



**5.0 motion & manipulation**

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## Specification

### Material

- Body: Stainless Steel
- Housing: Anodized Aluminium

### Temperature range

- Feedthrough: 250 °C
- CF flange style: 450 °C
- KF flange style: 150 °C
- Torque: 0.4 Nm
- Axial Load: 2.7 Kg max
- Lateral Load: 4.5 Kg max
- Speed: 1000 rpm
- Resolution scale: 5°



Part Number	Flange	A	B
5-RM-1030	DN16CF	40,0	105,9
5-RM-2030	DN40CF	40,0	105,9

A : Shaft length on vacuum side; B : Air side length from knife edge

Part Number	Flange	A	B
5-RM-3040	DN16KF	38,6	107,2
5-RM-4040	DN40KF	41,4	104,7

A : Shaft length on vacuum side; B : Air side length from knife edge

Description	Part Number
UHV STANDARD ROTARY FEEDTHROUGH 360° ROTARY TRAVEL ON CF16	5-RM-1030
UHV STANDARD ROTARY FEEDTHROUGH 360° ROTARY TRAVEL ON CF40	5-RM-2030
HV STANDARD ROTARY FEEDTHROUGH 360° ROTARY TRAVEL ON KF16	5-RM-3040
HV STANDARD ROTARY FEEDTHROUGH 360° ROTARY TRAVEL ON KF40	5-RM-4040

## 5.2

# Linear Motion Feedthroughs

### Specification

#### Material

- Body: Stainless Steel
- Housing: Anodized Aluminium

#### Temperature range

- Feedthrough: 250 °C
- CF flange style: 450 °C
- KF flange style: 150 °C
  
- Axial Load: 2.3 Kg max.
- Lateral Load: 2.3 kg at 50.8mm max. extension

#### Resolution

- Linear scale: 0.65 mm

With 2 threaded holes on vacuum side shaft end for easy attachment



Flange type Part Number	A min (mm)	A max (mm)	B (mm)
CF16 - 5-LM-1010	90,2	115,6	139,7
CF40 - 5-LM-2010	90,2	115,6	139,7
CF16 - 5-LM-3010	90,2	141,0	175,3
CF40 - 5-LM-4010	90,2	141,0	175,3

A : Shaft length on vacuum side; B : Air side length from knife edge

Flange type Part Number	A min (mm)	A max (mm)	B (mm)
KF16 - 5-LM-0205	89,0	114,4	141,2
KF40 - 5-LM-0206	91,5	116,9	138,7
KF16 - 5-LM-0207	89,0	139,8	176,8
KF40 - 5-LM-0208	91,5	142,3	174,3

A : Shaft length on vacuum side; B : Air side length from knife edge

Description	Part Number
UHV STANDARD LINEAR FEEDTHROUGH ON CF16 25MM TRAVEL	5-LM-1010
UHV STANDARD LINEAR FEEDTHROUGH ON CF40 25MM TRAVEL	5-LM-2010
UHV STANDARD LINEAR FEEDTHROUGH ON CF16 50MM TRAVEL	5-LM-3010
UHV STANDARD LINEAR FEEDTHROUGH ON CF40 50MM TRAVEL	5-LM-4010
UHV STANDARD LINEAR FEEDTHROUGH ON KF16 25MM TRAVEL	5-LM-5020
UHV STANDARD LINEAR FEEDTHROUGH ON KF40 25MM TRAVEL	5-LM-6020
UHV STANDARD LINEAR FEEDTHROUGH ON KF16 50MM TRAVEL	5-LM-7020
UHV STANDARD LINEAR FEEDTHROUGH ON KF40 50MM TRAVEL	5-LM-8020

## Description

Our Mini Z linear manipulator are applicable drives with a compact design. The standard versions on DN16CF flange have a travel length of 25mm and 50mm and are suitable wherever space is restricted and you are looking for a competitive performance.

