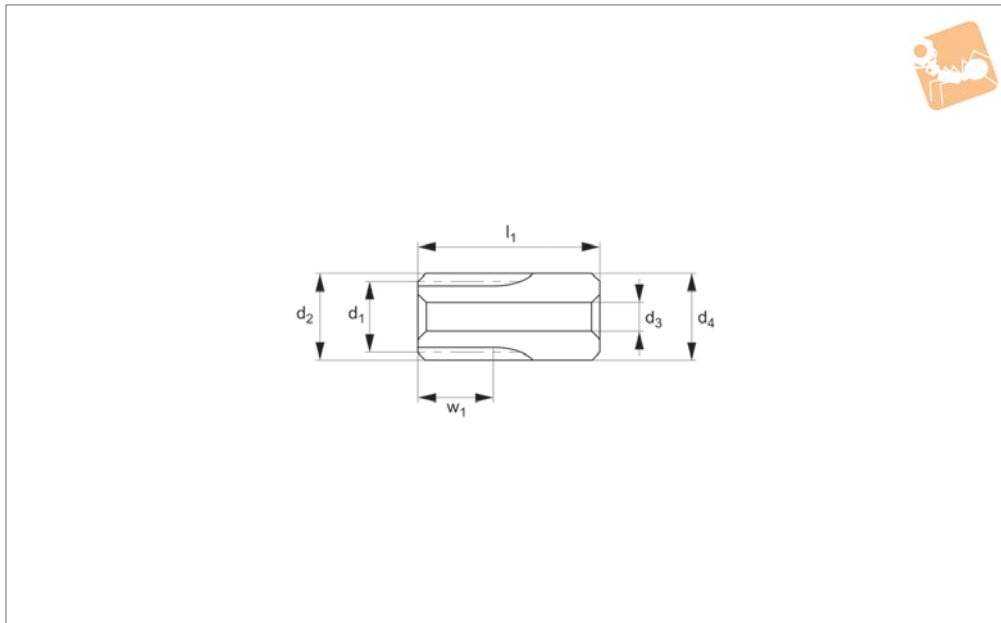




Spur Gears - Module 1.5

stainless steel - 14 teeth



R5188

STANDARD SPUR GEARS

Material

Stainless steel (AISI 304, JIS G 4303).
Accuracy to JIS B 1702-1 (ISO) class 9.

Technical Notes

20° pressure angle, full depth tooth.
Amount of backlash when assembling

gears = 0,09 - 0,18mm.

Tips

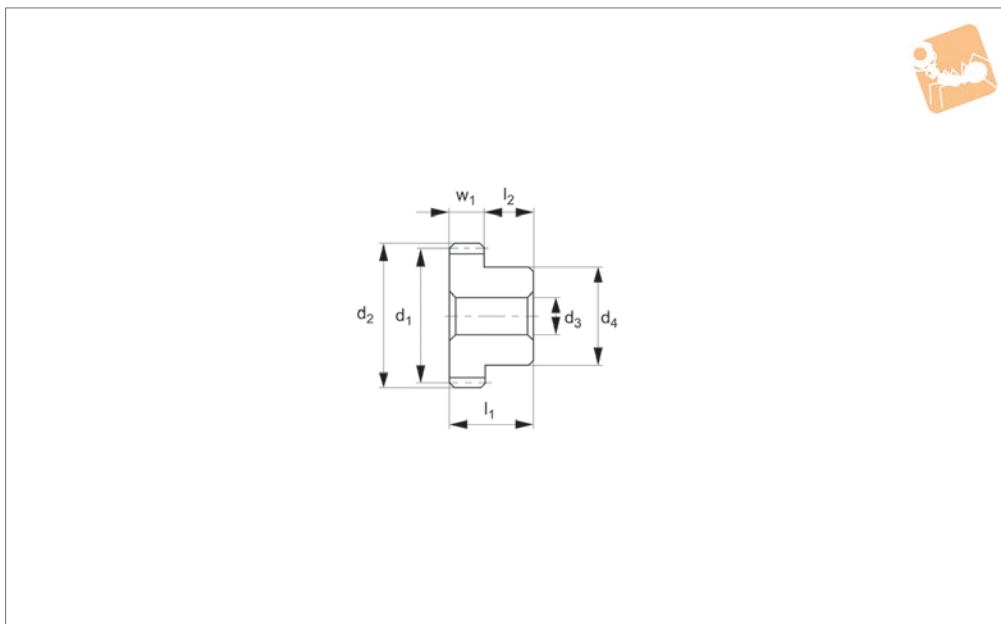
For module 1.5 stainless gears with 15-100 teeth see R5190.
Max. allowable torque (Nm) is based on standard operating conditions (see tech-

