



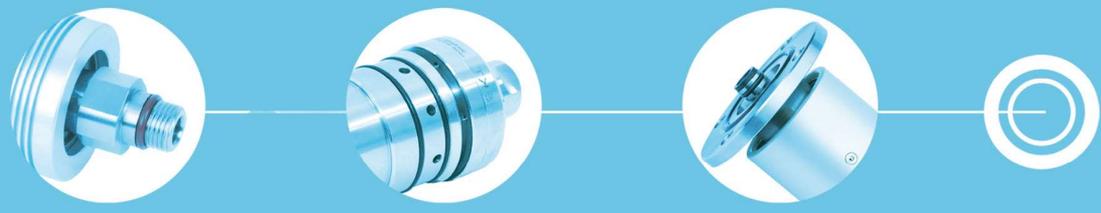
ROTARY JOINT

To provide the Highest design technology
and Know-How from many years experiences.



Rotary Joint for Machine Tools

To provide the Highest design technology and Know-How from many years experiences.



INDEX

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SRJ01-Type

▶ Integrated type :

Developed for machine tools and special designated machine line which are operated under condition of high rotating speed and pressure.

- ▶ During Rotary motion, high rotating speed and pressure make more friction and abrasion relevantly, SKT Rotary Joint confirms excellent performance and life time via the use of SKT own developed High quality Seal and up-to-date pressed-in methods.



● ● SRJ 01 TYPE

SRJ 01 Axial type Selection chart

Model	Media	Pressure	Temperature	Max.Speed	Max.Flow
SRJ01-201-01	Coolant / Oil	100 bar	70°C	20,000 min ⁻¹	80 L/min
SRJ01-201-02					
SRJ01-202-01				7,000 min ⁻¹	20 L/min
SRJ01-202-02					
SRJ01-202-03				15,000 min ⁻¹	80 L/min
SRJ01-202-04					
SRJ01-202-05				15,000 min ⁻¹	80 L/min
SRJ01-203-01					
SRJ01-204-01				24,000 min ⁻¹	24 L/min

※ Please request for customized model, and Subject to technical change without notice.

SRJ 01 Radial type Selection chart

Model	Media	Pressure	Temperature	Max.Speed	Max.Flow	
SRJ01-101-01	Coolant / Oil Air	30 bar 10 bar	120°C	4,000 min ⁻¹	80 L/min	
SRJ01-101-02						
SRJ01-101-03						
SRJ01-101-04						
SRJ01-201-11	Coolant / Oil	100 bar	70°C	20,000 min ⁻¹	80 L/min	
SRJ01-201-12				7,000 min ⁻¹	20 L/min	
SRJ01-202-11						
SRJ01-202-12				15,000 min ⁻¹	80 L/min	
SRJ01-202-13						
SRJ01-202-14						7,000 min ⁻¹
SRJ01-202-15						
SRJ01-202-41				10,000 min ⁻¹	6.7 L/min	
SRJ01-202-51				15,000 min ⁻¹	6.7 L/min	
SRJ01-203-02				100 bar	24,000 min ⁻¹	24 L/min
SRJ01-205-01					10,000 min ⁻¹	24 L/min

● ● SRJ 03 TYPE

SRJ 03 (2-PORT) Radial type Selection chart

Model	Media	Pressure	Temperature	Max.Speed	Max.Flow
SRJ03-101-01	Coolant / Oil Air	70 bar 10 bar	70°C	7,000 min ⁻¹	70 L/min

※ Please request for customized model, and Subject to technical change without notice.



SRJ02 - Type

▶ Detachable type

Developed for the machine tools application with growing high precision cutting technology which must endure the high pressure with high rotating speed.

- ▶ During Rotary motion, high rotating speed and pressure make more friction and abrasion relevantly, SKT Rotary Joint confirms excellent performance and life time via the use of SKT own developed High quality Seal and up-to-date pressed-in methods.

● ● SRJ 02 TYPE

SRJ 02 Axial type Selection chart

Model	Media	Pressure	Temperature	Max.Speed	Max.Flow
SRJ02-101-01	Coolant / Oil	100 bar	70°C	40,000 min ⁻¹	80 L/min
SRJ02-101-02					35 L/min
SRJ02-102-01					80 L/min
SRJ02-103-01					35 L/min
SRJ02-103-02					80 L/min

SRJ 02 Radial type Selection chart

Model	Media	Pressure	Temperature	Max.Speed	Max.Flow
SRJ02-101-11	Coolant / Oil	100 bar	70°C	40,000 min ⁻¹	35 L/min
SRJ02-101-12					80 L/min

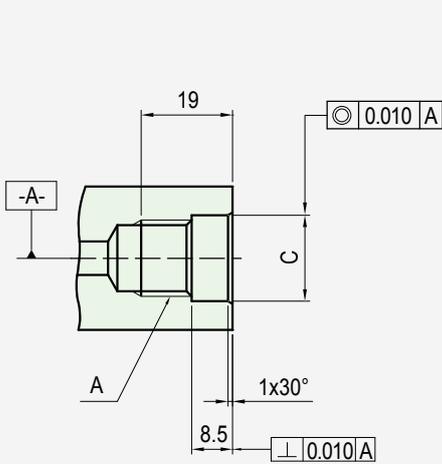
※ Please request for customized model, and Subject to technical change without notice.

SRJ 01-101

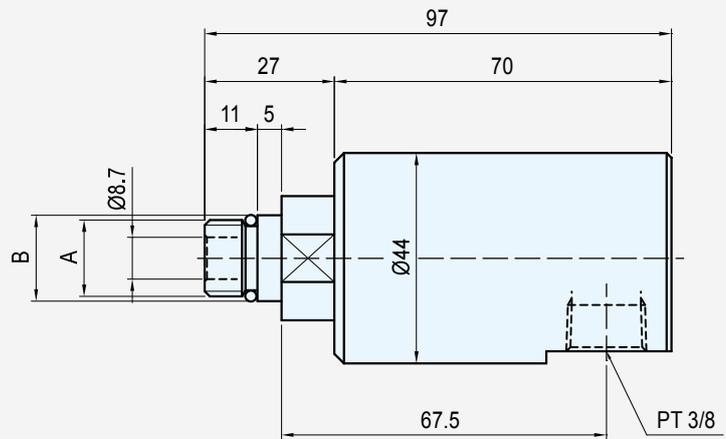
► For CNC Lathe Chucks

- Anodizing Aluminum Body.
- Stainless Steel Rotor due to resisting property for corrosion, abrasion, heat and cold condition

- Max. Pressure : 30 bar (Air 10 bar)
- Max. Speed : 4,000 min⁻¹
- Media : Coolant, Air
- Max. Temperature : 120°C
- Max. Flow : 80 L/min



Spindle Detail



Radial Connection

●● SRJ 01-101

Model	A	B	C	Max. Flow
SRJ01-101-01	M16x1.5 LH	17.994/17.983	18.007/17.997	80 L/min
SRJ01-101-02	M16x2.0 RH	17.994/17.983	18.007/17.997	

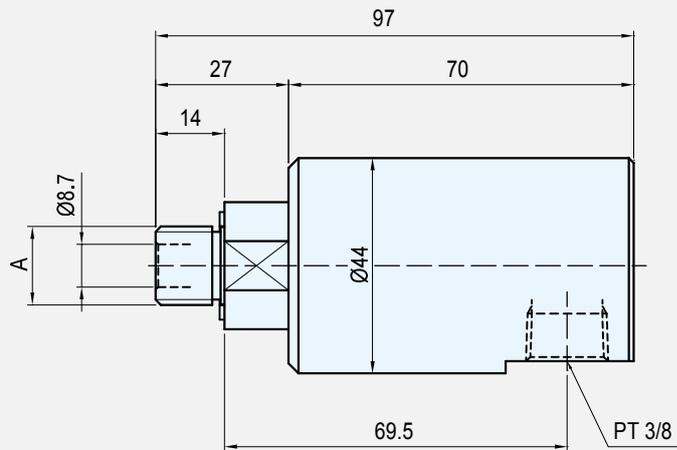
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SRJ 01-101

