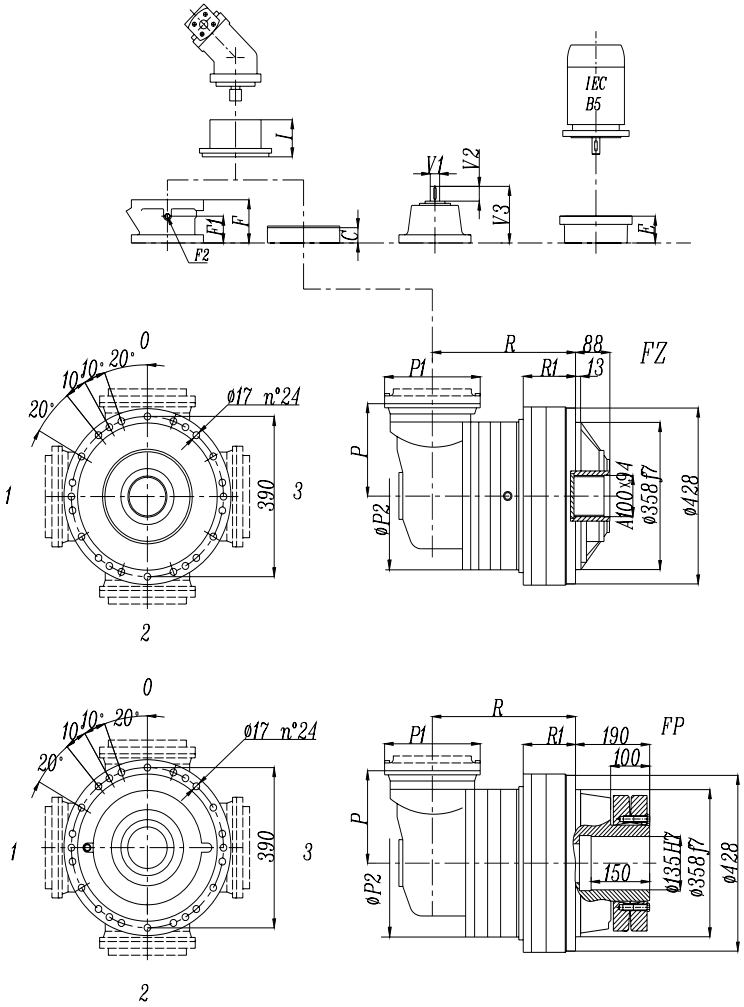
EP311 R

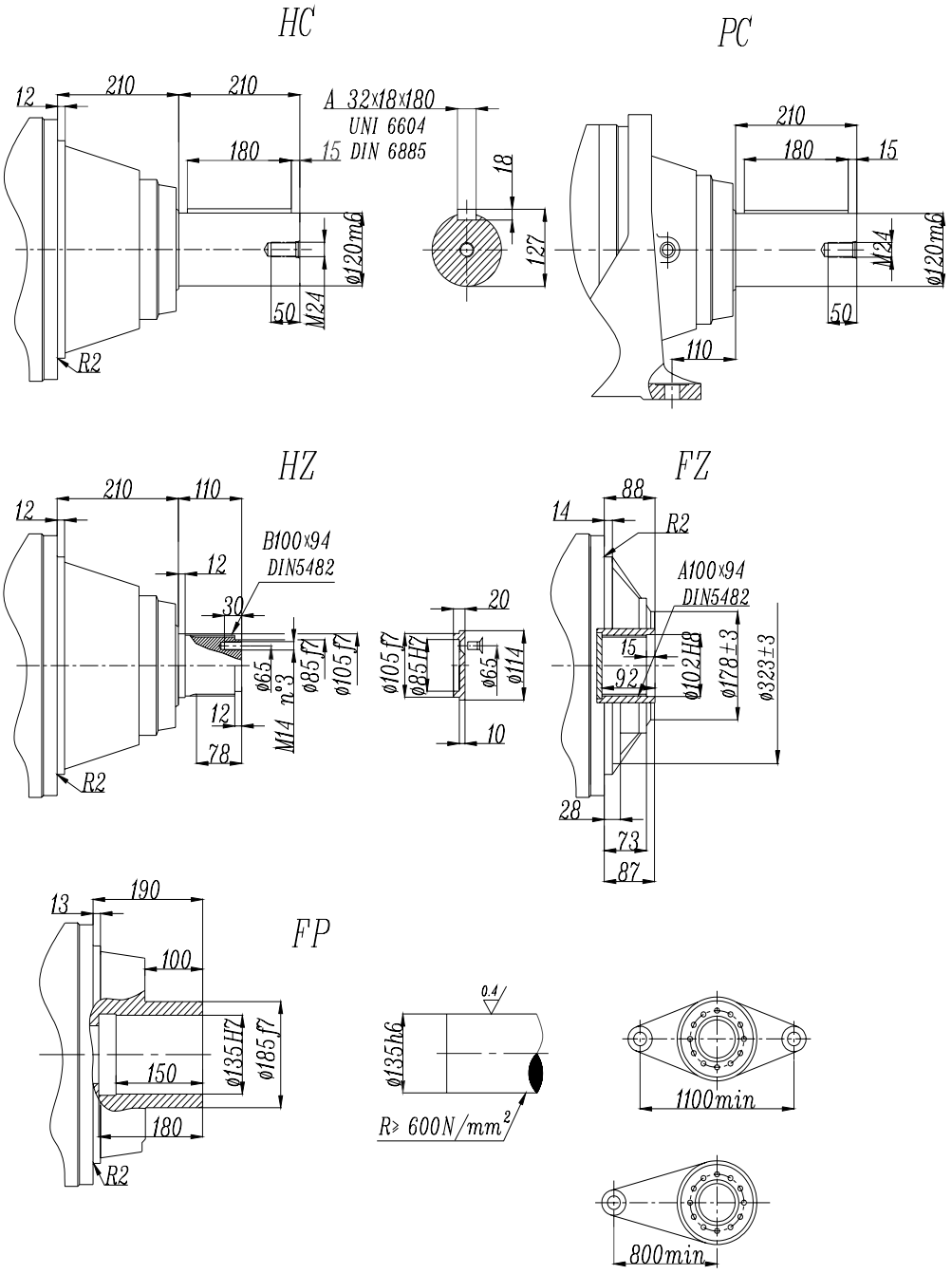


FP version
Max. transmissible
54000 N.m

	R				Ref. weight (without input) (Kg)				C	P	I	Brake				
	HZ HC	PC PZ	FZ	FP	HZ HC	PC PZ	FZ	FP				F	F1	F2	Type	Ref. Weight 15 Kg
311 R2	340	550	340	340	320	390	300	310	45	345	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

	P1	E (IEC motor input)														
		HZ	HC	FZ	FP	IEC 71	IEC 80	IEC 90	IEC 100	IEC 112	IEC 132	IEC 160	IEC 180	IEC 200	IEC 225	IEC 250
311 R2	292	154	154	154	154								152	182	212	193
311 R3	245	130	130	110	110						114	144	144	174	174	
311 R4	186	130	130	110	110	65	84	84	94	94	114	144				

