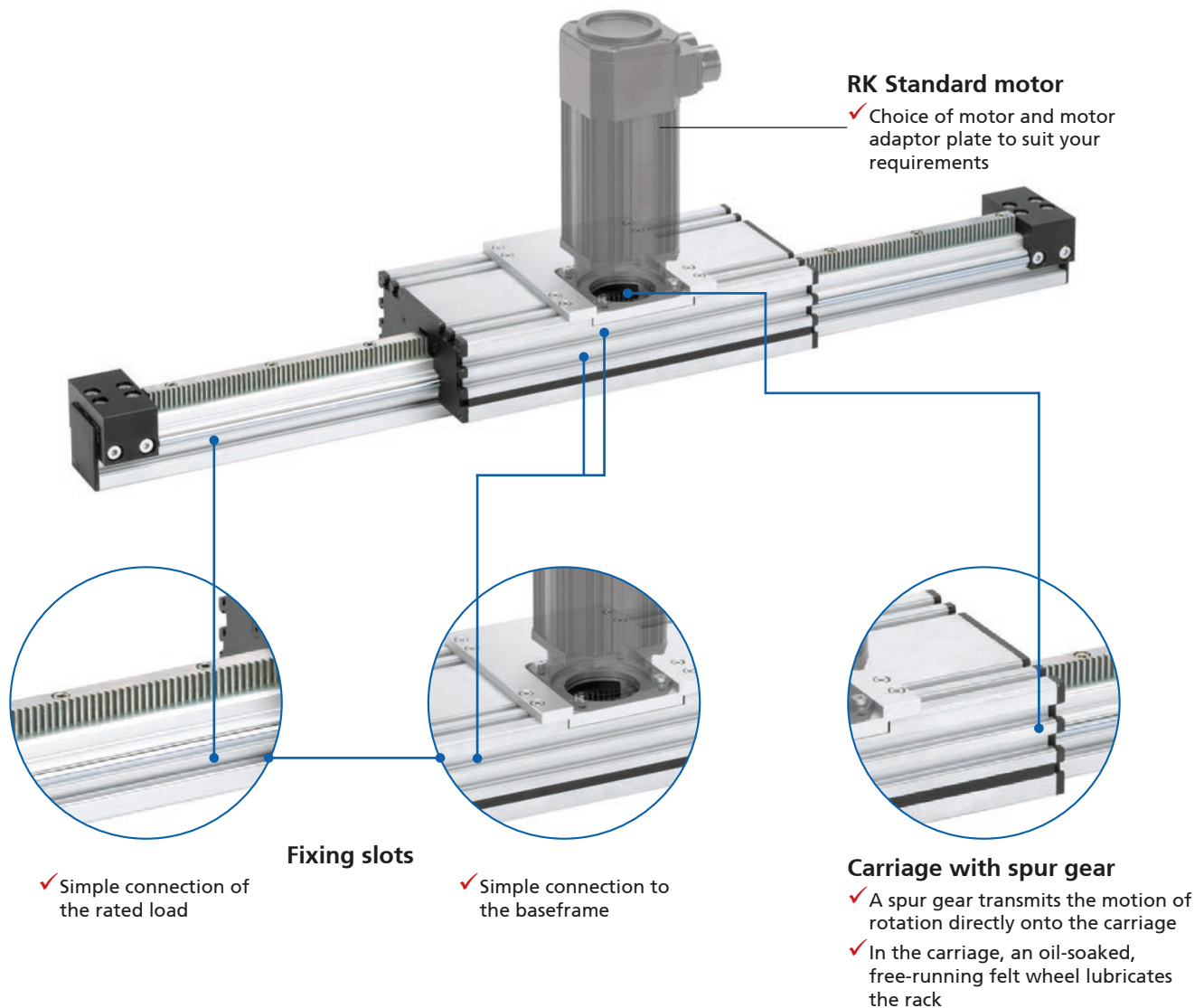


Roller guide actuators – SQ ZST

Rack and pinion with fixed carriage, also for larger travels up to 30 m



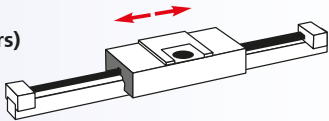
Features:

- Linear power transmission via rack and spur gear
- Designed specially for large strokes of up to 30 m and more
- High positioning accuracy, even with large stroke lengths
- Travel speed up to 5 m/s
- Guide profile made from the BLOCAN® modular profile system
- Rack lubrication via felt wheel
- Suitable for RK standard motors

Options:

- Second non driven carriage
- Longer stroke lengths
- Additional independently driven carriages

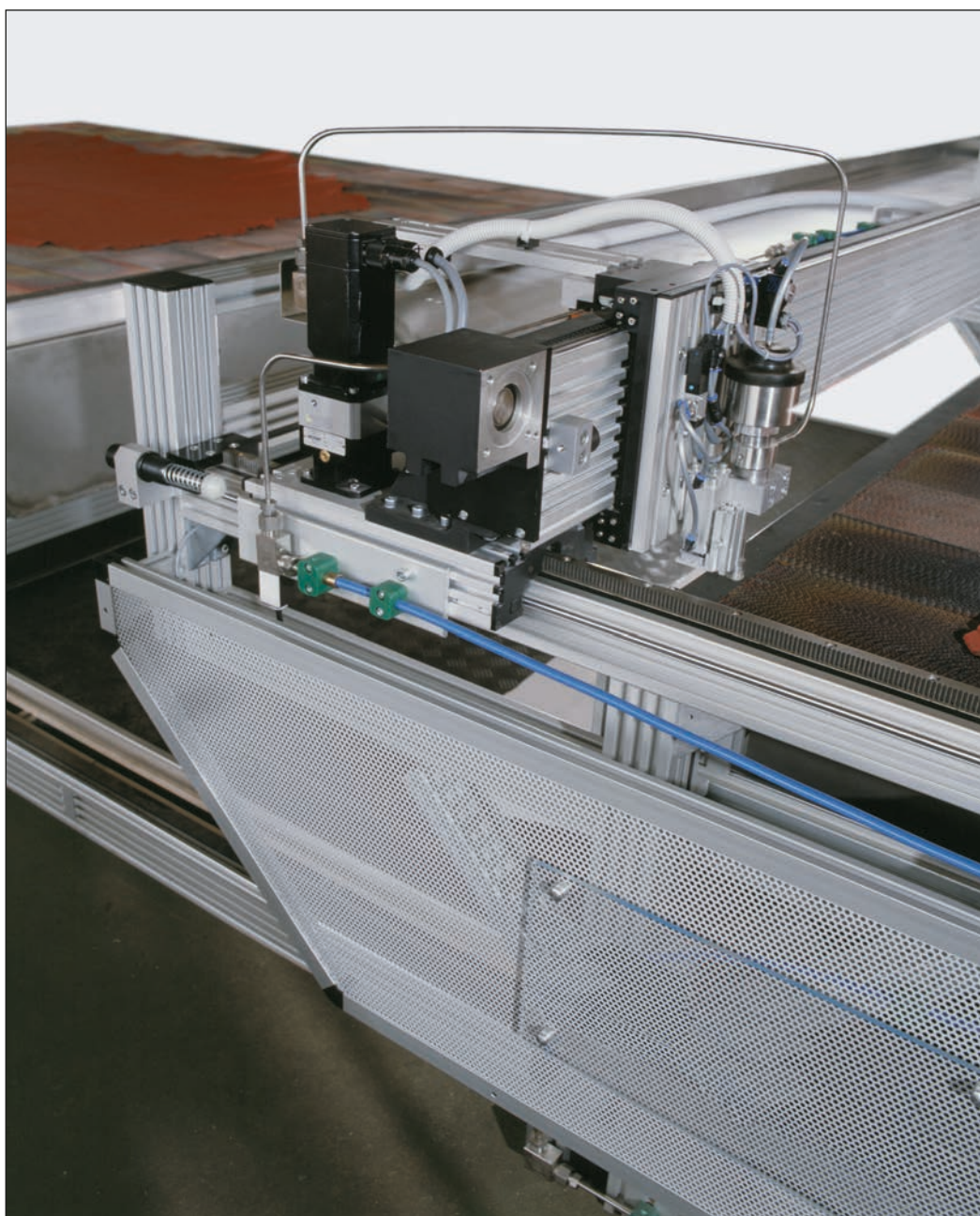
SQ ZST – Table of contents

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SQ ZST – Technical data

General information/operating conditions

Design	Aluminium profile, rack drive, moving profile
Guide	Rollers, external
Installation position	Any position
Repeatability	± 0.05 mm
Pitch accuracy rack	± 0.1 mm/300 mm travel
Max. travel speed	5 m/s
Ambient temperature	0°C to +60°C
Protection class	IP 20



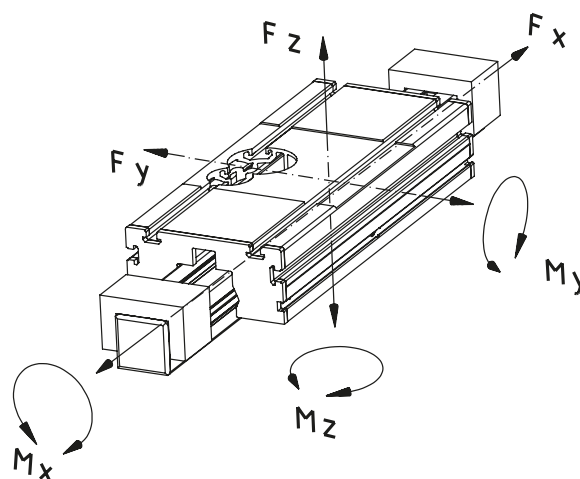
3-axis plotter, X-axis moves via an SQ ZST rack unit

SQ ZST – Technical data

Load data*

F	Force [N]
M	Moment [Nm]
I	Geometric moment of inertia [cm ⁴]

* With reference to carriage (static values, guide element resting on full surface)

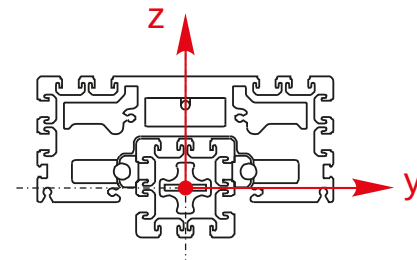


Type	F _x	F _y	F _z	M _x	M _y	M _z
SQ ZST 60	1132	2550	2550	99	171	171
SQ ZST 60 x 120		2550	2550	99	171	171
SQ ZST 80		2550	2550	124	201	201
SQ ZST 80 x 160		2550	2550	124	201	201

Geometric moment of inertia

Type	I _y	I _z
SQ ZST 60	51.2	51.2
SQ ZST 60 x 120	94.7	372.3
SQ ZST 80	155.3	155.3
SQ ZST 80 x 160	292.4	1090

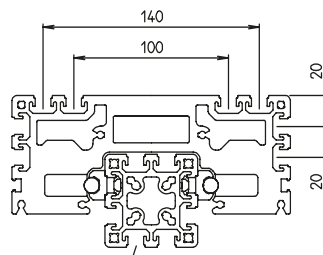
[cm⁴]



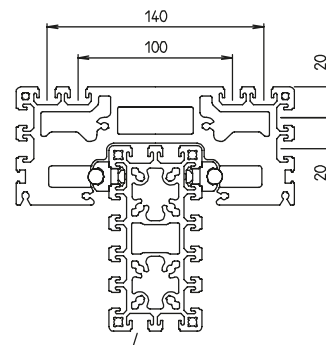
SQ ZST – Versions

Order instructions:

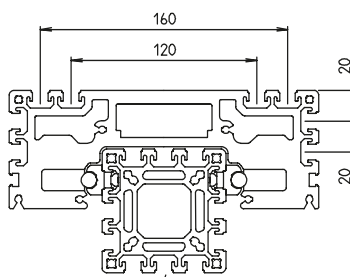
- Longer travel lengths on request
- Second non driven or independently driven carriage available on request



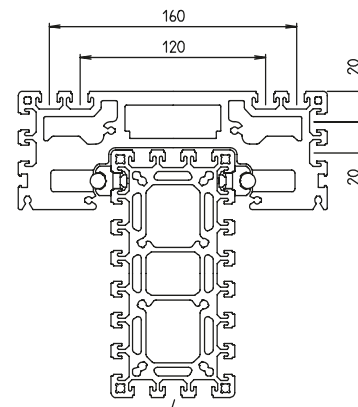
Profile F-60



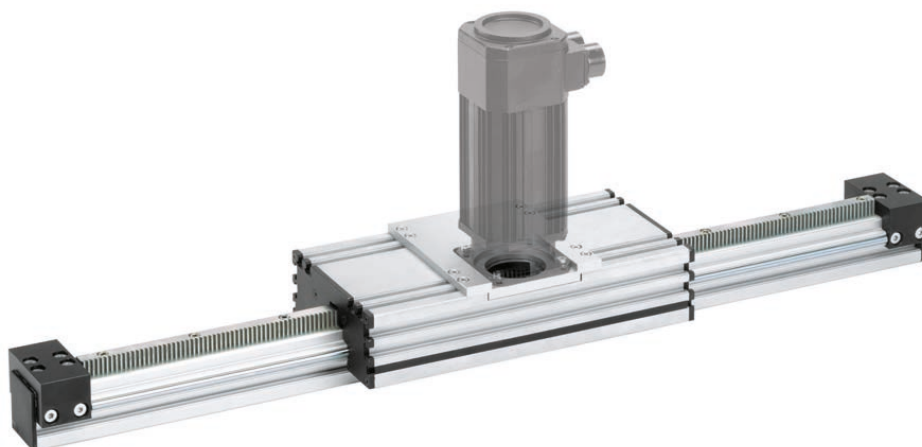
Profile F-60 x 120



Profile F-80



Profile F-80 x 160



Code No.	Type	Basic length	B1	B2	C	F	H	J	K1	K2	L1
FGA6060 _ A	SQ ZST 60	470	180	depending on engine	98	21.5	150	362	60	90	4
FGA6012 _ A	SQ ZST 60 x 120	470	180		158	81.5	150	362	60	90	4
FGA8080 _ A	SQ ZST 80	470	200		118	41.5	150	362	80	110	4
FGA8016 _ A	SQ ZST 80 x 160	470	200		198	121.5	150	362	80	110	4

----- Total length = basic length + travel [mm]

For motor (see chapter "Motors and controls"):