► For CNC Lathe Chucks

- Anodizing Aluminum Body.
- Stainless Steel Rotor due to resisting property for corrosion, abrasion, heat and cold condition

- Max. Pressure : 30 bar (Air 10 bar)
- Max. Speed : 4,000 min⁻¹
- Media : Coolant, Air
- Max. Temperature : 120°C
- Max. Flow : 80 L/min



Radial Connection

● ● SRJ 01-101

Model	A	Max. Flow
SRJ01-101-03	M16x2.0 RH	80 L/min
SRJ01-101-04	5/8-18 UNF LH	

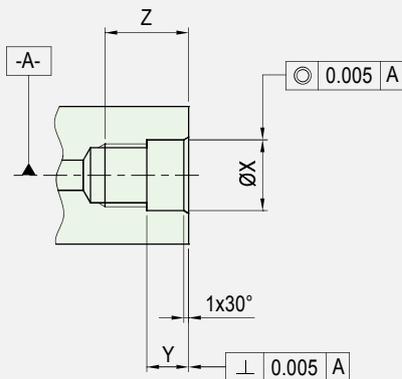
※ Please request for customized model, and Subject to technical change without notice.

SRJ 01-201

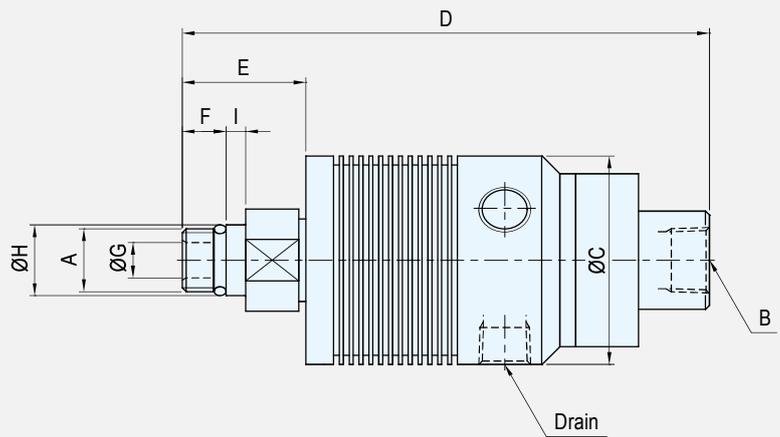
- Available for high speed operating without media, thanks to SKT own developed high quality Seal.
- Anodizing Aluminum Body.
- Silicon carbide Seal: long time endurable quality for harsh operating condition
- Stainless Steel Rotor due to resisting property for corrosion, abrasion, heat and cold condition
- **DRY RUN available**



- Max. Pressure : 100 bar
- Max. Speed : 20,000 min⁻¹
- Max. Temperature : 70°C
- Max. Flow : 80 L/min



Spindle Detail



Axial Connection

●● SRJ 01-201

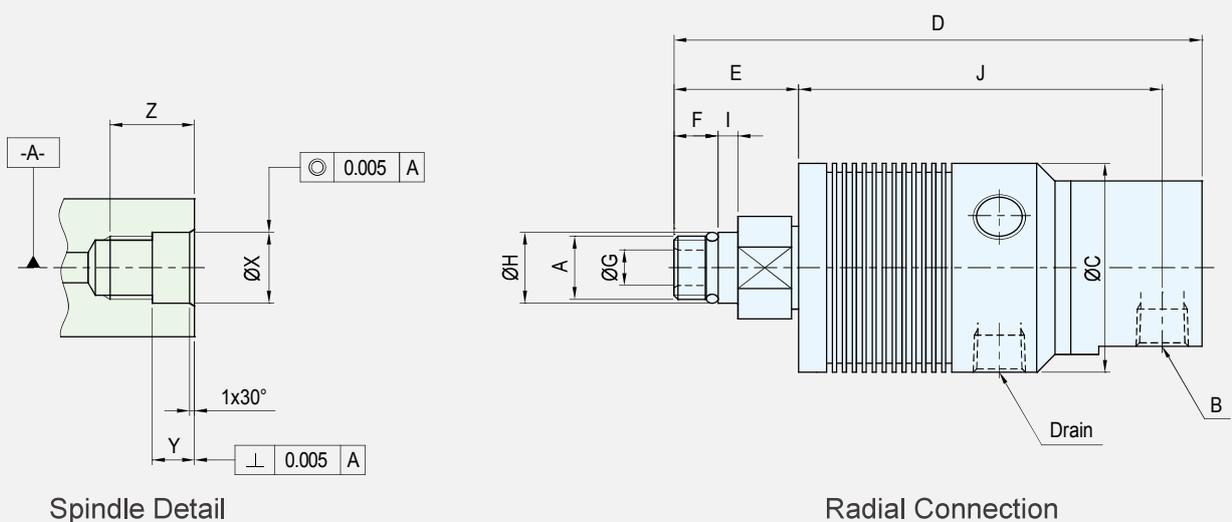
Model	A	B	C	D	E	F	G	H	I
SRJ01-201-01	M16x1.5 LH	PT 1/4	53	133.9	31.4	11	8.7	17.994 / 17.983	5
SRJ01-201-02	M16x1.5 LH	PT 3/8	53	132.9	31.4	11	8.7	17.994 / 17.983	5

X	Y	Z	Max. Flow
18.007 / 17.997	8.5	17	80 L/min
18.007 / 17.997	8.5	17	80 L/min

※ Please request for customized model, and Subject to technical change without notice.

SRJ 01-201

- Available for high speed operating without media, thanks to SKT own developed high quality Seal.
 - Anodizing Aluminum Body.
 - Silicon carbide Seal: long time endurable quality for harsh operating condition
 - Stainless Steel Rotor due to resisting property for corrosion, abrasion, heat and cold condition
 - **DRY RUN available**
-
- Max. Pressure : 100 bar
 - Max. Speed : 20,000 min⁻¹
 - Max. Temperature : 70°C
 - Max. Flow : 80 L/min



Spindle Detail

Radial Connection

●● SRJ 01-201

Model	A	B	C	D	E	F	G	H	I
SRJ01-201-11	M16x1.5 LH	PT 1/4	53	132.9	31.4	11	8.7	17.994 / 17.983	5
SRJ01-201-12	M16x1.5 LH	PT 3/8	53	132.9	31.4	11	8.7	17.994 / 17.983	5

x	y	z	Max. Flow
18.007 / 17.997	8.5	17	80 L/min
18.007 / 17.997	8.5	17	80 L/min

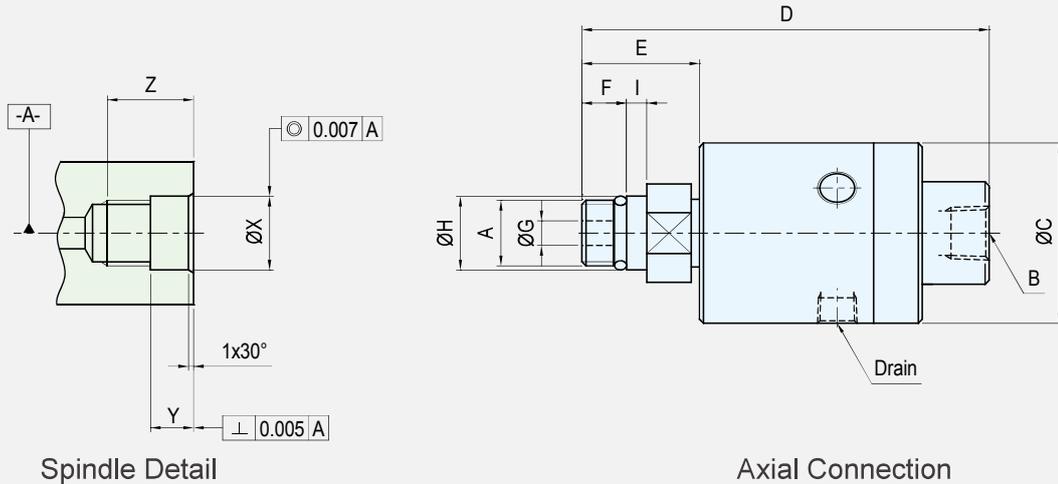
※ Please request for customized model, and Subject to technical change without notice.

