

Pearl

Pearl Rotary Joint

— Rotary Joint —

RX Series

CATALOG

PEARL  JOINT
株式会社 昭和技研工業
SHOWA GIKEN INDUSTRIAL CO., LTD.

RX Series



RXE **RXH** **RXK**


Features	RXE	RXH	RXK
A floating seal ring provides good follow-up capability to the rotor seal face, resulting in stable seal performance.	✓	✓	✓
A variety of options are available for various applications.	✓	✓	✓
Due to low torque, a measure for preventing casing rotation is not required in many cases.	✓	✓	—
There are various types of products such as simplex, duplex, stationary IP, and duplex, rotational IP.	✓	✓	—
Many options for roll connection, including a flange connection type and five available thread connection types.	✓	✓	—
Products with “stainless steel specifications” are available. Their metal parts subject to fluid contact are all made from stainless steel.	✓	✓	—
As sealed ball bearings are used, greasing is not required.	✓	—	—

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The contents are subject to change without notice.

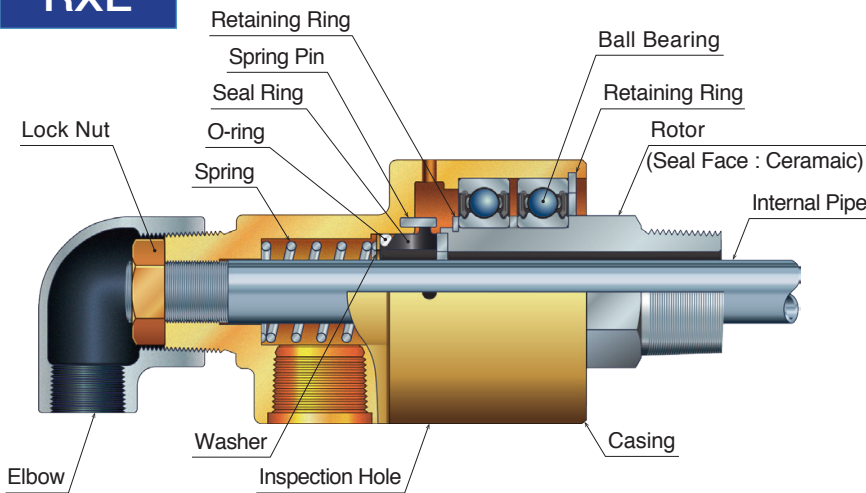
Service Conditions

Series	Line	Fluid	Size	Max.		
				Pressure (MPa)	Rotation Speed (min ⁻¹)	Temperature (°C)
	RXE	Water / Oil	8A~25A	2.25	3,500	100
			32A, 40A	1.67	2,000	
			50A~80A	1.18	750	
	RXH	Water / Thermal Oil	10A~25A	2.25	3,500	150
			32A, 40A	1.67	2,000	
			50A~80A	1.18	750	
	RXK	Water / Oil	90A, 100A	0.98	500	100

Structures and Materials

A mechanical seal for the standard specification consists of a combination of carbon and ceramics. For RXE/RXH, ceramic parts can be replaced with carbide ones as a quasi-standard.

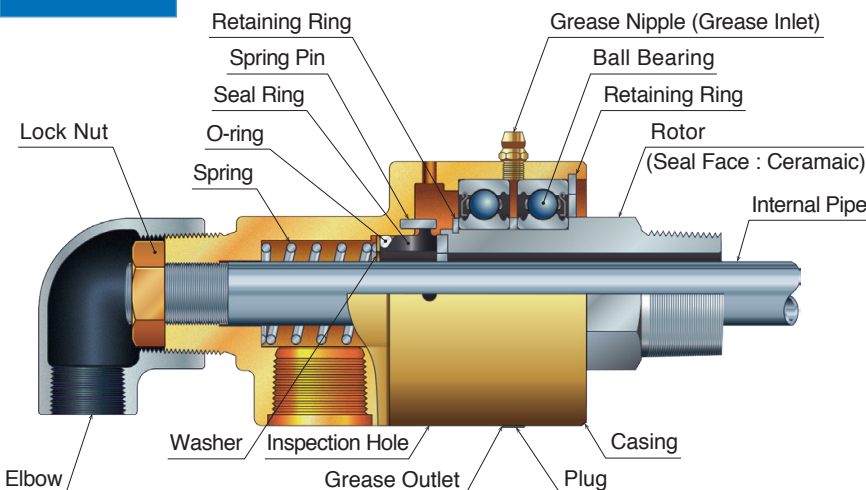
RXE



Materials of Main Components (Standard Specification)

Part Name	Material
Rotor	Stainless Steel (Seal Face : Ceramic)
Casing	Copper Alloy
Seal Ring	Carbon
O-ring	NBR

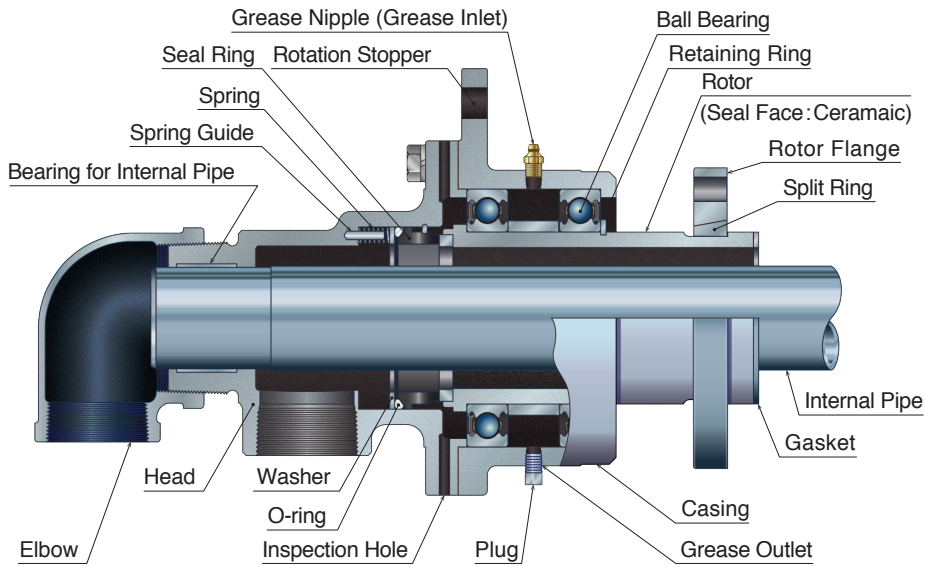
RXH



Materials of Main Components (Standard Specification)

Part Name	Material
Rotor	Stainless Steel (Seal Face : Ceramic)
Casing	Copper Alloy
Seal Ring	Carbon
O-ring	FKM

RXK



**Materials of Main Components
(Standard Specification)**

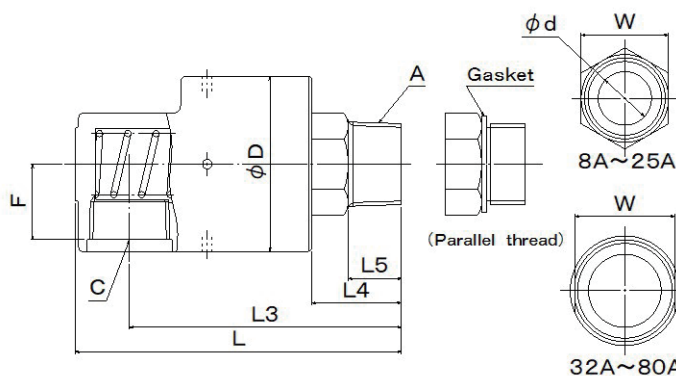
Part Name	Material
Rotor	Carbon Steel (Seal Face : Ceramic)
Casing	Cast Iron
Head	Cast Iron
Seal Ring	Carbon
O-ring	NBR

The rotor and head are finished with electroless nickel plating.
Heat-resistant paint is applied to external parts.

Note) Component materials are indicated on product drawings.
Contact our sales representative for requests for product drawings.



Simplex, Thread Connection



(mm)

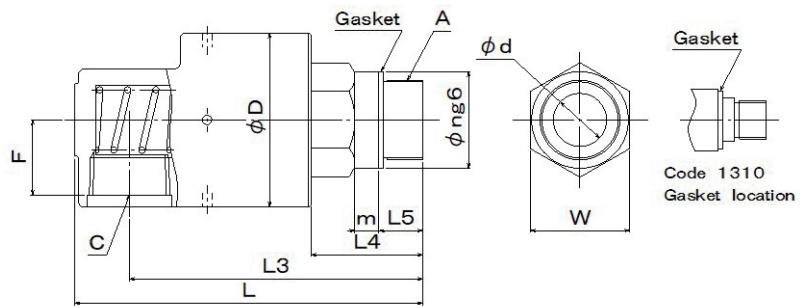
Size	Code	A	C	F	D	L	L3	L4	L5	d	W
8A	1008	R1/4	Rc1/4	18	39	82	70	22	14	6	17
10A	1010	R3/8	Rc3/8	21	46	91	77	23	14	9	19
	1110	G3/8	Rc3/8	21	46	94	80	26	15	9	22
	1210	M16×1.5	Rc3/8	21	46	94	80	26	15	9	22
	1610	NPT3/8	NPT3/8	21	46	91	77	23	14	9	19
	1710	5/8-18UNF	NPT3/8	21	46	94	80	26	15	9	22
15A	1015	R1/2	Rc1/2	24	53	108	91	29	18	12.5	22
	1115	G1/2	Rc1/2	24	53	110	93	31	18	12.5	27
	1215	M22×1.5	Rc1/2	24	53	110	93	31	18	12.5	27
	1615	NPT1/2	NPT1/2	24	53	108	91	29	18	12.5	22
	1715	3/4-16UNF	NPT1/2	24	53	110	93	31	18	12.5	27
20A	1020	R3/4	Rc3/4	30	65	121	101	32	19	18	32
	1120	G3/4	Rc3/4	30	65	121	101	32	17	18	32
	1220	M26×1.5	Rc3/4	30	65	121	101	32	17	18	32
	1620	NPT3/4	NPT3/4	30	65	121	101	32	19	18	32
	1720	1-14UNS	NPT3/4	30	65	121	101	32	17	18	32
25A	1025	R1	Rc1	31	72	135	112	37	22	22	36
	1125	G1	Rc1	31	72	131	108	33	18	22	36
	1225	M35×1.5	Rc1	31	72	132	109	34	16	22	41
	1625	NPT1	NPT1	31	72	135	112	37	22	22	36
	1725	1 1/2-12UNF	NPT1	31	72	139	116	41	23	22	41
32A	1032	R1 1/4	Rc1 1/4	41	83	161	134	45	25	30	41
	1132	G1 1/4	Rc1 1/4	41	83	162	135	46	25	30	41
	1232	M42×1.5	Rc1 1/4	41	83	162	135	46	25	30	41
	1632	NPT1 1/4	NPT1 1/4	41	83	161	134	45	25	30	41
	1732	1 3/4-12UN	NPT1 1/4	41	83	162	135	46	25	30	41
40A	1040	R1 1/2	Rc1 1/2	44	89	171	141	47	25	35	46
	1140	G1 1/2	Rc1 1/2	44	89	172	142	48	25	35	46
	1240	M50×1.5	Rc1 1/2	44	89	172	142	48	25	35	46
	1640	NPT1 1/2	NPT1 1/2	44	89	171	141	47	25	35	46
	1740	2-12UN	NPT1 1/2	44	89	172	142	48	25	35	46
50A	1050	R2	Rc2	57	115	206	168	56	30	48	60
	1650	NPT2	NPT2	57	115	206	168	56	30	48	60
65A	1065	R2 1/2	Rc2 1/2	73	123	257	210	75	40	58	65
	1665	NPT2 1/2	NPT2 1/2	73	123	257	210	75	40	58	65
80A	1080	R3	Rc3	80	138	279	224	75	40	68	75
	1680	NPT3	NPT3	80	138	279	224	75	40	68	75

Note 1) Contact us when you need a screw hole (option code T) for temperature or pressure sensor installation in the casing.

2) RXH is not available for code 1008.

RXE	13 ■ ■ ■ Code
RXH	

Simplex, Thread Connection with Spigot



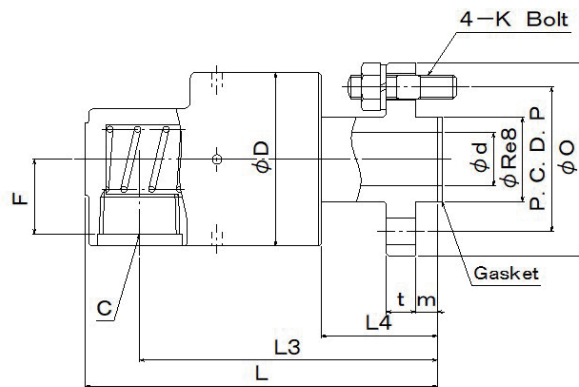
(mm)

Size	Code	A	C	F	D	L	L3	L4	L5	m	n	d	W
10A	1310	M16×1.5	Rc3/8	21	46	99	85	31	13	7	18	9	22
15A	1315	M22×1.5	Rc1/2	24	53	117	100	37	14	10	28	12.5	30
20A	1320	M25×1.5	Rc3/4	30	65	130	110	41	16	10	30	16	32
25A	1325	M33×1.5	Rc1	31	72	144	121	46	18	10	40	22	41

Note) Contact us when you need a screw hole (option code T) for temperature or pressure sensor installation in the casing.

RXE	21 ■ ■ ■ Code
RXH	

Simplex, Flange Connection



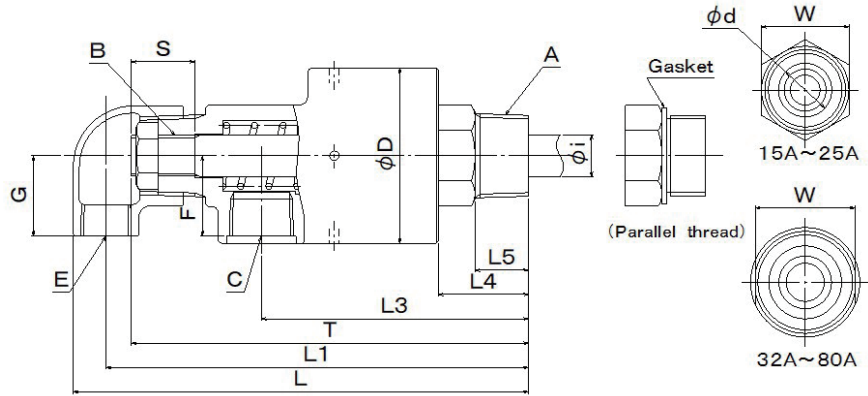
(mm)

Size	Code	C	F	D	L	L3	L4	d	Flange					K
									R	P	O	t	m	
15A	2115	Rc1/2	24	53	118	101	39	12.5	25	45	62	10	8	M8
20A	2120	Rc3/4	30	65	134	114	45	18	30	54	74	12	8	M10
25A	2125	Rc1	31	72	146	123	48	22	35	60	80	12	9	M10
32A	2132	Rc1¼	41	83	166	139	50	30	50	75	96	14	9	M10
40A	2140	Rc1½	44	89	174	144	50	35	50	75	96	14	9	M10
50A	2150	Rc2	57	115	210	172	60	48	65	95	120	14	10	M12
65A	2165	Rc2½	73	123	242	195	60	58	80	110	136	16	12	M12
80A	2180	Rc3	80	138	269	214	65	68	90	125	154	20	15	M12

Note) Contact us when you need a screw hole (option code T) for temperature or pressure sensor installation in the casing.



Duplex, Stationary IP, Thread Connection



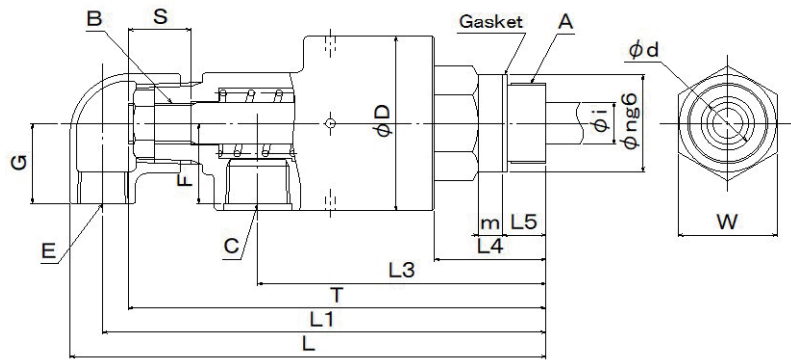
(mm)

Size	Code	A	C	E	F	G	D	L	L1	L3	L4	L5	d	W	Internal Pipe				
															Size	i	B	S	T
15A	3015	R1/2	Rc1/2	Rc3/8	24	25	53	153	141	91	29	18	12.5	22	6A	10.5	G1/8	22	133
	3115	G1/2	Rc1/2	Rc3/8	24	25	53	155	143	93	31	18	12.5	27	6A	10.5	G1/8	22	135
	3215	M22×1.5	Rc1/2	Rc3/8	24	25	53	155	143	93	31	18	12.5	27	6A	10.5	G1/8	22	135
	3615	NPT1/2	NPT1/2	NPT3/8	24	25	53	153	141	91	29	18	12.5	22	6A	10.5	G1/8	22	133
	3715	3/4-16UNF	NPT1/2	NPT3/8	24	25	53	155	143	93	31	18	12.5	27	6A	10.5	G1/8	22	135
20A	3020	R3/4	Rc1/2	Rc3/8	30	28	65	164	152	98	32	19	18	32	8A	13.8	G1/4	23	144
	3120	G3/4	Rc1/2	Rc3/8	30	28	65	164	152	98	32	17	18	32	8A	13.8	G1/4	23	144
	3220	M26×1.5	Rc1/2	Rc3/8	30	28	65	164	152	98	32	17	18	32	8A	13.8	G1/4	23	144
	3620	NPT3/4	NPT1/2	NPT3/8	30	28	65	164	152	98	32	19	18	32	8A	13.8	G1/4	23	144
	3720	1-14UNS	NPT1/2	NPT3/8	30	28	65	164	152	98	32	17	18	32	8A	13.8	G1/4	23	144
25A	3025	R1	Rc3/4	Rc1/2	33	33	72	187	174	110	37	22	22	36	10A	17.3	G3/8	26	163
	3125	G1	Rc3/4	Rc1/2	33	33	72	183	170	106	33	18	22	36	10A	17.3	G3/8	26	159
	3225	M35×1.5	Rc3/4	Rc1/2	33	33	72	184	171	107	34	16	22	41	10A	17.3	G3/8	26	160
	3625	NPT1	NPT3/4	NPT1/2	33	33	72	187	174	110	37	22	22	36	10A	17.3	G3/8	26	163
	3725	1½-12UNF	NPT3/4	NPT1/2	33	33	72	191	178	114	41	23	22	41	10A	17.3	G3/8	26	167
32A	3032	R1¼	Rc1	Rc3/4	36	40	83	219	202	132	45	25	30	41	15A	21.7	G1/2	30	189
	3132	G1¼	Rc1	Rc3/4	36	40	83	220	203	133	46	25	30	41	15A	21.7	G1/2	30	190
	3232	M42×1.5	Rc1	Rc3/4	36	40	83	220	203	133	46	25	30	41	15A	21.7	G1/2	30	190
	3632	NPT1¼	NPT1	NPT3/4	36	40	83	219	202	132	45	25	30	41	15A	21.7	G1/2	30	189
	3732	1¾-12UN	NPT1	NPT3/4	36	40	83	220	203	133	46	25	30	41	15A	21.7	G1/2	30	190
40A	3040	R1½	Rc1	Rc3/4	39	43	89	226	209	137	47	25	35	46	20A	27.2	G3/4	32	196
	3140	G1½	Rc1	Rc3/4	39	43	89	227	210	138	48	25	35	46	20A	27.2	G3/4	32	197
	3240	M50×1.5	Rc1	Rc3/4	39	43	89	227	210	138	48	25	35	46	20A	27.2	G3/4	32	197
	3640	NPT1½	NPT1	NPT3/4	39	43	89	226	209	137	47	25	35	46	20A	27.2	G3/4	32	196
	3740	2-12UN	NPT1	NPT3/4	39	43	89	227	210	138	48	25	35	46	20A	27.2	G3/4	32	197
50A	3050	R2	Rc1½	Rc1	50	51	115	268	247	164	56	30	48	60	25A	34.0	G1	34	233
	3650	NPT2	NPT1½	NPT1	50	51	115	268	247	164	56	30	48	60	25A	34.0	G1	34	233
65A	3065	R2½	Rc2	Rc1½	68	62	123	345	315	206	75	40	58	65	32A	42.7	G1¼	45	293
	3665	NPT2½	NPT2	NPT1½	68	67	123	375	327	206	75	40	58	65	32A	42.7	G1¼	45	293
80A	3080	R3	Rc2	Rc1½	72	62	138	352	322	212	75	40	68	75	40A	48.6	G1½	45	300
	3680	NPT3	NPT2	NPT1½	72	67	138	382	334	212	75	40	68	75	40A	48.6	G1½	45	300

Note) B is a right-hand thread.

RXE	33 ■ ■ ■ Code
RXH	

**Duplex, Stationary IP,
Thread Connection
with Spigot**



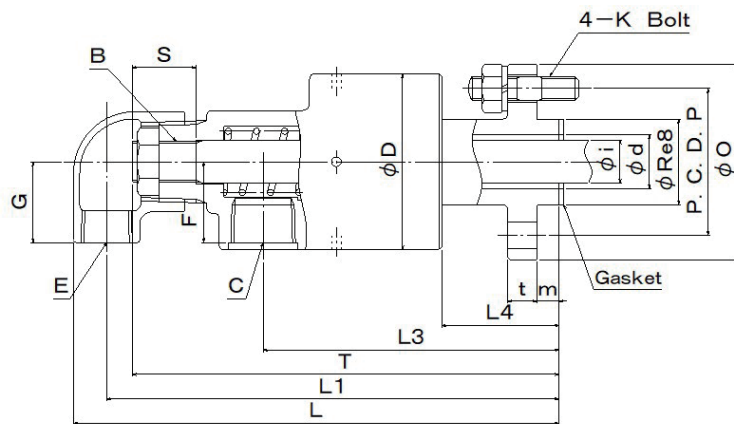
(mm)

Size	Code	A	C	E	F	G	D	L	L1	L3	L4	L5	m	n	d	W	Internal Pipe				
																	Size	i	B	S	T
15A	3315	M22×1.5	Rc1/2	Rc3/8	24	25	53	161	150	100	37	14	10	28	12.5	30	6A	10.5	G1/8	22	142
20A	3320	M25×1.5	Rc1/2	Rc3/8	30	28	65	173	161	107	41	16	10	30	16	32	8A	13.8	G1/4	23	153
25A	3325	M33×1.5	Rc3/4	Rc1/2	33	33	72	196	183	119	46	18	10	40	22	41	10A	17.3	G3/8	26	172

Note) B is a right-hand thread.

RXE	41 ■ ■ ■ Code
RXH	

**Duplex, Stationary IP,
Flange Connection**



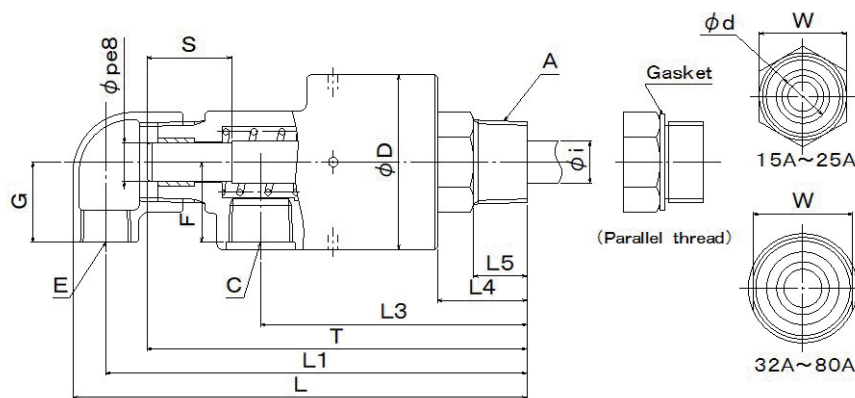
(mm)

Size	Code	C	E	F	G	D	L	L1	L3	L4	d	Flange					K	Internal Pipe				
												R	P	O	t	m		Size	i	B	S	T
15A	4115	Rc1/2	Rc3/8	24	25	53	163	151	101	39	12.5	25	45	62	10	8	M8	6A	10.5	G1/8	22	143
20A	4120	Rc1/2	Rc3/8	30	28	65	177	165	111	45	18	30	54	74	12	8	M10	8A	13.8	G1/4	23	157
25A	4125	Rc3/4	Rc1/2	33	33	72	198	185	121	48	22	35	60	80	12	9	M10	10A	17.3	G3/8	26	174
32A	4132	Rc1	Rc3/4	36	40	83	224	207	137	50	30	50	75	96	14	9	M10	15A	21.7	G1/2	30	194
40A	4140	Rc1	Rc3/4	39	43	89	229	212	140	50	35	50	75	96	14	9	M10	20A	27.2	G3/4	32	199
50A	4150	Rc1½	Rc1	50	51	115	272	251	168	60	48	65	95	120	14	10	M12	25A	34.0	G1	34	237
65A	4165	Rc2	Rc1½	68	62	123	330	300	191	60	58	80	110	136	16	12	M12	32A	42.7	G1¼	45	278
80A	4180	Rc2	Rc1½	72	62	138	342	312	202	65	68	90	125	154	20	15	M12	40A	48.6	G1½	45	290

Note) B is a right-hand thread.

RXE	5 ■ ■ ■ ■ Code
RXH	

**Duplex, Rotational IP,
Thread Connection**

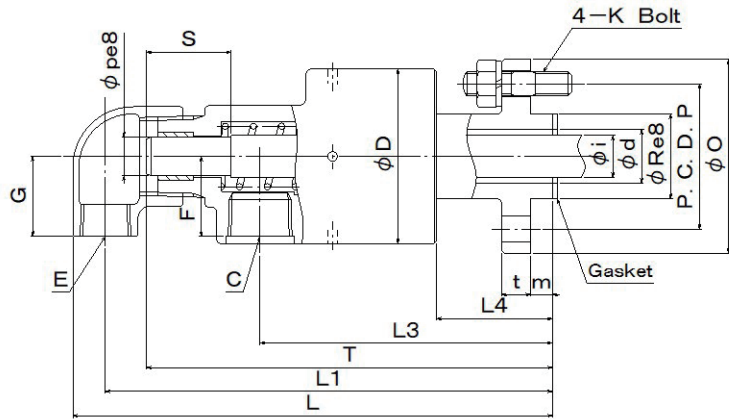


(mm)

Size	Code	A	C	E	F	G	D	L	L1	L3	L4	L5	d	W	Internal Pipe				
															Size	i	p	S	T
15A	5015	R1/2	Rc1/2	Rc3/8	24	25	53	153	141	91	29	18	12.5	22	6A	10.5	10	30	128
	5115	G1/2	Rc1/2	Rc3/8	24	25	53	155	143	93	31	18	12.5	27	6A	10.5	10	30	130
	5215	M22×1.5	Rc1/2	Rc3/8	24	25	53	155	143	93	31	18	12.5	27	6A	10.5	10	30	130
	5615	NPT1/2	NPT1/2	NPT3/8	24	25	53	153	141	91	29	18	12.5	22	6A	10.5	10	30	128
	5715	3/4-16UNF	NPT1/2	NPT3/8	24	25	53	155	143	93	31	18	12.5	27	6A	10.5	10	30	130
20A	5020	R3/4	Rc1/2	Rc3/8	30	28	65	164	152	98	32	19	18	32	8A	13.8	13	30	138
	5120	G3/4	Rc1/2	Rc3/8	30	28	65	164	152	98	32	17	18	32	8A	13.8	13	30	138
	5220	M26×1.5	Rc1/2	Rc3/8	30	28	65	164	152	98	32	17	18	32	8A	13.8	13	30	138
	5620	NPT3/4	NPT1/2	NPT3/8	30	28	65	164	152	98	32	19	18	32	8A	13.8	13	30	138
	5720	1-14UNS	NPT1/2	NPT3/8	30	28	65	164	152	98	32	17	18	32	8A	13.8	13	30	138
25A	5025	R1	Rc3/4	Rc1/2	33	33	72	187	174	110	37	22	22	36	10A	17.3	16	35	157
	5125	G1	Rc3/4	Rc1/2	33	33	72	183	170	106	33	18	22	36	10A	17.3	16	35	154
	5225	M35×1.5	Rc3/4	Rc1/2	33	33	72	184	171	107	34	16	22	41	10A	17.3	16	35	154
	5625	NPT1	NPT3/4	NPT1/2	33	33	72	187	174	110	37	22	22	36	10A	17.3	16	35	157
	5725	1½-12UNF	NPT3/4	NPT1/2	33	33	72	191	178	114	41	23	22	41	10A	17.3	16	35	160
32A	5032	R1¼	Rc1	Rc3/4	36	40	83	219	202	132	45	25	30	41	15A	21.7	20	40	182
	5132	G1¼	Rc1	Rc3/4	36	40	83	220	203	133	46	25	30	41	15A	21.7	20	40	182
	5232	M42×1.5	Rc1	Rc3/4	36	40	83	220	203	133	46	25	30	41	15A	21.7	20	40	182
	5632	NPT1¼	NPT1	NPT3/4	36	40	83	219	202	132	45	25	30	41	15A	21.7	20	40	182
	5732	1¼-12UN	NPT1	NPT3/4	36	40	83	220	203	133	46	25	30	41	15A	21.7	20	40	182
40A	5040	R1½	Rc1	Rc3/4	39	43	89	226	209	137	47	25	35	46	20A	27.2	26	40	189
	5140	G1½	Rc1	Rc3/4	39	43	89	227	210	138	48	25	35	46	20A	27.2	26	40	189
	5240	M50×1.5	Rc1	Rc3/4	39	43	89	227	210	138	48	25	35	46	20A	27.2	26	40	189
	5640	NPT1½	NPT1	NPT3/4	39	43	89	226	209	137	47	25	35	46	20A	27.2	26	40	189
	5740	2-12UN	NPT1	NPT3/4	39	43	89	227	210	138	48	25	35	46	20A	27.2	26	40	189
50A	5050	R2	Rc1½	Rc1	50	51	115	268	247	164	56	30	48	60	25A	34.0	32	45	224
	5650	NPT2	NPT1½	NPT1	50	51	115	268	247	164	56	30	48	60	25A	34.0	32	45	224
65A	5065	R2½	Rc2	Rc1½	68	62	123	345	315	206	75	40	58	65	32A	42.7	40	55	283
	5665	NPT2½	NPT2	NPT1½	68	67	123	375	327	206	75	40	58	65	32A	42.7	40	55	283
80A	5080	R3	Rc2	Rc1½	72	62	138	352	322	212	75	40	68	75	40A	48.6	48	60	290
	5680	NPT3	NPT2	NPT1½	72	67	138	382	334	212	75	40	68	75	40A	48.6	48	60	290

RXE	61 ■ ■ Code
RXH	

**Duplex, Rotational IP,
Flange Connection**

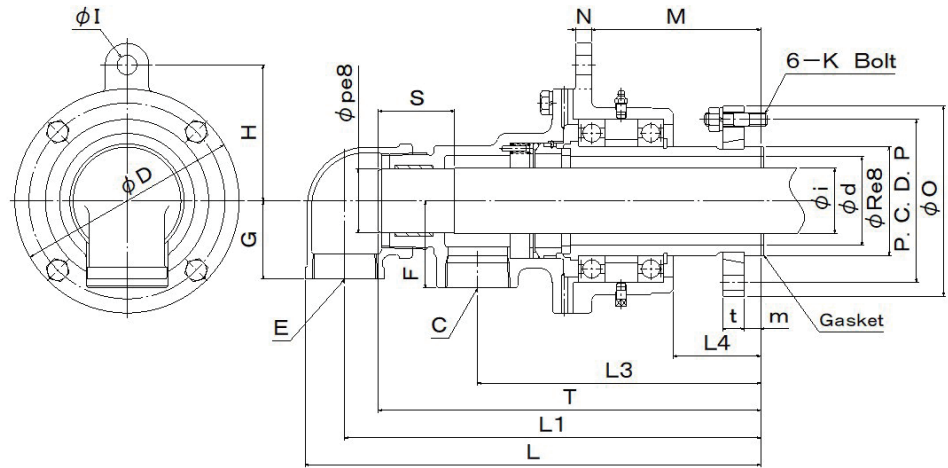


(mm)

Size	Code	C	E	F	G	D	L	L1	L3	L4	d	Flange					K	Internal Pipe				
												R	P	O	t	m		Size	i	p	S	T
15A	6115	Rc1/2	Rc3/8	24	25	53	163	151	101	39	12.5	25	45	62	10	8	M8	6A	10.5	10	30	138
20A	6120	Rc1/2	Rc3/8	30	28	65	177	165	111	45	18	30	54	74	12	8	M10	8A	13.8	13	30	151
25A	6125	Rc3/4	Rc1/2	33	33	72	198	185	121	48	22	35	60	80	12	9	M10	10A	17.3	16	35	168
32A	6132	Rc1	Rc3/4	36	40	83	224	207	137	50	30	50	75	96	14	9	M10	15A	21.7	20	40	187
40A	6140	Rc1	Rc3/4	39	43	89	229	212	140	50	35	50	75	96	14	9	M10	20A	27.2	26	40	192
50A	6150	Rc1½	Rc1	50	51	115	272	251	168	60	48	65	95	120	14	10	M12	25A	34.0	32	45	228
65A	6165	Rc2	Rc1½	68	62	123	330	300	191	60	58	80	110	136	16	12	M12	32A	42.7	40	55	268
80A	6180	Rc2	Rc1½	72	62	138	342	312	202	65	68	90	125	154	20	15	M12	40A	48.6	48	60	280



Duplex, Rotational IP,
Flange Connection



(mm)

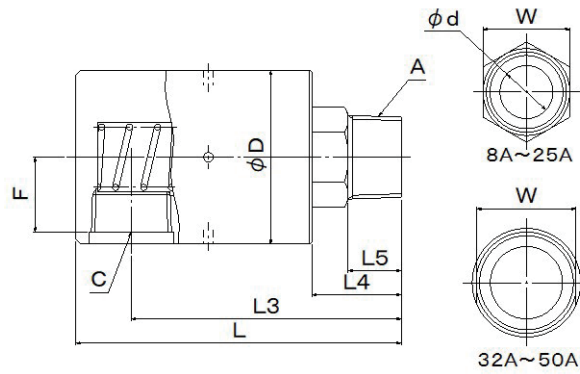
Size	Code	C	E	F	G	D	H	I	M	N	L	L1	L3	L4
90A	6081	Rc2	Rc2	80	72	206	125	18	155	15	419	382	260	80
100A	6082	Rc2½	Rc2 ½	95	90	236	140	18	168	16	483	437	290	85

(mm)

Size	Code	d	Flange					K	Internal Pipe				
			R	P	O	t	m		Size	i	p	S	T
90A	6081	82	100	150	175	20	15	M12	50A	60.5	59	70	347
100A	6082	98	120	160	190	20	20	M16	65A	76.3	75	80	392

RXE	10 ■ ■ S Code
RXH	

Simplex, Thread Connection, Stainless Steel Specification



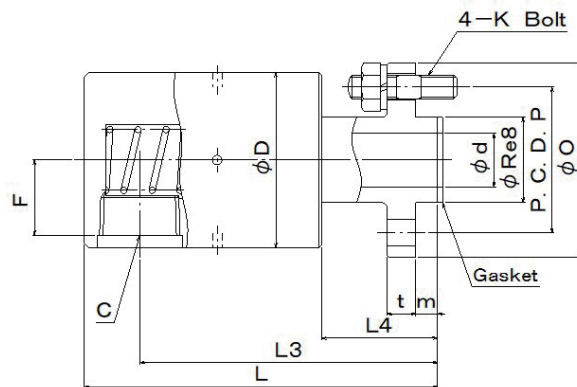
(mm)

Size	Code	A	C	F	D	L	L3	L4	L5	d	W
8A	1008S	R1/4	Rc1/4	18	39	82	70	22	14	6	17
10A	1010S	R3/8	Rc3/8	21	46	90	77	23	14	9	19
15A	1015S	R1/2	Rc1/2	24	53	108	91	29	18	12.5	22
20A	1020S	R3/4	Rc3/4	29	65	120	101	32	19	18	32
25A	1025S	R1	Rc1	31	72	135	112	37	22	22	36
32A	1032S	R1¼	Rc1¼	41	92	161	134	45	25	30	41
40A	1040S	R1½	Rc1½	40	94	171	141	47	25	35	46
50A	1050S	R2	Rc2	54	124	210	168	56	30	48	60

Note) RXH is not available for code 1008S.

RXE	21 ■ ■ S Code
RXH	

Simplex, Flange Connection, Stainless Steel Specification



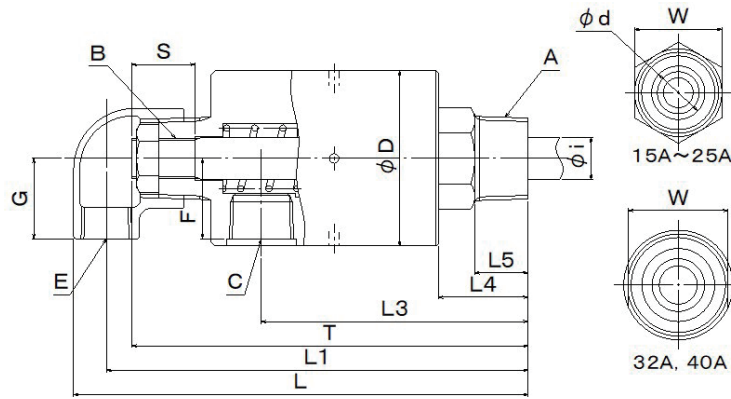
(mm)

Size	Code	C	F	D	L	L3	L4	d	Flange					K
									R	P	O	t	m	
15A	2115S	Rc1/2	24	53	119	101	39	12.5	25	45	62	10	8	M8
20A	2120S	Rc3/4	29	65	133	114	45	18	30	54	74	12	8	M10
25A	2125S	Rc1	31	72	146	123	48	22	35	60	80	12	9	M10
32A	2132S	Rc1¼	41	92	166	139	50	30	50	75	96	14	9	M10
40A	2140S	Rc1½	40	94	174	144	50	35	50	75	96	14	9	M10
50A	2150S	Rc2	54	124	214	172	60	48	65	95	120	14	10	M12

RXE
RXH

30 ■ ■ S
Code

Duplex, Stationary IP,
Thread Connection,
Stainless Steel
Specification



(mm)

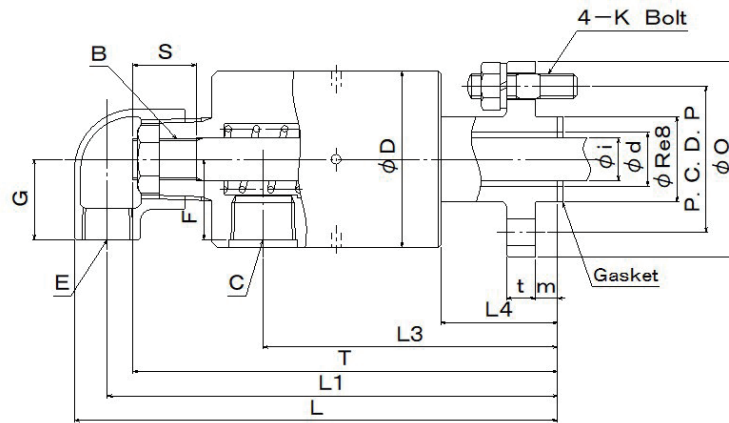
Size	Code	A	C	E	F	G	D	L	L1	L3	L4	L5	d	W	Internal Pipe				
															Size	i	B	S	T
15A	3015S	R1/2	Rc1/2	Rc3/8	24	25	53	154	141	91	29	18	12.5	22	6A	10.5	G1/8	22	133
20A	3020S	R3/4	Rc1/2	Rc3/8	30	28	65	165	152	98	32	19	18	32	8A	13.8	G1/4	23	144
25A	3025S	R1	Rc3/4	Rc1/2	33	33	72	189	174	110	37	22	22	36	10A	17.3	G3/8	26	163
32A	3032S	R1¼	Rc1	Rc3/4	38	40	83	220	202	132	45	25	30	41	15A	21.7	G1/2	30	189
40A	3040S	R1½	Rc1	Rc3/4	41	43	89	227	209	137	47	25	35	46	20A	27.2	G3/4	32	196

Note) B is a right-hand thread.

RXE
RXH

41 ■ ■ S
Code

Duplex, Stationary IP,
Flange Connection,
Stainless Steel
Specification



(mm)

Size	Code	C	E	F	G	D	L	L1	L3	L4	d	Flange					K	Internal Pipe				
												R	P	O	t	m		Size	i	B	S	T
15A	4115S	Rc1/2	Rc3/8	24	25	53	164	151	101	39	12.5	25	45	62	10	8	M8	6A	10.5	G1/8	22	143
20A	4120S	Rc1/2	Rc3/8	30	28	65	178	165	111	45	18	30	54	74	12	8	M10	8A	13.8	G1/4	23	157
25A	4125S	Rc3/4	Rc1/2	33	33	72	200	185	121	48	22	35	60	80	12	9	M10	10A	17.3	G3/8	26	174
32A	4132S	Rc1	Rc3/4	38	40	83	225	207	137	50	30	50	75	96	14	9	M10	15A	21.7	G1/2	30	194
40A	4140S	Rc1	Rc3/4	41	43	89	230	212	140	50	35	50	75	96	14	9	M10	20A	27.2	G3/4	32	199

Note) B is a right-hand thread.

Masses

Masses of RXE/RXH (Standard Specification)

(kg)

Code	8A	10A	15A	20A	25A	32A	40A	50A	65A	80A
1■■■	0.35	0.60	0.9	1.3	1.8	2.7	3.4	6.5	8.7	12.0
21■■	-	-	1.1	1.7	2.1	3.5	4.0	7.4	9.9	13.6
3■■■/5■■■	-	-	1.0	1.4	2.0	3.1	3.7	6.7	9.6	11.6
41■■/61■■	-	-	1.2	1.8	2.3	3.9	4.3	7.6	10.8	13.2

Masses of RXE/RXH (Stainless Steel Specification)

(kg)

Code	8A	10A	15A	20A	25A	32A	40A	50A
10■■S	0.45	0.80	1.2	1.8	2.5	4.7	5.0	11.5
21■■S	-	-	1.4	2.2	2.8	5.4	5.7	12.5
30■■S	-	-	1.3	1.9	2.7	4.0	4.7	-
41■■S	-	-	1.5	2.3	3.0	4.8	5.3	-

Masses of RXK

(kg)

Code	90A	100A
6081	25	-
6082	-	35

Flow Rate

The maximum flow velocity in the product is about 3 m/s when the fluid is water.
The following tables show guidelines for the maximum flow rates calculated based on the above flow velocity.

Water Flow Rate (Simplex) = $A \times 3 \times 3600 / 10000$

Line	Code	Size	Flow Passage Area (cm ²)	Water Flow Rate (m ³ /h)
			A(Note1)	
RXE RXH	1■■■■ 21■■■	8A	0.283	0.305
		10A	0.636	0.687
		15A	1.23	1.33
		20A	2.54	2.75
		25A	3.80	4.11
		32A	7.07	7.63
		40A	9.62	10.4
		50A	18.1	19.5
		65A	26.4	28.5
		80A	36.3	39.2

Note 1) A = (Rotor flow passage area)

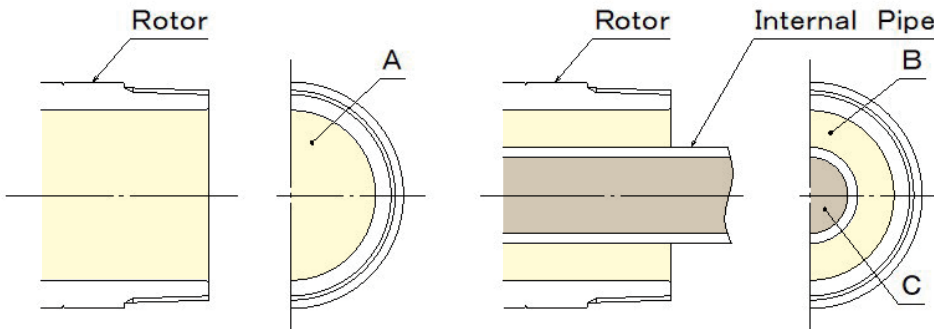
Water Flow Rate (Duplex) = $(B \text{ or } C) \times 3 \times 3600 / 10000$ (Note 4)

Line	Code	Size	Flow Passage Area (cm ²)		Water Flow Rate (m ³ /h)
			B(Note2)	C(Note3)	
RXE RXH	3■■■■ 41■■■ 5■■■■ 61■■■	15A-6A	0.361	0.332	0.358
		20A-8A	1.05	0.694	0.749
		25A-10A	1.45	1.19	1.28
		32A-15A	3.37	1.94	2.09
		40A-20A	3.81	3.53	3.81
		50A-25A	9.02	5.73	6.18
		65A-32A	12.1	10.0	10.8
		80A-40A	17.8	13.6	14.7
RXK	6081 6082	90A-50A	24.1	21.6	23.4
		100A-65A	29.7	34.1	32.1

Note 2) B = A – (Internal pipe section area)

Note 3) C = (Internal pipe flow passage area)

Note 4) B or C, whichever is smaller



Internal Pipe Dimensions (SUS304)

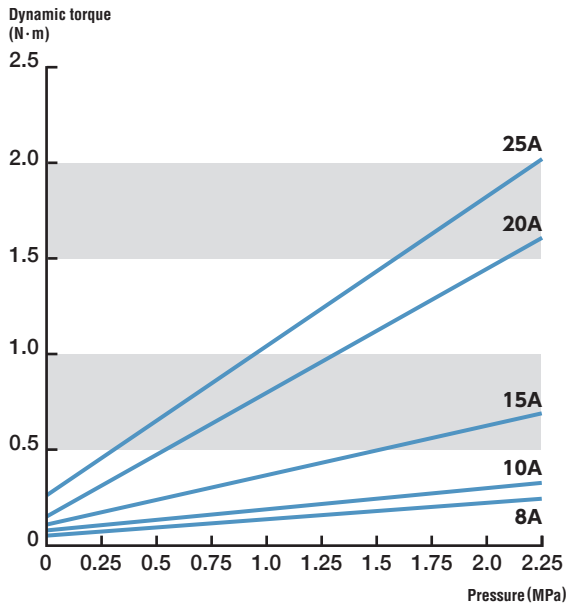
Size	Outer Dia. x Thickness
6A	φ 10.5 × 2.0
8A	φ 13.8 × 2.2
10A	φ 17.3 × 2.5
15A	φ 21.7 × 3.0
20A	φ 27.2 × 3.0
25A	φ 34.0 × 3.5
32A	φ 42.7 × 3.5
40A	φ 48.6 × 3.5
50A	φ 60.5 × 4.0
65A	φ 76.3 × 5.2

* Internal pipe outer diameters and thickness are based on the values of "internal pipe dimensions" in the table shown on the right.

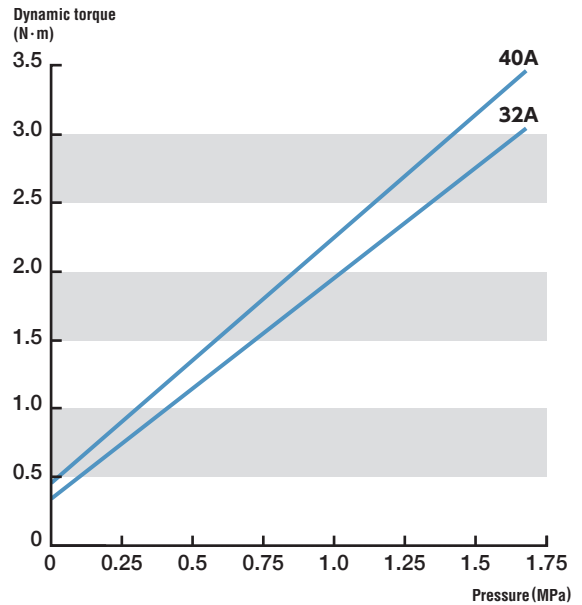
If an internal pipe with a different thickness is used, the water flow rate (for duplex) varies.

Dynamic Torque

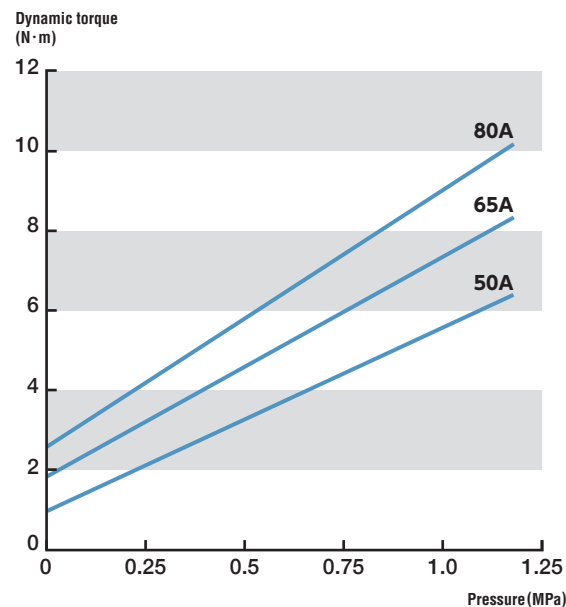
RXE/RXH Dynamic torque (8A~25A)



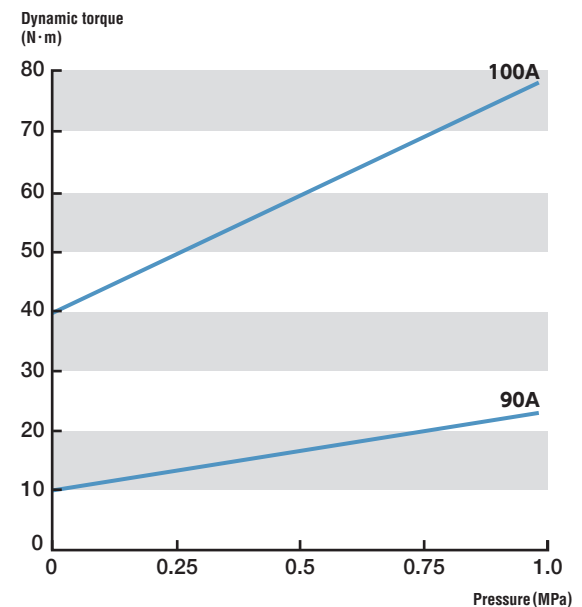
RXE/RXH Dynamic torque (32A,40A)



RXE/RXH Dynamic torque (50A~80A)



RXK Dynamic torque (90A,100A)



Note 1) Dynamic torque varies depending on product storage conditions, storage period, or fluid types.

2) Starting torque is larger than dynamic torque. Although starting torque is even larger when wringing occurs, it does not indicate any fault.

3) Data are typical values measured based on in-house test standards. They are not guaranteed values.

Accessories

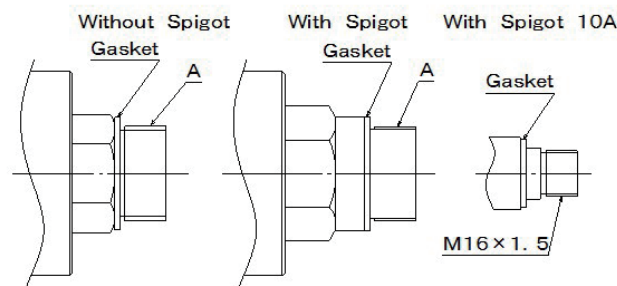
1) A product installed with a parallel thread is supplied with a gasket (copper plate).

Accessories (Parallel Thread Connection without Spigot)

Line	Size	A	Gasket		
			Outer Dia.	Inner Dia.	Thick-ness
RXE RXH	10A	G3/8	26	17	2
		M16×1.5	23	16.3	2
		5/8-18UNF			
	15A	G1/2	30	21.3	2
		M22×1.5	27.5	22.2	2
		3/4-16UNF	27.5	19.5	2
	20A	G3/4	35	26.8	2
		M26×1.5			
	25A	G1	39.5	33.5	2
		M35×1.5	42	35.3	2
		1½-12UNF	44	38.5	2
	32A	G1¼	49	42.5	2
M42×1.5					
1¾-12UN		52	45	2	
40A	G1½	56	48.3	2	
	M50×1.5	58	51	2	
2-12UN					

Accessories (Parallel Thread Connection with Spigot)

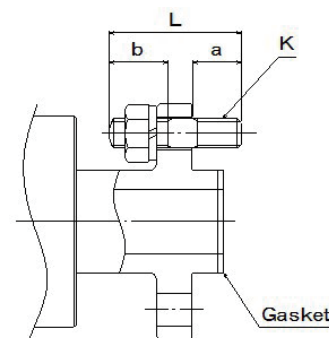
Line	Size	A	Gasket		
			Outer Dia.	Inner Dia.	Thick-ness
RXE RXH	10A	M16×1.5	24	18.5	2
	15A	M22×1.5	27.5	22.2	2
	20A	M25×1.5	29.5	25.2	2
	25A	M33×1.5	39.5	33.5	2



2) A product installed with a flange is supplied with a gasket (copper jacket) and four sets of a stud bolt (SS400), a hex. nut (SS400), and a spring washer (SWRH) for up to 80A, or six sets thereof for 90A and 100A.

*The gasket material for RXK is copper plate.

*The gasket material for products with stainless steel specifications (21■■S or 41■■S) is PTFE.



Accessories (Flange Connection)

Line	Size	Gasket (Copper Jacket)			Gasket (PTFE)			Stud Bolt				Hex. Nut	Spring Washer
		Outer Dia.	Inner Dia.	Thick-ness	Outer Dia.	Inner Dia.	Thick-ness	K	L	a	b		
RXE RXH	15A	24	16	3.2	24	13.5	2	M8	36	11	18	M8 type1	M8 No.2
	20A	29	20	3.2	29.5	20	2	M10	45	15	20	M10 type1	M10 No.2
	25A	34	26	3.2	34	25	2						
	32A	49	37	3.2	49	37	2	M10	48	15	20	M10 type1	M10 No.2
	40A												
	50A												
	65A	79	62	3.2	-	-	-	M12	58	18	27	M12 type1	M12 No.2
80A	89	74	3.2	-	-	-							
RXK	90A	99	82	3	-	-	-	M16	69	24	28	M16 type1	M16 No.2
	100A	119	100	3	-	-	-						

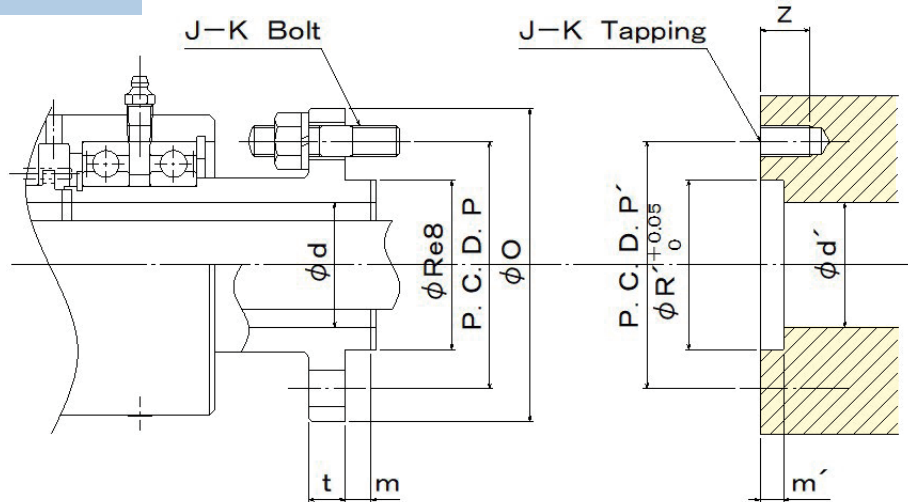
3) A duplex, stationary IP product is supplied with a lock nut (right-hand thread) used for securing the internal pipe. The material for the standard specification is copper alloy for 15A to 25A, or SS400 for 32A to 80A. The material for the stainless steel specification is SUS304.

Flange Connection - Dimensions on the Roll Side (Reference Values)

RXE

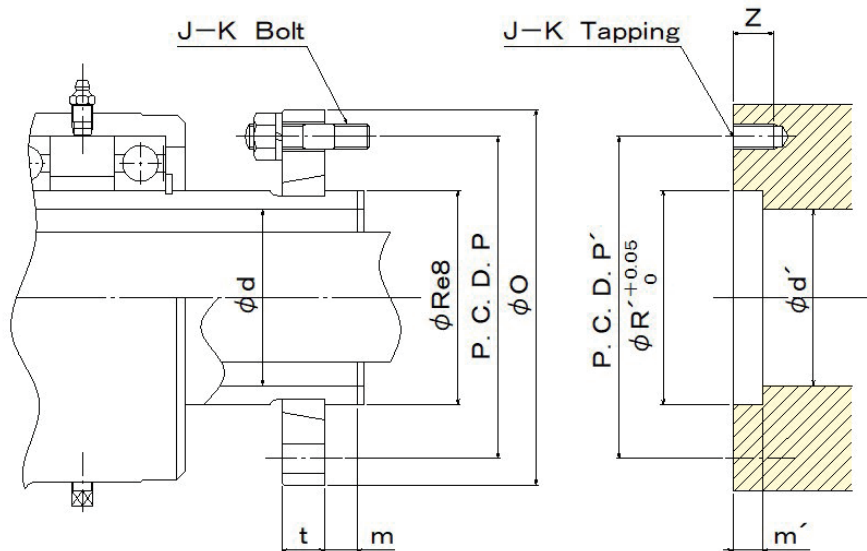
RXH

15A~80A



RXK

90A,100A



Flange Dimensions

(mm)

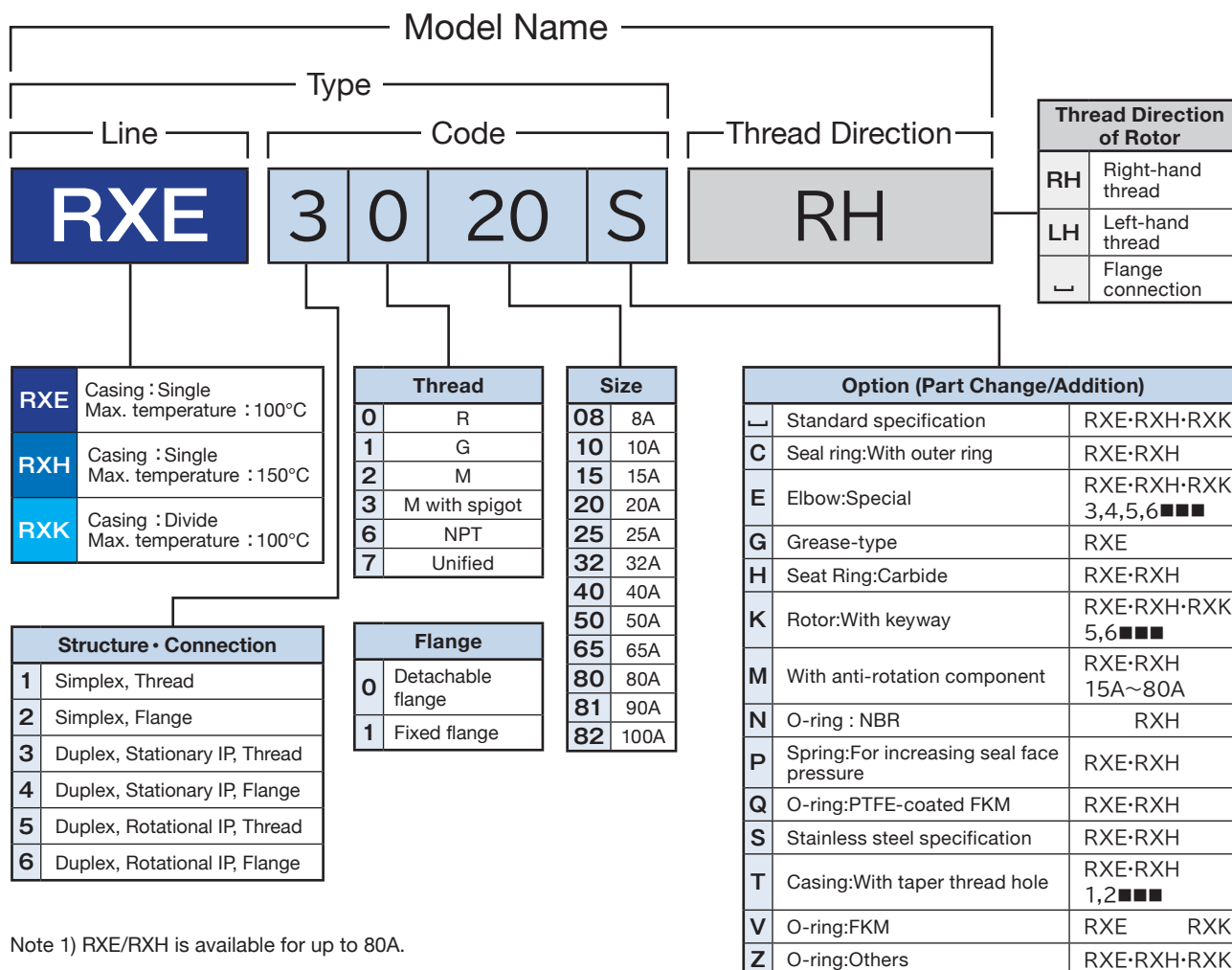
Size	d	R	P	O	t	m
15A	12.5	25	45	62	10	8
20A	18	30	54	74	12	8
25A	22	35	60	80	12	9
32A	30	50	75	96	14	9
40A	35	50	75	96	14	9
50A	48	65	95	120	14	10
65A	58	80	110	136	16	12
80A	68	90	125	154	20	15
90A	82	100	150	175	20	15
100A	98	120	160	190	20	20

