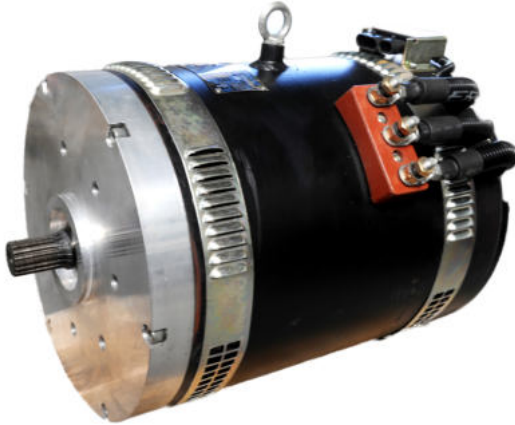


XQ (D) Series DC Traction Motors



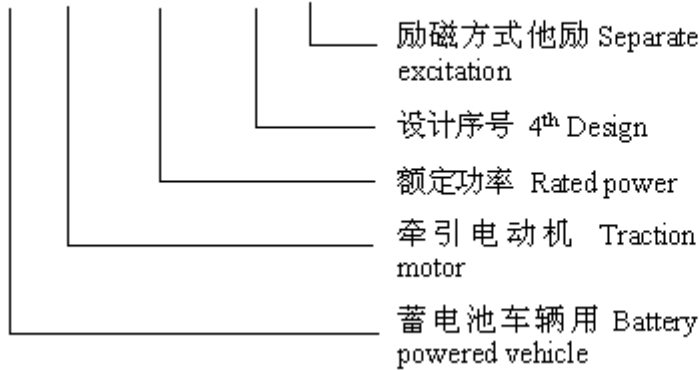
- Rated output: 0.55 to 13kW Voltage:22-75V
- Insulation class: F Duty cycle: S2

Application: Used for driving and steering the equipment which are powered by battery and driving oil pump, ideal for forklift of 0.5~3 ton and van of 2~5 ton.

Feature: Great speed regulation performance; strong overload capacity.

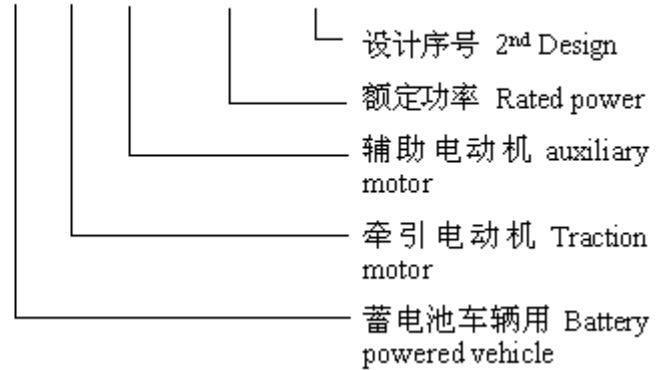
Designations of the type

X Q - 2.2 - 4 (T)



DC traction motor

X Q D - 7.5 - 2



DC auxiliary motor

Performance Data
DC Traction Motors (Series Excitation)

NO	Type	Rated output (kW)	Rated voltage (V)	Rated current (A)	Rated speed (r/min)	Duty cycle	Weight (kg)	Structural type	Application
1	XQ-0.55-1	0.55	22	38	2100	S2 30min	11	Horizontal and shaft out	Walking motor for 0.5-1T forklift
2	XQ-0.75	0.75	22	50	2400	S2 30min	11	Horizontal and shaft out	Walking motor for 0.5-1T forklift
3	XQ-0.75-1	0.75	22	50	2400	S2 30min	13	Horizontal and double shaft out	Walking motor for 0.5-1T forklift
4	XQ-1.2	1.2	24	67	1900	S2 60min	29	Vertical and double shaft out	Walking motor for 1-1.2T stacker
5	XQ-1.5	1.5	34	62	1900	S2 60min	38	Spline shaft out	For pallet carrier
6	XQ-2.2-1	2.2	22	135	1600	S2 60min	44	Spline shaft out	Walking motor for 1-1.2T forklift
7	XQ-2.2-2	2.2	45	65	2400	S2 60min	43	Spline shaft out	Walking motor for 0.5T stacker
8	XQ-2.2-4	2.2	45	64	1900	S2 60min	40	Spline shaft out	Walking motor for 1.25T forklift
9	XQ-3-1	3	45	87	1780	S2 60min	48	Spline shaft out	Walking motor for 1.25T-1.75T three-point electric forklift
10	XQ-3-2	3	22	190	1500	S2 60min	70	Spline shaft out	Walking motor for 1-1.35T three-point electric forklift
11	XQ-3-3	3	40	97	1500	S2 60min	75	Single bond cone double shaft	For 2T tractor
12	XQ-3-3D	3	45	90	1800	S2 60min	75	Single bond cone double shaft	For 2~3T tractor and truck
13	XQ-3-3H	3	45	90	1800	S2 60min	75	Spline cone double shaft	For 2~3T tractor, truck and tour bus
14	ZC3-48A	3	48	72	2800	S2 60min	38	19 teeth internal spline	For sightseeing bus
15	XQ-4	4	45	110	1700	S2 60min	85	Spline shaft out	Walking motor for 1-1.35T forklift
16	XQ-4-1	4	45	110	1700	S2 60min	90	Single bond cone shaft out	Walking motor for 1-1.35T forklift
17	XQ-4.5	4.5	45	125	1350	S2 60min	89	Single bond cone shaft out	Walking motor for 1.2T forklift
18	XQ-4.5-1	4.5	45	125	1800	S2 60min	89	Single bond cone double shaft	For 3~5 T tractor and truck
19	XQ-4.5H	4.5	45	125	1800	S2 60min	89	Spline cone double shaft	For 3~5 T tractor and truck
20	XQ-5	5	45	139	1480	S2 60min	95	Spline shaft out	Walking motor for 1.5-1.75T forklift
21	XQ-5-1	5	45	139	1480	S2 60min	95	Spline cone double shaft	For 4~7T tractor and truck
22	XQ-5F	5.4	48	140	1680	S2 60min	95	Vertical and double spline shaft out	1.5T station type forward shift forklift traction
23	XQ-5H	5.4	48	140	1680	S2 60min	95	Vertical and double spline shaft out	1.6~2T sit-forward forklift traction
24	XQ-6.3	6.3	45	173	1200	S2 60min	112	Spline shaft out	Walking motor for 2-2.5T forklift
25	XQ-6.3-1	6.3	45	173	1200	S2 60min	112	Horizontal and double shaft out	For 7~10T tractor and truck
26	XQ-8	8	45	222	1300	S2 60min	120	Spline shaft out	Walking motor for 2-2.5T forklift
27	XQ-10-1	10	75	165	1200	S2 60min	135	Spline shaft out	Walking motor for 2.5-3T forklift

