

Linear actuator Runner



High push/pull load



Compactness



High safety factor



Silent operation



Runner

Linear actuator



Benefits

- High push/pull load
- Compact
- Back-up nut as standard
- High safety factor
- Silent operation

Technical data

	Unit	RU20	RU21	RU22	RU23	RU24	RU25
Rated push load	N	8 000	10 000	12 000 ¹⁾	8 000	10 000	12 000 ¹⁾
Rated pull load	N	8 000	8 000	8 000	8 000	8 000	8 000
Speed (full load to no load)	mm/s	7 to 10	5 to 8	4 to 7	8 to 15	6 to 12	5 to 9
Stroke	mm	100 to 700	100 to 700	100 to 700	100 to 700	100 to 700	100 to 700
Retracted length	mm	S+215/315 ²⁾	S+215/315 ²⁾	S+215/315 ²⁾	S+215/315 ²⁾	S+215/315 ²⁾	S+215/315 ²⁾
Voltage	V DC	24	24	24	24	24	24
Power consumption	W	N/A	N/A	N/A	N/A	N/A	N/A
Current consumption	A	7	7	7	10	10	10
Duty cycle	%	10 (1/9)	10 (1/9)	10 (1/9)	10 (1/9)	10 (1/9)	10 (1/9)
Ambient temperature	°C	+10 to +40	+10 to +40	+10 to +40	+10 to +40	+10 to +40	+10 to +40
Type of protection	IP	x4/x6S	x4/x6S	x4/x6S	x4/x6S	x4/x6S	x4/x6S
Weight	kg	4,7	4,7	4,7	4,7	4,7	4,7
Color	–	Grey	Grey	Grey	Grey	Grey	Grey

	Unit	RU33 ³⁾	RU34	RU35 ³⁾
Rated push load	N	8 000	10 000	12 000 ¹⁾
Rated pull load	N	8 000	8 000	8 000
Speed (full load to no load)	mm/s	17 to 24	14 to 20	11 to 15
Stroke	mm	100 to 700	100 to 700	100 to 700
Retracted length	mm	S+215/315 ²⁾	S+215/315 ²⁾	S+215/315 ²⁾
Voltage	V DC	36	36	36
Power consumption	W	N/A	N/A	N/A
Current consumption	A	10	10	10
Duty cycle	%	10 (1/9)	10 (1/9)	10 (1/9)
Ambient temperature	°C	+10 to +40	+10 to +40	+10 to +40
Type of protection	IP	x4/x6S	x4/x6S	x4/x6S
Weight	kg	4,7	4,7	4,7
Color	–	Grey	Grey	Grey

