

MICROCON®

MICROCON je výrobcem kompletních programovatelných pohonů s krokovými motory i dodavatelem jednotlivých komponentů.

Firma vznikla v roce 1991, od roku 1995 funguje jako společnost s ručením omezeným.

V počátcích byly prioritní činnosti spojené s vývojem a výrobou programovatelného řízení krokových motorů. Sortiment byl brzo rozšířen o nabídku krokových motorů a později i dalších komponentů (pružné spojky, posuvové šrouby, lineární vedení, šnekové převodovky, kuličkové šrouby, napájecí zdroje).

V České a Slovenské republice Microcon zastupuje níže jmenované firmy jako autorizovaný distributor:

PACIFIC SCIENTIFIC (USA) - pohony s krokovými motory a servopohony

HUCO ENGINEERING (GB) - pružné spojky

KERK MOTION PRODUCTS (USA) - posuvové šrouby a lineární vedení

Dále firma Microcon dodává produkty firem:

BOSCH REXROTH - kompaktní vedení, lineární vedení s vodicími tyčemi

TOS Znojmo - šnekové převodovky

SKF - kuličkové šrouby

OK TECHNIK-EMC - napájecí zdroje

KOMPLETNÍ DODÁVKY POHONŮ OD JEDNOHO DODAVATELE

STAR – Compact Modules CKK

Technical Data

General technical data

Load capacities and moments

Compact Module	No. of carriages	Ball screw $d_0 \times P$	Dynamic load capacity C			Dynamic moments		Planar moment of inertia		Maximum length	Moved mass
			Guideway (N)	Ball screw (N)	Fixed bearing (N)	M_t (Nm)	M_L (Nm)	I_x (cm ⁴)	I_y (cm ⁴)	L_{max} (mm)	m_b (kg)
CKK 12-90	1	12 x 5 12 x 10	4 620	3 800 2 500	6 900	125	16	14.32	124.4	750	0.36
	2 ($l_m = 65$ mm)	12 x 5 12 x 10	7 500	3 800 2 500	6 900	200	240	14.32	124.4	750	0.59
CKK 15-110	1	16 x 5	15 600	12 300	13 400	515	80	37.74	318.7	1 500	0.52
		16 x 10		9 600							
		16 x 16		6 300							
	2 ($l_m = 85$ mm)	16 x 5 16 x 10 16 x 16	25 340	12 300 9 600 6 300	13 400	835	1 075	37.74	318.7	1 500	0.86
CKK 20-145	1	20 x 5	37 600	14 300	17 000	1 650	255	114.10	986.4	1 800	1.21
		20 x 20		9 100							
		25 x 10		15 700							
	2 ($l_m = 100$ mm)	20 x 5	61 080	14 300	17 000	2 685	3 050	114.10	986.4	1 800	2.06
		20 x 20 25 x 10		9 100 15 700							

l_m = center-to-center distance between carriages.

Maximum permissible loads

Compact Module	No. of carriages	Maximum permissible forces			Maximum permissible moments	
		F_{y1} (N)	F_{y2} (N)	F_x (N)	M_t (Nm)	M_L (Nm)
CKK 12-90	1	4 620	4 620	2 490	125	16
	2	7 500	7 500	4 050	203	244
CKK 15-110	1	12 000	6 000	3 480	198	31
	2	19 490	9 740	5 650	322	414
CKK 20-145	1	29 000	14 500	8 410	638	100
	2	47 110	23 550	13 660	1 030	1 180

Modulus of elasticity E

$$E = 70\,000 \text{ N/mm}^2$$

Mass

Mass calculation does not include motor or switches.

Mass formula:

Mass (kg/mm) · length L (mm) + mass of all parts of fixed length (carriage, end blocks, etc.) (kg)

Compact Module	Ball screw	No. of carriages	Mass (kg)
CKK 12-90	with	1	$0.0055 \cdot L + 0.9$
		2	$0.0055 \cdot L + 1.2$
CKK 15-110	with	1	$0.0092 \cdot L + 1.6$
		2	$0.0092 \cdot L + 2.0$
CKK 20-145	with	1	$0.0178 \cdot L + 3.0$
		2	$0.0178 \cdot L + 3.9$

