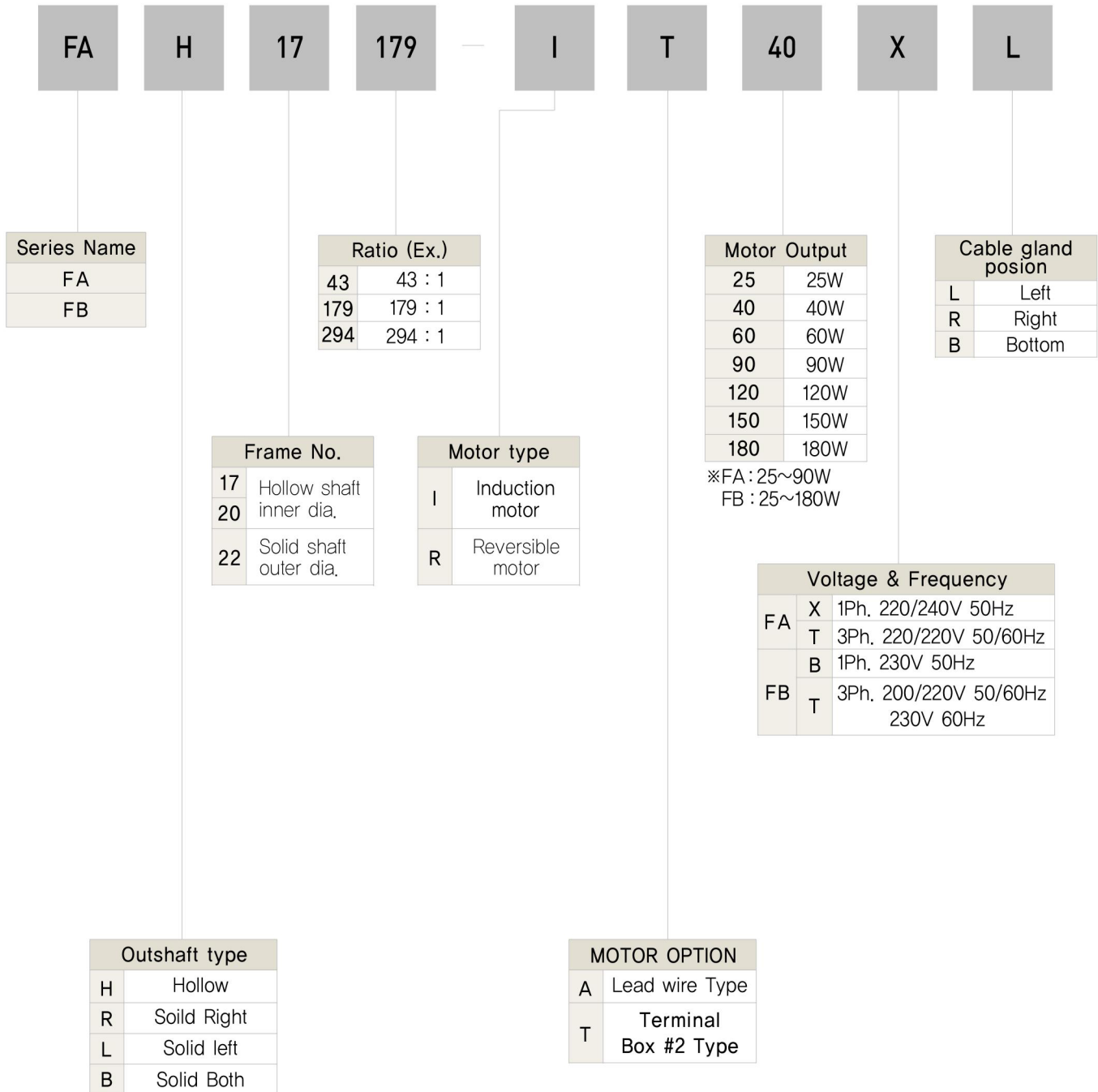


FA / FB SERIES

FA / FB SERIES GEARED MOTOR CODING



FA SERIES GEARED MOTOR

■ SPECIFICATION

■ MOTOR

No	Output	Voltage	Frequency	Duty	Rated			Starting Torque	Stall Torque	Capacitor
					Current	speed	Torque			
					A	r/min	Nm			
1	25	1Ph. 230	50	Cont.	0,27	1,300	0,26	0,15	0,32	1,5
2	40				0,32	1,300	0,31	0,19	0,41	2,0
3	60				0,48	1,300	0,49	0,34	0,66	3,5
4	90				0,70	1,300	0,74	0,53	0,98	5,0

