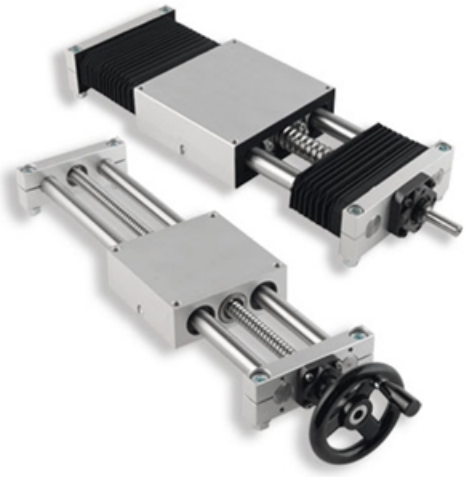
Table of contents

- Linear Unit QME- standard version
- Linear Unit QME Right + Left drive
- Hand wheel
- Hand wheel with locking device- WL
- Hand wheel with locking device and position indicator- WIL
- Bellow
- Magnet and rail for end/position switches
- Position switch
- Motor flange and coupling or timing belt transmission

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Linear Unit QME- standard version

By using Linear Unit QME from Rollco you save both time and money. The units are designed to fulfil the need of an easy to mount unit for medium precision requirements. The units are ready to mount linear tables guided with linear ball bearings on hardened shafts and driven by ball- or lead-screw. There is a wide variety of executions available for quick delivery from our workshop.



Selectable standard options are:
• Bellows
• Hand wheel
• Screw locking
• Mechanical position counter
• Left+Right drive units
• Magnetic end position switches

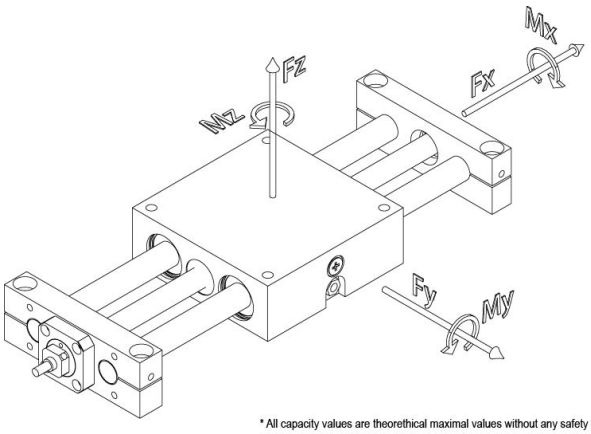
For higher level of corrosion resistance, low/high temperature versions, other screw-leads or types, customized machining of the drive- and mounting-interfaces, contact Rollco.

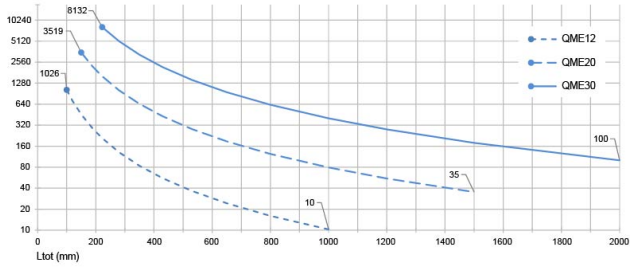
Characteristics
• Linear ball bearings used for lowest friction and minimal and persistent play.
• Low backlash ball screw, optional with reduced backlash or backlash eliminated by light preload.
• Customized mounting flange for motor and/or customized end-machining of the screw shaft available.
• Corrosion resistant version as option.

Max Ltot: QME12: 1000 mm, QME20: 1500 mm, QME30: 2000 mm
Dimensions of Drive ends refer to Standard version drawing.
All dimensions in mm. Drive ends

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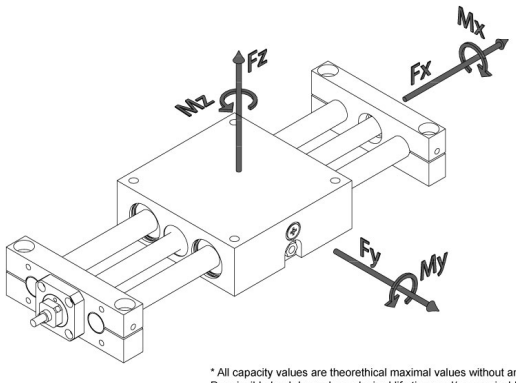
General Data

