

Class	ATLANTA Quality	Module	Total Pitch Error <sup>1)</sup> (± µm/m)	Tooth Thickness Tolerance (µm)	Maximum Length (mm)	Maximum Feed Force Per Pinion Contact <sup>2)</sup> (kN)	Application Examples
<b>UHPR</b> Ultra High Precision Rack	5 Hardened & Ground	2	30	-15	1000	19.5	High-precision machine tools, Laser cutting systems, CNC cutting machines
		3	30	-15	1000	28.5	
<b>HPR</b> High Precision Rack	6 Hardened & Ground	2	34	-20	1000	19.5	Machine tools, Waterjet/Plasma/Laser cutting machines, CNC cutting machines, Tube bending systems, Robots, Automation
		3	34	-20	1000	31.0	
		4	34	-20	1000	60.0	
	6 Hardened & Ground	1.5	34	-20	1000	9.0	Machine tools, Waterjet/Plasma/Laser cutting machines, CNC cutting machines, Tube bending systems, Robots, Automation
		2	34	-20	2000	15.5	
		3	34	-20	2000	28.5	
		4	34	-20	2000	51.5	
		5	34	-20	2000	76.0	
		6	34	-20	2000	109.0	
	7 Hardened & Ground	8	34	-20	1920	191.0	Woodworking/Waterjet/Plasma/Laser cutting machines, CNC cutting machines, Tube bending systems, Robots, Automation
		10	34	-20	1500	287.0	
		12	34	-20	1000	409.0	
2		52	-36	2000	15.5		
7 Hardened & Ground	3	52	-36	2000	28.5	Woodworking/Waterjet/Plasma/Laser cutting machines, CNC cutting machines, Tube bending systems, Robots, Automation	
	4	52	-36	2000	51.5		
	5	52	-36	2000	76.0		
	6	52	-36	2000	109.0		
	8	52	-36	1920	191.0		
	10	52	-36	1500	287.0		
<b>PR</b> Precision Rack	8 Hardened & Ground	2	60	-58	2000	13.5	Material handling, Robots, Automation
		3	60	-58	2000	24.5	
		4	60	-58	2000	44.0	
		5	60	-58	2000	64.5	
		6	60	-58	2000	90.5	
	8 Quenched & Tempered, Milled	2	100	-110	2000	8.0	Material handling, Robots, Automation
		3	100	-110	2000	14.0	
		4	100	-110	2000	27.0	
<b>BR</b> Basic Rack	10 Induction-Hardened Milled	1.5	200	-110	1000	3.5	Lifting axis, Material handling, Welding robots
		2	200	-110	2000	9.5	
		3	200	-110	2000	17.5	
		4	200	-110	2000	32.0	
		5	200	-110	2000	49.0	
		6	200	-110	2000	67.5	
		8	200	-110	1920	118.5	
		10	200	-110	1000	178.5	
		12	200	-110	1000	252.5	

1) Values are for rack lengths of 1,000 mm. For total pitch errors values for other rack lengths, please see the respective catalog pages.

2) Values are only valid for special steel according ATLANTA-Standard.

When using the maximum capacity of the teeth, or multiple pinions in contact, the mounting screw loads must be checked separately! Please ask ATLANTA for advice!