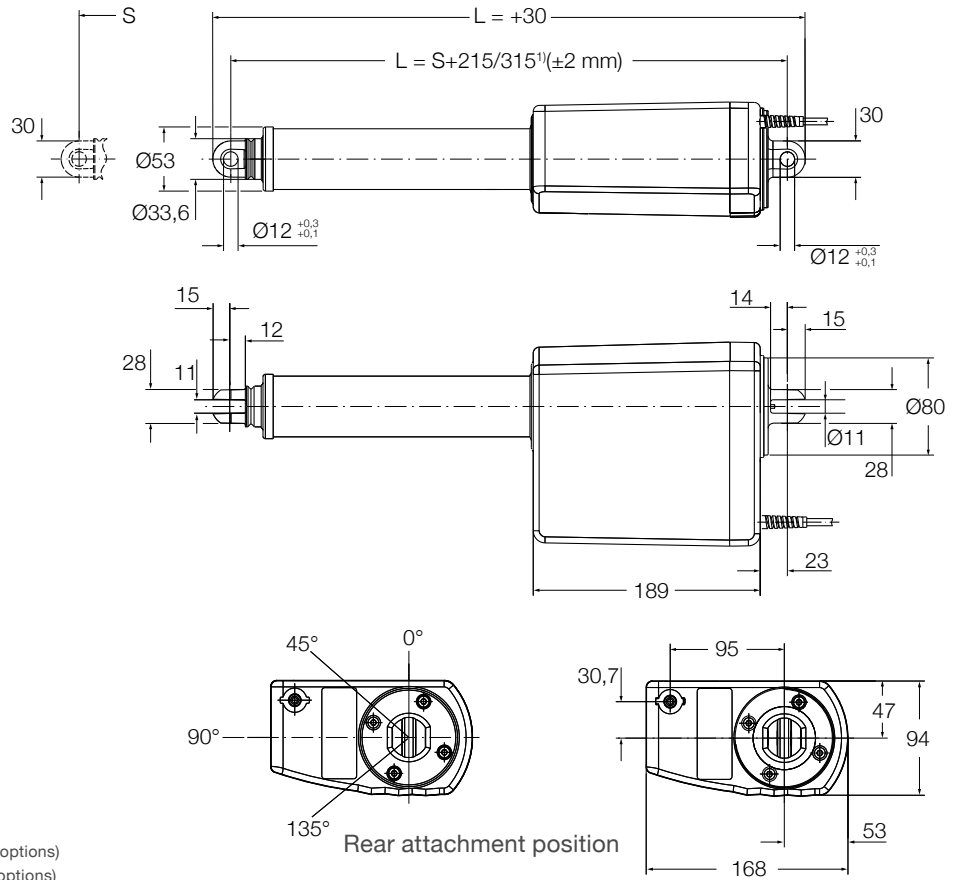
¹⁾ Safety working load for medical application is 10 000 N (EN 60601)

²⁾ S ≤ 500 mm; L = S + 215

S > 500 mm; L = S + 315

³⁾ Actuators fulfill UL requirements, Certifications open

Dimensional drawing

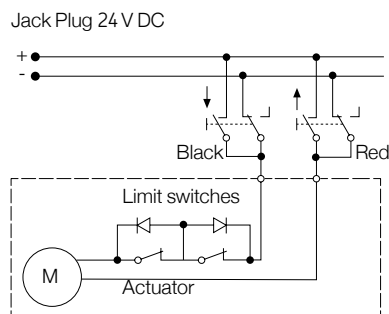
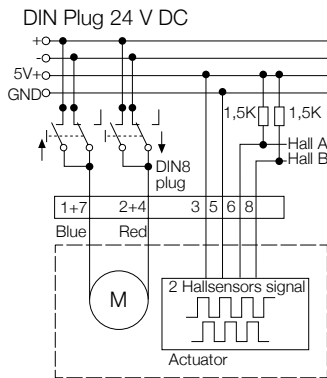


Legend:

S = stroke
L = retracted length

¹⁾ Retracted length:
up to 500 mm stroke: stroke +215 mm (plus options)
from 500 mm stroke: stroke +315 mm (plus options)

Connecting diagrams



Suitable control units and accessories

	Control units			
	SCU	VCU	BCU	MCU
RU20, RU21, RU22	•	•	•	•
RU23, RU24, RU25	•	•	•	•
Operating switches				
EHA 1				•
EHA 3	•	•	•	
STJ	•	•	•	
STF				•
STE	•	•	•	
STA				•

