



# FLOWFIT® FFPMM MOTORS



Low speed high torque orbital motors are specifically engineered to deliver powerful rotational force at reduced speeds. Also known as mini motors and gerotor motors. These motors are suitable replacements for Sauer Danfoss OMM motors. The FFPMM motor is constructed from durable ductile cast iron, featuring a compact design ideal for both industrial and mobile applications. It is well-suited for extended operation at moderate pressures and shorter durations at higher pressures. The FFPMM hydraulic series motor provides high output torque from a very small package.

Type		FFPMM 8	FFPMM 12.5	FFPMM 20	FFPMM 32	FFPMM 40	FFPMM 50
<b>Displacement (ml/r)</b>		8.2	12.9	19.9	31.6	39.8	50.3
<b>Max Pressure Drop (Bar)</b>	<b>Cont.</b>	100	100	100	100	90	70
	<b>Int.</b>	140	140	140	140	140	140
	<b>Peak</b>	200	200	200	160	160	160
<b>Max Torque (N.m)</b>	<b>Cont.</b>	11	16	25	40	45	46
	<b>Int.</b>	15	23	35	57	70	88
	<b>Peak</b>	21	33	51	64	82	100
<b>Speed Range (Cont.) (r/min)</b>		1950	1550	1000	630	500	400
<b>Max Flow (Cont.) (r/min)</b>		16	20	20	20	20	20
<b>Max Output Power (Cont.) (Kw)</b>		1.8	2.4	2.4	2.4	2.4	1.8
<b>Weight (Kg)</b>		1.9	2	2.1	2.2	2.3	2.4

Intermittent operation the permissible values may occur for max. 10% of every minute  
 Peak Load: the permissible values may occur for max. 1% of every minute





# PERFORMANCE DATA

## FFPMM8

Pressure (Bar)

		Max Cont.				Max int.	
		35	50	70	100	120	140
Flow (L/min)	2	3 228	5 218	8 206	10 156	12 111	14 58
	4	3 474	5 471	7 463	11 426	13 913	15 331
	8	3 953	5 946	7 926	11 884	13 855	15 816
	12	2 1444	5 1426	7 1402	10 1360	13 1324	15 1288
Max Cont.	15		4 1912	7 1900	10 1861	12 1833	14 1780
Max int.	20			6 2395	10 2350	11 2328	14 2281

Torque: 6 Nm  
Speed: 2395 r/min

## FFPMM12.5

Pressure (Bar)

		Max Cont.				Max int.	
		35	50	70	100	120	140
Flow (L/min)	2	6 140	8 136	11 119	16 68	19 111	
	4	6 296	8 289	12 274	17 229	19 391	23 451
	8	5 605	8 596	12 583	17 543	20 855	24 784
	12	5 912	8 905	11 895	16 859	20 1324	24 784
Max Cont.	15	5 1152	7 1144	11 1136	16 1102	19 1833	23 3610
Max Cont.	20	3 1542	7 1532	10 1521	15 1500	19 2328	22 4371
Max int.	25	2 1910	6 1891	9 1878	14 1848	18 1828	22 7881

Torque: 6 Nm  
Speed: 1891 r/min

## FFPMM20

Pressure (Bar)

		Max Cont.				Max int.		
		17	35	50	750	100	120	140
Flow (L/min)	2	3 99	9 96	14 89	19 74	26 42	30 12	
	4	4 197	9 191	14 182	19 178	26 134	31 112	36 74
	8	4 398	9 395	13 391	19 377	27 340	31 319	36 288
	12	3 596	8 594	13 588	18 579	26 545	31 353	37 493
Max Cont.	15	3 745	8 741	12 738	17 728	25 695	30 684	36 660
Max Cont.	20	1 998	6 995	11 991	19 985	24 962	29 916	35 885
Max int.	25		4 1247	9 1245	14 1242	23 1189	28 1180	33 1176

Torque: 4 Nm  
Speed: 1247 r/min

## FFPMM32

Pressure (Bar)

