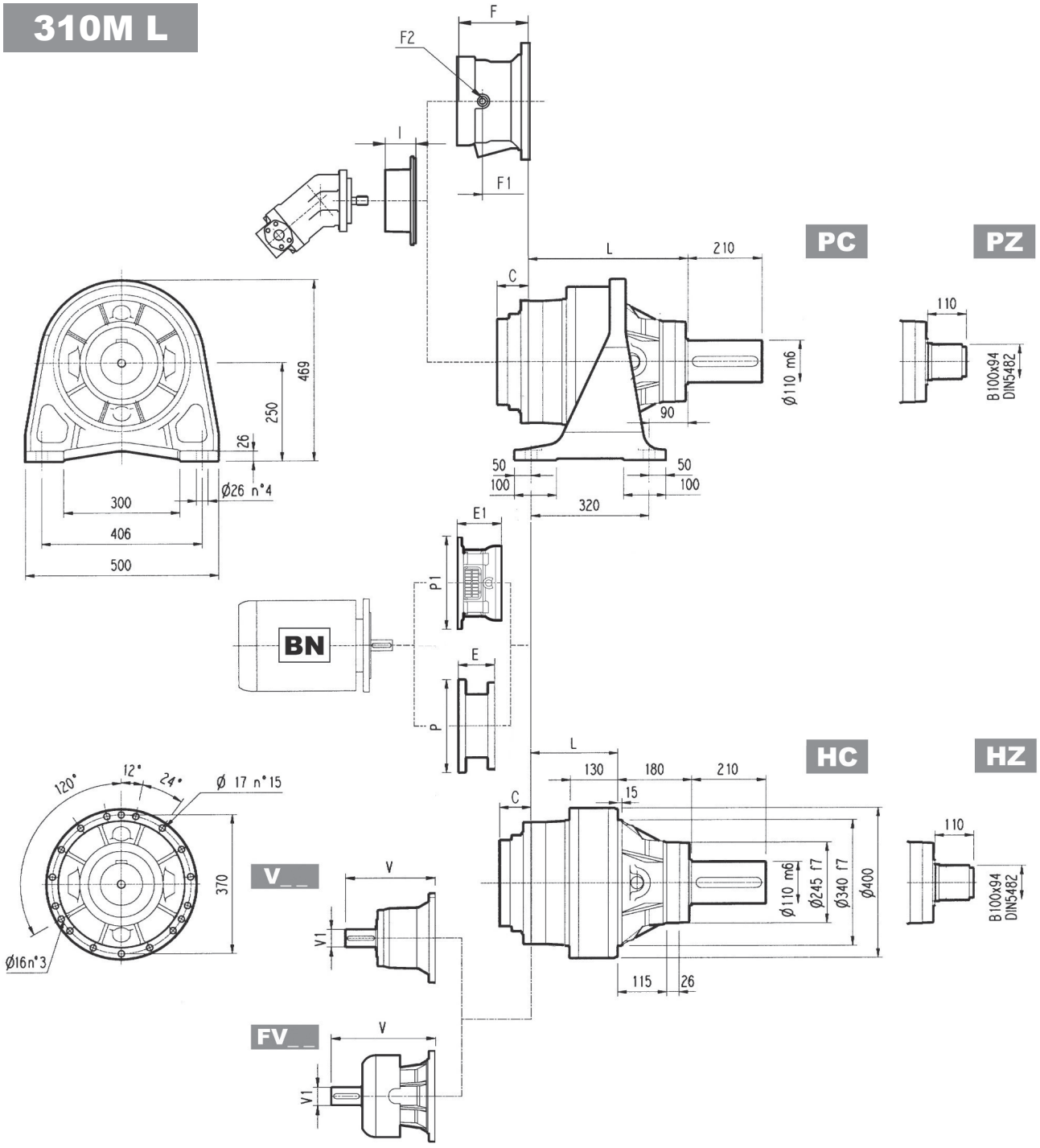
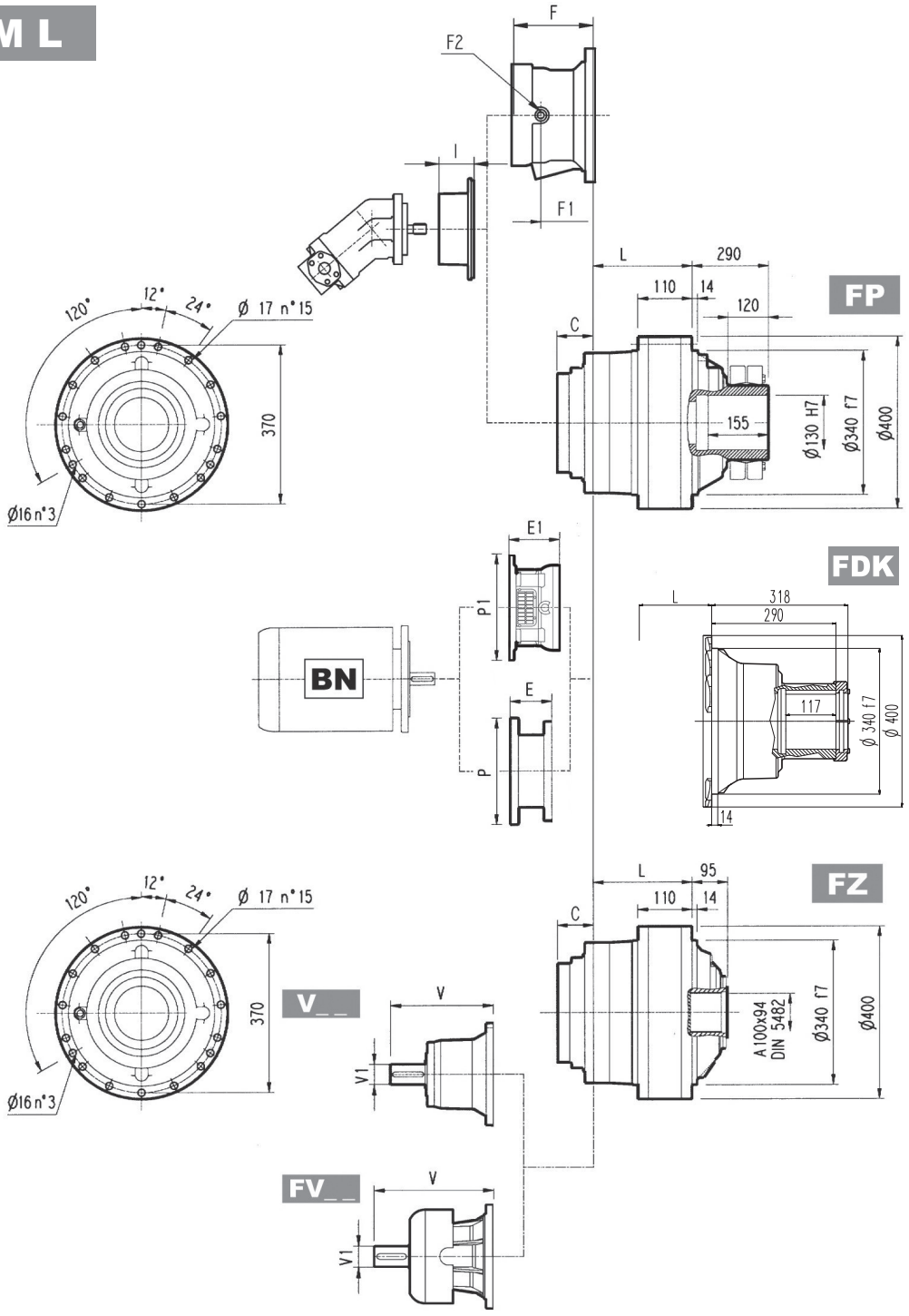
310M L



	L				Kg			
	PC - PZ	HC - HZ	FZ	FP - FDK	PC - PZ	HC - HZ	FZ	FP - FDK
310M L1	288	108	88	88	155	135	110	115
310M L2	424	244	224	224	185	165	140	145
310M L3	489	309	289	289	194	174	149	154
310M L4	542	362	342	342	198	178	153	158

	V	V1	Kg	V	V1	Kg	V	V1	Kg	V	V1	Kg	C	Input	I	F	F1	F2	Type	Input	Kg
310M L1	377	80	50	—	—	—	457	80	63	—	—	—	88	C		—	—	—	—	—	—
310M L2	307	60	23	—	—	—	357	60	28	—	—	—	45	B		195	147	1/4 G	6	B	28
310M L3	239	48	15	—	—	—	276	48	17	—	—	—	37	A		145	95	1/4 G	5	A	16
310M L4	137.5	24	6	158	38	7	—	—	—	—	—	—	37	A	461	105	65	1/4 G	4	A	10

310M L



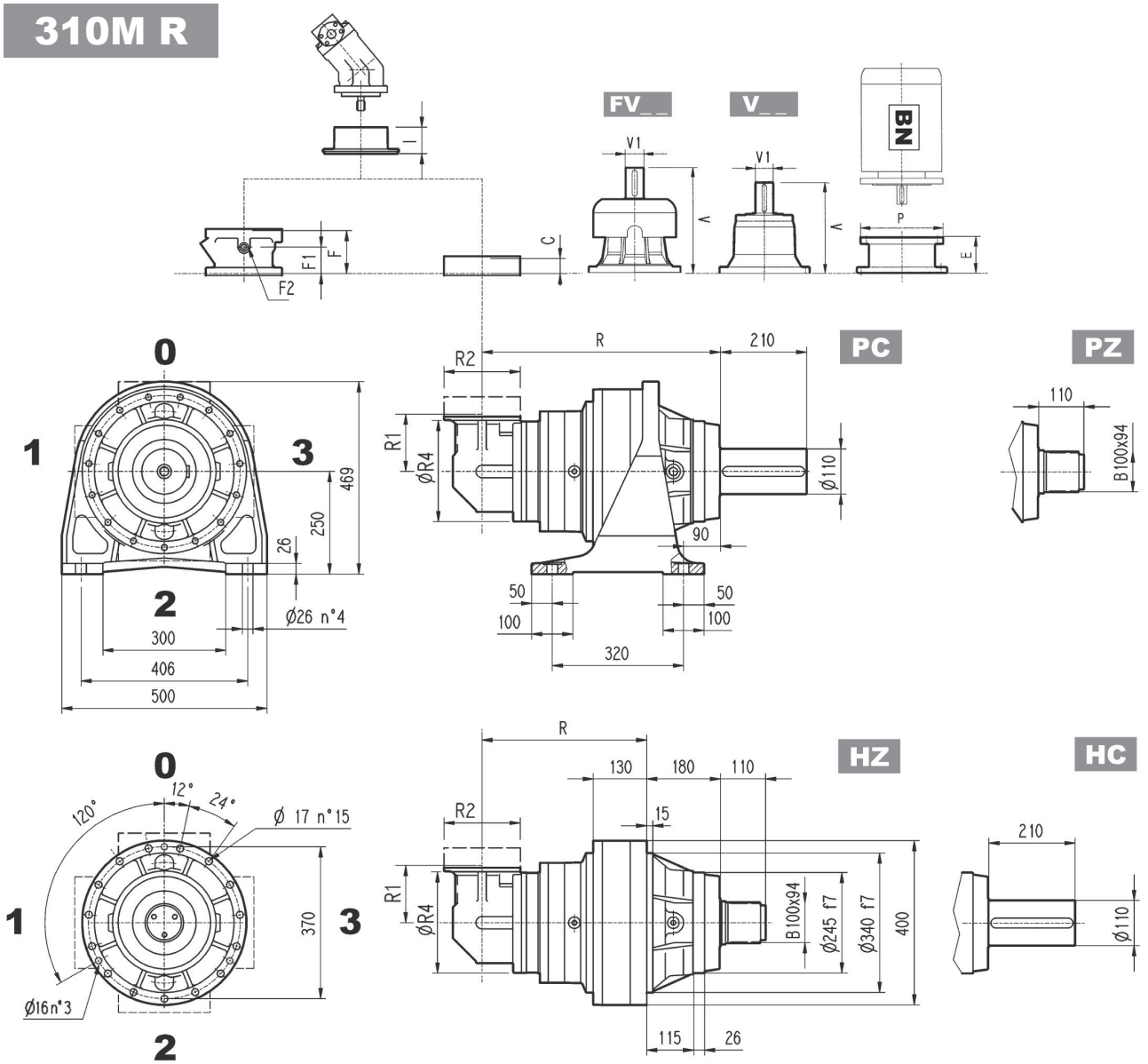
	PF 160		PF 180		PF 200		PF225		PF 250	
	E1	P1	E1	P1	E1	P1	E1	P1	E1	P1
310M L1	—	—	—	—	—	—	254	550	254	550
310M L2	—	—	167	390	197	400	197	450	207	550
310M L3	165	400	165	400	195	400	195	450	—	—
310M L4	165	400	165	400	—	—	—	—	—	—

