

SRSA-U-75xx

Linear unit



Technical data

Designation	Symbol	Unit	SRSA-U-7510	SRSA-U-7515	SRSA-U-7520
Performance Data					
Max. dynamic axial force	F_{max}	kN	500	500	500
Max. static axial force	F_{max0}	kN	500	500	500
Dynamic load capacity	C	kN	505	561	572
Maximum torque to reach Fmax	M_{max}	Nm	1 050	1 521	2 004
Max. linear speed	v_{max}	mm/s	356	533	711
Max. rotational speed	n_{max}	1/min	2 133	2 133	2 133
Max. acceleration	a_{max}	m/s ²	19,1	28,6	38,2
Duty cycle	D_{unit}	%	100%	100%	100%
Mechanical Data					
Screw type	—	—	Roller screw	Roller screw	Roller screw
Screw diameter	d_{screw}	mm	75	75	75
Screw lead	p_{screw}	mm	10	15	20
Lead accuracy	—	—	G5	G5	G5
Stroke ¹⁾	s	mm	100...1 500	100...1 500	100...1 500
Internal overstroke each side	s_0	mm	10	10	10
Backlash ²⁾	$s_{backlash}$	mm	0	0	0
Efficiency	η_{lu}	%	76%	79%	79%
Inertia @ 0 mm stroke	J_{lu}	10 ⁻⁴ kgm ²	625	625	625
Δ Inertia per 100 mm stroke	ΔJ	10 ⁻⁴ kgm ²	24,6	24,6	24,6
Weight @ 0 mm stroke	m_{lu}	kg	156,5	156,5	156,5
Δ weight per 100 mm stroke	Δm	kg	11,3	11,3	11,3
Weight of anti-rotation @ 0 mm stroke	m_{arot0}	kg	7,5	7,5	7,5
Δ Weight of anti-rot. per 100 mm stroke	Δm_{arot}	kg	2,7	2,7	2,7
Environment					
Ambient temperature	$T_{ambient}$	°C	0...+40	0...+40	0...+40
Degree of protection ³⁾	IP	—	54	54	54

1) By 100 mm steps
 2) Backlash elimination up to stroke 1 000 mm. For longer strokes $s_{backlash} = 0,02$ mm
 3) With anti-rotation option IP44

Performance diagrams