Dimensions on the Roll Side

(mm)

Size	d'	R'	P'	m'	Z	J-K
15A	12.5	25	45	7	12	4-M8
20A	18	30	54	7	16	4-M10
25A	22	35	60	8	16	4-M10
32A	30	50	75	8	16	4-M10
40A	35	50	75	8	16	4-M10
50A	48	65	95	9	19	4-M12
65A	58	80	110	11	19	4-M12
80A	68	90	125	14	19	4-M12
90A	82	100	150	14	19	6-M12
100A	98	120	160	19	25	6-M16

Model Names and Types



- Note 1) RXE/RXH is available for up to 80A.
 2) Only two types, RXK6081 for 90A and RXK6082 for 100A, are available for RXK.
 3) “└” indicates a space. A model name is indicated without spaces.
 4) If two codes are selected, they are indicated in alphabetical order.
 5) The selection of three or more options resulting in a long model name is indicated as “RXS■■■■” to denote a customized product for administrative reasons.
 (“■■■■” indicates a four-digit number allocated to each model.)
 If you have any questions, contact our sales representative.

Standard Spec : Without Options
 Quasi-standard Spec : With Options

Internal Pipe

Product Size and Internal Pipe Size

Product Size	15A	20A	25A	32A	40A	50A	65A	80A	90A	100A
Internal Pipe Size	6A	8A	10A	15A	20A	25A	32A	40A	50A	65A

Precautions on Selection

1. Select a product whose operating conditions are within the service conditions (listed in the table on page 2).
2. Select a product installed with a parallel thread or a flange instead of a taper thread if it is used in a high-rotation speed range.
3. An installation thread must be tightened when a roll is operated. Select a left-hand thread for a roll that rotates clockwise when viewed from the product installation side, and select a right-hand one for a roll that rotates counterclockwise.
4. Select an option as necessary.
 - 1) See “Model Names and Types” (page 18) for the types of options.
 - 2) All metal parts subject to fluid contact are stainless steel when option code S (stainless steel specification) is selected.
 - 3) If option code K is selected, the rotor has a keyway so that the internal pipe rotates in phase with the rotor.
5. RX series is not suitable for non-rotating, intermittent rotating, or low-speed rotating (several rotations per minute) operation. Fluid leakage may result. Contact our sales representative if you need a product suitable for such operating condition.
6. Operation under conditions where both pressure and rotation speed are close to the max. values or long-time dry operation (operation without fluid flow) reduces product lifetime.
7. After a long-time storage or depending on service environment, oil released from the grease may seep from the ball bearing. However, it does not indicate any fault.
8. The product cannot be used for steam applications.
9. The product cannot be used for liquid containing solid particles (slurry) or pulverulent body.
10. The product cannot be used for fluid that causes corrosion on it.
11. The product is not designed according to the general design rules for safety and hygiene of food processing machinery (JIS B 9650). Consult with us when considering the use of the product in food-related facilities.
12. Depending on the fluid used, the product may subject to restrictions due to national laws or local regulations.

As for customized products, we can produce products with modifications that are not included in the options. If you have any questions or wish to purchase customized products, contact our sales representative.

Maintenance

1) Greasing

- As grease-sealed ball bearings are used for RXE, greasing is not required.
- RXH and RXK require the periodic greasing(refilling) of ball bearings. Perform greasing with reference to the frequency (guideline) shown to the right.

* Use the following brand of grease filled in the product before shipment.
 【 Idemitsu Kosan Co., Ltd. Daphne Eponex SR2 】

Greasing Frequency (Guideline)

Fluid Temperature (°C)	Greasing Frequency
0~60	Every six months
60~120	Every three months
120~150	Monthly

2) Replacement of consumables

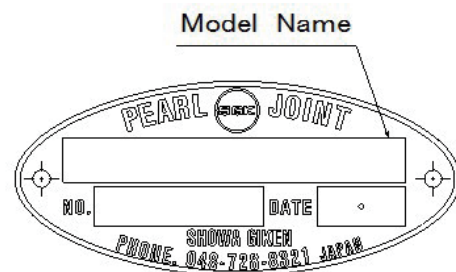
You can use the product for an extended period of time by replacing consumables.
 Contact us for replacement. We carry it out according to our repair program.
 Depending on the products, expenses for purchasing new products may be lower than repair expenses.
 Contact us for more information.

Product Order

Please provide the following information.

1) When ordering our product you are currently using

- ① Model name (indicated on the product's nameplate)
- ② When ordering our product with an internal pipe
 The drawing number if you have a product drawing we provided. The tip shape and dimensions of the internal pipe if you don't have the product drawing.



Nameplate

2) When newly ordering our products

- ① Model name (See page 18.)
- ② The tip shape and dimensions of an internal pipe for a product ordered with it
- ③ Related information
 - The name of equipment to which our product is installed
 - The name of the fluid used
 - Fluid pressure and temperature, and roll rotation speed
 - Roll rotation direction viewed from the product installation side
 - Roll connection method
 - Service environment
 - Requests, etc.

If you have any questions, contact our sales representative.

Product Warranty

If a malfunction occurs during the warranty period, contact us or the distributor and send the product to us. Be sure to carefully pack the product for protection before sending it. After receiving the product, we will confirm the malfunction. If the malfunction was clearly caused by the materials of product components or the manufacturing method, we will repair the product in question or replace it with a new one free of charge.

Product Warranty Provision

1. Warranty Period

< New products >

One (1) year and six (6) months after shipment (from the manufacturing date) or one (1) year after installation, whichever comes first.

< Repaired products >

Six (6) months after shipment (from the manufacturing date).

2. We charge a fee for repairs in any of the following cases.

- ① Failure after the warranty period has expired
- ② Failure caused by use of the product deviating from the service conditions
- ③ Failure caused by misuse (improper storage, installation, pipe laying, operation or maintenance, etc.)
- ④ Failure caused by fluid contaminants or foreign objects in the fluid
- ⑤ Failure caused by relocation, transport, or falling of the product after delivery
- ⑥ Failure caused by disassembly, repair, or modification done by personnel other than our service personnel
- ⑦ Failure of the product attributed to using materials or according to standards specified by the customer
- ⑧ Failure of the product attributed to using materials provided by the customer
- ⑨ Failure caused due to unavoidable acts of nature such as fires or other natural disasters

3. Scope of Responsibility

Our responsibility shall be limited to repairs, replacements, or transport expenses covered by this product warranty provision. Expenses or damages caused by said failures above shall not be covered.

4. Applicable Regions

This product warranty provision shall be applicable to products installed in Japan.
Contact our sales representative if you install and use our products outside Japan.

5. Another Agreement

If another product warranty agreement is made separately with us and clearly states that said agreement shall have priority over this product warranty provision, this provision shall not be applicable.

6. This product warranty provision shall not restrict the customer's legal rights.

PEARL  JOINT
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