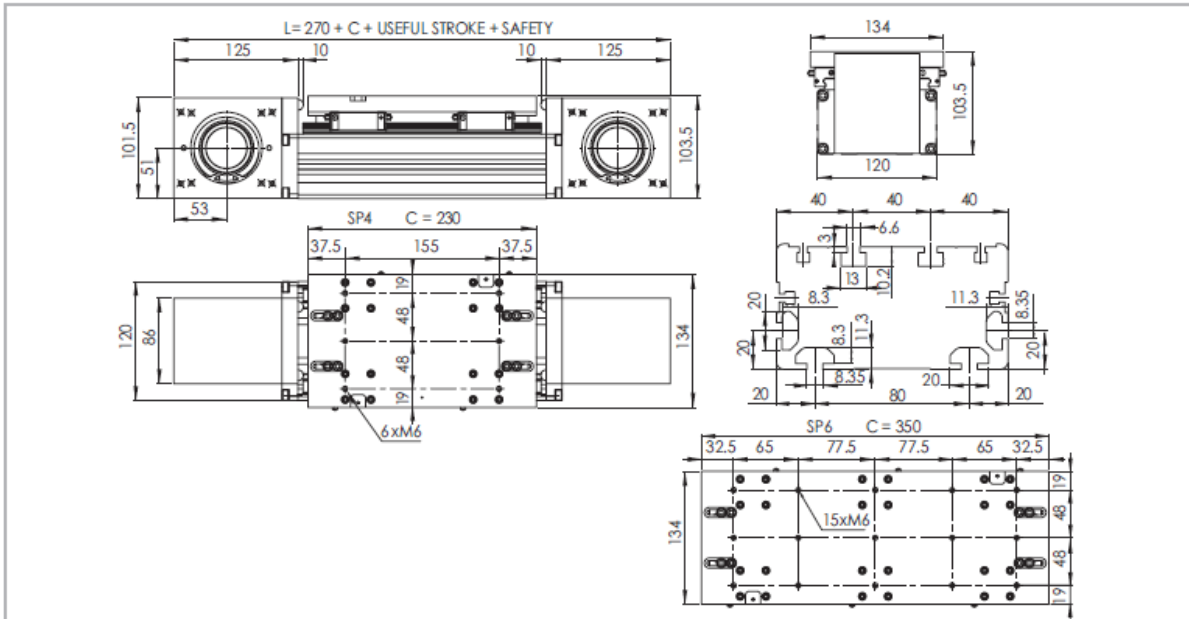


Rollon R-SMART 120

R-SMART 120 Dimensions



The length of the safety stroke is provided on request according to the customer's specific requirements.

Fig. 22

Technical data

	Type	
	R-SMART 120 SP4	R-SMART 120 SP6
Max. useful stroke length [mm]*1	6050	5930
Max. positioning repeatability [mm]*2	± 0.05	± 0.05
Max. speed [m/s]	4.0	4.0
Max. acceleration [m/s ²]	50	50
Type of belt	40 AT 10	40 AT 10
Type of pulley	Z 21	Z 21
Pulley pitch diameter [mm]	66.84	66.84
Carriage displacement per pulley turn [mm]	210	210
Carriage weight [kg]	3	4
Zero travel weight [kg]	12.9	15
Weight for 100 mm useful stroke [kg]	0.9	0.9
Starting torque [Nm]	1.95	2.3
Moment of inertia of pulleys [g · mm ²]	1.054.300	1.054.300
Rail size [mm]	15	15

*1) It is possible to obtain stroke up to 11.200 (SP4), 11.080 (SP6) by means of special Rollon joints.

*2) Positioning repeatability is dependent on the type of transmission used.

