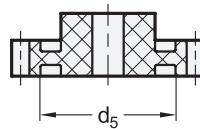
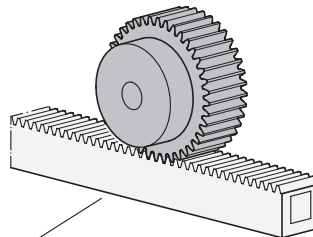
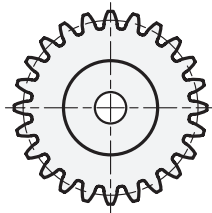


z ≥ 31



Application example



Gear rack EN 7822



Dimensions in: millimeters - inches

Module	z Tooth count	GR	VDB	b ₁ Tooth width	b ₂	d ₁	d ₂ Pitch circle Ø	d ₃	d ₄ Pre-bored hole	d ₅	Max. torque in Nm
2	12	12	12	20 0.79	35 1.38	28 1.10	24 0.94	18 0.71	8 0.31	-	15.5
2	13	-	-	20 0.79	35 1.38	30 1.18	26 1.02	18 0.71	8 0.31	-	16.8
2	14	-	-	20 0.79	35 1.38	32 1.26	28 1.10	20 0.79	8 0.31	-	18.1
2	15	15	15	20 0.79	35 1.38	34 1.34	30 1.18	22 0.87	8 0.31	-	19.4
2	16	-	-	20 0.79	35 1.38	36 1.42	32 1.26	25 0.98	8 0.31	-	20.7
2	17	-	-	20 0.79	35 1.38	38 1.50	34 1.34	25 0.98	8 0.31	-	21.9
2	18	-	-	20 0.79	35 1.38	40 1.57	36 1.42	30 1.18	10 0.39	-	23.2
2	19	-	-	20 0.79	35 1.38	42 1.65	38 1.50	30 1.18	10 0.39	-	24.5
2	20	20	20	20 0.79	35 1.38	44 1.73	40 1.57	30 1.18	10 0.39	-	25.8
2	21	-	-	20 0.79	35 1.38	46 1.81	42 1.65	30 1.18	10 0.39	-	27.1
2	22	-	-	20 0.79	35 1.38	48 1.89	44 1.73	30 1.18	10 0.39	-	28.4
2	23	-	-	20 0.79	35 1.38	50 1.97	46 1.81	35 1.38	10 0.39	-	29.7
2	24	24	24	20 0.79	35 1.38	52 2.05	48 1.89	35 1.38	10 0.39	-	31
2	25	-	-	20 0.79	35 1.38	54 2.13	50 1.97	35 1.38	10 0.39	-	32.3
2	26	-	-	20 0.79	35 1.38	56 2.20	52 2.05	40 1.57	14 0.55	-	33.6
2	27	-	-	20 0.79	35 1.38	58 2.28	54 2.13	40 1.57	14 0.55	-	34.9
2	28	-	-	20 0.79	35 1.38	60 2.36	56 2.20	40 1.57	14 0.55	-	36.1
2	29	-	-	20 0.79	35 1.38	62 2.44	58 2.28	40 1.57	14 0.55	-	37.4
2	30	30	30	20 0.79	35 1.38	64 2.52	60 2.36	40 1.57	14 0.55	-	38.7
2	31	-	-	20 0.79	35 1.38	66 2.60	62 2.44	40 1.57	14 0.55	48 1.89	40
2	32	-	-	20 0.79	35 1.38	68 2.68	64 2.52	45 1.77	16 0.63	51 2.01	41.3

