

## 2.5 Velocità in entrata

Tutte le prestazioni dei riduttori sono calcolate in base ad una velocità in entrata di  $1400 \text{ min}^{-1}$ .

Tutti i riduttori ammettono velocità fino a  $3000 \text{ min}^{-1}$  anche se è consigliabile, dove l'applicazione lo permette, utilizzare valori inferiori a  $1400 \text{ min}^{-1}$ .

Nella tabella sottostante riportiamo i coefficienti correttivi della potenza in entrata P alle varie velocità riferita ad  $F_s = 1$

## 2.5 Input speed

All calculations of gear unit performance are based on an input speed of  $1400 \text{ min}^{-1}$ .

All gear units permit speed up to  $3000 \text{ min}^{-1}$ , nevertheless it is advisable to keep below  $1400 \text{ min}^{-1}$ , depending on application.

The table below reports input power P corrective coefficients at the various speeds, with  $F_s = 1$ .

## 2.5 Antriebsdrehzahl

Bei der Berechnung der Getriebeleistungen wurde eine Antriebsdrehzahl von  $1400 \text{ min}^{-1}$  berücksichtigt.

Bei allen Getriebe sind Antriebsdrehzahlen bis  $3000 \text{ min}^{-1}$  möglich; es ist jedoch ratsam, die Drehzahlen unter  $1400 \text{ min}^{-1}$  zu halten, wenn die Anwendung es ermöglicht.

In der folgenden Tabelle finden Sie die Korrekturkoeffizienten für die Antriebsleistung P bei den verschiedenen Drehzahlen, bezogen auf  $F_s = 1$ .

Tab. 1

$n_1$ (rpm)	3000	2800	2200	1800	1400	900	700	500
Pc (kW)	P x 1.9	P x 1.8	P x 1.48	P x 1.24	P x 1	P x 0.7	P x 0.56	P x 0.42

## 2.6 Rendimento

Il valore del rendimento dei riduttori può essere stimato con sufficiente approssimazione in base al numero di riduzioni, trascurando le variazioni non significative attribuibili alle varie grandezze e rapporti.

## 2.6 Efficiency

The efficiency value of the gear units can be estimated sufficiently well on the basis of the number of reduction stages, ignoring non-significant variations which can be attributed to the various sizes and ratios.

## 2.6 Wirkungsgrad

Der Wirkungsgrad der Getriebe kann mit ausreichender Annäherung aufgrund der Anzahl der Untersetzungsstufen ermittelt werden, dabei können die unwesentlichen Veränderungen, die auf die verschiedenen Größen und Untersetzungsverhältnisse zurückzuführen sind, außer acht gelassen werden.

	T...B	T...C
	0.95	0.93

## 2.7 Potenza termica

I valori delle potenze termiche,  $P_{T0}$  (kW), relative alle diverse grandezze di riduttori ortogonali sono riportati nella tabella seguente in funzione della velocità di rotazione in entrata del riduttore

## 2.7 Thermal power

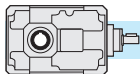
The following table shows the values of thermal power  $P_{T0}$  (kW) for each gearbox size on the basis of rotation speed at gearbox input.

## 2.7 Thermische Leistung

Die folgende Tabelle enthält die Werte  $P_{T0}$  der thermischen Leistung (kW) je nach Getriebegröße und abhängig von Drehzahlen am Getriebeantrieb.

Tab. 2

Potenza Termica / Thermal power / Thermische Leistung $P_{T0}$ [kW]		
T	$n_1$ [ $\text{min}^{-1}$ ]	
	1400	2800
T56B	4.0	3.4
T63B	5.5	4.7
TA71B	4.4	3.8
TA90B	6.7	5.7
TA112B	10.1	8.6
TA140B	15.2	12.9
TA180B	24.6	20.9
TA200B	31.5	26.8
TA225B	39.9	33.9
T56C	3.3	2.8
T63C	4.2	3.6
TA80C	5.0	4.3
TA100C	7.6	6.5
TA125C	11.5	9.8
TA160C	18.3	15.6
TA180C	22.9	19.4
TA200C	29.9	25.4



