



# Tolerances

## DURBAL-heavy-duty rod ends, series BRM, BRF, BRTM, BRTF, BEM, BEF

d1		$\Delta d_{1mp}$ tolerance limit		$V_{d1p}$	$V_{d1mp}$	$\Delta b_{1s}$ tolerance limit		$\Delta h_{s,h1s,h2s}$ tolerance limit	
over	incl.	upper	lower	max.	max.	upper	lower	upper	lower
	6	+0,012	0	0,012	0,009	0	- 0,12	+0,8	-1,2
6	10	+0,015	0	0,015	0,011	0	- 0,12	+0,8	-1,2
10	18	+0,018	0	0,018	0,014	0	- 0,12	+1,0	-1,7
18	30	+0,021	0	0,021	0,016	0	- 0,12	+1,4	-2,1
30	50	+0,025	0	0,025	0,019	0	- 0,12	+1,8	-2,7

## DURBAL-heavy-duty rod ends, series EM, EF, PM, PF

d1		$\Delta d_{1mp}$ tolerance limit		$V_{d1p}$	$V_{d1mp}$	$\Delta b_{1s}$ tolerance limit		$\Delta h_{s,h1s,h2s}$ tolerance limit	
over	incl.	upper	lower	max.	max.	upper	lower	upper	lower
	10	+0,002	-0,010	0,008	0,006	0	-0,12	+0,8	-1,2
10	18	+0,003	-0,011	0,008	0,006	0	-0,12	+0,8	-1,2
18	30	+0,003	-0,013	0,010	0,008	0	-0,12	+1,0	-1,7
30	50	+0,003	-0,015	0,012	0,009	0	-0,12	+1,4	-2,1
50	80	+0,004	-0,019	0,015	0,011	0	-0,15	+1,8	-2,7

## Dimension and tolerance symbols

- $d_1$  = nominal bore diameter of the inner ring or joint ball
- $\Delta d_{1mp}$  = mean bore diameter deviation in one plane, arithmetical mean of the largest and smallest bore diameter
- $V_{d1p}$  = bore diameter variation in one plane, difference between the largest and smallest bore diameter
- $V_{d1mp}$  = mean bore diameter variation, difference between the largest and smallest bore diameter of one inner ring or joint ball
- $b_1$  = inner ring or joint ball width
- $\Delta b_{1s}$  = single inner ring or joint ball width deviation
- $h, h_1, h_2$  = system length from inner ring or ball bore center to shank end
- $\Delta h_s, \Delta h_{1s}, \Delta h_{2s}$  = system length variation of a single rod end