Linear actuators

RUNNER RU20 / RU21 / RU22

Features
- Very compact design
- High push and pull force
- Quiet, low vibration
- Safety factor 4 up to 300 mm stroke (at 10 kN load)
- Long service life

Description
The Runner is a very compact and strong high performance actuator, able to lift loads up to 12 kN. The actuator runs very quietly and with low vibration. Based on the robust design, the Runner has a long service life. The standard version includes a safety nut and limit switches as well as a Jack or DIN plug. With a safety factor of 4 for stroke lengths of up to 300 mm, the Runner is ideally suited for medical applications. The Runner system is also compatible with the SKF DC Telemag pillars.

Installation
The actuator is secured to the fork heads by means of bolts. It is important here to ensure that the load which is to be moved acts centrally onto the push tube. No lateral forces may act on the push tube whatever the orientation, and the actuator must not be installed off-centre. The operating manual must be observed for installation and putting into service. Any applications which do not comply with the operating manual must be discussed first with the manufacturer. Applications which involve a risk of personal injury must be made safe by the user.

Electrical connection
The Runner system comes with a first failure safe control unit (BCU, VCU, or SCU) for the operation of up to 3 actuators. The control unit can be operated stand-alone or be mounted with an adaptor plate on the actuator.

Maintenance
The Runner requires no maintenance during its service life. The expected service life depends on the particular model and the application. The user must conduct his own tests in this regard. Faulty actuators may only be opened and repaired at our factory.

Options
- Emergency lowering
- Electrical anti-pinching protection
- Encoder

Control
- Control unit
- Operating elements

Reference standards
- EN 60601-1
- UL 60601-1

Technical data:	Unit	RU20	RU21	RU22
Push or pull force*	N	8 000/8 000	10 000/8 000	12 000**/8 000
Speed (at full load)	mm/s	6,5–10	5–8	4–6,5
Stroke	mm	100–700	100–700	100–700
Voltage	V	24	24	24
Current consumption	A	7	7	7
Duty cycle on/off	Int.	1 min./9 min.	1 min./9 min.	1 min./9 min.
Ambient temperature	℃	+10 to +40	+10 to +40	+10 to +40
Protection class	IP	X4/X6	X4/X6	X4/X6
Weight	kg	4,7	4,7	4,7
Colour	-	grey	grey	grey

All data at room temperature
* See load diagrams on page 2
** Safety working load for medical applications 10 000 N (EN 60601)

magnetic

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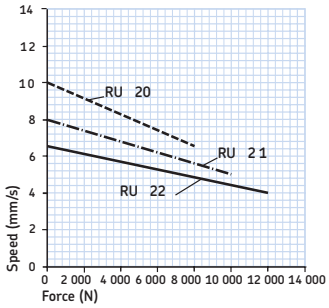
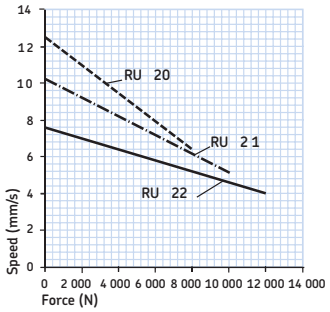
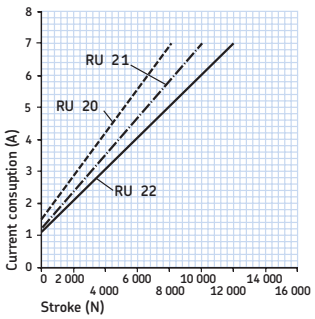


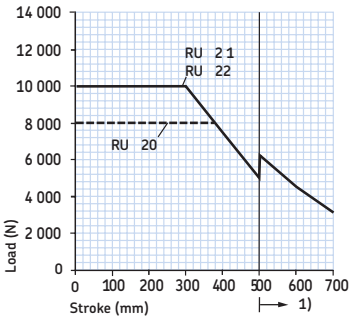
Speed-force diagram 24 V stable



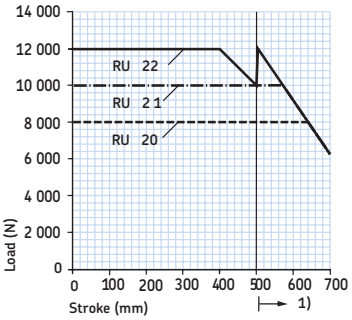
Speed-force diagram with BCU, VCU, or SCU



