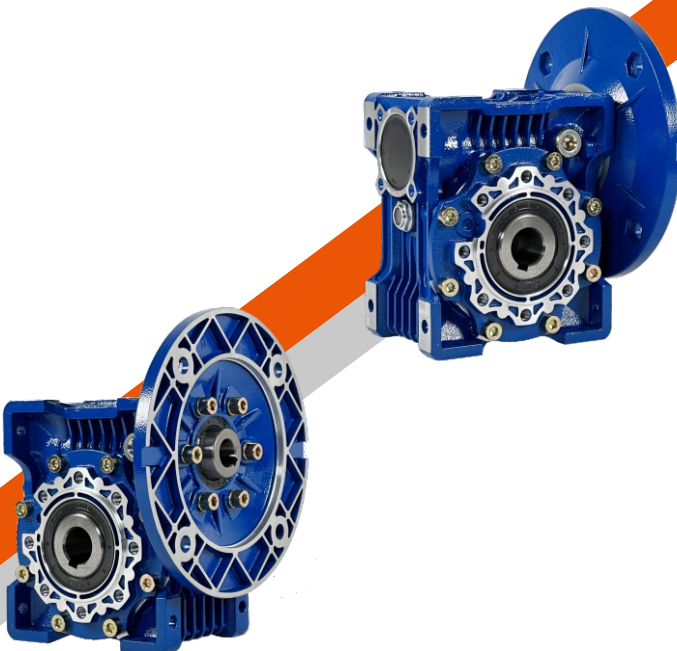




UNLEASHING POWER



UNLOCKING VALUE



Series PBWR Worm Gear Reducers

GEARED MOTORS • GEARBOXES • GEAR ASSEMBLIES • DRIVE SOLUTIONS



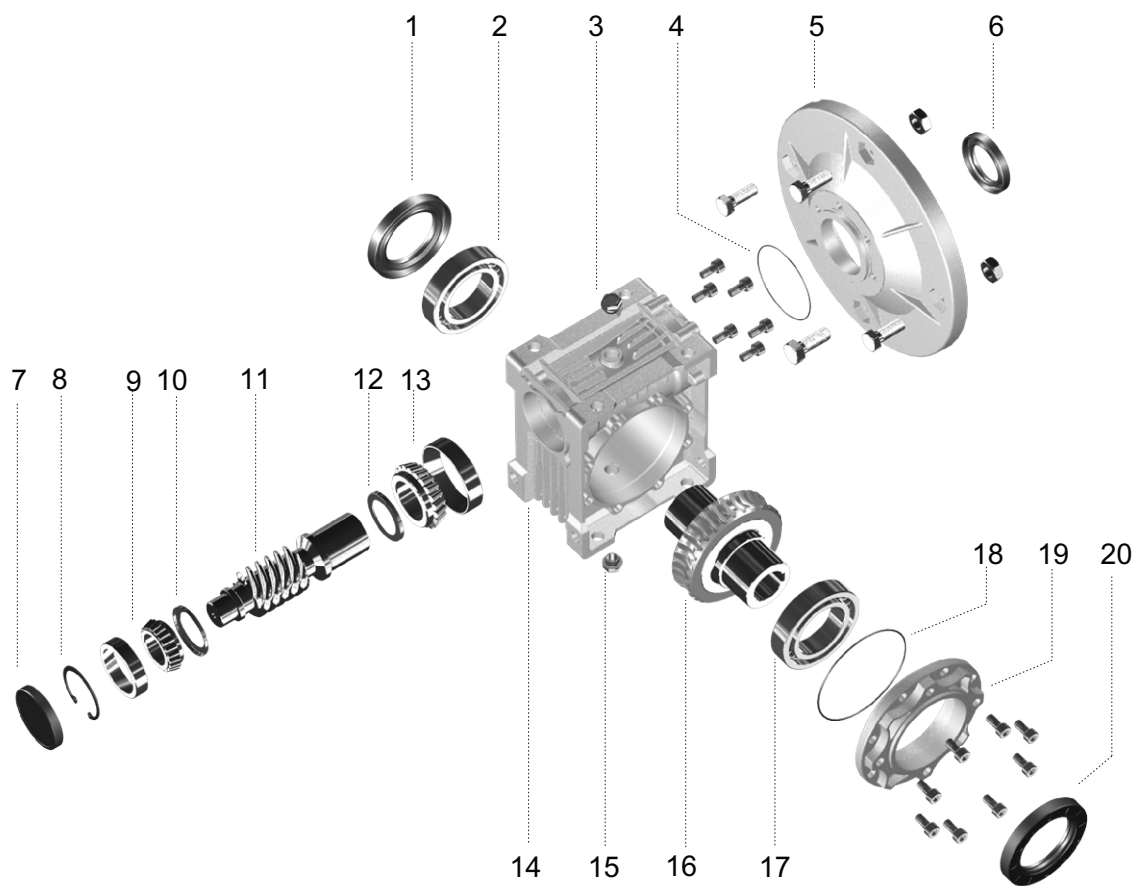
PBWR Series worm reducer

1. Introduction	01
2. Unit Designation - Single Stage Worm Reducer	02
3. Gearbox with accessories options	03
4. Unit Designation - Double Stage Worm Reducer	04
5. Mounting Positions & Lubrication Details of Reducer	06
6. Type of Load and Service Factor of Reducer	07
7. Ratings - Single stage worm gear reducer	08
8. Ratings - Double stage worm gear reducer	12
9. GAD - Single stage worm gear reducer	15
10. GAD - Double stage worm gear reducer	25
11. Details of Motor and Reducer Accessories	29
12. The importance of Using and Maintaining Reducer	30
13. Performance of the PC Series Gear Reducer	31
14. Unit Designation - PC Series Gear Reducer	33
15. Mounting Position of the PC Series Gear Reducer	34
16. GAD - PC Series Gear Reducer	35
17. Mounting Position of PC Series + PBWR Reducer	37
18. Unit Designation PC Series + PBWR Reducer	38
19. GAD - PC Series + PBWR Reducer	40
20. Ratings - PC Series + PBWR Reducer	41
21. Unit Identification - Name Plate	45
22. Notes	46

The advantages of worm reducer

1. High quality Aluminum alloy ,appearance elegant, efficient thermally, high load carrying capacity.
2. Installed in multi-surfaces,hollow output shaft, various type of input and output end accessories.
3. we can mount other transmission machinery easily.
4. Small size, compact construction, light weight, robust design and save place for mounting.
5. Run steadily and low noise.
6. High reliability and high efficiency.

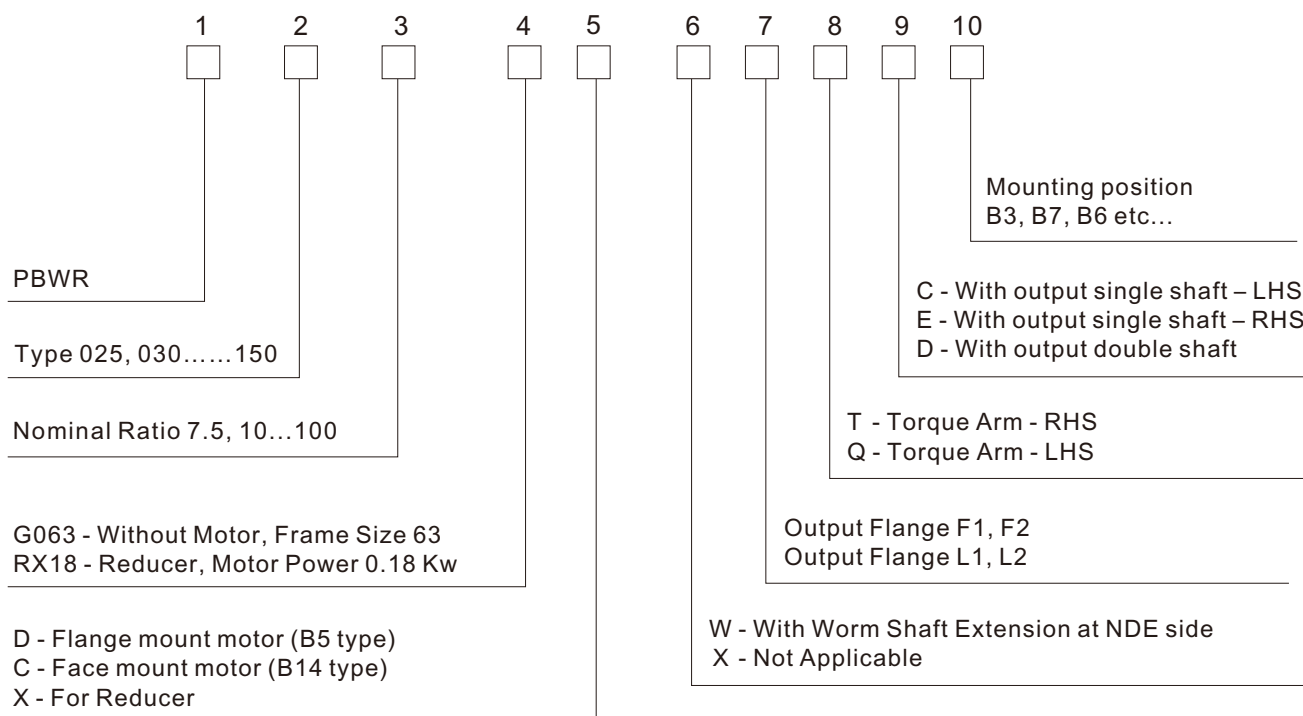
Basic structure



- | | | | |
|---------------------|---------------------|---------------------|-----------------------|
| 1. Oil seal | 6. Oil seal | 11. Worm | 16. Gear |
| 2. Bearing | 7. Seal and cover | 12. Oil baffle disc | 17. Bearing |
| 3. Breather vent | 8. Circlip | 13. Bearing | 18. O-type seal ring |
| 4. O-type seal ring | 9. Bearing | 14. Housing | 19. Bearing and cover |
| 5. Input flange | 10. Oil baffle disc | 15. Plug screw | 20. Oil seal |



UNIT DESIGNATION SINGLE STAGE WORM REDUCER



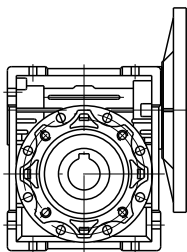
Kindly Note that digits 7 to 9 are omitted when not required.

Explanation of the Gearbox Nomenclature :

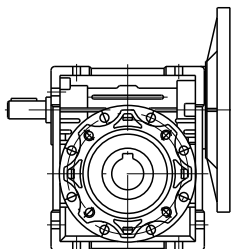
PBWR	With input flange (using with electric motor)
25-30-40-50-63-75-90-110-130-150	Type(centre distance)(SIZE 25 to be provide on request)
7.5-10-15-20-25-30-40-50-60-80-100	Nominal ratio
G063	Without Motor, Frame Size 63
RX18	Reducer, Motor Power 0.18 Kw
F.....(1-2).L.....(1-2)	Output flange and mounting position (Right Side / Left Side)
T	T - Torque Arm - RHS,Q - Torque Arm - LHS
W	With Worm Shaft Extn at NDE side
C,E	With output single shaft – LHS,With output single shaft – RHS
D	With output double shaft
1 TO 6	Mounting - 1(B3), 2(B7), 3(B6), 4(B8), 5(V5), 6(V6).

GEARBOX WITH ACCESSORIES OPTIONS

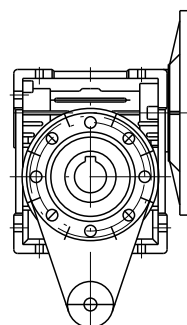
PBWR.....



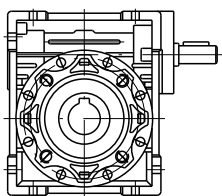
PBWR.....W



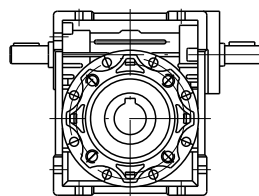
.....T



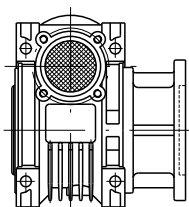
PBWR...R....



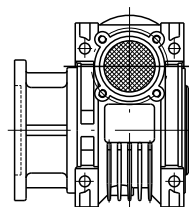
PBWR...R...W..



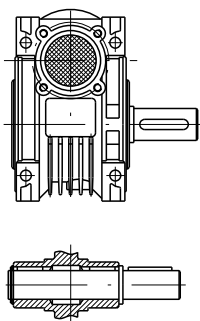
.....F1,L1



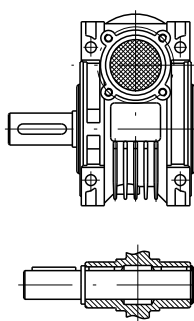
.....F2,L2



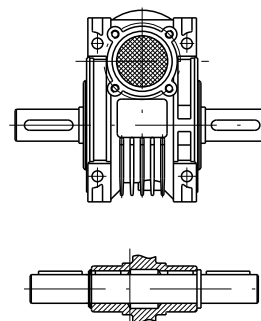
.....E



.....C

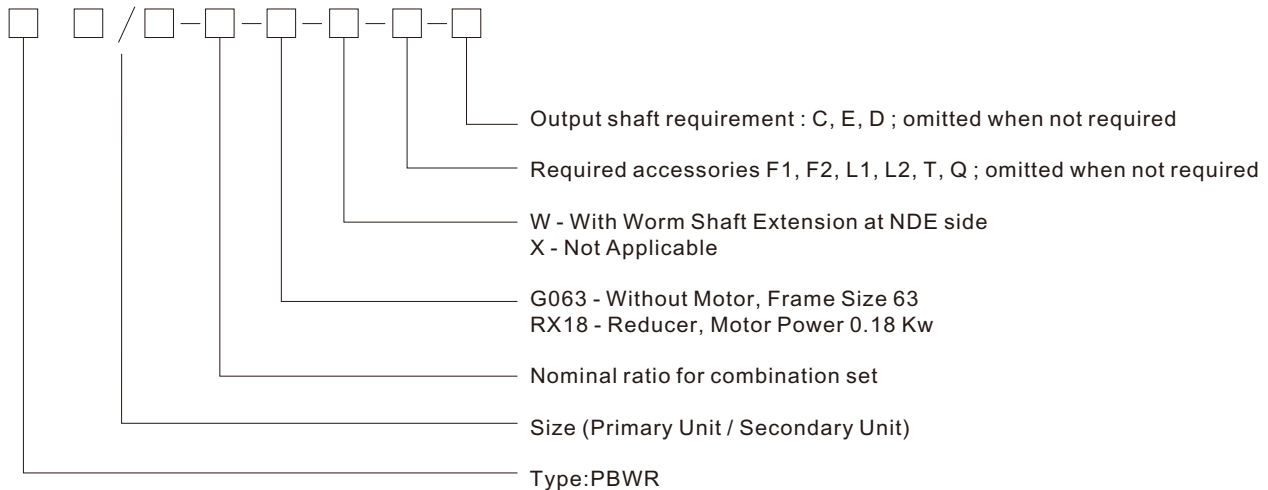


.....D

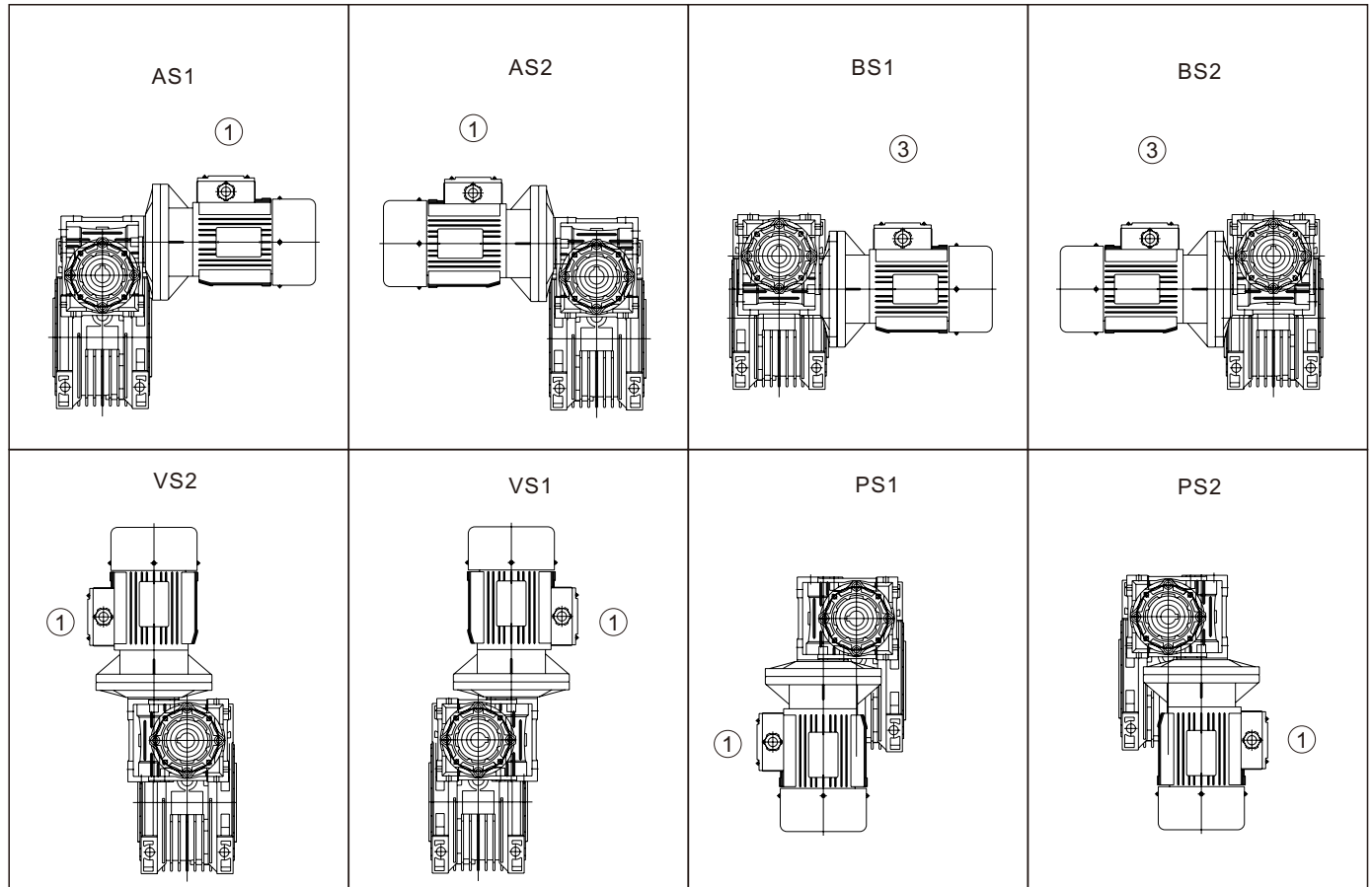


UNIT DESIGNATION DOUBLE STAGE WORM REDUCER

Indication for combination PBWR series worm speed reducer



Different type of Mounting Position



**EXPLANATION OF
THE GEARBOX NOMENCLATURE****Examples :**

1.PBWR-040-030-GX18-F1-D

Means:

Gearbox Type : PBWR

Gearbox Size : 40

Nominal Ratio : 30

Without Electric Motor, 0.18 Kw : GX18

Output Flange : Type F

Right Side : 1

Double Output Shaft : D

2.PBWR-110-080-RX55-W-L2-Q

Means:

Gearbox Type : PBWR

Gearbox Size : 110

Nominal Ratio : 80

Reducer, Motor Power, 0.55 Kw : RX55

With Shaft Extension at Non Drive End : W

Output Flange : Type L

Left Side : 2

Torque Arm Left Side : Q

3.PBWR 40/75-300-GX37-X

Means:

Gearbox Type : PBWR

Gearbox Size : 40/75

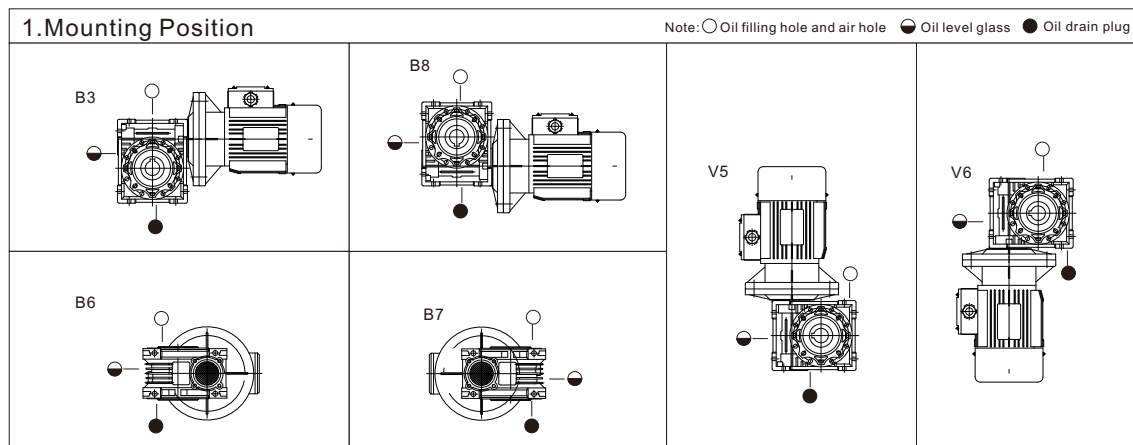
Nominal Ratio : 300

Without Electric Motor, 0.37 Kw : GX37

With Shaft Extension at Non Drive End : X

MOUNTING POSITION & LUBRICANT DETAILS OF REDUCER

Mounting Position of the Single Stage Worm Reducer and corresponding Oil Filling Amount and Lubricant Types



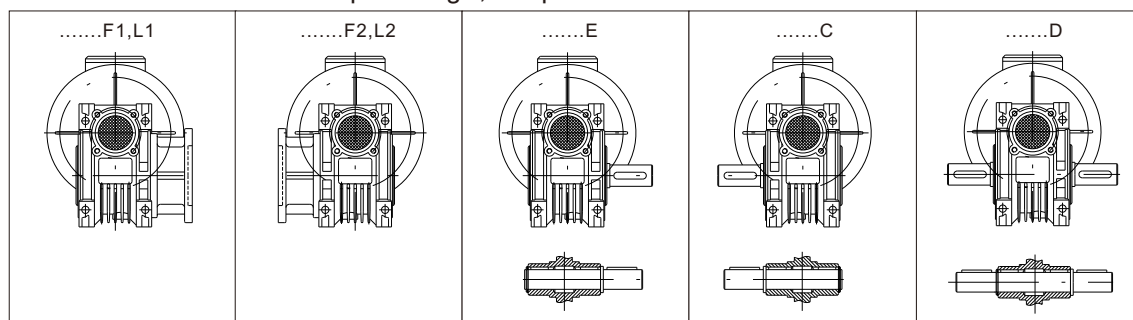
2. Oil quantities against different mounting positions

Gearbox Size		PBWR25	PBWR30	PBWR40	PBWR50	PBWR63	PBWR75	PBWR90	PBWR110	PBWR130	PBWR150
Lubricating oil (Liter)	B3	0.02	0.04	0.08	0.15	0.3	0.55	1.0	3.0	4.5	7.0
	B6, B7								2.5	3.5	5.4
	B8								2.2	3.3	5.1
	V5								3.0	4.5	7.0
	V6								2.2	3.3	5.1

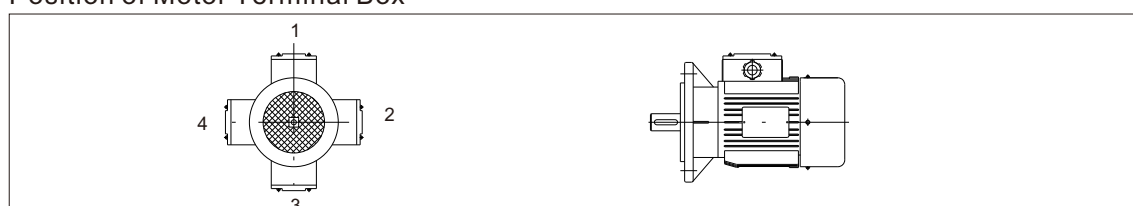
3. Lubricating oil

Gearbox Size		PBWR25, PBWR30, PBWR40 PBWR50, PBWR63, PBWR75	PBWR90, PBWR110, PBWR130, PBWR150
	Lubricant	Synthetic Oil	Synthetic Oil
	Ambient Temperature	-25°C ~ +50°C	-25°C ~ +50°C
ISO		VG320	VG320
Used in International	AGIP	TELUM VSF320	TELUM VSF320
	SHELL	TIVELA S320	TIVELA S320
	ESSO	S220	SPARTAN EP 460
	MOBIL	GLYGOYLE 30	MOBIL GEAR 634
	CASTROL	ALPHASYN PG 320	ALPHA MAX 460
	BP	ENERGOL SG-XP 320	ENETGOL SG-XP 460

Installation Position of Output flange, Output Shaft of Gearboxes



Position of Motor Terminal Box



TYPE OF LOAD AND SERVICE FACTOR OF REDUCER

Load carrying capacity of worm gearbox:

Reference circle of worm slide(m/s)	Lubricant Grade
≤ 2.2	ISO VG - 460
$> 2.5-5$	ISO VG - 320
$> 5-12$	ISO VG - 220

Selection criteria to find out service factor of worm gearbox :

(Table 2)

NO of starts per hour <10			
Nature of load generated by driven machine	Hours running per day		
	< 2	2~8	8~16
Uni form	0.8	1	1.25
Moderate shock	1	1.25	1.5
heavy shock	1.25	1.5	1.75

(Table 3)

NO of starts per hour >10			
Nature of load generates by driven machine	Hours running per day		
	< 2	2~8	8~24
Uniform	1	1.25	1.75
Moderate shock	1.5	1.75	2
Heavy shock	1.75	2	2.25

RATINGS
SINGLE STAGE WORM GEAR REDUCER

Selection Parameter of Single Stage Worm Gear Reducer (Input Speed 1400 rpm, 4 Pole)

Output speed (r/min)	Output torque (N.m)	Service Factor	Ratio (i)	Type	Output speed (r/min)	Output torque (N.m)	Service Factor	Ratio (i)	Type	
0.06kW					0.12kW					
186.7	2.6	4.2	7.5	PBWR25	46.7	17.2	2.6	30	PBWR40	
140	3.4	3.5	10		35	21	1.9	40		
93.3	4.9	2.5	15		28	25	1.5	50		
70	6.1	2.0	20		23.3	28	1.3	60		
46.7	8.2	1.6	30		17.5	34	1.0	80		
35	10	1.3	40		14	38	0.8	100		
28	12	0.9	50							
23.3	14	0.7	60							
186.7	2.6	6.9	7.5	PBWR30	23.3	29	2.3	60	PBWR50	
140	3.4	5.4	10		17.5	35	1.9	80		
93.3	4.7	3.8	15		14	40	1.4	100		
70	6	3.0	20		0.18kW					PBWR30
56	7	3.0	25		186.7	7.8	2.3	7.5		
46.7	8	2.5	30		140	10	1.8	10		
35	9.7	1.9	40		93.3	14	1.3	15		
28	11	1.5	50		70	18	1.0	20		
23.3	13	1.3	60	56	21	1.0	25			
17.5	14	0.9	80	46.7	24	0.8	30			
0.09kW					70	19	2.0	20	PBWR40	
186.7	3.9	2.8	7.5	PBWR25	56	23	1.7	25		
140	5.1	2.4	10		46.7	26	1.7	30		
93.3	7.3	1.6	15		35	32	1.3	40		
70	9.2	1.3	20		28	38	1.0	50		
46.7	12	1.1	30		23.3	43	0.8	60		
35	15	0.9	40							
186.7	3.9	4.6	7.5	PBWR30	35	32	2.3	40	PBWR50	
140	5	3.6	10		28	39	1.9	50		
93.3	7.1	2.5	15		23.3	43	1.6	60		
70	9	2.0	20		17.5	52	1.2	80		
56	10	2.0	25		14	60	0.9	100		
46.7	12	1.7	30		0.25kW					PBWR40
35	14	1.2	40		186.7	11	3.6	7.5		
28	17	1.0	50		140	14	2.8	10		
23.3	19	0.9	60		93.3	21	1.9	15		
				70	27	1.5	20			
28	19	2.0	50	PBWR40	56	32	1.2	25		
23.3	21	1.7	60		46.7	36	1.3	30		
17.5	26	1.3	80		35	44	0.9	40		
14	29	1.0	100		28	37	0.8	50		
0.12kW										
186.7	5.2	3.4	7.5		PBWR30	70	26	2.7	20	PBWR50
140	6.7	2.7	10			56	32	2.2	25	
93.3	9.5	1.9	15			46.7	37	2.3	30	
70	12	1.5	20			35	46	1.7	40	
56	14	1.5	25	28		54	1.4	50		
46.7	16	1.3	30	23.3		60	1.1	60		
35	19	0.9	40	17.5		72	0.9	80		
28	23	0.8	50							

RATINGS
SINGLE STAGE WORM GEAR REDUCER

Selection Parameter of Single Stage Worm Gear Reducer (Input Speed 1400 rpm, 4 Pole)

Output speed (r/min)	Output torque (N.m)	Service Factor	Ratio (i)	Type	Output speed (r/min)	Output torque (N.m)	Service Factor	Ratio (i)	Type	
0.25kW					0.75kW					
28	56	2.4	50	PBWR63	93.3	63	1.2	15	PBWR50	
23.3	63	2.0	60		70	81	0.9	20		
17.5	78	1.6	80		93.3	63	2.2	15	PBWR63	
14	87	1.4	100		70	83	1.6	20		
0.37kW					56	100	1.3	25		PBWR75
186.7	16	2.4	7.5	PBWR40	46.7	114	1.4	30		
140	21	1.9	10		35	143	1.0	40		
93.3	31	1.3	15		56	102	2.0	25		
70	39	1.0	20		46.7	117	2.0	30		
56	47	0.8	25	PBWR50	35	147	1.5	40	PBWR90	
46.7	53	0.8	30		28	177	1.2	50		
140	21	3.3	10		23.3	200	1.0	60		
93.3	31	2.4	15		28	184	1.8	50		
70	40	1.8	20	PBWR63	23.3	212	1.5	60	PBWR63	
56	48	1.5	25		17.5	258	1.1	80		
46.7	55	1.5	30		14	302	0.9	100		
35	68	1.1	40		1.1kW					
28	80	0.9	50	PBWR63	186.7	49	2.6	7.5	PBWR63	
23.3	89	0.8	60		140	65	2.0	10		
35	70	2.1	40		93.3	93	1.5	15		
28	83	1.6	50		70	122	1.1	20	PBWR75	
23.3	94	1.4	60	56	146	0.9	25			
17.5	115	1.1	80	46.7	167	1.0	30			
14	129	0.9	100	35	165	0.9	40			
0.55kW					93.3	95	2.1	15	PBWR75	
186.7	25	2.9	7.5	PBWR50	70	123	1.7	20		
140	32	2.2	10		56	150	1.3	25		
93.3	46	1.6	15		46.7	171	1.3	30	PBWR90	
70	59	1.2	20	35	216	1.0	40			
56	71	1.0	25	28	264	0.9	50			
46.7	81	1.0	30	23.3	223	0.8	60			
35	80	0.9	40	PBWR63	35	225	1.6	40	PBWR90	
70	60	2.2	20		28	270	1.3	50		
56	73	1.8	25		23.3	311	1.0	60		
46.7	83	1.9	30		17.5	328	0.9	80	PBWR110	
35	105	1.4	40	PBWR75	28	281	2.3	50		
28	124	1.1	50		23.3	324	1.9	60		
23.3	140	0.9	60		17.5	402	1.3	80		
17.5	180	1.1	80	PBWR90	14	473	1.0	100		
14	206	0.9	100		1.5kW					
17.5	189	1.5	80		186.7	67	1.9	7.5	PBWR63	
14	221	1.2	100		140	89	1.5	10		
				93.3	127	1.1	15			
					70	166	0.8	20		

RATINGS SINGLE STAGE WORM GEAR REDUCER

Selection Parameter of Single Stage Worm Gear Reducer (Input Speed 1400 rpm, 4 Pole)

Output speed (r/min)	Output torque (N.m)	Service Factor	Ratio (i)	Type	Output speed (r/min)	Output torque (N.m)	Service Factor	Ratio (i)	Type						
1.5kW					3kW										
140	90	2.2	10	PBWR75	186.7	136	1.4	7.5	PBWR75						
93.3	130	1.5	15		140	180	1.1	10							
70	168	1.3	20		93.3	261	0.8	15							
56	205	1.0	25		186.7	138	2.1	7.5	PBWR90						
46.7	233	1.0	30		140	182	1.7	10							
70	171	2.1	20	PBWR90	93.3	264	1.4	15							
56	210	1.6	25		70	344	1.0	20							
46.7	239	1.7	30		56	420	0.8	25							
35	307	1.2	40		46.7	479	0.9	30							
28	368	0.9	50		93.3	264	2.5	15	PBWR110						
23.3	424	0.8	60	PBWR110	70	348	1.9	20							
35	319	2.2	40		56	430	1.6	25							
28	384	1.7	50		46.7	485	1.5	30							
23.3	442	1.4	60		35	638	1.1	40							
17.5	548	0.9	80		28	767	0.9	50	56	429	2.2	25	PBWR130		
2.2kW					46.7	491	2.1	30	46.7	491	2.1	30			
186.7	100	1.8	7.5	PBWR75	35	638	1.6	40	35	638	1.6	40			
140	132	1.5	10		28	767	1.3	50	28	767	1.3	50			
93.3	191	1.0	15		23.3	884	1.0	60	23.3	884	1.0	60			
70	240	0.9	20		17.5	1113	0.8	80	17.5	1113	0.8	80			
46.7	269	0.8	30		28	777	1.8	50	28	777	1.8	50			
186.7	101	2.9	7.5	PBWR90	23.3	896	1.4	60	23.3	896	1.4	60	PBWR150		
140	134	2.3	10		17.5	1113	1.0	80	17.5	1113	1.0	80			
93.3	194	1.9	15		14	1310	0.8	100	14	1310	0.8	100			
70	252	1.4	20		3.7kW					186.7	168	1.1		7.5	PBWR75
56	308	1.1	25		140	222	0.9	10	140	222	0.9	10			
46.7	351	1.2	30	PBWR110	186.7	170	1.7	7.5	186.7	170	1.7	7.5	PBWR90		
35	433	1.0	40		140	224	1.4	10	140	224	1.4	10			
28	393	0.9	50		93.3	326	1.1	15	93.3	326	1.1	15			
70	255	2.5	20		70	424	0.9	20	70	424	0.9	20			
56	315	2.2	25		140	224	2.7	10	140	224	2.7	10		PBWR110	
46.7	356	2.0	30	93.3	326	2.1	15	93.3	326	2.1	15				
35	468	1.5	40	70	429	1.5	20	70	429	1.5	20				
28	563	1.2	50	56	530	1.3	25	56	530	1.3	25				
23.3	648	1.0	60	46.7	598	1.2	30	46.7	598	1.2	30	PBWR130			
35	468	2.2	40	PBWR130	56	530	1.7	25	56	530	1.7		25		
28	563	1.7	50		46.7	606	1.7	30	46.7	606	1.7		30		
23.3	648	1.4	60		PBWR150	35	787	1.3	40	35	787		1.3	40	
17.5	816	1.0	80			28	946	1.1	50	28	946		1.1	50	
14	869	0.8	100			23.3	1091	0.9	60	23.3	1091		0.9	60	
28	570	2.5	50												
23.3	657	1.9	60												
17.5	816	1.4	80												
14	960	1.0	100												

RATINGS SINGLE STAGE WORM GEAR REDUCER

Selection Parameter of Single Stage Worm Gear Reducer (Input Speed 1400 rpm, 4 Pole)

Output speed (r/min)	Output torque (N.m)	Service Factor	Ratio (i)	Type	Output speed (r/min)	Output torque (N.m)	Service Factor	Ratio (i)	Type		
3.7kW					15kW						
28	958	1.5	50	PBWR150	186.7	698	1.7	7.5	PBWR150		
23.3	1105	1.2	60		140	921	1.3	10			
17.5	1373	0.9	80		93.3	1351	0.9	15			
5.5kW					70	1760	0.7	20			
186.7	253	2.2	7.5	PBWR110							
140	334	1.8	10								
93.3	484	1.4	15								
70	638	1.0	20								
56	711	0.9	25								
140	333	2.5	10	PBWR130							
93.3	490	1.9	15								
70	645	1.4	20								
56	788	1.2	25								
46.7	900	1.2	30								
35	1171	0.9	40	PBWR150							
28	1103	0.8	50								
70	645	2.0	20								
56	788	1.5	25								
46.7	934	1.3	30	PBWR110							
35	1171	1.3	40								
28	1426	1.0	50								
23.3	1643	0.8	60								
7.5kW											
186.7	345	1.6	7.5	PBWR110							
140	455	1.3	10								
93.3	660	1.0	15								
186.7	349	2.1	7.5	PBWR130							
140	455	1.8	10								
93.3	668	1.4	15								
70	880	1.0	20								
56	1074	0.9	25								
46.7	1228	0.8	30	PBWR150							
35	1596	0.7	40								
11kW											
186.7	512	2.3	7.5	PBWR150							
140	675	1.8	10								
93.3	990	1.3	15								
70	1291	1.0	20								
56	1576	0.8	25								

Note : non-standard speed ratios and motor frames, please get in touch with us. We can confirm their technical suitability and offer them upon specific request.

