

Introduction

Magnetically driven dual shaft wobblestick manipulator with DN40CF mounting flange.

Linear Travel in standard lengths from 100mm to 300mm, retracted shaft length 63mm, continuously rotatable. Custom lengths available.

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, MD version	30N typical
Linear force, MD(HT) version	60N typical
Linear force, MDG version	23N typical
Torque, MD version	0.5Nm typical
Torque, MD(HT) version	1Nm typical
Torque, MDG version	0.4Nm typical

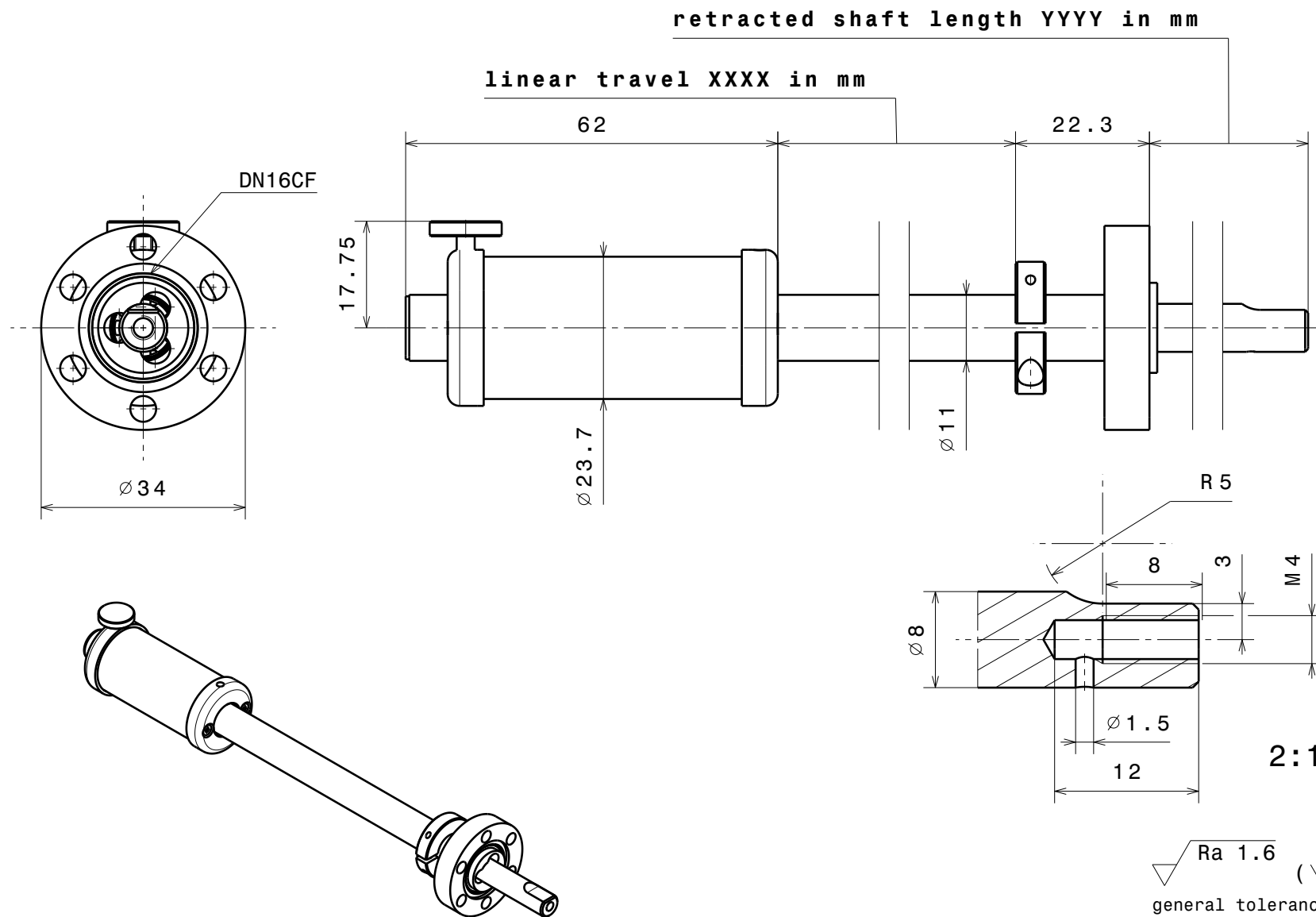
Retracted Shaft Length

Single shaft	30mm
Dual shaft	30mm

Description	Part Code
Magnetic linear/rotary feedthrough DN16CF 100mm travel	M-MD16-100
Magnetic linear/rotary feedthrough DN16CF 200mm travel	M-MD16-200
Magnetic linear/rotary feedthrough DN16CF 300mm travel	M-MD16-300
Magnetic linear/rotary feedthrough DN16CF 400mm travel	M-MD16-400
Magnetic linear/rotary feedthrough DN16CF Xmm travel Ymm shaft	M-MD16-X-Y
Magnetic linear/rotary feedthrough DN40CF 100mm travel	M-MD40-100
Magnetic linear/rotary feedthrough DN40CF 200mm travel	M-MD40-200
Magnetic linear/rotary feedthrough DN40CF 300mm travel	M-MD40-300
Magnetic linear/rotary feedthrough DN40CF 400mm travel	M-MD40-400
Magnetic linear/rotary feedthrough DN40CF Xmm travel Ymm shaft	M-MD40-X-Y



Description	Part Code
High torque magnetic linear / rotary feedthrough DN16CF 100mm travel	M-MD16(HT)-100-30