Description	Part Number
UHV Mini z manipulator on CF16, travel length 25mm	5-MZ-1000
UHV Mini z manipulator on CF16, travel length 50mm	5-MZ-2000



# Z Compact Single Axis

## Description

Z compact single stages offer a wider range of travel lengths although the design remains compact. Standard versions are available with DN40CF and DN63CF flanges, travel lengths vary from 50 to 150 mm and can be measured with a mm scaling.

Description	Travel length	Bellow min. ID	Part Number
COMPACT Z STAGE ONLY CF40 STROKE 50mm	50 mm	36 mm	5-CZ-0210
COMPACT Z STAGE ONLY CF40 STROKE 100mm	100 mm	36 mm	5-CZ-0211
COMPACT Z STAGE ONLY CF40 STROKE 150mm	150mm	36 mm	5-CZ-0212
COMPACT Z STAGE ONLY CF63 STROKE 50mm	50 mm	63 mm	5-CZ-0213
COMPACT Z STAGE ONLY CF63 STROKE 100mm	100 mm	63 mm	5-CZ-0214

You are looking for different travel lengths, flange sizes or motorized versions? Please contact our sales office!



**Description**

X-Y-drives offer the ability to move your sample on a circular pattern. We are offering translators with 2 different travel paths: +/- 12.5 mm and +/- 25.0 mm. Both versions are directed by micrometers and can be handled manual or with stepper motors. Standard flange sizes vary from DN40CF to DN100CF.

Please contact us to discuss your further needs!

Description	Part Number
X-Y TRANSLATOR ± 12.5mm CLEAR ID 74mm ON CF100 CLEAR HOLES	5-XY-0521
X-Y TRANSLATOR ± 25mm CLEAR ID 74mm ON CF100 CLEAR HOLES	5-XY-0052

## Tripe Axis – Compact xyz Stage

### Description

The compact XYZ manipulator is a suitable solution where space is restricted.

### Features:

- Bellows I.D. min. 38mm
- XY travel  $\pm 12.5$  mm
- Z travel 50, 100 and 150 mm
- Resolution to 0.01 mm on XY-direction with micrometer screws
- Actuation in Z-direction by hand wheel with mm scale
- Base flange DN40CF with through holes
- Top flange DN40CF with thread holes
- Edge welded bellows used for flange connection

You are looking for different travel lengths, flange sizes or motorized versions? Please contact our sales office!

Description	Travel length	Bellow min. ID	Part Number
COMPACT XYZ STAGE CF40	50 mm	38 mm	5-CTA-001
COMPACT XYZ STAGE CF40	100 mm	38 mm	5-CTA-002
COMPACT XYZ STAGE CF40	150mm	38 mm	5-CTA-003

### *Description*

Our UHV magnetic transporter is ideal for moving your sample even a long pathway. Full 360° rotary motion is possible, but can be avoided by a guided stopper. As standard mounted on a DN40CF flange possible travel lengths vary from 300 to 1000 mm. Further flange sizes and travel lengths on are possible on request. The magnetic transporter show an all-metal construction and have a bake out temperature up to 200°C

Please contact us for further information.

## Triple Axis – Precision xyz Stage

### *Description*

The precision XYZ manipulator is an ideal solution when accurate movements in xyz direction is required. Please call our sales office to discuss your demands.

Description	Part Number
XYZ MANIPULATOR XY $\pm$ 12.5mm STROKE 50mm ON CF40	5-XYZ-0500
XYZ MANIPULATOR XY $\pm$ 12.5mm STROKE 100mm ON CF40	5-XYZ-0010
XYZ MANIPULATOR XY $\pm$ 12.5mm STROKE 150mm ON CF40	5-XYZ-0510
XYZ MANIPULATOR XY $\pm$ 12.5mm STROKE 200mm ON CF40	5-XYZ-0020
XYZ MANIPULATOR XY $\pm$ 12.5mm STROKE 250mm ON CF40	5-XYZ-0520
XYZ MANIPULATOR XY $\pm$ 12.5mm STROKE 300mm ON CF40	5-XYZ-0030

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