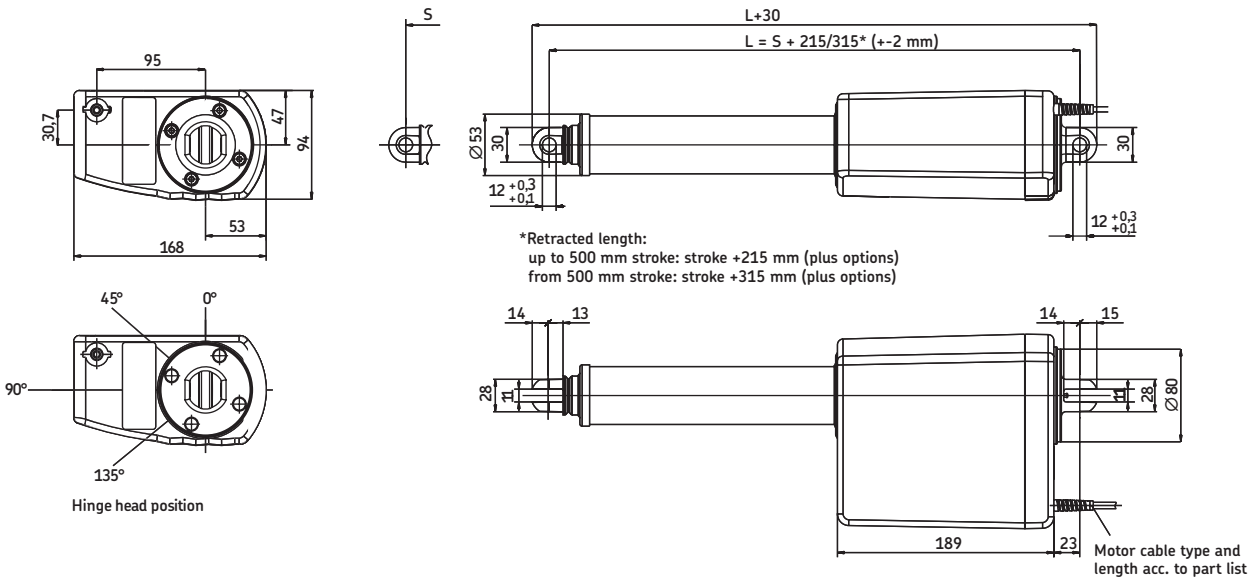
Current-force diagram 24 V



Push force limit, safety factor S=4 (EN 60601) 1) retracted length extension at stroke >500 mm



Push force limit, safety factor S=2
1) retracted length extension at stroke >500 mm



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SKF

Linear actuators

RUNNER RU23 / RU24 / RU25

Features
- Very compact design
- High push and pull force
- Quiet, low vibration
- Safety factor 4 up to 300 mm stroke (at 10 kN load)
- Long lifetime

Description
The Runner is a very compact and strong high performance actuator, able to lift loads up to 12 kN. The actuator runs very quietly and with low vibration. Based on the robust design, the Runner has a longservice life. The standard version includes a safety nut and limit switches as well as a Jack or DIN plug. With a safety factor of 4 for stroke length of up to 300 mm the Runner is ideally suited for medical applications. The Runner system is also compatible with the SKF DC Telemag pillars.

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Options
- Emergency lowering
- Electrical anti-pinching protection
- Encoder

Control
- Control unit
- Operating elements

Reference standards
- EN 60601-1
- UL 60601-1

Technical data:	Unit	RU23	RU24	RU25
Push or pull force*	N	8 000/8 000	10 000/8 000	12 000**/8 000
Speed (at full load)	mm/s	8 to 14,5	6 to 12	4,7 to 9
Stroke	mm	100 to 700	100 to 700	100 to 700
Voltage	V	24	24	24
Current consumption	A	10	10	10
Duty cycle on/off	Int.	1 min./9 min.	1 min./9 min.	1 min./9 min.
Ambient temperature	°C	+10 to +40	+10 to +40	+10 to +40
Protection class	IP	X4/X6	X4/X6	X4/X6
Weight	kg	4,7	4,7	4,7
Colour	-	grey	grey	grey

