

ROTARY JOINTS

Steel Industry Products

CE/CI/CH/CX/BE/M/GJ



Rotary Joints
Swivel Joints
Hoses
Syphons
Turbulator Bars
Sight Flow Indicators
Core Chucks



Steam & Condensate Systems



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FOR CONTINUOUS CASTING MACHINES



TENGXUAN TECHNOLOGY CO., LTD.

Introduction

Tengxuan Technology Company specializes in research, development and the manufacturing of rotary joints and related products. Tengxuan is also the leading sealing technology and steam syphon expert in China, accumulating many technical patents over the years.

Tengxuan has a large machine shop facility, with over 90 state-of-the-art machines. Our products are manufactured to ISO9001 quality management standards. We have our own sales and service staff, assisting customers around the world. Tengxuan products are widely used in industries such as paper, steel, corrugating, textiles, non-wovens, rubber, plastics and chemical and food processing.

Along with our high quality products, we offer our customers the highest level of aftermarket sales and service.



Industries

Tengxuan rotary joints are engineered specifically for continuous casters, re-heat furnaces, tunnel furnaces and other demanding applications for water cooling and transmittal of fluids and gases.

- Steel
- Paper and Paper Converting
- Corrugating
- Machine Tool
- Printing
- Plastics
- Food Processing
- Textiles
- Non-wovens
- Chemical
- Rubber

Design and manufacturing capabilities
In-house and field technical support
Maintenance training
Installation guidance and trouble shooting

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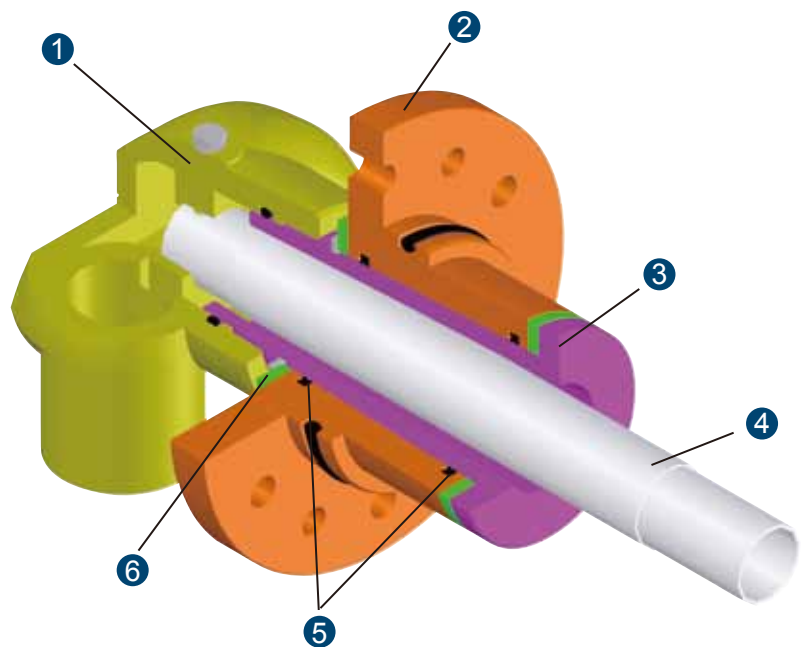
Quick Selection Chart

Type	Media				Pressure (Max.)		Temperature (Max.)		Speed (RPM)
	Steam	Air	Oil	Water	BAR	PSI	°C	°F	
CE	●	●	●	●	11	160	120	248	120
CI	●	●	●	●	11	160	120	248	120
CH	●	●	●	●	11	160	120	248	120
CX	●	●	●	●	11	160	110	230	110
BE	●	●	●	●	15	217	120	248	2500

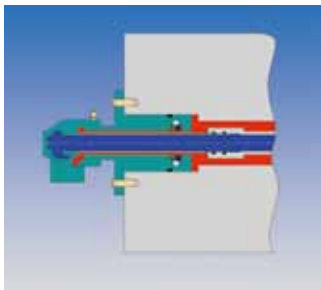
● Recommended ● Not Recommended

1. Consult Tengxuan Technology for specific details.
2. For specific application parameters, see catalog page.Consult Tengxuan Technology for applications requiring increased speeds and pressures.
3. Do not operate Rotary Joints at maximum pressure, temperature and speed simultaneously.

CX Rotary Joints



- ① Duo-flow Elbow
- ② Brass Body
- ③ Stainless Steel Nipple
- ④ Water Supply Pipe
- ⑤ X-Rings
- ⑥ Thrust Washer



Operating Data

Max.Speed	110 RPM
Max.Temperature	110°C
Max.Pressure	11 Bar
Media	Water

Two X-Ring seals
Simple design offers no flow restrictions
Field Repairable design
Shock and vibration resistant design
Interchangeable to competitive design

Mono flow

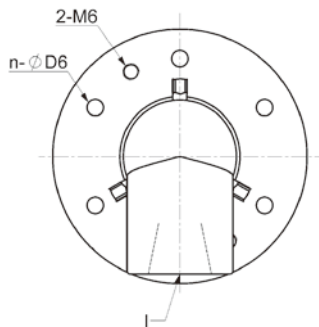
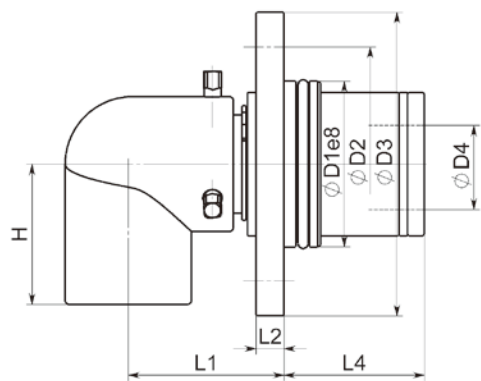
Model	I (BSPT)	D1	D2	D3	D4	D5	n-D6	L1	L2	L4	H
CXM020E 3/4"	3/4"	46	-	60	20	41	-	56.5	6.5	35	45
CXM020F 3/4"	3/4"	46	72	90	20	-	6-ø7	47.5	6.5	35	45
CXM025E 1"	1"	59	-	72	25	51	-	61.5	9	50	50
CXM025F 1"	1"	59	83	108	25	-	6-ø7	55.5	10	50	50
CXM040E 1-1/2"	1-1/2"	71	-	90	40	68	-	69	8	80	50
CXM040F 1-1/2"	1-1/2"	71	98	125	40	-	6-ø7	64	10	80	50