Performance Data
DC Traction Motors (Series Excitation)

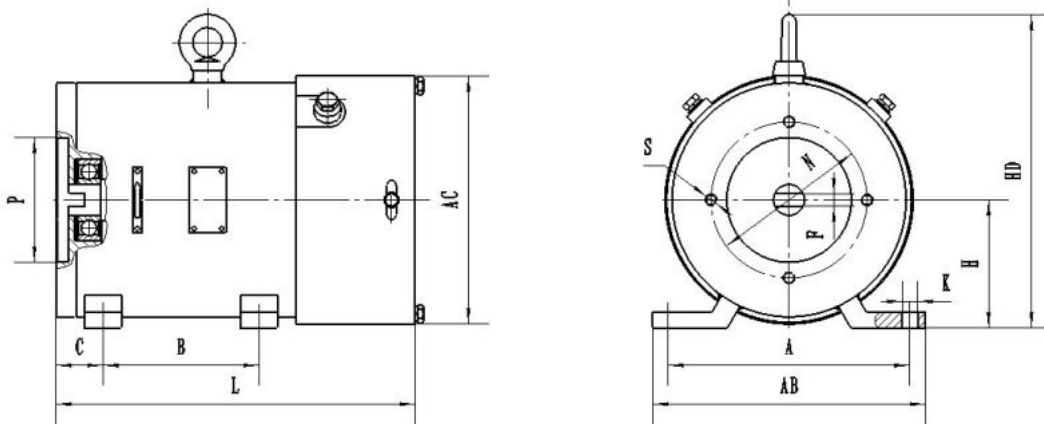
NO	Type	Rated output (kW)	Rated voltage (V)	Rated current (A)	Excitation way	Rated speed (r/min)	Duty cycle	Weight (kg)	Structural type	Application
1	XQ-0.55T	0.55	22	37	4	2100	S2 30min	11	Horizontal and shaft out	Walking motor for 0.5-1T forklift
2	XQ-0.75T	0.75	22	50	6	2400	S2 30min	11	Horizontal and shaft out	Walking motor for 0.5-1T forklift
3	XQ-0.75-1T	0.75	22	50	6	2400	S2 30min	13	Horizontal and double shaft out	Walking motor for 0.5-1T forklift
4	XQ-1.2T	1.2	24	67	8	1900	S2 60min	29	Vertical and double shaft out	Walking motor for 1-1.2T stacker
5	XQ-1.5T	1.5	34	62	8.7	1900	S2 60min	38	Spline shaft out	Pallet carrier
6	XQ-2.2-1T	2.2	22	135	9	1600	S2 60min	44	Spline shaft out	Walking motor for 1-1.2T forklift
7	XQ-2.2-2T	2.2	45	65	7.5	2400	S2 60min	43	Spline shaft out	Walking motor for 0.5T stacker
8	XQ-2.2-4T	2.2	45	64	8.5	1900	S2 60min	40	Spline shaft out	Walking motor for 1.25T forklift
9	XQ-3-1T	3	45	87	10.5	1780	S2 60min	48	Spline shaft out	Walking motor for 1.25T-1.75T three-point electric forklift
10	XQ-4T	4	45	110	11	1700	S2 60min	70	Spline shaft out	Walking motor for 1T-1.5T three-point electric forklift
11	XQ-5T	5	45	135	20	1480	S2 60min	95	Spline shaft out	Walking motor for 1.5T forklift
12	XQ-5.2T	5.2	45	139	20	1480	S2 60min	95	18 teeth outer spline	Walking motor for 1.5T forklift
13	XQ-6.3T	6.3	45	172	11	1400	S2 60min	112	Spline shaft out	Walking motor for 2-2.5T forklift
14	XQ-6.3A	6.5	45	173	11.5	1200	S2 60min	112	18 teeth outer spline	Walking motor for 2-2.5T forklift
15	XQ-7A3	7	45	180	11.5	1400	S2 60min	120	18 teeth outer spline	Walking motor for 2-2.5T forklift
16	XQ-8A3	8	45	220	11	1550	S2 60min	120	Spline shaft out	Walking motor for 2.5T forklift
17	XQ-8T	8	45	222	25	1200	S2 60min	120	Spline shaft out	Walking motor for 2-2.5T forklift
18	XQ-10T	10	75	150	16	1450	S2 60min	135	Spline shaft out	Walking motor for 2.5-3T forklift
19	XQ-10.2A-T	10.2	75	162.5	16	1500	S2 60min	135	18 teeth outer spline	Walking motor for 2.5-3T forklift

Performance Data
DC Traction Motors (Series Excitation)