		Max Cont.				Max int.		
		17	35	50	750	100	120	140
Flow (L/min)	2	7 61	15 57	21 52	28 74	40 16		
	4	7 126	15 211	21 114	29 106	41 82	48 67	57 49
	8	7 250	15 244	21 239	29 231	41 207	49 194	58 167
	12	6 378	13 374	20 369	28 362	40 338	48 322	58 972
Max Cont.	15	4 476	12 472	18 468	27 624	39 441	47 942	57 406
Max Cont.	20	3 633	10 630	17 627	25 619	37 601	46 585	55 566
Max int.	25	1 791	8 789	15 787	23 783	35 766	43 753	52 732

Torque: 8 Nm  
Speed: 789 r/min





# PERFORMANCE DATA

## FFPMM40

Pressure (Bar)

		Max Cont.				Max int.	
		30	50	70	85	100	120
Flow (L/min)	2	16 45	27 40	36 34	44 28	51 17	
	4	16 96	27 93	37 85	44 79	52 65	62 52
	8	15 197	26 195	36 182	44 176	52 166	63 154
	12	14 293	25 287	35 282	43 277	51 268	62 257
	15	13 371	24 365	34 360	42 355	50 347	62 338
	Max Cont.	20	10 497	21 492	31 487	39 480	48 472
Max int.	25	7 622	19 617	29 612	37 607	44 600	56 591

Torque: 19 Nm  
Speed: 617 r/min

## FFPMM50

Pressure (Bar)

		Max Cont.				Max int.	
		15	30	50	70	100	
Flow (L/min)	2	11 73	23 33	36 27	50 22		
	4	11 76	22 73	36 68	50 63	70 55	
	8	11 157	21 154	35 149	50 145	71 137	
	12	11 237	20 234	33 231	49 226	71 218	
	15	10 296	18 295	32 294	47 288	69 282	
	Max Cont.	20	8 395	14 395	29 393	44 390	64 381
Max int.	25	4 498	10 496	25 494	40 490	59 484	

