

RIGIBELT

Mechanical non-magnetic actuator



LINEAR TELESCOPIC NON-MAGNETIC ACTUATOR

Horizontal and vertical transfer

The originator of Rigid Chain Technology (RCT), SERAPID has been designing and manufacturing telescopic mechanical actuators for heavy load transfer for more than 45 years.

The RigiBelt is a non-magnetic mechanical actuator. It is comprised of two flexible belts that fit together like a zipper to form a rigid push/pull column. The belts are made from reinforced plastic and therefore are totally non-magnetic. The belts lock together in a smooth movement within the drive housing. When retracted, the belts coil and store in a compact space designed to best fit the application.

The RigiBelt is suitable for the most diverse applications, from medical technology to aerospace to warehouse logistics. It is easily integrated into virtually any work environment. The standard RigiBelt actuator can be adapted specifically to your application needs.

Do not hesitate to contact us, we will help you find the optimal solution for your project.

Benefits

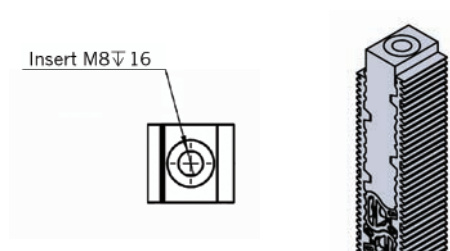
- entirely non-magnetic
- light weighted
- strong and flexible belts
- horizontal and vertical transfer



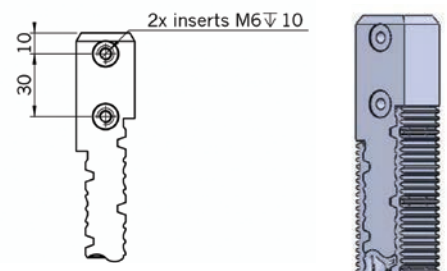
Interfaces

There are two standard ways to attach the links to your application- at the top or on the side of the end link:

Option 1



Option 2



These interfaces, as with all RigiBelt materials, are non-magnetic. Other push-pull interfaces can be designed according to your applications and needs, please consult with us for details.

Features

stroke	from 100 mm to many meters with or without guide
max. static load of the belt	500 kg*
elongation**	3 mm / 100 kg
compression**	1 mm / 100 kg
weight of a belt	700 g/m
section of a belt	25 mm x 28 mm

* maximum value without safety coefficient for R&D application

** at max. load. This information is based on static testing performed by an independent laboratory. Dynamic capacity and life cycle depend on the drive design.

Drive housing

The drive housing of the RigiBelt is compact and easy to integrate into the application environment. It also is completely non-magnetic; consisting partly of stainless steel, partly of anodised aluminum. This composition makes the system ideal for clinical environments, food processing and clean rooms.

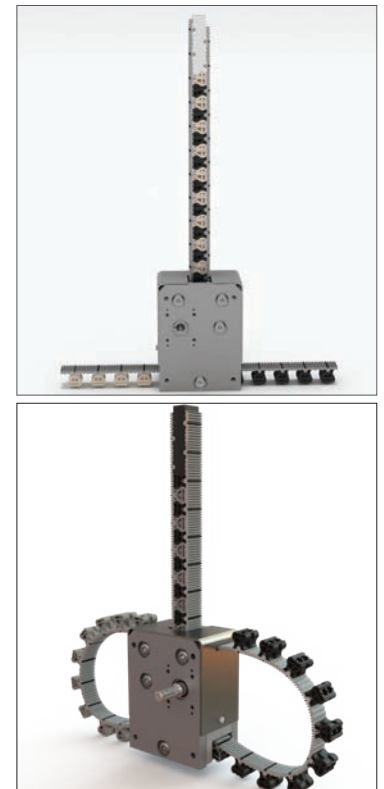
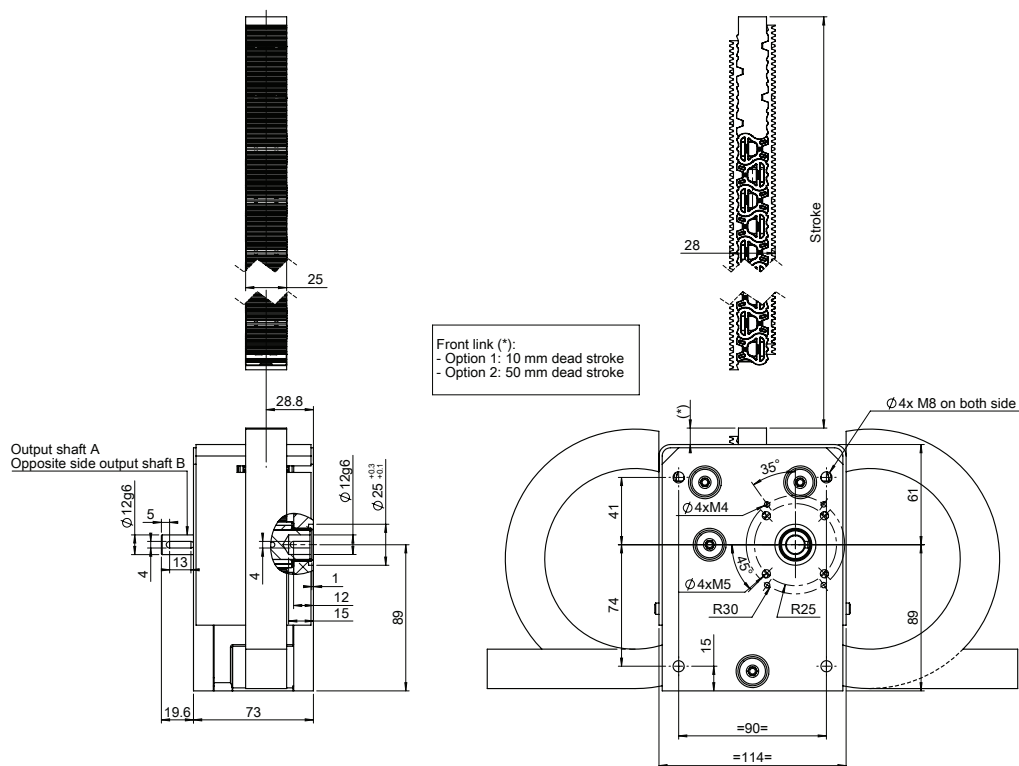
Depending on requirements, AC or DC motors are used.

