



**ROTARY CYLINDER**

# Next-Generation Hydraulic Cylinder with Large Through-Hole

## SR series

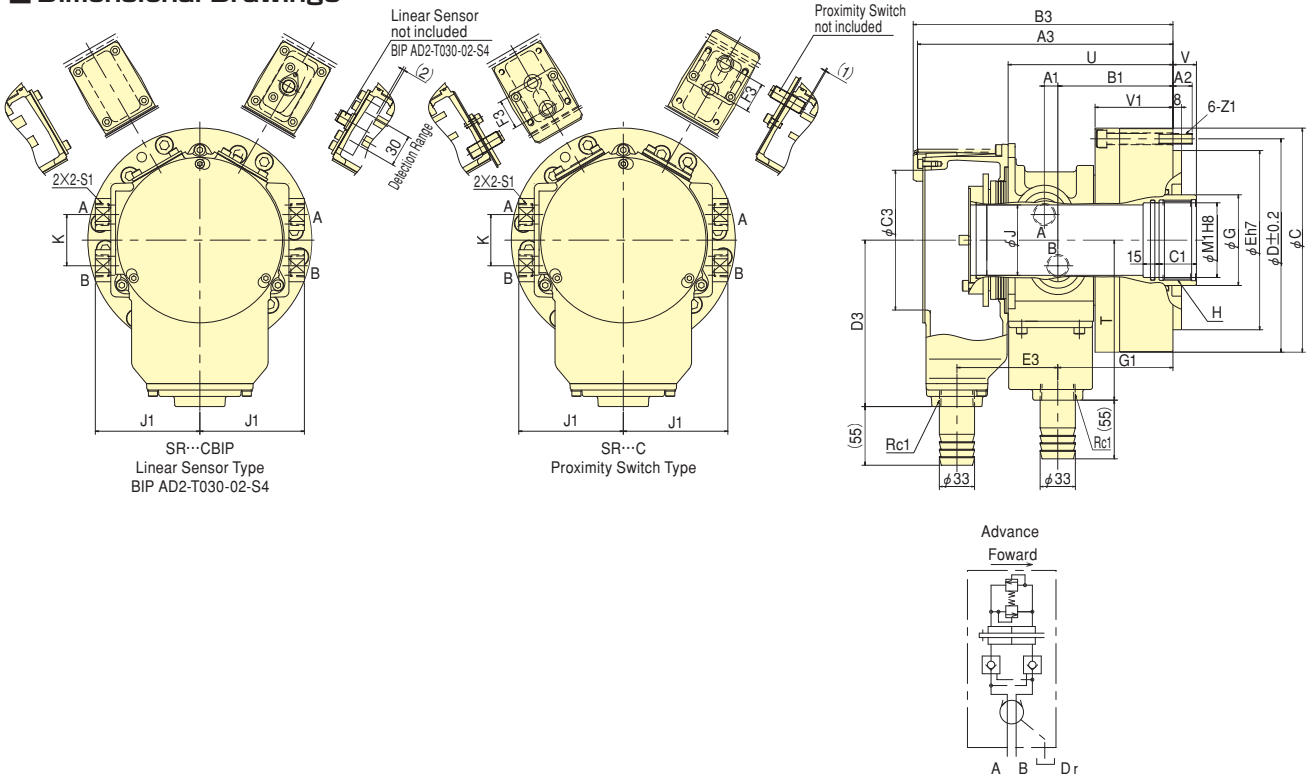
### Suitable design for KITAGAWA chuck

- 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 P62 about options.
  - \*CE correspondence (Only series with checking device)



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

### Dimensional Drawings



### Dimensions

Dimensions	C	D	E	G	H	J	K	T	U	V max.	V min.	A1	B1	C1	G1	J1	M1	S1	V1	Z1	A2
Model																					
SR1146C	176	147	130	65	M55×2	46	40	124.5	129.5	13	-3	11.5	90.2	25	97	76.5	50	Rc3/8	62.5	M8	16.5
SR1453C	200	165	140	70	M60×2	53	40	130	133.5	19	0	11.5	94.2	30	101	82.5	55	Rc3/8	66.5	M8	12.5
SR1566C	210	190	168	85	M75×2	66	48	150	154.5	22	0	12.7	107.9	35	108	98	70	Rc1/2	73	M10	18
SR1677C	222	195	160	100	M88×2	77	46	175	171	22	-1	15.5	115.5	35	122.5	98.5	80	Rc1/2	72	M10	19
SR1781C	230	205	168	100	M90×2	81	46	175	176	23	-2	15.5	120.5	35	127.5	98.5	85	Rc1/2	77	M10	19
SR2010C	263	240	200	125	M115×2	106	46	200	204.5	27	-1	18	138	35	146.5	116	110	Rc1/2	86.5	M12	18

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

### Coolant Collector Linear Sensor Type

Dimensions	A3 length	B3 length MAX	C3	D3	E3
Model					
SR1146CBIP	202.5	-	98	109.5	68.5
SR1453CBIP	212.5	-	110	117.5	74.5
SR1566CBIP	239.5	-	131	156	94.5
SR1677CBIP	262	-	151	159.5	102.5
SR1781CBIP	267	-	151	159.5	102.5
SR2010CBIP	301.5	-	180	165	118

### Coolant Collector Proximity Switch Type

Dimensions	A3 length	B3 length MAX	C3	D3	E3	F3
Model						
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
SR1677C	262	266	151	159.5	102.5	28
SR1781C	267	271	151	159.5	102.5	28
SR2010C	301.5	308	180	165	118	35

### Specifications

Specifications	Thru-Hole mm	Piston stroke mm	Piston Area		Draw bar		Max. Operation Pressure MPa	Max. Speed min <sup>-1</sup>	Moment of Inertia kg·m <sup>2</sup>	Net Weight kg	Leakage l/min
			Push Side cm <sup>2</sup>	Pull Side cm <sup>2</sup>	Push Side kN	Pull Side kN					
Model											
SR1146C	46	16	87	76	32.8	28.6	4.0	6000	0.026	12	3.0
SR1453C	53	19	121	111	47.9	43.9	4.2	6000	0.043	15	3.9
SR1566C	66	22	132	120	49.7	45.0	4.0	5000	0.066	21	4.0
SR1677C	77	23	150	135	56.4	50.7	4.0	4500	0.084	25	4.3
SR1781C	81	25	171	156	64.3	58.7	4.0	4500	0.096	26	4.3
SR2010C	106	28	201	191	75.5	71.8	4.0	3500	0.196	40	6.0

※SR...C has the same specifications as SR...CBIP ※Leakage: Pressure 3.0MPa and oil temperature 50°C ※Draw bar: at Max. Operation Pressure