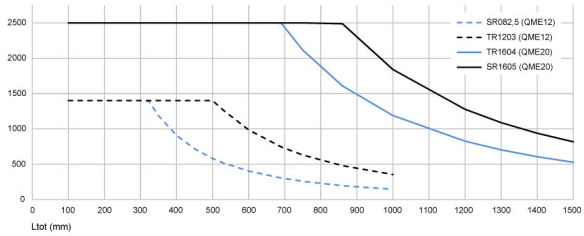




* All capacity values are theorethical maximal values without any safety factor.
Permissible load depends on desired life time and/or permissble deflection of the shafts. For motor driven units in automation applications, a dynamic safety factor of at least 5 is recommended.

* Permissible load based on a shaft deflection of 1/1000 of Ltot. For long units, actual load may need to be reduced to achive a deflection acceptable for the application.





* All capacity values are theorethical maximal values without any safety factor.
Permissible load depends on desired life time and/or permissble deflection of the shafts. For motor driven units in automation applications, a dynamic safety factor of at least 5 is recommended.

* Permissible loads above will be limited for long units according to diagram 2. The dynamic capacity (Ca) is used for life time calculations. Ca is not defined for TR-screws and they can not be life time calculated.

Designation	Screw Type	Static Load Capacity Fz (N)	Dynamic Load Capacity Fz (N)	Static Load Capacity Fy (Nm)	Dynamic Load Capacity Fy (Nm)
QME 12	SR082,5	3160	2080	3160	2080
QME 12-TR	TR1203	3160	2080	3160	2080
QME 20	SR1605	5600	3520	5600	3520
QME 20-TR	TR1604	5600	3520	5600	3520
QME 30	SR/SL3205 / SR3210 / SR3220	11200	6400	11200	6400
QME 30-TR	TR3006	11200	6400	11200	6400

Designation	Static Load Capacity Mx (Nm)	Dynamic Load Capacity Mx (Nm)	Static Load Capacity My (Nm)	Dynamic Load Capacity My (Nm)	Static Load Capacity Mz (Nm)	Dynamic Load Capacity Mz (Nm)
QME 12	71	47	74	47	74	49
QME 12-TR	71	47	74	47	74	49
QME 20	202	127	216	127	216	136
QME 20-TR	202	127	216	127	216	136
QME 30	728	416	678	416	678	387
QME 30-TR	728	416	678	416	678	387

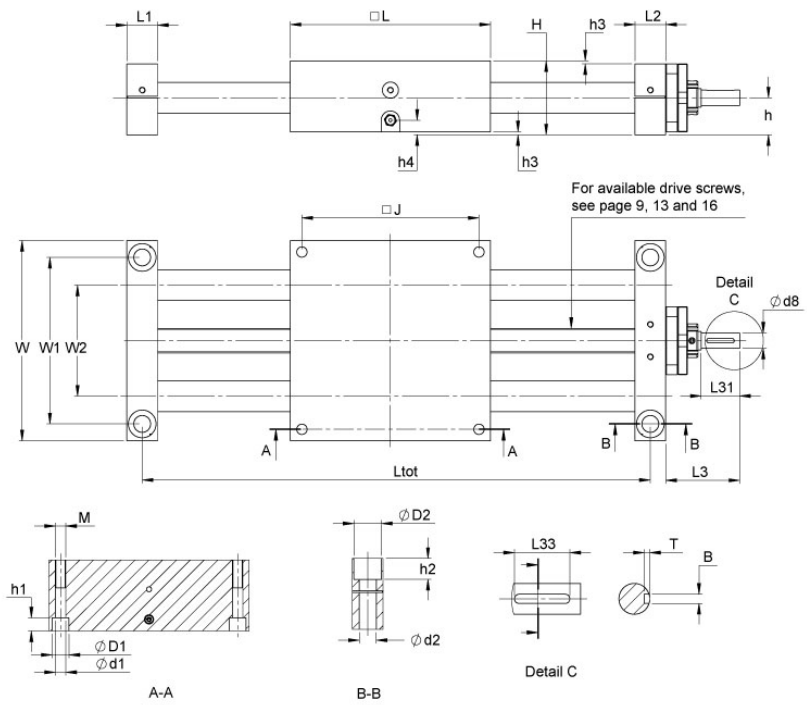
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General Data

