

Cost-effective retraction system with deflection for small robots - triflex® RSE

Specially developed for robots with small to medium cable and hose packages, the igus® triflex® RSE retraction system offers a way to prevent loop formation in the workspace of the robot, even in highly dynamic applications.

- For series TRC·TRE with a ø-index of 40 mm
- Extremely fast response, even in highly dynamic robot programs
- Low weight on the robot, very little reduction in robot handling capacity
- Universal adjustable installation brackets
- Maintenance and lubrication-free igus® drylin® W linear unit
- For maximum degrees of freedom
- More tolerance for the robot's programmer
- For cable diameters up to 11 mm

Optional accessories | RS modular retraction system



Cover - for additional mounting space and extreme movements



Adapter consoles - for custom mounting options



Axis 6 clamp - for triflex® R mounting bracket

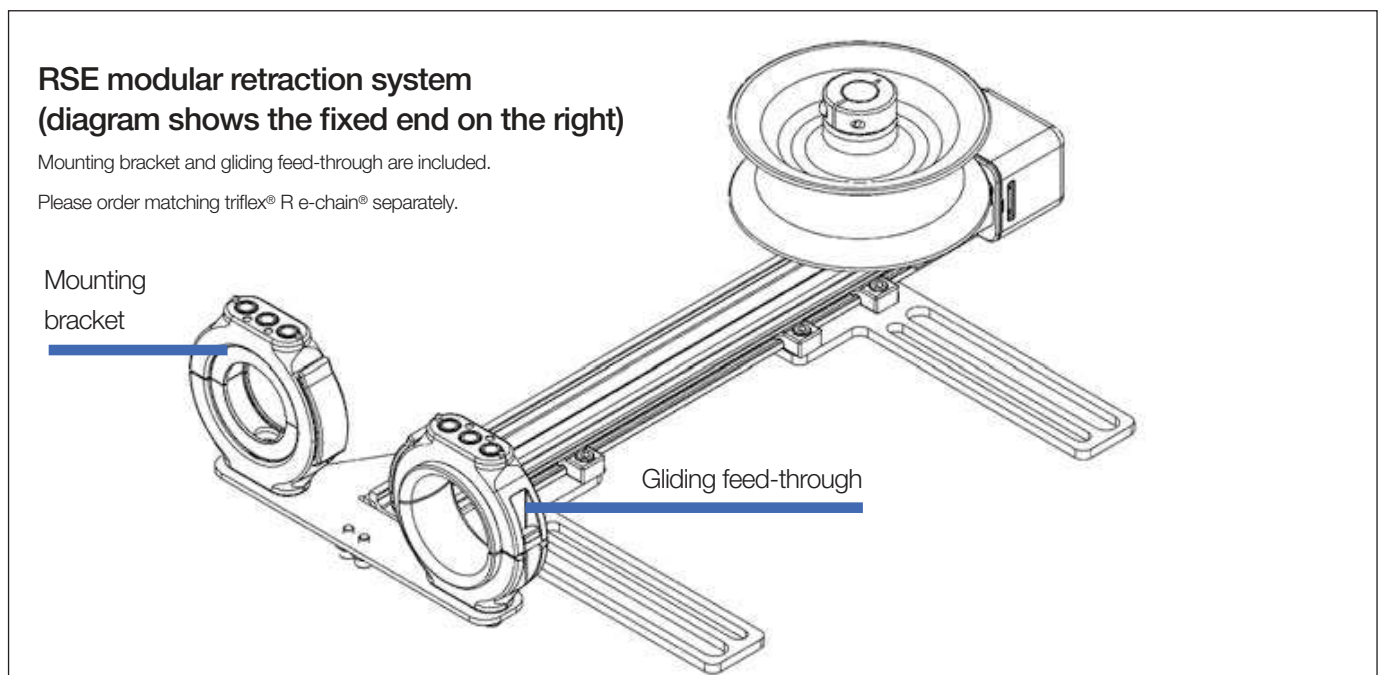
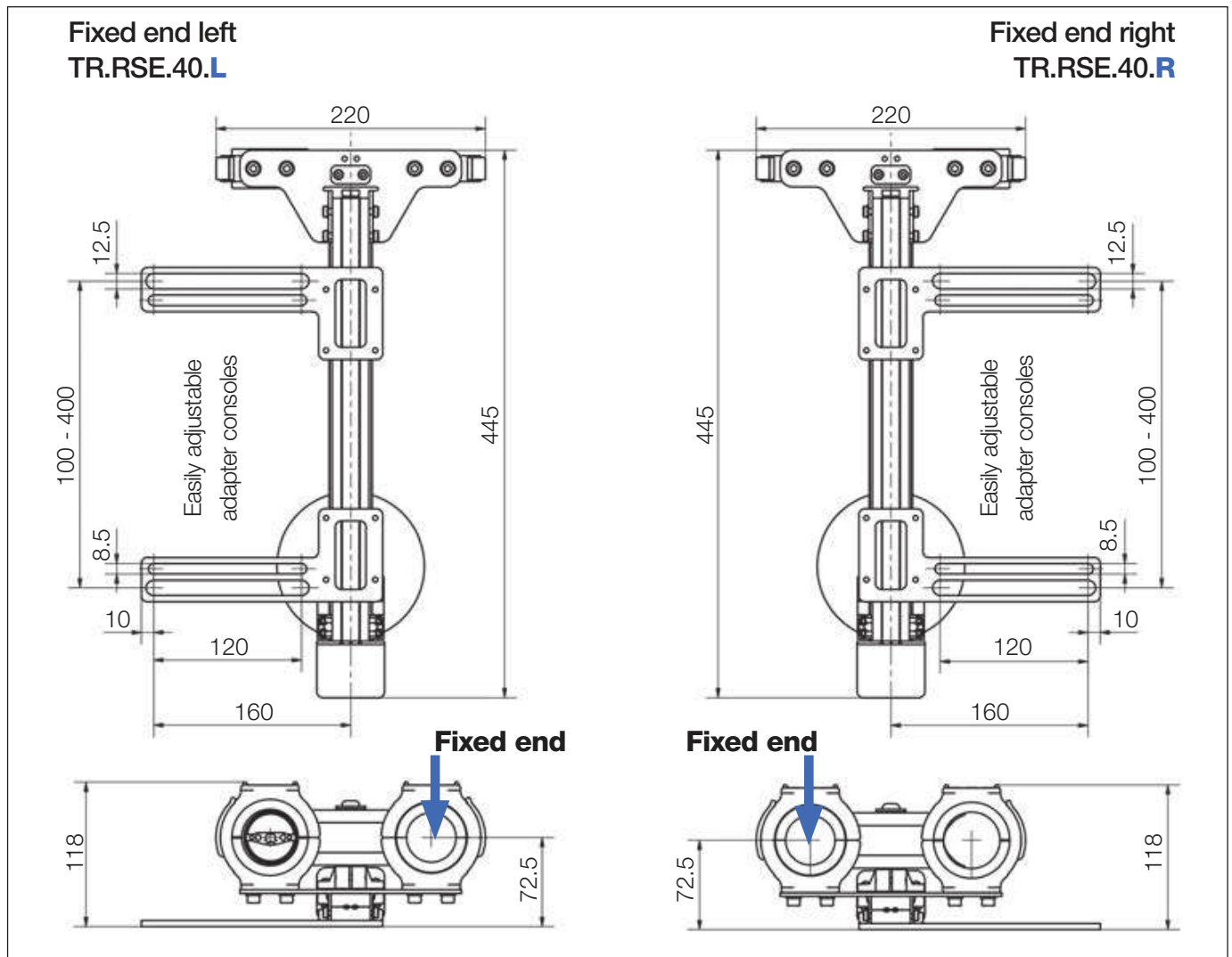


Reliable and controlled energy supply, even in confined space



e-chain® is guided closely to the arm with a low profile

Dimensions | RSE cost-effective retraction system



Product range

Product range | RSE cost-effective retraction system with deflection

Ø Index	Part No. fixed end left	Part No. fixed end right	Retraction length ¹⁾ ≤ [mm]	Weight* [kg]
40.	▶ TR.RSE.40.L	TR.RSE.40.R	500	1.6