Dual flow

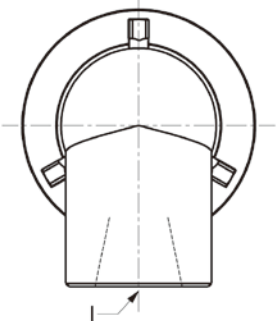
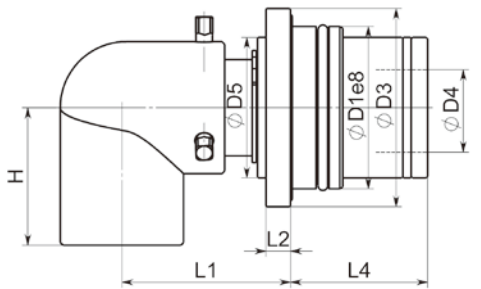
Model	I (BSPT)	O (BSPT)	D1	D2	D3	D4	D5	n-D6	D7	L1	L2	L3	L4	L5	L6	H
CXD020E 3/4"	3/4"	3/4"	46	-	60	20	41	-	13	56.5	6.5	30	35	50	50	41
CXD020F 3/4"	3/4"	3/4"	46	72	90	20	-	6-ø7	13	47.5	6.5	30	35	50	50	41
CXD025E 1"	3/4"	3/4"	59	-	72	25	51	-	19	59	9	30	50	65	50	41
CXD025F 1"	3/4"	3/4"	59	83	108	25	-	6-ø7	19	53	10	30	50	65	50	41
CXD040E 1-1/2"	1"	1"	71	-	90	40	68	-	28.7	72	8	30	80	70	64	43
CXD040F 1-1/2"	1"	1"	71	98	125	40	-	6-ø7	28.7	67	10	30	80	70	64	43



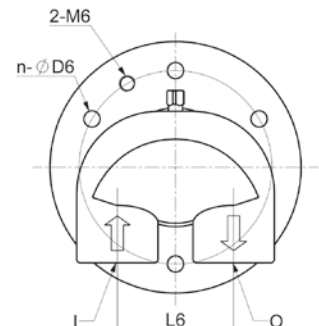
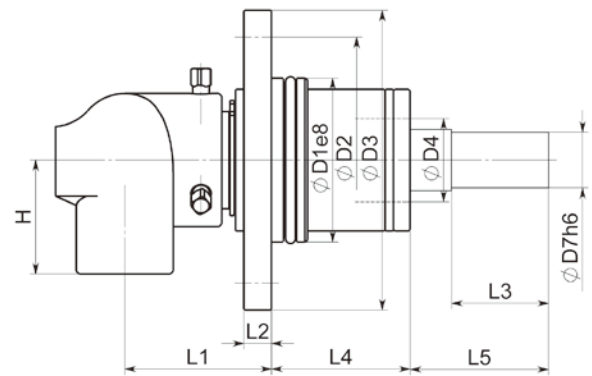
CX Rotary Joints Mounting Dimensions



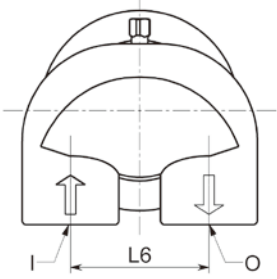
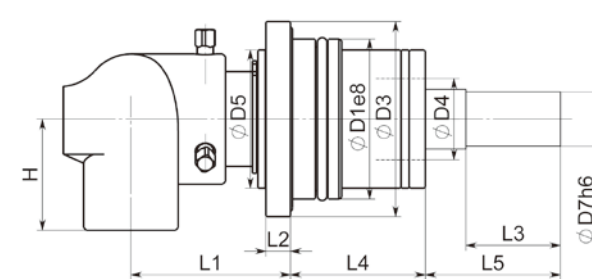
CXMF



CXME

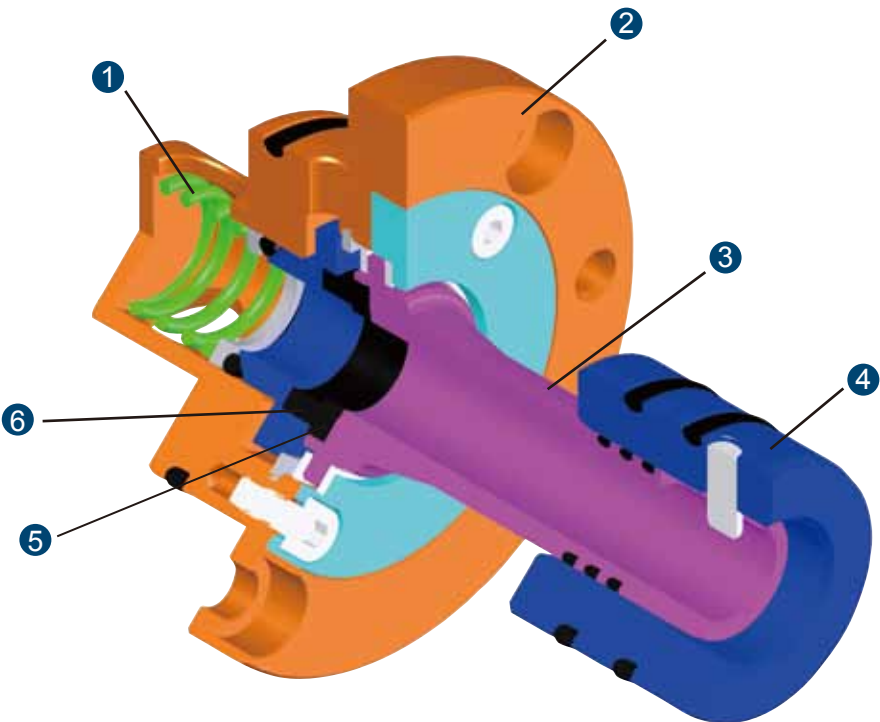


CXDF



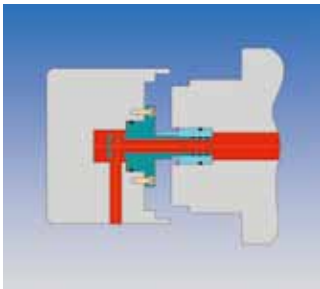
CXDE

CE Rotary Joints



- 1 Spring
- 2 Body
- 3 Nipple
- 4 Journal Adapter
- 5 Carbon Graphite Seal
- 6 Tungsten Carbide Seal