High torque magnetic linear / rotary feedthrough DN16CF 200mm travel	M-MD16(HT)-200-30
High torque magnetic linear / rotary feedthrough DN16CF 300mm travel	M-MD16(HT)-300-30
High torque magnetic linear / rotary feedthrough DN16CF 400mm travel	M-MD16(HT)-400-30
High torque magnetic linear / rotary feedthrough DN16CF 500mm travel	M-MD16(HT)-500-30
High torque magnetic linear / rotary feedthrough DN16CF Xmm travel Ymm shaft	M-MD16HT-X-Y
High torque magnetic linear / rotary feedthrough DN16CF 100mm travel	M-MD40(HT)-100-30
High torque magnetic linear / rotary feedthrough DN16CF 200mm travel	M-MD40(HT)-200-30
High torque magnetic linear / rotary feedthrough DN16CF 300mm travel	M-MD40(HT)-300-30
High torque magnetic linear / rotary feedthrough DN16CF 400mm travel	M-MD40(HT)-400-30
High torque magnetic linear / rotary feedthrough DN16CF 500mm travel	M-MD40(HT)-500-30
High torque magnetic linear / rotary feedthrough DN16CF Xmm travel Ymm shaft	M-MD40(HT)-X-Y
Dual shaft magnetic linear / rotary feedthrough DN40CF 100mm travel	M-MDG40-100-30
Dual shaft magnetic linear / rotary feedthrough DN40CF 150mm travel	M-MDG40-150-30
Dual shaft magnetic linear / rotary feedthrough DN40CF 200mm travel	M-MDG40-200-30
Dual shaft magnetic linear / rotary feedthrough DN40CF 250mm travel	M-MDG40-250-30
Dual shaft magnetic linear / rotary feedthrough DN40CF 300mm travel	M-MDG40-300-30
Dual shaft magnetic linear / rotary feedthrough DN40CF Xmm travel Ymm shaft	M-MDG40-X-Y