■ GEARED MOTOR

No	Motor Design	Ratio	Stage	No Load		Rated			Permissible Torque	Starting Torque	Stall Torque
				Speed	Current	speed	Current	Torque			
				r/min	A	r/min	A	Nm			
1	25W	43	3	34,3	0,12	30,2	0,27	8,2	50	4,7	10,1
2		61	3	24,1	0,12	21,2	0,27	11,6		6,7	14,3
3		86	3	17,1	0,12	15,0	0,27	16,4		9,4	20,2
4		107	3	13,8	0,12	12,2	0,27	20,3		11,7	24,9
5		132	3	11,2	0,12	9,8	0,27	25,0		14,4	30,8
6		179	3	8,2	0,12	7,2	0,27	34,0		19,6	41,9
7		217	4	6,8	0,12	6,0	0,27	37,0		21,4	45,6
8		*295	4	5,0	0,12	4,4	0,27	50,3		29,0	61,9
9		*324	4	4,6	0,12	4,0	0,27	55,3		31,9	68,1
10		*368	4	4,0	0,12	3,5	0,27	62,8		36,2	77,2
11		*432	4	3,4	0,12	3,0	0,27	73,8		42,6	90,8
12		*520	4	2,8	0,12	2,5	0,27	88,7		51,2	109,1
13		*651	4	2,3	0,12	2,0	0,27	111,1		64,1	136,7
14		*905	4	1,6	0,12	1,4	0,27	154,4		89,1	190,1
1	40W	43	3	34,3	0,15	30,2	0,32	9,7	50	6,0	12,9
2		61	3	24,1	0,15	21,2	0,32	13,9		8,5	18,4
3		86	3	17,1	0,15	15,0	0,32	19,5		12,0	25,8
4		107	3	13,8	0,15	12,2	0,32	24,2		14,8	32,0
5		132	3	11,2	0,15	9,8	0,32	29,9		18,3	39,5
6		179	3	8,2	0,15	7,2	0,32	40,5		24,8	53,6
7		217	4	6,8	0,15	6,0	0,32	44,1		27,1	58,4
8		*295	4	5,0	0,15	4,4	0,32	60,0		36,7	79,3
9		*324	4	4,6	0,15	4,0	0,32	66,0		40,4	87,2
10		*368	4	4,0	0,15	3,5	0,32	74,8		45,9	99,0
11		*432	4	3,4	0,15	3,0	0,32	87,9		53,9	116,3
1	60W	43	3	34,3	0,23	30,2	0,48	15,4	50	10,7	20,7
2		61	3	24,1	0,23	21,2	0,48	21,9		15,2	29,5
3		86	3	17,1	0,23	15,0	0,48	30,9		21,4	41,6
4		107	3	13,8	0,23	12,2	0,48	38,2		26,5	51,4
5		132	3	11,2	0,23	9,8	0,48	47,2		32,7	63,6
6		*179	3	8,2	0,23	7,2	0,48	64,1		44,5	86,3
7		*217	4	6,8	0,23	6,0	0,48	69,8		48,4	94,0
8		*295	4	5,0	0,23	4,4	0,48	94,8		65,8	127,7
1	90W	43	3	34,3	0,30	30,2	0,70	23,3	50	16,7	30,8
2		61	3	24,1	0,30	21,2	0,70	33,1		23,7	43,9
3		86	3	17,1	0,30	15,0	0,70	46,6		33,4	61,7
4		*107	3	13,8	0,30	12,2	0,70	57,7		41,3	76,4
5		*132	3	11,2	0,30	9,8	0,70	71,3		51,0	94,4
6		*179	3	8,2	0,30	7,2	0,70	96,8		69,3	128,2

※ NOTE : ** limited permissible torque.

FB SERIES GEARED MOTOR

■ SPECIFICATION

■ MOTOR

No	Output	Voltage	Frequency	Duty	Rated			Starting Torque	Stall Torque	Capacitor
					Current	speed	Torque			
					A	r/min	Nm			
1	25	230	50	Cont.	0.27	1300	0.26	0.15	0.32	1.5
2	40	230	50		0.32	1300	0.31	0.19	0.41	2.0
3	60	230	50		0.48	1300	0.49	0.34	0.66	3.5
4	90	230	50		0.70	1300	0.74	0.53	0.98	5.0
5	180	230	50		1.29	1300	1.29	0.90	2.00	8.0

■ GEARED MOTOR

No	Motor Design	Ratio	Stage	No Load		Rated			Permissible Torque	Starting Torque	Stall Torque
				Speed	Current	speed	Current	Torque			
				r/min	A	r/min	A	Nm			
1	25W	21	3	70.5	0.12	61.9	0.27	4.0	100	2.3	4.9
2		39	3	37.9	0.12	33.3	0.27	7.4		4.3	9.1
3		49	3	30.2	0.12	26.5	0.27	9.3		5.4	11.4
4		58	3	25.5	0.12	22.4	0.27	11.0		6.3	13.5
5		62	3	23.9	0.12	21.0	0.27	11.8		6.8	14.5
6		74	3	20.0	0.12	17.6	0.27	14.0		8.1	17.3
7		78	3	19.0	0.12	16.7	0.27	14.8		8.5	18.2
8		82	3	18.0	0.12	15.9	0.27	15.5		9.0	19.1
9		93	3	15.9	0.12	14.0	0.27	17.6		10.2	21.7
10		105	3	14.1	0.12	12.4	0.27	19.9		11.5	24.5
11		118	3	12.5	0.12	11.0	0.27	22.4		12.9	27.5
12		131	3	11.3	0.12	9.9	0.27	24.8		14.3	30.6
13		143	3	10.3	0.12	9.1	0.27	27.1		15.6	33.4
14		167	3	8.9	0.12	7.8	0.27	31.7		18.3	39.0
15		216	3	6.9	0.12	6.0	0.27	40.9		23.6	50.4
16		240	3	6.2	0.12	5.4	0.27	45.5		26.2	56.0
17		306	3	4.8	0.12	4.2	0.27	58.0		33.5	71.4
18		40W	21	3	70.5	0.15	61.9	0.32		4.7	100
19	39		3	37.9	0.15	33.3	0.32	8.8	5.4	11.7	
20	49		3	30.2	0.15	26.5	0.32	11.1	6.8	14.6	
21	58		3	25.5	0.15	22.4	0.32	13.1	8.0	17.3	
22	62		3	23.9	0.15	21.0	0.32	14.0	8.6	18.5	
23	74		3	20.0	0.15	17.6	0.32	16.7	10.2	22.1	
24	78		3	19.0	0.15	16.7	0.32	17.6	10.8	23.3	
25	82		3	18.0	0.15	15.9	0.32	18.5	11.4	24.5	
26	93		3	15.9	0.15	14.0	0.32	21.0	12.9	27.8	
27	105		3	14.1	0.15	12.4	0.32	23.7	14.5	31.4	
28	118		3	12.5	0.15	11.0	0.32	26.7	16.3	35.3	
29	131		3	11.3	0.15	9.9	0.32	29.6	18.1	39.2	
30	143		3	10.3	0.15	9.1	0.32	32.3	19.8	42.7	
31	167		3	8.9	0.15	7.8	0.32	37.7	23.1	49.9	
32	216		3	6.9	0.15	6.0	0.32	48.8	29.9	64.6	
33	240		3	6.2	0.15	5.4	0.32	54.2	33.2	71.7	
34	306	3	4.8	0.15	4.2	0.32	69.2	42.4	91.5		

※ NOTE : *** limited permissible torque.