Bearing cover inserted design
Flex hoses are eliminated
Carbon graphite seals
No flow restrictions for improved roll cooling
Interchangeable with competitive designs
No maintenance required

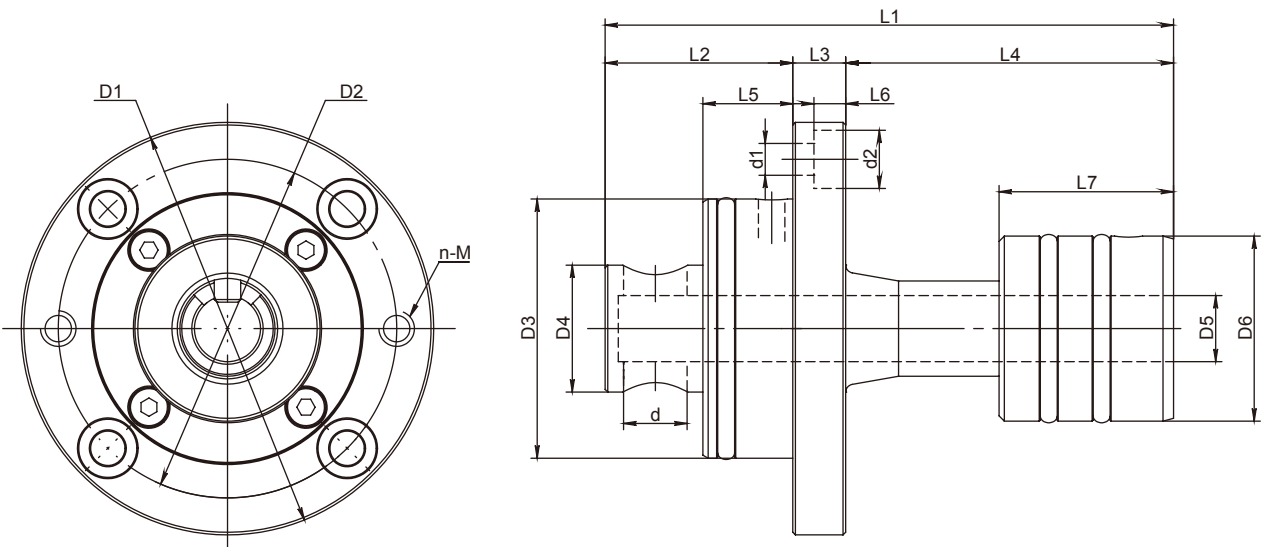


Operating Data

Max.Speed 120 RPM
Max.Temperature 120 °C
Max.Pressure 11 Bar
Media Water



CE Rotary Joints
Mounting Dimensions



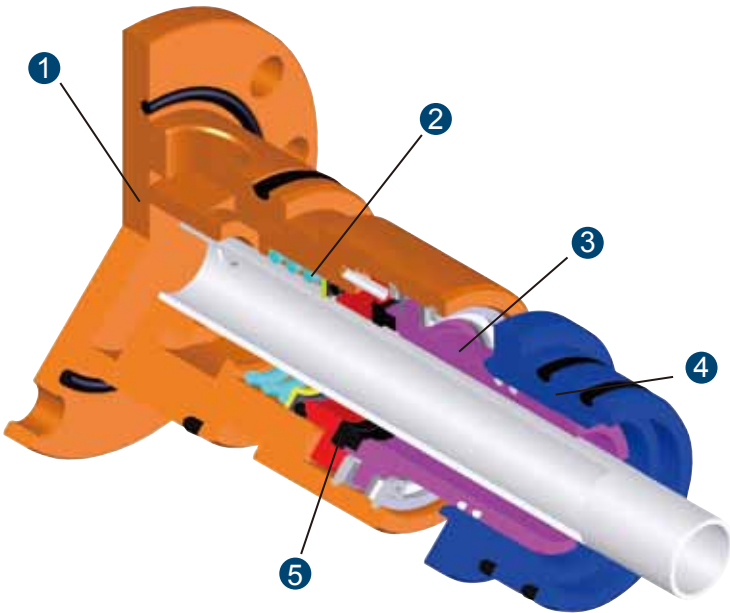
CEM

Model	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	d	d1	d2	n-M
CEM015 1/2"	78	64	49(e8)	24	12.5	35(h6)	107.5(0/-8)	35.5	10	62(0/-8)	17	6	33	12	4-Φ6.5	11	2-M6
CEM020 3/4"	100	80	59(h9)	32	16.7	45(h7)	126±5	45	12	69±5	20	6	40	16	4-Φ7.0	11	2-M6

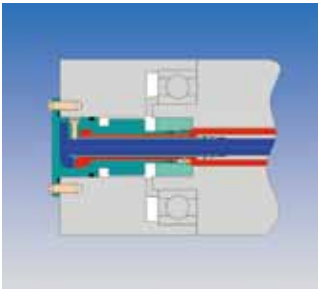
Model	D1	D2	D3	D4	D5	d	L1	L2	L3	L4	L5	L6	L7	L8	F	H
CEMT015 1/2"	25(e8)	41	12	27(e7)	35(e9)	12	85.5(0/-8)	7.5	28	9.1	5.5	46.1	71(0/-8)	20	5	16.5

NOTICE:Tengxuan CE Rotary Joints can be manufactured to the mounting dimensions of competitive products.

