

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.

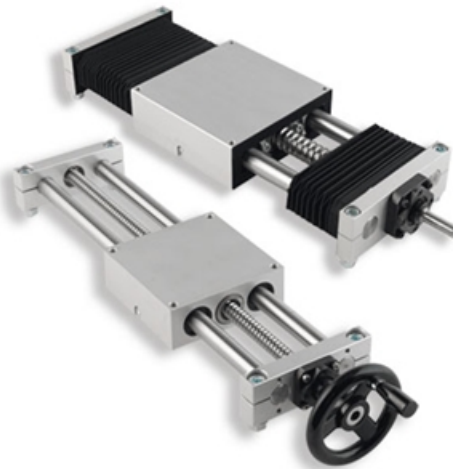
Characteristics

- 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.

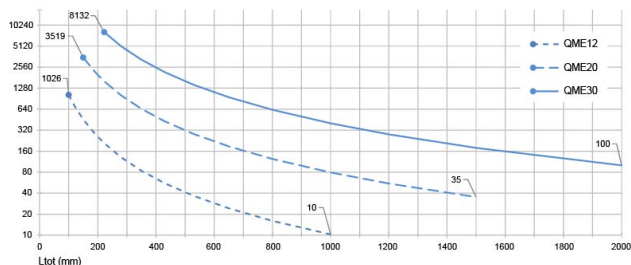
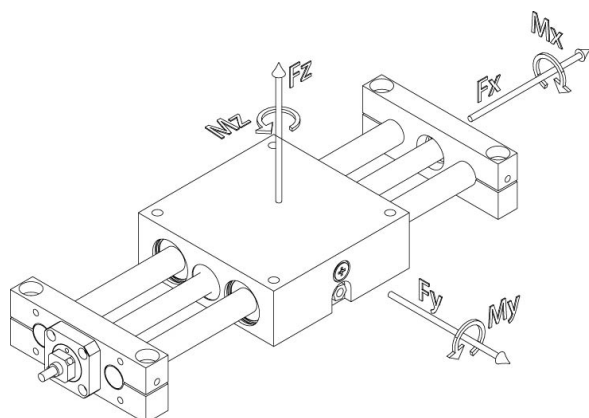
Max Ltot: QME12: 1000 mm, QME20: 1500 mm, QME30: 2000 mm

Dimensions of Drive ends refer to Standard version drawing.

All dimensions in mm. Drive ends

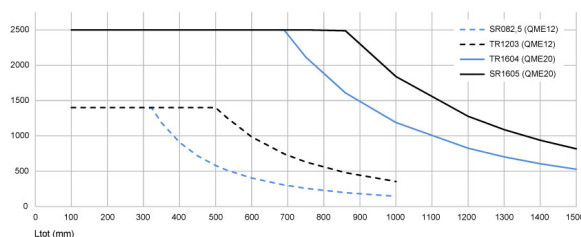
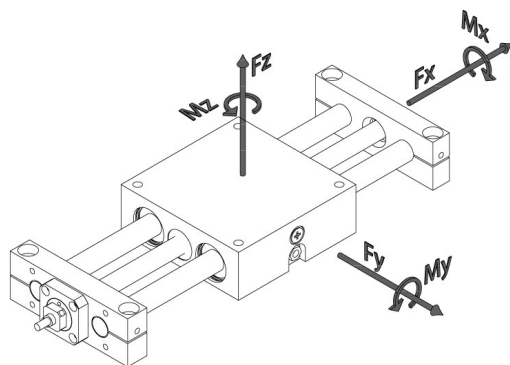


General Data



* 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.



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* 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.

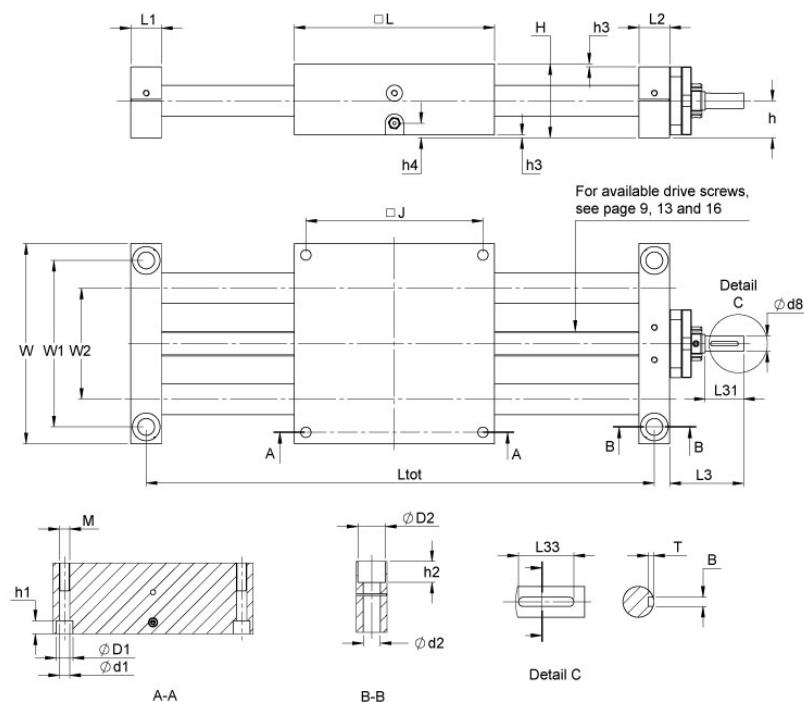
Designation	Screw Type	Static Load Capacity Fz (N)	Dynamic Load Capacity Fz (N)	Static Load Capacity Fy (Nm)	Dynamic Load Capacity Fy (Nm)
QME 12	SR082,5	3160	2080	3160	2080
QME 12-TR	TR1203	3160	2080	3160	2080
QME 20	SR1605	5600	3520	5600	3520
QME 20-TR	TR1604	5600	3520	5600	3520
QME 30	SR/SL3205 /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

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

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