Hand switch

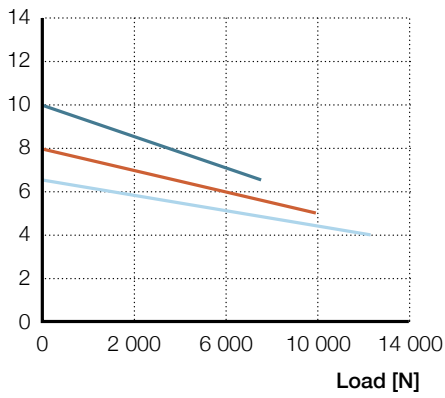
Foot switch

Desk switch

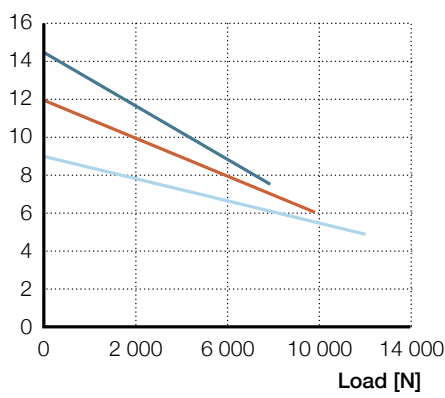
Performance diagrams

Speed-load diagram

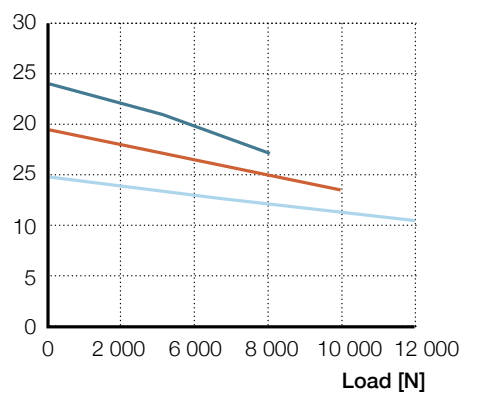
Speed [mm/s]



Speed [mm/s]

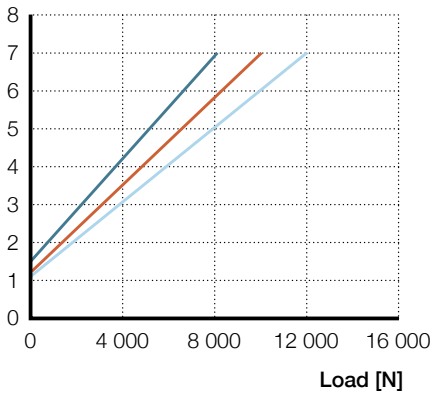


Speed [mm/s]

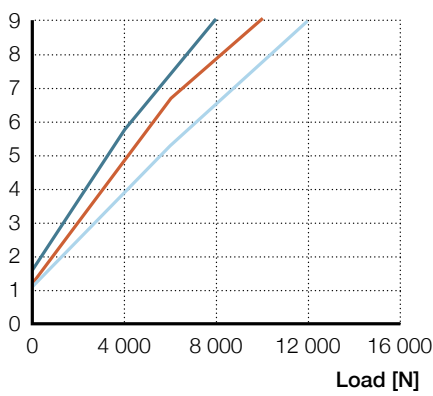


Current-load diagram

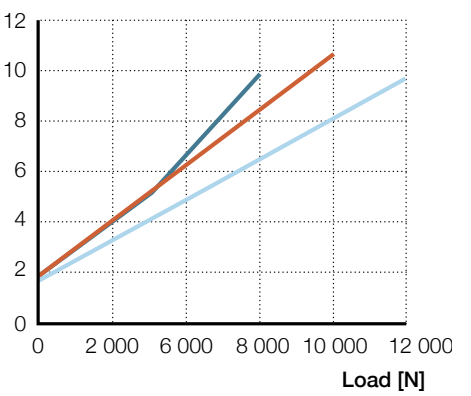
Current consumption [A]



Current consumption [A]



Current consumption [A]

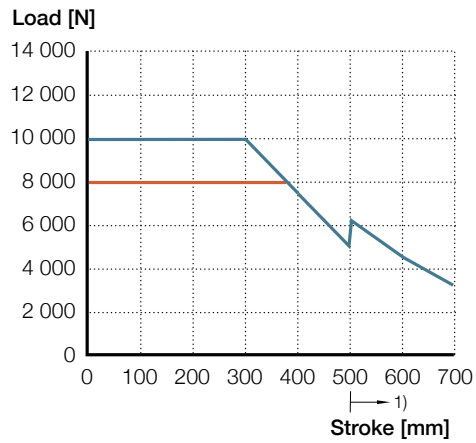


- Rated push load 8 000 RU20
- Rated push load 10 000 RU21
- Rated push load 12 000 RU22

