T·Y·Gear
Since 1974

Gear Reducer for Extruder

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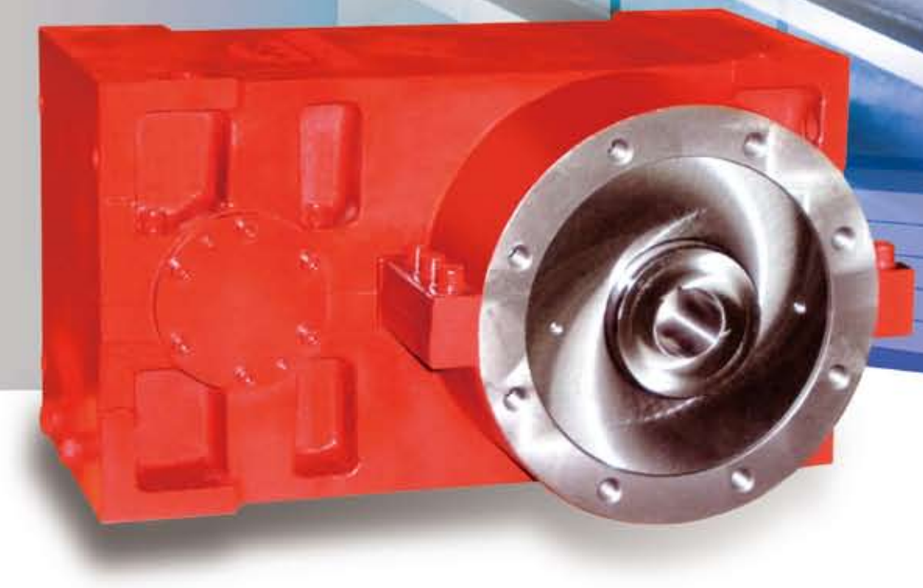

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Design idea and features of gear reducers for extrusion machines

DESIGN IDEA

1. Tien Yi provides gear reducers are high-strength and high-precision gear components designed by using ITRI CAD software for gears based on the company's experience in manufacturing over three decades. The production is done with imported high precision machinery under sound test and quality control.
2. We provide the most satisfactory service presently to customers like steel mills, paper plants, rubber plants, textile mills and factories with great gravity and loads who use our products.
3. We also provide single-screw gear boxes for manufacturers of extrusion machines based on user confidence and recognition.

FEATURES OF GEAR REDUCERS

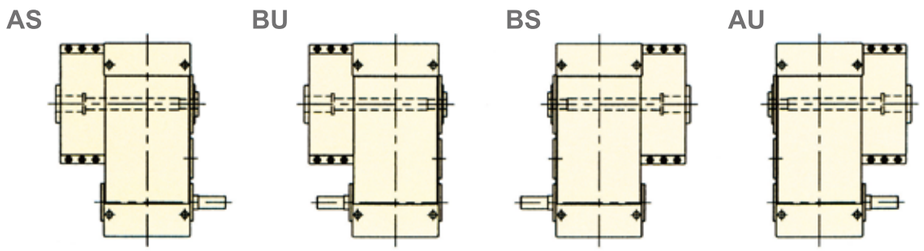
1. The gears of the reducer are of low-carbon alloyed steel or forged before undergoing normalization treatment to give the workpieces denser interior structure and increased flexibility, such that they can withstand heavier load and greater impact during operation.
2. The gears of the reducer are manufactured to AGMA standards.
3. The gears of the reducer have been carburization treated with the teeth surface further milled by high-precision grinder to enhance the meshing rate of the gears, decrease noise levels as well as increase the working efficiency with extended gear reducer life.

Examples of model notation

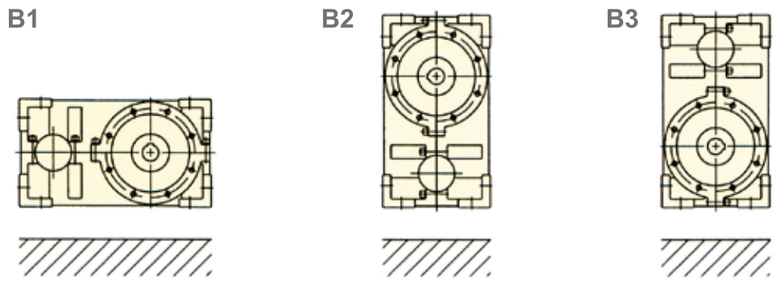
TEX- 2P140 - BS - 10 - B1

- 2P — Number of gear ratios (2 or 3)
- 140 — SIZE (112...400-TEX-2P) (160...400-TEX-3P)
- BS — Assembly (P: parallel shafts)
- 10 — Examples of shaft engagement
- B1 — Reduction ratio (6.3...25-TEX-2P) (28...125-TEX-3P)
- Installation

Examples of shaft engagement



Installation



How to select a reducer

1 Determine the conditions of use for the reducer

- Driven parts
- Driving parts
- Power to be transmitted to the driven parts
- Input speed, n_1 rpm
- Output speed, n_2 rpm
- Daily time of operation, hr/D

2 Determine the model

(1) Reduction ratio, $i=\frac{n_1}{n_2}$

(2) Reducer rated power

$PN=P\times K_1$

i= Reduction ratio

n_1= Speed of input shaft

n_2= Speed of output shaft

P= Power to be transmitted to the driven part

PN= Rated power

K_1= coefficient of operation

Example:

1. Motor of the driving part
   Pm=75kw
   Speed n_1=1450 rpm
2. The driven part
   Power requirement P=60kw
   Speed n_2=145 rpm
   Daily time of operation: 16 hrs

