

4

GUIDEWAYS WITH INTEGRATED TOOTHED RACK MVZ (M/V/ML) FOR POSITIVE CONTROL OF THE NEEDLE ROLLER FLAT CAGE ASSEMBLY



A MATERIAL

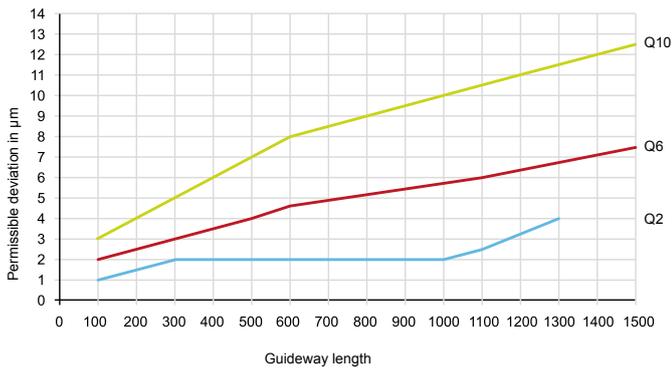
Hardened tool steel 1.2842 HRc 58 – 62.

B QUALITY

Raceways and locating faces are precision ground.

The guideways are available in 3 qualities (parallelism tolerance of the raceways on the reference sides of the guideway in relation to a defined length).

- Q10: normal quality for general machine construction
- Q6: precise quality for machine tool construction
- Q2: particularly precise quality for exceptionally demanding structures



SPECIAL EXECUTIONS
SEE CHAPTER 10 ALTERNATIVE VERSIONS

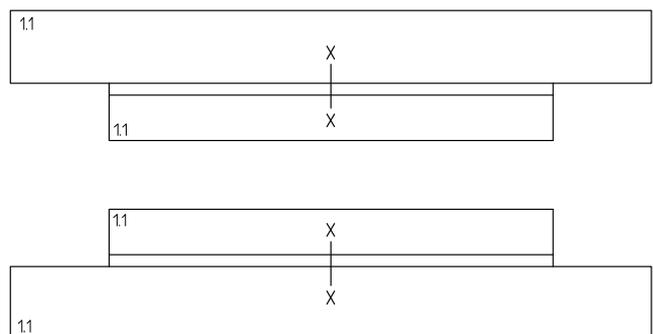
C MATCHING BY SETS

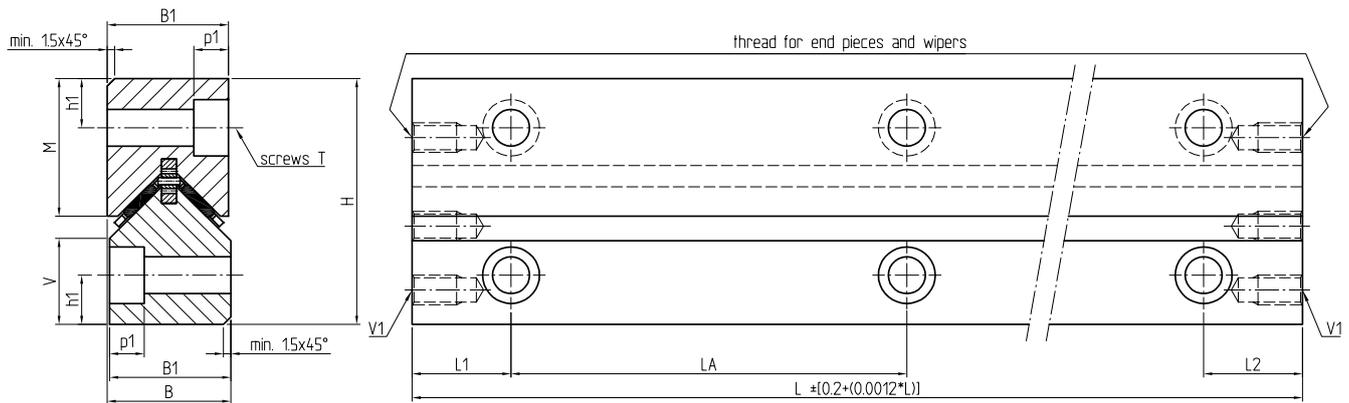
MVZ – guideways with integrated toothed rack are supplied in sets and consist of:

- M and/or ML guideways with integrated toothed rack.
- V guideways with integrated toothed rack.
- Flat cage assemblies: E-HW F or E-HW with integrated toothed wheel for positive control of the cage assemblies.
- The assembly dimensions have the same mounting dimensions as the M/ML and V guideways with flat cage assemblies.

IMPORTANT ASSEMBLY INFORMATION

- Set numbering must be respected.
- When the guideways are being positioned, it is important to take into account the “X-X” labelling which guarantees the correct positioning of the guideways and cage assemblies in the central stroke position.





DIMENSIONS IN MM

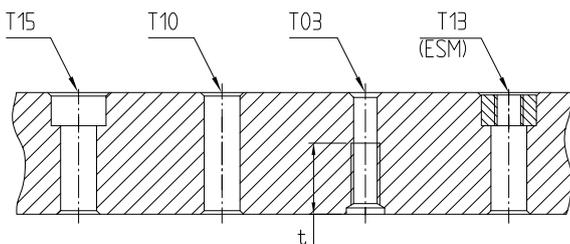
Type	Dimensions					Fixing holes						Threads	
	H 0/-0.2	B 0/-0.1	B1 0/-0.2	M	V	Screws T ****	h1	p1	t min.	LA***	L1** min.	L2** min.	V1
M3015	30	15	15	15.75	-	M4	5.5	4.6	15	40°	15	15	M3
V3015	30	15	15	-	10.5	M4	5.5	4.6	15	40°	15	15	M3
M4020	40	20	20	22.5	-	M6	7.5	6.9	20	80°	15	15	M5
V4020	40	20	20	-	13.5	M6	7.5	6.9	20	80°	15	15	M5
M5025	50	25	25	28	-	M6	10	6.9	15	80°	20	20	M6
V5025	50	25	25	-	17	M6	10	6.9	15	80°	20	20	M6
M6035	60	35	35	35	-	M8	11	9.1	20	100	20	20	M6
V6035	60	35	35	-	20	M8	11	9.1	20	100	20	20	M6
M7040	70	40	40	40	-	M10	13	11.1	25	100	20	20	M6
V7040	70	40	40	-	24	M10	13	11.1	25	100	20	20	M6
M8050	80	50	50	45	-	M12	14	13.1	30	100	20	20	M6
V8050	80	50	50	-	26	M12	14	13.1	30	100	20	20	M6

* M/V3015: length (L) 100mm, hole distances (LA) = 35mm
 M/V4020: length (L) 100mm, hole distances (LA) = 50mm
 M/V5025: length (L) 100mm, hole distances (LA) = 50mm

** L1 and L2 are the same size at both ends of the guideways and dependent on the guideway length without any specific requests being made

*** The tolerance of the hole distances (LA) is in proportion to the length tolerance

**** 4 hole types in the guideways for screw size T (according to the drawing below)



- T15: Sinkhole for screws ISO 4762
- T10: Clearance hole
- T03: Threaded hole, thread length "t"
- T13: Sinkhole as T15, but with insert nuts ESM

STANDARD LENGTHS (MM)

Dimensions		100	150	200	300	400	500	600	700	800	900	1000	Made-to-measure lengths up to L max.
M3015	V3015	o	o	o	o	o	o	o					600
M4020	V4020	o	o	o	o	o	o	o	o	o	o	o	1000
M5025	V5025	o		o	o	o	o	o	o	o	o	o	1300
M6035	V6035			o	o	o	o	o	o	o	o	o	1300
M7040	V7040			o	o	o	o	o	o	o	o	o	1300
M8050	V8050				o	o	o	o	o	o	o	o	1300

o = ex stock, non-hardened, non-ground
 Special lengths available on request