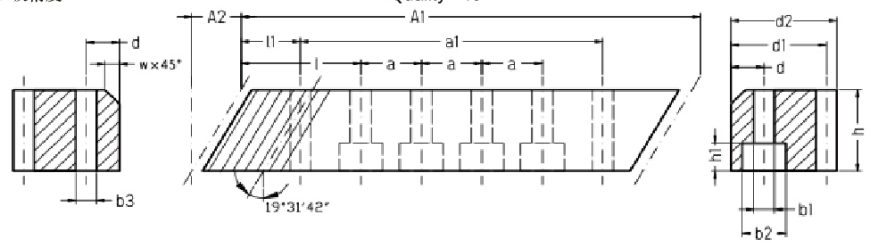
基础齿条 模数 1.5-12 BR RACKS MODULE 1.5-12 斜齿齿条

10 级精度 Quality 10



订货代码	模数			齿数							孔数									重量
Order code	M	A1	A2	Z	h	d2	d1	w	l	a	No. of holes	d	b1	b2	h1	l1	a1	b3	Kg
H00-15-1011	1.5	1000	6.02	200	17	17	15.5	2	62.5	125	8	6	6	10	6	31.7	936.6	5.7	2.60
H00-02-1011	2	1000	8.87	150	25	24	22	2	62.5	125	8	8	7	11	7	31.7	936.6	5.7	4.20
H00-02-2011	2	2000	8.87	300	25	24	22	2	62.5	125	16	8	7	11	7	31.7	1936.6	5.7	8.40
H00-03-1011	3	1000	10.64	100	30	29	26	2	62.5	125	8	9	10	15	9	35.0	930.0	7.7	6.00
H00-03-2011	3	2000	10.64	200	30	29	26	2	62.5	125	16	9	10	15	9	35.0	1930.0	7.7	12.00
H00-04-1011	4	1000	14.20	75	40	39	35	2	62.5	125	8	12	10	15	9	33.3	933.4	7.7	10.50
H00-04-1012	4	1000	14.20	75	40	39	35	2	62.5	125	8	12	14	20	13	33.3	933.4	11.7	10.50
H00-04-1512	4	1506.67	14.20	113	40	39	35	2	62.5	125	12	12	14	20	13	33.3	1433.4	11.7	15.75
H00-04-2011	4	2000	14.20	150	40	39	35	2	62.5	125	16	12	10	15	9	33.3	1933.4	7.7	21.00
H00-04-2012	4	2000	14.20	150	40	39	35	2	62.5	125	16	12	14	20	13	33.3	1933.4	11.7	21.00
H00-05-1011	5	1000	17.70	60	50	39	34	2.5	62.5	125	8	12	14	20	13	37.5	925.0	11.7	13.00
H00-05-2011	5	2000	17.70	120	50	39	34	2.5	62.5	125	16	12	14	20	13	37.5	1925.0	11.7	26.00
H00-06-1011	6	1000	21.40	50	60	49	43	2.5	62.5	125	8	16	18	26	17	37.5	925.0	15.7	19.80
H00-06-2011	6	2000	21.40	100	60	49	43	2.5	62.5	125	16	16	18	26	17	37.5	1925.0	15.7	39.60
H00-08-1011	8	960	28.40	36	80	79	71	2.5	60	120	8	25	22	33	21	120.0	720.0	19.7	42.50
H00-08-2011	8	1920	28.40	72	80	79	71	2.5	60	120	16	25	22	33	21	120.0	1680.0	19.7	85.00
H00-10-1011	10	1000	35.46	30	100	99	89	2.5	62.5	125	8	32	33	48	32	125.0	750.0	19.7	68.72
H00-12-1011	12	1000	42.56	25	120	120	108	2.5	40.0	125	8	40	39	58	38	125.0	750.0	19.7	120.0

单位：mm/Dimensions in mm

◎齿距累积误差 GTi/1000≤0.200mm GTi/1500≤0.300mm GTi/2000≤0.400mm

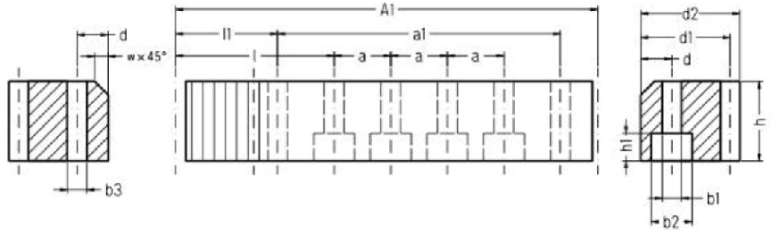
1. 铣削齿面，感应淬火。
2. 材料：优质钢材。
3. 安装块：客户可以按照需求购买续接使用的安装块。
4. 材质、齿条长度、孔径、孔位可依照客户需要定制。

◎Total pitch error GTi/1000≤0.200mm GTi/1500≤0.300mm GTi/2000≤0.400mm

1.Milled teeth,and induction hardened.
2.Material: Excellent steel.
3.Companion racks:Customers can according to the requirements purchase the block used to connect.
4.The material, the length of the rack, the diameter and the position of the hole can be customized according to the needs of customers.

超高精度齿条 模数 2-6 UHPR RACKS MODULE 2-6 直齿齿条

5 级精度 Quality 5



订货代码	模数		齿数							孔数									重量
Ordering code	M	A1	Z	h	d2	d1	w	l	a	No. of holes	d	b1	b2	h1	l1	a1	b3	Kg
S51-02-1011	2	1005.31	160	24	24	22	2	62.83	125.66	8	8	7	11.0	7	31.3	942.2	5.7	4.1
S51-03-1010	3	1017.88	108	29	29	26	2	63.61	127.23	8	9	10	15.0	9	34.4	949.1	7.7	6.0
S51-03-1011	3	1017.88	108	29	29	26	2	63.61	127.23	8	10	12	17.5	11	28.6	960.6	11.7	5.9
S51-03-1511	3	1526.81	162	29	29	26	2	63.61	127.23	12	10	12	17.5	11	28.6	1469.6	11.7	8.9
S51-04-1011	4	1005.31	80	39	39	35	2	62.83	125.66	8	13	16	23.0	15	30.3	944.7	15.7	10.7
S51-04-1511	4	1507.96	120	39	39	35	2	62.83	125.66	12	13	16	23.0	15	30.3	1447.3	15.7	15.8
S51-05-1011	5	1005.31	64	49	49	44	2.5	62.83	125.66	8	15	18	26.0	17	34.8	935.7	15.7	16.3
S51-05-1511	5	1507.96	96	49	49	44	2.5	62.83	125.66	12	15	18	26.0	17	34.8	1438.3	15.7	25.3
S51-06-1011	6	1017.88	54	59	59	53	2.5	63.62	127.23	8	20	22	33.0	21	98.6	820.6	19.7	24.5

◎齿距累积误差 GTi/1000≤0.026mm.

1. 齿面高频淬火并磨削。
2. 材质：优质钢材。
3. 安装块：客户可以按照需求购买续接使用的安装块。
4. 材质、齿条长度、孔径、孔位可依照客户需要定制。

◎Total pitch error GTi/1000≤0.026 mm.

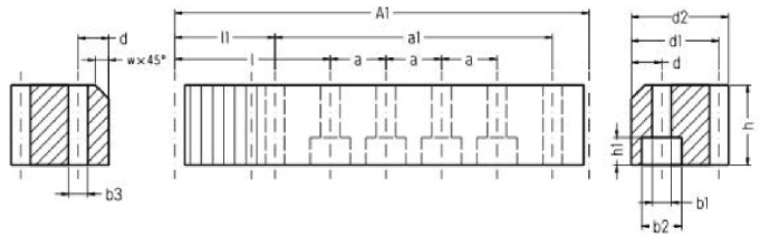
1.Teeth induction-hardened and ground.
2.Material:Excellent steel.
3.Companion racks: Customers can according to the requirements purchase the block used to connect.
4.The material, the length of the rack, the diameter and the position of the hole can be customized according to the needs of customers.