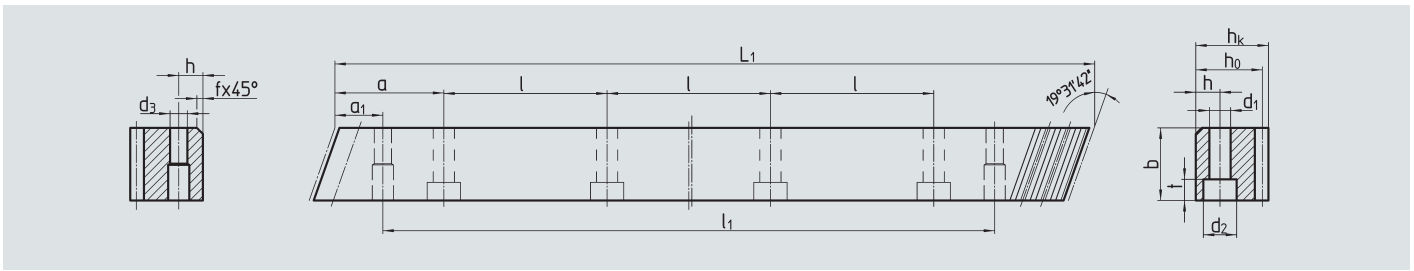
Class & Quality			UHPR 5	6	HPR 6	7	PR 8	8	BR 10
Material			Heat-Treat Steel <sup>1)</sup>	Case-Hardened <sup>1)</sup>	Heat-Treat Steel <sup>1)</sup>	Heat-Treat Steel <sup>1)</sup>	Heat-Treat Steel <sup>1)</sup>	Heat-Treat Steel <sup>1)</sup>	Heat-Treat Steel <sup>1)</sup>
Heat Treatment			High-Performance Hardening	High-Performance Hardening	High-Performance Hardening	High-Performance Hardening	High-Performance Hardening	Quenched & Tempered	High-Performance Hardening
Module	Mounting Holes	Rack Lengths mm	Order Code						
1.5	✓	500			29 15 055				39 15 050
		1000			29 15 105				39 15 100
	✗	500							39 16 050
		1000			29 16 105				39 16 100
2	✓	500		29 20 050	29 20 055			38 21 050	39 20 050
		1000	5 01 79 004	29 20 100	29 20 105	29 20 107	29 20 108	38 21 100	39 20 100
		1500			29 20 155	29 20 157	29 20 158		
		2000			29 20 205	29 20 207	29 20 208	38 21 200	39 20 200
	✗	500		29 21 050					39 21 050
		1000		29 21 100	29 21 105			38 20 100	39 21 100
3	✓	500		29 30 050	29 30 055			38 31 050	39 30 050
		1000	5 01 79 005	29 30 100	29 30 105	29 30 107	29 30 108	38 31 100	39 30 100
		1500			29 30 155	29 30 157	29 30 158		
		2000			29 30 205	29 30 207	29 30 208	38 31 200	39 30 200
	✗	500		29 31 050					39 31 050
		1000		29 31 100	29 31 105			38 30 100	39 31 100
		1500			29 31 155	29 31 157	29 31 158		
		2000			29 31 205	29 31 207	29 31 208	38 30 200	39 31 200
4	✓	500		29 40 050					39 40 050
		1000		29 40 100	29 40 105			38 41 100	39 40 100
		2000			29 40 205			38 41 200	39 40 200
	✓ Large Holes	1000		29 42 100	29 42 105	29 40 107	29 40 108		
		1500			29 42 155	29 40 157	29 40 158		
		2000			29 42 205	29 40 207	29 40 208		
	✗	500		29 41 050					
		1000		29 41 100	29 41 105			38 40 100	39 41 100
		1500			29 41 155	29 41 157	29 41 158		
		2000			29 41 205	29 41 207	29 41 208	38 40 200	39 41 200
5	✓	500			29 50 055				
		1000			29 50 105	29 50 107	29 50 108		39 50 100
		2000			29 50 205	29 50 207	29 50 208		39 50 200
	✗	1000			29 51 105				39 51 100
		2000			29 51 205				
6	✓	500			29 60 055				
		1000			29 60 105	29 60 107	29 60 108		39 60 100
		2000			29 60 205	29 60 207	29 60 208		39 60 200
	✗	1000			29 61 105				39 61 100
		2000			29 61 205				39 61 200
8	✓	1000			29 80 105				
		2000			29 80 205				
	✗	1000			29 81 105				39 81 100
		2000			29 81 205				39 81 200
10	✓	1000			29 10 105				
	✗	1000			29 11 105				39 11 100
12	✓	1000			29 12 105				
	✗	1000			29 13 105				39 13 100


1) According to ATLANTA-Standard

✓ With mounting holes

✗ Without mounting holes

### ATLANTA Quality 5



Order Code	Module	$L_1$	N° of Teeth	$b^{*0.4}$	$h_k$	$h_0$	$f$	$a$	$l$	N° of Holes	$h$	$d_1$	$d_2$	$t$	$a_1$	$l_1$	$d_3$	
501 79 004	2	1000.00	150	24	24	22	2	62.5	125	8	8	7	11	7	31.7	936.6	5.7	4.10
501 79 005	3	1000.00	150	29	29	26	2	62.5	125	8	9	10	15	9	35.0	930.0	7.7	5.90

**Total Pitch Error:  $GT_f / 1000 \leq 0.030$  mm**

- ⊗ Teeth hardened with the ATLANTA High-Performance hardening process and ground
- ⊗ Heat-treatable steel according to ATLANTA-Standard
- ⊗ Ground on all sides after hardening

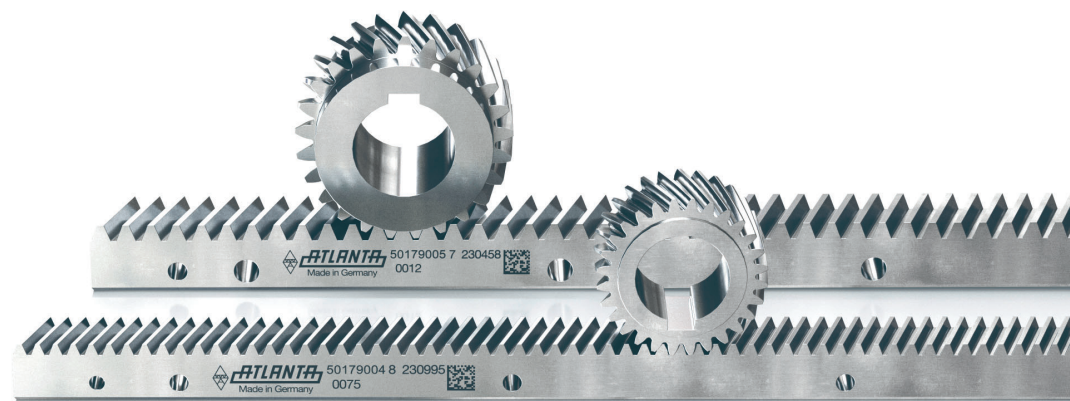
For information on mounting racks, see page C-92.

To achieve precision rack joints, we recommend our patented rack assembly kit, see page C-96.

