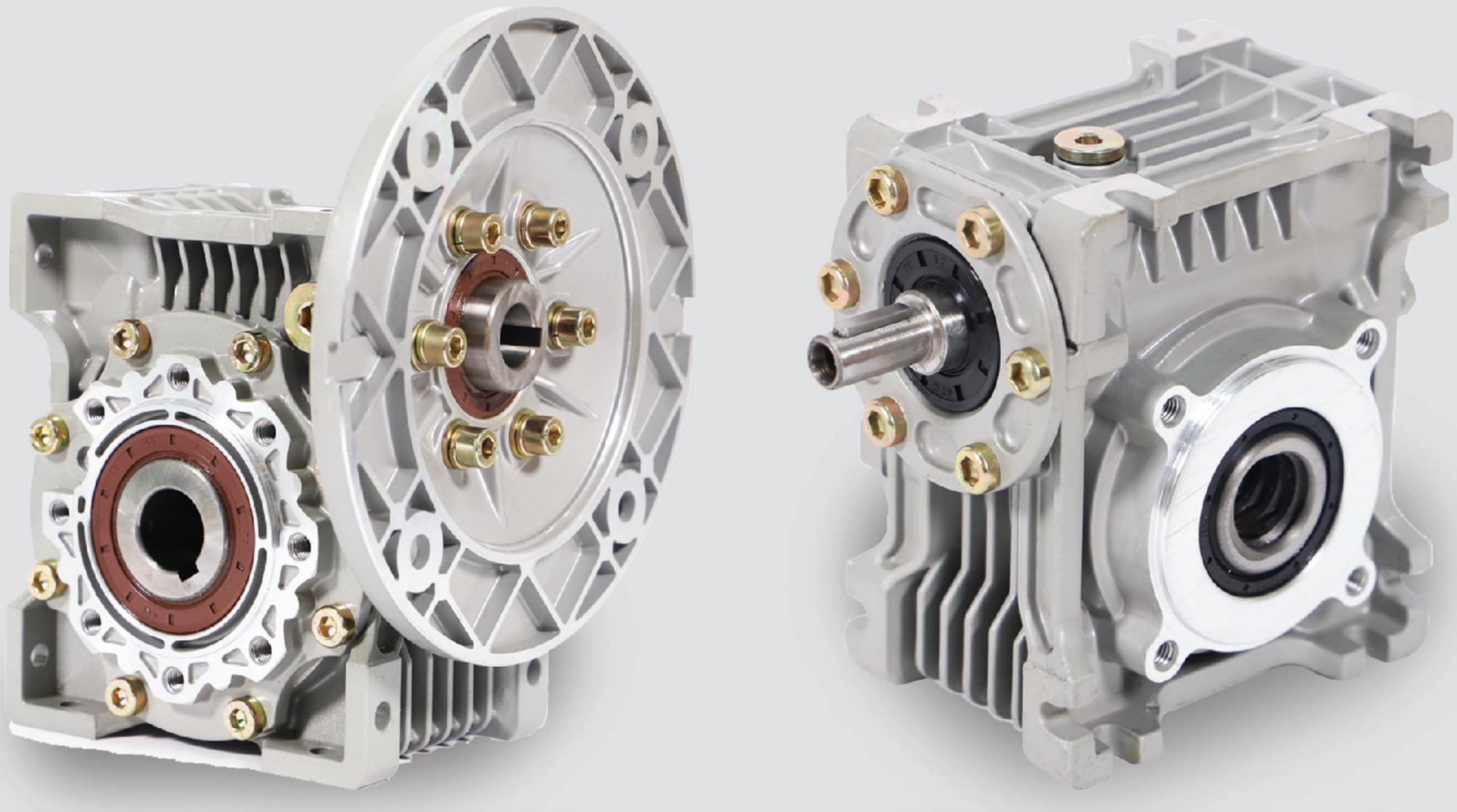
TECHNICAL
CATALOGUE

ATLAS
MOTORI & RIDUTTORI

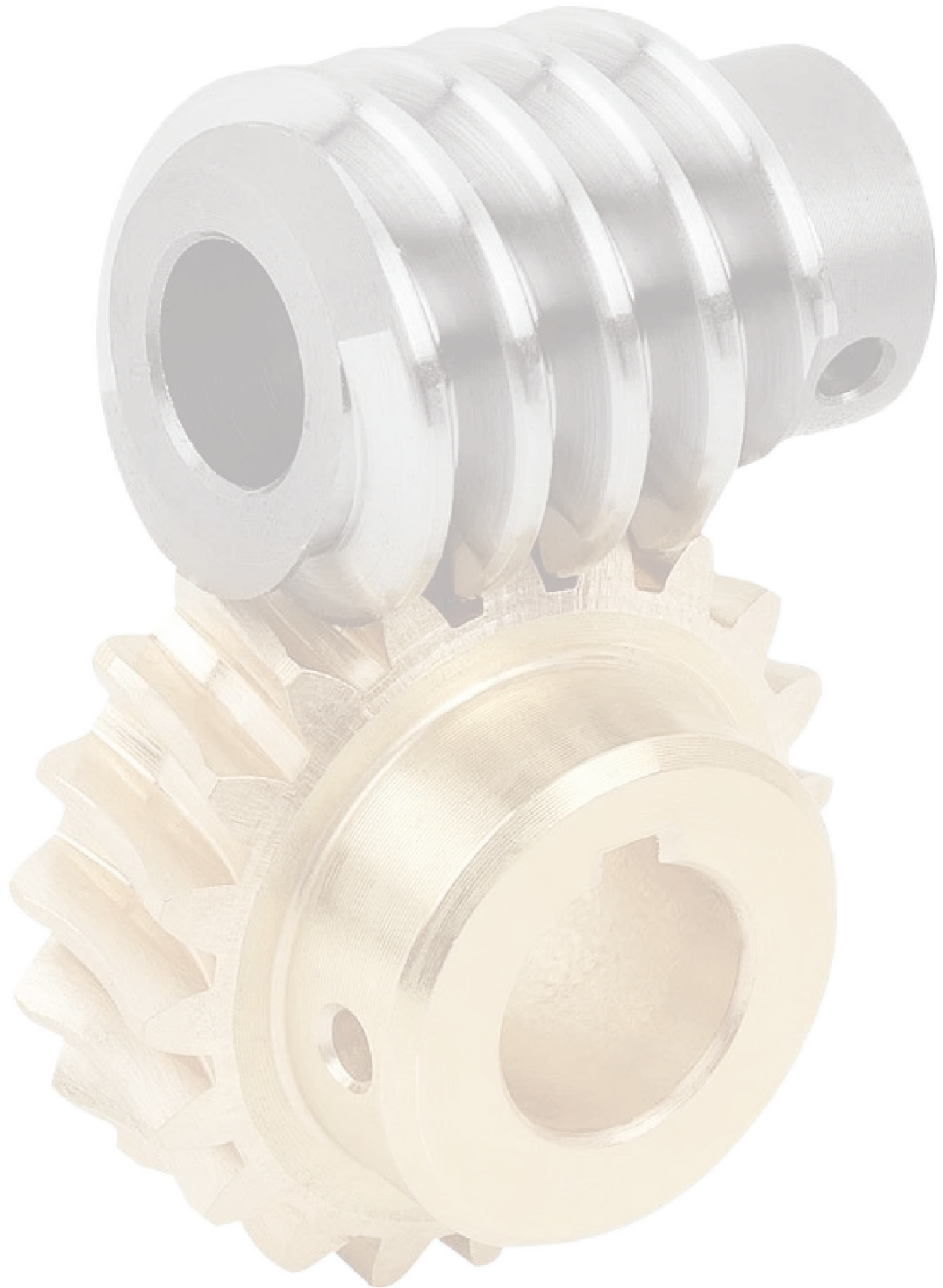


WORM
GEAREDMOTORS

STANDARD **IEC**

ATLAS MOTORI & RIDUTTORI

WORM **GEARED** MOTORS



About US

Atlas Motori Riduttori S.r.l, an Italian company which is specialized for high quality power transmission components such as Worm Gearboxes, Helical Gearboxes and Induction Motors. With the best quality and product durability, Atlas has succeeded to be customer choice globally. The company “Atlas”, based in Milan, Italy, assures to offer the best quality product with optimum performance for light and heavy industrial applications. Our design and engineering team have been relentlessly working on the product improvement since its formation.

Atlas is working exclusively in below products:

0.09kW to 7.5kW premium efficiency IEC standard motors

0.09kW to 15kW special shaft for helical gears input

High quality worm gearboxes from 14mm to 45mm

Helical gearboxes for high torque application

Our products are competent to replace the most of European brands both in quality and dimension.

Product summary

1. Worm Geared Reducer

- The reducer which model is among AWG25 to AWG90 made of aluminum alloy die-cast, good looking in appearance, compact in structure, rust proofing on surface and small volume to save mounting space.
- The reducer model among AWG110 to AWG150 is made of cast iron which casted with aluminum mould. It's good looking and solid, and can be used through the setting of multi-azimuth.
- Good radiating characteristic leads safe and reliability and high efficiency for using.
- The strong capacity of loading ensure stable transmission, make less vibration and noise.
- Varies of connecting structure for power input and torque output meet different require-merits; the design of Gear Box outline and the set of foot hole with good versality is apt to many kinds of mounting.

2. Combine Gear Reducer

- It is combined by two gear reducer and has all the virtues of them. to get higher ratio with it.
- The models of 150/130,63/110,63/90,50/75,40/63,40/50,30/40,30/40,30/30,25/25 are in common use. You can choose 25,30,40,50,63,75,90,110,130,150 as combination units to combine according to the fact of your special needs.

Service factor

Please understand the following at first in order to select the model of AWG speed reducer properly:

- Loading condition.
- Speed scope or ratio in application.
- Working condition and environment.
- Installation space.

Define working condition coefficient K1 and revise coefficient K2.

- Ensure machinery load types A,B,C according to table 1.
- Get the working condition coefficient K1 from diagram 1 according to turning time (hour/day) and start frequency (time/hour)
- Inspect working condition and select coefficient K2 from table 2.

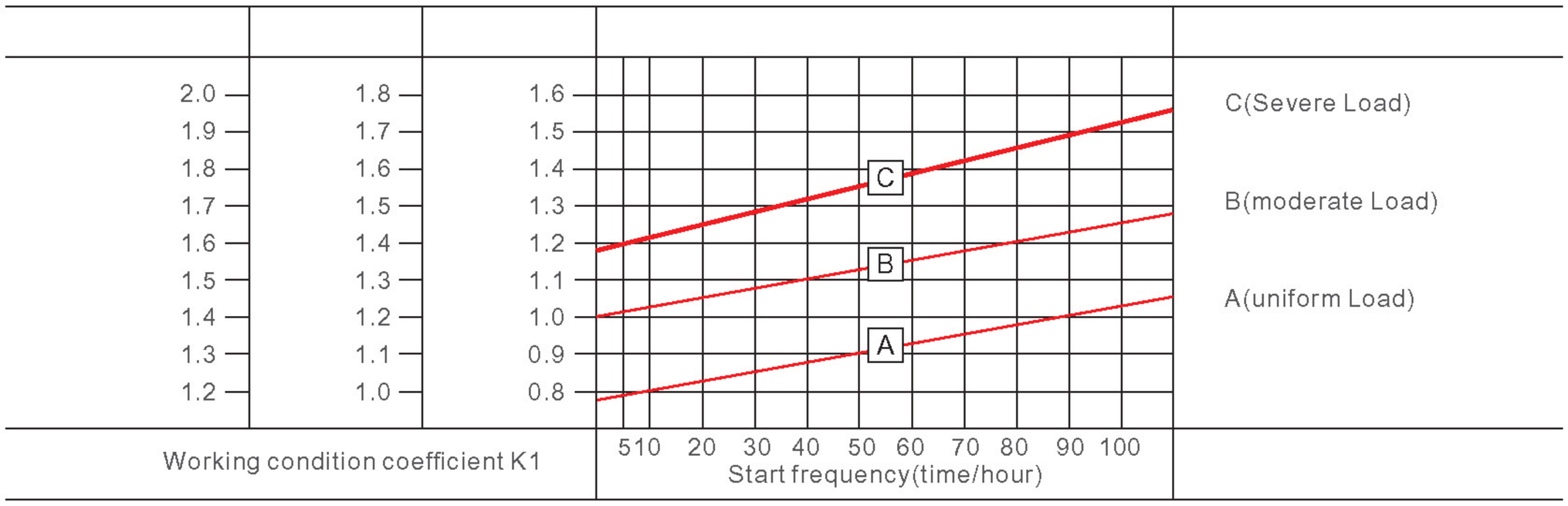
Table 1 machinery load Classification selection

Using Situation	Example	Load Type
Uniform Load	Conveyer Band(uniform Converying)	A(uniform Load)
Moderate Load	Speed Changed Conveying	B(moderate Load)
Severe Load	Compressor、Pulverizer，etc.	C(severe Load)

Table 2 working condition coefficient K2

Ambient Temperature	Working Condition Coefficient K2
-10℃~30℃	1
30℃~40℃	1.1~1.2

Diagram 1 working condition coefficient K1



Reducer selected

- At first it is better to make sure the value input machinery load T (torque) and then you can get the output torque through T multiply with work situation coefficient K1 and work situation revise coefficient K2. The required model can be gained by the above and connecting ratio or output speed.
- You can also select the reducer as followings: calculate output torque according to known input power and then select the reducer in accordance with output torque and rotate speed.

Lubricant

Lubrication oil chosen table

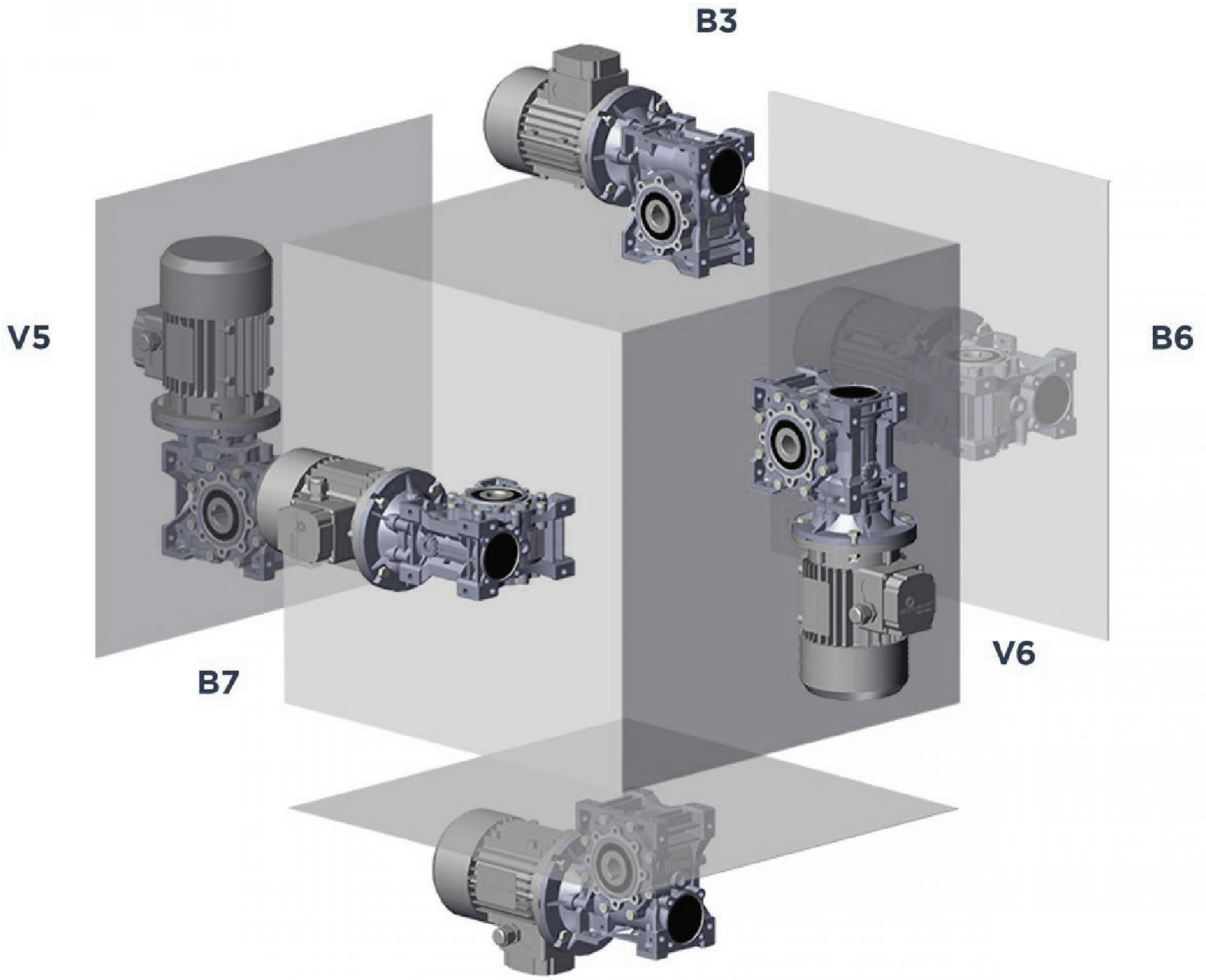
Reducer size	25-90	110-150	
Type of lubrication oil	Complex lubrication oil	Mineral lubrication oil	
Ambient temperature	-25~ +50	-5 ~ +40	-15 ~ +25
ISO VG	ISO VG 320	ISO VG 460	ISO VG 220
AGIP	TELIUM VSF320	BLASIA 460	BLASIA 220
SHELL	TIVELA OIL Sc320	OMALA OIL 460	OMALA OIL 220
ESSO	S220	SPARTAN EP460	SPARTAN EP220
MOBIL	GLYGOYLE 320	MOBIL GEAR 634	MOBIL GEAR 630
CASTROL	ALPHASYN PG320	ALPHA MAX 460	ALPHA MAX 220
BP	ENERGOL SG-XP320	ENERGOL GR-XP460	ENERGOL GR-XP220

Adding capacity of lubrication oil

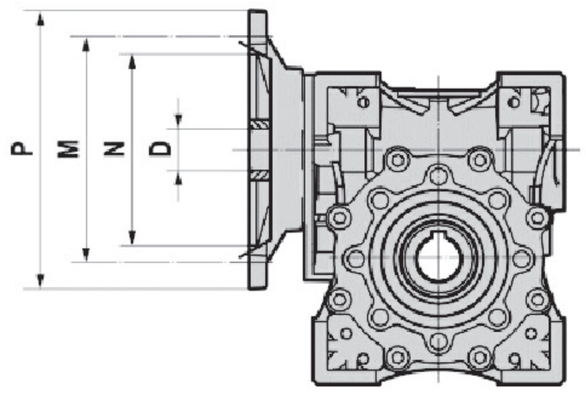
Type / Installation	025	030	040	050	063	075	090	110	130	150
B3	0.02	0.04	0.08	0.15	0.3	0.55	1	3	4.5	7
B6 B7								2.5	3.5	5.4
B8								2.2	3.3	5.1
V5								3	4.5	7
V6								2.2	3.3	5.1

Mounting positions

The mounting position of the gear unit identifies its space orientation. Unless specified otherwise, the standard positions are B3/BS. B3 mounting position, as from a technical point of view, ensures lower oil splash, better lubrication and less heating. For positions not envisaged, it is necessary to call our Technical Service. "U" version is related to sizes from AWG 030-063. For these sizes it is not necessary to specify mounting position. For AWG 090-110 mounting position B3 is valid also for B6-B7-B8. Mounting positions V5 and V6 must be specified. For AWG 130-150 mounting positions B3-B6-B7-B8-V5-V6 must be specified.



AWG Input flange availability



The table report possible configurations strictly based on geometric criteria. To determine the compatibility of a motor-gear unit assembly in terms of mechanical factors, double check the selected configuration against the rating charts for AWG performances.

AWG	PAM IEC	N	M	P	D	i											
						5	7,5	10	15	20	25	30	40	50	60	80	10
025	56B14	50	65	80	9	9	•	•	•	•	**	•	•	•	•	**	**
030	63B5	95	115	140	11	•	•	•	•	•	•	•	•	•	**	**	**
	63B14	60	75	90	11												
	56B5	80	100	120	9	•	•	•	•	•	•	•	•	•	•	•	**
	56B14	50	65	80	9												
040	71B5	110	130	160	14	•	•	•	•	•	•	•	•	**	**	**	**
	71B14	70	85	105	14												
	63B5	95	115	140	11	•	•	•	•	•	•	•	•	•	•	•	•
	63B14	60	75	90	11												
	56B5	80	100	120	9	**	**	**	**	**	**	**	**	•	•	•	•
050	80B5	130	165	200	19	•	•	•	•	•	•	•	**	**	**	**	**
	80B14	80	100	120	19												
	71B5	110	130	160	14	•	•	•	•	•	•	•	•	•	•	•	**
	71B14	70	85	105	14												
	63B5	95	115	140	11	**	**	**	**	**	**	**	•	•	•	•	•
063	90B5	130	165	200	24	**	•	•	•	•	•	•	•	+	+	+	+
	90B14	95	115	140	24												
	80B5	130	165	200	19	**	•	•	•	•	•	•	•	•	•	•	+
	80B14	80	100	120	19												
	71B5	110	130	160	14	**	•	•	•	•	•	•	•	•	•	•	•
	71B14	70	85	105	14												
075	100/112B5	180	215	250	28	**	•	•	•	•	•	•	+	+	+	+	+
	100/112B14	110	130	160	28												
	90B5	130	165	200	24	**	•	•	•	•	•	•	•	•	•	+	+
	90B14	95	115	140	24												
	80B5	130	165	200	19	**	•	•	•	•	•	•	•	•	•	•	•
	80B14	80	100	120	19												
	71B5	110	130	160	14	**	•	•	•	•	•	•	•	•	•	•	•
	71B14	70	85	105	14												
090	100/112B5	180	215	250	28	**	•	•	•	•	•	•	•	+	+	+	+
	100/112B14	110	130	160	28												
	90B5	130	165	200	24	**	•	•	•	•	•	•	•	•	•	•	+
	90B14	95	115	140	24												
	80B5	130	165	200	19	**	•	•	•	•	•	•	•	•	•	•	•
	80B14	80	100	120	19												
110	132B5	230	265	300	38	**	•	•	•	•	•	•	•	+	+	+	+
	100/112B5	180	215	250	28	**	•	•	•	•	•	•	•	•	•	+	+
	100/112B14	110	130	160	28												
	90B5	130	165	200	24	**	•	•	•	•	•	•	•	•	•	•	•
	90B14	95	115	140	24												
	80B5	130	165	200	19	**	•	•	•	•	•	•	•	•	•	•	•
	80B14	80	100	120	19												
130	132B5	230	265	300	38	**	•*	•*	•*	•*	•*	•*	•*	**	**	**	**
	100/112B5	180	215	250	28	**	**	**	**	**	•	•	•	•	•	•	•
	90B5	130	165	200	24	**	**	**	**	**	**	**	**	**	**	•	•

Parameter selections

Worm Geared Reducer(flange input, input speed is 1400r/min)/(matched with 4 poles motor)

N_2-output speed; M_2-output torque; i-ratio; kN-Output shaft radial force; f.s.-factor of safety

Model	N_2 (r/min)	M_2 (N.m)	i	kN	f.s.
0.06kw					
AWG25	186.7	2.6	7.5	0.50	4.2
	140	3.4	10	0.55	3.5
	93.3	4.9	15	0.63	2.5
	70	6.1	20	0.69	2.0
	46.7	8.2	30	0.79	1.6
	35	10	40	0.87	1.3
	28	12	50	0.94	0.9
	23.3	14	60	1.00	0.7
AWG30	186.7	2.6	7.5	0.68	6.9
	140	3.4	10	0.75	5.4
	93.3	4.7	15	0.86	3.8
	70	6	20	0.94	3.0
	56	7	25	1.02	3.0
	46.7	8	30	1.08	2.5
	35	9.7	40	1.19	1.9
	28	11	50	1.28	1.5
	23.3	13	60	1.36	1.3
	17.5	14	80	1.50	0.9
0.09kw					
AWG25	186.7	3.9	7.5	0.50	2.8
	140	5.1	10	0.55	2.4
	93.3	7.3	15	0.63	1.6
	70	9.2	20	0.69	1.3
	46.7	12	30	0.79	1.1
	35	15	40	0.87	0.9
AWG30	186.7	3.9	7.5	0.68	4.6
	140	5	10	0.75	3.6
	93.3	7.1	15	0.86	2.5
	70	9	20	0.94	2.0
	56	10	25	1.02	2.0
	46.7	12	30	1.08	1.7
	35	14	40	1.19	1.2
	28	17	50	1.28	1.0
	23.3	19	60	1.36	0.9
AWG40	28	19	50	2.47	2.0
	23.3	21	60	2.63	1.7
	17.5	26	80	2.89	1.3
	14	29	100	3.11	1.0
0.12kw					
AWG30	186.7	5.2	7.5	0.68	3.4
	140	6.7	10	0.75	2.7
	93.3	9.5	15	0.86	1.9
	70	12	20	0.94	1.5
	56	14	25	1.02	1.5
	46.7	16	30	1.08	1.3
	35	19	40	1.19	0.9
	28	23	50	1.28	0.8
AWG40	46.7	17.2	30	2.08	2.6
	35	21	40	2.29	1.9

Model	N_2 (r/min)	M_2 (N.m)	i	kN	f.s.
0.12kw					
AWG40	28	25	50	2.47	1.5
	23.3	28	60	2.63	1.3
	17.5	34	80	2.89	1.0
	14	38	100	3.11	0.8
AWG50	23.3	29	60	3.61	2.3
	17.5	35	80	3.97	1.9
	14	40	100	4.28	1.4
0.18kw					
AWG30	186.7	7.8	7.5	0.68	2.3
	140	10	10	0.75	1.8
	93.3	14	15	0.86	1.3
	70	18	20	0.94	1.0
	56	21	25	1.02	1.0
	46.7	24	30	1.08	0.8
AWG40	70	19	20	1.82	2.0
	56	23	25	1.96	1.7
	46.7	26	30	2.08	1.7
	35	32	40	2.29	1.3
	28	38	50	2.47	1.0
	23.3	43	60	2.63	0.8
AWG50	35	32	40	3.15	2.3
	28	39	50	3.39	1.9
	23.3	43	60	3.61	1.6
	17.5	52	80	3.97	1.2
	14	60	100	4.28	0.9
0.25kw					
AWG40	186.7	11	7.5	1.31	3.6
	140	14	10	1.44	2.8
	93.3	21	15	1.65	1.9
	70	27	20	1.82	1.5
	56	32	25	1.96	1.2
	46.7	36	30	2.08	1.3
	35	44	40	2.29	0.9
	28	37	50	2.47	0.8
AWG50	70	26	20	2.50	2.7
	56	32	25	2.69	2.2
	46.7	37	30	2.86	2.3
	35	46	40	3.15	1.7
	28	54	50	3.39	1.4
	23.3	60	60	3.61	1.1
	17.5	72	80	3.97	0.9
AWG63	28	56	50	4.44	2.4
	23.3	63	60	4.71	2.0
	17.5	78	80	5.19	1.6
	14	87	100	5.59	1.4
0.37kw					
AWG40	166.7	16	7.5	1.31	2.4
	140	21	10	1.44	1.9
	93.3	31	15	1.65	1.3