Determine the model

1. Reduction ratio $i=\frac{1450}{145}=10$
2. Coefficient of operation looked up in table is 1.5

PN=60×1.5=90 KW

Nominal horsepower of the reducer is decided based on i and PN

Table of operation coefficients

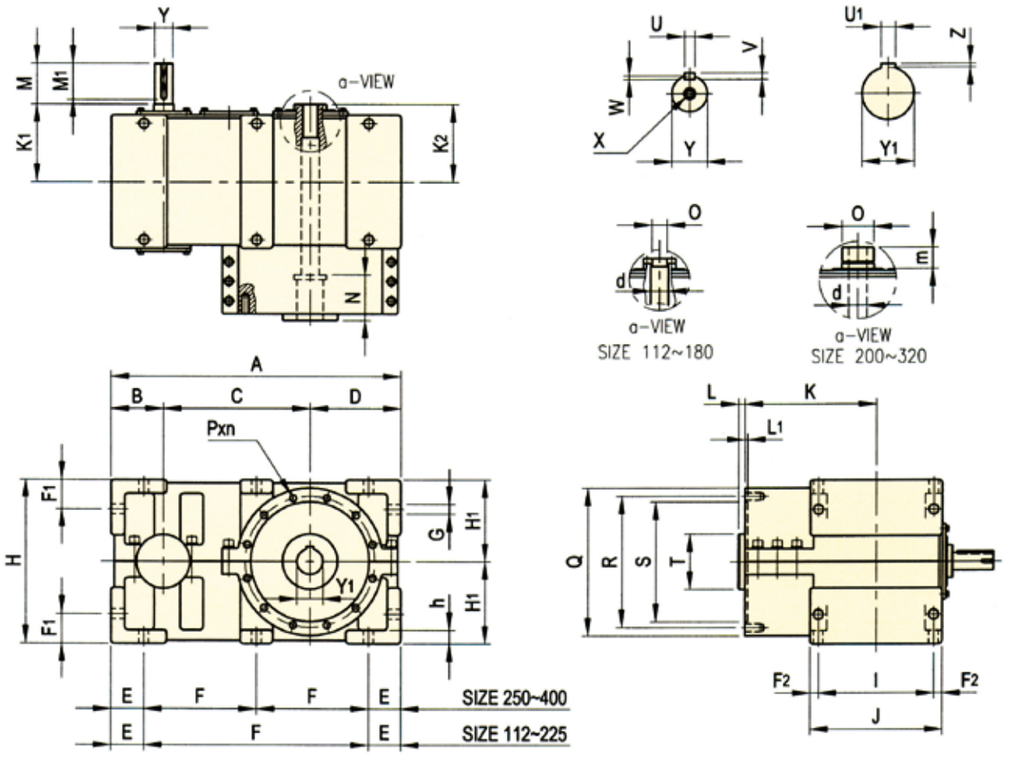
Driving Unit	Operation Time	Nature of Load		
		Uniform Load	Light Impact	Heavy Impact
		U	M	H
Motor	3 hr/D	0.80	1.00	1.50
	10 hr/D	1.00	1.25	1.75
	24 hr/D	1.25	1.50	2.00
Internal Combustion Engine	3 hr/D	1.00	1.25	1.75
	10 hr/D	1.25	1.50	2.00
	24 hr/D	1.50	1.75	2.25

Conditions of Use

Driving unit	
Driven unit	KW
Speed of input shaft	rpm
Speed of output shaft	rpm
Screw diameter	mm
Ambient temperature	ºC
Operation time	hr/D
Direction of rotation	
Shaft alignment	