2.8 Dati tecnici

2.8 Technical data

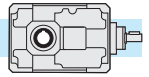
2.8 Technische Daten

T	n <sub>1</sub> = 1400			TC - TF				TA	
	in	ir	n <sub>2</sub> rpm	T <sub>2</sub> Nm	P1 kW	FS'	IEC	T <sub>2M</sub> Nm	P kW
56B	8	8.06	174	94	1.8	1.2		110	2.1
	10	10.17	138	119	1.8	1.0	56	120	1.8
	12.5	12.31	114	120	1.5	1.1	63 (B5)	130	1.6
	16	15.00	93	107	1.1	1.3	71	140	1.4
	20	20.33	69	119	0.9	1.2	80	140	1.1
	25	24.62	57	120	0.75	1.2	90 (B5)	140	0.90
	31.5	30.00	47	107	0.55	1.3	(B14)	140	0.70
	40	39.38	36	140	0.55	1.0	TF	140	0.55
	50	48.00	29	115	0.37	1.2		140	0.45
56C	40	40.28	35	95	0.37	1.4		135	0.53
	50	50.83	28	119	0.37	1.2	56	140	0.43
	63	61.54	23	98	0.25	1.4	63 (B5)	140	0.36
	80	75.00	19	119	0.25	1.2	71	145	0.30
	100	101.67	14	116	0.18	1.2	80	145	0.22
	125	123.08	11	141	0.18	1.0	90 (B5)	145	0.19
	160	150.00	9	124	0.13	1.2	(B14)	145	0.15
	200	196.92	7	112	0.09	1.3	TF	145	0.10
250	240.00	6	137	0.09	1.1		150	0.10	
63B	8	7.94	176	93	1.8	1.7		155	3.0
	10	10.18	138	119	1.8	1.4	56	170	2.6
	12.5	12.50	112	146	1.8	1.3	63 (B5)	185	2.3
	16	15.88	88	185	1.8	1.1	71	200	1.9
	20	20.36	69	198	1.5	1.0	80	200	1.5
	25	25.00	56	178	1.1	1.1	90 (B5)	200	1.2
	31.5	31.00	45	181	0.9	1.1	(B14)	200	1.0
	40	40.00	35	194	0.75	1.0	TF	200	0.80
	50	49.60	28	177	0.55	1.1		200	0.60
63	60.80	23	146	0.37	1.2		170	0.40	
63C	40	39.71	35	189	0.75	1.1		200	0.79
	50	50.89	28	178	0.55	1.2	56	210	0.65
	63	62.50	22	147	0.37	1.4	63 (B5)	210	0.53
	80	79.41	18	186	0.37	1.1	71	210	0.42
	100	101.79	14	161	0.25	1.3	80	210	0.33
	125	125.00	11	198	0.25	1.1	90 (B5)	210	0.26
	160	155.00	9	177	0.18	1.2	(B14)	210	0.21
	200	200.00	7	165	0.13	1.3	TF	210	0.17
	250	248.00	6	205	0.13	1.0		210	0.13
315	304.00	5	174	0.09	1.0		180	0.09	
71B	10	10.25	137	120	1.8	1.9		230	3.5
	12.5	13.05	107	152	1.8	1.6	63	240	2.8
	16	15.63	90	182	1.8	1.4	71	250	2.5
	20	19.64	71	229	1.8	1.3	80	290	2.3
	25	24.99	56	243	1.5	1.2	90 (B5)	280	1.7
	31.5	29.95	47	213	1.1	1.2	TC-TF	260	1.3
	40	38.73	36	226	0.9	1.1	80	240	1.0
	50	50.18	28	244	0.75	1.1	(B14)	260	0.80
	63	60.13	23	214	0.55	1.2	TC	260	0.70
80	77.76	18	186	0.37	1.3		240	0.50	