Model	N_2 (r/min)	M_2 (N.m)	i	kN	f.s.
0.37kw					
	70	39	20	1.82	1.0
	56	47	25	1.96	0.8
	46.7	53	30	2.08	0.8
AWG50	140	21	10	1.98	3.3
	93.3	31	15	2.27	2.4
	70	40	20	2.5	1.8
	56	48	25	2.69	1.5
	46.7	55	30	2.86	1.5
	35	68	40	3.15	1.1
	28	80	50	3.39	0.9
	23.3	89	60	3.61	0.8
AWG63	35	70	40	4.12	2.1
	28	83	50	4.44	1.6
	23.3	94	60	4.71	1.4
	17.5	115	80	5.19	1.1
	14	129	100	5.59	0.9
0.55kw					
AWG50	186.7	25	7.5	1.8	2.9
	140	32	10	1.98	2.2
	93.3	46	15	2.27	1.6
	70	59	20	2.5	1.2
	56	71	25	2.69	1.0
	46.7	81	30	2.86	1.0
	35	80	40	3.15	0.9
AWG63	70	60	20	3.27	2.2
	56	73	25	3.52	1.8
	46.7	83	30	3.74	1.9
	35	105	40	4.12	1.4
	28	124	50	4.44	1.1
	23.3	140	60	4.71	0.9
AWG75	35	108	40	4.86	2.0
	28	129	50	5.24	1.6
	23.3	146	60	5.56	1.4
	17.5	180	80	6.13	1.1
	14	206	100	6.60	0.9
AWG90	17.5	189	80	6.78	1.5
	14	221	100	7.30	1.2
0.75kw					
AWG50	186.7	34	7.5	1.80	2.1
	140	44	10	1.98	1.6
	93.3	63	15	2.27	1.2
	70	81	20	2.50	0.9
AWG63	93.3	63	15	2.97	2.2
	70	83	20	3.27	1.6
	56	100	25	3.52	1.3
	46.7	114	30	3.74	1.4
	35	143	40	4.12	1.0
AWG75	56	102	25	4.16	2.0
	46.7	117	30	4.42	2.0
	35	147	40	4.86	1.5
	28	177	50	5.24	1.2
	23.3	200	60	5.56	1.0
AWG90	28	184	50	5.79	1.8
	23.3	212	60	6.16	1.5

Model	N_2 (r/min)	M_2 (N.m)	i	kN	f.s.
0.75kw					
AWG90	17.5	258	80	6.78	1.1
	14	302	100	7.30	0.9
1.1kw					
AWG63	186.7	49	7.5	2.35	2.6
	140	65	10	2.59	2.0
	93.3	93	15	2.97	1.5
	70	122	20	3.27	1.1
	56	146	25	3.52	0.9
	46.7	167	30	3.74	1.0
	35	165	40	3.59	0.9
AWG75	93.3	95	15	3.50	2.1
	70	123	20	3.86	1.7
	56	150	25	4.16	1.3
	46.7	171	30	4.42	1.3
	35	216	40	4.86	1.0
	28	264	50	4.60	0.9
	23.3	223	60	4.89	0.8
AWG90	35	225	40	5.38	1.6
	28	270	50	5.79	1.3
	23.3	311	60	6.16	1.0
	17.5	328	80	6.17	0.9
AWG110	28	281	50	7.32	2.3
	23.3	324	60	7.78	1.9
	17.5	402	80	8.57	1.3
	14	473	100	9.23	1.0
1.5kw					
AWG63	186.7	67	7.5	2.35	1.9
	140	89	10	2.59	1.5
	93.3	127	15	2.97	1.1
	70	166	20	3.27	0.8
AWG75	140	90	10	3.06	2.2
	93.3	130	15	3.50	1.5
	70	168	20	3.86	1.3
	56	205	25	4.16	1.0
	46.7	233	30	4.42	1.0
AWG90	70	171	20	4.27	2.1
	56	210	25	4.60	1.6
	46.7	239	30	4.89	1.7
	35	307	40	5.38	1.2
	28	368	50	5.79	0.9
	23.3	424	60	6.16	0.8
AWG110	35	319	40	6.80	2.2
	28	384	50	7.32	1.7
	23.3	442	60	7.78	1.4
	17.5	548	80	8.57	0.9
2.2kw					
AWG75	186.7	100	7.5	2.78	1.8
	140	132	10	3.06	1.5
	93.3	191	15	3.50	1.0
	70	240	20	3.38	0.9
	46.7	269	30	3.89	0.8
AWG90	186.7	101	7.5	3.08	2.9
	140	134	10	3.39	2.3
	93.3	194	15	3.88	1.9

Model	N_2 (r/min)	M_2 (N.m)	i	kN	f.s.
2.2kw					
AWG90	70	252	20	4.27	1.4
	56	308	25	4.60	1.1
	46.7	351	30	4.89	1.2
	35	433	40	4.90	1.0
	28	393	50	5.28	0.9
AWG110	70	255	20	5.39	2.5
	56	315	25	5.81	2.2
	46.7	356	30	6.18	2.0
	35	468	40	6.8	1.5
	28	563	50	7.32	1.2
	23.3	648	60	7.78	1.0
AWG130	35	468	40	8.89	2.2
	28	563	50	9.58	1.7
	23.3	648	60	10.18	1.4
	17.5	816	80	11.21	1.0
	14	869	100	10.62	0.8
AWG150	28	570	50	13.10	2.5
	23.3	657	60	13.92	1.9
	17.5	816	80	15.32	1.4
	14	960	100	16.50	1.0
3kw					
AWG75	186.7	136	7.5	2.78	1.4
	140	180	10	3.06	1.1
	93.3	261	15	3.50	0.8
AWG90	186.7	138	7.5	3.08	2.1
	140	182	10	3.39	1.7
	93.3	264	15	3.88	1.4
	70	344	20	4.27	1.0
	56	420	25	4.60	0.8
	46.7	479	30	4.89	0.9
AWG110	93.3	264	15	4.90	2.5
	70	348	20	5.39	1.9
	56	430	25	5.81	1.6
	46.7	485	30	6.18	1.5
	35	638	40	6.80	1.1
	28	767	50	7.32	0.9
AWG130	56	429	25	7.60	2.2
	46.7	491	30	8.08	2.1
	35	638	40	8.89	1.6
	28	767	50	9.58	1.3
	23.3	884	60	10.18	1.0
	17.5	1113	80	11.21	0.8
AWG150	28	777	50	13.10	1.8
	23.3	896	60	13.92	1.4
	17.5	1113	80	15.32	1.0
	14	1310	100	16.50	0.8
4kw					
AWG75	186.7	182	7.5	2.44	1.4
AWG90	186.7	184	7.5	3.08	1.6
	140	243	10	3.39	1.3
	93.3	352	15	3.88	1.0
	70	458	20	4.27	0.8
AWG110	140	242	10	4.28	2.5
	93.3	352	15	4.90	1.9
	70	464	20	5.39	1.4

Model	N_2 (r/min)	M_2 (N.m)	i	kN	f.s.
4kw					
AWG110	56	573	25	5.81	1.2
	46.7	647	30	6.18	1.1
AWG130	56	573	25	7.60	1.6
	46.7	655	30	8.08	1.6
	35	851	40	8.89	1.2
	28	1023	50	9.58	1.0
	23.3	1179	60	10.18	0.8
AWG150	28	1036	50	13.10	1.4
	23.3	1195	60	13.92	1.1
	17.5	1484	80	15.32	0.8
5.5kw					
AWG110	186.7	253	7.5	3.89	2.2
	140	334	10	4.28	1.8
	93.3	484	15	4.90	1.4
	70	638	20	5.39	0.9
	56	711	25	5.15	1.0
AWG130	140	333	10	5.60	2.5
	93.3	490	15	6.41	1.9
	70	645	20	7.06	1.4
	56	788	25	7.60	1.2
	46.7	900	30	8.08	1.2
	35	1171	40	8.89	0.9
	28	1103	50	8.51	0.8
AWG150	70	645	20	9.65	2.0
	56	788	25	10.40	1.5
	46.7	934	30	11.05	1.3
	35	1171	40	12.16	1.3
	28	1426	50	13.10	1.0
	23.3	1643	60	13.92	0.8
7.5kw					
AWG110	186.7	345	7.5	3.89	1.6
	140	455	10	4.28	1.3
	93.3	660	15	4.90	1.0
AWG130	186.7	349	7.5	5.09	2.1
	140	455	10	5.6	1.8
	93.3	668	15	6.41	1.4
	70	880	20	7.06	1.0
	56	1074	25	7.6	0.9
	46.7	1228	30	8.08	0.8
	35	1596	40	8.89	0.7
AWG150	70	880	20	9.65	1.5
	56	1074	25	10.4	1.1
	46.7	1274	30	11.05	0.9
	35	1596	40	12.16	1.0
11kw					
AWG150	186.7	512	7.5	6.96	2.3
	140	675	10	7.66	1.8
	93.3	990	15	8.77	1.3
	70	1291	20	9.65	1.0
	56	1576	25	10.4	0.8
15kw					
AWG150	186.7	698	7.5	6.96	1.7
	140	921	10	7.66	1.3
	93.3	1351	15	8.77	0.9.
	70	1760	20	9.65	0.7

AWG Worm Gear Reducer - 1400RPM

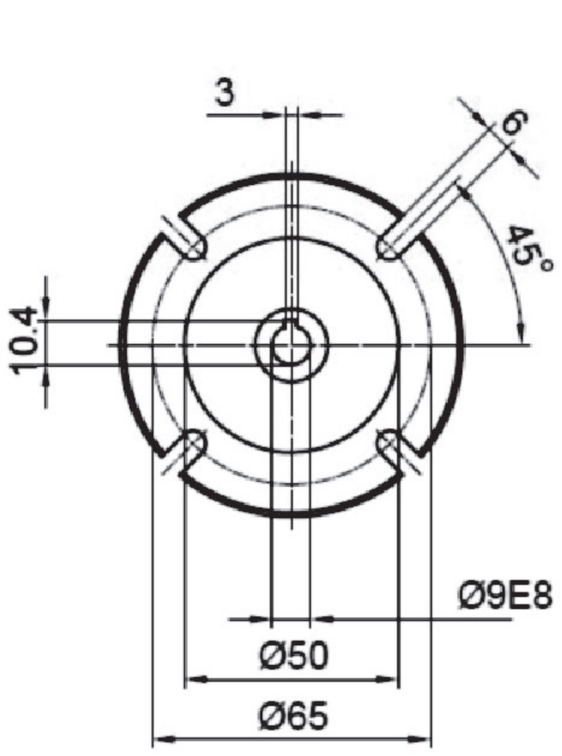
kw-motor power, N2-output speed, M2-output torque, i-ratio, kN1-output radial force, kN2-input radial force

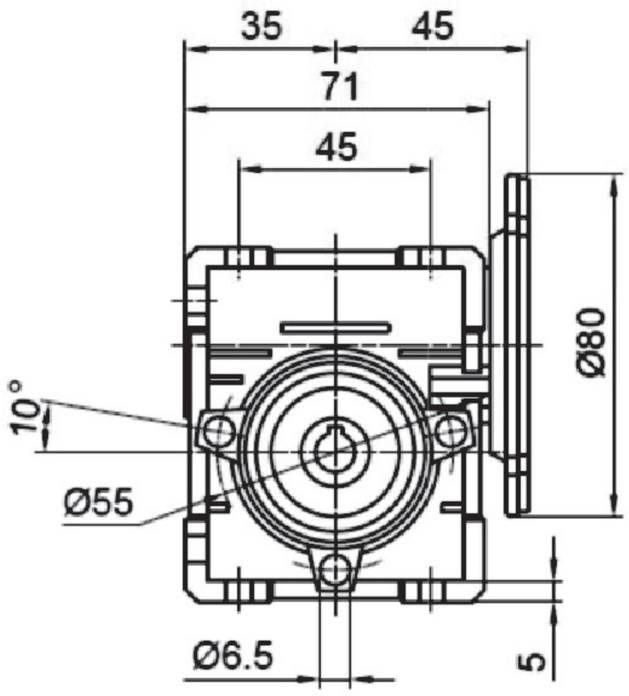
Model	kw	N_2 (r/min)	M_2 (N.m)	i	kN1	kN2
AWG30	0.4	186.7	18	7.5	0.68	0.15
	0.3	140	18	10	0.75	0.16
	0.2	93.3	18	15	0.86	0.16
	0.2	70	18	20	0.94	0.19
	0.2	56	21	25	1.02	0.21
	0.2	46.7	20	30	1.08	0.21
	0.1	35	18	40	1.19	0.21
	0.1	28	17	50	1.28	0.21
	0.1	23.3	16	60	1.36	0.21
	0.1	17.5	13	80	1.50	0.21
AWG40	0.9	186.7	40	7.5	1.31	0.29
	0.7	140	40	10	1.44	0.33
	0.5	93.3	40	15	1.65	0.33
	0.4	70	39	20	1.82	0.35
	0.3	56	38	25	1.96	0.35
	0.3	46.7	45	30	2.08	0.35
	0.2	35	41	40	2.29	0.35
	0.2	28	39	50	2.47	0.35
	0.2	23.3	36	60	2.63	0.35
	0.1	17.5	33	80	2.89	0.35
	0.1	14	29	100	3.11	0.35
AWG50	1.6	186.7	71	7.5	1.80	0.4
	1.2	140	72	10	1.98	0.49
	0.9	93.3	74	15	2.27	0.49
	0.7	70	73	20	2.50	0.49
	0.5	56	70	25	2.69	0.49
	0.6	46.7	84	30	2.86	0.49
	0.4	35	76	40	3.15	0.49
	0.3	28	73	50	3.39	0.49
	0.3	23.3	68	60	3.61	0.49
	0.2	17.5	65	80	3.97	0.49
	0.2	14	55	100	4.28	0.49
AWG63	2.8	186.7	128	7.5	2.35	0.5
	2.2	140	130	10	2.59	0.57
	1.6	93.3	140	15	2.97	0.61
	1.2	70	135	20	3.27	0.66
	1.0	56	130	25	3.52	0.70
	1.1	46.7	160	30	3.74	0.70
	0.8	35	145	40	4.12	0.70
	0.6	28	135	50	4.44	0.70
	0.5	23.3	130	60	4.71	0.70
	0.4	17.5	122	80	5.19	0.70
	0.3	14	118	100	5.59	0.70
AWG75	4.1	186.7	185	7.5	2.78	0.70
	3.2	140	195	10	3.06	0.83
	2.3	93.3	200	15	3.50	0.85
	1.9	70	210	20	3.86	0.98
	1.5	56	200	25	4.16	0.98
	1.5	46.7	230	30	4.42	0.98

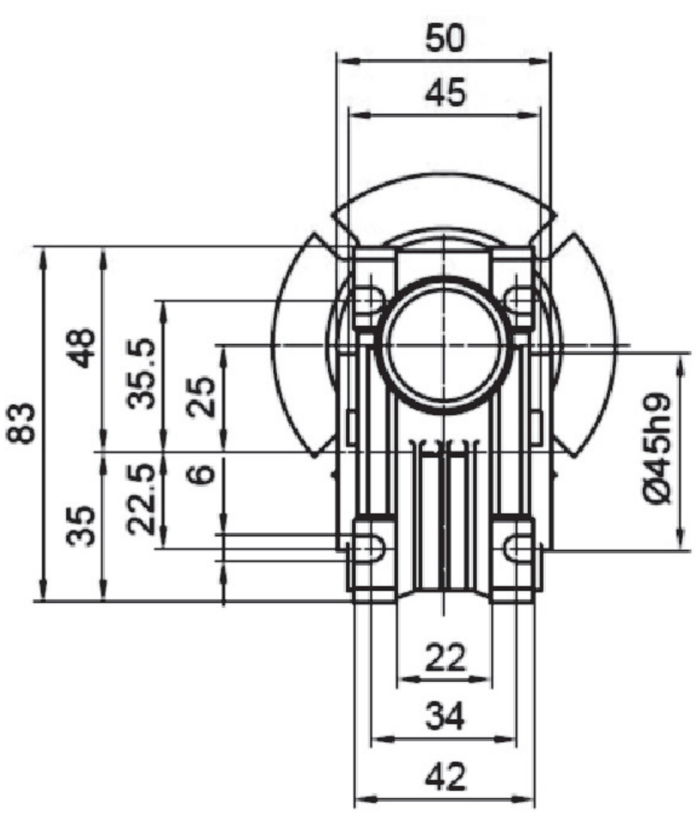
Model	kw	N_2 (r/min)	M_2 (N.m)	i	kN1	kN2
AWG75	1.1	35	220	40	4.86	0.98
	0.9	28	210	50	5.24	0.98
	0.8	23.3	200	60	5.56	0.98
	0.6	17.5	190	80	6.13	0.98
	0.5	14	180	100	6.60	0.98
AWG90	6.3	186.7	290	7.5	3.08	0.90
	5.1	140	310	10	3.39	1.08
	4.1	93.3	360	15	3.88	1.25
	2.4	56	340	25	4.60	1.27
	2.6	46.7	410	30	4.89	1.27
	1.8	35	360	40	5.38	1.27
	1.4	28	340	50	5.79	1.27
	1.1	23.3	320	60	6.16	1.27
	0.8	17.5	285	80	6.78	1.27
	0.7	14	270	100	7.30	1.27
AWG110	12	186.7	552	7.5	3.89	1.20
	9.8	140	598	10	4.28	1.46
	7.5	93.3	656	15	4.90	1.60
	5.6	70	644	20	5.39	1.70
	4.7	56	679	25	5.81	1.70
	4.5	46.7	725	30	6.18	1.70
	3.3	35	702	40	6.80	1.70
	2.6	28	660	50	7.32	1.70
	2.1	23.3	616	60	7.78	1.70
	1.4	17.5	515	80	8.57	1.70
	1.1	14	483	100	9.23	1.70
AWG130	16.1	186.7	750	7.5	5.09	1.50
	13.5	140	820	10	5.60	1.84
	10.3	93.3	920	15	6.41	2.07
	7.8	70	910	20	7.06	2.10
	6.5	56	930	25	7.60	2.10
	6.4	46.7	1040	30	8.08	2.10
	4.9	35	1050	40	8.89	2.10
	3.8	28	980	50	9.58	2.10
	3.1	23.3	900	60	10.18	2.10
	2.3	17.5	840	80	11.21	2.10
	1.7	14	740	100	12.07	2.10
AWG150	25.8	186.7	1200	7.5	6.96	1.95
	20.2	140	1240	10	7.66	2.26
	13.9	93.3	1250	15	8.77	2.28
	11.1	70	1300	20	9.65	2.67
	8.4	56	1200	25	10.40	2.80
	7.1	46.7	1200	30	11.05	2.80
	7.3	35	1550	40	12.16	2.80
	5.4	28	1400	50	13.10	2.80
	4.2	23.3	1260	60	13.92	2.80
	3.1	17.5	1150	80	15.32	2.80
	2.3	14	1000	100	16.50	2.80