SRJ 01-202

- Available for high speed operating without media, thanks to SKT own developed high quality Seal.
- Anodizing Aluminum Body.
- Silicon carbide Seal: long time endurable quality for harsh operating condition
- Stainless Steel Rotor due to resisting property for corrosion, abrasion, heat and cold condition
- **DRY RUN See the table below.**



- Max. Pressure : 100 bar
- Max. Speed : 7,000 min⁻¹, 15,000 min⁻¹
- Max. Temperature : 70°C
- Max. Flow : 20 L/min, 80 L/min



● ● SRJ 01-202

Model	A	B	C	D	E	F	G	H	I
SRJ01-202-01	M16x1.5 LH	PT 1/4	44	100.5	29	11	6	17.994 / 17.983	5
SRJ01-202-02	M16x1.5 LH	PT 1/4	44	100.5	29	11	6	15.994 / 15.983	5
SRJ01-202-03	M16x1.5 LH	PT 3/8	44	100.5	28	11	8.7	15.994 / 15.983	5
SRJ01-202-04	5/8-18 UNF LH	PT 3/8	44	104.5	33	14	6	16.650 / 16.645	6
SRJ01-202-05	M16x1.5 LH	PT 3/8	44	100.5	28	11	8.7	17.994 / 17.983	5

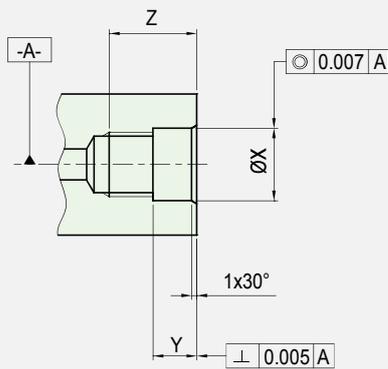
Model	X	Y	Z	Max. Speed	Max. Flow	Max. Pressure	Dry Run
SRJ01-202-01	18.007 / 17.997	8.5	19	7,000 min ⁻¹	20 L/min	100 bar	No
SRJ01-202-02	16.007 / 15.997	8.5	19	7,000 min ⁻¹	20 L/min	100 bar	No
SRJ01-202-03	16.007 / 15.997	8.5	19	15,000 min ⁻¹	80 L/min	100 bar	Yes
SRJ01-202-04	16.660 / 16.653	9.5	22	7,000 min ⁻¹	20 L/min	100 bar	No
SRJ01-202-05	18.007 / 17.997	8.5	19	15,000 min ⁻¹	80 L/min	100 bar	Yes

SRJ 01-202

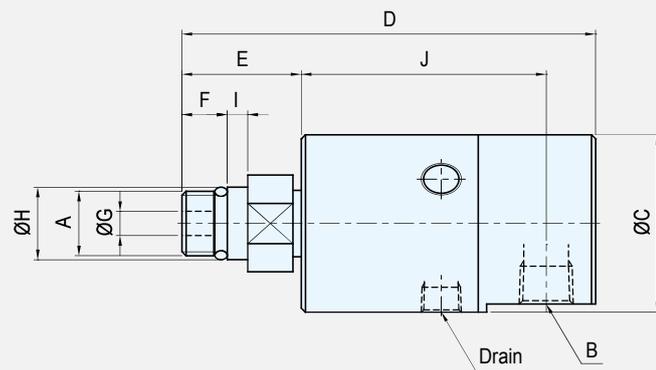
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- Anodizing Aluminum Body.
- Silicon carbide Seal: long time endurable quality for harsh operating condition
- Stainless Steel Rotor due to resisting property for corrosion, abrasion, heat and cold condition
- **DRY RUN See the table below.**



- Max. Pressure : 100 bar
- Max. Speed : 7,000 min⁻¹, 15,000 min⁻¹
- Max. Temperature : 70°C
- Max. Flow : 20 L/min, 80 L/min



Spindle Detail



Radial Connection

● ● SRJ 01-202

Model	A	B	C	D	E	F	G	H	I
SRJ01-202-11	M16x1.5 LH	PT 1/4	44	100.5	29	11	6	17.994 / 17.983	5
SRJ01-202-12	M16x1.5 LH	PT 1/4	44	100.5	28	11	6	15.994 / 15.983	5
SRJ01-202-13	M16x1.5 LH	PT 3/8	44	106	28	11	8.7	15.994 / 15.983	5
SRJ01-202-14	5/8-18 UNF LH	PT 3/8	44	104.5	33	14	6	16.650 / 16.645	6
SRJ01-202-15	M16x1.5 LH	PT 3/8	44	106	28	11	8.7	17.994 / 17.983	5

Model	X	Y	Z	Max. Speed	Max. Flow	Max. Pressure	Dry Run
SRJ01-202-11	18.007 / 17.997	8.5	19	7,000 min ⁻¹	20 L/min	100 bar	No
SRJ01-202-12	16.007 / 15.997	8.5	19	7,000 min ⁻¹	20 L/min	100 bar	No
SRJ01-202-13	16.007 / 15.997	8.5	19	15,000 min ⁻¹	80 L/min	100 bar	Yes
SRJ01-202-14	16.660 / 16.653	9.5	22	7,000 min ⁻¹	20 L/min	100 bar	No
SRJ01-202-15	18.007 / 17.997	8.5	19	15,000 min ⁻¹	80 L/min	100 bar	Yes

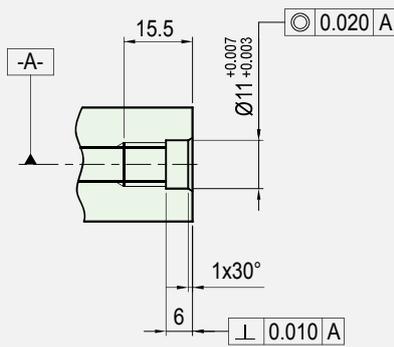
SRJ 01-202

- Available for high speed operating without media, thanks to SKT own developed high quality Seal.
- Anodizing Aluminum Body.
- Silicon carbide Seal: long time endurable quality for harsh operating condition
- Stainless Steel Rotor due to resisting property for corrosion, abrasion, heat and cold condition
- **DRY RUN available**

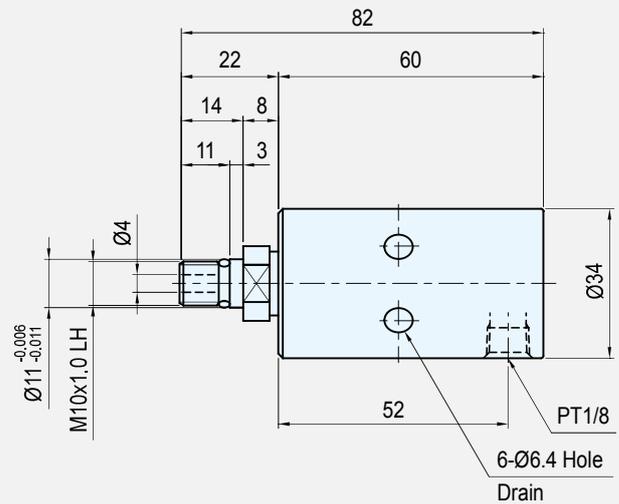
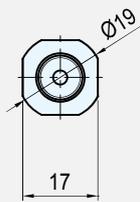
- Max. Pressure : 100 bar
- Max. Speed : 10,000 min⁻¹
- Max. Temperature : 70°C
- Max. Flow : 6.7 L/min



●● SRJ 01-202-41



Spindle Detail



Radial Connection

※ Please request for customized model, and Subject to technical change without notice.

