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UNLEASHING POWER

UNLOCKING VALUE

Series PBWR

Worm Gear Reducers

GEARED MOTORS · GEARBOXES · GEAR ASSEMBLIES · DRIVE SOLUTIONS

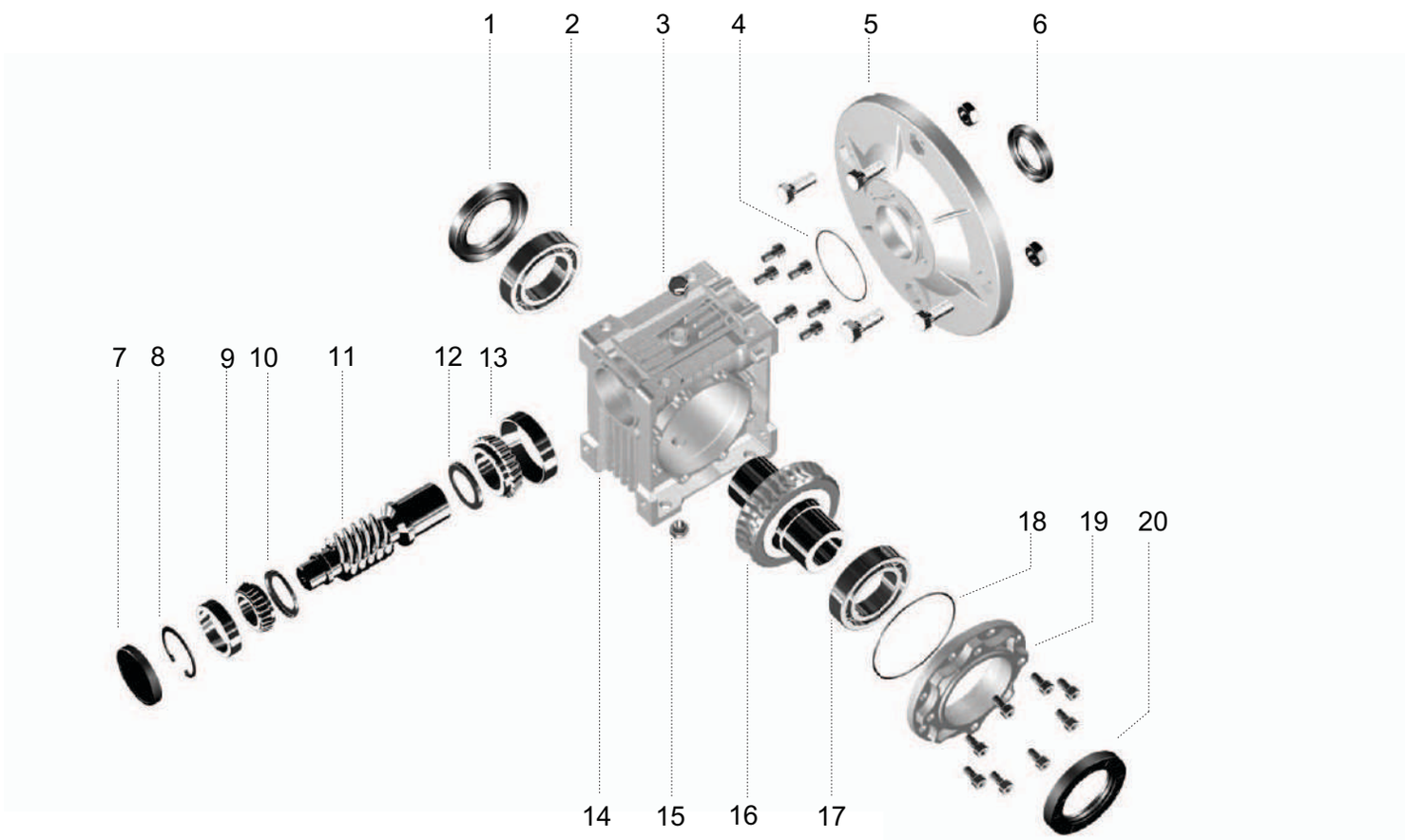
CPBWR-1.00INP0723

CONTENTS

The advantages of worm reducer

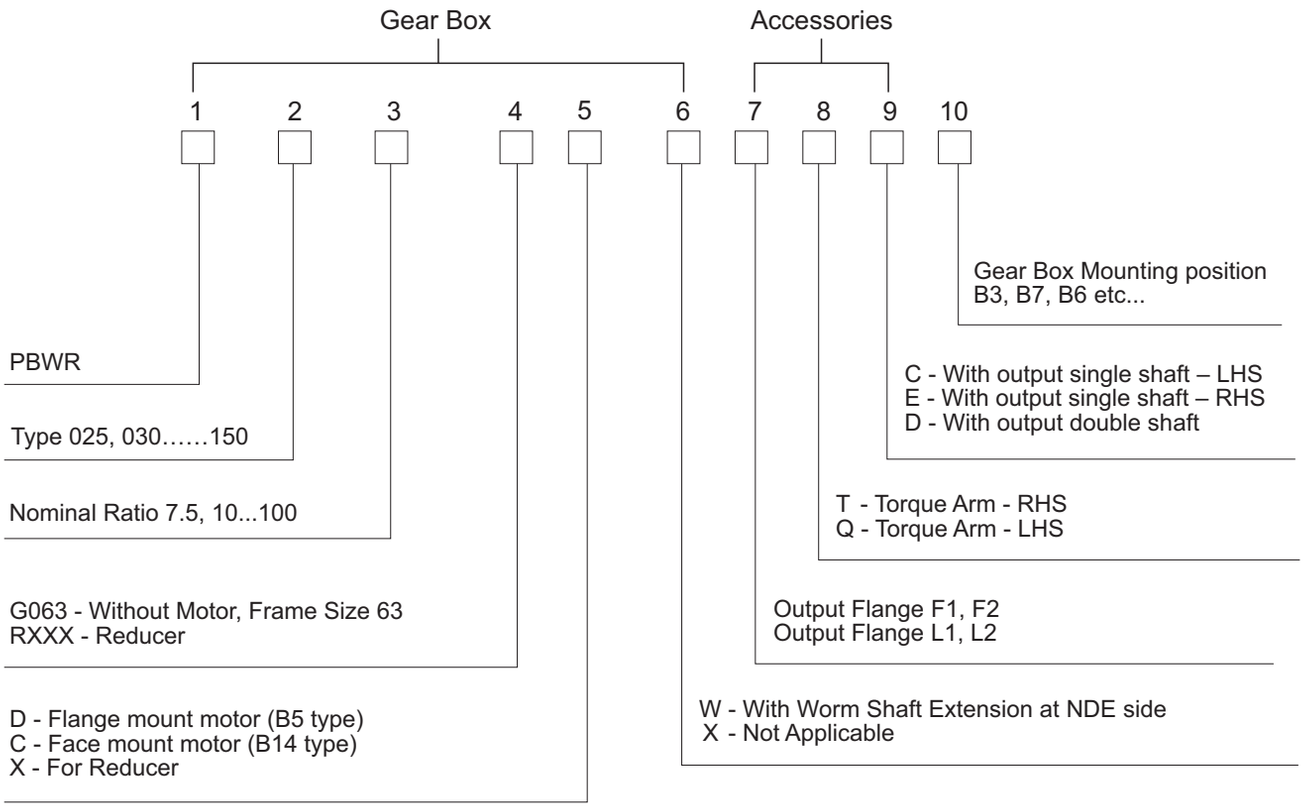
1. High quality Aluminum alloy, appearance elegant, efficient thermally, high load carrying capacity.
2. Installed in multi-surfaces,hollow output shaft, various type of input and output end accessories.
3. We can mount other transmission machinery easily.
4. Small size, compact construction, light weight, 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 DESCRIPTION
SINGLE STAGE WORM REDUCER



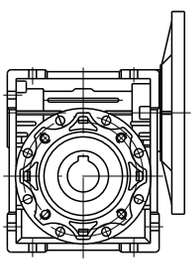
Kindly Note that digits 7 to 9 are omitted when not required.

Explanation of the Gearbox Nomenclature :

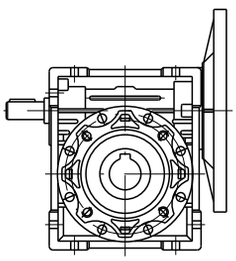
PBWR	Gear Box type (With input flange)
25-30-40-50-63-75-90-110-130-150	Gear Box size (SIZE 25 to be provide on request)
7.5-10-15-20-25-30-40-50-60-80-100	Nominal ratio
G063	Without Motor, Frame Size 63
RXXX	Reducer
F.....(1-2).L.....(1-2)	Output flange and mounting position (Right Side / Left Side)
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



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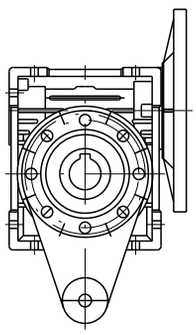
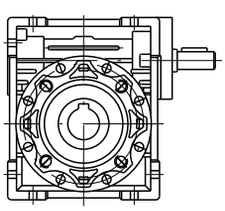
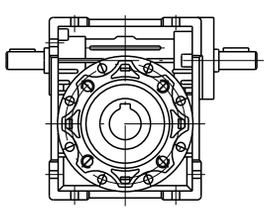


PBWR...R....



PBWR....R...W..



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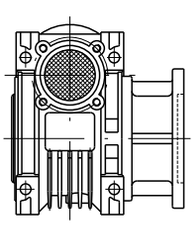
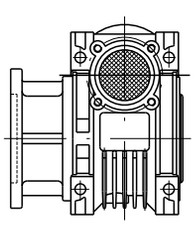


.....F2,L2



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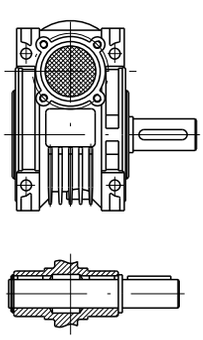

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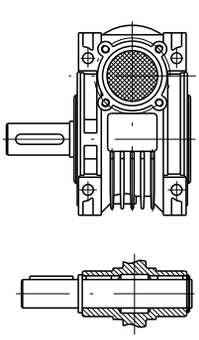
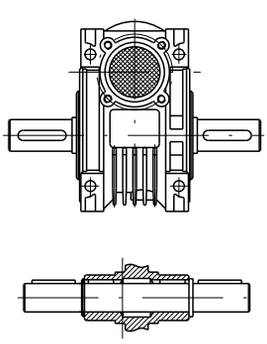
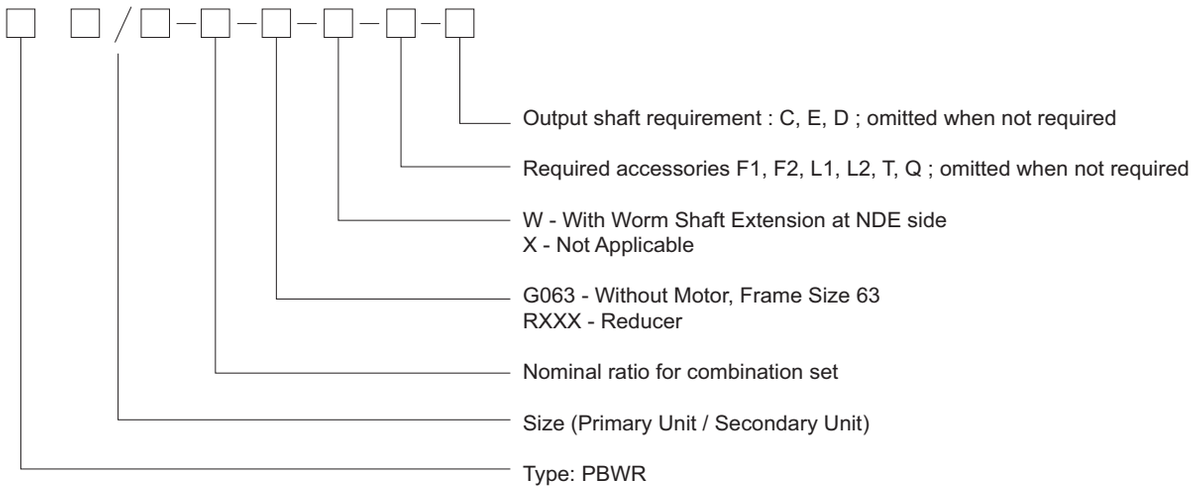


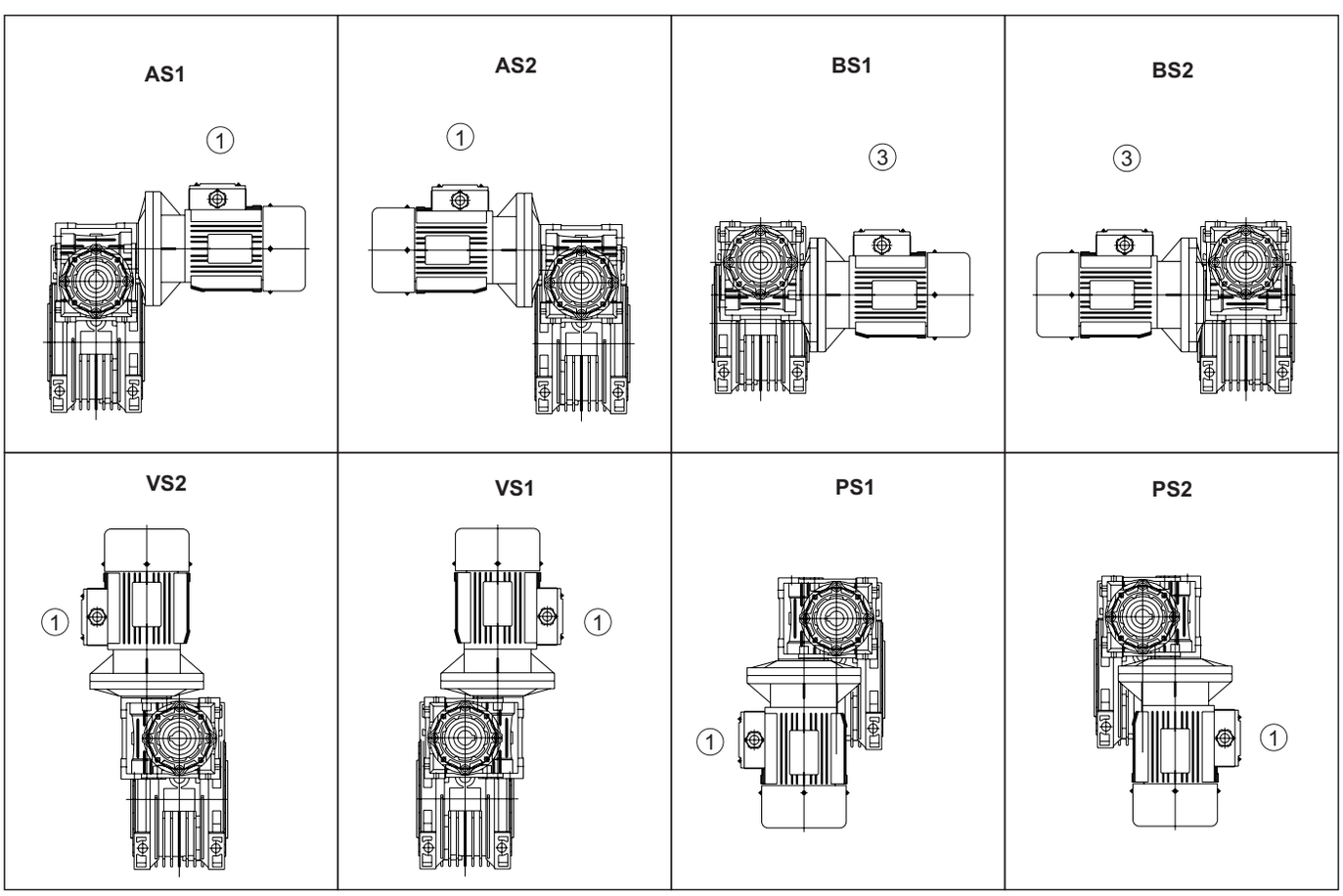
.....D



Combination of double stage worm reducer



Different type of Mounting Position - Double stage worm reducer



*Kindly note that "○" denoted as a terminal box position

Examples :