FP M_{2max} = 44000 Nm

Bemerkung: Für R Design kontaktieren Sie den technischen Service von Bonfiglioli

	P71		P80		P90		P100		P112		P132		P160		P180		P200		P225		P250	
	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P
310M L1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	271	400	301	450	281	550
310M L2	—	—	—	—	—	—	—	—	—	—	—	—	152	350	153	350	183	400	212	450	193	550
310M L3	—	—	—	—	—	—	—	—	—	—	114	300	144	350	144	350	174	400	—	—	—	—
310M L4	65	160	84	200	84	200	94	250	94	250	114	300	144	350	—	—	—	—	—	—	—	—

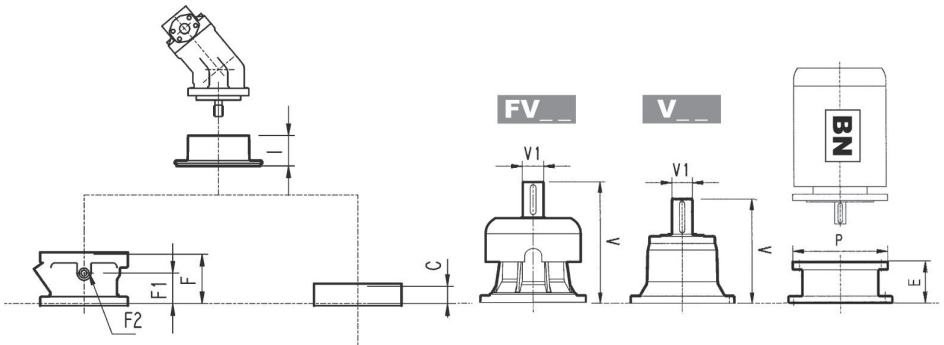
310M R

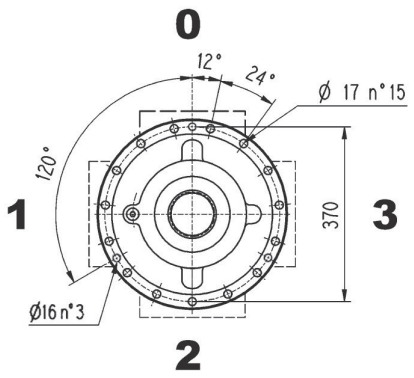


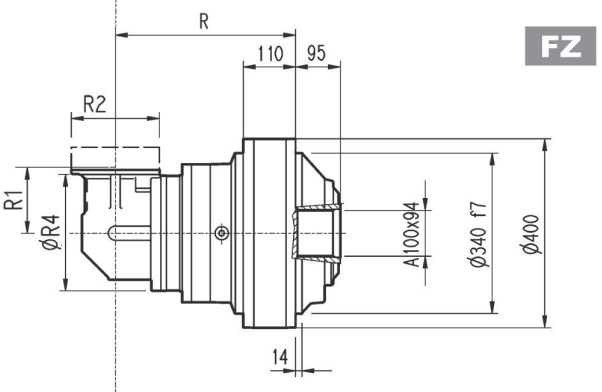
	R				R1	R2	R4	Kg			
	PC-PZ	HC-HZ	FZ	FP - FDK				PC-PZ	HC-HZ	FZ	FP - FDK
310M R2 (B)	495	315	295	295	345	292	400	280	260	240	250
310M R2 (C)	513	333	313	313	390	292	480	300	280	260	270
310M R3	561	381	361	361	140	186	244	209	189	164	169
310M R4	581	401	381	381	140	186	244	214	194	169	174

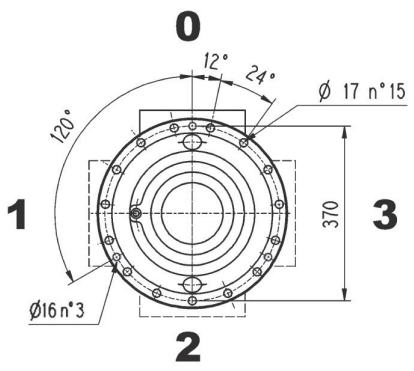
	V	V1	Kg	V	V1	Kg	V	V1	Kg	V	V1	Kg	C	Input	I	F	F1	F2	Type	Input	Kg
310M R2 (B)	307	60	23	—	—	—	357	60	28	—	—	—	45	B		195	147	1/4 G	6	B	28
310M R2 (C)	307	60	23	—	—	—	357	60	28	—	—	—	45	B		195	147	1/4 G	6	B	28
310M R3	137.5	24	6	158	38	7	—	—	—	—	—	—	37	A		145	95	1/4 G	5	A	16
310M R4	137.5	24	6	158	38	7	—	—	—	—	—	—	37	A	461	105	65	1/4 G	4	A	10

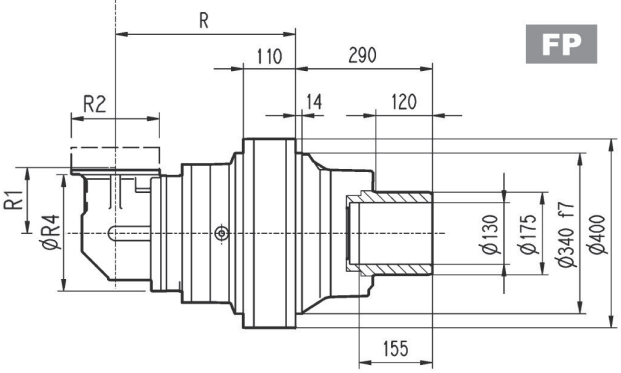
310M R

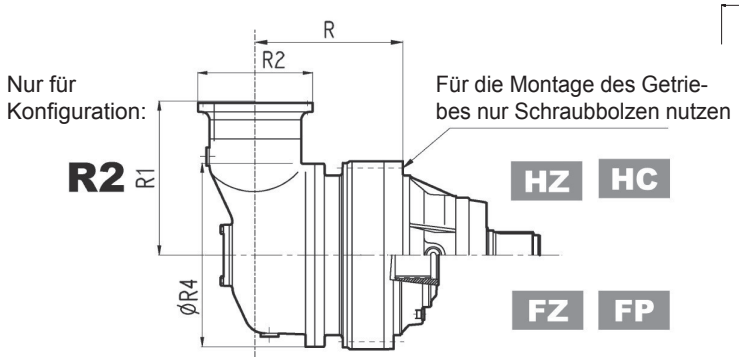


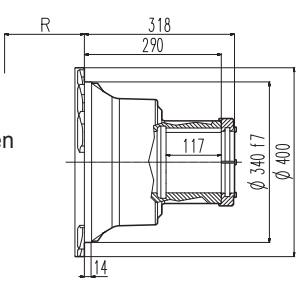








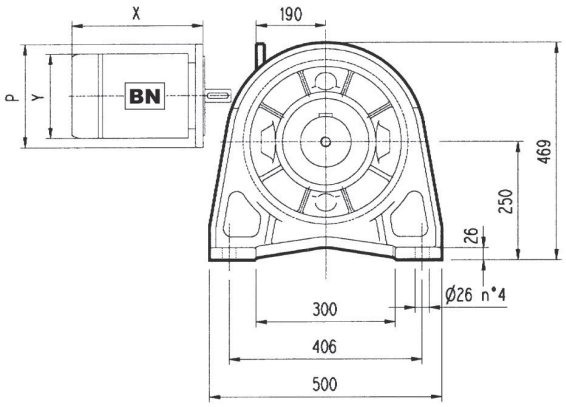




FP M_{2max} = 44000 Nm

	P71		P80		P90		P100		P112		P132		P160		P180		P200		P225		P250	
	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P
310M R2 (B)	—	—	—	—	—	—	—	—	—	—	—	—	152	350	152	350	182	400	212	450	—	—
310M R2 (C)	—	—	—	—	—	—	—	—	—	—	—	—	152	350	152	350	182	400	212	450	193	550
310M R3	65	160	84	200	84	200	94	250	94	250	114	300	144	350	—	—	—	—	—	—	—	—
310M R4	65	160	84	200	84	200	94	250	94	250	114	300	144	350	—	—	—	—	—	—	—	—