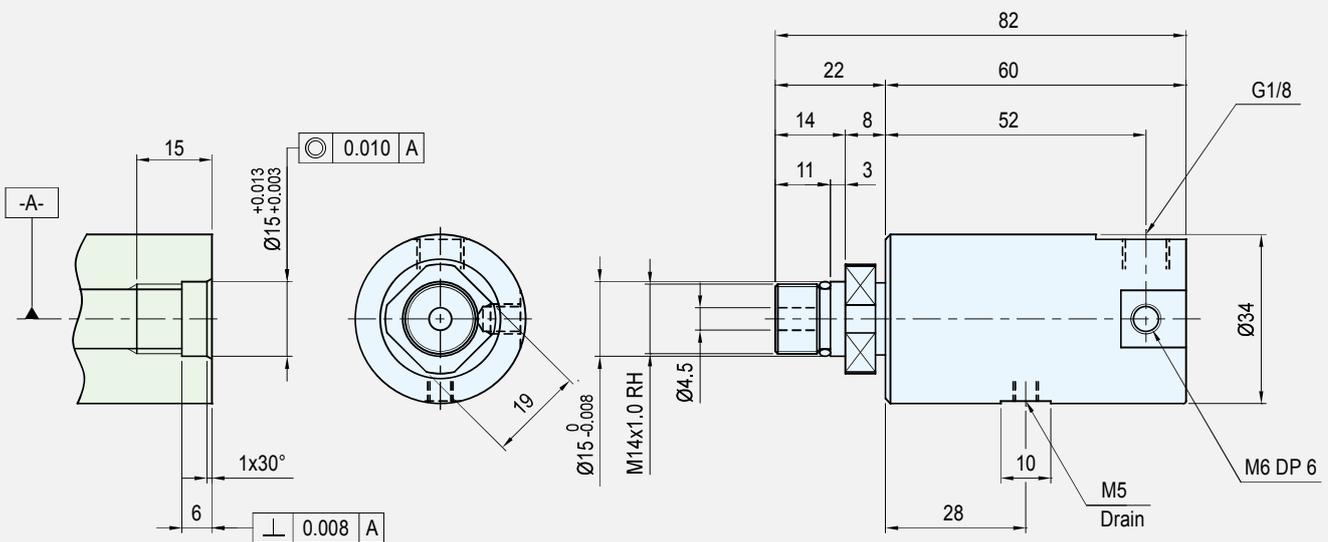
SRJ 01-202

- Available for high speed operating without media, thanks to SKT own developed high quality Seal.
- Anodizing Aluminum Body.
- Silicon carbide Seal: long time endurable quality for harsh operating condition
- Stainless Steel Rotor due to resisting property for corrosion, abrasion, heat and cold condition
- **DRY RUN available**

- Max. Pressure : 70 bar
- Max. Speed : 15,000 min⁻¹
- Max. Temperature : 70°C
- Max. Flow : 6.7 L/min



●● SRJ 01-202-51



Spindle Detail

Radial Connection

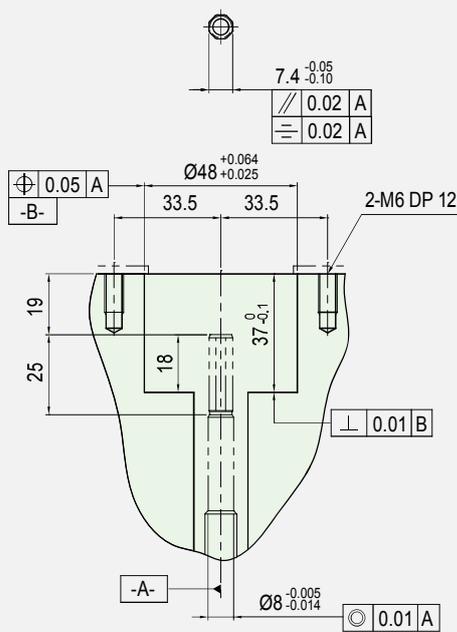
※ Please request for customized model, and Subject to technical change without notice.

SRJ 01-203

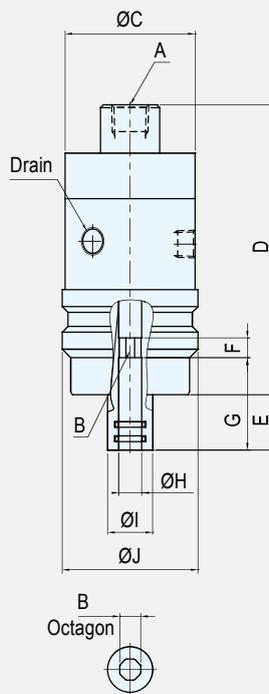
- Available for high speed operating without media, thanks to SKT own developed high quality Seal.
- Silicon carbide Seal: long time endurable quality for harsh operating condition
- Stainless Steel Body and Rotor due to resisting property for corrosion, abrasion, heat and cold condition
- **DRY RUN available**



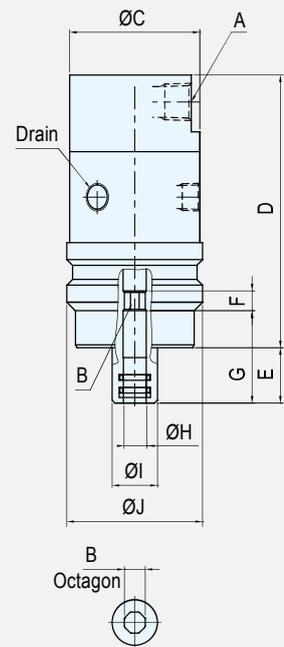
- Max. Pressure : 100 bar
- Max. Temperature : 70°C
- Max. Speed : 24,000 min⁻¹
- Max. Flow : 24 L/min



Housing Detail



Axial Connection



Radial Connection

● ● SRJ 01-203

Model	Supply Direction	A	B	C	D	E	F	G	H	I	J
SRJ01-203-01	Axial Connection	PT 1/4	7.4 ^{+0.10} ₀	46	102	19.5	7	32.5	8.1 ^{+0.015} ₀	16 ⁰ _{-0.1}	48 ^{-0.009} _{-0.025}
SRJ01-203-02	Radial Connection	PT 1/4	7.4 ^{+0.10} ₀	46	96	19.5	7	32.5	8.1 ^{+0.015} ₀	16 ⁰ _{-0.1}	48 ^{-0.009} _{-0.025}

※ Please request for customized model, and Subject to technical change without notice.

