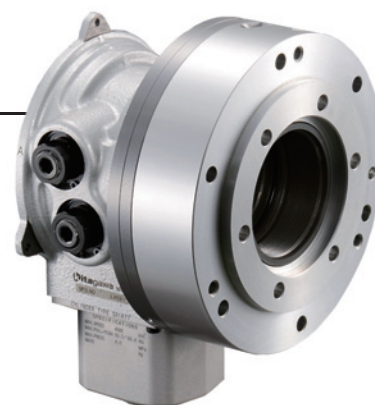




**ROTARY
CYLINDER**

Next-Generation Hydraulic Cylinder with Large Through-Hole

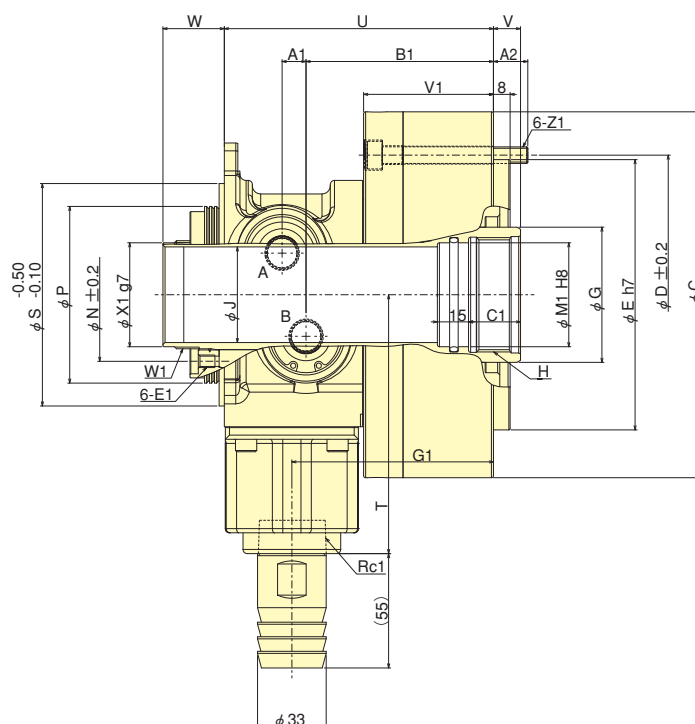
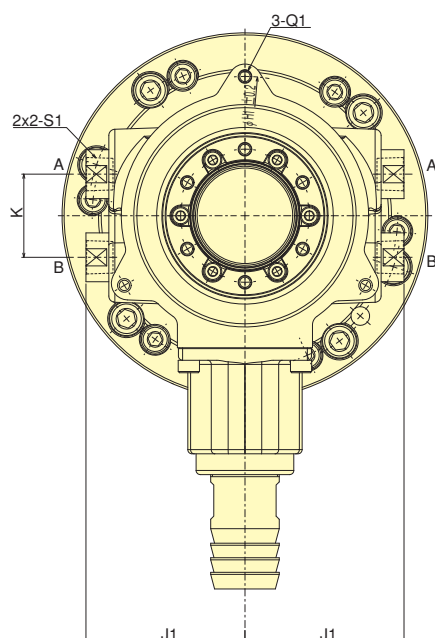
SR series



■ Suitable design for KITAGAWA chuck

- Large through-hole
- This model is not equipped with a coolant collector.
For models equipped with a coolant collector,
please see the SR_C series.

■ Dimensional Drawings



回転
シリンダー

■ Dimensions

Dimensions	C	D	E	G	H	J	K	N	P	S	T	U	V max.	V min.	W max.	W min.	A1	B1	C1	E1	G1	H1	J1	M1	Q1	S1	V1	W1	X1	Z1	A2
Model																															
SR1146	176	147	130	65	M55x2	46	40	64	85	107	124.5	129.5	13	-3	45.5	29.5	11.5	90.2	25	M6x8	97	134	76.5	50	M6	Rc3/8	62.5	M52x1.5	50	M8	16.5
SR1453	200	165	140	70	M60x2	53	40	73	96	117	130	133.5	19	0	53	34	11.5	94.2	30	M6x12	101	144	82.5	55	M6	Rc3/8	66.5	M58x1.5	56	M8	13
SR1566	210	190	168	85	M75x2	66	48	88	111	137	150	154.5	22	0	52	30	12.7	107.9	35	M6x12	108	169	98	70	M6	Rc1/2	73	M74x1.5	71.5	M10	18
SR1670	222	195	160	95	M78x2	70	46	103	126	157	175	171	22	-1	53	30	15.5	115.5	35	M6x12	122.5	189	98.5	75	M6	Rc1/2	72	M89x2	86	M10	19
SR1675	222	195	160	95	M85x2	75	46	103	126	157	175	171	22	-1	53	30	15.5	115.5	35	M6x12	122.5	189	98.5	80	M6	Rc1/2	72	M89x2	86	M10	19
SR1677	222	195	160	100	M88x2	77	46	103	126	157	175	171	22	-1	53	30	15.5	115.5	35	M6x12	122.5	189	98.5	80	M6	Rc1/2	72	M89x2	86	M10	19
SR1781	230	205	168	100	M90x2	81	46	103	126	157	175	176	23	-2	55	30	15.5	120.5	35	M6x12	127.5	189	98.5	85	M6	Rc1/2	77	M89x2	86	M10	19

■ Specifications

Specifications	Thru-Hole mm	Piston stroke mm	Piston Area Push Side cm ²	Piston Area Pull Side cm ²	Piston thrust Push Side kN	Piston thrust Pull Side kN	Max. Operation Pressure MPa	Max. Speed min ⁻¹	Moment of Inertia kg·m ²	Net Weight kg	Leakage ℓ/min
SR1146	46	16	87	76	32.8	28.6	4.0	6000	0.026	11	3.0
SR1453	53	19	121	111	47.9	43.9	4.2	6000	0.045	14	3.9
SR1566	66	22	132	120	49.7	45.0	4.0	5000	0.064	19	4.0
SR1670	70	23	150	143	56.4	53.6	4.0	4500	0.086	24.5	4.3
SR1675	75	23	150	143	56.4	53.6	4.0	4500	0.084	23.5	4.3
SR1677	77	23	150	135	56.4	50.7	4.0	4500	0.084	23.5	4.3
SR1781	81	25	171	156	64.3	58.7	4.0	4500	0.095	23.5	4.3

※Leakage: Pressure 3.0MPa and oil temperature 50℃ ※Piston thrust: at Max. Operation Pressure



**ROTARY
CYLINDER**

Next-Generation Hydraulic Cylinder with Large Through-Hole

SR_C series

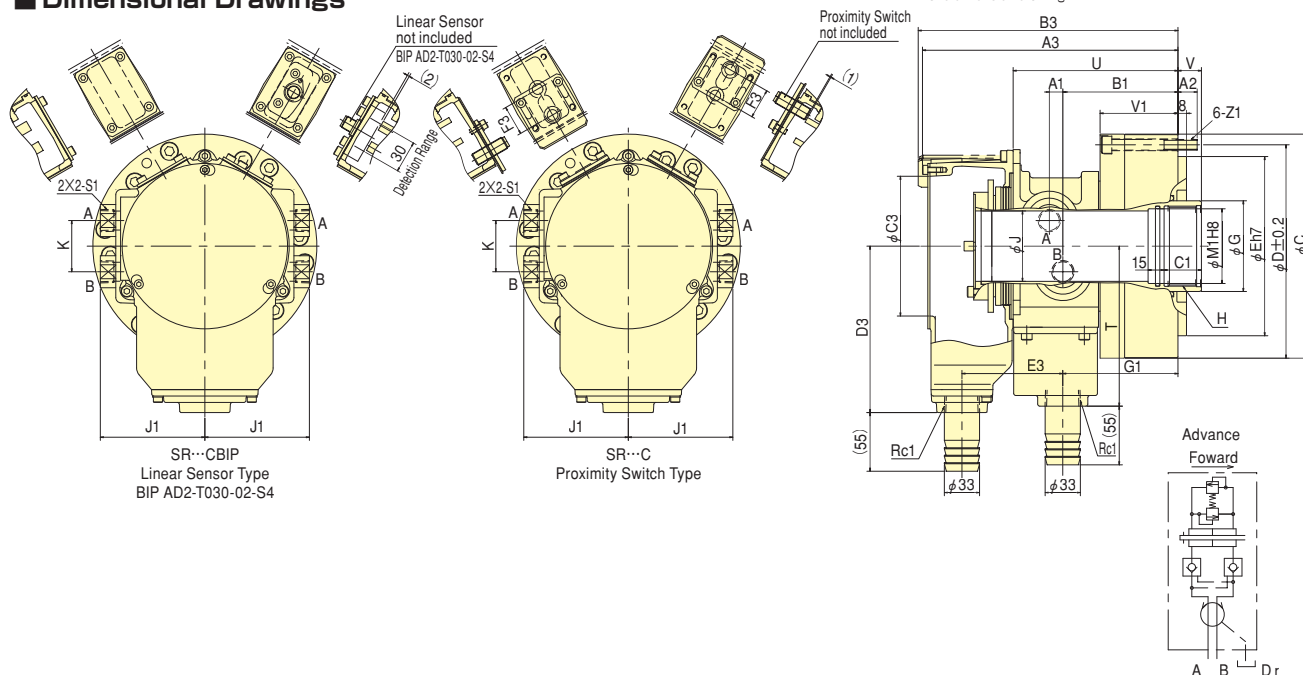
Suitable design for KITAGAWA chuck

- Large through-hole
- Coolant collector and confirmation devices are equipped as a standard
- Linear sensor can be available
 - ※ Linear sensor specifications may not be available depending on the machine manufacturer. Please confirm with the manufacturer.
 - ※ Please refer to P76 about options.
 - ※ CE correspondence (Only series with confirmation device)



The proximity switch is optional.
Determine the appropriate type according to the controller type and dimension drawing.

Dimensional Drawings



回転
シリンダ

Dimensions

Model	C	D	E	G	H	J	K	N	P	S	T	U	V max.	V min.	W max.	W min.	A1	B1	C1	E1	G1	H1	J1	M1	Q1	S1	V1	W1	X1	Z1	A2
SR1146C	176	147	130	65	M55x2	46	40	64	85	107	124.5	129.5	13	-3	45.5	29.5	11.5	90.2	25	M6x8	97	134	76.5	50	M6	Rc3/8	62.5	M52x1.5	50	M8	16.5
SR1453C	200	165	140	70	M60x2	53	40	73	96	117	130	133.5	19	0	53	34	11.5	94.2	30	M6x12	101	144	82.5	55	M6	Rc3/8	66.5	M58x1.5	56	M8	13
SR1566C	210	190	168	85	M75x2	66	48	88	111	137	150	154.5	22	0	52	30	12.7	107.9	35	M6x12	108	169	98	70	M6	Rc1/2	73	M74x1.5	71.5	M10	18
SR1670C	222	195	160	95	M78x2	70	46	103	126	157	175	171	22	-1	53	30	15.5	115.5	35	M6x12	122.5	189	98.5	75	M6	Rc1/2	72	M89x2	86	M10	19
SR1675C	222	195	160	95	M85x2	75	46	103	126	157	175	171	22	-1	53	30	15.5	115.5	35	M6x12	122.5	189	98.5	80	M6	Rc1/2	72	M89x2	86	M10	19
SR1677C	222	195	160	100	M88x2	77	46	103	126	157	175	171	22	-1	53	30	15.5	115.5	35	M6x12	122.5	189	98.5	80	M6	Rc1/2	72	M89x2	86	M10	19
SR1781C	230	205	168	100	M90x2	81	46	103	126	157	175	176	23	-2	55	30	15.5	120.5	35	M6x12	127.5	189	98.5	85	M6	Rc1/2	77	M89x2	86	M10	19

※SR...C, has the same dimension as SR...CBIP

Coolant Collector Proximity Switch Type

Model	A3 length	B3 length MAX	C3	D3	E3	F3
SR1146C	202.5	204.5	98	109.5	68.5	24
SR1453C	212.5	216.5	110	117.5	74.5	25
SR1566C	239.5	243.5	131	156	94.5	28
SR1670C	262	266	151	159.5	102.5	28
SR1675C	262	266	151	159.5	102.5	28
SR1677C	262	266	151	159.5	102.5	28
SR1781C	267	271	151	159.5	102.5	28

Coolant Collector Linear Sensor Type

Model	A3 length	B3 length MAX	C3	D3	E3
SR1146CBIP	202.5	—	98	109.5	68.5
SR1453CBIP	212.5	—	110	117.5	74.5
SR1566CBIP	239.5	—	131	156	94.5
SR1670CBIP	262	—	151	159.5	102.5
SR1675CBIP	262	—	151	159.5	102.5
SR1677CBIP	262	—	151	159.5	102.5
SR1781CBIP	267	—	151	159.5	102.5

Specifications

Model	Thru-Hole mm	Piston stroke mm	Piston Area Push Side cm ²	Piston Area Pull Side cm ²	Piston thrust Push Side kN	Piston thrust Pull Side kN	Max. Operation Pressure MPa	Max. Speed min ⁻¹	Moment of Inertia kg·m ²	Net Weight kg	Leakage ℓ/min
SR1146C	46	16	87	76	32.8	28.6	4.0	6000	0.026	13	3.0
SR1453C	53	19	121	111	47.9	43.9	4.2	6000	0.045	16	3.9
SR1566C	66	22	132	120	49.7	45.0	4.0	5000	0.064	21.5	4.0
SR1670C	70	23	150	143	56.4	53.6	4.0	4500	0.086	27.5	4.3
SR1675C	75	23	150	143	56.4	53.6	4.0	4500	0.084	26.5	4.3
SR1677C	77	23	150	135	56.4	50.7	4.0	4500	0.084	26	4.3
SR1781C	81	25	171	156	64.3	58.7	4.0	4500	0.095	26.5	4.3

※SR...C, has the same specifications as SR...CBIP ※Leakage: Pressure 3.0MPa and oil temperature 50℃ ※Piston thrust: at Max. Operation Pressure