EP311 L - EP311 R

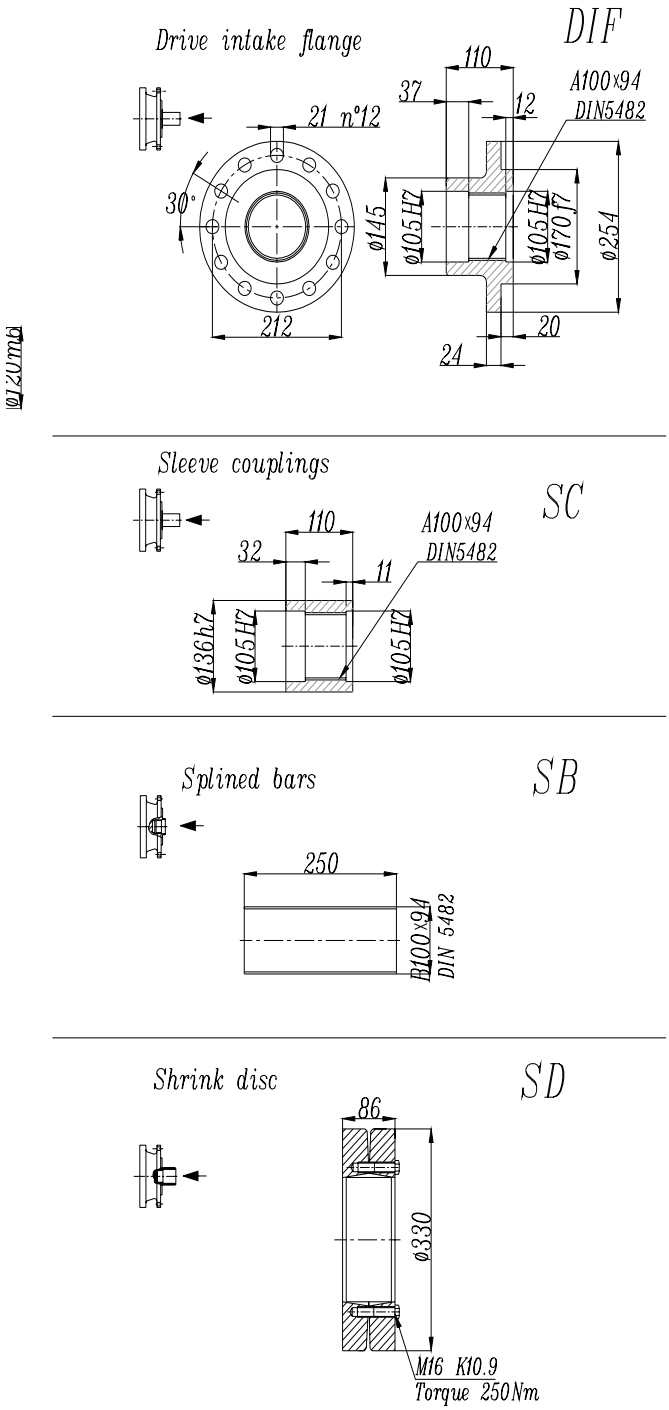


FP version

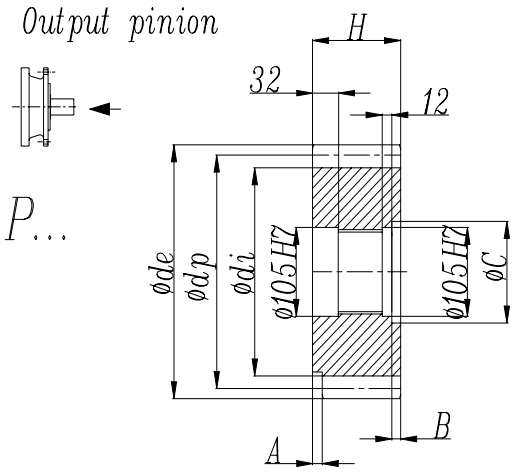
Max. transmissible

54000 N.m

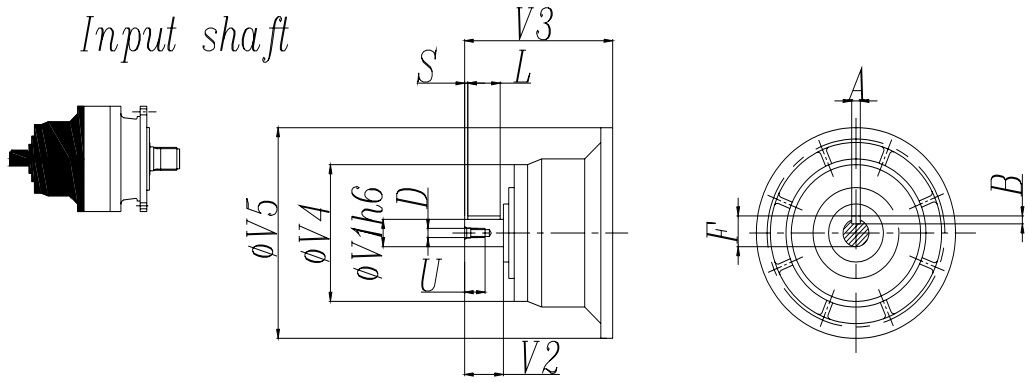
EP311 L - EP311 R



EP311 L - EP311 R



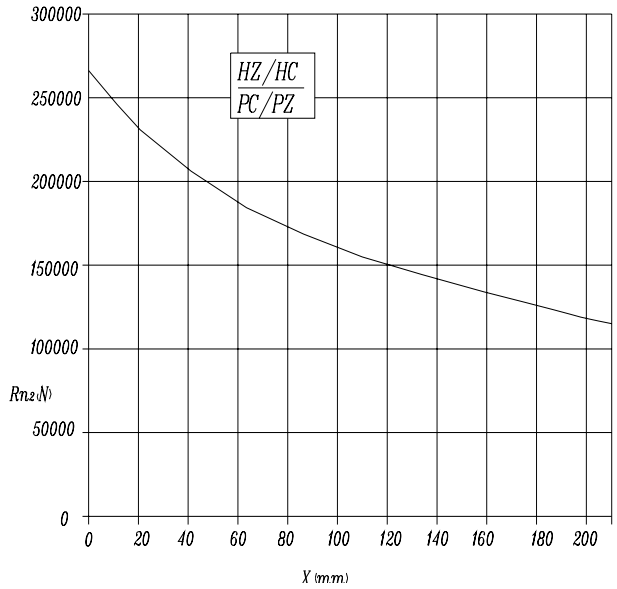
	m	z	x	dp	di	de	H	A	B	C
PLQ	12	23	0	276	246	300	110	0	0	0
PPD	16	13	0.5000	208	184	252.5	145	0	35	116
PPF	16	15	0.450	240	215	280	125	0	15	120

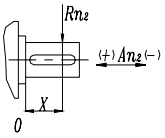


	CODE	V1	V2	V3	V4	V5	A	B	F	L	S	D	U
311 L1	V11B	80	130	348	200	428	22	14	85	110	10	M16	36
311 L2	V07B	80	130	315	200	345	22	14	85	110	105	M16	36
	V07A	60	105	313	155	345	18	11	64	90	7.5	M16	36
311 L3	V05B	48	82	239	155	245	14	9	51.5	70	6	M16	36
311 L4	V01A	24	36	137.5	120	186	8	7	27	30	3	M8	19
	V01B	38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

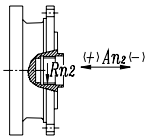
EP311 L - EP311 R

Permissible radial and axial loads on output shaft with Fh2 (n2 • h=10 000)





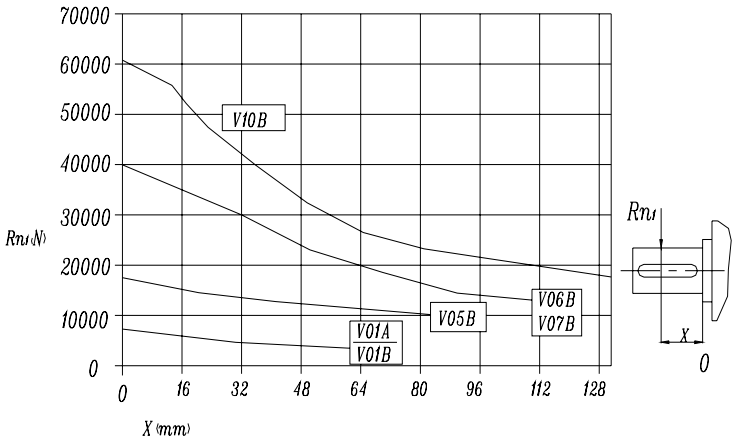
	An2 (+)	An2 (−)
HZ-HC-PC-PZ	200 000	140 000



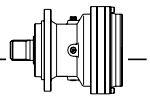
	Rn2	An2 (+/−)
FZ	65 000	52 000

Load corrective factor fh2 on shafts	fh2= n2 • h		10 000	25 000	50 000	100 000	500 000	1 000 000
	fh2	MZ-MC-PC-PZ-FZ	1	0.74	0.58	0.46	0.27	0.21
		HZ-HC	1	0.76	0.61	0.50	0.31	0.25

Permissible radial loads on input shaft with Fh1 (n1 • h=250 000)



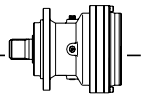
Load corrective factor fh1 on shafts	Fh1= n1 • h	250 000	500 000	1 000 000	2 00 000	5 000 000	10 000 000
	fh1	1	0.79	0.63	0.50	0.37	0.29



EP313L M2'=50000N.m

	I	Mn_2 (N.m)						P_1	P_t(KW) (ta=20℃)	n_1	n_{1max}	M_b	Brake type
	1:	n_2.h 10000	n_2.h 25000	n_2.h 50000	n_2.h 100000	n_2.h 500000	n_2.h 1000000	(KW)	(n_1=1500)	(min^{-1})	(min^{-1})	(N.m)	
L1	4.0	55000	55000	55000	46000	28400	23000	200	45	500	800		
	5.7	55000	48000	45000	45000	27800	22600	200	45	500	800		
	6.5	49000	42400	39000	39000	27800	22500	200	45	500	800		
L2	13.7	55000	55000	55000	46000	28400	23000	130	30	1500	2500	3200	6L
	17.6	55000	55000	55000	46000	28400	23000	130	30	1500	2500	3200	6L
	22.6	55000	48000	45000	45000	27800	22600	130	30	1500	2500	3200	6L
	26.9	55000	48000	45000	45000	27800	22600	130	30	1500	2500	3200	6L
	31.9	55000	48000	45000	45000	27800	22600	120	30	1500	2500	2600	6K
	37.9	49000	42400	39000	39000	27800	22500	110	30	1500	2500	2100	6G
	50.3	55000	55000	55000	46000	28400	23000	80	18	1750	3 500	1000	5K
	64.5	55000	55000	55000	46000	28400	23000	65	18	1750	3 500	1000	5K
L3	73.9	55000	55000	55000	46000	28400	23000	60	18	1750	3 500	1000	5K
	82.7	55000	48000	45000	45000	27800	22600	58	18	1750	3 500	1000	5K
	94.7	55000	48000	45000	45000	27800	22600	55	18	1750	3 500	800	5G
	113	55000	48000	45000	45000	27800	22600	55	18	1750	3 500	800	5G
	135	55000	48000	45000	45000	27800	22600	50	18	1750	3 500	800	5G
	150	55000	48000	45000	45000	27800	22600	45	18	1750	3 500	500	5C
	183	55000	48000	45000	45000	27800	22600	40	18	1750	3 500	400	5B
	218	55000	48000	45000	45000	27800	22600	36	18	1750	3 500	400	5B
	258	49000	42400	39000	39000	27800	22500	31	18	1750	3 500	400	5B
	250	55000	55000	55000	46000	28400	23000	30	11	1750	3 500	330	4H
	280	55000	48000	45000	45000	27800	22600	30	11	1750	3 500	330	4H
L4	329	55000	55000	55000	46000	28400	23000	28	11	1750	3 500	260	4F
	426	55000	55000	55000	46000	28400	23000	22	11	1750	3 500	260	4F
	546	55000	48000	45000	45000	27800	22600	15	11	1750	3 500	160	4D
	650	55000	48000	45000	45000	27800	22600	12.5	11	1750	3 500	160	4D
	776	55000	48000	45000	45000	27800	22600	10	11	1750	3 500	100	4B
	865	55000	48000	45000	45000	27800	22600	9	11	1750	3 500	100	4B
	1079	55000	48000	45000	45000	27800	22600	8	11	1750	3 500	100	4B
	1321	55000	48000	45000	45000	27800	22600	6.7	11	1750	3 500	100	4B
	1568	55000	48000	45000	45000	27800	22600	5.7	11	1750	3 500	50	4A
	1859	49000	42400	39000	39000	27800	22500	4.5	11	1750	3 500	50	4A

