

Rotation Ram SRP series (Maximum operating pressure: 33 MPa) Production by order

Hydraulic Cylinders

● An oscillating-type actuator which rotates the pinion with a rack having pistons at both ends to generate strong torque at the shaft, generating almost no heat or noise.



Description of the type

SRP 05 - 90°

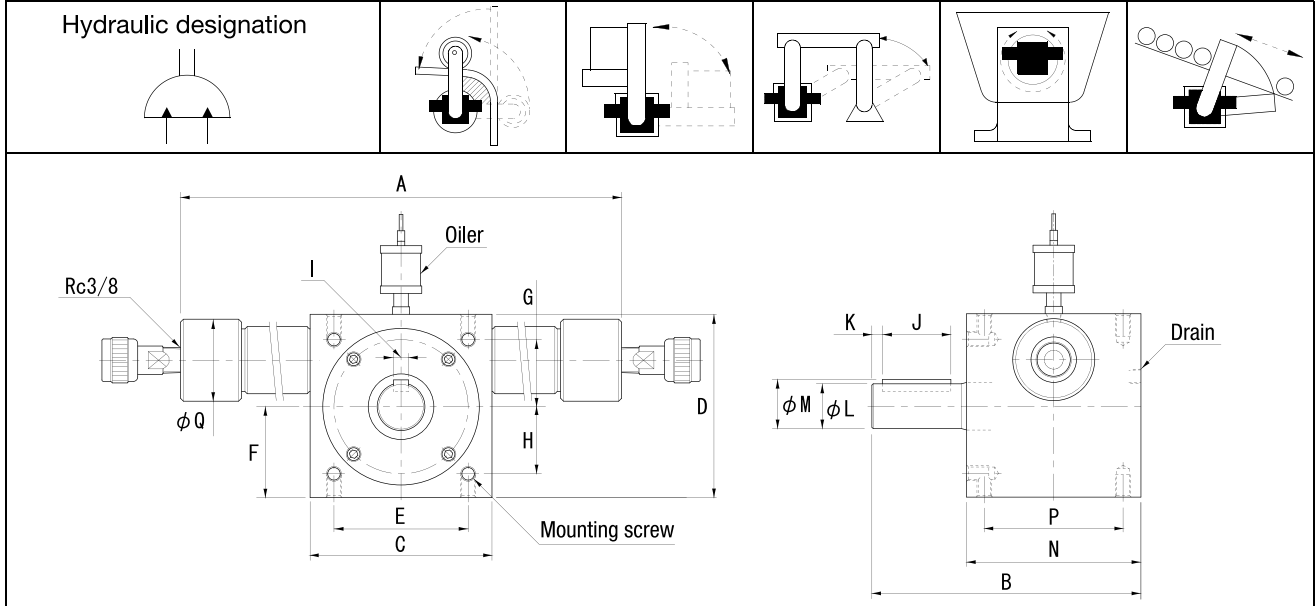
Maximum output

0.5 : 0.5 kN·m
1 : 1 kN·m
5 : 5 kN·m
10 : 10 kN·m
20 : 20 kN·m

Rotation angle

90°
180°
360°

SRP series



■ Specification

Type	SRP-05			SRP-1			SRP-5			SRP-10			SRP-20		
Torque	0.5 kN·m			1 kN·m			5 kN·m			10 kN·m			20 kN·m		
Theoretical pressure	25.0 MPa			20.5 MPa			22.0 MPa			25.4 MPa			28.6 MPa		
Rotation angle	A	Necessary oil level cm ³	Approximate weight kg	A	Necessary oil level cm ³	Approximate weight kg	A	Necessary oil level cm ³	Approximate weight kg	A	Necessary oil level cm ³	Approximate weight kg	A	Necessary oil level cm ³	Approximate weight kg
	90°	220	32	12.5	278	76	37.0	478	350	79	496	610	117	688	1080
180°	296	63	13.5	382	150	38.5	690	705	85	666	1200	127	990	2160	225
360°	446	124	15.0	590	300	41.5	1114	1400	97	1006	2440	150	1594	4320	249

※ The efficiency is approx. 88 % to 90 %.

Type	B	C	D	E	F	G	H	I	J	K	L	M	N	P	φQ	☆	Mounting screw
SRP-05	180.5	122	123	90	61	45	45	10	46	7	30	33	117	93	55	2.5	12-M10 × 1.5 Depth 15
SRP-1	230.5	172	160	120	75	67	57	12	60	10	45	48	146	117	70	4	12-M12 × 1.75 Depth 26
SRP-5	337.5	232	254	180	116	86	86	20	105	15	70	74.5	204	160	104	9	12-M16 × 2 Depth 35
SRP-10	421.5	260	262	170	110	120	80	20	145	15	80	84.5	238	193	155	12	12-M18 × 2.5 Depth 30
SRP-20	526.5	304	349	244	156	126	126	28	220	10	110	116	282	222	155	20	12-M24 × 3 Depth 40

“☆” mark: Maximum allowable radial load at the center of the shaft (unit: kN)

※ Drain piping of the body of the gear case should be installed.

※ The outline drawing shows the key position of the standard product, from which the ram rotates to both the right and left for half of the rated angle.

※ Available on request if the key position needs to be changed or angles other than the above are required.

※ The shaft rotates to the left when oil is fed to the right port and rotates to the right when oil is fed to the left port.

※ The port connection diameter is Rc3/8 for all types. The port is equipped with an S-1R coupler and protrudes from the edge by approx. 53 mm.

※ The ram should not be fixed with a thrust load applied to the shaft.

※ When the equipment runs autonomously due to a change in moment, a valve to prevent autonomous running (counterbalance valve) should be inserted in the circuit.

※ The backlash of the pinion and rack of the rotation ram is between 0.5° and 1°.