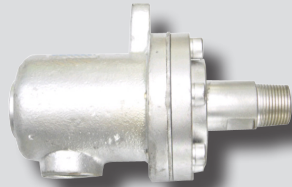


DR3000 series



DR3001, DR3002



DR3011, DR3012

How to Order

DR30 0 1 H - 10A

① ② ③ ④ ⑤

① Series

DR30	Lubrication free, double seal rotary joint
------	--

④ Temperature

Nil	Standard
H	High temperature

② Head compartment

0	Duplex with fixed internal pipe
1	Simplex L

⑤ Shaft size

	R(PT)
15A	1/2
20A	3/4
25A	1
32A	1 1/4
40A	1 1/2
50A	2
65A	2 1/2
80A	3
100A	4

③ Connection type

1	Right-hand screw
2	Left-hand screw
5	Flange

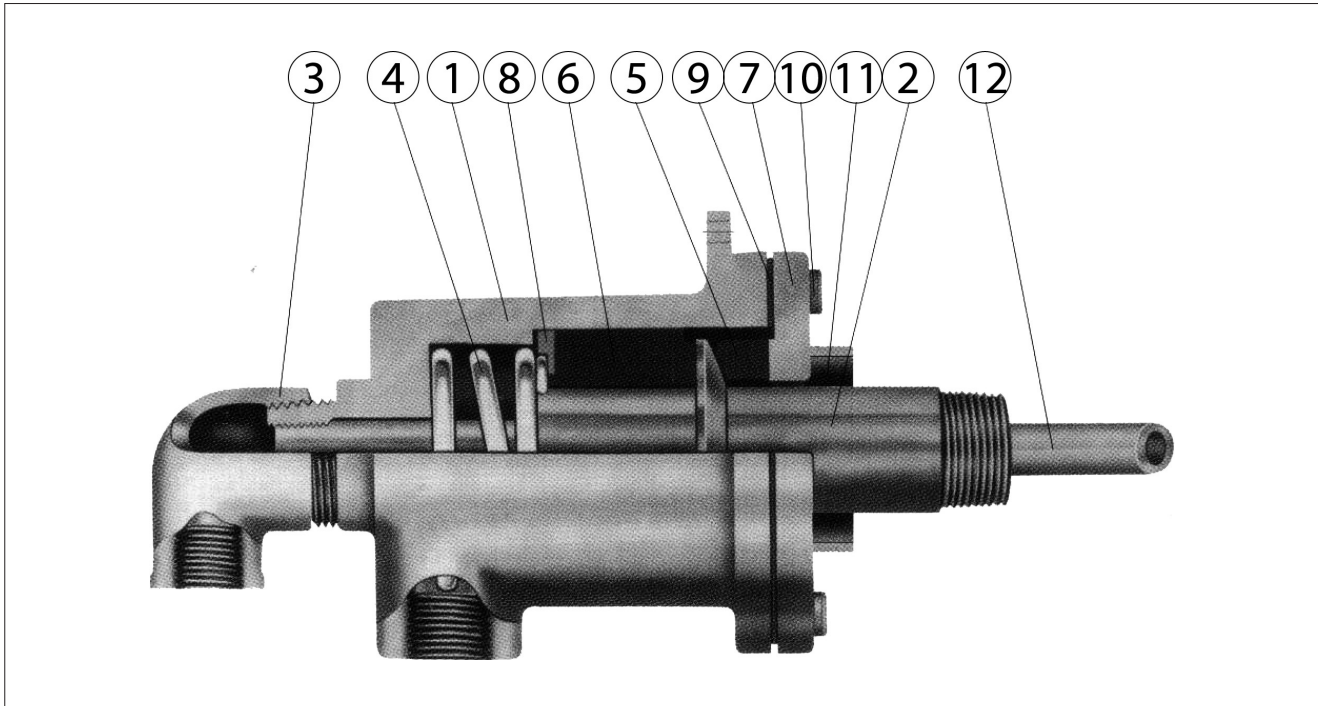
Specifications

Model	Standard	High temperature
Max. pressure	15kgf/cm ² G	7kgf/cm ² G
Max. temperature	180°C	250°C
Max. rotation	15A~40A	300rpm
	50A~100A	100rpm
Fluid	Saturated vapor, heating medium, hot water	