nical 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. H8	d ₄	l ₁	Torque Nm max.	Weight g
R5188.150-014	m 1.5	14	21	24	12	8	24	36	5.71	105



R5190



Material

Stainless steel (AISI 304, JIS G 4303).
Accuracy to JIS B 1702-1 (ISO) class 9.

Technical Notes

20° pressure angle, full depth tooth.
Amount of backlash when assembling

gears = 0,09 - 0,18mm.

Tips

For module 1.5 stainless gears with 14 teeth see R5188.

Max. allowable torque (Nm) is based on standard operating conditions (see tech-

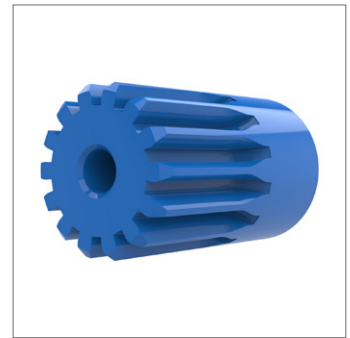
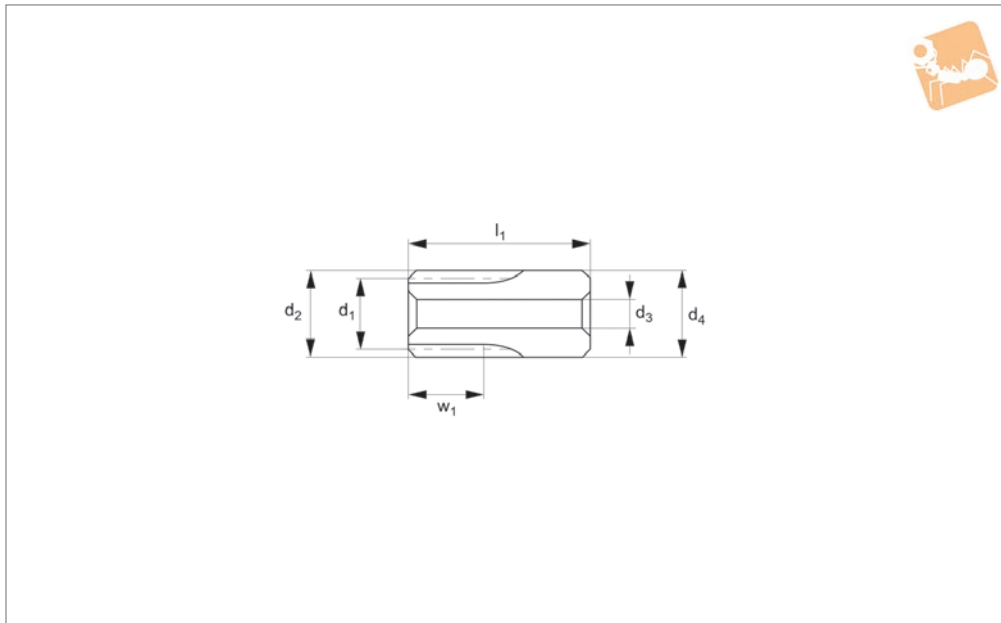
nical pages) with a safety factor of 1.2. For non standard applications apply a suitable safety factor depending on frequency of use, type of working etc.