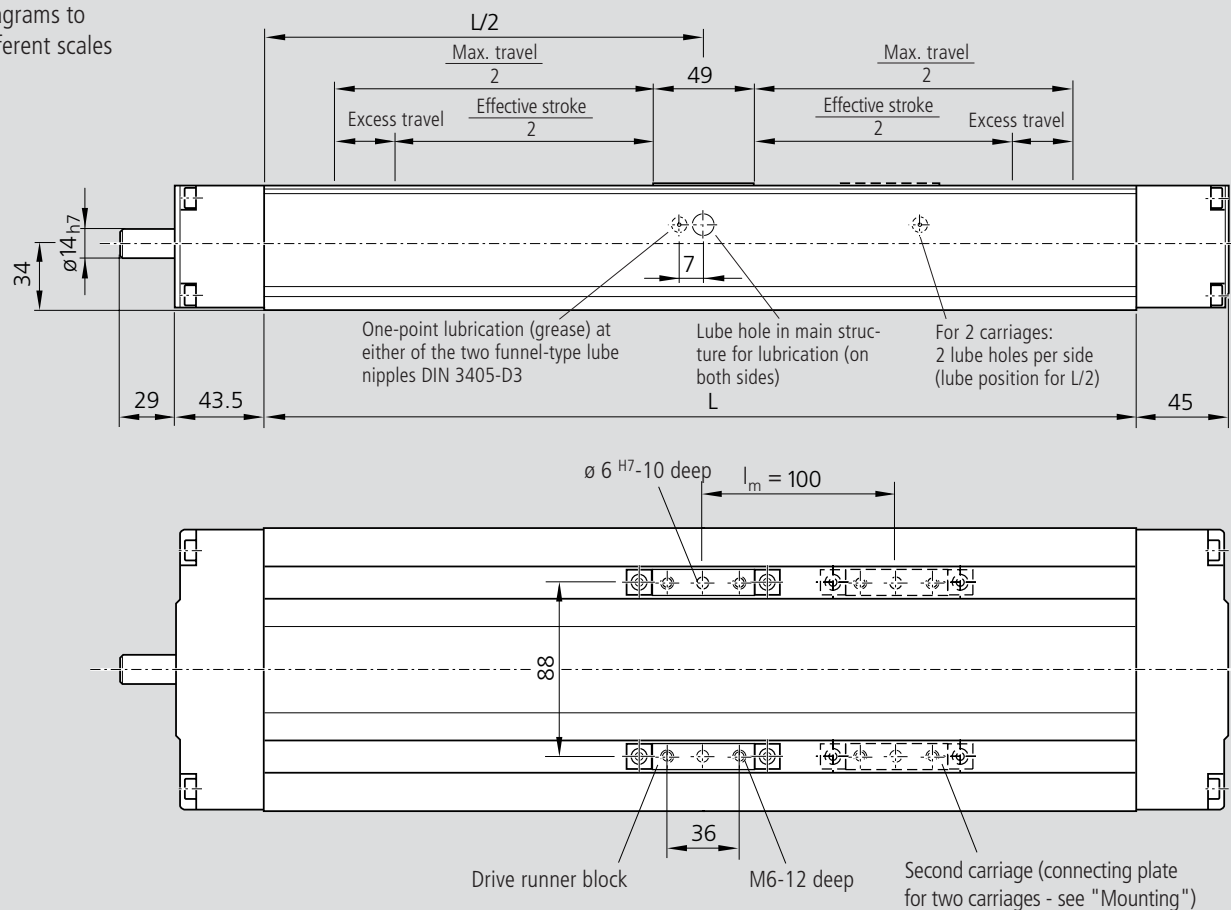


STAR – Compact Module CKK 20-145

Dimension Drawings

All dimensions in mm

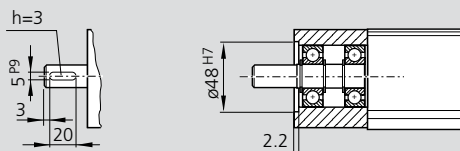
Diagrams to different scales



For further information and dimensions, see "Motors"