M_{2max}=1.2×Mn2(n2×h=10 000)

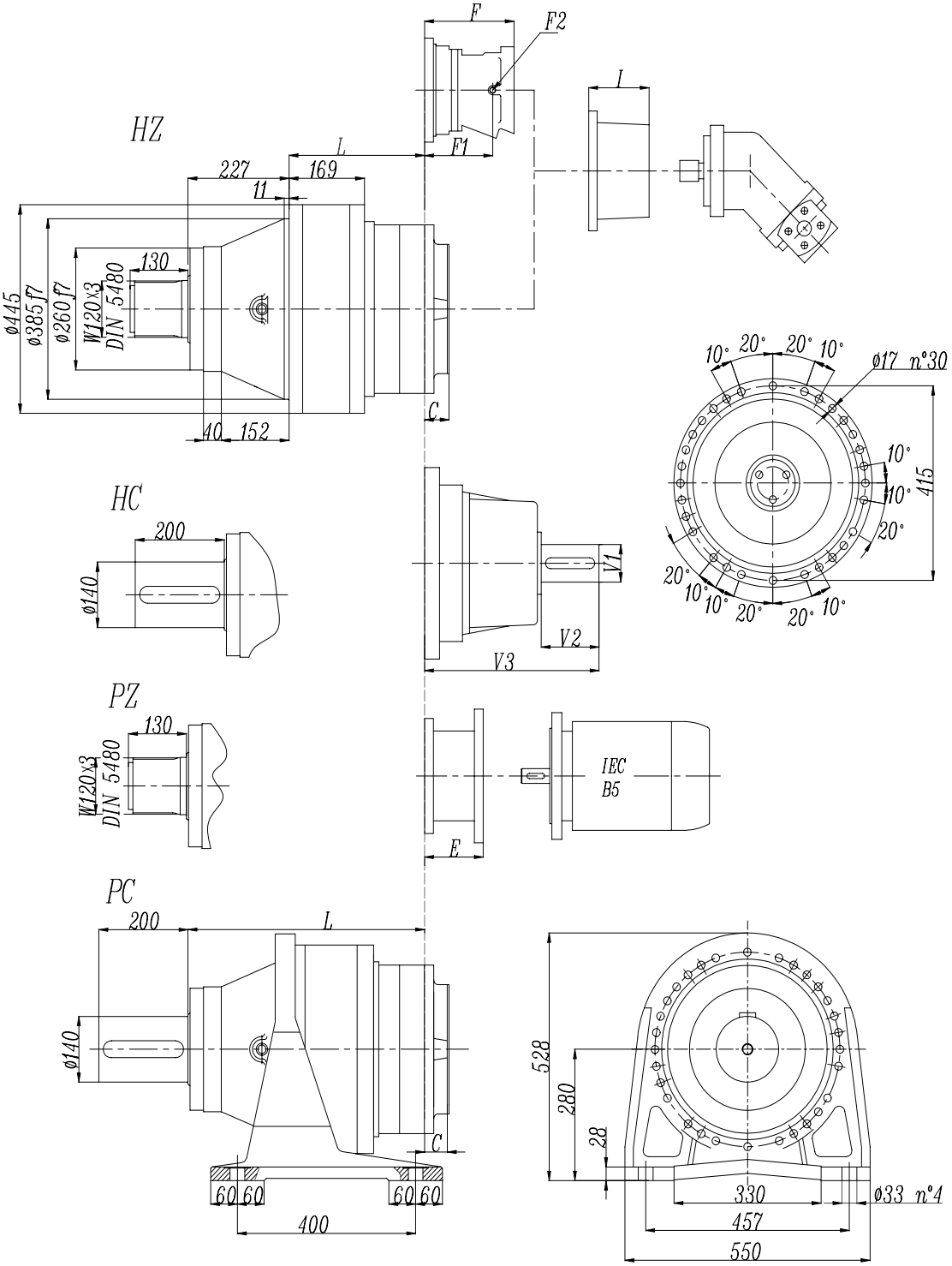


EP313R M2'=50000N.m

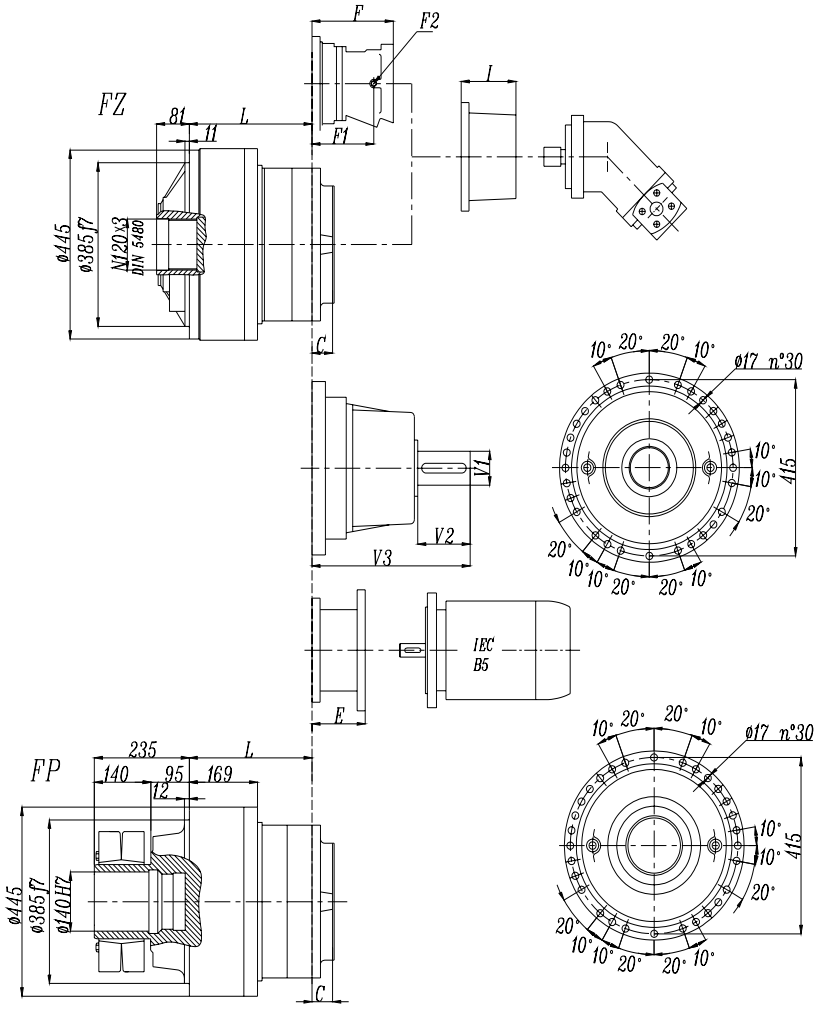
	I	Mn_2 (N.m)						P_1	P_t(KW)	n_1	n_{1max}	M_b	Brake type
	1:	n_2.h 10000	n_2.h 25000	n_2.h 50000	n_2.h 100000	n_2.h 500000	n_2.h 1000000	(KW)	(ta=20℃) (n_1=1500)	(min^{-1})	(min^{-1})	(N.m)	
R2	11.7	28000	27000	25000	24000	16000	12500	150	75	1500	2 500	3200	6L
	16.7	35000	33000	31000	30000	18000	15000	150	75	1500	2 500	3200	6L
	19.0	44000	40000	37000	36000	22000	17000	150	75	1500	2 500	3200	6L
R3	51.9	34000	29500	27000	27000	18600	15100	70	40	1750	3 500	800	5G
	66.6	45000	45000	37400	32000	19700	16000	60	40	1750	3 500	800	5G
	85.4	55000	48000	45000	45000	27800	22600	60	40	1750	3 500	800	5G
	102	55000	48000	45000	45000	27800	22600	50	40	1750	3 500	630	5E
	121	55000	48000	45000	45000	27800	22600	45	40	1750	3 500	630	5E
	143	49000	42400	39000	39000	27800	22500	40	40	1750	3 500	500	5C
R4	129	49000	42400	39000	39000	27800	22500	35	22	1750	3 500	400	4K
	165	55000	55000	55000	46000	28400	23000	35	22	1750	3 500	400	4K
	189	55000	55000	55000	46000	28400	23000	35	22	1750	3 500	330	4H
	212	55000	48000	45000	45000	27800	22600	35	22	1750	3 500	330	4H
	243	55000	48000	45000	45000	27800	22600	31	22	1750	3 500	330	4H
	289	55000	48000	45000	45000	27800	22600	27	22	1750	3 500	260	4F
	345	55000	48000	45000	45000	27800	22600	23	22	1750	3 500	260	4F
	384	55000	48000	45000	45000	27800	22600	21	22	1750	3 500	160	4D
	470	55000	48000	45000	45000	27800	22600	17.5	22	1750	3 500	160	4D
	558	55000	48000	45000	45000	27800	22600	15	22	1750	3 500	160	4D
	662	49000	42400	39000	39000	27800	22500	11	22	1750	3 500	100	4B