CI Rotary Joints



- ① Body
- ② Spring
- ③ Nipple
- ④ Connector
- ⑤ Carbon Graphite Seal

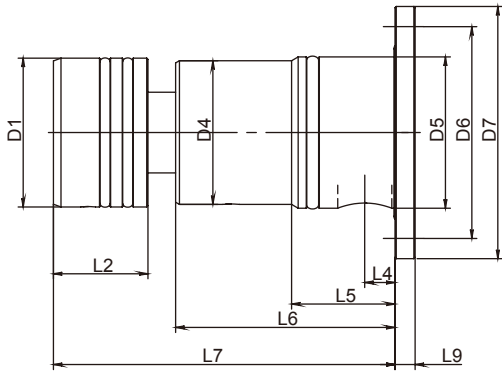
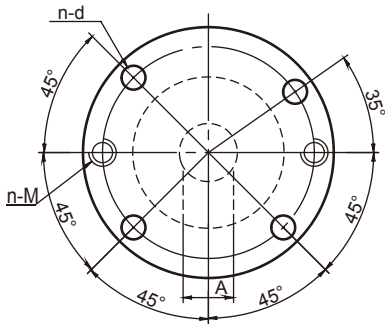


Operating Data

Max.Speed 120 RPM
 Max.Temperature 120 °C
 Max.Pressure 11 Bar
 Media Water

Flex hoses are eliminated
Tungsten carbide seal faces
Journal and bearing seal protected
Mounts to outside of bearing cover
Long life and good stability
No maintenance required

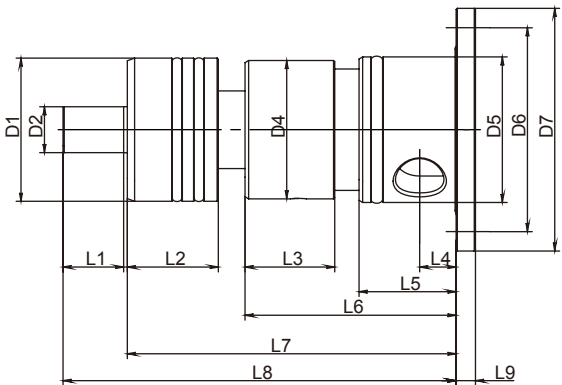
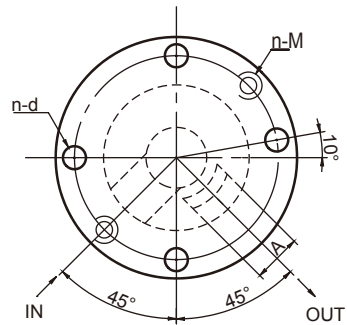
Mounting Dimensions



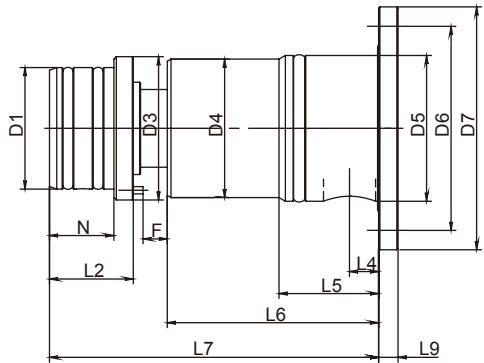
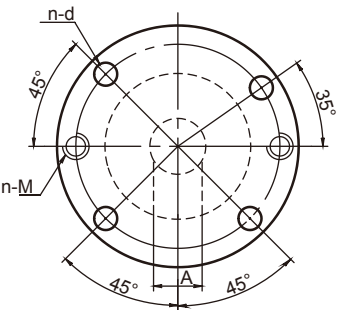
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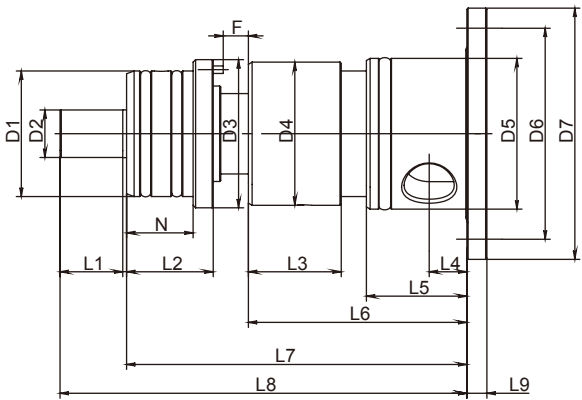
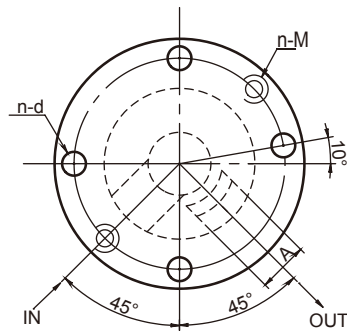
CI Rotary Joints Mounting Dimensions