Designation	Dynamic Capacity Ca (N)	Permissible Fx (N)
QME 12	2030	1400
QME 12-TR	n/a	1400
QME 20	7100	2500
QME 20-TR	n/a	2500
QME 30	9500	3200
QME 30-TR	n/a	3200

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Dimensions



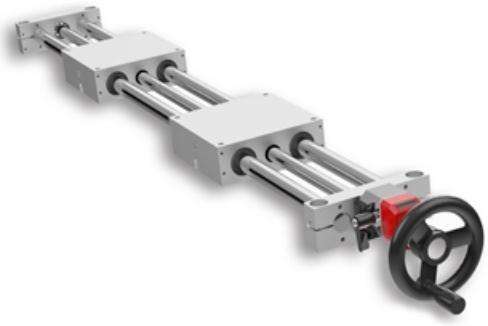
Designation	J	L	L1	L2	h	H1	H2	W	W1
QME 12	73	85	12	14	15	5.5	8.5	85	73
QME 12-TR	73	85	12	14	15	5.5	-	85	73
QME 20	115	130	20	20	24	8.5	13.5	130	108
QME 20-TR	115	130	20	20	24	8.5	-	130	108
QME 30	184	200	22	22	36	8.5	14	200	178
QME 30-TR	184	200	22	22	36	8.5	-	200	178

Designation	W2	M	Ltot	d1	D1	d2	D2	h1	h2	h3
QME 12	45	M6 x 12	stroke+98	5.2	5.2	5.5	5.5	5.5	8.5	1.5
QME 12-TR	45	M6 x 12	stroke+98	-	5.2	-	5.5	-	8.5	1.5
QME 20	72	M8 x 18	stroke+150	6.8	6.8	11	11	8.5	13.5	2
QME 20-TR	72	M8 x 18	stroke+150	-	6.8	-	11	-	13.5	2
QME 30	130	M8 x 18	stroke+222	6.8	6.8	13	13	8.5	14	2
QME 30-TR	130	M8 x 18	stroke+222	-	6.8	-	13	-	14	2

Designation	h4	H	L3	L31	d8	B (P9)x L33 x T	Drive end W x
QME 12	7.5	31.5	23	8	4 (h7)	no keyway	53
QME 12-TR	7.5	-	23	8	4 (h7)	no keyway	53
QME 20	7.5	48	48	25	10 (h7)	3 x 21 x 1.8	61
QME 20-TR	7.5	-	48	25	10 (h7)	3 x 21 x 1.8	61
QME 30	15	70	80	45	16 (h7)	5 x 36 x 3	68
QME 30-TR	15	-	80	45	16 (h7)	5 x 36 x 3	68

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Linear Unit QME Right + Left drive



By using Linear Unit QME from Rollco you save both time and money. The units are designed to fulfil the need of an easy to mount unit for medium precision requirements. The units are ready to mount linear tables guided with linear ball bearings on hardened shafts and driven by ball- or lead-screw. There is a wide variety of executions available for quick delivery from our workshop.

• Selectable standard options are:
• Bellows
• Hand wheel
• Screw locking
• Mechanical position counter
• Left+Right drive units
• Magnetic end position switches

Ask us if you need higher level of corrosion resistance, low/high temperature versions, other screw-leads or -types, customized machining of the drive- and mounting-interfaces and so on.

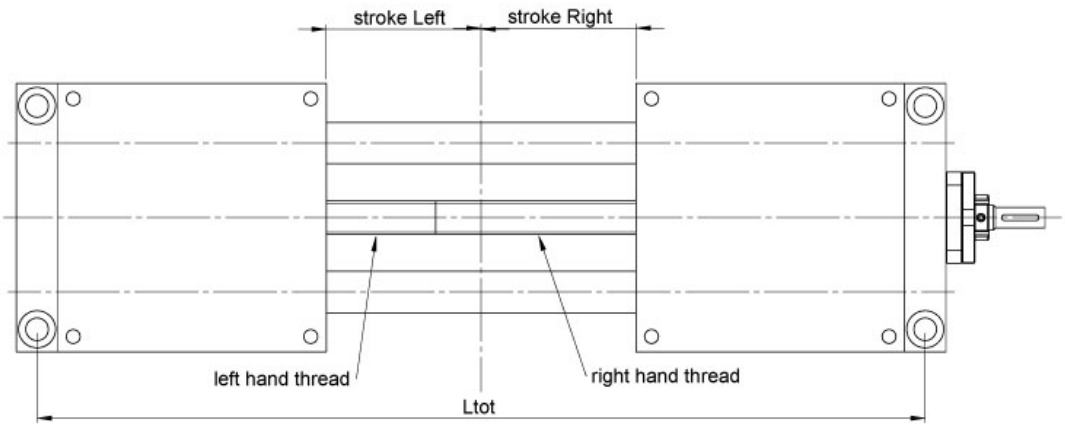
Characteristics
• Linear ball bearings used for lowest friction and minimal and persistent play.
• Low backlash ball screw, optional with reduced backlash or backlash eliminated by light preload.
• Customized mounting flange for motor and/or customized end-machining of the screw shaft available.
• Corrosion resistant version as option.