Torque: 10 Nm  
Speed: 496 r/min

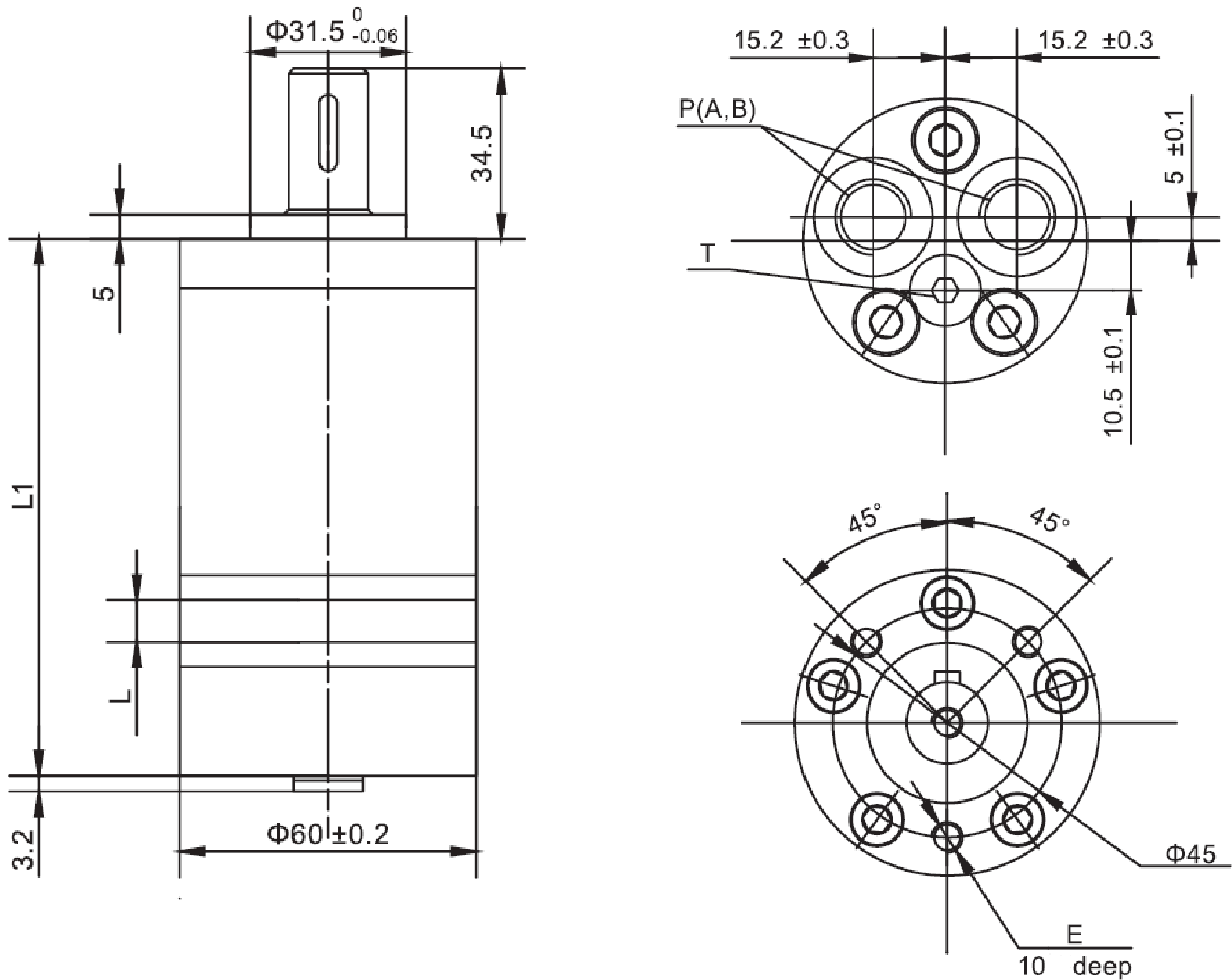






# INSTALLATION DATA

## Rear Ports