FB SERIES GEARED MOTOR

■ SPECIFICATION

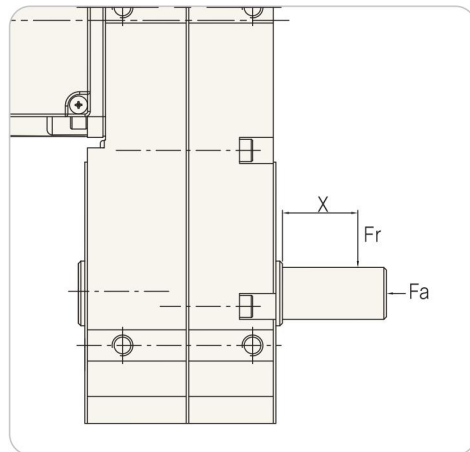
■ GEARED MOTOR

No	Motor Design	Ratio	Stage	No Load		Rated			Permissible Torque	Starting Torque	Stall Torque
				Speed	Current	speed	Current	Torque			
				r/min	A	r/min	A	Nm			
35	60W	21	3	70.5	0.23	61.9	0.48	7.5	100	5.2	10.1
36		39	3	37.9	0.23	33.3	0.48	13.9		9.7	18.8
37		49	3	30.2	0.23	26.5	0.48	17.5		12.1	23.6
38		58	3	25.5	0.23	22.4	0.48	20.7		14.4	27.9
39		62	3	23.9	0.23	21.0	0.48	22.1		15.4	29.8
40		74	3	20.0	0.23	17.6	0.48	26.4		18.3	35.6
41		78	3	19.0	0.23	16.7	0.48	27.9		19.3	37.5
42		82	3	18.0	0.23	15.9	0.48	29.3		20.3	39.5
43		93	3	15.9	0.23	14.0	0.48	33.2		23.1	44.7
44		105	3	14.1	0.23	12.4	0.48	37.5		26.0	50.5
45		118	3	12.5	0.23	11.0	0.48	42.2		29.2	56.8
46		131	3	11.3	0.23	9.9	0.48	46.8		32.5	63.0
47		143	3	10.3	0.23	9.1	0.48	51.1		35.4	68.8
48		167	3	8.9	0.23	7.8	0.48	59.7		41.4	80.4
49		216	3	6.9	0.23	6.0	0.48	77.2		53.5	103.9
50		240	3	6.2	0.23	5.4	0.48	85.7		59.5	115.5
51		*306	3	4.8	0.23	4.2	0.48	109.3		75.8	147.2
52	90W	21	3	70.5	0.30	61.9	0.70	11.3	100	8.1	15.0
53		39	3	37.9	0.30	33.3	0.70	21.0		15.1	27.9
54		49	3	30.2	0.30	26.5	0.70	26.4		18.9	35.0
55		58	3	25.5	0.30	22.4	0.70	31.3		22.4	41.4
56		62	3	23.9	0.30	21.0	0.70	33.4		24.0	44.3
57		74	3	20.0	0.30	17.6	0.70	39.9		28.6	52.9
58		78	3	19.0	0.30	16.7	0.70	42.1		30.1	55.7
59		82	3	18.0	0.30	15.9	0.70	44.2		31.7	58.6
60		93	3	15.9	0.30	14.0	0.70	50.2		35.9	66.4
61		105	3	14.1	0.30	12.4	0.70	56.6		40.6	75.0
62		118	3	12.5	0.30	11.0	0.70	63.7		45.6	84.3
63		131	3	11.3	0.30	9.9	0.70	70.7		50.6	93.6
64		143	3	10.3	0.30	9.1	0.70	77.1		55.3	102.2
65		167	3	8.9	0.30	7.8	0.70	90.1		64.5	119.3
66		*216	3	6.9	0.30	6.0	0.70	116.5		83.5	154.3
67		*240	3	6.2	0.30	5.4	0.70	129.5		92.7	171.5
68		*306	3	4.8	0.30	4.2	0.70	165.1		118.2	218.6
69	180W	21	3	70.5	0.75	61.9	1.29	19.7	100	13.8	30.6
70		39	3	37.9	0.75	33.3	1.29	36.7		25.6	56.9
71		49	3	30.2	0.75	26.5	1.29	46.1		32.1	71.4
72		58	3	25.5	0.75	22.4	1.29	54.5		38.1	84.6
73		62	3	23.9	0.75	21.0	1.29	58.3		40.7	90.4
74		74	3	20.0	0.75	17.6	1.29	69.6		48.6	107.9
75		78	3	19.0	0.75	16.7	1.29	73.4		51.2	113.7
76		82	3	18.0	0.75	15.9	1.29	77.1		53.8	119.6
77		93	3	15.9	0.75	14.0	1.29	87.5		61.0	135.6
78		105	3	14.1	0.75	12.4	1.29	98.7		68.9	153.1
79		*118	3	12.5	0.75	11.0	1.29	111.0		77.4	172.0
80		*131	3	11.3	0.75	9.9	1.29	123.2		85.9	191.0
81		*143	3	10.3	0.75	9.1	1.29	134.5		93.8	208.5
82		*167	3	8.9	0.75	7.8	1.29	157.0		109.6	243.5
83		*216	3	6.9	0.75	6.0	1.29	203.1		141.7	314.9
84		*240	3	6.2	0.75	5.4	1.29	225.7		157.5	349.9
85		*306	3	4.8	0.75	4.2	1.29	287.8		200.8	446.1

※ NOTE : ** limited permissible torque.

