

Rotary/linear motion feedthrough

DN 25 ISO-KF
FCH025-H



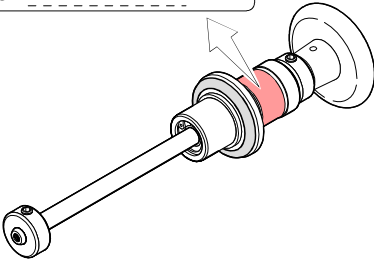
Operating Manual
incl. Manufacturer's Declaration

rina07e1 (0004)

Product Identification

In all communications with Inficon, please specify the information on the product nameplate. For convenient reference copy that information into the space provided below.

INFICON, FL-9496 Balzers
Typ: FCH025-H
No: 214-322
F-No: _____



Validity

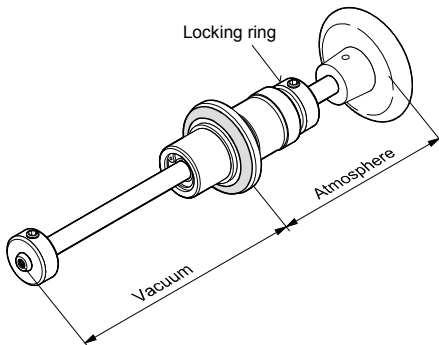
This document applies to products with part number 214-322. We reserve the right to make technical changes without prior notice.

Intended Use

The rotary/linear motion feedthrough FCH025-H is used for transferring rotary and linear movements into vacuum systems.

Functional Principle

The motions performed at atmosphere are transferred directly to the vacuum system.



Safety

Symbols Used

STOP DANGER
Information on preventing any kind of physical injury.

WARNING
Information on preventing extensive equipment and environmental damage.

Caution
Information on correct handling or use. Disregard can lead to malfunctions or minor equipment damage.

Personnel Qualifications

Skilled personnel
All work described in this document may only be carried out by persons who have suitable technical training and the necessary experience or who have been instructed by the end-user of the product.

General Safety Instructions

- Adhere to the applicable regulations and take the necessary precautions for all work you are going to do and consider the safety instructions in this document.
- Before you begin to work, find out whether any vacuum components are contaminated. Adhere to the relevant regulations and take the necessary precautions when handling contaminated parts.

Communicate the safety instructions to all other users.

Liability and Warranty

Inficon assumes no liability and the warranty becomes null and void if the end-user or third parties

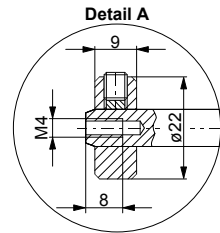
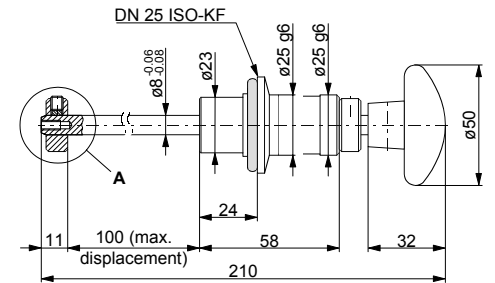
- disregard the information in this document
- use the product in a non-conforming manner
- make any kind of changes (modifications, alterations etc.) to the product
- use the product with accessories not listed in the corresponding product documentation.

The end-user assumes the responsibility in conjunction with the process media used.

Technical Data

Connection flange	DN 25 ISO-KF
Shaft connection	M4×8 mm or ø8 mm
Mounting orientation	any
Tightness static	1×10 ⁻⁹ mbar l/s
Tightness dynamic	1×10 ⁻⁹ mbar l/s 1×10 ⁻⁴ mbar l/s
Pressure range	1×10 ⁻⁸ mbar 1 bar (absolute)
Maximum displacement	100 mm
Shaft load radial, at max. displacement	15 N
Shaft load torsion	8 Nm
Temperatures operation (static, dynamic)	50 °C
Temperatures bakeout	110 °C
Temperatures storage	-15 °C ... +60 °C
Materials housing	Al alloy, coated
Materials shaft	stainless steel, nonmagnetic
Materials seal	FPM
Weight	0.2 kg

Dimensions



Installation

Caution



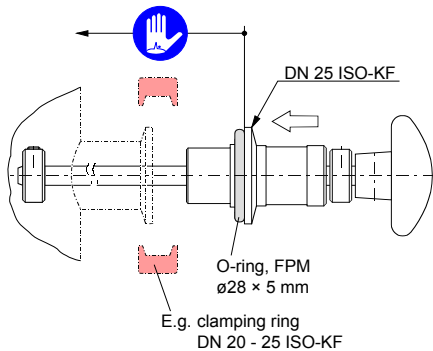
Caution: vacuum component
Dirt and damages impair the function of the vacuum component.
When handling vacuum components, take appropriate measures to ensure cleanliness and prevent damages.

Caution

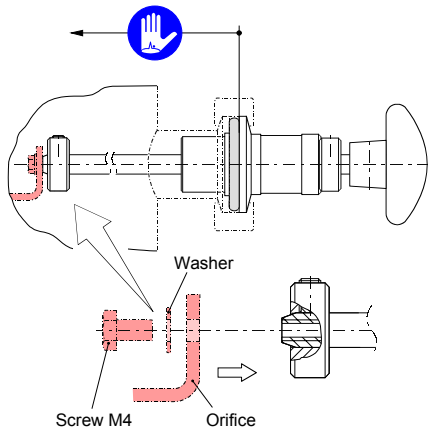


Caution: dirt sensitive area
Touching the product or parts thereof with one's bare hands increases the desorption rate.
Always wear clean, lint-free gloves and use clean tools when working in this area.