Order No.	Module	No. of teeth z	Pitch dia. d ₁	d ₂	w ₁	d ₃ tol. H8	d ₄	l ₁	l ₂	Torque Nm max.	Weight g
R5190.150-015-12	m 1.5	15	22.5	25.5	12	8	18	22	10	6.40	49.3
R5190.150-015-16	m 1.5	15	22.5	25.5	16	8	18	26	10	8.53	60.3
R5190.150-016-12	m 1.5	16	24.0	27.0	12	8	20	22	10	7.10	59.2
R5190.150-016-16	m 1.5	16	24.0	27.0	16	8	20	26	10	9.46	72.0
R5190.150-018-12	m 1.5	18	27.0	30.0	12	10	22	22	10	8.53	70.9
R5190.150-018-16	m 1.5	18	27.0	30.0	16	10	22	26	10	11.38	86.6
R5190.150-020-12	m 1.5	20	30.0	33.0	12	10	25	22	10	10.02	92.5
R5190.150-020-16	m 1.5	20	30.0	33.0	16	10	25	26	10	13.36	112.4
R5190.150-024-12	m 1.5	24	36.0	39.0	12	10	30	22	10	13.06	139.2
R5190.150-025-12	m 1.5	25	37.5	40.5	12	10	30	22	10	13.84	147.5
R5190.150-025-16	m 1.5	25	37.5	40.5	16	10	30	26	10	18.45	180.0
R5190.150-028-12	m 1.5	28	42.0	45.0	12	10	30	22	10	16.20	174.2
R5190.150-030-12	m 1.5	30	45.0	48.0	12	10	30	22	10	17.79	193.7
R5190.150-030-16	m 1.5	30	45.0	48.0	16	10	30	26	10	23.71	241.7
R5190.150-032-10	m 1.5	32	48.0	51.0	10	10	30	20	10	16.16	187.1
R5190.150-036-10	m 1.5	36	54.0	57.0	10	10	30	20	10	18.88	225.2
R5190.150-040-10	m 1.5	40	60.0	63.0	10	12	36	20	10	21.63	287.0
R5190.150-045-10	m 1.5	45	67.5	70.5	10	12	36	20	10	25.08	346.6
R5190.150-048-10	m 1.5	48	72.0	75.0	10	12	36	20	10	27.18	385.7
R5190.150-050-10	m 1.5	50	75.0	78.0	10	12	42	20	10	28.59	442.3
R5190.150-060-10	m 1.5	60	90.0	93.0	10	14	50	20	10	35.67	635.8
R5190.150-080-10	m 1.5	80	120.0	123.0	10	16	60	20	10	50.03	1089.0
R5190.150-090-10	m 1.5	90	135.0	138.0	10	16	60	20	10	57.21	1327.0
R5190.150-100-10	m 1.5	100	150.0	153.0	10	16	60	20	10	64.47	1594.0



Spur Gears - Module 1.5 - Plastic

blue polyacetal - 14 teeth



R5191

STANDARD SPUR GEARS

Material

Polyacetal, blue, machined.
Accuracy to JIS B 1702-1 (ISO) class 9-10.

Technical Notes

20° pressure angle, full depth tooth.
Amount of backlash when assembling gears = 0,09-0,18mm.
Blue polyacetal machined gears are

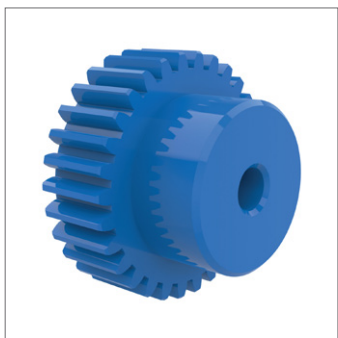
suitable for use in food machinery applications. Approved by the FDA (USA) and by regulators in the EU and Japan, where the food has an alcohol percentage of <15%. Please clean gears thoroughly before use.