FA / FB SERIES

■ PERMISSIBLE THE RADIAL FORCE (Fr) & AXIAL FORCE (Fa)



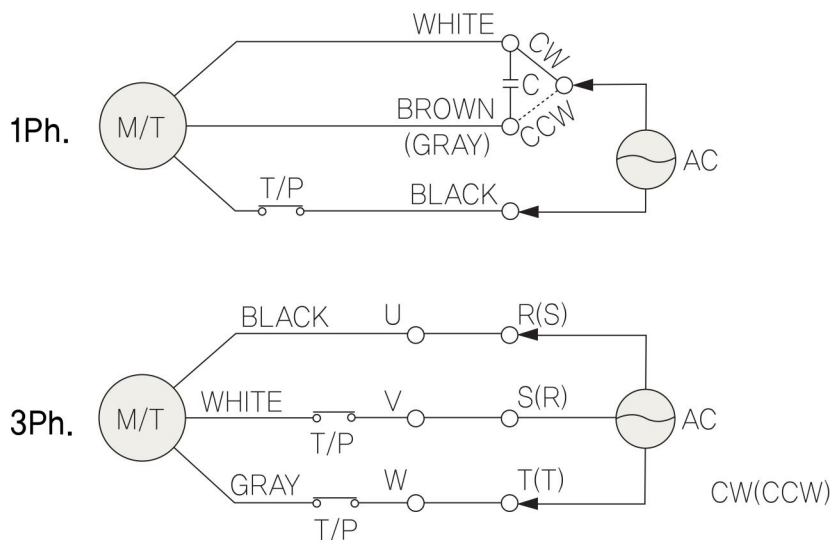
FA : Fr = 2,000N(at X = 20mm)
 Fa = 500N
 FB : Fr = 4,000N(at X = 20mm)
 Fa = 1000N

In addition to permissible radial and axial forces, if only axial forces and simultaneous radial and axial forces are present, please consult with SPG

■ CONNECTION DIAGRAM (MOTOR ONLY)

POWER : 230V 50Hz 1Ph. 200-220V 50/60Hz 3Ph.

LEADS : 1Ph. Type 'X' - BLACK, WHITE, BROWN
 1Ph. Type 'B' - BLACK, WHITE, GRAY
 3Ph. Type 'T' - BLACK, WHITE, GRAY



■ ROTATE DIRECTION & OPTION

■ Rotate direction [Geared Motor] (VIEW 'Z')

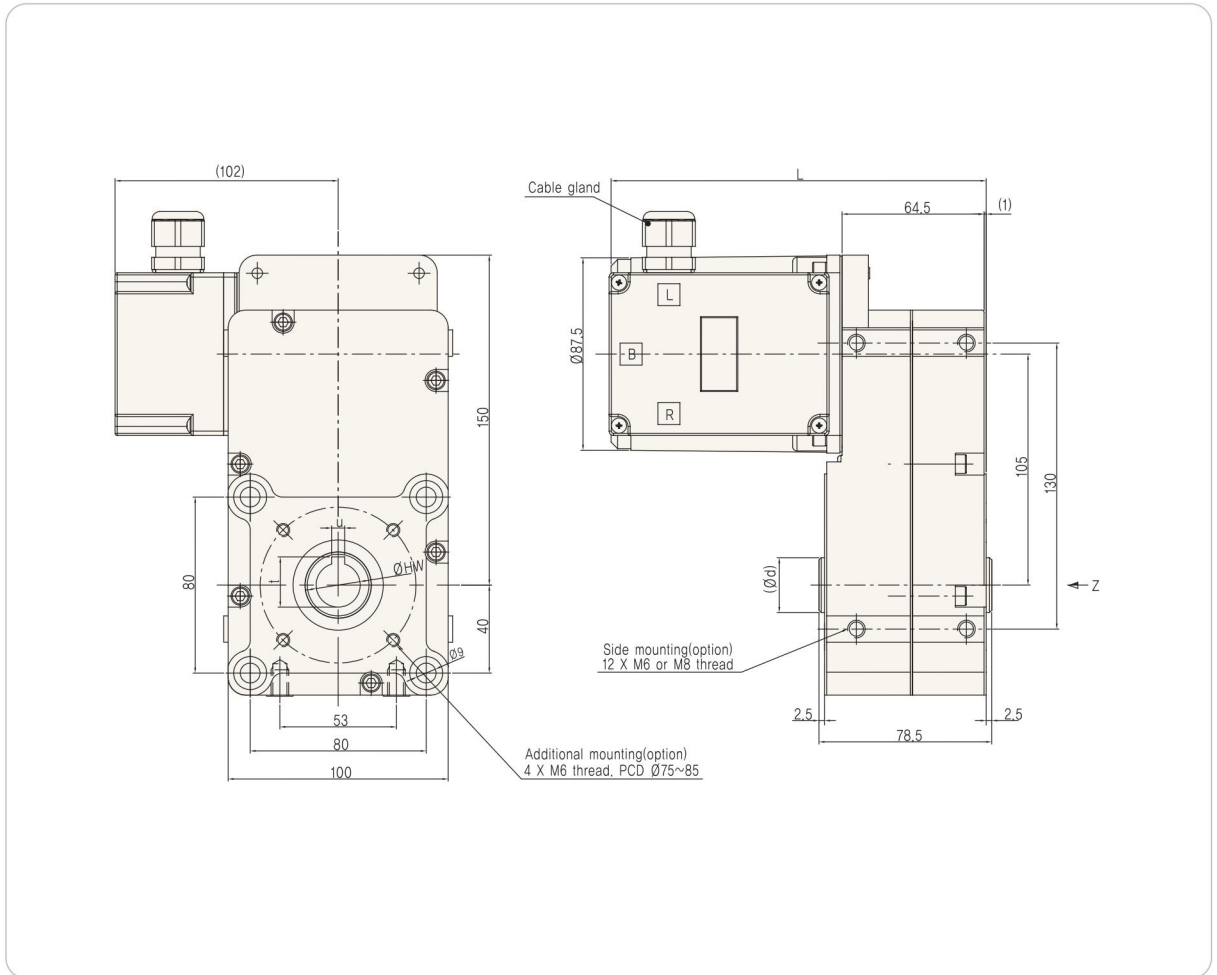
- Gear's stage even : Motor CW→Gear Head CW
- Gear's stage odd : Motor CW→Gear Head CCW

■ Special Option

- Possible to pick out the Thermal Protector (T/P) lead wires separately.
- Hall sensor or Tacho generator mounted

■ DIMENSIONS

■ FAH17(20)-□-IT25(40)XL(B, R)



Output(W)	Weight(kg)	$\varnothing HW$	t	u	$\varnothing d$	L
25/40	5.3	17(20)	19.3(22.8)	5(6)	25(30)	170.5