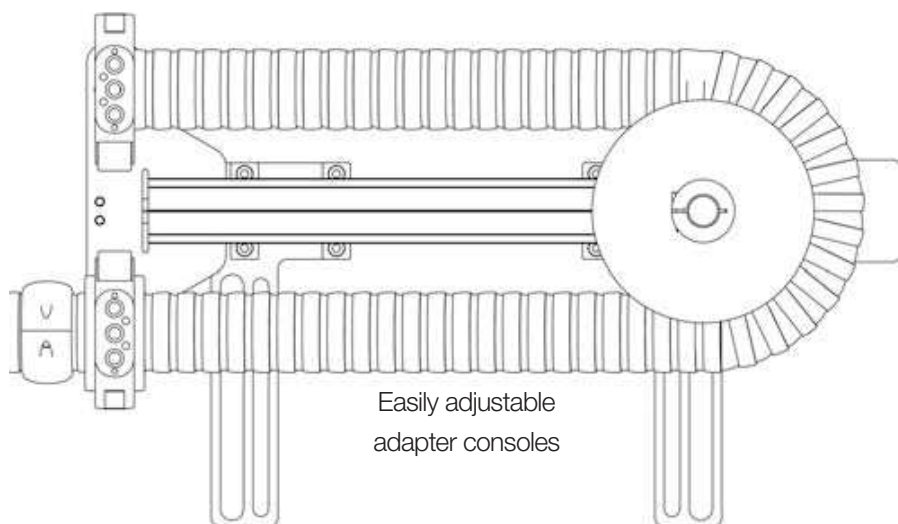
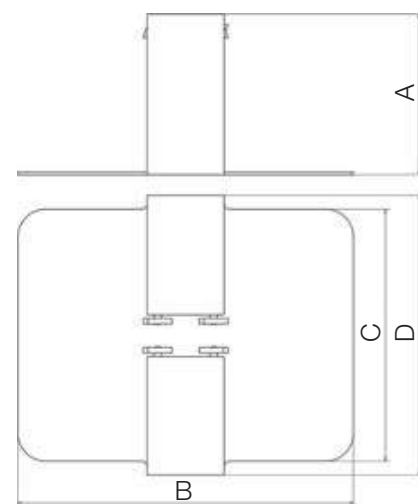
1) These are the maximum values. In normal operation a filling of no more than 70% is advised.


Please order matching triflex® R e-chain® separately.






Product range | Cover, optional

Ø Index	Optional cover retrofit kit	A [mm]	B [mm]	C [mm]	D [mm]	Load* ≤ [kg]	Weight [kg]
40.	▶ TR.RSE.40.COVER	115	240	180	200	1.5	1.1

*Maximum fill weight to be used with the cover



 **Order key**
TR.RSE.40.L / R

-  R = Fixed end right
-  L = Fixed end left
-  Ø Index
-  System
-  e-chains® series

System design | RSE and matching e-chains®

Cover for additional installation space
on the robot, optional: TR.RSE.40.**COVER**

Matching triflex® R e-chains® for RSE

TRC.RSE.40.058.LLLL.0

TRE.RSE.40.058.LLLL.0.B



Overall length =

additional length from the gliding feed-through
LLLL + the chain length within the system

