

## Product description

HSM380 series AC 380V synchronous servo motor is suitable for AC380V power supply servo application such as CNC machine tool, printing, converting etc. The motor is high dynamics with low heat remission. With different torque and speed option combine with HSD2000 servo drive HSM380 servo motor can meet position/speed/torque control requirement in various automation and drive industries and applications.

HNC Electric provides customized solutions based on any specified requirements from customers, e.g.: Rated torque, rated speed, maximum speed, dimension, plug connection & encoders etc.

## At a glance

- Compact size, high speed & high torque with high dynamic response feature
- 2500PPR encoder/ resolver, 17 bit encoder are available to adapt different applications
- Employed shift current of D-P axis control, improved torque control accuracy up to 2%
- Flexible customization is available.

## Customer benefits

- Ultra energy saving with HSD2000 servo drive
- High response and accuracy thanks to high density magnetic material
- Low noise & low temperature rise (water cooling is optional)
- High reliability, less maintaining work caused
- Low rotor inertia, which improves system rapidity (more option for rotor inertia can be customized)

### Additional information

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[www.hncelectric.com/hsm380](http://www.hncelectric.com/hsm380)

For more information, please enter the link or scan the code via mobile devices and get direct access to technical data, manual, application examples and much more.

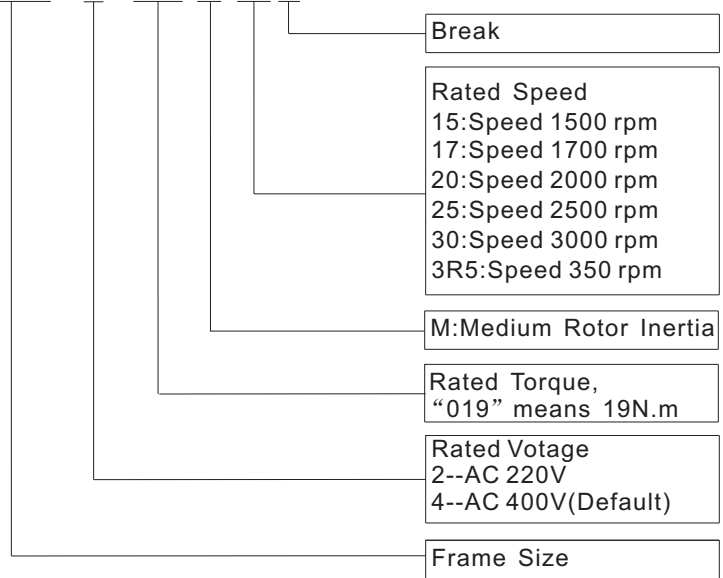


## Specifcaiton

Items	Description
Rated Voltage	380V
Encoder Line Number(PPR)	2500
Insulation Class	ClassF
Enclosure rating	IP54 (IP65 for S190 19~35Nm)
Ambient operating temperature	PTC100, with KTY optional
Ambient operating humidity	Below 90% RH No dewing
Thermal protection	optional
Cooling method	air cooling, force cooling or water cooling

## Model Definition

**S190 - 4 - 019 M 15 B**



Model	Rated torque N·m	Max torque N·m	Rated Speed rpm	Max Speed rpm	Rated power kW	Rated voltage Vac	Rated current A	Rotor inertia kg.cm <sup>2</sup>	Pole pair	Weight kg	Length mm
<b>Flame size 150</b>											
S150-4-015M25	15	45	2500	2800	3.8	380	11.5	38.8	4	19.4	230
S150-4-018M20	18	54	2000	2300	3.6	380	10.5	46	4	21.2	250
S150-4-023M20	23	69	2000	2300	4.7	380	13.5	58	4	24.2	280
S150-4-027M20	27	81	2000	2300	5.5	380	13.5	68	4	27.2	306
<b>Flame size 180</b>											
S180-4-017M15	17.2	43	1500	1800	2.7	380	6.5	34	4	19.5	226
S180-4-019M15	19	47	1500	1800	3	380	7.5	38	4	20.5	232
S180-4-021M20	21.5	53	2000	2300	4.5	380	9.5	47	4	22.2	243
S180-4-027M10	27	67	1000	1300	2.9	380	7.5	61	4	25.5	262
S180-4-027M15	27	67	1500	1800	4.3	380	10	61	4	25.5	262