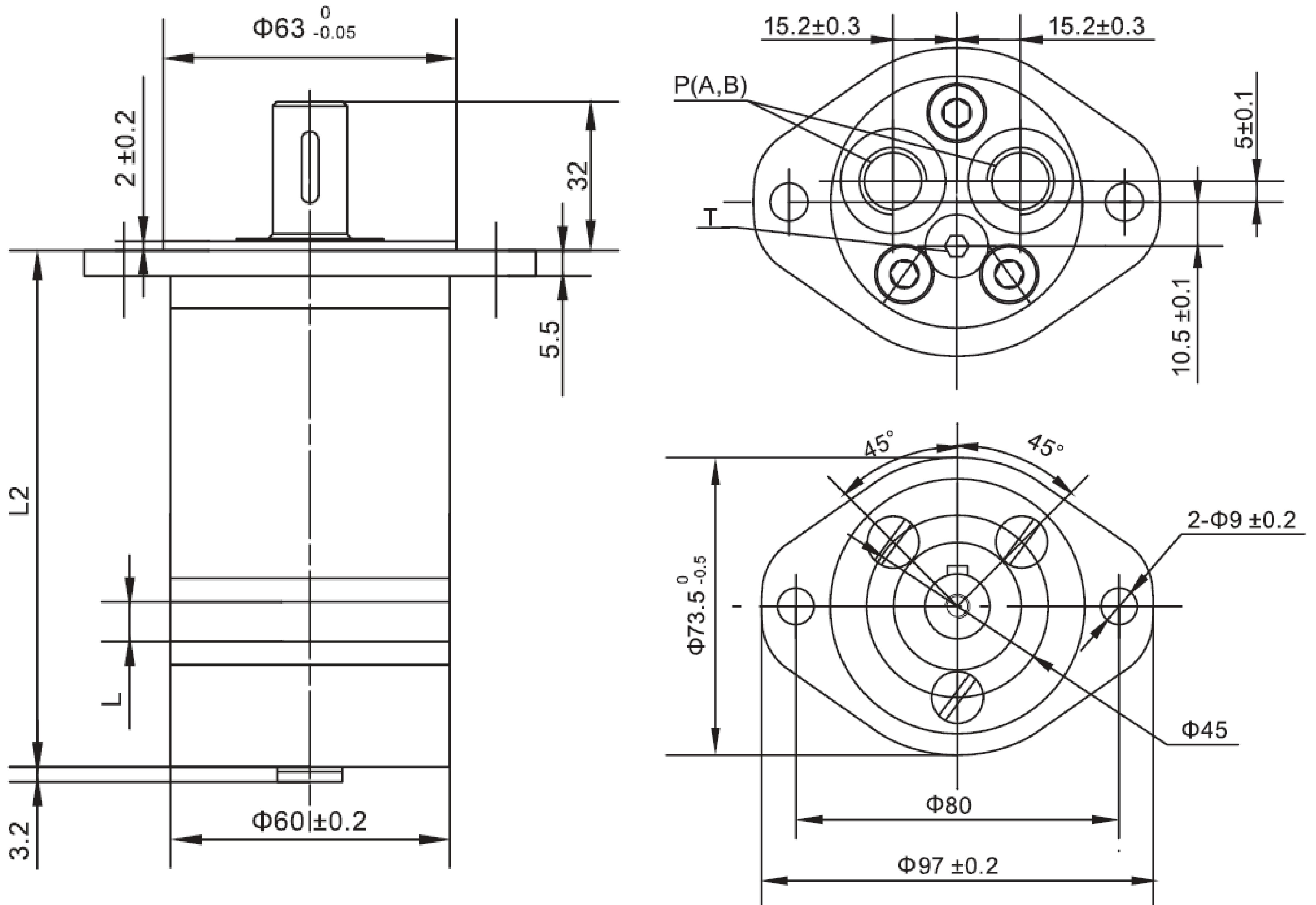
Type	FFPMM 8	FFPMM 12.5	FFPMM 20	FFPMM 32	FFPMM 40	FFPMM 50
L	3.5	5.5	8.5	13.5	17	21.5
L1	104	106	109	114	117.5	122