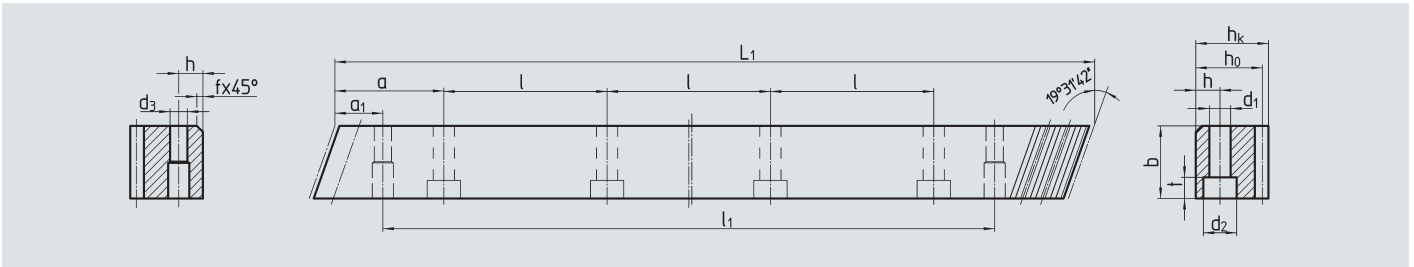
For lubrication of racks & pinions, we recommend our electronic lubrication systems, see Chapter D.

For the calculation and selection of the rack & pinion drive, see pages C-44 to C-55.

For screws for rack mounting, see page C- 95.



ATLANTA Quality 6



Order Code	Module	L <sub>1</sub>	N° of Teeth z	b <sup>*0.4</sup>	h <sub>k</sub>	h <sub>0</sub>	f	a	l	N° of Holes	h	d <sub>1</sub>	d <sub>2</sub>	t	a <sub>1</sub>	l <sub>1</sub>	d <sub>3</sub>	kg
29 20 050 <sup>2)</sup>	2	500.00	75	24	24	22	2	62.5	125	4	8	7	11	7	31.7	436.6	5.7	2.10
29 21 050	2	500.00	75	24	24	22	2	without mounting holes										2.10
29 20 100	2	1000.00	150	24	24	22	2	62.5	125	8	8	7	11	7	31.7	936.6	5.7	4.10
29 21 100	2	1000.00	150	24	24	22	2	without mounting holes										4.10
29 30 050 <sup>2)</sup>	3	500.00	50	29	29	26	2	62.5	125	4	9	10	15	9	35.0	430.0	7.7	2.90
29 31 050	3	500.00	50	29	29	26	2	without mounting holes										2.90
29 30 100	3	1000.00	100	29	29	26	2	62.5	125	8	9	10	15	9	35.0	930.0	7.7	5.90
29 31 100	3	1000.00	100	29	29	26	2	without mounting holes										5.90
29 40 050 <sup>1)2)</sup>	4	506.67	38	39	39	35	2	62.5	125	4	12	10	15	9	33.3	433.0	7.7	5.40
29 31 050	4	506.67	38	39	39	35	2	without mounting holes										5.40
29 40 100	4	1000.00	75	39	39	35	2	62.5	125	8	12	10	15	9	33.3	933.4	7.7	10.70
29 41 100	4	1000.00	75	39	39	35	2	without mounting holes										10.70
29 42 100	4	1000.00	75	39	39	35	2	62.5	125	8	12	14	20	13	33.3	933.4	11.7	10.70

- 1) This rack can only be used for continuous linking with the left side (see sketch).
- 2) Due to the screw connection, the feed force is max. 50 % of the value for racks with L<sub>1</sub> = 1,000 mm

**Total Pitch Error:**  $GT_f / 500 \leq 0.026 \text{ mm}$   
 $GT_f / 1000 \leq 0.034 \text{ mm}$

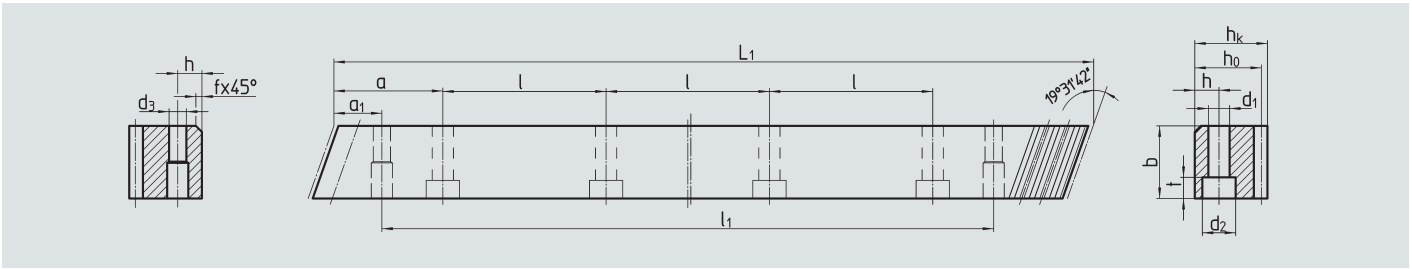
- ⊗ Teeth hardened with the ATLANTA High-Performance hardening process and ground
- ⊗ Heat-treatable steel according to ATLANTA-Standard
- ⊗ Ground on all sides after hardening

For information on mounting racks, see page C-92.

To achieve precision rack joints, we recommend our patented rack assembly kit, see page C-96. For lubrication of racks & pinions, we recommend our electronic lubrication systems, see Chapter D. For the calculation and selection of the rack & pinion drive, see pages C-44 to C-55.

For screws for rack mounting, see page C- 95.