1. PBWR-040-030-G063-F1-D

Means:
Gearbox Type : PBWR
Gearbox Size : 40
Nominal Ratio : 30
Without Electric Motor, Frame size 63
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-G071-W

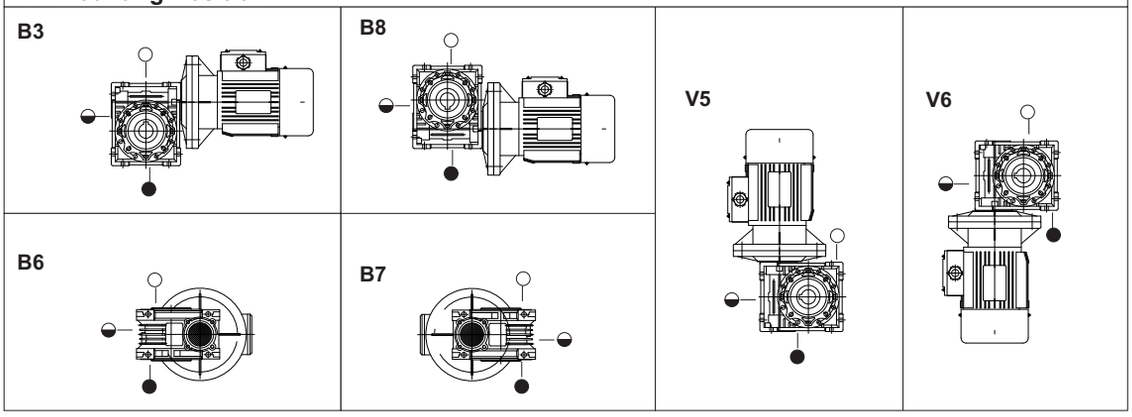
Means:
Gearbox Type : PBWR
Gearbox Size : 40/75
Nominal Ratio : 300
Without Electric Motor, Frame size 71
With Shaft Extension at Non Drive End : W

MOUNTING POSITION & LUBRICANT DETAILS OF REDUCER

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

1. Mounting Position

Note: ○ Oil filling hole and air hole ◒ Oil level glass ● Oil drain plug



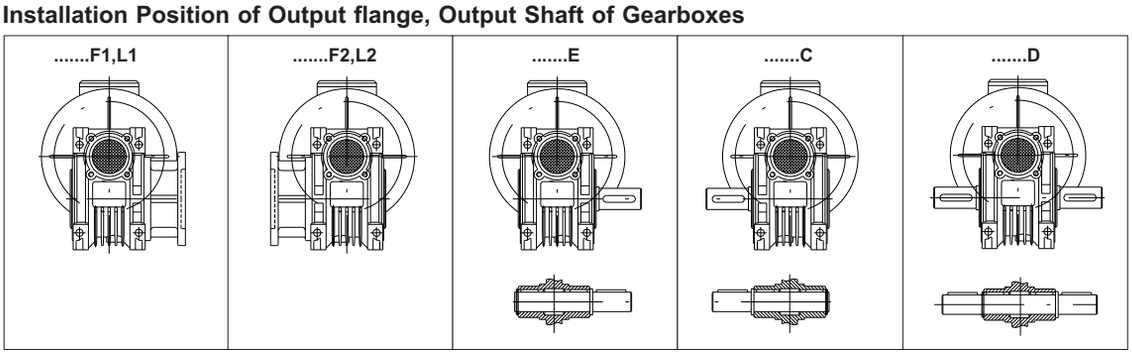
2. Oil quantities against different mounting positions

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

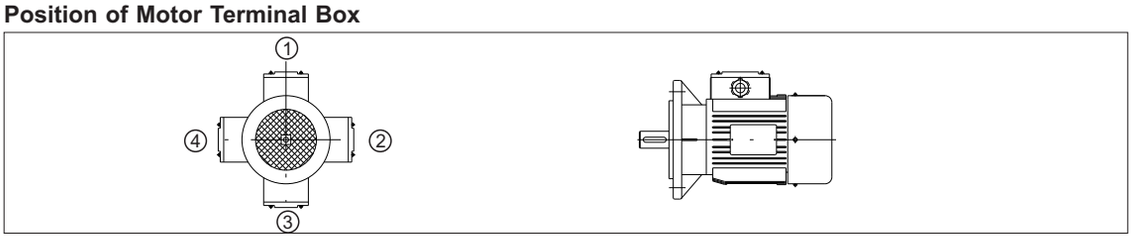
3. Lubricating oil

Gearbox Size		PBWR25, PBWR**30**, PBWR40 PBWR50, PBWR63, PBWR75	**PBWR90**, **PBWR110**, **PBWR130**, **PBWR150**		
	Lubricant	**Synthetic Oil**	**Synthetic Oil**	**Mineral Oil**	
	Ambient Temperature	-25°C ~ +50°C	-25°C ~ +50°C	-5°C ~ +40°C	-15°C ~ +40°C
ISO		VG320	VG320	VG460	VG320
Used in International	**AGIP**	TELIUM VSF320	TELIUM VSF320	BLASIA 460	BLASIA 220
	SHELL	TIVELA S320	TIVELA S320	OMALA OIL 460	OMALA OIL 220
	ESSO	S220	S220	SPARTAN EP 460	SPARTAN EP 220
	MOBIL	GLYGOYLE 30	GLYGOYLE 30	MOBIL GEAR 634	MOBIL GEAR 630
	CASTROL	ALPHASYN PG 320	ALPHASYN PG 320	ALPHA MAX 460	ALPHA MAX 220
	BP	ENERGOL SG-XP 320	ENERGOL SG-XP 320	ENETGOL SG-XP 460	ENETGOL SG-XP 220

Installation Position of Output flange, Output Shaft of Gearboxes



Position of Motor Terminal Box



*Kindly note that "○" denoted as a terminal box position

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	Duty cycle (Hours 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	Duty cycle (Hours 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

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
0.06kW				
186.7	2.6	4.2	7.5	PBWR25
140	3.4	3.5	10	
93.3	4.9	2.5	15	
70	6.1	2.0	20	
46.7	8.2	1.6	30	
35	10	1.3	40	
28	12	0.9	50	
23.3	14	0.7	60	
186.7	2.6	6.9	7.5	PBWR30
140	3.4	5.4	10	
93.3	4.7	3.8	15	
70	6	3.0	20	
56	7	3.0	25	
46.7	8	2.5	30	
35	9.7	1.9	40	
28	11	1.5	50	
23.3	13	1.3	60	
17.5	14	0.9	80	
0.09kW				
186.7	3.9	2.8	7.5	PBWR25
140	5.1	2.4	10	
93.3	7.3	1.6	15	
70	9.2	1.3	20	
46.7	12	1.1	30	
35	15	0.9	40	
186.7	3.9	4.6	7.5	PBWR30
140	5	3.6	10	
93.3	7.1	2.5	15	
70	9	2.0	20	
56	10	2.0	25	
46.7	12	1.7	30	
35	14	1.2	40	
28	17	1.0	50	
23.3	19	0.9	60	
28	19	2.0	50	PBWR40
23.3	21	1.7	60	
17.5	26	1.3	80	
14	29	1.0	100	
0.12kW				
186.7	5.2	3.4	7.5	PBWR30
140	6.7	2.7	10	
93.3	9.5	1.9	15	
70	12	1.5	20	
56	14	1.5	25	
46.7	16	1.3	30	
35	19	0.9	40	
28	23	0.8	50	

Output speed (r/min)	Output torque (N.m)	Service Factor	Ratio (i)	Type
0.12kW				
46.7	17.2	2.6	30	PBWR40
35	21	1.9	40	
28	25	1.5	50	
23.3	28	1.3	60	
17.5	34	1.0	80	
14	38	0.8	100	
23.3	29	2.3	60	PBWR50
17.5	35	1.9	80	
14	40	1.4	100	
0.18kW				
186.7	7.8	2.3	7.5	PBWR30
140	10	1.8	10	
93.3	14	1.3	15	
70	18	1.0	20	
56	21	1.0	25	
46.7	24	0.8	30	
70	19	2.0	20	PBWR40
56	23	1.7	25	
46.7	26	1.7	30	
35	32	1.3	40	
28	38	1.0	50	
23.3	43	0.8	60	
35	32	2.3	40	PBWR50
28	39	1.9	50	
23.3	43	1.6	60	
17.5	52	1.2	80	
14	60	0.9	100	
0.25kW				
186.7	11	3.6	7.5	PBWR40
140	14	2.8	10	
93.3	21	1.9	15	
70	27	1.5	20	
56	32	1.2	25	
46.7	36	1.3	30	
35	44	0.9	40	
28	37	0.8	50	
70	26	2.7	20	PBWR50
56	32	2.2	25	
46.7	37	2.3	30	
35	46	1.7	40	
28	54	1.4	50	
23.3	60	1.1	60	
17.5	72	0.9	80	

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
0.25kW				
28	56	2.4	50	PBWR63
23.3	63	2. 0	60	
17.5	78	1.6	80	
14	87	1.4	100	
0.37kW				
186.7	16	2.4	7.5	PBWR40
140	21	1.9	10	
93.3	31	1.3	15	
70	39	1. 0	20	
56	47	0.8	25	
46.7	53	0.8	30	
140	21	3.3	10	PBWR50
93.3	31	2.4	15	
70	40	1.8	20	
56	48	1.5	25	
46.7	55	1.5	30	
35	68	1.1	40	
28	80	0.9	50	
23.3	89	0.8	60	
35	70	2.1	40	PBWR63
28	83	1.6	50	
23.3	94	1.4	60	
17.5	115	1.1	80	
14	129	0.9	100	
0.55kW				
186.7	25	2.9	7.5	PBWR50
140	32	2.2	10	
93.3	46	1.6	15	
70	59	1.2	20	
56	71	1. 0	25	
46.7	81	1. 0	30	
35	80	0.9	40	
70	60	2.2	20	PBWR63
56	73	1.8	25	
46.7	83	1.9	30	
35	105	1.4	40	
28	124	1.1	50	
23.3	140	0.9	60	
35	108	2.0	40	PBWR75
28	129	1.6	50	
23.3	146	1.4	60	
17.5	180	1.1	80	
14	206	0.9	100	
17.5	189	1.5	80	PBWR90
14	221	1.2	100	

Output speed (r/min)	Output torque (N. m)	Service Factor	Ratio (i)	Type
0.75kW				
93.3	63	1.2	15	PBWR50
70	81	0.9	20	
93.3	63	2.2	15	PBWR63
70	83	1.6	20	
56	100	1.3	25	
46.7	114	1.4	30	
35	143	1. 0	40	
56	102	2. 0	25	PBWR75
46.7	117	2. 0	30	
35	147	1.5	40	
28	177	1.2	50	
23.3	200	1. 0	60	
28	184	1.8	50	PBWR90
23.3	212	1.5	60	
17.5	258	1.1	80	
14	302	0.9	100	
1.1kW				
186.7	49	2.6	7.5	PBWR63
140	65	2. 0	10	
93.3	93	1.5	15	
70	122	1.1	20	
56	146	0.9	25	
46.7	167	1. 0	30	
35	165	0.9	40	
93.3	95	2.1	15	PBWR75
70	123	1.7	20	
56	150	1.3	25	
46.7	171	1.3	30	
35	216	1. 0	40	
28	264	0.9	50	
23.3	223	0.8	60	
35	225	1.6	40	PBWR90
28	270	1.3	50	
23.3	311	1.0	60	
17.5	328	0.9	80	
28	281	2.3	50	PBWR110
23.3	324	1.9	60	
17.5	402	1.3	80	
14	473	1.0	100	
1.5kW				
186.7	67	1.9	7.5	PBWR63
140	89	1.5	10	
93.3	127	1.1	15	
70	166	0.8	20	

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
1.5kW				
140	90	2.2	10	PBWR75
93.3	130	1.5	15	
70	168	1.3	20	
56	205	1.0	25	
46.7	233	1.0	30	
70	171	2.1	20	PBWR90
56	210	1.6	25	
46.7	239	1.7	30	
35	307	1.2	40	
28	368	0.9	50	
23.3	424	0.8	60	
35	319	2.2	40	PBWR110
28	384	1.7	50	
23.3	442	1.4	60	
17.5	548	0.9	80	
2.2kW				
186.7	100	1.8	7.5	PBWR75
140	132	1.5	10	
93.3	191	1.0	15	
70	240	0.9	20	
46.7	269	0.8	30	
186.7	101	2.9	7.5	PBWR90
140	134	2.3	10	
93.3	194	1.9	15	
70	252	1.4	20	
56	308	1.1	25	
46.7	351	1.2	30	
35	433	1.0	40	
28	393	0.9	50	
70	255	2.5	20	PBWR110
56	315	2.2	25	
46.7	356	2.0	30	
35	468	1.5	40	
28	563	1.2	50	
23.3	648	1. 0	60	
35	468	2.2	40	PBWR130
28	563	1.7	50	
23.3	648	1.4	60	
17.5	816	1. 0	80	
14	869	0.8	100	
28	570	2.5	50	PBWR150
23.3	657	1.9	60	
17.5	816	1.4	80	
14	960	1. 0	100	

Output speed (r/min)	Output torque (N. m)	Service Factor	Ratio (i)	Type
3kW				
186.7	136	1.4	7.5	PBWR75
140	180	1.1	10	
93.3	261	0.8	15	
186.7	138	2.1	7.5	PBWR90
140	182	1.7	10	
93.3	264	1.4	15	
70	344	1. 0	20	
56	420	0.8	25	
46.7	479	0.9	30	
93.3	264	2.5	15	PBWR110
70	348	1.9	20	
56	430	1.6	25	
46.7	485	1.5	30	
35	638	1.1	40	
28	767	0.9	50	
56	429	2.2	25	PBWR130
46.7	491	2.1	30	
35	638	1.6	40	
28	767	1.3	50	
23.3	884	1. 0	60	
17.5	1113	0.8	80	
28	777	1.8	50	PBWR150
23.3	896	1.4	60	
17.5	1113	1.0	80	
14	1310	0.8	100	
3.7kW				
186.7	168	1.1	7.5	PBWR75
140	222	0.9	10	
186.7	170	1.7	7.5	PBWR90
140	224	1.4	10	
93.3	326	1.1	15	
70	424	0.9	20	
140	224	2.7	10	PBWR110
93.3	326	2.1	15	
70	429	1.5	20	
56	530	1.3	25	
46.7	598	1.2	30	
56	530	1.7	25	PBWR130
46.7	606	1.7	30	
35	787	1.3	40	
28	946	1.1	50	
23.3	1091	0.9	60	

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
3.7kW				
28	958	1.5	50	PBWR150
23.3	1105	1.2	60	
17.5	1373	0.9	80	
5.5kW				
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	
28	1103	0.8	50	
70	645	2.0	20	PBWR150
56	788	1.5	25	
46.7	934	1.3	30	
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	
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	

Output speed (r/min)	Output torque (N.m)	Service Factor	Ratio (i)	Type
15kW				
186.7	698	1.7	7.5	PBWR150
140	921	1.3	10	
93.3	1351	0.9	15	
70	1760	0.7	20	

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.