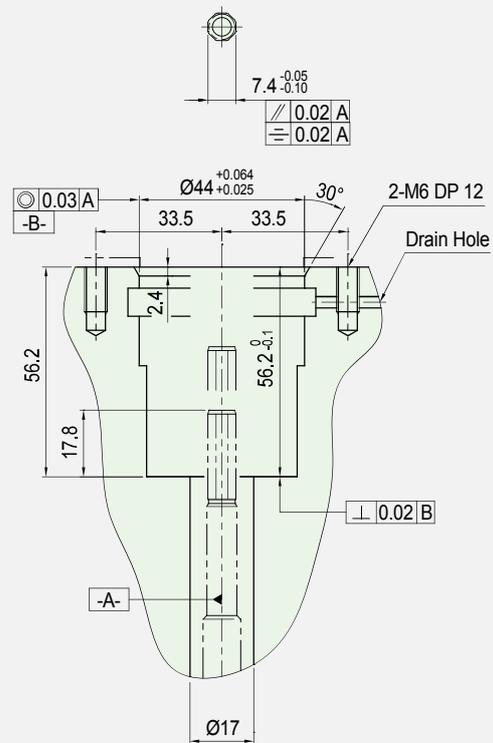
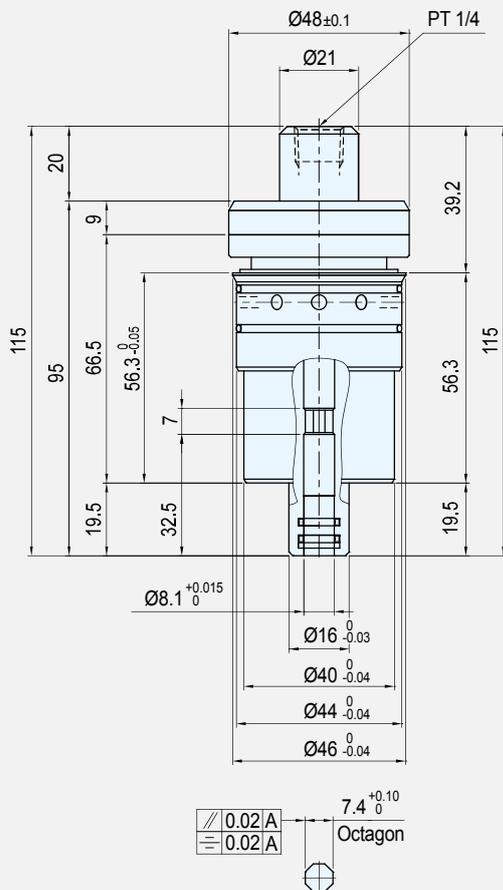
SRJ 01-204

- Available for high speed operating without media, thanks to SKT own developed high quality Seal.
- Silicon carbide Seal: long time endurable quality for harsh operating condition
- Stainless Steel Body and Rotor due to resisting property for corrosion, abrasion, heat and cold condition
- **DRY RUN available**

- Max. Pressure : 100 bar
- Max. Speed : 24,000 min⁻¹
- Media : Coolant
- Max. Temperature : 70°C
- Max. Flow : 24 L/min



● ● SRJ 01-204-01



Housing Detail

※ Please request for customized model, and Subject to technical change without notice.

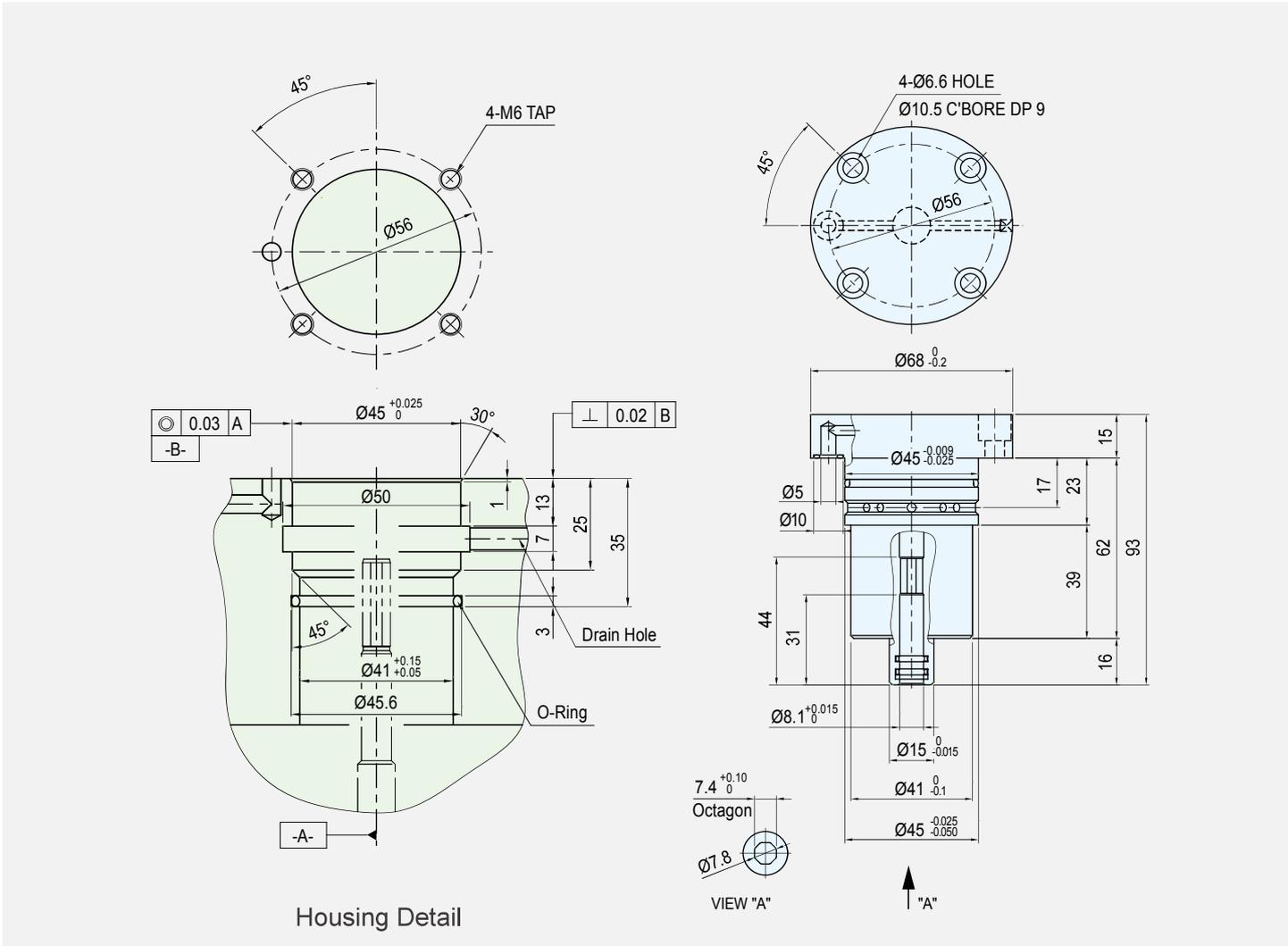
SRJ 01-205

- Available for high speed operating without media, thanks to SKT own developed high quality Seal.
- Silicon carbide Seal: long time endurable quality for harsh operating condition
- Anodizing Aluminum Body.
- Stainless Steel Rotor due to resisting property for corrosion, abrasion, heat and cold condition
- **DRY RUN available**



- Max. Pressure : 100 bar
- Media : Coolant
- Max. Speed : 10,000 min⁻¹
- Max. Temperature : 70°C
- Max. Flow : 24 L/min