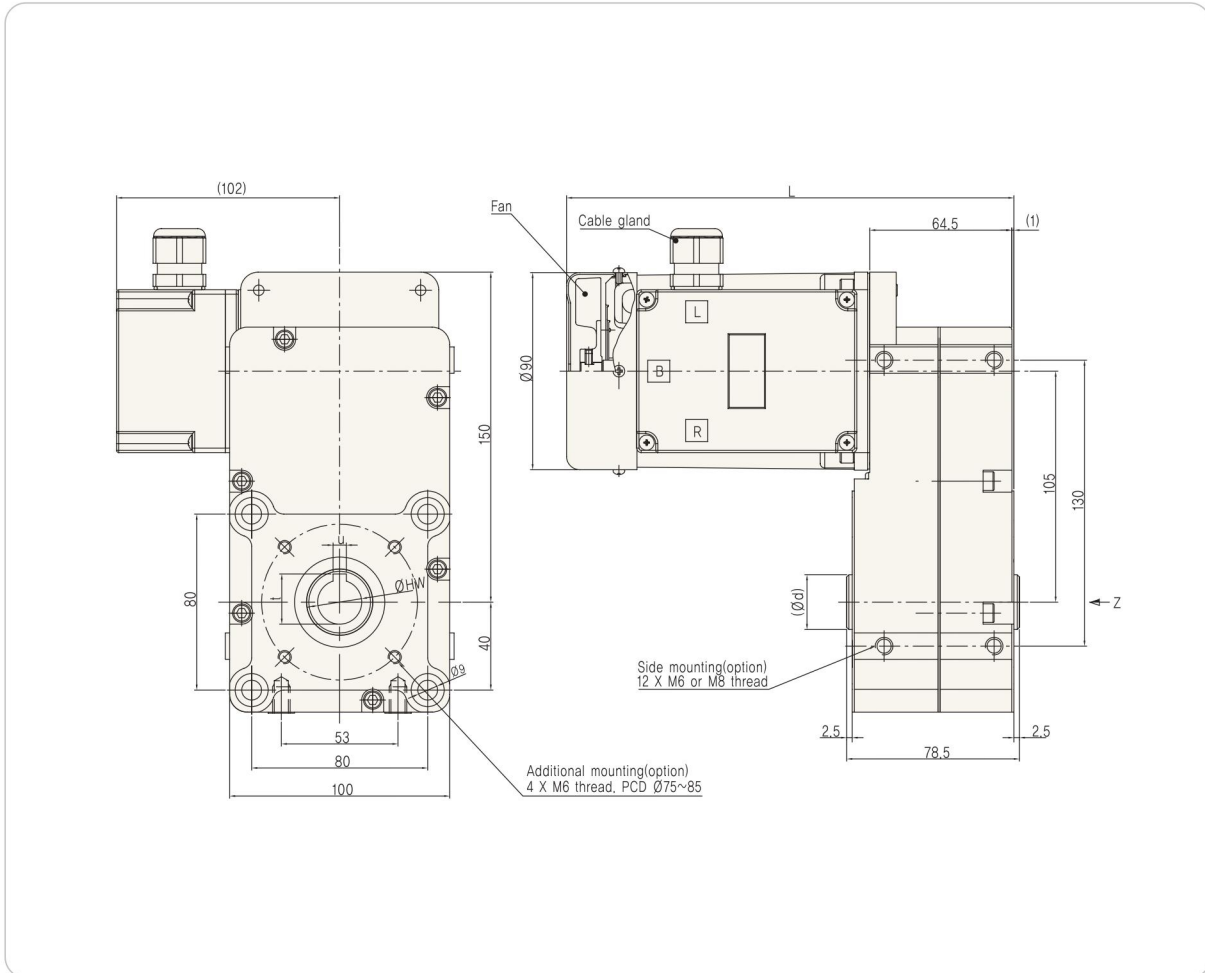
※ NOTE

- () are the dimensions at $\varnothing HW 20$.
- Cable gland position change is possible

FA SERIES

■ DIMENSIONS

■ FAH17(20)-□-IT60(90)XL(B, R)



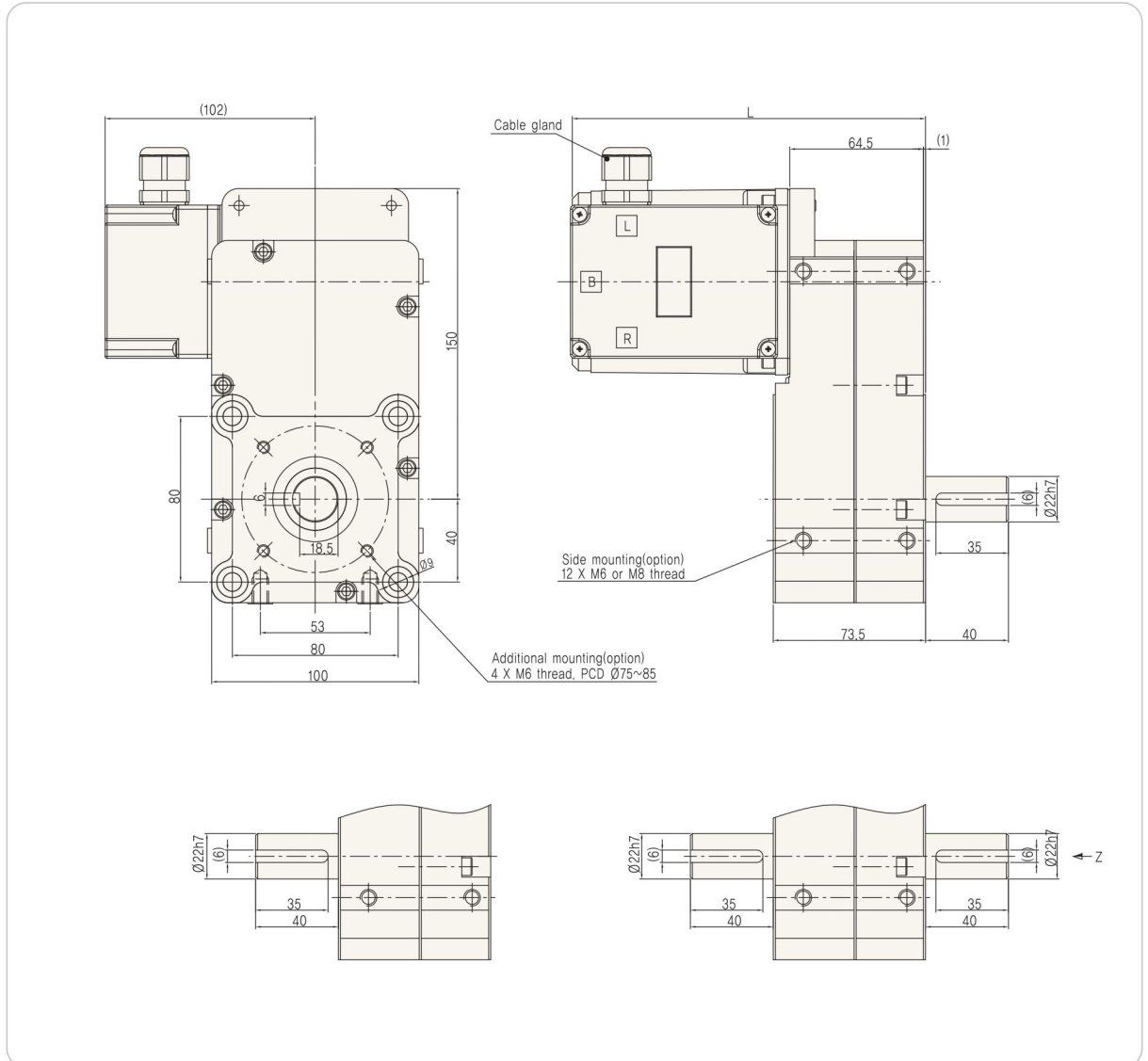
Output(W)	Weight(kg)	ØHW	t	u	Ød	L
60	5.5	17(20)	19.3(22.8)	5(6)	25(30)	188.3
90	5.8					203.3