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	
4.7	57	1.3	10	30	300	PBWR 30/40
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	

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						
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	PBWR 30/63
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			10			
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	

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	

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
0.25kW						
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	
2.8	995	1.6	10	50	500	PBWR 63/130
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	
1.1 **kW**						
4.7	1312	1.3	10	30	300	PBWR 63/130
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	

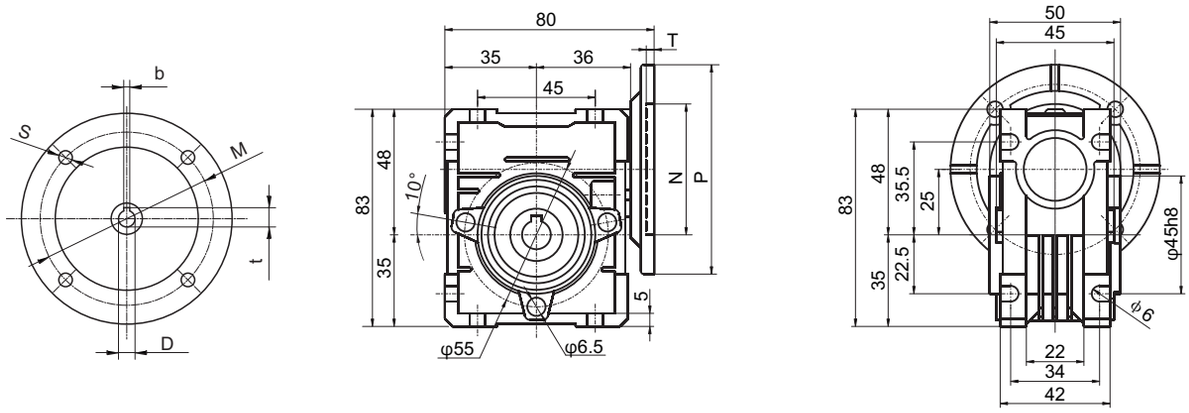
Selection Parameter of Double Stage Worm Gear Reducer (Input Speed 1400 rpm, 4 Pole)

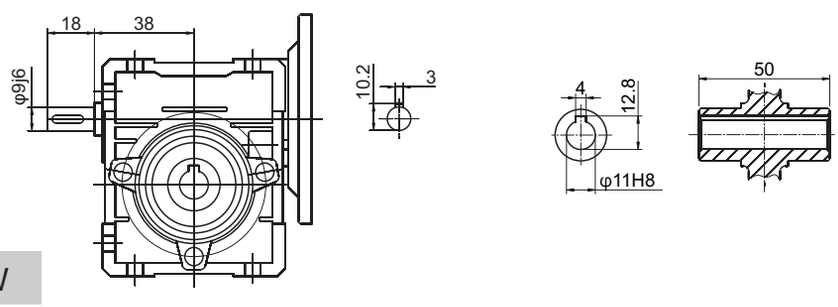
Output speed (r/min)	Output torque (N.m)	Service Factor	High speed transmission ratio (i1)	Low speed transmission ratio (i2)	General transmission ratio (i)	Combination model size
1.5kW						
4.7	1789	1.0	10	30	300	PBWR 63/130
3.5	2279	0.7	10	40	400	
9.3	1026	2.3	10	15	150	PBWR 63/150
7	1317	1.8	10	20	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





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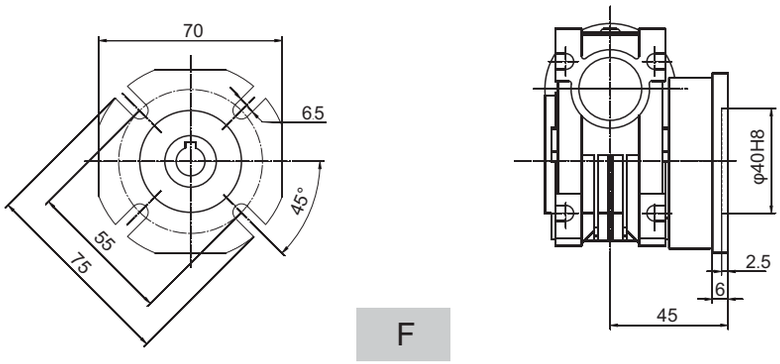
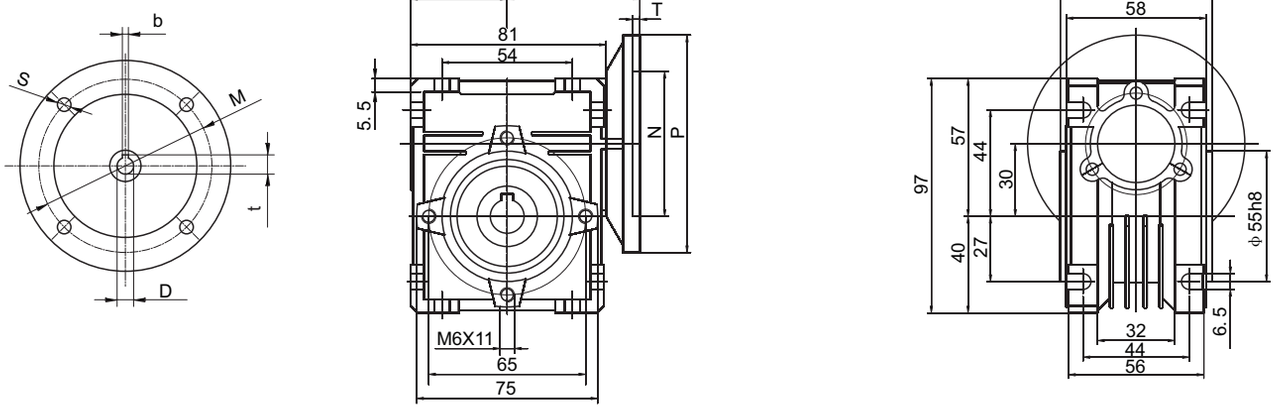


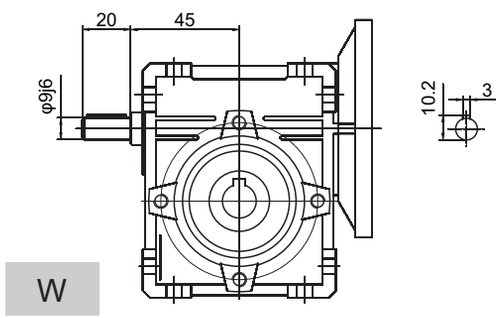
F

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





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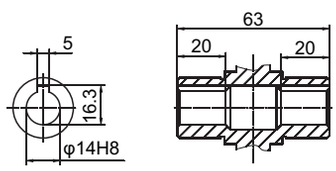
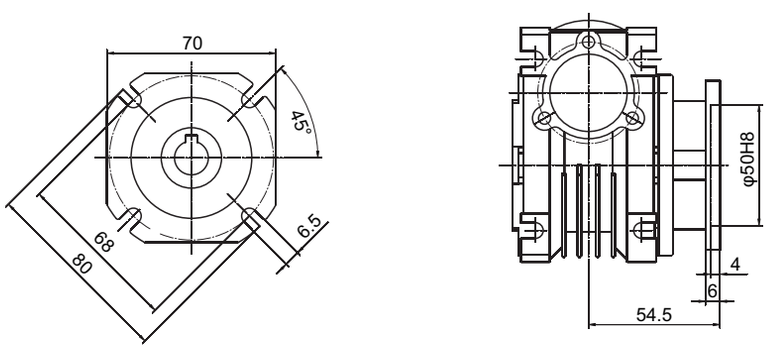




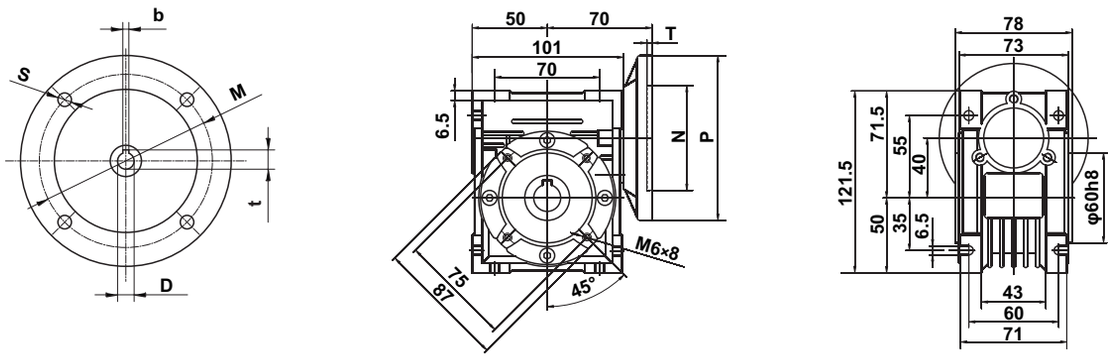
F

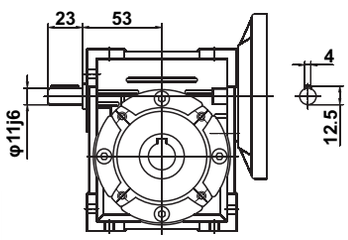
IEC	D_{E8}	b	t	P	M	N	S	T
56B5	9	3	10. 4	120	100	80	7	3.5
56B14	9	3	10.4	80	65	50	5. 5	3
63B14	11	4	12.8	90	75	60	5.5	3
63B5	11	4	12.8	140	115	95	9	3.5

Weight without motor ≈1.2kg

GENERAL ARRANGEMENT DRAWING
SINGLE STAGE WORM GEAR REDUCER

PBWR40





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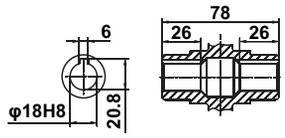

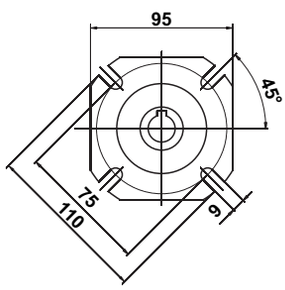

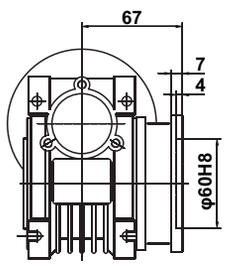

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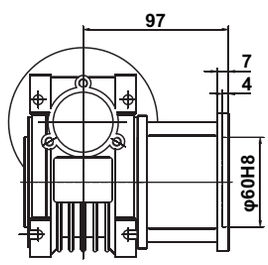

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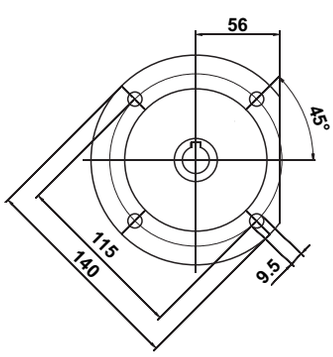

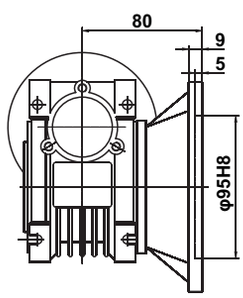

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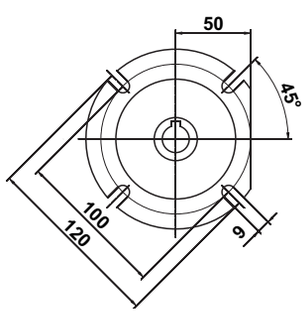
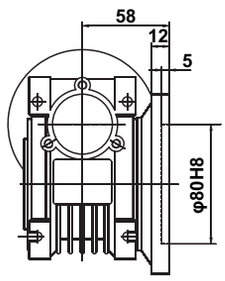




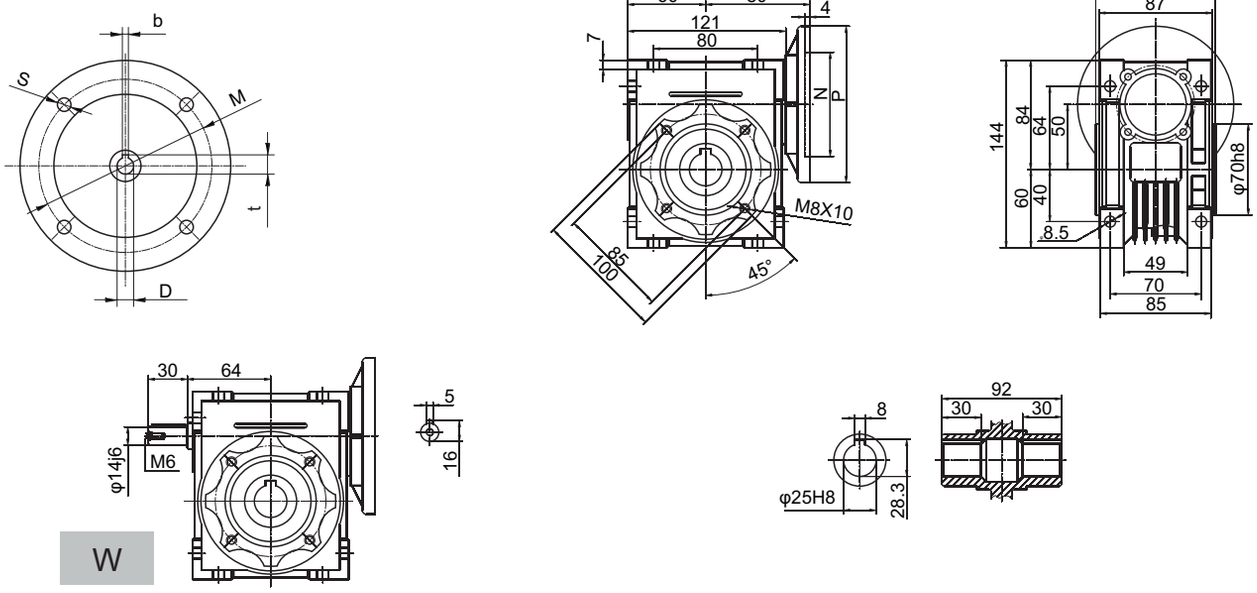
D

IEC	DE8	b	t	P	M	N	S	T
56B14	9	3	10.4	80	65	50	5.5	3
63B5	11	4	12.8	140	115	95	9	3.5
63B14	11	4	12.8	90	75	60	5.5	3
71B5	14	5	16.3	160	130	110	9	4
71B14	14	5	16.3	105	85	70	7	3

