



**Specialised Air Motors and Transmission**

Factory 19 / 5 Lyn Parade PRESTONS NSW 2170

PH: 02 9607 4100 FAX: 02 9607 4200

# **Nseries**

## **PLANETARY GEAR UNIT**



Part 2

[sales@samt.com.au](mailto:sales@samt.com.au)



[www.tonson-motor.com.au](http://www.tonson-motor.com.au)

## Mounting dimensions

planetary gear motor

3 stage planetary gear

in line transmission with motor

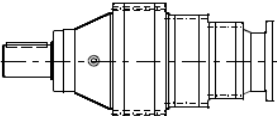
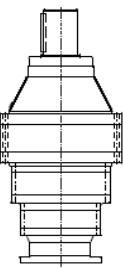
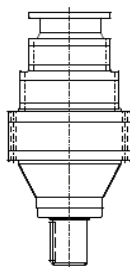
size 354~543

size	X <sub>1</sub> Ø	L <sub>1</sub>	X <sub>2</sub> Ø	L <sub>2</sub>	X <sub>3</sub> Ø	L <sub>3</sub>	D <sub>C</sub> Ø	E <sub>C</sub>	D <sub>S</sub>	E <sub>S</sub>	D <sub>H</sub> Ø	E <sub>H</sub>
354	353	138	240	70	200	60	100	130	EXT 29zx3mx30	90	110	160
355	353	139	280	104	240	67	100	130	EXT 29zx3mx30	90	110	160
428	428	140	280	113	240	67	110	165	EXT 39zx3mx30	130	130	180
429	428	184	353	82	240	75	120	165	EXT 39zx3mx30	130	130	180
445	445	175	353	128	240	79	130	170	EXT 42zx3mx30	130	140	205
446	445	175	353	128	280	104	140	170	EXT 42zx3mx30	130	140	205
542	542	199	428	137	280	113	160	210	EXT 30zx5mx30	170	170	250
543	542	219	428	181	353	82	170	210	EXT 30zx5mx30	170	170	250

size	D <sub>Z</sub>	E <sub>Z</sub>	G <sub>0</sub>	G <sub>1</sub>	G <sub>2</sub>	G <sub>3</sub>	M Ø	N Øf7	N <sub>0</sub> Ø	Q	Q <sub>0</sub>	weight
354	INT 29zx3mx30	75	72	141	235	141	314	278	225	8.5	25	166
355	INT 29zx3mx30	75	72	141	235	141	314	278	225	8.5	25	196
428	INT 39zx3mx30	107	135	210	320	210	390	358	230	10	40	267
429	INT 39zx3mx30	107	135	210	320	210	390	358	230	10	40	318
445	INT 42zx3mx30	110	152	227	362	227	415	385	260	13	40	373
446	INT 42zx3mx30	110	152	227	362	227	415	385	260	13	40	386
542	INT 30zx5mx30	120	224	279	427	279	503	460	300	13	32	605
543	INT 30zx5mx30	120	224	279	437	279	503	460	300	13	32	696

size	G							P <sub>m</sub>						
	motor frame							motor frame						
	100	112	132	160	180	200	225	100	112	132	160	180	200	225
354	332	332	345	411	411			250	250	300	350	350		
355		370	383	437	437				250	300	350	350		
428			394	448	448					300	350	350		
429			415	469	469	469				300	350	350	400	
445			455	509	509	509				300	350	350	400	
446				602	602	602	632				350	350	400	450
542				644	644	644	674				350	350	400	450
543					670	670	670					350	400	450

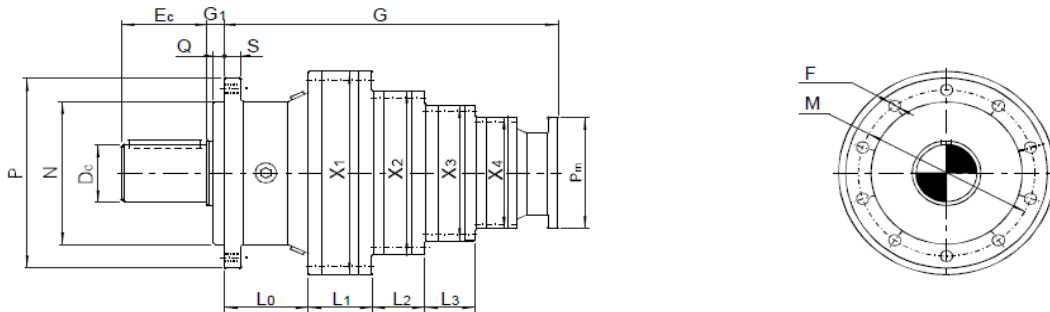
## Mounting positions and oil quantity(L)

B5	V1	V3	size	B5	V1,V3
			354	5.7	10
			355	6.4	11.2
			428	7.4	13
			429	9.7	17
			445	11.8	21
			446	12.3	22
			542	15.6	27
			543	19.6	34

## Mounting dimensions

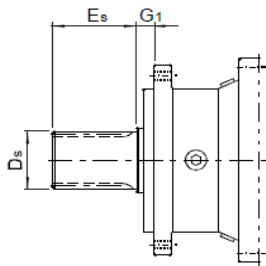
planetary gear motor  
 4 stage planetary gear  
 in line transmission with motor  
 size 200~353

### MN 4E200~353...C1C

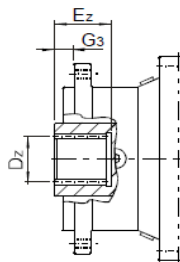


### Other shaft ends

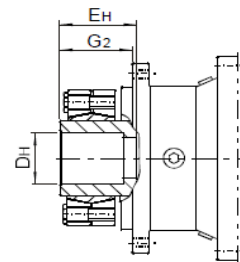
#### MN 4E200~353...C1S



#### MN 4E200~353...C1Z



#### MN 4E200~353...C1H



- 1) for cylindrical shaft details, see page 152;
- 2) for splined shaft details, see page 152;
- 2) for splined hollow shaft details, see page 153;
- 3) for hollow shaft with shrink disk details, see page 153;
- 4) for output flange details, see page 151;
- 5) can add foot on output flange, the details on page 154;
- 6) for motor dimensions, see page 155.