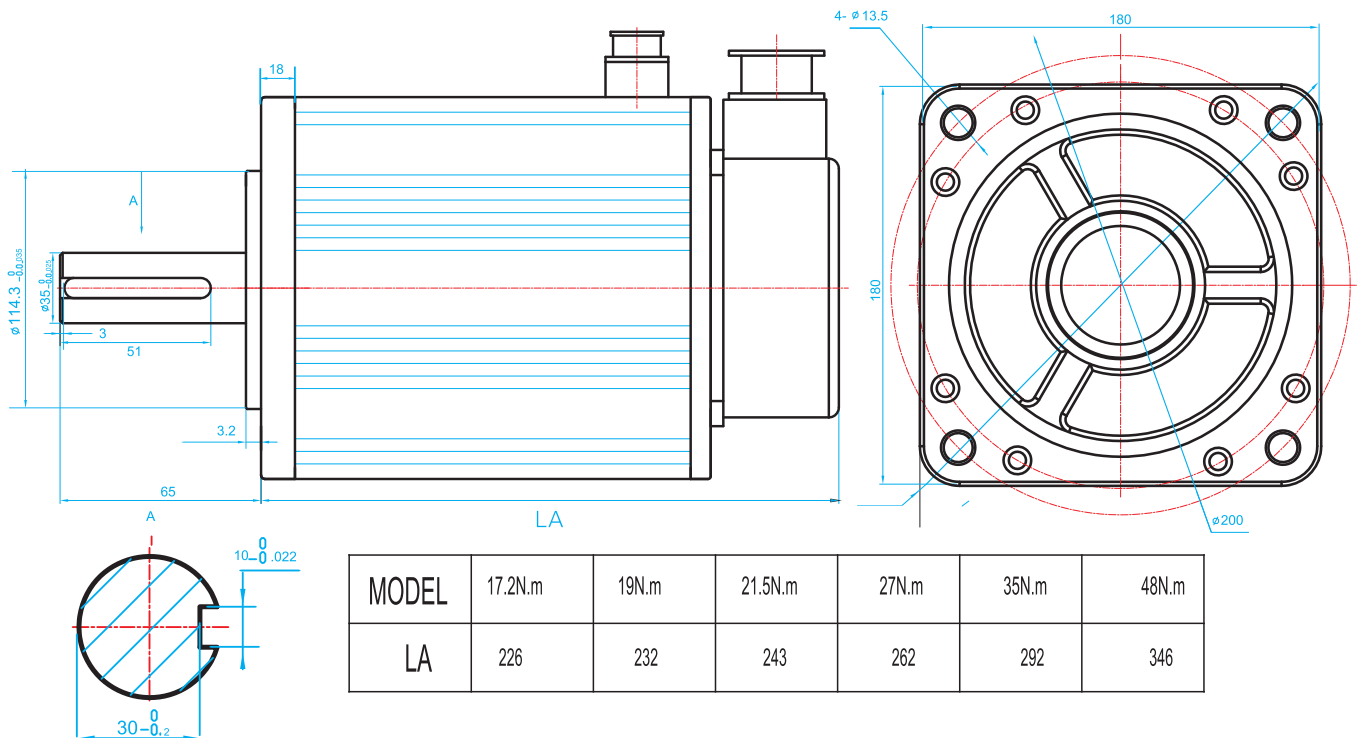
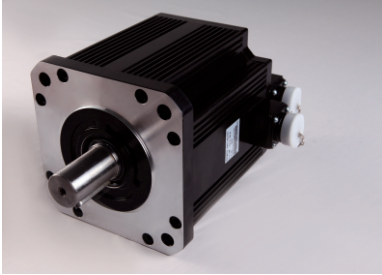
Model	Rated torque N·m	Max torque N·m	Rated Speed rpm	Max Speed rpm	Rated power kW	Rated voltage Vac	Rated current A	Rotor inertia kg.cm <sup>2</sup>	Pole pair	Weight kg	Length mm
S180-4-035M10	35	70	1000	1300	3.7	380	10	86	4	30.5	292
S180-4-035M15	35	70	1500	1800	5.5	380	12	86	4	30.5	292
S180-4-048M15	48	96	1500	1800	7.5	380	20	95	4	40	346
<b>Flame size 190</b>											
S190-4-019M15	19	57	1500	2000	3	380	7.5	37	5	17	173
S190-4-019M20	19	57	2000	2500	4	380	10.5	37	5	16	173
S190-4-019M25	19	57	2500	3000	5	380	11	37	5	15	173
S190-4-019M30	19	57	3000	3600	6	380	13	37	5	13	173
S190-4-026M15	26	78	1500	2000	4.5	380	11	55	5	23	196
S190-4-026M20	26	78	2000	2500	6	380	14	55	5	21	196
S190-4-026M25	26	78	2500	3000	7.5	380	18	55	5	20	196
S190-4-026M30	26	78	3000	3600	9	380	21	55	5	20	196
S190-4-035M15	35	105	1500	2000	5.5	380	11	74	5	29	226
S190-4-035M20	35	105	2000	2500	7.5	380	15	74	5	27	226
S190-4-035M25	35	105	2500	3000	9	380	19	74	5	26	226
S190-4-035M30	35	105	3000	3600	11	380	22	74	5	25	226
S190-4-048M15	48	144	1500	2000	7.5	380	17	54	5	24	256
S190-4-048M17	48	144	1700	2210	9	380	19	54	5	22	256
S190-4-048M20	48	144	2000	2500	11	380	23	54	5	20	256
S190-4-070M15	70	210	1500	2000	11	380	24	81	5	34	416
S190-4-070M17	70	210	1700	2210	12.5	380	27	81	5	30	416
S190-4-070M20	70	210	2000	2500	15	380	33	81	5	28	416
S190-4-096M15	96	288	1500	2000	15	380	32	107	5	41	456
S190-4-096M17	96	288	1700	2210	17	380	37	107	5	37	456
S190-4-096M20	96	288	2000	2500	20	380	43	107	5	35	456
S190-4-118M15	118	354	1500	2000	18.5	380	40	134	5	51	496
S190-4-118M17	118	354	1700	2210	21	380	45	134	5	48	496
S190-4-118M20	118	354	2000	2500	25	380	56	137	5	45	496
S190-4-140M15	140	420	1500	2000	22	380	48	160	5	60	536
S190-4-140M17	140	420	1700	2210	25	380	55	160	5	57	536
S190-4-140M20	140	420	2000	2500	29	380	65	160	5	55	536
<b>Flame size 215</b>											
S215-4-011M17L	11	61.8	1700	2000	123.6	380	24.5	89			380
S215-4-013M17L	13	73	1700	2000	146	380	29.5	106			380
S215-4-015M17L	15	84.3	1700	2000	168.6	380	33	125			380
S215-4-019M17L	18.5	104	1700	2000	208	380	40.5	162			380
S215-4-022M17L	22	123.6	1700	2000	247.2	380	46	208			380
S215-2-021M50L	21	11	5000	6000	42	380	38	33			380
S215-2-025M50L	24.8	13	5000	6000	49.6	380	45	37.9			380
S215-2-042M50L	42	22	5000	5000	84	380	42	68.2			380
S215-2-058M50L	57.4	30	5000	5000	115	380	57	96			380
S215-2-071M50L	70.7	37	5000	5000	141.4	380	70	123			380
S215-2-096M50L	95.5	50	5000	5000	191	380	94	184			380