Weight without motor ≈2.2kg

GENERAL ARRANGEMENT DRAWING
SINGLE STAGE WORM GEAR REDUCER

PBWR50

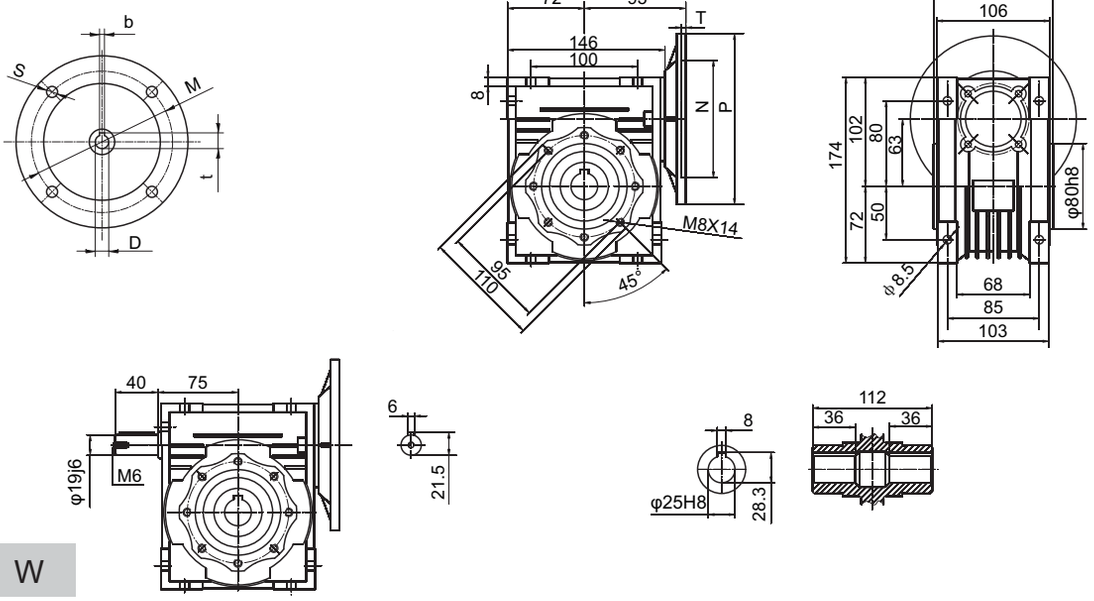


IEC	D_{E8}	b	t	P	M	N	S	T
63B14	11	4	12.8	90	75	60	5.5	3
63B5	11	4	12.8	140	115	95	9	3.5
71B5	14	5	16.3	160	130	110	9	4
71B14	14	5	16.3	105	85	70	7	3
80B5	19	6	21.8	200	165	130	11	4
80B14	19	6	21.8	120	100	80	7	3.5

Weight without motor ≈3.8kg

GENERAL ARRANGEMENT DRAWING
SINGLE STAGE WORM GEAR REDUCER

PBWR63

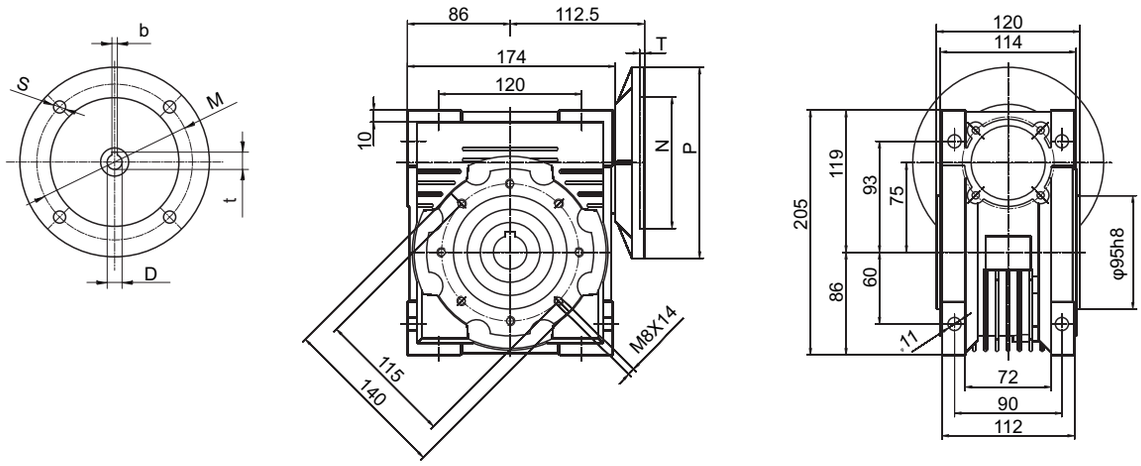


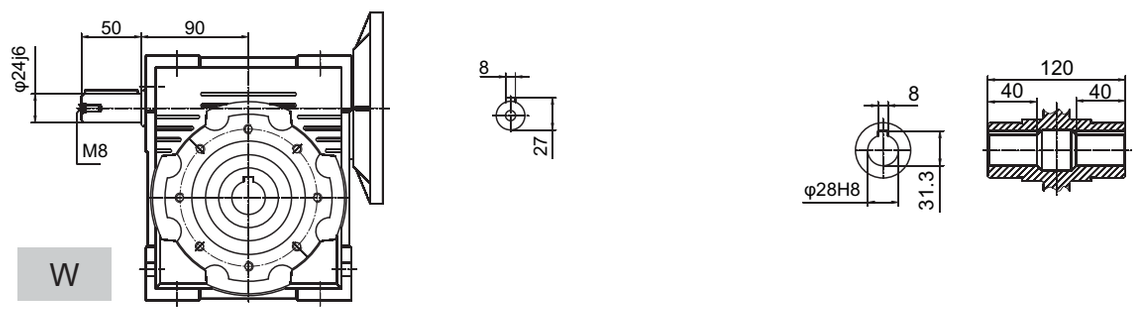
Weight without motor ≈6.2kg

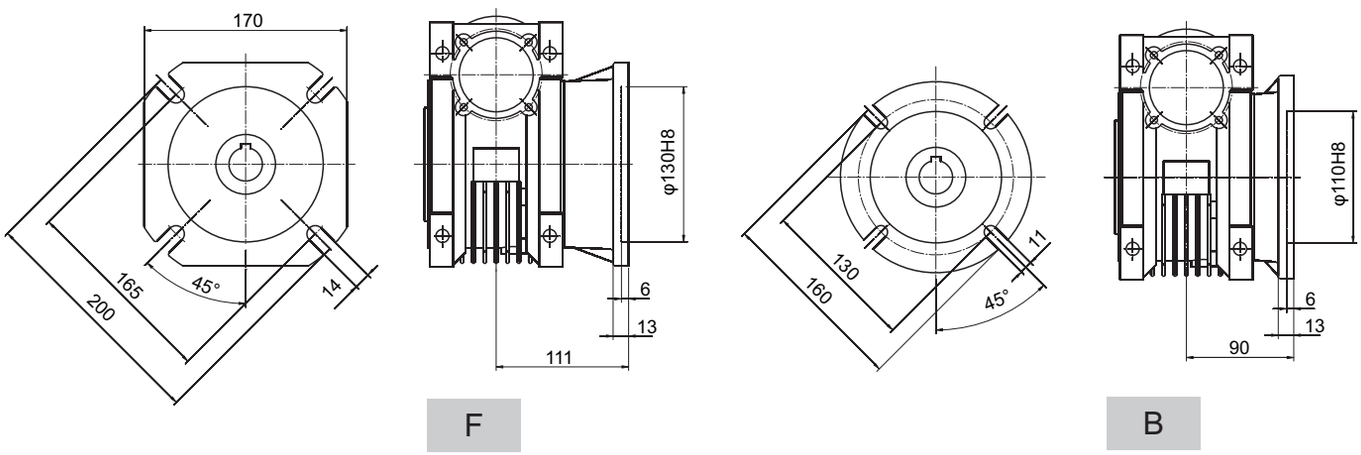
IEC	DE8	b	t	P	M	N	S	T
71B5	14	5	16.3	160	130	110	9	4
71B14	14	5	16.3	105	85	70	7	3
80B5	19	6	21.8	200	165	130	11	4
80B14	19	6	21.8	120	100	80	7	3.5
90B5	24	8	27.3	200	165	130	11	4
90B14	24	8	27.3	140	115	95	9	3.5

GENERAL ARRANGEMENT DRAWING
SINGLE STAGE WORM GEAR REDUCER

PBWR75





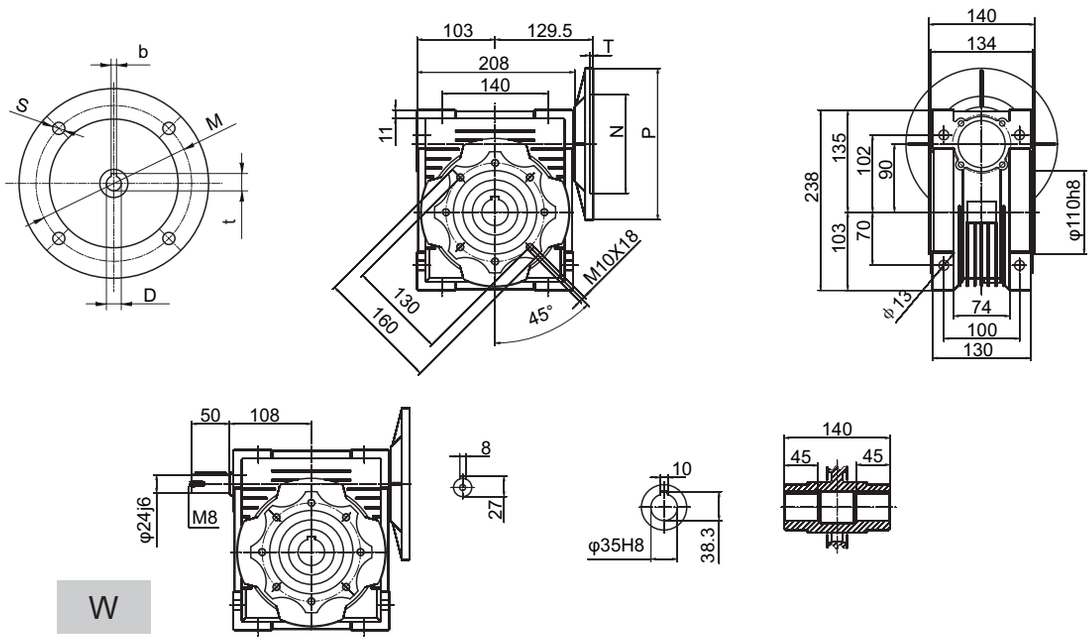


IEC	D_{E8}	b	t	P	M	N	S	T
80B5	19	6	21.8	200	165	130	11	4
80B14	19	6	21.8	120	100	80	6.5	3.5
90B5	24	8	27.3	200	165	130	11	4
90B14	24	8	27.3	140	115	95	9	3.5
100/112B5	28	8	31.3	250	215	180	13.5	4
100/112B14	28	8	31.3	160	130	110	9	4.5

Weight without motor ≈ 9kg

GENERAL ARRANGEMENT DRAWING
SINGLE STAGE WORM GEAR REDUCER

PBWR90

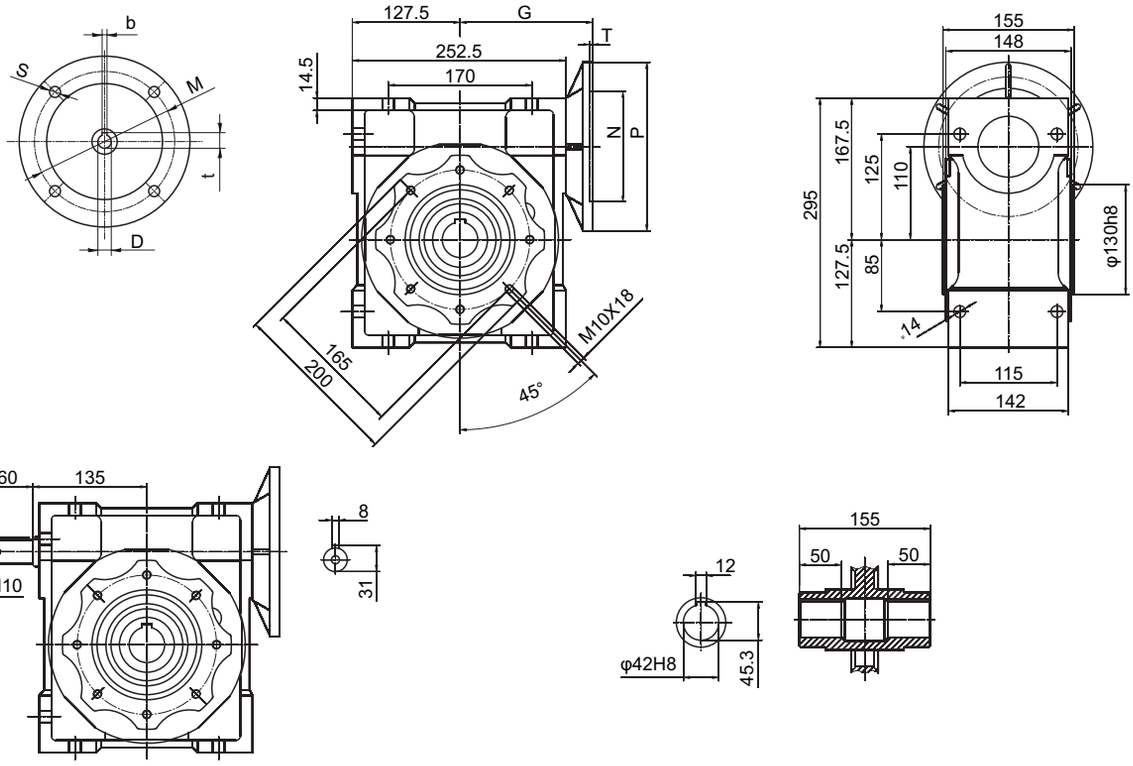


IEC	D_{E8}	b	t	P	M	N	S	T
80B5	19	6	21.8	200	165	130	11	4
80B14	19	6	21.8	120	100	80	6.5	3.5
90B5	24	8	27.3	200	165	130	11	4
90B14	24	8	27.3	140	115	95	9	3.5
100/112B5	28	8	31.3	250	215	180	13.5	4
100/112B14	28	8	31.3	160	130	110	9	4.5