3/V 10M L3



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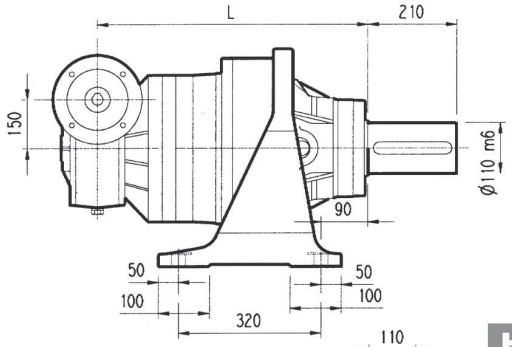
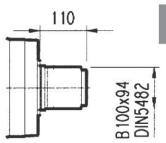
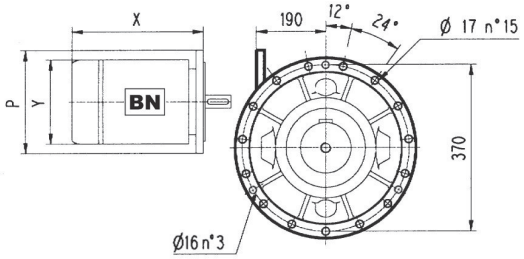
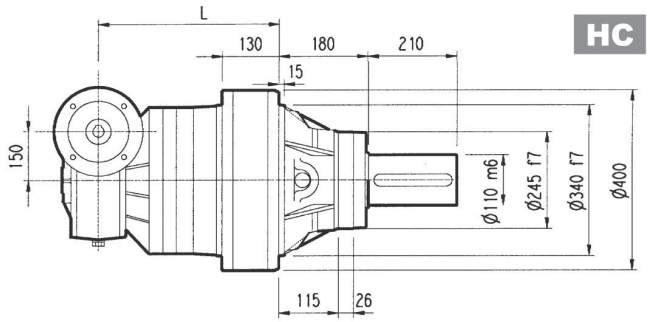


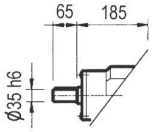
HZ PZ

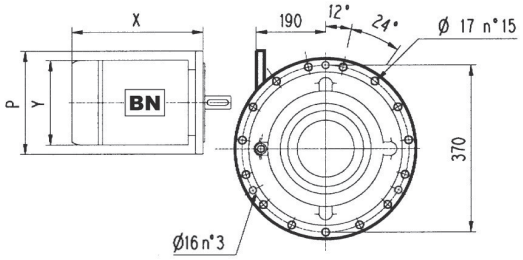




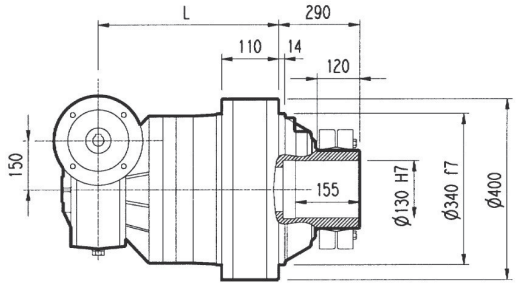
HC



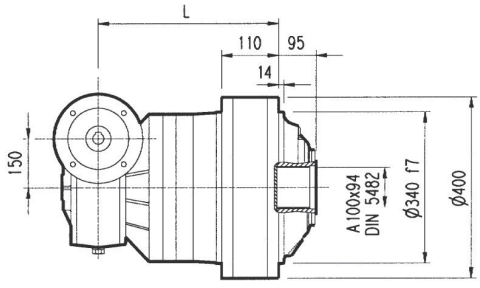




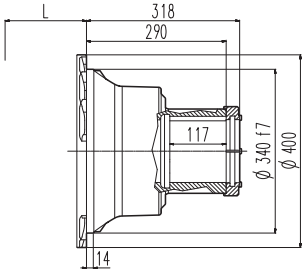
FP



FZ



FDK

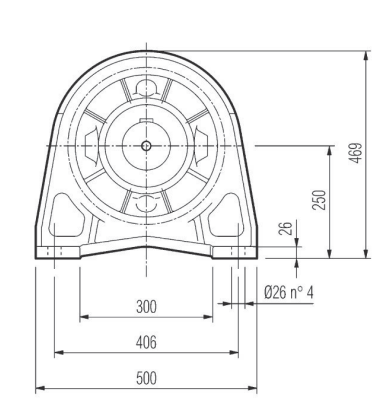


FP | **M_{2max} = 44000 Nm**

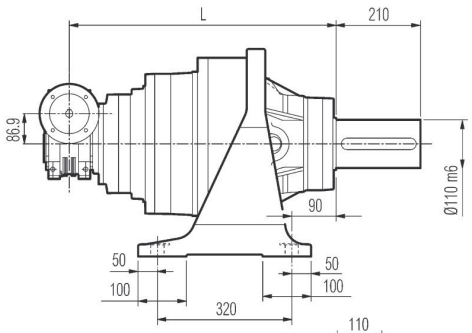
	L				Kg				P71	P80	P90	P100	P112	P132	P160
	PC - PZ	HC - HZ	FZ	FP	PC - PZ	HC - HZ	FZ	FP	P	P	P	P	P	P	P
3/V 10M L3	608	428	408	408	245	225	200	205	—	—	—	250	250	300	300

Bonfiglioli Riduttori

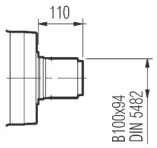
3/V 10M L4

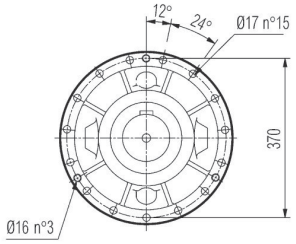


PC

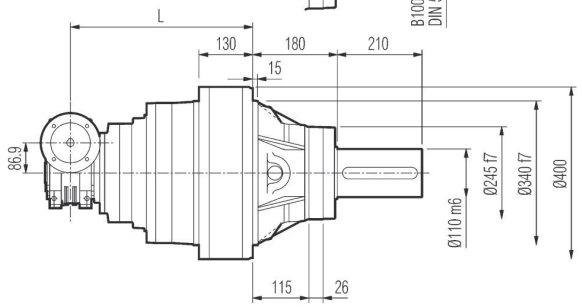


HZ PZ

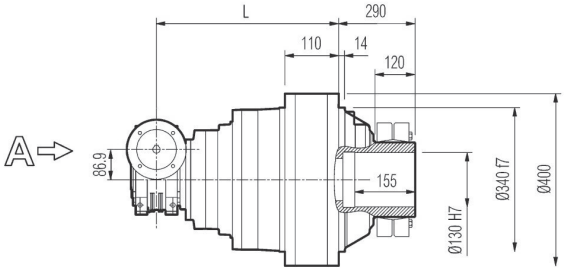


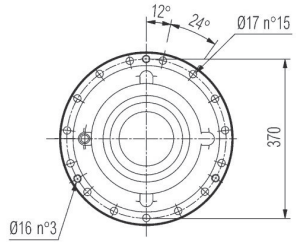


HC



FP





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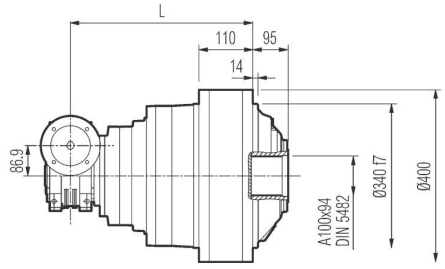
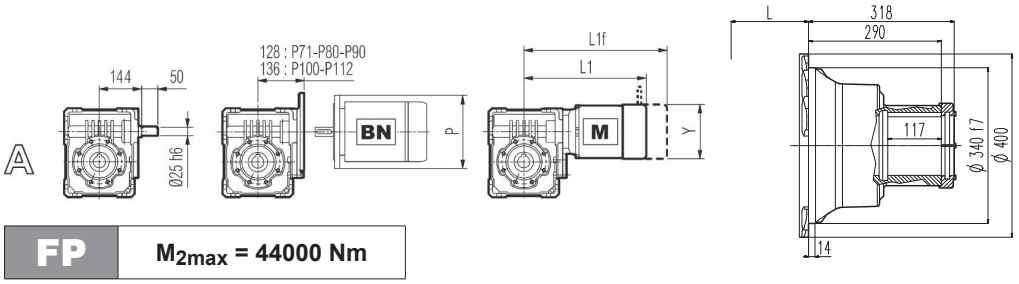


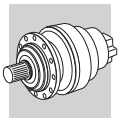
FDK



FP M_{2max} = 44000 Nm

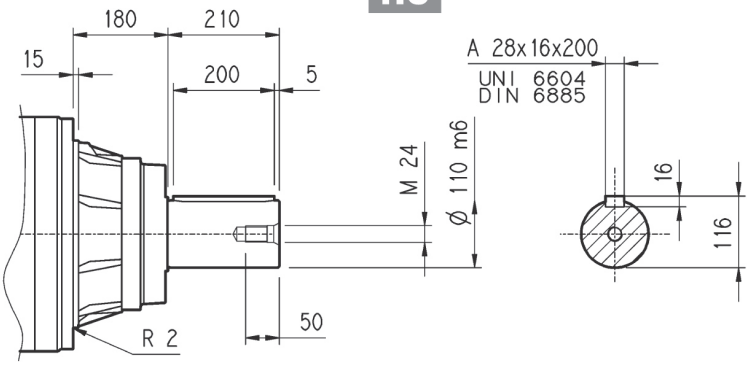
	L				Kg			
	PC - PZ	HC - HZ	FZ	FP - FDK	PC - PZ	HC - HZ	FZ	FP - FDK
3/V 10M L4	634	454	434	434	210	190	165	170

	P71	P80	P90	P100	P112	S1 + M1			S2 + M2S			S3 + M3S			S3 + M3L		
	P	P	P	P	P	L1	L1f	Y	L1	L1f	Y	L1	L1f	Y	L1	L1f	Y
3/V 10M L4	160	200	200	250	250	324	385	138	349	425	156	392	477	193	424	515	193

