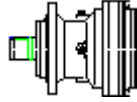


**NB311 GEARBOX**  
(PARAMETER AND DIMENSION)

**M2-35000 N.M**



**NB311L M2'=35000N.m**

I			Mn <sub>2</sub> (N.m)				P <sub>1</sub>	P <sub>t</sub> (KW)	n <sub>1</sub>	n <sub>1max</sub>	M <sub>b</sub>	Brake
	n <sub>2</sub> .h	n <sub>2</sub> .h	n <sub>2</sub> .h	n <sub>2</sub> .h	n <sub>2</sub> .h	n <sub>2</sub> .h						
1:	1000 0	25000	5000 0	1000 00	5000 00	1000 000	(K W)	(n <sub>1</sub> =15 00)	(min <sup>-1</sup> '1)	(min <sup>-1</sup> '1)	(N. m)	制 动 器 械
L 1	4.1 4500 0	45000	3740 0	3200 0	1970 0	1600 0	180	35	750	1000		
	5.3 4300 0	36500	3230 0	3200 0	1970 0	1600 0	180	35	750	1000		
	6.2 3400 0	29500	2700 0	2700 0	1860 0	1510 0	180	35	750	1000		
L 2	14. 4500 0	45000	3740 0	3200 0	1970 0	1600 0	100	25	1500	2500	320 0	6L
	18. 4500 0	45000	3740 0	3200 0	1970 0	1600 0	100	25	1500	2500	320 0	6L
	23. 4300 1	36500	3230 0	3200 0	1970 0	1600 0	100	25	1500	2500	260 0	6K
	27. 4300 6	36500	3230 0	3200 0	1970 0	1600 0	100	25	1500	2500	210 0	6G
	32. 4300 7	36500	3230 0	3200 0	1970 0	1600 0	90	25	1500	2500	210 0	6G
	38. 3400 8	29500	2700 0	2700 0	1860 0	1510 0	80	25	1500	2500	150 0	6E
	51. 4500 4	45000	3740 0	3200 0	1970 0	1600 0	60	18	1 750	3 500	100 0	5K
	66. 4500 0	45000	3740 0	3200 0	1970 0	1600 0	50	18	1 750	3 500	100 0	5K



06	0			0	0	0	0			750	500		
<b>M<sub>2max</sub>=1.2×Mn<sub>2</sub>(n<sub>2</sub>×h=10 000)</b>													