Note that “stroke” for a L+R unit refers to the stroke of each individual slider.
All drive end types possible also for Left + Right drive.

Please contact us for CAD-files!

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General Data



Designation	Drive screw	Ltot
QME 12-2xR-L	Tr screw TR1203/TL1203	stroke * 2+183
QME 20-2xR-L	Tr screw TR1604/TL1604	stroke * 2+280
QME 30-2xR-L	Ball screw SR3205/SL3205	stroke * 2+422

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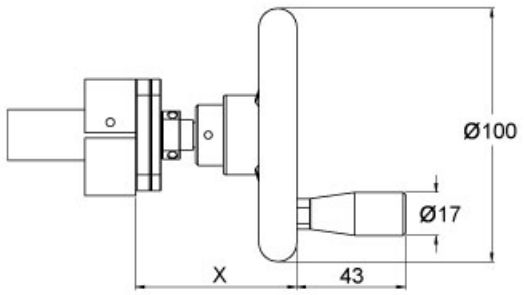
Hand wheel

For Linear unit QME.
Dimensions in mm.



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General Data



Designation	Compatible with	X
QW12	QME12	54
QW20	QME20	64
QW30	QME30	70

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Hand wheel with locking device- WL

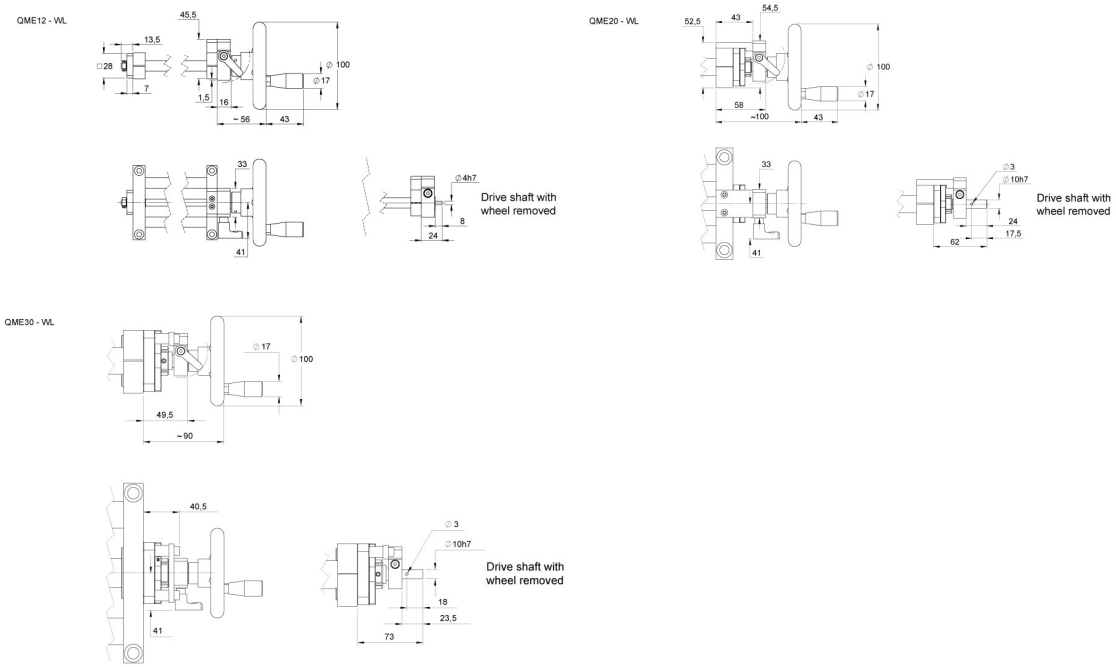
Locking device are available for all sizes. We recommend locking device for all hand driven units with ball screw to avoid back driving.
Locking device is always included if position indicator is selected (option WIL).