TEX-2P

Exterior dimensions

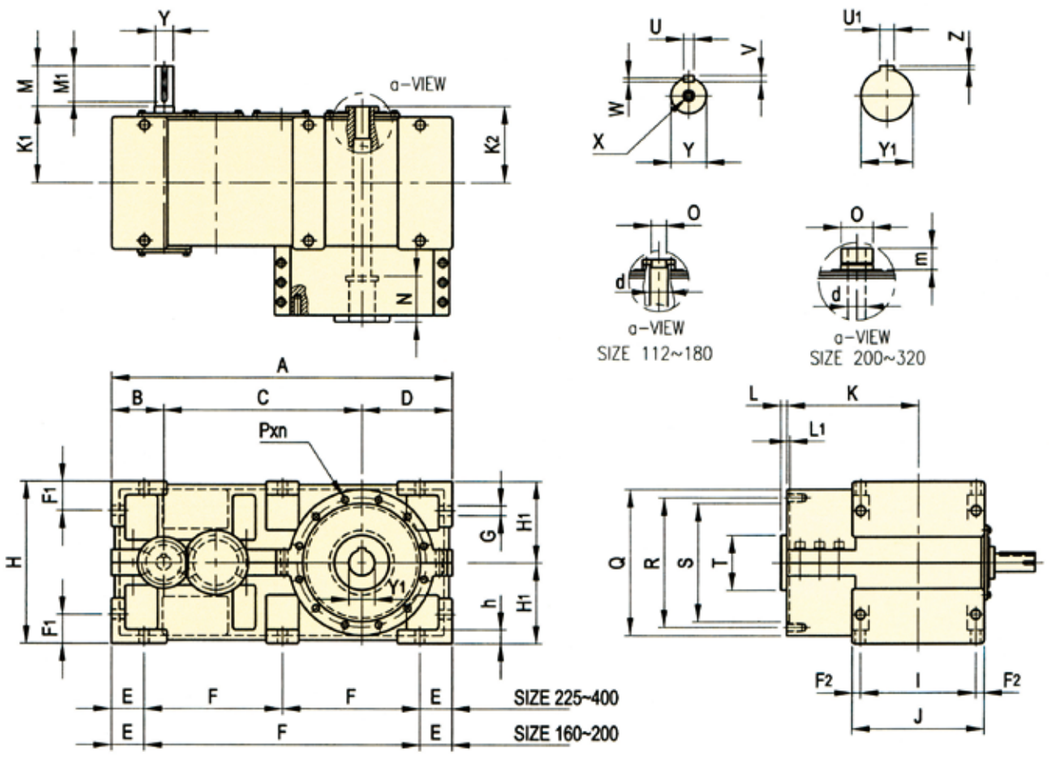


Size	A	B	C	D	E	F	F1	F2	G	H	H1	h	I	J	K	K1	K2	L	L1	M
112	397	70	202	125	45	307	42	12	14	224	112	16	160	184	180	115	115	8	5	56
125	445	80	225	140	50	345	45	12	16	250	125	17	180	204	205	130	130	8	5	63
140	502	90	252	160	56	390	48	15	18	280	140	18	200	230	215	145	145	8	5	70
160	565	100	285	180	63	439	50	15.5	20	320	160	21	225	256	250	160	160	17	6	80
180	632	112	320	200	70	492	60	18	22	360	180	26	250	286	275	175	175	17	6	90
200	710	125	360	225	80	550	70	20	24	400	200	31	280	320	320	190	190	18	6	100
225	795	140	405	250	90	615	80	22.5	27	450	225	36	315	360	355	210	210	18	6	112
250	890	160	450	280	100	345	90	26	30	500	250	42	355	407	405	235	235	20	8	125
280	1000	180	505	315	112	388	100	30	33	560	280	48	400	460	445	260	260	20	8	140
320	1125	200	570	355	125	437.5	112	35	36	630	315	50	450	520	490	290	290	20	8	160
360	1265	225	640	400	140	492.5	125	40	39	710	355	55	500	580	560	322	322	24	10	180
400	1420	250	720	450	160	550	140	45	42	800	400	60	560	650	640	370	370	24	10	200

Size	M1	m	N	n	O	P	d	Q	R	S_{H7}	T	U_{H9}	$U1_{H9}$	V	W	X	Y	$Y1_{H7}$	Z	Weight KG	Oil L
112	45		60	8	M14	M12	20	200	170	150	70	8	8	7	4	M6	24k6	28H7	3.3	78	3.5
125	50		80	8	M18	M12	22	230	205	180	80	8	10	7	4	M8	28k6	32H7	3.3	108	4.5
140	60		80	8	M18	M12	22	260	230	200	90	10	10	8	5	M8	32k6	38H7	3.3	150	6
160	70		80	8	M18	M16	26	300	260	230	110	10	12	8	5	M10	35k6	42H7	3.3	210	8
180	80		110	8	M24	M20	35	350	300	260	130	12	14	8	5	M10	40k6	48H7	3.8	310	12
200	90	40	110	8	M85	M20	45	380	330	290	140	14	18	9	5.5	M10	45k6	60H7	4.4	446	18
225	100	40	140	12	M85	M20	55	400	350	310	160	14	20	9	5.5	M12	50m6	70H7	4.9	575	24
250	110	40	140	12	M85	M24	55	450	400	365	170	16	22	10	6	M12	55m6	80H7	5.4	770	33
280	130	40	140	12	M90	M24	60	500	450	400	180	18	25	11	7	M12	60m6	90H7	5.4	1082	43
320	150	40	140	12	M90	M24	60	600	500	450	190	20	28	12	7.5	M16	70m6	100H7	6.4	1415	55
360	170	40	160	12	M120	M30	80	680	600	520	200	22	28	14	9	M16	80m6	110H7	6.4	2500	79
400	190	50	180	12	M120	M33	80	750	680	600	220	25	32	14	9	M20	90m6	125H7	7.4	3500	105

TEX-3P

Exterior dimensions



Size	A	B	C	D	E	F	F1	F2	G	H	H1	h	I	J	K	K1	K2	L	L1	M R<100	M R>100	M1 R<100	M1 R>100
160	665	100	385	180	63	539	50	15.5	20	320	160	21	225	256	250	160	160	17	6	70	63	60	50
180	744	112	432	200	70	604	60	18	22	360	180	26	250	286	275	175	175	17	6	80	70	70	60
200	835	125	485	225	80	675	70	20	24	400	200	31	280	320	320	190	190	18	6	90	80	80	70
225	935	140	545	250	90	377.5	80	22.5	27	450	225	36	315	355	360	210	210	18	6	100	90	90	80
250	1050	160	610	280	100	425	90	26	30	500	250	42	355	405	407	235	235	20	8	112	100	100	90
280	1180	180	685	315	112	478	100	30	33	560	280	48	400	445	460	260	260	20	8	125	112	110	100
320	1325	200	770	355	125	537.5	112	35	36	630	315	50	450	490	520	290	290	20	8	140	125	130	110
360	1490	225	865	400	140	605	125	40	39	710	355	55	500	560	560	322	322	24	10	160	140	150	130
400	1670	250	970	450	160	675	140	45	42	800	400	60	560	640	640	370	370	24	10	180	160	170	150

Size	m	N	n	d	O	P	Q	R	S_{H7}	T	Y R<100	U_{H9} R<100	V R<100	W R<100	Y R>100	U_{H9} R>100	V R>100	W R>100	X	$Y1_{H7}$	$U1_{H9}$	Z	Weight KG	Oil L
160		80	8	26	M18	M16	300	260	230	110	32k6	10	8	5	28k6	8	7	4	M8	42H7	12	3.3	260	10
180		110	8	25	M20	M20	350	300	260	130	35k6	10	8	5	32k6	10	8	5	M8	48H7	14	3.8	338	16
200	50	110	8	42	M85	M20	380	330	290	140	40k6	12	8	5	35k6	10	8	5	M10	60H7	18	4.4	490	22
225	50	140	12	55	M85	M20	400	350	310	160	45k6	14	9	5.5	40k6	12	8	5	M10	70H7	20	4.9	656	28
250	50	140	12	55	M85	M24	450	400	365	170	50m6	14	9	5.5	45k6	14	9	5.5	M10	80H7	22	5.4	900	36
280	50	140	12	60	M90	M24	500	450	400	180	55m6	16	10	6	50m6	14	9	5.5	M12	90H7	25	5.4	1300	47
320	50	140	12	60	M90	M24	600	500	450	190	60m6	18	11	7	55m6	16	10	6	M12	100H7	28	6.4	1890	60
360	50	160	12	80	M120	M30	680	600	520	200	70m6	20	12	7.5	60m6	18	11	7	M12	110H7	28	6.4	2820	85
400	50	180	12	80	M120	M33	750	680	600	220	80m6	22	14	9	70m6	20	12	7.5	M16	125H7	32	7.4	4020	115