ATLANTA Quality 6



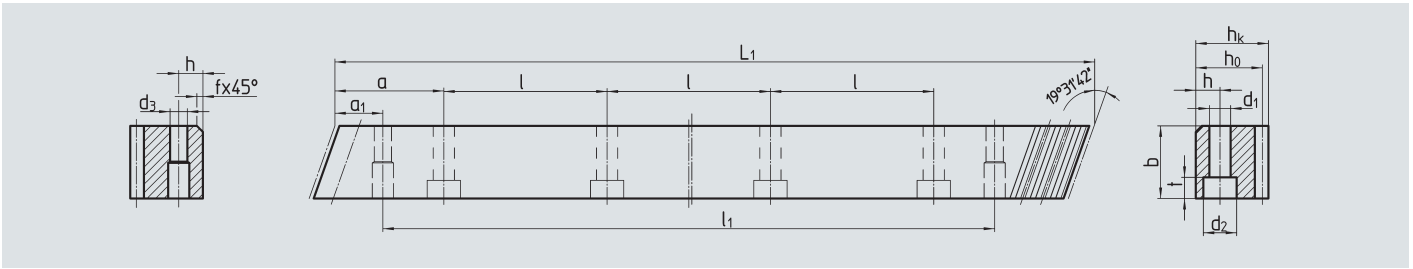
Order Code	Module	L <sub>1</sub>	N° of Teeth z	b <sup>+0.4</sup>	h <sub>k</sub>	h <sub>0</sub>	f	a	l	N° of Holes	h	d <sub>1</sub>	d <sub>2</sub>	t	a <sub>1</sub>	l <sub>1</sub>	d <sub>3</sub>	kg	
29 15 055 <sup>2)</sup>	1.5	500.00	100	19	19	17.5	2	62.5	125	4	8	7	11	7	31.7	436.6	5.7	1.30	
29 15 105	1.5	1000.00	200	19	19	17.5	2	62.5	125	8	8	7	11	7	31.7	936.6	5.7	2.60	
29 16 105	1.5	1000.00	200	19	19	17.5	2			without mounting holes									2.60
29 20 055 <sup>2)</sup>	2	500.00	75	24	24	22	2	62.5	125	4	8	7	11	7	31.7	436.6	5.7	2.10	
29 20 105	2	1000.00	150	24	24	22	2	62.5	125	8	8	7	11	7	31.7	936.6	5.7	4.10	
29 21 105	2	1000.00	150	24	24	22	2			without mounting holes									4.10
29 20 155	2	1500.00	225	24	24	22	2	62.5	125	12	8	7	11	7	31.7	1436.6	5.7	6.15	
29 20 205	2	2000.00	300	24	24	22	2	62.5	125	16	8	7	11	7	31.7	1936.6	5.7	8.20	
29 21 205	2	2000.00	300	24	24	22	2			without mounting holes									8.20
29 30 055 <sup>2)</sup>	3	500.00	50	29	29	26	2	62.5	125	4	9	10	15	9	35.0	430.0	7.7	2.90	
29 30 105	3	1000.00	100	29	29	26	2	62.5	125	8	9	10	15	9	35.0	930.0	7.7	5.90	
29 31 105	3	1000.00	100	29	29	26	2			without mounting holes									5.90
29 30 155	3	1500.00	150	29	29	26	2	62.5	125	12	9	10	15	9	35.0	1430.0	7.7	8.85	
29 30 205	3	2000.00	200	29	29	26	2	62.5	125	16	9	10	15	9	35.0	1930.0	7.7	11.80	
29 31 205	3	2000.00	200	29	29	26	2			without mounting holes									11.80
29 40 105	4	1000.00	75	39	39	35	2	62.5	125	8	12	10	15	9	33.3	933.4	7.7	10.70	
29 41 105	4	1000.00	75	39	39	35	2			without mounting holes									10.70
29 42 105	4	1000.00	75	39	39	35	2	62.5	125	8	12	14	20	13	33.3	933.4	11.7	10.70	
29 42 155 <sup>1)</sup>	4	1506.67	113	39	39	35	2	62.5	125	12	12	14	20	13	33.3	1433.4	11.7	16.05	
29 40 205	4	2000.00	150	39	39	35	2	62.5	125	16	12	10	15	9	33.3	1933.4	7.7	21.40	
29 41 205	4	2000.00	150	39	39	35	2			without mounting holes									21.40
29 42 205	4	2000.00	150	39	39	35	2	62.5	125	16	12	14	20	13	33.3	1933.4	11.7	21.40	
29 50 055 <sup>2)</sup>	5	500.00	30	49	49	34	2.5	62.5	125	4	12	14	20	13	37.5	425.0	11.7	6.50	
29 50 105	5	1000.00	60	49	49	34	2.5	62.5	125	8	12	14	20	13	37.5	925.0	11.7	13.00	
29 51 105	5	1000.00	60	49	49	34	2.5			without mounting holes									13.00
29 50 205	5	2000.00	120	49	49	34	2.5	62.5	125	16	12	14	20	13	37.5	1925.0	11.7	26.00	
29 51 205	5	2000.00	120	49	49	34	2.5			without mounting holes									26.00
29 60 055 <sup>2)</sup>	6	500.00	25	59	59	43	2.5	62.5	125	4	16	18	26	17	37.5	425.0	15.7	9.90	
29 60 105	6	1000.00	50	59	59	43	2.5	62.5	125	8	16	18	26	17	37.5	925.0	15.7	18.10	
29 61 105	6	1000.00	50	59	59	43	2.5			without mounting holes									18.10
29 60 205	6	2000.00	100	59	59	43	2.5	62.5	125	16	16	18	26	17	37.5	1925.0	15.7	36.20	
29 61 205	6	2000.00	100	59	59	43	2.5			without mounting holes									36.20
29 80 105	8	960.00	36	79	79	71	2.5	60.0	120	8	25	22	33	21	120.0	720.0	19.7	42.50	
29 81 105	8	960.00	36	79	79	71	2.5			without mounting holes									42.50
29 80 205	8	1920.00	72	79	79	71	2.5	60.0	120	16	25	22	33	21	120.0	1680.0	19.7	85.00	
29 81 205	8	1920.00	72	79	79	71	2.5			without mounting holes									85.00
29 10 105 <sup>3)</sup>	10	1000.00	30	99	99	89	2.5	62.5	125	8	32	33	48	32	125.0	750.0	19.7	68.72	
29 11 105 <sup>3)</sup>	10	1000.00	30	99	99	89	2.5			without mounting holes									68.72
29 10 155 <sup>3)</sup>	10	1500.00	45	99	99	89	2.5	62.5	125	12	32	33	48	32	125.0	1250.0	19.7	103.00	
29 12 105 <sup>3)</sup>	12	1000.00	25	120	120	108	2.5	40.0	125	8	40	39	58	38	125.0	750.0	19.7	111.00	
29 13 105 <sup>3)</sup>	12	1000.00	25	120	120	108	2.5			without mounting holes									111.00