Model	Rated torque N·m	Max torque N·m	Rated Speed rpm	Max Speed rpm	Rated power kW	Rated voltage Vac	Rated current A	Rotor inertia kg.cm <sup>2</sup>	Pole pair	Weight kg	Length mm
<b>Flame size 260</b>											
S260-4-140M15	140	280	1500	2000	22	380	45	870	4	90	432
S260-4-140M17	140	280	1700	2300	25	380	50	870	4	86	432
S260-4-140M20	140	280	2000	2500	29	380	60	870	4	85	432
S260-4-190M15	191	382	1500	2000	30	380	62	1150	4	110	482
S260-4-190M17	191	382	1700	2300	34	380	71	1150	4	106	482
S260-4-190M20	191	382	2000	2500	40	380	84	1150	4	104	482
S260-4-236M15	236	472	1500	2000	37	380	76	1440	4	125	532
S260-4-236M17	236	472	1700	2300	42	380	91	1440	4	120	532
S260-4-236M20	236	472	2000	2500	49	380	101	1440	4	118	532
S260-4-286M15	286	572	1500	2000	45	380	92	1725	4	143	582
S260-4-286M17	286	572	1700	2300	51	380	103	1725	4	139	582
S260-4-286M20	286	572	2000	2500	60	380	116	1725	4	137	582
<b>Flame size 300</b>											
S300-4-1000M3R5	1000	2000	350	400	37	380	91	2060	10	133	478
S300-4-1500M3R5	1500	3000	350	400	55	380	136	3010	10	180	583
S300-4-2500M3R5	2500	5000	350	400	92	380	214	5160	10	245	788
<b>Flame size 350</b>											
S350-4-1000M3R5	1000	2000	350	400	37	380	97	2840	10	148	382
S350-4-1500M3R5	1500	3000	350	400	55	380	145	3940	10	225	487
S350-4-2500M3R5	2500	5000	350	400	92	380	235	6610	10	297	692