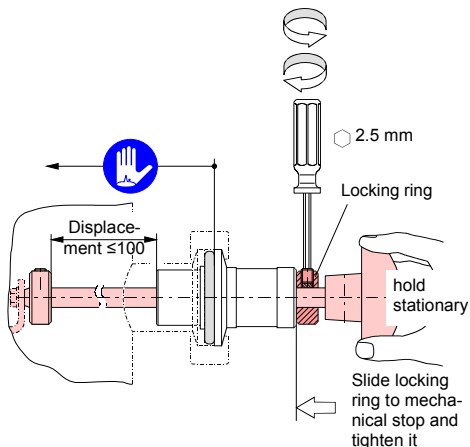
- 1 Establish the vacuum connection.



- 2 Install the process related component (e.g. orifice).

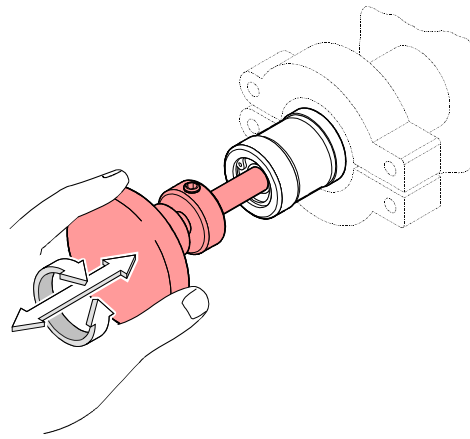


- 3 Limit the displacement (immersion depth)
(factory setting: 100 mm).



Operation

The rotary/linear motion feedthrough is ready for operation as soon as it has been installed.



Deinstallation

DANGER



Caution: contaminated parts
Contaminated parts can be detrimental to health and environment.
Before beginning to work, find out whether any parts are contaminated. Adhere to the relevant regulations and take the necessary precautions when handling contaminated parts.

Caution



Caution: vacuum component
Dirt and damages impair the function of the vacuum component.
When handling vacuum components, take appropriate measures to ensure cleanliness and prevent damages.

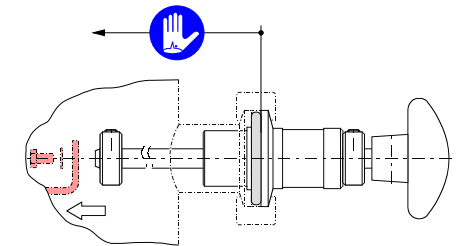
Caution



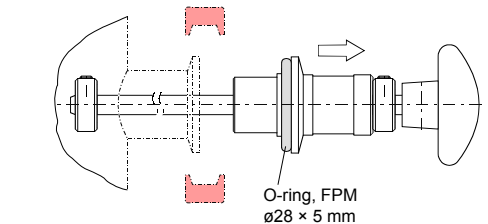
Caution: dirt sensitive area
Touching the product or parts thereof with one's bare hands increases the desorption rate.
Always wear clean, lint-free gloves and use clean tools when working in this area.

- 1 Vent the vacuum system.

- 2 Detach the process related component.



- 3 Detach the vacuum connection.



Maintenance


The product requires no maintenance.


Repair

We recommend returning the product to your nearest Inficon-Service Center for repair.

Inficon assumes no liability and the warranty becomes null and void if any repair work is carried out by the end-user or third parties.

Storage

 **Caution**





Caution: vacuum component

Inappropriate storage leads to an increase of the desorption rate and/or may result in mechanical damage of the product.

Cover the side of the product which is going to be exposed to the vacuum with grease free aluminum foil. Do not exceed the admissible storage temperature range (-> "Technical data").

Returning the Product

 **WARNING**



Caution: forwarding contaminated products


Contaminated parts (e.g. radioactive, toxic, caustic or microbiological) can be detrimental to health and environment.


Products returned to Inficon should preferably be free of harmful substances. Adhere to the forwarding regulations of all involved countries and forwarding companies and enclose a duly completed declaration of contamination.

Products that are not clearly declared as "free of harmful substances" are decontaminated at the expense of the customer.

Products not accompanied by a duly completed declaration of contamination are returned to the sender at his own expense.

Disposal


 **DANGER**




Caution: contaminated parts

Contaminated parts can be detrimental to health and environment.

Before beginning to work, find out whether any parts are contaminated. Adhere to the relevant regulations and take the necessary precautions when handling contaminated parts.

 **WARNING**



Caution: substances detrimental to the environment

Products or parts thereof (mechanical and electric components, operating fluids etc.) can be detrimental to the environment.

Dispose of such substances in accordance with the relevant local regulations.

Separating the components

After disassembling the product, separate its components according to the following criteria:

- Contaminated components
Contaminated components (radioactive, toxic, caustic, or biological hazard etc.) must be decontaminated in accordance with the relevant national regulations, separated according to their materials, and recycled.
- Other components
Such components must be separated according to their materials and recycled.

Option

The anti rotation device used for securing the shaft against rotary movements.