- 1) This rack can only be used for continuous linking with the left side
- 2) Due to the screw connection, the feed force is max. 50 % of the value for racks with L1 = 1,000 mm
- 3) On Request

**Total Pitch Error:**  $GT_f / 500 \leq 0.026 \text{ mm}$   
 $GT_f / 1000 \leq 0.034 \text{ mm}$   
 $GT_f / 1500 \leq 0.041 \text{ mm} (\pm 0.027 \text{ mm} / 1000)$   
 $GT_f / 2000 \leq 0.044 \text{ mm} (\pm 0.022 \text{ mm} / 1000)$

For further information see next page

ATLANTA Quality 7



Order Code	Module	L <sub>1</sub>	N° of Teeth	b <sup>+0.4</sup>	h <sub>k</sub>	h <sub>0</sub>	f	a	l	N° of Holes	h	d <sub>1</sub>	d <sub>2</sub>	t	a <sub>1</sub>	l <sub>1</sub>	d <sub>3</sub>	kg
29 20 107	2	1000.00	150	24	24	22	2	62.5	125	8	8	7	11	7	31.7	936.6	5.7	4.10
29 20 157	2	1500.00	225	24	24	22	2	62.5	125	12	8	7	11	7	31.7	1436.6	5.7	6.15
29 20 207	2	2000.00	300	24	24	22	2	62.5	125	16	8	7	11	7	31.7	1936.6	5.7	8.20
29 30 107	3	1000.00	100	29	29	26	2	62.5	125	8	9	10	15	9	35.0	930.0	7.7	5.90
29 30 157	3	1500.00	150	29	29	26	2	62.5	125	12	9	10	15	9	35.0	1430.0	7.7	8.85
29 30 207	3	2000.00	200	29	29	26	2	62.5	125	16	9	10	15	9	35.0	1930.0	7.7	11.80
29 40 107	4	1000.00	75	39	39	35	2	62.5	125	8	12	14	20	13	33.3	933.4	11.7	10.70
29 40 157 <sup>1)</sup>	4	1506.67	113	39	39	35	2	62.5	125	12	12	14	20	13	33.3	1433.0	11.7	16.00
29 40 207	4	2000.00	150	39	39	35	2	62.5	125	16	12	14	20	13	33.3	1933.4	11.7	21.40
29 50 107	5	1000.00	60	49	39	34	2.5	62.5	125	8	12	14	20	13	37.5	925.0	11.7	13.00
29 50 207	5	2000.00	120	49	39	34	2.5	62.5	125	16	12	14	20	13	37.5	1925.0	11.7	26.00
29 60 107	6	1000.00	50	59	49	43	2.5	62.5	125	8	16	18	26	17	37.5	925.0	15.7	18.10
29 60 207	6	2000.00	100	59	49	43	2.5	62.5	125	16	16	18	26	17	37.5	1925.0	15.7	36.20

1) This rack can only be used for continuous linking with the left side

Other lengths on request

**Total Pitch Error:**  $GT_f/1000 \leq 0.052 \text{ mm}$   
 $GT_f/1500 \leq 0.062 \text{ mm } (\triangleq 0.042 \text{ mm} / 1000)$   
 $GT_f/2000 \leq 0.068 \text{ mm } (\triangleq 0.034 \text{ mm} / 1000)$

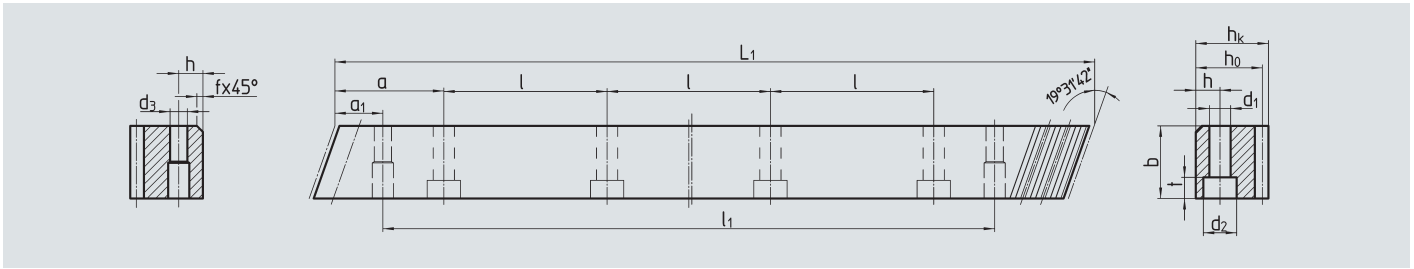
- ⊗ Teeth hardened with the ATLANTA High-Performance hardening process and ground
- ⊗ Heat-treatable steel according to ATLANTA-Standard
- ⊗ Ground on all sides after hardening


For information on mounting racks, see page C-92.

