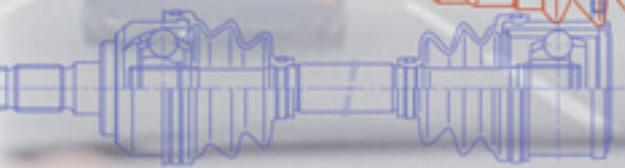
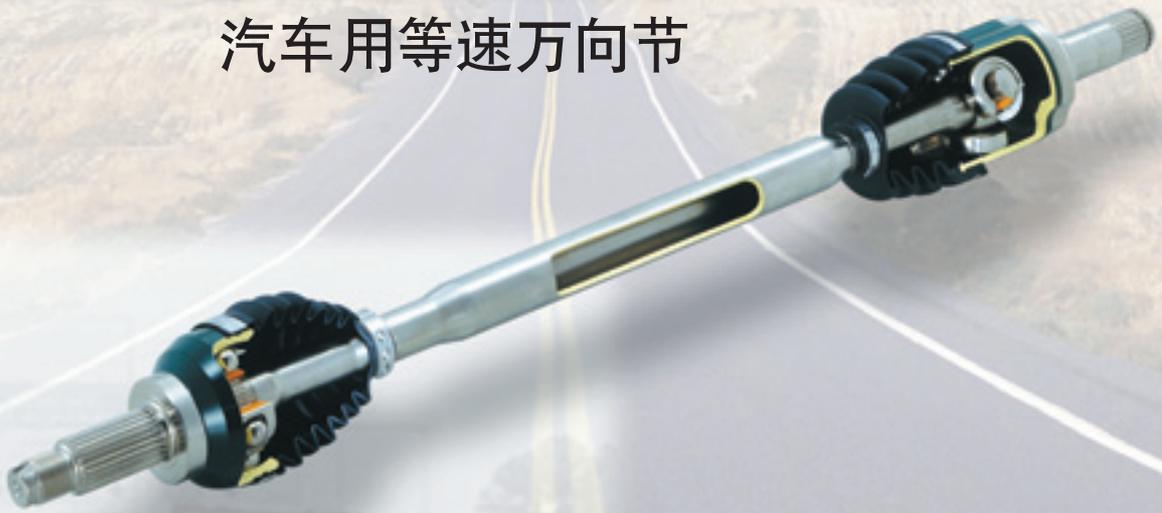


For New Technology Network

NTN®

CONSTANT VELOCITY JOINTS for AUTOMOBILES

汽车用等速万向节



CAT. No. 5601-III/CE

NTN constant velocity joint for automobiles supports the concept of "Fun to Drive"

NTN constant velocity joints are used in automotive propeller shafts and half shafts to transmit power from the engine to the wheels.

In today's automotive market there are increasing demands to create safer, more comfortable, environment-friendly vehicles.

In response to these needs, NTN constant velocity joints have always provided long life, outstanding function, low weight and compactness.

As a pioneer in the field of constant velocity joints, NTN has gained abundant experience over the years and this experience has been used for innovations and continuous improvements of our products.

NTN 的汽车用等速万向节让您享受驾驶的乐趣。

如今人们追求更为安全、舒适及环保的汽车。NTN 响应此需要，向市场提供了长寿命、轻巧及有杰出功能的等速万向节。它们用于传动轴及驱动轴中，有效的将动力从引擎传至车轮。

NTN 作为等速万向节的先驱开发者，我们利用多年累积的经验，不断创新及改进产品设计。

**Longer life,
more
durable**

长寿命 · 更耐用化

**More lightweight
and compact**

更轻巧 · 更紧凑

**Environment-
friendly**

保护环境

**Minimal
vibration
(for enhanced comfort)**

低振动 (加强舒适性)