※ NOTE

- () are the dimensions at ØHW 20.
- Cable gland position change is possible

■ DIMENSIONS

■ FAR(L, B)22-□-IT□XL(B, R)



Output(W)	L
25/40	170.5
60	188.3
90	203.3

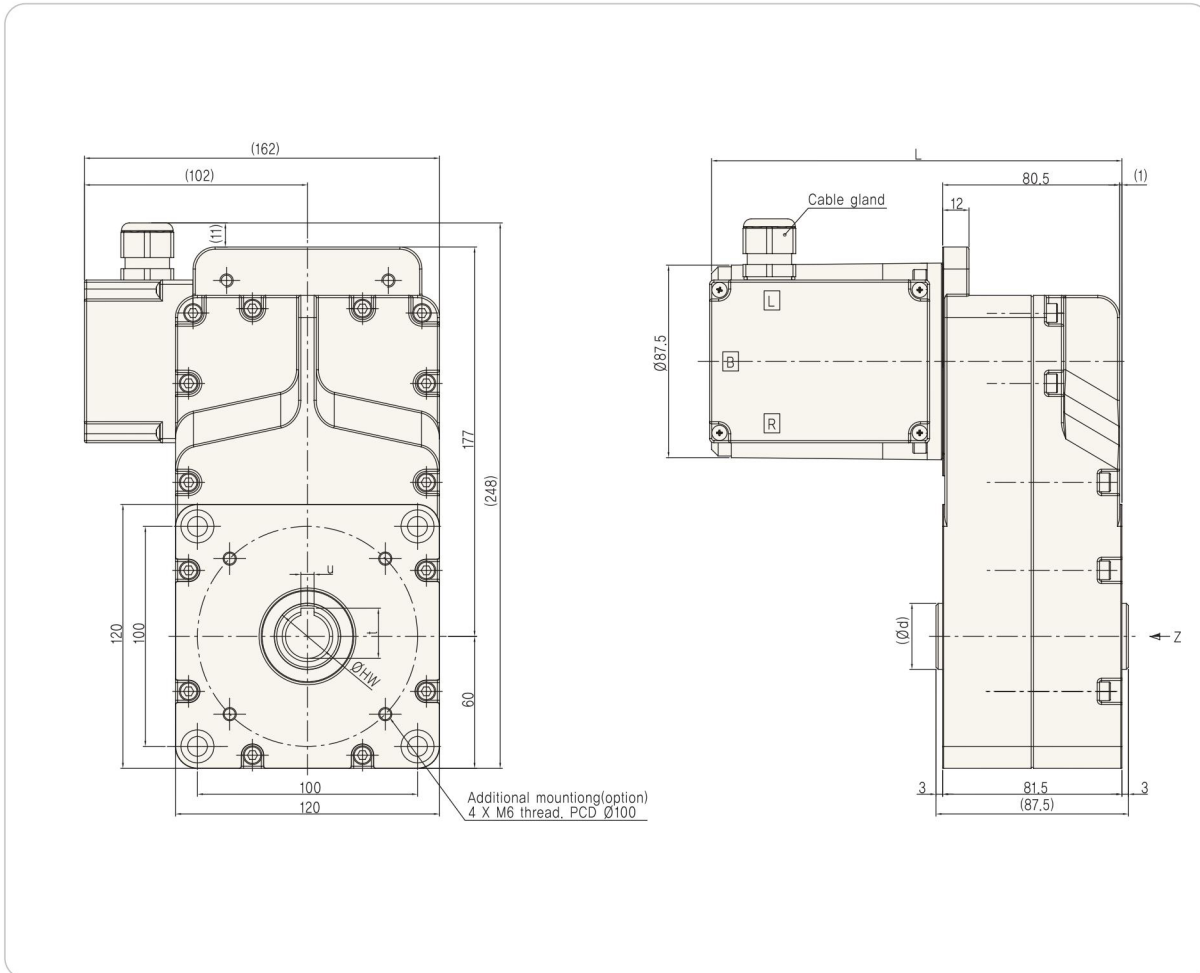
※ NOTE

- Cable gland position change is possible

FB SERIES

■ DIMENSIONS

■ FBH20-□-IT25(40)XL(B, R)