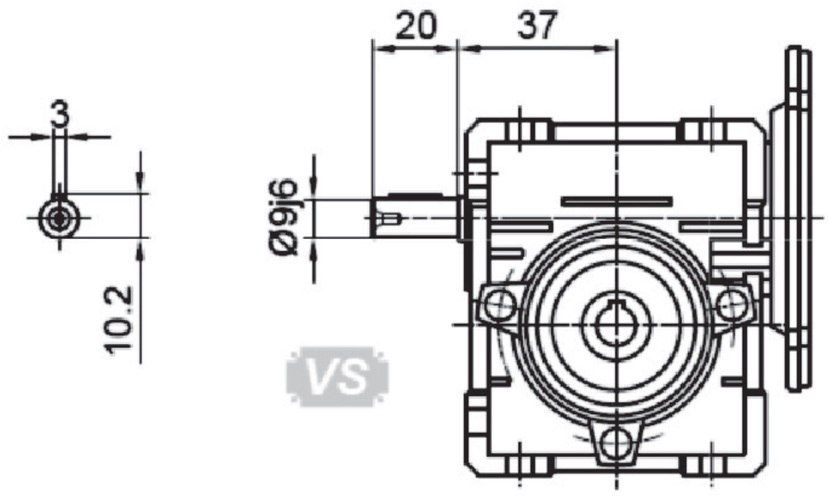
Dimensions

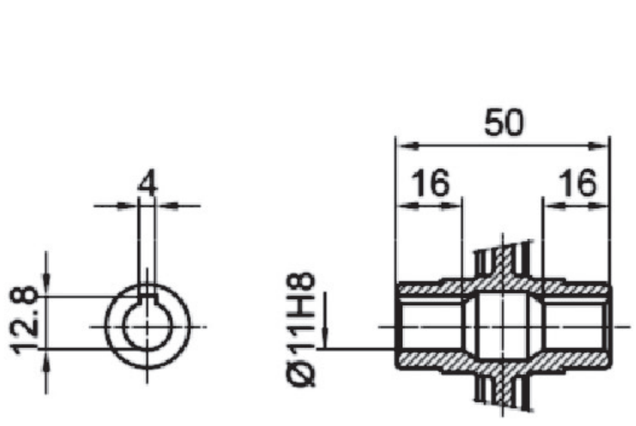
AWG25

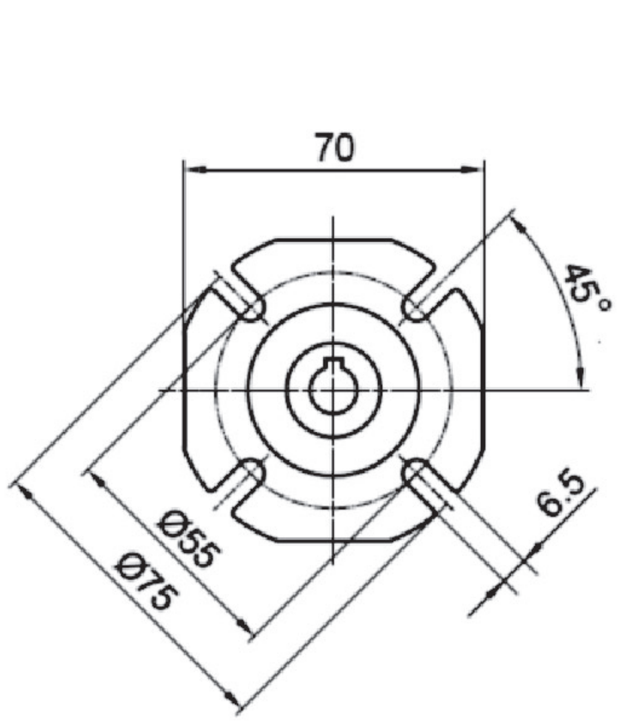


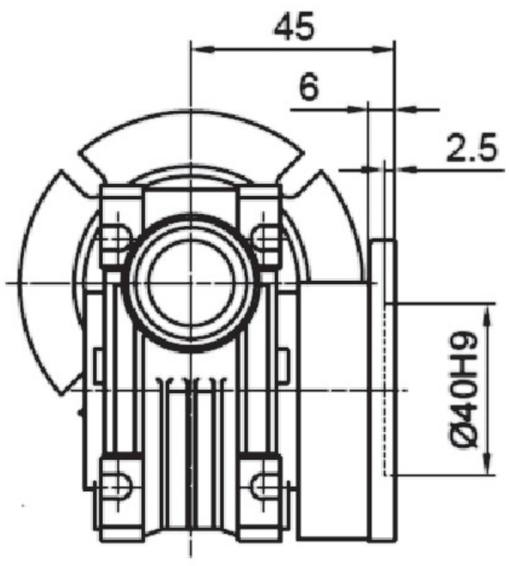








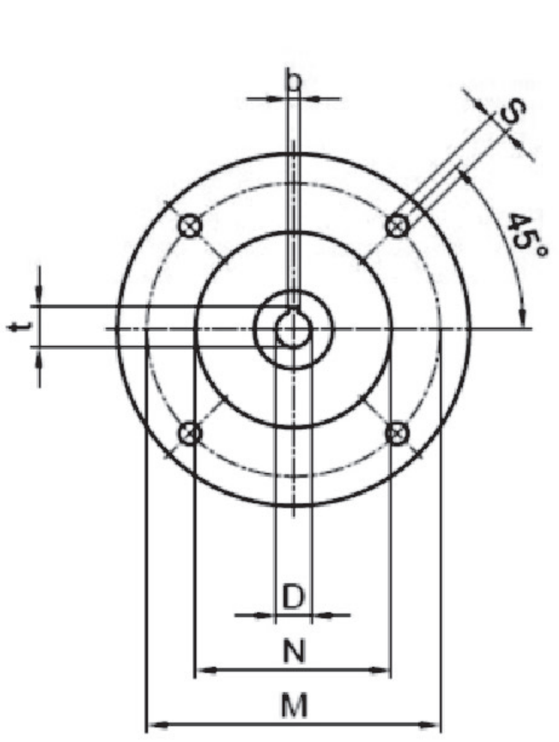


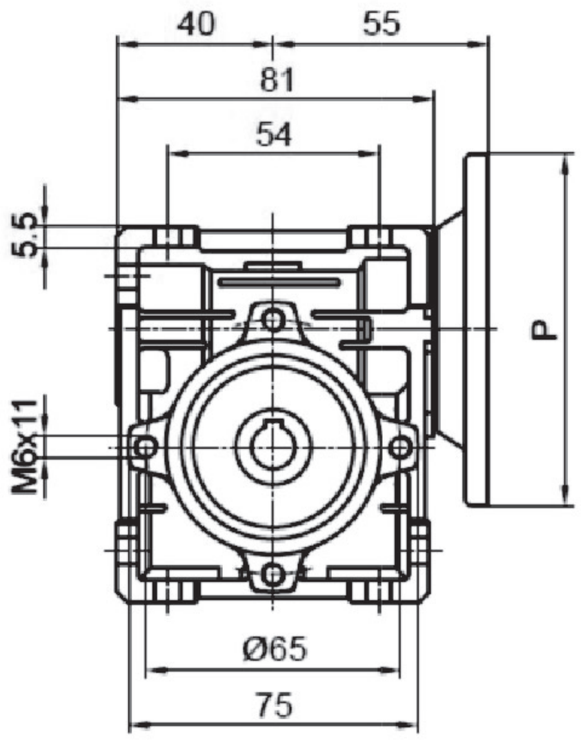


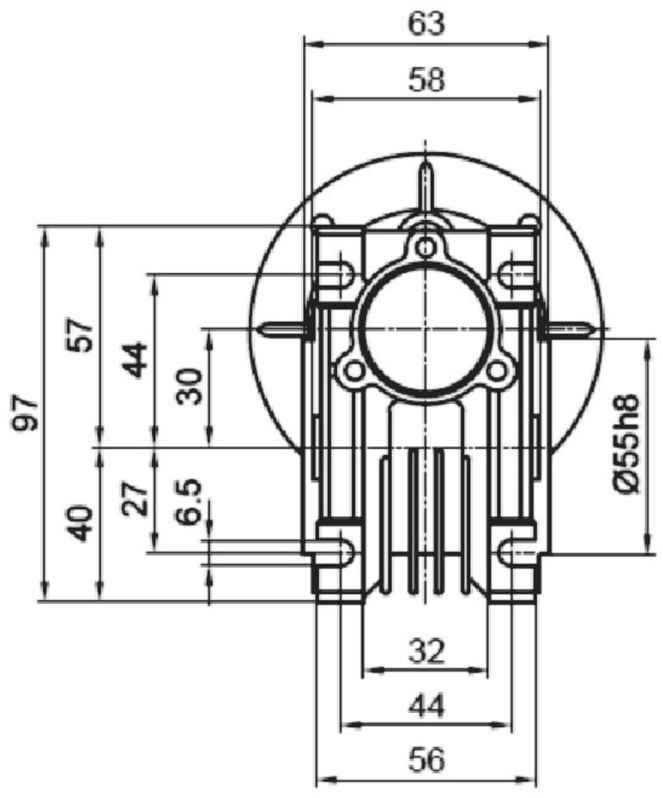
*Weight without motor≈0.7kg

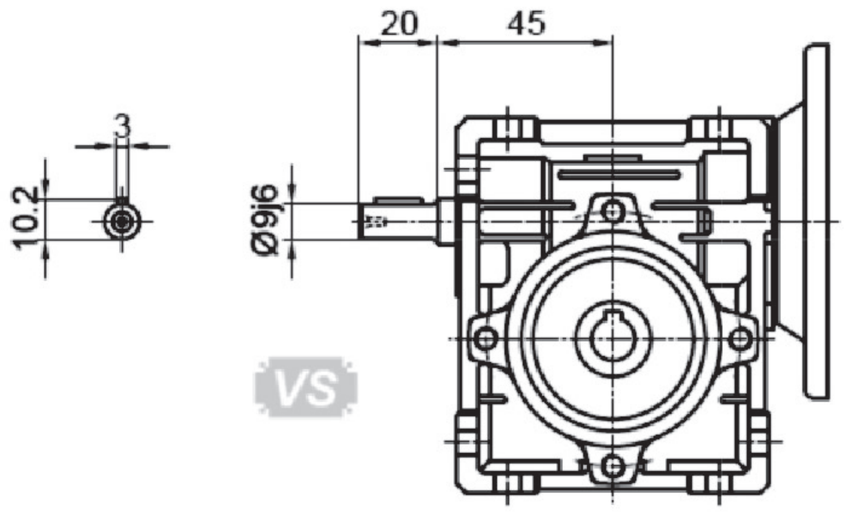
Dimensions

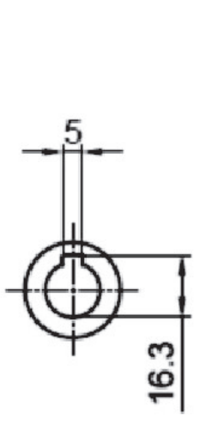
AWG30 >

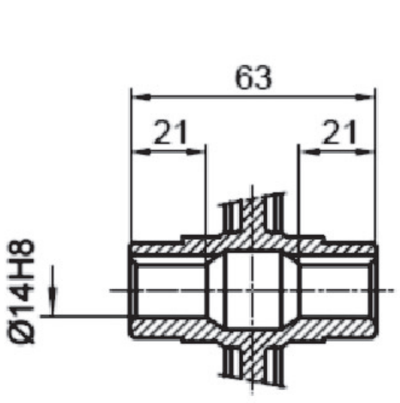


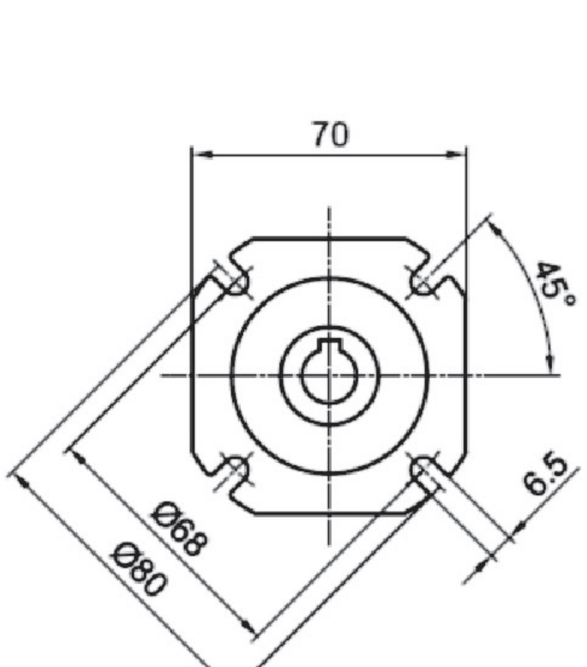


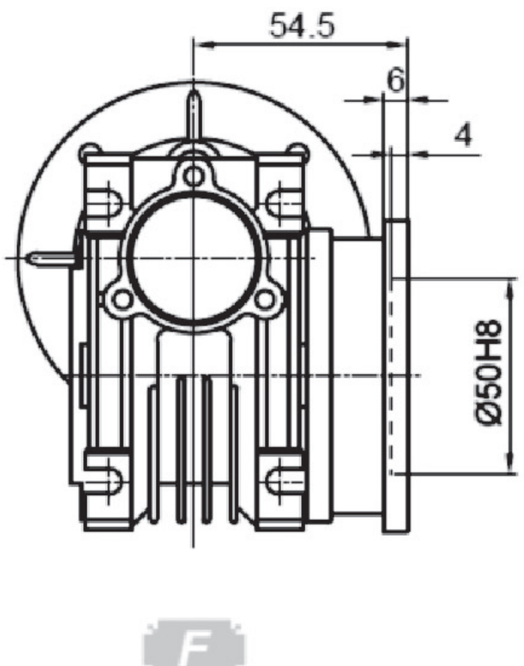










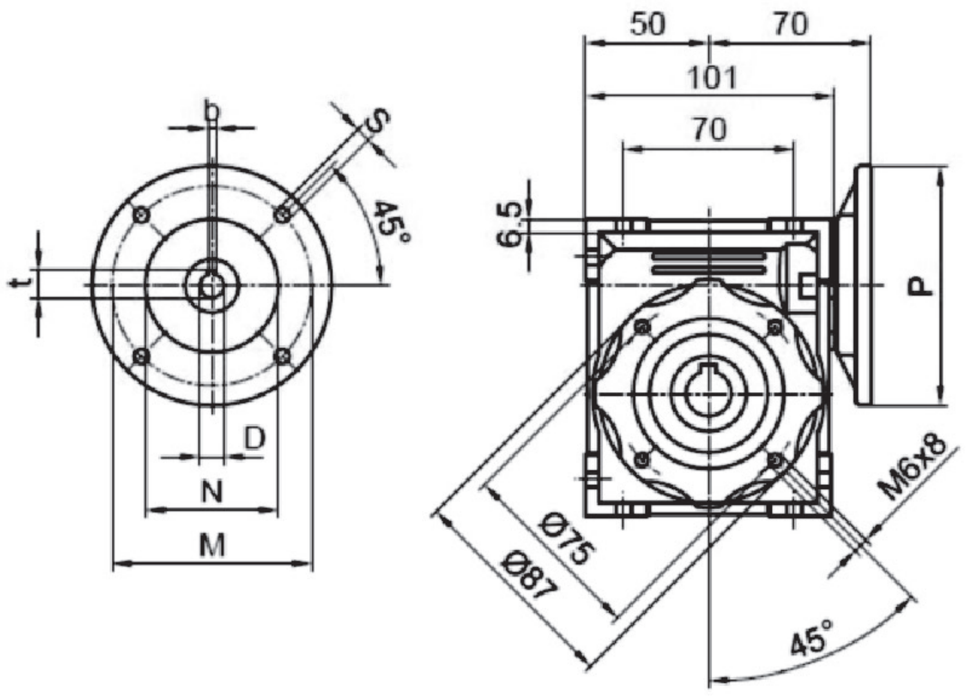


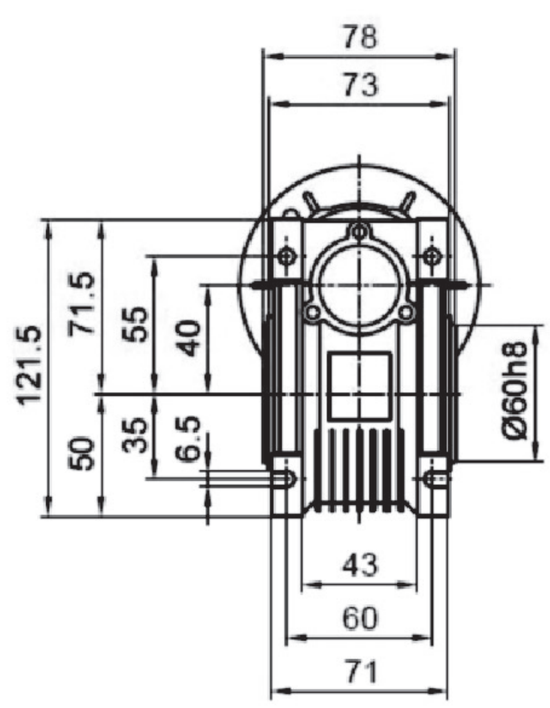
PAM / IEC	D_{E8}	b	t	P	M	N	S
63B5	11	4	12.8	140	115	95	9
63B14	11	4	12.8	90	75	60	5.5
56B5	9	3	10.4	120	100	80	6.5
56B14	9	3	10.4	80	65	50	5.5

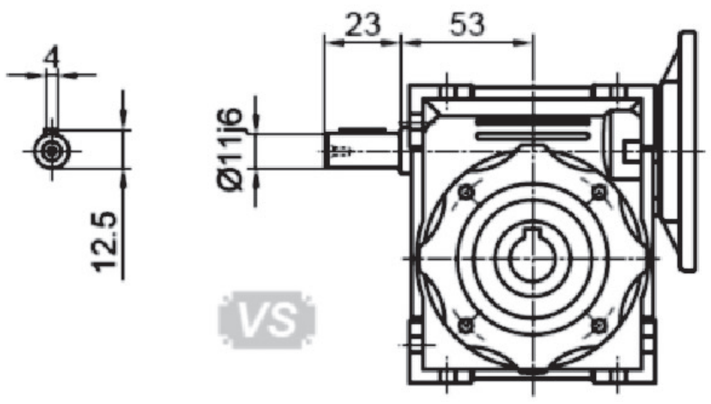
*Weight without motor≈ 1.2kg

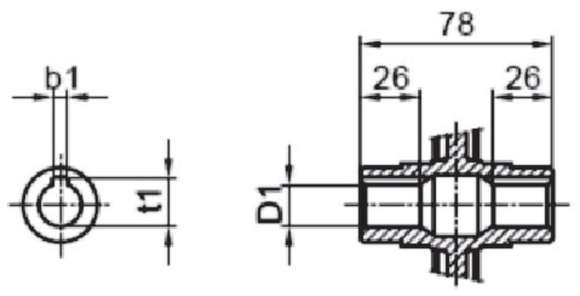
Dimensions

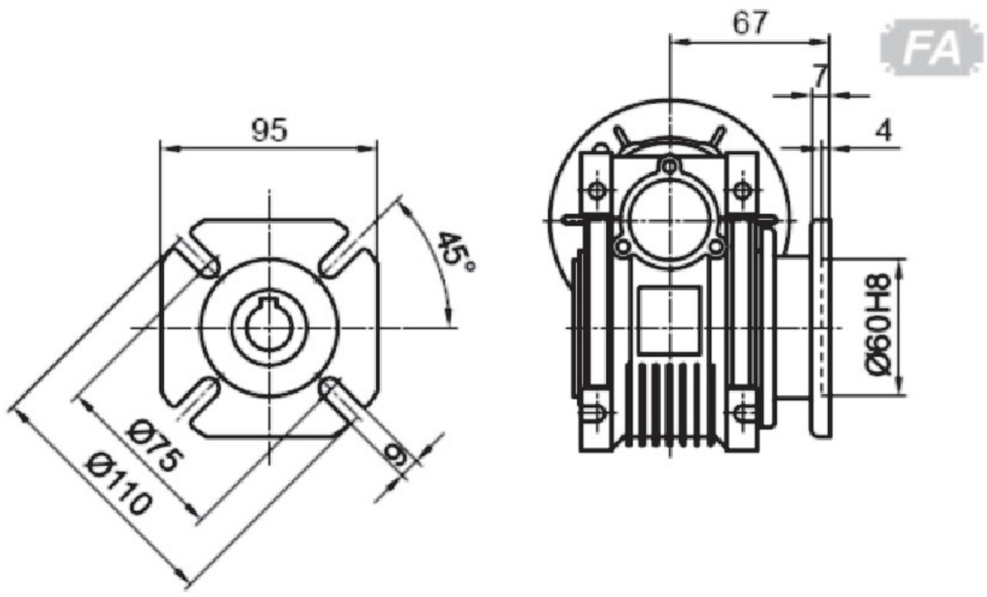
AWG40

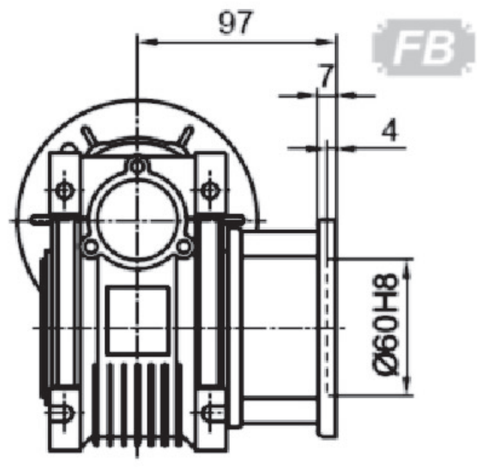


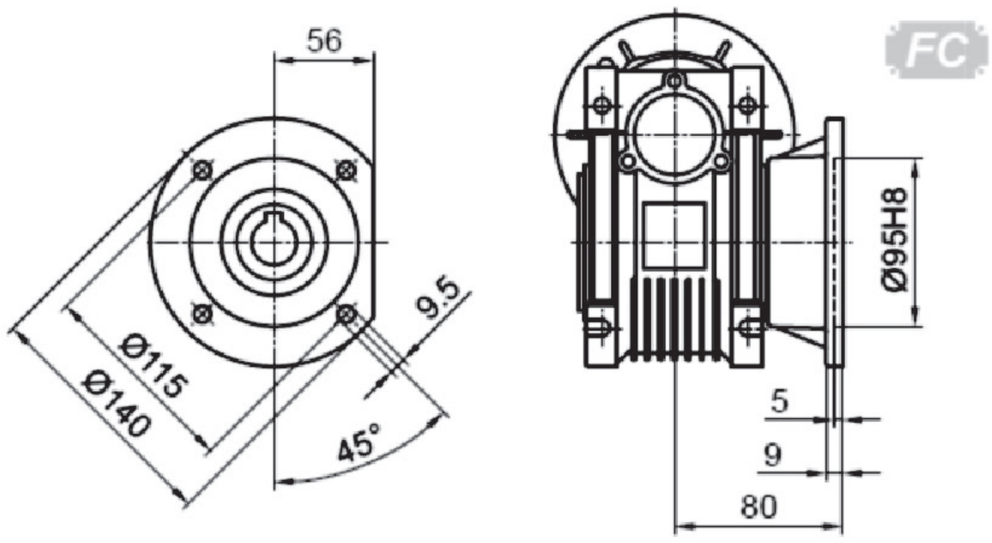


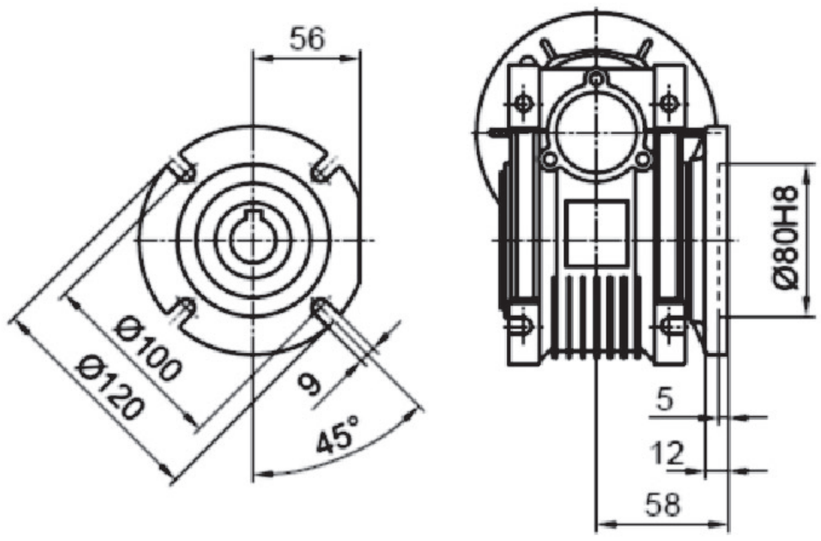












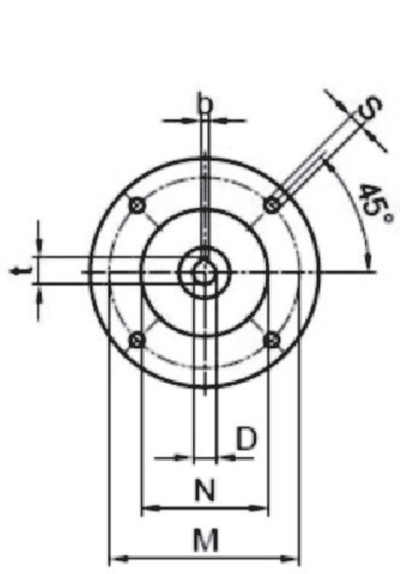
PAM / IEC	D_{E8}	b	t	P	M	N	S
71B5	14	5	16.3	160	130	110	8.5
71B14	14	5	16.3	105	85	70	6.5
63B5	11	4	12.8	140	115	95	9
63B14	11	4	12.8	90	75	60	6
56B5	9	3	10.4	120	100	80	6.5

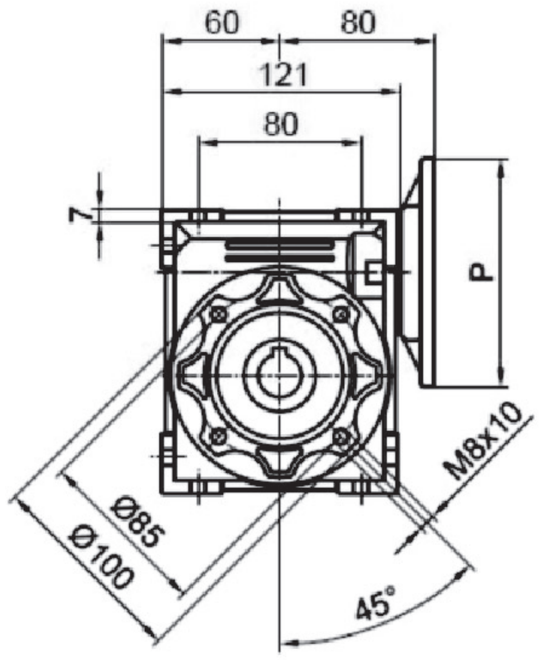
Output	$D1_{H8}$	b1	t1
	18	6	20.8
	(19)	(6)	(21.8)
(..) Only on request			

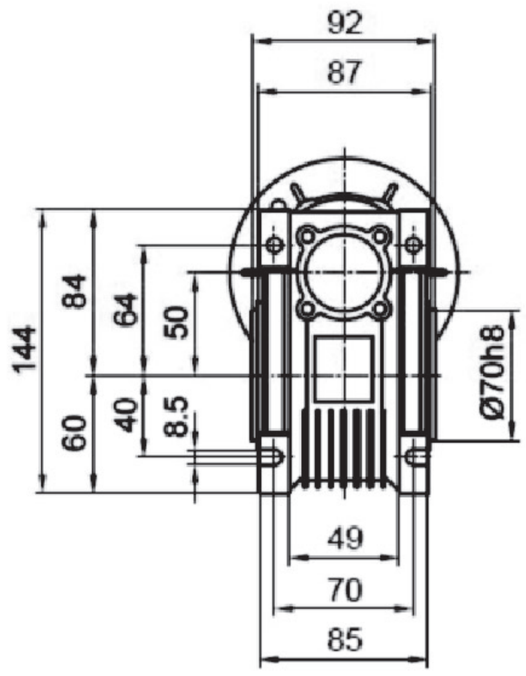
*Weight without motor≈ 2.3kg

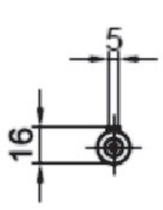
Dimensions

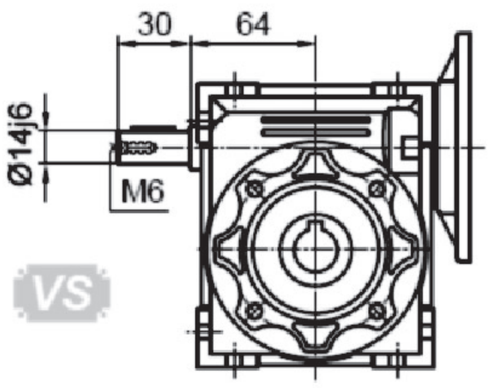
AWG 50

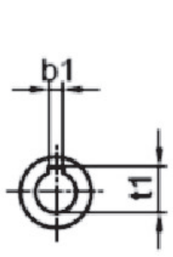


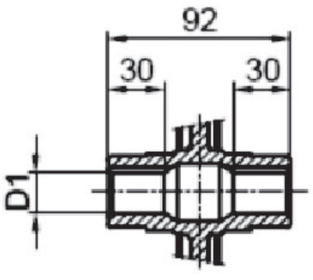


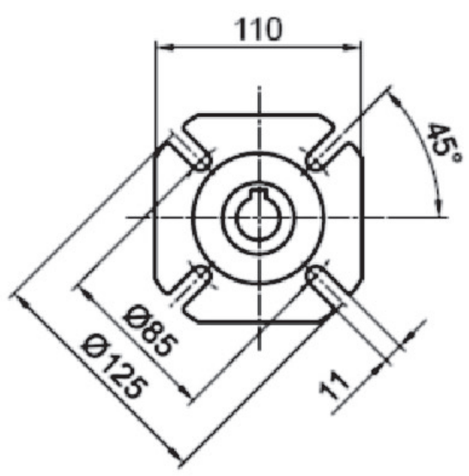


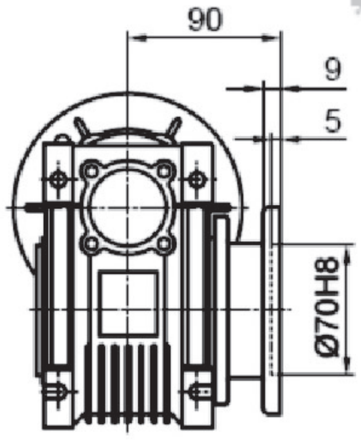


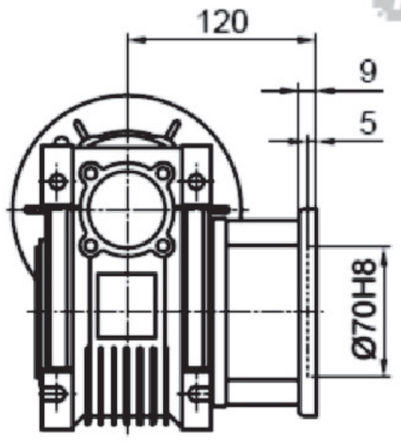


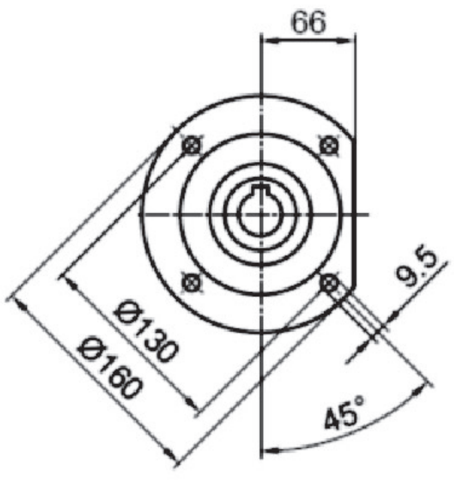


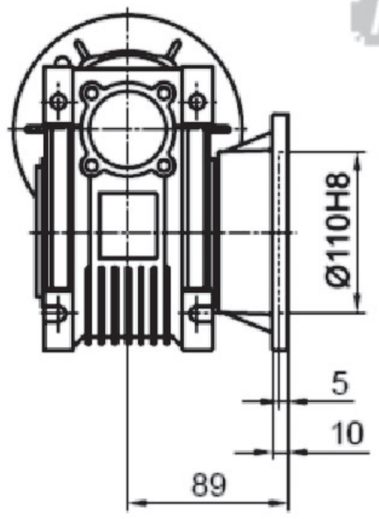


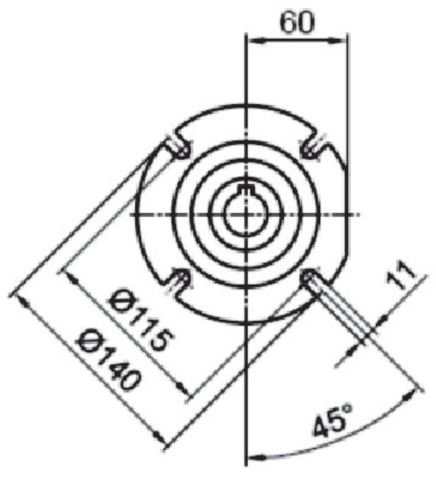


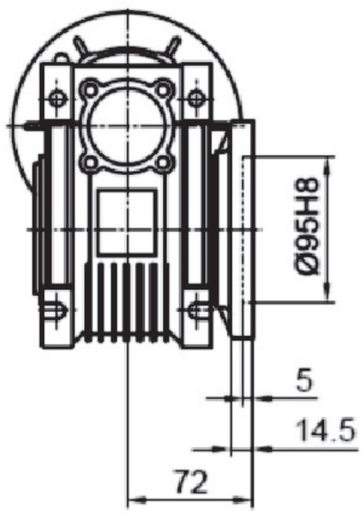










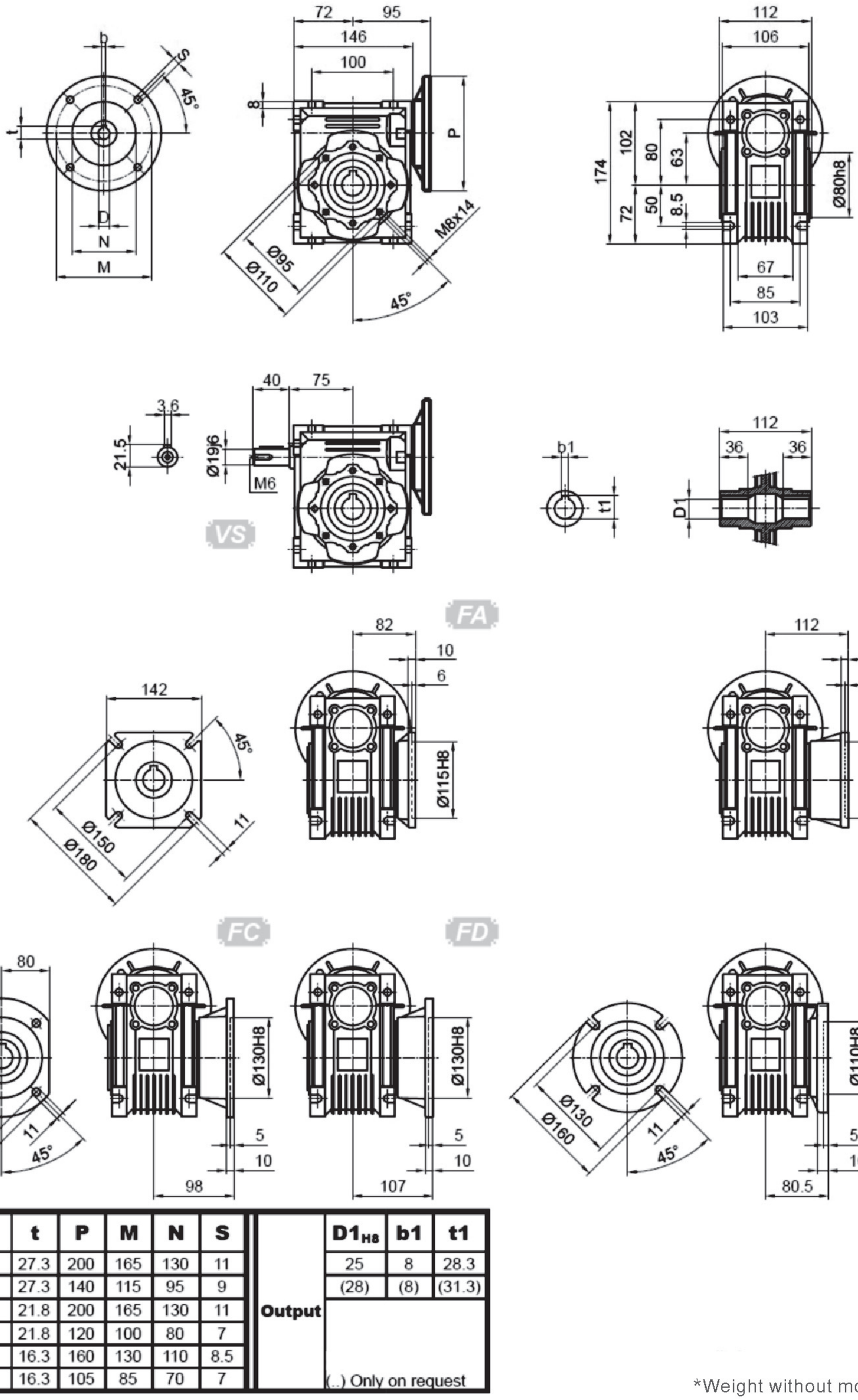


PAM / IEC	D_{E8}	b	t	P	M	N	S	Output	$D1_{H8}$	b1	t1
80B5	19	6	21.8	200	165	130	11		25	8	28.3
80B14	19	6	21.8	120	100	80	6.5		(24)	(8)	(27.3)
71B5	14	5	16.3	160	130	110	8.5				
71B14	14	5	16.3	105	85	70	7				
63B5	11	4	12.8	140	115	95	8.5		(..) Only on request		