P(A,B)(deep) Ports	E (deep) - Mounting Thread	T (deep) - Drain Connection
2 X G3/8 BSP (12)	3 X M6 (13)	G1/8 BSP (10)



# INSTALLATION DATA

## F - Rear Ports with oval mount



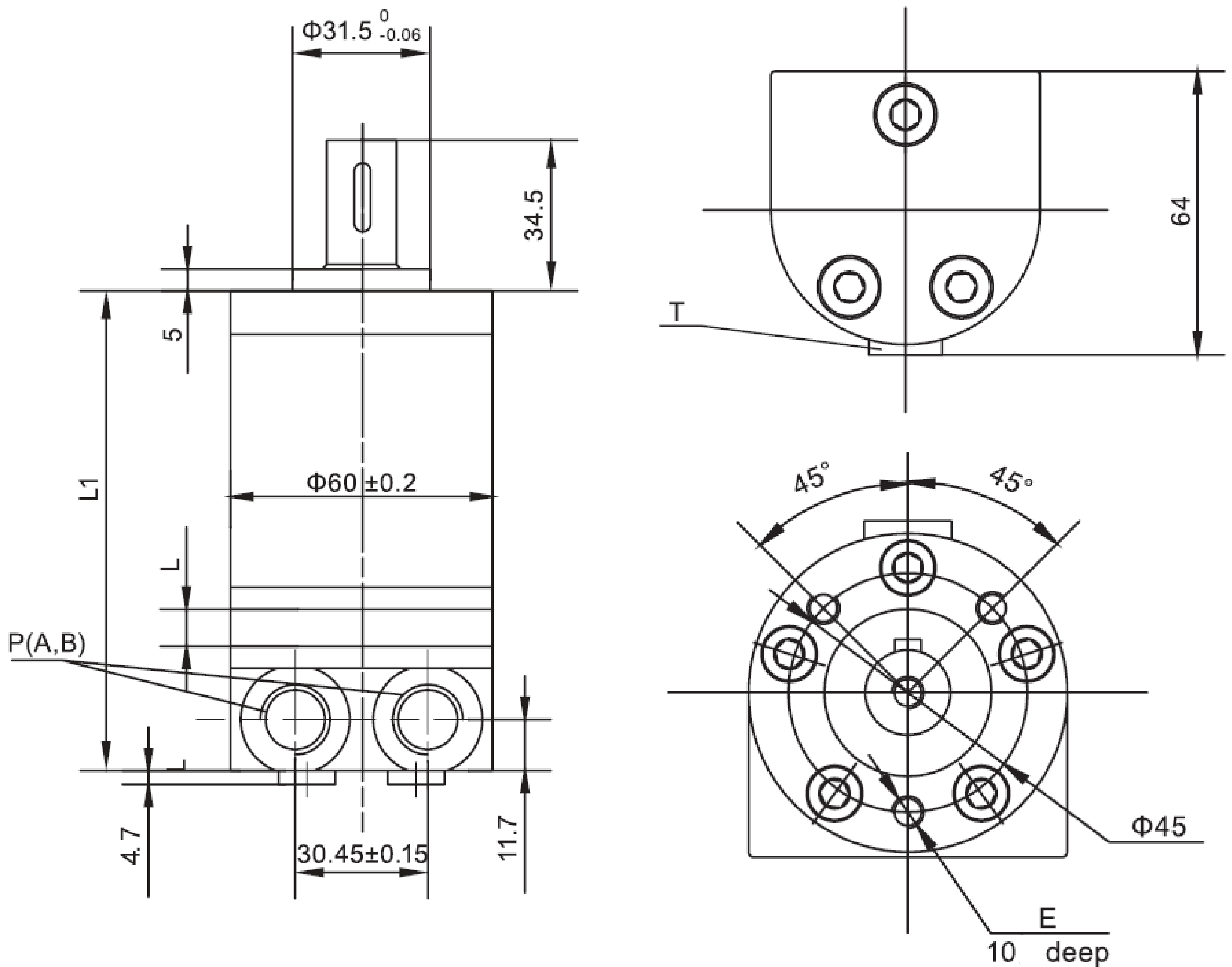
Type	FFPMM 8	FFPMM 12.5	FFPMM 20	FFPMM 32	FFPMM 40	FFPMM 50
L	3.5	5.5	8.5	13.5	17	21.5
L2	107.5	109.5	112.5	117.5	121	125.5

P(A,B)(deep) Ports	T (deep) - Drain Connection
2 X G3/8 BSP (12)	G1/8 BSP (10)