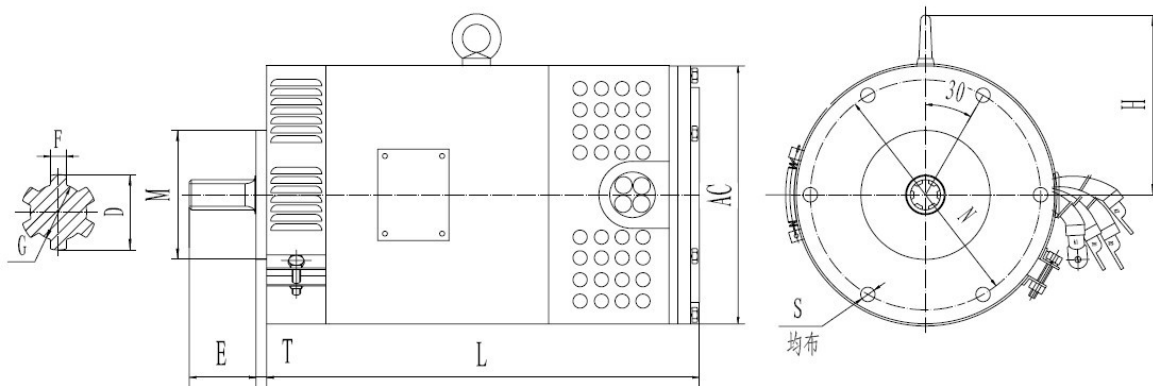
NO	Type	Rated output (kW)	Rated voltage (V)	Rated current (A)	Rated speed (r/min)	Excitation way	Duty cycle	Weight (kg)	Structural type	Application
1	XQD-0.75-2	0.75	45	25	1650	Compound excitation	S2 15min	12	Horizontal and foot-mounted, concave flat mouth shaft extension	Steering motor for 1-1.5T forklift
2	XQD-0.8	0.8	45	25	1500	Compound excitation	S2 60 min	24	Horizontal and foot-mounted, concave flat mouth shaft extension	Steering motor for 1.5-2.5T forklift
3	XQD-0.8-5	0.95	22	65	2200	Compound excitation	S2 60 min	24	Horizontal and foot-mounted, concave flat mouth shaft extension	Steering motor for 1.5-2.5T forklift
4	XQD-1.35	1.35	75	25.1	1500	Compound excitation	S2 30 min	24	Horizontal and foot-mounted, concave flat mouth shaft extension	Steering motor for 3T forklift
5	XQD-1.35-2	1.35	45	42	1500	Compound excitation	S2 30 min	24	Horizontal and foot-mounted, concave flat mouth shaft extension	Steering motor for airport tractor
6	XQD-3	3	24	175	1700	Series excitation	S2 5 min	24	Vertical internal keyway	Lifting motor for 1.6T stacker
7	XQD-6.3	6.3	45	173	2000	Compound excitation	S2 15 min	72	Horizontal and foot-mounted, straight-sided internal spline	Lifting motor for 1.5T forklift
8	XQD-7.5	7.5	45	205	2000	Compound excitation	S2 15 min	80	Horizontal and foot-mounted, rectangle internal spline	Lifting motor for 2T forklift
9	XQD-7.5-2S	7.5	45	210	1550	Series excitation	S2 15 min	80	Horizontal and foot-mounted, 10 teeth internal spline	Lifting motor for 1.5T forklift
10	XQD-7.5-2J	7.5	45	210	1550	Series excitation	S2 15 min	80	Horizontal and foot-mounted, 10 teeth internal spline	Lifting motor for 1-1.5T three-fulcrum AC electric forklift
11	XQD-7.5-2SW	7.5	45	210	1550	Series excitation	S2 15 min	80	Horizontal and foot-mounted, rectangle internal spline	Lifting motor for 1.5T forklift
12	XQD-7.5-3S	7.5	45	210	1550	Series excitation	S2 15 min	80	Horizontal and foot-mounted, 10 teeth internal spline	Lifting motor for 1.5T forklift
13	XQD-8.2	8.2	45	240	1600	Series excitation	S2 5 min	45	Horizontal without foot-mounted, 10 teeth internal spline	Lifting motor for 1.5T forklift
14	XQD-8.2-1	8.2	45	240	1600	Series excitation	S2 5 min	45	Horizontal and foot-mounted, rectangle internal spline	Lifting motor for 1.5T forklift

Performance Data
DC Auxiliary Motors

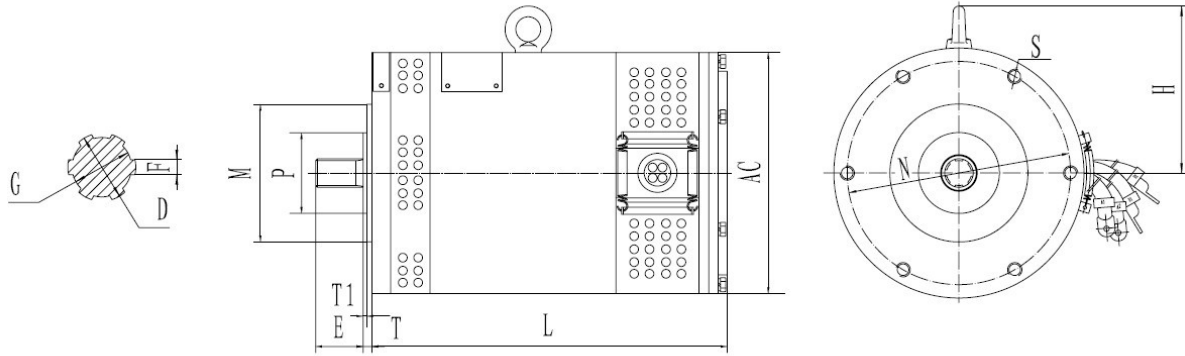
NO	Type	Rated output (kW)	Rated voltage (V)	Rated current (A)	Rated speed (r/min)	Excitation way	Duty cycle	Weight (kg)	Structural type	Application
15	XQD-8.6	8.6	45	248	1600	Series excitation	S2 5 min	45	Horizontal without foot-mounted, 10 teeth internal spline	Lifting motor for 2-2.5T forklift
16	XQD-8.6-3D	8.6	45	248	1600	Series excitation	S2 5 min	45	90° foot-mounted, rectangle internal spline	Lifting motor for 2-2.5T forklift
17	XQD-8.6-2S	8.6	45	235	1550	Series excitation	S2 5 min	80	Horizontal and foot-mounted, rectangle internal spline	Lifting motor for 2T forklift
18	XQD-8.6-3S	8.6	45	235	1550	Series excitation	S2 5 min	80	Horizontal and foot-mounted, 10 teeth internal spline	Lifting motor for 2T forklift
19	XQD-8.6H-1S	8.6	45	235	1550	Series excitation	S2 5 min	80	10 teeth internal spline with square end cover	Forward lift motor for 1.6T forklift
20	XQD-8.6FQ	8.6	45	235	1550	Series excitation	S2 5 min	80	Horizontal and foot-mounted, 10 teeth internal spline	Lifting motor for 1.8T three-fulcrum AC electric forklift
21	XQD-10-5	10	45	278	2000	Compound excitation	S2 15 min	83	Horizontal and foot-mounted, rectangle internal spline	Lifting motor for 2.5T forklift
22	XQD-10-2S	10	45	275	2000	Series excitation	S2 15 min	83	Horizontal and foot-mounted, 10 teeth internal spline	Lifting motor for 2.5T forklift
23	XQD-10-2J	10	45	275	2000	Series excitation	S2 15 min	83	Horizontal and foot-mounted, 10 teeth internal spline	Lifting motor for 2-2.5T three-fulcrum AC electric forklift
24	XQD-10-3D	10	75	160	2000	Series excitation	S2 15 min	83	Horizontal and foot-mounted, rectangle internal spline	Lifting motor for 2.5T forklift
25	XQD-12	12	75	193	2000	Compound excitation	S2 15 min	85	Horizontal and foot-mounted, rectangle internal spline	Lifting motor for 3T forklift
26	XQD-13-2S	13	75	210	1500	Series excitation	S2 15 min	85	Horizontal and foot-mounted, 10 teeth internal spline	Lifting motor for 3T forklift
27	XQD-13-C	13	75	210	1500	Series excitation	S2 15 min	85	Horizontal and foot-mounted, rectangle internal spline	Lifting motor for 3T forklift

