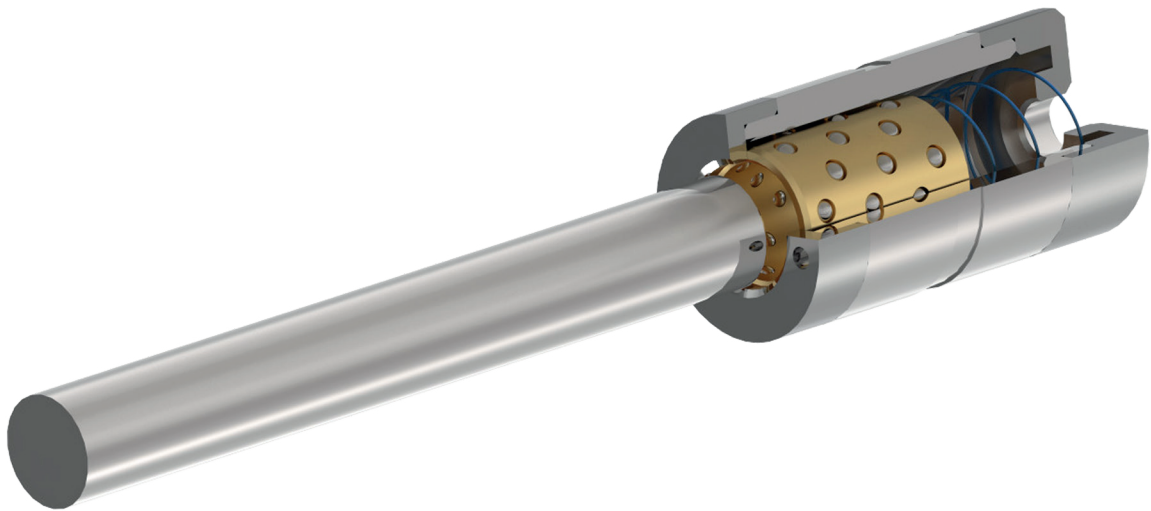


Agathon Micro Centering System μ -Pos

(near-series prototype)

Product description

A miniature high precision centering alternative to conventional centering systems for very demanding positional tasks that are often used in microforms, micro-punching tools and fixture construction as well as mechanically engineered mechanisms. Critical applications that can benefit from using them can be found in the field of optics, assembly systems, medical applications, watches and much, much more.



Ideal applications

- Applications with small forces
- High repeatability of accuracy and backlash-free actions are needed
- Mechanical engineered systems (assembly lines, indexing with minimal spacing)
- Fixture construction (fast positioning systems)
- Clean room, vacuum, optics, food, pharmaceuticals, electronics, watch industry, handling systems, etc.
- Mold making and under certain conditions, mold sizes of 96mmx96mm-150mmx150mm, such as hearing aids, etc.)

Advantages gained

- Ready to install, plug&play with pillar diameters in sizes 4 / 5 / 6 mm
- Pillar (new standard) can be ordered direct from Agathon
- Installation compatible with standard bushings in the mini range sizes
- No pairing of components is necessary
- Long centering length of approx. 11mm, 1.5mm of which is within max. load capacity
- Positional repeatability $< 0.5\mu\text{m}$ (tests with 7981: $0.26\mu\text{m}$)
- Combined movements (swivel and axial movements) are possible
- Almost wear-free
- Stainless steel/ceramic version: No maintenance (lubrication, oil, etc.) which make them ideal in clean room environments
- Standard material version: minimal maintenance would be required

Application notes

Must ensure that no small parts or debris can fall into the bushing. If necessary, mount the bushing in the upper part.

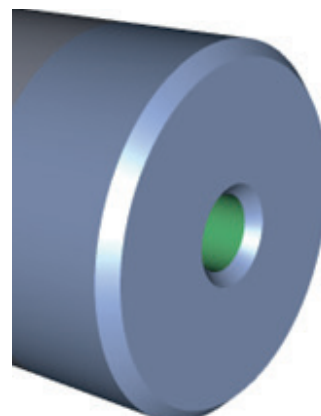
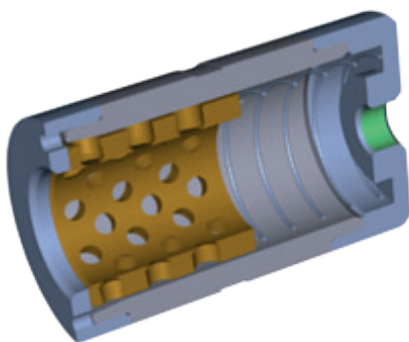
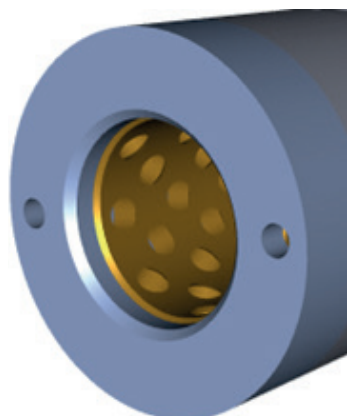
Dimensions

Micro Centering System								
d1	d2	d3	l1	Number of rows	Number of balls per row	Number of balls	Cdyn	Centering length
4	6	8	20	5	8	40	27	11.00
5	7	10	20	5	8	40	35	11.00
6	9	12	25	7	8	56	103	11.00

Material (for completely maintenance free solution)

- Cage: brass
- Balls: ceramic
- Bushing/pillar: INOX 1.4125

Alternative materials are: all made from inox (also balls) or completely made from standard material 1.3505 (52100 equivalent)



CAD files available on request