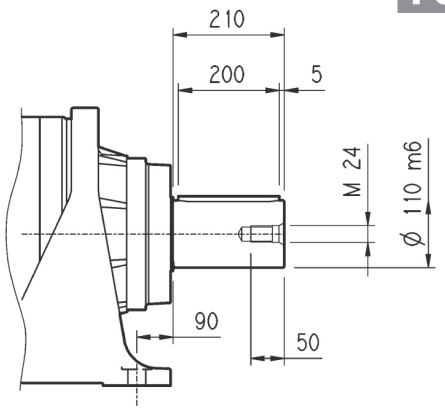


310M L 310M R 3/V 10M L

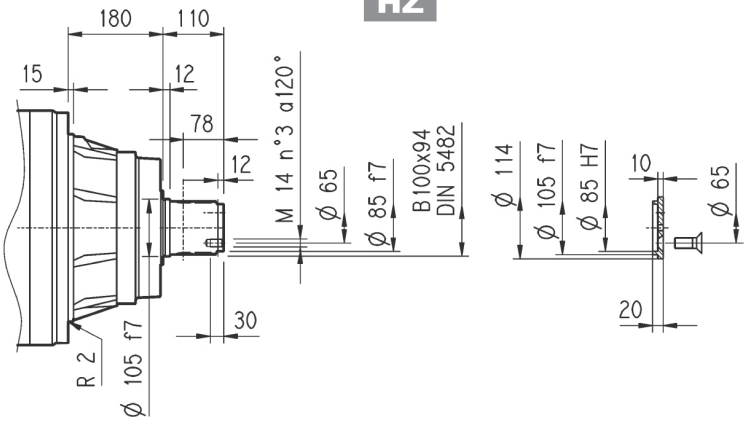
HC



PC



HZ



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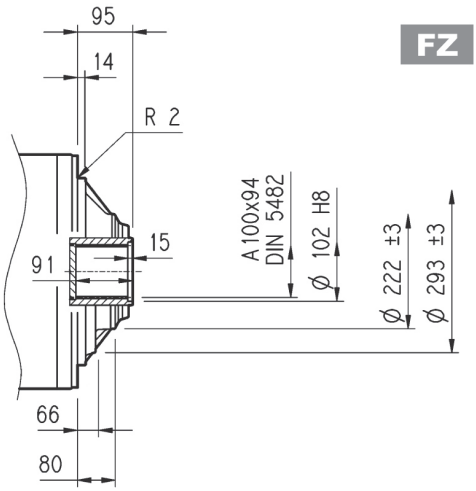
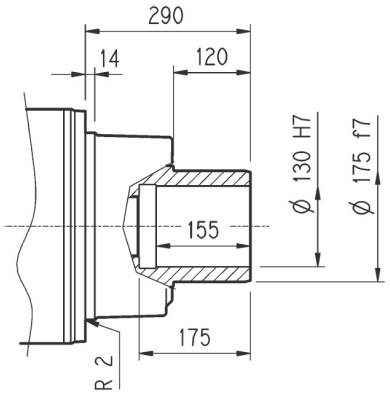
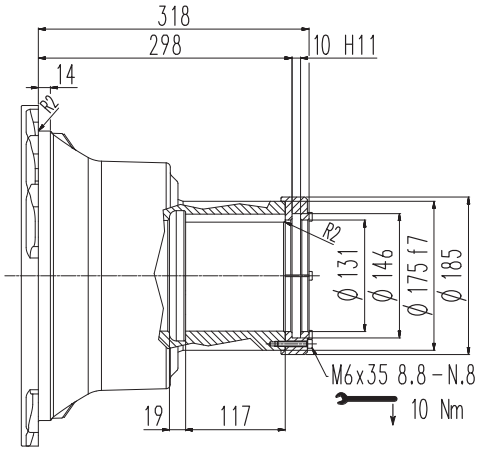


FP





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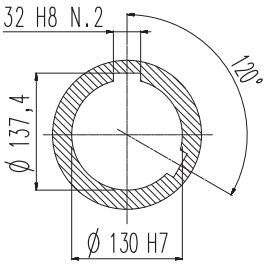
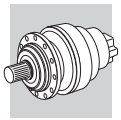


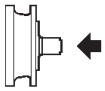
FP	M_{2max} = 44000 Nm

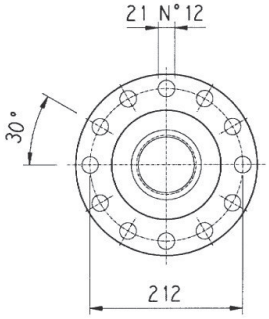


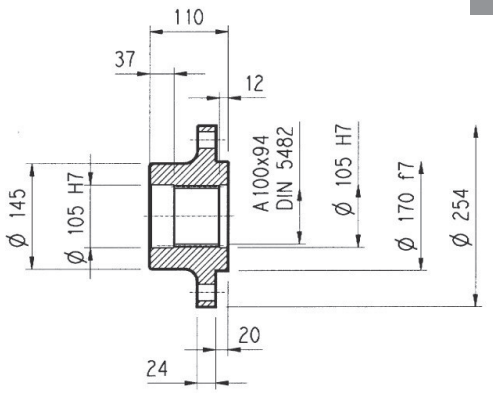
310M L | 310M R | 3/V 10M L

Flansch

W0A



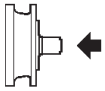


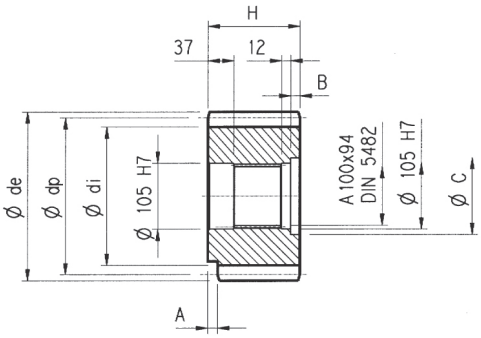


Material: Stahl C40

Ritzel

P...



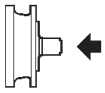


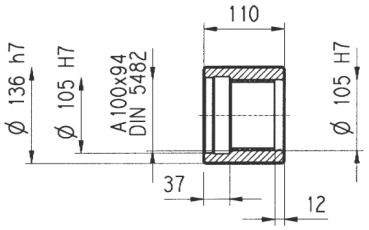
$\alpha = 20°$

	m	z	x	dp	di	de	H	A	B	C	Material
PLQ	12	23	—	276	246	300	110	—	—	—	Einsatzstahl 18NiCrMo5 Einsatzgehärtet
PPD	16	13	0.500	208	184	252.5	145	—	35	116	Vergüteter Stahl 39NiCrMo3
PPF	16	15	0.450	240	215	280	125	—	15	120	

Naben

M0A

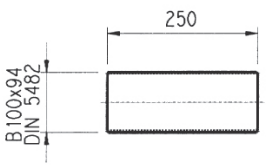




Material: Stahl 16CrNi4

Vielkeilwellen

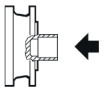
B0A

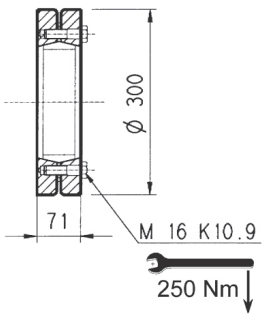


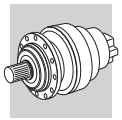
Material: Einsatzstahl 18NiCrMo5 UNI 5331
muss einsatzgehärtet werden 50-55 HRC

Schrumpfscheibe

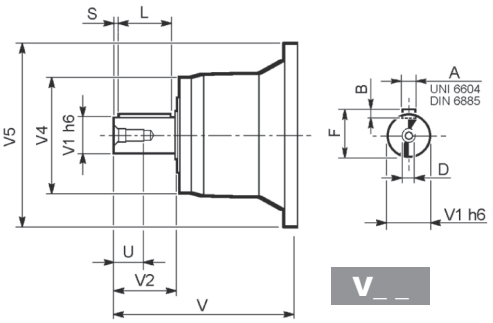
G0A



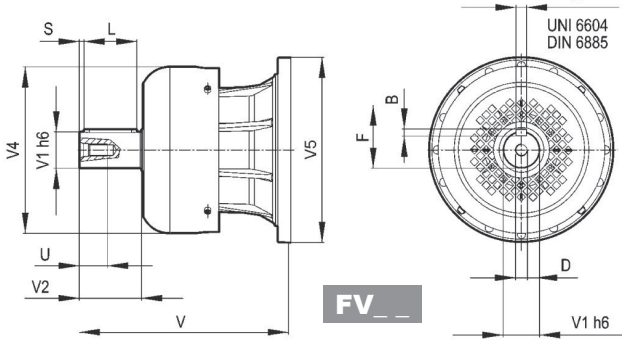




310M L 310M R



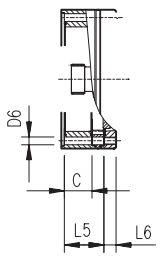
V_ _

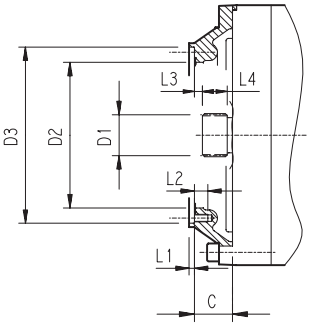


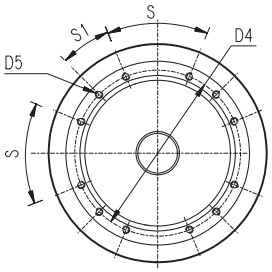
FV_ _

		V	V1	V2	V4	V5	A	B	F	L	S	D	U
310M L1	V10B	377	80	130	200	400	22	14	85	110	10	M16	36
	FV10B	457	80	130	347.5	400	22	14	85	110	10	M16	36
310M L2	V06B	307	60	105	155	292	18	11	64	90	7.5	M16	36
	FV06B	357	60	105	309	292	18	11	64	90	7.5	M16	36
310M L3	V05B	239	48	82	155	245	14	9	51.5	70	6	M16	36
	FV05B	276	48	82	219.5	244	14	9	51.5	70	6	M16	36
310M L4	V01A	137.5	24	36	120	186	8	7	27	30	3	M8	19
	V01B	158	38	58	120	186	10	8	41	50	4	M12	28
310M R2 (B) (C)	V06B	307	60	105	155	292	18	11	64	90	7.5	M16	36
	FV06B	357	60	105	309	292	18	11	64	90	7.5	M16	36
310M R3-R4	V01A	137.5	24	36	120	186	8	7	27	30	3	M8	19
	V01B	158	38	58	120	186	10	8	41	50	4	M12	28

310M L 310M R

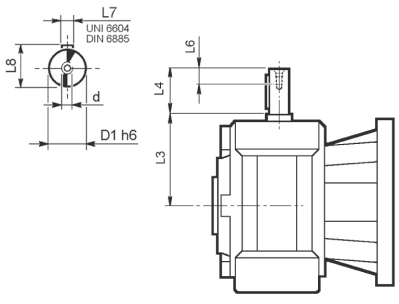






		C	D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	S	S1	Input
310M L1	V9AC	88	70x64 DIN 5482	200	282 H7	266	M12 n°12	—	4	22	11	32	—	—	45°	45°	C
310M L2	V9AB	45	58x53 DIN 5482	195	236 H7	222	M10 n°12	—	4	18	11	22	—	—	45°	22.5°	B
310M L3	V9AA	37	40x36 DIN 5482	140	178 H7	165	M10 n°8	—	4	18	9	18	—	—	45°	45°	A
310M L4	V9AA	37	40x36 DIN 5482	140	178 H7	165	M10 n°8	11	4	—	9	18	53	18	45°	45°	A
310M R2 (B) (C)	V9AA	45	58x53 DIN 5482	195	236 H7	222	M10 n°12	—	4	18	11	22	—	—	45°	22.5°	B
310M R3-R4	V9AA	37	40x36 DIN 5482	140	178 H7	165	M10 n°8	11	4	—	9	18	37	18	45°	45°	A