Dimensions
mm
1~3.5T Forklift Steering Motor


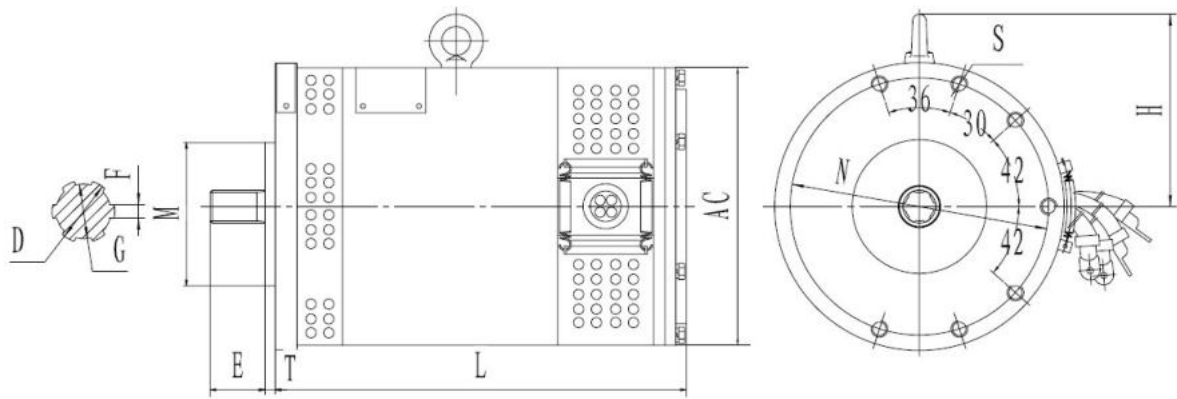
Type	Mounting Dimension									Overall Dimension			
	A	B	C	F	H	N	P	S	K	AB	AC	HD	L
XQD-0.75	115	100	50	8	63	100	80	M8	Φ10	135	120	150	231
XQD-0.8	155	100	30	8	82	100	80	M8	Φ10	175	160	201	235
XQD-1.35	155	100	30	8	82	100	80	M8	Φ10	175	160	201	270

1~1.5T Forklift Traction Motor with Rectangle Spline


Type	Mounting Dimension									Overall Dimension		
	T	E	D	F	G	M	N	S	H	AC	L	
XQ-5C	10	60	28	6	23	120	215	Φ13.5	170	240	402	
XQ-5-T	10	60	28	6	23	120	215	Φ13.5	170	240	402	
XQ-5-3A1	10	60	28	6	23	120	215	Φ13.5	170	240	402	
XQ-5-4A4	10	60	28	6	23	120	215	M12	170	240	402	
XQ-6.3-5	10	60	28	6	23	120	215	Φ13.5	185	270	425.5	

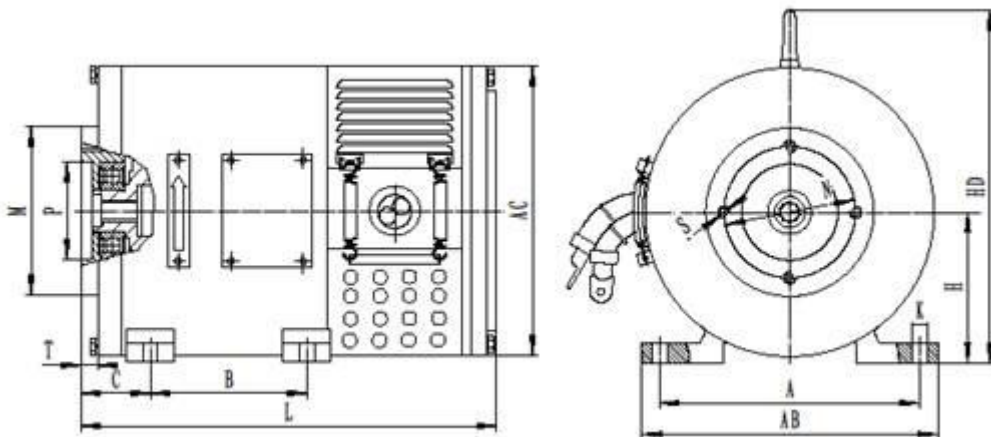
2~2.5T Forklift Traction Motor with Rectangle Spline


Type	Mounting Dimension										Overall Dimension		
	T1	T	E	D	F	G	M	P	N	S	H	AC	L
XQ-6.3-2	6	14	56	32	6	26	170	90	250	M12	185	270	399.5
XQ-6.3-T	6	14	56	32	6	26	170	90	250	M12	185	270	397
XQ-8-1T	8	14	58	32	6	26	170	90	250	M12	185	270	393.5
XQ-8T	8	14	58	32	6	26	170	90	250	M12	185	270	393.5



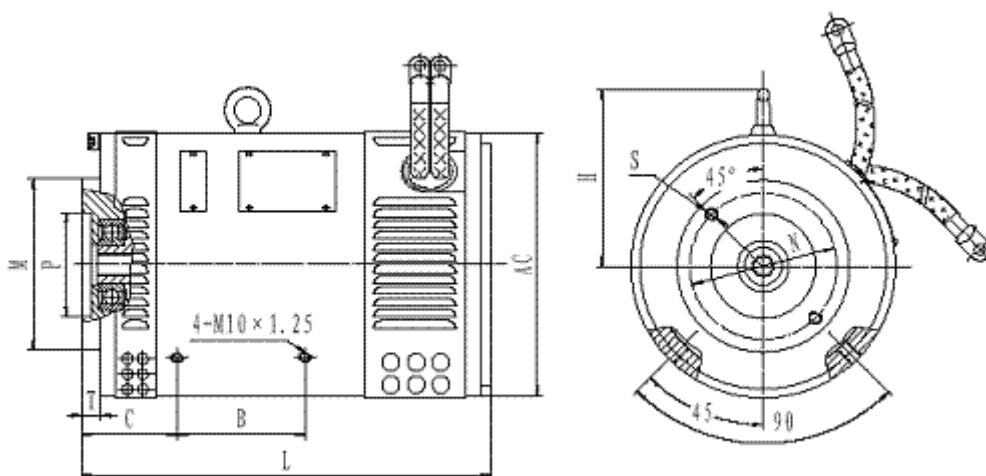
Type	Mounting Dimension								Overall Dimension			
	T	E	D	F	G	M	N	S	H	AC	L	
XQ-8	10	50	32	7	28	130	250	M16X1.5	185	270	397	
XQ-7A3	10	50	32	7	28	130	250	M16X1.5	185	270	390	
XQ-8A3	10	50	32	7	28	130	250	M16X1.5	185	270	390	