T	n <sub>1</sub> = 1400			TC - TF				TA	
	in	ir	n <sub>2</sub> rpm	T <sub>2</sub> Nm	P1 kW	FS'	IEC	T <sub>2M</sub> Nm	P kW
90B	5*	4.56	307	118	4	3.2		380	12.8
	6.3*	6.26	224	162	4	2.5		405	10.0
	10	10.25	137	266	4	1.8	71	480	7.2
	12.5	13.05	107	338	4	1.6	80	530	6.3
	16	15.63	90	405	4	1.4	90	550	5.4
	20	19.64	71	509	4	1.2	100	620	4.9
	25	24.99	56	486	3	1.3	112 (B5)	630	3.9
	31.5	29.95	47	427	2.2	1.3	TC-TF	560	2.9
	40	38.73	36	452	1.8	1.1	90 (B14)	500	2.0
80C	50	50.18	28	488	1.5	1.1	TC	550	1.7
	63	60.13	23	429	1.1	1.3		570	1.5
	80	77.76	18	454	0.9	1.1		505	1.0
	50	52.18	27	596	1.8	1.1		660	2.0
	63	62.53	22	595	1.5	1.1		680	1.7
	80	79.58	18	555	1.1	1.3	63	710	1.4
	100	99.97	14	698	1.1	1.1	71	740	1.2
	125	119.78	12	684	0.9	1.1	80 (B5)	740	1.0
112B	160	152.45	9	532	0.55	1.3	TC-TF	680	0.70
	200	182.67	8	637	0.55	1.1	80 (B14)	700	0.60
	250	240.51	6	565	0.37	1.3		750	0.49
	315	306.11	5	719	0.37	1.0	TC	740	0.38
	400	366.78	4	582	0.25	1.2		700	0.30
	500	474.35	3	542	0.18	1.2		660	0.22
	630	613.46	2	506	0.13	1.2		620	0.16
	5*	4.86	288	290	9.2	1.5		440	14.0
	10	10.25	137	611	9.2	1.5		920	13.9
12.5	13.05	107	778	9.2	1.3		1000	11.8	
16	15.63	90	932	9.2	1.2	80	1100	10.9	
20	19.64	71	1171	9.2	1.0	90	1190	9.4	
25	24.99	56	1215	7.5	1.1	100	1190	9.4	
31.5	29.95	47	1067	5.5	1.1	112	1280	7.9	
40	38.73	36	1004	4	1.0	132 (B5)	1220	6.3	
50	50.18	28	976	3	1.1	TC-TF	1050	4.2	
63	60.13	23	857	2.2	1.4		1070	3.3	
80	77.76	18	907	1.8	1.2		1240	3.2	
100C	50	52.18	27	993	3	1.3		1300	3.9
	63	62.53	22	1190	3	1.1	71	1350	3.4
	80	79.58	18	1111	2.2	1.3	80	1410	2.8
	100	99.97	14	1395	2.2	1.1	90	1470	2.3
	125	119.78	12	1368	1.8	1.1	100	1470	2.3
	160	152.45	9	1064	1.1	1.3	112 (B5)	1480	1.9
	200	182.67	8	1275	1.1	1.1	TC-TF	1360	1.4
	250	240.51	6	1144	0.75	1.3		1400	1.2
	315	306.11	5	1456	0.75	1.0	90 (B14)	1500	1.0
	400	366.78	4	1280	0.55	1.1	TC	1480	0.80
	500	474.35	3	1113	0.37	1.2		1400	0.60
	630	613.46	2	973	0.25	1.3		1360	0.50

Flange quadrate / Square flanges / Viereckige Flansche

\* Rapporti speciali / Special ratios / Sonderverhältnisse



2.8 Dati tecnici

2.8 Technical data

2.8 Technische Daten

T	n <sub>1</sub> = 1400			TC - TF				TA	
	in	ir	n <sub>2</sub> rpm	T <sub>2</sub> Nm	P <sub>1</sub> kW	FS'	IEC	T <sub>2M</sub> Nm	P kW
140B	7*	6.88	203	983	22	1.4	TC-TF	1350	30.2
	10	10.25	137	1461	22	1.3		1850	27.9
	12.5	13.05	107	1860	22	1.1		2050	24.3
	16	15.63	90	1874	18.5	1.2		2200	21.7
	20	19.64	71	2354	18.5	1.0		2400	18.9
	25	24.99	56	2429	15	1.0		2540	15.7
	31.5	29.95	47	2135	11	1.1		2300	11.9
	40	38.73	36	1882	7.5	1.2		2210	8.8
	50	50.18	28	1789	5.5	1.2		2120	6.5
	63	60.13	23	2143	5.5	1.1		2350	6.0
80	77.76	18	2016	4	1.1	2250	4.5		
125C	50	52.18	27	2483	7.5	1.1	TC-TF	2650	8.0
	63	62.53	22	2182	5.5	1.3		2760	7.0
	80	79.58	18	2777	5.5	1.0		2880	5.7
	100	99.97	14	2537	4	1.2		3000	4.7
	125	119.78	12	2280	3	1.3		3000	4.0
	160	152.45	9	2128	2.2	1.3		2720	2.8
	200	182.67	8	2549	2.2	1.1		2800	2.4
	250	240.51	6	2746	1.8	1.1		3050	2.0
	315	306.11	5	2913	1.5	1.0		2960	1.5
	400	366.78	4	2560	1.1	1.1		2800	1.2
180B	10	10.25	137	1993	30	2.0	TC-TF	3900	58.7
	12.5	13.05	107	2536	30	1.7		4300	50.9
	16	15.63	90	3039	30	1.5		4500	44.4
	20	19.64	71	3818	30	1.3		5100	40.1
	25	24.99	56	4859	30	1.1		5230	32.3
	31.5	29.95	47	4269	22	1.1		4680	24.1
	40	38.73	36	3764	15	1.1		4300	17.1
	50	50.18	28	3577	11	1.2		4300	13.2
	63	60.13	23	4286	11	1.1		4780	12.3
	80	77.76	18	3779	7.5	1.2		4380	8.7
160C	50	52.18	27	4966	15	1.0	TC-TF	5130	15.5
	63	62.53	22	4363	11	1.2		5350	13.5
	80	79.58	18	4644	9.2	1.2		5570	11.0
	100	99.97	14	4756	7.5	1.2		5800	9.2
	125	119.78	12	5699	7.5	1.0		5800	7.6
	160	152.45	9	5319	5.5	1.0		5470	5.7
	200	182.67	8	4635	4	1.2		5600	4.8
	250	240.51	6	4577	3	1.3		5890	3.3
	315	306.11	5	5826	3	1.0		5920	3.0
	400	366.78	4	5119	2.2	1.1		5600	2.4
500	474.35	3	4514	1.5	1.2	5280	1.8		
630	613.46	2	4281	1.1	1.2	4960	1.3		