Table of gear reducer rated power of transmission and rated torque

i	Gr./Size	112			125			140			160		
	n1 rpm	n2 rpm	MN daNm	PN kW	Pt kW	MN daNm	PN kW	Pt kW	MN daNm	PN kW	Pt kW	MN daNm	PN kW	Pt kW
6.3	1450	230	196	45	25	246	59	35	311	75	42	429	101	56
	1000	159	196	31	25	248	41	35	312	52	42	437	71	56
	700	111	199	22	25	250	29	35	309	36	42	440	50	56
7.1	1450	204	202	41	25	256	55	35	351	75	42	456	101	56
	1000	141	207	29	25	257	38	35	352	52	42	464	71	56
	700	99	205	20	25	261	27	35	347	36	42	467	50	56
8	1450	181	208	37	25	262	53	35	396	75	42	516	101	56
	1000	125	212	26	25	265	37	35	397	52	42	526	71	56
	700	87	210	18	25	266	26	35	395	36	42	529	50	56
9	1450	161	214	35	25	279	50	35	406	66	42	589	101	56
	1000	111	217	24	25	275	34	35	410	46	42	600	71	56
	700	78	219	19	25	277	24	35	420	33	42	604	50	56
10	1450	145	211	30	25	278	44	35	428	59	42	618	90	56
	1000	100	214	21	25	284	31	35	433	41	42	626	63	56
	700	70	216	15	25	287	22	35	437	29	42	633	45	56
11.2	1450	129	207	27	25	281	39	35	420	54	42	607	82	56
	1000	89	209	19	25	282	27	35	425	38	42	614	58	56
	700	62	211	13	25	284	19	35	429	27	42	621	41	56
12.5	1450	116	195	22	25	295	37	35	445	49	42	578	67	56
	1000	80	197	15	25	298	26	35	450	34	42	585	47	56
	700	56	198	11	25	301	18	35	454	24	42	590	33	56
14	1450	104	222	22	22	282	31	30	432	43	38	627	62	50
	1000	71	225	15	22	285	21	30	437	30	38	633	43	50
	700	50	226	11	22	287	15	30	440	21	38	639	31	50
16	1450	91	214	19	22	304	26	30	424	40	38	615	57	50
	1000	62	216	13	22	307	18	30	428	28	38	621	40	50
	700	44	218	9	22	309	13	30	432	20	38	627	28	50
18	1450	80	209	17	22	299	24	30	403	32	38	585	46	50
	1000	55	211	12	22	302	19	30	407	23	38	591	32	50
	700	39	213	8	22	304	12	30	410	16	38	596	23	50
20	1450	72	197	14	22	285	20	30	388	38	38	567	41	50
	1000	50	199	9	22	288	14	30	395	20	38	573	29	50
	700	35	200	7	22	290	10	30	398	14	38	577	20	50
22.5	1450	64	190	12	22	277	18	30	376	25	38	588	39	50
	1000	44	191	8	22	280	13	30	380	17	38	593	27	50
	700	31	193	6	22	281	9	30	382	12	38	598	19	50
25	1450	58	198	11	22	278	17	30	406	24	38	570	34	50
	1000	40	199	8	22	280	12	30	410	17	38	575	24	50
	700	28	201	5	22	282	8	30	413	12	38	577	20	50

I : Reduction ratio
n 1 : Speed of input shaft
n 2 : Speed of output shaft
MN: Torque of output shaft
P N : Rated power
P t : Power of heat efficiency

TEX-2P

Table of gear reducer rated power of transmission and rated torque

i	Gr./Size	180			200			225			250		
	n1 rpm	n2 rpm	MN daNm	PN kW	Pt kW	MN daNm	PN kW	Pt kW	MN daNm	PN kW	Pt kW	MN daNm	PN kW	Pt kW
6.3	1450	230	583	137	72	841	202	88	1192	281	110	1599	384	137
	1000	159	579	96	72	839	139	88	1187	193	110	1600	265	137
	700	111	577	68	72	836	97	88	1186	135	110	1595	185	137
7.1	1450	204	656	137	72	946	202	88	1342	281	110	1900	384	137
	1000	141	652	96	72	944	139	88	1337	193	110	1901	265	137
	700	99	650	68	72	941	97	88	1336	135	110	1896	185	137
8	1450	181	742	137	72	1071	202	88	1517	281	110	2018	384	137
	1000	125	738	96	72	1068	139	88	1512	193	110	2020	265	137
	700	87	736	68	72	1066	97	88	1510	135	110	2014	185	137
9	1450	161	828	137	72	1143	189	88	1587	258	110	2080	349	137
	1000	111	842	96	72	1157	132	88	1605	180	110	2108	244	137
	700	78	851	68	72	1177	94	88	1631	128	110	2136	173	137
10	1450	145	848	122	72	1198	168	88	1607	244	110	2125	312	137
	1000	100	857	85	72	1215	118	88	1623	170	110	2163	219	137
	700	70	864	60	72	1229	83	88	1650	121	110	2186	155	137
11.2	1450	129	851	111	72	1176	154	88	1608	207	110	2147	294	137
	1000	89	862	78	72	1192	108	88	1631	145	110	2182	206	137
	700	62	871	55	72	1205	76	88	1650	103	110	2209	146	137
12.5	1450	116	902	101	72	1247	139	88	1572	187	110	2128	246	137
	1000	80	913	70	72	1263	97	88	1594	131	110	2158	172	137
	700	56	922	50	72	1276	69	88	1612	93	110	2183	122	137
14	1450	104	877	90	65	1212	124	81	1686	179	101	2291	230	124
	1000	71	887	63	65	1227	86	81	1708	125	101	2322	161	124
	700	50	895	44	65	1232	61	81	1726	89	101	2348	113	124
16	1450	91	860	81	65	1190	113	81	1628	153	101	2252	21	124
	1000	62	870	57	65	1204	79	81	1648	107	101	2281	151	124
	700	44	878	40	65	1215	56	81	1664	75	101	2306	107	124
18	1450	80	819	67	65	1133	92	81	1591	138	101	254	181	124
	1000	55	828	46	65	1145	64	81	1610	96	101	2480	126	124
	700	39	835	33	65	1156	45	81	1625	68	101	2203	89	124
20	1450	72	794	59	65	1098	82	81	1643	115	101	2094	163	124
	1000	50	802	41	65	1110	57	81	1661	84	101	2119	113	124
	700	35	809	29	65	1120	40	81	1676	57	101	2141	80	124
22.5	1450	64	766	52	65	1058	71	81	1606	104	101	2175	137	124
	1000	44	774	36	65	1069	50	81	1623	73	101	2199	96	124
	700	31	780	25	65	1079	35	81	1637	51	101	2219	68	124
25	1450	58	826	50	65	1143	70	81	1563	94	101	2114	123	124
	1000	40	834	35	65	1154	49	81	1579	65	101	2137	86	124
	700	28	840	25	65	1163	34	81	1593	46	101	2156	61	124