*Weight without motor≈3.5kg

Dimensions

AWG 63 >



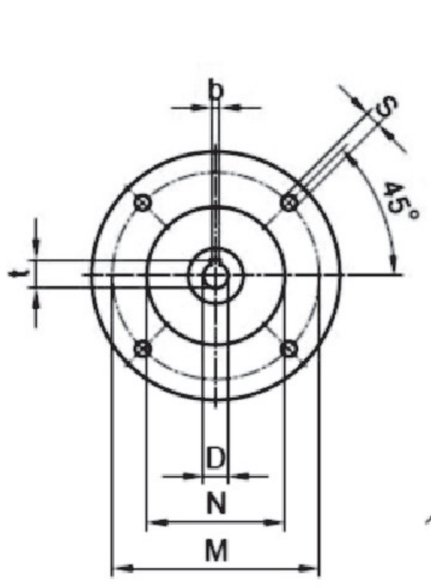
PAM / IEC	D_{E8}	b	t	P	M	N	S
90B5	24	8	27.3	200	165	130	11
90B14	24	8	27.3	140	115	95	9
80B5	19	6	21.8	200	165	130	11
80B14	19	6	21.8	120	100	80	7
71B5	14	5	16.3	160	130	110	8.5
71B14	14	5	16.3	105	85	70	7

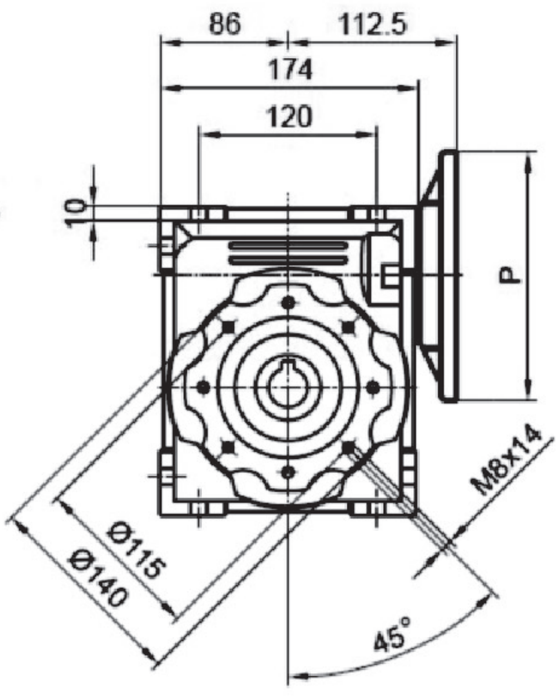
Output	$D1_{H8}$	b1	t1
	25	8	28.3
	(28)	(8)	(31.3)
(..) Only on request			

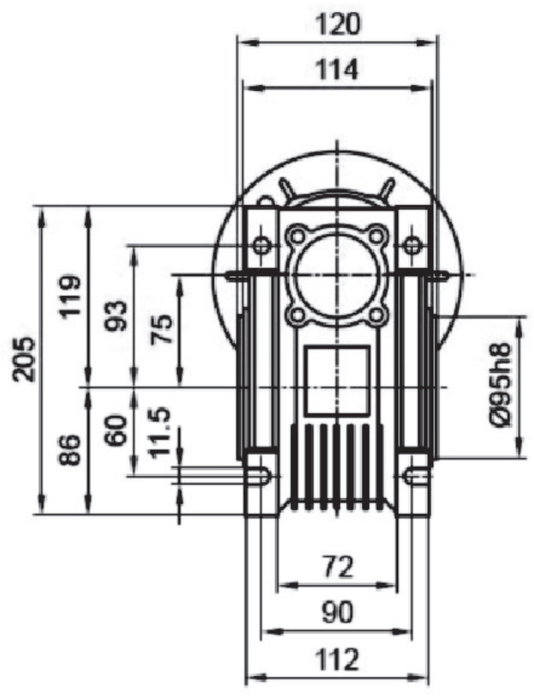
*Weight without motor≈6.2kg

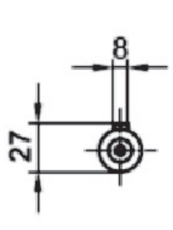
Dimensions

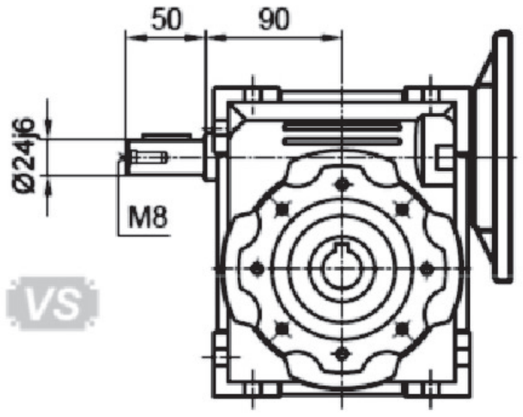
AWG 75

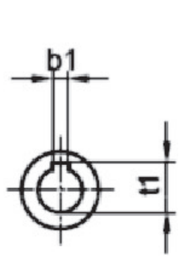


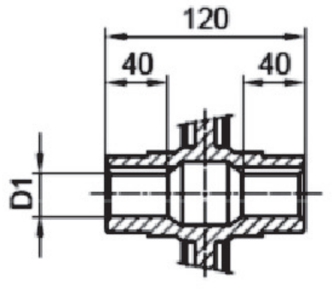


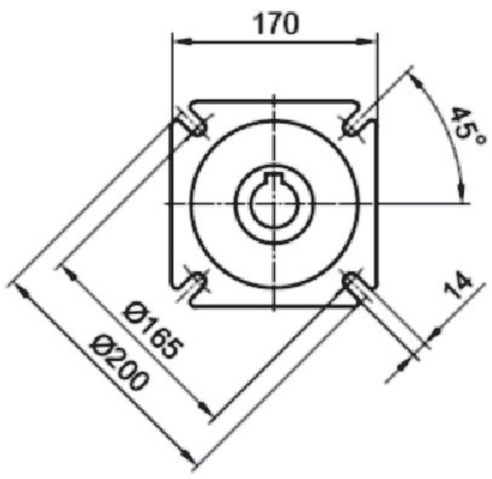




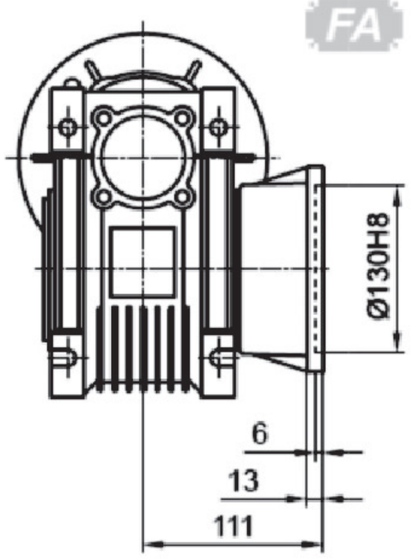




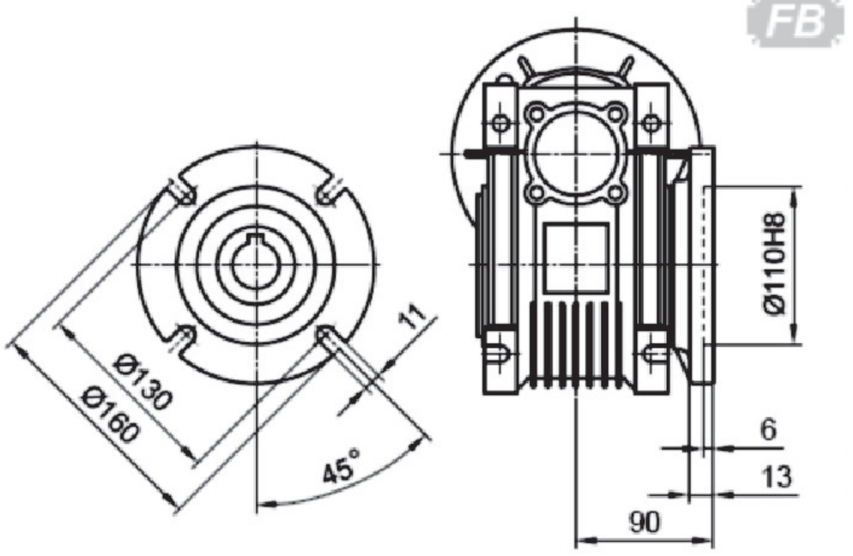




FA



FB



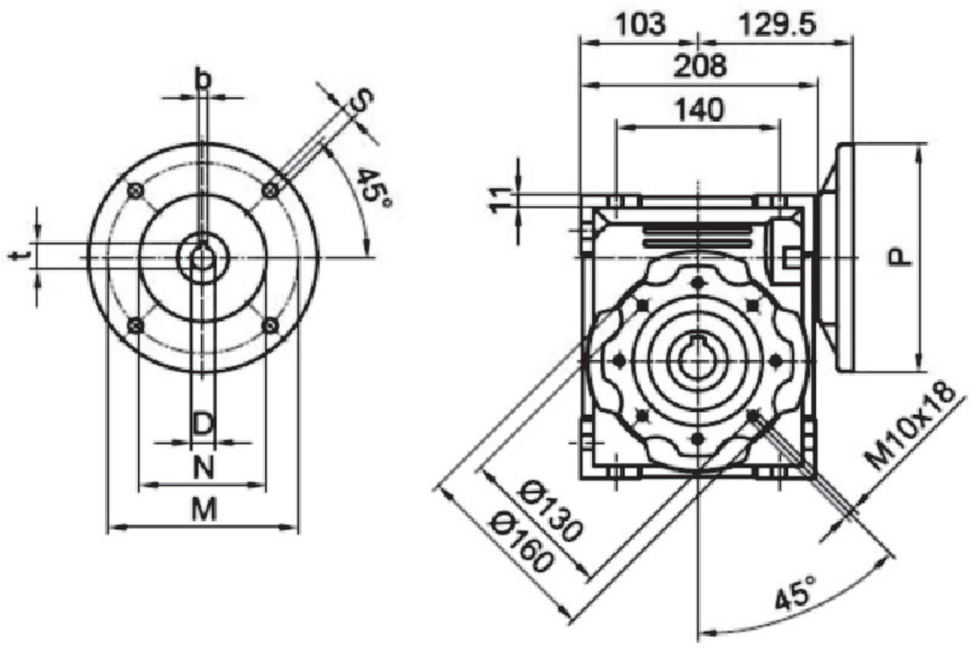
PAM / IEC	D_{E8}	b	t	P	M	N	S	Output	$D1_{H8}$	b1	t1
100/112B5	28	8	31.3	250	215	180	13		28	8	31.3
100/112B14	28	8	31.3	160	130	110	9		(35)	(10)	(38.3)
90B5	24	8	27.3	200	165	130	11				
90B14	24	8	27.3	140	115	95	9				
80B5	19	6	21.8	200	165	130	11				
80B14	19	6	21.8	120	100	80	6.5				
71B5	14	5	16.3	160	130	110	9				

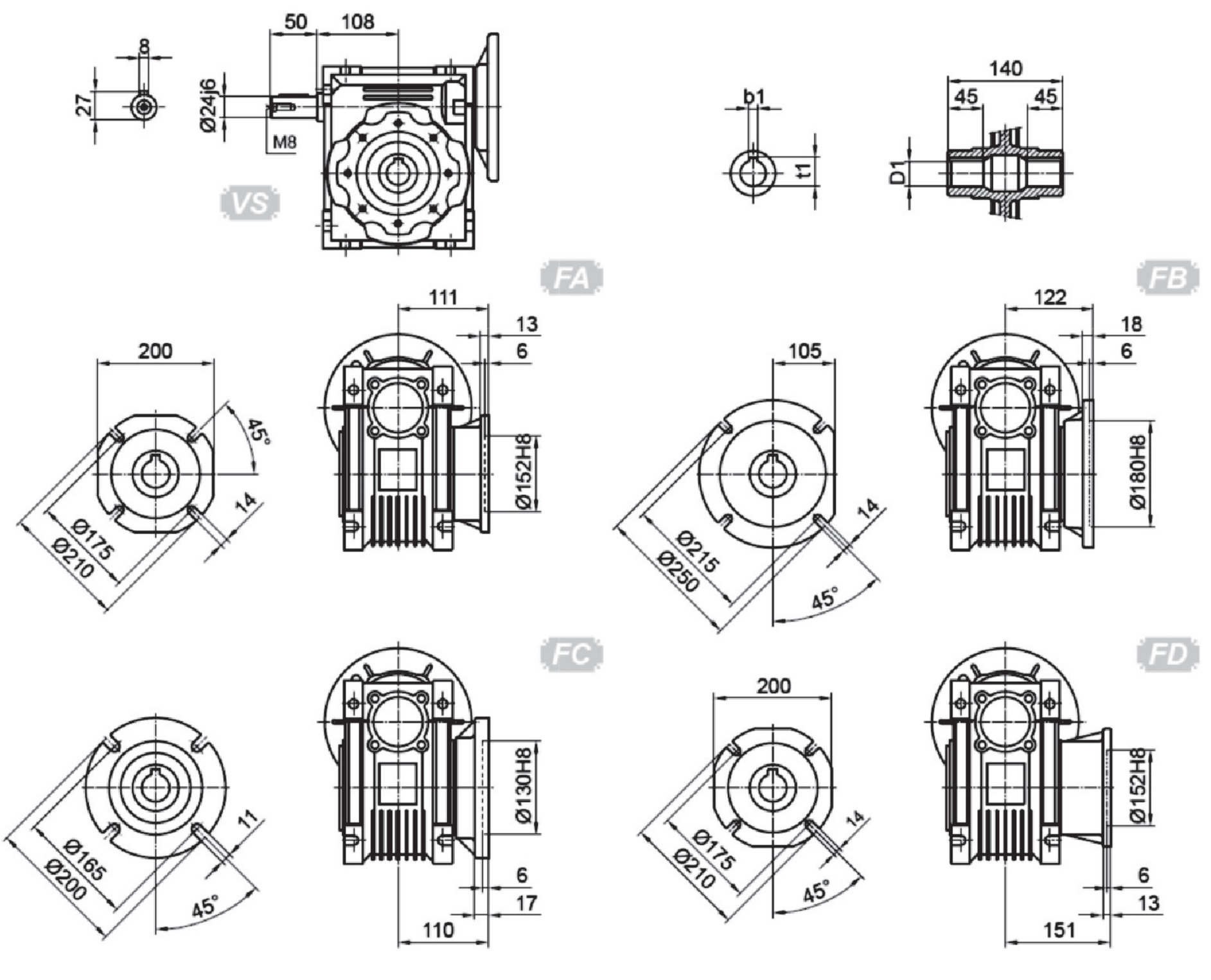
(..) Only on request

*Weight without motor≈9.0kg

Dimensions

AWG 90





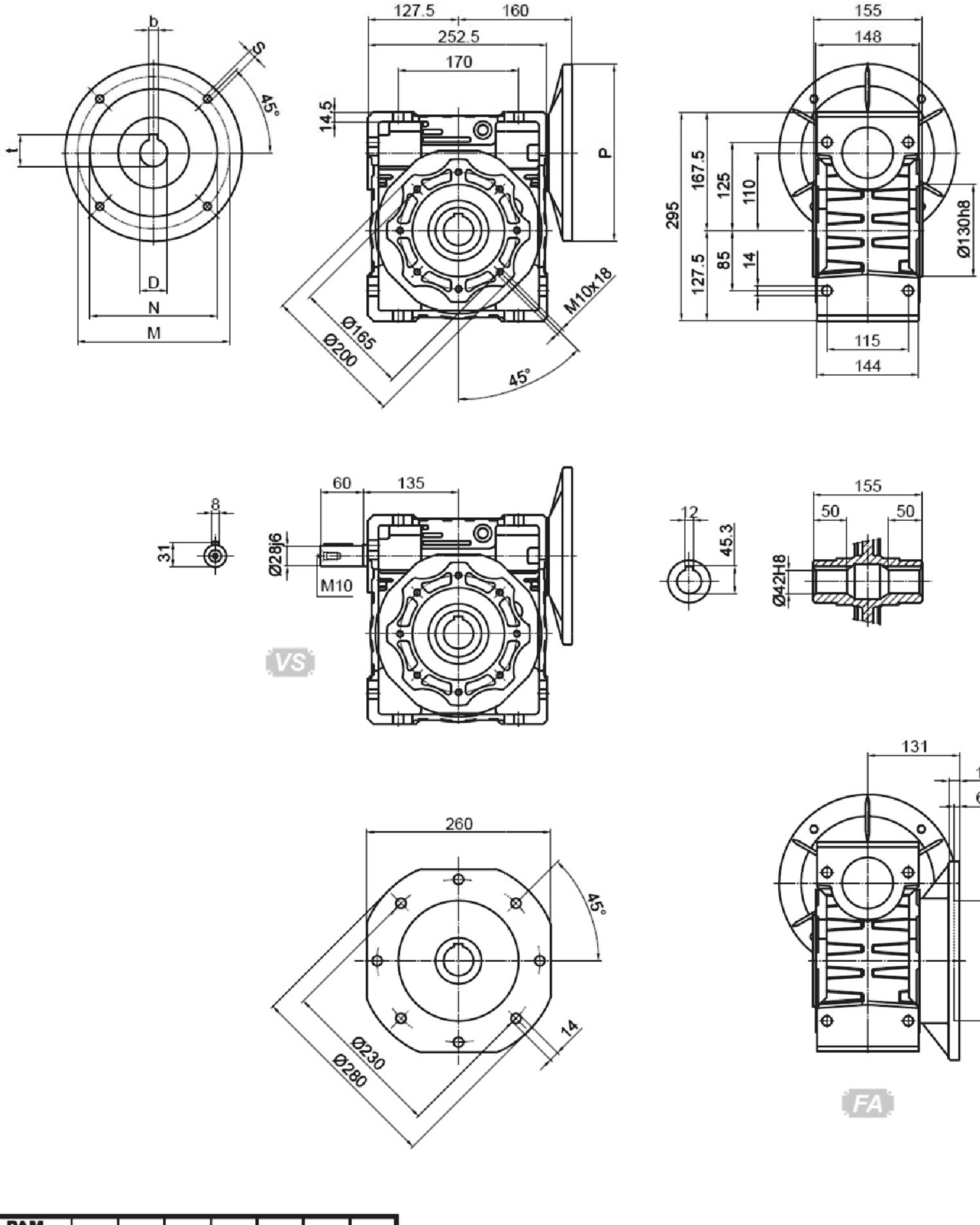
PAM / IEC	D_{E8}	b	t	P	M	N	S
100/112B5	28	8	31.3	250	215	180	13
100/112B14	28	8	31.3	160	130	110	9
90B5	24	8	27.3	200	165	130	11
90B14	24	8	27.3	140	115	95	9
80B5	19	6	21.8	200	165	130	11
80B14	19	6	21.8	120	100	80	6.5

Output	$D1_{H8}$	b1	t1
	35	10	38.3
	(38)	(10)	(41.3)
(..) Only on request			

*Weight without motor≈ 13kg

Dimensions

AWG 110

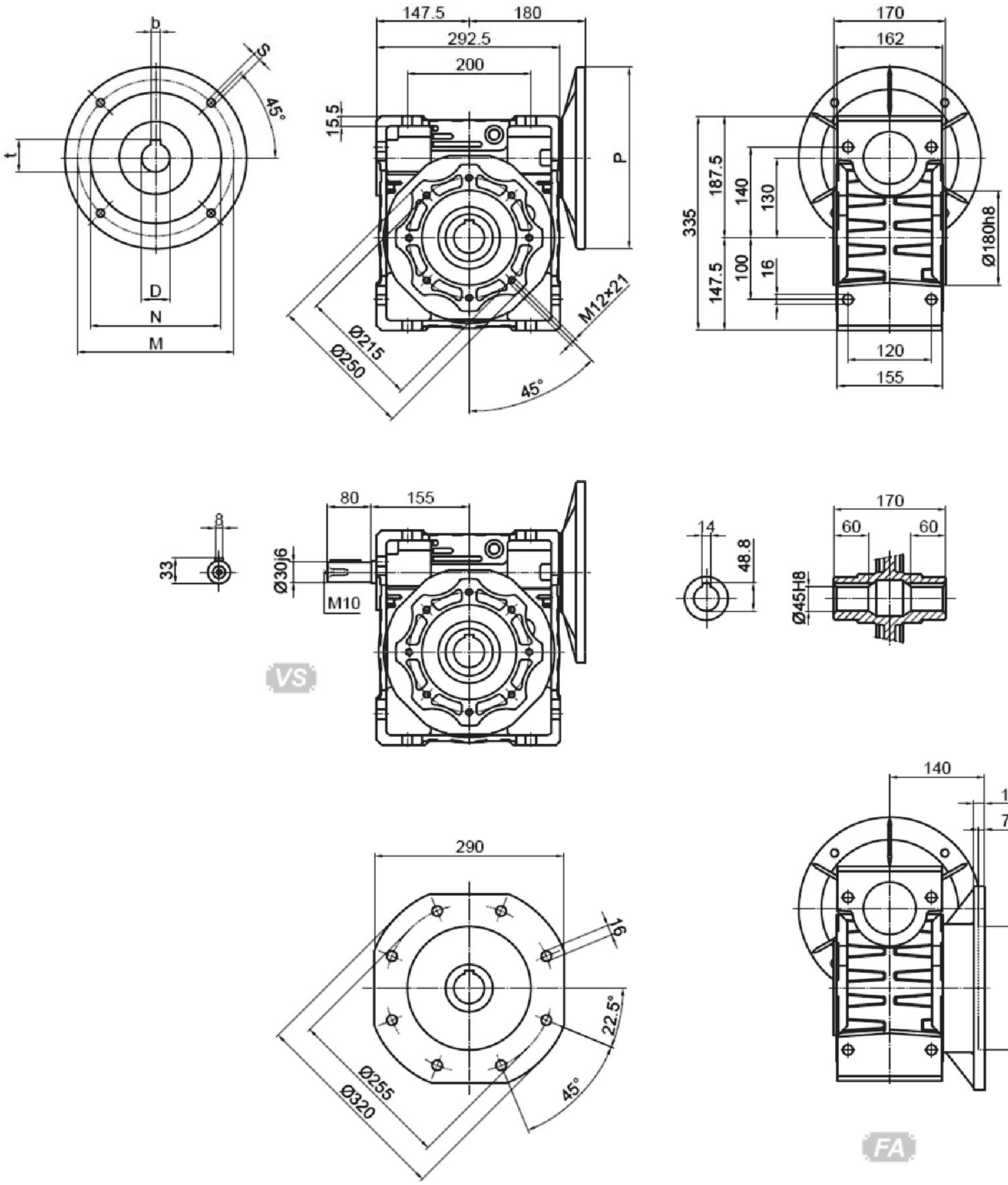


PAM / IEC	D_{E8}	b	t	P	M	N	S
132B5	38	10	41.3	300	265	230	M12
100/112B5	28	8	31.3	250	215	180	13
90B5	24	8	27.3	200	165	130	11
80B5	19	6	21.8	200	165	130	11