All data at room temperature
* See load diagrams on page 2
** Safety working load for medical applications 10 000 N (EN 60601)

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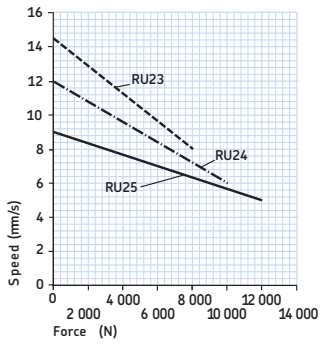
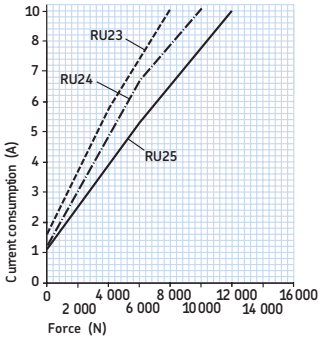
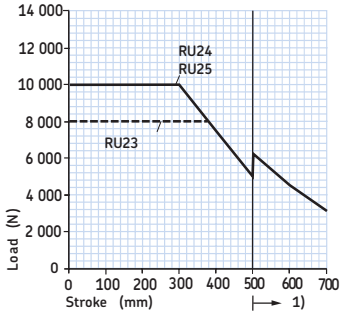
Linear actuators RUNNER RU23 / RU24 / RU25



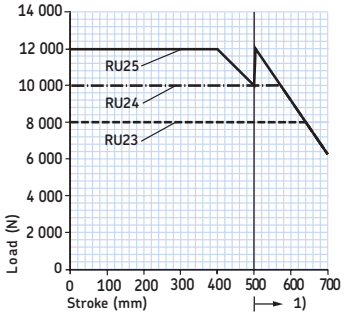
Speed-force diagram 24 V stable



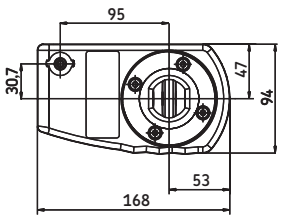
Current-force diagram 24 V

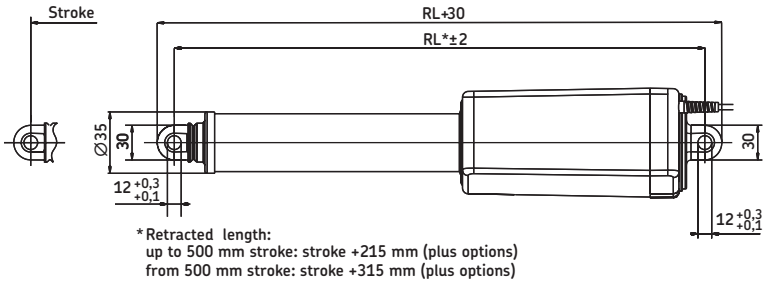


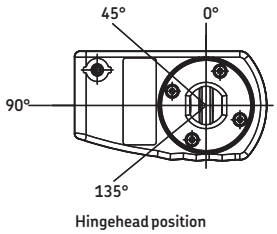
Push force limit, safety factor S=4 (EN 60601) 1) retracted length extension at stroke >500 mm



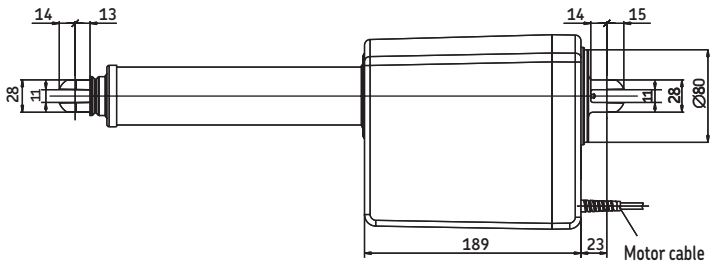
Push force limit, safety factor S=2 1) retracted length extension at stroke >500 mm







Hingehead position



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