I : Reduction ratio
n 1 : Speed of input shaft
n 2 : Speed of output shaft
MN: Torque of output shaft
P N : Rated power
P t : Power of heat efficiency

TEX-2P

Table of gear reducer rated power of transmission and rated torque

Gr./Size			280			320			360			400		
i	n1 rpm	n2 rpm	MN daNm	PN kW	Pt kW	MN daNm	PN kW	Pt kW	MN daNm	PN kW	Pt kW	MN daNm	PN kW	Pt kW
6.3	1450	230	2334	559	168	3263	768	210	5089	1250	245	7138	1750	300
	1000	159	2331	385	168	3321	539	210	5089	862	245	7133	1206	300
	700	111	2327	269	168	3371	383	210	5085	603	245	7131	844	300
7.1	1450	204	2636	559	168	3687	768	210	5911	1250	245	7742	1750	300
	1000	141	2634	385	168	3754	539	210	5911	862	245	7736	1206	300
	700	99	2629	269	168	3810	383	210	5907	603	245	7734	844	300
8	1450	181	2810	559	168	3926	768	210	6399	1250	245	8848	1750	300
	1000	125	2807	385	168	3993	539	210	6399	862	245	8841	1206	300
	700	87	2801	269	168	4055	383	210	6394	603	245	8839	844	300
9	1450	161	2991	522	168	4476	768	210	7364	1239	245	10129	1708	300
	1000	111	3041	366	168	4555	539	210	7464	855	245	10121	1177	300
	700	78	3086	260	168	4624	383	210	7362	598	245	10122	724	300
10	1450	145	3056	464	168	4581	684	210	7267	1133	245	9959	1543	300
	1000	100	3113	326	168	4662	480	210	7267	781.4	245	9958	1064	300
	700	70	3151	231	168	4731	341	210	7268	547	245	9947	744	300
11.2	1450	129	3078	425	168	4613	627	210	7145	1029	245	10382	1477	300
	1000	89	3127	298	168	4689	439	210	7145	709.7	245	10376	1018	300
	700	62	3168	211	168	4753	312	210	7146	496.8	245	10382	713	300
12.5	1450	116	2935	346	168	4400	510	210	7095	916	245	10099	1217	300
	1000	80	2979	242	168	4469	358	210	7094	631.7	245	10096	839	300
	700	56	3016	172	168	4528	254	210	7095	442.2	245	10091	587	300
14	1450	104	2848	309	155	4271	455	187	7230	799	230	10341	1121	290
	1000	71	2890	216	155	4336	319	187	7229	551	230	10339	773	290
	700	50	2925	153	155	4391	226	187	7229	385.7	230	10337	541	290
16	1450	91	3129	293	155	4692	433	187	7078	720	230	10161	1012	290
	1000	62	3171	205	155	4758	303	187	7079	496.6	230	10147	697	290
	700	44	3206	146	155	4814	215	187	7078	347.6	230	10149	755	290
18	1450	80	2981	239	155	4472	352	187	7257	615	230	10220	877	290
	1000	55	3019	167	155	4532	246	187	7254	424	230	10207	604	290
	700	39	3051	118	155	4583	174	187	7257	296.9	230	10211	423	290
20	1450	72	2892	213	155	4339	315	187	7140	557	230	9998	785	290
	1000	50	2928	148	155	4395	219	187	7138	384	230	9991	541	290
	700	35	2958	105	155	4443	155	187	7140	268.9	230	9999	379	290
22.5	1450	64	3030	201	155	4546	297	187	6950	497	230	9733	696	290
	1000	44	3065	140	155	4602	207	187	6951	342.8	230	9733	480	290
	700	31	3095	99	155	4648	147	187	6950	239.9	230	9733	336	290
25	1450	58	3011	181	155	4519	267	187	6761	423	230	9655	619	290
	1000	40	3046	126	155	4573	187	187	6760	291.7	230	9635	426	290
	700	28	3074	89	155	4618	132	187	6760	204.2	230	9629	298	290

I : Reduction ratio
n 1 : Speed of input shaft
n 2 : Speed of output shaft
MN: Torque of output shaft
P N : Rated power
P t : Power of heat efficiency

