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M AND V GUIDEWAYS WITH NEEDLE OR CYLINDRICAL ROLLER FLAT CAGE AS- SEMBLY



A MATERIAL

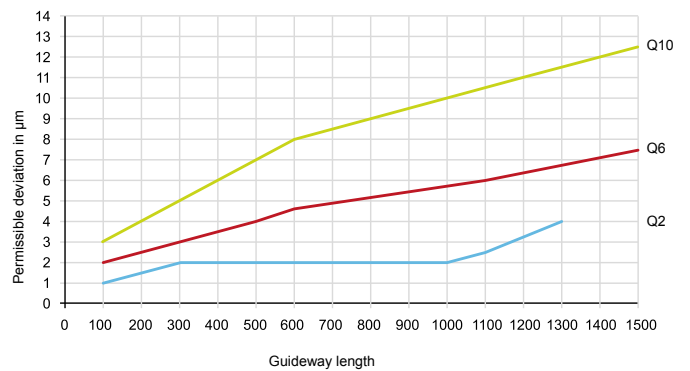
Hardened tool steel 1.2842 HRc 58 – 62.

B QUALITY

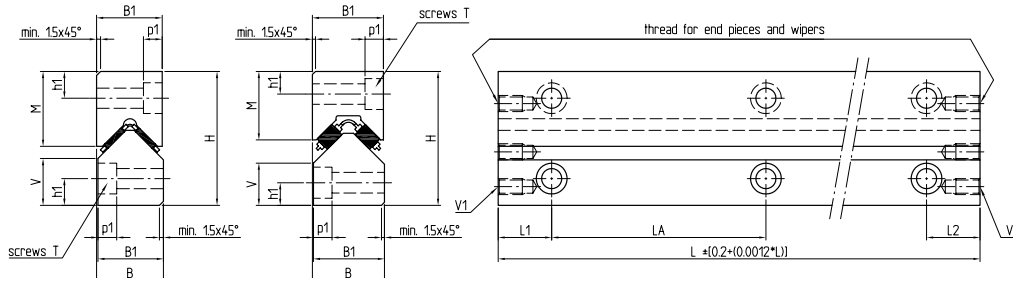
Raceways and locating faces are precision ground.

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



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
M3115	31	15	15	16	-	M4	6	5.2	15	50°	25	25	M3
V3115	31	15	15	-	11	M4	6	5.2	15	50°	25	25	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
M4422	44	22	22	23.1	-	M6	9	6.9	22	80°	15	15	M5
V4422	44	22	22	-	16.6	M6	9	6.9	22	80°	15	15	M5
M4525	45	25	25	22.75	-	M6	7.5	6.9	15	80°	20	20	M6
V4525	45	25	25	-	14	M6	7.5	6.9	15	80°	20	20	M6
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
M6535	65	35	35	33.25	-	M8	11	9.1	20	100	20	20	M6
V6535	65	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
M8550	85	50	50	42.25	-	M12	14	13.1	30	100	20	20	M6
V8550	85	50	50	-	26	M12	14	13.1	30	100	20	20	M6

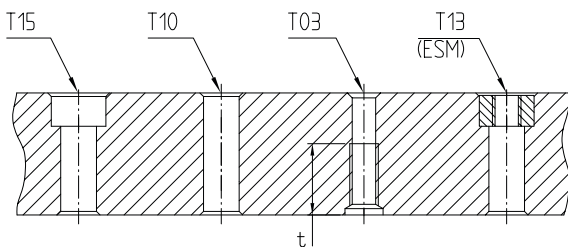
* M/V3015: length (L) 100mm, hole distances (LA) = 35mm
 M/V4422: length (L) 100mm, hole distances (LA) = 50mm
 M/V5025: length (L) 100mm, hole distances (LA) = 50mm

* M/V4020: length (L) 100mm, hole distances (LA) = 50mm
 M/V4525: 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	●	●	●	●	●	●	○					600
M3115	V3115	○	○	○	○	○	○	○					600
M4020	V4020	●	●	●	●	●	●	●	●	●	○	○	1000
M4422	V4422	○		○	○	○	○	○	○	○	○	○	1000
M4525	V4525	○		○	○	○	○	○	○	○	○	○	1000
M5025	V5025	●		●	●	●	●	●	●	●	○	○	1300
M6035	V6035			○	○	○	○	○	○	○	○	○	1300
M6535	V6535			○	○	○	○	○	○	○	○	○	1300
M7040	V7040			○	○	○	○	○	○	○	○	○	1300
M8050	V8050				○	○	○	○	○	○	○	○	1300
M8550	V8550				○	○	○	○	○	○	○	○	1300

● = ex stock, hardened, pre-ground
 ○ = ex stock, non-hardened, non-ground
 Special lengths available on request

CAGE ALLOCATION

Guideways	Rolling elements	Plastic	Aluminium	Steel	Brass	Brass (with damping)
M/V3015	Needle rollers			E-HW10 F	E-HW10 MS	
M/V3115	Needle rollers			E-HW10 F	E-HW10 MS	
M/V4020	Needle rollers	E-FFW2025	E-HW15	E-HW15 F	E-HW15 MS	E-HGW15
M/V4422	Needle rollers	E-FFW2025	E-HW15	E-HW15 F	E-HW15 MS	E-HGW15
M/V4525	Cylindrical rollers		E-HRW50			
M/V5025	Needle rollers	E-FFW2025	E-HW15 E-HW16	E-HW15 F	E-HW15 MS E-HW16 MS	E-HGW15
M/V6035	Needle rollers	E-FFW2535	E-HW20	E-HW20 F	E-HW20 MS	E-HGW20
M/V6535	Cylindrical rollers		E-HRW70			
M/V7040	Needle rollers	E-FFW3045	E-HW25	E-HW25 F	E-HW25 MS	E-HGW25
M/V8050	Needle rollers	E-FFW3555	E-HW30	E-HW30 F	E-HW30 MS	E-HGW30
M/V8550	Cylindrical rollers		E-HRW100			