●● SRJ 01-205-01



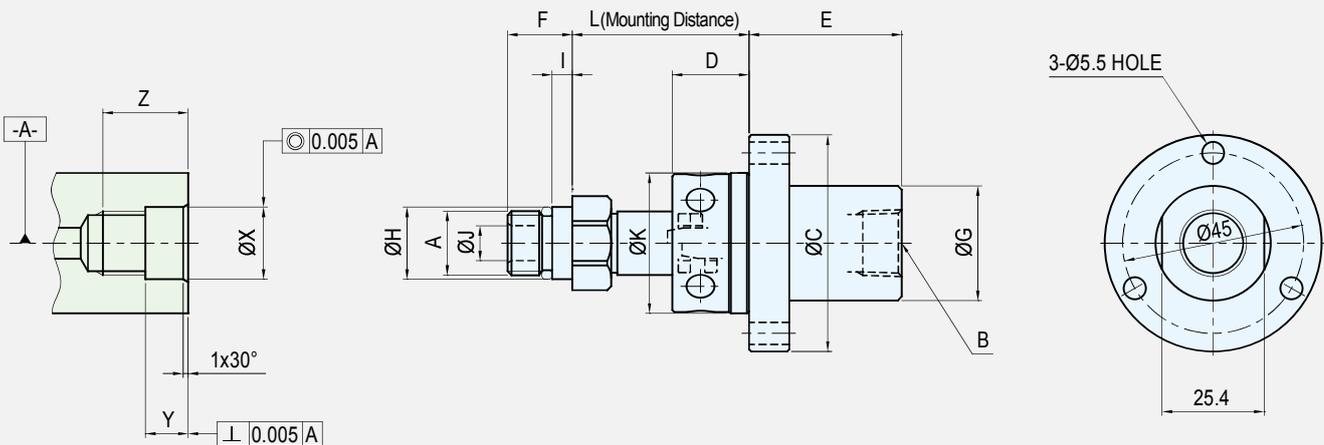
※ Please request for customized model, and Subject to technical change without notice.

SRJ 02-101

- Available for high speed operating without media, thanks to SKT own developed high quality Seal.
- Silicon carbide Seal: long time endurable quality for harsh operating condition
- Stainless Steel Body and Rotor due to resisting property for corrosion, abrasion, heat and cold condition
- **DRY RUN available**



- Max. Pressure : 100 bar
- Max. Speed : 40,000 min⁻¹
- Max. Temperature : 70°C
- Max. Flow : SRJ 02-101-01 : 80L/min
SRJ 02-101-02 : 35L/min



Spindle Detail

Axial Connection

●● SRJ 02-101

Model	A	B	C	D	E	F	G	H	I
SRJ02-101-01	M16x1.5 LH	PT 3/8	54	19	38	16	28.6	17.994 / 17.983	5
SRJ02-101-02	M12x1.25 LH	PT 3/8	54	19	38	17	28.6	13.994 / 13.983	5

J	K	L
8.7	35 ^{-0.1} _{-0.3}	41.5±2.5
6	35 ^{-0.1} _{-0.3}	38±2.5

X	Y	Z
18.007 / 17.997	8.5	17
14.007 / 13.997	8.5	18

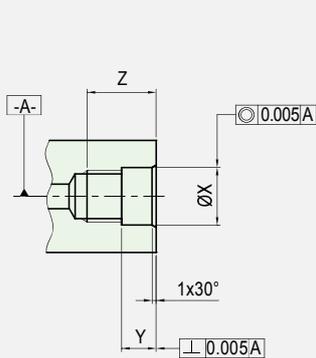
※ Please request for customized model, and Subject to technical change without notice.

SRJ 02-101

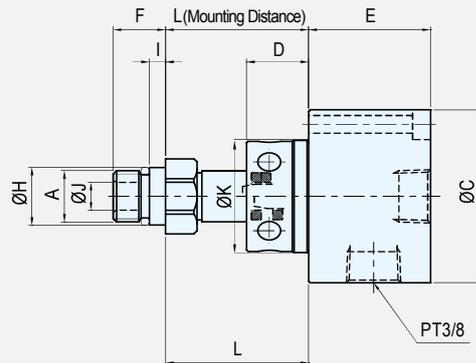
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- Stainless Steel Body and Rotor due to resisting property for corrosion, abrasion, heat and cold condition
- **DRY RUN available**



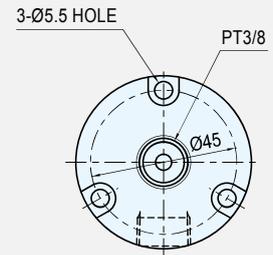
- Max. Pressure : 100 bar
- Max. Speed : 40,000 min⁻¹
- Max. Temperature : 70°C
- Max. Flow : SRJ 02-101-11 : 35L/min
SRJ 02-101-12 : 80L/min



Spindle Detail



Axial / Radial Connection



●● SRJ 02-101

Model	A	B	C	D	E	F	H	I
SRJ02-101-11	M12x1.25 LH	PT 3/8	54	19	37.5	17	13.994 / 13.983	5
SRJ02-101-12	M16x1.5 LH	PT 3/8	54	19	37.5	16	17.994 / 17.983	5

J	K	L
6	35 ^{+0.1} / _{-0.3}	38±2.5
8.7	35 ^{+0.1} / _{-0.3}	41.5±2.5

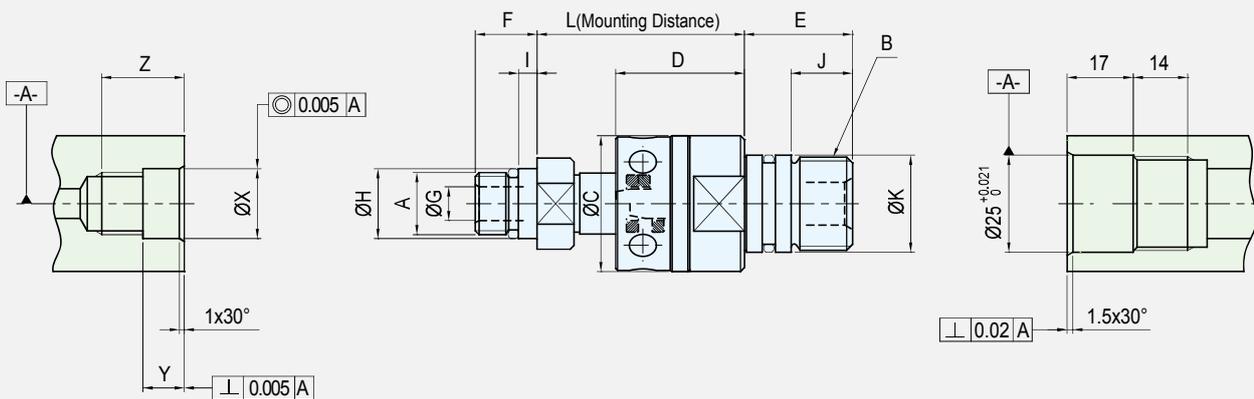
X	Y	Z
14.007 / 13.997	8.5	18
18.007 / 17.997	8.5	17

※ Please request for customized model, and Subject to technical change without notice.

SRJ 02-102

- Available for high speed operating without media, thanks to SKT own developed high quality Seal.
- Silicon carbide Seal: long time endurable quality for harsh operating condition
- Stainless Steel Body and Rotor due to resisting property for corrosion, abrasion, heat and cold condition
- **DRY RUN available**

- Max. Pressure : 100 bar
- Max. Speed : 40,000 min⁻¹
- Max. Temperature : 70°C
- Max. Flow : 80 L/min



Spindle Detail

Axial Connection

● ● SRJ 02-102

Model	A	B	C	D	E	F	G	H	I
SRJ02-102-01	M16x1.5 LH	M24x1.5 LH	35 ^{-0.1} _{-0.3}	33	27.8	16	8.7	17.994 / 17.983	5

J	K	L
15.8	25 ^{-0.009} _{-0.025}	52 ± 2.5

X	Y	Z
18.007 / 17.997	8.5	17

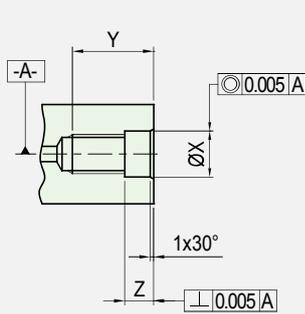
※ Please request for customized model, and Subject to technical change without notice.