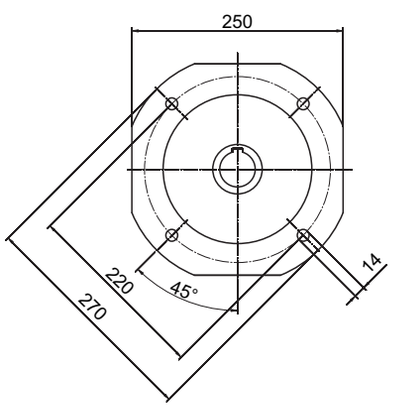
Weight without motor ≈12kg

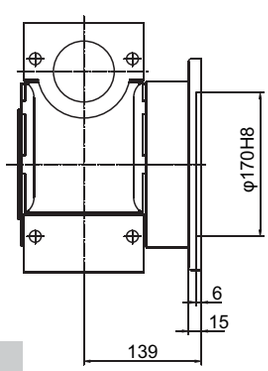
GENERAL ARRANGEMENT DRAWING
SINGLE STAGE WORM GEAR REDUCER

PBWR110

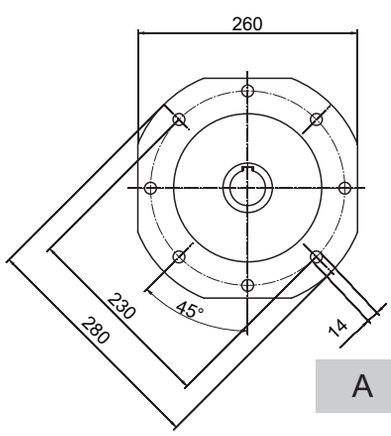


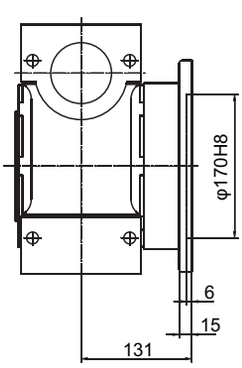
W





F





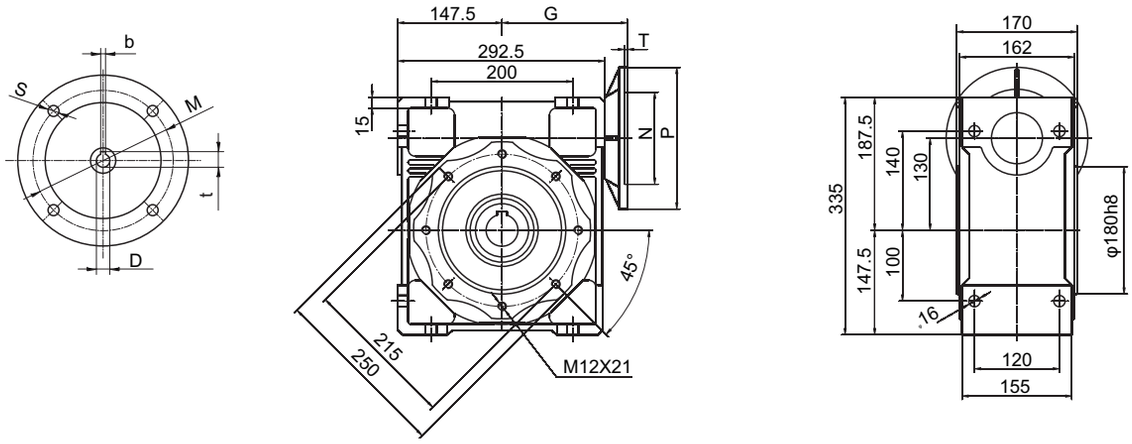
A

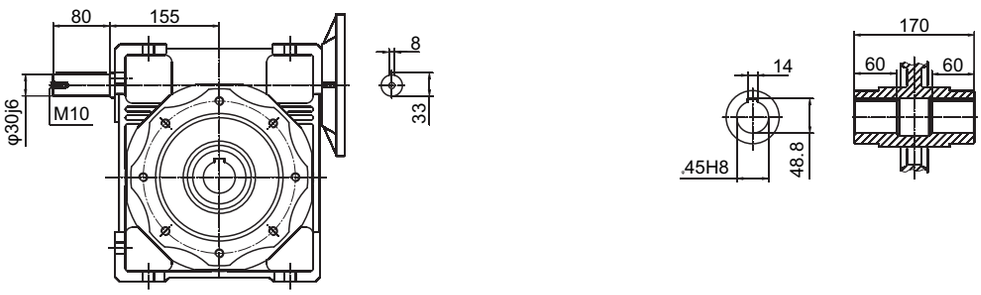
Weight without motor ≈38kg

IEC	D_{E8}	b	t	P	M	N	S	T	G
90B5	24	8	27.3	200	165	130	11	4	157
90B14	24	8	27.3	140	115	95	9	3.5	157
100/112B5	28	8	31.3	250	215	180	13.5	4	155
100/112B14	28	8	31.3	160	130	110	9	4.5	155
132B5	38	10	41.3	300	265	230	13.5	4.5	159

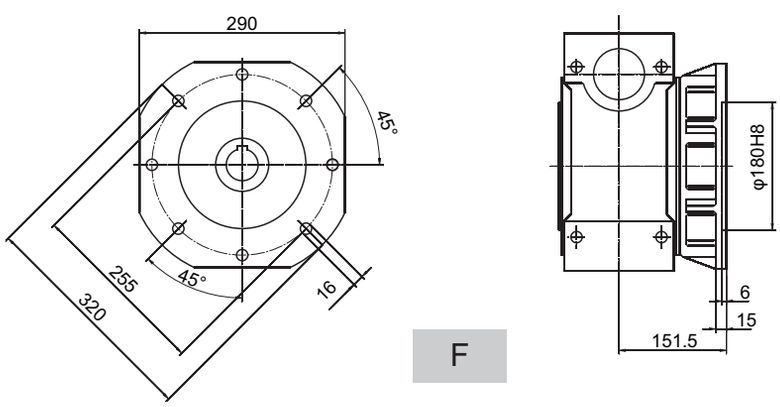
GENERAL ARRANGEMENT DRAWING
SINGLE STAGE WORM GEAR REDUCER

PBWR130

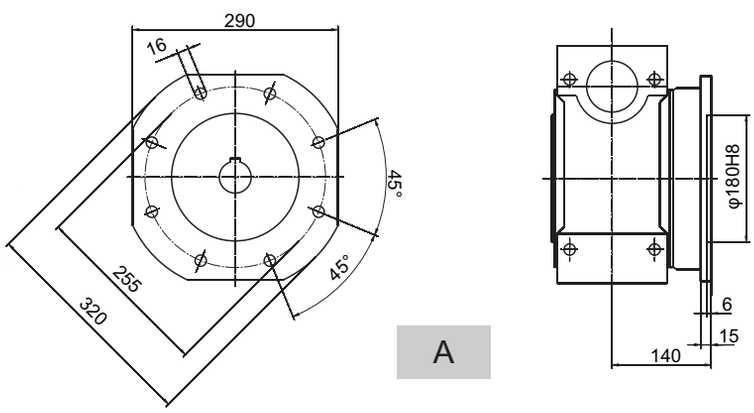




W



F



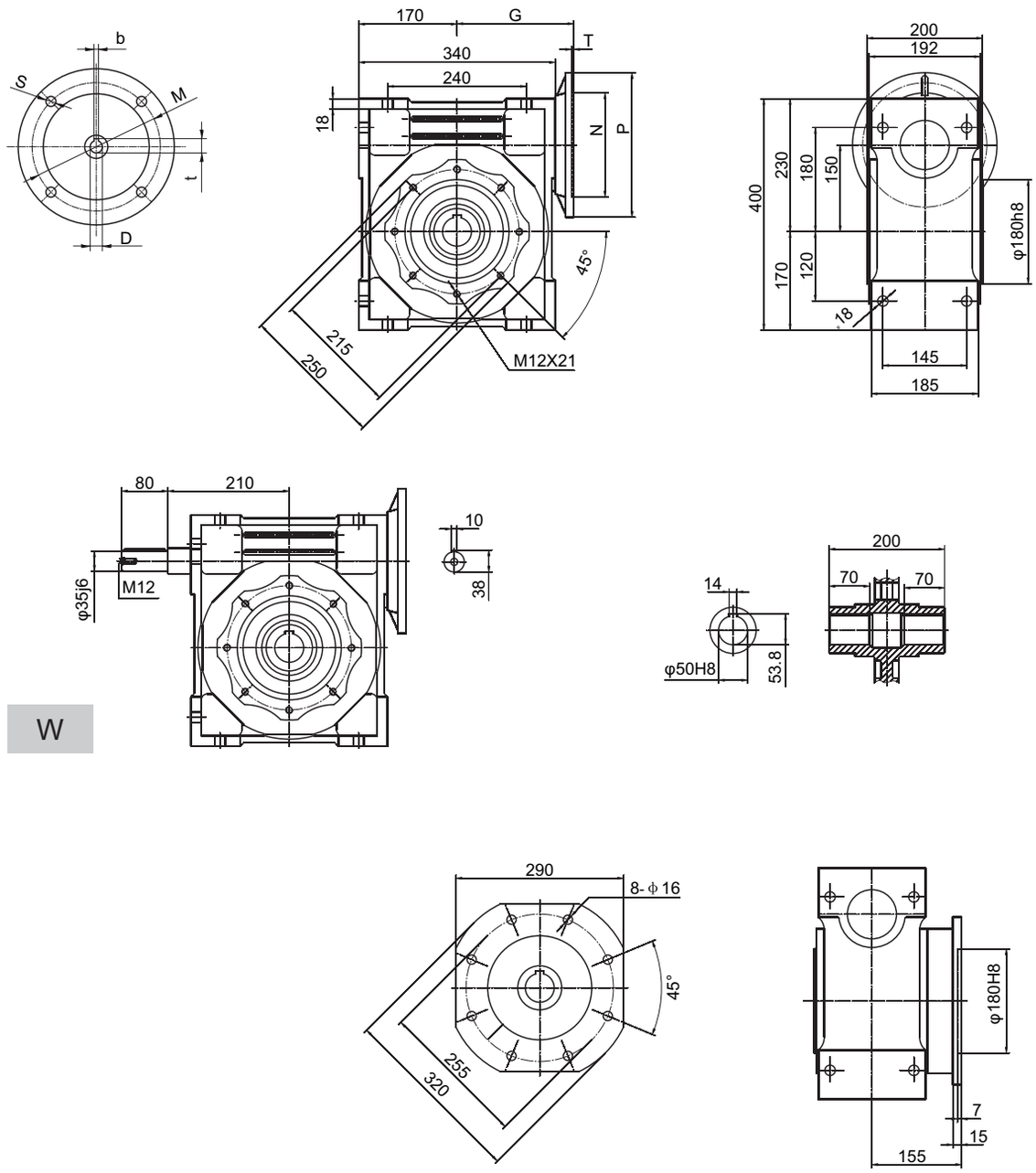
A

Weight without motor ≈55kg

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

GENERAL ARRANGEMENT DRAWING
SINGLE STAGE WORM GEAR REDUCER

PBWR150

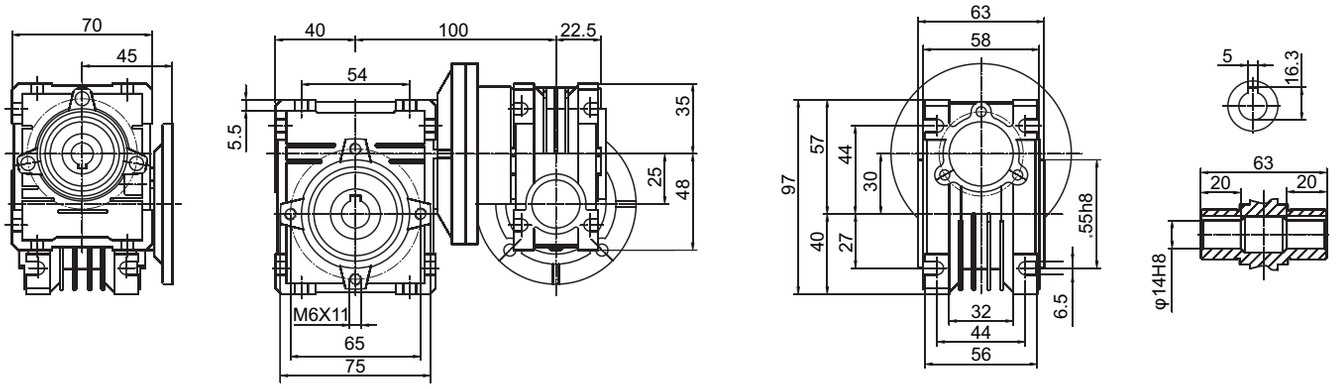


Weight without motor ≈105kg

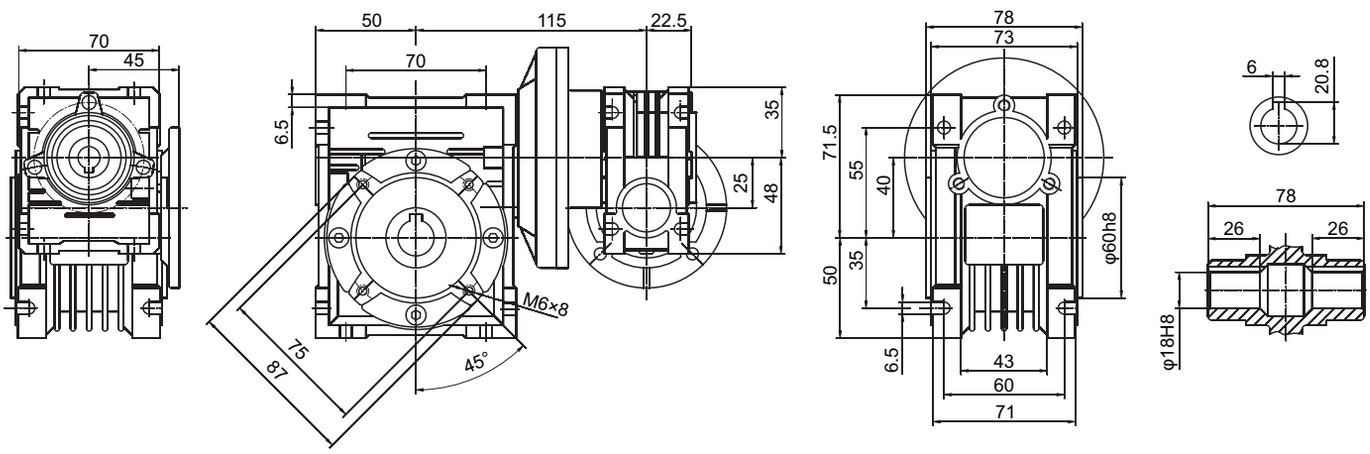
IEC	D_{E8}	b	t	P	M	N	S	T	G
100/112B5	28	8	31.3	250	215	180	13.5	4	202
132B5	38	10	41.3	300	265	230	13.5	4.5	202
160B5	42	12	45.3	350	300	250	18	6	212

