SITEMA
Expertise in Safety

Securing and holding inquiry

Our project:

Planned function of the clamping head in the machine / installation:

1. Force and load

* Required fields

*Load direction:

○ Securing / holding in only one direction:

max.: _____ kN (static without safety factor)

○ Compressive load on the mounting side (e.g. securing a cylinder against retracting)

○ Tensile load on the mounting side (e.g. securing a cylinder against expanding)

○ Securing / holding in both directions:

Load direction 1:

max.: _____ kN (static without safety factor)

Load direction 2:

max.: _____ kN (static without safety factor)

2. Safety

*Protective function:
(multiple selections possible)

☐ People are protected by the clamping head

☐ Machine parts / workpieces are protected by the clamping head

☐ The clamping is functional and necessary for operation of the machine (e.g. holding the position against a press force)

*Safety factor:

○ The holding force of the clamping head shall be a factor

_____ higher than the maximum load to be secured / held

○ not required

○ as yet undefined

*Clamping:

☐ Static clamping (the rod is always standing still when the clamp is activated)

☐ Dynamic clamping (occasional emergency braking)

While the clamp is being activated, the rod moves at a maximum speed of:

max. _____ m/s

3. Function

Desired actuation by:

☐ Hydraulics

System pressure in bar: min.: [　　　] bar available at all times

Fluid: ○ Hydraulic oil HLP 46

    ○ other:

[　　　　　　　　　　]

☐ Pneumatics

System pressure in bar: min.: [　　　] bar available at all times

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Mode of actuation:

☐ Electric actuation would be desirable

☐ Purely mechanical actuation would be desirable (only possible in connection with a suspension element such as chain, rope, belt, …)

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*Operating mode of the clamping head:

*Clamp

○ definitely at pressure failure and at zero pressure

○ by pressure is allowed (only if it is not a safety function)

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*Release

○ with pressure

○ at zero pressure

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*Release operation

○ Must always be possible without movement of the rod whether a load is acting on the clamping head or not
(Attention! A lifted load might drop down as a consequence of releasing unless it is otherwise supported)

○ Releasing when a load is acting on the clamping head should not be possible: the release operation is connected by machine control with relieving the clamping head of the load
(protection against unintended release)

Position:

○ The precise position must be held after clamping. Allowable tolerance when subject to the load given above: [　　　] mm

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○ Admissible path of the rod when clamping

    ○ < 0,1 mm   ○ < 2 mm   ○ < 18 mm

Special version:

At the same time, a torque of max.

[　　　] Nm must be held

(Clamping only at standstill, no braking of the rotational movement allowed)

4. General specifications

*Frequency of operation:

Cycles per year:

[   ]

Rod diameter:

⚪ undefined

⚪ fixed to [   ] mm

Load direction:

⚪ horizontal

⚪ vertical

Layout:

Add sketch as attachment if possible

Clamping head is:

⚪ stationary

⚪ moving

Size limits:

Height / length:

max. [   ] mm

Outer diameter / edge length:

max. [   ] mm

Weight:

⚪ as small as possible

⚪ if possible less than [   ] kg

Fixation of the clamping head:

⚪ The clamping head will not be mounted directly to a cylinder

⚪ The clamping head will be mounted directly to a cylinder

Type: [   ]

Rod during operation:

☐ Rod must be able to leave the clamping head during operation

Note: lateral forces acting on the clamping head are not admissible and must be absorbed by suitable bearings

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*Environment:

(multiple selections possible)

☐ normal dry workshop at room ambient temperature

☐ humid

☐ outdoor application

☐ sea air

☐ aggressive environment (e.g. acidic vapours)

☐ considerable dirt / dust

* Required fields

☐ extreme temperatures (< 0 °C and/or > 60 °C)

☐ machine tool wet

☐ machine tool dry

☐ food industry

(use of steam jet cleaning, suds, or similar)

☐ clean room

☐ other (please specify)

5. Personal data

*Company

*Name

Dept.

*E-mail

Phone

Street / no.

Postal / zip code, city

Country

○ Please call me

○ Please e-mail me

☐ I acknowledge SITEMA's privacy policy

6. Potential need (optional)

Price enquiry:

Please submit your best offer for:

○ once ☐ piece(s)

○ per month ☐ piece(s)

○ per year ☐ piece(s)

Desired delivery date:

Other remarks: