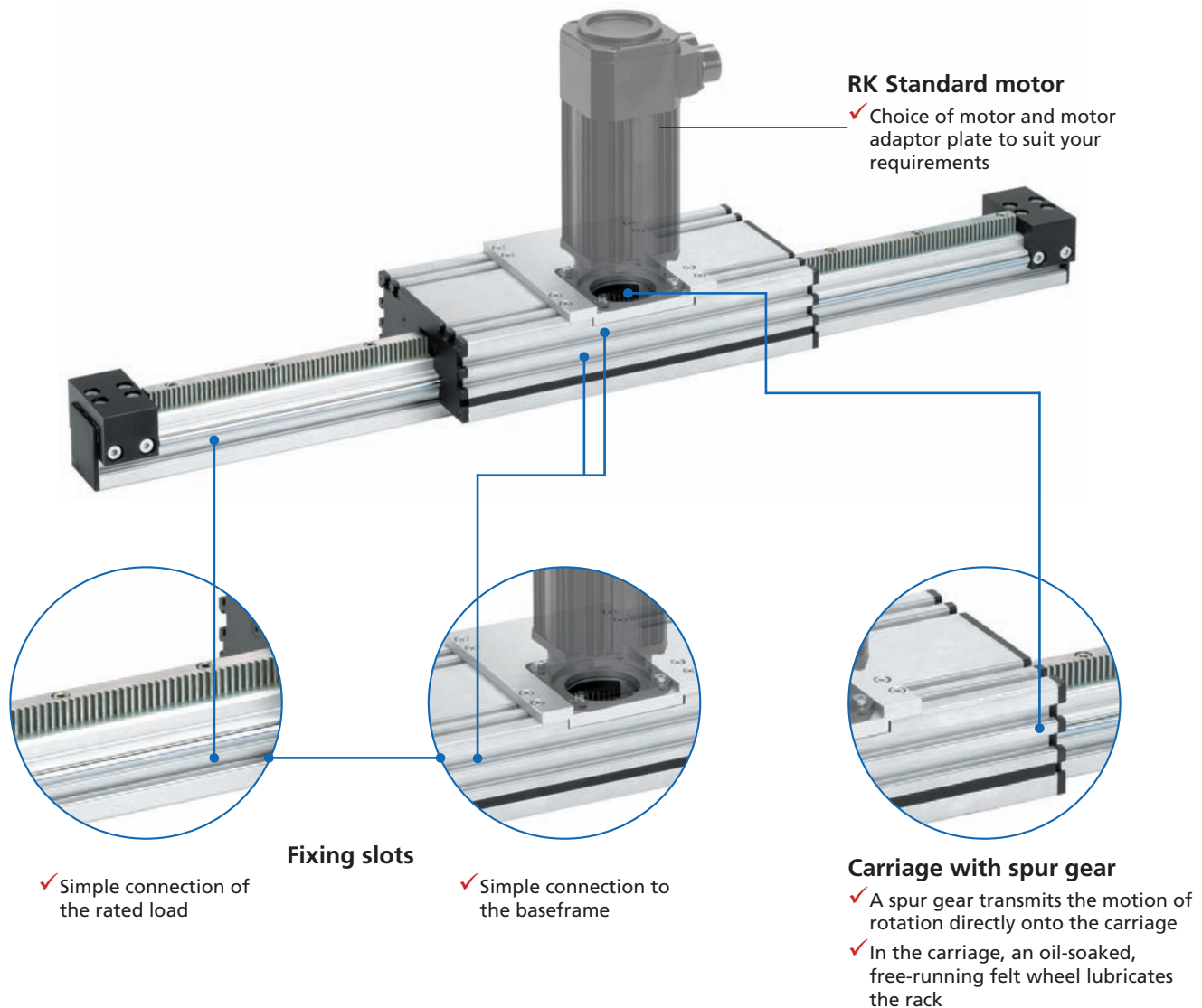


Roller guide actuators - SQ ZST

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



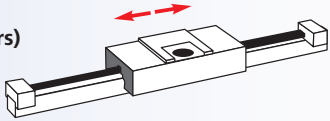
Features:

- 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

<p>Properties/Technical data</p>	<ul style="list-style-type: none"> ■ General information/operating conditions... 504 ■ Load data..... 505
<p>Versions (Dimensions, order numbers)</p> 	<ul style="list-style-type: none"> ■ SQ ZST rack unit 506 - 507
<p>Accessories</p> <p style="text-align: right;">Fixing</p> <p style="text-align: center;">Position determination</p>	<ul style="list-style-type: none"> ■ Slot stones 508 ■ Mechanical limit switch 510 ■ Inductive limit switch and holder 511

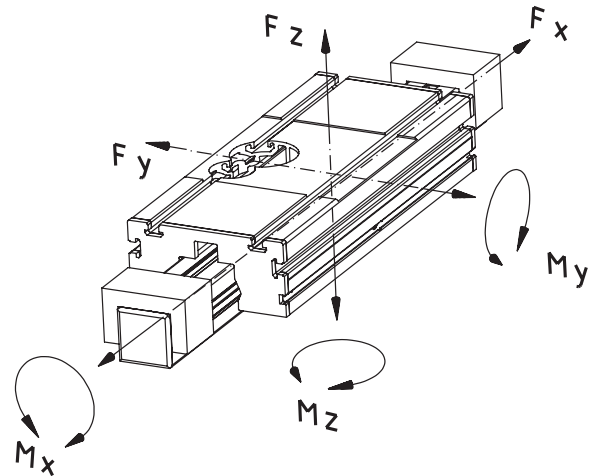
General information/operating conditions

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

SQ ZST - Technical data
Load data*

- F Force [N]
- M Moment [Nm]
- I Geometric moment of inertia [cm⁴]

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

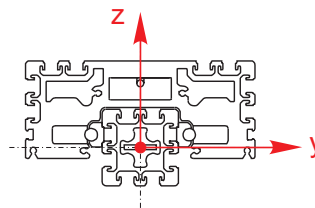


Type	F _x	F _y	F _z	M _x	M _y	M _z
SQ ZST 60	1132	2550	2550	99	171	171
SQ ZST 60 x 120		2550	2550	99	171	171
SQ ZST 80		2550	2550	124	201	201
SQ ZST 80 x 160		2550	2550	124	201	201

Geometric moment of inertia

[cm⁴]

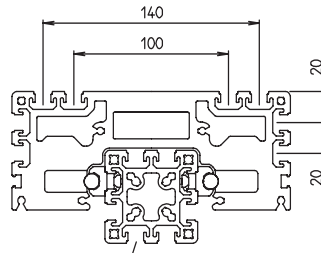
Type	I _y	I _z
SQ ZST 60	51.2	51.2
SQ ZST 60 x 120	94.7	372.3
SQ ZST 80	155.3	155.3
SQ ZST 80 x 160	292.4	1090



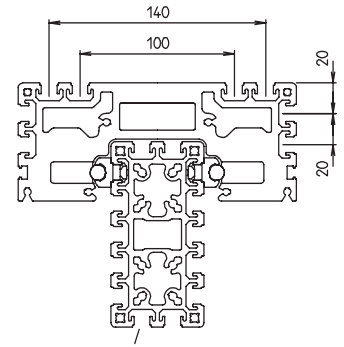
SQ ZST - Versions

Order information:

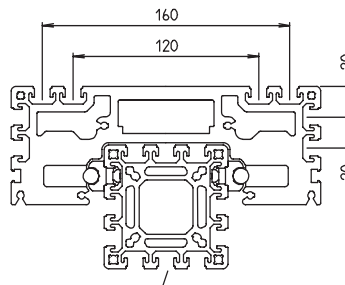
- Longer travel lengths on request
- Second non driven or independently driven carriage available on request



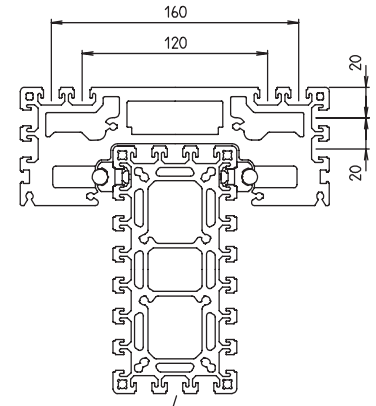
Profile F-60



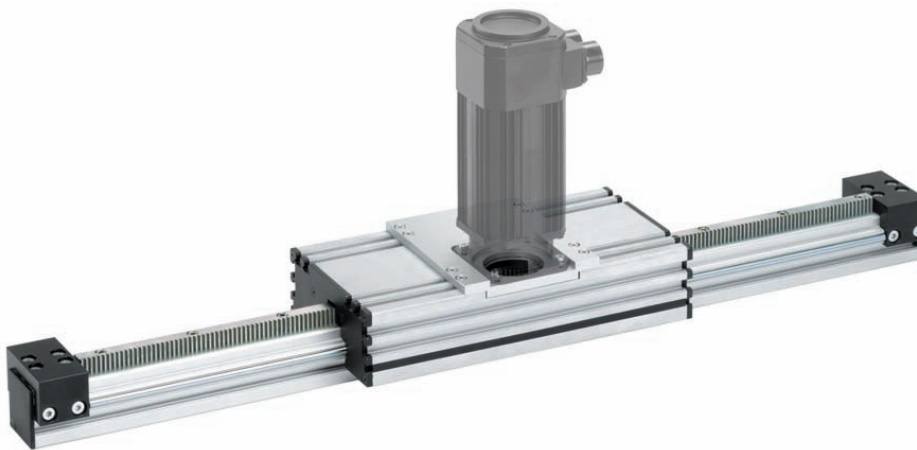
Profile F-60 x 120



Profile F-80



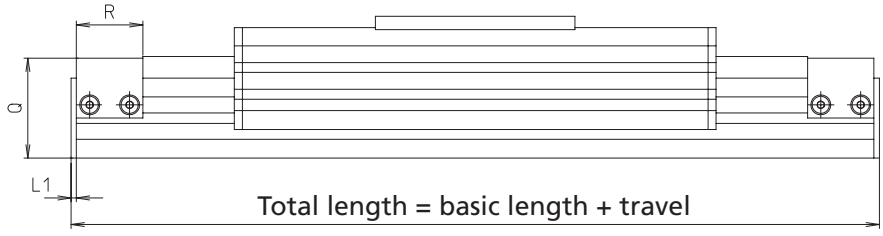
Profile F-80 x 160



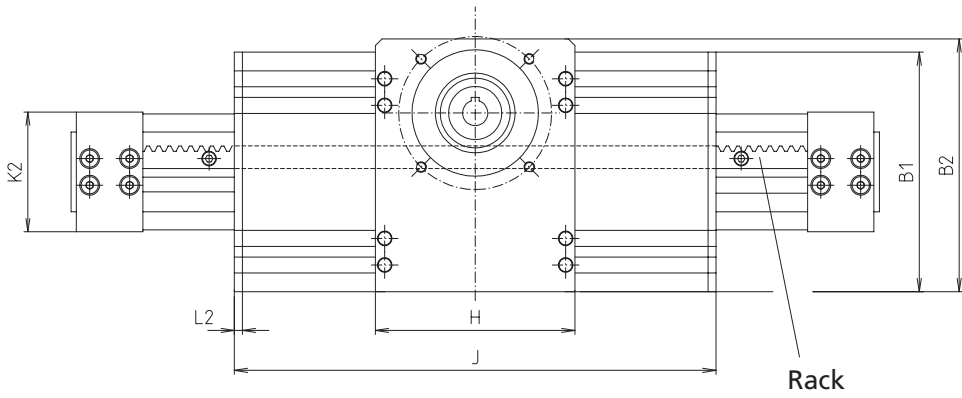
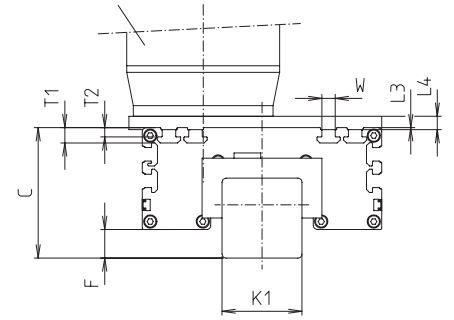
Code No.	Type	Basic length	B1	B2	C	F	H	J	K1	K2	L1
FGA6060 _ A	SQ ZST 60	470	180	depending on engine	98	21.5	150	362	60	90	4
FGA6012 _ A	SQ ZST 60 x 120	470	180		158	81.5	150	362	60	90	4
FGA8080 _ A	SQ ZST 80	470	200		118	41.5	150	362	80	110	4
FGA8016 _ A	SQ ZST 80 x 160	470	200		198	121.5	150	362	80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

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

- | | |
|------------------------------|-------------------------|
| A = RK-AC 118 | G = RK-SM 200/400 |
| B = RK-AC 118 with gear unit | I = 3-phase motor 90 W |
| C = RK-AC 240 | K = 3-phase motor 120 W |
| D = RK-AC 240 with gear unit | L = 3-phase motor 180 W |
| E = RK-AC 470 | M = 3-phase motor 250 W |
| F = RK-AC 470 with gear unit | |



Optional motor
(see chapter "Motors and controls")



[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

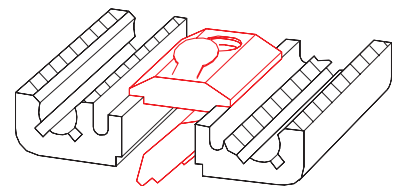
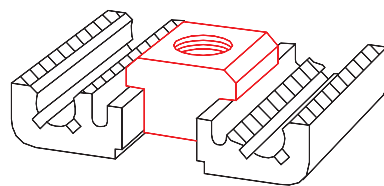
Slot stones

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

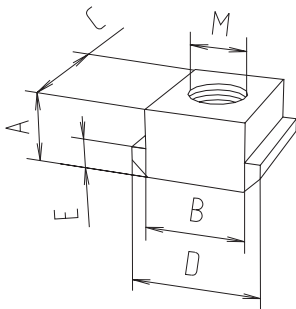
Material: galvanised steel

Slot stone -N-
can be slid into the slot

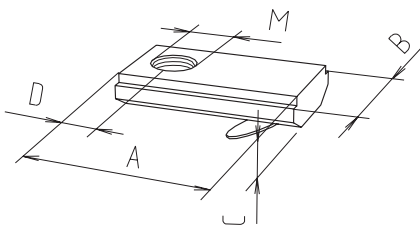
Slot stone -K-
can be swivelled into the slot



Slot stone -N-

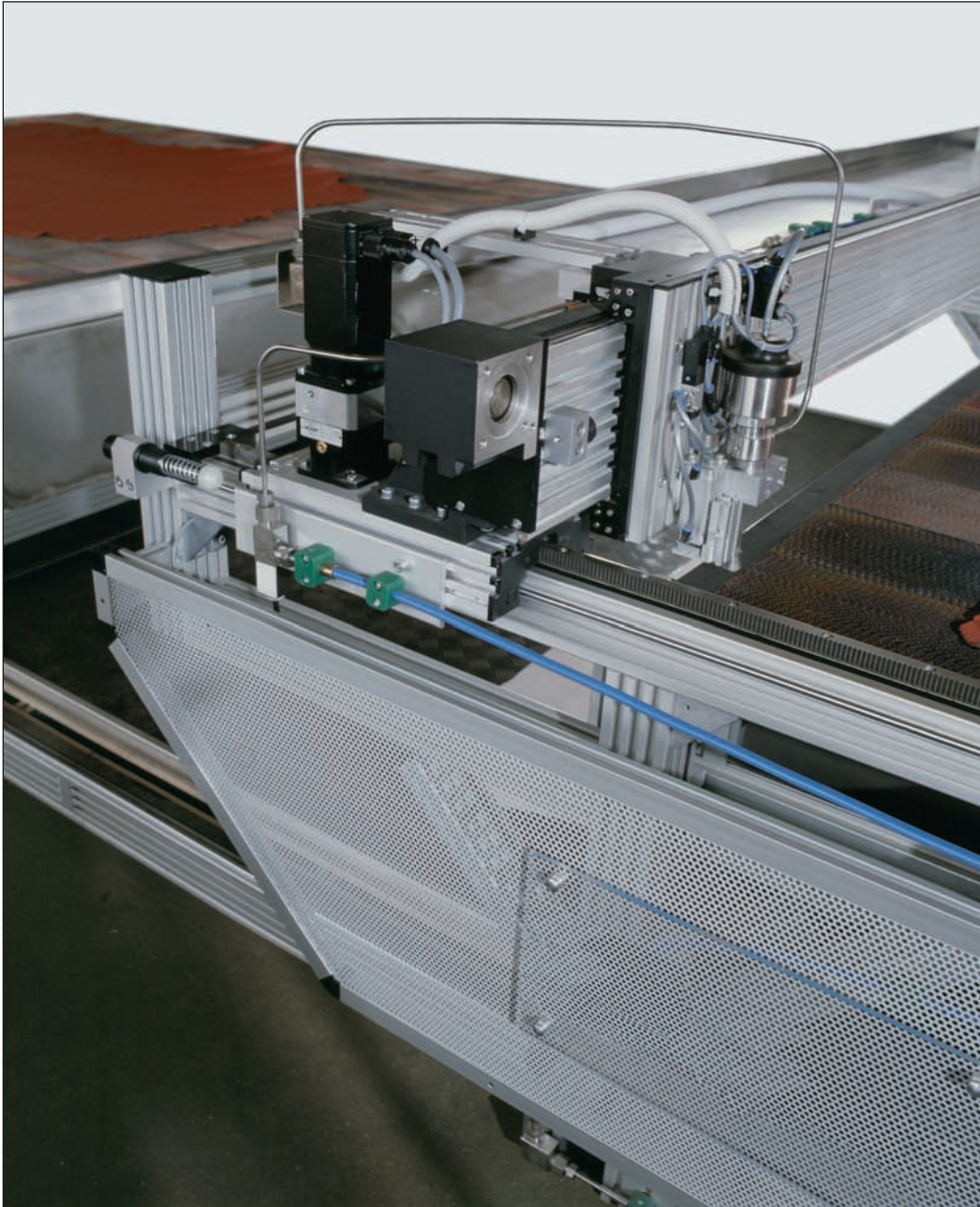


Slot stone -K-



[mm] 

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



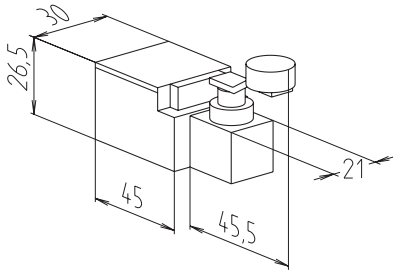
3-axis plotter, X-axis moves via an SQ ZST rack unit

SQ ZST – Position determination

Mechanical limit switch

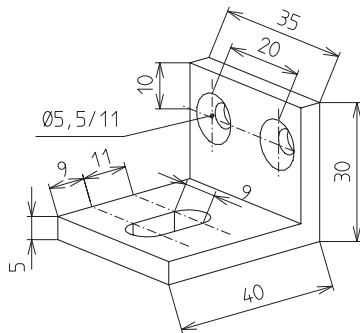
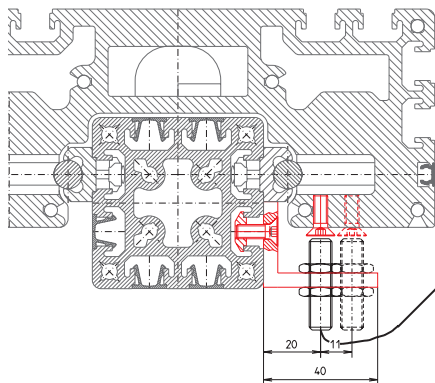
- Limit switch with angle lever
- Compact design

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

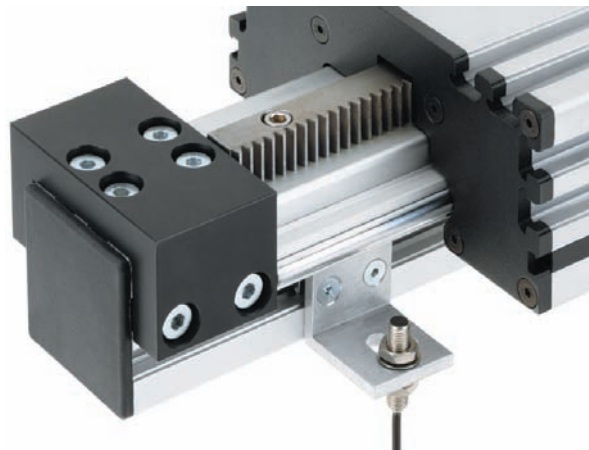
SQ ZST - Position determination
Holder for inductive limit switch


- 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!

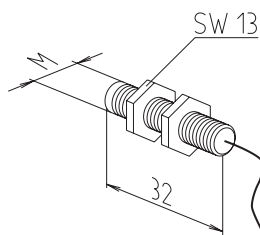


Code No.	Type
92909	SQ ZST 60, 60 x 120, 80, 80 x 160

Inductive limit switch

- Function indicator (LED)
- Maintenance-free

Material: Housing: stainless steel



Voltage	10-30 V DC
Max. switching current	200 mA
Max. starting current	200 mA
Operating frequency	700 Hz acc. to DIN EN 50010
Mechanical lifetime	independent of operating cycles
Operating distance	1.5 mm for steel/0.75 mm for aluminium
Protection class	IP 65
Ambient temperature	-25°C to +70°C

Code No.	Switching function	M
92816	Normally closed contact	M8 x 1
92817	Normally open contact	M8 x 1