Tips

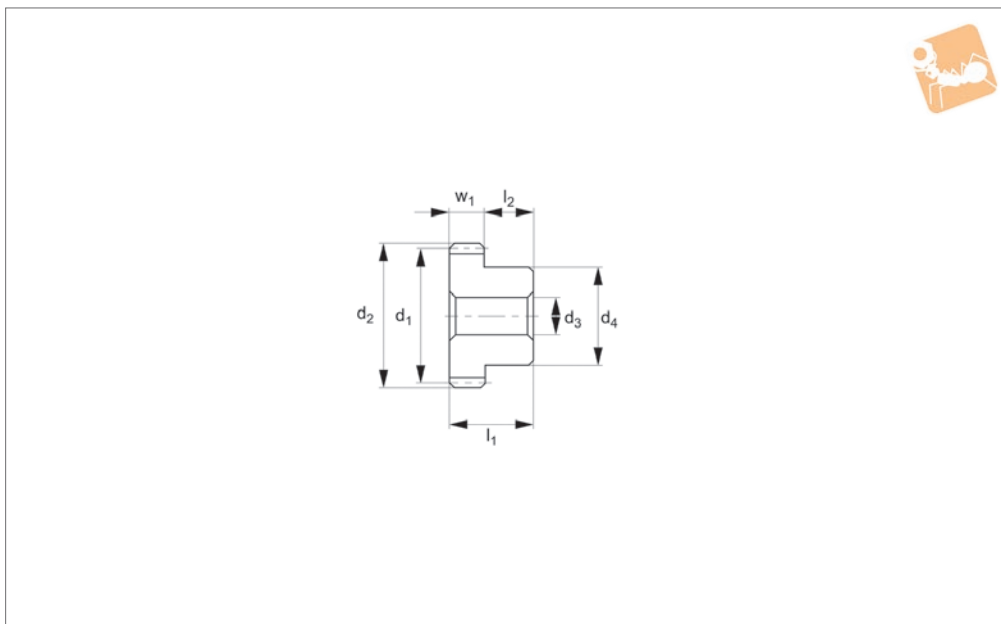
For module 1.5 blue plastic gears with 15-60 teeth see R5193.

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. H9	d ₄	l ₁	Torque Nm max.	Weight g
R5191.150-014	m 1.5	14	21	24	18	6	24	40	1.36	21



R5193



Material

Polyacetal, blue, machined.
Accuracy to JIS B 1702-1 (ISO) class 9-10.

Technical Notes

20° pressure angle, full depth tooth.
Amount of backlash when assembling gears = 0,09 - 0,18 mm.
Blue polyacetal machined gears are

suitable for use in food machinery applications. Approved by the FDA (USA) and by regulators in the EU and Japan, where the food has an alcohol percentage of <15%. Please clean gears thoroughly before use.

Tips

For module 1.5 blue plastic gears with 14 teeth see R5191.

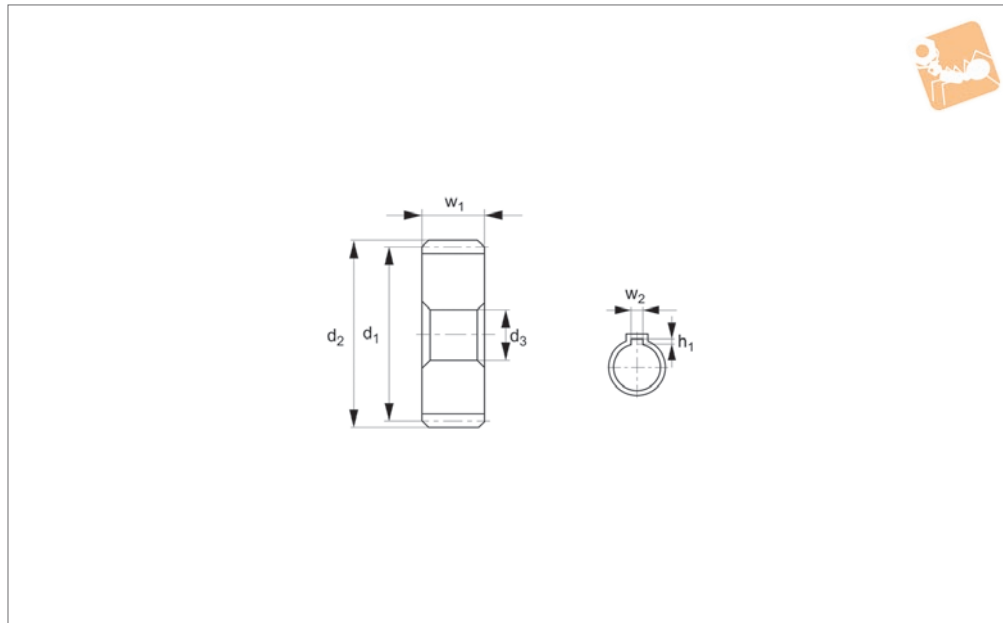
Max. allowable torque (Nm) is based on standard operating conditions (see technical pages) with a safety factor of 1.2. For non standard applications apply a suitable safety factor depending on frequency of use, type of working etc.