UHPR RACKS

MODULE 2-6

高精度齿条 模数 2-12 HPR RACKS MODULE 2-12 直齿齿条

6 级精度 Quality 6



订货代码	模数		齿数							孔数								重量
Order code	M	A1	Z	h	d2	d1	w	l	a	No.of holes	d	b1	b2	h1	l1	a1	b3	Kg
S61-02-1011	2	1005.30	160	24	24	22	2	62.8	125.66	8	8	7	11	7	31.40	942.70	5.7	4.20
S61-03-1011	3	1017.90	108	29	29	26	2	63.6	127.23	8	9	10	15	9	34.40	949.10	7.7	6.00
S61-04-1011	4	1005.30	80	39	39	35	2	62.8	125.66	8	12	10	15	9	37.50	930.30	7.7	10.50
S61-04-1021	4	1005.30	80	39	39	35	2	62.8	125.66	8	12	14	20	13	37.50	930.30	11.7	10.50
S61-04-1521	4	1507.90	120	39	39	35	2	62.8	125.66	12	12	14	20	13	37.50	1432.90	11.7	16.00
S61-05-1011	5	1005.30	64	49	39	34	2.5	62.8	125.66	8	12	14	20	13	30.10	945.00	11.7	13.40
S61-05-1511	5	1507.96	96	49	39	34	2.5	62.8	125.66	12	12	14	20	13	30.10	1447.70	11.7	20.10
S61-06-1011	6	1017.88	54	59	49	43	2.5	63.6	127.23	8	16	18	26	17	31.40	955.00	15.7	18.5
S61-06-1511	6	1526.81	81	59	49	43	2.5	63.6	127.23	12	16	18	26	17	31.40	1464.00	15.7	27.8
S61-08-1011	8	1005.30	40	79	79	71	2.5	62.8	125.66	8	25	22	33	21	26.60	952.00	19.7	44.76
S61-10-1011	10	1005.30	32	99	99	89	2.5	62.8	125.66	8	32	33	48	32	125.66	753.96	19.7	68.72
S61-12-1011	12	1017.90	27	120	120	108	2.5	63.6	127.23	8	40	39	58	38	127.23	763.40	19.7	111.00

单位：mm/Dimensions in mm

◎齿距累积误差 GTi/1000≤0.036mm.
GTi/1500≤0.043mm.

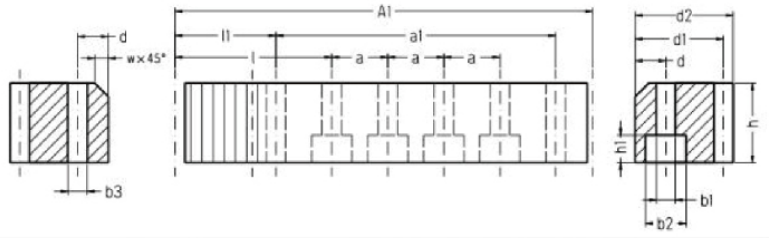
◎Total pitch error GTi/1000≤0.036mm.
GTi/1500≤0.043mm.

1. 齿面高频淬火并磨削。
2. 材质：优质钢材。
3. 安装块：客户可以按照需求购买续接使用的安装块。
4. 材质、齿条长度、孔径、孔位可依照客户需要定制。

1.Teeth induction-hardened and ground.
2.Material: Excellent steel.
3.Companion racks: Customers can according to the requirements purchase the block used to connect.
4.The material, the length of the rack, the diameter and the position of the hole can be customized according to the needs of customers.