TEX-3P

Table of gear reducer rated power of transmission and rated torque

Gr./Size			160			180			200			225		
i	n1 rpm	n2 rpm	MN daNm	PN kW	Pt kW	MN daNm	PN kW	Pt kW	MN daNm	PN kW	Pt kW	MN daNm	PN kW	Pt kW
28	1450	52	666	37.2	38	898	51.5	50	1302	72.5	63	1786	103	83
	1000	36	667	25.7	35	898	35.5	47	1302	50	60	1785	71	79
	700	25	667	18	33	900	24.9	44	1302	35	57	1785	49.7	75
31.5	1450	46	653	33.7	38	945	47	50	1283	66.2	63	1766	87.9	83
	1000	32	652	23.2	35	945	32.4	47	1284	45.7	60	1766	60.6	79
	700	22	654	16.3	33	946	22.7	44	1284	32	57	1765	42.4	75
35.5	1450	41	670	29.1	38	925	42.5	50	1320	61.5	63	1801	80.9	83
	1000	28	667	20	35	925	29.3	47	1320	42.4	60	1802	55.8	79
	700	20	667	14	33	925	20.5	44	1321	29.7	57	1799	39	75
40	1450	36	658	26.4	38	949	36.2	50	1288	51.7	63	1776	68.8	83
	1000	25	658	18.2	35	950	25	47	1290	35.7	60	1774	47.4	79
	700	17.5	656	12.7	33	950	17.5	44	1290	25	57	1775	33.2	75
45	1450	32	674	24.2	38	931	32.8	50	1264	46.3	63	1739	62.3	83
	1000	22	674	16.7	35	930	22.6	47	1263	31.9	60	1740	43	79
	700	15.5	675	11.7	33	929	15.8	44	1267	22.4	57	1734	30	75
50	1450	29	662	20.7	38	935	27.8	50	1291	40	63	1816	58.2	83
	1000	20	663	14.3	35	936	19.2	47	1298	27.6	60	1809	40	79
	700	14	662	10	33	934	13.4	44	1297	19.3	57	1809	28	75
56	1450	26	646	18.6	38	913	25	50	1270	36.2	63	1746	48	83
	1000	18	645	12.8	35	911	17.2	47	1272	25	60	1751	33.2	79
	700	12.5	648	9	33	916	12.1	44	1272	17.5	57	1748	23.2	75
63	1450	23	662	17.1	38	912	23.1	50	1295	33	63	1789	44	83
	1000	16	662	11.8	35	910	15.9	47	1297	22.8	60	1787	30.3	79
	700	11	665	8.3	33	916	11.2	44	1300	16	57	1786	21.2	75
71	1450	20.4	670	14.7	38	939	21.8	50	1245	27	63	1755	39.9	83
	1000	14	668	10.1	35	937	15	47	1244	18.6	60	1754	27.5	79
	700	10	671	7.1	33	937	10.5	44	1242	13	57	1758	19.3	75
80	1450	18	649	13.1	38	893	17.5	50	1281	26	63	1755	35	83
	1000	12.5	647	9	35	896	12.1	47	1279	17.9	60	1760	24.2	79
	700	8.7	647	6.3	33	888	8.4	44	1286	12.6	57	1756	16.9	75
90	1450	16	633	11.7	38	862	15.4	50	1214	20.8	63	1761	30.7	83
	1000	11	635	8.1	35	860	10.6	47	1210	14.3	60	163	21.2	79
	700	7.8	627	5.6	33	858	7.4	44	1209	10	57	1758	14.8	75
100	1450	14.5	648	10.2	38	893	14.5	50	1252	19.2	63	1718	27.6	83
	1000	10	645	7	35	893	10	47	1248	13.2	60	1715	19	79
	700	7	645	4.9	33	893	7	44	1256	9.3	57	1715	13.3	75
112	1450	13	644	8.6	38	864	12.8	50	1216	17.1	63	1725	24.3	83
	1000	9	641	5.9	35	862	8.8	47	1217	11.8	60	1729	16.7	79
	700	6.2	651	4.2	33	867	6.2	44	1213	8.3	57	1720	11.7	75
125	1450	11.6	644	8.6	38	821	10.6	50	1177	15.1	63	1671	21.6	83
	1000	8	641	5.9	35	820	7.3	47	1175	10.4	60	1671	14.9	79
	700	5.6	651	4.2	33	818	5.1	44	1178	7.3	57	1667	10.4	75

I : Reduction ratio
n 1 : Speed of input shaft
n 2 : Speed of output shaft
MN: Torque of output shaft
P N : Rated power
P t : Power of heat efficiency

TEX-3P

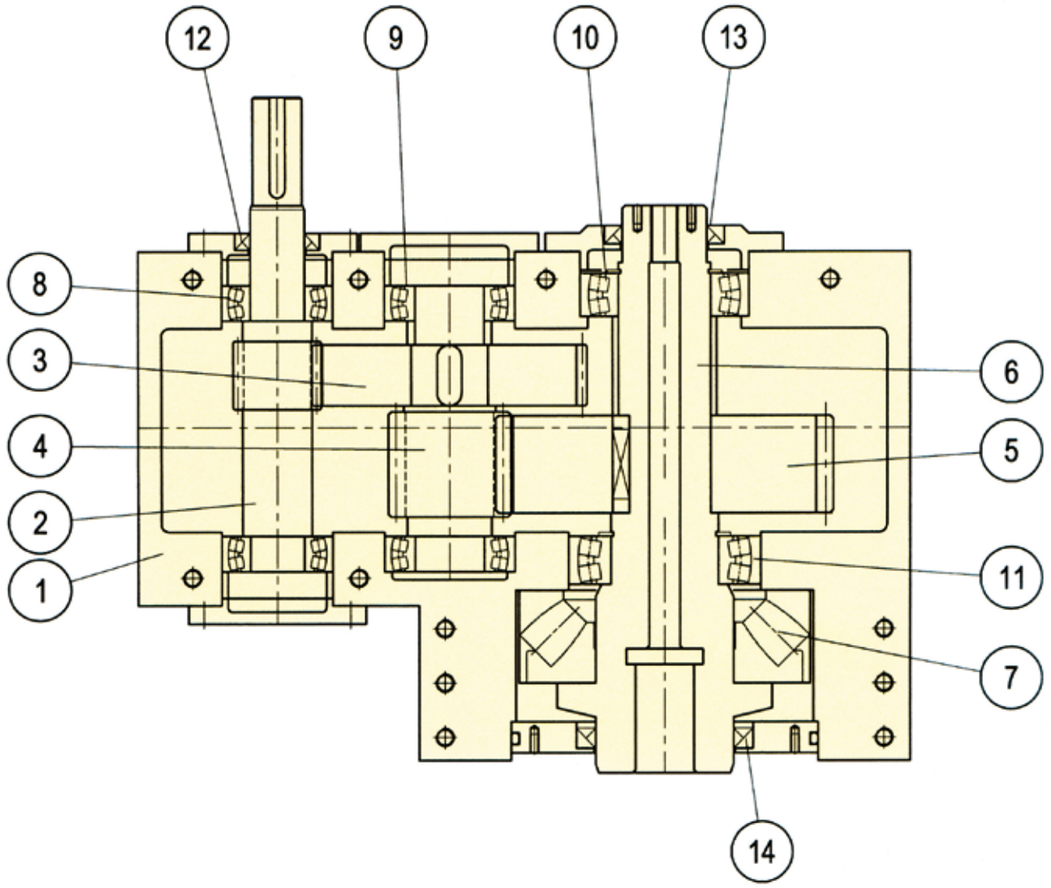
Table of gear reducer rated power of transmission and rated torque