C = RK-AC 240

D = RK-AC 240 with gear unit

E = RK-AC 470

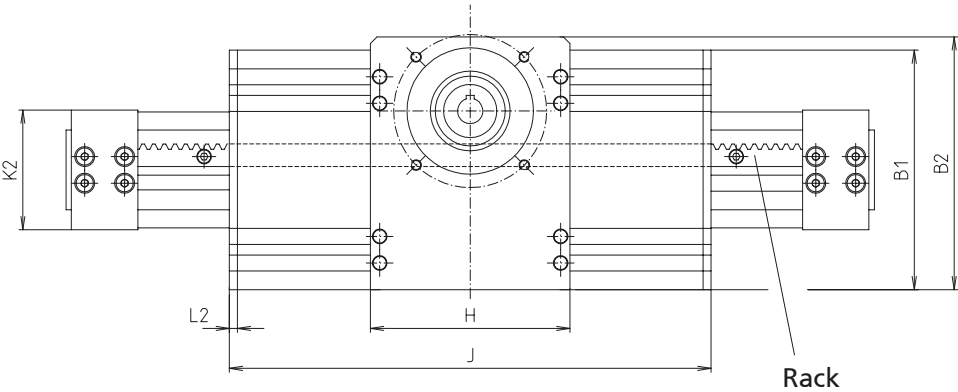
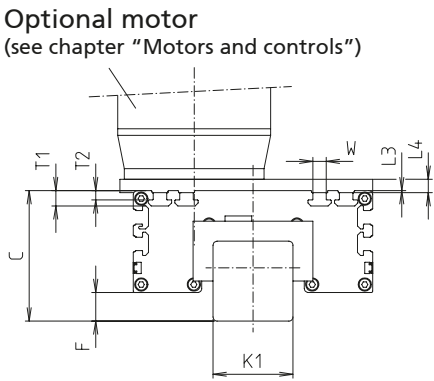
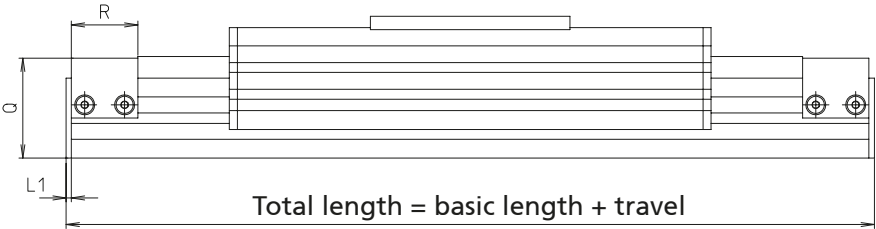
F = RK-AC 470 with gear unit

I = 3-phase motor 90 W

K = 3-phase motor 120W

L = 3-phase motor 180W

M = 3-phase motor 250W



[mm]

L2	C	L4	Q	R	T1	T2	W	Max. travel	Mass [kg]	
									Basic length	per 100 mm travel
6	1.5	depending on engine	75	50	11.5	7	10.1	29530	11.77	0.81
6	1.5		135	50	11.5	7	10.1	29530	13.88	1.26
6	1.5		95	50	11.5	7	10.1	29530	12.78	1.14
6	1.5		175	50	11.5	7	10.1	29530	14.28	1.34

SQ ZST – Fixing

Order instruction:

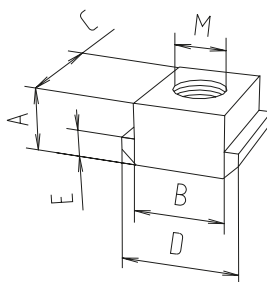
- Purchase only in lot sizes and a multiple of that, see product table below

- Slot stones can be inserted and positioned at the guide profile and carriage

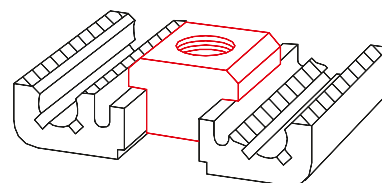
Material: zinc plated steel

Slot stones

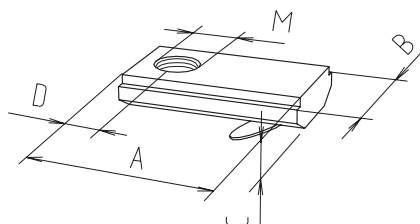
Slot stone -N-



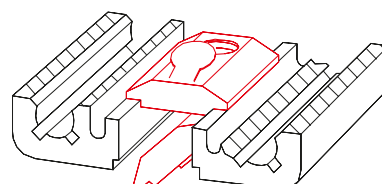
Slot stone -N- can be slid into the slot



Slot stone -K-



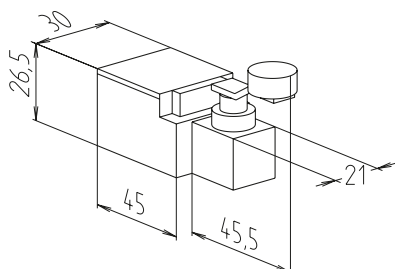
Slot stone -K- can be swivelled into the slot