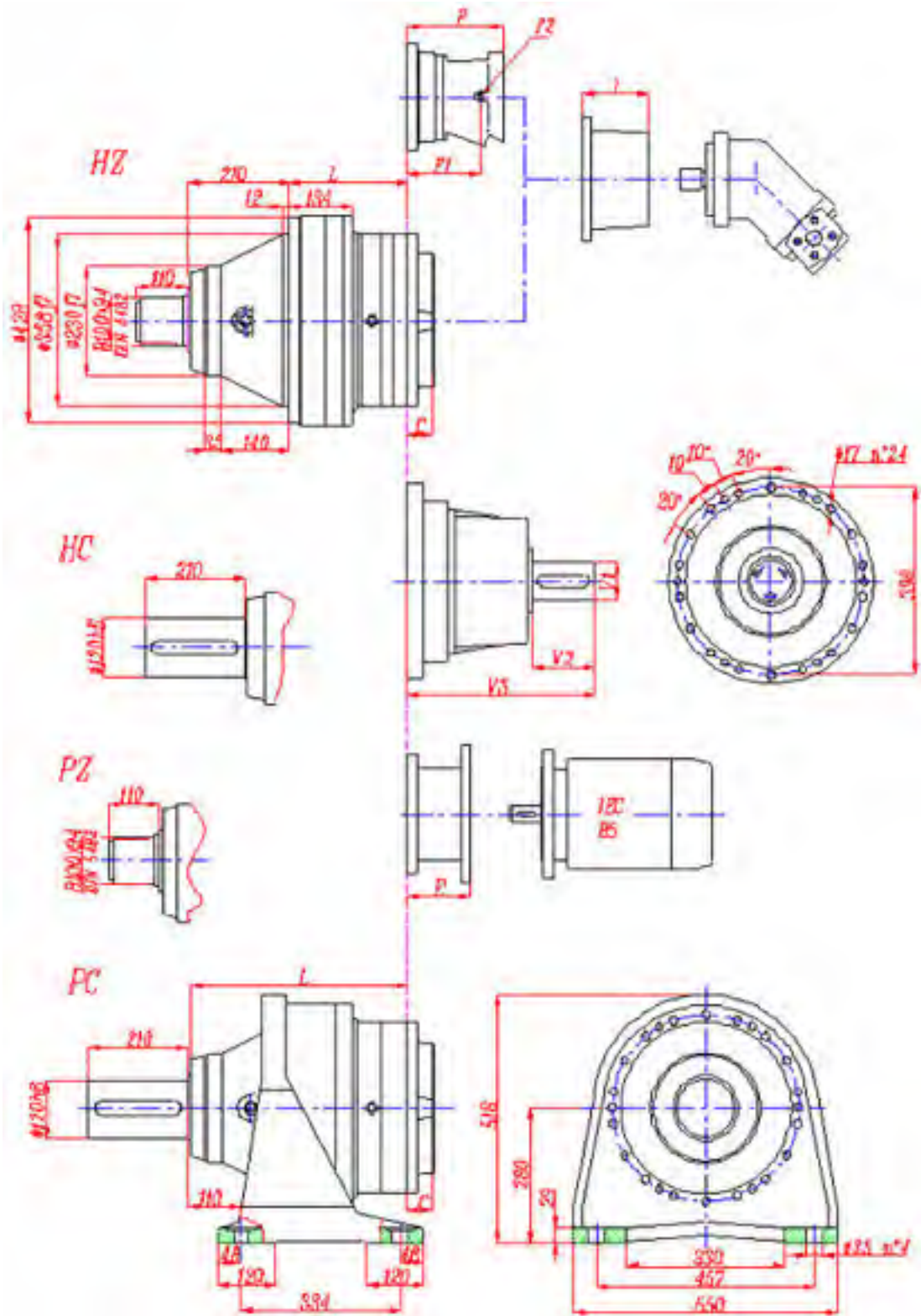


**NB311R M2'=35000N.m**

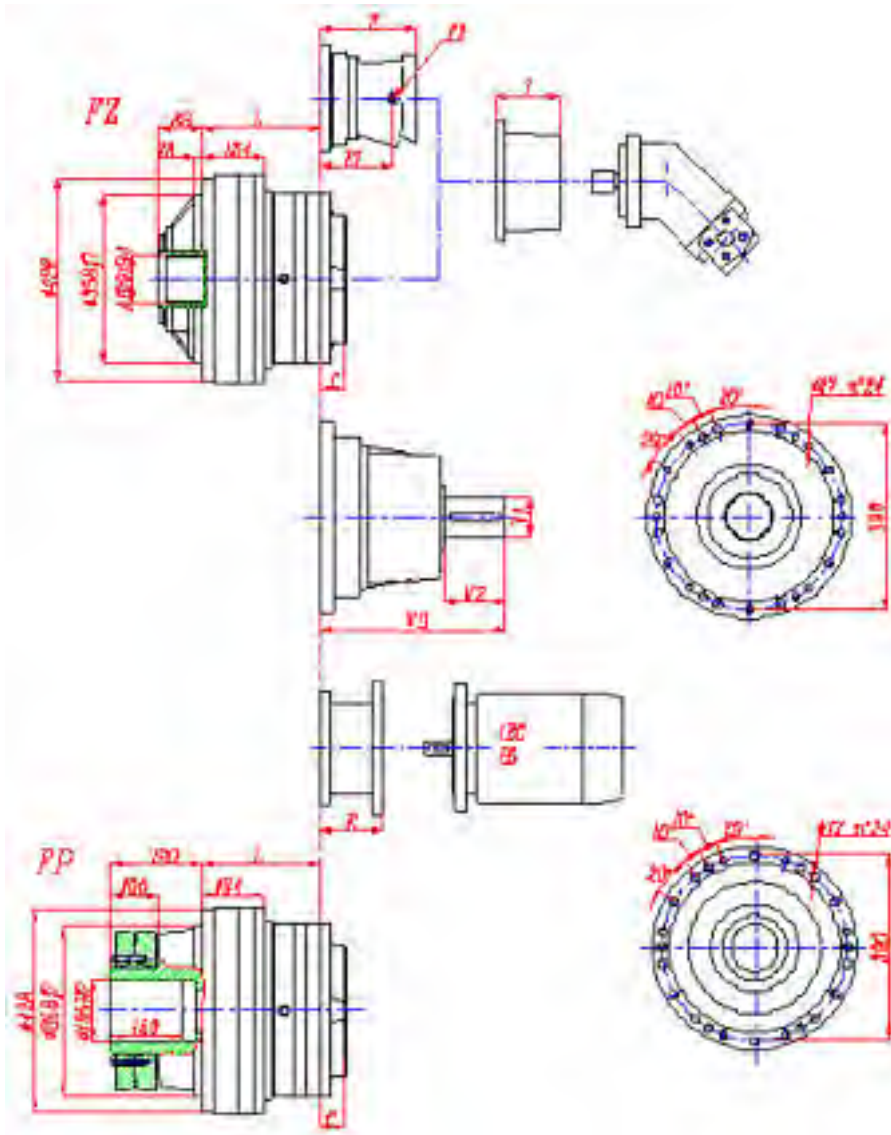
I	Mn <sub>2</sub> (N.m)					P <sub>1</sub>	P <sub>t</sub> (KW)	n <sub>1</sub>	n <sub>1max</sub>	M <sub>b</sub>	Brake
	n <sub>2</sub> .h	n <sub>2</sub> .h	n <sub>2</sub> .h	n <sub>2</sub> .h	n <sub>2</sub> .h						
1:	10000	2500 0	50000	10000 0	5000 00	1000000	(K (n <sub>1</sub> =150 W) 0)	(min <sup>-1</sup> )	(min <sup>-1</sup> )	(N.m )	制动 器械
R 20	12. 28000	2700 0	25000	2400 0	1600 0	12500	150 75	1 500	2 500	3200	6L
15. 4	35000	3300 0	31000	3000 0	1800 0	15000	150 75	1 500	2 500	3200	6L
18. 2	34000	3000 0	27000	2600 0	1800 0	15000	150 75	1 500	2 500	2600	6K
R 31	53. 34000	2950 0	27000	2700 0	1860 0	15100	60 40	1 750	3 500	800	5G
68. 1	45000	4500 0	37400	3200 0	1970 0	16000	50 40	1 750	3 500	800	5G
87. 5	43000	3650 0	32300	3200 0	1970 0	16000	45 40	1 750	3 500	630	5E
