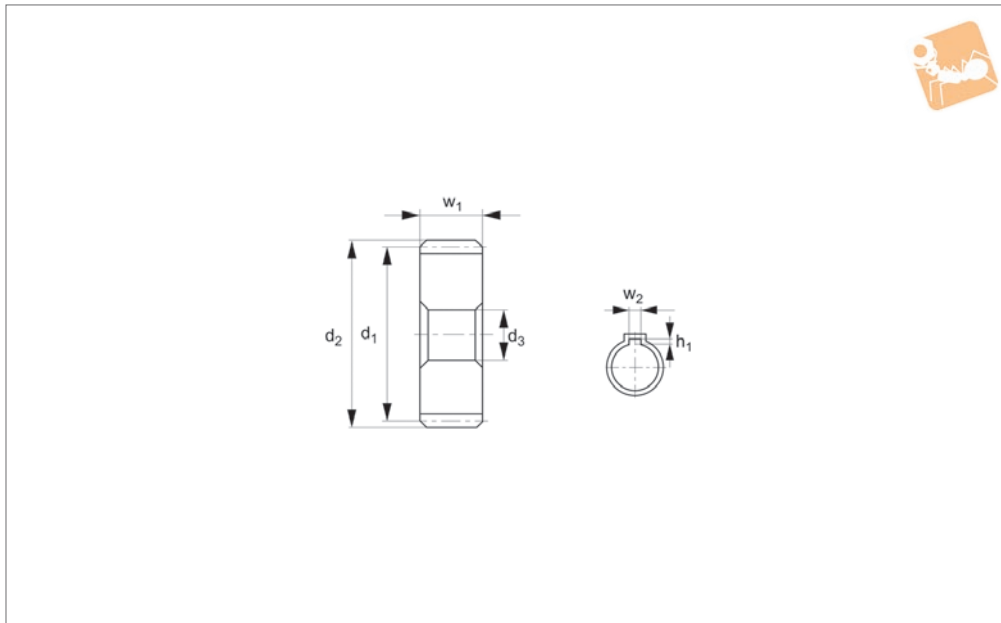




Spur Gears - Module 1.5

carbon steel - 15-100 teeth



R5194

STANDARD SPUR GEARS

Material

Carbon steel (ISO C45).
Accuracy to JIS B 1702-1 (ISO) class 8-9.

Technical Notes

20° pressure angle, full depth tooth.
Amount of backlash when assembling gears = 0,06 - 0,15mm

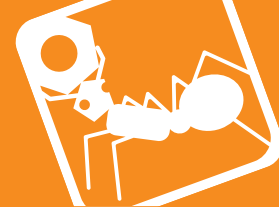
Tips

For module 1.5 steel gears with 60-100

teeth see R5195 (hubless) & R5204 (with hub),
for gears with 8-10 see teeth R5198 & R5199, for gears with 12-14 teeth see R5200, for gears with 15-100 teeth alternative see R5201 and R5204 (reduced weight version).
Max. allowable torque (Nm) is based on standard operating conditions (see technical pages) with a safety factor of 1.2. For

non standard applications apply a suitable safety factor depending on frequency of use, type of working etc.