## Mounting dimensions

planetary gear motor

4 stage planetary gear

in line transmission with motor

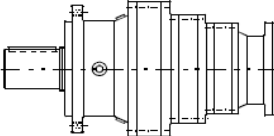
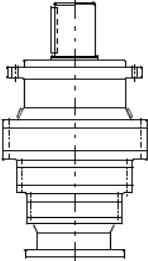
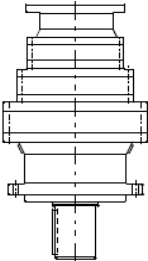
size 200~353

size	X <sub>1</sub> ∅	L <sub>1</sub>	X <sub>2</sub> ∅	L <sub>2</sub>	X <sub>3</sub> ∅	L <sub>3</sub>	X <sub>4</sub> ∅	L <sub>4</sub>	D <sub>c</sub> ∅	E <sub>c</sub>	D <sub>s</sub>	E <sub>s</sub>	D <sub>H</sub> ∅	E <sub>H</sub>
240	240	63	200	50	200	50	200	48	65	105	EXT 28zx2mx30	68	75	100
241	240	78	200	62	200	50	200	48	65	105	EXT 28zx2mx30	68	75	100
280	280	82	240	62	200	50	200	48	80	130	EXT 34zx2mx30	90	85	145
353	353	92	240	67	200	60	200	50	90	130	EXT 40zx2mx30	90	100	140

size	D <sub>Z</sub>	E <sub>Z</sub>	G <sub>1</sub>	G <sub>2</sub>	G <sub>3</sub>	L <sub>0</sub>	M ∅	N ∅f7	Q	P ∅	S	weight
240	INT 28zx2mx30	54	15	85	15	89	195	150	14	220	18	63
241	INT 28zx2mx30	54	15	85	15	89	195	150	14	220	18	71
280	INT 34zx2mx30	82	40	115	40	142	250	200	15	280	22	100
353	INT 40zx2mx30	85	36	120	36	124	295	230	10	325	25	155

size	G						P <sub>m</sub>					
	motor frame						motor frame					
	71	80	90	100	112	132	71	80	90	100	112	132
240	335	345	345				160	200	200			
241	362	372	372	390			160	200	200	250		
280	419	429	429	447	447		160	200	200	250	250	
353		439	439	457	457	470		200	200	250	250	250

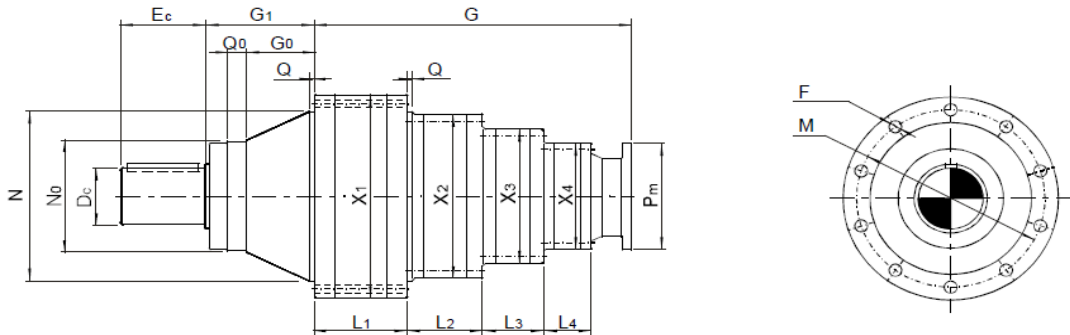
## Mounting positions and oil quantity(L)

B5	V1	V3	规格 size	B5	V1,V3
					
			241	2.7	4.7
			280	3.6	6.3
			353	5.1	8.9

## Mounting dimensions

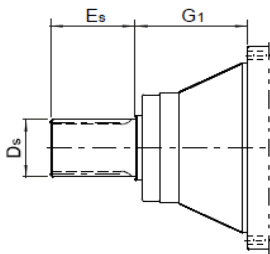
planetary gear motor  
 4 stage planetary gear  
 in line transmission with motor  
 size 354-696

### MN 4E354-696...C2C

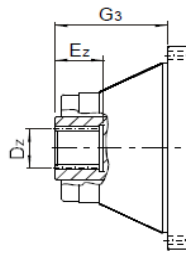


### Other shaft ends

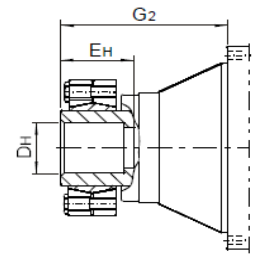
#### MN 4E354-696...C2S



#### MN 4E354-696...C2Z



#### MN 4E354-696...C2H



- 1) for cylindrical shaft details, see page 152;
- 2) for splined shaft details, see page 152;
- 2) for splined hollow shaft details, see page 153;
- 3) for hollow shaft with shrink disk details, see page 153;
- 4) for output flange details, see page 151;
- 5) can add foot on output flange, the details on page 154;
- 6) for motor dimensions, see page 155.

## Mounting dimensions

planetary gear motor

4 stage planetary gear

in line transmission with motor

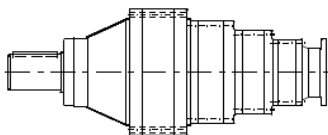
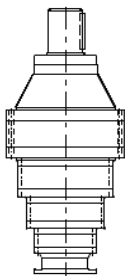
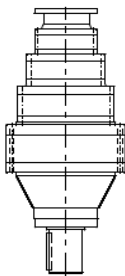
size 354~696

size	X <sub>1</sub> Ø	L <sub>1</sub>	X <sub>2</sub> Ø	L <sub>2</sub>	X <sub>3</sub> Ø	L <sub>3</sub>	X <sub>4</sub> Ø	L <sub>4</sub>	D <sub>c</sub> Ø	E <sub>c</sub>	D <sub>s</sub>	E <sub>s</sub>	D <sub>H</sub> Ø	E <sub>H</sub>
354	353	138	240	70	240	60	200	50	100	130	EXT 29zx3mx30	90	110	160
355	353	139	280	104	240	58	200	48	100	130	EXT 29zx3mx30	90	110	160
428	428	140	280	113	240	58	200	48	110	165	EXT 39zx3mx30	130	130	180
429	428	184	353	82	240	67	200	60	120	165	EXT 39zx3mx30	130	130	180
445	445	175	353	128	240	70	200	60	130	170	EXT 42zx3mx30	130	140	205
446	445	175	353	128	280	104	240	68	140	170	EXT 42zx3mx30	130	140	205
542	542	199	428	137	280	113	240	67	160	210	EXT 30zx5mx30	170	170	250
543	542	219	428	181	353	82	240	75	170	210	EXT 30zx5mx30	170	170	250
695	695	200	445	237	353	129	280	104	190	260	EXT 36zx5mx30	200	200	307
696	695	230	445	237	353	129	280	104	200	260	EXT 36zx5mx30	200	200	307

size	D <sub>z</sub>	E <sub>z</sub>	G <sub>0</sub>	G <sub>1</sub>	G <sub>2</sub>	G <sub>3</sub>	M Ø	N Øf7	N <sub>0</sub> Øf7	Q	Q <sub>0</sub>	weight
354	INT 29zx3mx30	75	72	141	235	141	314	278	225	8.5	25	171
355	INT 29zx3mx30	75	72	141	235	141	314	278	225	8.5	25	189
428	INT 39zx3mx30	107	135	210	320	210	390	358	230	10	40	260
429	INT 39zx3mx30	107	135	210	320	210	390	358	230	10	40	315
445	INT 42zx3mx30	110	152	227	362	227	415	385	260	13	40	369
446	INT 42zx3mx30	110	152	227	362	227	415	385	260	13	40	399
542	INT 30zx5mx30	120	224	279	427	279	503	460	300	13	32	617
543	INT 30zx5mx30	120	224	279	437	279	503	460	300	13	32	713
695	INT 36zx5mx30	140	-	152	318	152	635	560	-	20	-	1170
696	INT 36zx5mx30	140	-	152	333	152	635	560	-	20	-	1258

size	G motor frame							Pm motor frame										
	80	90	100	112	132	160	180	200	225	80	90	100	112	132	160	180	200	225
354	364	364	382	382	395					200	200	250	250	300				
355	395	395	413	413	426					200	200	250	250	300				
428		405	423	423	436						200	250	250	300				
429		438	456	456	469	535					200	250	250	300	350			
445			497	497	510	576	576					250	250	300	350	350		
446			535	535	548	602	602					250	250	300	350	350		
542				577	590	644	644						250	300	350	350		
543					631	685	685	685						300	350	350	400	
695					810	864	864	864	894					300	350	350	400	450
696					840	894	894	894	924					300	350	350	400	450