104	43000	3650 0	32300	3200 0	1970 0	16000	40 40	1 750	3 500	630	5E
124	43000	3650 0	32300	3200 0	1970 0	16000	35 40	1 750	3 500	500	5C
147	34000	2950 0	27000	2700 0	1860 0	15100	30 40	1 750	3 500	400	5B
R 44	155 45000	4500 0	37400	3200 0	1970 0	16000	32 22	1 750	3 500	400	4K
174	43000	3650 0	32300	3200 0	1970 0	16000	29 22	1 750	3 500	330	4H
199	43000	3650 0	32300	3200 0	1970 0	16000	26 22	1 750	3 500	330	4H
237	43000	3650 0	32300	3200 0	1970 0	16000	23 22	1 750	3 500	260	4F

			0		0	0								
283	43000	3650 0	32300	3200 0	1970 0	16000	20. 5	22	1 750	3 500	260	4F		
315	43000	3650 0	32300	3200 0	1970 0	16000	18. 6	22	1 750	3 500	160	4D		
385	43000	3650 0	32300	3200 0	1970 0	16000	15. 5	22	1 750	3 500	160	4D		
457	43000	3650 0	32300	3200 0	1970 0	16000	13. 3	22	1 750	3 500	160	4D		
543	34000	2950 0	27000	2700 0	1860 0	15100	9.5	22	1 750	3 500	100	4B		
<b><math>M_{2max}=1.2 \times Mn2(n2 \times h=10\ 000)</math></b>														

