickly in manufacturing by using STARK zero point clamping systems.

Utilise the years of experience and flexibility of specialists in zero point clamping technology to optimise your production. SPEEDY easy click is simple to operate as pressure is only required to release it.

The compact construction requires little space for mounting and allows the extremely narrow spacing.

The wide range of possibilities for installation in or on items give maximum scope to your design skills. SPEEDY easy click is also suitable in assembly technology or generally as a machine element. It does not rust and is therefore most suitable for the food-processing industry.

The optimum clamping action – the retractable nipples form a permanent positive fit connection, fastened together highly precisely by the spring action – prevents bending deflection or lifting and therefore ensures a high positioning accuracy.

Position, clamp, release – all integrated in the SPEEDY easy click – an intelligent zero point clamping system.

*"We are very satisfied with the cooperation we received. Starting with the design discussions during the planning phase to the advice and assistance provided on site."*

*Rainer Frisch, Lewa Attendorn*

### **STARK Spannsysteme GmbH**

Kommingerstrasse 48

A6840 Goetzis

Tel. +43 (0) 5523 64739-0

Fax +43 (0) 5523 64739-7

verkauf@stark-inc.com

www.stark-inc.com