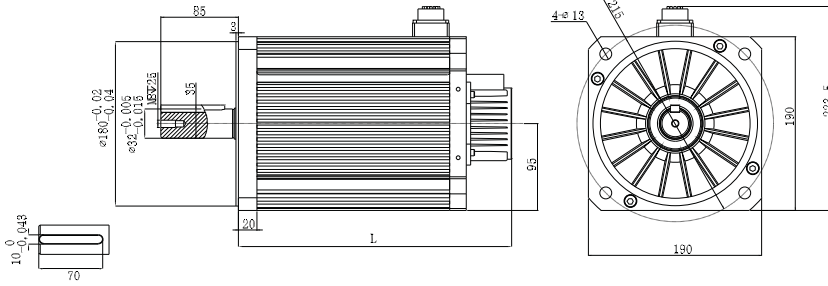


Flame Size 180

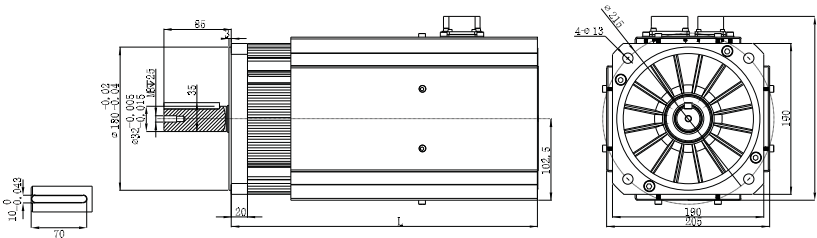
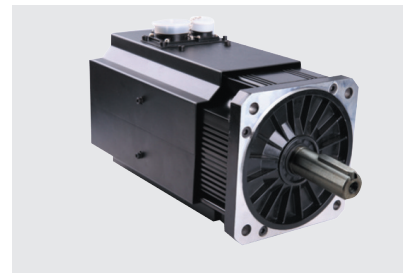
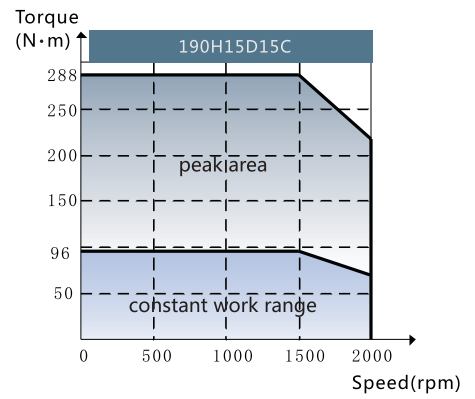