HALF SHAFT

半轴

CONSTANT VELOCITY JOINT

等速万向节

FIXED JOINT

固定式万向节

BJ

滚珠固定万向节

EBJ

高效紧凑滚珠固定万向节

UJ

大摆角滚珠固定万向节

EUJ

高效紧凑大摆角滚珠固定万向节

DOJ

双偏移万向节

EDJ

高效紧凑双偏移万向节

TJ

角接触三柱式万向节

ETJ

E型三柱式万向节

PTJ

枕形轴颈三柱式万向节

LJ

十字槽万向节

PLUNGING JOINT

往复式万向节



P4



P5



P6



P7



P8



P9



P10



P11



P12



P13

CONSTANT VELOCITY JOINT

等速万向节

FIXED JOINT

固定式万向节

BJ

滚珠固定万向节

HEBJ

高速EBJ

DOJ

双偏移万向节

HEDJ

高速EDJ

TJ

向心止推三面万向节

LJ

十字槽万向节

PLUNGING JOINT

往复式万向节



P14



P15



P16



P17



P18



P19



P20

PROPELLER SHAFT

传动轴

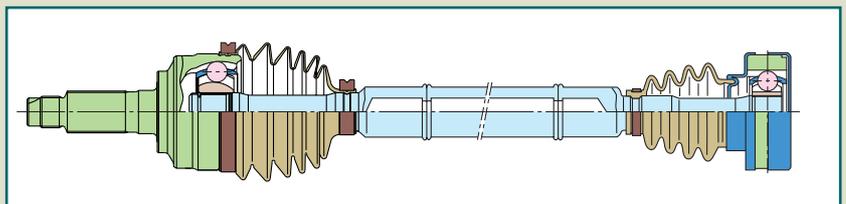
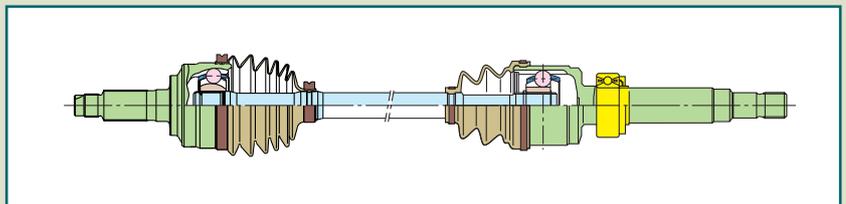
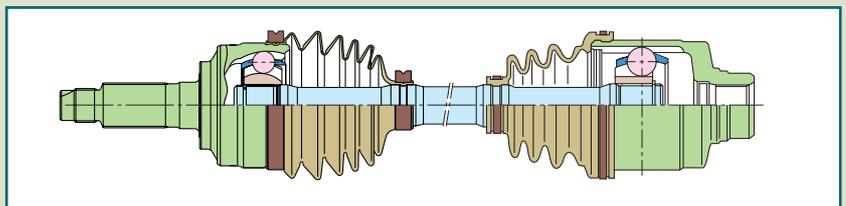
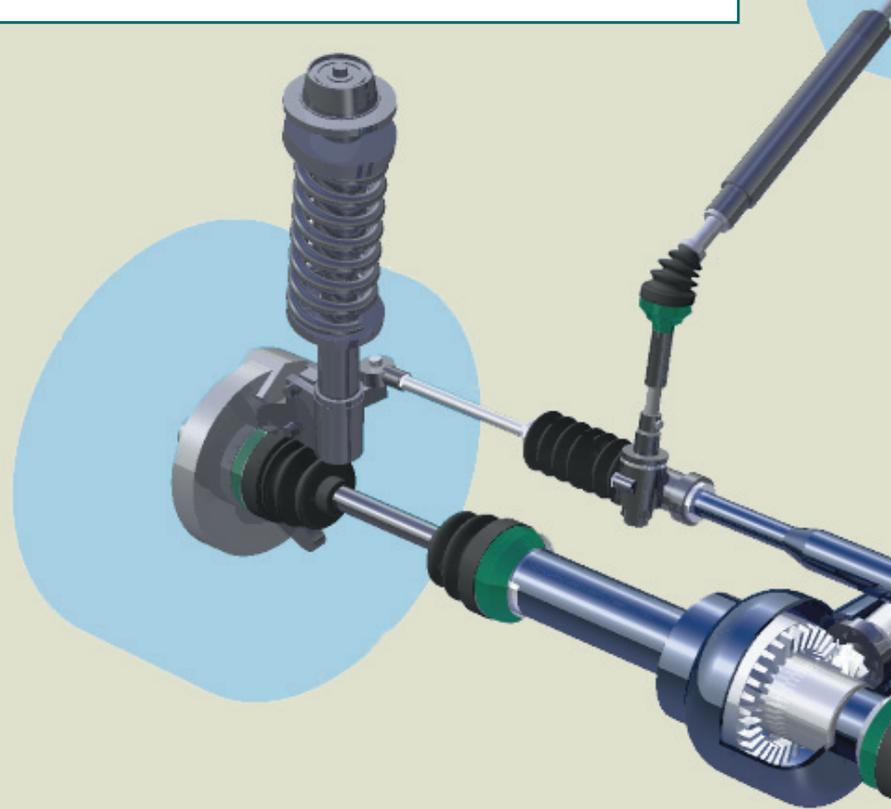
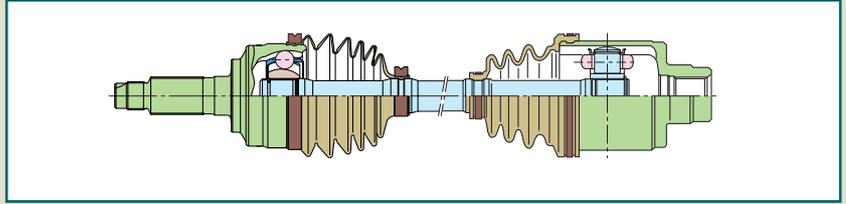
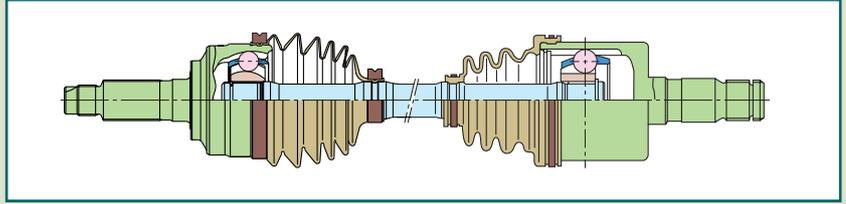
HLJ