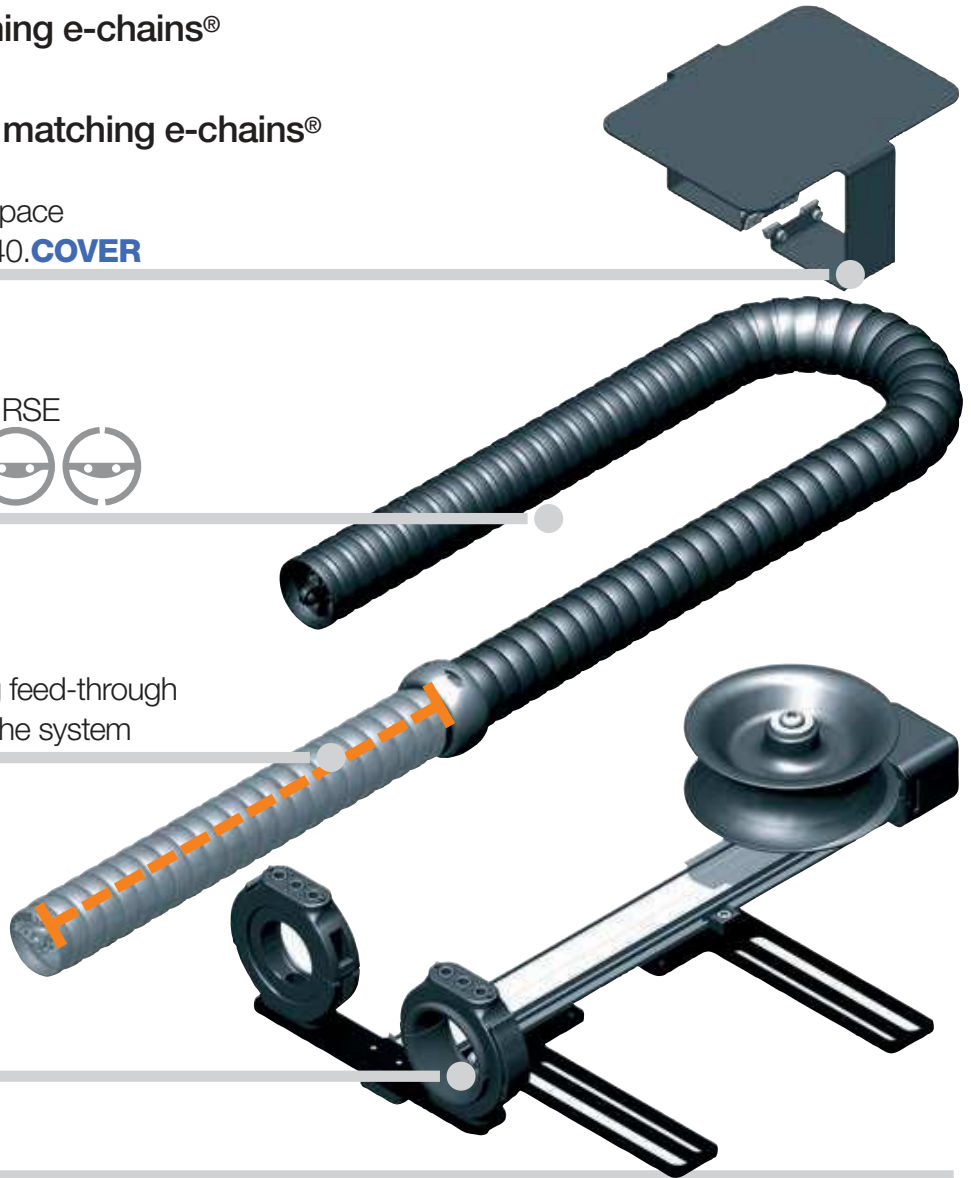
RSE system

(e-chain® not included) +

Mounting bracket +

Gliding feed-through =

TR.RSE.40.**L** or TR.RSE.40.**R**



Sample order of a complete TR.RSE system, Ø Index 40, fixed end on the left,
including cover and e-chain® (standard length: 500 mm)

System	Insert Ø index XX / select fixed end .L / .R	TR.RS.40. L
+ Cover	Insert Ø index XX / Insert Ø index XX (cover optional)	TR.RSE.40. COVER
+ e-chain®	Insert ø-index XX / Insert bend radius R / Insert standard length LLLL	TRC.RSE.40.058. 500.0
Order text:	TR.RSE.40. L + TR.RS.40. COVER + TRC.RSE.40.058. 500.0	



TRC.RSE.40.058.LLLL.0

TRE.RSE.40.058.LLLL.0.B



RSE e-chains® and cable length calculation

Product range | Matching e-chains® for RSE

Ø Index	Part No. TRC enclosed	Part No. TRE "easy" design
40. ▶	TRC.RSE.40.058. LLLL.0	TRE.RSE.40.058. LLLL.0.B

*Standard lengths from the gliding feed-through outside the system - special lengths upon request.

e-chains® standard lengths*

LLLL [mm] | **500** | **750** | **1000** | **1250** |

Part No. with desired value for the standard length **LLLL** (measured from the gliding feed-through) corresponds to the robot arm length from axis 3. Supplement to **TRC.RS.60.087.500.0**, for example

Calculating the overall chain length | RSE e-chains®

Ø Index	Bend radius <i>R</i> [mm]	Chain length* [mm]	Number of e-chain® links	Total e-chain® length [mm]
40. ▶	058	904	65	LLLL + 904

*Values are related to the chain length within the system

Please add the chain length within the system to the standard length **LLLL** (measured from the gliding feed-through) to get the **overall chain length**