M_{2max}=1.2×Mn2(n2×h=10 000)

EP313 L


HZ
F
F2
F1
L
I
227
169
11
130
ø445
ø385f7
ø260f7
W120x3
DIN 5480
40
152
C
10°
20°
20°
10°
ø17 n°30
10°
10°
20°
415
HC
200
ø140
V1
V2
V3
PZ
130
W120x3
DIN 5480
IEC
B5
E
PC
200
L
ø140
C
60
60
60
60
400
528
280
28
330
457
550
ø33 n°4

EP313 L



FP version

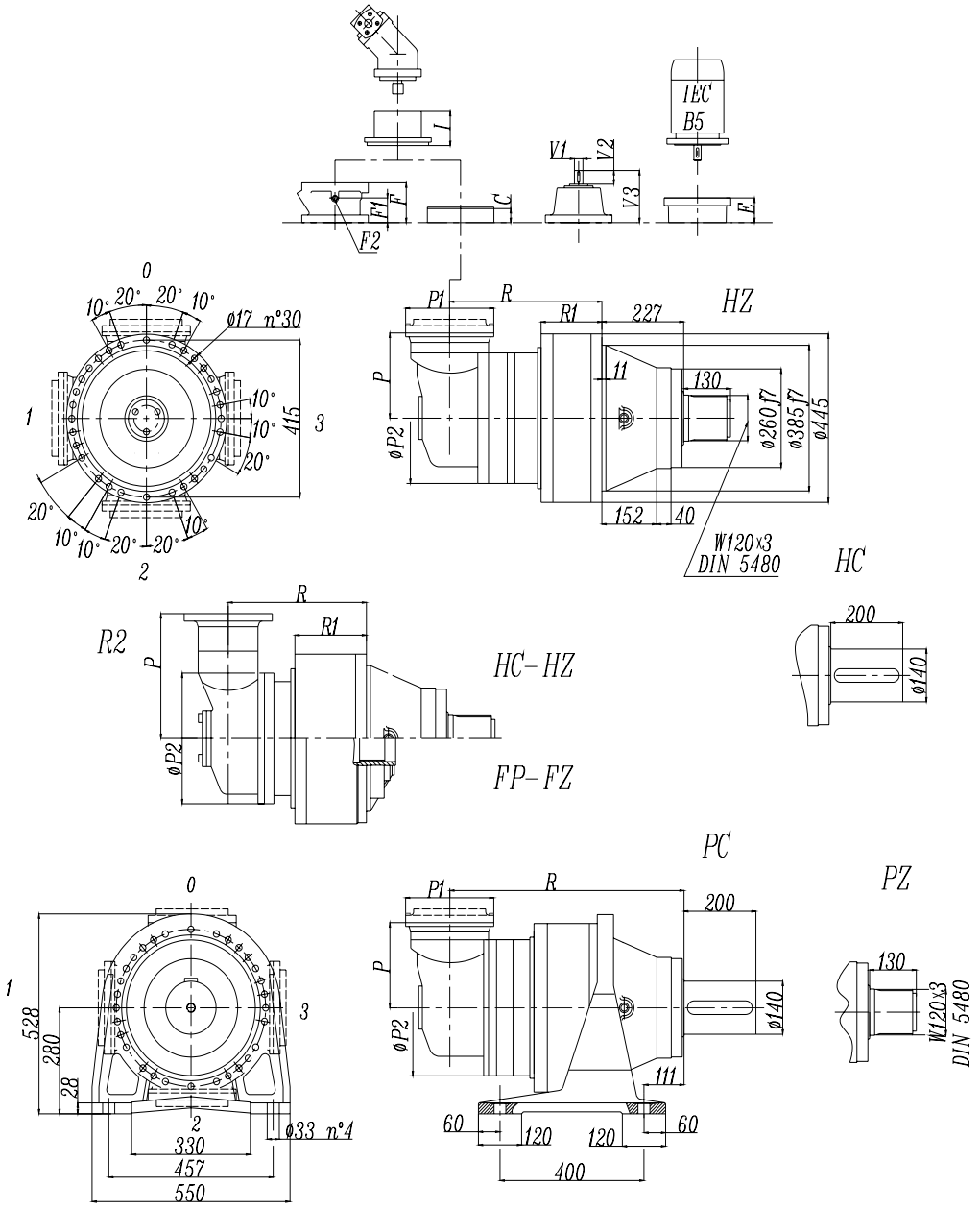
Max. transmissible

66000 N.m

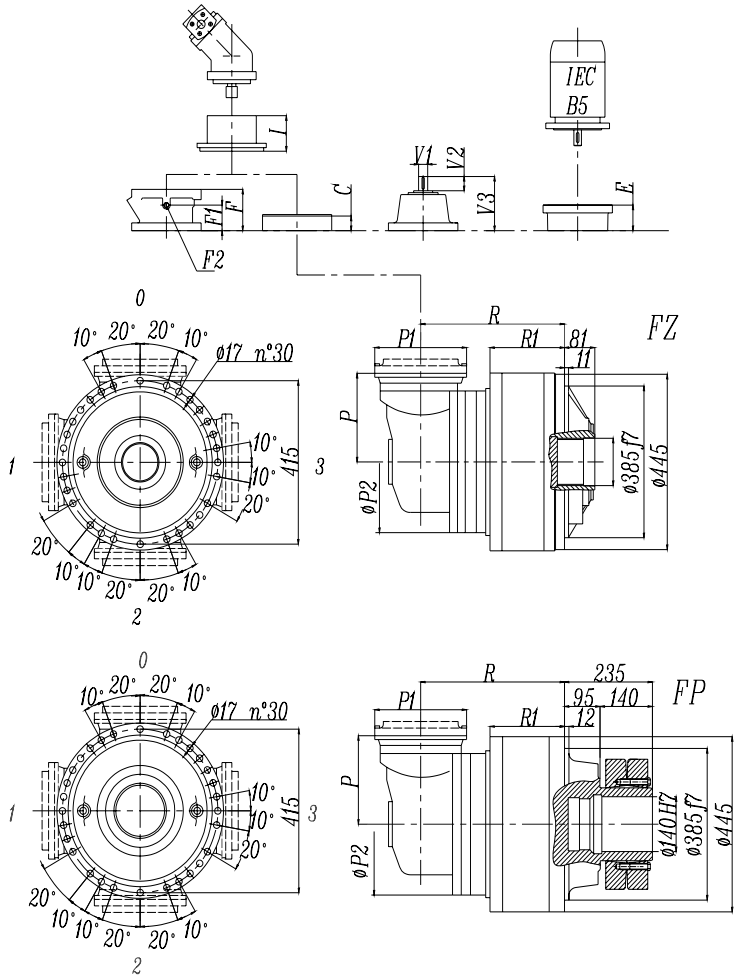
	L				Ref. weight (without input) (Kg)				C	I	Brake				
	HZ HC	PC PZ	FZ	FP	HZ HC	PC PZ	FZ	FP			F	F1	F2	Type	Ref. Weight
313 L1	154	381	154	154	230	320	200	200	76	According to hydraulic motor					
313 L2	304	531	304	304	290	380	260	280	51		201	153	1/4 G	6	38 Kg
313 L3	397	624	397	397	302	392	272	292	37		145	95	1/4 G	5	22 Kg
313 L4	462	689	462	462	309	400	279	300	37		105	65	1/4 G	4	15 Kg

	E (IEC motor input)													
	IEC 71	IEC 80	IEC 90	IEC 100	IEC 112	IEC 132	IEC 160	IEC 180	IEC 200	IEC 225	IEC 250			
313 L1														
313 L2								195	186	216	215			
313 L3						114	144	144	174					
313 L4	65	84	84	94	94	114	144							

EP313 R


IEC
B5
I
V1
V2
V3
F1
F
C
E
F2
0
10°
20°
20°
10°
ø17 n°30
10°
10°
20°
415
1
3
20°
10°
10°
20°
20°
10°
2
P1
R
R1
227
HZ
P
11
130
øP2
ø260 f7
ø385 f7
ø445
152
40
W120x3
DIN 5480
HC
R
R1
R2
P
HC-HZ
øP2
FP-FZ
200
ø140
PC
PZ
0
P1
R
200
1
528
280
28
3
P
øP2
ø140
111
2
330
457
550
ø33 n°4
60
120
120
60
400
130
W120x3
DIN 5480