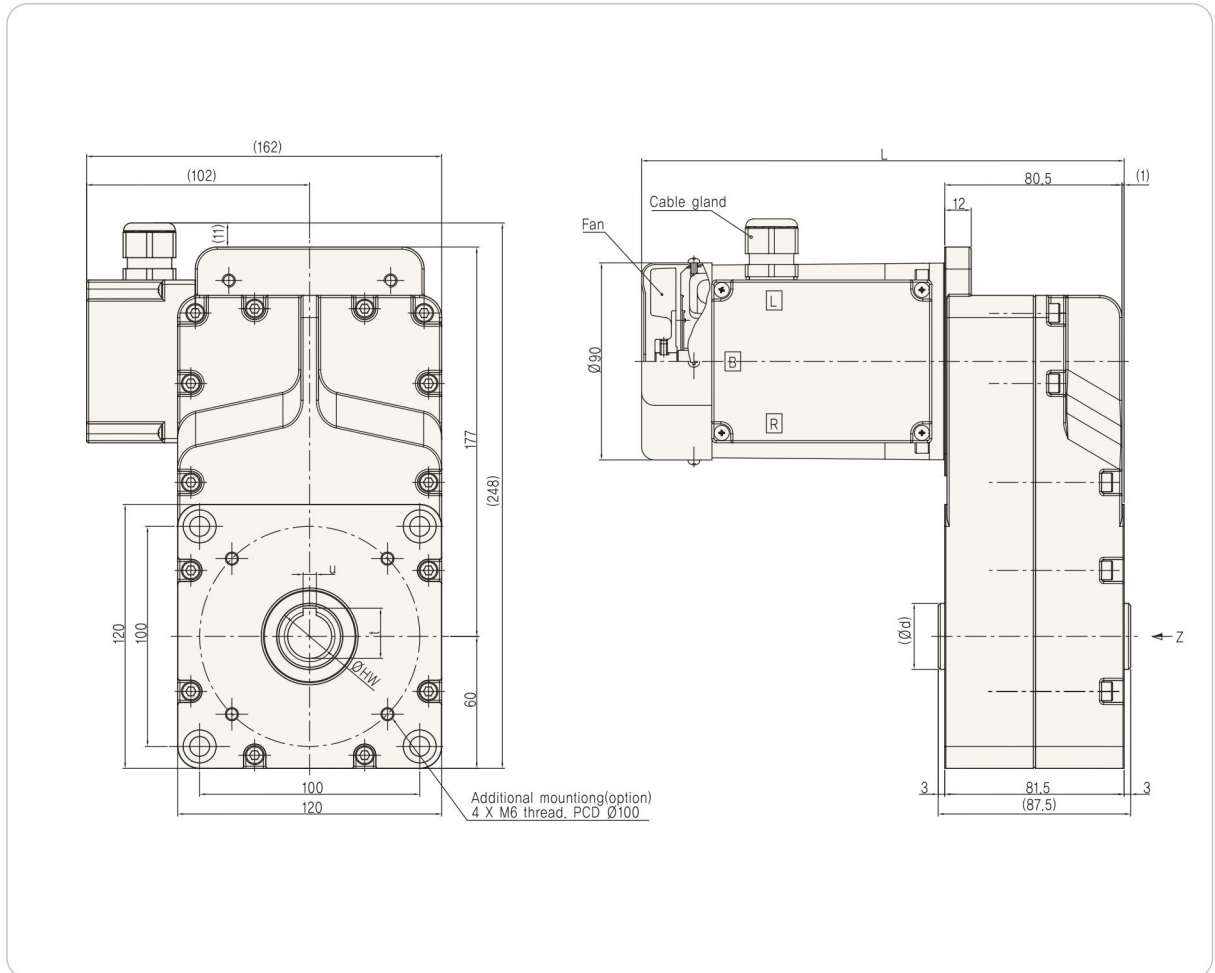
Output(W)	Weight(kg)	ØHW	t	u	Ød	L
25/40	7	20	22.8	6	30	186.5

※ NOTE

- Cable gland position change is possible

■ DIMENSIONS

■ FBH20-□-IT60(90)XL(B, R)