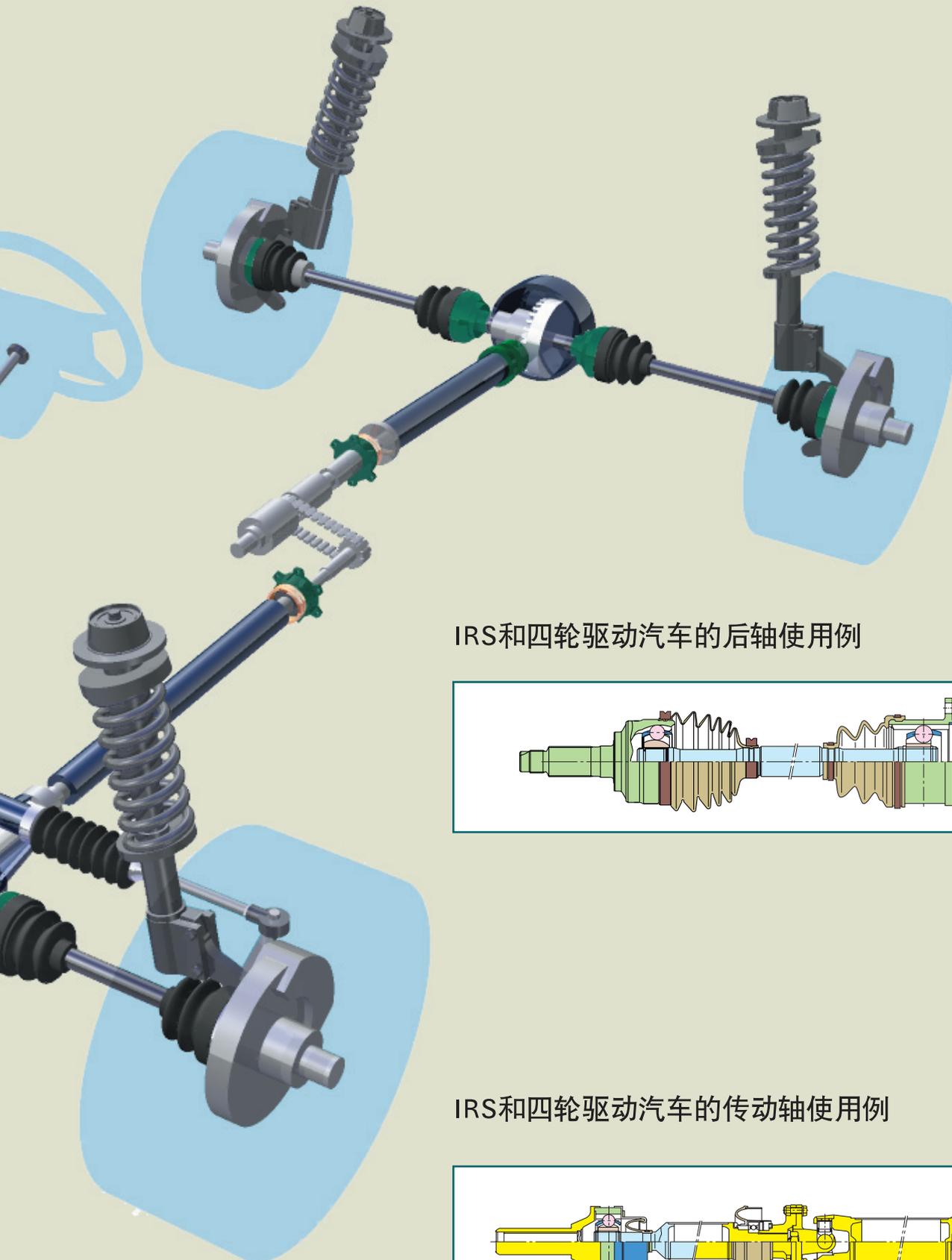
高速十字槽万向节

Typical Application of NTN Constant Velocity Joint

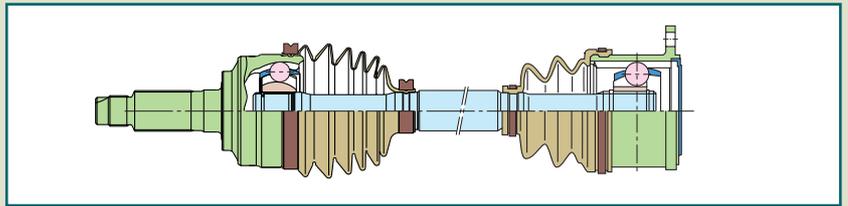
等速万向节的应用例子

前部驱动和四轮驱动汽车的前轴使用例

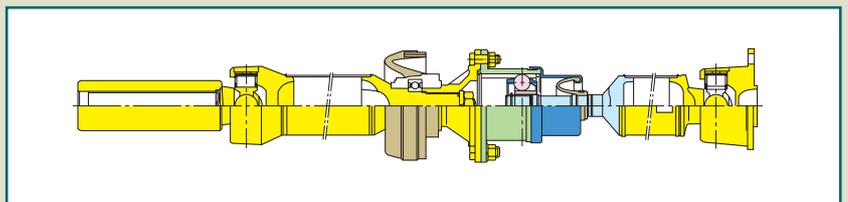
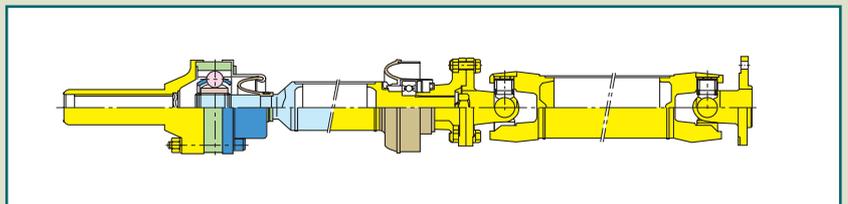