NB311 L



NB311 L

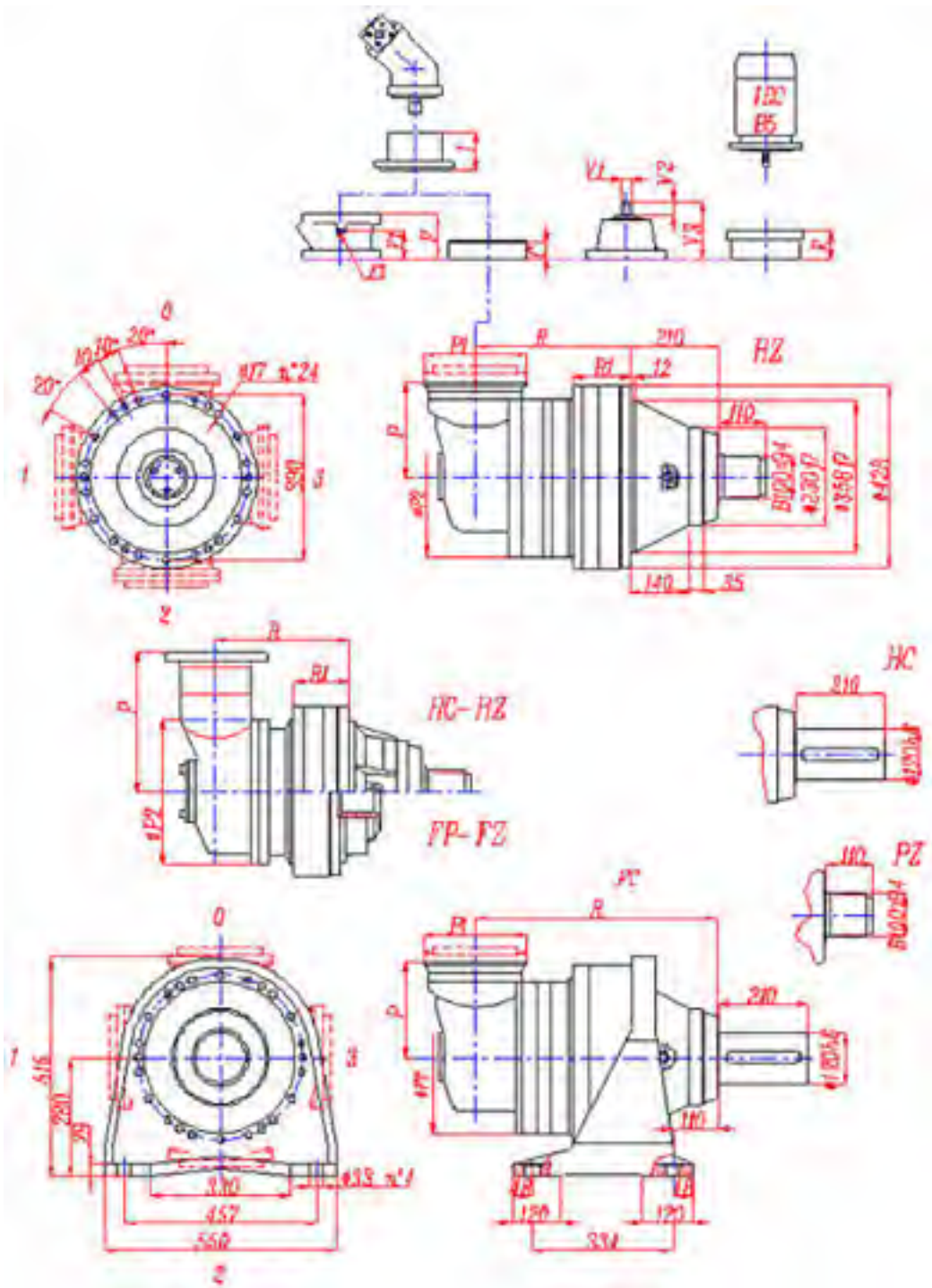


FP version  
 Max. transmissible  
 54000 N.m

	L				Ref. weight (without input)(Kg)				C	I	Brake				
	HZHC	PCPZ	FZ	FP	HZHC	PCPZ	FZ	FP			F	F1	F2	Type	Ref. Weight
311 L1	115	325	115	115	180	250	160	170	81	According to hydraulic motor					
311 L2	248	458	248	248	225	295	205	215	51		201	153	1/4 G	6	38 Kg
311 L3	341	551	341	341	237	307	217	227	37		145	95	1/4 G	5	22 Kg
311 L4	406	616	406	406	244	314	224	234	37		105	65	1/4 G	4	15 Kg

