

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.

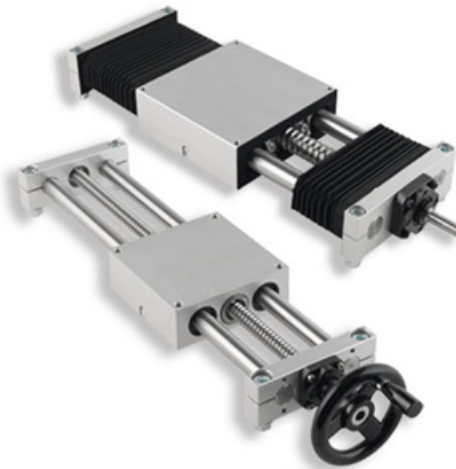
Characteristics

- 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.

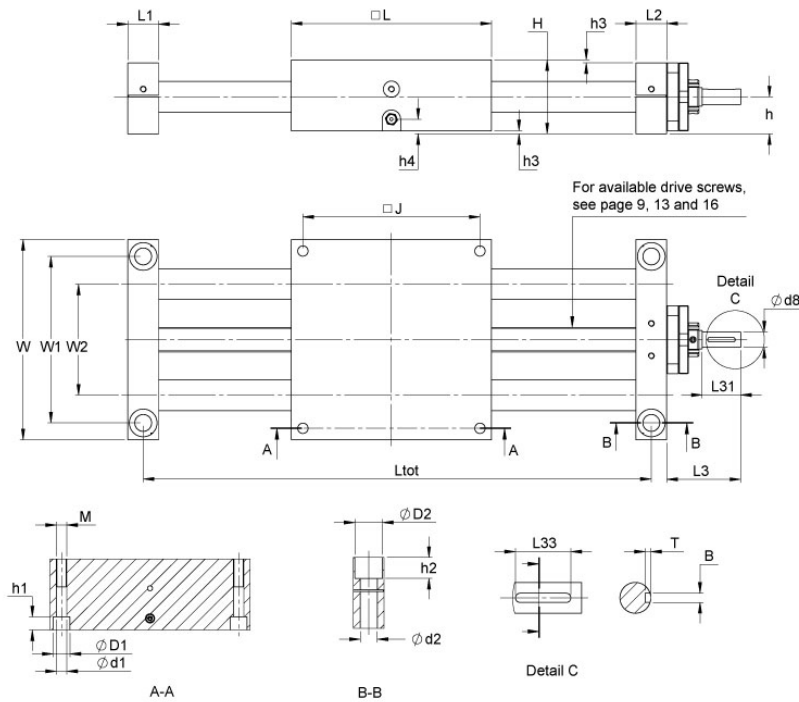
Max Ltot: QME12: 1000 mm, QME20: 1500 mm, QME30: 2000 mm

Dimensions of Drive ends refer to Standard version drawing.

All dimensions in mm. Drive ends



Product Data



Designation	J	L	L1	L2	h
QME 12	73	85	12	14	15
QME 12-TR	73	85	12	14	15
QME 20	115	130	20	20	24
QME 20-TR	115	130	20	20	24
QME 30	184	200	22	22	36
QME 30-TR	184	200	22	22	36

Designation	H2	W	W1	W2	M	Ltot
QME 12	8.5	85	73	45	M6 x 12	stroke+98
QME 12-TR	-	85	73	45	M6 x 12	stroke+98
QME 20	13.5	130	108	72	M8 x 18	stroke+150
QME 20-TR	-	130	108	72	M8 x 18	stroke+150
QME 30	14	200	178	130	M8 x 18	stroke+222
QME 30-TR	-	200	178	130	M8 x 18	stroke+222

Designation	d1	D1	h1	d2	D2	h2
QME 12	5.2	5.2	5.5	5.5	5.5	8.5
QME 12-TR	-	5.2	-	-	5.5	8.5
QME 20	6.8	6.8	8.5	11	11	13.5
QME 20-TR	-	6.8	-	-	11	13.5
QME 30	6.8	6.8	8.5	13	13	14
QME 30-TR	-	6.8	-	-	13	14

