

Technical datasheet: VERO-S NSE-M_{plus} 138

Functional description:

The clamping operation is performed based on an integrated spring assembly. The resulting clamping of the pin is self-locking. To open the module the tangentially positioned drive piston is actuated through a 120° counterclockwise rotation – closing is then executed in the clockwise direction via spring support.

Characteristics	Description
Unlocking torque	15 Nm
Weight	4 kg
Repeatability: with SPA 40 with SPG 40	< 0.005 mm < 0.002 mm
Hermetically sealed	Maintenance-free, IP 67 (DIN EN 60529)
Corrosion-resistant	All functional parts are made of hardened, stainless steel
Self-locking system	Clamping pin remains in the module
Short taper centering	Precise centering by quick and easy joining via entry radii
Application of proven and fundamental safety principles in terms of DIN 13849-2: technical attachment A	Is applied for example by using of reliable springs, using of proper materials and manufacturing processes, proper dimensioning, etc.
Patented dual stroke system	Therefore highest pull-down forces
Definition of the clamping module in terms of MRL Directive 2006/42/EC	Incomplete machine
PL (Performance Level)	Not applicable because the module is no safety component
Elimination of errors	Release of the clamped quick-change pallet system without adjacent unlocking signal

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Pull-down force in axial direction

without turbo function = **2 500 N**



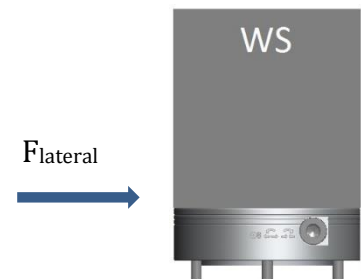
Lateral force with turbo-function

$$F_{lateral} = F_{pull\ down\ force} * \mu$$

$$= 2\,500\ N * 0.1$$

$$F_{lateral} = \mathbf{250\ N}$$

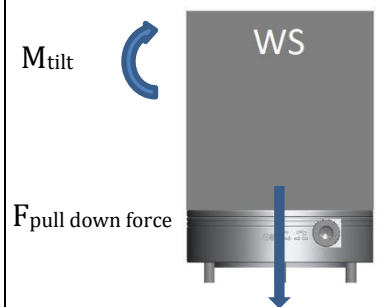
[Lateral force without relative movement]



Tilting moment clamping-station with turbo-function

1-way

$$M_{tilt\ module} = \mathbf{300\ Nm} \text{ (determined empirically)}$$



Tilting moment clamping station

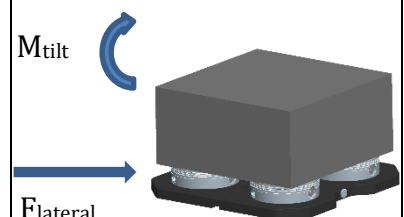
4-way

Pitch 200 mm x 200 mm

$$M_{tilt} = \mathbf{510\ Nm} \quad F_{lateral} = \mathbf{1\,000\ N}$$

Pitch 300 mm x 300 mm

$$M_{tilt} = \mathbf{730\ Nm} \quad F_{lateral} = \mathbf{1\,000\ N}$$



 **More details in quotation**