Gr./Size			250			280			320			360			400		
i	n1	n2	MN	PN	Pt	MN	PN	Pt	MN	PN	Pt	MN	PN	Pt	MN	PN	Pt
	rpm	rpm	daNm	kW	kW	daNm	kW	kW	daNm	kW	kW	daNm	kW	kW	daNm	kW	kW
28	1450	52	2488	138.5	103	3595	209	130	5191	290	167	7029	403	206	10489	609	252
	1000	36	2487	95.5	98	3591	144	124	5191	200	160	7028	227.9	196	10489	420	242
	700	25	2489	66.9	94	3595	100.9	120	5191	140	154	7031	194.6	189	10489	294	234
31.5	1450	46	2451	126.4	103	3489	173.4	130	5098	263	167	7382	367	206	10167	500	252
	1000	32	2452	87.2	98	3490	119.6	124	5098	181.4	160	7379	253	196	10142	344	242
	700	22	2450	61	94	3489	83.7	120	5099	127	154	7375	177	189	10151	241	234
35.5	1450	41	2505	108.7	103	3621	164.4	130	5224	227	167	7251	333	206	10563	477	252
	1000	28	2506	75	98	3621	113.4	124	5226	156.6	160	7253	229.7	196	10564	329	242
	700	20	2506	52.5	94	3622	79.4	120	5225	109.6	154	7253	160.8	189	10550	230	234
40	1450	36	2468	99.2	103	3512	136.3	130	5134	206	167	7445	284	206	10424	434	252
	1000	25	2467	68.4	98	3512	94	124	5131	142	160	7446	195.9	196	10413	299	242
	700	17.5	2468	47.9	94	3512	65.8	120	5131	99.4	154	7439	137	189	10398	209	234
45	1450	32	2425	90	103	3588	125	130	5262	189	167	7313	257.7	206	10000	350	252
	1000	22	2422	62	98	3588	86.2	124	5261	130.3	160	7312	177.7	196	9984	241	242
	700	15.5	2422	43.4	94	3586	60.3	120	5260	71.2	154	7312	124.4	189	10002	169	234
50	1450	29	2480	82.5	103	3530	113.5	130	5174	161.8	167	7332	218	206	9725	310	252
	1000	20	2480	56.9	98	3531	78.3	124	5174	111.6	160	7330	150.3	196	9689	213	242
	700	14	2478	39.8	94	3530	54.8	120	5166	78	154	7329	105.2	189	968	149	234
56	1450	26	2381	67.3	103	3454	96	130	5060	145.6	167	7180	195.5	206	10312	303	252
	1000	18	2380	46.4	98	3454	66.2	124	5059	100.4	160	7179	135.5	196	10313	209	242
	700	12.5	2382	32.5	94	3451	46.3	120	5060	70.3	154	7183	94.9	189	10292	146	234
63	1450	23	2379	60	103	3547	88.8	130	5192	134.2	167	7185	182	206	10335	251	252
	1000	16	2380	41.4	98	3544	61.2	124	5194	92.6	160	7184	125.5	196	10329	173	242
	700	11	2382	29	94	3549	42.9	120	5193	64.8	154	7188	87.9	189	10320	121	234
71	1450	20.4	2395	52	103	3474	80	130	4947	107.7	167	6998	162.5	206	10125	225	252
	1000	14	2397	35.9	98	3476	55.2	124	4943	74.3	160	6994	112	196	10113	155	242
	700	10	2395	25.1	94	3472	38.6	120	4942	52	154	6994	78.4	189	10067	108	234
80	1450	18	2395	46.4	103	3481	66.3	130	5105	100	167	7238	140.6	206	9833	199	252
	1000	12.5	2395	32	98	3479	45.7	124	5108	69	160	7241	97	196	9815	137	242
	700	8.7	2395	22.4	94	3480	32	120	5108	48.3	154	7241	67.9	189	9825	96	234
90	1450	16	2326	41.3	103	3393	59.2	130	4970	89.2	167	7042	125.4	206	9864	172	252
	1000	11	2328	28.5	98	3391	40.8	124	4968	61.5	160	7044	86.5	196	9813	118	242
	700	7.8	2322	19.9	94	3395	28.6	120	4962	43	154	7038	60.5	189	9860	83	234
100	1450	14.5	2336	36.3	103	3404	54	130	4814	78.8	167	7053	114.5	206	10180	160	252
	1000	10	2333	25	98	3401	37.2	124	4810	54.3	160	7056	79	196	10148	110	242
	700	7	2333	17.5	94	3395	26	120	4809	38	154	7056	55.3	189	10148	77	234
112	1450	13	2337	32.4	103	3401	47.3	130	4982	74	167	7062	104.2	206	9921	142	252
	1000	9	2332	22.3	98	3398	32.6	124	4978	51	160	7066	71.9	196	9928	98	242
	700	6.2	2330	15.6	94	3395	22.8	120	4992	35.8	154	7062	50.3	189	9914	68.5	234
125	1450	11.6	2262	28.6	103	3296	41.8	130	4835	65.5	167	7068	94.8	206	9565	124	252
	1000	8	2286	19.7	98	3293	28.8	124	4838	45.2	160	7070	65.4	196	9564	85.5	242
	700	5.6	2260	13.8	94	3300	20.2	120	4832	31.6	154	7073	45.8	189	9588	60	234

I : Reduction ratio
n 1 : Speed of input shaft
n 2 : Speed of output shaft
MN: Torque of output shaft
P N : Rated power
P t : Power of heat efficiency