Output(W)	Weight(kg)	ØHW	t	u	Ød	L
60	7.2	20	22.8	6	30	204.3
90	7.6					219.3

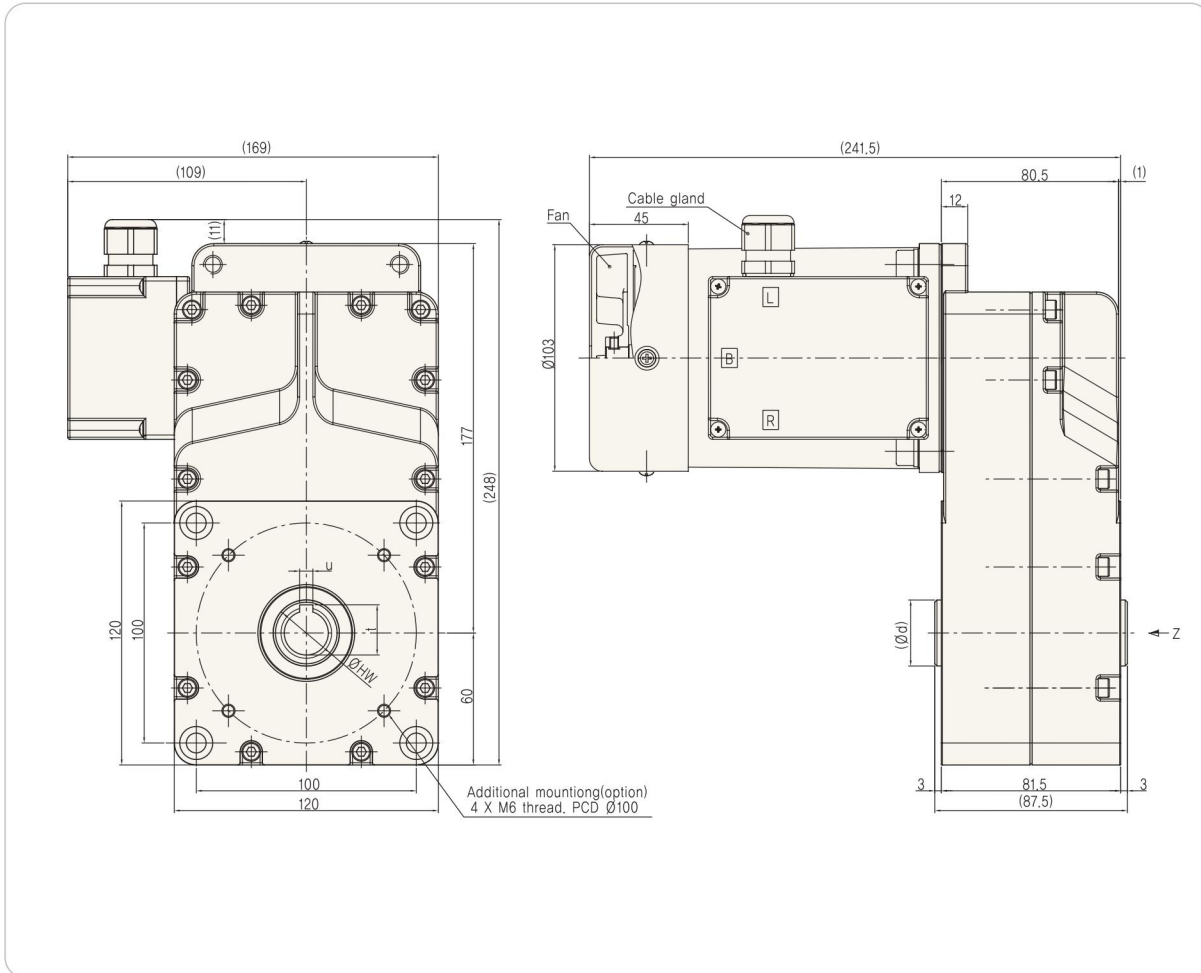
※ NOTE

- Cable gland position change is possible

FB SERIES

■ DIMENSIONS

■ FBH20-□-IT180XL(B, R)



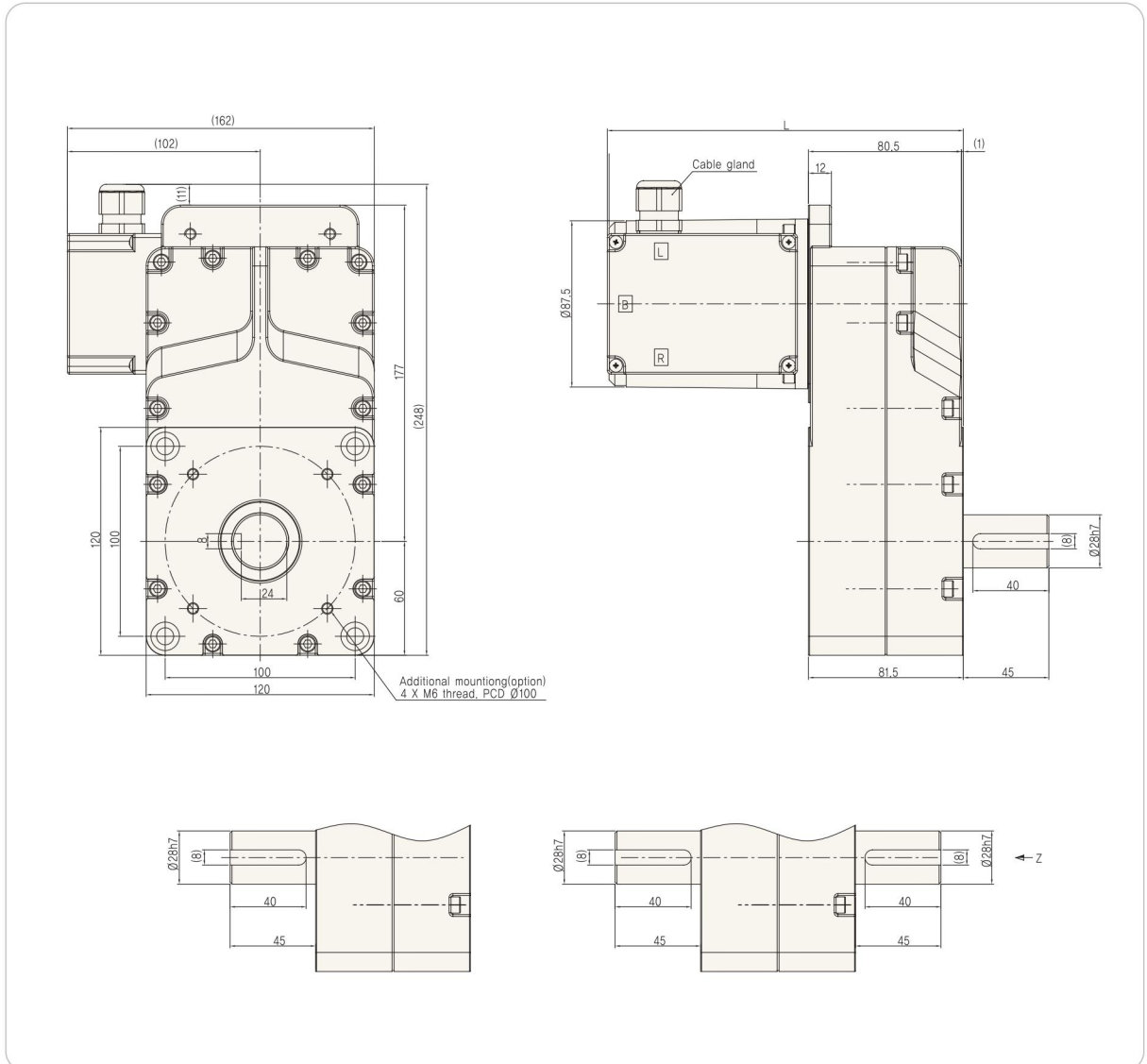
Output(W)	Weight(kg)	$\varnothing HW$	t	u	$\varnothing d$	L
120/150/180	9.2	20	22.8	6	30	241.5

※ NOTE

- Cable gland position change is possible

■ DIMENSIONS

■ FBR(L, B)28-□-IT□XL(B, R)



Output(W)	L
25/40	170.5
60	188.3
90	203.3
120/150/180	241.5

※ NOTE

- Cable gland position change is possible