1~3T Forklift involute Oil Pump Motor



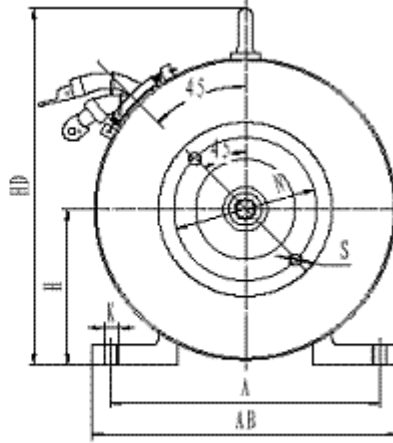
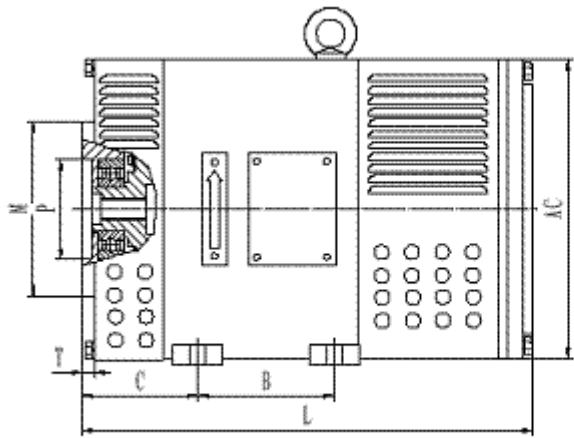
Involute inside spline parameter	
Teeth no. (Z)	10
Diametral pitch (DP)	16/32
Pressure Angle (A)	30°
Dividing circle diameter (D)	Φ15.875
Base circle major diameter (Db)	Φ13.749
Major diameter (Del)	Φ17.463 ^{+0.027} ₀
Minor diameter (Dil)	Φ14.465 ^{+0.11} ₀
Pin diameter	Φ2.743
Pin spacing	11.834
Teeth width	2.49
Tolerance class and fit class 6H	6H(GB3478.1-83)
Maximum actual slot width Emax	2.5816
Minimum actual slot width Emin	2.523
Minimum value of the involute termination circle Dflmin	Φ17.463
Cumulative pitch tolerance Fp	0.037
Profile tolerance Ff	0.032
Tooth tolerances Fb	0.014

Type	Mounting Dimension										Overall Dimension			
	A	B	C	T	M	P	N	H	S	K	AB	AC	HD	L
XQD-7.5-3S	216	130	57	14	140	80	109	125	M10	Φ12	246	240	295	345
XQD-8.6-3S	216	130	57	14	140	80	109	125	M10	Φ12	246	240	295	345
XQD-10-3S	216	110	93	10	140	80	109	125	M10	Φ12	246	240	295	365
XQD-13-3S	216	140	93	10	140	80	109	125	M10	Φ12	246	240	295	395



Involute inside spline parameter	
Teeth no. (Z)	10
Diametral pitch (DP)	16/32
Pressure Angle (A)	30°
Dividing circle diameter (D)	Φ15.875
Base circle major diameter (Db)	Φ13.749
Major diameter (Del)	Φ17.463 ^{+0.027} ₀
Minor diameter (Dil)	Φ14.465 ^{+0.11} ₀
Pin diameter	Φ2.743
Pin spacing	11.834
Teeth width	2.49
Tolerance class and fit class 6H	6H(GB3478.1-83)
Maximum actual slot width Emax	2.5816
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Minimum value of the involute termination circle Dflmin	Φ17.463
Cumulative pitch tolerance Fp	0.037
Profile tolerance Ff	0.032
Tooth tolerances Fb	0.014

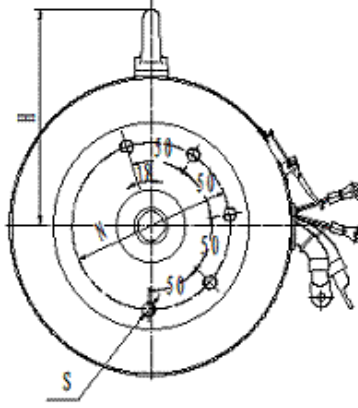
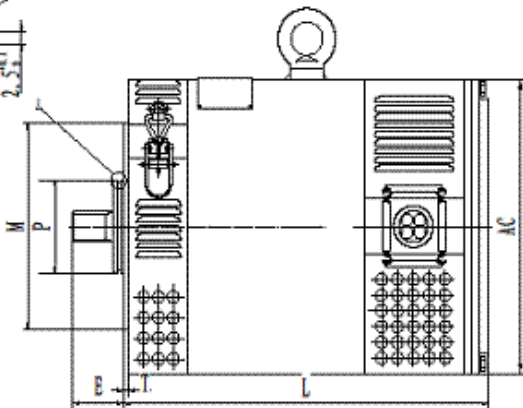
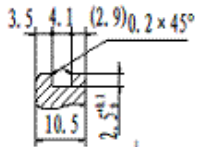
Type	Mounting Dimension							Overall Dimension		
	B	C	T	M	P	N	S	H	AC	L
XQD-8.2	100	75	15	135	82.55	115	M10X1.25	140	207	321
XQD-8.6	125	75	15	135	82.55	115	M10X1.25	140	207	335



Involute inside spline parameter	
Teeth no. (Z)	10
Diametral pitch (DP)	16/32
Pressure Angle (A)	30°
Dividing circle diameter (D)	Φ15.875
Base circle major diameter (Db)	Φ13.749
Major diameter (De)	Φ17.463 ^{+0.27}
Minor diameter (Di)	Φ14.465 ^{-0.11}
Pin diameter	Φ2.743
Pin spacing	11.834
Teeth width	2.49
Tolerance class and fit class	6H 6H(GB3478.1-83)
Maximum actual slot width Emax	2.5816
Minimum actual slot width Emin	2.523
Minimum value of the involute termination circle Dfmin	Φ17.463
Cumulative pitch tolerance Fp	0.037
Profile tolerance Ff	0.032
Tooth tolerances Fb	0.014