## Mounting positions and oil quantity(L)





B5	V1	V3	size	B5	V1,V3
					
			355	6.8	11.9
			428	7.8	13.7
			429	10.3	18
			445	12.4	22
			446	13.1	23
			542	16.4	29
			543	21	36
			695	27	47
			696	31	54

## TECHNICAL DATA

Technical data for right angle gear motor







**TECHNICAL DATA**

<b>P<sub>1</sub> = 0.25kW n<sub>1</sub> = 1400rpm</b>										
n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2MAX</sub> [N]		 Kg
								C	S	
<b>0.657</b>	3270	1.4	2132	8	MN C3E 241		7114	30000	35500	84
<b>0.762</b>	2820	1.8	1836	8	MN C3E 241		7114	30000	35500	84
<b>0.898</b>	2390	2.24	1559	8	MN C3E 241		7114	30000	35500	84
<b>1.08</b>	1980	2.8	1290	8	MN C3E 241		7114	30000	35500	84
<b>1.36</b>	1580	3.75	1030	8	MN C3E 241		7114	30000	35500	84
<b>1.58</b>	1360	4.25	887	8	MN C3E 241		7114	30000	35500	84
<b>0.762</b>	2820	1	1836	7.1	MN C3E 240		7114	30000	35500	75
<b>0.898</b>	2390	1.32	1559	7.1	MN C3E 240		7114	30000	35500	75
<b>1.08</b>	1980	1.6	1290	7.1	MN C3E 240		7114	30000	35500	75
<b>1.36</b>	1580	2	1030	7.1	MN C3E 240		7114	30000	35500	75
<b>1.58</b>	1360	2.24	887	7.1	MN C3E 240		7114	30000	35500	75
<b>1.86</b>	1160	2.65	753	7.1	MN C3E 240		7114	30000	35500	75
<b>2.33</b>	920	3.35	601	7.1	MN C3E 240		7114	30000	35500	75
<b>2.81</b>	760	4	498	7.1	MN C3E 240		7114	30000	35500	75
<b>3.27</b>	660	4.75	429	7.1	MN C3E 240		7114	30000	35500	75
<b>5.61</b>	392	2.12	250	7.1	MN C2E 200		7114	15000	18000	49
<b>6.51</b>	337	3	215	7.1	MN C2E 200		7114	15000	18000	49
<b>7.67</b>	287	3.55	183	7.1	MN C2E 200		7114	15000	18000	49
<b>9.6</b>	229	5.3	146	7.1	MN C2E 200		7114	15000	18000	49





<b>P<sub>1</sub> = 0.37kW n<sub>1</sub> = 1400rpm</b>										
<b>0.773</b>	4110	1.8	1811	9.5	MN C3E 280		7124	47500	53000	113
<b>0.928</b>	3430	2.65	1509	9.5	MN C3E 280		7124	47500	53000	113
<b>1.12</b>	2840	3.15	1249	9.5	MN C3E 280		7124	47500	53000	113
<b>0.898</b>	3540	1.5	1559	8	MN C3E 241		7124	30000	35500	84
<b>1.08</b>	2930	1.9	1290	8	MN C3E 241		7124	30000	35500	84
<b>1.36</b>	2340	2.5	1030	8	MN C3E 241		7124	30000	35500	84
<b>1.58</b>	2020	3	887	8	MN C3E 241		7124	30000	35500	84
<b>1.86</b>	1710	3.55	753	8	MN C3E 241		7124	30000	35500	84
<b>2.33</b>	1370	4.25	601	8	MN C3E 241		7124	30000	35500	84
<b>0.898</b>	3540	0.9	1559	7.1	MN C3E 240		7124	30000	35500	75
<b>1.08</b>	2930	1.06	1290	7.1	MN C3E 240		7124	30000	35500	75
<b>1.36</b>	2340	1.32	1030	7.1	MN C3E 240		7124	30000	35500	75
<b>1.58</b>	2020	1.5	887	7.1	MN C3E 240		7124	30000	35500	75
<b>1.86</b>	1710	1.8	753	7.1	MN C3E 240		7124	30000	35500	75
<b>2.33</b>	1370	2.24	601	7.1	MN C3E 240		7124	30000	35500	75
<b>2.81</b>	1130	2.8	498	7.1	MN C3E 240		7124	30000	35500	75
<b>3.27</b>	970	3.15	429	7.1	MN C3E 240		7124	30000	35500	75
<b>4.09</b>	780	4	342	7.1	MN C3E 240		7124	30000	35500	75
<b>4.82</b>	660	4.75	290	7.1	MN C3E 240		7124	30000	35500	75
<b>5.61</b>	580	2.65	250	7.1	MN C2E 201		7124	19000	22400	52

## TECHNICAL DATA

<b>P<sub>1</sub> = 0.37kW n<sub>1</sub>=1400rpm</b>										
n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
6.51	499	3.55	215	7.5	MN C2E 201		7124	19000	22400	52
7.67	424	4.25	183	7.5	MN C2E 201		7124	19000	22400	52
5.61	580	1.5	250	7.1	MN C2E 200		7124	15000	18000	49
6.51	499	2.12	215	7.1	MN C2E 200		7124	15000	18000	49
7.67	424	2.36	183	7.1	MN C2E 200		7124	15000	18000	49
9.6	339	3.55	146	7.1	MN C2E 200		7124	15000	18000	49
11.6	280	4.25	121	7.1	MN C2E 200		7124	15000	18000	49
13.5	241	4.75	104	7.1	MN C2E 200		7124	15000	18000	49
16	203	5.6	87.6	7.1	MN C2E 200		7124	15000	18000	49