RATINGS
DOUBLE STAGE WORM GEAR REDUCER

Selection Parameter of Double Stage Worm Gear Reducer (Input Speed 1400 rpm, 4 Pole)

Output speed (r/min)	Output torque (N.m)	Service Factor	High speed transmission ratio (i1)	Low speed transmission ratio (i2)	General transmission ratio (i)	Combination model size
0.06kW						
14	25	1.3	10	10	100	PBWR 25/30
9.3	32	0.9	10	15	150	
7	41	0.7	10	20	200	
5.6	44	0.8	10	25	250	
4.7	59	1.2	10	30	300	PBWR 25/40
3.5	71	0.9	10	40	400	
2.8	82	0.7	20	25	500	
2.3	101	0.6	20	30	600	
1.9	116	0.5	25	30	750	
1.6	143	0.5	30	30	900	
1.2	171	0.4	30	40	1200	
0.9	197	0.3	50	30	1500	
0.78	217	0.3	60	30	1800	
0.6	268	0.2	60	40	2400	
0.5	324	0.2	60	50	3000	
0.4	294	0.1	50	80	4000	
0.3	356	0.1	50	100	5000	PBWR 30/40
4.7	57	1.3	10	30	300	
3.5	70	0.9	10	40	400	
2.8	96	0.6	20	25	500	
2.3	104	0.7	20	30	600	
1.9	121	0.6	25	30	750	
1.6	139	0.5	30	30	900	
1.2	166	0.4	30	40	1200	
0.9	196	0.4	50	30	1500	
0.78	218	0.3	60	30	1800	
0.58	261	0.2	60	40	2400	
0.4	300	0.2	80	40	3200	
0.4	279	0.1	50	80	4000	
0.28	338	0.1	50	100	5000	
1.6	141	1.0	30	30	900	PBWR 30/50
1.2	169	0.7	30	40	1200	
0.93	199	0.7	50	30	1500	
0.78	222	0.7	60	30	1800	
0.6	266	0.5	60	40	2400	
0.5	307	0.4	60	50	3000	
0.35	288	0.3	50	80	4000	
0.29	311	0.3	60	80	4800	
0.9	203	1.1	30	50	1500	PBWR 30/63
0.78	225	0.9	30	60	1800	
0.58	276	0.8	60	40	2400	
0.47	319	0.7	60	50	3000	
0.35	306	0.6	50	80	4000	
0.28	360	0.4	50	100	5000	
0.6	330	1.1	60	40	2400	PBWR 40/75
0.47	377	0.8	60	50	3000	
0.06kW						
0.35	355	0.7	50	80	4000	PBWR 40/75
0.28	419	0.5	50	100	5000	
0.5	405	1.4	60	50	3000	PBWR 40/90
0.35	365	1.3	50	80	4000	
0.28	431	1.0	50	100	5000	
0.09kW						
14	37	0.8	10	10	100	PBWR 25/30
9.3	49	0.6	10	15	150	
7	62	0.5	10	20	200	
5.6	66	0.5	10	25	250	
4.7	75	0.4	10	30	300	
3.5	107	0.3	10	40	400	
2.8	115	0.2	20	25	500	
2.3	135	0.2	20	30	600	
1.9	151	0.2	25	30	750	
1.6	178	0.2	30	30	900	
1.2	212	0.1	30	40	1200	
0.9	247	0.1	50	30	1500	
0.78	304	0.1	60	30	1800	
0.58	340	0.1	60	40	2400	
0.47	405	0.1	60	50	3000	
4.7	88	0.8	10	30	300	PBWR 30/40
3.5	107	1.2	10	40	400	PBWR 30/50
2.8	123	1.0	10	50	500	
2.3	159	0.9	20	30	600	
1.9	185	0.8	25	30	750	
1.6	212	0.7	30	30	900	
1.6	200	1.0	15	60	900	
1.2	263	0.9	30	40	1200	
0.93	305	0.7	30	50	1500	
0.9	359	1.1	50	30	1500	PBWR 40/75
0.78	404	1.0	60	30	1800	
0.58	496	0.7	60	40	2400	
0.5	608	0.9	60	50	3000	PBWR 40/90
0.35	548	0.8	50	80	4000	
0.12kW						
4.7	118	1.2	10	30	300	PBWR 30/50
3.5	142	0.9		40	400	
2.8	164	0.7	10	50	500	
2.8	171	1.3	10	50	500	PBWR 30/63
2.3	208	1.1	15	40	600	
1.9	241	0.9	15	50	750	

RATINGS
DOUBLE STAGE WORM GEAR REDUCER

Selection Parameter of Double Stage Worm Gear Reducer (Input Speed 1400 rpm, 4 Pole)

Output speed (r/min)	Output torque (N.m)	Service Factor	High speed transmission ratio (i1)	Low speed transmission ratio (i2)	General transmission ratio (i)	Combination model size
0.12kW						
1.6	324	1.2	30	30	900	PBWR 40/75
1.2	399	0.9	30	40	1200	
0.78	546	0.9	30	60	1800	PBWR 40/90
0.58	695	0.9	60	40	2400	
0.5	883	1.2	60	50	3000	PBWR 50/110
0.35	784	1.0	50	80	4000	
0.28	928	0.8	50	100	5000	
0.18kW						
3.5	221	1.0	10	40	400	PBWR 30/63
2.8	257	0.8	10	50	500	
2.3	362	1.1	20	30	600	PBWR 40/75
1.9	435	0.9	25	30	750	
1.6	487	0.8	30	30	900	
1.2	629	1.0	30	40	1200	PBWR 40/90
0.93	735	0.8	30	50	1500	
0.78	860	1.5	60	30	1800	PBWR 50/110
0.58	1113	1.1	60	40	2400	
0.25kW						
3.5	336	1.1	10	40	400	PBWR 40/75
2.8	384	0.8	10	50	500	
2.3	511	1.2	15	40	600	PBWR 40/90
1.9	598	0.9	15	50	750	
1.6	667	0.8	15	60	900	
1.2	943	1.3	30	40	1200	PBWR 50/110
0.93	1064	1.2	50	30	1500	
0.78	1195	1.1	60	30	1800	
0.6	1624	1.0	60	40	2400	PBWR 63/130
0.47	1935	0.8	60	50	3000	
0.35	2046	0.6	50	80	4000	
0.28	2430	0.5	50	100	5000	
0.78	1199	1.8	60	30	1800	PBWR 63/150
0.6	1446	1.8	60	40	2400	
0.5	1713	1.4	60	50	3000	
0.4	2026	0.9	50	80	4000	
0.3	2251	0.7	50	100	5000	
0.37kW						
4.7	405	1.0	10	30	300	PBWR 40/75
3.5	498	0.7	10	40	400	
4.7	401	1.5	7.5	40	300	PBWR 40/90
3.5	523	1.2	10	40	400	
2.8	611	0.9	10	50	500	
2.3	757	0.8	15	40	600	
0.25kW						
1.9	949	1.3	25	30	750	PBWR 50/110
1.6	1079	1.2	30	30	900	
1.2	1396	0.8	30	40	1200	
0.9	1674	1.1	50	30	1500	PBWR 63/130
0.78	1887	0.9	60	30	1800	
0.78	1774	1.2	60	30	1800	PBWR 63/150
0.6	2141	1.2	60	40	2400	
0.5	2535	0.9	60	50	3000	
0.55kW						
4.7	639	2.0	10	30	300	PBWR 50/110
3.5	826	1.4	10	40	400	
2.8	984	1.1	10	50	500	
2.3	1181	1.0	15	40	600	
1.9	1411	0.9	25	30	750	PBWR 63/130
2.8	995	1.6	10	50	500	
1.9	1470	1.2	25	30	750	
1.2	2132	0.8	30	40	1200	
0.78	2637	0.8	60	30	1800	PBWR 63/150
0.6	3182	0.8	60	40	2400	
0.75kW						
4.7	871	1.5	10	30	300	PBWR 50/110
3.5	1126	1.1	10	40	400	
2.8	1357	1.1	10	50	500	PBWR 63/130
2.3	1631	1.0	15	40	600	
1.9	2005	0.9	25	30	750	
1.6	2283	0.8	30	30	900	
2.8	1290	1.8	10	50	500	PBWR 63/150
2.3	1529	1.7	15	40	600	
1.9	1783	1.3	25	30	750	
1.6	2215	0.9	30	30	900	
1.2	2680	1.0	30	40	1200	PBWR 63/130
4.7	1312	1.3	10	30	300	
3.5	1671	1.0	10	40	400	
2.8	1991	0.8	10	50	500	
9.3	752	3.1	10	15	150	PBWR 63/150
7	966	2.4	10	20	200	
5.6	1175	1.7	10	25	250	
4.7	1364	1.7	10	30	300	
3.5	1619	1.6	10	40	400	
2.8	1893	1.2	10	50	500	
2.3	2242	1.2	15	40	600	
1.9	2616	0.9	25	30	750	

RATINGS
DOUBLE STAGE WORM GEAR REDUCER

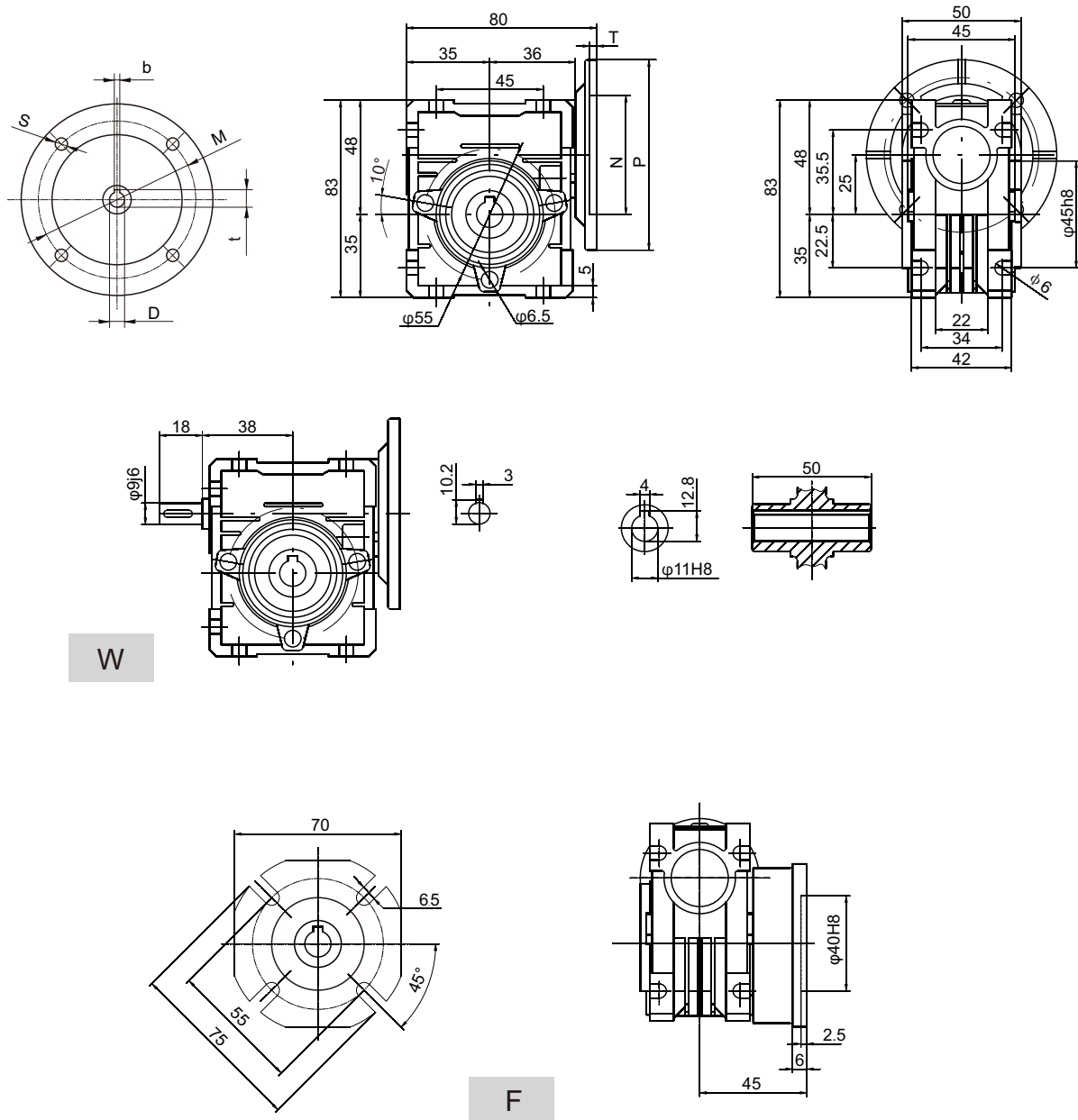
Selection Parameter of Double Stage Worm Gear Reducer (Input Speed 1400 rpm, 4 Pole)

Output speed (r/min)	Output torque (N.m)	Service Factor	High speed transmission ratio (i1)	Low speed transmission ratio (i2)	General transmission ratio (i)	Combination model size
1.5kW						
4.7	1789	1.0	10	30	300	PBWR 63/130
3.5	2279	0.7	10	40	400	
9.3	1026	2.3	10	15	150	PBWR 63/150
7	1317	1.8	10	20	200	
5.6	1602	1.3	10	25	250	
4.7	1860	1.3	10	30	300	
3.5	2208	1.2	10	40	400	
2.8	2582	0.9	10	50	500	
2.3	3057	0.9	15	40	600	

Note : non-standard speed ratios and motor frames, please get in touch with us. We can confirm their technical suitability and offer them upon specific request.

GENERAL ARRANGEMENT DRAWING SINGLE STAGE WORM GEAR REDUCER

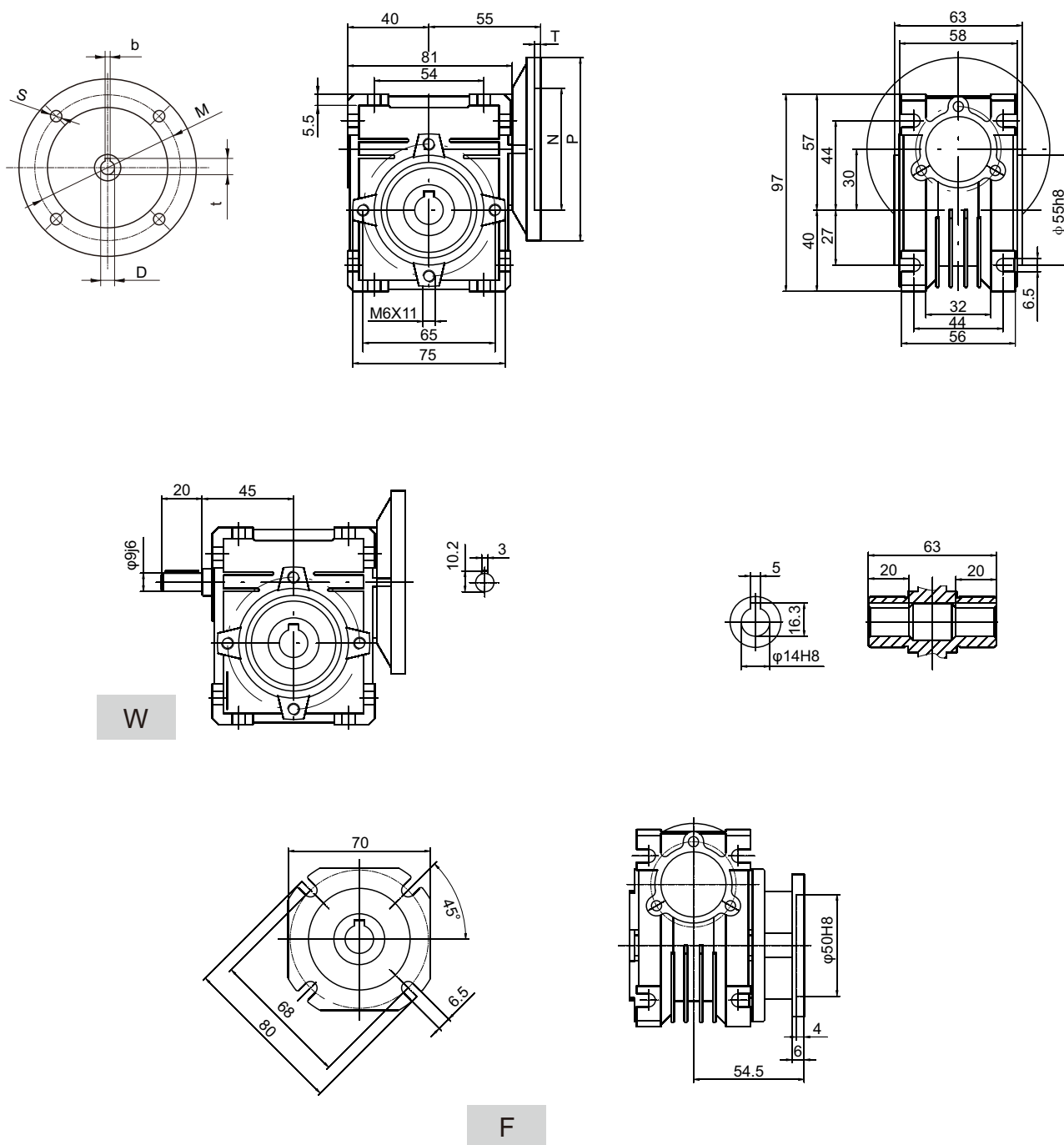
PBWR25



IEC	DE8	b	t	P	M	N	S	T
56B14	9	3	10.4	80	65	50	5.5	3

GENERAL ARRANGEMENT DRAWING SINGLE STAGE WORM GEAR REDUCER

PBWR30

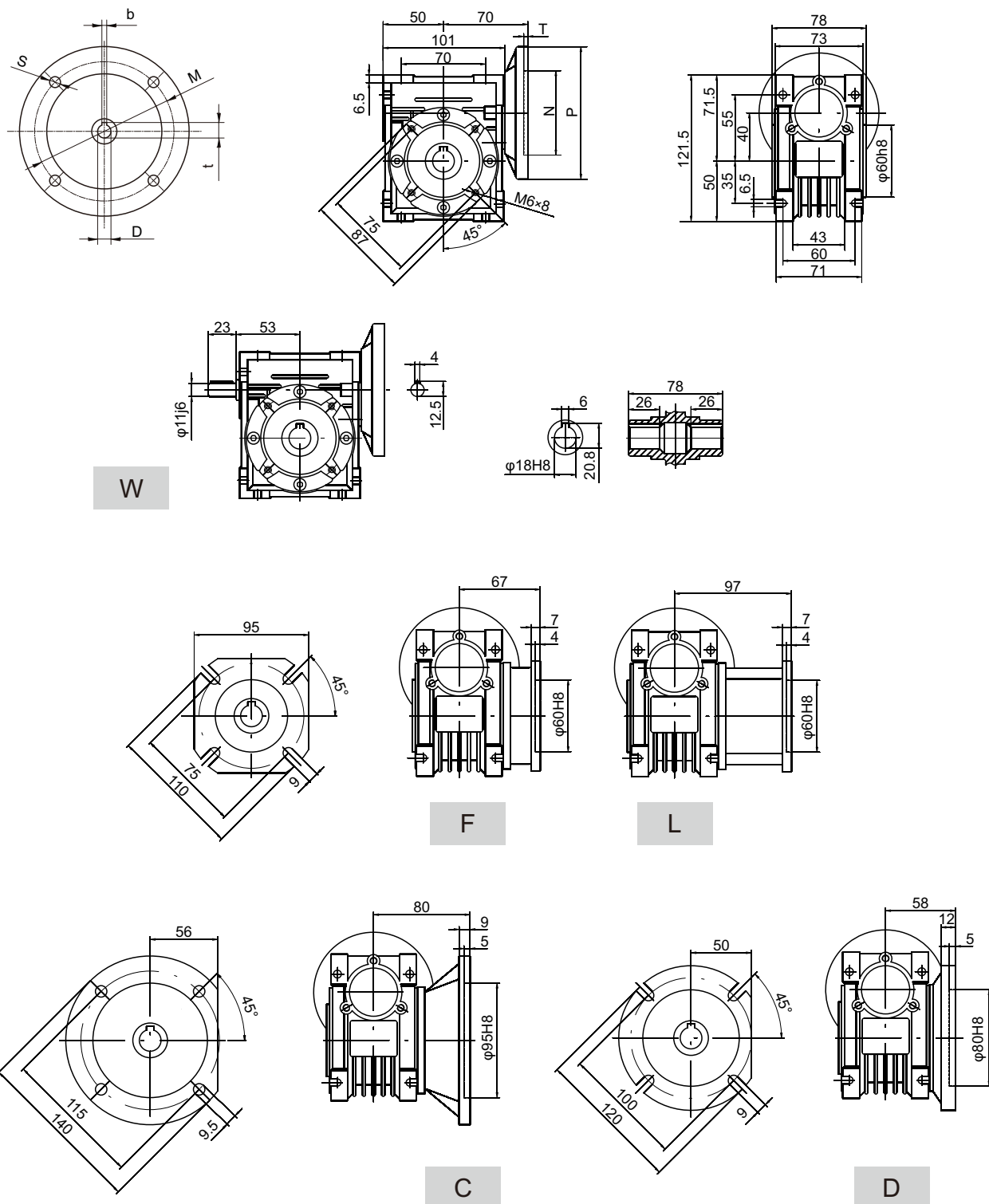


IEC	DE8	b	t	P	M	N	S	T
56B5	9	3	10.4	120	100	80	7	3.5
56B14	9	3	10.4	80	65	50	5.5	3
63B14	11	4	12.8	90	75	60	5.5	3
63B5	11	4	12.8	140	115	95	9	3.5