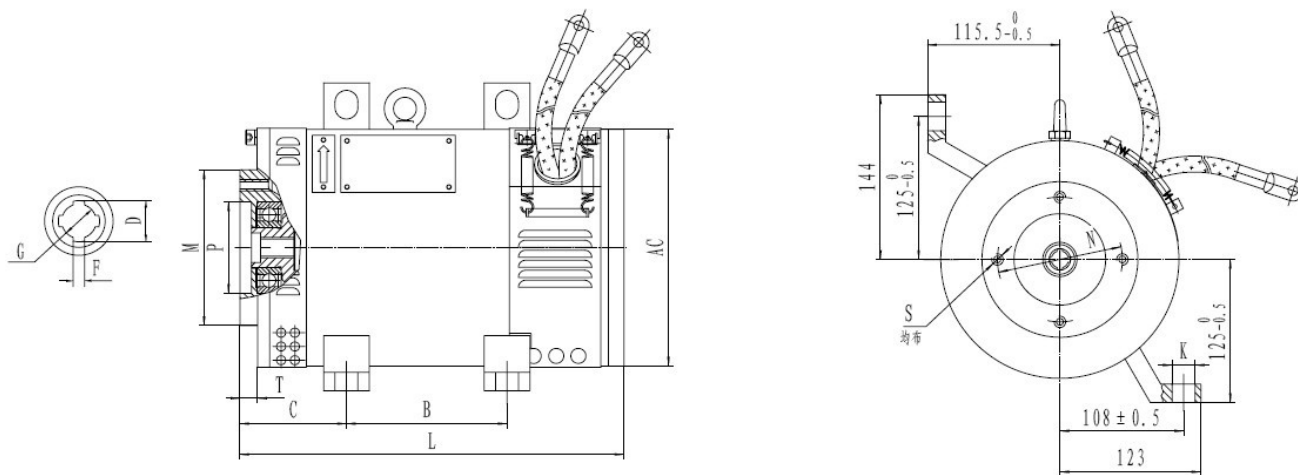
Type	Mounting Dimension										Overall Dimension			
	A	B	C	T	M	P	H	N	S	K	AB	AC	HD	L
XQD-10-4D	216	110	93	10	140	82.55	125	115	M10×1.25	M10×1.25	223	240	295	365

1-3.5T Forklift Oil Pump Motor with Rectangular Spline

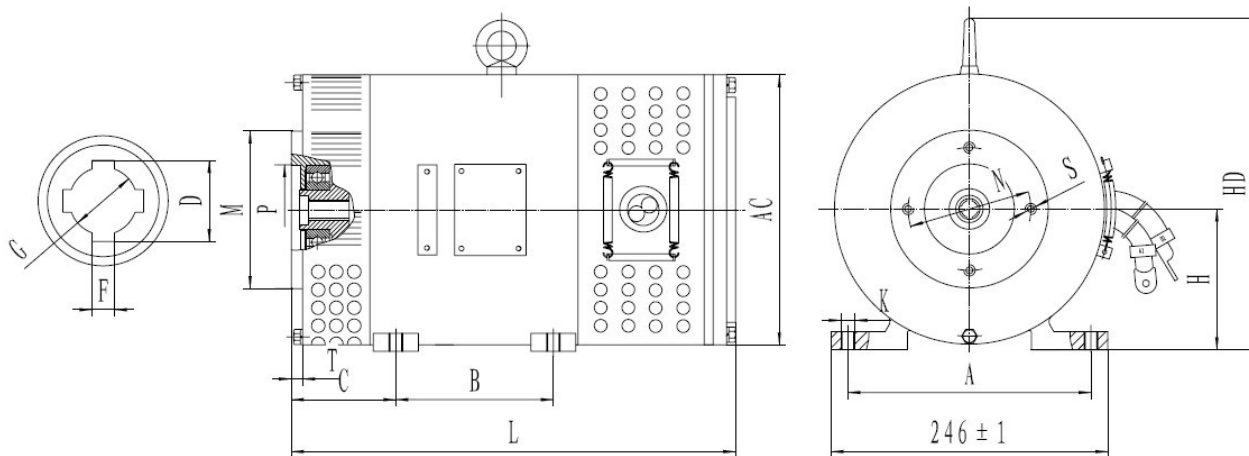


Involute inside spline parameter	
Teeth no. (Z)	10
Diametral pitch (DP)	16/32
Pressure Angle (A)	30°
Dividing circle diameter (D)	Φ15.875
Base circle major diameter (Db)	Φ13.749
Major diameter (De)	Φ17.463 ^{+0.27}
Minor diameter (Di)	Φ14.465 ^{-0.11}
Pin diameter	Φ2.743
Pin spacing	11.834
Teeth width	2.49
Tolerance class and fit class	6H 6H(GB3478.1-83)
Maximum actual slot width Emax	2.5816
Minimum actual slot width Emin	2.523
Minimum value of the involute termination circle Dfmin	Φ17.463
Cumulative pitch tolerance Fp	0.037
Profile tolerance Ff	0.032
Tooth tolerances Fb	0.014

Type	Mounting Dimension													Overall Dimension		
	A	B	C	T	H	M	P	D	F	G	N	S	K	AC	HD	L
XQD-6.3B	216	130	57	14	125	140	80	18	5	15	109	M10	Φ12	240	312	345
XQD-7.5-2	216	130	57	14	125	140	80	18	5	15	109	M10	Φ12	240	312	345
XQD-7.5-C	216	130	57	14	125	140	80	18	5	15	109	M10	Φ12	240	312	345
XQD-8.6-C	216	130	57	14	125	140	80	18	5	15	109	M10	Φ12	240	312	345
XQD-10-C	216	130	80	10	125	140	80	18	5	15	109	M10	Φ12	240	312	363
XQD-12	216	140	93	10	125	140	80	18	5	15	109	M10	Φ12	240	312	395
XQD-13-C	216	140	93	10	125	140	80	18	5	15	109	M10	M12	240	312	395
XQD-13-2C	216	140	93	10	125	140	80	18	5	15	109	M10	Φ12	240	312	395
XQD-8.2-1	216	130	57	15	125	136	80	18	5	15	109	M10	Φ12	207	260	321
XQD-8.6-1	216	130	57	15	125	136	80	18	5	15	109	M10	Φ12	207	260	335