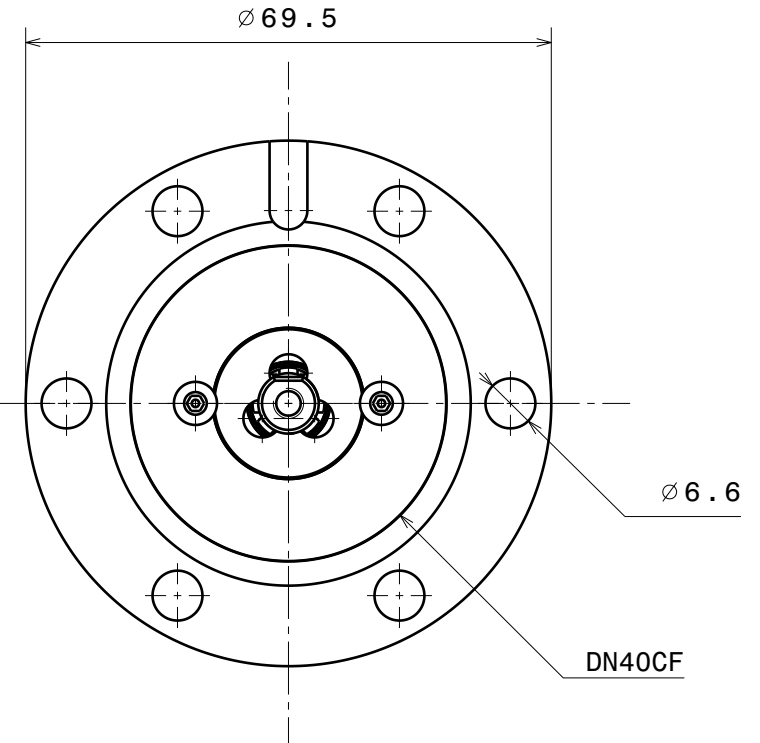
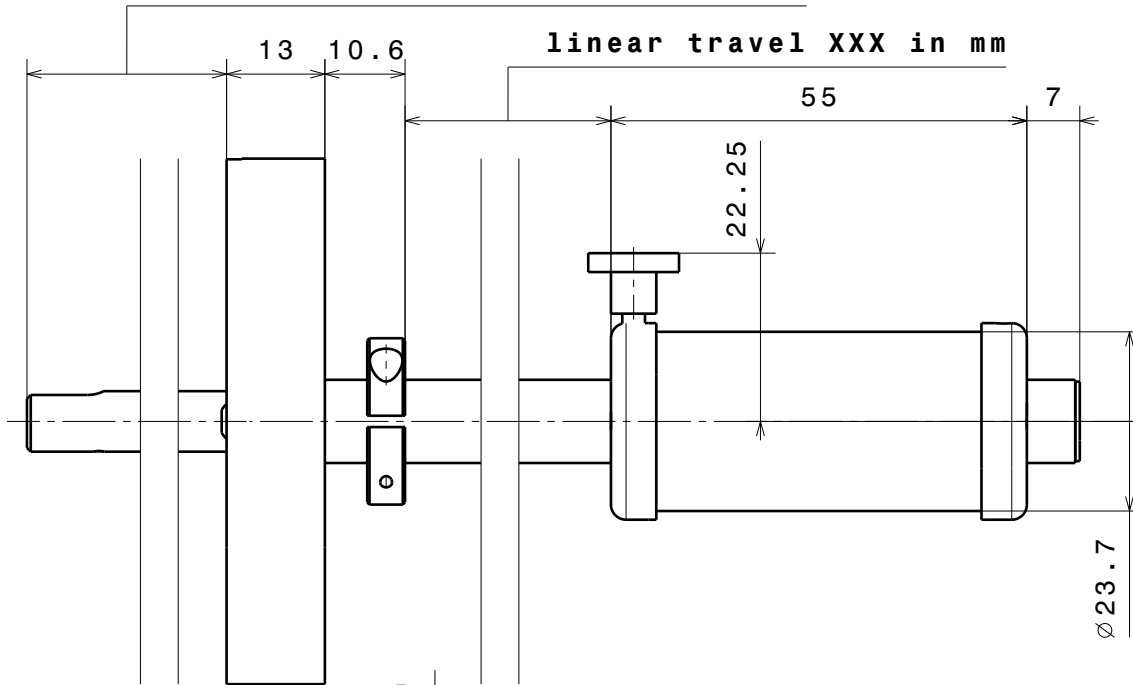