Features

- Lubrication free, easy maintenance type.
- Applicable to high-pressure or high temperature conditions.
- Long service life with wear resistance seal
- Compact size, light weight
- Available high speed rotation

Structure



Part no.	Parts	Part no.	Parts
1	Body	7	Seal Plate
2	Shaft	8	Spring Adaptor
3	Elbow	9	Gasket
4	Spring	10	Bolt
5	Seal Ring	11	Carbon Bearing 2
6	Carbon Bearing 1	12	Inner Pipe

SHAFT

The shaft is made to rotate by attaching it by either a screw or a flange to a rotating roll or drum. With the screw-in method, the Korean Standards (KS) taper pipe thread is used. The screws must be allowed to tighten freely against the direction of rotation of the roll or drum to which the shaft is connected. The left-hand screw is used when the roll or drum rotates clockwise when viewed from the rotary joint installation position. Likewise, the right-hand screw is used when the roll or drum rotates counterclockwise when viewed from the rotary joint installation position. When the flange method is used, the stainless steel rotating shaft has an end surface for plane sealing and a spherical friction seal can be fitted beside it.

HEAD BLOCK

The head block is where the fluid feed inlet and discharge outlet join. With the duplex type, the internal pipe is fitted to this block usually using the KS parallel pipe thread. The thread is made a little longer on the internal pipe side than on the head block side, letting the thread jut out in the direction of the elbow and providing the thread with lock nuts to ensure that the screws do not loosen in whichever direction the internal pipe is made to rotate. The sealing mechanism consists mainly of the Floating Ring, Combination Thrust Bearing and Seal, Seal Ring, Wedge and Spring. Integrated with the seal ring, the spring gives appropriate initial sealing face pressure to the floating ring, the thrust bearing (that also serves as a seal) and rotation shaft's seal surface. The perfect airtightness of the R-3000 Series is maintained by the double seal structure and by the sealing face pressure that increases and decreases in proportion to changes in the inner fluid pressure.

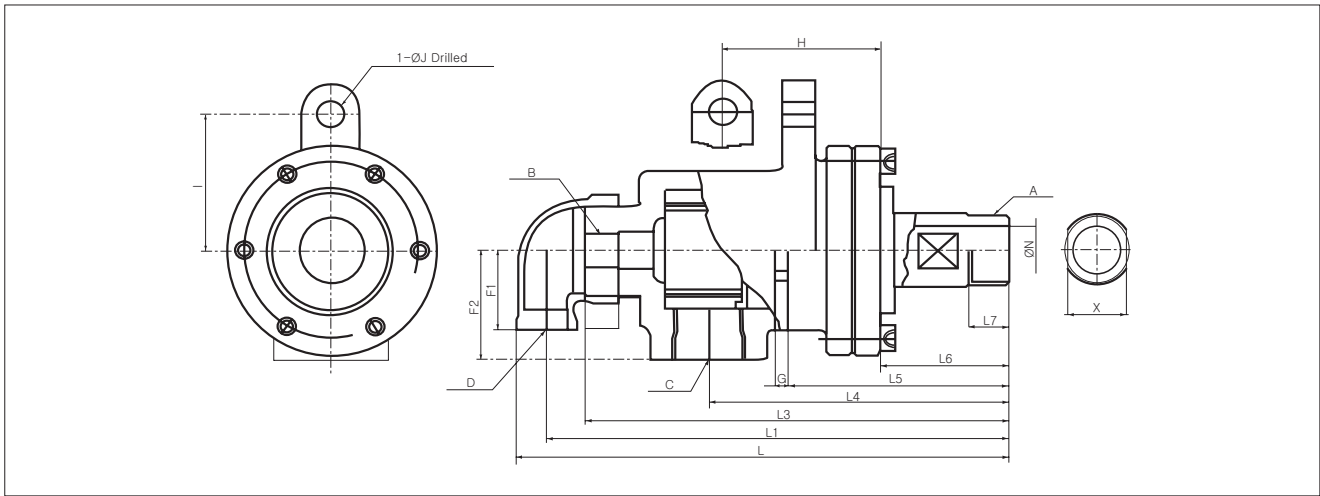
BODY

The body has a built-in lubrication-free, high quality, carbon graphite bearing that bears the weight of the joint. The cutaway view (left) shows a fixed internal pipe duplex type rotary joint with a feed inlet and discharge outlet. The simplex L type rotary joint is also available.

Type Selection Recommendations

1. The DR-3001,3002,3011,3012,3005 and 3015 are all designed for atmospheric temperature application, with the wedge replaced with an O-ring. These 6 types are recommended for handling fluids with heat resistance up to 150°C
2. The DR-3101, 3102, 3111, 3112, 3105 and 3115 are for use at high temperatures with the teflon wedge. These 6 types are recommended for handling fluids with heat resistance up to 230°C
3. None of these are recommended for liquids where the temperature changes more than 50°C repeatedly.

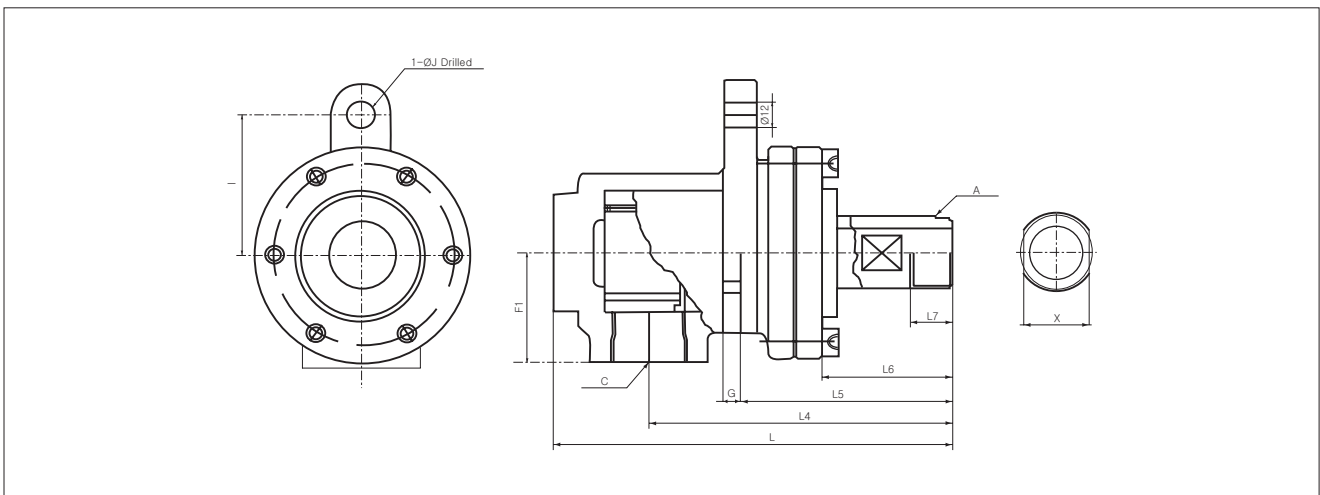
Dimensions-DR3001, DR3002, DR3101, DR3102 (Duplex With Fixed Internal Pipe)



Unit:mm

Size	A R(PT)	B (PF)	C Rc(PT)	D Rc(PT)	F1	F2	G	H	I	J	K	L	L1	L3	L4	L5	L6	L7	N	X	Y	Z
15A	1/2	1/8	1/2	3/8	25	35	-	-	-	-	15	172	160	145	110	-	34	18	12	21	-	-
20A	3/4	1/4	3/4	1/2	33	40	-	-	-	-	15	195	181	163	120	-	36	20	18	26	-	-
25A	1	3/8	1	1/2	38	52	-	30.5	65	12	15	234	220	202	143	-	61.5	20	23	32	-	-
32A	1 1/4	1/2	1	3/4	70	43	-	62.5	75	16	29	285.5	263.5	238.5	174.5	-	73	25	30	46	-	-
40A	1 1/2	3/4	1	3/4	70	43	-	62.5	75	16	29	285.5	263.5	238.5	174.5	-	73	25	34	46	-	-
50A	2	1	1 1/2	1	51	82	12	-	-	-	28	352	330	302	221	157	93.5	30	48	56	19	200
65A	2 1/2	1 1/2	2	1 1/2	97	62	18	-	-	-	25	381.5	353.5	316.5	234	157.5	92.5	33	60	72	23	230
80A	3	2	2	2	80	90	-	-	-	-	26	432	392	343	267	-	88	35	73	-	-	-
100A	4	2 1/2	3	2 1/2	90	100	-	-	-	-	30	502	456	409	306	-	100	40	96	-	-	-

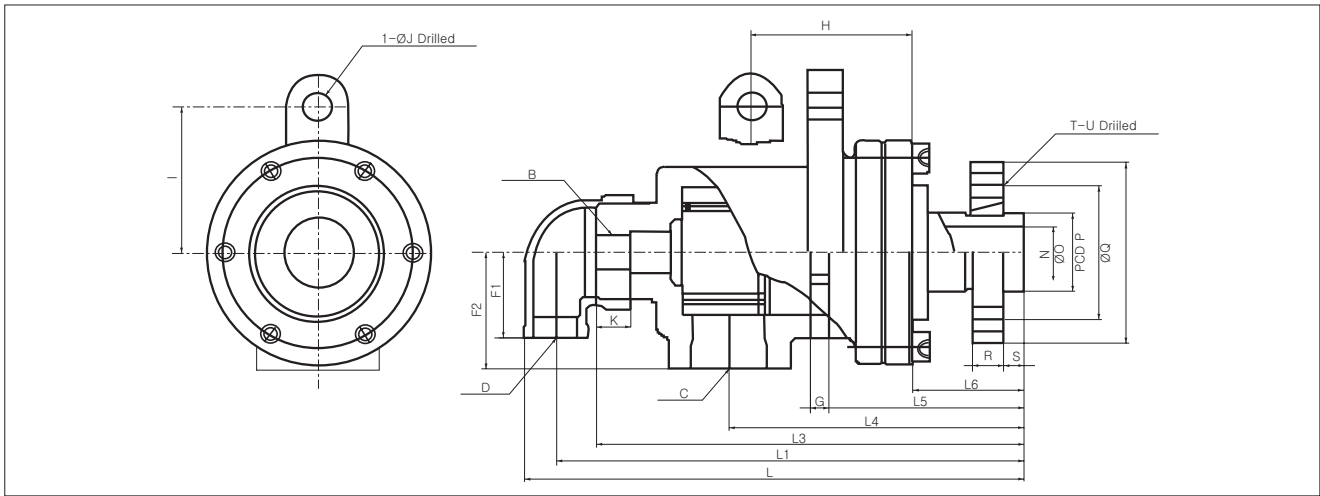
Dimensions-DR3011, DR3012, DR3111, DR3112 (Simplex L)



Unit:mm

Size	A R(PT)	C Rc(PT)	F1	G	H	I	J	L	L4	L5	L6	L7	N	X	Y	Z
15A	1/2	1/2	35	-	-	-	-	132	110	-	34	18	12	21	-	-
20A	3/4	3/4	40	-	-	-	-	145	120	-	36	20	18	26	-	-
25A	1	1	52	-	30.5	65	12	188	143	-	61.5	20	23	30	-	-
32A	1 1/4	1 1/2	65	-	36.5	80	16	222.5	174.5	-	73	25	30	46	-	-
40A	1 1/2	1 1/2	65	-	36.5	80	16	222.5	174.5	-	73	25	34	46	-	-
50A	2	2	82	12	-	-	-	279	221	157	93.5	30	48	56	19	200
65A	2 1/2	2 1/2	98	18	-	-	-	279	234	156	92	33	60	72	23	230
80A	3	3	100	-	-	-	-	334	280	-	88	35	73	-	-	-
100A	4	4	115	-	-	-	-	385	317	-	100	40	96	-	-	-

