

### Introduction

The M-RMJG40 is a simple, all metal sealed, linear-rotary feedthrough with independent rotation of the inner as well as the outer shaft. It's main purpose is to transport samples between UHV-chambers. The independent rotary motion of each shaft enhances operation of sample locking mechanisms and sample carrier platforms by being able to drive and also rotate them.

Two sets of rare earth magnets on the air and vacuum side provide the necessary force to ensure a rigid coupling from the handle to the shaft. Slide bearings for linear motion throughout guarantee for smooth operation even after numerous bakeout cycles.

### Specifications:

#### Materials

All UHV compatible

#### Vacuum Range

CF flanged atm to  $1 \times 10^{-11}$  mbar

#### Temperature Range\*

CF flanged -196 to 150°C

#### Load

Linear force 70N typical

Torque 5Nm typical

#### Retracted Shaft Length

Dual shaft 50mm



Description	Part Code
Dual rotatable shaft magnetic transporter with slide bearings 300mm linear 50mm retracted DN40CF both shafts independantly rotatable	M-RMJG40-300-50
Dual rotatable shaft magnetic transporter with slide bearings 500mm linear 50mm retracted DN40CF both shafts independantly rotatable	M-RMJG40-500-50
Dual rotatable shaft magnetic transporter with slide bearings 750mm linear 50mm retracted DN40CF both shafts independantly rotatable	M-RMJG40-0750-50
Dual rotatable shaft magnetic transporter with slide bearings 1000mm linear 50mm retracted DN40CF both shafts independantly rotatable	M-RMJG40-1000-50
Dual rotatable shaft magnetic transporter with slide bearings Xmm linear, Ymm retracted DN40CF both shafts independantly rotatable	M-RMJG40-X-Y

YYYY retracted (minimum 45, standard 50)

XXXX + 170

XXXX linear travel

minimum 56

7

100

7

4x M3x4

DN40CF

Ø 60

40

Ø 6.35 h6 ( 0 -0.009 )

25

10

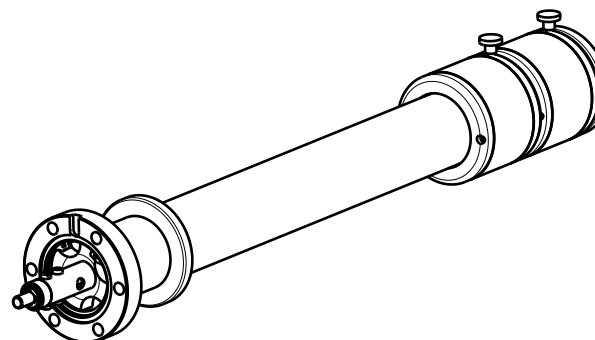
13

11

Ø 15

2.8

8



1:4

Material: UHV compatible

Dual Shaft Rotatable Sample  
Transporter

RMJG40

**Ferrovac GmbH**  
CH-8050 Zurich

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nominal dimension up to	over 6	over 30	over 100	over 300	over 1000
tolerance ±	0.05	0.1	0.3	0.5	0.8

Scale	Drawn	S.Michels
Date	25.11.2016	
changed	.....	

1:1

Rev. A

**RMJG40**