高精度齿条 模数 2-8 HPR RACKS MODULE 2-8 直齿齿条

7 级精度 Quality 7



订货代码	模数		齿数							孔数								重量
Order code	M	A1	Z	h	d2	d1	w	l	a	No.of holes	d	b1	b2	h1	l1	a1	b3	Kg
S71-02-1011	2	1005.30	160	24	24	22	2	62.8	125.66	8	8	7	11	7	31.4	942.7	5.7	4.20
S71-03-1011	3	1017.90	108	29	29	26	2	63.6	127.23	8	9	10	15	9	34.4	949.1	7.7	6.00
S71-04-1011	4	1005.30	80	39	39	35	2	62.8	125.66	8	12	14	20	13	37.5	930.3	11.7	10.50
S71-05-1011	5	1005.30	64	49	39	34	2.5	62.8	125.66	8	12	14	20	13	30.1	945.0	11.7	13.40
S71-06-1011	6	1017.88	54	59	49	43	2.5	63.6	127.23	8	16	18	26	17	31.4	955.0	15.7	20.20
S71-08-1011	8	1005.30	40	79	79	71	2.5	62.8	125.66	8	25	22	33	21	26.6	952.0	19.7	44.76

单位：mm/Dimensions in mm

◎齿距累积误差 GTi/1000≤0.052mm.

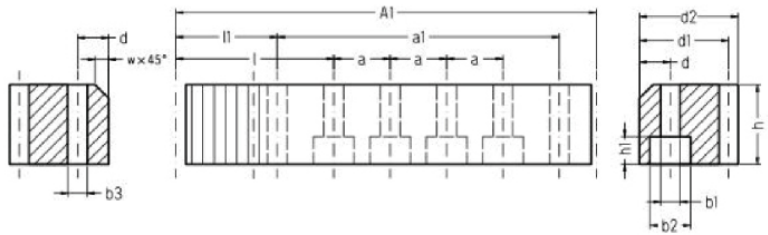
◎Total pitch error GTi/1000≤0.052mm.

1. 齿面高频淬火并磨削。
2. 材质：优质钢材。
3. 安装块：客户可以按照需求购买续接使用的安装块。
4. 材质、齿条长度、孔径、孔位可依照客户需要定制。

1.Teeth induction-hardened and ground.
2.Material: Excellent steel.
3.Companion racks: Customers can according to the requirements purchase the block used to connect.
4.The material, the length of the rack, the diameter and the position of the hole can be customized according to the needs of customers.

精密齿条 模数 2-5 PR RACKS MODULE 2-5 直齿齿条

8 级精度 Quality 8



订货代码	模数		齿数							孔数								重量
Order code	M	A1	Z	h	d2	d1	w	l	a	No. of holes	d	b1	b2	h1	l1	a1	b3	Kg
S81-02-1011	2	1005.3	160	25	24	22	2	62.8	125.66	8	8	7	11	7	31.4	942.7	5.7	4.2
S81-03-1011	3	1017.9	108	30	29	26	2	63.6	127.23	8	9	10	15	9	34.4	949.1	7.7	6.0
S81-04-1011	4	1005.3	80	40	39	35	2	62.8	125.66	8	12	14	20	13	37.5	930.3	11.7	10.5
S81-05-1011	5	1005.3	64	50	39	34	2.5	62.8	125.66	8	12	14	20	13	30.2	945.0	11.7	13.4

单位：mm/Dimensions in mm

◎齿距累积误差 GTi/1000≤0.060mm.

1. 齿面高频淬火并磨削。
2. 材质：优质钢材。
3. 安装块：客户可以按照需求购买续接使用的安装块。
4. 材质、齿条长度、孔径、孔位可依照客户需要定制。

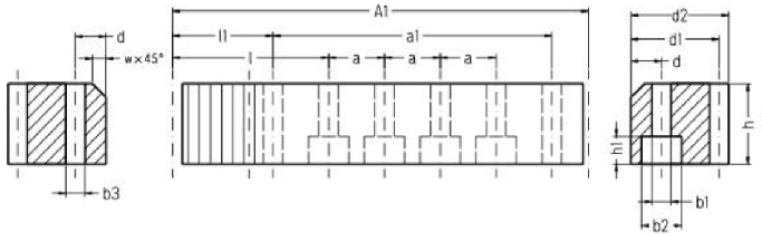
◎Total pitch error GTi/1000≤0.060mm.

1.Teeth induction-hardened and ground.
2.Material: Excellent steel.
3.Companion racks: Customers can according to the requirements purchase the block used to connect.
4.The material, the length of the rack, the diameter and the position of the hole can be customized according to the needs of customers.