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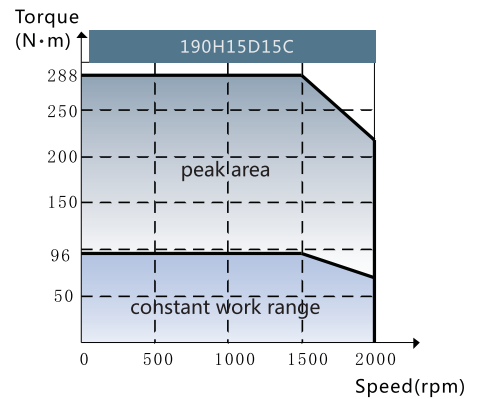
Flame Size 190



Mounting dimensions of flame size 190 ( natural cooling )

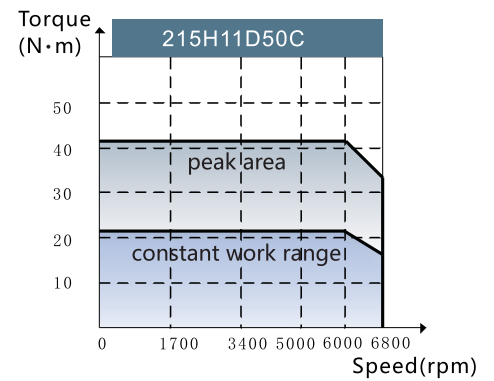
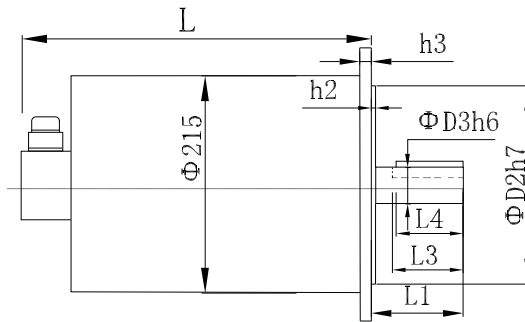
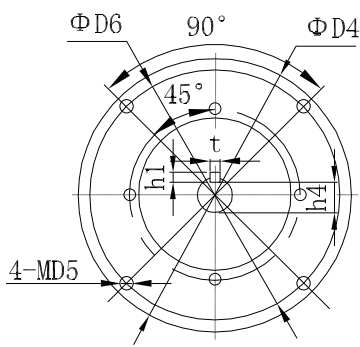
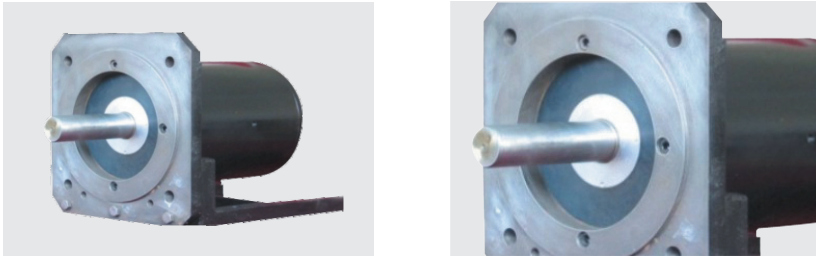


Mounting dimensions of flame size 190 ( forced-air cooling )