Weight without motor $\approx 1.2\text{kg}$

GENERAL ARRANGEMENT DRAWING SINGLE STAGE WORM GEAR REDUCER

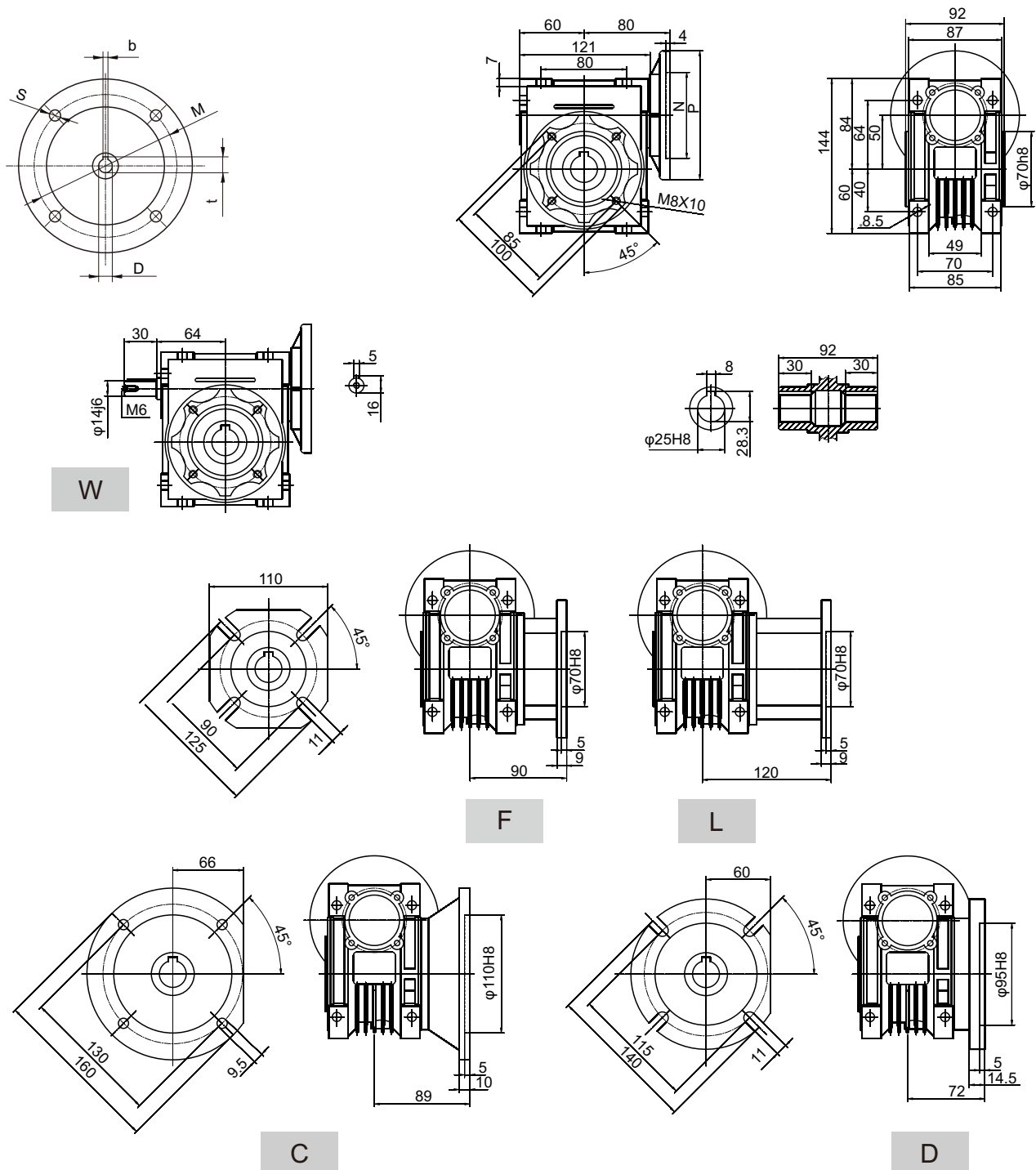
PBWR40



Weight without motor ≈ 2.2kg

GENERAL ARRANGEMENT DRAWING SINGLE STAGE WORM GEAR REDUCER

PBWR50

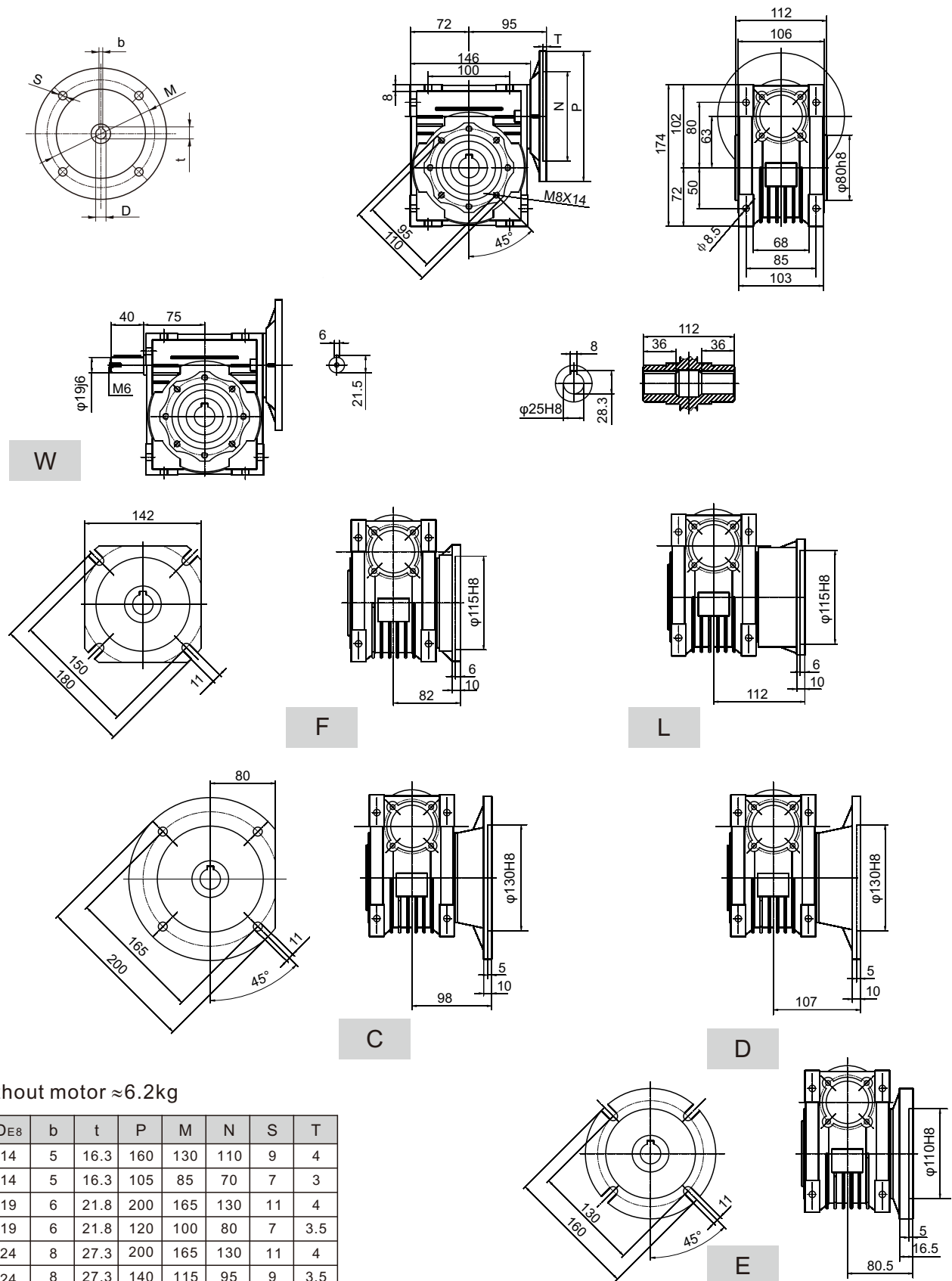


IEC	D _{E8}	b	t	P	M	N	S	T
63B14	11	4	12.8	90	75	60	5.5	3
63B5	11	4	12.8	140	115	95	9	3.5
71B5	14	5	16.3	160	130	110	9	4
71B14	14	5	16.3	105	85	70	7	3
80B5	19	6	21.8	200	165	130	11	4
80B14	19	6	21.8	120	100	80	7	3.5

Weight without motor $\approx 3.8\text{kg}$

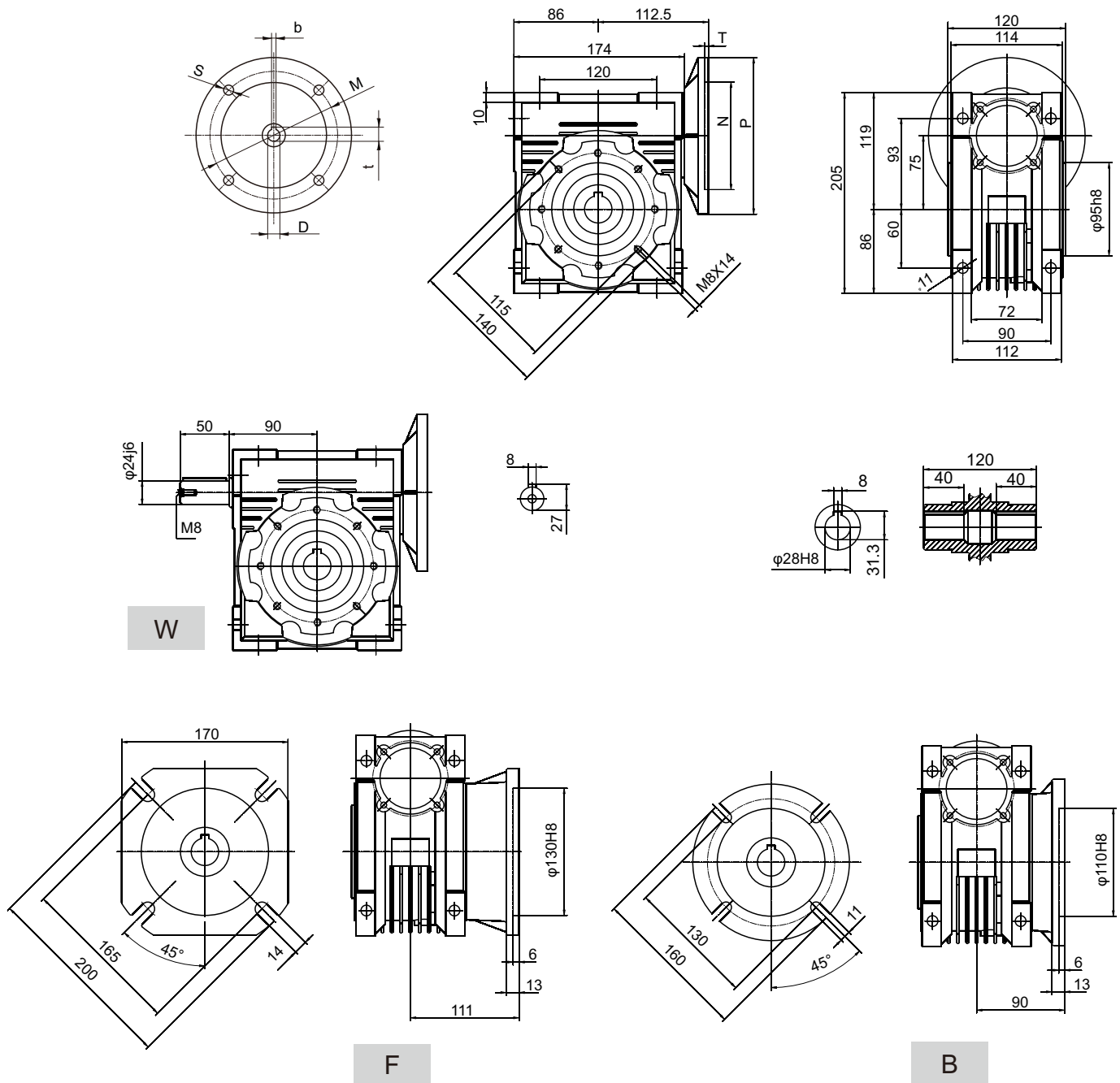
GENERAL ARRANGEMENT DRAWING SINGLE STAGE WORM GEAR REDUCER

PBWR63



GENERAL ARRANGEMENT DRAWING SINGLE STAGE WORM GEAR REDUCER

PBWR75

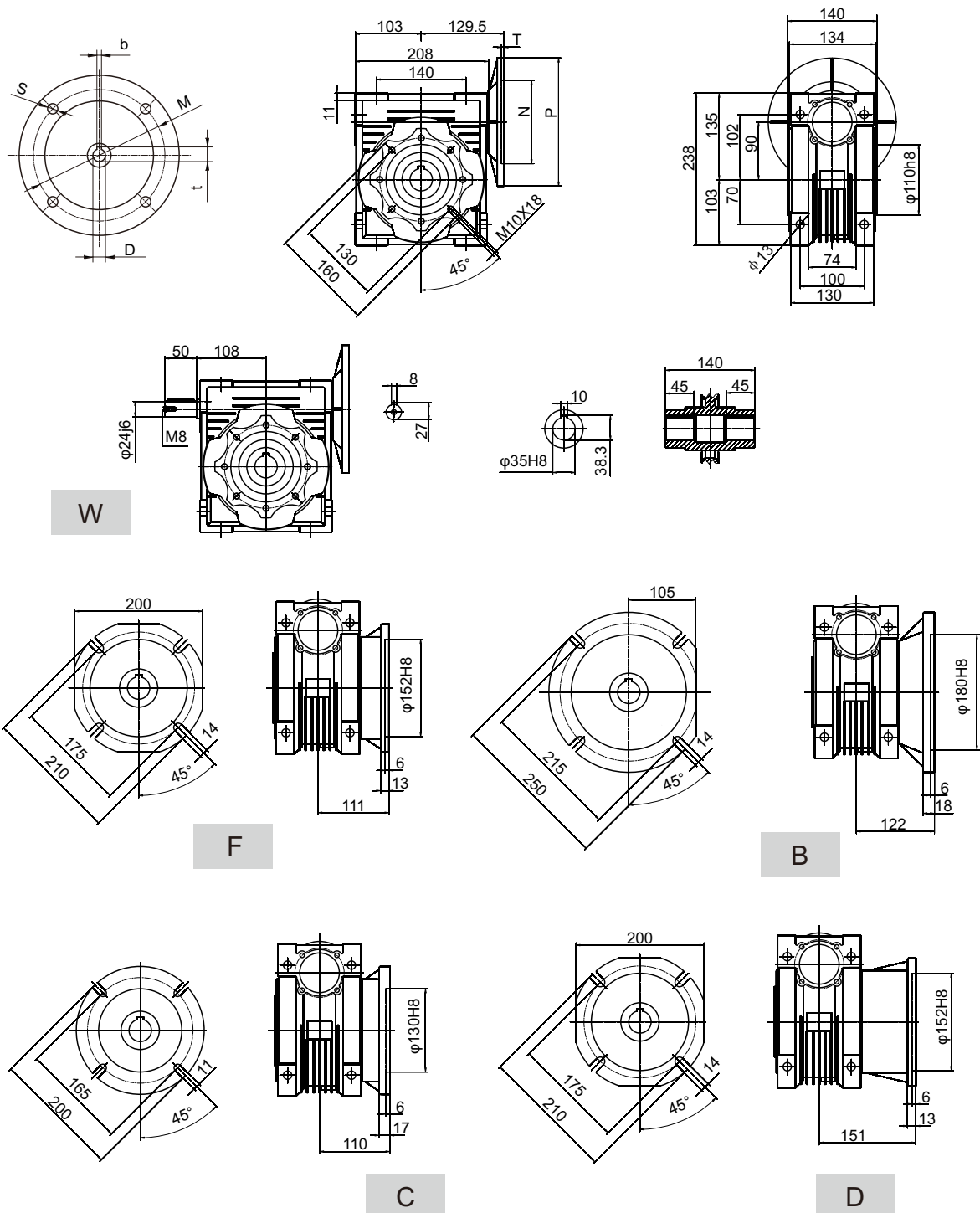


IEC	DE8	b	t	P	M	N	S	T
80B5	19	6	21.8	200	165	130	11	4
80B14	19	6	21.8	120	100	80	6.5	3.5
90B5	24	8	27.3	200	165	130	11	4
90B14	24	8	27.3	140	115	95	9	3.5
100/112B5	28	8	31.3	250	215	180	13.5	4
100/112B14	28	8	31.3	160	130	110	9	4.5

Weight without motor ≈9kg

GENERAL ARRANGEMENT DRAWING SINGLE STAGE WORM GEAR REDUCER

PBWR90

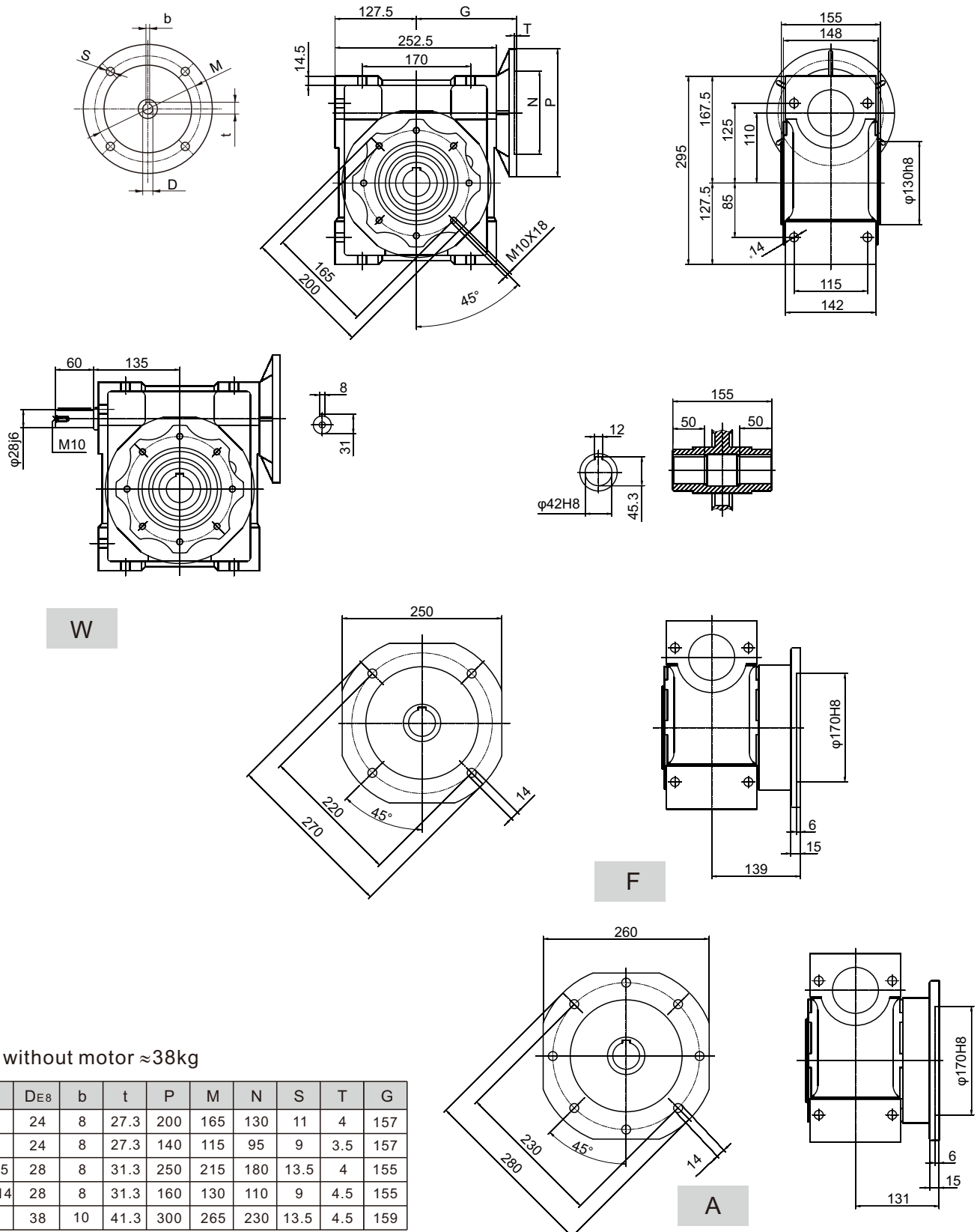


IEC	D _{E8}	b	t	P	M	N	S	T
80B5	19	6	21.8	200	165	130	11	4
80B14	19	6	21.8	120	100	80	6.5	3.5
90B5	24	8	27.3	200	165	130	11	4
90B14	24	8	27.3	140	115	95	9	3.5
100/112B5	28	8	31.3	250	215	180	13.5	4
100/112B14	28	8	31.3	160	130	110	9	4.5