To achieve precision rack joints, we recommend our patented rack assembly kit, see page C-96. For lubrication of racks & pinions, we recommend our electronic lubrication systems, see Chapter D. For the calculation and selection of the rack & pinion drive, see pages C-44 to C-55.

For screws for rack mounting, see page C- 95.

## ATLANTA Quality 8



Order Code	Module	$L_1$	N° of Teeth	$b^{*0.4}$	$h_k$	$h_0$	f	a	l	N° of Holes	h	$d_1$	$d_2$	t	$a_1$	$l_1$	$d_3$	
29 20 108	2	1000.00	150	24	24	22	2	62.5	125	8	8	7	11	7	31.7	936.6	5.7	4.12
29 20 158	2	1500.00	225	24	24	22	2	62.5	125	12	8	7	11	7	31.7	1436.6	5.7	6.15
29 20 208	2	2000.00	300	24	24	22	2	62.5	125	16	8	7	11	7	31.7	1936.6	5.7	8.00
29 30 108	3	1000.00	100	29	29	26	2	62.5	125	8	9	10	15	9	35.0	930.0	7.7	5.70
29 30 158	3	1500.00	150	29	29	26	2	62.5	125	12	9	10	15	9	35.0	1430.0	7.7	8.90
29 30 208	3	2000.00	200	29	29	26	2	62.5	125	16	9	10	15	9	35.0	1930.0	7.7	11.20
29 40 108	4	1000.00	75	39	39	35	2	62.5	125	8	12	14	20	13	33.3	933.4	11.7	10.10
29 40 158 <sup>1)</sup>	4	1506.67	113	39	39	35	2	62.5	125	12	12	14	20	13	33.3	1433.4	11.7	16.00
29 40 208	4	2000.00	150	39	39	35	2	62.5	125	16	12	14	20	13	33.3	1933.4	11.7	20.16
29 50 108	5	1000.00	60	49	39	34	2.5	62.5	125	8	12	14	20	13	37.5	925.0	11.7	13.00
29 50 208	5	2000.00	120	49	39	34	2.5	62.5	125	16	12	14	20	13	37.5	1925.0	11.7	24.52
29 60 108	6	1000.00	50	59	49	43	2.5	62.5	125	8	16	18	26	17	37.5	925.0	15.7	18.25
29 60 208	6	2000.00	100	59	49	43	2.5	62.5	125	16	16	18	26	17	37.5	1925.0	15.7	36.20

1) This rack can only be used for continuous linking with the left side

Other lengths and without mounting holes on request

**Total Pitch Error:**  $GT_f/1000 \leq 0.060 \text{ mm}$   
 $GT_f/1500 \leq 0.072 \text{ mm} (\triangleq 0.048 \text{ mm} / 1000)$   
 $GT_f/2000 \leq 0.078 \text{ mm} (\triangleq 0.039 \text{ mm} / 1000)$

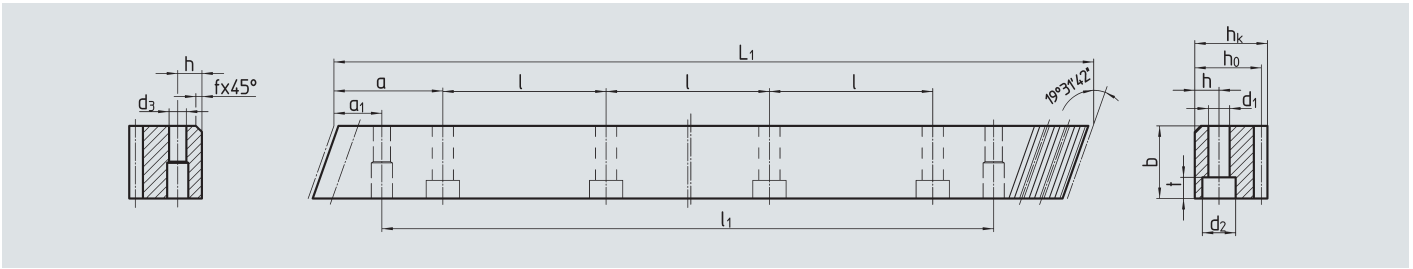
- ⊗ Teeth hardened with the ATLANTA High-Performance hardening process and ground
- ⊗ Heat-treatable steel according to ATLANTA-Standard
- ⊗ Ground on all sides after hardening


For information on mounting racks, see page C-92.

To achieve precision rack joints, we recommend our patented rack assembly kit, see page C-96. For lubrication of racks & pinions, we recommend our electronic lubrication systems, see Chapter D. For the calculation and selection of the rack & pinion drive, see pages C-44 to C-55.

For screws for rack mounting, see page C- 95.