Order No.	Module	No. of teeth z	Pitch dia. d ₁	d ₂	w ₁	d ₃ tol. H7	Keyway (w ₂ x h ₁)	Torque Nm max.	Weight g
R5194.150-015-12-08	m 1.5	15	22.5	25.5	12	8	-	13.08	32.7
R5194.150-015-18-08	m 1.5	15	22.5	25.5	18	8	-	19.10	49.1
R5194.150-016-12-08	m 1.5	16	24.0	27.0	12	8	-	14.13	37.9
R5194.150-016-16-08	m 1.5	16	24.0	27.0	16	8	-	18.91	50.5
R5194.150-016-18-08	m 1.5	16	24.0	27.0	18	8	-	21.20	56.8
R5194.150-018-12-10	m 1.5	18	27.0	30.0	12	10	-	17.00	46.5
R5194.150-018-16-10	m 1.5	18	27.0	30.0	16	10	-	22.73	62.1
R5194.150-018-18-10	m 1.5	18	27.0	30.0	18	10	-	25.59	69.8
R5194.150-019-12-10	m 1.5	19	28.5	31.5	12	10	-	18.53	52.7
R5194.150-019-18-10	m 1.5	19	28.5	31.5	18	10	-	27.79	79.0
R5194.150-020-10-10	m 1.5	20	30.0	33.0	10	10	-	16.62	49.3
R5194.150-020-12-10	m 1.5	20	30.0	33.0	12	10	-	19.96	59.2
R5194.150-020-12-12	m 1.5	20	30.0	33.0	12	12	4x1,8	19.96	55.3
R5194.150-020-12-15	m 1.5	20	30.0	33.0	12	15	5x2,3	19.96	48.9
R5194.150-020-16-10	m 1.5	20	30.0	33.0	16	10	-	26.64	78.9
R5194.150-020-18-10	m 1.5	20	30.0	33.0	18	10	-	29.99	88.8
R5194.150-020-18-12	m 1.5	20	30.0	33.0	18	12	4x1,8	29.99	82.9
R5194.150-020-18-15	m 1.5	20	30.0	33.0	18	15	5x2,3	29.99	73.3
R5194.150-021-12-10	m 1.5	21	31.5	34.5	12	10	-	21.49	66.0
R5194.150-021-18-10	m 1.5	21	31.5	34.5	18	10	-	32.28	99.0
R5194.150-022-12-10	m 1.5	22	33.0	36.0	12	10	-	23.01	73.2
R5194.150-022-18-10	m 1.5	22	33.0	36.0	18	10	-	34.57	109.8
R5194.150-023-12-10	m 1.5	23	34.5	37.5	12	10	-	24.54	80.7
R5194.150-023-18-10	m 1.5	23	34.5	37.5	18	10	-	36.86	121.0
R5194.150-024-10-10	m 1.5	24	36.0	39.0	10	10	-	21.68	73.7
R5194.150-024-12-10	m 1.5	24	36.0	39.0	12	10	-	26.07	88.5