Order code:
MD16-XXXX-YYYY
e.g. MD16-0200-0030

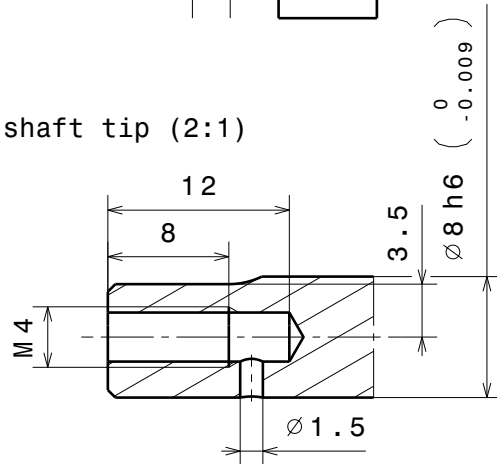
Material: fully UHV compatible materials		nominal	min.	1	6	30	100	300	1000
Linear Rotary Feedthrough DN16CF		dimension	max.	6	30	100	300	1000	2000
MD		tolerance	±	0.05	0.1	0.3	0.5	0.8	1.2
Scale		Drawn		Denys Sutter					
1:1 (2:1)		Date		07.02.2011					
Rev. C		Revised		02.11.16 JB					
Ferrovac GmbH CH-8050 Zurich		THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FERROVAC GMBH. ANY REPRODUCTION IN PART OR AS WHOLE WITHOUT OUR PERMISSION IS PROHIBITED.		MD16					

retracted shaft length YYY in mm

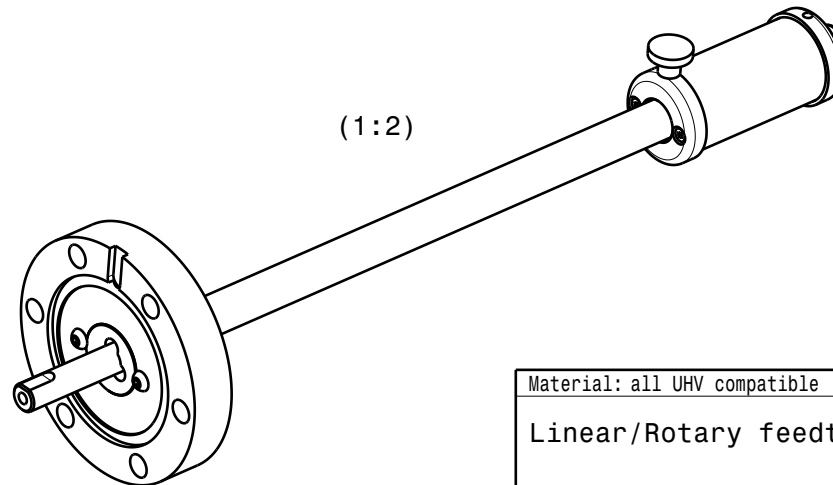
linear travel XXX in mm



shaft tip (2:1)



(1:2)



Ra 1.6

(✓)