# INSTALLATION DATA

## S - Side ports



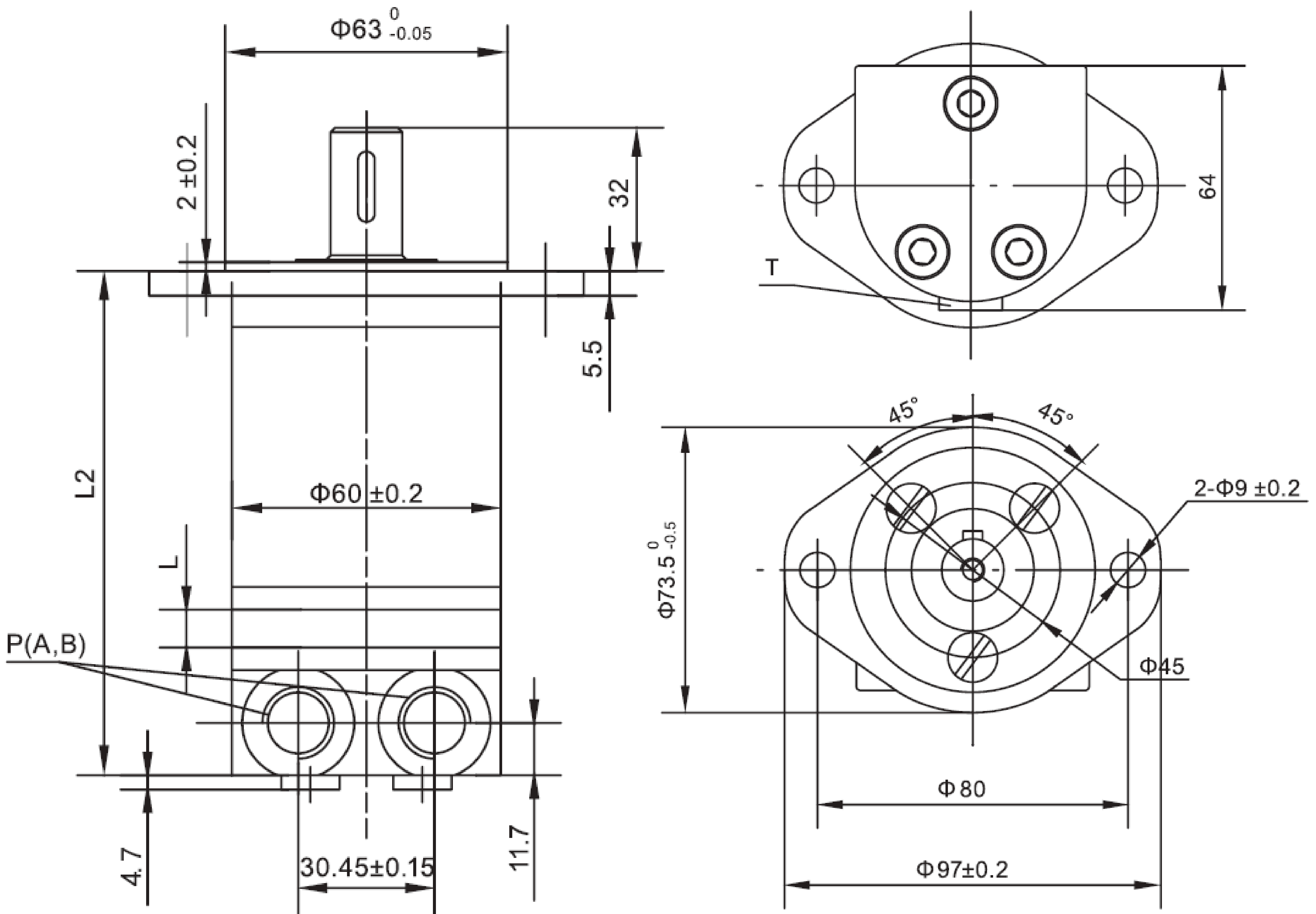
Type	FFPMM 8	FFPMM 12.5	FFPMM 20	FFPMM 32	FFPMM 40	FFPMM 50
L	3.5	5.5	8.5	13.5	17	21.5
L1	105	107	110	115	118.5	123

P(A,B)(deep) Ports	E (deep) - Mounting Thread	T (deep) - Drain Connection
2 X G3/8 BSP (12)	3 X M6 (13)	G1/8 BSP (10)



