

## Overview Spur Gear Elements with straight tooth system



**Spur gear shafts:** Steel,  
straight tooth system

Module	Length in mm	Page
1,0/1,5/2,0	200-250	247



**Internal gears:** Brass,  
straight tooth system  
**Internal gears:** Steel,  
straight tooth system

Module	Length in mm	Page
0,5/0,7/1,0	4/6/8	249
1,0/1,5/2,0	10/15/16	249



**Ratchet wheels and braces:**  
Steel,  
straight tooth system

Module	Length in mm	Page
3,14	4/9	250
4,71	6/9	250

## Overview Spur Gears with Helical Teeth



**Spur gears:** Brass, helical teeth,  
right hand

Module	Length in mm	Page
0,3/0,5	5/10	251



**Spur gears:** Steel, helical teeth,  
right hand and left hand

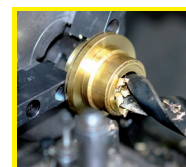
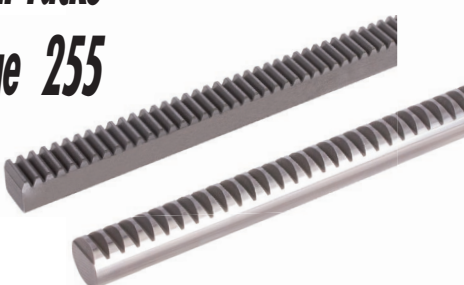
Module	Length in mm	Page
1,0	10	251



**Spur gears:** Steel, helical teeth,  
left hand, hardened  
and ground

Module	Length in mm	Page
2,0/3,0	28	252
4,0/5,0	40/50	253

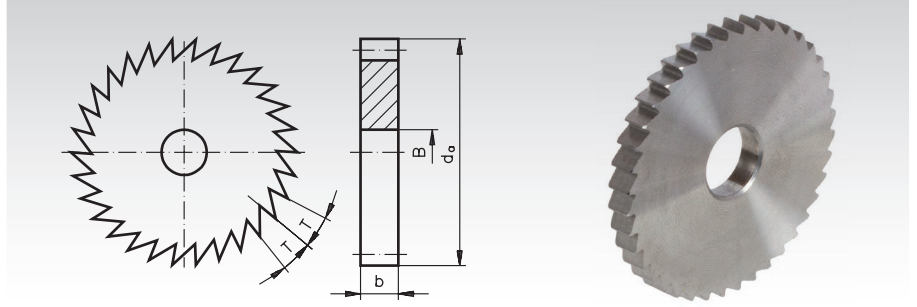
**Gear racks**  
**Page 255**



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

## Ratchet Wheels Made from Steel

**Material:** C45Pb up to 80 mm diameter, above C45. Unhardened.  
Without Hub. Tip angle 60°.



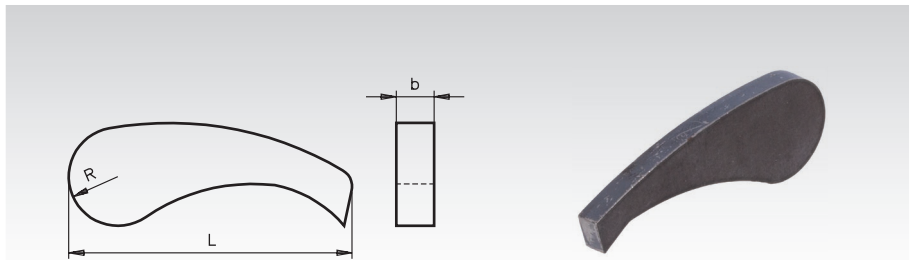
**Ordering Details:**

e.g.: Product No. 223 720 00, Ratchet Wheel, pitch 3.14, 20 Teeth

Product No.	Number of teeth	Tooth Width b mm	Pitch mm	Tip Ø d <sub>a</sub> mm	B mm	Weight g
223 720 00	20	4	3,14	20	6	7
223 730 00	30	9	3,14	30	6	45
223 740 00	40	4	3,14	40	10	33
223 760 00	60	4	3,14	60	15	78
223 780 00	80	4	3,14	80	15	145
227 720 00	20	6	4,71	30	8	55
227 740 00	40	6	4,71	60	12	116
227 760 00	60	6	4,71	90	15	274
227 780 00	80	6	4,71	120	20	494
227 710 00	100	6	4,71	150	20	781
227 712 00	120	9	4,71	180	20	1723

## Ratchet Braces Made from Steel

**Material:** Steel St37, unhardened, without bore.  
Tip angle 60°.



**Ordering Details:**

e.g.: Product No. 223 701 00, Ratchet Brace, Steel

Product No.	Length L approx. in mm	Radius R approx. in mm	Width b approx. in mm	Weight g
223 701 00	49,5	9	4	20
227 701 00	49,5	9	6	28
227 702 00	75	13	9	127



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