CID601



CIM402
CIM602

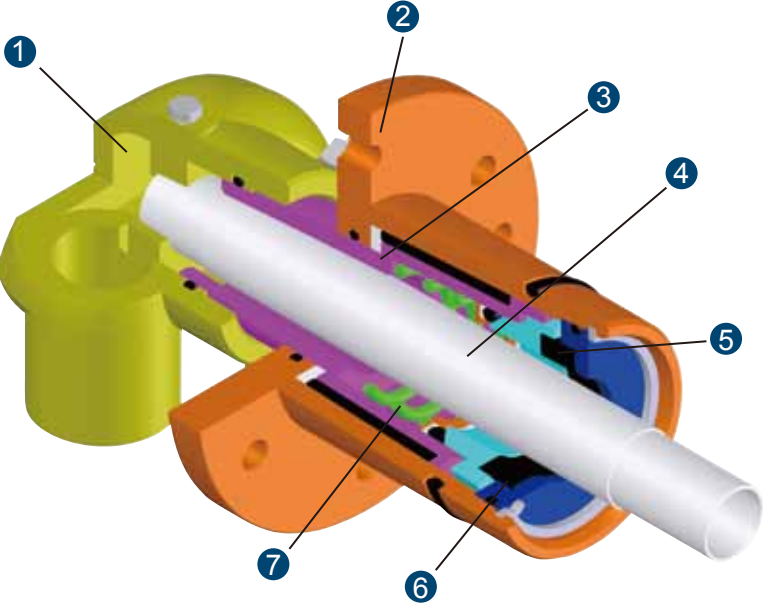


CID602

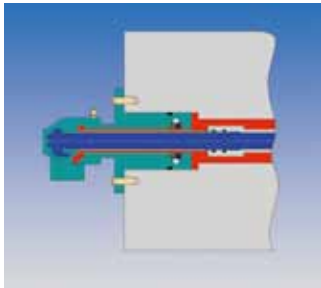
Model	D1(h6)	D2(h9)	D3	D4	D5(e8)	D6	D7	L1	L2	L3	L4	L5	L6	L7(0/-10)	L8	L9	A	n-d	n-M	N
CIM402	27	/	35	39	40	62	74	/	34	/	9	24	56	103	/	8	15	4-Φ7	2-M6	25.5
CIM601	59	/	/	57	60	84	100	/	37.5	/	12	41	87	135.5	/	8	20	4-Φ9	2-M8	/
CID601	59	19	/	57	60	84	100	25	37.5	37	15	40	87	135.5	162	8	20	4-Φ9	2-M8	/
CIM602	50	/	59	57	60	84	100	/	34.5	/	12	41	87	135.5	/	8	20	4-Φ9	2-M8	26.5
CID602	50	19	59	57	60	84	100	25	34.5	37	15	40	87	135.5	162	8	20	4-Φ9	2-M8	25.5

NOTICE:Tengxuan CI Rotary Joints can be manufactured to the mounting dimensions of competitive products.

CH Rotary Joints



- 1 Duo-flow Elbow
- 2 Brass Body
- 3 Stainless Steel Nipple
- 4 Water Supply Pipe
- 5 Carbon Graphite Seal
- 6 Tungsten Carbide Seal
- 7 Coil Spring



Operating Data

Max.Speed 120 RPM
 Max.Temperature 120°C
 Max.Pressure 11 Bar
 Media Water

Balanced Mechanical Seal Design
 Seal Faces – Tungsten Carbide/Carbon Graphite
 Seal Face Options for Contaminated Water
 Mono and Duo Flow Designs
 Journal Inserted Mounting
 Self Lubricated Carbon Graphite Sleeve Bearing
 Field Repairable
 Can be mounted with Retaining Plate or Flanged Body

Mono flow

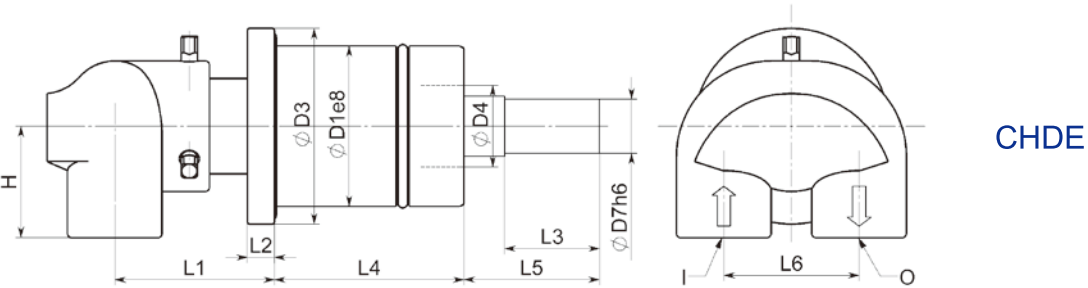
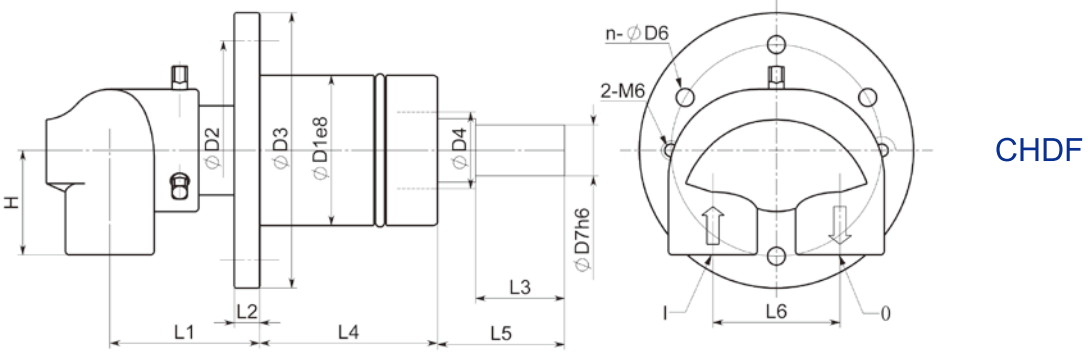
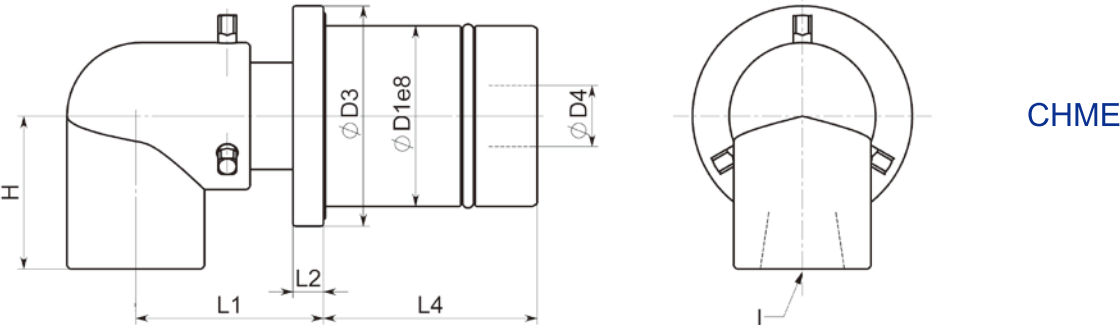
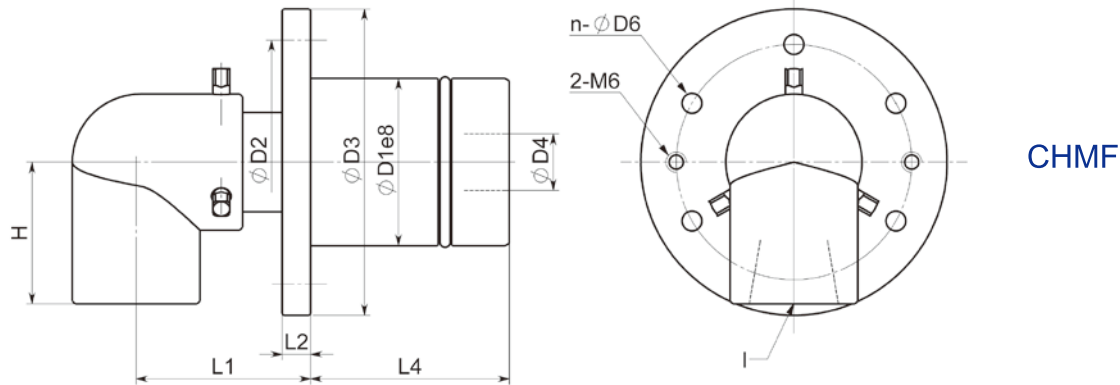
Model	I (BSPT)	D1	D2	D3	D4	n-D6	L1	L2	L4	H
CHM020E 3/4"	3/4"	46	-	60	20	-	48.5	6.5	58.5	45
CHM020F 3/4"	3/4"	46	72	90	20	6-ø7	48.5	6.5	58.5	45
CHM025E 1"	1"	59	-	72	25	-	61.5	10	70	50
CHM025F 1"	1"	59	83	108	25	6-ø7	61.5	10	70	50
CHM040E 1-1/2"	1-1/2"	71	-	86	38	-	65	10	75	50
CHM040F 1-1/2"	1-1/2"	71	98	125	38	6-ø7	70	10	70	50