*Weight without motor≈40kg

Dimensions

AWG 130

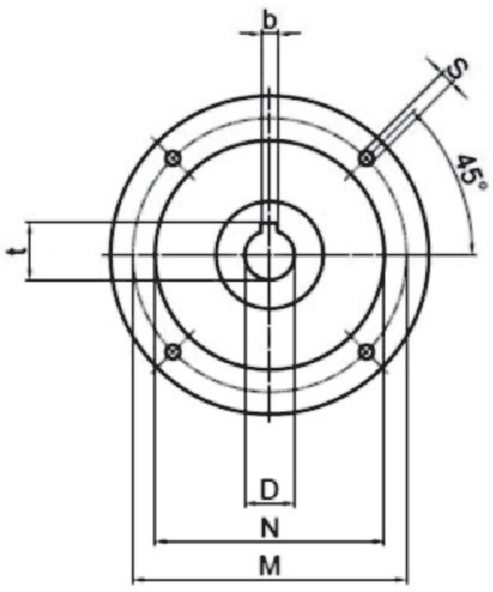


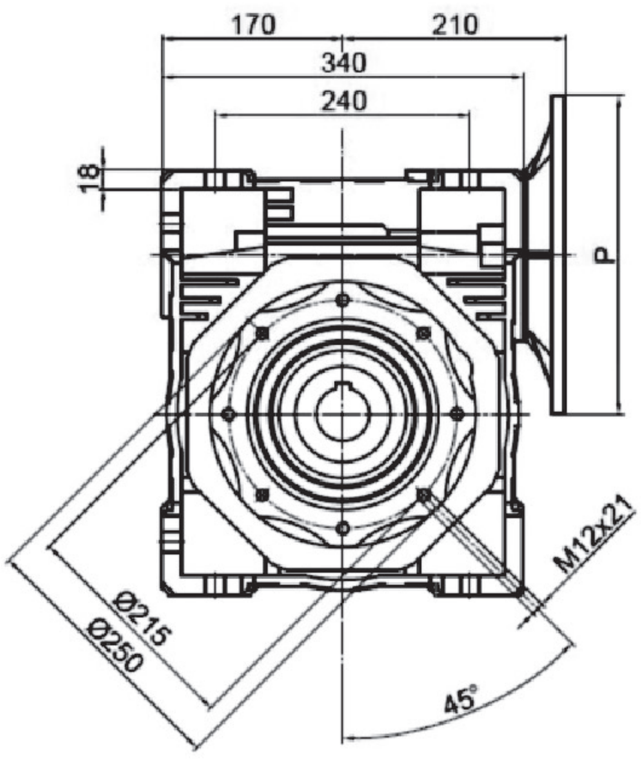
PAM / IEC	D_{E8}	b	t	P	M	N	S
132B5	38	10	41.3	300	265	230	M12
100/112B5	28	8	31.3	250	215	180	13
90B5	24	8	27.3	200	165	130	11

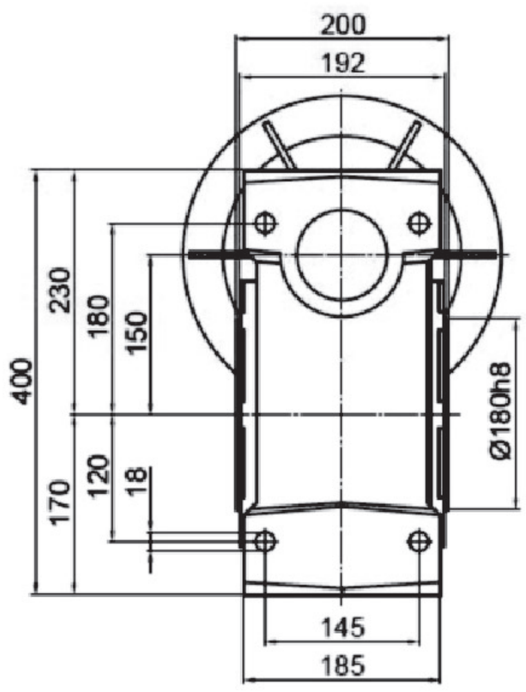
*Weight without motor≈50kg

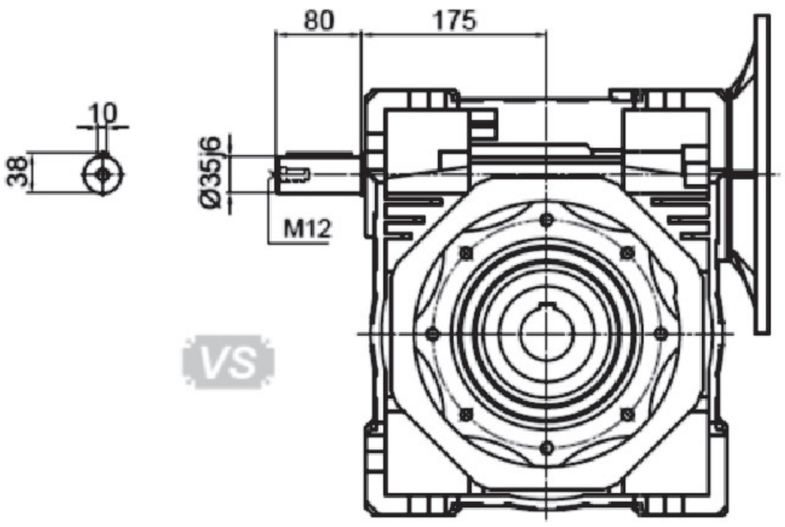
Dimensions

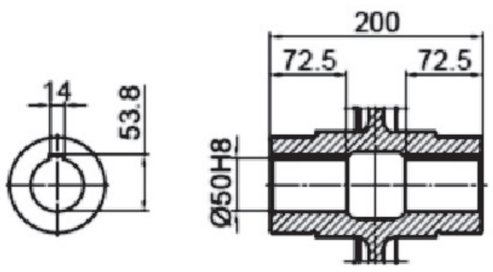
AWG 150

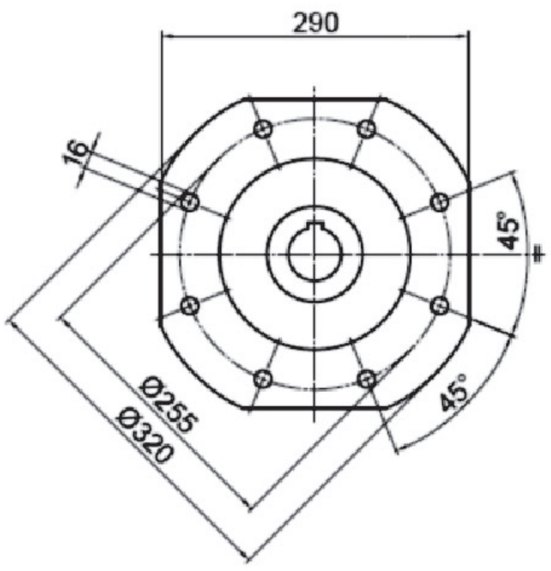


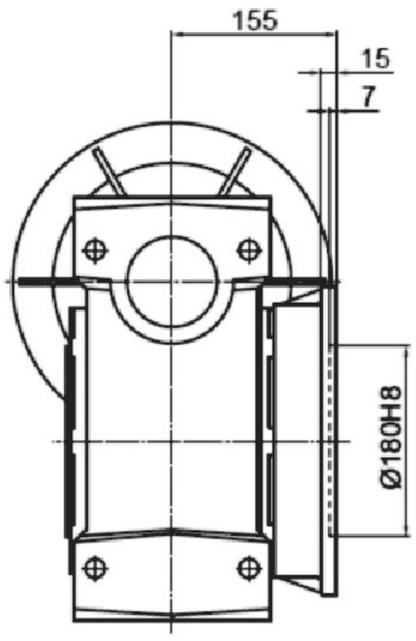








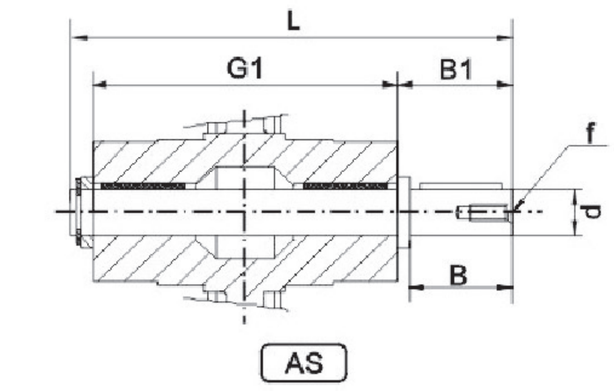


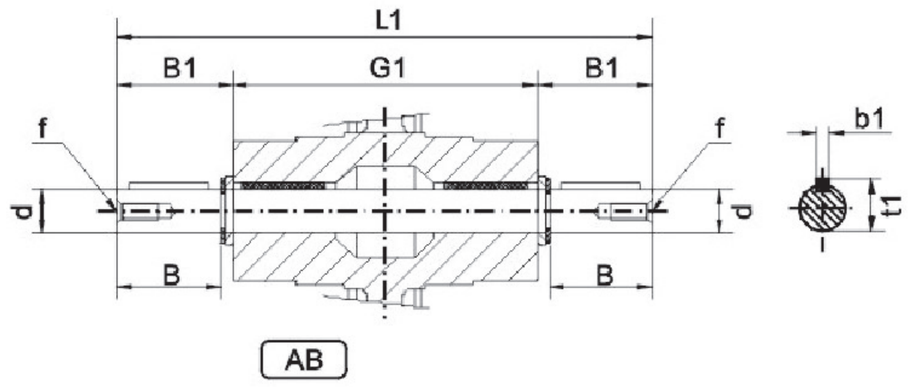


PAM / IEC	D_{E8}	b	t	P	M	N	S
160B5	42	12	45.3	350	300	250	19
132B5	38	10	41.3	300	265	230	M12
100/112B5	28	8	31.3	250	215	180	M12

*Weight without motor≈84kg

Size of extension output shaft

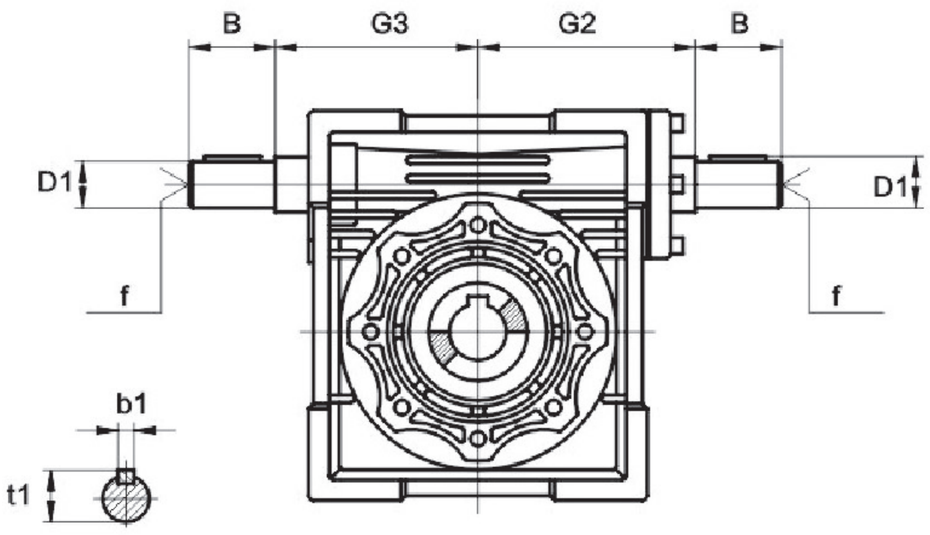




	d	B	B1	G1	L	L1	f	b1	t1
025	11 g6 (9)	23 (25)	25.5 30	50	81 (85.5)	101	-	4 (3)	12.5 (10.2)
030	14 g6	30	32.5	63	102	128	M6	5	16
040	18 h6	40	43	78	128	164	M6	6	20.5
050	25 h6	50	53.5	92	153	199	M10	8	28
063	25 h6	50	53.5	112	173	219	M10	8	28
075	28 h6	60	63.5	120	192	247	M10	8	31
090	35 h6	80	84.5	140	234	309	M12	10	38
110	42 h6	80	84.5	155	249	324	M16	12	45
130	45 h6	80	85	170	265	340	M16	14	48.5
150	50 h6	82	87	200	297	374	M16	14	53.5

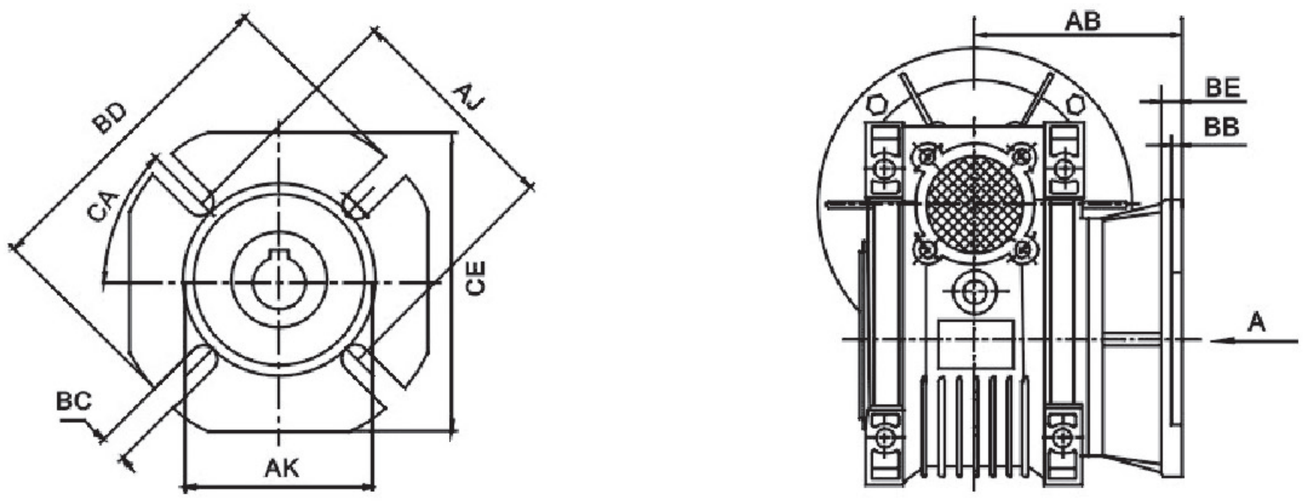
• •Only on request

Size of double extension worm shaft



	G2	G3	D1(j6)	B	f	b1	t1
025	38	37	9	20	-	3	10.2
030	51	45	9	20	-	3	10.2
040	60	53	11	23	-	4	12.5
050	74	64	14	30	M6	5	16
063	90	75	19	40	M6	6	21.5
075	105	90	24	50	M8	8	27
090	125	108	24	50	M8	8	27
110	142	135	28	60	M10	8	31
130	162	155	30	80	M10	8	33
150	195	175	35	80	M12	10	38

Output flange mounting dimensions

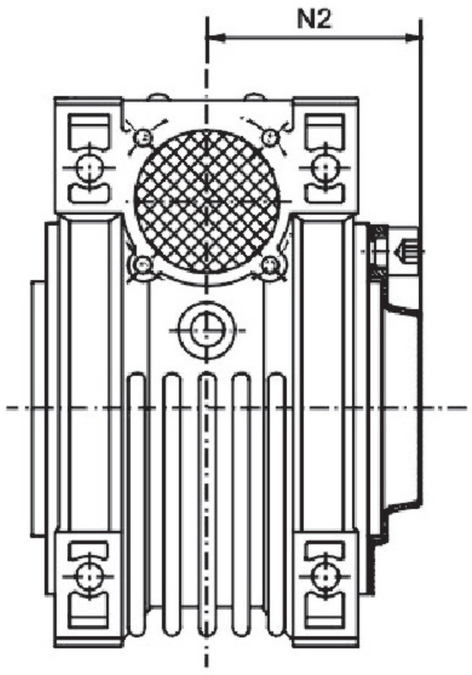


A•to

	025	030	040	050	063	075	090	110	130	150
AB	45	54.5	67	90	82	111	111	131	140	155
AJ	55	68	80	85	150	165	175	230	255	255
AK	40	50	60	70	115	130	152	170	180	180
BB	3	4	4	5	6	6	6	6	6	7
BD	75	80	110	125	180	200	210	280	320	320
BE	6	6	7	9	10	13	13	15	15	15
BC	6.5(n.4)	6.5(n.4)	9(n.4)	11(n.4)	11(n.4)	14(n.4)	14(n.4)	Φ14(n.8)	Φ16(n.8)	Φ16(n.8)
CA	45°	45°	45°	45°	45°	45°	45°	45°	22.5°	22.5°
CE	70	70	95	110	142	170	200	260	290	290

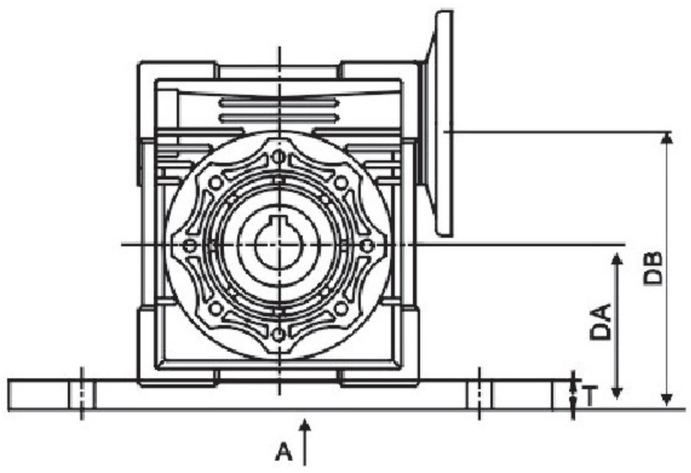
Accessories

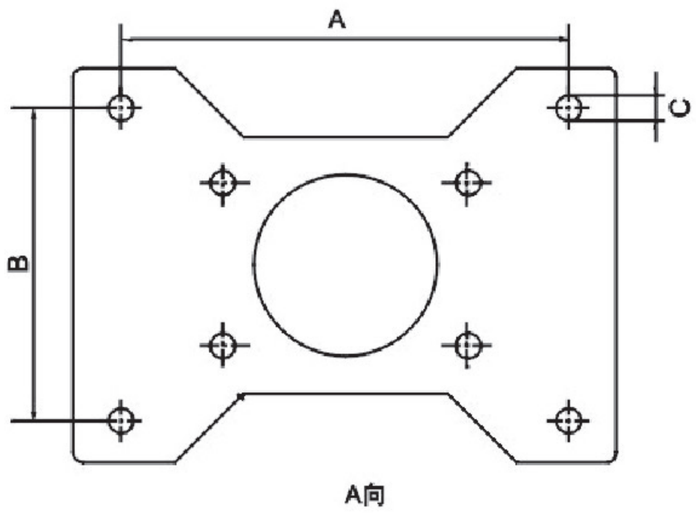
Protective cover



	N2
030	42
040	50
050	58
063	69
075	74
090	86
110	94
130	102
150	117

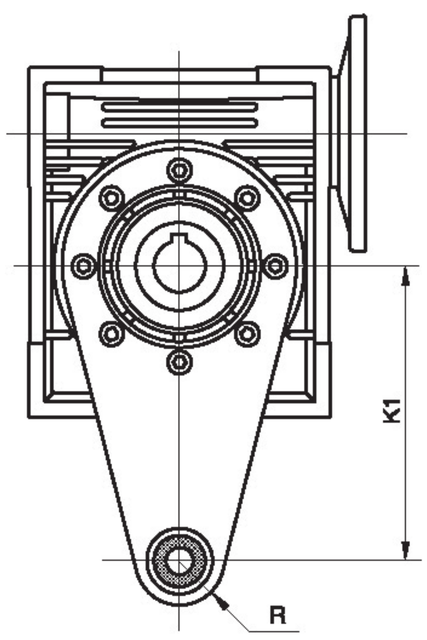
Base plate

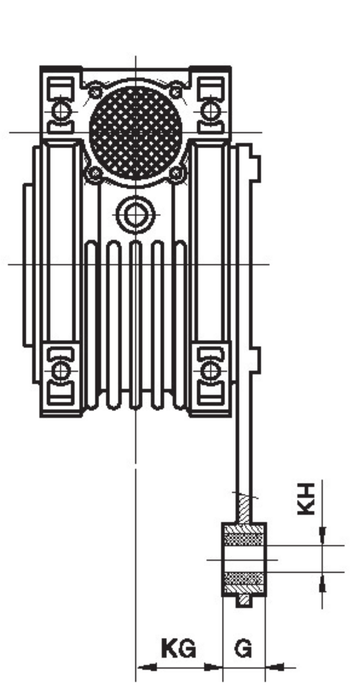




	030	040-A	040-B	050	063-A	063-B	075	090
A	111	111	146	162	179	203	214	214
B	84	84	114	119	124	133	149	156
C	8.5	8.5	10.5	12.5	12.5	12.5	12.5	12.5
DA	57	67	70	76	89	93	101.5	117.5
DB	87	107	110	126	152	156	176.5	207.5
T	17	17	20	16	17	21	15.5	14.5

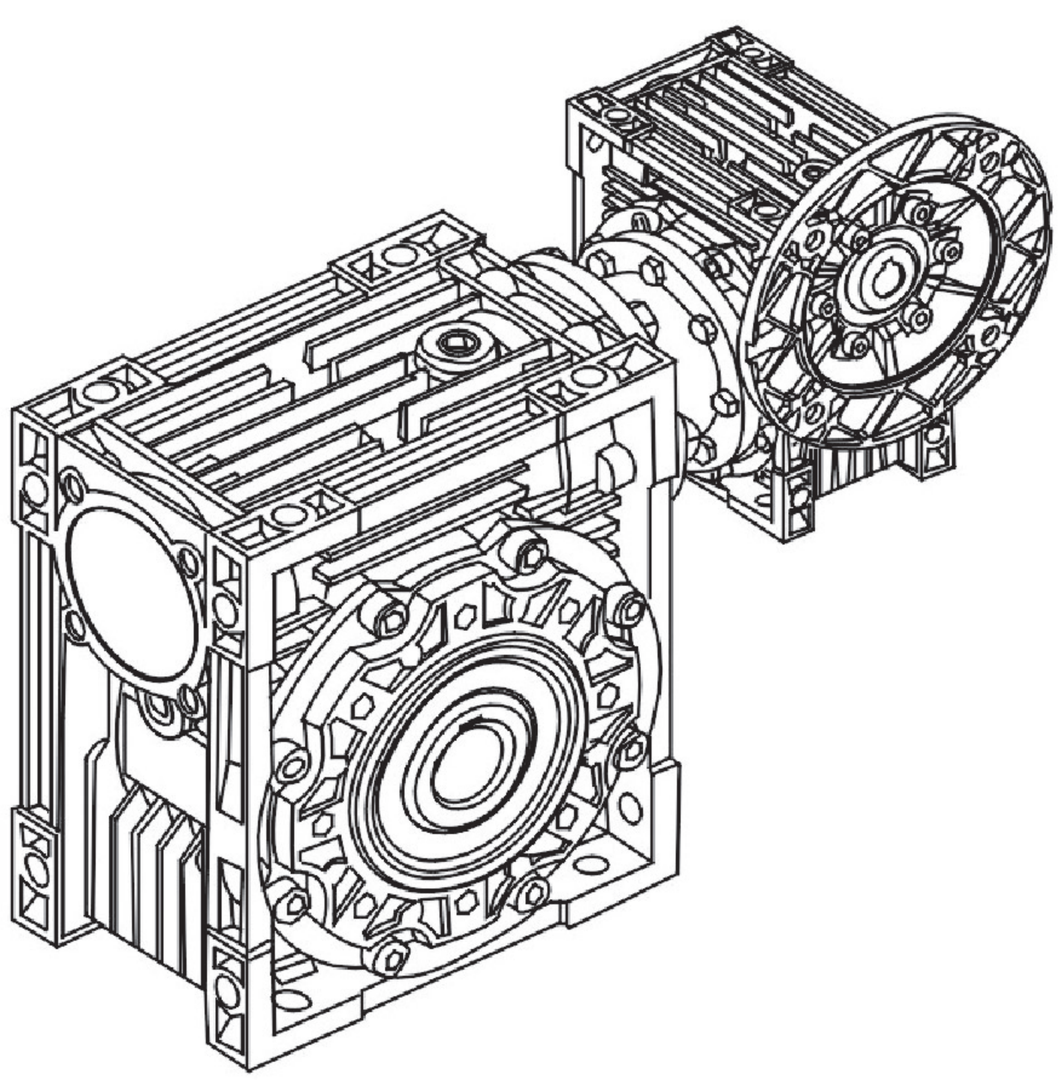
Size of torque arm





	K1	R	KG	G	KH
025	70	15	17.5	14	8
030	85	15	24	14	8
040	100	18	31.5	14	10
050	100	18	38.5	14	10
063	150	18	49	14	10
075	200	30	47.5	25	20
090	200	30	57.5	25	20
110	250	35	62	30	25
130	250	35	69	30	25
150	250	35	84	30	25

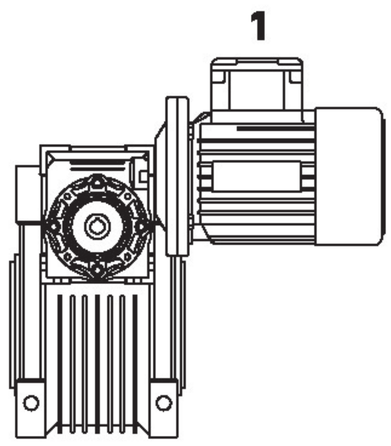
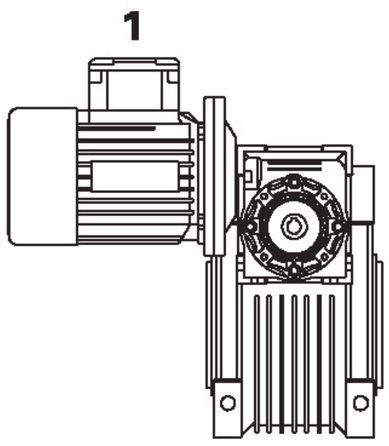
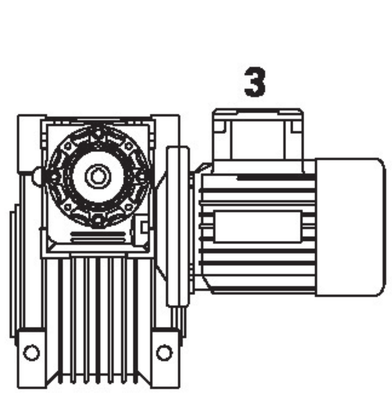
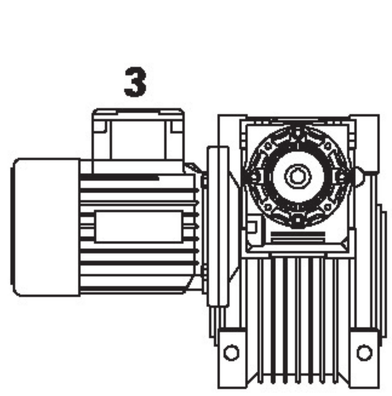
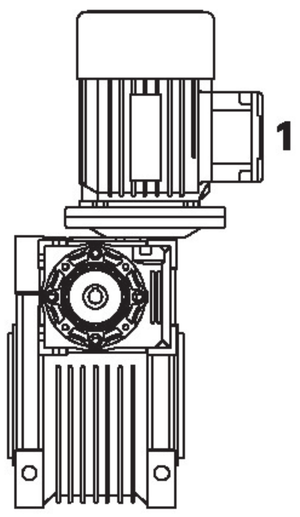
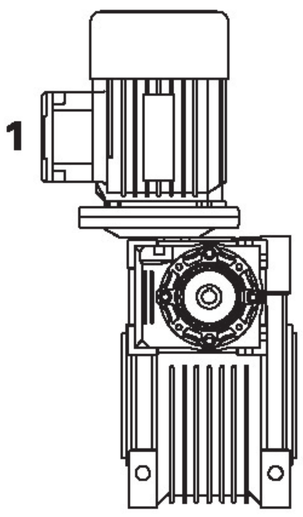
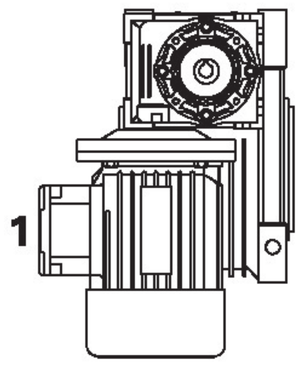
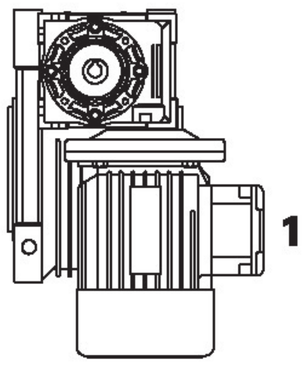
C - AWG Combine Gear Reducer