Tab. 41

R-SMART 120 - Load capacity

Type	F _x [N]		F _y [N]		F _z [N]	M _x [Nm]	M _y [Nm]	M _z [Nm]
	Stat.	Dyn.	Stat.	Dyn.	Stat.	Stat.	Stat.	Stat.
R-SMART 120 SP4	3154	2090	96800	45082	96800	4453	6244	6244
R-SMART 120 SP6	3154	2090	145200	67623	145200	6679	11906	11906

See verification under static load and lifetime on page SL-2 and SL-3 SS-20

Tab. 44

Moments of inertia of the aluminum body

Type	I _x [10 ⁷ mm ⁴]	I _y [10 ⁷ mm ⁴]	I _p [10 ⁷ mm ⁴]
R-SMART 120 SP	0.108	0.367	0.475

Tab. 42

Driving belt

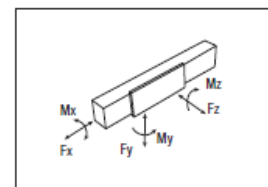
The driving belt is manufactured from a friction resistant polyurethane and with steel cords for high tensile stress resistance.

Type	Type of belt	Belt width [mm]	Weight [kg/m]
R-SMART 120 SP	40 AT 10	40	0.23

Tab. 43

$$\text{Belt length (mm)} = 2 \times L - 115 \text{ (SP4)}$$

$$2 \times L - 235 \text{ (SP6)}$$



Hinweise zur Rollon R-SMART Achse:

Befestigung mit Spannpratzen oder Nutensteinen

Aufgrund des Kugelumlauf-Führungssystems können die Rollon Linear-einheiten der R-SMART Serie in jeder beliebigen Position eingebaut werden, da die Einheit dank dieses Systems Belastungen aus allen Richtungen aufnehmen kann.

Zur Befestigung der Lineareinheiten der R-SMART Serie werden die folgenden Systeme empfohlen:

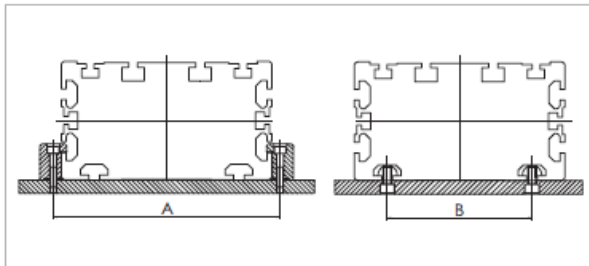


Abb. 28

Einheit (mm)

	A	B
R-SMART 120	132	80
R-SMART 160	180	110
R-SMART 220	240	170

Tab. 56

Spannpratze

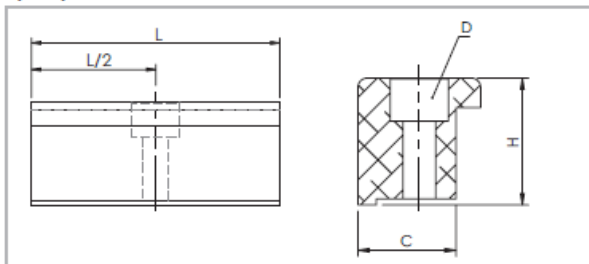


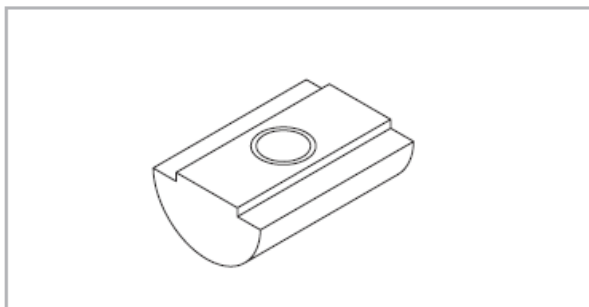
Abb. 29

Abmessungen (mm)

Passend für Typ	C	H	L	D	Bestellcode
R-SMART 120	16	20,7	50	M5	1000111
R-SMART 160	31	28,5	100	M10	1002377
R-SMART 220	31	28,5	100	M10	1002377

Tab. 57

T-Nutenstein



Nutensteine aus Stahl zur Verwendung in den Nuten am Profil Abb. 30

Einheit (mm)

Passend für Typ	Bohrung	Länge	Bestellcode
R-SMART 120	M6	20	6000437
R-SMART 160	M6	20	6000437
R-SMART 160	M8	20	6001544
R-SMART 220	M6	20	6000437
R-SMART 220	M8	20	6001544

Tab. 58

Beachten Sie bei der Montage die nach VDI 2230 (2015-11) vorgeschriebenen Anziehdrehmomente.