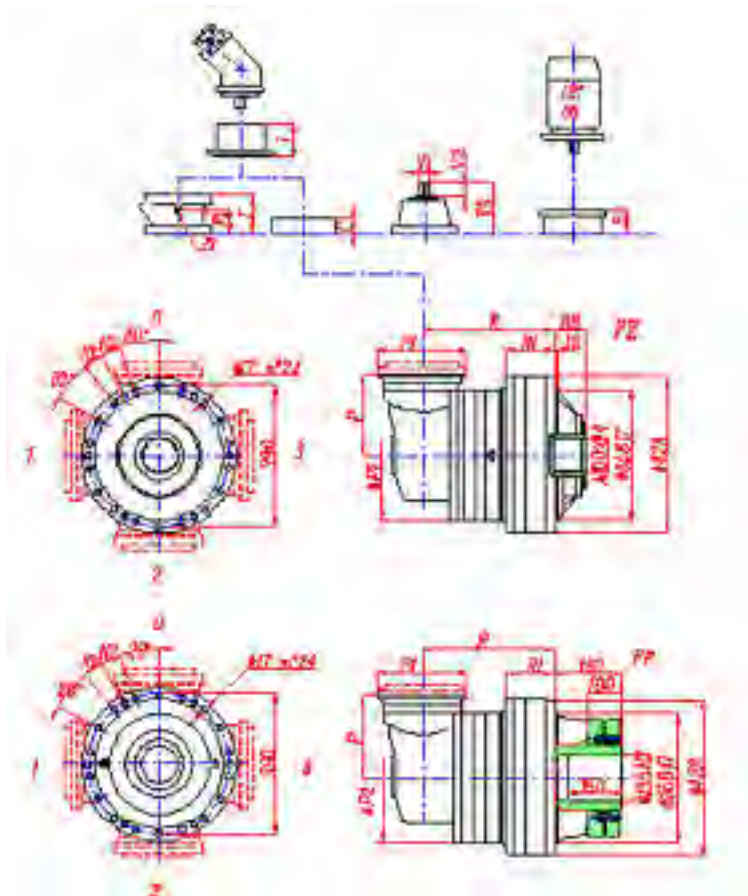
	E (IEC motor input)												
	IEC71	IEC80	IEC90	IEC100	IEC112	IEC132	IEC160	IEC180	IEC200	IEC225	IEC250		
311 L1													
311 L2								195	186	216	215		
311 L3						114	144	144	174				
311 L4	65	84	84	94	94	114	144						

NB311 R



NB311 R





FP version  
 Max. transmissible  
 54000 N.m

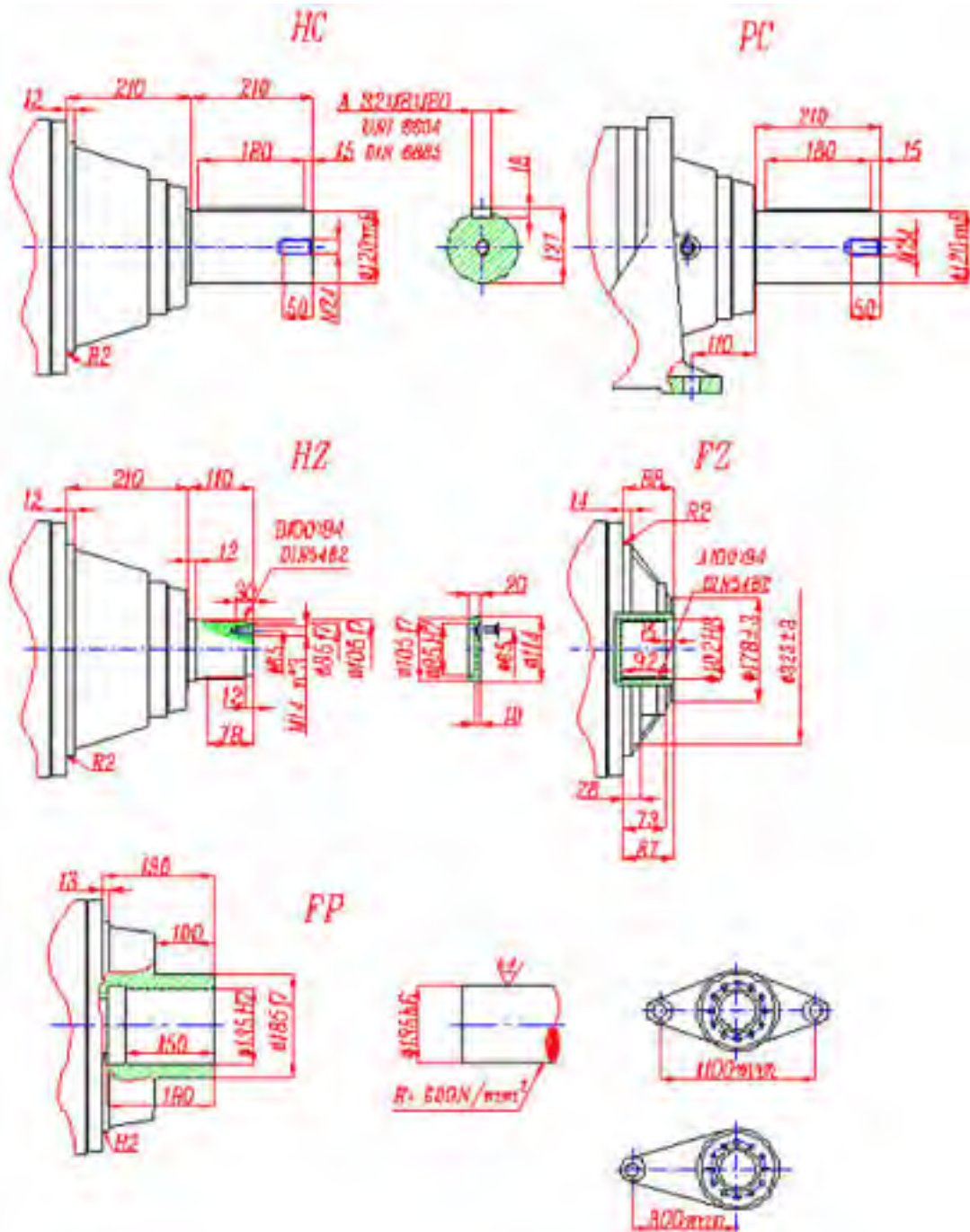
	R				Ref. weight (without input)(Kg)				C	P	I	Brake				
	HZHC	PCPZ	FZ	FP	HZHC	PCPZ	FZ	FP				F	F1	F2	Type	Ref. Weight 15 Kg
311 R2	340	550	340	340	320	390	300	310	453737	345122	According to hydraulic motor	195	147	1/4 G	6	38
311 R3	367	577	367	367	275	345	255	265	37	140		145	95	1/4 G	4	22
311 R4	433	641	433	433	257	331	241	251	37	140		105	65	1/4 G	4	15