Flame Size 215



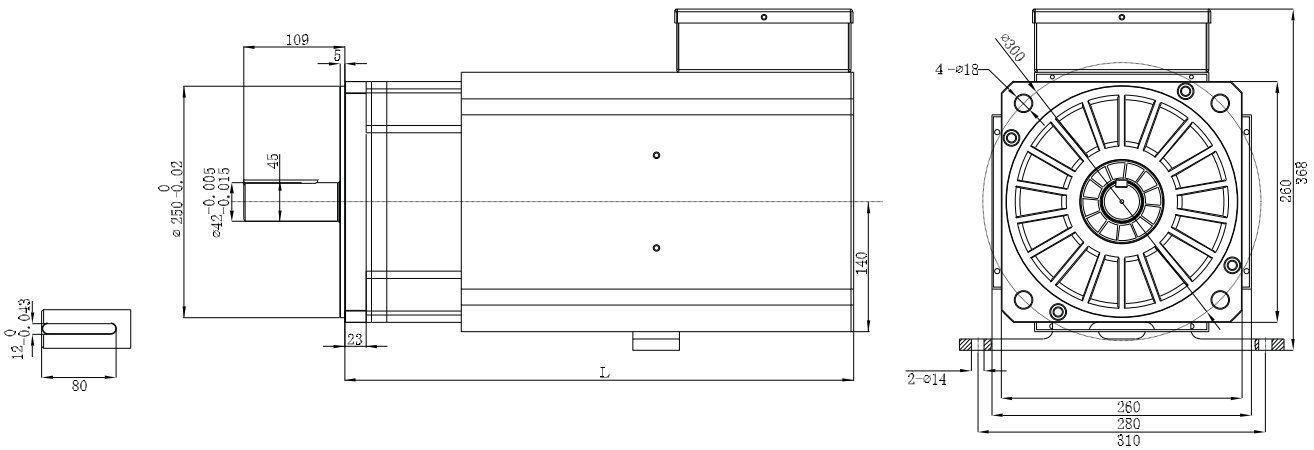
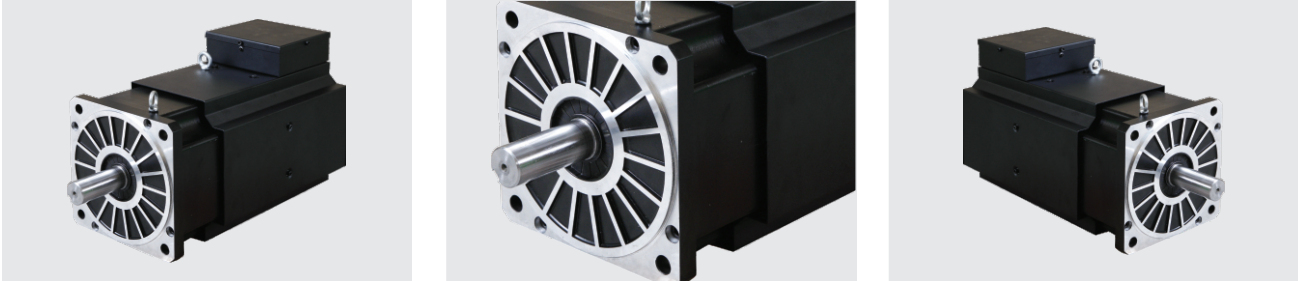
Mounting dimensions of flame size 215