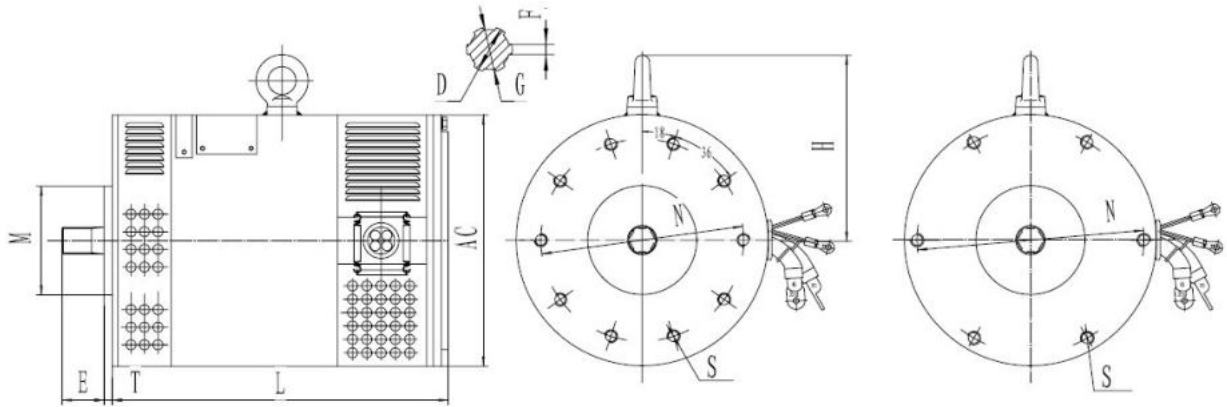
1~3.5T Forklift Involute Traction Motor with spline


Type	Mounting Dimension						Overall Dimension		
	T	E	M	P	N	S	H	AC	L
XQ-5.2T	8	60	200	95	170	M14X1.5	170	240	412
XQ-6.3A	8	60	230	95	170	M14X1.5	185	270	402
XQ-10.2A-T	5	55	210	95	170	M14X1.5	220	300	390

1~3T Forklift Oil Pump Motor with rectangular spline


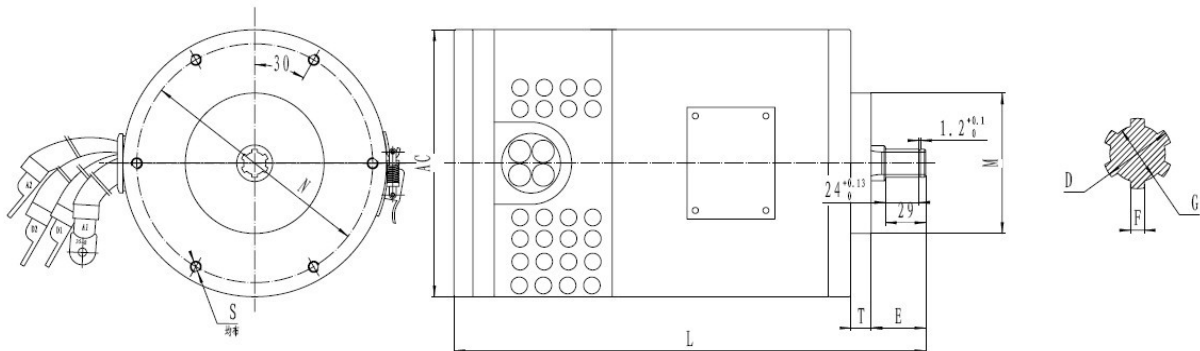
Type	Mounting Dimension											Overall Dimension	
	B	C	T	M	P	N	D	F	G	S	K	AC	L
XQD-8.6-3D	140	93	15	136	80	109	18	5	15	M10	Φ20	207	335
XQD-8.2-3D	140	93	15	136	80	109	18	5	15	M10	Φ20	207	321
XQD-10-3D	140	93	10	140	80	109	18	5	15	M10	Φ20	240	362.5

3~3.5T Forklift walking motor with rectangular spline

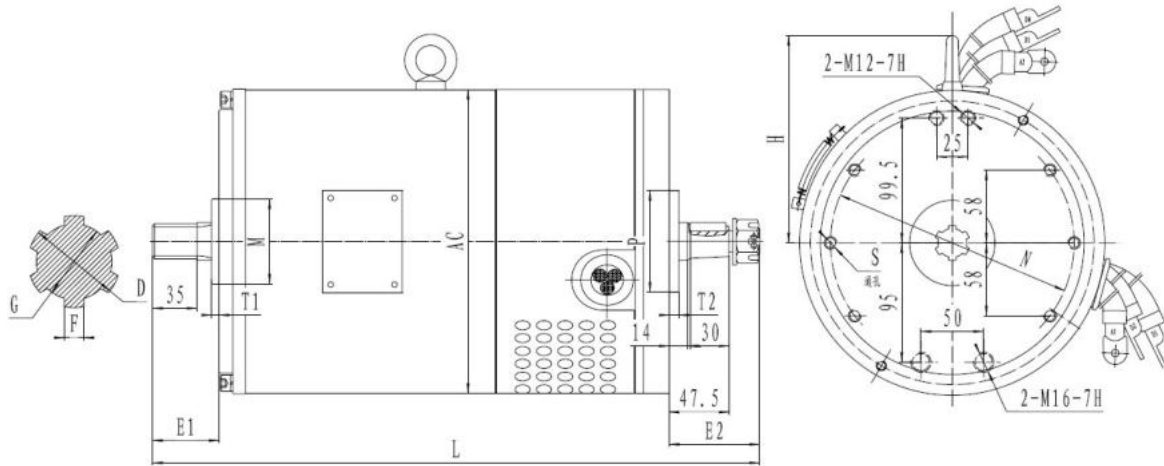


Type	Mounting Dimension								Overall Dimension		
	T	E	D	F	G	M	N	S	H	AC	L
XQ-10A	10	60	32	7	28	130	283	6-M16X1.5	220	300	400
XQ-10-1C	10	50	32	7	28	130	250	10-M16X1.5	220	300	400
XQ-10T	10	50	32	7	28	130	283	6-M16X1.5	220	300	400