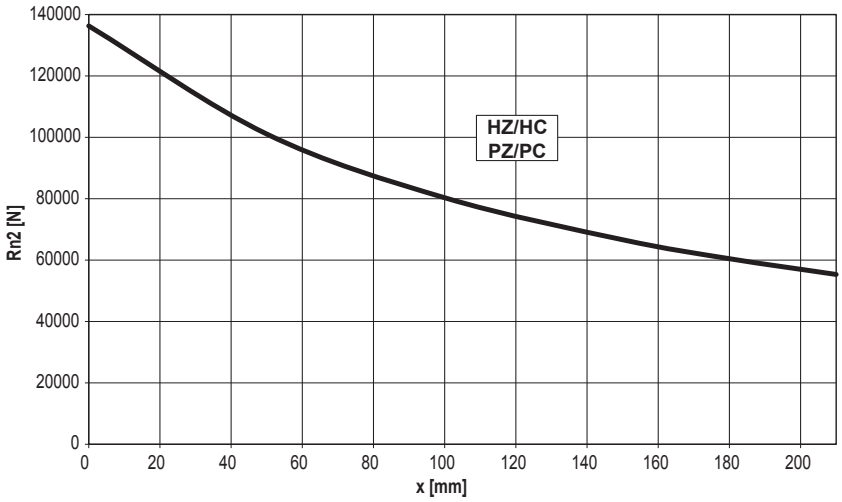
3/V 10M L

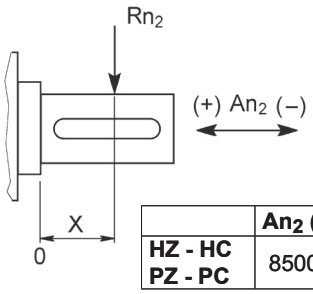


	D1 h6	L3	L4	L6	L7	L8	d
3/V 10M L3_HS	35	185	65	20	10	38	M8
3/V 10M L4_HS	25	144	50	19	8	28	M8

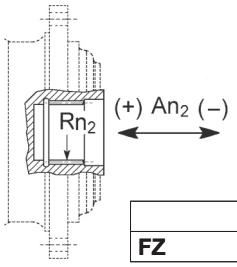
310M L 310M R 3/V 10M L

An der Abtriebswelle zulässige Radial- und Axialkräfte für einen Wert von $Fh_2 : n_2 \cdot h = 100000$





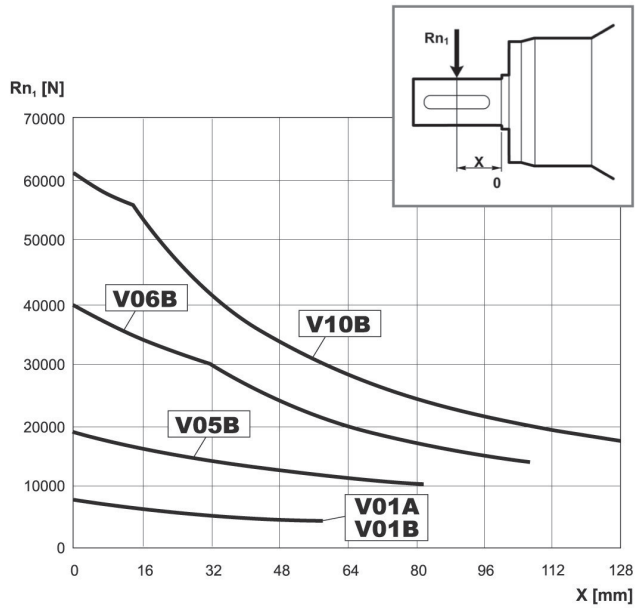
	An2 (+)	An2 (-)
HZ - HC PZ - PC	85000	50000

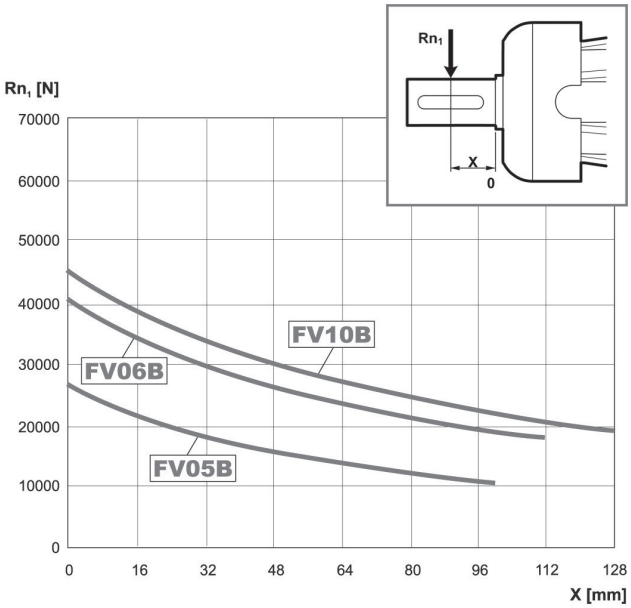


	Rn2	An2 (+/-)
FZ	30170	24136

Korrekturfaktor fh_2 für Wellenbelastungen	$Fh_2 = n_2 \cdot h$		10000	25000	50000	100000	500000	1000000
	fh_2	FZ	**2.15**	**1.59**	**1.26**	**1.00**	**0.58**	**0.46**
		HZ - HC - PZ - PC	**1.27**	**1.27**	**1.23**	**1.00**	**0.62**	**0.50**

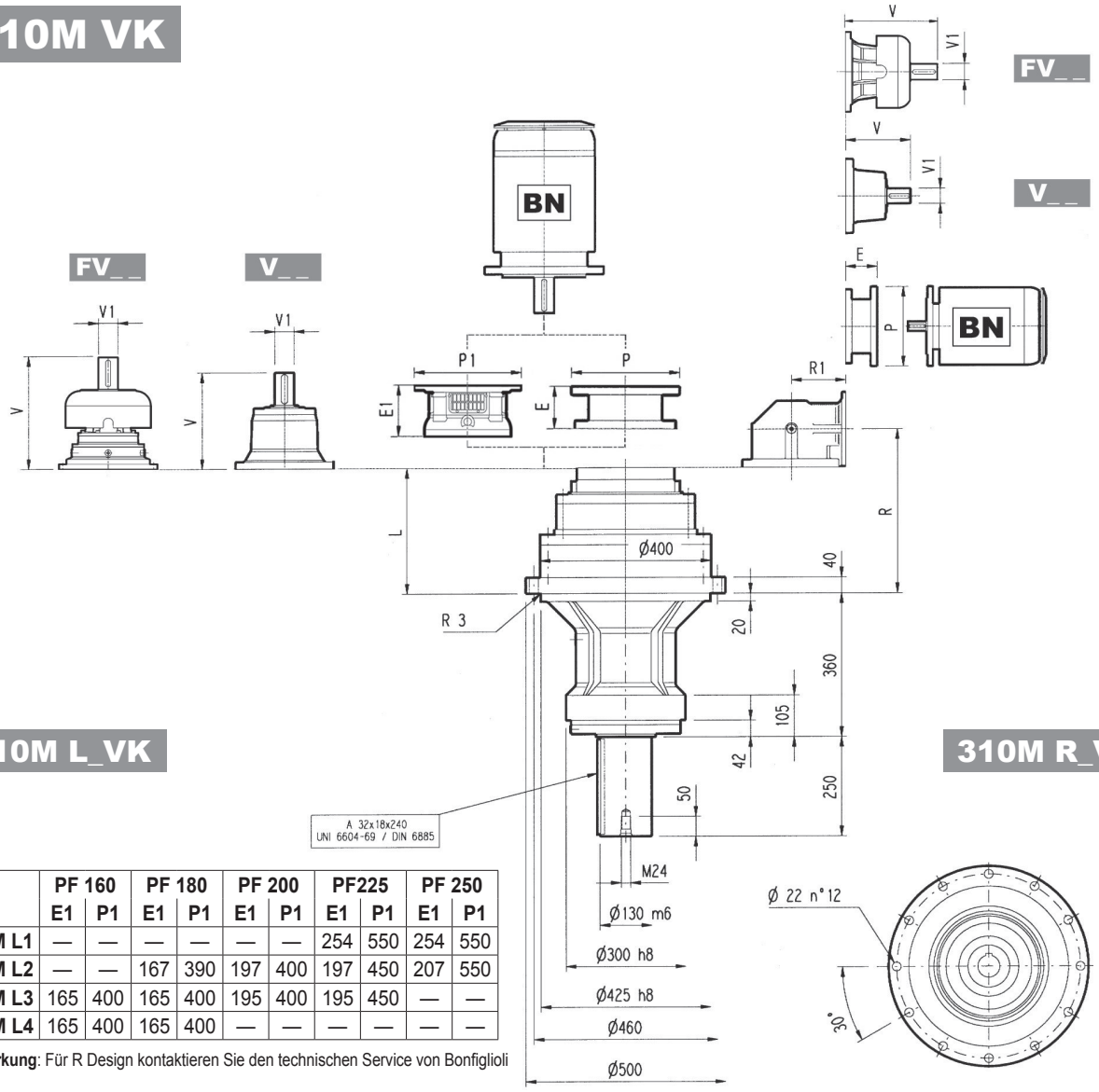
An der Antriebswelle zulässige Radiallasten für einen Wert von $Fh_1 : n_1 \cdot h = 250000$





Korrekturfaktor fh_1 für Wellenbelastungen	$Fh_1 = n_1 \cdot h$	250000	500000	1000000	2000000	5000000	10000000
	fh_1	**1**	**0.79**	**0.63**	**0.50**	**0.37**	**0.29**

310M VK



310M L_VK

310M R_VK

	PF 160		PF 180		PF 200		PF225		PF 250	
	E1	P1	E1	P1	E1	P1	E1	P1	E1	P1
310M L1	—	—	—	—	—	—	254	550	254	550
310M L2	—	—	167	390	197	400	197	450	207	550
310M L3	165	400	165	400	195	400	195	450	—	—
310M L4	165	400	165	400	—	—	—	—	—	—

Bemerkung: Für R Design kontaktieren Sie den technischen Service von Bonfiglioli

	L	Kg	V	V1	Kg	V	V1	Kg	V	V1	Kg	V	V1	Kg
310M L1	107	200	377	80	50	—	—	—	457	80	63	—	—	—
310M L2	243	230	307	60	23	—	—	—	357	60	28	—	—	—
310M L3	308	240	239	48	15	—	—	—	276	48	17	—	—	—
310M L4	361	245	137.5	24	6	158	38	7	—	—	—	—	—	—