Dual flow

Model		I (BSPT)	O(BSPT)	D1	D2	D3	D4	n-D6	D7	L1	L2	L3	L4	L5	L6	H
CHD020E	3/4"	3/4"	3/4"	46	-	60	20	-	13	48.5	6.5	30	58.5	31.5	50	41
CHD020F	3/4"	3/4"	3/4"	46	72	90	20	6- Ø7	13	48.5	6.5	30	58.5	31.5	50	41
CHD025E	1"	3/4"	3/4"	59	-	72	25	-	19	59	10	30	70	45	50	41
CHD025F	1"	3/4"	3/4"	59	83	108	25	6- Ø7	19	59	10	30	70	45	50	41
CHD040E	1-1/2"	1"	1"	71	-	86	38	-	29	69	5	30	75	60	64	43
CHD040F	1-1/2"	1"	1"	71	98	125	38	6- Ø7	29	74	10	30	70	60	64	43



CH Rotary Joints Mounting Dimensions



BE Rotary Joints



Springs located outside of flow path
Optimized balanced seal assembly
Precision ball bearing design
Suitable for severe conditions
Silicon Carbide and carbon graphite seal faces
General purpose applications
Long life and good stability
No maintenance required

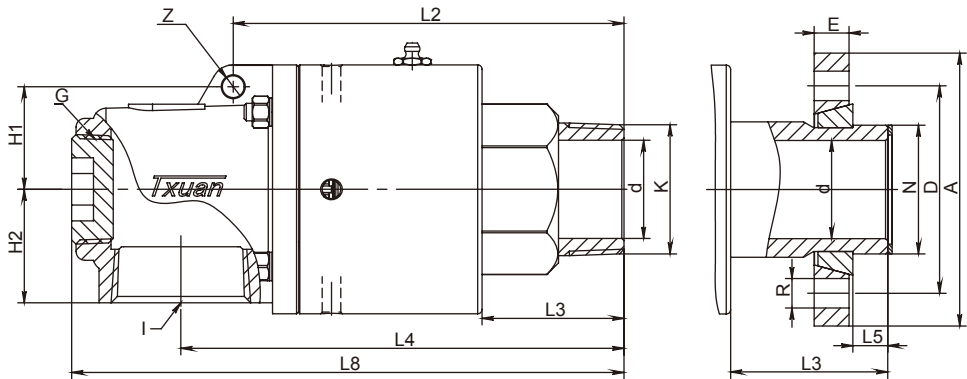
Max. Water Pressure:	15 bar / 217 psig	
Max. Hot Oil Pressure:	7 bar / 100 psig	
Max. Air Pressure:	11 bar / 160 psig	
Max. Temperature:	120°C / 248 °F	
* > 120 °C consult TENGXUAN		
Max. Speed Rotors with:	Model 6 - 20	3000 RPM
	Model 25 - 40	2500 RPM
	Model 50	1000 RPM
	Model 65 - 80	600 RPM
	*Please consult TENGXUAN for Max. Speed in air applications	
Media:	Water, Hot oil, Air	
Sizes:	1/8" — 3"	