<b>P<sub>1</sub> = 0.55kW n<sub>1</sub>=1400rpm</b>										
0.747	6330	2.36	1873	12.5		MN C3E 354	801-4	71000	80000	217
0.745	6350	1.7	1880	10.6	MN C3E 353		801-4	60000	67000	173
0.884	5350	2.36	1584	10.6	MN C3E 353		801-4	60000	67000	173
1.07	4430	2.8	1311	10.6	MN C3E 353		801-4	60000	67000	173
1.12	4220	2.12	1249	9.5	MN C3E 280		801-4	47500	53000	119
1.32	3580	2.5	1060	9.5	MN C3E 280		801-4	47500	53000	119
1.52	3100	3	919	9.5	MN C3E 280		801-4	47500	53000	119
1.08	4360	1.25	1290	8	MN C3E 241		801-4	30000	35500	89
1.58	3000	2	887	8	MN C3E 241		801-4	30000	35500	89
1.86	2540	2.36	753	8	MN C3E 241		801-4	30000	35500	89
2.33	2030	3	601	8	MN C3E 241		801-4	30000	35500	89
2.81	1680	3.55	498	8	MN C3E 241		801-4	30000	35500	89
3.27	1450	4	429	8	MN C3E 241		801-4	30000	35500	89
1.58	3000	1.06	887	7.1	MN C3E 240		801-4	30000	35500	81
1.86	2540	1.18	753	7.1	MN C3E 240		801-4	30000	35500	81
2.33	2030	1.5	601	7.1	MN C3E 240		801-4	30000	35500	81
2.81	1680	1.8	498	7.1	MN C3E 240		801-4	30000	35500	81
3.27	1450	2.12	429	7.1	MN C3E 240		801-4	30000	35500	81
4.09	1160	2.65	342	7.1	MN C3E 240		801-4	30000	35500	81
4.82	980	3.15	290	7.1	MN C3E 240		801-4	30000	35500	81
5.61	860	2.65	250	7.1	MN C2E 240		801-4	30000	35500	74
5.61	860	1.8	250	7.5	MN C2E 201		801-4	19000	22400	58
6.51	740	2.36	215	7.5	MN C2E 201		801-4	19000	22400	58
7.67	630	2.8	183	7.5	MN C2E 201		801-4	19000	22400	58
9.6	500	4	146	7.5	MN C2E 201		801-4	19000	22400	58
5.61	860	1	250	7.1	MN C2E 200		801-4	15000	11800	55
6.51	740	1.4	215	7.1	MN C2E 200		801-4	15000	11800	55
7.67	630	1.6	183	7.1	MN C2E 200		801-4	15000	11800	55
9.6	500	2.36	146	7.1	MN C2E 200		801-4	15000	11800	55
11.6	416	2.8	121	7.1	MN C2E 200		801-4	15000	11800	55
13.5	359	3.35	104	7.1	MN C2E 200		801-4	15000	11800	55
16	302	3.75	87.6	7.1	MN C2E 200		801-4	15000	11800	55





**TECHNICAL DATA**

<b>P<sub>1</sub> = 0.55kW n<sub>1</sub>=1400rpm</b>										
n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2</sub> MAX[N]		 Kg
								C	S	
19.3	250	4.5	72.5	7.1	MN C2E 200		801-4	15000	18000	55
22.4	215	5	62.4	7.1	MN C2E 200		801-4	15000	18000	55

<b>P<sub>1</sub> = 0.75kW n<sub>1</sub>=1400rpm</b>										
0.736	8760	2	1903	13.2		MN C3E 355	802-4	71000	80000	230
0.873	7380	2.65	1603	13.2		MN C3E 355	802-4	71000	80000	230
0.747	8630	1.7	1873	12.5		MN C3E 354	802-4	71000	80000	217
0.887	7270	2.12	1579	12.5		MN C3E 354	802-4	71000	80000	217
1.07	6020	3	1306	12.5		MN C3E 354	802-4	71000	80000	217
0.884	7300	1.8	1584	10.6	MN C3E 353		802-4	60000	67000	173
1.07	6040	2.12	1311	10.6	MN C3E 353		802-4	60000	67000	173
1.26	5130	2.5	1113	10.6	MN C3E 353		802-4	60000	67000	173
1.61	3990	3.35	868	10.6	MN C3E 353		802-4	60000	67000	173
1.52	4230	2.12	919	9.5	MN C3E 280		802-4	47500	53000	119
1.84	3500	2.65	761	9.5	MN C3E 280		802-4	47500	53000	119
2.14	3020	3	655	9.5	MN C3E 280		802-4	47500	53000	119
1.58	4080	1.4	887	8	MN C3E 241		802-4	30000	35500	89
1.86	3470	1.7	753	8	MN C3E 241		802-4	30000	35500	89
2.33	2770	2.12	601	8	MN C3E 241		802-4	30000	35500	89
2.81	2290	2.5	498	8	MN C3E 241		802-4	30000	35500	89
3.27	1970	3	429	8	MN C3E 241		802-4	30000	35500	89
4.09	1580	3.75	342	8	MN C3E 241		802-4	30000	35500	89
6.6	1000	3.55	212	8	MN C2E 241		802-4	30000	35500	89
2.33	2770	1.12	601	7.1	MN C3E 240		802-4	30000	35500	81
2.81	2290	1.32	498	7.1	MN C3E 240		802-4	30000	35500	81
3.27	1970	1.6	429	7.1	MN C3E 240		802-4	30000	35500	81
4.09	1580	2	342	7.1	MN C3E 240		802-4	30000	35500	81
4.82	1340	2.36	290	7.1	MN C3E 240		802-4	30000	35500	81
5.68	1130	2.65	246	7.1	MN C3E 240		802-4	30000	35500	81
5.61	1180	1.9	250	9	MN C2E 240		802-4	30000	35500	74
6.6	1000	2.24	212	9	MN C2E 240		802-4	30000	35500	74
7.67	860	3	183	9	MN C2E 240		802-4	30000	35500	74
5.61	1180	1.32	250	7.5	MN C2E 201		802-4	19000	22400	58
6.51	1010	1.7	215	7.5	MN C2E 201		802-4	19000	22400	58
7.67	860	2.12	183	7.5	MN C2E 201		802-4	19000	22400	58
9.6	690	3	146	7.5	MN C2E 201		802-4	19000	22400	58
11.6	570	3.55	121	7.5	MN C2E 201		802-4	19000	22400	58
6.51	1010	1	215	7.1	MN C2E 200		802-4	15000	18000	55
7.67	860	1.18	183	7.1	MN C2E 200		802-4	15000	18000	55
9.6	690	1.8	146	7.1	MN C2E 200		802-4	15000	18000	55
11.6	570	2.12	121	7.1	MN C2E 200		802-4	15000	18000	55
13.5	489	2.36	104	7.1	MN C2E 200		802-4	15000	18000	55

**TECHNICAL DATA**

<b>P<sub>1</sub> = 0.75kW n<sub>1</sub> = 1400rpm</b>									
-------------------------------------------------------	--	--	--	--	--	--	--	--	--





n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2MAX</sub> [N]		 Kg
								C	S	
13.5	489	4	104	7.5	MN C2E 201		802-4	19000	22400	58
16	412	2.8	87.6	7.1	MN C2E 200		802-4	15000	18000	55
19.3	341	3.35	72.5	7.1	MN C2E 200		802-4	15000	18000	55
22.4	294	3.75	62.4	7.1	MN C2E 200		802-4	15000	18000	55
28.1	235	4.5	49.8	7.1	MN C2E 200		802-4	15000	18000	55
33.1	199	5.3	42.3	7.1	MN C2E 200		802-4	15000	18000	55
39.6	172	3	35.3	8	MN CE 200		802-4	15000	18000	47
47.9	142	4.5	29.3	8	MN CE 200		802-4	15000	18000	47

<b>P<sub>1</sub> = 1.1kW n<sub>1</sub> = 1400rpm</b>									
------------------------------------------------------	--	--	--	--	--	--	--	--	--