EP313 R

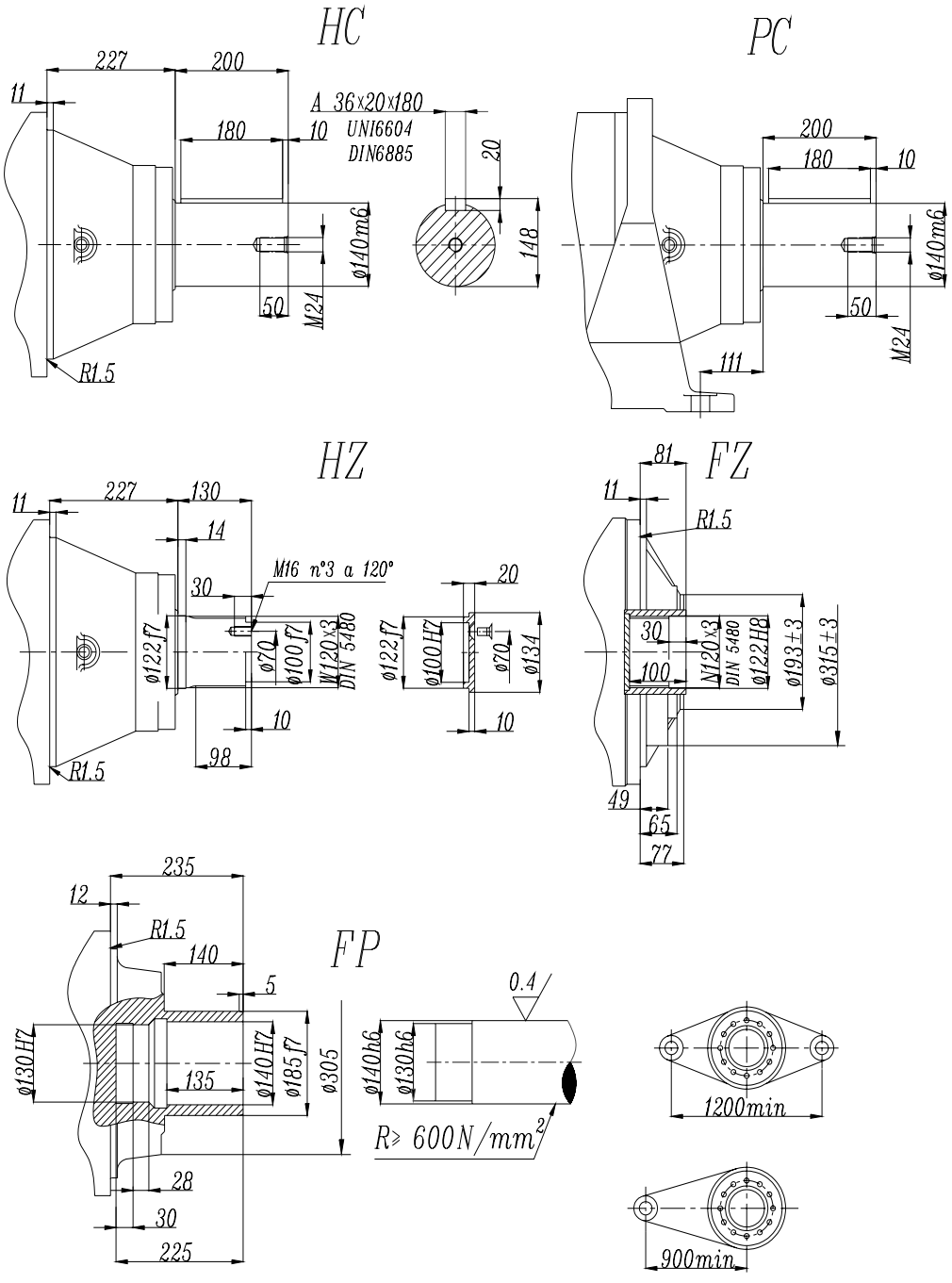


FP version
Max. transmissible
66000 N.m

	R				Ref. weight (without input) (Kg)				C	P	I	Brake				
	HZ HC	PC PZ	FZ	FP	HZ HC	PC PZ	FZ	FP				F	F1	F2	Type	Ref. Weight 15 Kg
313 R2	384	611	384	384	370	460	340	360	45	395	According to hydraulic motor	195	147	1/4 G	6	38
313 R3	423	650	423	423	340	430	310	330	37	225		145	95	1/4 G	4	22
313 R4	485	712	485	485	322	412	292	312	37	140		105	65	1/4 G	4	15

	P1	E (IEC motor input)														
		HZ	HC	FZ	FP	IEC 71	IEC 80	IEC 90	IEC 100	IEC 112	IEC 132	IEC 160	IEC 180	IEC 200	IEC 225	IEC 250
313 R2	292	154	154	154	154								152	182	212	193
313 R3	245	130	130	110	110						114	144	144	174	174	
313 R4	186	130	130	110	110	65	84	84	94	94	114	144				

EP313 L - EP313 R



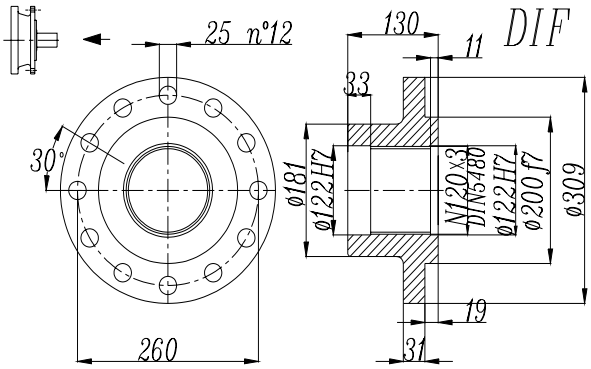
FP version

Max. transmissible

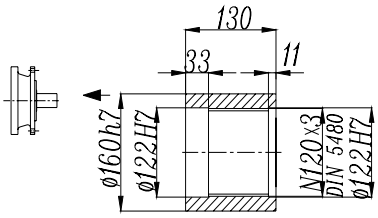
66000 N.m

EP313 L - EP313 R

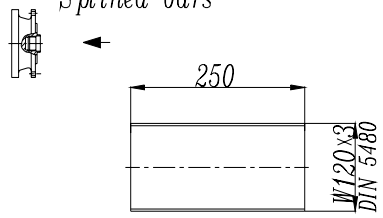
Drive intake flange



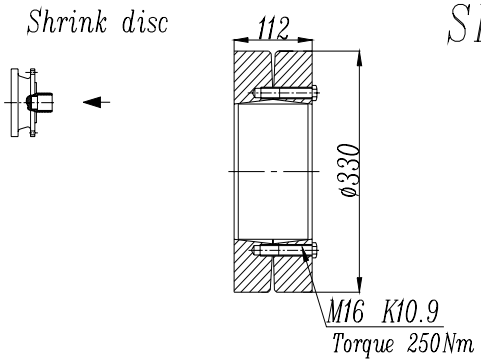
Sleeve couplings SC



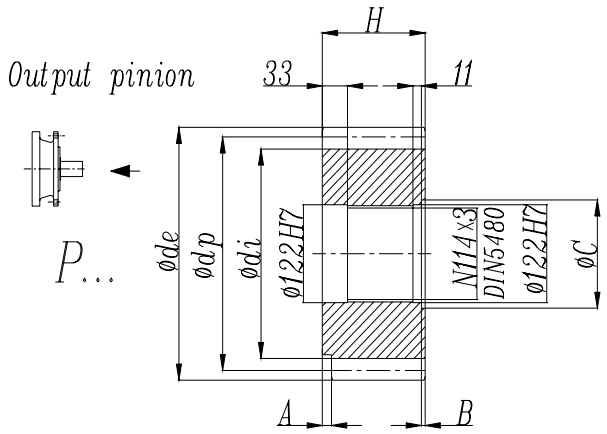
Splined bars SB



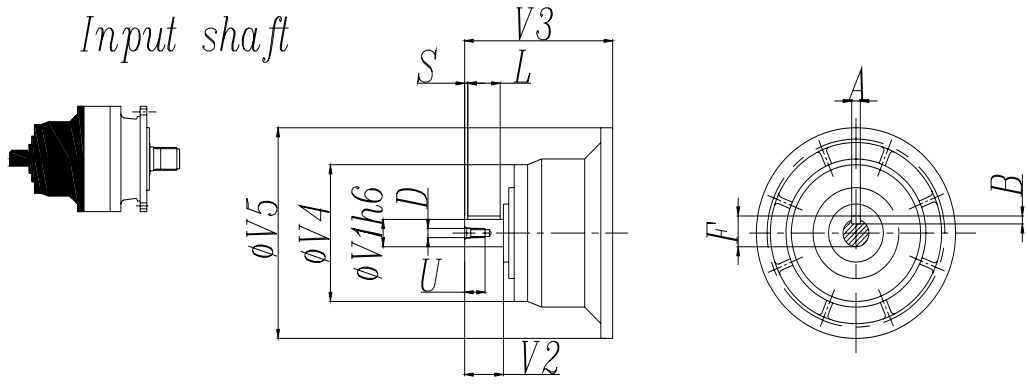
Shrink disc SD



EP313 L - EP313 R



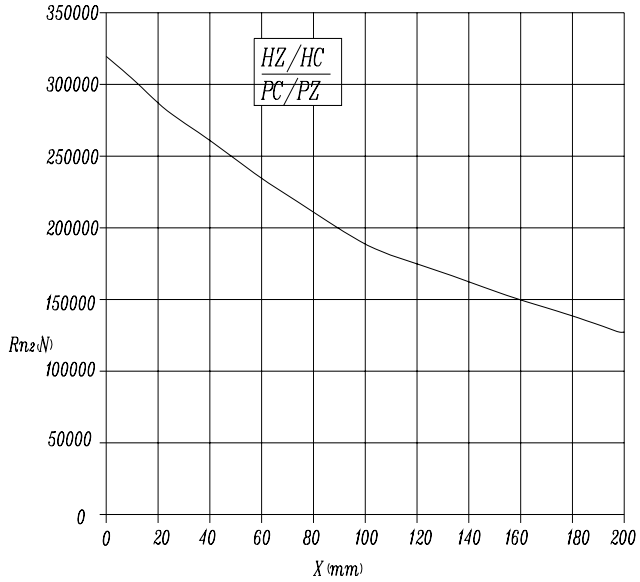
	m	z	x	dp	di	de	H	A	B	C
PRH	16	17	0.500	272	247	315	135	0	5	136
PRI	18	18	0.333	324	294	365	140	0	10	140