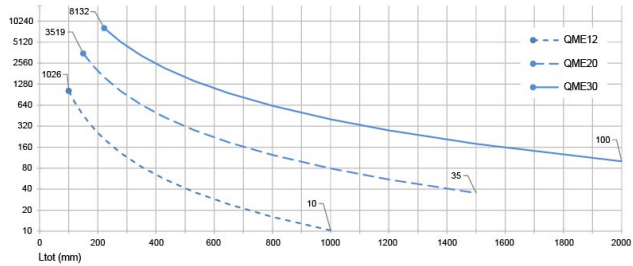
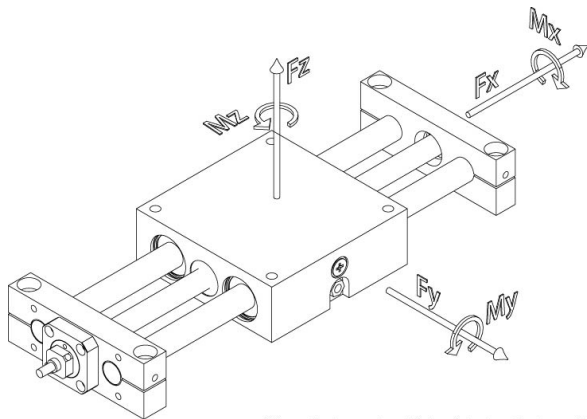
Product Data

Designation	h3	h4
QME 12	1.5	7.5
QME 12-TR	1.5	7.5
QME 20	2	7.5
QME 20-TR	2	7.5
QME 30	2	15
QME 30-TR	2	15

Drive ends

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

Load Linear guiding

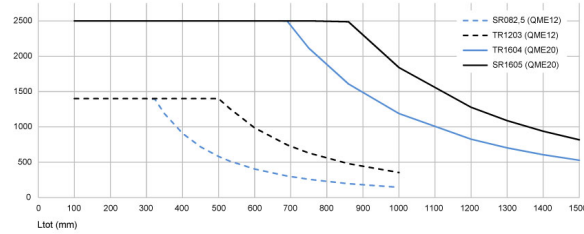
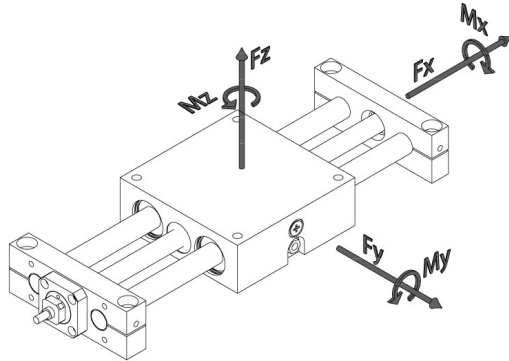


* All capacity values are theoretical maximal values without any safety factor.
 Permissible load depends on desired life time and/or permissible deflection of the shafts. For motor driven units in automation applications, a dynamic safety factor of at least 5 is recommended.
 * Permissible load based on a shaft deflection of 1/1000 of Ltot. For long units, actual load may need to be reduced to achieve a deflection acceptable for the application.

Designation	Static Load Capacity Fz (N)	Dynamic Load Capacity Fz (N)	Static Load Capacity Fy (Nm)	Dynamic Load Capacity Fy (Nm)	Static Load Capacity Mx (Nm)
QME 12	3160	2080	3160	2080	71
QME 12-TR	3160	2080	3160	2080	71
QME 20	5600	3520	5600	3520	202
QME 20-TR	5600	3520	5600	3520	202
QME 30	11200	6400	11200	6400	728
QME 30-TR	11200	6400	11200	6400	728

Designation	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	47	74	47	74	49
QME 12-TR	47	74	47	74	49
QME 20	127	216	127	216	136
QME 20-TR	127	216	127	216	136
QME 30	416	678	416	678	387
QME 30-TR	416	678	416	678	387

Load Feed-direction



* All capacity values are theoretical maximal values without any safety factor.
Permissible load depends on desired life time and/or permissible 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	Dynamic Capacity Ca (N)	Permissible Fx (N)
QME 12	SR082,5	2030	1400
QME 12-TR	TR1203	n/a	1400
QME 20	SR1605	7100	2500
QME 20-TR	TR1604	n/a	2500
QME 30	SR/SL3205 / SR3210 / SR3220	9500	3200
QME 30-TR	TR3006	n/a	3200