154

P1	E (IEC motor input)														
	HZ	HC	FZ	FP	IEC7	IEC8	IEC9	IEC10	IEC11	IEC13	IEC16	IEC18	IEC20	IEC22	IEC25
					1	0	0	0	2	2	0	0	0	5	0

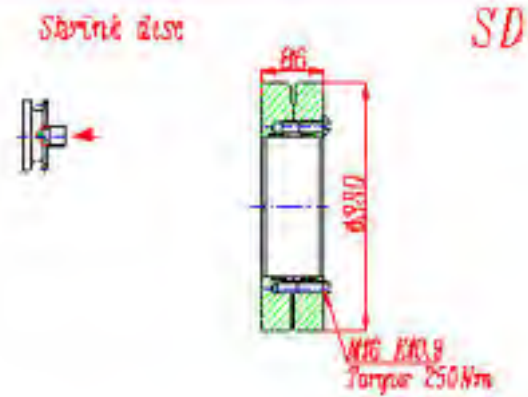
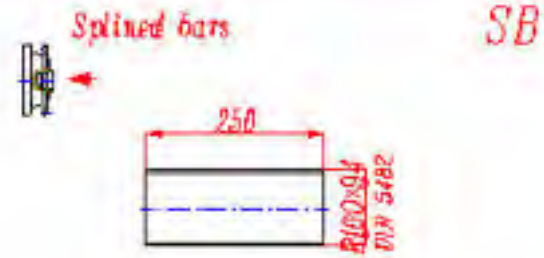
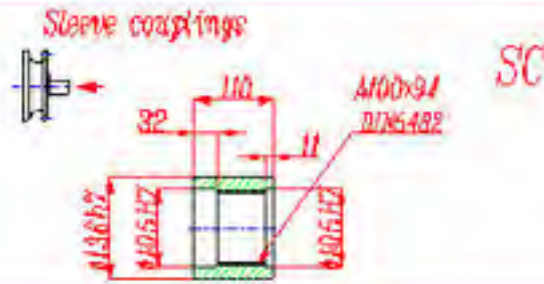
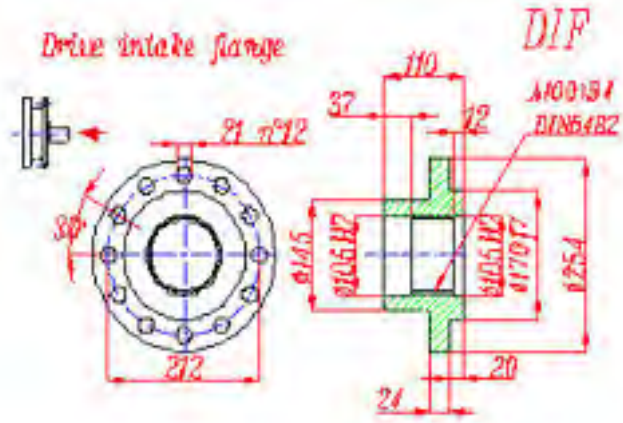
31 1 R2	29 2	15 4	15 4	15 4								152	182	212	193	
31 1 R3	24 5	13 0	13 0	11 0	11 0						114	144	144	174	174	
31 1 R4	18 6	13 0	13 0	11 0	11 0	65	84	84	94	94	114	144				