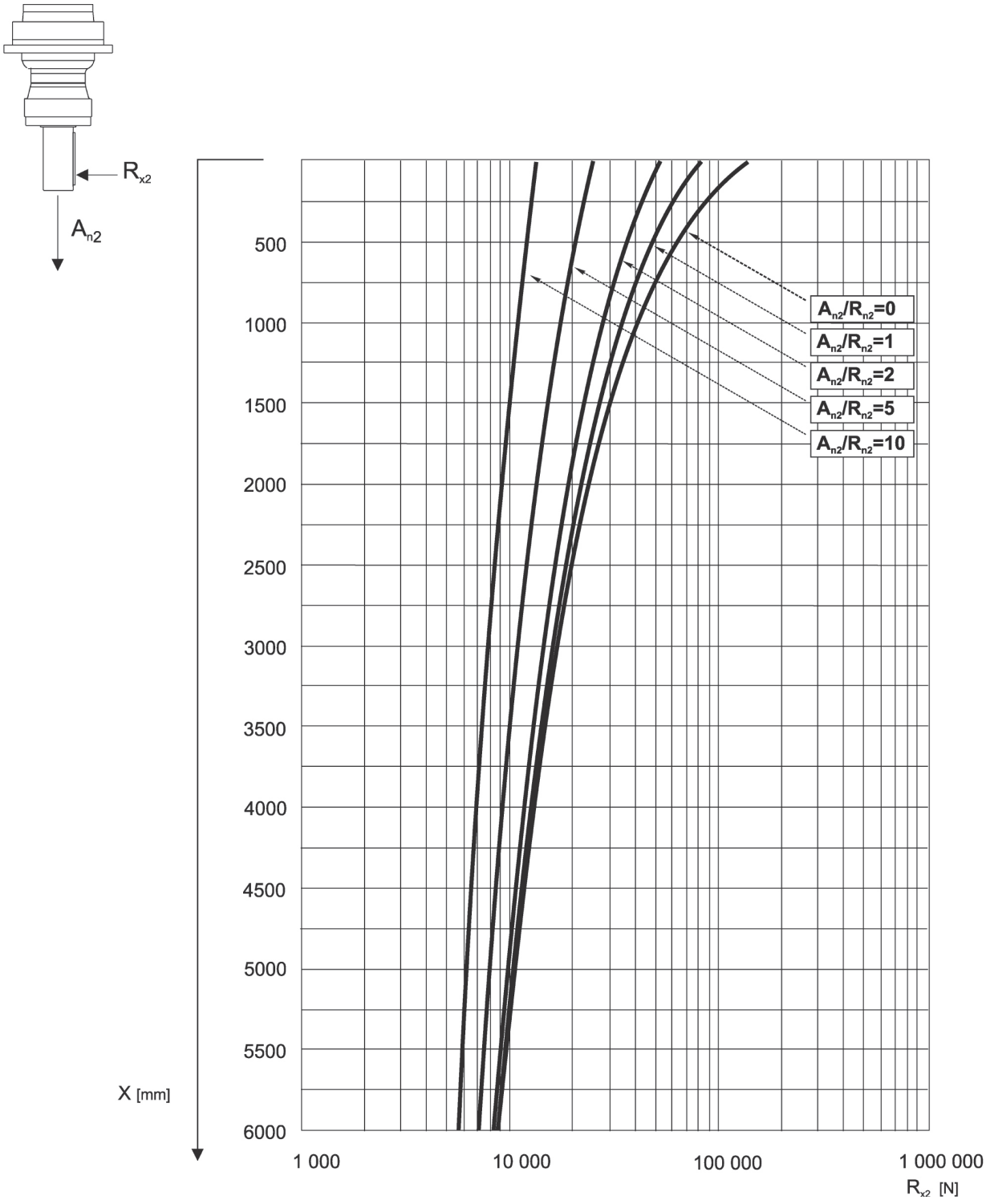
	P71		P80		P90		P100		P112		P132		P160		P180		P200		P225		P250	
	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P
310M L1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	271	400	301	450	281	550
310M L2	—	—	—	—	—	—	—	—	—	—	—	—	152	350	153	350	183	400	212	450	193	550
310M L3	—	—	—	—	—	—	—	—	—	—	114	300	144	350	144	350	174	400	—	—	—	—
310M L4	65	160	84	200	84	200	94	250	94	250	114	300	144	350	—	—	—	—	—	—	—	—

	R	R1	Kg	V	V1	Kg	V	V1	Kg	V	V1	Kg	V	V1	Kg
310M R2 (B)	315	345	320	307	60	23	—	—	—	357	60	28	—	—	—
310M R2 (C)	333	390	340	307	60	23	—	—	—	357	60	28	—	—	—
310M R3	380	140	250	137.5	24	6	158	38	7	—	—	—	—	—	—
310M R4	400	140	260	137.5	24	6	158	38	7	—	—	—	—	—	—

	P71		P80		P90		P100		P112		P132		P160		P180		P200		P225	
	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P
310M R2 (B)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	152	350	182	400	212	450
310M R2 (C)	—	—	—	—	—	—	—	—	—	—	114	300	152	350	152	350	182	400	212	450
310M R3	65	160	84	200	84	200	94	250	94	250	114	300	144	350	—	—	—	—	—	—
310M R4	65	160	84	200	84	200	94	250	94	250	114	300	144	350	—	—	—	—	—	—

310M VK

Das nachstehende Diagramm ermöglicht das Berechnen der zulässigen, auf die Welle des Getriebes einwirkende externe Radialkraft, die sich auf die Distanz x von der Wellenschulter bezieht.
Die Kurven beziehen sich auf den Wert, der sich aus dem Verhältnis zwischen der Axialkraft An_2 und der Radialkraft Rn_2 fur n_2 = 10 min^{-1} und einer Dauer von 10000 Std. ergibt.

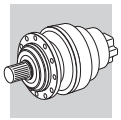


310M L

338

33640 Nm

n_1 min^{-1}		i	n_2 min^{-1}	M_{n2} Nm	P_{n1} kW	P_t kW	P (IEC)	Rn_2 [N] MC	MZ	HC/PC	HZ/PZ	FZ	$M_{2\,max}$ Nm
1500	**310ML1**	**4.09**	367	11700	175	35	200 ... 250	—	—	26500	33600	9080	47600
	310ML1	**5.25**	286	12300	175	35	200 ... 250	—	—	28500	36200	9870	47600
	310ML1	**6.23**	241	12800	175	35	200 ... 250	—	—	30000	38100	10400	47600
	310ML2	**14.7**	102	14900	75	22.0	160 ... 250	—	—	38900	49300	13900	47600
	310ML2	**17.4**	86	15400	75	22.0	160 ... 250	—	—	40900	51800	14700	47600
	310ML2	**21.8**	69	16100	75	22.0	160 ... 250	—	—	43700	55500	15900	47600
	310ML2	**25.4**	59	16700	75	22.0	160 ... 250	—	—	45800	58000	16700	47600
	310ML2	**28**	54	20300	75	22.0	160 ... 250	—	—	47100	59800	17200	47600
	310ML2	**30.7**	49	17100	75	22.0	160 ... 250	—	—	48500	61400	17800	47600
	310ML2	**32.6**	46	20800	75	22.0	160 ... 250	—	—	49300	62500	18100	47600
	310ML2	**38.6**	39	17800	75	22.0	160 ... 250	—	—	51900	65800	19200	47600
	310ML2	**46.7**	32	17800	64	22.0	160 ... 250	—	—	55000	69700	20500	47600
	310ML3	**53**	28.3	19100	40	18.0	132 ... 200	—	—	57100	72400	21300	47600
	310ML3	**62.6**	24.0	19800	40	18.0	132 ... 200	—	—	60000	76100	22500	47600
	310ML3	**73.9**	20.3	22300	40	18.0	132 ... 200	—	—	63100	80000	23800	47600
	310ML3	**80.3**	18.7	20600	40	18.0	132 ... 200	—	—	64700	82000	24500	47600
	310ML3	**92.7**	16.2	23200	40	18.0	132 ... 200	—	—	67500	85600	25700	47600
	310ML3	**101**	14.9	20800	36	18.0	132 ... 200	—	—	69200	87800	26400	47600
	310ML3	**108**	13.9	24300	39	18.0	132 ... 200	—	—	70600	89600	27000	47600
	310ML3	**119**	12.6	21500	31	18.0	132 ... 200	—	—	72800	92300	27900	47600
	310ML3	**135**	11.1	25800	33	18.0	132 ... 200	—	—	75600	95900	29100	47600
	310ML3	**149**	10.0	21700	25	18.0	132 ... 200	—	—	77900	98800	30100	47600
	310ML3	**164**	9.2	26600	27.9	18.0	132 ... 200	—	—	78000	98900	31100	47600
	310ML3	**177**	8.5	17900	17.3	18.0	132 ... 200	—	—	78000	98900	31900	47600
	310ML3	**202**	7.4	22100	18.8	18.0	132 ... 200	—	—	78000	98900	33300	47600
	310ML3	**230**	6.5	19300	14.5	18.0	132 ... 200	—	—	78000	98900	34800	47600
	310ML3	**249**	6.0	17900	12.4	18.0	132 ... 200	—	—	78000	98900	35700	47600
	310ML3	**295**	5.1	22700	13.2	18.0	132 ... 200	—	—	78000	98900	37800	47600
	310ML3	**350**	4.3	18500	9.1	18.0	132 ... 200	—	—	79800	101100	40000	47600
	310ML4	**392**	3.8	18900	8.5	11.0	71 ... 160	—	—	81000	102700	41500	47600
	310ML4	**453**	3.3	29000	11.3	11.0	71 ... 160	—	—	82700	104900	43600	47600
	310ML4	**507**	3.0	24900	8.7	11.0	71 ... 160	—	—	84100	106600	45300	47600
	310ML4	**590**	2.5	25600	7.7	11.0	71 ... 160	—	—	85900	108900	47600	47600
	310ML4	**637**	2.4	25900	7.2	11.0	71 ... 160	—	—	86900	110100	48800	47600
	310ML4	**726**	2.1	26500	6.5	11.0	71 ... 160	—	—	88500	112200	51000	47600