GENERAL ARRANGEMENT DRAWING
DOUBLE STAGE WORM GEAR REDUCER

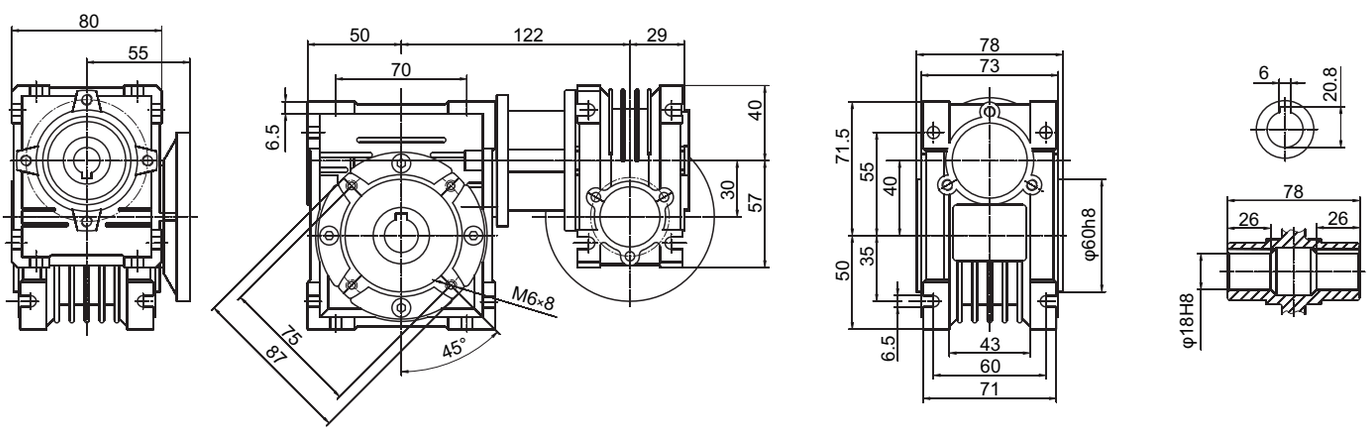
PBWR 25/30



PBWR 25/40

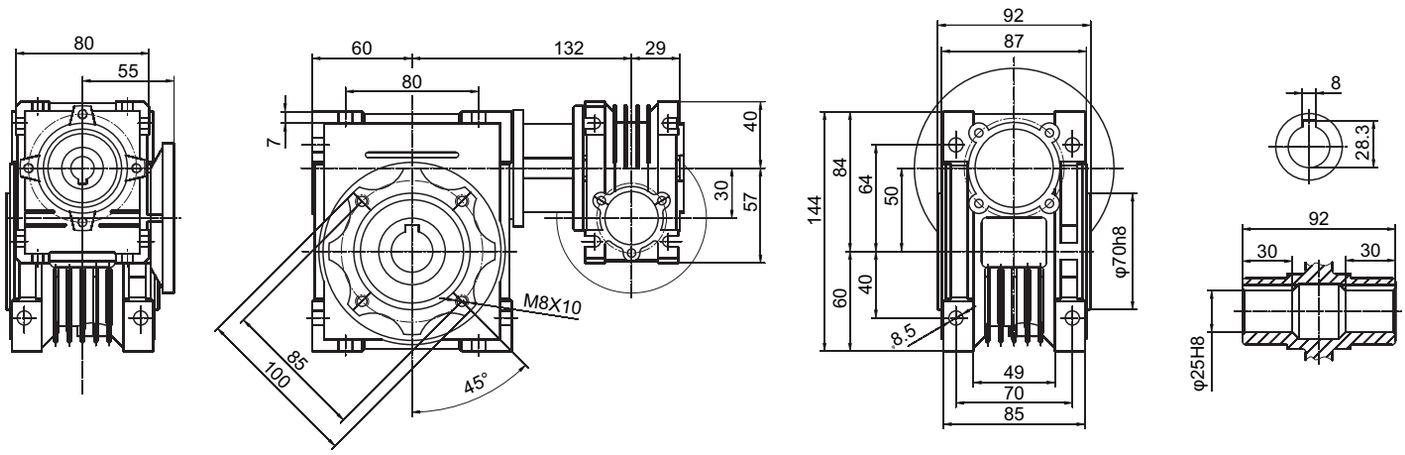


PBWR 30/40

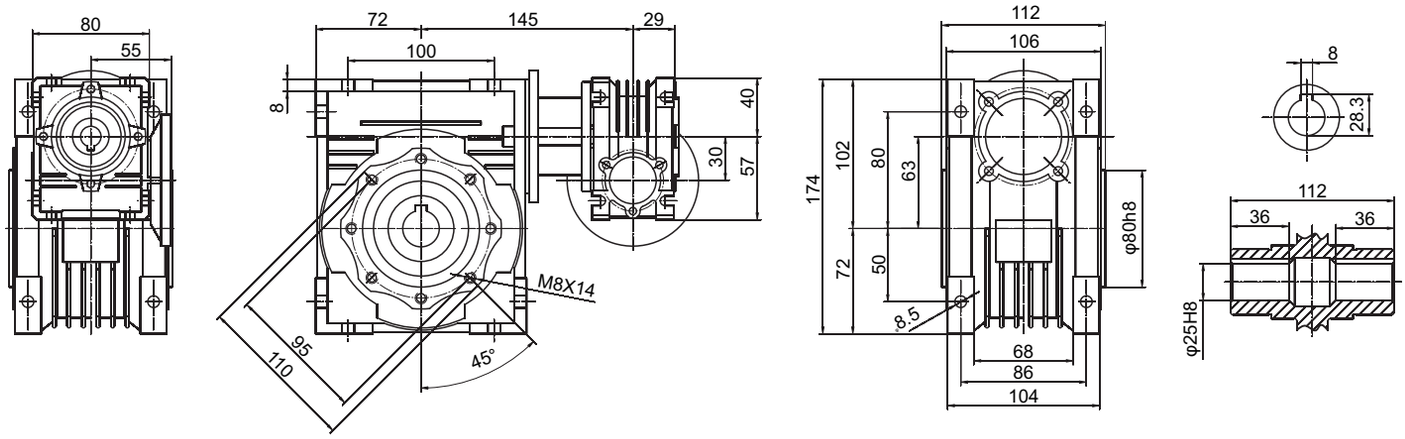


GENERAL ARRANGEMENT DRAWING
DOUBLE STAGE WORM GEAR REDUCER

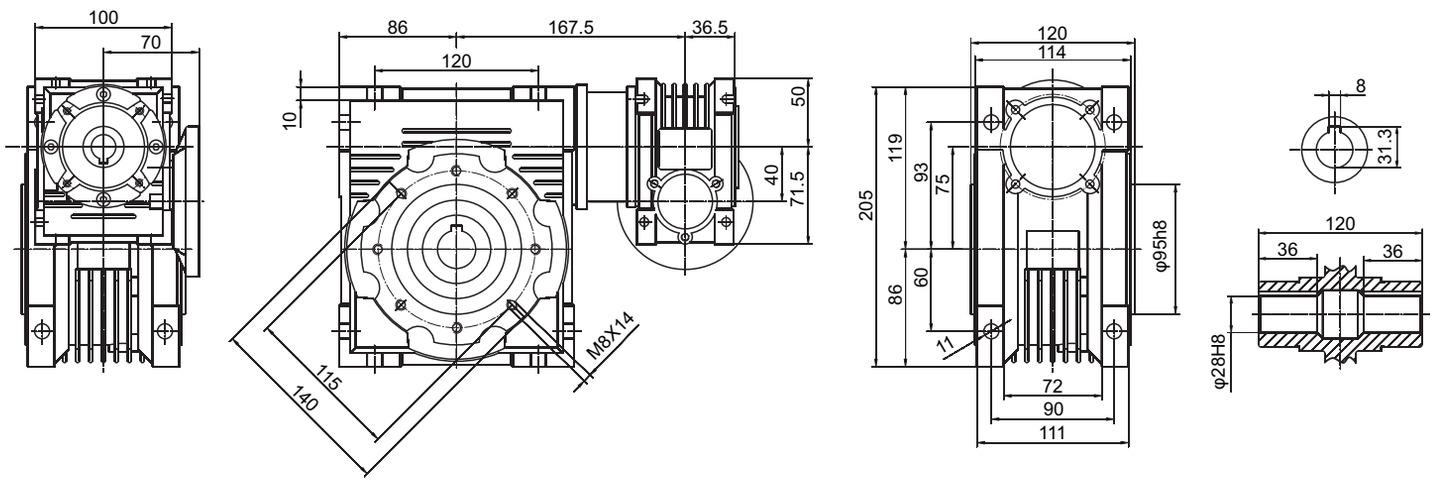
PBWR 30/50



PBWR 30/63

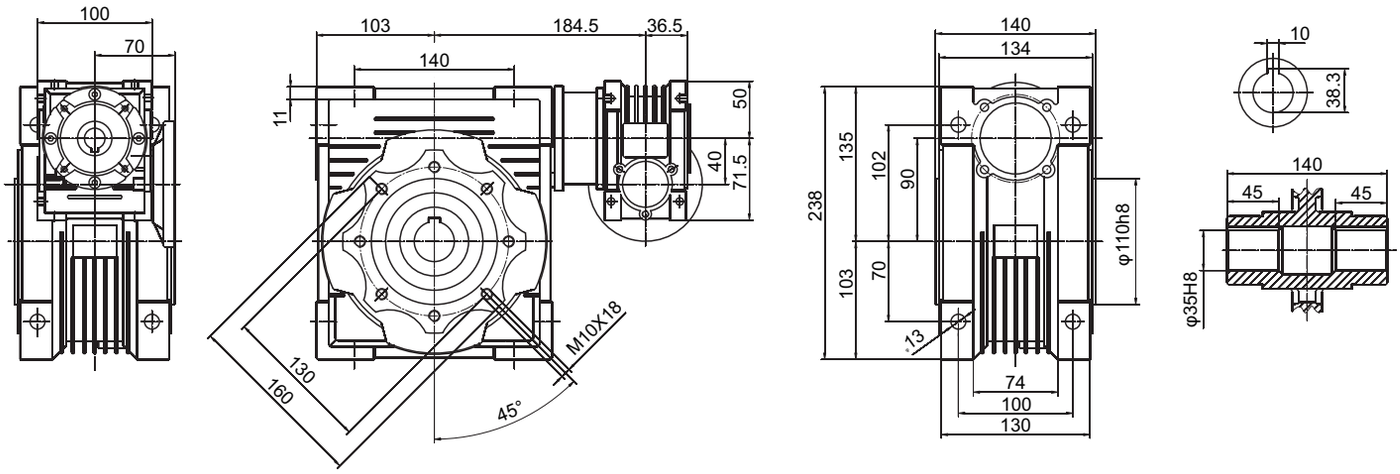


PBWR 40/75

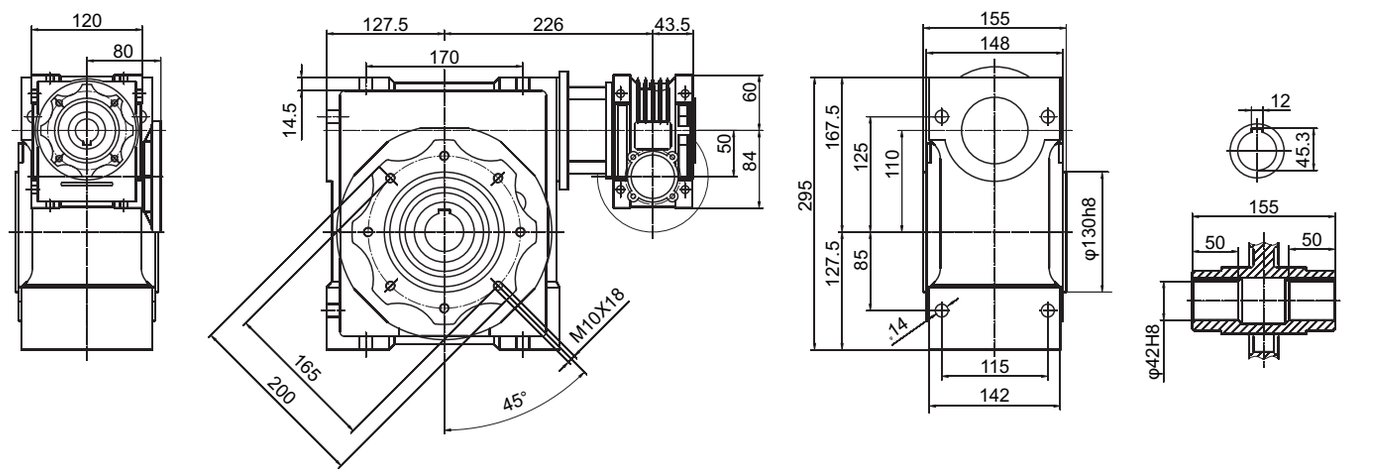


GENERAL ARRANGEMENT DRAWING
DOUBLE STAGE WORM GEAR REDUCER

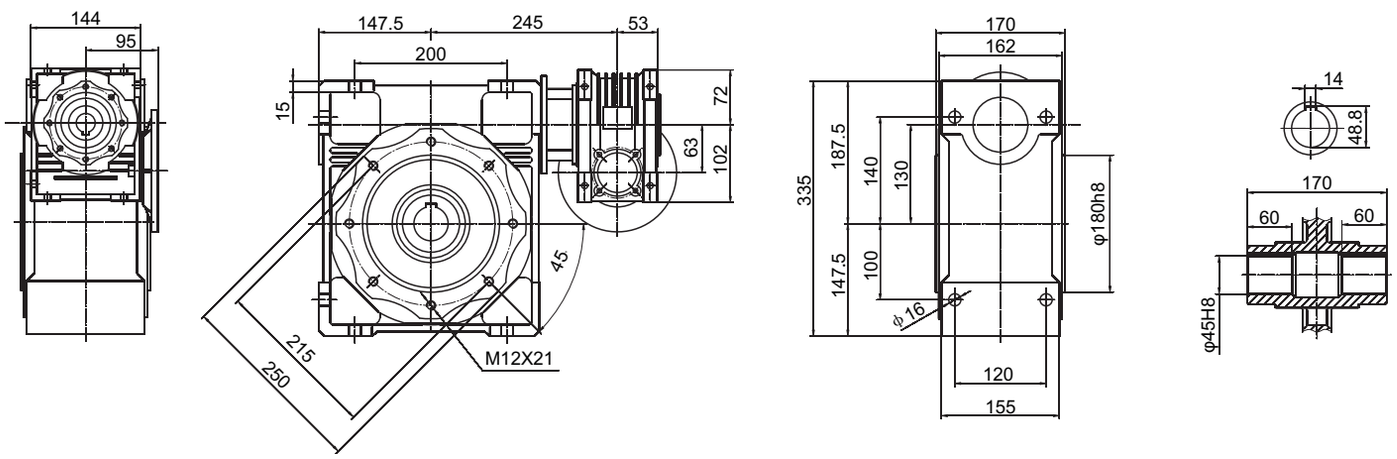
PBWR 40/90



PBWR 50/110

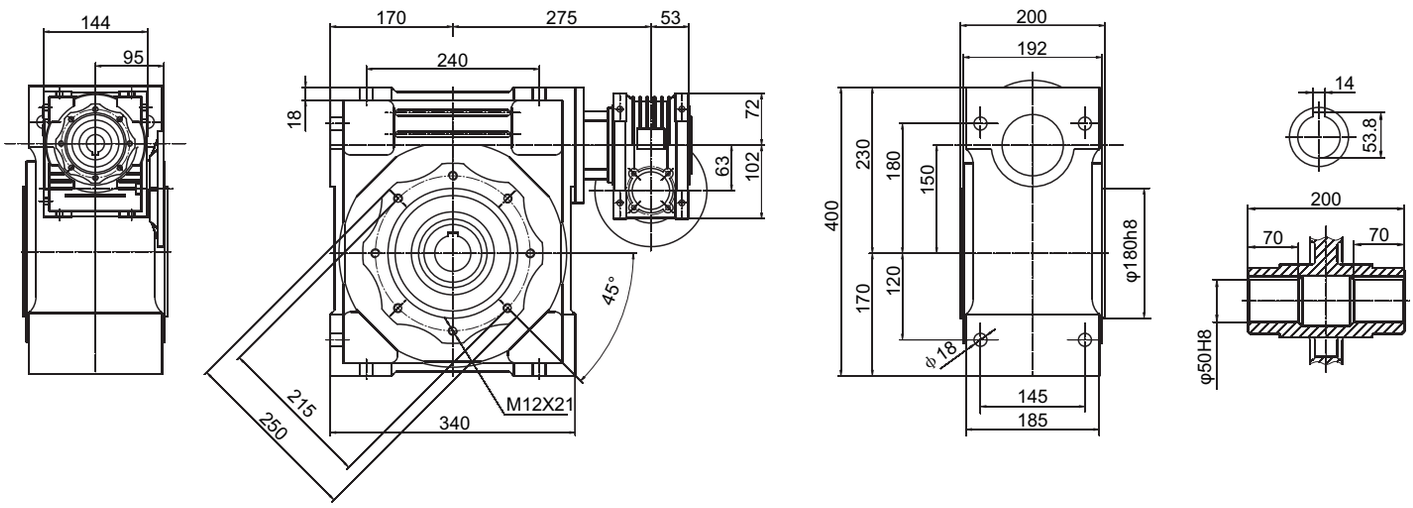


PBWR 63/130

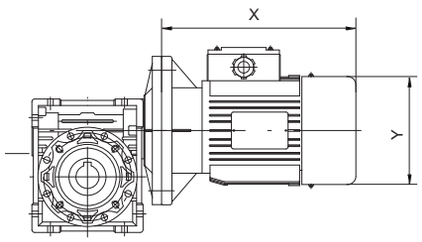


GENERAL ARRANGEMENT DRAWING
DOUBLE STAGE WORM GEAR REDUCER

PBWR 63/150



DETAILS OF MOTOR AND GEARBOX ACCESSORIES

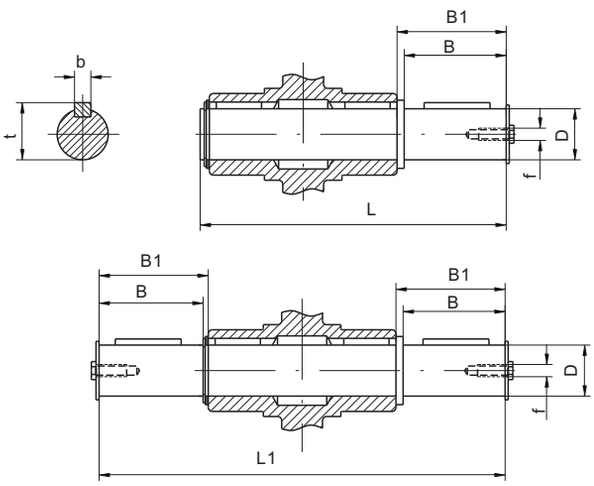


Overall dimensions for electric motor

	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	

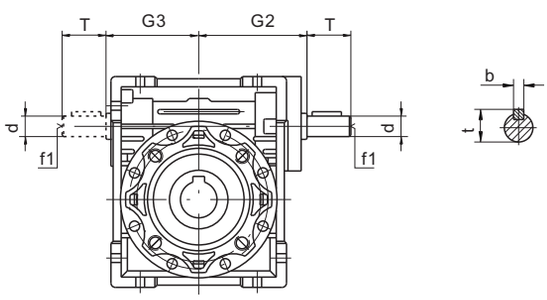
Dimensions of single/double output shaft

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



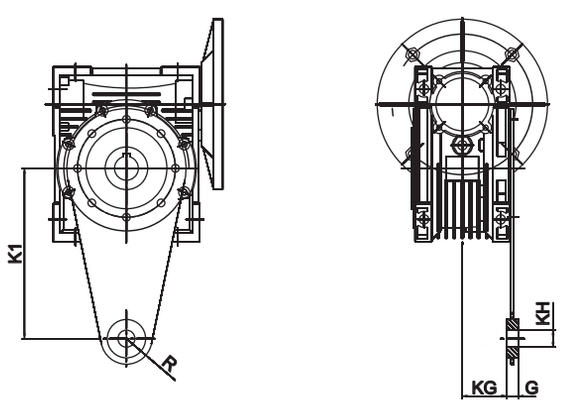
Dimensions of extension worm shafts

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



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).