**Flame size 215**

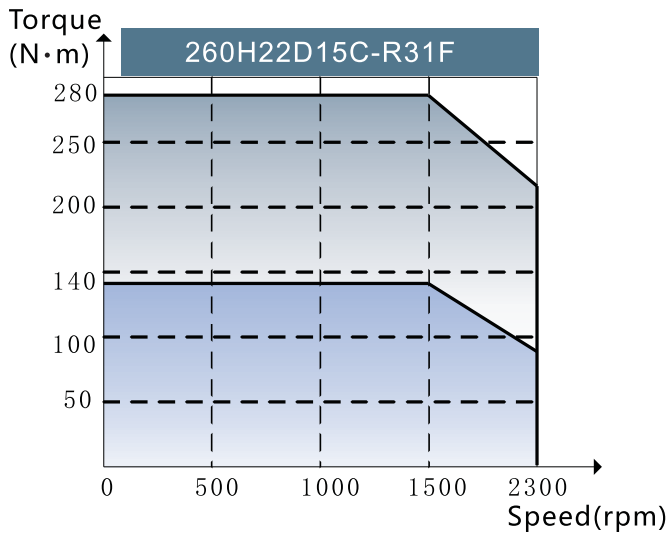
Models	S215-4-□ M17L					S215-2-□ M50L			S215-4-□ M50L			
Motor dimensions (mm)	L	336	354	372	416	448	163	170	210	250	300	370
	L1	125	125	125	125	125	43	43	43	43	43	43
	h2	4	4	4	4	4	3	3	3	3	3	3
	h3	17	17	17	17	17	16	16	16	16	16	16
	D2	200	200	200	200	200	200	200	200	200	200	200
	D3	42	42	42	48	48	32	32	32	38	38	38
	D4	250	250	250	250	250	250	250	250	250	250	250
	D5	13	13	13	13	13	13	13	13	13	13	13
Shaft connection without key If shaft is connected with key (mm)	D6	230	230	230	230	230	230	230	230	230	230	230
	L3	105	106	106	107	107	34	34	35	35	36	36
	L4	100	100	100	100	100	30	30	30	30	30	30
	t	10	12	12	14	14	5	8	10	10	12	12
	h4	35.5	35.5	35.5	35.5	39.5	27.5	27.5	27.5	31.5	31.5	31.5



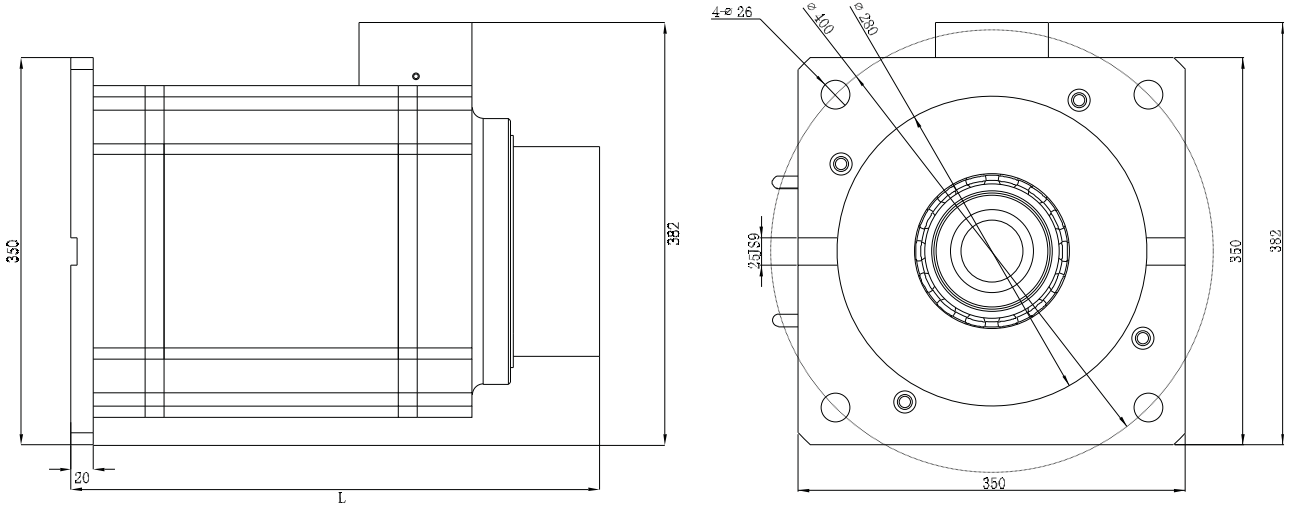
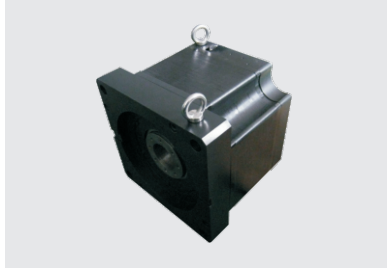
Flame Size 260



Mounting dimensions of flame size 260



Flame Size 300, 350



Mounting dimensions of flame size 300/350