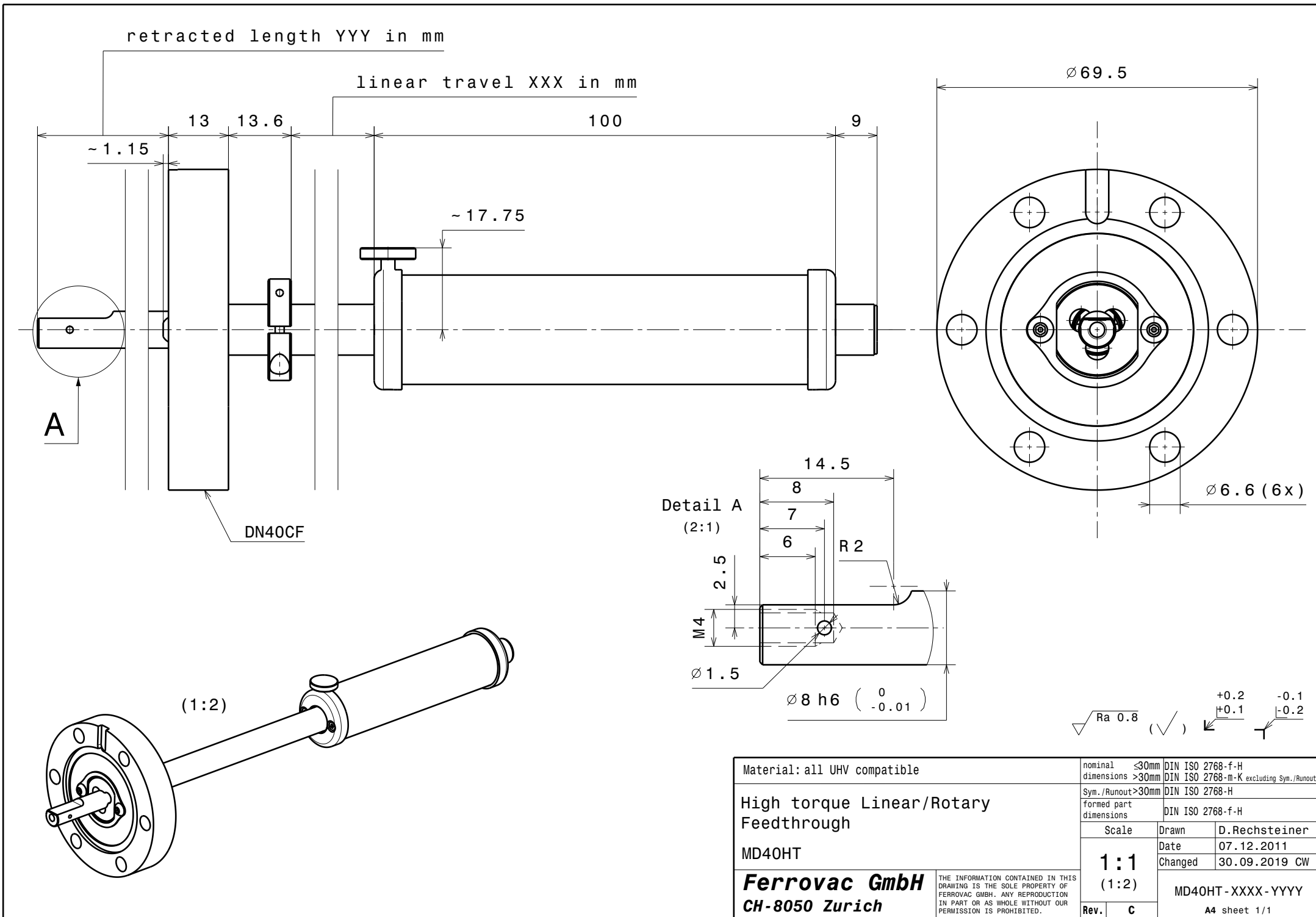
+0.2
+0.1

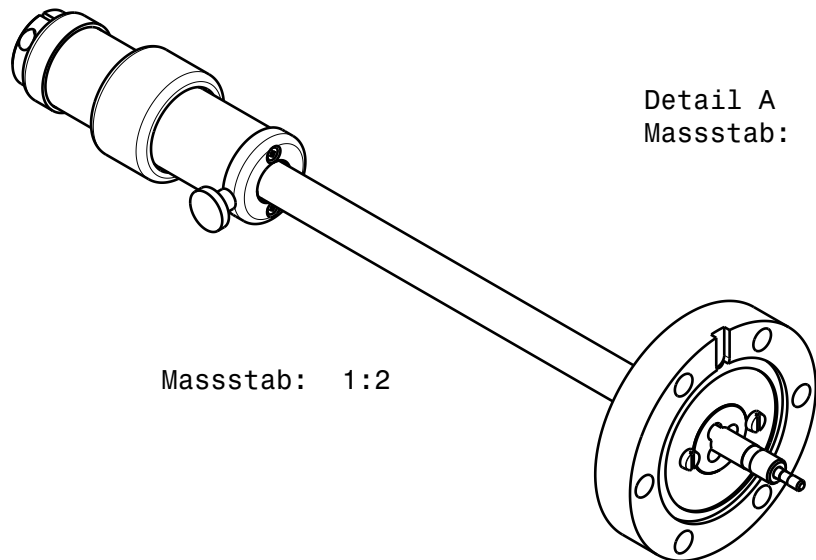
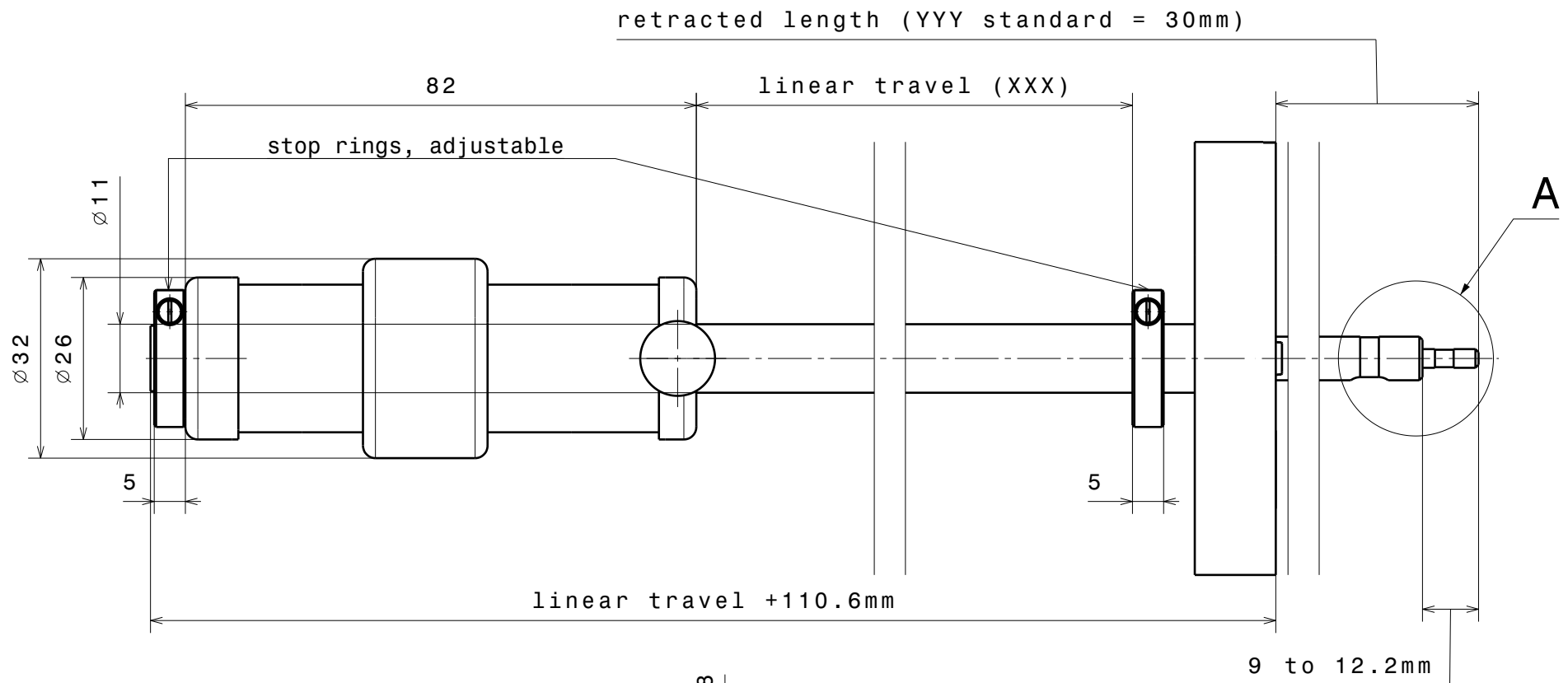
-0.1
-0.2

general tolerances ISO 2768-K

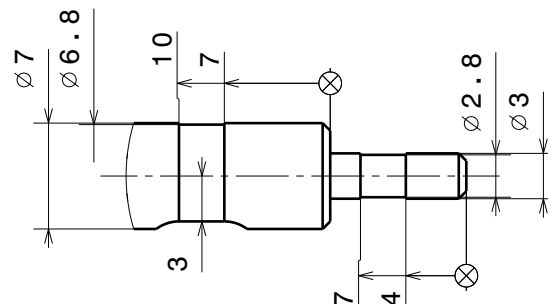
Material: all UHV compatible		nominal	over	1	6	30	100	300	1000
Linear/Rotary feedthrough DN40CF		dimension up to		6	30	100	300	1000	2000
		tolerance ±		0.05	0.1	0.3	0.5	0.8	1.2
MD		Scale	Drawn	Denys Sutter					
			Date	22.03.2011					
			Checked	Name					
Ferrovac GmbH		1:1		MD40					
CH-8050 Zurich		(1:2)							
		(2:1)							