0.736	12850	1.9	1903	15		MN C3E 428	90S-4	90000	97500	302
0.873	10830	2.24	1603	15		MN C3E 428	90S-4	90000	97500	302
0.736	12850	1.4	1903	13.2		MN C3E 355	90S-4	71000	80000	238
0.873	10830	1.8	1603	13.2		MN C3E 355	90S-4	71000	80000	238
1.07	8820	2.36	1306	13.2		MN C3E 355	90S-4	71000	80000	238
1.07	8820	2	1306	12.5		MN C3E 354	90S-4	71000	80000	225
1.26	5120	2.36	1109	12.5		MN C3E 354	90S-4	71000	80000	225
1.26	7520	1.7	1113	10.6	MN C3E 353		90S-4	60000	67000	181
1.61	5860	2.36	868	10.6	MN C3E 353		90S-4	60000	67000	181
1.95	4850	2.8	718	10.6	MN C3E 353		90S-4	60000	67000	181
2.26	4180	3.35	618	10.6	MN C3E 353		90S-4	60000	67000	181
2.14	4420	2.12	655	9.5	MN C3E 280		90S-4	47500	53000	127
2.68	3530	2.65	523	9.5	MN C3E 280		90S-4	47500	53000	127
3.11	3040	3	450	9.5	MN C3E 280		90S-4	47500	53000	127
2.33	4060	1.5	601	8	MN C3E 241		90S-4	30000	35500	102
2.81	3360	1.7	498	8	MN C3E 241		90S-4	30000	35500	102
3.27	2890	2	429	8	MN C3E 241		90S-4	30000	35500	102
4.09	2310	2.5	342	8	MN C3E 241		90S-4	30000	35500	102
4.82	1960	2.8	290	8	MN C3E 241		90S-4	30000	35500	102
5.68	1660	3.35	246	8	MN C3E 241		90S-4	30000	35500	102
5.61	1720	2.12	250	8	MN C2E 241		90S-4	30000	35500	102
6.6	1460	2.5	212	8	MN C2E 241		90S-4	30000	35500	102
3.27	2890	1.06	429	7.1	MN C3E 240		90S-4	30000	35500	89
4.09	2310	1.32	342	7.1	MN C3E 240		90S-4	30000	35500	89
4.82	1960	1.6	290	7.1	MN C3E 240		90S-4	30000	35500	89
5.68	1660	1.8	246	7.1	MN C3E 240		90S-4	30000	35500	89
5.61	1720	1.32	250	9	MN C2E 240		90S-4	30000	35500	82
6.6	1460	1.5	212	9	MN C2E 240		90S-4	30000	35500	82
7.67	1260	2	183	9	MN C2E 240		90S-4	30000	35500	82
5.61	1720	0.9	250	7.5	MN C2E 201		90S-4	19000	22400	66
6.51	1480	1.18	215	7.5	MN C2E 201		90S-4	19000	22400	66
7.67	1260	1.4	183	7.5	MN C2E 201		90S-4	19000	22400	66

## TECHNICAL DATA





**P<sub>1</sub> = 1.1 kW** n<sub>1</sub> = 1400 rpm

n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2MAX</sub> [N]		 Kg
								C	S	
7.67	1260	3.55	183	10.2	MN C2E 241		90S-4	30000	35500	90
9.26	1040	4.25	151	10.2	MN C2E 241		90S-4	30000	35500	90
9.26	1040	2.5	151	10.2	MN C2E 240		90S-4	30000	35500	82
11.6	830	3.35	121	10.2	MN C2E 240		90S-4	30000	35500	82
9.6	1010	2	146	7.5	MN C2E 201		90S-4	19000	22400	66
11.6	830	2.36	121	7.5	MN C2E 201		90S-4	19000	22400	66
13.5	720	2.8	104	7.5	MN C2E 201		90S-4	19000	22400	66
16	600	3.15	87.6	7.5	MN C2E 201		90S-4	19000	22400	66
19.3	500	3.75	72.5	7.5	MN C2E 201		90S-4	19000	22400	66
22.4	431	4.25	62.4	7.5	MN C2E 201		90S-4	19000	22400	66
9.6	1010	1.18	146	7.1	MN C2E 200		90S-4	15000	18000	63
11.6	830	1.4	121	7.1	MN C2E 200		90S-4	15000	18000	63
13.5	720	1.6	104	7.1	MN C2E 200		90S-4	15000	18000	63
16	600	1.9	87.6	7.1	MN C2E 200		90S-4	15000	18000	63
19.3	500	2.24	72.5	7.1	MN C2E 200		90S-4	15000	18000	63
22.4	431	2.65	62.4	7.1	MN C2E 200		90S-4	15000	18000	63
28.1	344	3.15	49.8	7.1	MN C2E 200		90S-4	15000	18000	63
33.1	292	3.55	42.3	7.1	MN C2E 200		90S-4	15000	18000	63
39	248	3.35	35.9	7.1	MN C2E 200		90S-4	15000	18000	63
39.6	252	2	35.3	8.7	MN CE 200		90S-4	15000	18000	55
47.9	209	3	29.3	8.7	MN CE 200		90S-4	15000	18000	55
55.6	180	4.25	25.2	8.7	MN CE 200		90S-4	15000	18000	55
69.6	143	6.3	20.1	8.7	MN CE 200		90S-4	15000	18000	55
82.1	122	5.6	17.1	8.7	MN CE 200		90S-4	15000	18000	55

**P<sub>1</sub> = 1.5 kW** n<sub>1</sub> = 1400 rpm





0.87	14830	2.24	1610	17.8	MN C3E 429		90L-4	100000	106000	322
0.873	14760	1.7	1603	17.8	MN C3E 428		90L-4	100000	106000	322
1.07	12030	2.5	1306	17.8	MN C3E 428		90L-4	100000	106000	322
1.07	12030	1.8	1306	13.2	MN C3E 355		90L-4	100000	106000	322
1.38	9370	2.5	1018	13.2	MN C3E 355		90L-4	100000	106000	322
1.62	7960	3	864	13.2	MN C3E 355		90L-4	100000	106000	322
1.47	8800	2	955	12.5	MN C3E 354		90L-4	71000	80000	225
1.88	6850	2.5	744	12.5	MN C3E 354		90L-4	71000	80000	225
1.84	7000	2.12	718	10.6	MN C3E 353		90L-4	60000	67000	181
2.26	5690	2.5	618	10.6	MN C3E 353		90L-4	60000	67000	181
2.63	4900	2.8	532	10.6	MN C3E 353		90L-4	60000	67000	181
3.29	3910	3.35	425	10.6	MN C3E 353		90L-4	60000	67000	181
3.11	4150	2.24	450	9.5	MN C3E 280		90L-4	47500	53000	127
3.89	3310	2.65	359	9.5	MN C3E 280		90L-4	47500	53000	127
3.27	3950	1.5	429	8.5	MN C3E 241		90L-4	30000	35500	97
4.09	3150	1.8	342	8.5	MN C3E 241		90L-4	30000	35500	97