Magazine

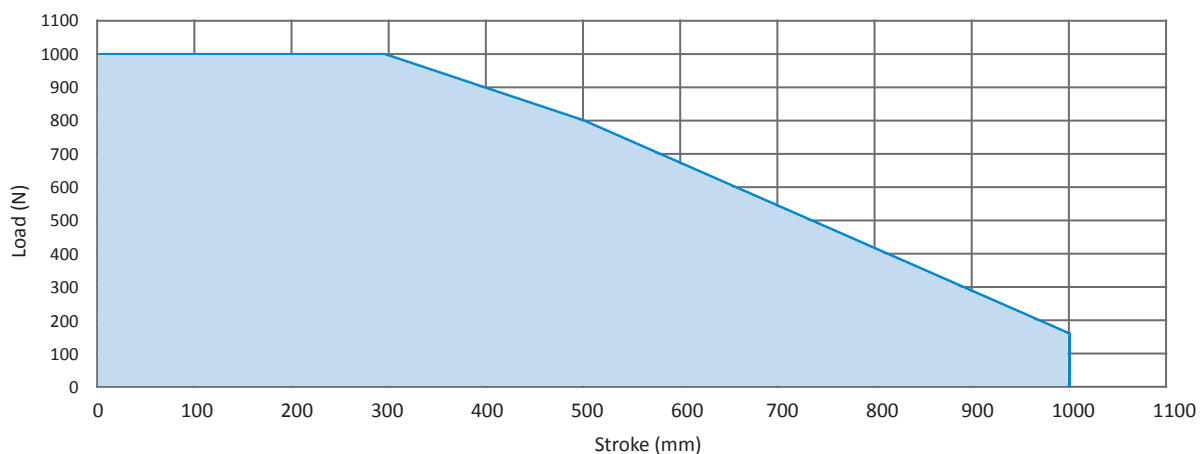
The belts can be coiled on either side of the housing or exit in a straight line, depending on your project needs. As with all RigiBelt materials, the magazine also is completely non-magnetic.

Technical characteristics of the drive

capacity	up to 1 000 N (see graph below)
speed	20 to 300 mm/s
push/pull system	
no maintenance	



Lifting loads (unguided)



SERAPID France - Head Office

ZI Louis Delaporte, Zone Bleue, Voie F
F-76370 Rouxmesnil-Bouteilles | France
+33 (0)2 32 06 35 60
info-fr@serapid.com

SERAPID Ltd

Elm Farm Park, Great Green, Thurston,
Bury St Edmunds | IP31 3SH England
+44 (0)1359 233335
info-uk@serapid.com

SERAPID Deutschland GmbH

Wilhelm-Frank-Straße 30
D-97980 Bad Mergentheim | Germany
+49 (0)7931 9647-0
info-de@serapid.com

SERAPID
RIGID CHAIN TECHNOLOGY
www.serapid.com

SERAPID USA INC.

34100 Mound Road
Sterling Heights MI 48310 | USA
+1 586 274 0774
info-us@serapid.com

SERAPID Singapore Pte Ltd

1 George Street #10-01
Singapore 049145 | Singapore
+65 9119 5890
info-sg@serapid.com

SERAPID Italy Office | +39 01 18 00 35 44 | info-it@serapid.com
SERAPID Mexico Office / LATAM | +52 1 442 4 900 701 | info-mx@serapid.com

SERAPID China Office | +86 185 1215 0303 | info-cn@serapid.com
SERAPID Brazil Office | +55 11 9 73 85 78 37 | info-br@serapid.com