Quick Release Flanges Type K

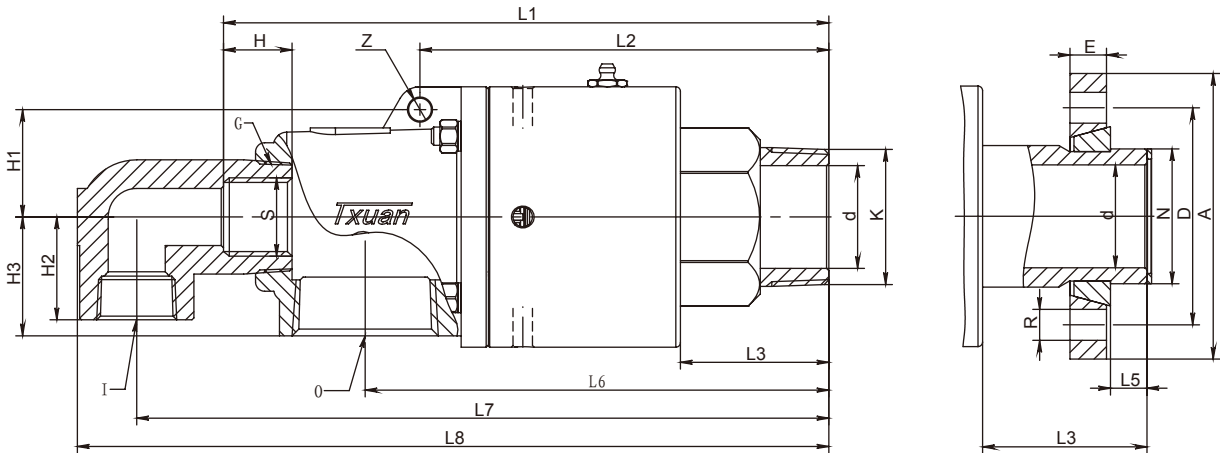
Nominal Size		Φ A	Φ D	Φ N	E	Φ R	L5
015	1/2"	80	55	23	14	4-Φ10	8
020	3/4"	80	55	26	14	4-Φ12	11
025	1"	90	65	32.3	14	4-Φ12	11
032	1-1/4"	100	75	41	16	4-Φ14	13
040	1-1/2"	115	85	47.5	16	4-Φ14	13
050	2"	125	95	59	16	4-Φ14	16
065	2-1/2"	140	110	72	18	4-Φ14	19
080	3"	160	130	90	20	6-Φ14	25

Seal Combinations - Standard
Carbon Graphite/Silicon Carbide for water
Optional:
Carbon Graphite/Special Metal for hot oil, hot water and saturated Steam
Multi-purpose applications
Seal Combination -For severe conditions
Tungsten Carbide/Silicon Carbide (max. temperature 90°C)

Mounting Dimensions

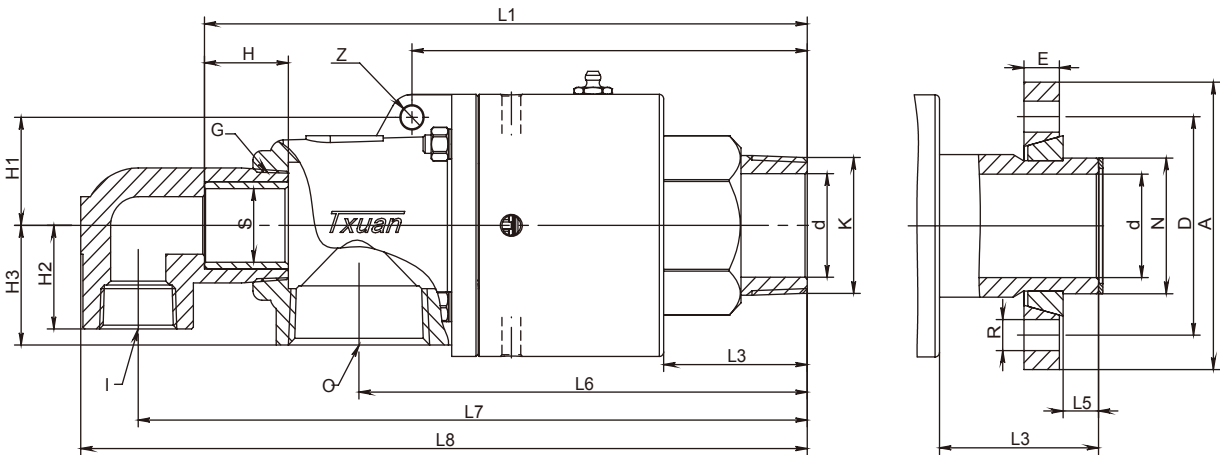


Model	K(BSPT)	I(BSPT)	ΦZ	Φd	H	H1	H2	L2	L3	L4	L8	G(BSPT)
BEM015	1/2"	Rc 1/2"	/	13	15	/	28	/	35	108	162	R c 3/8"
BEM020	3/4"	Rc 3/4"	/	16	15	/	30	/	40	125	185	R c 1/2"
BEM025	1"	Rc 1"	/	23	18	/	35	/	44	132	198	R c 3/4"
BEM032	1-1/4"	Rc 1-1/4"	/	30	22	/	39	/	54	161	251	R c 1"
BEM040	1-1/2"	Rc 1-1/2"	/	36	25	/	38	/	58	172	266	R c 1-1/4"
BEM050	2"	Rc 2"	10	45	28	47	45	179	65	203	329	R c 1-1/2"
BEM065	2-1/2"	Rc 2"	14	60	32	60	72	215	/	230	366	/
BEM080	3"	Rc 2"	14	75	32	75	72	280	/	295	454	/



BES DUAL FLOW STATIONARY INTERNAL PIPE

Model	K(BSPT)	O(BSPT)	I(BSPT)	ΦZ	Φd	H	H1	H2	H3	L1	L2	L3	L6	L7	L8	S(BSP)	G(BSPT)
BES015	1/2"	R 1/2"	Rc 1/2"	/	13	15	/	28	28	119	/	35	108	149	162	G1/8"	Rc 3/8"
BES020	3/4"	R 3/4"	Rc 3/4"	/	16	15	/	30	32	140	/	40	125	174	185	G1/4"	Rc 1/2"
BES025	1"	R 1"	Rc 1"	/	23	18	/	35	35	150	/	44	132	184	198	G3/8"	Rc 3/4"
BES032	1-1/4"	R 1-1/4"	Rc 1-1/4"	/	30	22	/	39	43	183	/	54	161	233	251	G1/2"	Rc 1"
BES040	1-1/2"	R 1-1/2"	Rc 1-1/2"	/	36	25	/	38	47	195	/	58	172	247	266	G3/4"	Rc 1-1/4"
BES050	2"	R 2"	Rc 2"	10	45	28	47	45	52	235	179	65	203	303	329	G3/4"	Rc 1-1/2"
BES065	2-1/2"	R 2-1/2"	Rc 2"	14	60	32	60	72	72	304	215	/	230	329	366	G1-1/4"	/
BES080	3"	R 3"	Rc 2"	14	75	32	75	72	72	373	280	/	295	410	454	G1-1/2"	/