## TECHNICAL DATA

<b>P<sub>1</sub> = 1.5kW n<sub>1</sub> = 1400rpm</b>										
n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2MAX</sub> [N]		 Kg
								C	S	
4.59	2810	3.15	305	9.5	MN C3E 280		90L-4	47500	53000	127
6.6	2000	3	212	12.5	MN C2E 280		90L-4	47500	53000	119
7.92	1660	3.75	177	12.5	MN C2E 280		90L-4	47500	53000	119
4.82	2670	2.12	290	8	MN C3E 241		90L-4	30000	35500	97
5.68	2270	2.5	246	8	MN C3E 241		90L-4	30000	35500	97
5.61	2350	1.6	250	10	MN C2E 241		90L-4	30000	35500	90
6.6	2000	1.8	212	10	MN C2E 241		90L-4	30000	35500	90
7.67	1720	2.5	183	10	MN C2E 241		90L-4	30000	35500	90
9.26	1420	3	151	10	MN C2E 241		90L-4	30000	35500	90
11.6	1140	4.5	121	10	MN C2E 241		90L-4	30000	35500	90
4.82	2670	1.18	290	7.1	MN C3E 240		90L-4	30000	35500	89
5.68	2270	1.32	246	7.1	MN C3E 240		90L-4	30000	35500	89
5.61	2350	0.95	250	9	MN C2E 240		90L-4	30000	35500	82
6.6	2000	1.12	212	9	MN C2E 240		90L-4	30000	35500	82
7.67	1720	1.5	183	9	MN C2E 240		90L-4	30000	35500	82
9.26	1420	1.9	151	9	MN C2E 240		90L-4	30000	35500	82
11.6	1140	2.5	121	9	MN C2E 240		90L-4	30000	35500	82
13.5	980	3.15	104	9	MN C2E 240		90L-4	30000	35500	82
16.9	780	4	83	9	MN C2E 240		90L-4	30000	35500	82
7.67	1720	1.06	183	7.5	MN C2E 201		90L-4	19000	22400	66
9.6	1370	1.5	146	7.5	MN C2E 201		90L-4	19000	22400	66
11.6	1140	1.7	121	7.5	MN C2E 201		90L-4	19000	22400	66
13.5	980	2	104	7.5	MN C2E 201		90L-4	19000	22400	66
16	820	2.36	87.6	7.5	MN C2E 201		90L-4	19000	22400	66
19.3	680	2.8	72.5	7.5	MN C2E 201		90L-4	19000	22400	66
22.4	590	3.15	62.4	7.5	MN C2E 201		90L-4	19000	22400	66
28.1	469	3.75	49.8	7.5	MN C2E 201		90L-4	19000	22400	66
33.1	398	4.5	42.3	7.5	MN C2E 201		90L-4	19000	22400	66
39	338	4.5	35.9	7.5	MN C2E 201		90L-4	19000	22400	66
39.6	344	2.65	35.3	8.5	MN CE 201		90L-4	19000	22400	58
47.9	284	4	29.3	8.5	MN CE 201		90L-4	19000	22400	58
9.6	1370	0.9	146	7.1	MN C2E 200		90L-4	15000	18000	63
11.6	1140	1.06	121	7.1	MN C2E 200		90L-4	15000	18000	63
13.5	980	1.18	104	7.1	MN C2E 200		90L-4	15000	18000	63
16	820	1.4	87.6	7.1	MN C2E 200		90L-4	15000	18000	63
19.3	680	1.7	72.5	7.1	MN C2E 200		90L-4	15000	18000	63
22.4	590	1.9	62.4	7.1	MN C2E 200		90L-4	15000	18000	63
28.1	469	2.36	49.8	7.1	MN C2E 200		90L-4	15000	18000	63
33.1	398	2.65	42.3	7.1	MN C2E 200		90L-4	15000	18000	63
39	338	2.5	35.9	7.1	MN C2E 200		90L-4	15000	18000	63
39.6	344	1.5	35.3	8	MN CE 200		90L-4	15000	18000	63
47.9	284	2.24	29.3	8	MN CE 200		90L-4	15000	18000	63
55.6	245	3.15	25.2	8	MN CE 200		90L-4	15000	18000	63
69.6	195	4.5	20.1	8	MN CE 200		90L-4	15000	18000	63

**TECHNICAL DATA**





<b>P<sub>1</sub> = 1.5kW n<sub>1</sub> = 1400rpm</b>									
------------------------------------------------------	--	--	--	--	--	--	--	--	--

n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
82.1	166	4.25	17.1	8	MN CE 200		90L-4	15000	18000	55
92.5	147	4.5	15.1	8	MN CE 200		90L-4	15000	18000	55
116	117	6.3	12.1	8	MN CE 200		90L-4	15000	18000	55
137	100	5.6	10.3	8	MN CE 200		90L-4	15000	18000	55

<b>P<sub>1</sub> = 2.2kW n<sub>1</sub> = 1400rpm</b>									
------------------------------------------------------	--	--	--	--	--	--	--	--	--

1.03	18420	2.24	1363	19			MN C3E 445	100L1-4	112000	118000	432
1.22	15440	2.5	1143	17			MN C3E 429	100L1-4	100000	106000	334
1.29	14700	2	1089	15			MN C3E 428	100L1-4	90000	97500	314
1.51	12490	2.36	924	15			MN C3E 428	100L1-4	90000	97500	314
1.62	11670	2	864	13.2			MN C3E 355	100L1-4	71000	80000	249
1.96	9660	2.36	715	13.2			MN C3E 355	100L1-4	71000	80000	249
2.36	8030	2.5	594	12.5			MN C3E 354	100L1-4	71000	80000	237
2.85	6640	3	492	12.5			MN C3E 354	100L1-4	71000	80000	237
2.63	7190	1.9	532	10.6			MN C3E 353	100L1-4	60000	67000	193
3.29	5740	2.36	425	10.6			MN C3E 353	100L1-4	60000	67000	193
3.88	4870	2.65	361	10.6			MN C3E 353	100L1-4	60000	67000	193
4.38	4320	3	320	10.6			MN C3E 353	100L1-4	60000	67000	193
6.36	3040	2.8	220	15			MN C2E 353	100L1-4	60000	67000	183
7.54	2506	3.55	186	15			MN C2E 353	100L1-4	60000	67000	183
4.59	4120	2.12	305	9.5			MN C3E 280	100L1-4	47500	53000	138
5.41	3500	2.5	259	9.5			MN C3E 280	100L1-4	47500	53000	138
6.6	2930	2	212	12.5			MN C2E 280	100L1-4	47500	53000	131
7.92	2404	2.65	177	12.5			MN C2E 280	100L1-4	47500	53000	131
9.57	2020	3.55	146	12.5			MN C2E 280	100L1-4	47500	53000	131
3.27	5790	1	429	8			MN C3E 241	100L1-4	30000	35500	116
4.82	3920	1.4	290	8			MN C3E 241	100L1-4	30000	35500	116
5.68	3330	1.7	246	8			MN C3E 241	100L1-4	30000	35500	116
5.61	3450	1.06	250	10			MN C2E 241	100L1-4	30000	35500	102
6.6	2930	1.25	212	10			MN C2E 241	100L1-4	30000	35500	102
7.67	2502	1.8	183	10			MN C2E 241	100L1-4	30000	35500	102
9.26	2090	2.12	151	10			MN C2E 241	100L1-4	30000	35500	102
11.6	1670	3	121	10			MN C2E 241	100L1-4	30000	35500	102
13.5	1430	3.55	104	10			MN C2E 241	100L1-4	30000	35500	102
7.67	2502	1	183	9			MN C2E 240	100L1-4	30000	35500	94
9.26	2090	1.25	151	9			MN C2E 240	100L1-4	30000	35500	94
11.6	1670	1.7	121	9			MN C2E 240	100L1-4	30000	35500	94
13.5	1430	2.12	104	9			MN C2E 240	100L1-4	30000	35500	94
9.6	2010	1	146	7.5			MN C2E 201	100L1-4	19000	22400	66
11.6	1670	1.18	121	7.5			MN C2E 201	100L1-4	19000	22400	66
13.5	1430	1.4	104	7.5			MN C2E 201	100L1-4	19000	22400	66