Dimensions in mm.



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General Data



Designation	Compatible with
QME12-WL	QME12
QME20-WL	QME20
QME30-WL	QME30

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Hand wheel with locking device and position indicator- WIL

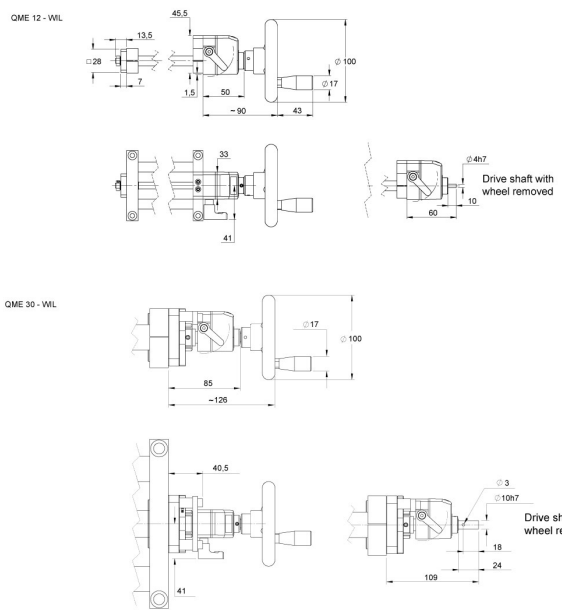
Locking device and mechanical position indicators are available for all sizes. We recommend locking device for all hand driven units with ball screw to avoid back driving. Locking device is always included if position indicator is selected (option WIL).
The position indicator have 4 digits where the tree black-background digits represent position in millimeter and the red-background digit 1/10 of a millimeter. The value increase as the moving part moves away from the drive end (at CCW rotation of the hand-wheel). For left+right units, the value of the counter increase as the two moving parts moves apart. The zero of the counter is set at delivery to be at mechanical end stop but can easily be adjusted to arbitrary position by releasing a single setscrew and turn the indicator hollow shaft in relation to the drive screw.



Dimensions in mm.

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General Data



Designation	Compatible with
QME12-WIL	QME12
QME20-WIL	QME20
QME30-WIL	QME30

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Bellow

Bellow for QME Linear Unit.
Note that “stroke” for a L+R unit refers to the stroke of each individual slider.
Bellows are recommended for all applications where the unit isn’t protected against dust and dirt. The bellow may also work as a squeeze protection.



Dimensions in mm.

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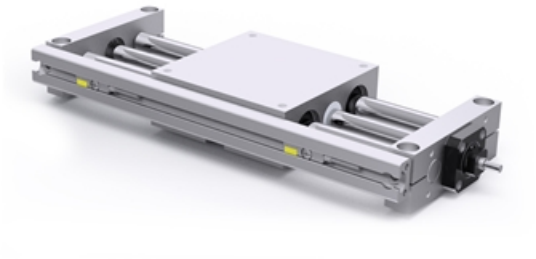
General Data

Designation	Bellow Ltot	Bellow R+L Ltot
QME12-B	stroke * 1.286 + 110	stroke * 2.572 + 195
QME20-B	stroke * 1.200 + 162	stroke * 2.4 + 292
QME30-B	stroke * 1.146 + 234	stroke * 2.292 + 434

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Magnet and rail for end/position switches

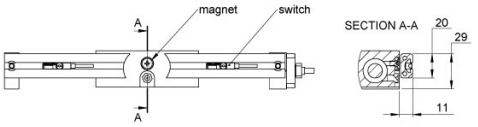
For linear unit QME.
Dimensions in mm.