Order No.	Module	No. of teeth z	Pitch dia. d_1	d_2	w_1	d_3 tol. H7	Keyway ($w_2 \times h_1$)	Torque Nm max.	Weight g
R5194.150-024-12-12	m 1.5	24	36.0	39.0	12	12	4×1,8	26.07	84.6
R5194.150-024-12-15	m 1.5	24	36.0	39.0	12	15	5×2,3	26.07	78.2
R5194.150-024-16-10	m 1.5	24	36.0	39.0	16	10	-	34.76	118.0
R5194.150-024-18-12	m 1.5	24	36.0	39.0	18	12	-	39.15	127.8
R5194.150-024-18-15	m 1.5	24	36.0	39.0	18	15	5×2,3	39.15	117.2
R5194.150-024-18-16	m 1.5	24	36.0	39.0	18	16	5×2,3	39.15	113.8
R5194.150-025-10-10	m 1.5	25	37.5	40.5	10	10	-	23.01	80.5
R5194.150-025-12-10	m 1.5	25	37.5	40.5	12	10	-	27.60	96.6
R5194.150-025-12-12	m 1.5	25	37.5	40.5	12	12	4×1,8	27.60	92.7
R5194.150-025-12-15	m 1.5	25	37.5	40.5	12	15	5×2,3	27.60	86.3
R5194.150-025-16-12	m 1.5	25	37.5	40.5	16	12	-	36.86	124.5
R5194.150-025-18-12	m 1.5	25	37.5	40.5	18	12	-	36.86	140.1
R5194.150-025-18-15	m 1.5	25	37.5	40.5	18	15	5×2,3	36.86	129.5
R5194.150-025-18-16	m 1.5	25	37.5	40.5	18	16	5×2,3	36.86	126.0
R5194.150-026-12-10	m 1.5	26	39.0	42.0	12	10	-	29.22	105.1
R5194.150-026-18-12	m 1.5	26	39.0	42.0	18	12	-	43.83	152.8
R5194.150-027-12-10	m 1.5	27	40.5	43.5	12	10	-	30.75	114.0
R5194.150-027-18-12	m 1.5	27	40.5	43.5	18	12	-	46.13	166.0
R5194.150-028-10-12	m 1.5	28	42.0	45.0	10	12	-	26.93	99.9
R5194.150-028-12-10	m 1.5	28	42.0	45.0	12	10	-	32.37	123.1
R5194.150-028-12-12	m 1.5	28	42.0	45.0	12	12	4×1,8	32.37	119.2
R5194.150-028-12-15	m 1.5	28	42.0	45.0	12	15	5×2,3	32.37	112.8
R5194.150-028-16-12	m 1.5	28	42.0	45.0	16	12	-	43.16	159.8
R5194.150-028-18-12	m 1.5	28	42.0	45.0	18	12	-	48.51	179.8
R5194.150-028-18-15	m 1.5	28	42.0	45.0	18	15	5×2,3	48.51	169.2
R5194.150-028-18-20	m 1.5	28	42.0	45.0	18	20	6×2,8	48.51	149.0
R5194.150-029-12-10	m 1.5	29	43.5	46.5	12	10	-	33.90	132.6
R5194.150-029-18-12	m 1.5	29	43.5	46.5	18	12	-	50.90	194.0
R5194.150-030-10-12	m 1.5	30	45.0	48.0	10	12	-	29.60	116.0
R5194.150-030-12-10	m 1.5	30	45.0	48.0	12	10	-	35.52	142.4
R5194.150-030-12-12	m 1.5	30	45.0	48.0	12	12	4×1,8	35.52	138.5
R5194.150-030-12-15	m 1.5	30	45.0	48.0	12	15	5×2,3	35.52	132.1
R5194.150-030-16-14	m 1.5	30	45.0	48.0	16	14	-	47.37	180.4