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Detail A
Massstab: 2:1



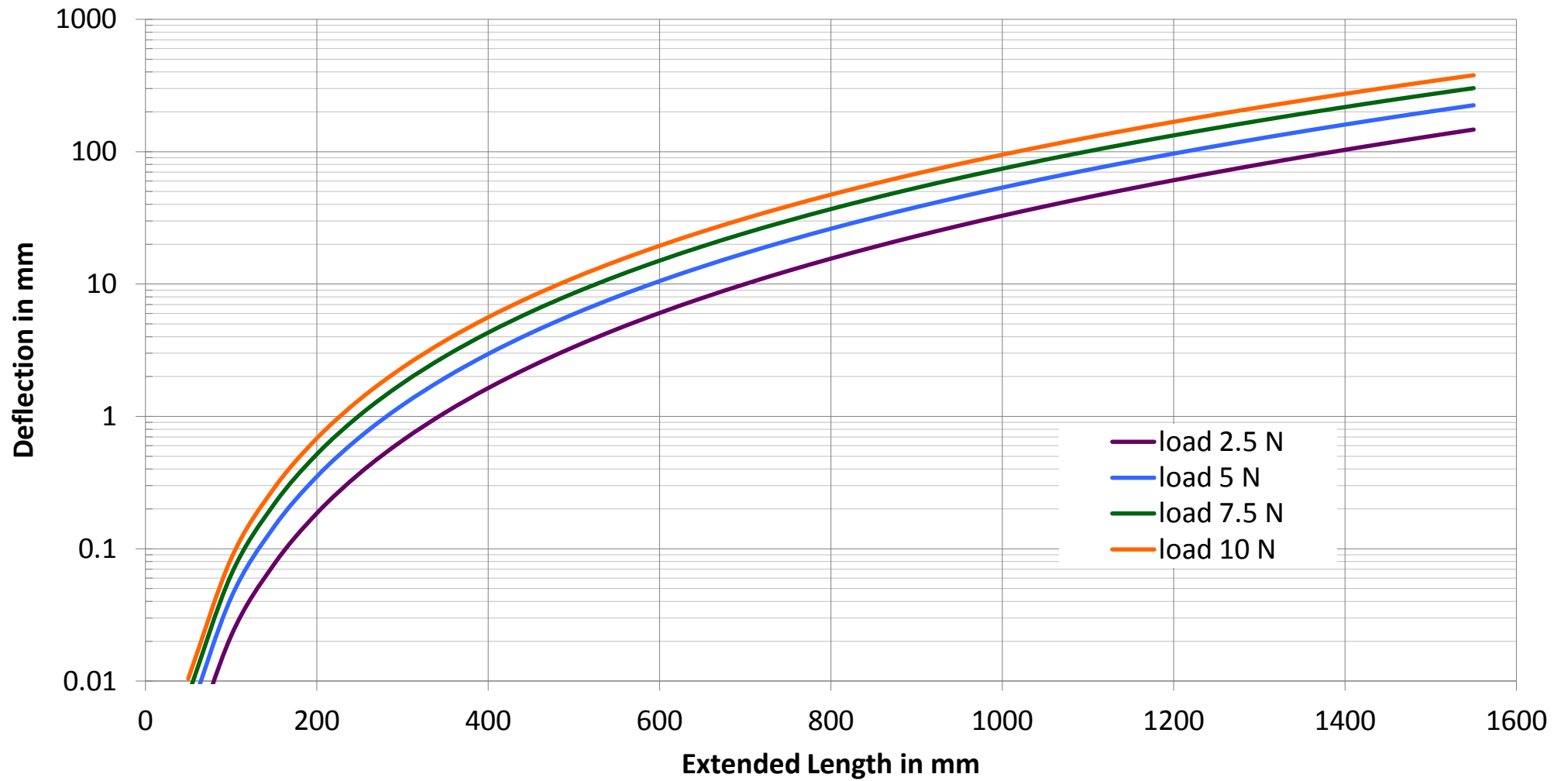
Specification

bakeout temperature max. 150°C
He leak rate < 1.0 · 10⁻¹⁰ mbar
continuous rotation
torque 0.4 Nm
linear force 23 N

Material:		nominal over	1	6	30	100	300	1000	
Dual Shaft Linear/ Rotary Feedthrough DN40CF		dimension up to	6	30	100	300	1000	2000	
		tolerance ±	0.05	0.1	0.3	0.5	0.8	1.2	
		Scale	Drawn	von Gunten					
MDG			Date	22.11.2010					
			Revised						
Ferrovac GmbH CH-8050 Zurich		1:1	MDG40 sheet 1/1						
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MD Deflection vs Extended Length at different Loads



MDG Deflection vs Extended Length at different Loads