Weight without motor $\approx 12\text{kg}$

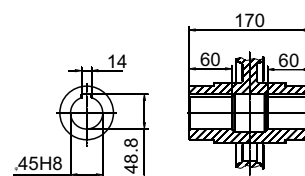
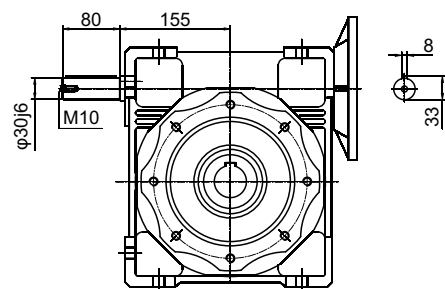
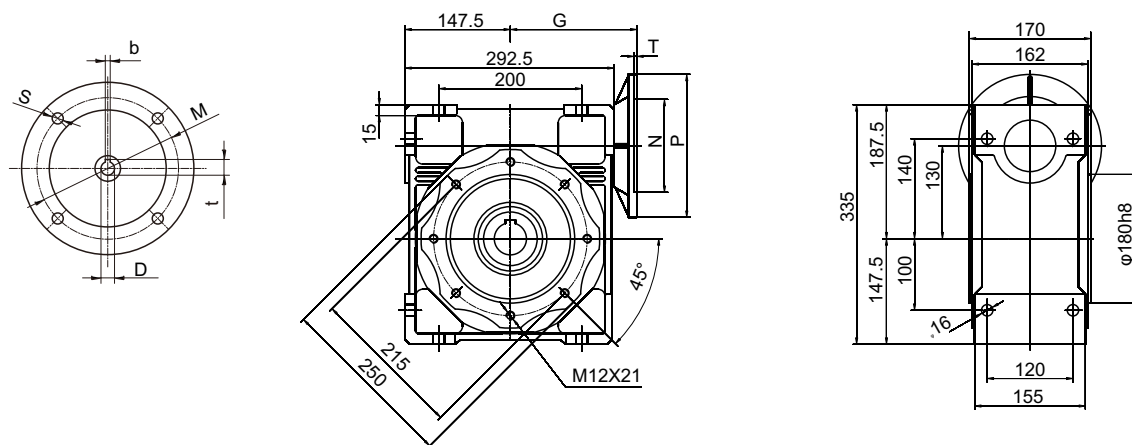
GENERAL ARRANGEMENT DRAWING SINGLE STAGE WORM GEAR REDUCER

PBWR110

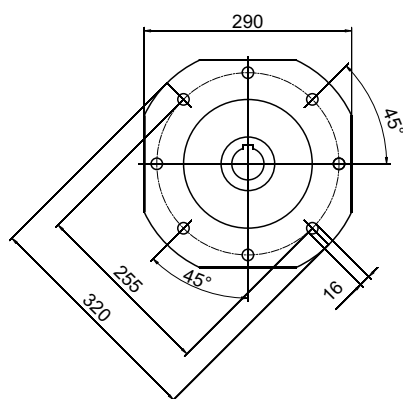


GENERAL ARRANGEMENT DRAWING SINGLE STAGE WORM GEAR REDUCER

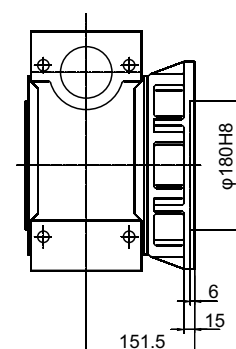
PBWR130



W

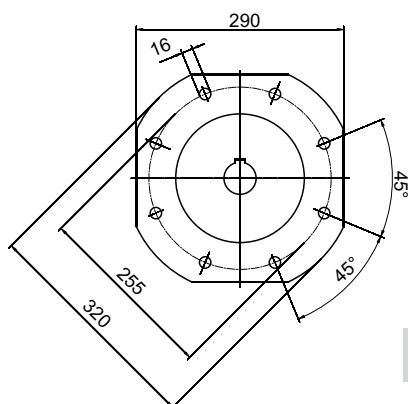


F

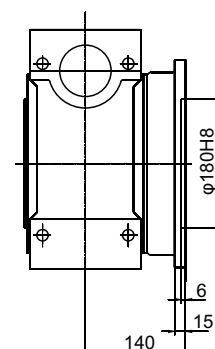


Weight without motor $\approx 55\text{kg}$

IEC	DE8	b	t	P	M	N	S	T	G
90B5	24	8	27.3	200	165	130	11	4	177
90B14	24	8	27.3	140	115	95	9	3.5	177
100/112B5	28	8	31.3	250	215	180	13.5	4	175
100/112B14	28	8	31.3	160	130	110	9	4.5	175
132B5	38	10	41.3	300	265	230	13.5	4.5	179

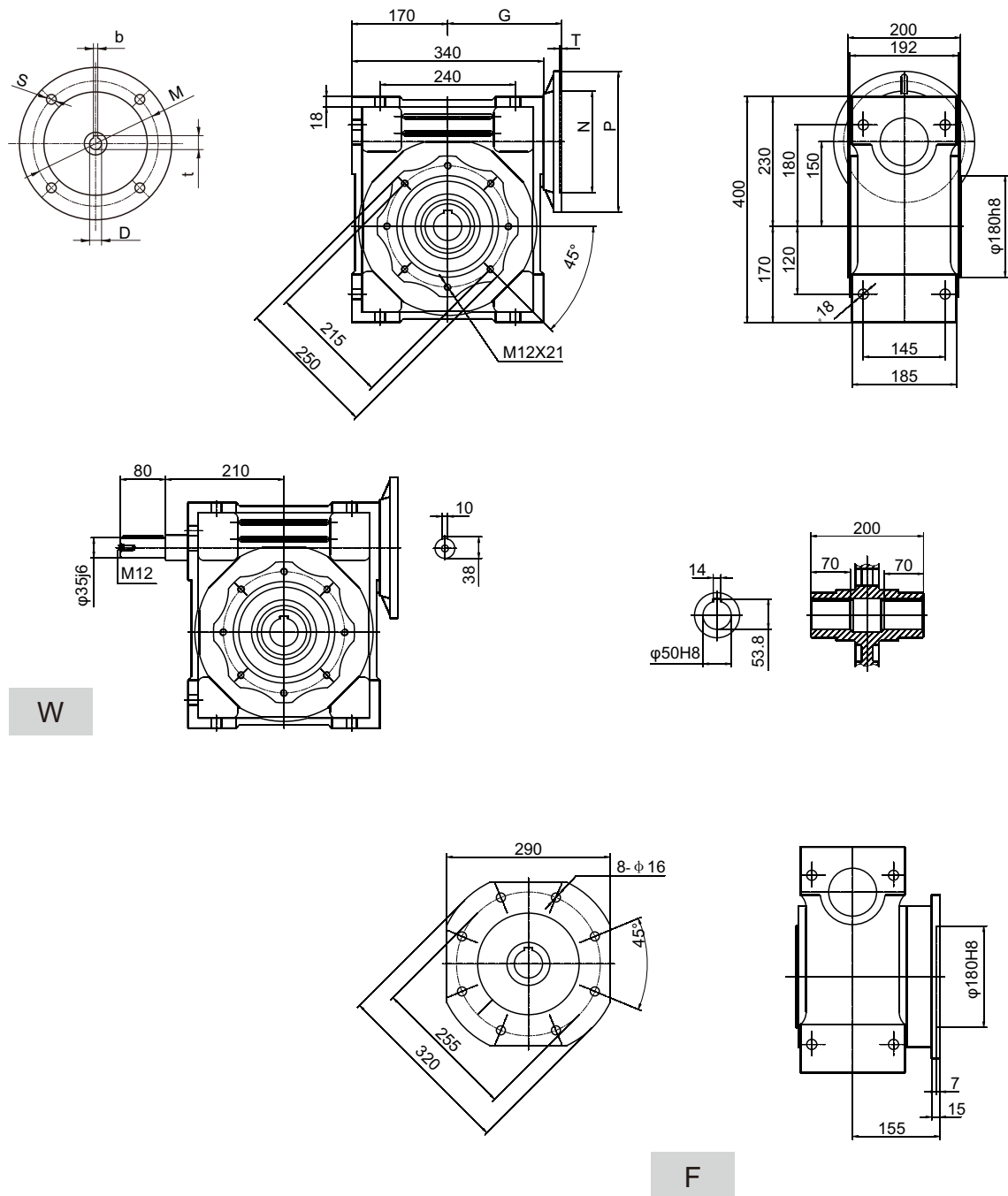


A



GENERAL ARRANGEMENT DRAWING SINGLE STAGE WORM GEAR REDUCER

PBWR150

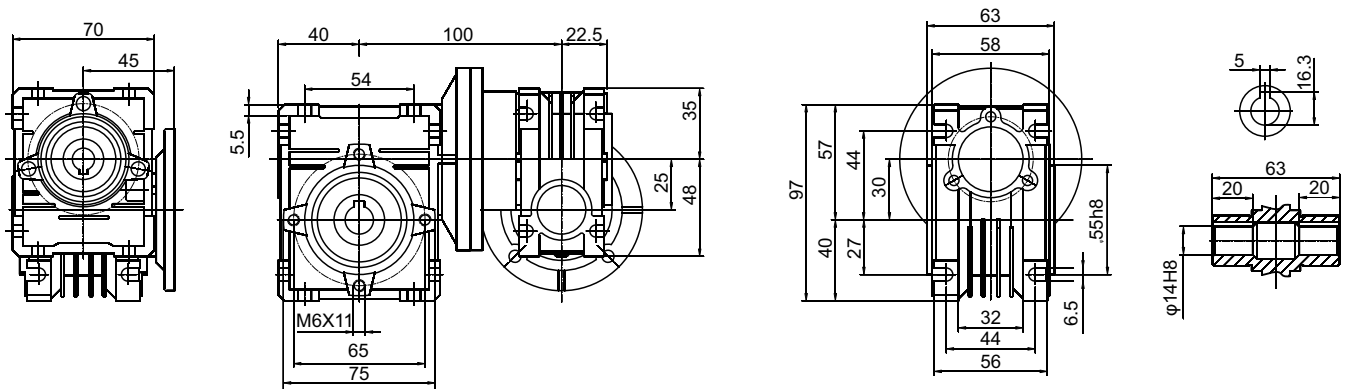


Weight without motor $\approx 105\text{kg}$

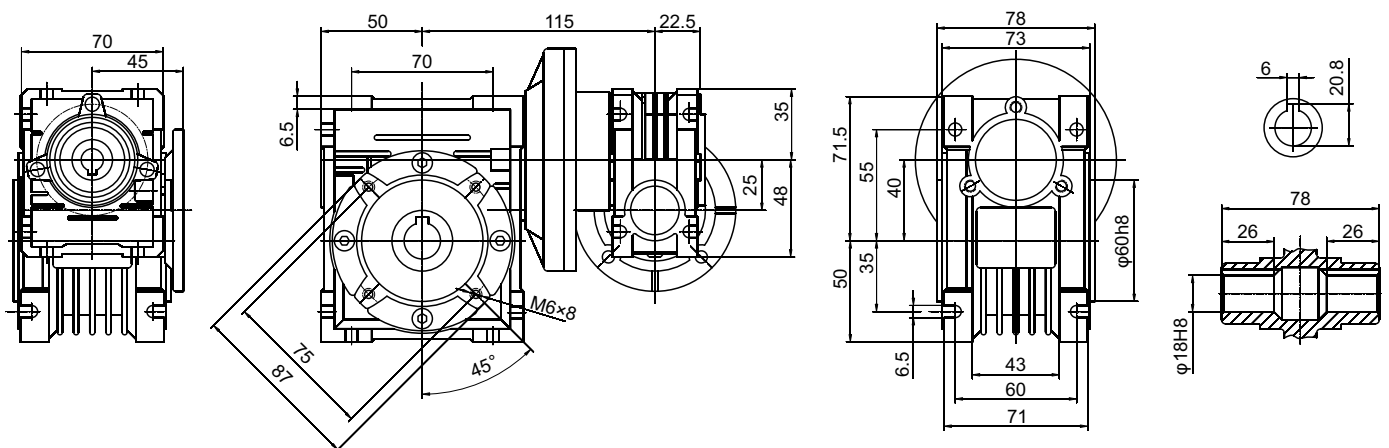
IEC	DE8	b	t	P	M	N	S	T	G
100/112B5	28	8	31.3	250	215	180	13.5	4	202
132B5	38	10	41.3	300	265	230	13.5	4.5	202
160B5	42	12	45.3	350	300	250	18	6	212