Order No.	Module	No. of teeth z	Pitch dia. d ₁	d ₂	w ₁	d ₃ tol. H9	d ₄	l ₁	l ₂	Torque Nm max.	Weight g
R5193.150-015	m 1.5	15	22.5	25.5	15	6	18	30	15	1.51	12.4
R5193.150-016	m 1.5	16	24.0	27.0	15	6	18	30	15	1.65	13.6
R5193.150-018	m 1.5	18	27.0	30.0	15	8	20	30	15	1.94	16.4
R5193.150-020	m 1.5	20	30.0	33.0	15	8	22	30	15	2.23	20.6
R5193.150-022	m 1.5	22	33.0	36.0	15	8	24	30	15	2.53	25.3
R5193.150-024	m 1.5	24	36.0	39.0	15	8	24	30	15	2.82	28.7
R5193.150-025	m 1.5	25	37.5	40.5	15	8	28	30	15	2.97	32.8
R5193.150-026	m 1.5	26	39.0	42.0	15	8	28	30	15	3.12	35.9
R5193.150-028	m 1.5	28	42.0	45.0	15	8	30	30	15	3.41	41.8
R5193.150-030	m 1.5	30	45.0	48.0	15	8	32	30	15	3.83	48.2
R5193.150-032	m 1.5	32	48.0	51.0	15	8	35	30	15	4.14	56.2
R5193.150-035	m 1.5	35	52.5	55.5	15	8	40	30	15	4.60	69.9
R5193.150-036	m 1.5	36	54.0	57.0	15	8	40	30	15	4.75	72.5
R5193.150-040	m 1.5	40	60.0	63.0	15	10	45	30	15	5.53	89.7
R5193.150-045	m 1.5	45	67.5	70.5	15	10	50	30	15	6.33	113.5
R5193.150-048	m 1.5	48	72.0	75.0	15	10	55	30	15	6.81	132.6
R5193.150-050	m 1.5	50	75.0	78.0	15	10	55	30	15	7.13	139.9
R5193.150-055	m 1.5	55	82.5	85.5	15	10	60	30	15	7.93	136.8
R5193.150-056	m 1.5	56	84.0	87.0	15	10	60	30	15	8.09	173.2
R5193.150-060	m 1.5	60	90.0	93.0	15	10	65	30	15	8.90	200.9



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 x 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