# INSTALLATION DATA

## FS - Side ports with oval mount



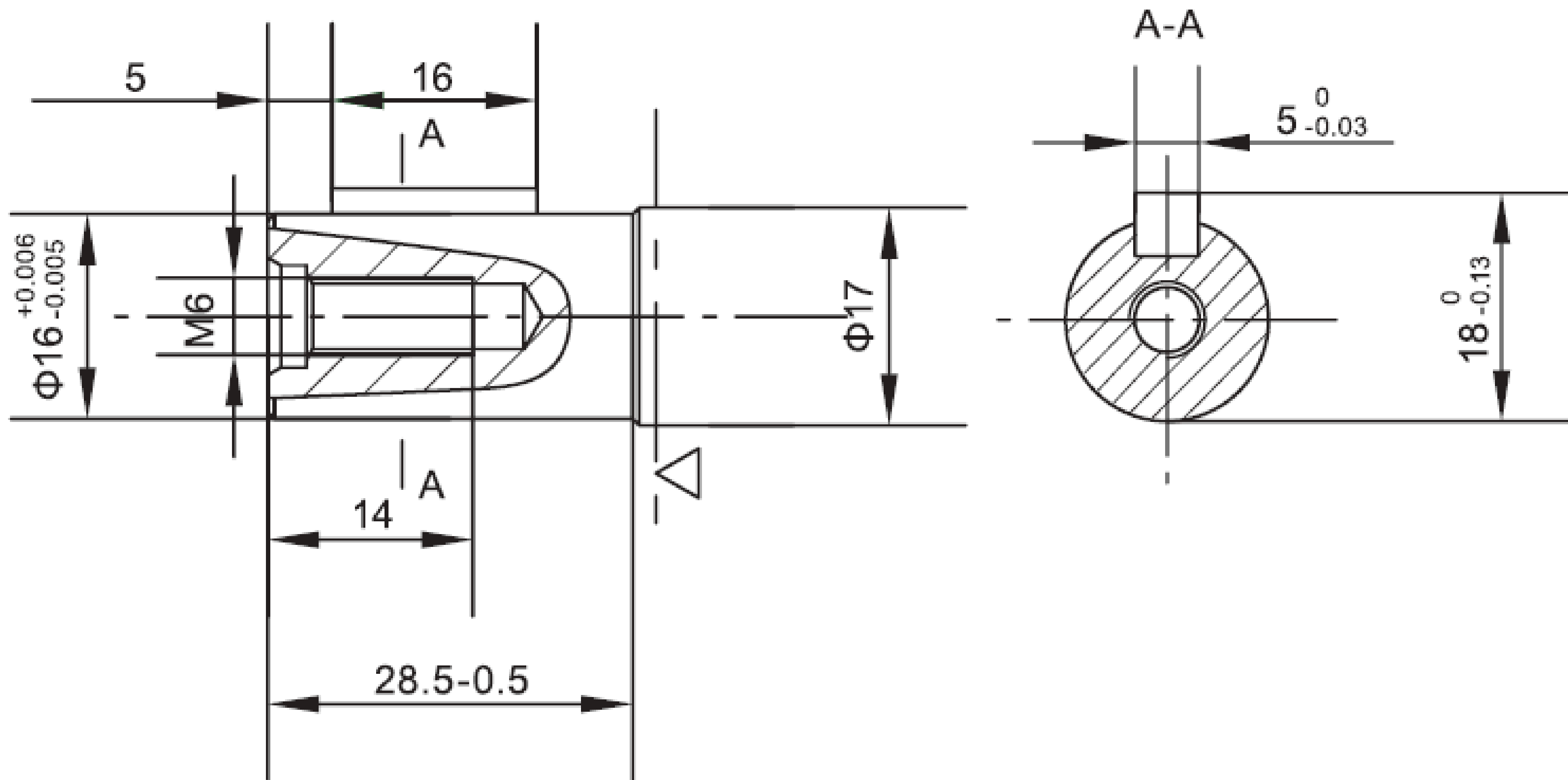
Type	FFPMM 8	FFPMM 12.5	FFPMM 20	FFPMM 32	FFPMM 40	FFPMM 50
L	3.5	5.5	8.5	13.5	17	21.5
L2	108.5	110.5	113.5	118.5	122	126.5

P(A,B)(deep) Ports	T (deep) - Drain Connection
2 X G3/8 BSP (12)	G1/8 BSP (10)



# SHAFT VERSION

C -  $\varnothing 16$  Cylindrical Shaft, Parallel Key 5 x 5 x 16



◁ : Motor mounting surface





# ORDERING CODES

**1****2****3**

<b>FFPMM</b>			
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<b>Pos.1</b>	<b>Mounting Flange</b>
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Omit - Rear ports

<b>F</b>	Rear ports with oval mount
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<b>S</b>	Side ports
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<b>FS</b>	Side ports with oval mount
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<b>Pos.2</b>	<b>Displacement code</b>
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<b>8</b>	8.2 cc/rev
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<b>12.5</b>	12.9 cc/rev
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<b>20</b>	19.9 cc/rev
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<b>32</b>	31.6 cc/rev
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<b>40</b>	39.8 cc/rev
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<b>50</b>	50.3 cc/rev
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<b>Pos.3</b>	<b>Shaft Extensions</b>
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<b>C</b>	Ø 16 Cylindrical Shaft, Parallel Key 5 x 5 x 16
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All our motors are supplied with a black gloss phosphatizing finish, enhancing corrosion resistance and improving friction performance.