SRJ 02-103

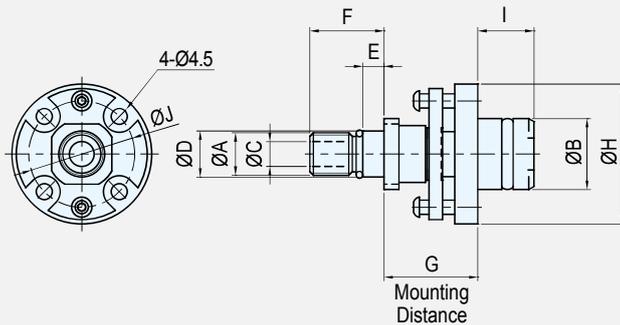
- Available for high speed operating without media, thanks to SKT own developed high quality Seal.
- Silicon carbide Seal: long time endurable quality for harsh operating condition
- Stainless Steel Body and Rotor due to resisting property for corrosion, abrasion, heat and cold condition
- **DRY RUN available**



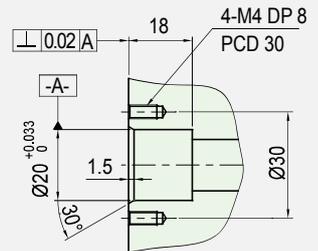
- Max. Pressure : 100 bar
- Max. Speed : 40,000 min⁻¹
- Max. Temperature : 70°C
- Max. Flow : SRJ 02-103-01 : 35L/min
SRJ 02-103-02 : 80L/min



Spindle Detail



Axial Connection



Housing Detail

● ● SRJ 02-103

Model	A	B	C	D	E	F	G	H	I	J
SRJ02-103-01	M12x1.25 LH	20 ^{-0.040} _{-0.061}	6	13 ⁰ _{-0.005}	6	21	26±2.0	39.5	15.9	PCD30
SRJ02-103-02	M16x1.5 LH	20 ^{-0.040} _{-0.061}	8.7	18 ^{-0.006} _{-0.017}	6	21	26±2.0	39.5	15.9	PCD30

Model	X	Y	Z
SRJ02-103-01	13 ^{+0.020} _{+0.010}	23	8.2
SRJ02-103-02	18 ^{+0.007} ₀	23	8.2

※ Please request for customized model, and Subject to technical change without notice.

SRJ 03-101

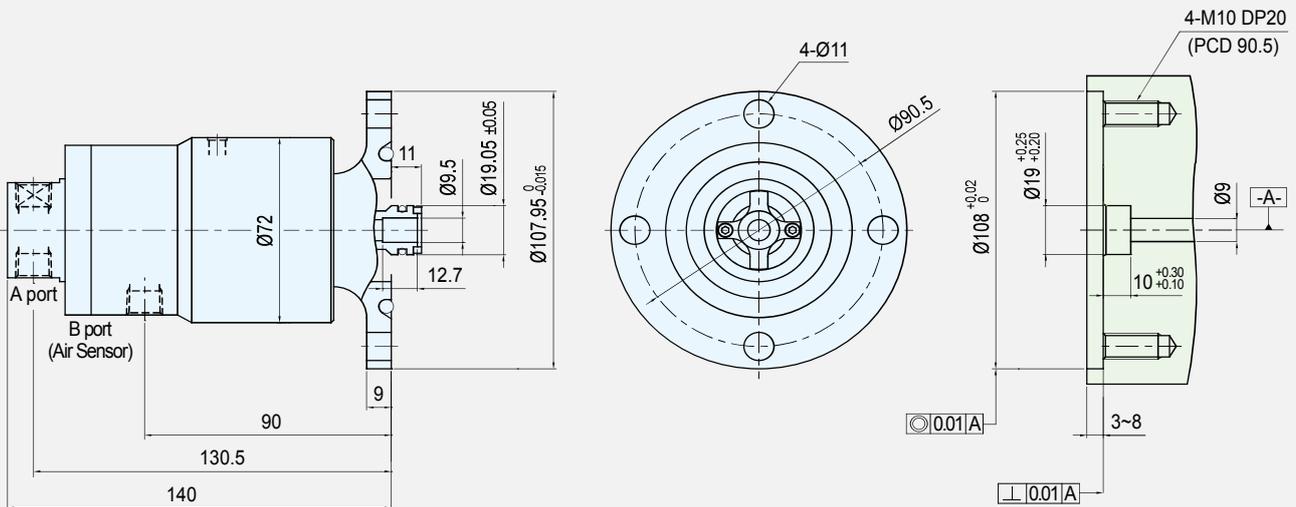
► For CNC Lathe Chucks

- Available for high speed operating without media, thanks to SKT own developed high quality Seal.
- Coolant / Pneumatic Rotary Joint with Two Channels
- Anodizing Aluminum body.
- Stainless Steel Flange type Rotor due to resisting property for corrosion, abrasion, heat and cold condition.



- | | |
|--|---------------------------|
| - Max. Pressure : A port - 70 bar | - Media : B port - Air |
| - Max. Pressure : B port - 10 bar | - Max. Temperature : 70°C |
| - Max. Speed : 7,000 min ⁻¹ | - Max. Flow : 70 L/min |
| - Media : A port - Coolant, Air | |

● ● SRJ 03-101-01



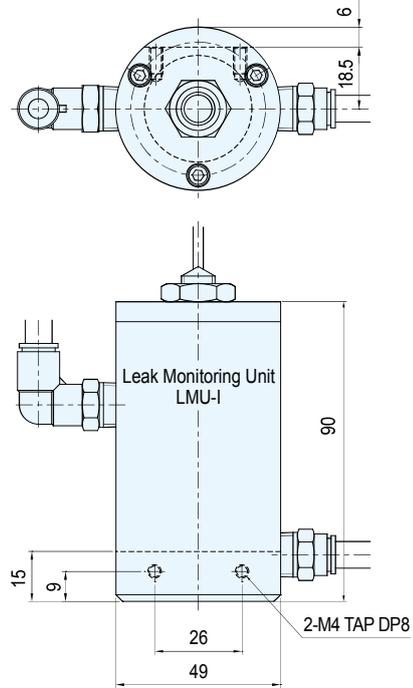
Radial Connection

Housing Detail

Rotary Joint Leak Monitoring Unit

LMU-1

- This Rotary Joint leaking monitoring Unit is developed for monitoring the status of the rotary joint and leakage of coolant.
- The Spindle unit is reliably protected from leaked coolant due to this monitoring unit makes an alarm that the rotary joint is going to fail and leaking.
- This Rotary Joint leaking monitoring Unit is located at the drain port of the Rotary Joint at vertical position must.