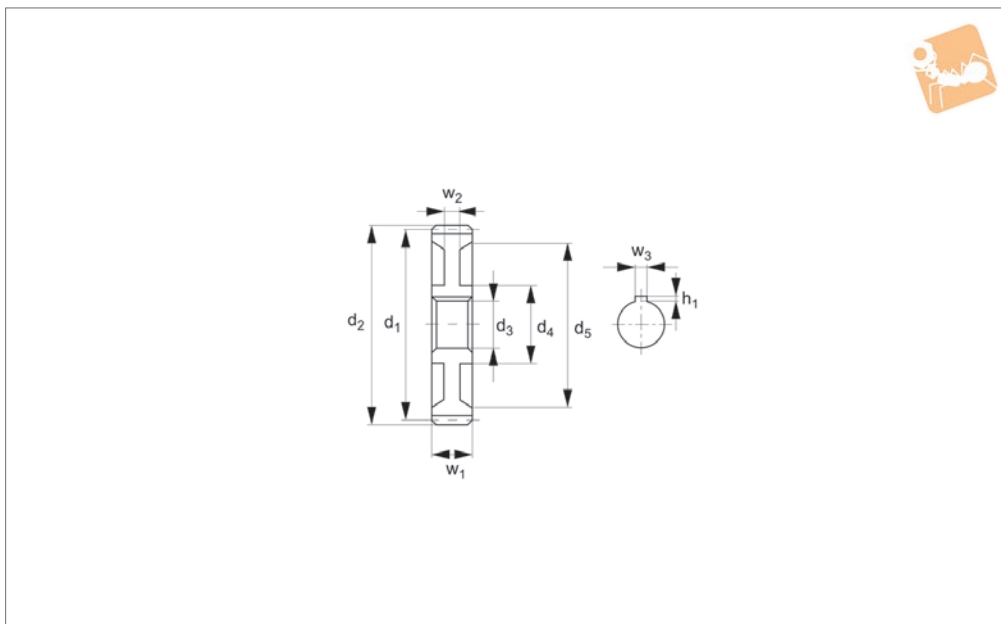


Order No.	Module	No. of teeth z	Pitch dia. d_1	d_2	w_1	d_3 tol. H7	Keyway ($w_2 \times h_1$)	Torque Nm max.	Weight g
R5194.150-044-10-12	m 1.5	44	66.0	69.0	10	12	-	48.70	259.7
R5194.150-044-16-12	m 1.5	44	66.0	69.0	16	12	-	78.31	415.5
R5194.150-045-10-12	m 1.5	45	67.5	70.5	10	12	-	50.14	272.0
R5194.150-045-16-12	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



R5195



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. This is a reduced

weight version of the hubless gears R5194.

Tips

For module 1.5 hubless steel gears with 60-100 teeth see R5194. For gears with 8-10 teeth see R5198 & R5199, for 12-14 teeth see R5200, for gears with 15-100 teeth See R5201 & R5194 (reduced weight

version).

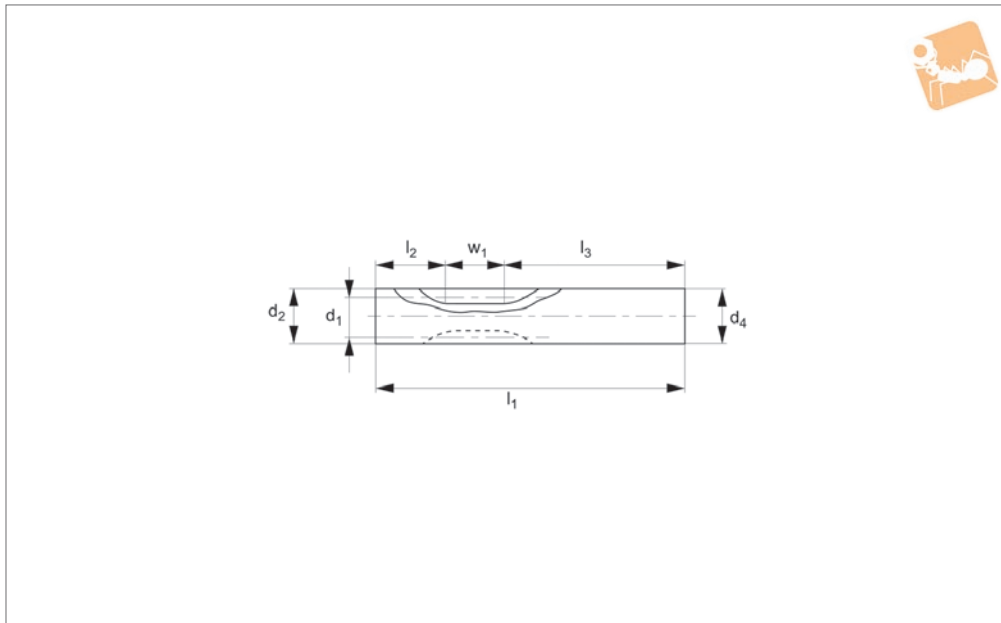
Max. allowable torque (Nm) is based on standard operating conditions (see technical pages) with a safety factor of 1.2. For non standard applications apply a suitable safety factor depending on frequency of use, type of working etc.