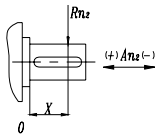


	CODE	V1	V2	V3	V4	V5	A	B	F	L	S	D	U
313 L1	V11B	80	130	348	200	428	22	14	85	110	10	M16	36
313 L2	V07B	80	130	315	200	345	22	14	85	110	105	M16	36
	V07A	60	105	313	155	345	18	11	64	90	7.5	M16	36
313 L3	V05B	48	82	239	155	245	14	9	51.5	70	6	M16	36
313 L4	V01A	24	36	137.5	120	186	8	7	27	30	3	M8	19
	V01B	38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

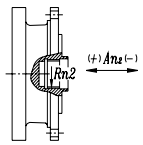
EP313 L - EP313 R

Permissible radial and axial loads on output shaft with Fh2 (n2 • h=10 000)





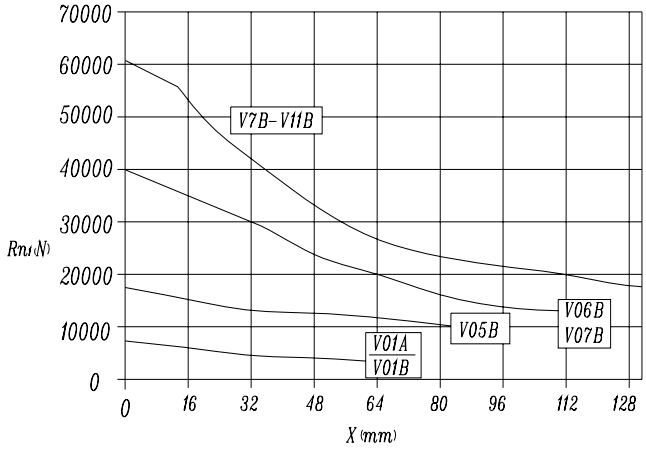
	An2 (+)	An2 (−)
HZ- HC- PC- PZ	250 000	160 000

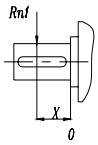


	Rn2	An2 (+/−)
FZ	80 000	75 000

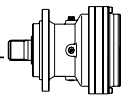
Load corrective factor fh2 on shafts	fh2= n2 • h		10 000	25 000	50 000	100 000	500 000	1 000 000
	fh2	MZ-MC-PC-PZ-FZ	1	0.74	0.58	0.46	0.27	0.21
		HZ-HC	1	0.76	0.61	0.50	0.31	0.25

Permissible radial loads on input shaft with Fh1 (n1 • h=250 000)





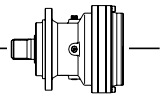
Load corrective factor fh1 on shafts	Fh1= n1 • h	250 000	500 000	1 000 000	2 00 000	5 000 000	10 000 000
	fh1	1	0.79	0.63	0.50	0.37	0.29



EP315L M2'=80000N.m

	I	Mn_2 (N.m)						P_1	P_t(KW) (ta=20℃)	n_1	n_{1max}	M_b	Brake type
	1:	n_2.h 10000	n_2.h 25000	n_2.h 50000	n_2.h 100000	n_2.h 500000	n_2.h 1000000	(KW)	(n_1=1500)	(min^{-1})	(min^{-1})	(N.m)	
L1	3.8	105000	100000	97000	85000	53000	42800	260	60	350	500		
	4.4	99000	87000	79000	78000	49000	39700	260	60	350	500		
	5.3	90000	80000	70000	68000	42000	34000	260	60	350	500		
	6.2	80000	70000	65000	65000	41000	33000	230	60	350	500		
L2	16.1	105000	100000	97000	85000	53000	42800	180	45	750	1000		
	18.5	99000	87000	79000	78000	49000	39700	180	45	750	1000		
	22.0	99000	87000	79000	78000	49000	39700	180	45	750	1000		
	26.3	90000	80000	70000	68000	42000	34000	170	45	750	1000		
	31.2	80000	70000	65000	65000	41000	33000	140	45	750	1000		
	35.8	90000	80000	70000	68000	42000	34000	120	45	750	1000		
	42.5	80000	70000	65000	65000	41000	33000	100	45	750	1000		
L3	59.2	105000	100000	97000	85000	53000	42800	100	30	1500	2500	2600	6K
	67.5	105000	100000	97000	85000	53000	42800	100	30	1500	2500	2100	6G
	77.4	99000	87000	79000	78000	49000	39700	100	30	1500	2500	2100	6G
	92.2	99000	87000	79000	78000	49000	39700	100	30	1500	2500	1500	6E
	109	99000	87000	79000	78000	49000	39700	90	30	1500	2500	1500	6E
	127	99000	87000	79000	78000	49000	39700	80	30	1500	2500	1100	6C
	152	90000	80000	70000	68000	42000	34000	65	30	1500	2500	1100	6C
	180	80000	70000	65000	65000	41000	33000	55	30	1500	2500	850	6B
	207	90000	80000	70000	68000	42000	34000	50	30	1500	2500	850	6B
	254	90000	80000	70000	68000	42000	34000	42	30	1500	2500	850	6B
	301	80000	70000	65000	65000	41000	33000	32	30	1500	2500	850	6B
L4	337	105000	100000	97000	85000	53000	42800	50	18	1750	3 500	400	5B
	387	99000	87000	79000	78000	49000	39700	35	18	1750	3 500	400	5B
	461	99000	87000	79000	78000	49000	39700	30	18	1750	3 500	400	5B
	544	99000	87000	79000	78000	49000	39700	26	18	1750	3 500	400	5B
	636	99000	87000	79000	78000	49000	39700	23	18	1750	3 500	400	5B
	709	99000	87000	79000	78000	49000	39700	21	18	1750	3 500	400	5B
	868	99000	87000	79000	78000	49000	39700	17.5	18	1750	3 500	400	5B
	1036	90000	80000	70000	68000	42000	34000	14	18	1750	3 500	400	5B
	1229	80000	70000	65000	65000	41000	33000	10.5	18	1750	3 500	400	5B
	1412	90000	80000	70000	68000	42000	34000	10.5	18	1750	3 500	400	5B
	1731	90000	80000	70000	68000	42000	34000	9	18	1750	3 500	400	5B
	2054	80000	70000	65000	65000	41000	33000	7	18	1750	3 500	400	5B

M_{2max}=1.2×Mn2(n2×h=10 000)