R5194.150-030-18-14	m 1.5	30	45.0	48.0	18	14	-	53.29	203.0
R5194.150-030-18-15	m 1.5	30	45.0	48.0	18	15	5×2,3	53.29	198.1
R5194.150-030-18-18	m 1.5	30	45.0	48.0	18	18	6×2,8	53.29	186.4
R5194.150-030-18-20	m 1.5	30	45.0	48.0	18	20	6×2,8	53.29	178.0
R5194.150-032-10-10	m 1.5	32	48.0	51.0	10	10	-	32.28	135.9
R5194.150-032-10-12	m 1.5	32	48.0	51.0	10	12	4×1,8	32.28	132.6
R5194.150-032-10-15	m 1.5	32	48.0	51.0	10	15	5×2,3	32.28	127.3
R5194.150-032-16-14	m 1.5	32	48.0	51.0	16	14	-	51.66	207.9
R5194.150-032-16-15	m 1.5	32	48.0	51.0	16	15	5×2,3	51.66	203.6
R5194.150-032-16-18	m 1.5	32	48.0	51.0	16	18	6×2,8	51.66	193.2
R5194.150-032-16-20	m 1.5	32	48.0	51.0	16	20	6×2,8	51.66	185.7
R5194.150-034-10-12	m 1.5	34	51.0	54.0	10	12	-	34.95	151.5
R5194.150-034-16-14	m 1.5	34	51.0	54.0	16	14	-	55.96	237.2
R5194.150-035-10-12	m 1.5	35	52.5	55.5	10	12	-	36.38	161.1
R5194.150-035-16-14	m 1.5	35	52.5	55.5	16	14	-	58.16	252.6
R5194.150-036-10-12	m 1.5	36	54.0	57.0	10	12	-	37.72	170.9
R5194.150-036-10-15	m 1.5	36	54.0	57.0	10	15	5×2,3	37.72	165.0
R5194.150-036-10-16	m 1.5	36	54.0	57.0	10	16	5×2,3	37.72	163.1
R5194.150-036-16-14	m 1.5	36	54.0	57.0	16	14	-	60.35	268.3
R5194.150-036-16-15	m 1.5	36	54.0	57.0	16	15	5×2,3	60.35	264.0
R5194.150-036-16-18	m 1.5	36	54.0	57.0	16	18	6×2,8	60.35	253.6
R5194.150-036-16-20	m 1.5	36	54.0	57.0	16	20	6×2,8	60.35	246.1
R5194.150-038-10-12	m 1.5	38	57.0	60.0	10	12	-	40.49	191.4
R5194.150-038-16-14	m 1.5	38	57.0	60.0	16	14	-	64.75	301.2
R5194.150-040-10-12	m 1.5	40	60.0	63.0	10	12	-	43.16	213.1
R5194.150-040-10-15	m 1.5	40	60.0	63.0	10	15	5×2,3	43.16	207.2
R5194.150-040-10-16	m 1.5	40	60.0	63.0	10	16	5×2,3	43.16	205.3
R5194.150-040-10-18	m 1.5	40	60.0	63.0	10	18	6×2,8	43.16	200.7
R5194.150-040-16-14	m 1.5	40	60.0	63.0	16	14	-	69.14	335.8
R5194.150-040-16-15	m 1.5	40	60.0	63.0	16	15	5×2,3	69.14	331.5
R5194.150-040-16-18	m 1.5	40	60.0	63.0	16	18	6×2,8	69.14	321.1
R5194.150-040-16-20	m 1.5	40	60.0	63.0	16	20	6×2,8	69.14	313.6
R5194.150-042-10-12	m 1.5	42	63.0	66.0	10	12	-	45.93	235.8
R5194.150-042-16-12	m 1.5	42	63.0	66.0	16	12	-	73.63	377.3