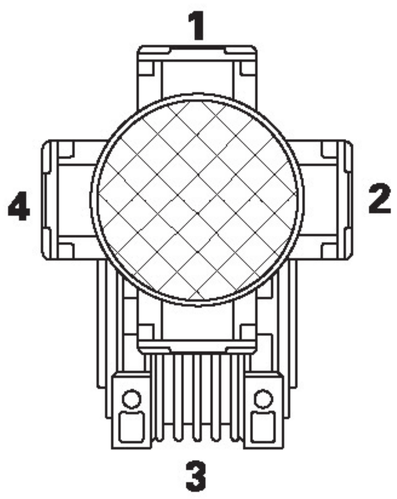
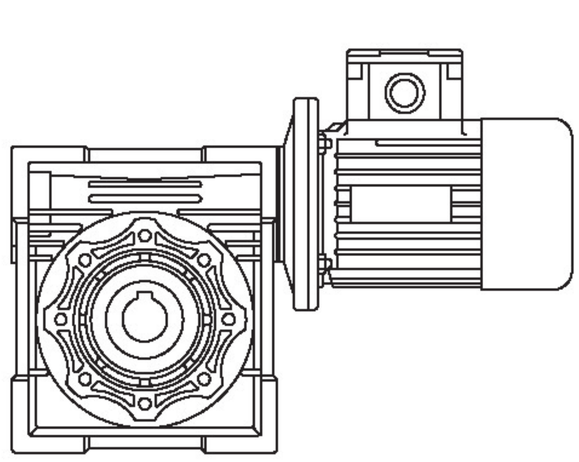
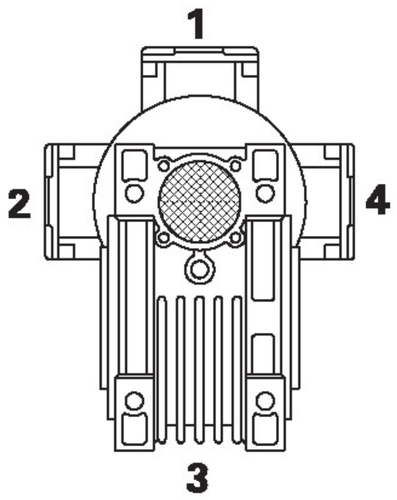
Model notes

C-AWG-063/130-600-VS-F1(FA)-AS-80B5-0.75kW-AS1			
C-AWG	Combined worm geared motor		
063/130	Center distance		
600	Reduction ratio		
VS	Double input shaft	F1(FA)	Output flange
AS	Single output shaft	AB	Double output shaft
PAM	Fitted for motor coupling	80B5	Motor mounting facility
0.75kW	Electric motor power	As1	Mounting position

C - AWG Mounting positions

AS1 	**AS2** 	**BS1** 	**BS2** 
VS1 	**VS2** 	**PS1** 	**PS2** 

Position of terminal box

Parameter selections

C - AWG Combine Worm Gear Reducer - 1400RPM

N_2-output speed, M_2-output torque, i-total ratio, i1- high speed ratio, i2-low speed ratio, kN- output radial force, f.s.-factor of safety

Model	N_2 (r/min)	M_2 (N.m)	i	i1	i2	kN	f.s.
0.06kw							
25/30	14	25	100	10	10	1.62	1.3
	9.3	32	150	10	15	1.83	0.9
	7.0	41	200	10	20	1.83	0.7
	5.6	44	250	10	25	1.83	0.8
25/40	4.7	59	300	10	30	3.49	1.2
	3.5	71	400	10	40	3.49	0.9
	2.8	82	500	20	25	3.49	0.7
	2.3	101	600	20	30	3.49	0.6
	1.9	116	750	25	30	3.49	0.5
	1.6	143	900	30	30	3.49	0.5
	1.2	171	1200	30	40	3.49	0.4
	0.9	197	1500	50	30	3.49	0.3
	0.8	217	1800	60	30	3.49	0.3
	0.6	268	2400	60	40	3.49	0.2
	0.5	324	3000	60	50	3.49	0.2
	0.4	294	4000	50	80	3.49	0.1
	0.3	356	5000	50	100	3.49	0.1
30/40	4.7	57	300	10	30	3.49	1.3
	3.5	70	400	10	40	3.49	0.9
	2.8	96	500	20	25	3.49	0.6
	2.3	104	600	20	30	3.49	0.7
	1.9	121	750	25	30	3.49	0.6
	1.6	139	900	30	30	3.49	0.5
	1.2	166	1200	30	40	3.49	0.4
	0.9	196	1500	50	30	3.49	0.4
	0.8	218	1800	60	30	3.49	0.3
	0.58	261	2400	60	40	3.49	0.2
	0.4	300	3200	80	40	3.49	0.2
	0.4	279	4000	50	80	3.49	0.1
	0.28	338	5000	50	100	3.49	0.1
30/50	1.6	141	900	30	30	4.84	1.0
	1.2	169	1200	30	40	4.84	0.7
	0.93	199	1500	50	30	4.84	0.7
	0.78	222	1800	60	30	4.84	0.7
	0.6	266	2400	60	40	4.84	0.5
	0.5	307	3000	60	50	4.84	0.4
	0.35	288	4000	50	80	4.84	0.3
	0.29	311	4800	60	80	4.84	0.3
30/63	0.9	203	1500	30	50	6.27	1.1
	0.78	225	1800	30	60	6.27	0.9
	0.58	276	2400	60	40	6.27	0.8
	0.47	319	3000	60	50	6.27	0.7
	0.35	306	4000	50	80	6.27	0.6
	0.28	360	5000	50	100	6.27	0.4

Model	N_2 (r/min)	M_2 (N.m)	i	i1	i2	kN	f.s.
0.06kw							
40/75	0.6	330	2400	60	40	7.38	1.1
	0.47	377	3000	60	50	7.38	0.8
	0.35	355	4000	50	80	7.38	0.7
	0.28	419	5000	50	100	7.38	0.5
40/90	0.5	405	3000	60	50	8.18	1.4
	0.35	365	4000	50	80	8.18	1.3
	0.28	431	5000	50	100	8.18	1.0
0.09kw							
25/30	14	37	100	10	10	1.62	0.8
	9.3	49	150	10	15	1.83	0.6
	7.0	62	200	10	20	1.83	0.5
	5.6	66	250	10	25	1.83	0.5
	4.7	75	300	10	30	1.83	0.4
	3.5	107	400	10	40	1.83	0.3
	2.8	115	500	20	25	1.83	0.2
	2.3	135	600	20	30	1.83	0.2
	1.9	151	750	25	30	1.83	0.2
	1.6	178	900	30	30	1.83	0.2
	1.2	212	1200	30	40	1.83	0.1
	0.9	247	1500	50	30	1.83	0.1
	0.78	304	1800	60	30	1.83	0.1
	0.58	340	2400	60	40	1.83	0.1
	0.47	405	3000	60	50	1.83	0.1
30/40	4.7	88	300	10	30	3.49	0.8
30/50	3.5	107	400	10	40	4.84	1.2
	2.8	123	500	10	50	4.84	1.0
	2.3	159	600	20	30	4.84	0.9
	1.9	185	750	25	30	4.84	0.8
	1.6	212	900	30	30	4.84	0.7
30/63	1.6	200	900	15	60	6.27	1.0
	1.2	263	1200	30	40	6.27	0.9
	0.93	305	1500	30	50	6.27	0.7
40/75	0.9	359	1500	50	30	7.38	1.1
	0.78	404	1800	60	30	7.38	1.0
	0.58	496	2400	60	40	7.38	0.7
40/90	0.5	608	3000	60	50	8.18	0.9
	0.35	548	4000	50	80	8.18	0.8
0.12kw							
30/50	4.7	118	300	10	30	4.84	1.2
	3.5	142	400	10	40	4.84	0.9
	2.8	164	500	10	50	4.84	0.7
30/63	2.8	171	500	10	50	6.27	1.3
	2.3	208	600	15	40	6.27	1.1
	1.9	241	750	15	50	6.27	0.9

Model	N_2 (r/min)	M_2 (N.m)	i	i1	i2	kN	f.s.
0.12kw							
40/75	1.6	324	900	30	30	7.38	1.2
	1.2	399	1200	30	40	7.38	0.9
40/90	0.78	546	1800	30	60	8.18	0.9
	0.58	695	2400	60	40	8.18	0.9
50/110	0.5	883	3000	60	50	10.32	1.2
	0.35	784	4000	50	80	10.32	1.0
	0.28	928	5000	50	100	10.32	0.8
0.18kw							
30/63	3.5	221	400	10	40	6.27	1.0
	2.8	257	500	10	50	6.27	0.8
40/75	2.3	362	600	20	30	7.38	1.1
	1.9	435	750	25	30	7.38	0.9
	1.6	487	900	30	30	7.38	0.8
40/90	1.2	629	1200	30	40	8.18	1.0
	0.93	735	1500	30	50	8.18	0.8
50/110	0.8	860	1800	60	30	10.32	1.5
	0.58	1113	2400	60	40	10.32	1.1
0.25kw							
30/63	3.5	159	400	10	40	6.27	1.4
	2.8	185	500	10	50	6.27	1.2
40/75	3.5	336	400	10	40	7.38	1.1
	2.8	384	500	10	50	7.38	0.8
40/90	2.3	511	600	15	40	8.18	1.2
	1.9	598	750	15	50	8.18	0.9
	1.6	667	900	15	60	8.18	0.8
50/110	1.2	943	1200	30	40	10.32	1.3
	0.93	1064	1500	50	30	10.32	1.2
	0.78	1195	1800	60	30	10.32	1.1
63/130	0.6	1624	2400	60	40	13.5	1.0
	0.47	1935	3000	60	50	13.5	0.8
	0.35	2046	4000	50	80	13.5	0.6
	0.28	2430	5000	50	100	13.5	0.5
63/150	0.8	1199	1800	60	30	18	1.8
	0.8	1199	1800	60	30	18	1.8
	0.6	1446	2400	60	40	18	1.8
	0.5	1713	3000	60	50	18	1.4
	0.4	2026	4000	50	80	18	0.9
	0.3	2251	5000	50	100	18	0.7
0.37kw							
40/75	4.7	405	300	10	30	7.38	1.0
	3.5	498	400	10	40	7.38	0.7
40/90	4.7	401	300	7.5	40	8.18	1.5
	3.5	523	400	10	40	8.18	1.2
	2.8	611	500	10	50	8.18	0.9
	2.3	757	600	15	40	8.18	0.8
50/110	1.9	949	750	25	30	10.32	1.3
	1.6	1079	900	30	30	10.32	1.2
	1.2	1396	1200	30	40	10.32	0.8
63/130	0.9	1674	1500	50	30	13.5	1.1

Model	N_2 (r/min)	M_2 (N.m)	i	i1	i2	kN	f.s.
0.37kw							
63/130	0.78	1887	1800	60	30	13.5	0.9
63/150	0.78	1774	1800	60	30	18	1.2
	0.6	2141	2400	60	40	18	1.2
	0.5	2535	3000	60	50	18	0.9
0.55kw							
50/110	4.7	638	300	10	30	10.32	2.0
	3.5	826	400	10	40	10.32	1.4
	2.8	984	500	10	50	10.32	1.1
	2.3	1181	600	15	40	10.32	1.0
	1.9	1411	750	25	30	10.32	0.9
63/130	2.8	995	500	10	50	13.5	1.6
	1.9	1471	750	25	30	13.5	1.2
	1.2	2132	1200	30	40	13.5	0.8
63/150	0.78	2637	1800	60	30	18	0.8
	0.6	3182	2400	60	40	18	0.8
0.75kw							
50/110	4.7	871	300	10	30	10.32	1.5
	3.5	1126	400	10	40	10.32	1.1
63/130	2.8	1357	500	10	50	13.5	1.1
	2.3	1631	600	15	40	13.5	1.0
	1.9	2005	750	25	30	13.5	0.9
	1.6	2283	900	30	30	13.5	0.8
63/150	2.8	1290	500	10	50	18	1.8
	2.3	1529	600	15	40	18	1.7
	1.9	1783	750	25	30	18	1.3
	1.6	2215	900	30	30	18	0.9
	1.2	2680	1200	30	40	18	1.0
1.1kw							
63/130	4.7	1312	300	10	30	13.5	1.3
	3.5	1671	400	10	40	13.5	1.0
	2.8	1991	150	10	50	13.5	0.8
63/150	9.3	752	150	10	15	18	3.1
	7.0	966	200	10	20	18	2.4
	5.6	1175	250	10	25	18	1.7
	4.7	1364	300	10	30	18	1.7
	3.5	1619	400	10	40	18	1.6
	2.8	1893	500	10	50	18	1.2
	2.3	2242	600	15	40	18	1.2
	1.9	2616	750	25	30	18	0.9
1.5kw							
63/130	4.7	1789	300	10	30	13.5	1.0
	3.5	2279	400	10	40	13.5	0.7
63/150	9.3	1026	150	10	15	18	2.3
	7	1317	200	10	20	18	1.8
	5.6	1602	250	10	25	18	1.3
	4.7	1860	300	10	30	18	1.3
	3.5	2208	400	10	40	18	1.2
	2.8	2582	500	10	50	18	0.9
	2.3	3057	600	15	40	18	0.9

Double step reducer(shaft extend input, input speed is 1400r/min)

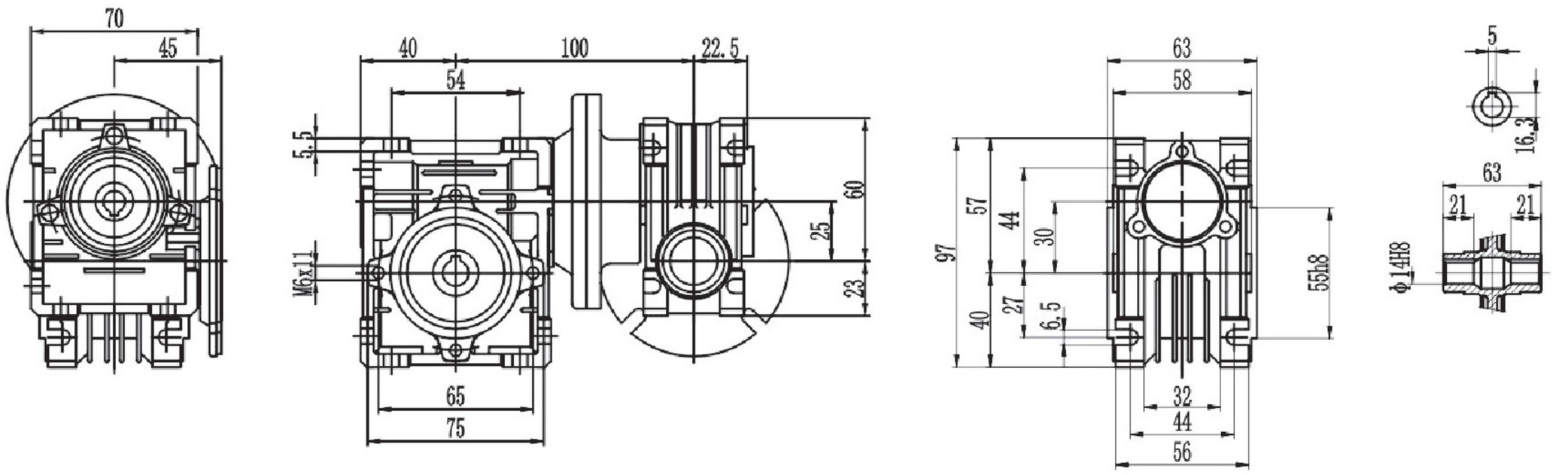
kw-motor power, N2-output speed, M2-output torque, i-ratio, kN1-output radial force, kN2-input radial force

Model	kw	N_2 (r/min)	M_2 (N.m)	i	kN1	kN2
30/40	0.1	4.7	73	300	3.49	0.21
	0.1	3.5	65	400	3.49	0.21
	0.08	2.8	61	500	3.49	0.21
	0.06	2.3	73	600	3.49	0.21
	0.04	1.9	73	750	3.49	0.21
	0.03	0.6	73	900	3.49	0.21
	0.02	1.2	65	1200	3.49	0.21
	0.02	0.9	73	1500	3.49	0.21
	0.02	0.8	73	1800	3.49	0.21
	0.01	0.58	65	2400	3.49	0.21
	0.01	0.4	65	3200	3.49	0.21
	0.01	0.35	33	4000	3.49	0.21
	0.01	0.28	29	5000	3.49	0.21
30/50	0.15	4.7	145	300	4.84	0.21
	0.1	3.5	124	400	4.84	0.21
	0.1	2.8	120	500	4.84	0.21
	0.1	2.3	145	600	4.84	0.21
	0.1	1.9	145	750	4.84	0.21
	0.1	1.6	145	900	4.84	0.21
	0.08	1.2	124	1200	4.84	0.21
	0.06	0.93	145	1500	4.84	0.21
	0.04	0.78	145	1800	4.84	0.21
	0.03	0.6	124	2400	4.84	0.21
	0.02	0.5	120	3000	4.84	0.21
	0.02	0.35	82	4000	4.84	0.21
	0.02	0.29	82	4800	4.84	0.21
30/63	0.24	4.7	230	300	6.27	0.21
	0.2	3.5	230	400	6.27	0.21
	0.2	2.8	216	500	6.27	0.21
	0.13	2.3	230	600	6.27	0.21
	0.11	1.9	216	750	6.27	0.21
	0.1	1.6	198	900	6.27	0.21
	0.1	1.2	230	1200	6.27	0.21
	0.1	0.93	216	1500	6.27	0.21
	0.1	0.78	198	1800	6.27	0.21
	0.1	0.58	230	2400	6.27	0.21
	0.08	0.47	216	3000	6.27	0.21
	0.06	0.35	172	4000	6.27	0.21
	0.04	0.28	150	5000	6.27	0.21
40/75	0.4	4.7	390	300	7.38	0.35
	0.3	3.5	360	400	7.38	0.35
	0.21	2.8	320	500	7.38	0.35
	0.2	2.3	390	600	7.38	0.35
	0.2	1.9	390	750	7.38	0.35
	0.14	1.6	390	900	7.38	0.35
	0.11	1.2	360	1200	7.38	0.35
	0.1	0.93	390	1500	7.38	0.35
	0.1	0.78	390	1800	7.38	0.35
	0.1	0.58	360	2400	7.38	0.35
	0.1	0.47	320	3000	7.38	0.35
	0.08	0.35	250	4000	7.38	0.35
	0.06	0.28	230	5000	7.38	0.35

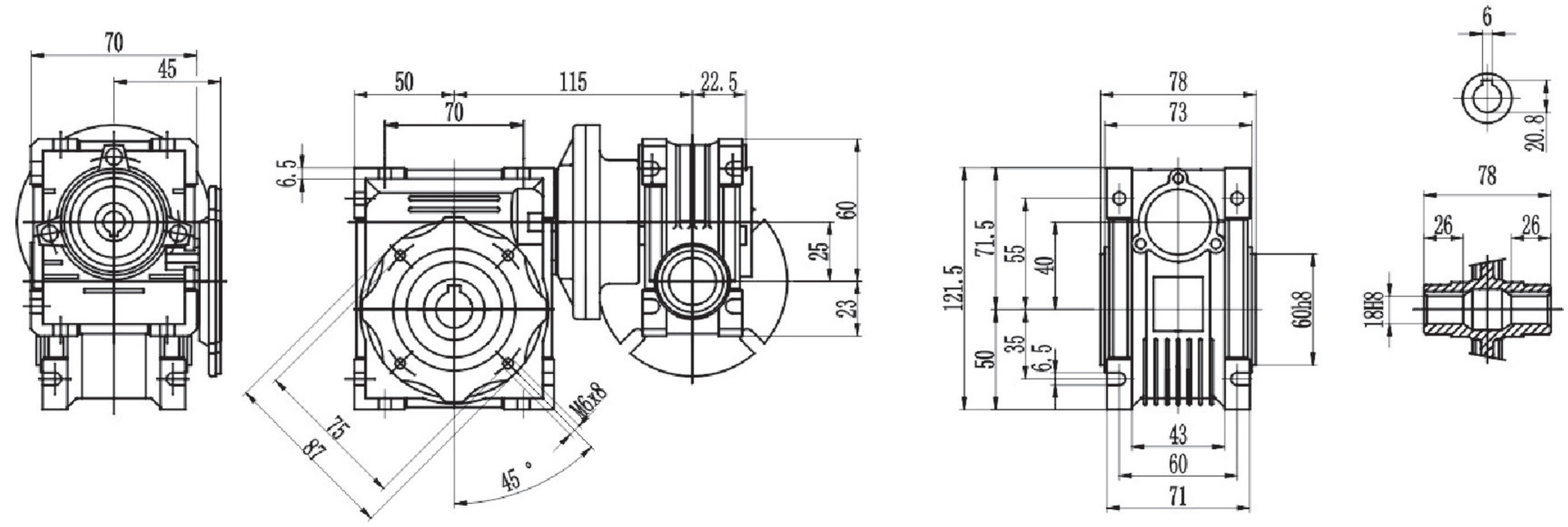
Model	kw	N_2 (r/min)	M_2 (N.m)	i	kN1	kN2
40/90	0.6	4.7	610	300	8.18	0.35
	0.43	3.5	610	400	8.18	0.35
	0.34	2.8	560	500	8.18	0.35
	0.3	2.3	610	600	8.18	0.35
	0.23	1.9	560	750	8.18	0.35
	0.2	1.6	505	900	8.18	0.35
	0.3	1.2	610	1200	8.18	0.35
	0.14	0.93	560	1500	8.18	0.35
	0.11	0.78	505	1800	8.18	0.35
	0.11	0.58	610	2400	8.18	0.35
	0.1	0.47	560	3000	8.18	0.35
	0.1	0.35	460	4000	8.18	0.35
	0.1	0.28	410	5000	8.18	0.35
50/110	1.1	4.7	1265	300	10.32	0.49
	0.8	3.5	1185	400	10.32	0.49
	0.61	2.8	1100	500	10.32	0.49
	0.6	2.3	1185	600	10.32	0.49
	0.5	1.9	1265	750	10.32	0.49
	0.43	1.6	1265	900	10.32	0.49
	0.31	1.2	1186	1200	10.32	0.49
	0.3	0.93	1265	1500	10.32	0.49
	0.3	0.78	1265	1800	10.32	0.49
	0.2	0.58	1185	2400	10.32	0.49
	0.15	0.47	1100	3000	10.32	0.49
	0.13	0.35	819	4000	10.32	0.49
	0.1	0.28	746	5000	10.32	0.49
63/130	0.8	2.3	1650	600	13.5	0.7
	0.7	1.9	1760	750	13.5	0.7
	0.6	1.6	1760	900	13.5	0.7
	0.4	1.2	1650	1200	13.5	0.7
	0.4	0.93	1760	1500	13.5	0.7
	0.4	0.93	1760	1500	13.5	0.7
	0.3	0.78	1760	1800	13.5	0.7
	0.3	0.58	1650	2400	13.5	0.7
	0.2	0.47	1550	3000	13.5	0.7
	0.1	0.35	1220	4000	13.5	0.7
	0.1	0.28	1100	5000	13.5	0.7
63/150	3.4	9.3	2340	150	18	0.7
	2.7	7.0	2340	200	18	0.7
	1.9	5.6	2050	250	18	0.7
	1.9	4.7	2340	300	18	0.7
	1.8	3.5	2670	400	18	0.7
	1.4	2.8	2330	500	18	0.7
	1.3	2.3	2670	600	18	0.7
	1.0	1.9	2330	750	18	0.7
	0.7	1.6	2100	900	18	0.7
	0.7	1.2	2670	1200	18	0.7
	0.4	0.8	2100	1800	18	0.7
	0.5	0.6	2670	2400	18	0.7
	0.3	0.5	2330	3000	18	0.7
	0.2	0.4	1880	4000	18	0.7
	0.2	0.3	1650	5000	18	0.7