NB311 L - NB311 R

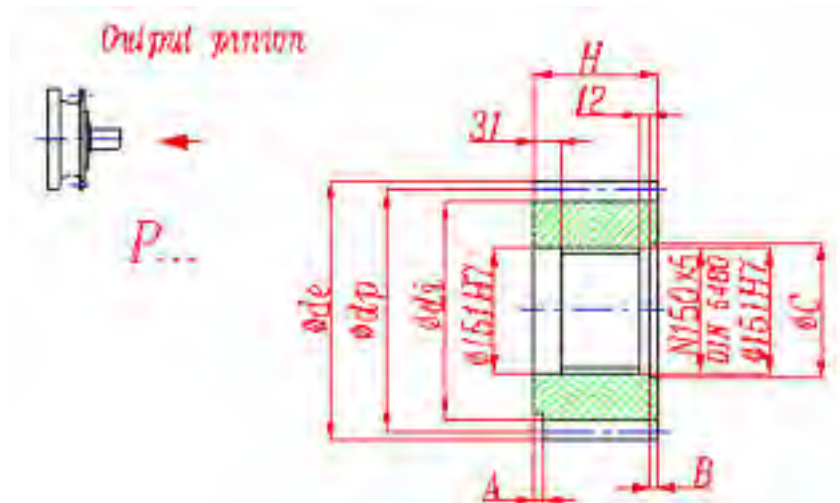


FP version  
 Max. transmissible  
 54000 N.m

01222720



NB311 L - NB311 R

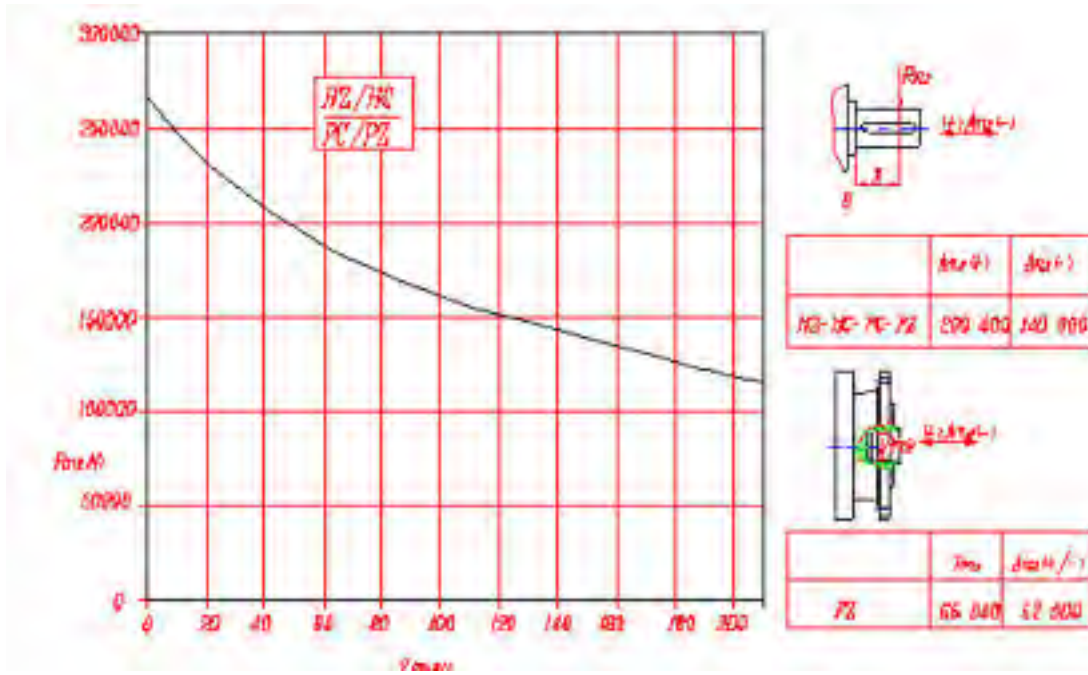


	m	z	x	dp	di	de	H	A	B	C
<b>PLQ</b>	12	23	0	276	246	300	110	0	0	0
<b>PPD</b>	16	13	0.5000	208	184	252.5	145	0	35	116
<b>PPF</b>	16	15	0.450	240	215	280	125	0	15	120

	CODE	V1	V2	V3	V4	V5	A	B	F	L	S	D	U
<b>311 L1</b>	V11B	80	130	348	200	428	22	14	85	110	10	M16	36
<b>311 L2</b>	V07B	80	130	315	200	345	22	14	85	110	105	M16	36
	V07A	60	105	313	155	345	18	11	64	90	7.5	M16	36
<b>311 L3</b>	V05B	48	82	239	155	245	14	9	51.5	70	6	M16	36
<b>311 L4</b>	V01A	24	36	137.5	120	186	8	7	27	30	3	M8	19
	V01B	38	58	158	120	186	10	8	41	50	4	M12	28