## TECHNICAL DATA

P <sub>1</sub> = <b>2.2kW</b> n <sub>1</sub> =1400rpm										
n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
16.9	1150	4.25	83	10	MN C2E 241		100L1-4	30000	35500	102
19.3	1000	4.5	72.5	10	MN C2E 241		100L1-4	30000	35500	102
16.9	1150	2.65	83	9	MN C2E 240		100L1-4	30000	35500	94
19.3	1000	2.5	72.5	9	MN C2E 240		100L1-4	30000	35500	94
22.4	860	3.15	62.4	9	MN C2E 240		100L1-4	30000	35500	94
28.1	690	4.25	49.8	9	MN C2E 240		100L1-4	30000	35500	94
16	1210	1.6	87.6	7.5	MN C2E 201		100L1-4	19000	22400	77
19.3	1000	1.9	72.5	7.5	MN C2E 201		100L1-4	19000	22400	77
22.4	860	2.12	62.4	7.5	MN C2E 201		100L1-4	19000	22400	77
28.1	690	2.65	49.8	7.5	MN C2E 201		100L1-4	19000	22400	77
33.1	580	3	42.3	7.5	MN C2E 201		100L1-4	19000	22400	77
19.3	1000	1.12	72.5	7.1	MN C2E 200		100L1-4	15000	18000	74
22.4	860	1.32	62.4	7.1	MN C2E 200		100L1-4	15000	18000	74
28.1	690	1.6	49.8	7.1	MN C2E 200		100L1-4	15000	18000	74
33.1	580	1.8	42.3	7.1	MN C2E 200		100L1-4	15000	18000	74
16	1210	0.95	87.6	7.1	MN C2E 200		100L1-4	15000	18000	74

P <sub>1</sub> = <b>3kW</b> n <sub>1</sub> =1400rpm										
4.88	5280	3.55	287	12.5		MN C3E 354	100L2-4	71000	80000	237
7.57	3480	3.55	185	12.5		MN C2E 354	100L2-4	71000	80000	237
4.59	5620	2.24	320	10.6	MN C3E 353		100L2-4	60000	67000	193
5.48	4700	2.8	255	10.6	MN C3E 353		100L2-4	60000	67000	193
6.87	3750	2.65	204	10.6	MN C3E 353		100L2-4	60000	67000	193
6.36	4150	2	220	15	MN C2E 353		100L2-4	60000	67000	183
7.54	3490	2.65	186	15	MN C2E 353		100L2-4	60000	67000	183
9.12	2890	3.55	154	15	MN C2E 353		100L2-4	60000	67000	183
6.6	3990	1.5	212	15	MN C2E 280		100L2-4	60000	67000	131
7.92	3330	1.9	177	15	MN C2E 280		100L2-4	60000	67000	131
9.57	2750	2.65	146	15	MN C2E 280		100L2-4	60000	67000	131
11	2390	3.35	127	15	MN C2E 280		100L2-4	60000	67000	131
12.8	2050	3.75	109	15	MN C2E 280		100L2-4	60000	67000	131
6.6	3990	0.9	212	10	MN C2E 241		100L2-4	30000	35500	102
7.67	3440	1.32	183	10	MN C2E 241		100L2-4	30000	35500	102
9.26	2850	1.5	151	10	MN C2E 241		100L2-4	30000	35500	102
11.6	2270	2.24	121	10	MN C2E 241		100L2-4	30000	35500	102
13.5	1960	2.65	104	10	MN C2E 241		100L2-4	30000	35500	102
16.9	1560	3.15	83	10	MN C2E 241		100L2-4	30000	35500	102
9.26	2850	0.95	151	9	MN C2E 240		100L2-4	30000	35500	94
11.6	2270	1.25	121	9	MN C2E 240		100L2-4	30000	35500	94
13.5	1960	1.6	104	9	MN C2E 240		100L2-4	30000	35500	94
16.9	1560	2	83	9	MN C2E 240		100L2-4	30000	35500	94
13.5	1960	1	104	9	MN C2E 201		100L2-4	19000	22400	77
16	1650	1.18	87.6	9	MN C2E 201		100L2-4	19000	22400	77

**TECHNICAL DATA**





**P<sub>1</sub> = 3kW n<sub>1</sub> = 1400rpm**

n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
19.3	1360	3.35	72.5	10.2	MN C2E 241		100L2-4	30000	35500	101
22.4	1180	4	62.4	10.2	MN C2E 241		100L2-4	30000	35500	101
19.3	1360	1.9	72.5	9.1	MN C2E 240		100L2-4	30000	35500	94
28.1	940	3.15	49.8	9.1	MN C2E 240		100L2-4	30000	35500	94
22.4	1180	2.24	62.4	9.1	MN C2E 240		100L2-4	30000	35500	94
33.1	800	3.15	42.3	9.1	MN C2E 240		100L2-4	30000	35500	94
39	680	3.15	35.9	9.1	MN C2E 240		100L2-4	30000	35500	94
39.6	690	1.9	35.3	11.2	MN CE 240		100L2-4	30000	35500	86
47.9	570	3	29.3	11.2	MN CE 240		100L2-4	30000	35500	86
19.3	1360	1.4	72.5	7.5	MN C2E 201		100L2-4	19000	22400	77
22.4	1180	1.6	62.4	7.5	MN C2E 201		100L2-4	19000	22400	77
28.1	940	1.9	49.8	7.5	MN C2E 201		100L2-4	19000	22400	77
33.1	800	2.24	42.3	7.5	MN C2E 201		100L2-4	19000	22400	77
39	680	2.24	35.9	7.5	MN C2E 201		100L2-4	19000	22400	77
39.6	690	1.32	35.3	8.5	MN CE 201		100L2-4	19000	22400	70
47.9	570	2	29.3	8.5	MN CE 201		100L2-4	19000	22400	70
55.6	490	2.8	25.2	8.5	MN CE 201		100L2-4	19000	22400	70
69.6	391	3.75	20.1	8.5	MN CE 201		100L2-4	19000	22400	70
82.1	332	3.75	17.1	8.5	MN CE 201		100L2-4	19000	22400	70
92.5	294	4	15.1	8.5	MN CE 201		100L2-4	19000	22400	70
22.4	1180	0.95	62.4	7.1	MN C2E 200		100L2-4	15000	18000	74
33.1	800	1.32	42.3	7.1	MN C2E 200		100L2-4	15000	18000	74
39	680	1.25	35.9	7.1	MN C2E 200		100L2-4	15000	18000	74
47.9	570	1.12	29.3	8.7	MN CE 200		100L2-4	15000	18000	67
55.6	490	1.6	25.2	8.7	MN CE 200		100L2-4	15000	18000	67
69.6	391	2.24	20.1	8.7	MN CE 200		100L2-4	15000	18000	67
82.1	332	2.12	17.1	8.7	MN CE 200		100L2-4	15000	18000	67
92.5	294	2.24	15.1	8.7	MN CE 200		100L2-4	15000	18000	67
116	235	3.15	12.1	8.7	MN CE 200		100L2-4	15000	18000	67
137	199	2.8	10.3	8.7	MN CE 200		100L2-4	15000	18000	67