IRS和四轮驱动汽车的后轴使用例

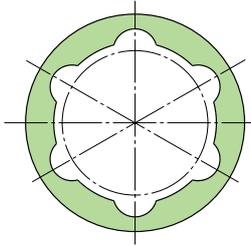


IRS和四轮驱动汽车的传动轴使用例

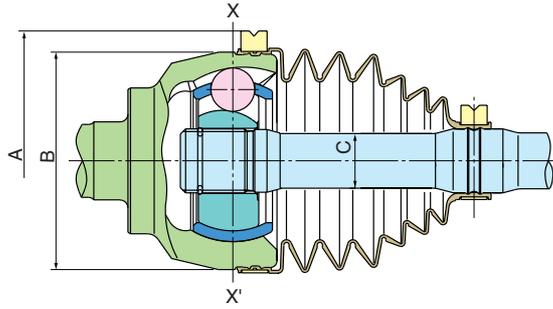


BJ

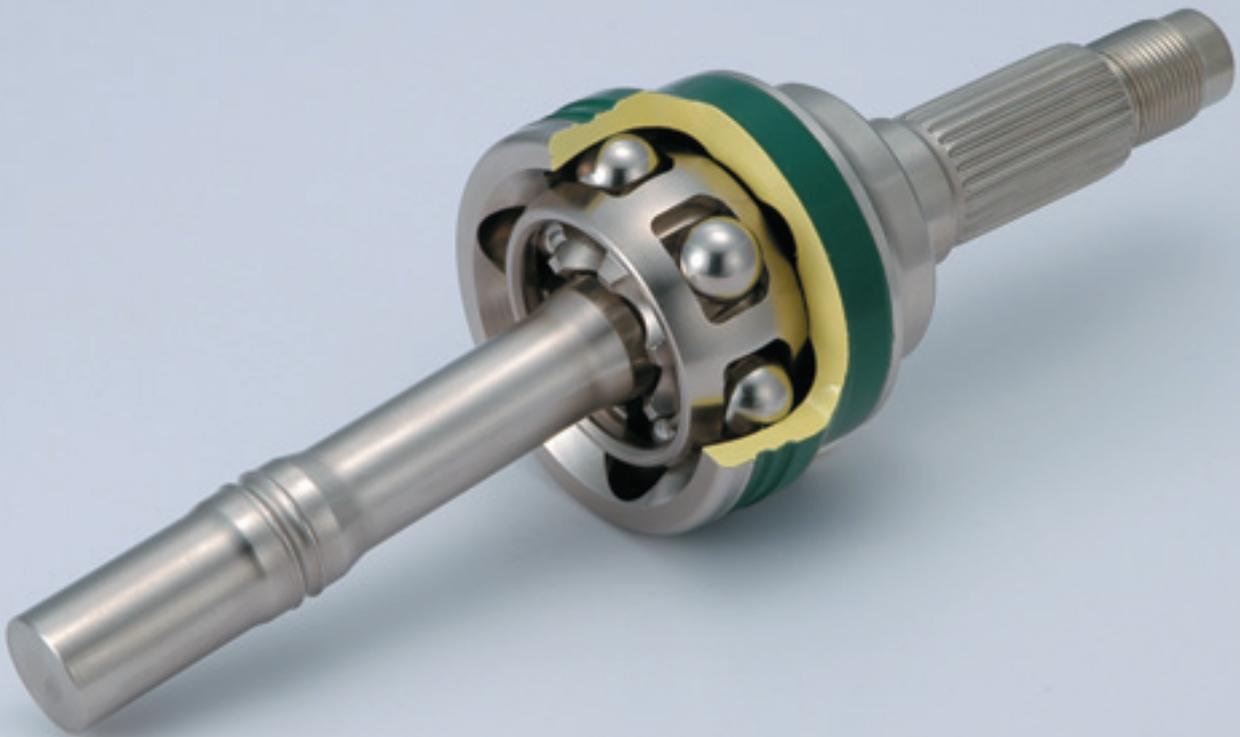
HALF SHAFT 半轴



X-X' 横切面



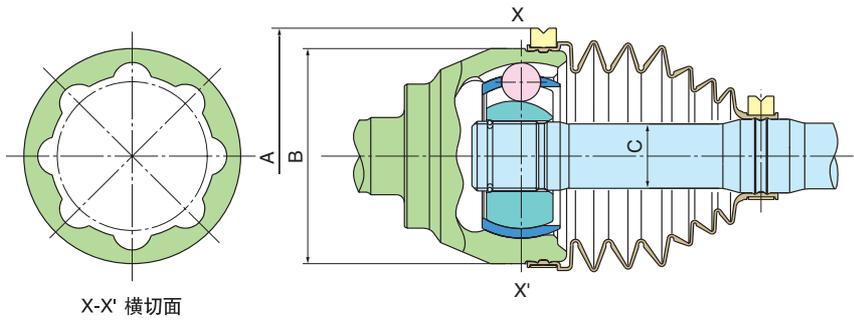
MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension		
		尺寸 mm		
		A	B	C
46.5°	BJ68LAC	84.3	65.3	17.0
	BJ71LAC	88.0	69.0	18.0
	BJ75LAC	91.6	72.6	19.0
	BJ79LAC	95.3	76.3	20.1
	BJ82LAC	98.9	79.9	21.2
	BJ87LAC	102.6	83.6	22.2
	BJ92LAC	106.4	87.4	23.3
	BJ95LAC	109.0	90.0	24.0
	BJ100LAC	113.7	94.7	25.4
	BJ104LAC	118.2	99.2	26.5
	BJ109LAC	122.2	103.2	27.6
	BJ117LAC	130.2	111.2	29.7
	BJ125LAC	138.2	119.2	31.8
	BJ133LAC	146.4	127.4	33.9



EBJ

HALF SHAFT

半轴



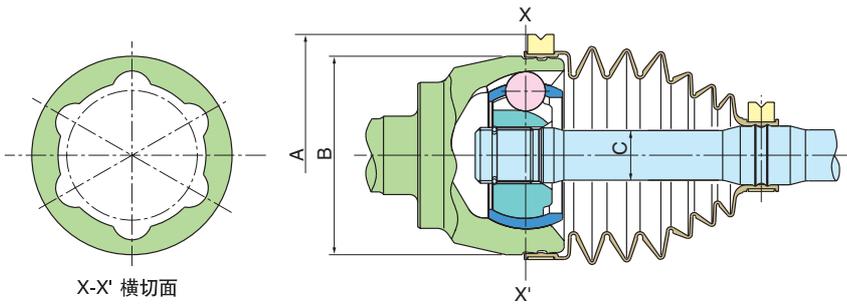
MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension		
		尺寸 mm		
		A	B	C
47°	EBJ82M	91.6	72.6	21.2
	EBJ87M	95.3	76.3	22.2
	EBJ92M	99.7	80.7	23.3
	EBJ95M	102.6	83.6	24.0
	EBJ100M	106.4	87.4	25.4
	EBJ104M	109.7	90.7	26.5
	EBJ109M	113.7	94.7	27.6
	EBJ113M	117.7	98.7	28.6
	EBJ117M	121.6	102.6	29.7
	EBJ125M	129.5	110.5	31.8

- The model EBJ is lighter and more compact than the model BJ.(E series)
- The model EBJ features higher efficiency and a lower temperature rise than the model BJ.
- BJ的轻巧、紧凑型(E系列)
- 高效率、低温升



UJ

HALF SHAFT
半轴



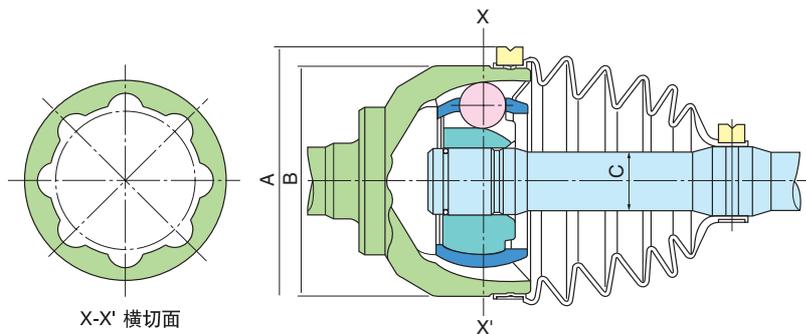
MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension 尺寸 mm		
		A	B	C
50°	UJ68	88.0	69.0	17.0
	UJ71	91.6	72.6	18.0
	UJ75	95.3	76.3	19.0
	UJ79	98.9	79.9	20.1
	UJ82	102.6	83.6	21.2
	UJ87	106.4	87.4	22.2
	UJ92	109.0	90.0	23.3
	UJ95	113.7	94.7	24.0
	UJ100	118.2	99.2	25.4
	UJ104	122.2	103.2	26.5
	UJ109	126.2	107.2	27.6
UJ117	134.2	115.2	29.7	



EUJ

HALF SHAFT

半轴



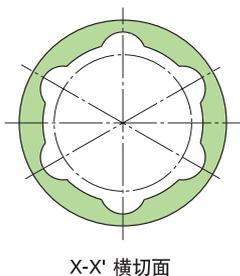
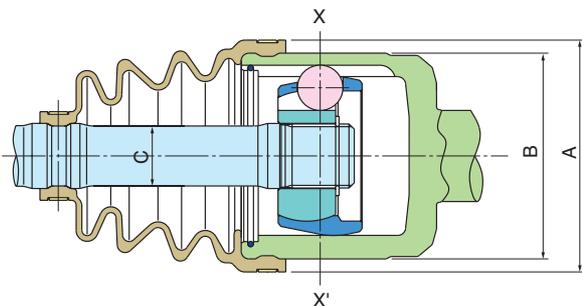
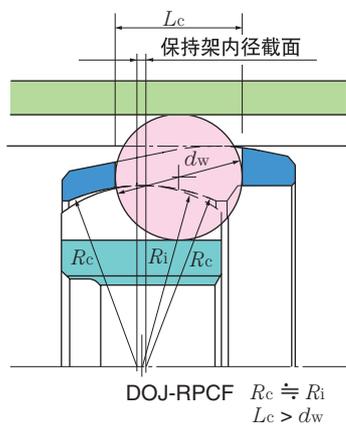
MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension		
		尺寸 mm		
		A	B	C
50°	EUJ71	85.4	65.5	18.0
	EUJ75	89.3	69.4	19.0
	EUJ79	92.9	73.0	20.1
	EUJ82	96.9	77.0	21.2
	EUJ87	100.7	80.8	22.2
	EUJ95	106.8	86.9	24.0
	EUJ100	111.8	91.9	25.4
	EUJ104	115.7	95.8	26.5
	EUJ109	119.0	99.1	27.6
	EUJ117	129.7	109.8	29.7