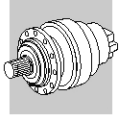
310M L

338

33640 Nm

n_1 min^{-1}		i	n_2 min^{-1}	M_{n2} Nm	P_{n1} kW	P_t kW	P (IEC)	Rn_2 [N] MC	MZ	HC/PC	HZ/PZ	FZ	$M_{2\,max}$ Nm
1500	**310ML4**	**798**	1.9	27000	6.0	11.0	71 ... 160	—	—	89700	113700	52700	47600
	310ML4	**974**	1.5	32000	5.8	11.0	71 ... 160	—	—	92300	117000	56300	47600
	310ML4	**1002**	1.5	28100	5.0	11.0	71 ... 160	—	—	92700	117500	56800	47600
	310ML4	**1164**	1.3	28800	4.4	11.0	71 ... 160	—	—	94700	120000	59700	47600
	310ML4	**1259**	1.2	24800	3.5	11.0	71 ... 160	—	—	95700	121400	61300	47600
	310ML4	**1438**	1.0	23800	2.9	11.0	71 ... 160	—	—	97600	123700	64100	47600
	310ML4	**1672**	0.90	23900	2.5	11.0	71 ... 160	—	—	99700	126400	65000	47600
	310ML4	**1794**	0.84	23900	2.4	11.0	71 ... 160	—	—	100700	127700	65000	47600
	310ML4	**2022**	0.74	23900	2.1	11.0	71 ... 160	—	—	102400	129900	65000	47600
	310ML4	**2523**	0.59	23900	1.7	11.0	71 ... 160	—	—	105700	134100	65000	47600
1000	**310ML1**	**4.09**	244	13200	175	42	200 ... 250	—	—	29900	37900	10400	47600
	310ML1	**5.25**	190	13900	175	42	200 ... 250	—	—	32200	40900	11300	47600
	310ML1	**6.23**	160	14400	175	42	200 ... 250	—	—	33900	43000	12000	47600
	310ML2	**14.7**	68	16800	75	26.4	160 ... 250	—	—	43900	55700	15900	47600
	310ML2	**17.4**	58	17400	75	26.4	160 ... 250	—	—	46100	58500	16800	47600
	310ML2	**21.8**	46	18100	75	26.4	160 ... 250	—	—	49400	62600	18200	47600
	310ML2	**25.4**	39	18500	75	26.4	160 ... 250	—	—	51700	65500	19100	47600
	310ML2	**28**	36	20900	75	26.4	160 ... 250	—	—	53200	67500	19700	47600
	310ML2	**30.7**	33	17700	64	26.4	160 ... 250	—	—	54700	69400	20300	47600
	310ML2	**32.6**	31	21000	72	26.4	160 ... 250	—	—	55700	70600	20800	47600
	310ML2	**38.6**	25.9	17800	51	26.4	160 ... 250	—	—	58600	74300	22000	47600
	310ML2	**46.7**	21.4	17800	42	26.4	160 ... 250	—	—	62100	78700	23400	47600
	310ML3	**53**	18.9	21600	40	21.6	132 ... 200	—	—	64500	81800	24400	47600
	310ML3	**62.6**	16.0	22400	40	21.6	132 ... 200	—	—	67800	85900	25800	47600
	310ML3	**73.9**	13.5	24600	38	21.6	132 ... 200	—	—	71200	90300	27300	47600
	310ML3	**80.3**	12.4	21300	30	21.6	132 ... 200	—	—	73000	92600	28000	47600
	310ML3	**92.7**	10.8	25700	32	21.6	132 ... 200	—	—	76300	96700	29400	47600
	310ML3	**101**	9.9	21700	24.7	21.6	132 ... 200	—	—	78000	98900	30300	47600
	310ML3	**108**	9.3	26700	28.4	21.6	132 ... 200	—	—	78000	98900	30900	47600
	310ML3	**119**	8.4	21900	21.1	21.6	132 ... 200	—	—	78000	98900	32000	47600
	310ML3	**135**	7.4	27700	23.5	21.6	132 ... 200	—	—	78000	98900	33400	47600
	310ML3	**149**	6.7	22300	17.1	21.6	132 ... 200	—	—	78000	98900	34500	47600
	310ML3	**164**	6.1	27000	18.9	21.6	132 ... 200	—	—	78000	98900	35600	47600
	310ML3	**177**	5.6	18000	11.6	21.6	132 ... 200	—	—	78000	98900	36500	47600
	310ML3	**202**	5.0	22700	12.9	21.6	132 ... 200	—	—	78100	99000	38100	47600
	310ML3	**230**	4.3	19300	9.6	21.6	132 ... 200	—	—	79600	100900	39800	47600
	310ML3	**249**	4.0	18700	8.6	21.6	132 ... 200	—	—	80500	102100	40900	47600
	310ML3	**295**	3.4	23900	9.3	21.6	132 ... 200	—	—	82500	104600	43300	47600
	310ML3	**350**	2.9	19900	6.5	21.6	132 ... 200	—	—	84500	107200	45800	47600
	310ML4	**392**	2.6	20300	6.1	13.2	71 ... 160	—	—	85900	108900	47600	47600
	310ML4	**453**	2.2	29000	7.6	13.2	71 ... 160	—	—	87700	111200	49900	47600
	310ML4	**507**	2.0	26700	6.2	13.2	71 ... 160	—	—	89100	113000	51800	47600
	310ML4	**590**	1.7	27400	5.5	13.2	71 ... 160	—	—	91000	115400	54500	47600
	310ML4	**637**	1.6	27800	5.2	13.2	71 ... 160	—	—	92000	116700	55900	47600
	310ML4	**726**	1.4	28500	4.6	13.2	71 ... 160	—	—	93800	118900	58400	47600
	310ML4	**798**	1.3	28900	4.3	13.2	71 ... 160	—	—	95100	120500	60300	47600
	310ML4	**974**	1.0	33100	4.0	13.2	71 ... 160	—	—	97800	124000	64400	47600
	310ML4	**1002**	1.0	30100	3.6	13.2	71 ... 160	—	—	98200	124500	65000	47600
	310ML4	**1164**	0.86	30100	3.1	13.2	71 ... 160	—	—	100300	127200	65000	47600
	310ML4	**1259**	0.79	24800	2.3	13.2	71 ... 160	—	—	101400	128600	65000	47600
	310ML4	**1438**	0.70	23900	2.0	13.2	71 ... 160	—	—	103400	131100	65000	47600
	310ML4	**1672**	0.60	23900	1.7	13.2	71 ... 160	—	—	105600	133900	65000	47600
	310ML4	**1794**	0.56	23900	1.6	13.2	71 ... 160	—	—	106700	135300	65000	47600
	310ML4	**2022**	0.49	23900	1.4	13.2	71 ... 160	—	—	108600	137600	65000	47600
	310ML4	**2523**	0.40	23900	1.1	13.2	71 ... 160	—	—	112000	142100	65000	47600
500	**310ML1**	**4.09**	122	16200	175	70	200 ... 250	—	—	36800	46700	13100	47600
	310ML1	**5.25**	95	17100	175	70	200 ... 250	—	—	39700	50300	14200	47600
	310ML1	**6.23**	80	17000	147	70	200 ... 250	—	—	41800	53000	15100	47600
	310ML2	**14.7**	34	20100	75	44	160 ... 250	—	—	54100	68500	20100	47600

B



310M L

338

33640 Nm

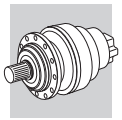
n_1 min^{-1}		i	n_2 min^{-1}	M_{n2} Nm	P_{n1} kW	P_t kW	P (IEC)	Rn_2 [N] MC	MZ	HC/PC	HZ/PZ	FZ	$M_{2\,max}$ Nm
500	310ML2	17.4	28.8	20700	66	44	160 ... 250	—	—	56800	72000	21200	47600
	310ML2	21.8	22.9	21500	55	44	160 ... 250	—	—	60800	77100	22900	47600
	310ML2	25.4	19.7	21500	47	44	160 ... 250	—	—	63600	80700	24100	47600
	310ML2	28	17.9	21300	42	44	160 ... 250	—	—	65500	83100	24900	47600
	310ML2	30.7	16.3	18600	34	44	160 ... 250	—	—	67400	85400	25600	47600
	310ML2	32.6	15.4	21400	37	44	160 ... 250	—	—	68600	87000	26100	47600
	310ML2	38.6	12.9	17800	25.7	44	160 ... 250	—	—	72200	91500	27700	47600
	310ML2	46.7	10.7	17800	21.2	44	160 ... 250	—	—	76400	96900	29500	47600
	310ML3	53	9.4	26400	28.6	36	132 ... 200	—	—	78000	98900	30800	47600
	310ML3	62.6	8.0	26900	24.6	36	132 ... 200	—	—	78000	98900	32500	47600
	310ML3	73.9	6.8	28100	21.8	36	132 ... 200	—	—	78000	98900	34400	47600
	310ML3	80.3	6.2	22400	16.0	36	132 ... 200	—	—	78000	98900	35300	47600
	310ML3	92.7	5.4	29000	17.9	36	132 ... 200	—	—	78000	98900	37100	47600
	310ML3	101	5.0	22700	12.9	36	132 ... 200	—	—	78100	99000	38100	47600
	310ML3	108	4.6	28100	14.9	36	132 ... 200	—	—	78800	100000	39000	47600
	310ML3	119	4.2	23400	11.3	36	132 ... 200	—	—	80000	101400	40300	47600
	310ML3	135	3.7	29900	12.7	36	132 ... 200	—	—	81400	103300	42000	47600
	310ML3	149	3.3	24400	9.4	36	132 ... 200	—	—	82600	104700	43400	47600
	310ML3	164	3.1	27200	9.5	36	132 ... 200	—	—	83700	106100	44800	47600
	310ML3	177	2.8	19900	6.4	36	132 ... 200	—	—	84600	107300	46000	47600
	310ML3	202	2.5	25700	7.3	36	132 ... 200	—	—	86200	109300	48000	47600
	310ML3	230	2.2	19400	4.8	36	132 ... 200	—	—	87900	111400	50200	47600
	310ML3	249	2.0	21200	4.9	36	132 ... 200	—	—	88900	112700	51500	47600
	310ML3	295	1.7	24800	4.8	36	132 ... 200	—	—	91000	115400	54500	47600
	310ML3	350	1.4	22500	3.7	36	132 ... 200	—	—	93300	118300	57700	47600
	310ML4	392	1.3	22900	3.5	22.0	71 ... 160	—	—	94800	120200	59900	47600
	310ML4	453	1.1	29000	3.8	22.0	71 ... 160	—	—	96800	122700	62900	47600
	310ML4	507	0.99	30100	3.5	22.0	71 ... 160	—	—	98400	124700	65000	47600
	310ML4	590	0.85	30100	3.0	22.0	71 ... 160	—	—	100500	127400	65000	47600
	310ML4	637	0.79	30100	2.8	22.0	71 ... 160	—	—	101600	128800	65000	47600
	310ML4	726	0.69	30100	2.5	22.0	71 ... 160	—	—	103500	131300	65000	47600
	310ML4	798	0.63	30100	2.2	22.0	71 ... 160	—	—	104900	133100	65000	47600
	310ML4	974	0.51	33200	2.0	22.0	71 ... 160	—	—	108000	136900	65000	47600
	310ML4	1002	0.50	30100	1.8	22.0	71 ... 160	—	—	108400	137500	65000	47600
	310ML4	1164	0.43	30100	1.5	22.0	71 ... 160	—	—	110800	140400	65000	47600
	310ML4	1259	0.40	24800	1.2	22.0	71 ... 160	—	—	112000	142000	65000	47600
	310ML4	1438	0.35	23900	0.98	22.0	71 ... 160	—	—	114200	144700	65000	47600
	310ML4	1672	0.30	23900	0.85	22.0	71 ... 160	—	—	116600	147900	65000	47600
	310ML4	1794	0.28	23900	0.79	22.0	71 ... 160	—	—	117800	149400	65000	47600
	310ML4	2022	0.25	23900	0.70	22.0	71 ... 160	—	—	119800	152000	65000	47600
	310ML4	2523	0.20	23900	0.56	22.0	71 ... 160	—	—	123700	156800	65000	47600