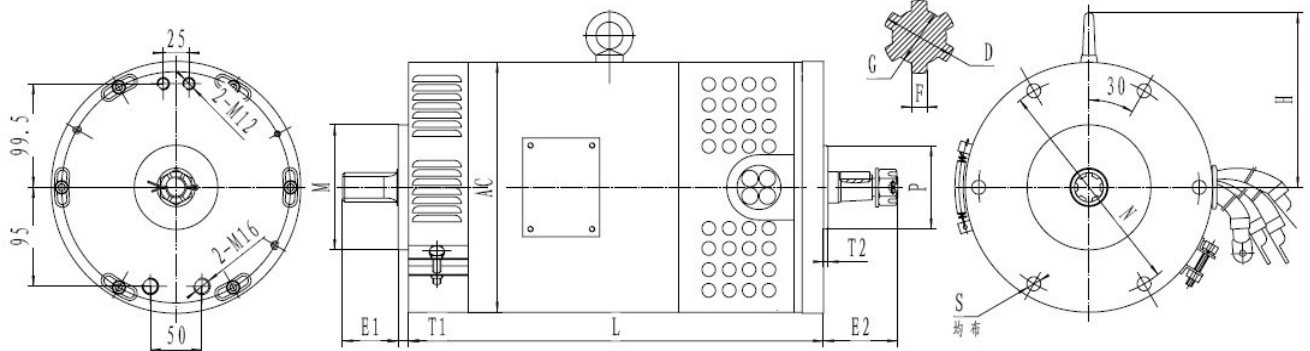
2~10T Forklift Traction motor with rectangular spline



Type	Mounting Dimension								Overall Dimension	
	M	D	F	G	T	E	N	S	L	AC
XQ-1.5-HT	100	20	4	16	14.5	39.5	170	M8	340	190
XQ-2.2-4	100	20	4	16	14.5	39.5	170	M8	350.5	190
XQ-3-1	100	20	4	16	14.5	39.5	170	M8	394.5	190

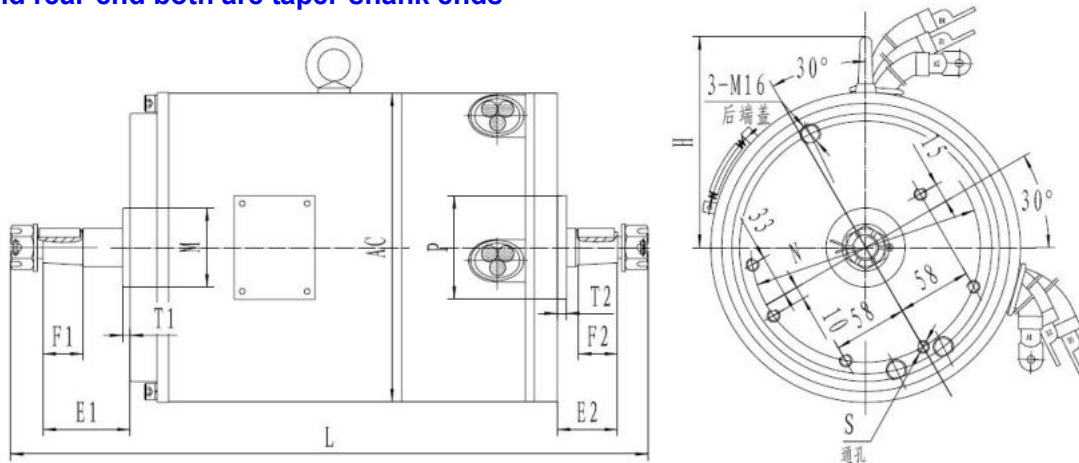
Traction motor (for 2~60T rail flat car) with spline front and taper-shank rear-end


Type	Mounting Dimension											Overall Dimension			
	T1	T2	E1	E2	N	D	F	G	M	P	N	S	H	AC	L
XQ-3-HT	6	7.5	53	72	194	28	6	23	68	80	194	M10	170	242	460
XQ-4.5-HT	6	7.5	53	72	194	28	6	23	68	80	194	M10	170	242	484

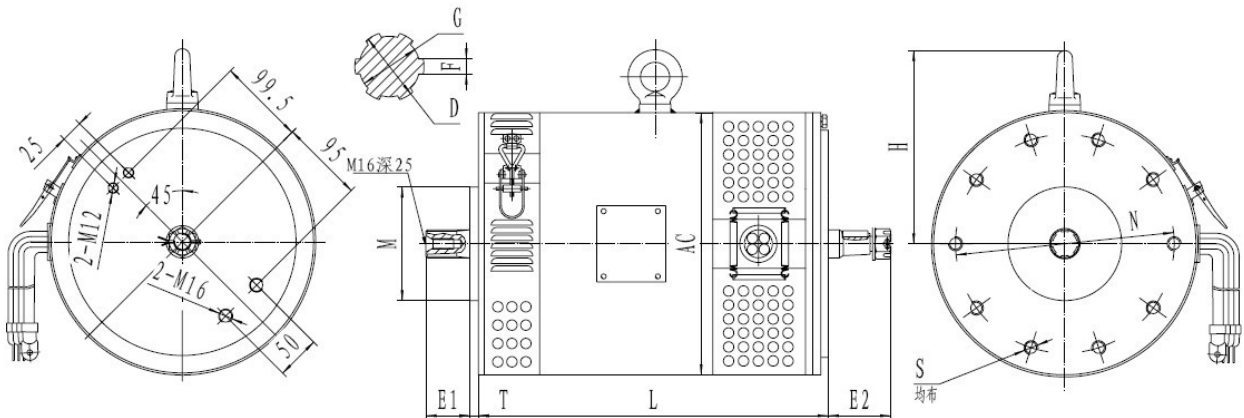


Type	Mounting Dimension											Overall Dimension		
	T1	T2	E1	E2	N	M	P	D	F	G	S	H	AC	L
XQ-5-HT	10	4.5	54	72	215	120	80	28	6	23	Φ13.5	170	240	402.5

Front and rear-end both are taper-shank ends



Type	Mounting Dimension										Overall Dimension		
	T1	T2	E1	E2	F1	F2	N	M	P	S	H	AC	L
XQ-3-3D	6	7.5	68.5	47.5	31.5	30.5	180	62	81	M10	170	242	500
XQ-4.5-1	6	7.5	68	47	31.5	31.5	180	62	81	M10	170	242	518



Type	Mounting Dimension									Overall Dimension		
	T	E1	E2	D	F	G	M	N	S	H	AC	L
XQ-10-1-HT	10	50	72	32	7	28	130	250	M16x1.5	220	300	400

Note: Dimensions here are indicative only. Actual product may differ. Data above may be changed without prior notice.