

## Gear Racks Made from Steel, Helical Toothed, Tempered, Teeth Milled

**Material:** high-quality, specially treated bright steel with approx. 900 N/mm<sup>2</sup> tensile strength.

Tooth quality 8e27.

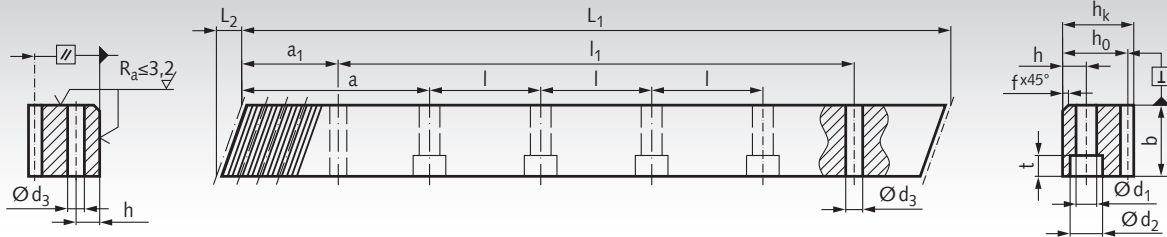
Helical tooth system, right hand 19° 31' 42".

For continuous linking.

Matching left hand-toothed counterparts, to simplify the mounting, are available at cost.

Matching helical-toothed spur gears page 256.

Ordering Details: e.g.: Product No. 255 603 11, Gear Rack, Helical Toothed, Tempered, Module 5, 500 mm



### Module 5

Product No. with Bores	L <sub>1</sub> mm	L <sub>2</sub> mm	Number of teeth	b mm	h <sub>k</sub> mm	h <sub>0</sub> mm	f mm	a mm	l mm	No. of h bores	d <sub>1</sub> mm	d <sub>2</sub> mm	t mm	a <sub>1</sub> mm	l <sub>1</sub> mm	d <sub>3</sub> mm	GT <sub>f</sub> /300 <sup>1)</sup> mm	Fu* N	Weight kg	
255 603 11	500,00	17,4	30	50	39	34	3	62,50	125	4	12	14	20	13	37,5	425,0	11,7	0,050	15000	6,5
255 605 11	1000,00	17,4	60	50	39	34	3	62,50	125	8	12	14	20	13	37,5	925,0	11,7	0,050	15000	13,0
255 609 11	2000,00	17,4	120	50	39	34	3	62,50	125	16	12	14	20	13	37,5	1925,0	11,7	0,050	15000	26,0
<b>without Bores</b>																				
255 603 10	500,00	17,4	30	50	39	34	3											0,050	15000	6,5
255 605 10	1000,00	17,4	60	50	39	34	3											0,050	15000	13,0
255 609 10	2000,00	17,4	120	50	39	34	3											0,050	15000	26,0
<b>Counterpart for mounting</b>																				
255 600 00	200,00	17,4	12	50	39	34														3,0

<sup>1)</sup> GT<sub>f</sub> /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 L<sub>300</sub>, with L<sub>300</sub> = (m / cos β) • π • z<sub>300</sub>.

\* 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%.

**Helical Tooth  
Spur Gears  
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