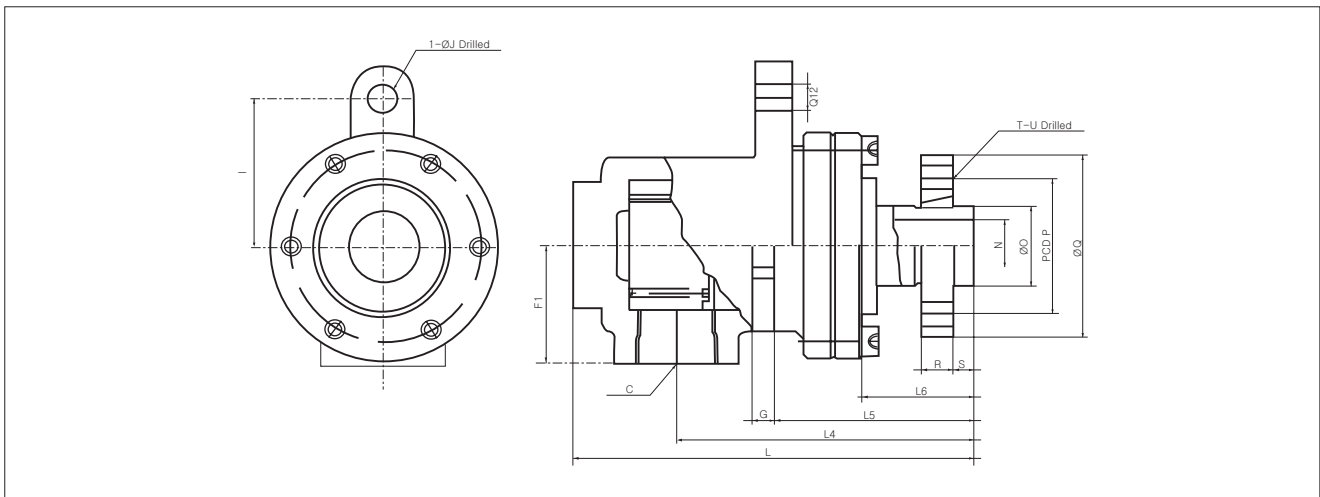
Dimensions-DR3005, DR3105 (Duplex With Fixed Internal Pipe, Flange)



Unit:mm

Size	B (PF)	C Rc(PT)	D Rc(PT)	F1	F2	G	H	I	J	K	L	L1	L3	L4	L5	L6	N	O	P	Q	R	S	T	U	Y	Z
15A	1/8	1/2	3/8	25	35	-	-	-	-	15	173	161	146	111	-	35	12	25	45	62	11	8	4	9	-	-
20A	1/4	3/4	1/2	33	40	-	-	-	-	15	199	185	167	124	-	40	18	30	54	74	13	8	4	11	-	-
25A	3/8	1	1/2	38	52	-	80	65	12	15	222	208	190	131	-	49.5	23	35	60	80	14	9	4	11	-	-
40A	3/4	1	3/4	43	70	-	62.5	75	16	29	296.5	274.5	249.5	185.5	-	84	34	50	75	96	16	9	4	11	-	-
50A	1	1 1/2	1	51	82	12	-	-	-	28	352	330	302	221	157	93	48	65	95	120	19	10	4	14	19	200
65A	1 1/2	2	1 1/2	62	97	18	-	-	-	18	382	354	316	234	157	92.5	60	80	110	136	20	12	4	14	23	230
80A	2	2	2	80	90	-	-	-	-	26	406	366	317	241	143	62	73	90	125	154	20	12	6	14	-	-
100A	2 1/2	3	2 1/2	90	110	-	-	-	-	30	468	422	375	272	152	66	100	120	165	195	22	12	6	18	-	-

Dimensions-DR3015, DR3115 (Simplex L, Flange)



Unit:mm

Size	C Rc(PT)	F1	G	H	I	J	L	L4	L5	L6	N	O	P	Q	R	S	T	U	Y	Z
15A	1/2	35	-	-	-	-	133	111	-	35	12	25	45	62	11	8	4	9	-	-
20A	3/4	40	-	-	-	-	149	124	-	40	18	30	54	74	13	8	4	11	-	-
25A	1	52	-	30.5	65	12	176	131	80	49.5	23	35	60	80	14	9	4	11	-	-
40A	1 1/2	65	-	36.5	80	16	233.5	185.5	-	84	34	50	75	96	16	9	4	11	-	-
50A	2	82	12	-	-	-	278	221	157	93.5	48	65	95	120	19	10	4	14	19	200
65A	2 1/2	98	18	-	-	-	279	234	156	92	60	80	110	136	20	12	4	14	23	230
80A	3	100	-	-	-	-	208	254	-	62	73	90	125	154	20	12	6	14	-	-
100A	4	115	-	-	-	-	351	283	-	66	100	120	165	195	22	12	6	18	-	-