

Introduction

The M-RMDS40 is an all metal sealed, linear feedthrough. It's main purpose is to transport samples between UHV-chambers. The square shaft makes this feedthrough especially sturdy. A set of rare earth magnets on the air- and vacuumside provides the necessary force to ensure a rigid coupling from the handle to the shaft. All ball bearings are Diconite (W-disulfide) dry lube coated. On request, the RMDS can be built with SiC ceramic hybrid ball bearings.

Specifications:

Materials

All UHV compatible

Vacuum Range

CF flanged atm to 1×10^{-11} mbar

Temperature Range*

CF flanged -196 to 150°C

Load

Linear force 70N typical

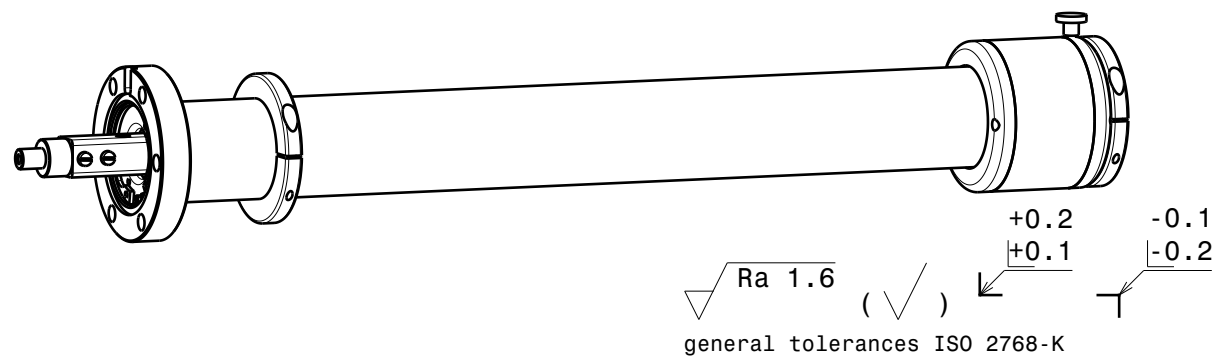
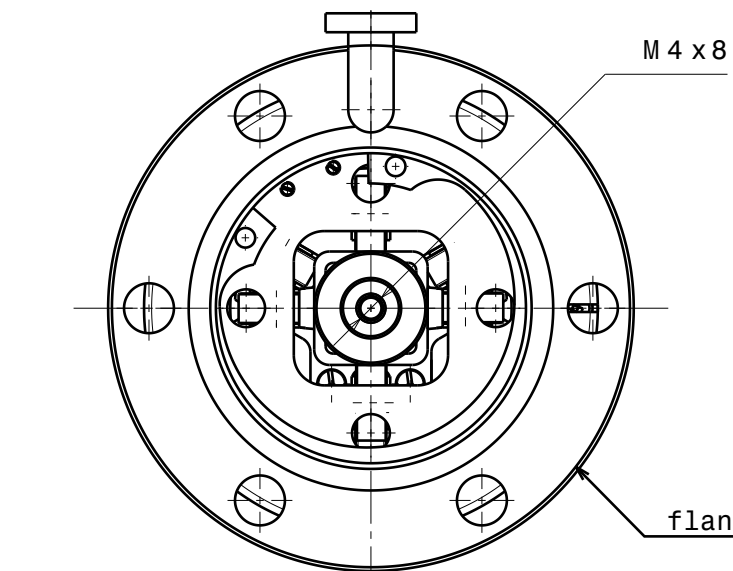
Torque 5Nm typical

Retracted Shaft Length

Dual shaft 30mm



Description	Part Code
Single shaft non rotatable linear magnetic transporter 300mm linear 50mm retracted DN40CF (with diconite coated ball bearings)	M-RMDS40-300-50
Single shaft non rotatable linear magnetic transporter 500mm linear 50mm retracted DN40CF (with diconite coated ball bearings)	M-RMDS40-500-50
Single shaft non rotatable linear magnetic transporter 750mm linear 50mm retracted DN40CF (with diconite coated ball bearings)	M-RMDS40-750-50
Single shaft non rotatable linear magnetic transporter 1000mm linear 50mm retracted DN40CF (with diconite coated ball bearings)	M-RMDS40-1000-50
Single shaft non rotatable linear magnetic transporter Xmm linear Ymm retracted DN40CF (with diconite coated ball bearings)	M-RMDS40-X-Y



Material: 1.4301		nominal over dimension up to tolerance ±	1	6	30	100	300	1000	
Singel Shaft Linear Sample Trasnpoter, non rotate			6	30	100	300	1000	2000	
			tolerance ±						
			0.05	0.1	0.3	0.5	0.8	1.2	
RMDS40			Scale	Drawn		B.Moser			
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