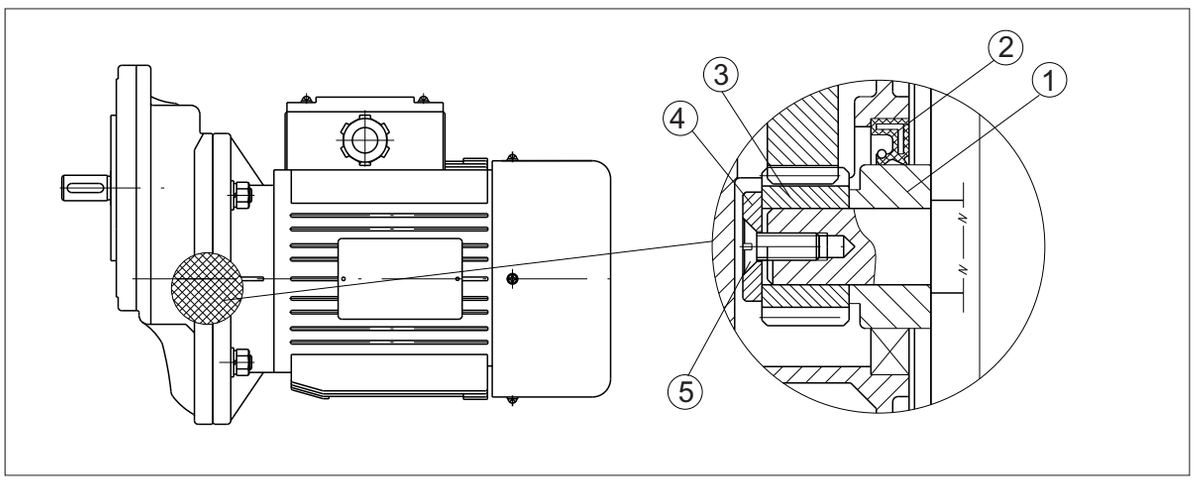
The installation of the motor on the PC Series gear speed reducer

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 ~120 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 :



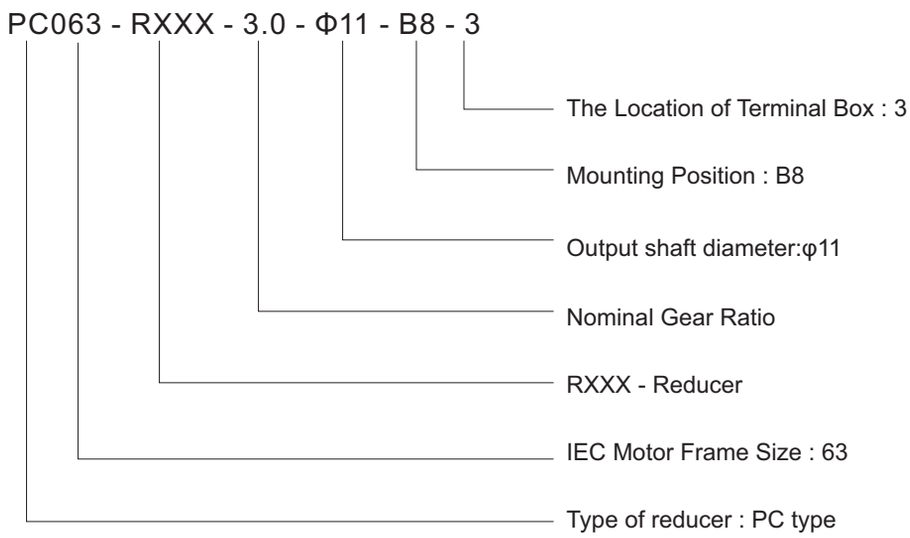
Lubricating oil details of the PC Series Gear Reducer

- 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℃~+50℃

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

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

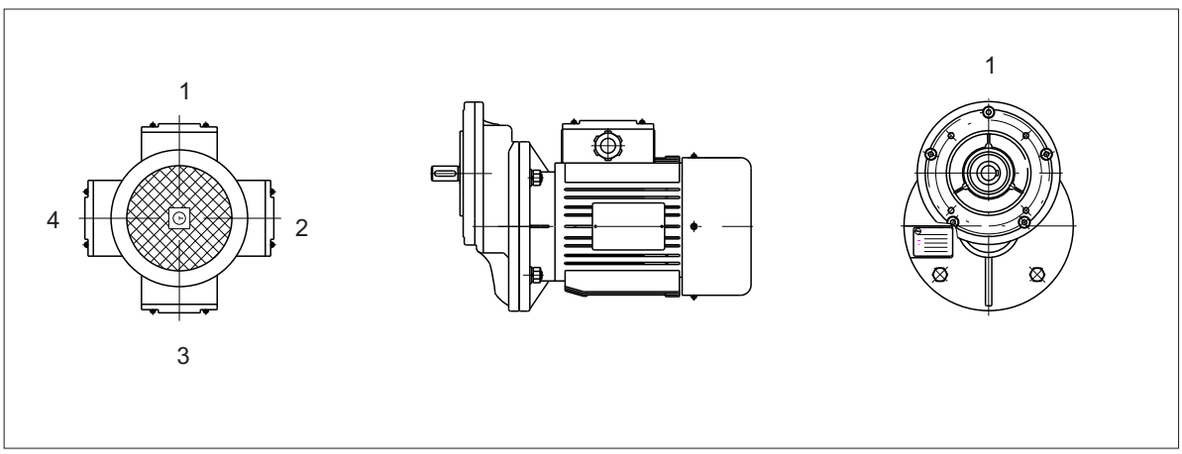
Explanation of the PC Series Gear Reducer Nomenclature



PC	Type
063,071,080,090	IEC Motor Frame Size
G063, RXXX	G063 - Without Motor, Frame Size 63 RXXX - Reducer
3.00 , 2.42	Nominal gear ratio
φ11,φ14,φ19,φ24,φ28	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

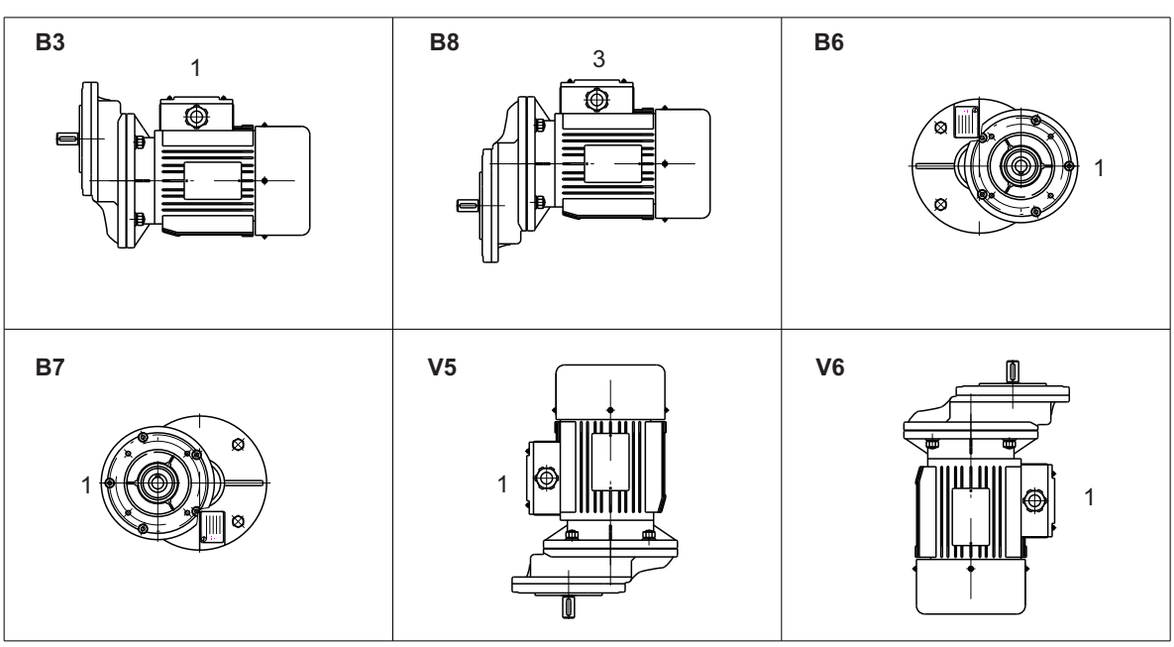
MOUNTING POSITION OF THE PC SERIES GEAR REDUCER

Location of terminal box



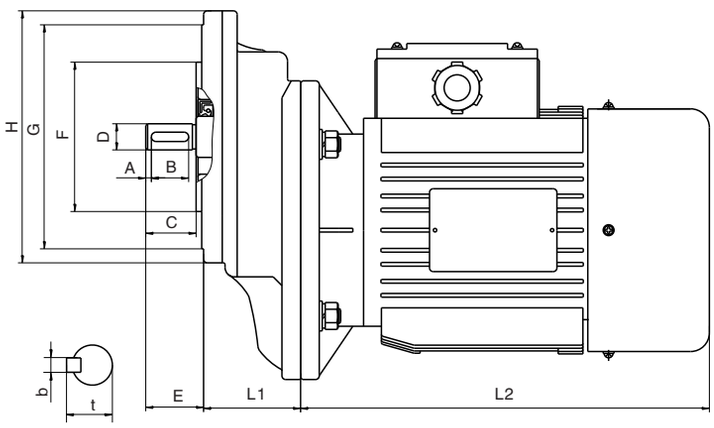
Notice : For specific requirements, indicate the position of the terminal box based on the diagram shown.

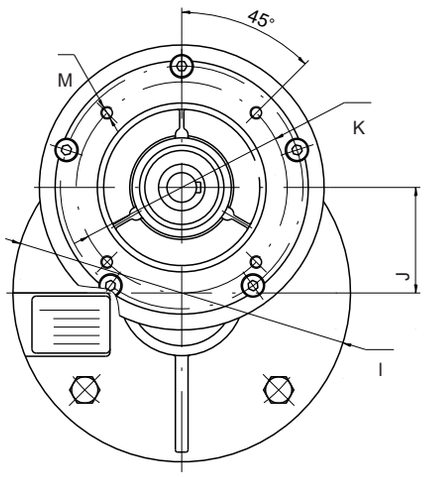
Mounting Position of the PC Series Gear Reducer



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

GENERAL ARRANGEMENT DRAWING
PC SERIES GEAR REDUCER

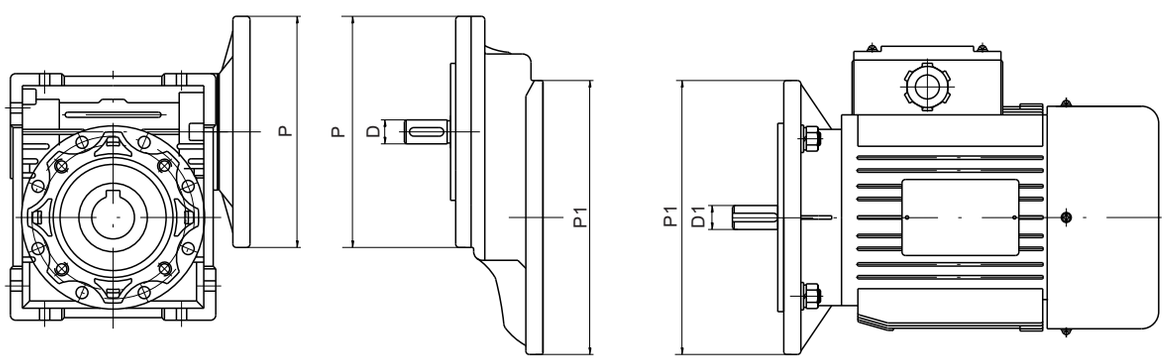




Type	A	B	C	D(js6)	b	t	E	F(H8)	G	H	I	J	K	M	L1	L2	Mount type
PC063	1.5	18	21	11	4	12.5	23	70	105	114	140	43	85	4-M6×10	47	183	63B5
	2	20	28	※14	5	16	30										
PC071	3	20	27	14	5	16	30	80	120	135	160	54	100	4-M6×10	57	210	71B5
	3	32	37	※19	6	21.5	40										
PC080	3	32	40	19	6	21.5	40										
	4	40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

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 :

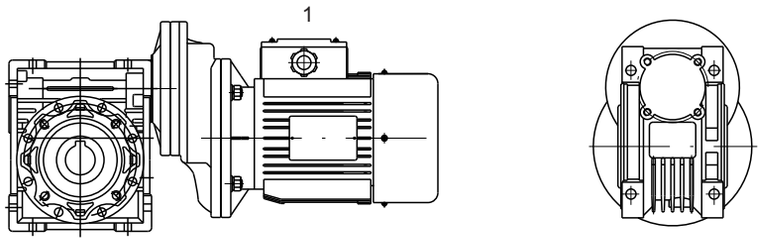
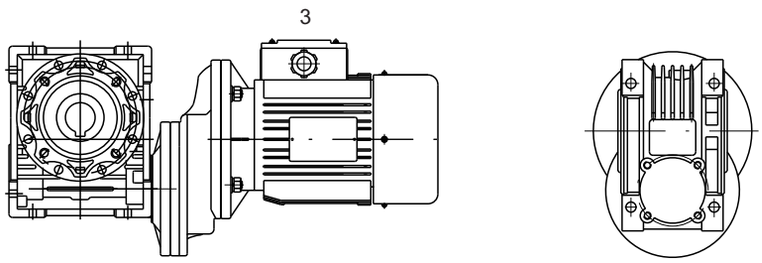
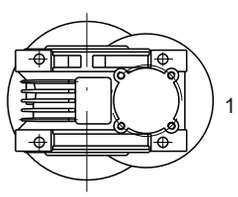
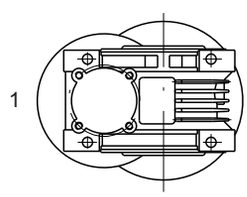
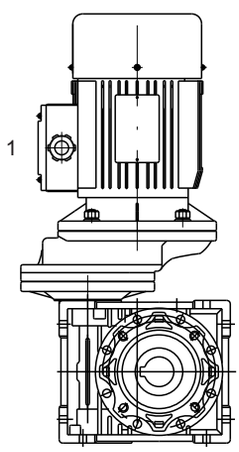
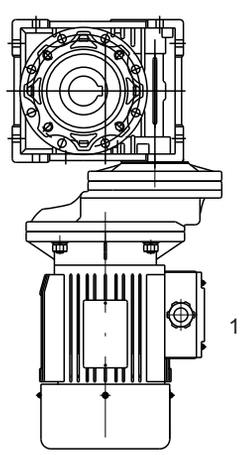