C - AWG Dimensions

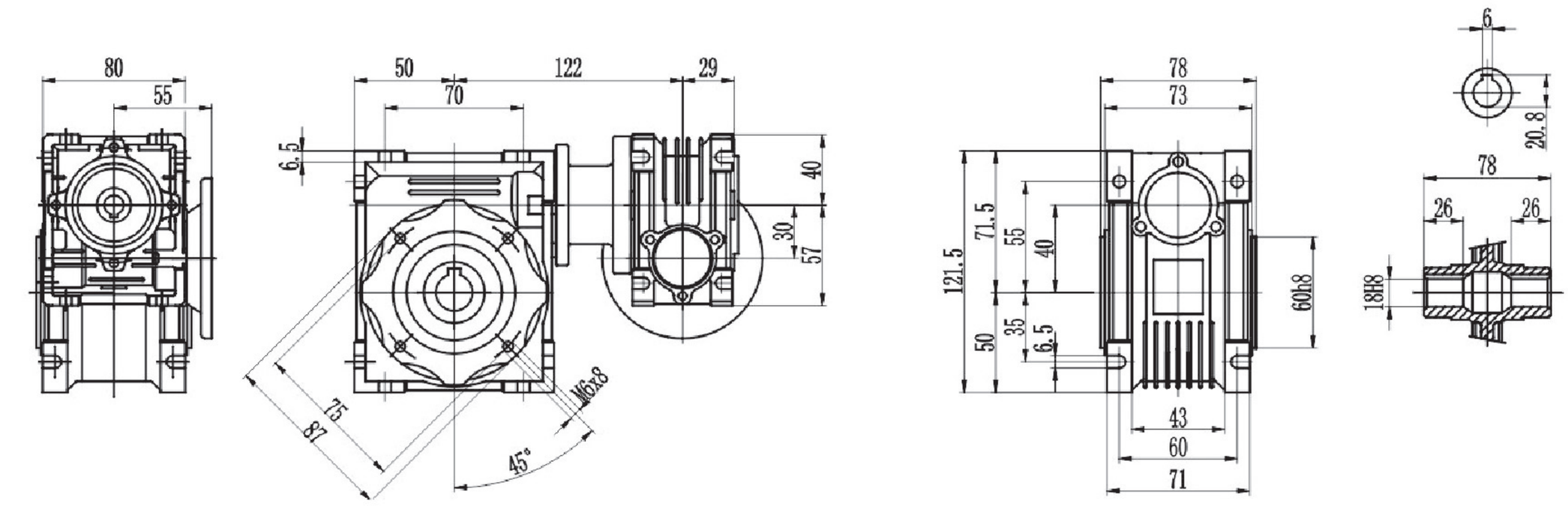
C - AWG 25/030



C - AWG 25/40

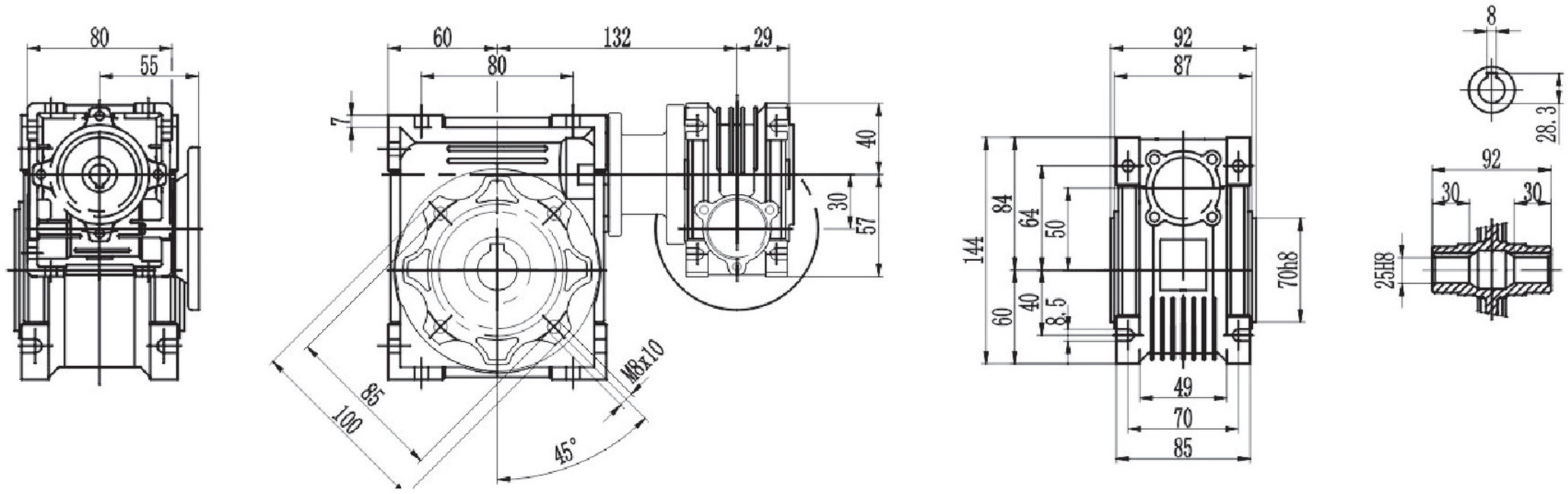


C - AWG 30/40

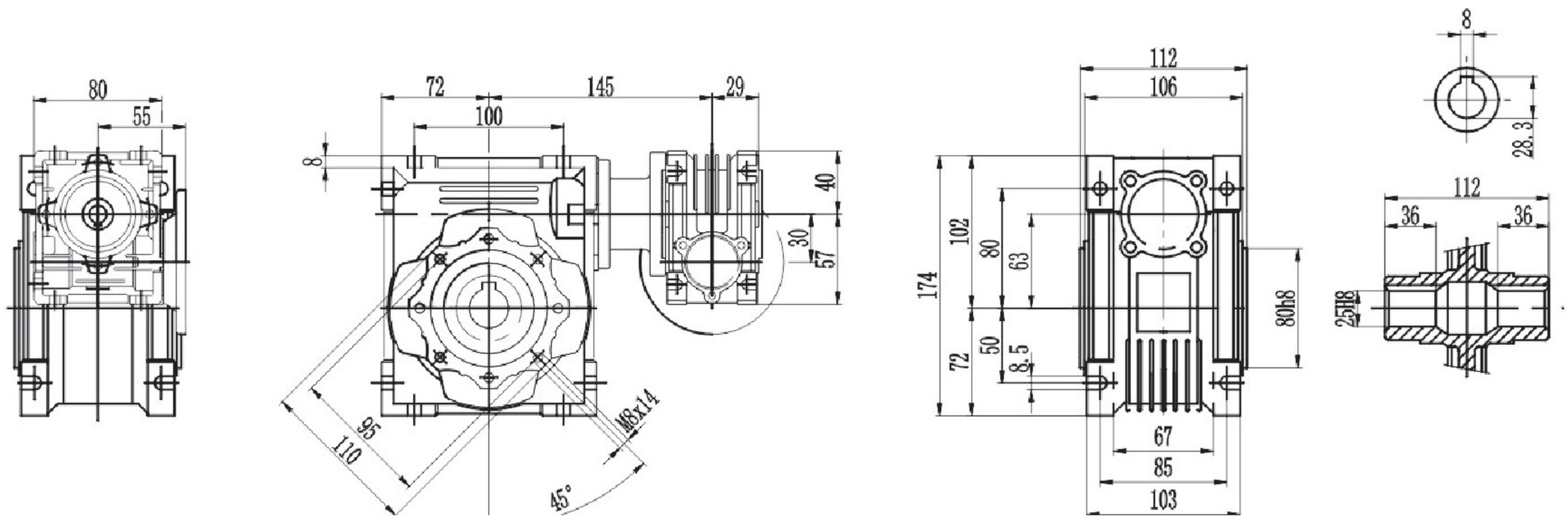


C - AWG Dimensions

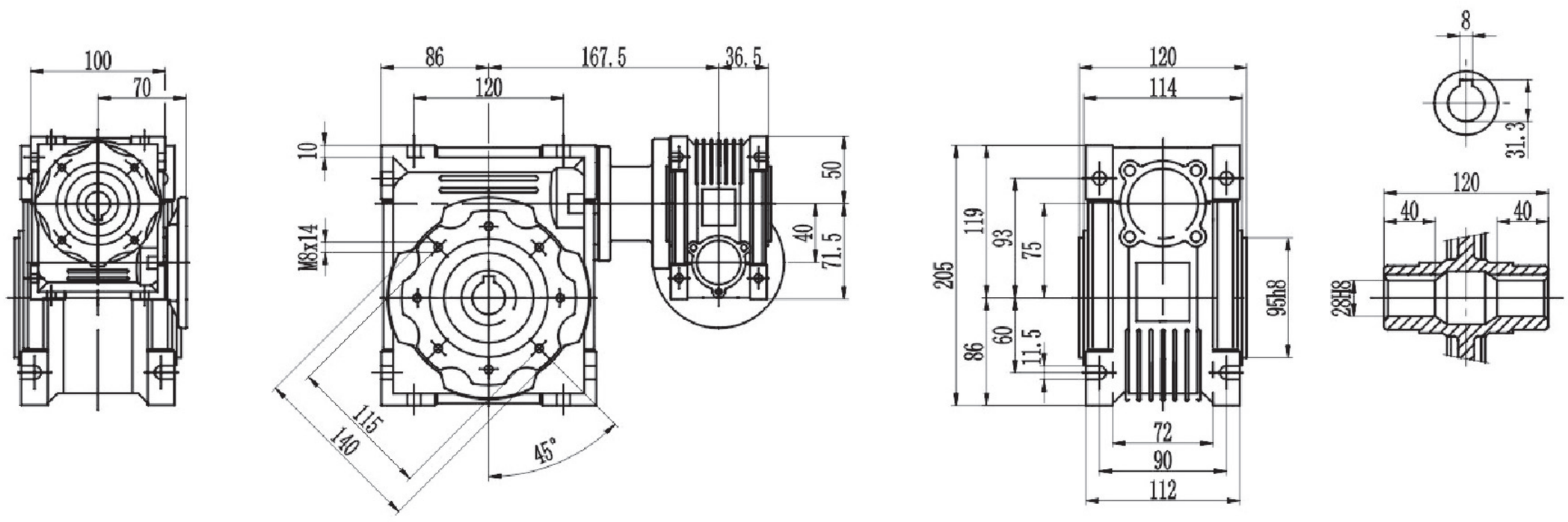
C - AWG 30/50



C - AWG 30/63

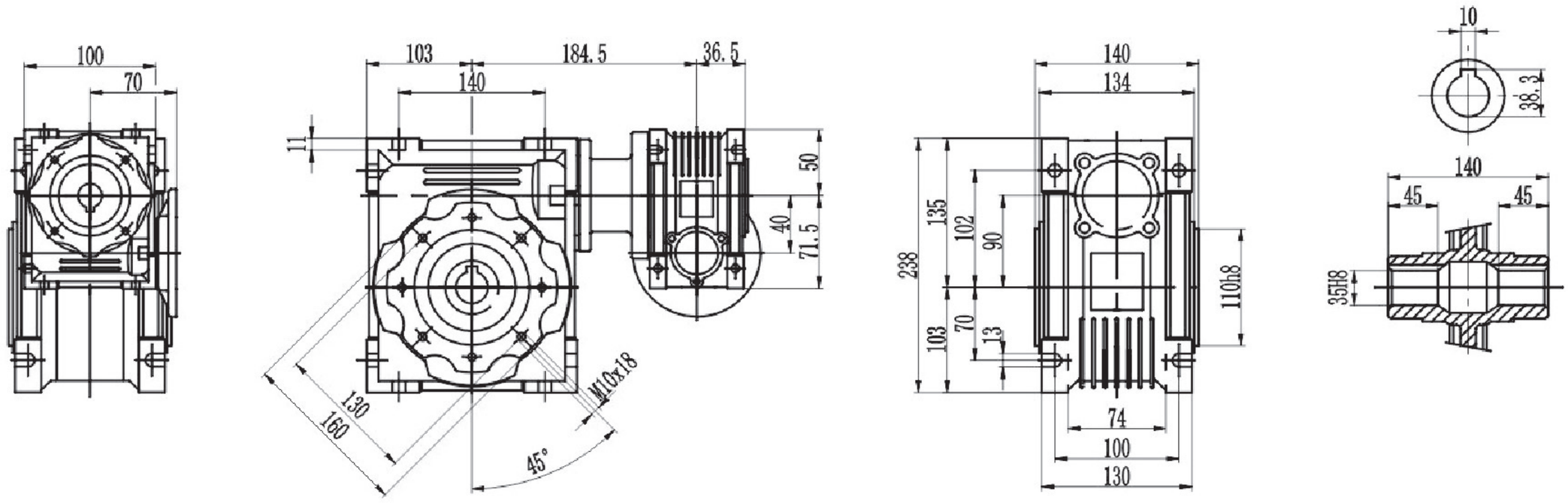


C - AWG 40/75

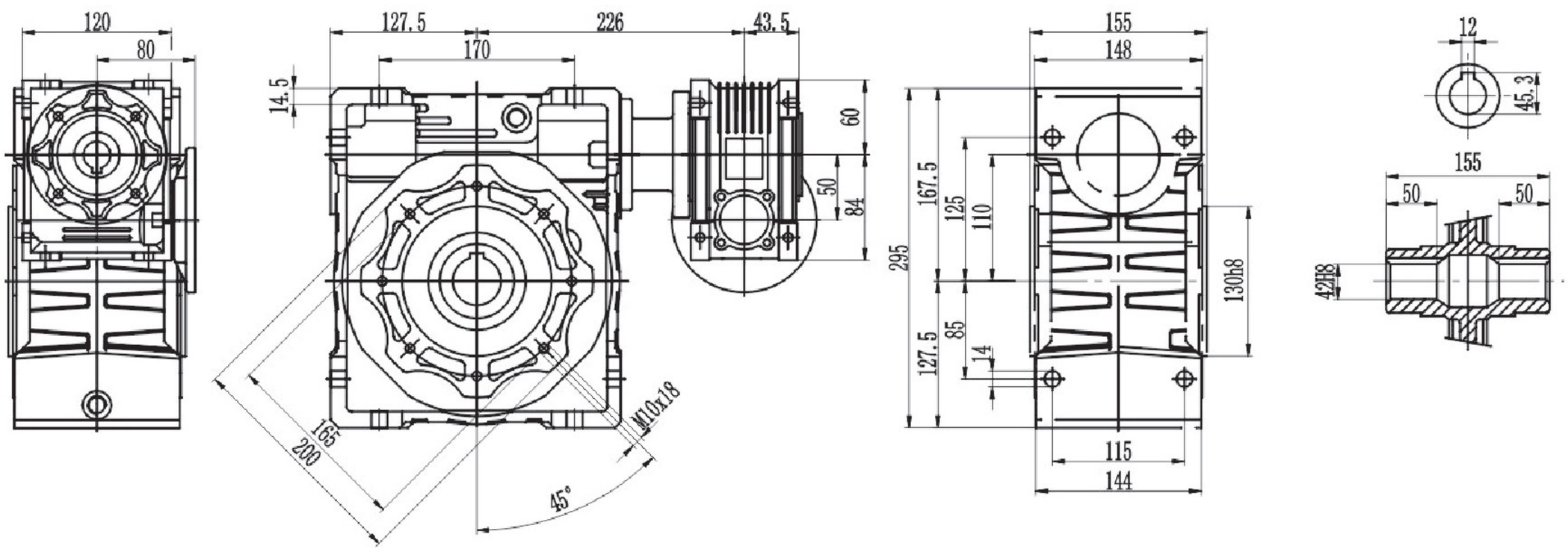


C - AWG Dimensions

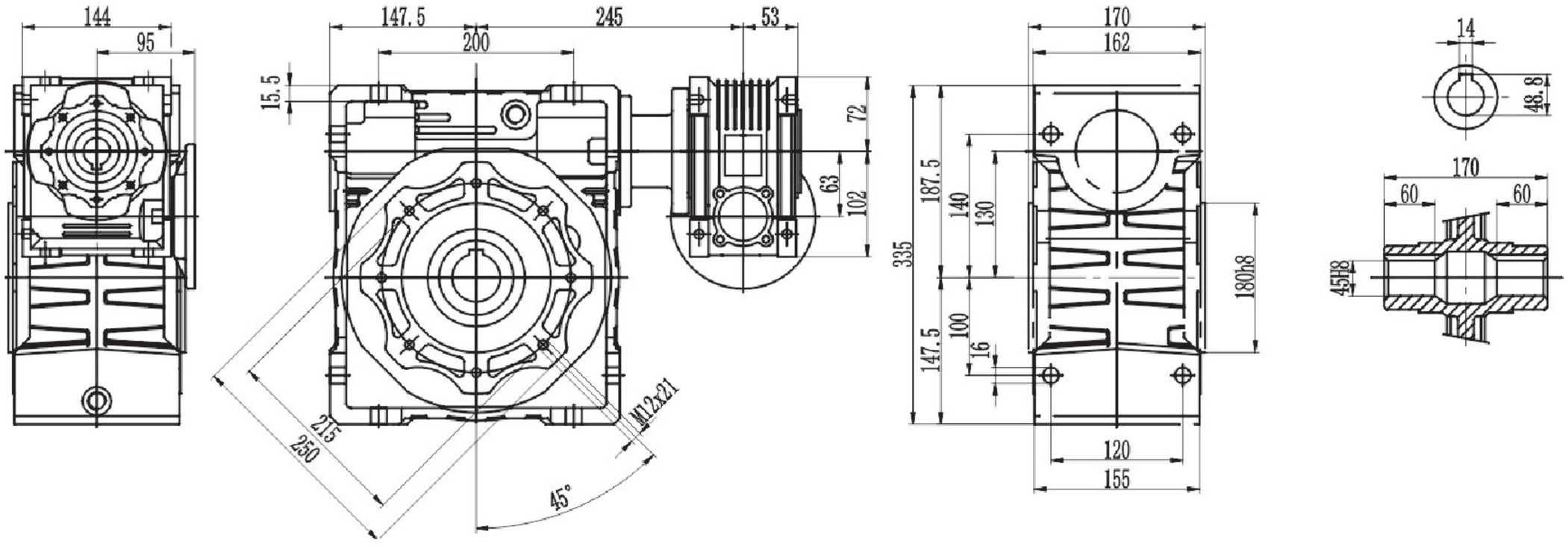
C - AWG 40/90



C - AWG 50/110

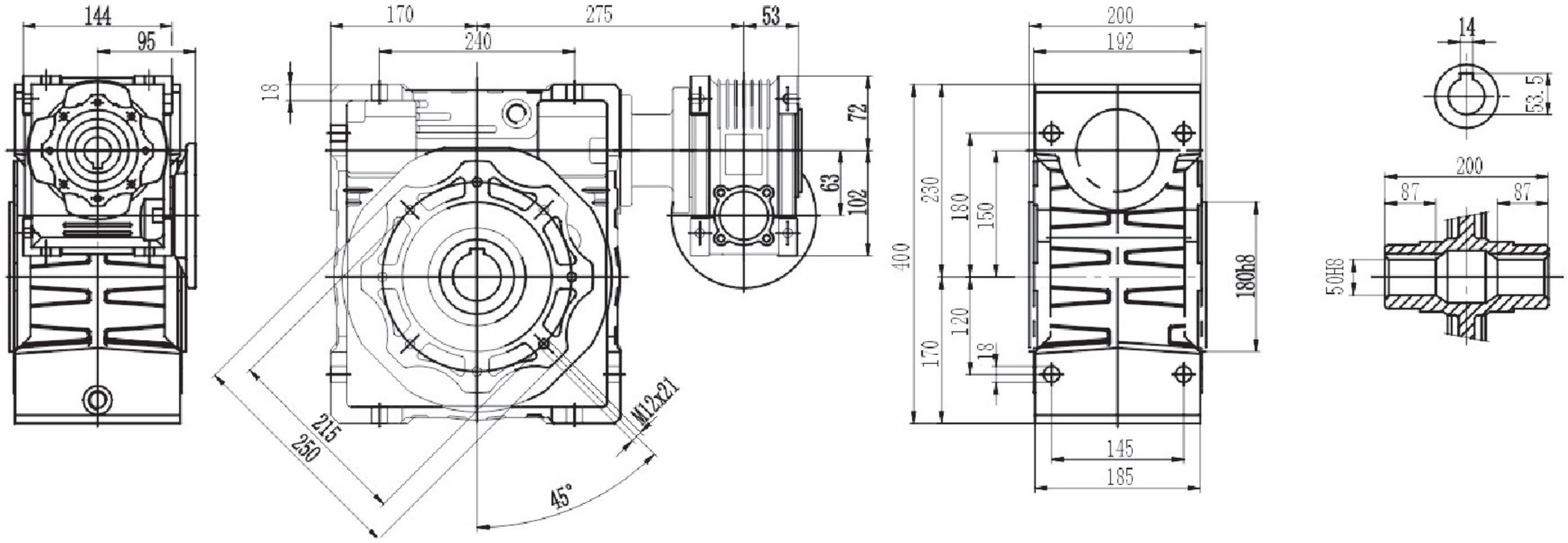


C - AWG 63/130

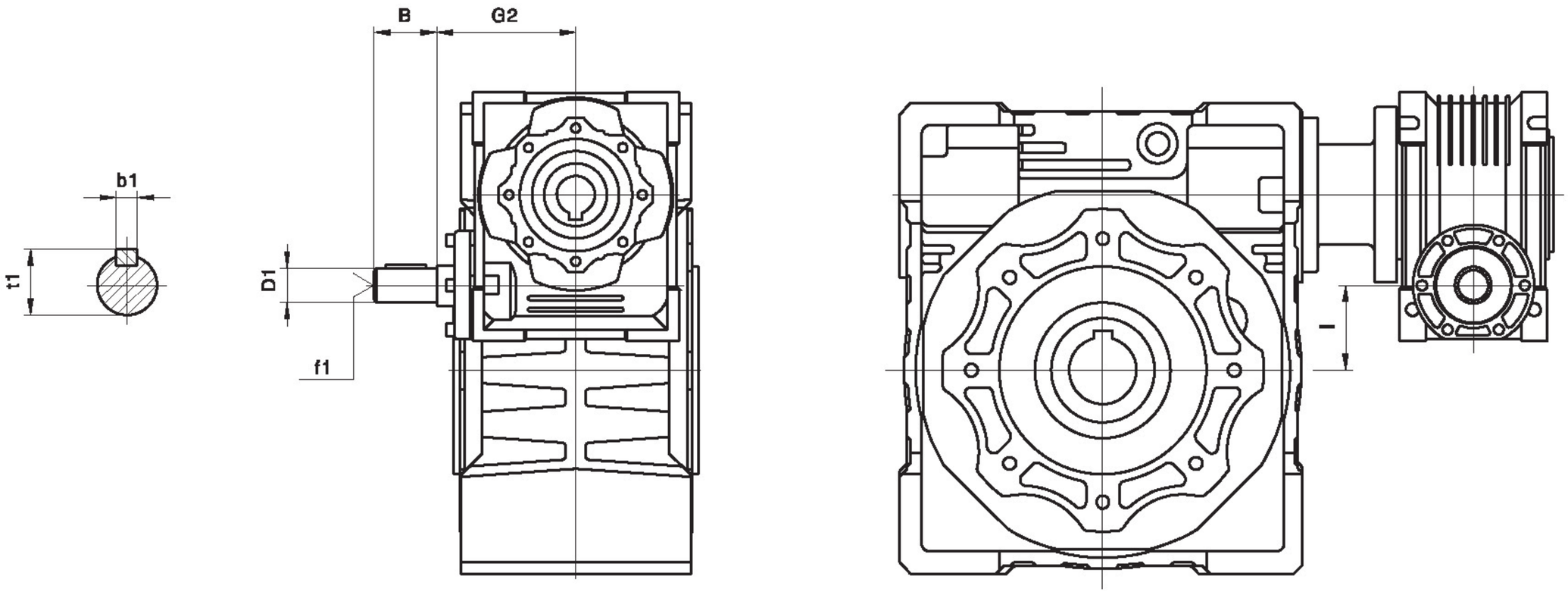


C - AWG Combine Gear Reducer Dimensions

C - AWG 63/150

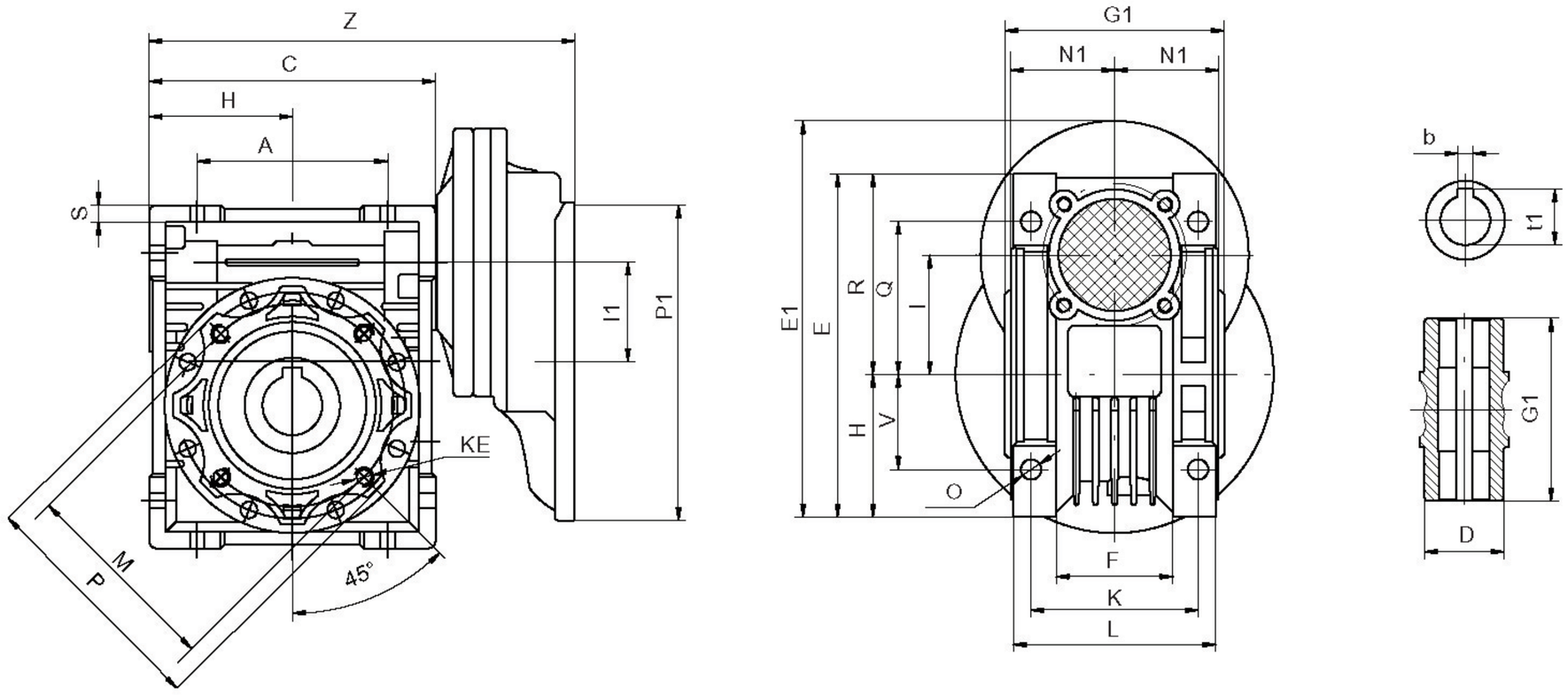


C - AWG - VS Dimensions



C - AWG	025-030	025-040	030-040	030-050	030-063	040-075	040-090	050-110	063-130	063-150
B	20	20	20	20	20	23	23	30	40	40
D1	9 j6	9 j6	9 j6	9 j6	9 j6	11 j6	11 j6	14 j6	19 j6	19 j6
G2	42	42	51	51	51	60	60	74	90	90
l	5	15	10	20	33	35	50	60	67	87
b1	3	3	3	3	3	4	4	5	6	6
f1	-	-	-	-	-	-	-	M6	M6	M6
t1	10.2	10.2	10.2	10.2	10.2	12.5	12.5	16	21.5	21.5

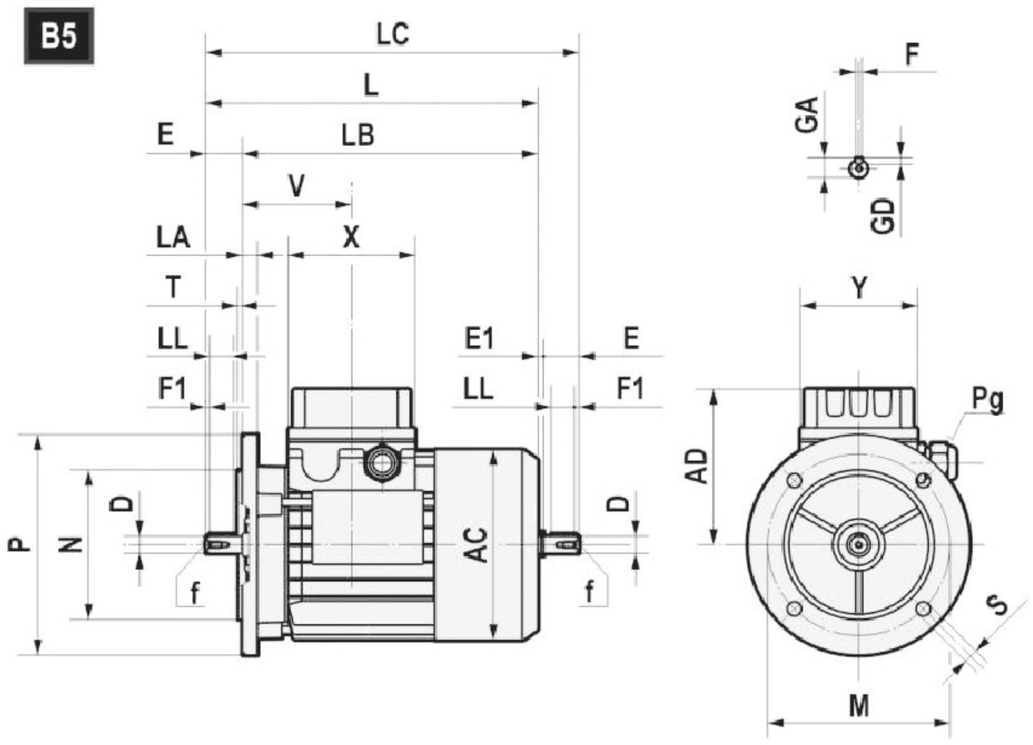
Outline dimension of PC+AWG combined reducer