GENERAL ARRANGEMENT DRAWING DOUBLE STAGE WORM GEAR REDUCER

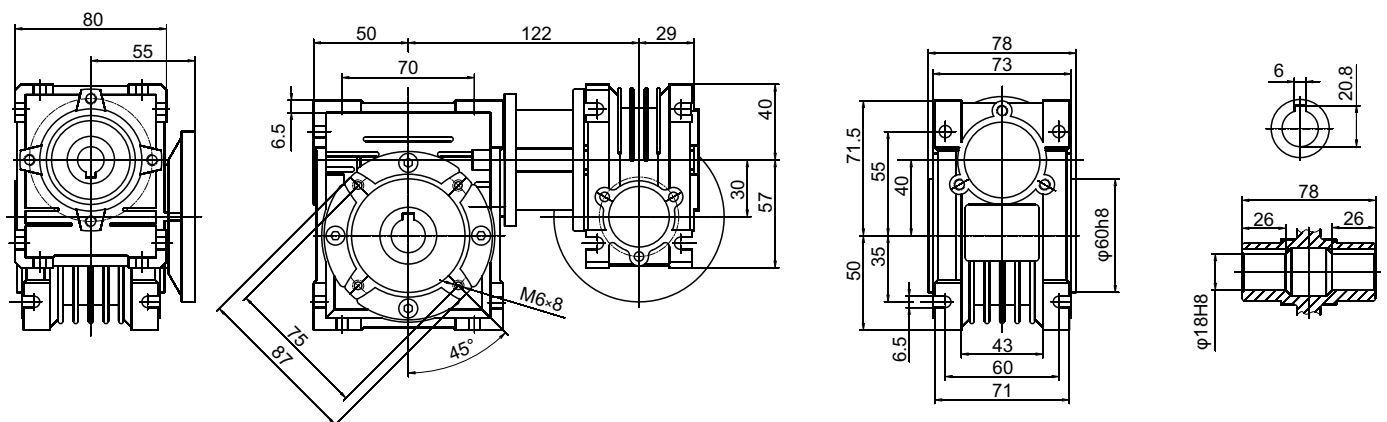
PBWR25/30



PBWR25/40

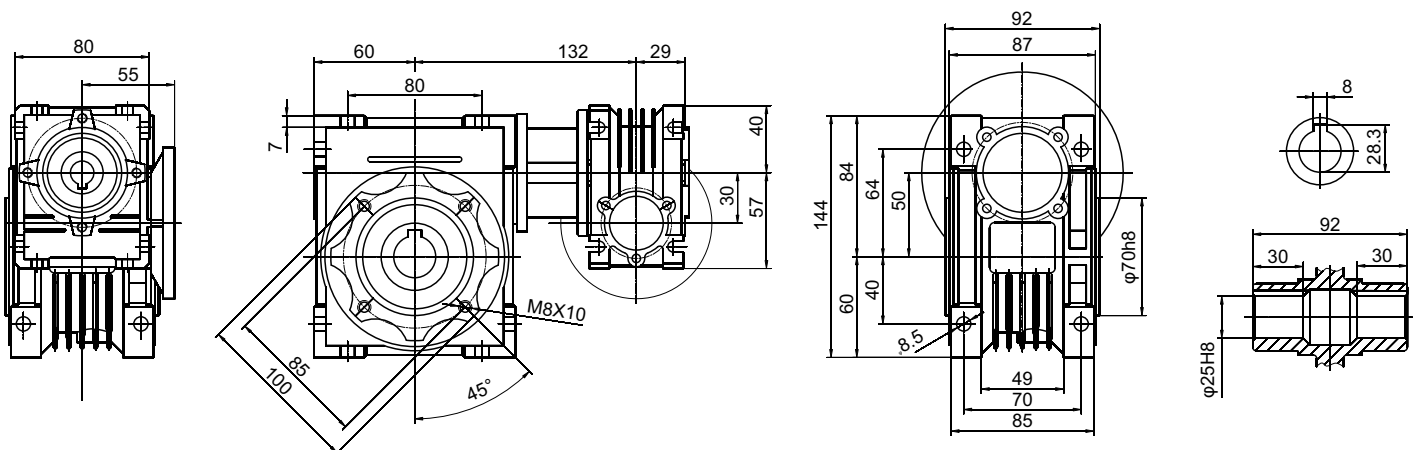


PBWR30/40

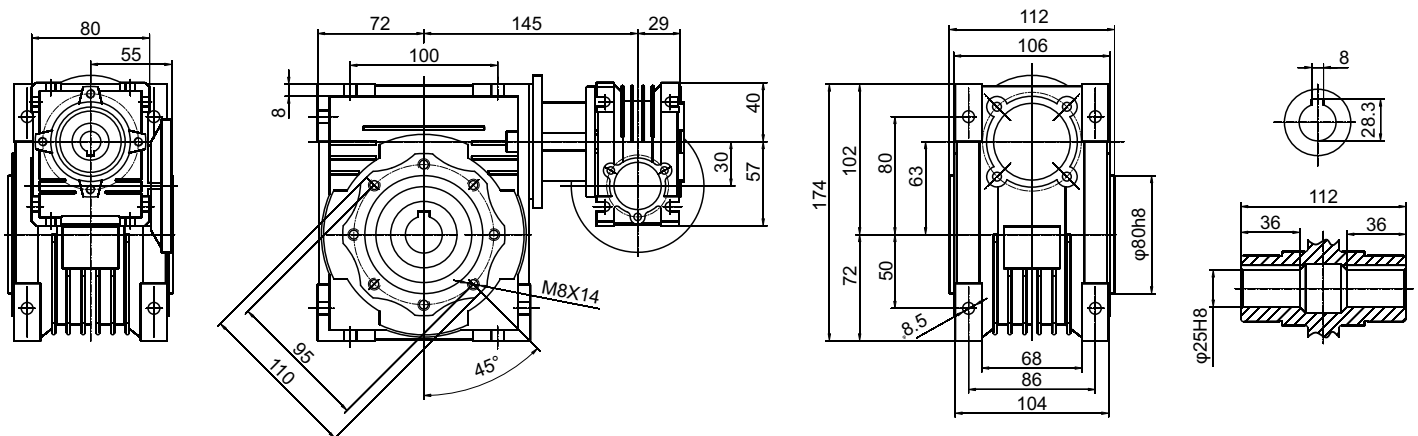


GENERAL ARRANGEMENT DRAWING DOUBLE STAGE WORM GEAR REDUCER

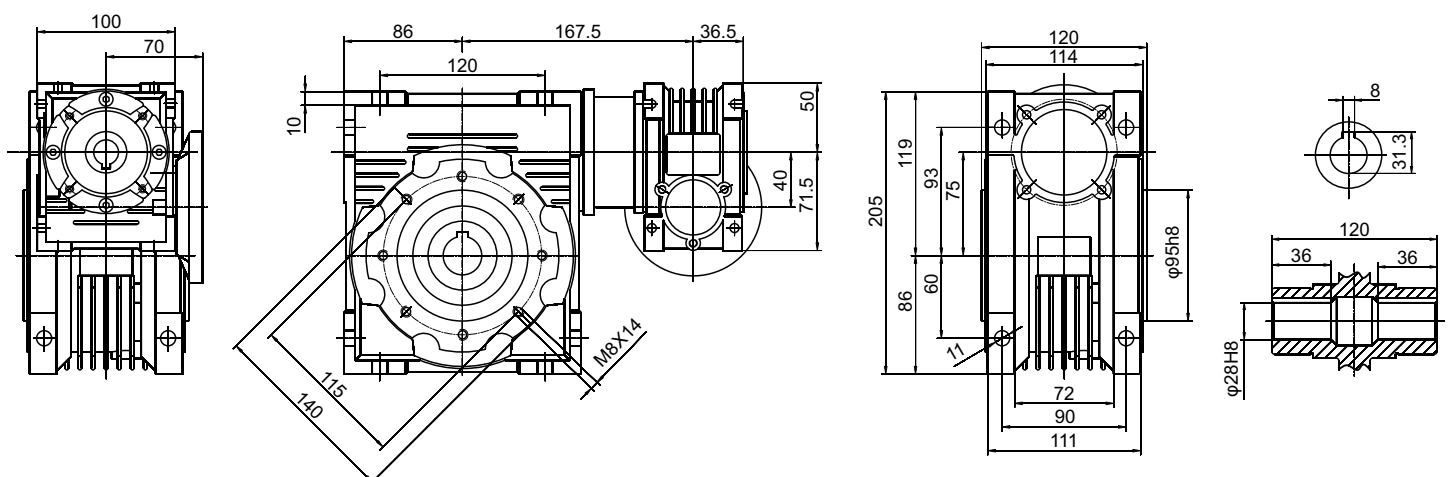
PBWR30/50



PBWR30/63

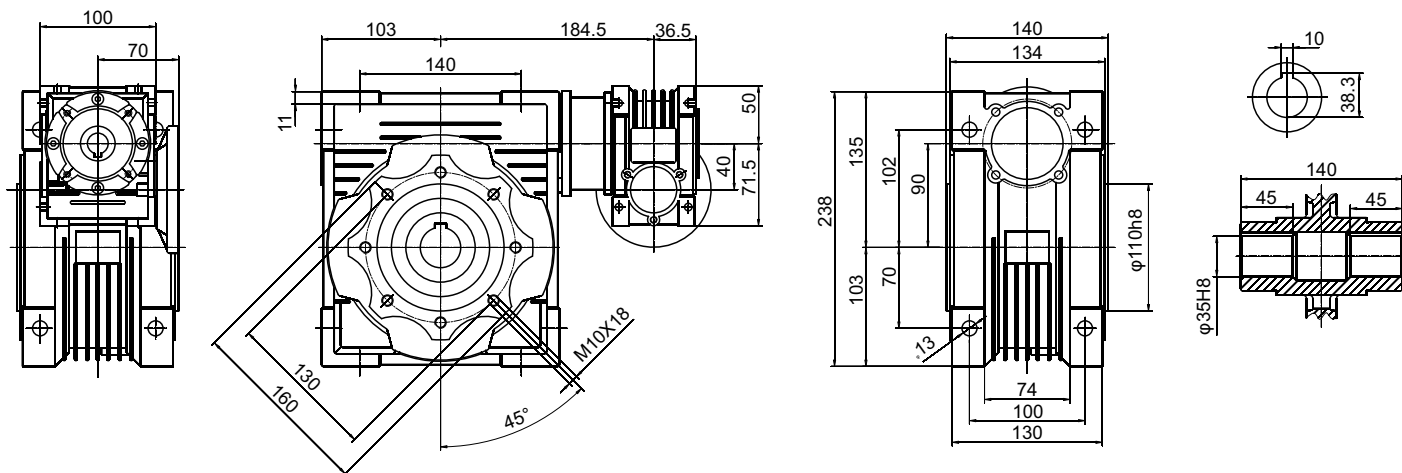


PBWR40/75

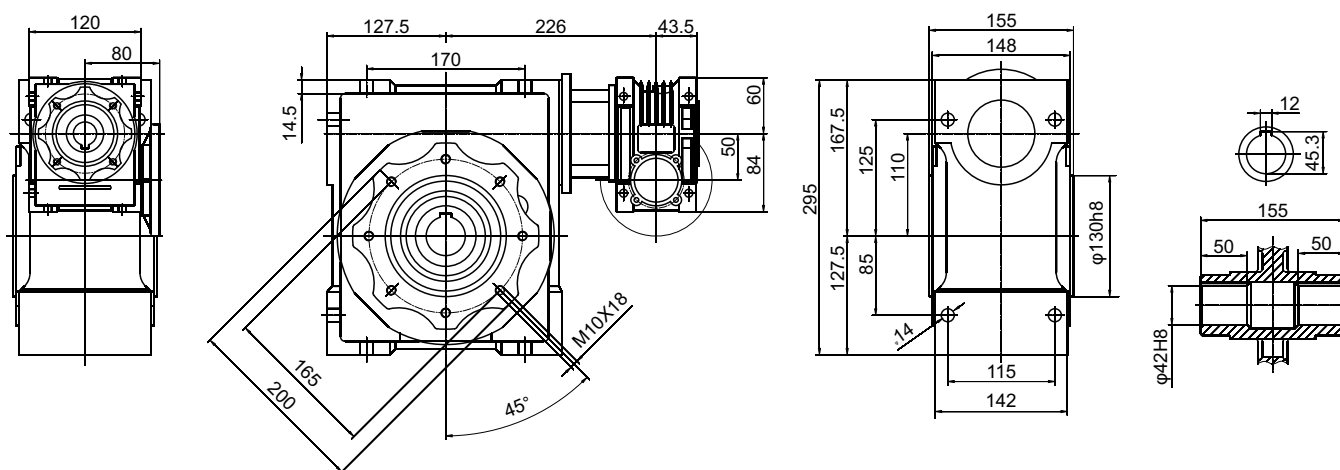


GENERAL ARRANGEMENT DRAWING DOUBLE STAGE WORM GEAR REDUCER

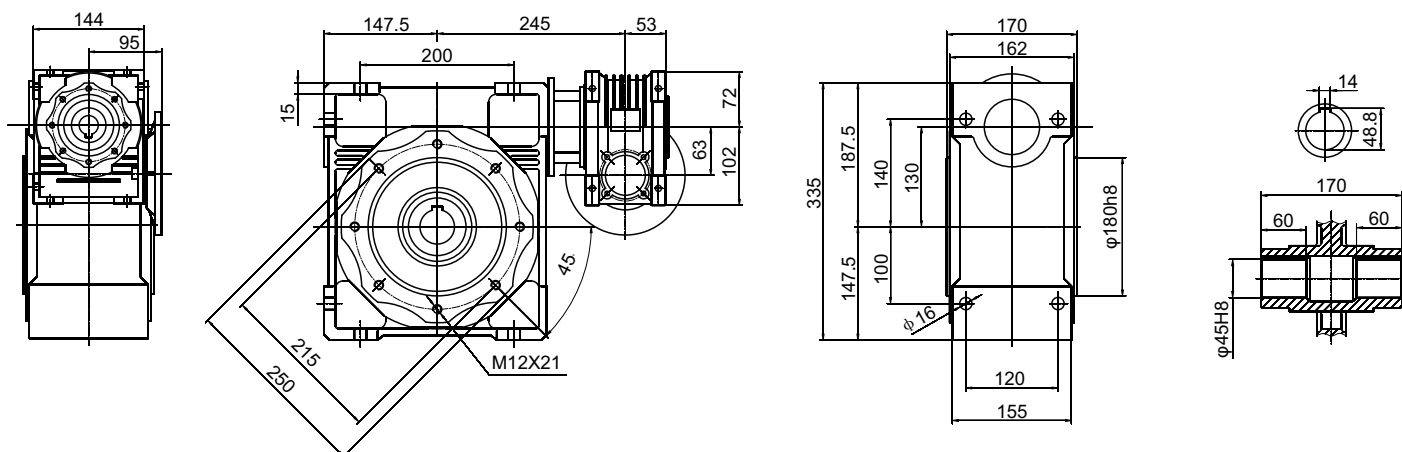
PBWR40/90



PBWR50/110

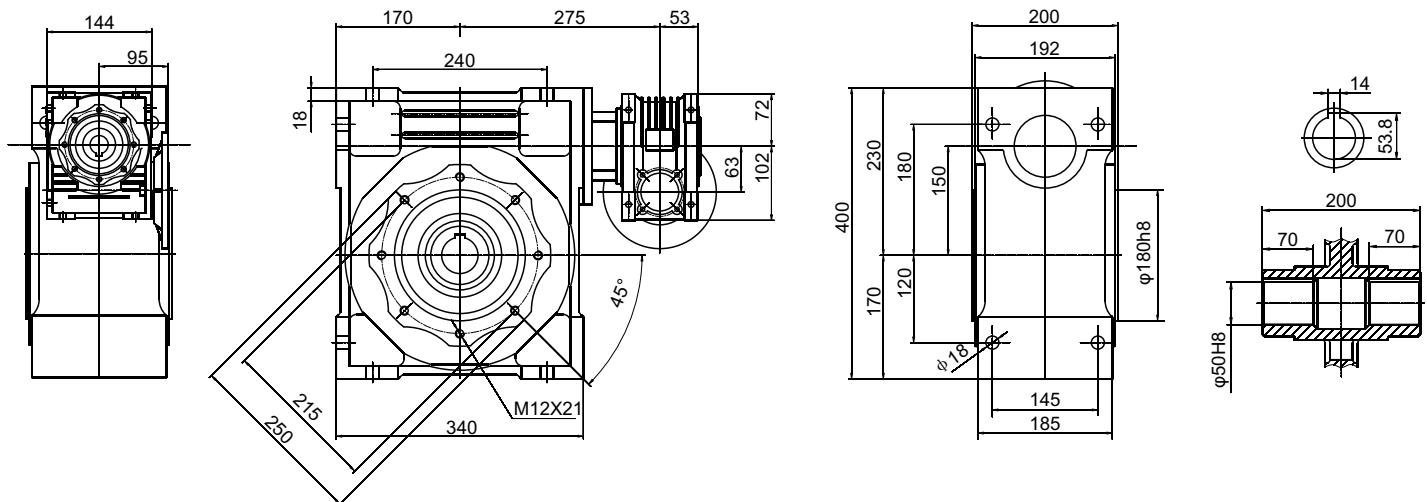


PBWR63/130

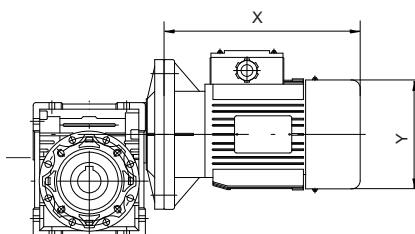


GENERAL ARRANGEMENT DRAWING DOUBLE STAGE WORM GEAR REDUCER

PBWR63/150



DETAILS OF MOTOR AND GEARBOX ACCESSORIES

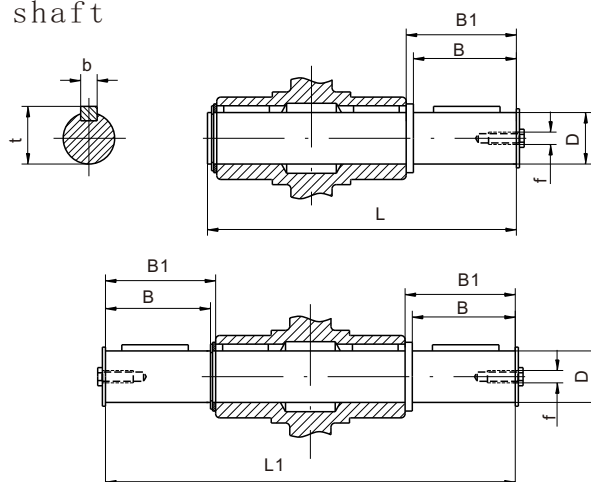


Overall dimensions for electric motor

	56		63		71		80		90		100		112	132		160	
(kw)	0.06	0.09	0.12	0.18	0.25	0.37	0.55	0.75	1.1	1.5	2.2	3	4	5.5	7.5	11	15
X	167		183		210		262		294	325	314		338	373	409	479	523
Y	110		124		140		158		180		198		222	262		314	

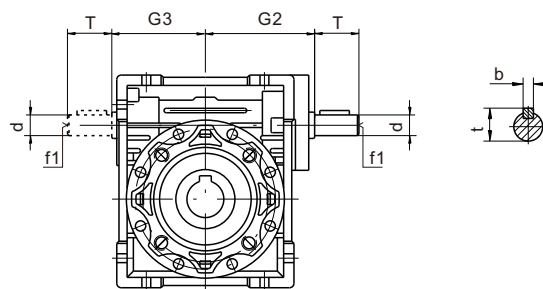
Dimensions of single/double output shaft

Type	D(h6)	B	B1	L	L1	f	b	t
25	11	23	25.5	81	101	-	4	12.5
30	14	30	32.5	102	128	M6	5	16
40	18	40	43	128	164	M6	6	20.5
50	25	50	53.5	152	199	M10	8	28
63	25	50	53.5	173	219	M10	8	28
75	28	60	63.5	192	247	M10	8	31
90	35	80	84	234	308	M12	10	38
110	42	80	84.5	249	324	M16	12	45
130	45	80	85	265	340	M16	14	48.5
150	50	102	110	324	420	M20	14	53.5



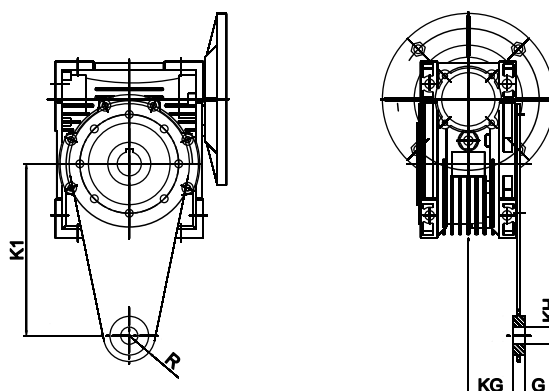
Dimensions of extension worm shafts

Type	G3	G2	T	d(j6)	b	t	f1
25	38	42	18	9	3	10.2	-
30	45	51	20	9	3	10.2	-
40	53	60	23	11	4	12.5	M5
50	64	74	30	14	5	16	M6
63	76.5	88.5	40	19	6	21.5	M6
75	90	105	50	24	8	27	M8
90	108	125	50	24	8	27	M8
110	135	142	60	28	8	31	M10
130	155	162	80	30	8	33	M10
150	175	195	80	35	10	38	M12



Dimensions of torque arms

Type	K1	R	KH	G	KG
25	70	15	8	14	17.5
30	85	15	8	14	24
40	100	18	10	14	31.5
50	100	18	10	14	38.5
63	150	18	10	14	49
75	200	30	20	25	47.5
90	200	30	20	25	57.5
110	250	35	25	30	62
130	250	35	25	30	69
150	250	35	25	30	84



Instruction - using and maintaining

For worm pairs that have been used or newly replaced for 150–400 hours, The lubricant must be changed, followed by a lubricant change interval of less than or equal to 4000 hours.

Regularly check the quantity and quality of the oil and maintain an adequate supply of lubricant, and promptly replace any oil that has been altered or contaminated.

The amount of lubricant added must adhere to the specified guidelines.

Oil from various brands cannot be combined with oil from the same brand. Different viscosities are permitted, nevertheless.

The reducer's operational ambient temperature ranges from -40°C to +40°C.

When the outside temperature is below 0°C, and the lubricant must be heated above 0°C before startup, or a low freezing point lubricant must be used.



PC Series Gear Reducer Features

The PC Series gear reducer is a single-stage gear drive that adopts a modularized structural design. i.e.

PC063 is a single-stage gear drive reducer with a transmission ratio of 3.0.

PC071 is a single-stage gear drive reducer with a transmission ratio of 3.0.

PC080 is a single-stage gear drive reducer with a transmission ratio of 3.0.

PC090 single-stage gear driving reducer, its transmission ratio $i = 2.42$

The detailed data is shown in the following technical data table:

The following provides more information on the PC+PBWR combination form:

show title "The Combination Form of PC+PBWR Reducer", Refer Page No. 36.

The connection method for PC series gear reducer and PBWR Series worm reducers

is comparatively simple and similar to the connection of the B14 mount.

The materials and manufacturing details for the main parts of the PC Kit Gear Reducer

1. Die-casting aluminum alloy (ZL106) case
2. 20CrMnMo gear alloy steel, surface treatment (cementing and hardening), involute tooth shape grinding (grinding gear teeth)
3. The output shaft of the reducer is made of 40Cr and adopts heat treatment for medium carbon steel (seasoning and surface hardening treatment).

The installation of the motor on the PC Series gear speed reducer

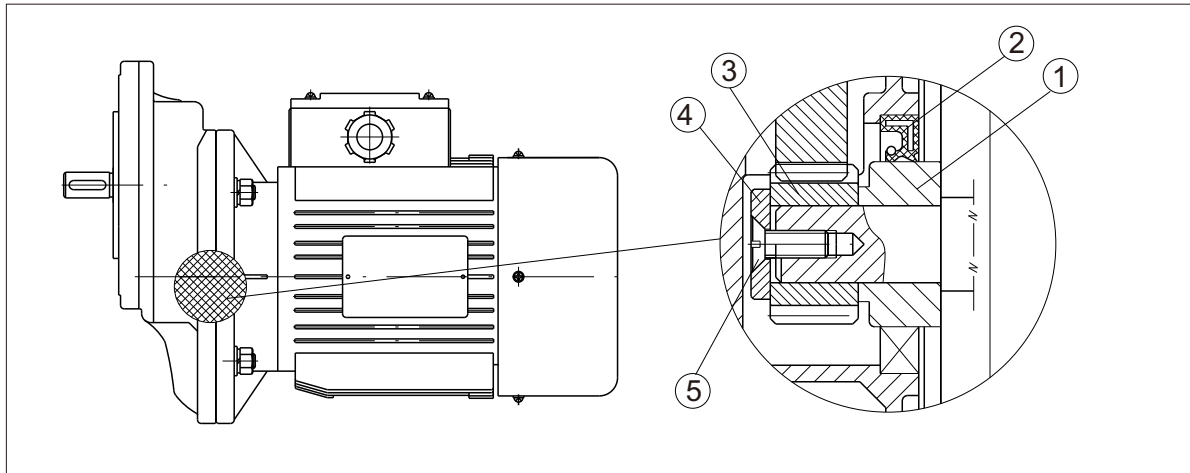
The installation of the motor on the PC Series gear reducer :

In order to fix the pinion correctly on the motor shaft, please follow the procedures below:

1. Completely clean the output shaft of the motor.
2. Remove the flat key on the output shaft.
3. Heat the sleeve (1) up to 100°C~120°C and fix the sleeve (1) on the output shaft based on the diagram.
4. Fix the pinion (3), referring to the method of fixing the sleeve (1).
5. Fix the washer (4) and fasten countersunk head screws (5)
(countersunk head screws shall be coated with screw fixing glue) in order to prevent looseness.
6. Because the PC Series gear reducer has been filled with lubricant, carefully remove the sealing end cover at (2) in the diagram; this procedure does not exist because a PC Series gear reducer has been provided with a motor when leaving the factory.
7. Replace the oil seal and motor at (2) in the diagram, being careful not to damage the oil seal.

Note: The PC Series speed reducer adopts a standard motor with high quality, and the motor may run with no vibration and low noise.

The installation of the motor on the PC Series gear reducer :



Lubricating oil details of the PC Series Gear Reducer

- PC Series reducer adopt No.2 extreme pressure lithium lubricating grease (long-term) for lubrication, and The reducer may be fixed according to the position indicated in the specification.
- No.2 extreme pressure lithium lubricating grease adopted on the PC Series reducer has the working range from -20°C~+50°C

Type	PC 063	PC 071	PC 080	PC 090
B3、 B8				
B6、 B7	0.05L	0.07L	0.15L	0.15L
V5、 V6				

Note: The unit of lubricant oil is liter (L).