T	n <sub>1</sub> = 1400			TC - TF				TA	
	in	ir	n <sub>2</sub> rpm	T <sub>2</sub> Nm	P <sub>1</sub> kW	FS'	IEC	T <sub>2M</sub> Nm	P kW
200B	8	8.14	172	1582	30	3.2	TC-TF	5000	94.8
	10	10.43	134	2028	30	2.7		5500	81.4
	12.5	12.60	111	2449	30	2.4		6000	73.5
	16	15.63	90	3039	30	2.1		6500	64.2
	20	17.65	79	3432	30	2.1		7100	62.1
	25	24.14	58	4692	30	1.5		7150	45.7
	31.5	29.95	47	5822	30	1.2		7250	37.4
	40	33.82	41	6575	30	1.1		7300	33.3
	50	47.93	29	6833	22	1.1		7400	23.8
	63	54.13	26	6489	18.5	1.1		7400	21.1
180C	50	53.11	26	6234	18.5	1.2	TC-TF	7240	21.5
	63	63.64	22	6056	15	1.2		7280	18.0
	80	76.85	18	7313	15	1.0		7420	15.2
	100	99.39	14	6936	11	1.1		7500	11.9
	125	122.88	11	7172	9.2	1.0		7500	9.6
	160	147.23	10	7005	7.5	1.1		7550	8.1
	200	190.41	7	6644	5.5	1.1		7600	6.3
	250	246.73	6	6261	4	1.2		7650	4.9
	315	295.63	5	7502	4	1.0		7700	4.1
	400	382.33	4	7276	3	1.1		7950	3.3
225B	8	8.44	166	2461	45	3.0	TF	7500	137.1
	10	10.13	138	2955	45	2.8		8300	126.4
	12.5	12.45	112	3630	45	2.5		9100	112.8
	16	15.93	88	4644	45	2.2		10000	96.9
	20	19.13	73	5577	45	1.9		10700	86.3
	25	23.49	60	6850	45	1.6		11000	72.3
200C	31.5	30.29	46	8832	45	1.3	TC-TF	11100	56.6
	40	37.09	38	8892	37	1.2		10800	44.9
	40	42.62	33	8110	30	1.3		10900	40.3
	50	51.18	27	9740	30	1.1		11000	33.9
	63	62.86	22	8772	22	1.3		11350	28.5
	80	76.97	18	10742	22	1.0		11050	22.6
	100	98.04	14	9330	15	1.2		11200	18.0
	125	120.41	12	11459	15	1.0		11500	15.1
	160	147.45	9	10290	11	1.1		11200	12.0
	200	196.87	7	9367	7.5	1.2		11400	9.1
250	241.79	6	11504	7.5	1.0	11700	7.6		
315	296.07	5	10330	5.5	1.1	11850	6.3		

Flange quadrate / Square flanges / Viereckige Flansche

\* Rapporto speciale / Special ratio / Sonderverhältnisse