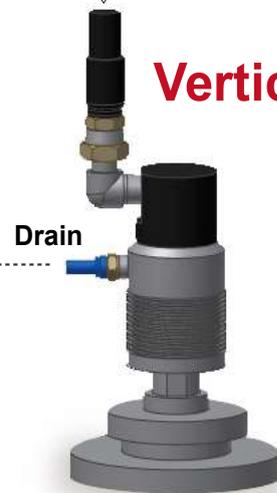


Horizontal



Coolant

Vertical



!! Stop a machine from a leakage of 50 cc/min

!! Vertical position only
(Not allowed to horizontal)



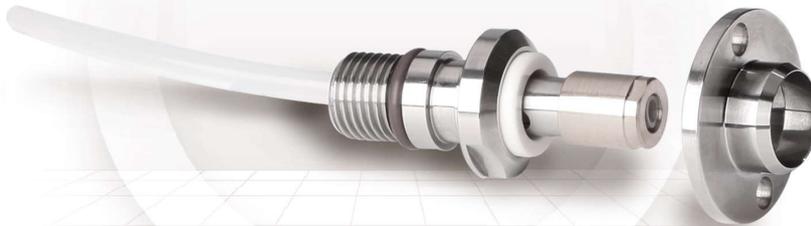
- Connection method : 2-wires
- Input Voltage : DC24V/ AC220V(protection circuit)
- Contact Current : 0.5A or 1A
- Output signal: Contact output (N/O, N/C)

※ Please request for customized model, and Subject to technical change without notice.

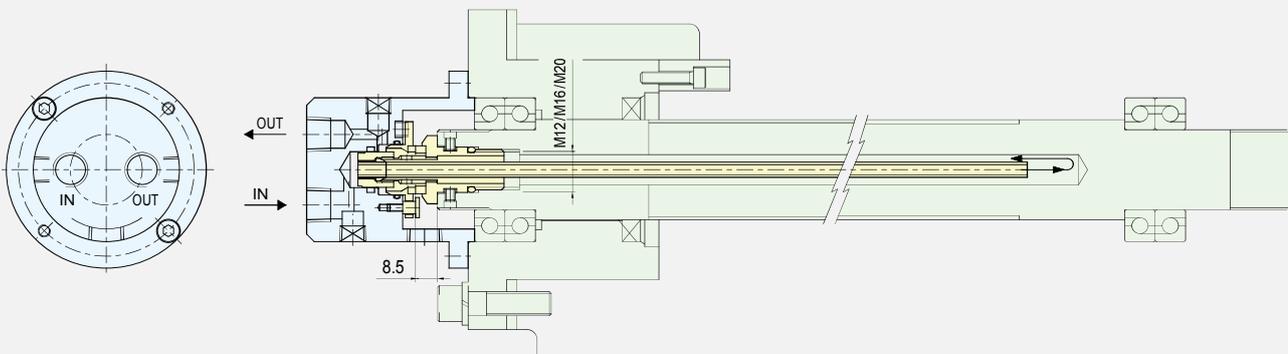
Rotary Joint for Hollow-core ball screw cooling

SBSC 12 / 16 / 20

The SBSC - 12/16/20 supply the cooling oil to hollow-core ball screws for higher accuracy and efficiency due to reduce the heat generating from ball screws.



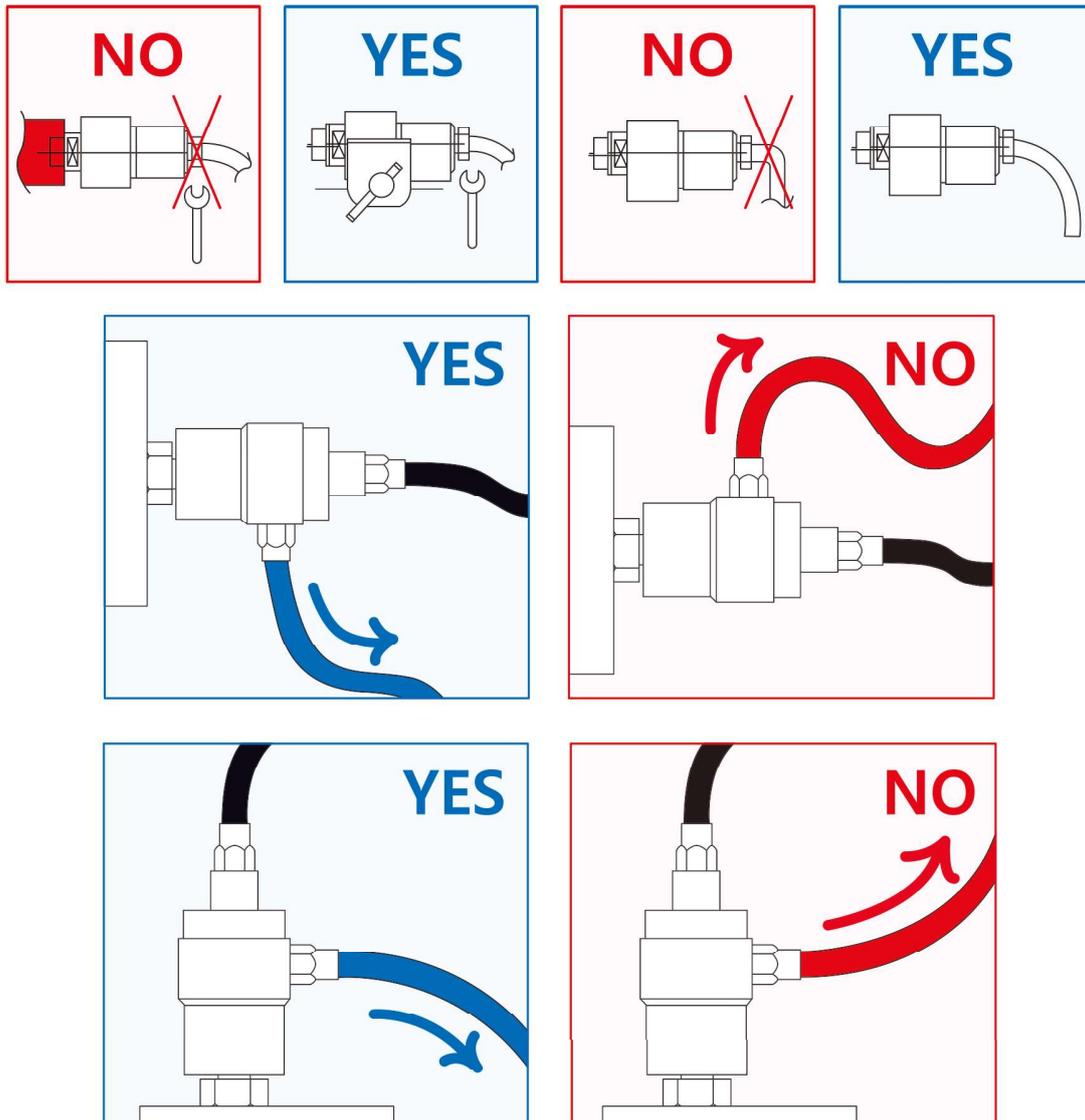
Dimensions are able to design changing upon Customer's request.



※ Please request for customized model, and Subject to technical change without notice.

MOUNTING INSTALLATION

- ● Attaching method and example for Flexible hose



※ Please request for customized model, and Subject to technical change without notice.

ORDERING CHECK LIST

Machine Type	Machining Center	<input type="checkbox"/>
	Turning Center	<input type="checkbox"/>
	Gun Drilling	<input type="checkbox"/>
	Gang Head	<input type="checkbox"/>
	Special Machine	<input type="checkbox"/>
	Other	<input type="checkbox"/>
Media	Coolant	<input type="checkbox"/>
	Oil	<input type="checkbox"/>
	Air	<input type="checkbox"/>
	MQL	<input type="checkbox"/>
	Others	<input type="checkbox"/>
Max. pressure		bar
Max. speed		min ⁻¹
Max. flow		L/min
Rotor Style		
Remark		



※ Please request for customized model, and Subject to technical change without notice.



Global Partner

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