TEX-2P

Structure

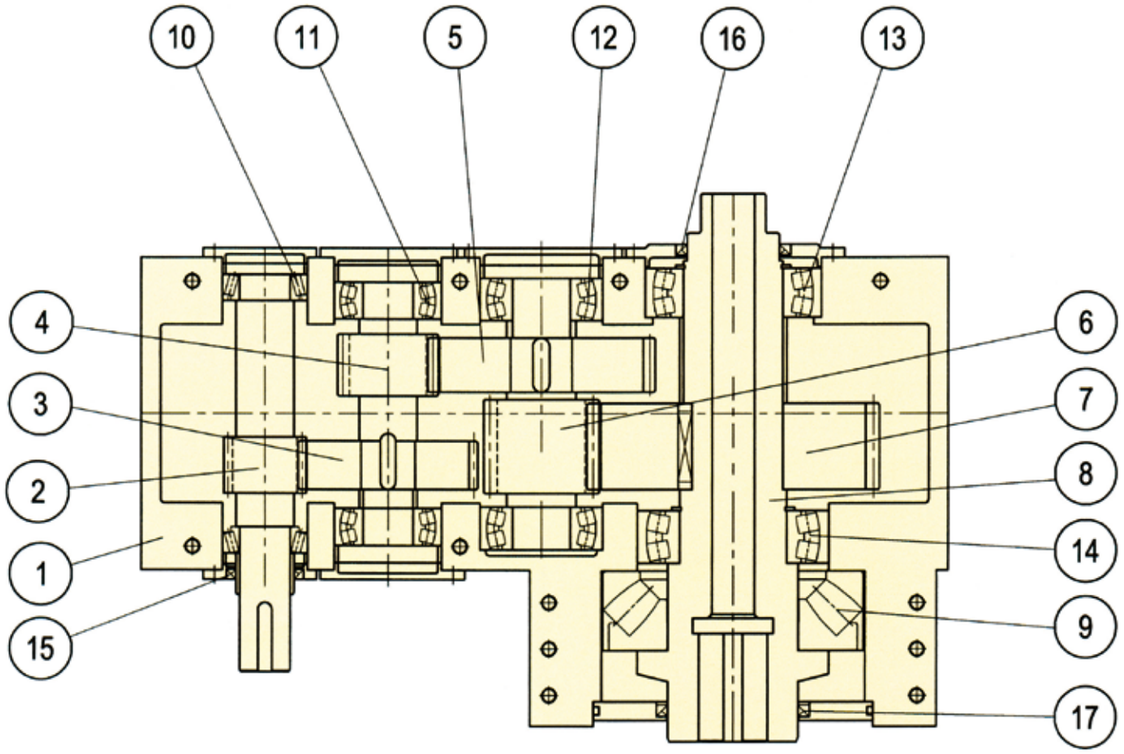


PART NUMBER	PART NAME
1	Gear box
2	Input shaft
3	Bevel gear
4	Gear shaft
5	Bevel gear
6	Output shaft
7	Thrust bearing

PART NUMBER	PART NAME
8	Bearing
9	Bearing
10	Bearing
11	Bearing
12	Oil seal
13	Oil seal
14	Oil seal

TEX-3P

Structure



PART NUMBER	PART NAME
1	Gear box
2	Input shaft
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4	Gear shaft
5	Bevel gear
6	Gear shaft
7	Bevel gear
8	Output shaft
9	Thrust bearing

PART NUMBER	PART NAME
10	Bearing
11	Bearing
12	Bearing
13	Bearing
14	Bearing
15	Oil seal
16	Oil seal
17	Oil seal

Lubrication

1. Lubrication by oil bath splash

Apply lubrication to TEX-2P112 ~ TEX-2P140 gear box by oil bath splash.

2. Forced lubrication

1. For TEX-2P125~TEX-2P180 gear boxes, apply PUMP forced lubrication working with internal cooling pipes, as Fig. 1 shows.
2. For TEX-2P200 gear boxes, apply PUMP forced lubrication working with exterior cooler, as Fig. 2 shows.
3. For TEX-2P225~TEX-2P400, apply motor and PUMP forced lubrication working with exterior cooler, as Fig. 3 shows.
4. For TEX-3P gear reducer, apply the lubrication same as for TEX-2P gear reducer.

Gr.	A	øB	C	Thread
125	80	12	35	3/8
140	80	12	35	3/8
160	90	12	40	3/8
180	100	12	40	3/8

Fig. 1

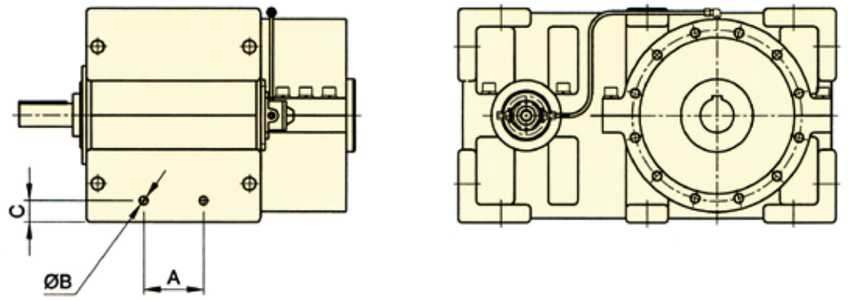

Fig. 2

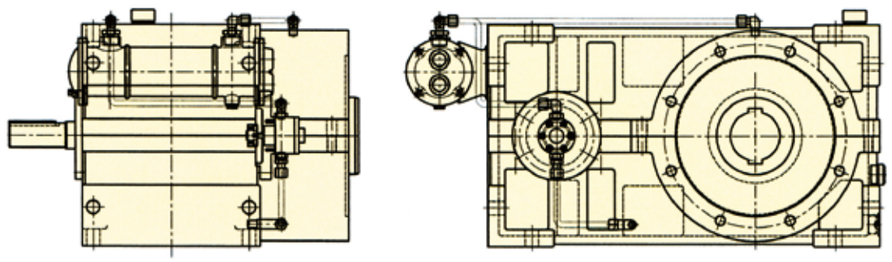

Fig. 3