- The model EUJ is lighter and more compact than the model UJ.(E series)
- The model EUJ features higher efficiency and a lower temperature rise than the model UJ.
- UJ的轻巧、紧凑型(E系列)
- 高效率、低温升



DOJ

HALF SHAFT 半轴



MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension 尺寸 mm		
		A	B	C
25°	DOJ68	71.2	61.5	17.0
	DOJ71	75.7	65.0	18.0
	DOJ75	79.7	69.0	19.0
	DOJ79	83.0	72.5	20.1
	DOJ82	87.4	75.7	21.2
	※ DOJ87	90.7	79.0	22.2
	※ DOJ92	93.6	82.0	23.3
	DOJ95	97.7	85.5	24.0
	DOJ100	100.7	89.0	25.4
	DOJ104	106.7	95.0	26.5
	DOJ109	110.2	98.5	27.6
	DOJ117	117.2	105.5	29.7
	DOJ125	124.2	112.5	31.8
30.5°	DOJ68L	75.7	65.0	17.0
	DOJ71L	79.7	69.0	18.0
	DOJ75L	83.0	72.5	19.0
	DOJ79L	87.4	75.7	20.1
	DOJ87L	94.6	83.0	22.2
	DOJ95L	100.7	89.0	24.0
	DOJ100L	104.7	93.0	25.4
	DOJ104L	110.2	98.5	26.5
	DOJ109L	113.7	102.0	27.6
	DOJ117L	120.7	109.0	29.7
	DOJ125L	127.7	116.0	31.8
	DOJ133L	135.2	123.5	33.9

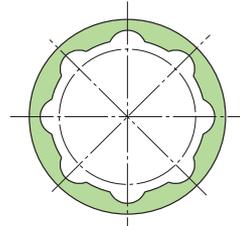
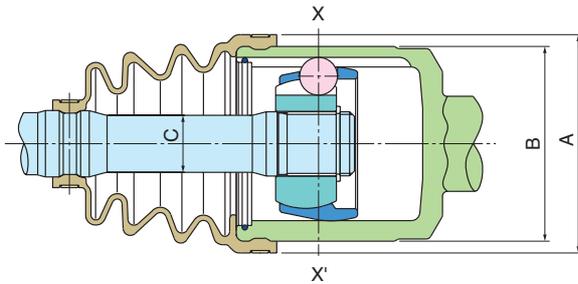
※MAX permissible working Angle 23°
※最大工作角度为23°



EDJ

HALF SHAFT

半轴



X-X' 横切面

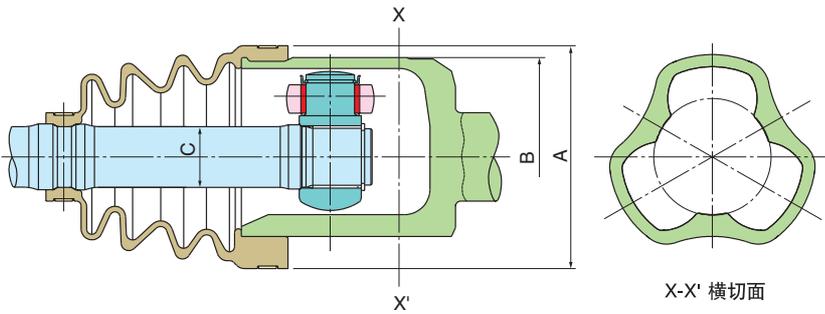
MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension		
		尺寸 mm		
		A	B	C
25°	EDJ82	80.2	71.5	21.2
	EDJ87	85.3	75.2	22.2
	EDJ92	87.4	79.0	23.3
	EDJ95	90.8	82.0	24.0
	EDJ100	94.1	85.5	25.4
	EDJ104	100.5	91.0	26.5
	EDJ109	105.3	95.0	27.6
	EDJ113	108.7	98.5	28.6
	EDJ117	112.2	102.0	29.7
	EDJ125	117.8	109.0	31.8

- The model EDJ is lighter and more compact than the model DOJ.(E series)
- The model EDJ features higher efficiency and a lower temperature rise than the model DOJ.
- DOJ的轻巧、紧凑型(E系列)
- 高效率、低温升



TJ

HALF SHAFT
半轴



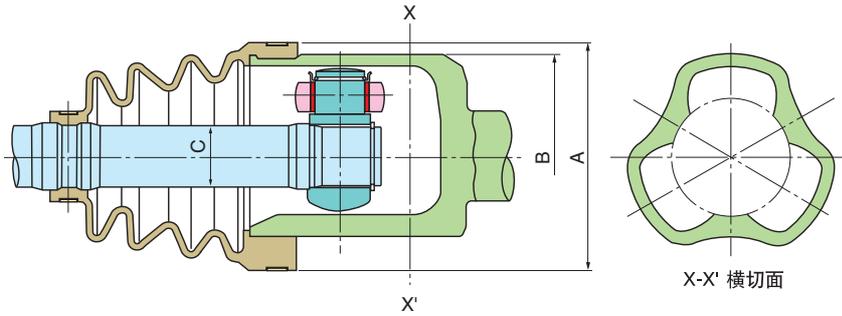
MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension		
		尺寸 mm		
		A	B	C
23°	TJ68	71.0	61.5	17.0
25°	TJ71	74.0	65.0	18.0
23°	TJ75	78.0	68.0	19.0
	TJ79	82.0	71.4	20.1
	TJ82	85.8	74.6	21.2
	TJ87	90.2	78.7	22.2
	TJ92	93.1	81.6	23.3
	TJ95	96.3	84.8	24.0
	TJ100	100.5	89.0	25.4
TJ104	106.7	95.0	26.5	
TJ109	110.2	98.5	27.6	



ETJ

HALF SHAFT

半轴



MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension 尺寸 mm		
		A	B	C
23°	ETJ71	71.2	60.9	18.0
	ETJ75	74.0	64.3	19.0
	ETJ79	76.6	67.2	20.1
	ETJ82	78.0	69.0	21.2
	ETJ87	82.0	71.4	22.2
	ETJ92	85.3	75.4	23.3
25°	ETJ95	87.4	76.6	24.0
	ETJ100	94.1	84.8	25.4