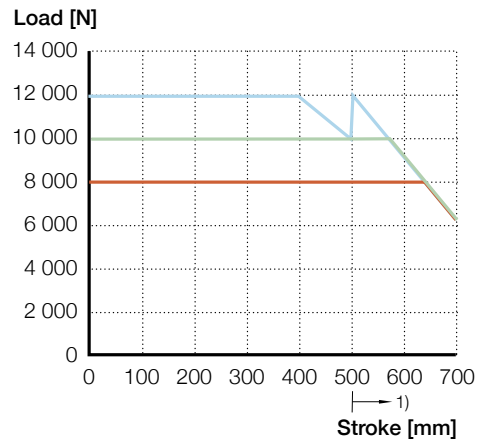
- Rated push load 8 000 RU23
- Rated push load 10 000 RU24
- Rated push load 12 000 RU25

- Rated push load 8 000 RU33
- Rated push load 10 000 RU34
- Rated push load 12 000 RU35

Safety factor load conditions



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



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

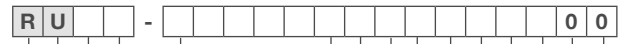
— RU21 RU22 RU24 RU25
 RU34 RU35

— RU20 RU23
 RU33

— RU22 RU25
 RU35

— RU21 RU24
 RU34

Ordering key



Type

Voltage

- 2 24 V DC
- 3 36 V DC

Load / Speed

	24 V DC	36 V DC
0	8 000 N / 7-10 mm/s	-
3	8 000 N / 8-15 mm/s	17 to 24 mm/s
1	10 000 N / 5-8 mm/s	-
4	10 000 N / 6-12 mm/s	14 to 20 mm/s
2	12 000 N / 4-7 mm/s	-
5	12 000 N / 5-9 mm/s	11 to 15 mm/s

Stroke (S) / Retracted length (L)

- 050 315 50 mm / 315 mm
- 100 315 100 mm / 315 mm
- 150 365 150 mm / 365 mm
- 200 415 200 mm / 415 mm
- 250 465 250 mm / 465 mm
- 300 515 300 mm / 515 mm
- 350 565 350 mm / 565 mm
- 400 615 400 mm / 615 mm
- 450 665 450 mm / 665 mm
- 500 715 500 mm / 715 mm
- 550 865 550 mm / 865 mm
- 600 915 600 mm / 915 mm
- 650 965 650 mm / 965 mm
- 700 XXX 700 mm / 1 015 mm
- SSS LLL 50 < S ≤ 500 mm / S+215
- SSS LLL 500 < S < 700 mm / S+315
- XXX XXX S > 700 mm (customized)

Type of protection / Color

- A IP×4S, grey
- B IP×6S, grey

Cable

- 15 Straight cable, 1,5 m, DIN8 plug
- 0D Straight cable, 1,5 m, Jack plug 180°

Rear attachment orientation / Hole diameter

- 0 0° / Ø12,0 mm
- 2 45° / Ø12,0 mm
- 4 90° / Ø12,0 mm
- 6 135° / Ø12,0 mm

Option 1

- 0 No option
- K Electrical anti-pinching (safety switch), pull load, L+20 mm
- L Electrical anti-pinching (safety switch), push load, L+20 mm
- M Mechanical end stop, L+25 mm
- N Electrical anti-pinching, pull load, with mechanical end stop, L+45 mm
- P Electrical anti-pinching, push load, with mechanical end stop, L+45 mm

Option 2

- 0 No option
- A 2-Hall encoder, 14 pulses, DIN8 plug

Option 3

- No option
- V Emergency lowering, L+53 mm (for push load only)

Customized

Options shown in red are only available on request. Contact Ewellix for more information on minimum quantities and additional costs.



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