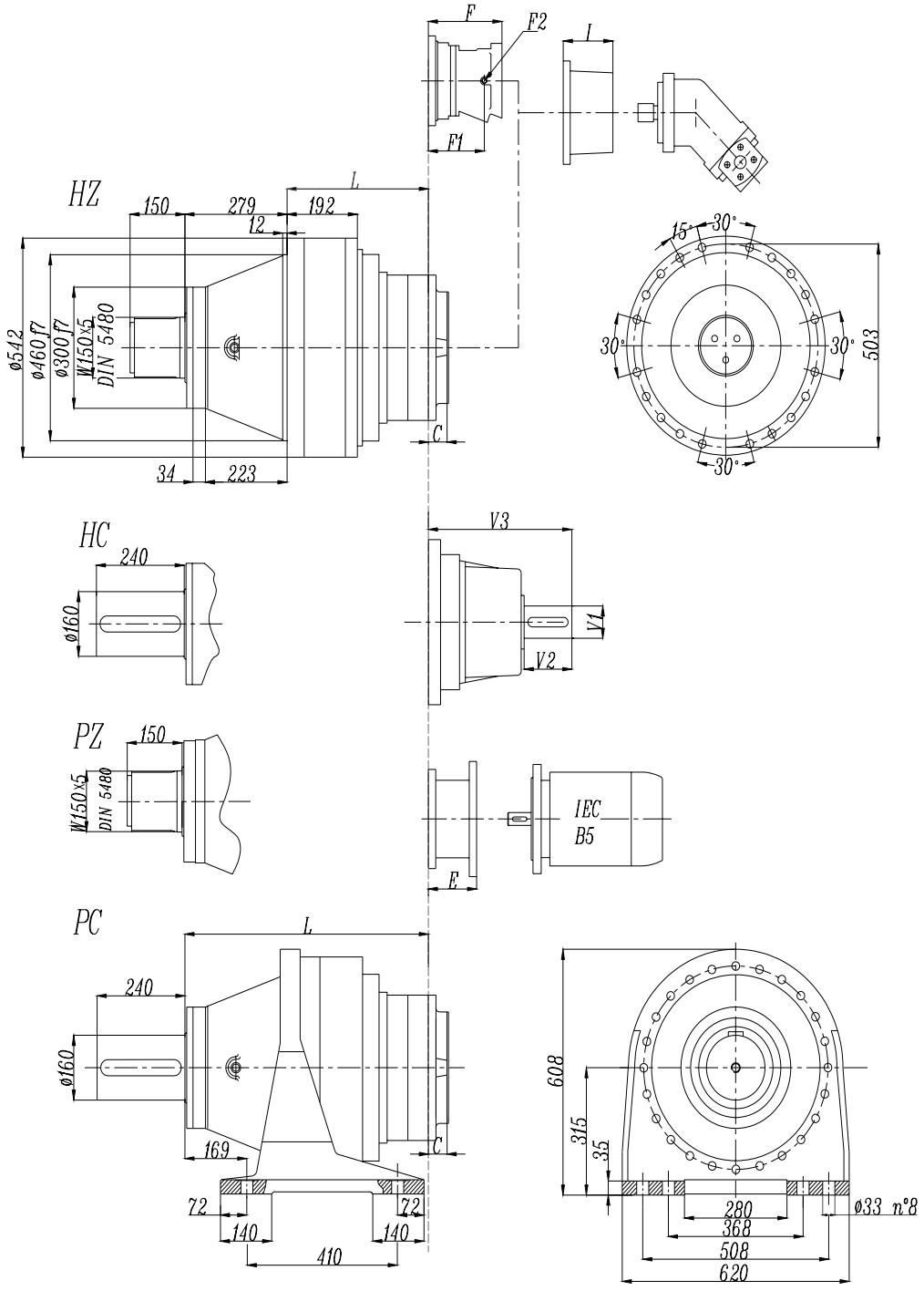


EP315R M2'=80000N.m

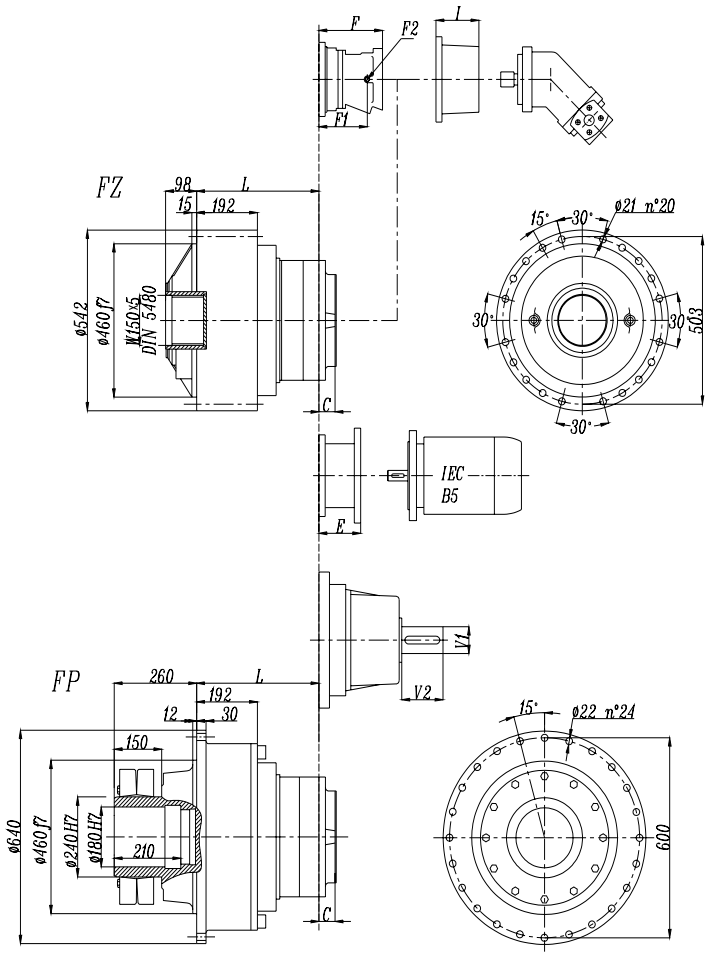
	I	Mn_2 (N.m)						P_1	P_t(KW)	n_1	n_{1max}	M_b	Brake type
	1:	n_2.h 10000	n_2.h 25000	n_2.h 50000	n_2.h 100000	n_2.h 500000	n_2.h 1000000	(KW)	(ta=20℃) (n_1=1500)	(min^{-1})	(min^{-1})	(N.m)	
R3	47.2	73000	73000	60000	48300	29800	24200	150	75	1500	2 500	3200	6L
	54.1	90000	80000	70000	68000	42000	34000	150	75	1500	2 500	2600	6K
	64.4	99000	87000	79000	78000	49000	39700	150	75	1500	2 500	2100	6G
	76.9	90000	80000	70000	68000	42000	34000	125	75	1500	2 500	2100	6G
	91.2	80000	70000	65000	65000	41000	33000	100	75	1500	2 500	1500	6E
	105	90000	80000	70000	68000	42000	34000	90	75	1500	2 500	1500	6E
	124	80000	70000	65000	65000	41000	33000	75	75	1500	2 500	850	6B
R4	152	90000	80000	70000	68000	42000	34000	80	40	1750	3 500	800	5G
	173	105000	10000	97000	85000	53000	42800	80	40	1750	3 500	800	5G
	198	99000	87000	79000	78000	49000	39700	70	40	1750	3 500	800	5G
	236	99000	87000	79000	78000	49000	39700	60	40	1750	3 500	630	5E
	279	99000	87000	79000	78000	49000	39700	50	40	1750	3 500	630	5E
	326	99000	87000	79000	78000	49000	39700	43	40	1750	3 500	500	5C
	389	90000	80000	70000	68000	42000	34000	32	40	1750	3 500	400	5B
	462	80000	70000	65000	65000	41000	33000	26	40	1750	3 500	400	5B
	531	90000	80000	70000	68000	42000	34000	23	40	1750	3 500	400	5B
	650	90000	80000	70000	68000	42000	34000	21	40	1750	3 500	400	5B
	772	80000	70000	65000	65000	41000	33000	16	40	1750	3 500	400	5B

M_{2max}=1.2×Mn2(n2×h=10 000)

EP315 L


F
F2
I
F1
HZ
L
150
279
192
12
ø542
ø460 f7
ø300 f7
W150x5
DIN 5480
C
34
223
15°
30°
30°
30°
30°
503
HC
240
ø160
V3
V1
V2
PZ
150
W150x5
DIN 5480
IEC
B5
E
PC
L
240
ø160
169
C
72
72
140
140
410
608
315
35
280
368
508
620
ø33 n°8

