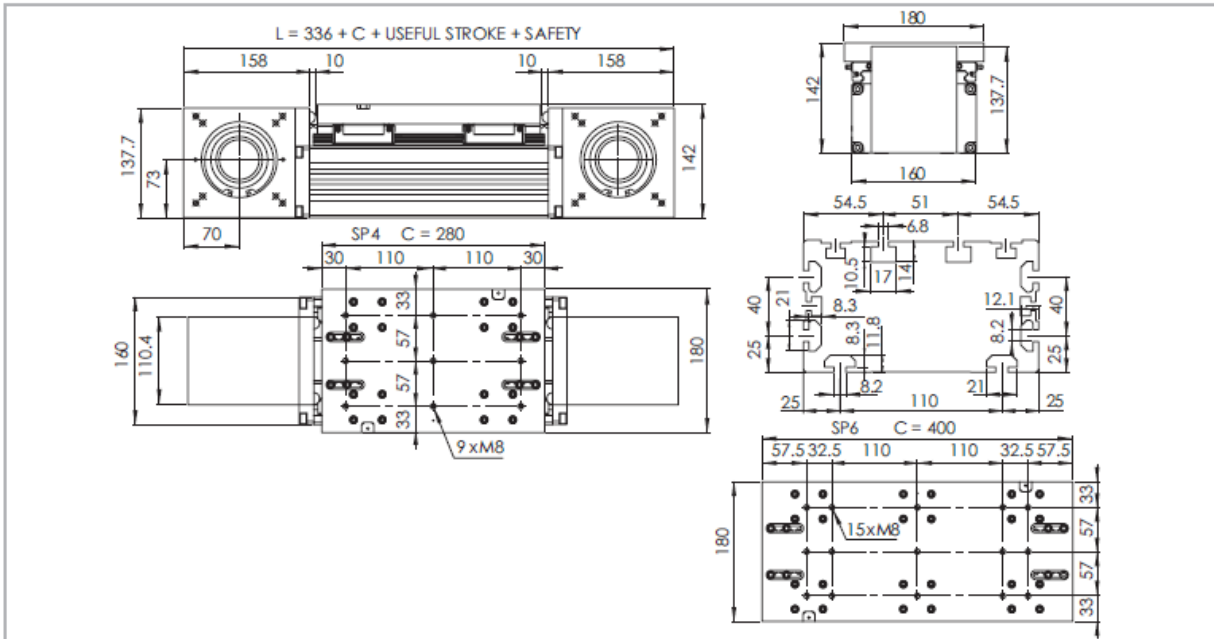


Rollon R-SMART 160

R-SMART 160 Dimensions



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

Fig. 23

Technical data

	Type	
	R-SMART 160 SP4	R-SMART 160 SP6
Max. useful stroke length [mm]*1	6000	5880
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	50 AT 10	50 AT 10
Type of pulley	Z 27	Z 27
Pulley pitch diameter [mm]	85.94	85.94
Carriage displacement per pulley turn [mm]	270	270
Carriage weight [kg]	5.4	7.5
Zero travel weight [kg]	24.4	27.9
Weight for 100 mm useful stroke [kg]	1.75	1.75
Starting torque [Nm]	3.4	3.95
Moment of inertia of pulleys [g · mm ²]	4.035.390	4.035.390
Rail size [mm]	20	20

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

*2) The positioning repeatability depends upon the type of transmission used

Tab. 45

R-SMART 160 SP4 - R-SMART 160 SP6 - 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 160 SP4	4980	3390	153600	70798	153600	8909	12595	12595
R-SMART 160 SP6	4980	3390	230400	106197	230400	13363	21427	21427

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

Tab. 48
SS-21

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 160 SP	0.383	1.313	1.696

Tab. 46

Driving belt

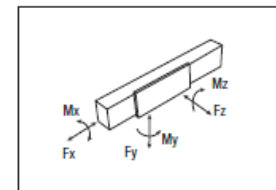
The driving belt is manufactured from a friction resistant polyurethane and with steel cords for high tensile stress resistance.

Type	Type of belt	Belt width [mm]	Weight [kg/m]
R-SMART 160 SP	50 AT 10	50	0.29

Tab. 47

$$\text{Belt length (mm)} = 2 \times L - 150 \text{ (SP4)}$$

$$2 \times L - 270 \text{ (SP6)}$$



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:

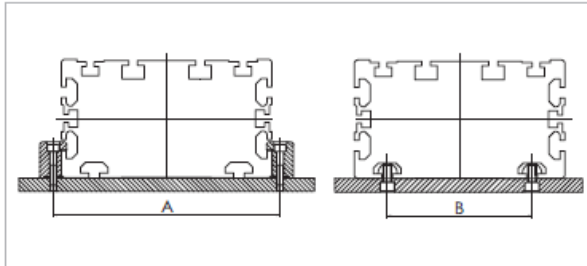


Abb. 28

Einheit (mm)

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

Tab. 56

Spannpratze

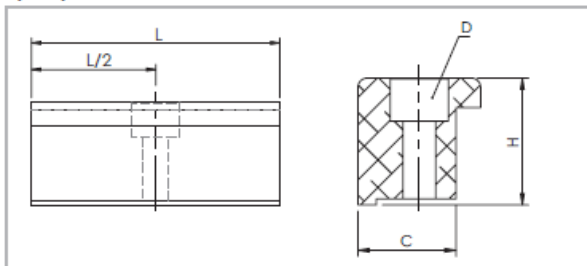


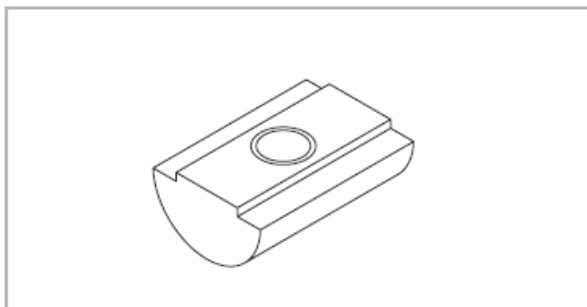
Abb. 29

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.