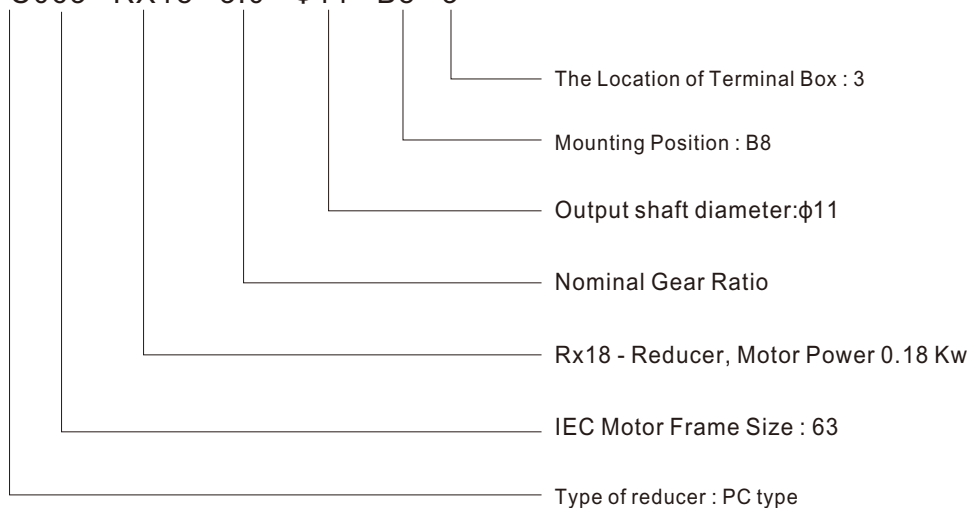
SERIES PC

UNIT DESIGNATION

PC SERIES GEAR REDUCER

Explanation of the PC Series Gear Reducer Nomenclature

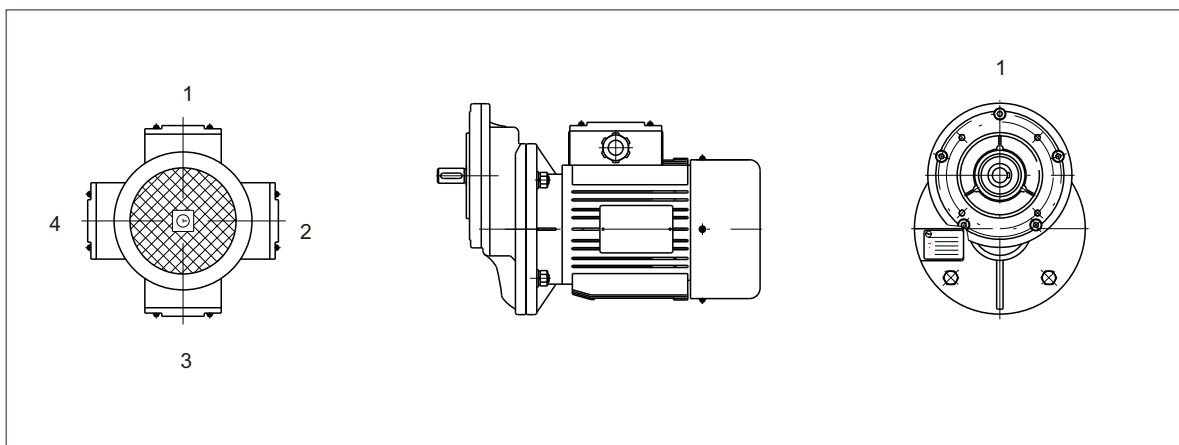
PC063 - RX18 - 3.0 - Φ 11 - B8 - 3



PC	Type
063,071,080,090	IEC Motor Frame Size
G063, RX18	G063 - Without Motor, Frame Size 63 RX18 - Reducer, Motor Power 0.18 Kw
3.00 , 2.42	Nominal gear ratio
Φ 11, Φ 14, Φ 19, Φ 24, Φ 28	Output shaft diameter
B3,B8,B6,B7,V5,V6	Mounting Position, Refer Page No. 34
1,2,3,4	Location of Terminal Box, Refer Page No. 34, omitted when not required

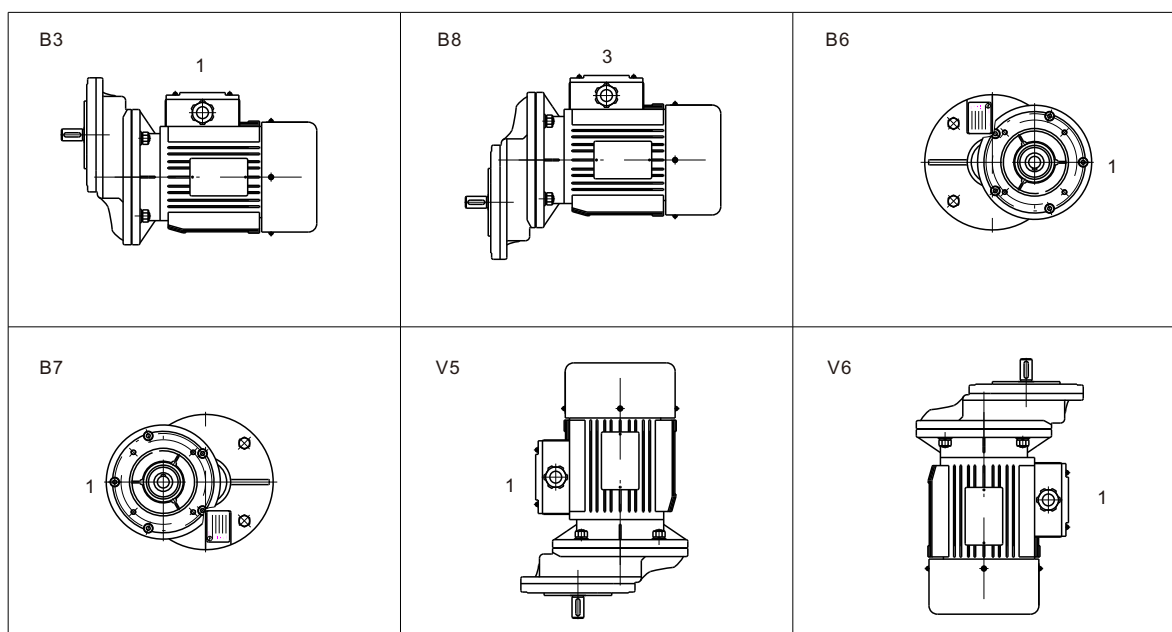
MOUNTING POSITION OF THE PC SERIES GEAR REDUCER

Location of terminal box



Notice : For specific requirements, indicate the position of the terminal box based on the diagram shown.

Mounting Position of the PC Series Gear Reducer

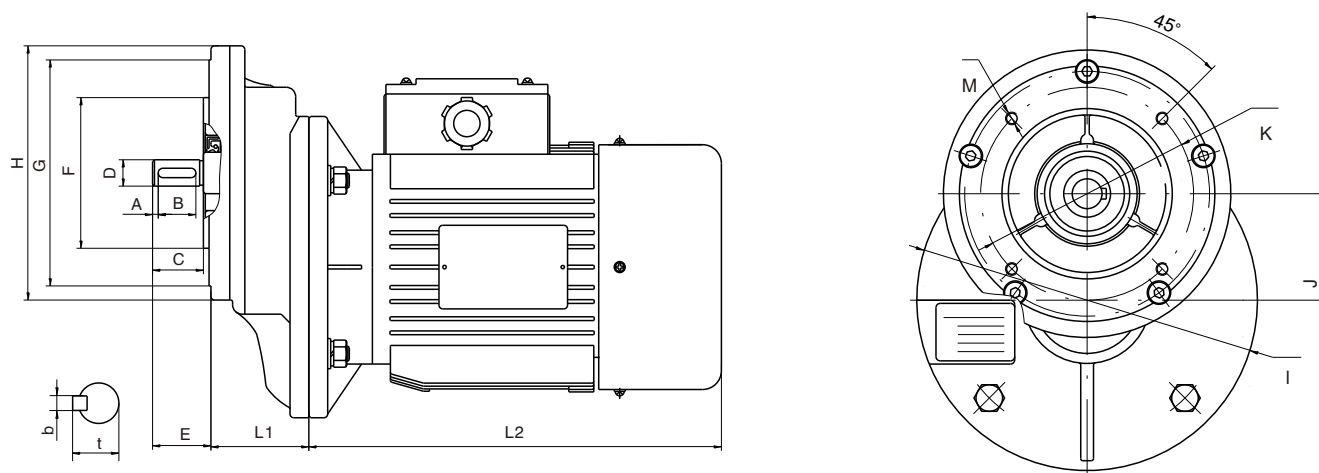


Note : If there is no specific description, B3 is regarded as the standard mounting position.

SERIES PC + PBWR

GENERAL ARRANGEMENT DRAWING

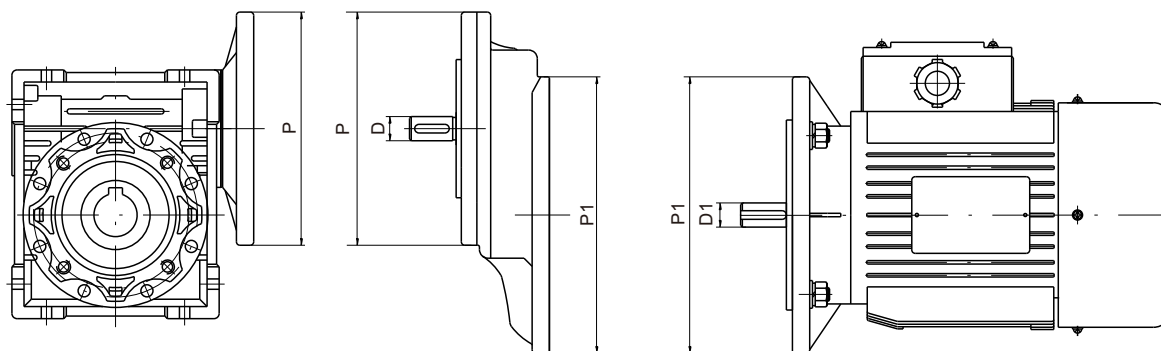
PC SERIES GEAR REDUCER



Type	A	B	C	D(js6)	b	t	E	F(H8)	G	H	I	J	K	M	L1	L2	Mount type
PC063	1.5	18	21	11	4	12.5	23	70	105	114	140	43	85	4-M6×10	47	183	63B5
	2	20	28	※14	5	16	30										
PC071	3	20	27	14	5	16	30	80	120	135	160	54	100	4-M6×10	57	210	71B5
	3	32	37	※19	6	21.5	40										
PC080	3	32	40	19	6	21.5	40	110	160	200	66	130	4-M8×11	74	262	80B5	
	4	40	50	※24	8	27	50										
	4	50	60	※28	8	31	60										
PC090	3	32	40	※19	6	21.5	40	110	160	200	66	130	4-M8×11	74	294 325	90B5 90LB5	
	3	40	50	24	8	27	50										
	3	50	60	※28	8	31	60										

Note: The output shaft's diameter D(js6) with "※" provided in the table is a non-standard specification, while the diameter without "※" is standard. The user may choose between both of them according to their needs.

The Combination Form of PC+PBWR Reducer :

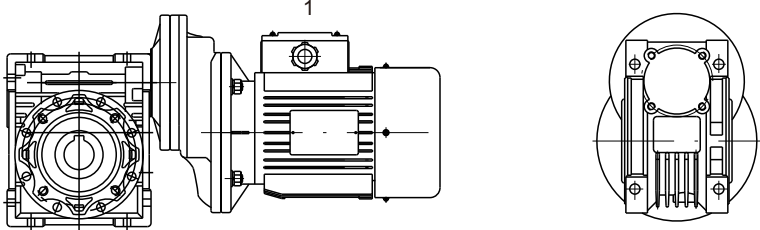
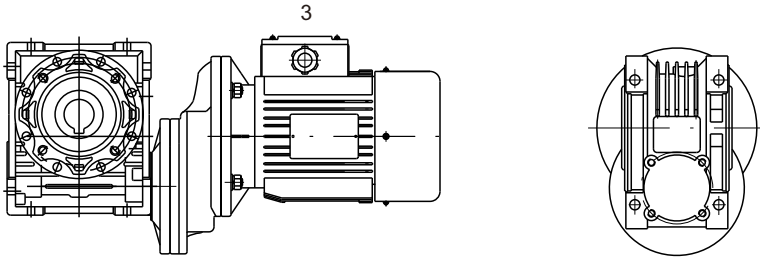
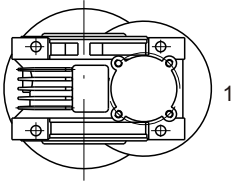
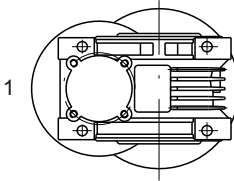
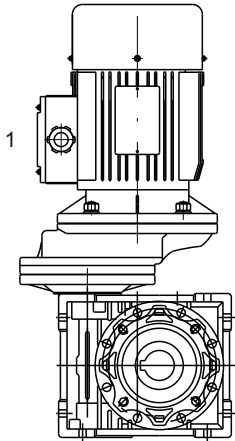
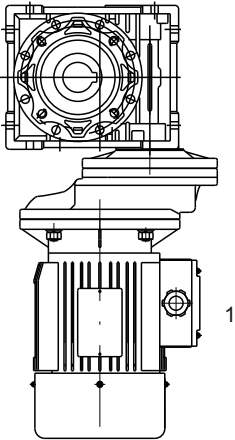


PC+PBWR		P1/D1 motor type	P/D	(P/D)	Remarks
PC063 +	PBWR 40	63B5-Φ140/Φ11	Φ105/Φ11	(Φ105/Φ14)	Worm reducer is provided with 71B14 type input flange
	PBWR 50				
	PBWR 63				
PC071 +	PBWR 50	71B5-Φ160/Φ14	Φ120/Φ14	(Φ120/Φ19)	Worm reducer is provided with 80B14 type input flange
	PBWR 63				
	PBWR 75				
PC080 +	PBWR 90	80B5-Φ200/Φ19	Φ160/Φ19	(Φ160/Φ24) (Φ160/Φ28)	Worm reducer is provided with 71B5 type input flange
	PBWR 75				
	PBWR 90				
	PBWR 110				
PC090 +	PBWR 130	90B5-Φ200/Φ24	Φ160/Φ24	(Φ160/Φ19) (Φ160/Φ28)	Worm reducer is provided with 71B5 type input flange
	PBWR 110				
	PBWR 130				

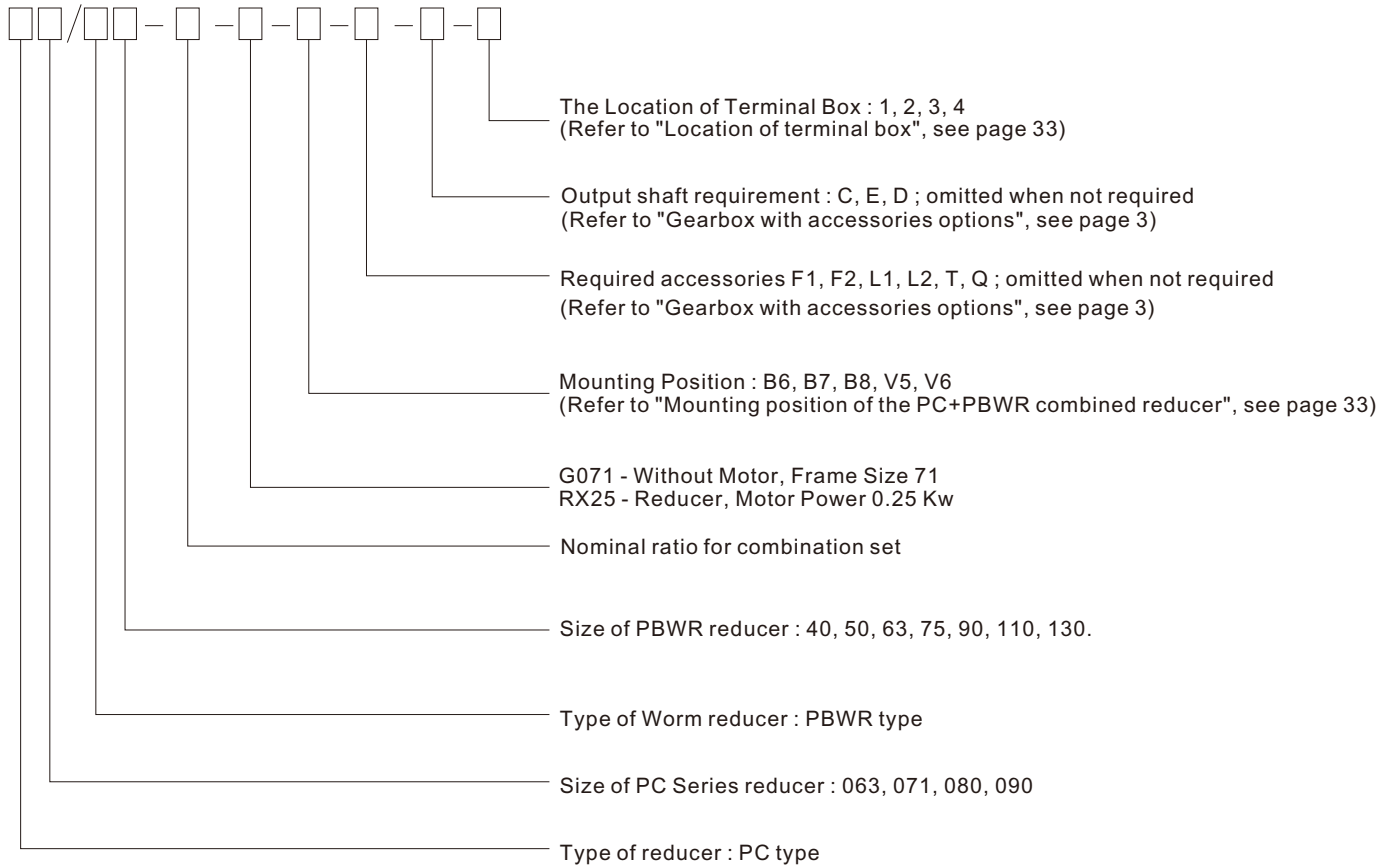
VARIOUS OPTIONS FOR
FRAME SIZES AND RATIOS

Type	(l)	PC063		PC071		PC080			PC090		
		$\Phi 105/\Phi 11$ i=3	$\Phi 105/\Phi 14$ i=3	$\Phi 120/\Phi 14$ i=3	$\Phi 120/\Phi 19$ i=3	$\Phi 160/\Phi 24$ i=3	$\Phi 160/\Phi 24$ i=3	$\Phi 160/\Phi 28$ i=3	$\Phi 160/\Phi 19$ i=2.42	$\Phi 160/\Phi 24$ i=2.42	$\Phi 160/\Phi 28$ i=2.42
PBWR40	25										
	30										
	40										
	50										
	60										
	80										
	100										
PBWR50	25										
	30										
	40										
	50										
	60										
	80										
	100										
PBWR63	25										
	30										
	40										
	50										
	60										
	80										
	100										
PBWR75	25										
	30										
	40										
	50										
	60										
	80										
	100										
PBWR90	25										
	30										
	40										
	50										
	60										
	80										
	100										
PBWR110	25										
	30										
	40										
	50										
	60										
	80										
	100										
PBWR130	25										
	30										
	40										
	50										
	60										
	80										
	100										

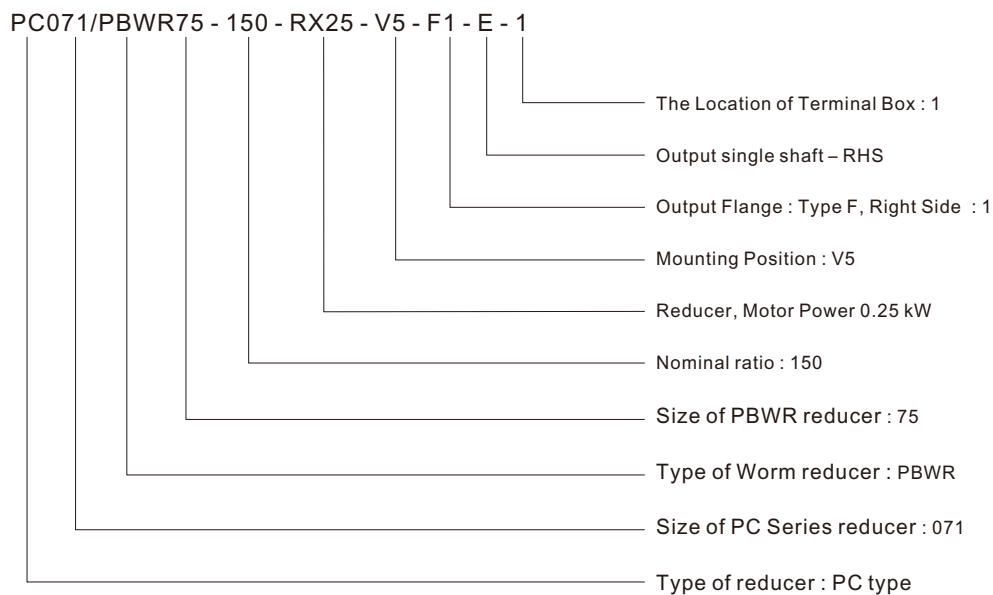
MOUNTING POSITION OF PCSERIES +PBWR REDUCER

B3			
B8			
B6		B7	
V5			
V6			

Note : If there is no specific description,B3 is regarded as the standard mounting position.