DONTOP 东拓 精密机械

精密齿条 模数 2-5 PR RACKS MODULE 2-5 直齿齿条

8 级精度 Quality 8



订货代码	模数		齿数							孔数								重量
Ordering code	M	A1	Z	h	d2	d1	w	l	a	No. of holes	d	b1	b2	h1	l1	a1	b3	Kg
S80-02-1011	2	1005.31	160	25	24	22	2	62.83	125.66	8	8	7	11	7	31.3	942.7	5.7	4.3
S80-03-1011	3	1017.88	108	30	29	26	2	63.62	127.23	8	9	10	15	9	34.4	949.1	7.7	6.2
S80-04-1011	4	1005.31	80	40	39	35	2	62.83	125.66	8	12	10	15	9	37.5	930.3	7.7	11.0
S80-05-1011	5	1005.31	64	50	39	34	2.5	62.83	125.66	8	12	14	20	13	30.2	945.0	11.7	13.4

单位：mm/Dimensions in mm

◎齿距累积误差 GTi/1000≤0.100mm.

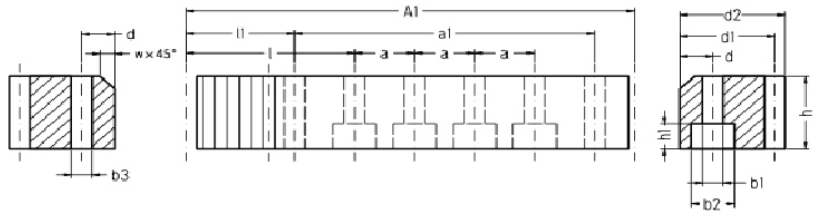
1. 铣削齿面，调质处理。
2. 材质：优质钢材。
3. 安装块：客户可以按照需求购买续接使用的安装块。
4. 材质、齿条长度、孔径、孔位可依照客户需要定制。

◎Total pitch error GTi/1000≤0.100mm.

1.Milled teeth, quenched and tempered.
2.Material: Excellent steel.
3.Companion racks: Customers can according to the requirements purchase the block used to connect.
4.The material, the length of the rack, the diameter and the position of the hole can be customized according to the needs of customers.

基础精度齿条 模数 1-10 BR RACKS MODULE 1-10 直齿齿条

10 级精度 Quality 10



订货代码	模数		齿数							孔数								重量
Order code	M	A1	Z	h	d2	d1	w	l	a	No.of holes	d	b1	b2	h1	l1	a1	b3	Kg
S00-01-1011	1	999.06	318	15	15	14	2		无安装孔 /Without mounting holes									1.64
S00-15-1011	1.5	999.03	212	17	17	15.5	2		无安装孔 /Without mounting holes									2.06
S00-02-1011	2	1005.31	160	25	24	22	2	62.83	125.66	8	8	7	11	7	31.3	942.7	5.7	4.20
S00-02-2011	2	2010.62	320	25	24	22	2	62.83	125.66	16	8	7	11	7	31.3	1948.0	5.7	8.40
S00-03-1011	3	1017.88	108	30	29	26	2	63.62	127.23	8	9	10	15	9	34.4	949.1	7.7	6.00
S00-03-2011	3	2035.75	216	30	29	26	2	63.62	127.23	16	9	10	15	9	34.4	1967.0	7.7	12.0
S00-04-1012	4	1005.31	80	40	39	35	2	62.83	125.66	8	12	10	15	9	37.5	930.3	7.7	10.2
S00-04-1012	4	1005.31	80	40	39	35	2	62.83	125.66	8	12	14	20	13	37.5	930.3	11.7	10.2
S00-04-2011	4	2010.62	160	40	39	35	2	62.83	125.66	16	12	10	15	9	37.5	1935.6	7.7	20.5
S00-04-2012	4	2010.62	160	40	39	35	2	62.83	125.66	16	12	14	20	13	37.5	1935.6	11.7	20.5
S00-05-1011	5	1005.31	64	50	39	34	2.5	62.83	125.66	8	12	14	20	13	30.2	945.0	11.7	13.8
S00-05-2011	5	2010.62	128	50	39	34	2.5	62.83	125.66	16	12	14	20	13	30.2	1950.3	11.7	27.5
S00-06-1011	6	1017.88	54	60	49	43	2.5	63.62	127.23	8	16	18	26	17	31.4	955.0	15.7	21.0
S00-06-2011	6	2035.75	108	60	49	43	2.5	63.62	127.23	16	16	18	26	17	31.4	1972.9	15.7	42.0
S00-08-1011	8	1005.31	40	80	79	71	2.5		无安装孔 /Without mounting holes									44.6
S00-10-1011	10	1005.3	32	100	99	89	2.5		无安装孔 /Without mounting holes									70.6