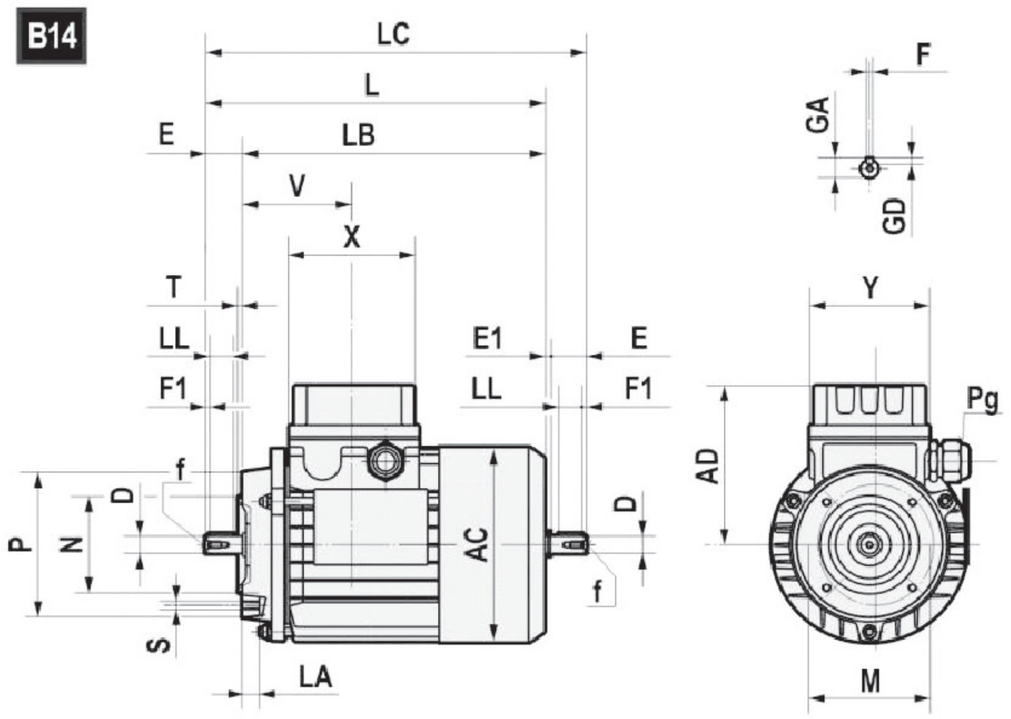


PC+AWG		A	C	D(H7)	t1	b	E	E1	F	G1	H	I	I1	K
PC 063+	AWG40	70	100	18	20.8	6	121.5	147	43	78	50	40	40	60
	AWG50	80	120	25	28.3	8	145	167	49	92	60	50	40	70
	AWG63	100	144	25	28.3	8	174	192	67	112	72	63	40	85
PC 071+	AWG50	80	120	25	28.3	8	145	177.5	48	92	60	50	50	70
	AWG63	100	144	25	28.3	8	174	202.5	67	112	72	63	50	85
	AWG75	120	172	28	31.3	8	205	228.5	72	120	86	75	50	90
	AWG90	140	206	35	38.3	10	238	260.5	72	140	103	90	50	100
PC 080+	AWG75	120	172	28	31.3	8	205	241	72	120	86	75	63	90
	AWG90	140	206	35	38.3	10	238	273	72	140	103	90	63	100
	AWG110	170	252.5	42	45.3	12	295	317.5		155	127.5	110	63	115
	AWG130	200	292.5	45	48.8	14	335	357.5		170	147.5	130	63	120
PC 090+	AWG110	170	252.5	42	45.3	12	295	317.5		155	127.5	110	63	115
	AWG130	200	292.5	45	48.8	14	335	357.5		170	147.5	130	63	120

PC+AWG		KE	L	M	N(h8)	N1	O	P	P1	Q	R	V	S	Z
PC 063+	AWG40	4- M8×8	71	75	60	36.5	6.5	87	140	55	71.5	35	6.5	165
	AWG50	4- M8×10	85	85	70	43.5	8.5	100	140	64	85	40	7	185.5
	AWG63	8- M8×14	103	95	80	53	8.5	110	140	80	102	50	8	213.5
PC 071+	AWG50	4- M8×10	85	85	70	43.5	8.5	100	160	64	85	40	7	202.5
	AWG63	8- M8×14	103	95	80	53	8.5	110	160	80	102	50	8	221.5
	AWG75	8- M8×14	113	115	95	57	11	140	160	93	119	60	10	252
	AWG90	8- M10×18	130	130	110	67	13	160	160	102	135	70	11	286
PC 080+	AWG75	8- M8×14	113	115	95	57	11	140	200	93	119	60	10	271.5
	AWG90	8- M10×18	130	130	110	67	13	160	200	102	135	70	11	305.5
	AWG110	8- M10×18	142	165	130	74	14	200	200	125	167.5	85	15	357
	AWG130	8- M12×21	155	215	180	81	16	250	200	140	187.5	10	15	397
PC 090+	AWG110	8- M10×18	142	165	130	74	14	200	200	125	167.5	85	15	357
	AWG130	8- M12×21	155	215	180	81	16	250	200	140	187.5	100	15	397

Electric Motors



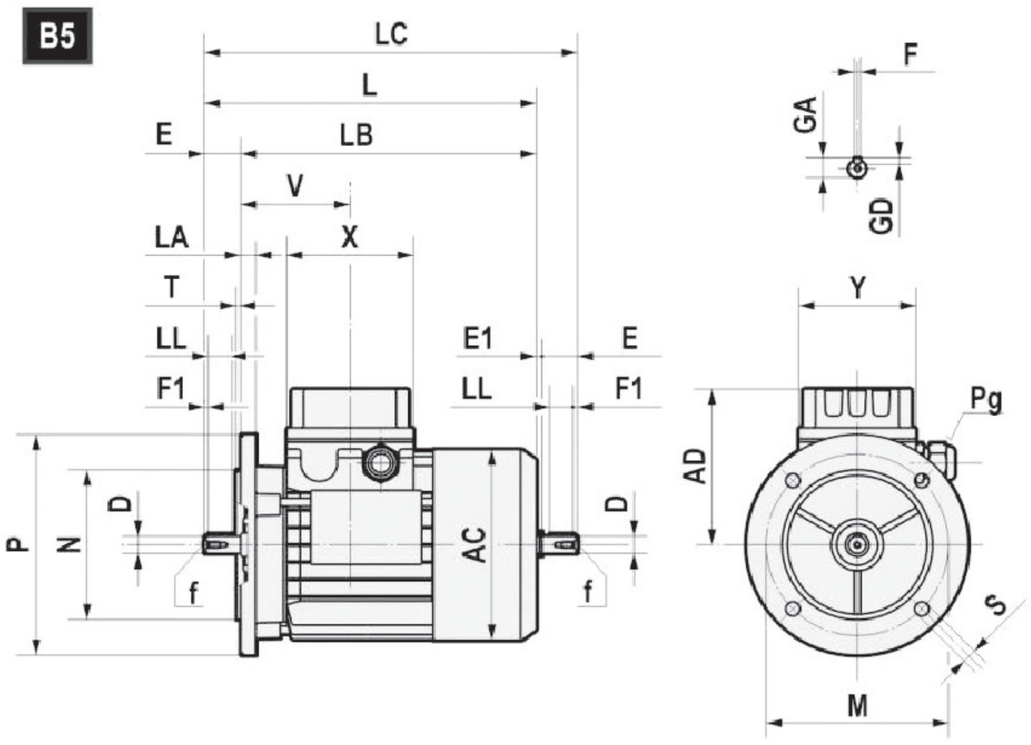


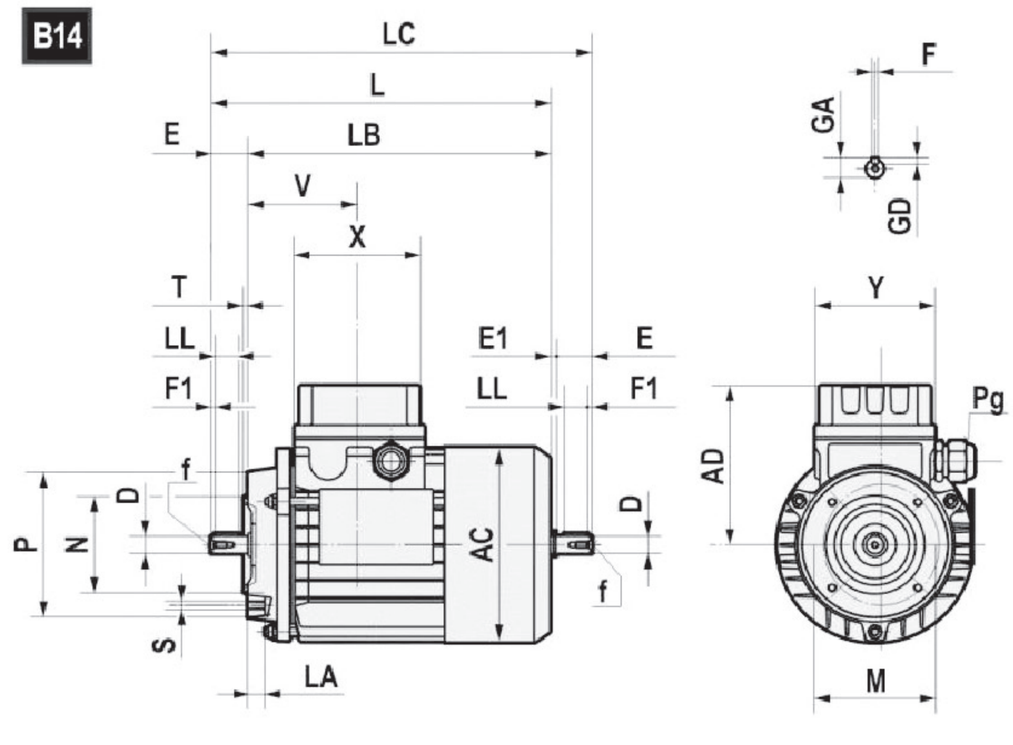
	AC	AD	L	LB	LC	X	Y	V	D	E	E1	f	F1	GA	F	GD
063	121	104	211	188	235,5	80	74	69	11j6	23	1,5	M4x10	2,5	12,5	4	4
071	139	112	238,5	208,5	271	80	74	74,5	14 j6	30	2,5	M5x12.5	3	16	5	5
080	158	122	272,5 *(296)	232,5 *(256)	314 *(337)	80	74	78	19 j6	40	1,5	M6x16	5	21,5	6	6
90S	173	146	298 *(331)	248 *(281)	349,5 *(381)	98	98	89,5	24 j6	50	1,5	M8x19	5	27	8	7
90L	173	146	323 *(356)	273 *(306)	374,5 *(408)	98	98	89,5	24 j6	50	1,5	M8x19	5	27	8	7
100	191	155	368	308	431,5	98	98	97,5	28 j6	60	3,5	M10x22	7,5	31	8	7
112	211	170	382,5 *(408)	322,5 *(348)	447 *(472)	98	98	100	28 j6	60	3,5	M10x22	7,5	31	8	7
132S	249	195	452	372	536,5	118	118	115,5	38 k6	80	4	M12x28	10	41	10	8
132L	249	195	490	410	574,5	118	118	115,5	38 k6	80	4	M12x28	10	41	10	8
160 M	249	195	520	410	/	118	118	115,5	42k6	100	/	M16x36	10	45	12	8

B5	M	N	P	LA	S	T
063	115	95	140	10	9	3
071	130	110	160	10	9,5	3,5
080	165	130	200	12	11	3,5
090	165	130	200	12	11	3,5
100	215	180	250	15	14	4
112	215	180	250	14,5	14	4
132	265	230	300	20	14	3,5
160	300	250	350	13	18,5	3,5

B14	M	N	P	LA	S	T
063	75	60	90	10	M5	2,5
071	85	70	105	10,5	M6	2,5
080	100	80	120	10,5	M6	3
090	115	95	140	11,5	M8	3
100	130	110	160	15	M8	3,5
112	130	110	160	11,5	M8	3,5
132	165	130	200	20,5	M10	3,5
160	215	180	250	-	M12	4

Electric Motors





		AC	AD	L	LB	X	D	E	f	GA	F	D	LL	Pg	
160 M	2-4-6	314	251	600	490	158	42	110	M16	45	12	8	90	2-M40x1,5	1-M16x1,5
160 L	2-4-6	314	251	645	535	158	42	110	M16	45	12	8	90	2-M40x1,5	1-M16x1,5
180 M	2-4	355	267	680	570	158	48	110	M16	51,5	14	9	100	2-M40x1,5	1-M16x1,5
180 L	4-6	355	267	720	610	158	48	110	M16	51,5	14	9	100	2-M40x1,5	1-M16x1,5
200 L	2-4-6	397	300	785	675	187	55	110	M20	59	16	10	100	2-M50x1,5	1-M16x1,5
225S	4	446	325	820	680	187	60	140	M20	64	18	11	125	2-M50x1,5	1-M16x1,5
225M	2	446	325	815	705	187	55	110	M20	59	16	10	100	2-M50x1,5	1-M16x1,5
225M	4-6	446	325	845	705	187	60	140	M20	64	18	11	125	2-M50x1,5	1-M16x1,5
250 M	2-4-6	485	360	910	770	238	60	140	M20	64	18	11	125	2-M63x1,5	1-M16x1,5
250 M	2-4-6	485	360	910	770	238	65	140	M20	69	18	11	125	2-M63x1,5	1-M16x1,5
280 S	2-4-6	547	390	970	830	238	65	140	M20	69	18	11	125	2-M63x1,5	1-M16x1,5
280 S	2-4-6	547	390	970	830	238	75	140	M20	79,5	20	12	125	2-M63x1,5	1-M16x1,5
280 M	2-4-6	547	390	1025	885	238	65	140	M20	69	18	11	125	2-M63x1,5	1-M16x1,5
280 M	2-4-6	547	390	1025	885	238	75	140	M20	79,5	20	12	125	2-M63x1,5	1-M16x1,5

B5	M	N	P	LA	S	T
160	300	250	350	13	19	5
180	300	250	350	15	19	5
200	350	300	400	17	19	5
225	400	350	450	20	19	5
250	500	450	550	22	19	5
280	500	450	550	22	19	5

Nominal power - [kW]

Poles	63A	63B	63C	71A	71B	71C	80A			80B		
2	0,18	0,25	0,37	0,37	0,55	-	-	0,75	0,75	-	1,1	1,1
4	0,12	0,18	0,22	0,25	0,37	0,55	0,55	-	-	-	0,75	0,75
6	0,09	0,12	0,15	0,18	0,25	0,37	0,37	-	-	0,55	-	-

Poles	90S		90L		100LR	100L	100LA		112MR	112MS	112MA	112M
2	1,5	1,5	2,2	2,2	-	3	3	-	-	-	4	4
4	1,1	1,1	1,5	1,5	-	-	2,2	2,2	2,2	3	4	4
6	-	0,75	0,75	-	1,1	1,5	1,1	-	-	-	2,2	2,2

Poles	112MR	112MS	132S	132SA	132MS	132SB	132M	132MA		132MB	
2	-	-	5,5	5,5	-	7,5	7,5	9,2	-	-	-
4	2,2	3	-	5,5	5,5	-	7,5	7,5	-	9,2	-
6	-	-	3	3	-	-	-	4	4	5,5	5,5

Poles	160M	160MA	160MB	160L	160LA	180M	180L
2	-	11	15	18,5	-	22	-
4	-	11	-	-	15	18,5	22
6	7,5	-	-	11	-	-	15

Poles	200L	200LA	200LB	225S	225M	250M	280S	280M
2	-	30	37	-	-	-	-	-
4	30	-	-	37	45	55	75	90
6	-	18,5	22	-	-	-	-	-

Operating instructions

1. AWG Worm Gear Reducer

1.1 The reducer which model is from AWG 25 to AWG 90 made of aluminum alloy die-cast housing good looking in appearance, compact in structure, rust proofing on surface and small volume to save mounting space.

1.2 The reducer model from AWG 110 to AWG 150 is made of cast iron which casted with Aluminum mould. It's good looking and solid, and can be used through the setting of multi-azimuth.

1.3 Good radiating characteristic leads safe and reliability and high efficiency for using.

1.4 The strong capacity of loading ensure stable transmission, make less vibration and noise.

1.5 Varies of connecting structure for power input and torque output meet different require-merits; the design of box outline and the set of foot hole with good versality is apt to many kinds of mounting.

2. C - AWG Combine Gear Reducer

2.1 It is combined by two single step reducers and has all the virtues of them. And you can get bigger ratio with it.

2.2 The models of 25/30,25/40,30/40,30/50,30/63,40/75,40/90,50/110,63/130,63/150 are in common use. You can choose 25,30,40,50,63,75,90,110,130,150 as combination units to combine according to the fact of your special needs.

3. Notes of installation

3.1 The base-plate must be plane and stoutness, and the base-bolts must be screwed down and shockproof.

3.2 The connecting shafts of prime mover, reducer and operation device must be coaxial after installation.

3.3 The diameter tolerance zone of input and output shaft is h6, the holes of fittings (such as couplings, belt-pulley, sprocket wheel and so on) must properly mate the shaft, which prevents bearing from breakage because of over-tight mate or avoid effecting normal power transmission because of over-loose mate.

3.4 Drives such as sprocket wheel and gear must be fitted closed to bearing in order to reduce bending stress of hanging shaft.

3.5 While assembling motor to the reducer, it is necessary to add butters to the worm shaft input hole and keyway, so as to avoid tightly assembling and rusting when it is used for a long time.

3.6 Supporting unit is required when reducers directly match with motors whose weight is bigger than normal.

4. Operation notes

4.1 Before using, please check carefully whether the reducer mode, centre distance size, ratio, input connecting method, output shaft structure, input and output shaft direction and revolving direction are right revolving direction are right according to requirement. It is better that the input speed of worm shaft shouldn't exceed 1500RPM.

4.2 The load should be added step by step when using the machine. Never starting reducer with full load.

4.3 The reducer which model is among 25-90 has the hole to add oil only. It has been full of synthetic lubrication oil ISO VG320. User doesn't need to add oil, after about 500 hours continual running, please change new lubrication oil. Then change the oil once per 6000 hours.

4.4 The reducer model of 110-150 has oil add hole, oil out hole and oil gauge. Mineral lubrication oil ISO VG460 has been filled in enough, before using; user must pull out the rubber ring of vent plug. After the first 400 hours running, clean the interior box and change new oil in it. Then change the oil once per 4000 hours.

4.5 The permitted temperature of the reducer oil is 95 degree. If up to this degree, reducer must be stopped and checked.

4.6 When the ambient temperature is 5 degree upper or lower than the normal level stated in the table, please contact with us.

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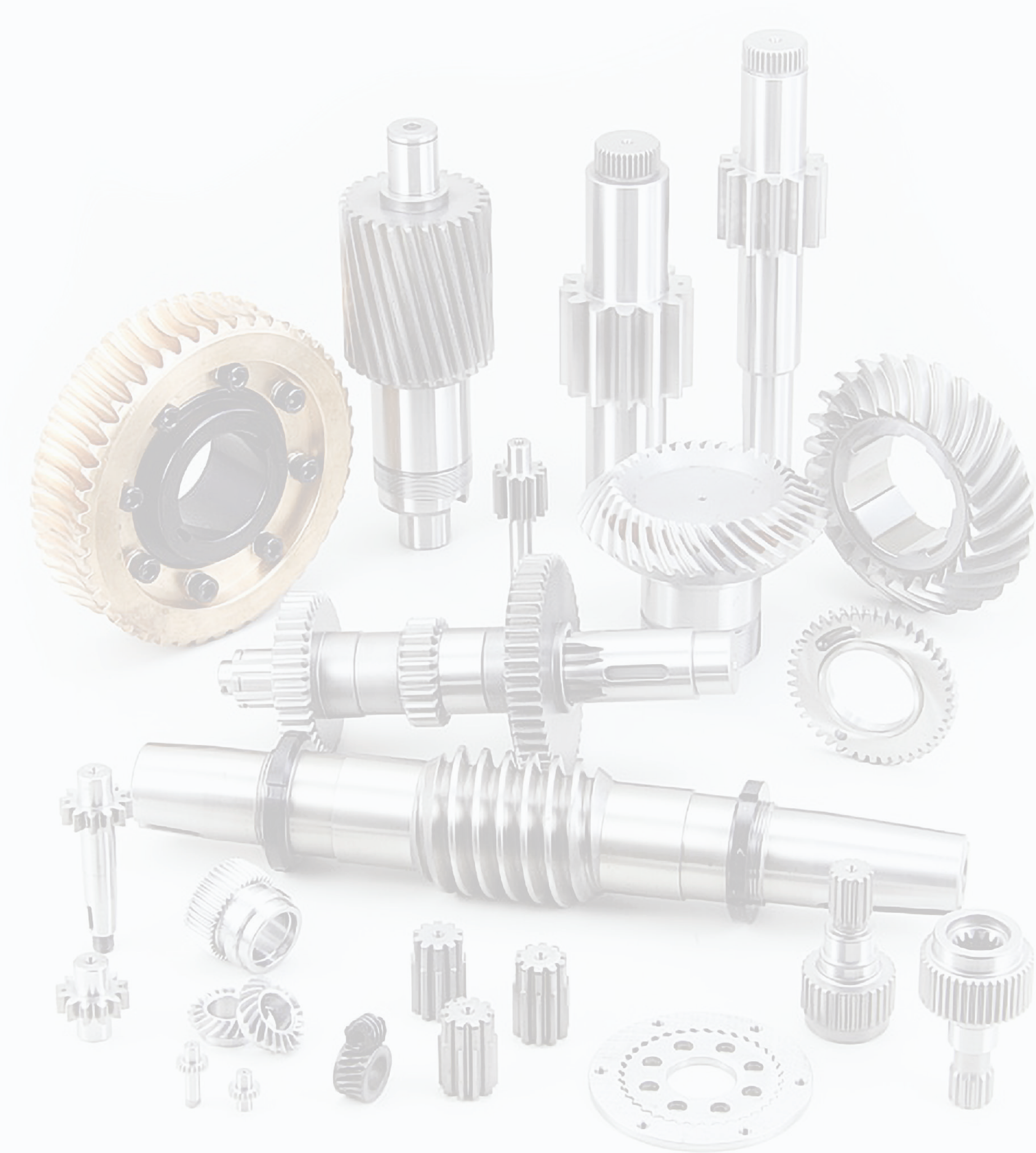
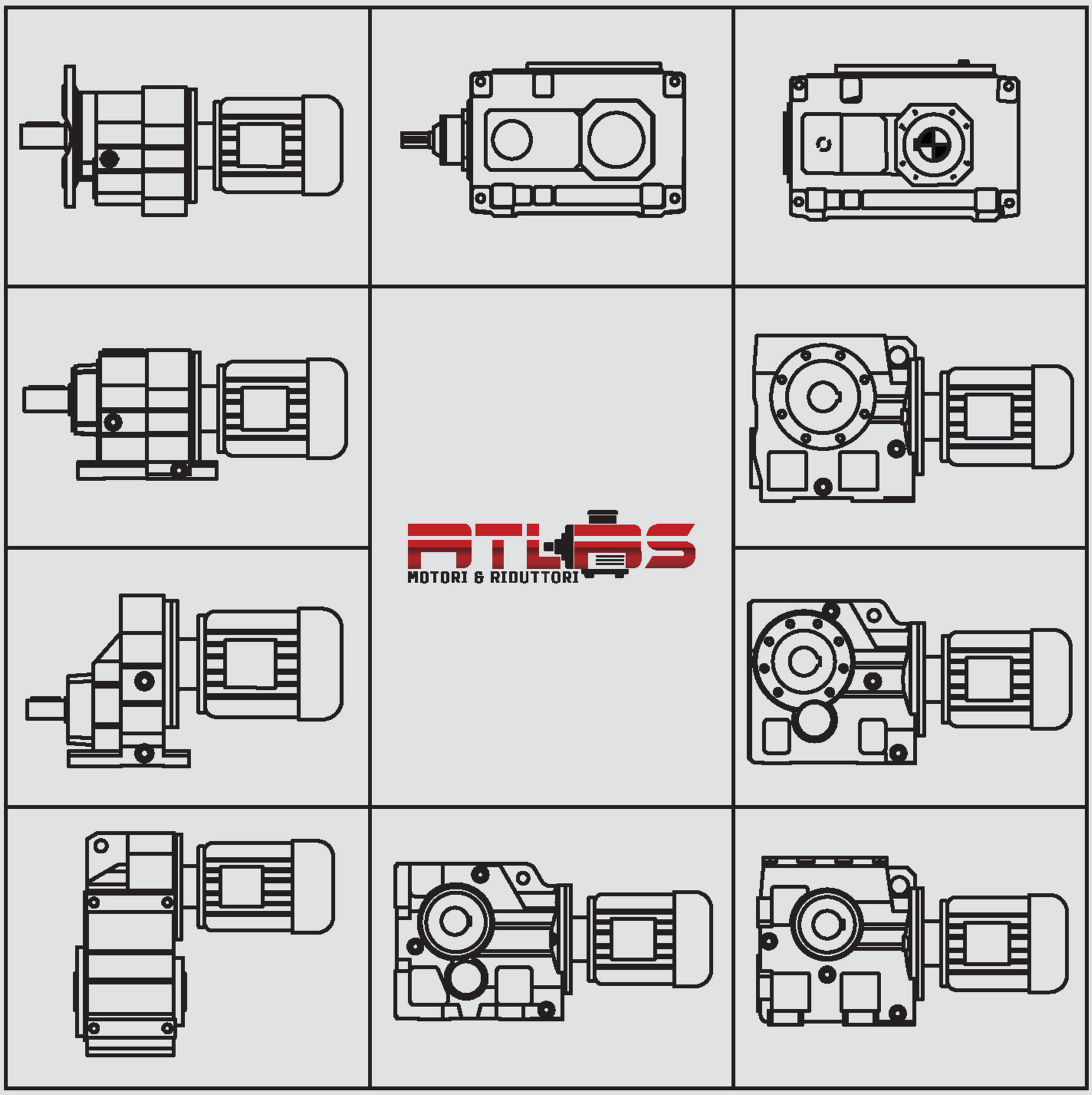
WORM **GEARED** MOTORS



Our Other Product



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