Dimensions in: millimeters - inches

Module	z Tooth count		b ₁ Tooth width	b ₂	d ₁	d ₂ Pitch circle Ø	d ₃	d ₄ Pre-bored hole	d ₅	Max. torque in Nm
	GR	VDB								
2	33	-	20 0.79	35 1.38	70 2.76	66 2.60	45 1.77	16 0.63	51 2.01	42.6
2	34	-	20 0.79	35 1.38	72 2.83	68 2.68	45 1.77	16 0.63	51 2.01	43.9
2	35	-	20 0.79	35 1.38	74 2.91	70 2.76	45 1.77	16 0.63	51 2.01	45.2
2	36	36	20 0.79	35 1.38	76 2.99	72 2.83	50 1.97	16 0.63	59 2.32	46.5
2	37	-	20 0.79	35 1.38	78 3.07	74 2.91	50 1.97	16 0.63	59 2.32	47.8
2	38	-	20 0.79	35 1.38	80 3.15	76 2.99	50 1.97	16 0.63	59 2.32	49.1
2	39	-	20 0.79	35 1.38	82 3.23	78 3.07	50 1.97	16 0.63	59 2.32	50.4
2	40	40	20 0.79	35 1.38	84 3.31	80 3.15	55 2.17	16 0.63	66 2.60	51.6
2	42	-	20 0.79	35 1.38	88 3.46	84 3.31	55 2.17	16 0.63	66 2.60	54.2
2	44	-	20 0.79	35 1.38	92 3.62	88 3.46	60 2.36	16 0.63	68 2.68	56.8
2	45	-	20 0.79	35 1.38	94 3.70	90 3.54	60 2.36	16 0.63	68 2.68	58.1
2	46	-	20 0.79	35 1.38	96 3.78	92 3.62	60 2.36	16 0.63	75 2.95	59.4
2	48	48	20 0.79	35 1.38	100 3.94	96 3.78	60 2.36	16 0.63	75 2.95	62
2	50	-	20 0.79	35 1.38	104 4.09	100 3.94	60 2.36	20 0.79	84 3.31	64.6
2	52	-	20 0.79	35 1.38	108 4.25	104 4.09	60 2.36	20 0.79	90 3.54	67.1
2	54	-	20 0.79	35 1.38	112 4.41	108 4.25	60 2.36	20 0.79	90 3.54	69.7
2	57	-	20 0.79	35 1.38	118 4.65	114 4.49	60 2.36	20 0.79	90 3.54	73.6
2	60	-	20 0.79	35 1.38	124 4.88	120 4.72	60 2.36	20 0.79	101 3.98	77.5
2	62	-	20 0.79	35 1.38	128 5.04	124 4.88	60 2.36	20 0.79	101 3.98	80
2	64	-	20 0.79	35 1.38	132 5.20	128 5.04	60 2.36	20 0.79	101 3.98	82.6
2	65	-	20 0.79	35 1.38	134 5.28	130 5.12	60 2.36	20 0.79	101 3.98	83.9
2	66	-	20 0.79	35 1.38	136 5.35	132 5.20	60 2.36	20 0.79	101 3.98	85.2
2	68	-	20 0.79	35 1.38	140 5.51	136 5.35	60 2.36	20 0.79	101 3.98	87.8
2	70	-	20 0.79	35 1.38	144 5.67	140 5.51	60 2.36	20 0.79	117 4.61	90.4
2	72	-	20 0.79	35 1.38	148 5.83	144 5.67	60 2.36	20 0.79	117 4.61	93
2	74	-	20 0.79	35 1.38	152 5.98	148 5.83	60 2.36	20 0.79	117 4.61	95.5
2	75	-	20 0.79	35 1.38	154 6.06	150 5.91	60 2.36	20 0.79	117 4.61	96.8
2	76	-	20 0.79	35 1.38	156 6.14	152 5.98	60 2.36	20 0.79	117 4.61	98.1
2	78	-	20 0.79	35 1.38	160 6.30	156 6.14	60 2.36	20 0.79	117 4.61	100.7
2	80	-	20 0.79	35 1.38	164 6.46	160 6.30	60 2.36	20 0.79	117 4.61	103.3
2	90	-	20 0.79	35 1.38	184 7.24	180 7.09	60 2.36	20 0.79	147 5.79	116.2
2	100	-	20 0.79	35 1.38	204 8.03	200 7.87	60 2.36	25 0.98	183 7.20	129.1

3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
3.10





Specification

- Plastic Technopolymer (Polyamide PA)
 - Glass fiber reinforced
 - Temperature resistant up to 248 °F (120 °C)
 - Gray ● GR
- Plastic Technopolymer (Polyamide PA)
 - Glass fiber reinforced
 - Temperature resistant up to 248 °F (120 °C)
 - FDA compliant plastic granulate
 - Blue, RAL 5005, matte finish
 - Visually detectable ● VDB
- ISO Fundamental Tolerances → page QVX
- Plastic Characteristics → page QVX
- RoHS compliant

On request

- With keyway
- With bore H9

Information

Spur gears EN 7802 of plastic reduce both weight and noise while offering high corrosion resistance. Spur gears of polyamide allow the transmission of significantly higher torques compared with gears made of other plastics. This makes them especially suited for applications with high torques at low speeds.

The spur gears have involute toothing with a pressure angle of 20°. More details about the design as well as shaping the hub or machining a keyway can be found in the technical information.

see also...

- General Notes for Gears → page XYZ
- Technical Instructions for Gears → page XYZ
- Product Family Standard Parts made of Detectable Plastics → page XYZ
- Gear Racks EN 7822 → page QVX

How to order EN 7802-2-21-GR	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">1</td> <td>Module</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Tooth count z</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Color</td> </tr> </table>	1	Module	2	Tooth count z	3	Color
1	Module						
2	Tooth count z						
3	Color						