310M R

340

33640 Nm

n_1 min^{-1}		i	n_2 min^{-1}	M_{n2} Nm	P_{n1} kW	Pt kW	P (IEC) -	Rn_2 [N] MC	MZ	HC/PC	HZ/PZ	FZ	$M_{2\,max}$ Nm
1500	**310MR2B**	**12.0**	125	11900	130	55	160 ... 225	—	—	36600	46400	13000	47600
	310MR2B	**15.4**	97	15200	130	55	160 ... 225	—	—	39400	50000	14100	47600
	310MR2B	**18.3**	82	17000	130	55	160 ... 225	—	—	41500	52600	15000	47600
	310MR2C	**16.6**	90	15000	130	55	160 ... 250	—	—	40300	51100	14500	47600
	310MR2C	**21.3**	70	18700	130	55	160 ... 250	—	—	43500	55100	15800	47600
	310MR2C	**25.3**	59	17500	115	55	160 ... 250	—	—	45800	58000	16700	47600
	310MR3	**37.7**	40	6480	29.6	22.0	71 ... 160	—	—	51600	65400	19000	47600
	310MR3	**44.6**	34	7650	29.5	22.0	71 ... 160	—	—	54200	68700	20100	47600
	310MR3	**55.9**	26.8	9600	29.5	22.0	71 ... 160	—	—	58000	73600	21700	47600
	310MR3	**65.0**	23.1	11200	29.5	22.0	71 ... 160	—	—	60700	77000	22800	47600
	310MR3	**71.8**	20.9	12300	29.5	22.0	71 ... 160	—	—	62500	79300	23600	47600
	310MR3	**78.6**	19.1	13500	29.6	22.0	71 ... 160	—	—	64300	81500	24300	47600
	310MR3	**83.4**	18.0	14300	29.6	22.0	71 ... 160	—	—	65400	82900	24800	47600
	310MR3	**99.0**	15.2	16000	27.9	22.0	71 ... 160	—	—	68900	87300	26300	47600
	310MR3	**120**	12.5	17100	24.6	22.0	71 ... 160	—	—	72900	92400	28000	47600
	310MR4	**136**	11.0	22600	29.5	15.0	71 ... 160	—	—	75700	96000	29200	47600
	310MR4	**160**	9.4	26100	28.8	15.0	71 ... 160	—	—	78000	98900	30900	47600
	310MR4	**189**	7.9	27400	25.7	15.0	71 ... 160	—	—	78000	98900	32600	47600
	310MR4	**206**	7.3	22100	19.1	15.0	71 ... 160	—	—	78000	98900	33500	47600
	310MR4	**238**	6.3	28400	21.2	15.0	71 ... 160	—	—	78000	98900	35200	47600
	310MR4	**258**	5.8	22500	15.4	15.0	71 ... 160	—	—	78000	98900	36200	47600
	310MR4	**276**	5.4	27900	17.9	15.0	71 ... 160	—	—	78000	98900	37000	47600
	310MR4	**305**	4.9	22800	13.2	15.0	71 ... 160	—	—	78200	99100	38200	47600
	310MR4	**347**	4.3	29600	15.2	15.0	71 ... 160	—	—	79600	101000	39900	47600
	310MR4	**383**	3.9	23700	11.0	15.0	71 ... 160	—	—	80800	102400	41200	47600
	310MR4	**454**	3.3	19400	7.6	15.0	71 ... 160	—	—	82800	104900	43600	47600
	310MR4	**517**	2.9	25000	8.6	15.0	71 ... 160	—	—	84300	106900	45600	47600
	310MR4	**590**	2.5	19300	5.8	15.0	71 ... 160	—	—	85900	108900	47600	47600
	310MR4	**639**	2.3	20600	5.7	15.0	71 ... 160	—	—	86900	110200	48900	47600
	310MR4	**757**	2.0	24800	5.8	15.0	71 ... 160	—	—	89000	112900	51700	47600
	310MR4	**898**	1.7	21900	4.3	15.0	71 ... 160	—	—	91200	115700	54800	47600



310M R

340

33640 Nm

n_1 min^{-1}		i	n_2 min^{-1}	M_{n2} Nm	P_{n1} kW	Pt kW	P (IEC)	Rn_2 [N] MC	MZ	HC/PC	HZ/PZ	FZ	$M_{2\,max}$ Nm
1000	**310MR2B**	**12.0**	83	13400	124	66	160 ... 225	—	—	41300	52400	14900	47600
	310MR2B	**15.4**	65	17200	124	66	160 ... 225	—	—	44500	56400	16200	47600
	310MR2B	**18.3**	55	17700	107	66	160 ... 225	—	—	46900	59400	17100	47600
	310MR2C	**16.6**	60	16900	113	66	160 ... 250	—	—	45500	57700	16600	47600
	310MR2C	**21.3**	47	20700	108	66	160 ... 250	—	—	49100	62200	18000	47600
	310MR2C	**25.3**	39	17800	78	66	160 ... 250	—	—	51700	65500	19100	47600
	310MR3	**37.7**	26.5	7320	22.2	26.4	71 ... 160	—	—	58200	73800	21800	47600
	310MR3	**44.6**	22.4	8640	22.2	26.4	71 ... 160	—	—	61200	77600	23000	47600
	310MR3	**55.9**	17.9	10800	22.2	26.4	71 ... 160	—	—	65500	83100	24900	47600
	310MR3	**65.0**	15.4	12600	22.2	26.4	71 ... 160	—	—	68500	86900	26100	47600
	310MR3	**71.8**	13.9	13900	22.2	26.4	71 ... 160	—	—	70600	89500	27000	47600
	310MR3	**78.6**	12.7	15200	22.3	26.4	71 ... 160	—	—	72600	92000	27800	47600
	310MR3	**83.4**	12.0	16200	22.2	26.4	71 ... 160	—	—	73900	93700	28400	47600
	310MR3	**99.0**	10.1	17800	20.6	26.4	71 ... 160	—	—	77800	98600	30100	47600
	310MR3	**120**	8.4	17900	17.1	26.4	71 ... 160	—	—	78000	98900	32000	47600
	310MR4	**136**	7.4	25600	22.2	18.0	71 ... 160	—	—	78000	98900	33400	47600
	310MR4	**160**	6.2	28200	20.8	18.0	71 ... 160	—	—	78000	98900	35300	47600
	310MR4	**189**	5.3	29100	18.2	18.0	71 ... 160	—	—	78000	98900	37300	47600
	310MR4	**206**	4.9	22800	13.1	18.0	71 ... 160	—	—	78300	99300	38400	47600
	310MR4	**238**	4.2	30000	14.9	18.0	71 ... 160	—	—	79900	101400	40300	47600
	310MR4	**258**	3.9	23700	10.9	18.0	71 ... 160	—	—	80900	102600	41400	47600
	310MR4	**276**	3.6	28100	12.0	18.0	71 ... 160	—	—	81700	103600	42300	47600
	310MR4	**305**	3.3	24400	9.5	18.0	71 ... 160	—	—	82800	105000	43800	47600
	310MR4	**347**	2.9	30400	10.4	18.0	71 ... 160	—	—	84400	107000	45700	47600
	310MR4	**383**	2.6	25400	7.9	18.0	71 ... 160	—	—	85600	108500	47200	47600
	310MR4	**454**	2.2	20800	5.4	18.0	71 ... 160	—	—	87700	111200	50000	47600
	310MR4	**517**	1.9	26800	6.1	18.0	71 ... 160	—	—	89300	113300	52200	47600
	310MR4	**590**	1.7	19400	3.9	18.0	71 ... 160	—	—	91000	115400	54500	47600
	310MR4	**639**	1.6	22100	4.1	18.0	71 ... 160	—	—	92100	116700	56000	47600
	310MR4	**757**	1.3	24800	3.9	18.0	71 ... 160	—	—	94300	119600	59200	47600
	310MR4	**898**	1.1	23500	3.1	18.0	71 ... 160	—	—	96700	122600	62700	47600
500	**310MR2B**	**12.0**	42	16400	76	110	160 ... 225	—	—	50900	64500	18800	47600
	310MR2B	**15.4**	32	19400	70	110	160 ... 225	—	—	54800	69500	20400	47600
	310MR2B	**18.3**	27.3	17800	54	110	160 ... 225	—	—	57700	73200	21600	47600
	310MR2C	**16.6**	30	20200	68	110	160 ... 250	—	—	56100	71100	20900	47600
	310MR2C	**21.3**	23.4	21200	55	110	160 ... 250	—	—	60400	76600	22700	47600
	310MR2C	**25.3**	19.7	17800	39	110	160 ... 250	—	—	63600	80700	24100	47600
	310MR3	**37.7**	13.2	9010	13.7	44	71 ... 160	—	—	71700	90900	27500	47600
	310MR3	**44.6**	11.2	10600	13.7	44	71 ... 160	—	—	75300	95500	29000	47600
	310MR3	**55.9**	8.9	13300	13.7	44	71 ... 160	—	—	78000	98900	31300	47600
	310MR3	**65.0**	7.7	15500	13.7	44	71 ... 160	—	—	78000	98900	32900	47600
	310MR3	**71.8**	7.0	17100	13.7	44	71 ... 160	—	—	78000	98900	34000	47600
	310MR3	**78.6**	6.4	18300	13.3	44	71 ... 160	—	—	78000	98900	35100	47600
	310MR3	**83.4**	6.0	19900	13.7	44	71 ... 160	—	—	78000	98900	35800	47600
	310MR3	**99.0**	5.1	18000	10.4	44	71 ... 160	—	—	78000	98900	37900	47600
	310MR3	**120**	4.2	18600	8.9	44	71 ... 160	—	—	80000	101500	40400	47600
	310MR4	**136**	3.7	29600	12.9	30	71 ... 160	—	—	81500	103300	42100	47600
	310MR4	**160**	3.1	31100	11.5	30	71 ... 160	—	—	83400	105800	44500	47600
	310MR4	**189**	2.6	31700	9.9	30	71 ... 160	—	—	85400	108300	47000	47600
	310MR4	**206**	2.4	25800	7.4	30	71 ... 160	—	—	86500	109600	48400	47600
	310MR4	**238**	2.1	32200	8.0	30	71 ... 160	—	—	88300	111900	50700	47600
	310MR4	**258**	1.9	26800	6.1	30	71 ... 160	—	—	89300	113300	52200	47600
	310MR4	**276**	1.8	28100	6.0	30	71 ... 160	—	—	90200	114300	53300	47600
	310MR4	**305**	1.6	27600	5.4	30	71 ... 160	—	—	91500	116000	55100	47600
	310MR4	**347**	1.4	32100	5.5	30	71 ... 160	—	—	93200	118100	57500	47600
	310MR4	**383**	1.3	28700	4.4	30	71 ... 160	—	—	94500	119800	59500	47600
	310MR4	**454**	1.1	23500	3.1	30	71 ... 160	—	—	96800	122800	62900	47600
	310MR4	**517**	0.97	30100	3.4	30	71 ... 160	—	—	98600	125100	65000	47600
	310MR4	**590**	0.85	19500	2.0	30	71 ... 160	—	—	100500	127400	65000	47600
	310MR4	**639**	0.78	23900	2.2	30	71 ... 160	—	—	101700	128900	65000	47600
	310MR4	**757**	0.66	24800	1.9	30	71 ... 160	—	—	104100	132100	65000	47600
	310MR4	**898**	0.56	23900	1.6	30	71 ... 160	—	—	106700	135300	65000	47600