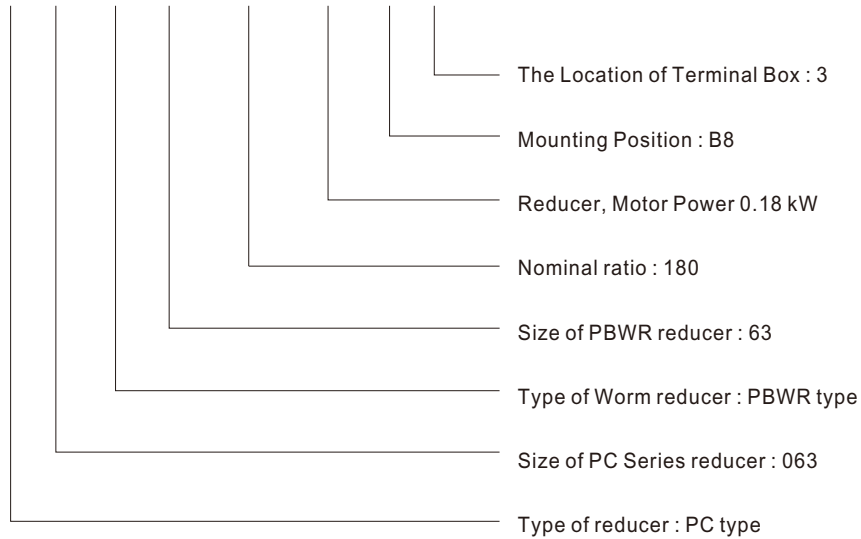
Explanation of the PC Series + PBWR Gear Reducer Nomenclature

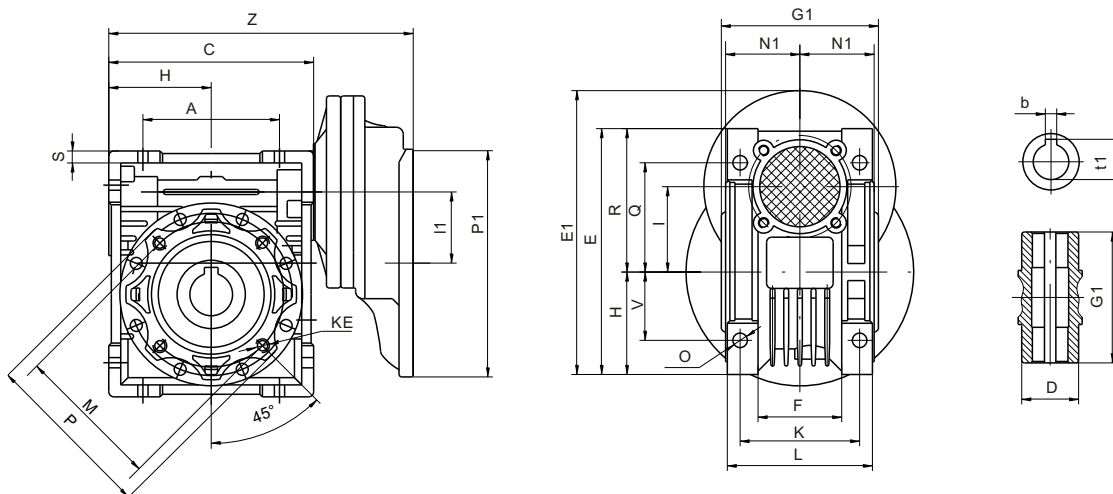




Explanation of the PC Series + PBWR Gear Reducer Nomenclature

PC063/PBWR63 - RX18 - 180 - B8 - 3





PC+PBWR		A	C	D(H7)	t1	b	E	E1	F	G1	H	I	I1	K
PC 063+	PBWR40	70	100	18	20.8	6	121.5	147	43	78	50	40	40	60
	PBWR50	80	120	25	28.3	8	145	167	49	92	60	50	40	70
	PBWR63	100	144	25	28.3	8	174	192	67	112	72	63	40	85
PC 071+	PBWR50	80	120	25	28.3	8	145	177.5	48	92	60	50	50	70
	PBWR63	100	144	25	28.3	8	174	202.5	67	112	72	63	50	85
	PBWR75	120	172	28	31.3	8	205	228.5	72	120	86	75	50	90
	PBWR90	140	206	35	38.3	10	238	260.5	72	140	103	90	50	100
PC 080+	PBWR75	120	172	28	31.3	8	205	241	72	120	86	75	63	90
	PBWR90	140	206	35	38.3	10	238	273	72	140	103	90	63	100
	PBWR110	170	252.5	42	45.3	12	295	317.5		155	127.5	110	63	115
	PBWR130	200	292.5	45	48.8	14	335	357.5		170	147.5	130	63	120
PC 090+	PBWR110	170	252.5	42	45.3	12	295	317.5		155	127.5	110	63	115
	PBWR130	200	292.5	45	48.8	14	335	357.5		170	147.5	130	63	120

PC+PBWR		KE	L	M	N(h8)	N1	O	P	P1	Q	R	V	S	Z
PC 063+	PBWR40	4-M8×8	71	75	60	36.5	6.5	87	140	55	71.5	35	6.5	167
	PBWR50	4-M8×10	85	85	70	43.5	8.5	100	140	64	85	40	7	187
	PBWR63	8-M8×14	103	95	80	53	8.5	110	140	80	102	50	8	214
PC 071+	PBWR50	4-M8×10	85	85	70	43.5	8.5	100	160	64	85	40	7	197
	PBWR63	8-M8×14	103	95	80	53	8.5	110	160	80	102	50	8	224
	PBWR75	8-M8×14	113	115	95	57	11	140	160	93	119	60	10	255.5
	PBWR90	8-M10×18	130	130	110	67	13	160	160	102	135	70	11	289.5
PC 080+	PBWR75	8-M8×14	113	115	95	57	11	140	200	93	119	60	10	272.5
	PBWR90	8-M10×18	130	130	110	67	13	160	200	102	135	70	11	306.5
	PBWR110	8-M10×18	142	165	130	74	14	200	200	125	167.5	85	15	357.5
	PBWR130	8-M12×21	155	215	180	81	16	250	200	140	187.5	10	15	397.5
PC 090+	PBWR110	8-M10×18	142	165	130	74	14	200	200	125	167.5	85	15	357.5
	PBWR130	8-M12×21	155	215	180	81	16	250	200	140	187.5	100	15	397.5



Selection Parameter of Series PC + PBWR Reducer
(Input Speed 1400 rpm, 4 Pole & 900 rpm, 6 pole)

P1 (KW)	n2 (r/min)	M2 (N.M)	Service Factor	i	Type	Motor type
0.12	466.7	2.4	2.08	3	PC063	0.12KW-4P-63B5
	18.7	42.4	1.20	75	PC063+PBWR40	0.12KW-4P-63B5
	156.6	46.0	1.20	90		
	11.7	57.0	0.90	120		
	9.3	66.0	0.70	150		
	7.8	74.0	0.60	180		
	9.3	67.5	1.30	150	PC063+PBWR50	0.12KW-4P-63B5
	7.8	75.0	1.10	180		
	5.8	88.0	0.80	240		
	4.7	98.0	0.70	300		
	5.8	92.3	1.50	240	PC063+PBWR63	0.12KW-4P-63B5
	4.7	103.0	1.20	300		
	466.7	3.6	1.42	3	PC063	0.18KW-4P-63B5
	18.7	63.5	0.80	75	PC063+PBWR40	0.18KW-4P-63B5
	15.6	70.0	0.80	90		
	11.7	85.0	0.60	120		
0.18	18.7	63.5	1.40	75	PC063+PBWR50	0.18KW-4P-63B5
	15.6	71.0	1.50	90		
	11.7	87.0	1.10	120		
	9.3	101.0	0.90	150		
	7.8	113	0.70	180		
	5.8	133.0	0.60	240		
	9.3	103.1	1.70	150	PC063+PBWR63	0.18KW-4P-63B5
	7.8	117.0	1.40	180		
	5.8	139.0	1.00	240		
	4.7	155.0	0.80	300		
	300.0	5.6	1.97	3	PC071	0.18KW-6P-71B5
	12.0	94.5	1.20	75	PC071+PBWR50	0.18KW-6P-71B5
	10.0	105.0	1.40	90		
	7.5	126.0	1.00	120		
	12.0	97.4	2.20	75	PC071+PBWR63	0.18KW-6P-71B5
	10.0	107.0	2.40	90		
	7.5	131.0	1.80	120		
	6.0	152.0	1.40	150		
	5.0	168.0	1.20	180		
	3.8	197.0	0.90	240		
	3.0	218.0	0.70	300		
	5.0	178.8	1.70	180	PC071+PBWR75	0.18KW-6P-71B5
	3.8	211.0	1.20	240		
	3.0	235.0	1.00	300		
0.25	466.7	5.0	2.20	3	PC071	0.25KW-4P-71B5
	18.7	88.3	1.00	75	PC071+PBWR50	0.25KW-4P-71B5
	15.6	98.0	1.10	90		
	11.7	121.0	0.80	120		
	18.7	90.8	1.80	75	PC071+PBWR63	0.25KW-4P-71B5
	15.6	100.0	2.00	90		
	11.7	125.0	1.50	120		
	9.3	143.0	1.20	150		
	7.8	163.0	1.00	180		

Selection Parameter of Series PC + PBWR Reducer
(Input Speed 1400 rpm, 4 Pole & 900 rpm, 6 pole)

P1 (KW)	n2 (r/min)	M2 (N.M)	Service Factor	i	Type	Motor type
0.25	5.8	192.0	0.70	240		
	4.7	215.0	0.60	300		
	9.3	150.9	1.70	150	PC071+PBWR75	0.25KW-4P-71B5
	7.8	172.0	1.40	180		
	5.8	201.0	1.10	240		
	4.7	230.0	0.90	300		
	300.0	7.8	1.41	3	PC071	0.25KW-6P-71B5
	12.0	135.3	1.60	75	PC071+PBWR63	0.25KW-6P-71B5
	10.0	148.0	1.80	90		
	7.5	181.0	1.30	120		
	6.0	211.0	1.00	150		
	12.0	139.3	2.40	75	PC071+PBWR75	0.25KW-6P-71B5
	10.0	155.0	2.50	90		
	7.5	191.01	1.90	120		
	6.0	219.0	1.50	150		
	5.0	248.0	1.20	180		
	5.0	262.6	1.90	180	PC071+PBWR90	0.25KW-6P-71B5
	3.8	318.0	1.40	240		
	3.0	358.0	1.10	300		
0.37	466.7	7.4	1.49	3	PC071	0.37KW-4P-71B5
	18.7	134.4	1.2	75	PC071+PBWR63	0.37KW-4P-71B5
	15.6	148.0	1.40	90		
	11.7	185.0	1.00	120		
	9.3	212.0	0.80	150		
	18.7	138.2	1.8	75	PC071+PBWR75	0.37KW-4P-71B5
	15.6	154.0	1.9	90		
	11.7	191.0	1.50	120		
	9.3	223.0	1.10	150		
	7.8	254.0	0.90	180		
	7.8	268.0	1.50	180	PC071+PBWR90	0.37KW-4P-71B5
	5.8	321.0	1.10	240		
	4.7	371.0	0.90	300		
	300.0	11.5	1.91	3	PC080	0.37KW-6P-80B5
	12.0	206.1	1.60	75	PC080+PBWR75	0.37KW-6P-80B5
	10.0	230.0	1.70	90		
	7.5	283.0	1.30	120	PC080+PBWR75	0.37KW-6P-80B5
	6.0	324.0	1.00	150		
	6.0	347.5	1.60	150	PC080+PBWR90	0.37KW-6P-80B5
	5.0	389.0	1.30	180		
	3.8	471.0	1.00	240		
	3.8	508.8	1.60	240	PC080+PBWR110	0.37KW-6P-80B5
	3.0	577.0	1.30	300		

Selection Parameter of Series PC + PBWR Reducer
(Input Speed 1400 rpm, 4 Pole & 900 rpm, 6 pole)

P1 (KW)	n2 (r/min)	M2 (N.M)	Service Factor	i	Type	Motor type
0.55	466.7	11.0	2.03	3	PC080	0.55KW-4P-80B5
	18.7	205.4	1.20	75	PC080+PBWR75	0.55KW-4P-80B5
	15.6	230.0	1.30	90		
	11.7	284.0	1.00	120		
	9.3	332.0	0.80	150		
	15.6	239.7	2.30	90	PC080+PBWR90	0.55KW-4P-80B5
	11.7	297.0	1.60	120		
	9.3	355.0	1.30	150		
	7.8	398	1	180		
	5.8	477	0.8	240		
	7.8	425.5	1.80	180	PC080+PBWR110	0.55KW-4P-80B5
	5.8	513.0	1.30	240		
	4.7	597.0	1.00	300		
	300.0	17.2	1.29	3	PC080	0.55KW-6P-80B5
	12.0	306.4	1.10	75	PC080+PBWR75	0.55KW-6P-80B5
	10.0	341.0	1.10	90		
	10.0	357.2	2.00	90	PC080+PBWR90	0.55KW-6P-80B5
	7.5	441.0	1.40	120		
	6.0	516.0	1.10	150		
	5.0	578.0	0.90	180		
	7.5	462.2	2.60	120	PC080+PBWR110	0.55KW-6P-80B5
	6.0	552.0	2.00	150		
	5.0	620.0	1.60	180		
	3.8	756.0	1.10	240		
	3.8	756.4	1.60	240	PC080+PBWR130	0.55KW-6P-80B5
	3.0	858.0	1.30	300		
0.75	466.0	15.0	1.47	3	PC080	0.75KW-4P-80B5
	18.7	280.1	0.90	75	PC080+PBWR75	0.75KW-4P-80B5
	15.6	313.0	1.00	90		
	15.6	336.9	1.70	90	PC080+PBWR110	0.75KW-4P-80B5
	11.7	405.0	1.20	12		
	9.3	483.0	0.90	150		
	7.8	543.0	0.70	180		
	11.7	429.8	2.20	120		
	9.3	506.0	1.70	150	PC080+PBWR130	0.75KW-4P-80B5
	7.8	580.0	1.30	180		
	5.8	700.0	0.90	240		
	5.8	712.2	1.40	240		
	4.7	813.0	1.10	300		
	376	18.7	1.91	2.42	PC090	0.75KW-6P-90B5
	12.4	392.9	3.20	72.6	PC090+PBWR110	0.75KW-6P-90B5
	9.3	508.0	2.30	96.8		
	7.4	607.0	1.80	121		
	6.2	682.0	1.50	145.2		
	4.6	832.0	1.00	193.6		

Selection Parameter of Series PC + PBWR Reducer
(Input Speed 1400 rpm, 4 Pole & 900 rpm, 6 pole)

P1 (KW)	n2 (r/min)	M2 (N.M)	Service Factor	I	Type	Motor type
0.75	12.4	398.7	4.40	72.6	PC090+PBWR130	0.75KW-6P-90B5
	9.3	508	3.2	96.8		
	7.4	607	2.6	121		
	6.2	682.0	2.10	145.2		
	4.6	832.0	1.50	193.6		
	3.7	944.0	1.20	242		
1.1	578.5	17.8	2.00	2.42	PC090	1.1KW-4P-90B5
	19.3	392.2	2.50	72.6	PC090+PBWR110	1.1KW-4P-90B5
	14.5	508.0	1.80	96.8	PC090+PBWR130	1.1KW-4P-90B5
	11.6	599.0	1.50	121		
	9.6	686.0	1.10	145.2		
	7.2	828.0	0.80	193.6		
	19.3	397.7	3.50	72.6		
	14.5	508.0	2.60	96.8		
	11.6	608.0	2.00	121		
	9.6	686.0	1.60	145.0		
	7.2	843.0	1.20	193.6		
	5.8	962.0	0.90	242		
	376.0	27.4	1.30	2.42	PC090	1.1KW-6P-90B5
	12.4	576.2	2.20	72.6	PC090+PBWR110	1.1KW-6P-90B5
	9.3	746.0	1.60	96.8	PC090+PBWR130	1.1KW-6P-90B5
	7.4	890.0	1.20	121		
	6.2	1000.0	1.00	145.2		
	12.4	584.7	3.00	72.6		
	9.3	746.0	2.20	96.8		
	7.4	890.0	1.70	121		
	6.2	1000.0	1.40	145.2		
	4.6	1220.0	1.00	193.6		
1.5	578.5	24.3	1.47	2.42	PC090	1.5KW-4P-90B5
	19.3	534.9	1.90	72.6	PC090+PBWR110	1.5KW-4P-90B5
	14.5	693.0	1.30	96.8	PC090+PBWR130	1.5KW-4P-90B5
	11.6	817.0	1.10	121		
	9.6	936.0	0.80	145.2		
	19.3	542.3	2.60	72.6		
	14.5	693.0	1.90	96.8		
	11.6	830.0	1.50	121		
	9.6	936.0	1.10	145.2		
	7.2	1148.9	0.80	193.6		
2.2	1157.0	17.9	2.00	2.42	PC090	1.5KW-2P-90B5
	38.6	397.7	2.10	72.6	PC090+PBWR110	1.5KW-2P-90B5
	28.9	516.7	1.50	96.8	PC090+PBWR130	1.5KW-2P-90B5
	23.1	617.0	1.20	121		
	38.6	408.6	2.90	72.6		
	28.9	545.0	2.00	96.8		
	23.1	654.0	1.60	121		
	19.3	752.0	1.30	145.2		

UNIT IDENTIFICATION (NAME PLATE DETAILS)

When requesting further information, or service support quote the following information from the nameplate:

- Unit Type
- Sr. Number

1 - Type

Series PBWR

2 - Size of Unit

030 Through 150

3 - IEC Frame size

		IMS Certified ISO 9001:2015 ISO 14001:2015 ISO 45001:2018	
POWER BUILD PVT LTD			
TYPE	PBWR050	RATIO	10
FRAME SIZE	71B14		
Sr. No.			

5 - ISO Details

6 - Ratio

7.5, 10, 15, 20, 25, 30,
40, 50, 60, 80, 100

4 - PBL unique gearbox number

1 - Type

Series PC

2 - Size of Unit

63 Through 90

3 - IEC Frame size

		IMS Certified ISO 9001:2015 ISO 14001:2015 ISO 45001:2018	
POWER BUILD PVT LTD			
TYPE	PC 090	RATIO	2.42
FRAME SIZE	90B5		
Sr. No.			

5 - ISO Details

6 - Ratio

PC63-PC80 : 3
PC90 : 2.42

4 - PBL unique gearbox number

[illegible]

[illegible]

[illegible]

Notes :

[illegible]



MARKETING & SERVICING FIRM



REGISTERED OFFICE :

Anand - Sojitra Road, Vallabh Vidyanagar - 388 120. Gujarat, INDIA.
Phones : +91 269 223 0168, +91 269 223 1125 Fax : +91 269 223 6508

: BRANCH OFFICES :

Ahmedabad:

Phone: +91 79 26406683
Email : infopbl@powerbuild.in

Bangalore:

Phone: +91 80 25251834,
+91 80 25250219
Email : infopbl@powerbuild.in

Chennai:

Phone: +91 44 24349237,
+91 44 24349497,
+91 44 24322455
Email : infopbl@powerbuild.in

Coimbatore:

Phone: +91 97277 19344
Email : infopbl@powerbuild.in

Indore:

Phone: +91 97277 19344
Email : infopbl@powerbuild.in

Jamshedpur:

Phone: +91 7631199950
Email : infopbl@powerbuild.in

Jaipur:

Phone: +91 97277 19344
Email : infopbl@powerbuild.in

Kolkata:

Phone: +91 33 24761861
+91 33 24761904
Email : infopbl@powerbuild.in

Mumbai:

Phone: +91 97277 19344
Email : infopbl@powerbuild.in

Nagpur:

Phone: +91 97277 19344
Email : infopbl@powerbuild.in

New Delhi:

Phone: +91 97277 19344
Email : infopbl@powerbuild.in

Pune:

Phone: +91 97277 19344
Email : infopbl@powerbuild.in

Raipur:

Phone: +91 97277 19344
Email : infopbl@powerbuild.in

Hyderabad:

Phone: +91 97277 19344
Email : infopbl@powerbuild.in

Vadodara:

Phone: +91 265 2313670
Email : infopbl@powerbuild.in

INTERNATIONAL LOCATIONS

UK | SWEDEN | USA | NETHERLANDS | SINGAPORE
GERMANY | FINLAND | DENMARK | AUSTRALIA | ITALY

SUBSIDIARIES

1. RADICON TRANSMISSION THAILAND LTD. (THAILAND)
2. RADICON TRANSMISSION FZE (UAE)

GEARED MOTORS • GEARBOXES • GEAR ASSEMBLIES • DRIVE SOLUTIONS

POWER BUILD PVT LTD
Leaders in Power Transmission Solutions

Anand Sojitra Road, Vallabh Vidyanagar, Anand - 388120 (Gujarat) India • Tel.: +91 (2692) 231070, 231120, 231170, Mo.: +91 97277 19344

Web: www.powerbuild.in | E-mail: infopbl@powerbuild.in

CIN : U32201GJ1972PTC002065