ATLANTA Quality 8



Order Code	Module	L <sub>1</sub>	N° of Teeth	b <sup>*0.4</sup>	h <sub>k</sub>	h <sub>0</sub>	f	a	l	N° of Holes	h	d <sub>1</sub>	d <sub>2</sub>	t	a <sub>1</sub>	l <sub>1</sub>	d <sub>3</sub>	
38 21 050 <sup>2)</sup>	2	500.00	75	25	24	22	2	62.5	125	4	8	7	11	7	31.7	436.6	5.7	2.10
38 21 100	2	1000.00	150	25	24	22	2	62.5	125	8	8	7	11	7	31.7	936.6	5.7	4.30
38 20 100	2	1000.00	150	25	24	22	2	without mounting holes										4.30
38 21 200	2	2000.00	300	25	24	22	2	62.5	125	16	8	7	11	7	31.7	1936.6	5.7	8.60
38 20 200	2	2000.00	300	25	24	22	2	without mounting holes										8.60
38 31 050 <sup>2)</sup>	3	500.00	50	30	29	26	2	62.5	125	4	9	10	15	9	35.0	430.0	7.7	3.00
38 31 100	3	1000.00	100	30	29	26	2	62.5	125	8	9	10	15	9	35.0	930.0	7.7	6.10
38 30 100	3	1000.00	100	30	29	26	2	without mounting holes										6.10
38 31 200	3	2000.00	200	30	29	26	2	62.5	125	16	9	10	15	9	35.0	1930.0	7.7	12.20
38 30 200	3	2000.00	200	30	29	26	2	without mounting holes										12.20
38 41 100	4	1000.00	75	40	39	35	2	62.5	125	8	12	10	15	9	33.3	933.4	7.7	10.90
38 40 100	4	1000.00	75	40	39	35	2	without mounting holes										10.90
38 41 200	4	2000.00	150	40	39	35	2	62.5	125	16	12	10	15	9	33.3	1933.4	7.7	21.80
38 40 200	4	2000.00	150	40	39	35	2	without mounting holes										21.80

2) Due to the screw connection, the feed force is maximum 50 % of the value for racks with L<sub>1</sub> = 1,000 mm

**Total Pitch Error:**  $GT_f / 500 \leq 0.050 \text{ mm}$   
 $GT_f / 1000 \leq 0.100 \text{ mm}$   
 $GT_f / 2000 \leq 0.200 \text{ mm}$

- ⊗ Teeth milled, quenched & tempered
- ⊗ Heat-treatable steel according to ATLANTA-Standard
- ⊗ Backside machined

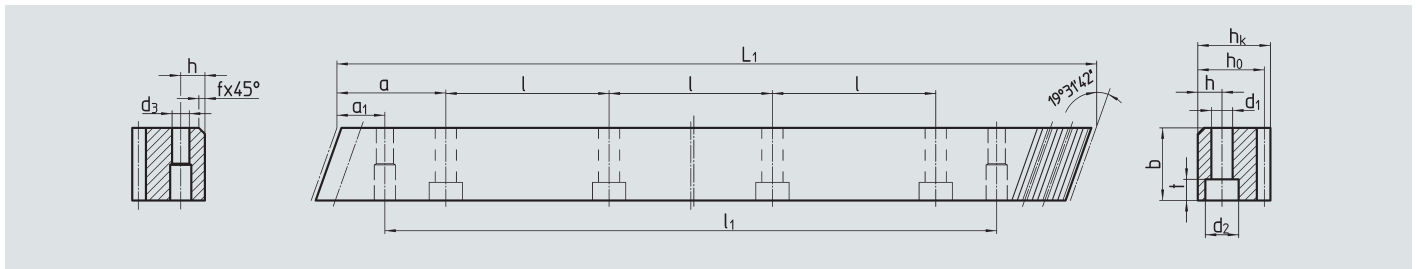
For information on mounting racks, see page C-92.

To achieve precision rack joints, we recommend our patented rack assembly kit, see page C-96. For lubrication of racks & pinions, we recommend our electronic lubrication systems, see Chapter D. For the calculation and selection of the rack & pinion drive, see pages C-44 to C-55.

For screws for rack mounting, see page C- 95.



