

Precision Gear Racks Made from Steel, Helical Toothed, Teeth Hardened and Ground

Material: C45K, Material-No. 1.0503, made from specially treated bright steel with approx. 650 N/mm² tensile strength. Teeth induction hardened to 50 to 55 HRC, after hardening ground all around. As only the teeth are hardened subsequent drilling and pinning is easily possible. Tooth quality 6h25.

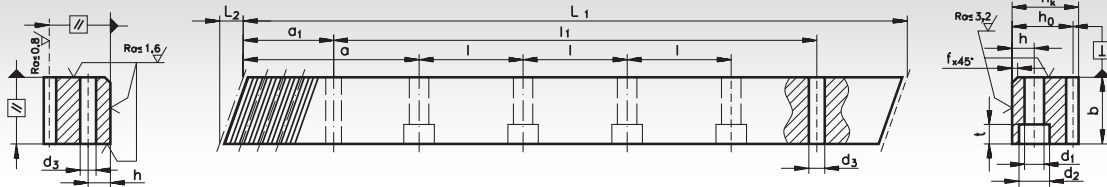
Helical tooth system, right hand 19° 31' 42".

For continuous linking.

Matching helical-toothed spur gears page 256.



Ordering Details: e.g.: Product No. 255 603 01, Gear Rack, Helical Toothed, Hardened, Teeth Ground, Module 5.0, 500 mm



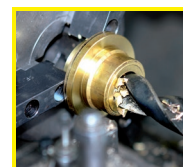
Module 5.0

Product No. with Bores	L ₁	L ₂	Number of teeth	b	h _k	h ₀	f	a	l	No. of h bores	d ₁	d ₂	t	a ₁	l ₁	d ₃	GT _f /300 ¹⁾	Fu*	Weight	
	mm	mm		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	N	kg	
255 603 01	500,00	17,4	30	49	39	34	3	62,50	125	4	12	14	20	13	37,5	425,0	11,7	0,025	32000	6,50
255 605 01	1000,00	17,4	60	49	39	34	3	62,50	125	8	12	14	20	13	37,5	925,0	11,7	0,025	32000	13,00
without Bores																				
255 603 00	500,00	17,4	30	49	39	34	3										0,025	32000	6,50	
255 605 00	1000,00	17,4	60	49	39	34	3										0,025	32000	13,00	
Counterpart for mounting																				
255 600 00	200,00	17,4	12	50	39	34											0,025	32000	3,00	

¹⁾ GT_f / 300 = total pitch error, i.e. the max. permissible deviation (per 300 mm) of the measured length of the rack compared to the theoretical length L₃₀₀, with L₃₀₀ = (m / cos β) • π • z₃₀₀.

* Tangential force at tooth, calculated for a gear with 20 teeth. With a smaller number of teeth, the tangential force has to be reduced by 10%.

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Spur Gears
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**Reworking within
24h-service possible.
Custom made parts
on request.**