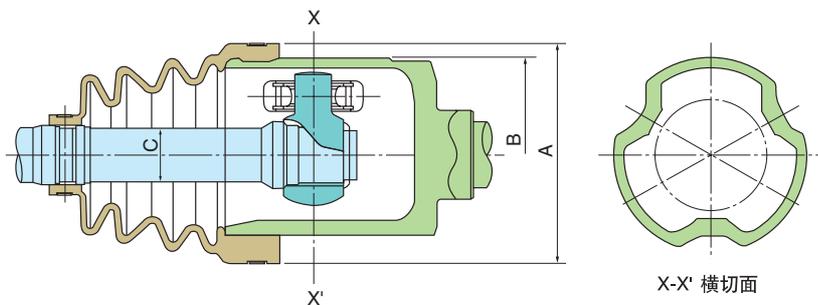
- The model ETJ is lighter and more compact than the model TJ.(E series)
- TJ的轻巧、紧凑型(E系列)



PTJ

HALF SHAFT

半轴



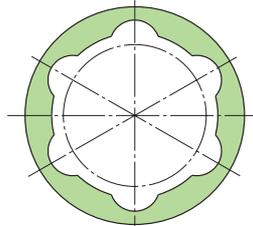
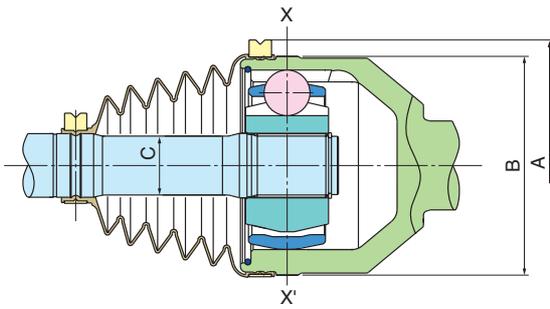
MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension		
		尺寸 mm		
		A	B	C
26°	PTJ75	78.0	69.0	19.0
	PTJ82	85.3	75.7	21.2
	PTJ87	87.4	79.0	22.2
	PTJ92	90.8	82.0	23.3
	PTJ95	94.1	85.5	24.0
	PTJ100	97.7	89.0	25.4
	PTJ104	105.3	95.0	26.5

- The induced cyclic axial load and the static plunging resistance are held to constant low levels and are not related to the working angle.
- 循环轴向负荷及静态往复运动阻力被恒定在低水平并与工作角度无关。



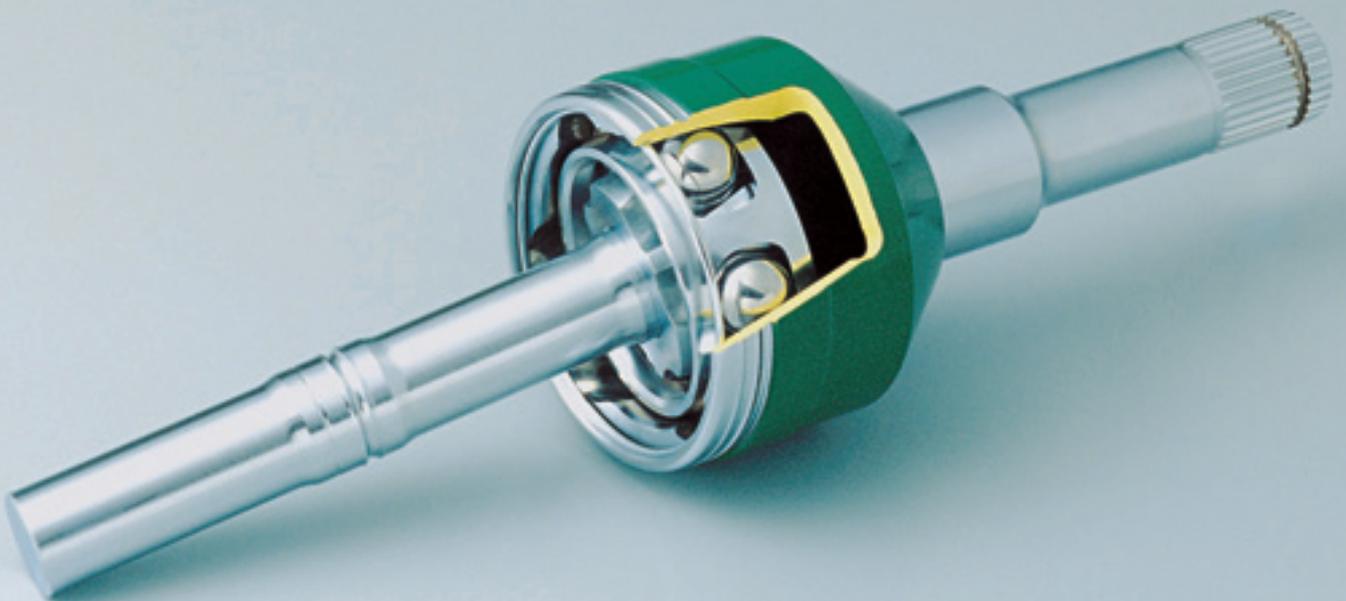
LJ

HALF SHAFT
半轴



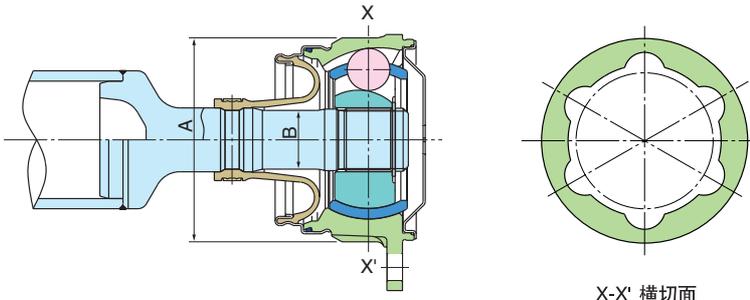
X-X' 横切面

MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension		
		尺寸 mm		
		A	B	C
23°	LJ95	111.2	93.0	24.0
	LJ100	116.6	98.5	25.4
	LJ104	120.8	102.0	26.5