## ATLANTA Quality 10



Order Code	Module	$L_1$	N° of Teeth	$b^{+0.4}$	$h_k$	$h_0$	f	a	l	N° of Holes	h	$d_1$	$d_2$	t	$a_1$	$l_1$	$d_3$	kg
39 15 050 <sup>2)</sup>	1.5	500.00	100	17	17	15.5	2	62.5	125	4	6	6	10	6	31.7	436.6	5.7	2.00
39 16 050	1.5	500.00	100	17	17	15.5	2	without mounting holes										2.00
39 15 100	1.5	1000.00	200	17	17	15.5	2	62.5	125	8	6	6	10	6	31.7	936.6	5.7	2.60
39 16 100	1.5	1000.00	200	17	17	15.5	2	without mounting holes										2.60
39 20 050 <sup>2)</sup>	2	500.00	75	25	24	22	2	62.5	125	4	8	7	11	7	31.7	436.6	2.7	2.10
39 21 050	2	500.00	75	25	24	22	2	without mounting holes										2.10
39 20 100	2	1000.00	150	25	24	22	2	62.5	125	8	8	7	11	7	31.7	936.6	5.7	4.20
39 21 100	2	1000.00	150	25	24	22	2	without mounting holes										4.20
39 20 200	2	2000.00	300	25	24	22	2	62.5	125	16	8	7	11	7	31.7	1936.6	5.7	8.40
39 21 200	2	2000.00	300	25	24	22	2	without mounting holes										8.40
39 30 050 <sup>2)</sup>	3	500.00	50	30	29	26	2	62.5	125	4	9	10	15	9	35.0	430.0	7.7	3.00
39 31 050	3	500.00	50	30	29	26	2	without mounting holes										3.00
39 30 100	3	1000.00	100	30	29	26	2	62.5	125	8	9	10	15	9	35.0	930.0	7.7	6.00
39 31 100	3	1000.00	100	30	29	26	2	without mounting holes										6.00
39 30 200	3	2000.00	200	30	29	26	2	62.5	125	16	9	10	15	9	35.0	1930.0	7.7	12.00
39 31 200	3	2000.00	200	30	29	26	2	without mounting holes										12.00
39 40 050 <sup>1)2)</sup>	4	506.67	38	40	39	35	2	62.5	125	4	12	10	15	9	33.3	433.0	7.7	5.30
39 40 100	4	1000.00	75	40	39	35	2	62.5	125	8	12	10	15	9	33.3	933.4	7.7	10.50
39 41 100	4	1000.00	75	40	39	35	2	without mounting holes										10.50
39 40 200	4	2000.00	150	40	39	35	2	62.5	125	16	12	10	15	9	33.3	1933.4	7.7	21.00
39 41 200	4	2000.00	150	40	39	35	2	without mounting holes										21.00
39 50 100	5	1000.00	60	50	39	34	2.5	62.5	125	8	12	14	20	13	37.5	925.0	11.7	13.00
39 51 100	5	1000.00	60	50	39	34	2.5	without mounting holes										13.00
39 50 200	5	2000.00	120	50	39	34	2.5	62.5	125	16	12	14	20	13	37.5	1925.0	11.7	26.00
39 60 100	6	1000.00	50	60	49	43	2.5	62.5	125	8	16	18	26	17	37.5	925.0	15.7	19.80
39 61 100	6	1000.00	50	60	49	43	2.5	without mounting holes										19.80
39 60 200	6	2000.00	100	60	49	43	2.5	62.5	125	16	16	18	26	17	37.5	1925.0	15.7	39.60
39 61 200	6	2000.00	100	60	49	43	2.5	without mounting holes										39.60

1) This rack can only be used for continuous linking with the left side

2) Due to the screw connection, the feed force is maximum 50 % of the value for racks with  $L_1 = 1,000$  mm

**Total Pitch Error:**  
 $GT_f / 500 \leq 0.100$  mm  
 $GT_f / 1000 \leq 0.200$  mm  
 $GT_f / 1500 \leq 0.300$  mm  
 $GT_f / 2000 \leq 0.400$  mm

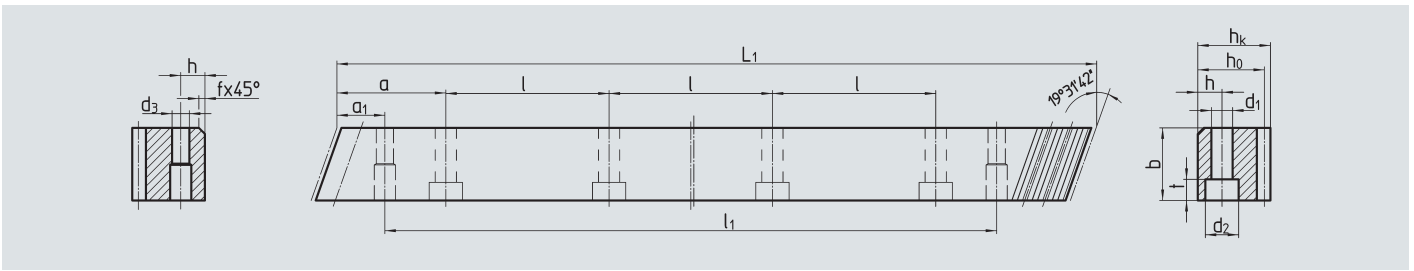
- ⊗ Teeth hardened with the ATLANTA High-Performance hardening process and ground
- ⊗ Heat-treatable steel according to ATLANTA-Standard
- ⊗ Ground on all sides after hardening

For information on mounting racks, see page C-92.

To achieve precision rack joints, we recommend our patented rack assembly kit, see page C-96. For lubrication of racks & pinions, we recommend our electronic lubrication systems, see Chapter D. For the calculation and selection of the rack & pinion drive, see pages C-44 to C-55.

For screws for rack mounting, see page C- 95.

## ATLANTA Quality 10



Order Code	Module	$L_1$	N° of Teeth	$b^{+0.4}$	$h_k$	$h_0$	f	a	l	N° of Holes	h	$d_1$	$d_2$	t	$a_1$	$l_1$	$d_3$	kg
39 81 100	8	960.00	36	80	79	71	2.5			without mounting holes								42.50
39 81 200	8	1920.00	72	80	79	71	2.5			without mounting holes								85.00
39 11 100	10	1000.00	30	100	99	89	2.5			without mounting holes								68.72
39 13 100	12	1000.00	25	120	120	108	2.5			without mounting holes								120.00

Total Pitch Error:  $GT_f/1000 \leq 0.200 \text{ mm}$   
 $GT_f/2000 \leq 0.400 \text{ mm}$

- ⊗ Teeth hardened with the ATLANTA High-Performance hardening process and ground
- ⊗ Heat-treatable steel according to ATLANTA-Standard
- ⊗ Backside machined, profile blasted

For information on mounting racks, see page C-92.

To achieve precision rack joints, we recommend our patented rack assembly kit, see page C-96. For lubrication of racks & pinions, we recommend our electronic lubrication systems, see Chapter D. For the calculation and selection of the rack & pinion drive, see pages C-44 to C-55.

For screws for rack mounting, see page C- 95.