单位：mm/Dimensions in mm

◎齿距累积误差 GTf/1000≤0.200mm.
GTf/2000≤0.400mm.

◎Total pitch error GTf/1000≤0.200 mm.
GTf/2000≤0.400 mm.

1. 铣削齿面，感应淬火。
2. 材质：优质钢材。
3. 安装块：客户可以按照需求购买续接使用的安装块。
4. 材质、齿条长度、孔径、孔位可依照客户需要定制。

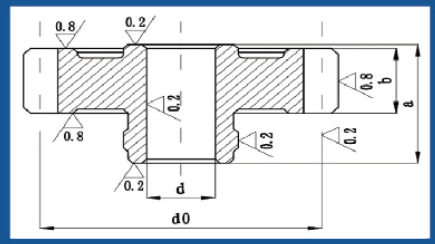
1.Milled teeth and induction hardened.
2.Material: Excellent steel.
3.Companion racks: Customers can according to the requirements purchase the block used to connect.
4.The material, the length of the rack, the diameter and the position of the hole can be customized according to the needs of customers.

HIGH PRECISION MASTER GEAR
高精度标准齿轮

INTRODUCTION OF
HIGH PRECISION MASTER GEAR PRODUCTS
高精度标准齿轮产品简介

高精度标准齿轮产品选用优质钢材制造，并经严格的热处理和稳定化处理。每件齿轮都经过严格的检验，能够保证产品精度及其保持精度的持久性，齿面光整、硬度高、耐磨损。
高精度标准齿轮用于校准齿轮量仪，以及用于单面啮合或双面啮合综合检查标准齿轮的精度。

The high precision master gears are made of high-grade steel and stabilized with heat treatment. Every gear is tested strictly and supplied with acceptance report, high precision, super-surface finishing and high hardness, ensuring its accuracy over a long time.
The gears can be used as standards in testing accuracy of master gears by method of single flank mesh or rolling mesh and also in calibrating the gear testers.



标准齿轮的尺寸和规格
Dimensions and Tolerance of Master Gears

标准齿轮的尺寸和公差表

按GB/T10095.1-2008(ISO1328-1995)中1、2级精度公差要求
TOLERANCE ACCORDING TO GB/T10095.1-2008(ISO1328-1995)CLASS1 OR 2

模数 Module (m)	齿数 Number of teeth (Z)	压力角 Pressure angle (α/°)	孔径 Diameter of bore (d/mm)	齿宽 Tooth width (b/mm)	1级精度 Class1 (μm)				2级精度 Class2 (μm)				备注 Note
					F_p	f_{pt}	F_α	F_r	F_p	f_{pt}	F_α	F_r	
2	60	20	40	20	4.6	1.3	1.5	3.5	6.5	1.9	2.1	5	*1
3.5	36	20	40	25	4.7	1.5	2	4	6.5	2.1	2.8	5.5	*1
4	30	20	40	25	4.9	1.6	2.4	4	7	2.3	3.4	5.5	*1
6	20	20	40	25	4.9	1.6	2.4	4	7	2.3	3.4	5.5	*2

单位：mm/Dimensions in mm

◎F_p-- 齿距累积总偏差 total cumulative pitch deviation
◎F_{pt}-- 单个齿距偏差 single pitch deviation
◎F_α-- 齿廓总偏差 total profile deviation
◎F_r-- 径向跳动误差 run-out

*1，*2 按 1 级或 2 级精度等级制造 Tolerance according to Class 1 or 2。