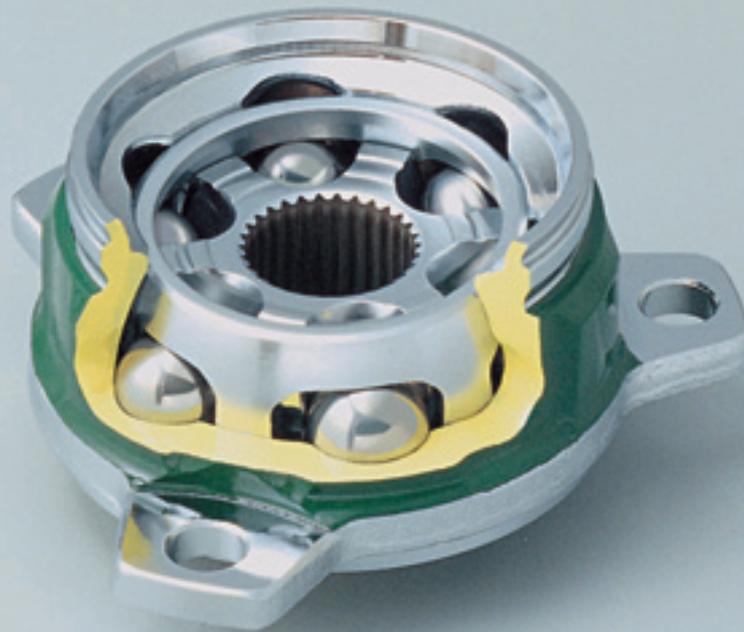
BJ

PROPELLER SHAFT
传动轴



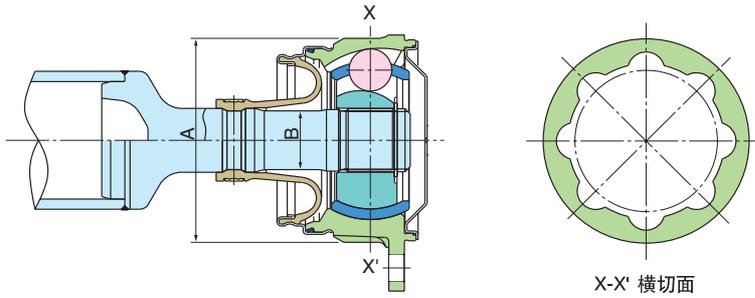
X-X' 横切面

MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension 尺寸 mm	
		A	B
20°	BJ75L	72.6	19.0
	BJ87L	79.9	22.2
	BJ100L	91.0	25.4



HEBJ

PROPELLER SHAFT
传动轴



MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension 尺寸 mm	
		A	B
20°	HEB87M	72.6	22.2
	HEB100M	83.7	25.4

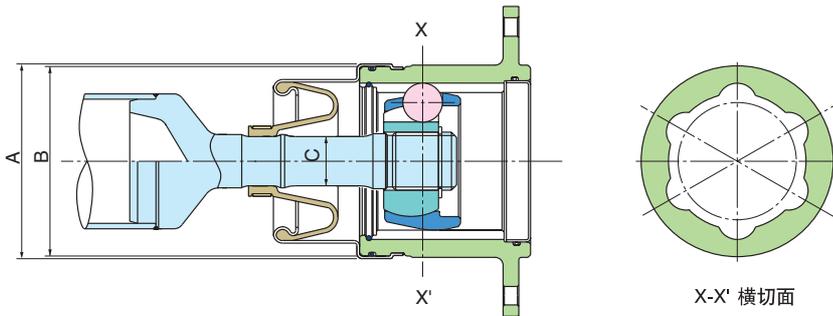
- The model HEBJ is lighter and more compact than the model BJ.
- BJ的轻巧、紧凑型



DOJ

PROPELLER SHAFT

传动轴

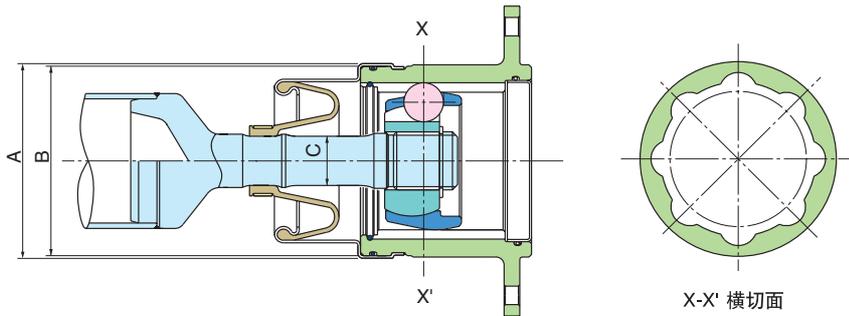


MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension 尺寸 mm		
		A	B	C
10°	DOJ75	75.0	73.0	19.0
	DOJ87	81.0	79.0	22.2



HEDJ

PROPELLER SHAFT
传动轴



MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension		
		尺寸 mm		
		A	B	C
10°	HED71	65.0	63.0	19.0
	HED82	75.0	73.0	22.2
	HED92	81.0	79.0	23.3
	HED95	85.0	83.0	25.4

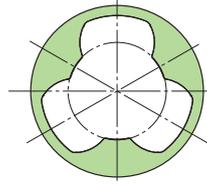
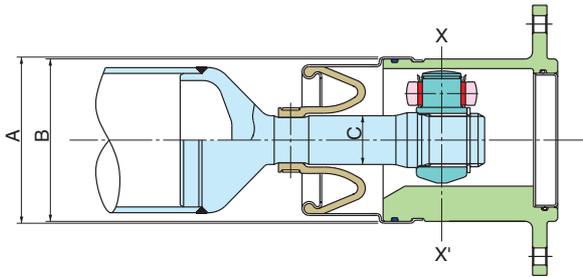
- The model HEDJ is lighter and more compact than the model DOJ.
- DOJ的轻巧、紧凑型



TJ

PROPELLER SHAFT

传动轴



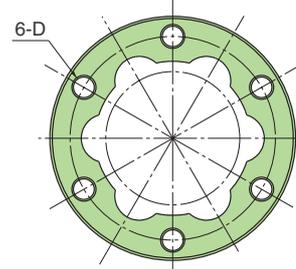
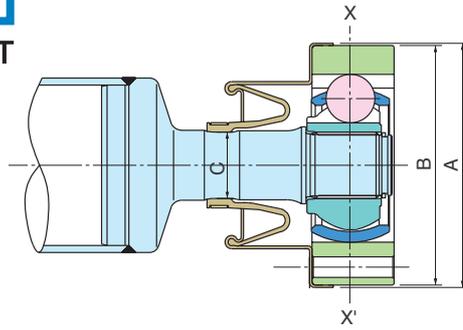
X-X' 横切面

MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension 尺寸 mm		
		A	B	C
10°	TJ75	70.0	68.0	19.0