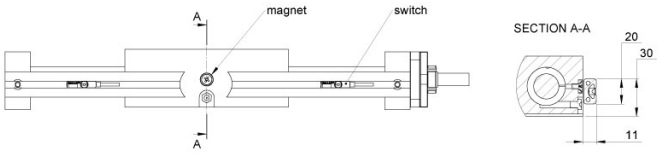
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General Data

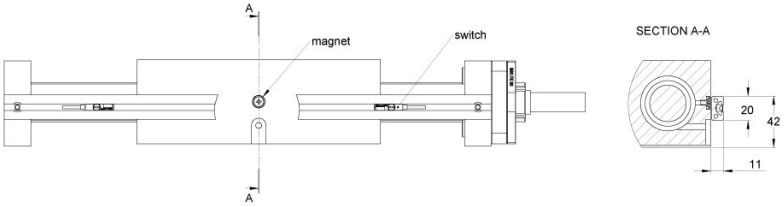
QME 12



QME 20



QME 30



Designation	Compatible with
Magnet and rail for end/position switches-12	QME12
Magnet and rail for end/position switches-20	QME20
Magnet and rail for end/position switches-30	QME30

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Position switch

For Linear Unit QME.
RHL-BMF235K-PS = Normally Open
RHL-BMF235K-PO = Normally Closed

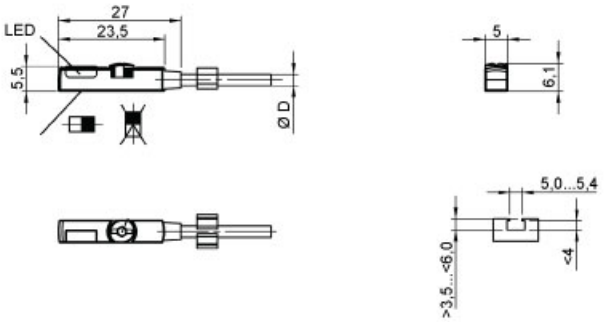
Characteristics:
• Precise readjustment
• All-electronically
• Vibration resistant
• High protection class

Dimensions in mm.



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General Data



Designation	Service Voltage (V DC)	Output	Max. Rating (mA)	Contact rating	Internal Power Consumption (mA)
RHL-BMF235K-PS (NO)	10 ... 30	PNP, NO	200	6 W max. (30 V, 200 mA)	6
RHL-BMF235K-PO (NC)	10 ... 30	PNP, NC	200	6 W max. (30 V, 200 mA)	6

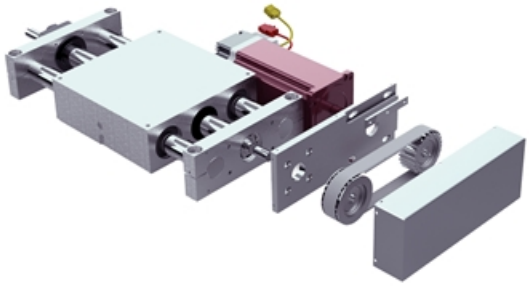
Designation	Max. Voltage Drop Static (V)	Operating Frequency (Hz)	Reproducibility (mm)	Ambient Temperature (°C)	Insulation Voltage Endurance (V DC)	Protection Class
RHL-BMF235K-PS (NO)	2.5	5000	< 0.1	-25 ... +85	75	IP 67
RHL-BMF235K-PO (NC)	2.5	5000	< 0.1	-25 ... +85	75	IP 67

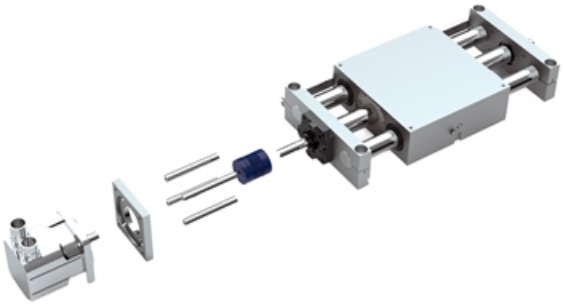
Designation	Indicators	Mounting	Casing material	Connection	Approval	Short circuit protected
RHL-BMF235K-PS (NO)	LED: yellow output signal	Hex key size 2.0 mm. Max. tightening torque 0.4 Nm	PA12	Cable PUR, 2.0 m as standard	CE	Yes
RHL-BMF235K-PO (NC)	LED: yellow output signal	Hex key size 2.0 mm. Max. tightening torque 0.4 Nm	PA12	Cable PUR, 2.0 m as standard	CE	Yes

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Motor flange and coupling or timing belt transmission

For Linear unit QME.
On request, contact Rollco for more information.





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General Data

Designation	Remark
Motor flange and coupling or timing belt transmission	Contact Rollco for more information

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