PC+PBWR		P1/D1 motor type	P/D	(P/D)	Remarks
PC063 +	PBWR 40	63B5-Φ140/Φ11	Φ105/Φ11	(Φ105/Φ14)	Worm reducer is provided with 71B14 type input flange
	PBWR 50				
	PBWR 63				
PC071 +	PBWR 50	71B5-Φ160/Φ14	Φ120/Φ14	(Φ120/Φ19)	Worm reducer is provided with 80B14 type input flange
	PBWR 63				
	PBWR 75	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

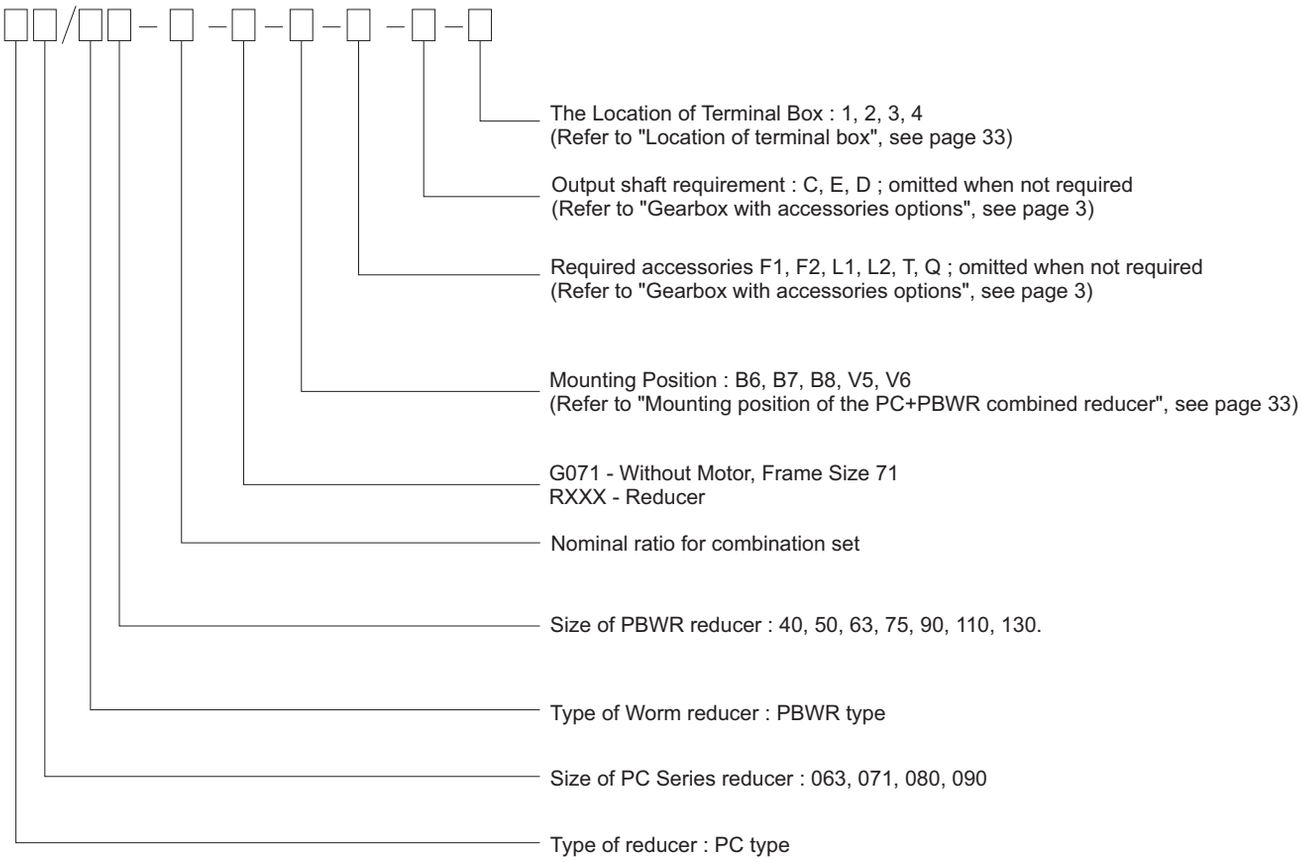
VARIOUS OPTIONS FOR FRAME SIZES AND RATIOS

Type	(I)	PC063		PC071		PC080			PC090		
		Φ105/Φ11 i=3	Φ105/Φ14 i=3	Φ120/Φ14 i=3	Φ120/Φ19 i=3	Φ160/Φ24 i=3	Φ160/Φ24 i=3	Φ160/Φ28 i=3	Φ160/Φ19 i=2.42	Φ160/Φ24 i=2.42	Φ160/Φ28 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

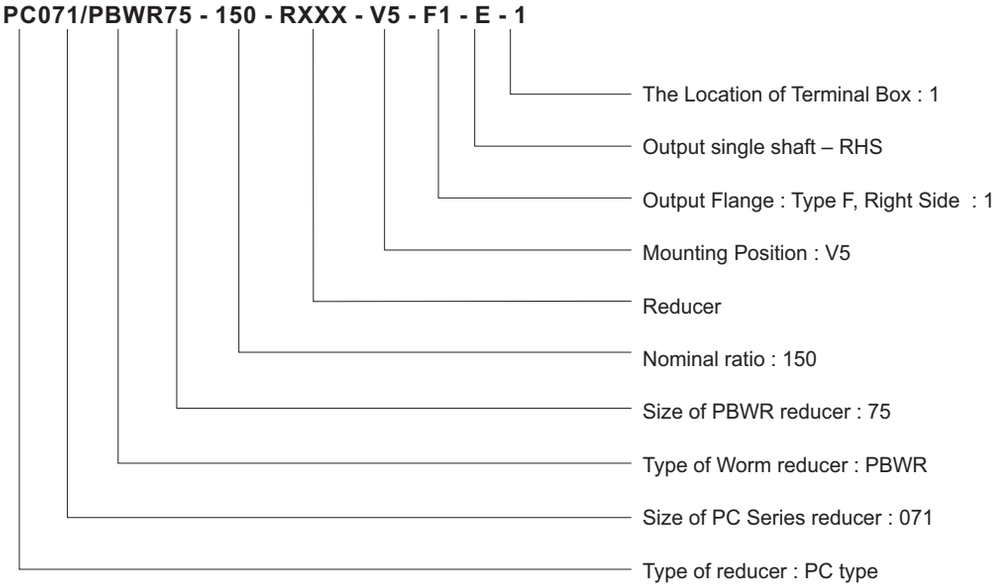
B3			
B8			
B6		**B7**	
V5		**V6**	

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

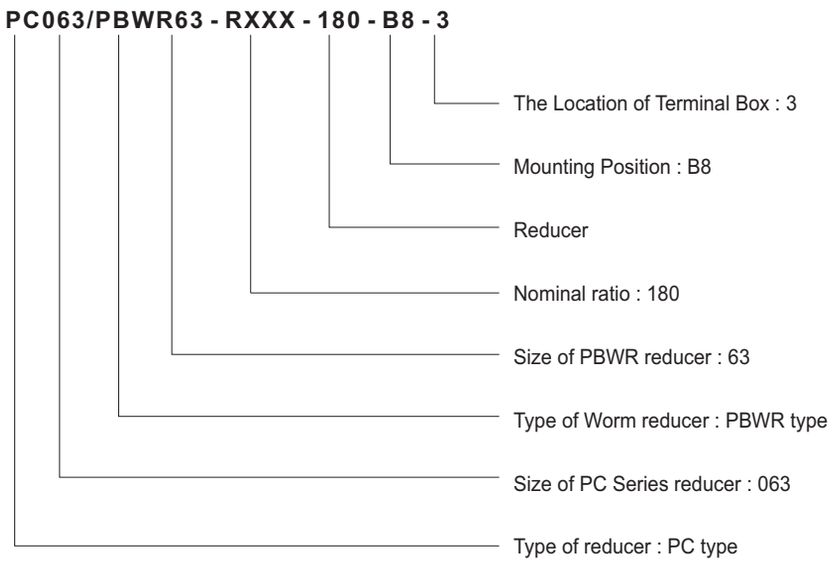


Explanation of the PC Series + PBWR Gear Reducer Nomenclature

PC071/PBWR75 - 150 - RXXX - V5 - F1 - E - 1

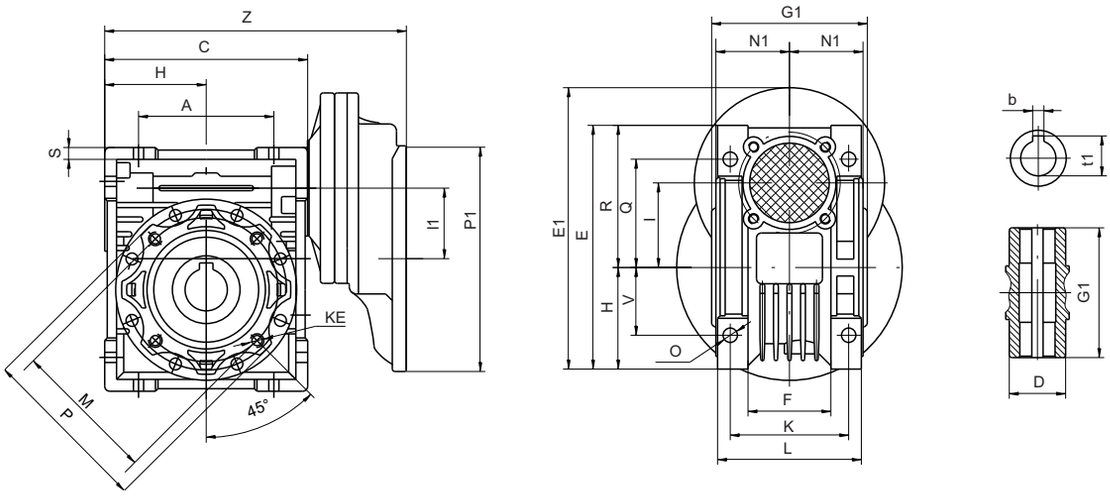


Explanation of the PC Series + PBWR Gear Reducer Nomenclature



SERIES PC + PBWR

GENERAL ARRANGEMENT DRAWING
PC SERIES + PBWR REDUCER



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		
0.18	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		
	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	PC080+PBWR75	0.37KW-6P-80B5
	300.0	11.5	1.91	3	PC080	0.37KW-6P-80B5
	12.0	206.1	1.60	75		
	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	PC090+PBWR110	0.75KW-6P-90B5
	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		
	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		
	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	PC090+PBWR130	1.1KW-4P-90B5
	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		
	7.4	890.0	1.20	121		
	6.2	1000.0	1.00	145.2		
	12.4	584.7	3.00	72.6	PC090+PBWR130	1.1KW-6P-90B5
	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		
	11.6	817.0	1.10	121		
	9.6	936.0	0.80	145.2		
	19.3	542.3	2.60	72.6	PC090+PBWR130	1.5KW-4P-90B5
	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		
	23.1	617.0	1.20	121		
	38.6	408.6	2.90	72.6	PC090+PBWR130	1.5KW-2P-90B5
	28.9	545.0	2.00	96.8		
	23.1	654.0	1.60	121		
	19.3	752.0	1.30	145.2		

Notes :

Notes :

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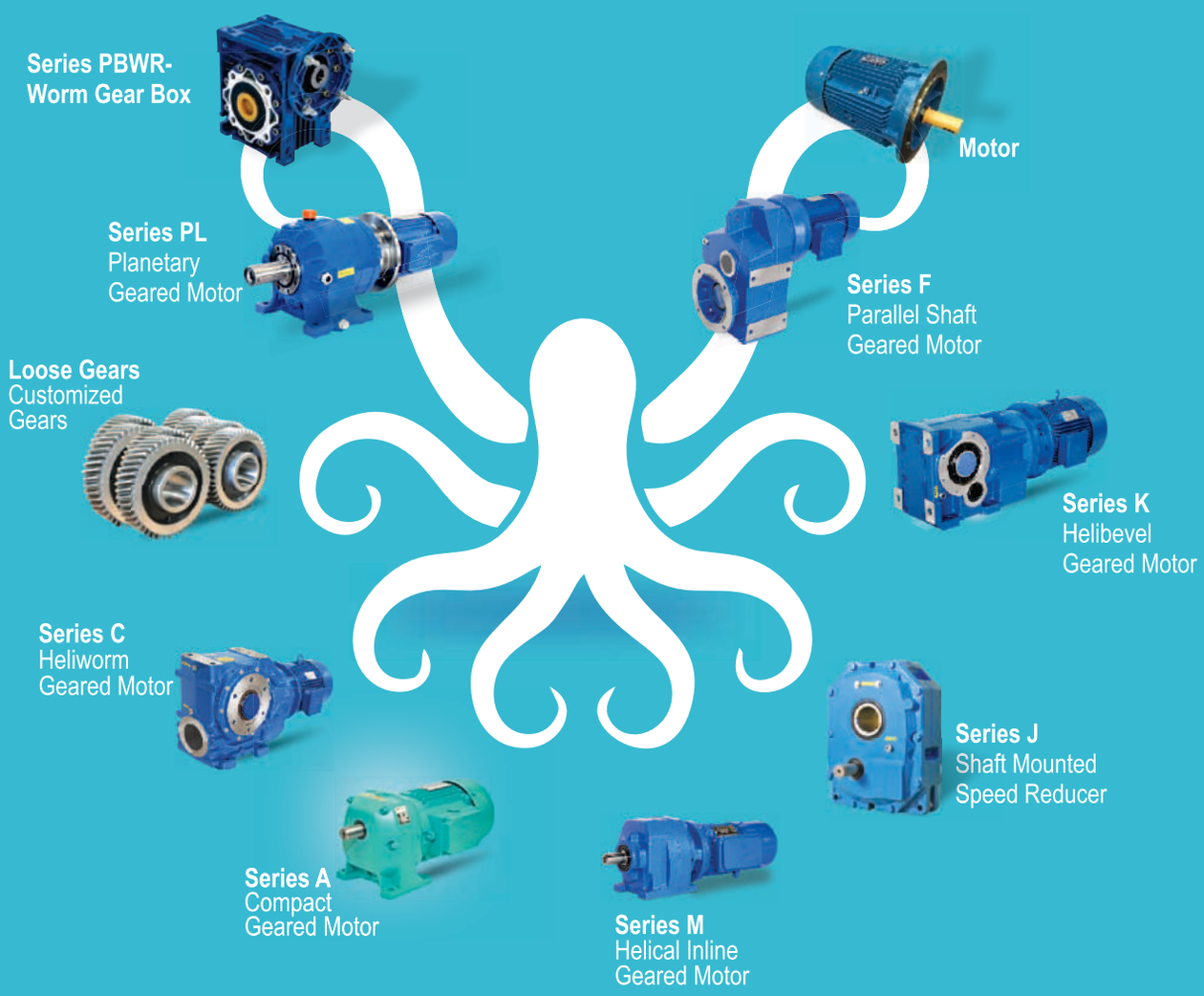

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