Spur Gears - Module 1.5

carbon steel - 15-100 teeth



Order No.	Module	No. of teeth z	Pitch dia. d_1	d_2	w_1	d_3 tol. H7	Keyway ($w_2 \times h_1$)	Torque Nm max.	Weight g
R5194.150-044-10-12	m 1.5	44	66.0	69.0	10	12	-	48.70	259.7
R5194.150-044-16-12	m 1.5	44	66.0	69.0	16	12	-	78.31	415.5
R5194.150-045-10-12	m 1.5	45	67.5	70.5	10	12	-	50.14	272.0
R5194.150-045-16-12	m 1.5	45	67.5	70.5	16	12	-	80.22	435.3
R5194.150-046-10-12	m 1.5	46	69.0	72.0	10	12	-	51.47	284.7
R5194.150-046-16-12	m 1.5	46	69.0	72.0	16	12	-	82.13	455.4
R5194.150-048-10-14	m 1.5	48	72.0	75.0	10	14	-	53.48	307.5
R5194.150-048-10-15	m 1.5	48	72.0	75.0	10	15	5×2,3	53.48	304.8
R5194.150-048-10-16	m 1.5	48	72.0	75.0	10	16	5×2,3	53.48	302.9
R5194.150-048-10-18	m 1.5	48	72.0	75.0	10	18	6×2,8	53.48	298.3
R5194.150-048-16-16	m 1.5	48	72.0	75.0	16	16	-	86.90	486.1
R5194.150-048-16-20	m 1.5	48	72.0	75.0	16	20	6×2,8	86.90	469.8
R5194.150-050-10-14	m 1.5	50	75.0	78.0	10	14	-	56.34	334.7
R5194.150-050-10-15	m 1.5	50	75.0	78.0	10	15	5×2,3	56.34	332.0
R5194.150-050-10-18	m 1.5	50	75.0	78.0	10	18	6×2,8	56.34	325.5
R5194.150-050-10-20	m 1.5	50	75.0	78.0	10	20	6×2,8	56.34	320.8
R5194.150-050-16-16	m 1.5	50	75.0	78.0	16	16	-	84.99	529.6
R5194.150-050-16-20	m 1.5	50	75.0	78.0	16	20	6×2,8	84.99	513.3
R5194.150-050-16-25	m 1.5	50	75.0	78.0	16	25	8×3,3	84.99	489.9
R5194.150-052-10-14	m 1.5	52	78.0	81.0	10	14	-	59.21	363.0
R5194.150-052-16-16	m 1.5	52	78.0	81.0	16	16	-	96.45	574.9
R5194.150-054-10-14	m 1.5	54	81.0	84.0	10	14	-	62.07	392.4
R5194.150-054-16-16	m 1.5	54	81.0	84.0	16	16	-	100.27	622.0
R5194.150-055-10-14	m 1.5	55	82.5	85.5	10	14	-	63.98	407.5
R5194.150-055-16-16	m 1.5	55	82.5	85.5	16	16	-	103.14	646.2
R5194.150-056-10-14	m 1.5	56	84.0	87.0	10	14	-	64.94	422.9
R5194.150-056-10-15	m 1.5	56	84.0	87.0	10	15	5×2,3	64.94	420.3
R5194.150-056-10-18	m 1.5	56	84.0	87.0	10	18	6×2,8	64.94	413.7
R5194.150-056-16-16	m 1.5	56	84.0	87.0	16	16	-	105.05	670.8
R5194.150-056-16-20	m 1.5	56	84.0	87.0	16	20	6×2,8	105.05	654.5
R5194.150-058-10-14	m 1.5	58	87.0	90.0	10	14	-	67.80	454.6
R5194.150-058-16-16	m 1.5	58	87.0	90.0	16	16	-	109.82	721.4
R5194.150-060-10-14	m 1.5	60	90.0	93.0	10	14	-	70.67	487.3
R5194.150-060-10-15	m 1.5	60	90.0	93.0	10	15	5×2,3	70.67	484.6
R5194.150-060-10-18	m 1.5	60	90.0	93.0	10	18	6×2,8	70.67	478.1
R5194.150-060-10-20	m 1.5	60	90.0	93.0	10	20	6×2,8	70.67	473.4
R5194.150-060-16-16	m 1.5	60	90.0	93.0	16	16	-	114.60	773.8
R5194.150-064-10-14	m 1.5	64	96.0	99.0	10	14	-	76.40	560.0
R5194.150-064-10-15	m 1.5	64	96.0	99.0	10	15	5×2,3	76.40	550.0
R5194.150-064-10-18	m 1.5	64	96.0	99.0	10	18	6×2,8	76.40	550.0
R5194.150-064-16-16	m 1.5	64	96.0	99.0	16	16	-	123.19	880.0
R5194.150-068-10-14	m 1.5	68	102.0	105.0	10	14	-	83.08	630.0
R5194.150-068-16-16	m 1.5	68	102.0	105.0	16	16	-	132.74	1000.0
R5194.150-070-10-14	m 1.5	70	105.0	108.0	10	14	-	85.95	670.0
R5194.150-070-10-15	m 1.5	70	105.0	108.0	10	15	5×2,3	85.95	670.0
R5194.150-070-10-18	m 1.5	70	105.0	108.0	10	18	6×2,8	85.95	660.0
R5194.150-070-16-16	m 1.5	70	105.0	108.0	16	16	-	136.56	1060.0
R5194.150-072-10-16	m 1.5	72	108.0	111.0	10	16	-	88.81	700.0
R5194.150-072-10-18	m 1.5	72	108.0	111.0	10	18	6×2,8	88.81	700.0
R5194.150-072-10-20	m 1.5	72	108.0	111.0	10	20	6×2,8	88.81	690.0
R5194.150-072-16-18	m 1.5	72	108.0	111.0	16	18	-	141.34	1120.0
R5194.150-075-10-16	m 1.5	75	112.5	115.5	10	16	-	92.63	760.0
R5194.150-075-16-18	m 1.5	75	112.5	115.5	16	18	-	148.98	1220.0
R5194.150-080-10-16	m 1.5	80	120.0	123.0	10	16	-	100.27	870.0
R5194.150-080-10-18	m 1.5	80	120.0	123.0	10	18	6×2,8	100.27	870.0
R5194.150-080-10-20	m 1.5	80	120.0	123.0	10	20	6×2,8	100.27	860.0
R5194.150-080-16-18	m 1.5	80	120.0	123.0	16	18	-	148.98	1390.0
R5194.150-084-10-16	m 1.5	84	126.0	129.0	10	16	-	105.05	960.0
R5194.150-084-16-22	m 1.5	84	126.0	129.0	16	22	-	148.98	1520.0
R5194.150-090-10-16	m 1.5	90	135.0	138.0	10	16	-	114.60	1110.0
R5194.150-090-16-22	m 1.5	90	135.0	138.0	16	22	-	183.35	1750.0
R5194.150-100-10-16	m 1.5	100	150.0	153.0	10	16	-	128.92	1370.0
R5194.150-100-10-18	m 1.5	100	150.0	153.0	10	18	6×2,8	128.92	1370.0
R5194.150-100-10-20	m 1.5	100	150.0	153.0	10	20	6×2,8	128.92	1360.0
R5194.150-100-16-18	m 1.5	100	150.0	153.0	16	18	-	206.27	2190.0

STANDARD SPUR GEARS