<b>311 R2</b>	V06B	60	105	307	155	292	18	11	64	90	7.5	M16	36
<b>311 R3-R4</b>	V01A	24	36	137.5	120	186	8	7	27	30	3	M8	19
	V01B	38	58	158	120	186	10	8	41	50	4	M12	28

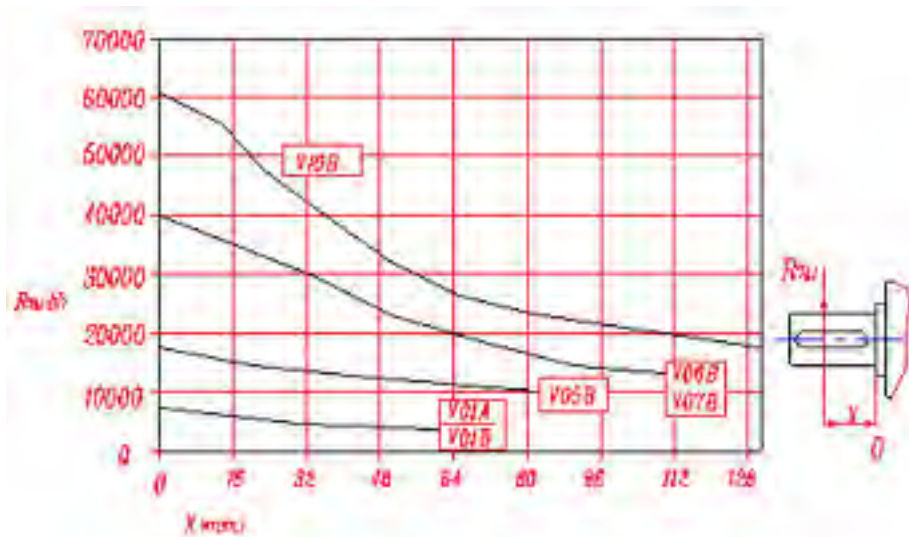
### NB311 L - NB311 R

Permissible radial and axial loads on output shaft with Fh2 (n<sub>2</sub>h=10 000)



Load corrective factor $f_{h2}$ on shafts	$f_{h2} = n_2 \cdot h$		10 000	25 000	50 000	100 000	500 000	1 000 000
	$f_{h2}$	MZ-MC-PC-PZ-FZ		1	0.74	0.58	0.46	0.27
	HZ-HC		1	0.76	0.61	0.50	0.31	0.25

Permissible radial loads on input shaft with  $F_{h1}$  ( $n_1 \cdot h = 250\,000$ )



Load corrective factor $f_{h1}$ on shafts	$F_{h1} = n_1 \cdot h$		250 000	500 000	1 000 000	2 00 000	5 000 000	10 000 000
	$f_{h1}$			1	0.79	0.63	0.50	0.37