Order No.	Module	No. of teeth z	Pitch dia. d ₁	d ₂	w ₁	d ₃ tol. H7	d ₄	d ₅	Keyway (w ₃ x h ₁)	Torque Nm max.	w ₂	Weight g
R5195.150-060-40	m 1.5	60	90	93	16	20	40	76	6x2,8	114.60	8	568.5
R5195.150-060-50	m 1.5	60	90	93	16	25	50	76	8x3,3	114.60	8	589.4
R5195.150-064-40	m 1.5	64	96	99	16	20	40	82	6x2,8	123.19	8	630.0
R5195.150-070-40	m 1.5	70	105	108	16	20	40	91	6x2,8	136.56	8	740.0
R5195.150-072-40	m 1.5	72	108	111	16	20	40	94	6x2,8	141.34	8	770.0
R5195.150-072-50	m 1.5	72	108	111	16	25	50	94	8x3,3	141.34	8	790.0
R5195.150-080-40	m 1.5	80	120	123	16	20	40	106	6x2,8	160.43	8	930.0
R5195.150-080-50	m 1.5	80	120	123	16	25	50	106	8x3,3	160.43	8	950.0
R5195.150-100-40	m 1.5	100	150	153	16	20	40	136	6x2,8	206.27	8	1380.0
R5195.150-100-50	m 1.5	100	150	153	16	25	50	136	8x3,3	206.27	8	1400.0



Spur Gears - Module 1.5

carbon steel - 8-10 teeth



R5198

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. Rack shift coefficient x = 0.5.

cient x = 0.5.

Tips

For module 1.5 hubless steel gears with 60-100 teeth see R5194. For gears with 8-10 teeth see R5198 & R5199, for gears with 12-14 teeth see R5200, for gears with 15-100 teeth See R5201 &

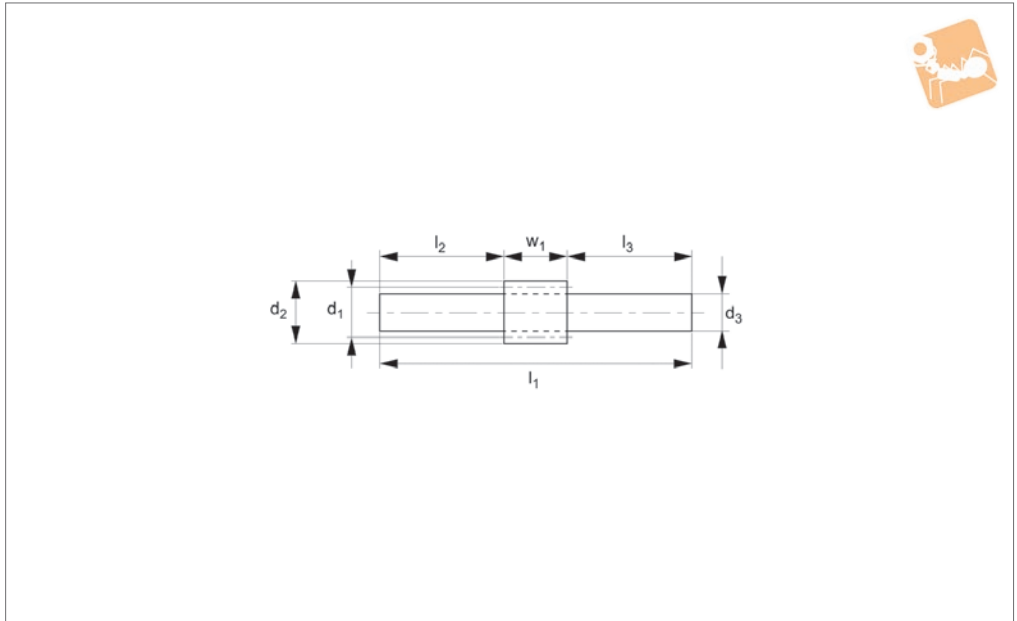
R5204 (reduced weight version).

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. H9	l ₁	l ₂	l ₃	Torque Nm max.	Weight g
R5198.150-08	m 1.5	8	Shifted Gear *	16	18	16	90	24	48	10.31	133.3
R5198.150-10	m 1.5	10	Shifted Gear *	19	18	19	90	24	48	14.23	190.5



R5199



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. Rack shift coefficient $x = 0.5$.

Tips

For module 1.5 hubless steel gears with 60-100 teeth see R5194.
For gears with 8-10 teeth alternative see R5198,
for gears with 12-14 teeth see R5200,
for gears with 15-100 teeth See R5201 & 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. h9	l_1	l_2	l_3	Torque Nm max.	Weight g
R5199.150-008	m 1.5	8	Shifted gear *	16	18	9	90	24	48	10.31	56.2
R5199.150-010	m 1.5	10	Shifted gear *	19	18	12	90	24	48	14.23	94.1