[mm]

Code No.	Version	lot sizes	A	B	C	D	E	M	F [N]
Slot stone -N-									
4026207	M5	10, 20, 30... pcs	8	10	13	15	4	M5	4000
4026203	M6	10, 20, 30... pcs	8	10	13	15	4	M6	9000
4026206	M8	10, 20, 30... pcs	8	10	13	15	4	M8	9000
Slot stone -K-									
4006211	M5	10, 20, 30... pcs	21	12	4	7	–	M5	5000
4006212	M6	10, 20, 30... pcs	21	12	4	7	–	M6	5000
4006213	M8	10, 20, 30... pcs	21	12	4	7	–	M8	5000
4016212	M6	10, 20, 30... pcs	21	14	4	7	–	M6	5000
4016213	M8	10, 20, 30... pcs	21	14	4	7	–	M8	8000

Mechanical limit switch



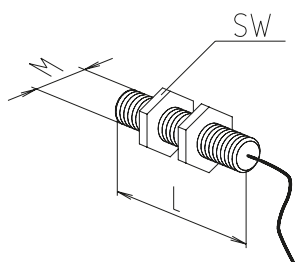
- Limit switch with angle lever
- Compact design

Material:
Thermoplastic, fully insulated

Max. voltage	250 V AC
Max. switching current	6 A
Max. starting current	16 A
Operating cycles	Max. 6,000/h
Mechanical lifetime	1 x 10 ⁷ switching cycles
Axis lever adjustment	locking by 360°
Protection class	IP 65
Ambient temperature	-30°C to +80°C

Code No.	Switching function
91905	NC/NO

Inductive limit switch



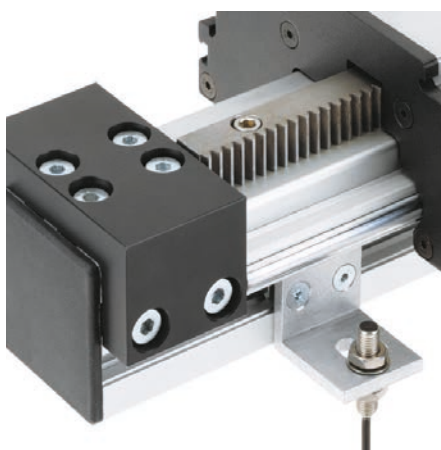
- Function indicator (LED)
- Maintenance-free

Material: Housing: stainless steel

Type	60-80
Voltage	10 - 30 V DC
Max. switching current	150 mA
Operating distance	2 mm for steel
Protection class	IP67
Ambient temperature	-25°C to +70°C
Cable lengths	2m

Code No.	Switching function	L	M	Wrench size (SW)
92826	Changeover	40	8x1	13

Holder for inductive limit switch

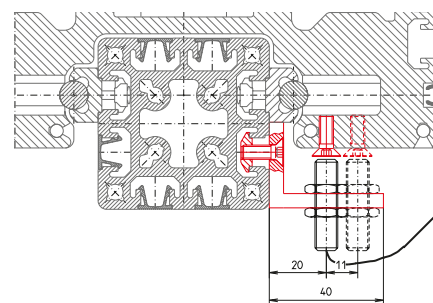
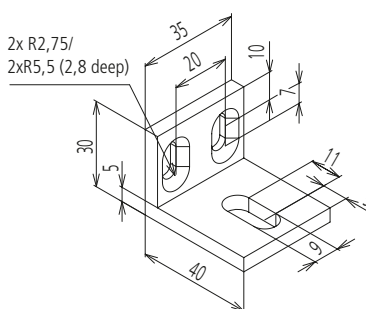


- Fixing bracket for proximity switches
- Fixing in the profile slot of the guide profile
- Simple axial displacement and adjustment of holder is possible

Material:
AlMgSi, vibratory finished

Scope of delivery:
Holder with fastenings

A proximity switch is not included!



Code No.	Type
92909	SQ ZST 60, 60 x 120, 80, 80 x 160