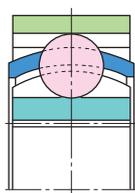


LJ

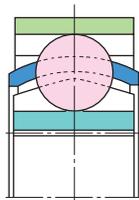
PROPELLER SHAFT
传动轴



X-X' 横切面

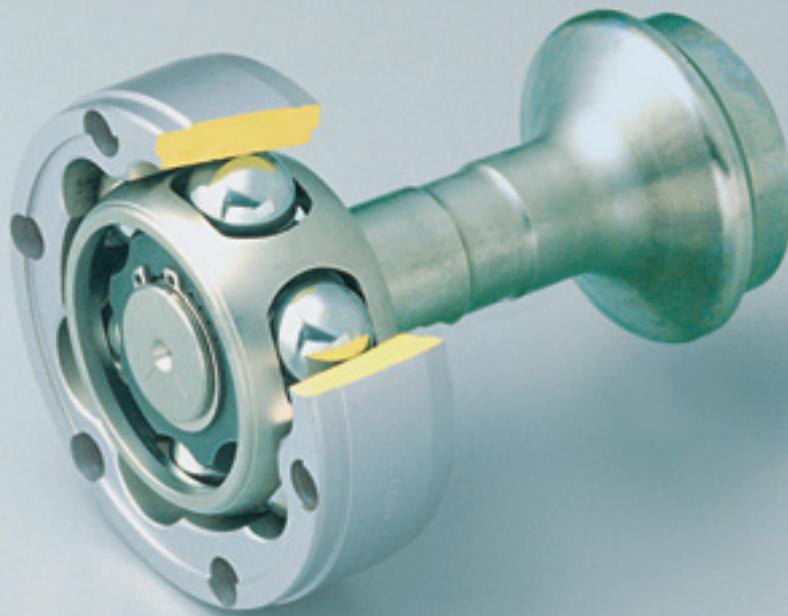


Float
浮动



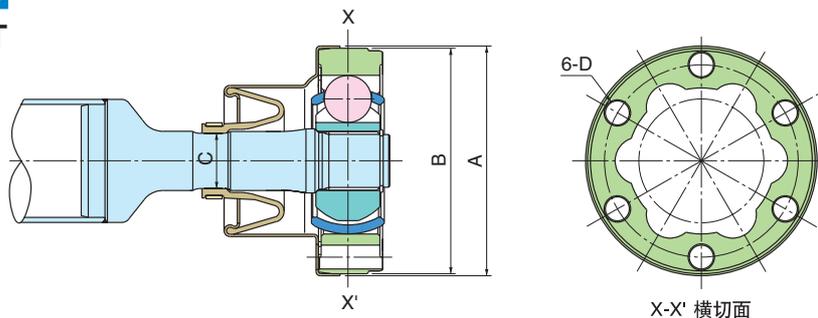
Non Float
无浮动

MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension 尺寸 mm			
		A	B	C	D (Diameter×P.C.D)
10°	LJ75	88.0	86.0	22.0	φ 8.1× 74.0
	LJ87	96.0	94.0	23.0	φ 8.1× 80.0
	LJ95	102.0	100.0	26.0	φ 8.1× 86.0
	LJ109	110.0	108.0	28.5	φ 10.1× 94.0
	LJ117	122.0	120.0	29.0	φ 12.1× 103.0



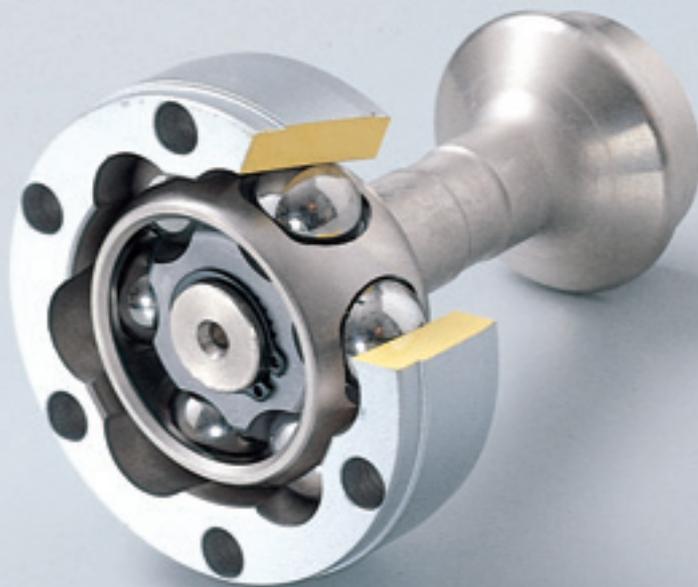
HLJ

PROPELLER SHAFT 传动轴



MAX Permissible working angle 最大工作角度	part number 部件号码	Dimension			
		尺寸 mm			
		A	B	C	D (Diameter×P.C.D)
10°	HLJ75	80.0	78.0	18.9	φ 8.1×66.0
	HLJ95	96.0	94.0	23.4	φ 8.1×80.0
	HLJ109	104.0	102.0	25.9	φ 10.1×88.0

- The model HLJ is lighter and more compact than the model LJ.
- LJ的轻巧、紧凑型



开发·设计
部门

NTN Design Engineering and R&D to Cover design Through Product Development

Always challenging new projects to meet increasing customer demand.

作为等速向节的先驱开发者，迄今为止开发出了众多的产品。该部门将多年累积的技术和新技术相结合，进一步开发出更为杰出的良品。



New Product Planning Dept.
新产品开发部



C.V. Joint Engineering Dept.
等速万向节技术部



FEM
外罩的FEM解析



CAD System
3维CAD系统

Design Section

设计部门

Test Section

试验部门



C.V. Joint boots durability testing machine
等速万向节用外罩的耐久试验



C.V. Joint life testing machine
等速万向节的寿命试验



C.V. Joint high speed durability testing machine for propeller shaft
传动轴用等速万向节高速试验

自动化

C.V.Joint Plant with The Latest Production Engineering Technology

等速万向节的工厂中几乎看不到操作人员的身影。这是因为生产采用90%自动化的生产线，从而控制质量的稳定性。
【质量管理】这便是我们的工作。

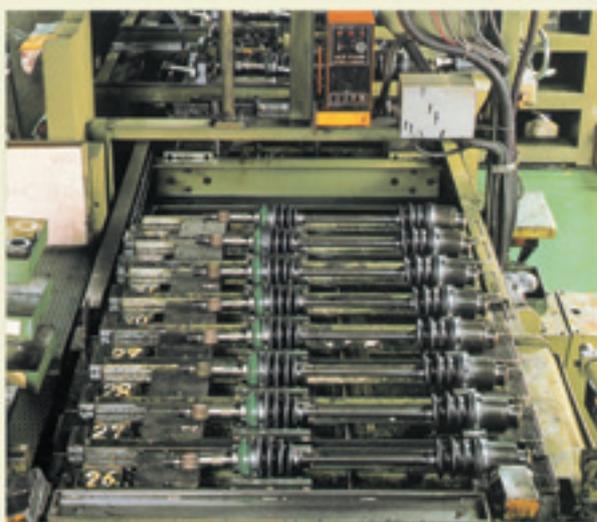
等速万向节专用 自动化工厂



Turning process of outer rings
外圈切削工序



Grinding process of outer rings
外圈研磨工序



Assembling process
组装工序