03.56.00

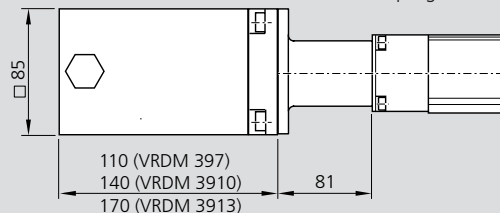
Type OF01



03.56.11

Type MF01

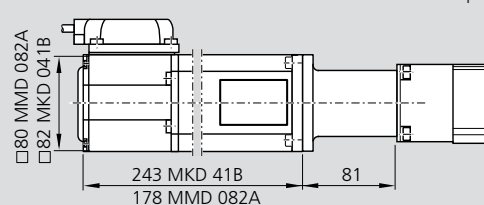
Motors VRDM .. with mount and coupling

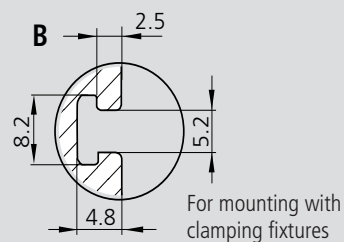
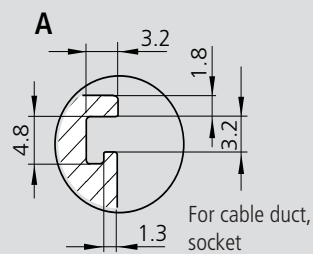
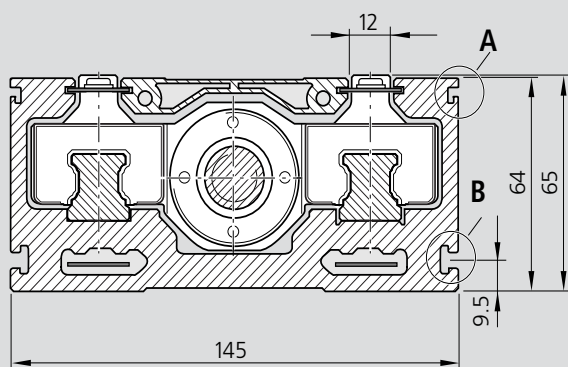
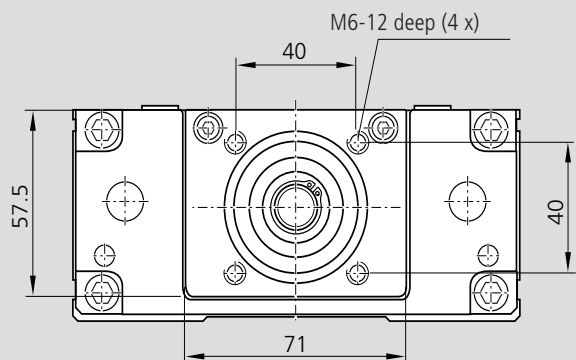


03.56.12

Type MF01

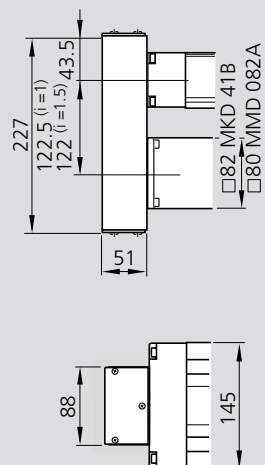
Motor MKD 41B and MMD 082A with mount and coupling





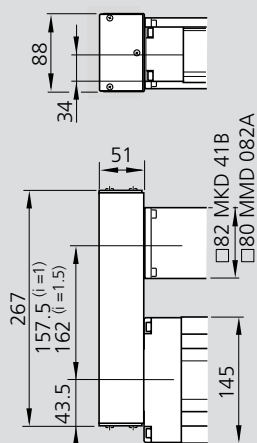
03.56.21

Type RV01, RV02
Motor MKD 41B and MMD 082A
with side drive with timing belt



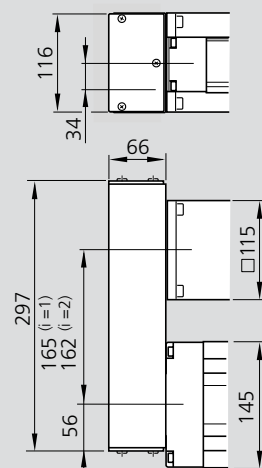
03.56.23

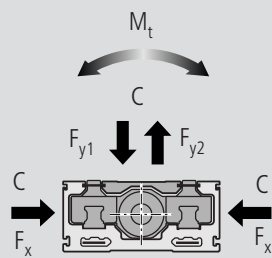
Type RV03, RV04
Motor MKD 41B and MMD 082A
with side drive with timing belt



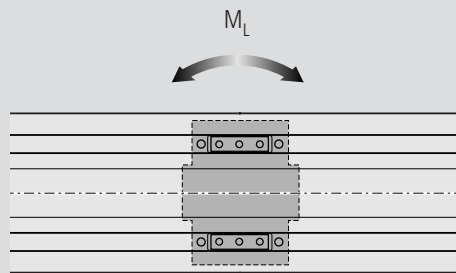
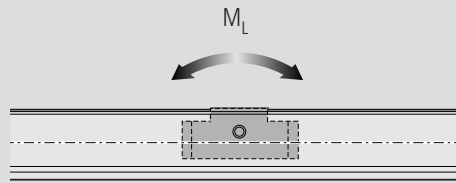
03.56.24

Type RV01, RV02, RV03, RV04
Motor MDD 71A
with side drive with timing belt

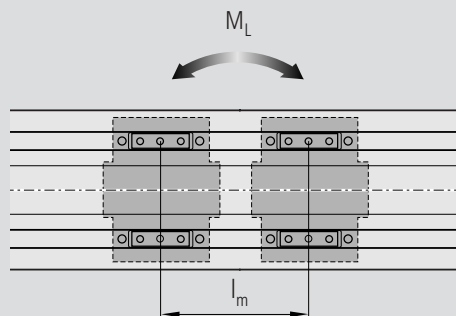




l_m = center-to-center distance between carriages



Compact Module with one carriage



Compact Module with two carriages

Notes on dynamic load capacities and moments

The dynamic load capacities and moments are based on 100 000 m travel.

However, a travel of just 50 000 m is often taken as a basis.

If this is the case, for comparison purposes:

Multiply value **C**, **M_t** and **M_L** from the STAR table by 1.26.