BER DUAL FLOW ROTARY INTERNAL PIPE

Model	K(BSPT)	O(BSPT)	I(BSPT)	ΦZ	Φd	H	H1	H2	H3	L1	L2	L3	L6	L7	L8	ΦS	G(BSPT)
BER015	1/2"	R 1/2"	Rc 1/2"	/	13	15	/	28	28	119	/	35	108	149	162	10	R c 3/8"
BER020	3/4"	R 3/4"	Rc 3/4"	/	16	15	/	30	32	140	/	40	125	174	185	12	R c 1/2"
BER025	1"	R 1"	Rc 1"	/	23	18	/	35	35	150	/	44	132	184	198	16	R c 3/4"
BER032	1-1/4"	R 1-1/4"	Rc 1-1/4"	/	30	22	/	39	43	183	/	54	161	233	251	20	R c 1"
BER040	1-1/2"	R 1-1/2"	Rc 1-1/2"	/	36	25	/	38	47	195	/	58	172	247	266	25	R c 1-1/4"
BER050	2"	R 2"	Rc 2"	10	45	28	47	45	52	235	179	65	203	303	329	32	R c 1-1/2"
BER065	2-1/2"	R 2-1/2"	Rc 2"	14	60	32	60	72	72	304	215	/	230	329	366	40	/
BER080	3"	R 3"	Rc 2"	14	75	32	75	72	72	373	280	/	295	410	454	56	/

Note: Maximum limits vary in relation to changes in size,rpm,pressure and temperature. Consult Wuxi Tengxuan for safe limitations under your specific application conditions.

Other Rotary Joints

M multi-flow joints

We manufacture special rotary joints for high speed, high pressure, multi-passage, high temperature applications to meet our customers requirements. These special rotary joints are for a variety of industries, such as metal working, steel processing, index tables, high pressure washing etc.



High pressure rotary joints

High pressure and high speed rotary joints for machine tools, index tables, and coiling equipment.

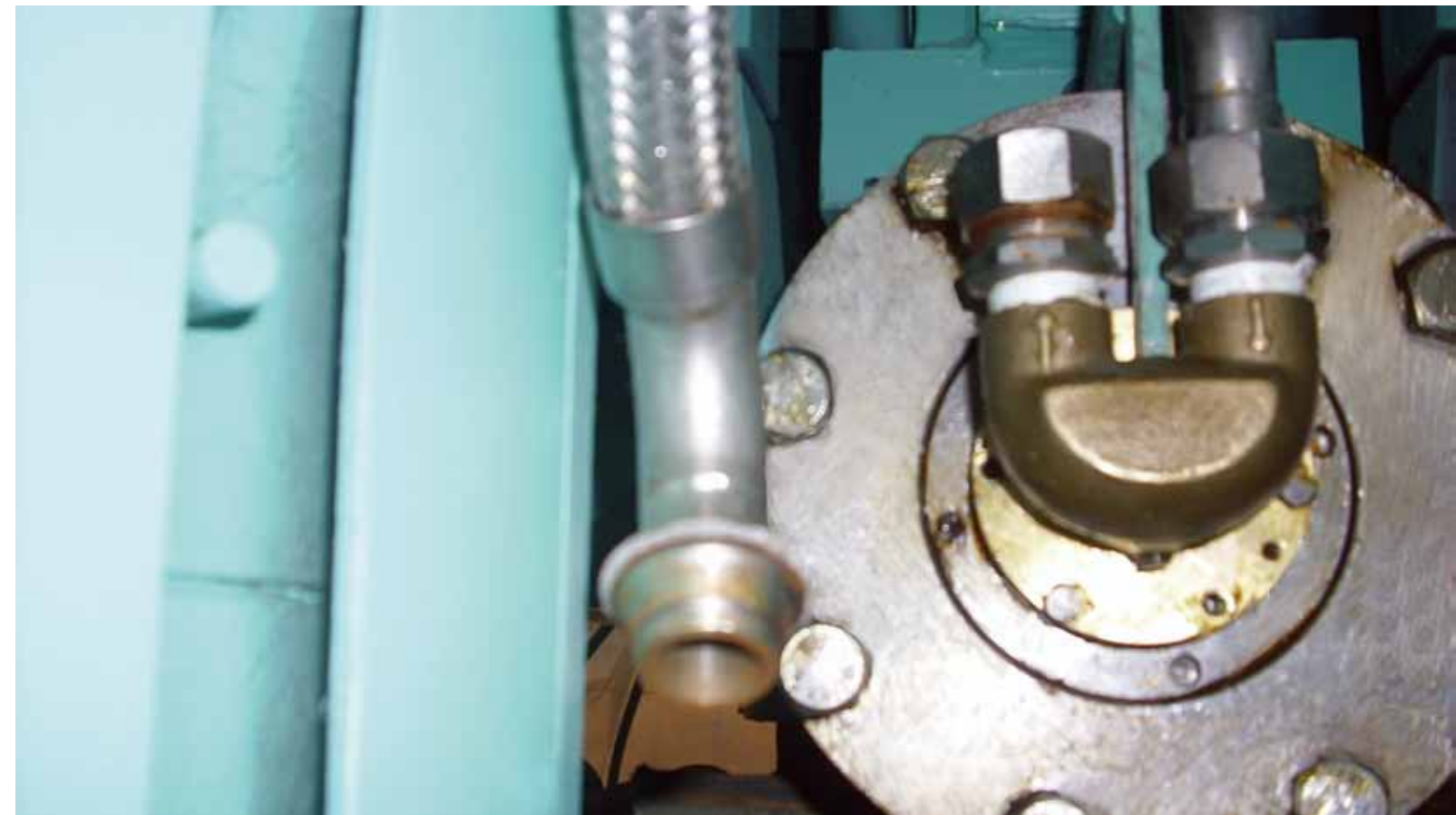


GJ swivel joints

Suitable for the transfer of fluids and gases when swivel movement is required. Our swivels are widely used in the steel, chemical, rubber and other general processing industries.



STEEL INDUSTRY PRODUCTS FOR CONTINUOUS CASTING MACHINES



Application