EP315 L



FP version

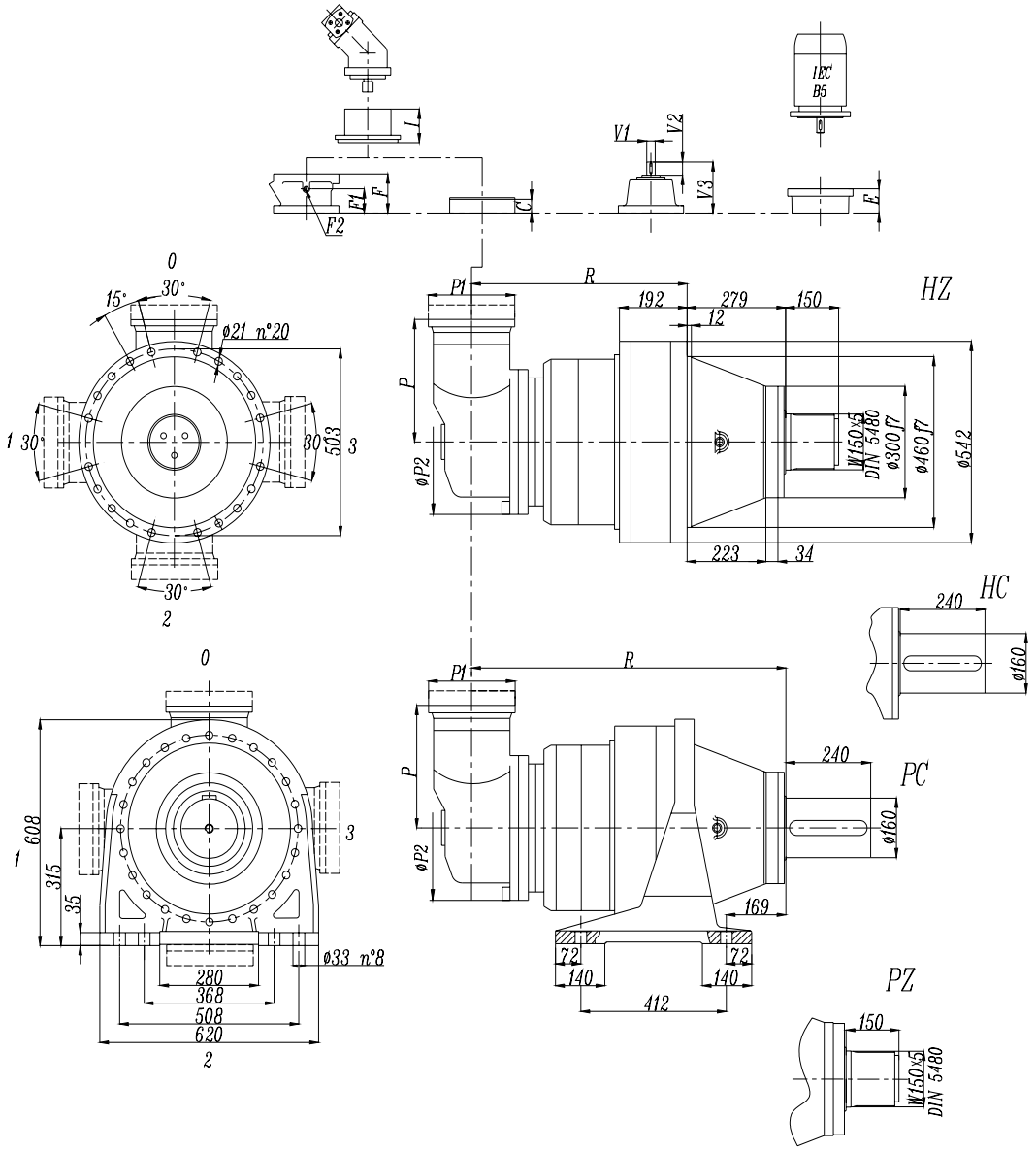
Max. transmissible

126000 N.m

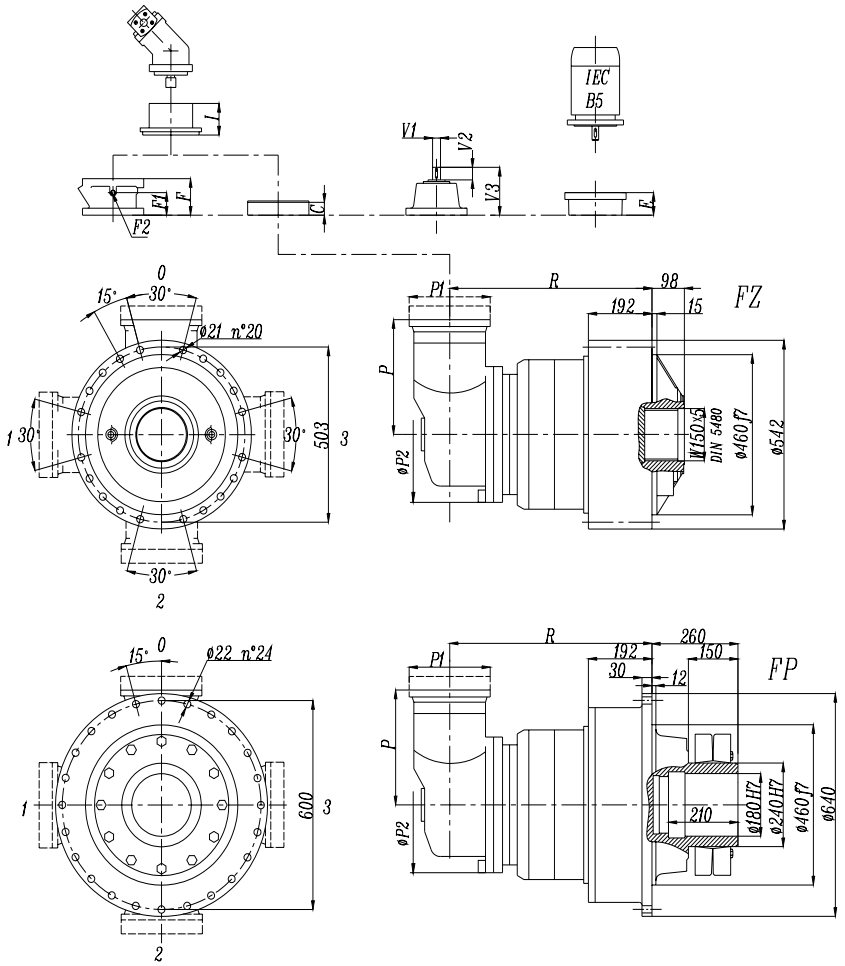
	L				Ref. weight (without input) (Kg)				C	I	Brake				
	HZ HC	PC PZ	FZ	FP	HZ HC	PC PZ	FZ	FP			F	F1	F2	Type	Ref. Weight
315 L1	174	453	174	174	370	500	280	330	116	According to hydraulic motor					
315 L2	386	665	386	386	455	585	365	415	81		232	185	1/4 G	6	46 Kg
315 L3	519	798	519	519	500	630	410	460	51		201	153	1/4 G	6	38 Kg
315 L4	612	891	612	612	512	642	422	472	37		145	95	1/4 G	5	22 Kg

	E (IEC motor input)													
						IEC 132	IEC 160	IEC 180	IEC 200	IEC 225	IEC 250			
315 L1														
315 L2														
315 L3								195	186	216	215			
315 L4						114	144	114	174					

EP315 R


IEC
B5
V1
V2
V3
I
E1
F
F2
C
E
0
15°
30°
ø21 n°20
1
30°
30
503
3
2
P1
R
192
279
150
12
HZ
P
øP2
W150x5
DIN 5480
ø300 f7
ø460 f7
ø542
223
34
240
HC
ø160
608
315
35
ø33 n°8
280
368
508
620
PC
169
72
140
412
PZ

EP315 R



FP version

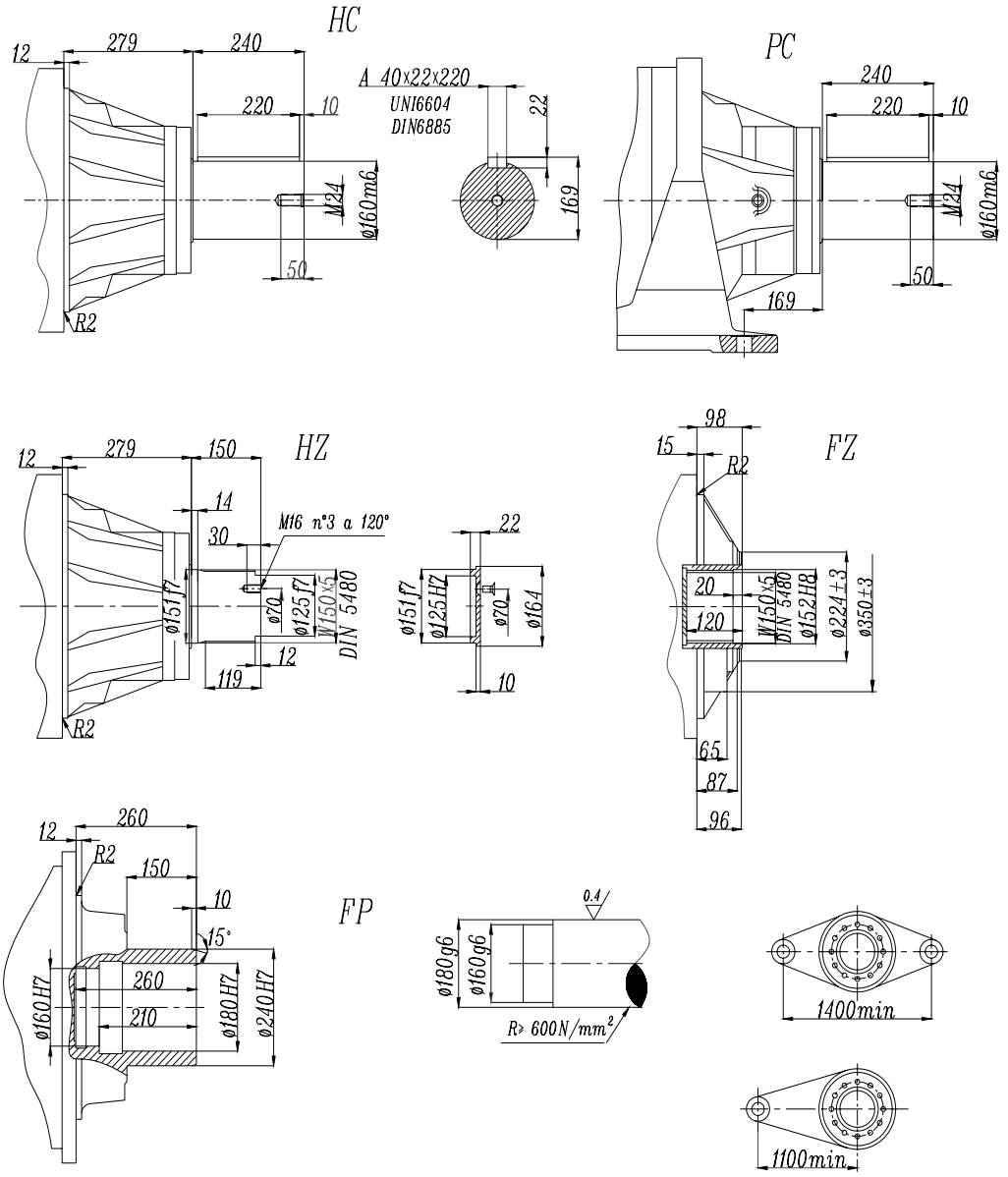
Max. transmissible

126000 N.m

	R				Ref. weight (without input) (Kg)				C	P	I	Brake				
	HZ HC	PC PZ	FZ	FP	HZ HC	PC PZ	FZ	FP				F	F1	F2	Type	Ref. Weight 15 Kg
											According					
315 R3	611	890	611	611	600	730	510	560	45	390	to hydraulic	195	147	1/4 G	6	38
315 R4	642	921	642	642	550	680	460	510	37	225	motor	145	95	1/4 G	4	22

	P1	E (IEC motor input)														
		HZ	HC	FZ	FP	IEC 71	IEC 80	IEC 90	IEC 100	IEC 112	IEC 132	IEC 160	IEC 180	IEC 200	IEC 225	IEC 250
315 R3	245	130	130	110	110								152	182	212	193
315 R4	186	130	130	110	110						114	144	144	174	174	

EP315 L - EP315 R



FP version

Max. transmissible

126000 N.m