**P<sub>1</sub> = 4kW n<sub>1</sub> = 1400rpm**





1.01	34100	1.7	1389	25.8	MN C3E 542	112M-4	150000	160000	667
1.2	28730	2.36	1170	25.8	MN C3E 542	112M-4	150000	160000	667
1.19	28970	1.9	1180	31.5	MN C3E 446	112M-4	125000	132000	452
1.51	22840	2.5	930	31.5	MN C3E 446	112M-4	125000	132000	452
1.21	28530	1.7	1162	19.8	MN C3E 445	112M-4	112000	118000	439
1.53	22490	2.12	916	19.8	MN C3E 445	112M-4	112000	118000	439
1.22	28070	1.4	1143	26.5	MN C3E 429	112M-4	100000	106000	341
1.44	23840	1.6	971	26.5	MN C3E 429	112M-4	100000	106000	341
1.85	18570	2.24	756	26.5	MN C3E 429	112M-4	100000	106000	341

**TECHNICAL DATA**

<b>P<sub>1</sub> = 4kW n<sub>1</sub> = 1400rpm</b>										
n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2MAX</sub> [N]		 Kg
								C	S	
1.85	18610	2.65	758	19.8						
2.24	15370	2.65	626	17.8						
2.35	14640	1.9	596	15.8						
2.71	12690	2.5	517	15.8						
3.15	10920	2.8	445	15.8						
2.71	12690	1.8	517	13.2						
3.15	10920	2.12	445	13.2						
3.94	8720	2.5	355	13.2						
7.46	4710	3.35	188	19.8						
4.14	8300	2.24	338	12.5						
4.88	7040	2.65	287	12.5						
5.75	5980	2.5	243	12.5						
6.86	5010	2.5	204	12.5						
6.38	5510	2.12	219	18						
7.57	4640	2.65	185	18						
9.15	3840	3.55	153	18						
5.48	6270	2.12	255	10.6	MN C3E 353		112M-4	60000	67000	193
6.87	5010	2	204	10.6	MN C3E 353		112M-4	60000	67000	193
6.36	5530	1.5	220	15.2	MN C2E 353		112M-4	60000	67000	190
7.54	4660	2	186	15.2	MN C2E 353		112M-4	60000	67000	190
9.12	3850	2.65	154	15.2	MN C2E 353		112M-4	60000	67000	190
11.7	3000	3.55	120	15.2	MN C2E 353		112M-4	60000	67000	190
9.57	3670	1.9	146	12.5	MN C2E 280		112M-4	47500	53000	138
11	3180	2.5	127	12.5	MN C2E 280		112M-4	47500	53000	138
12.8	2740	2.8	109	12.5	MN C2E 280		112M-4	47500	53000	138
16.1	2190	3.55	87.1	12.5	MN C2E 280		112M-4	47500	53000	138
18.4	1910	3.35	76.1	12.5	MN C2E 280		112M-4	47500	53000	138
9.26	3790	1.12	151	10.2	MN C2E 241		112M-4	30000	35500	109
11.6	3030	1.7	121	10.2	MN C2E 241		112M-4	30000	35500	109
13.5	2610	1.9	104	10.2	MN C2E 241		112M-4	30000	35500	109
16.9	2080	2.36	83	10.2	MN C2E 241		112M-4	30000	35500	109
19.3	1820	2.5	72.5	10.2	MN C2E 241		112M-4	30000	35500	109
22.4	1570	3	62.4	10.2	MN C2E 241		112M-4	30000	35500	109
28.1	1250	3.75	49.8	10.2	MN C2E 241		112M-4	30000	35500	109
11.6	3030	0.95	121	9.1	MN C2E 240		112M-4	30000	35500	101
13.5	2610	1.18	104	9.1	MN C2E 240		112M-4	30000	35500	101
16.9	2080	1.5	83	9.1	MN C2E 240		112M-4	30000	35500	101
19.3	1820	1.4	72.5	9.1	MN C2E 240		112M-4	30000	35500	101
22.4	1570	1.7	62.4	9.1	MN C2E 240		112M-4	30000	35500	101
28.1	1250	2.36	49.8	9.1	MN C2E 240		112M-4	30000	35500	101
19.3	1820	1.06	72.5	7.5	MN C2E 201		112M-4	19000	22400	84
22.4	1570	1.18	62.4	7.5	MN C2E 201		112M-4	19000	22400	84
28.1	1250	1.4	49.8	7.5	MN C2E 201		112M-4	19000	22400	84

**TECHNICAL DATA**





<b>P<sub>1</sub>=4kW n<sub>1</sub>=1400rpm</b>									
------------------------------------------------	--	--	--	--	--	--	--	--	--

n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
33.1	1060	3.75	42.3	10.2	MN C2E 241		112M-4	30000	35500	109
39	900	3.75	35.9	10.2	MN C2E 241		112M-4	30000	35500	109
39.8	910	2.36	35.2	15.5	MN CE 241		112M-4	30000	35500	129
48	760	3.55	29.1	15.5	MN CE 241		112M-4	30000	35500	129
33.1	1060	2.36	42.3	9.1	MN C2E 240		112M-4	30000	35500	101
39	900	2.36	35.9	9.1	MN C2E 240		112M-4	30000	35500	101
39.6	920	1.4	35.3	9.1	MN CE 240		112M-4	30000	35500	93
47.9	760	2.24	29.3	9.1	MN CE 240		112M-4	30000	35500	93
55.6	650	3.15	25.2	9.1	MN CE 240		112M-4	30000	35500	93
33.1	1060	1.7	42.3	7.5	MN C2E 201		112M-4	19000	22400	84
39	900	1.7	35.9	7.5	MN C2E 201		112M-4	19000	22400	84
39.6	920	1	35.3	8.5	MN CE 201		112M-4	19000	22400	77
47.9	760	1.5	29.3	8.5	MN CE 201		112M-4	19000	22400	77
55.6	650	2.12	25.2	8.5	MN CE 201		112M-4	19000	22400	77
69.6	520	2.8	20.1	8.5	MN CE 201		112M-4	19000	22400	77
82.1	442	2.8	17.1	8.5	MN CE 201		112M-4	19000	22400	77
92.5	392	3.15	15.1	8.5	MN CE 201		112M-4	19000	22400	77
116	313	4	12.1	8.5	MN CE 201		112M-4	19000	22400	77
137	266	3.75	10.3	8.5	MN CE 201		112M-4	19000	22400	77
33.1	1060	1	42.3	7.1	MN C2E 200		112M-4	15000	18000	81
39	900	0.95	35.9	7.1	MN C2E 200		112M-4	15000	18000	81
55.6	650	1.18	25.2	8.7	MN CE 200		112M-4	15000	18000	74
69.6	520	1.7	20.1	8.7	MN CE 200		112M-4	15000	18000	74
82.1	442	1.6	17.1	8.7	MN CE 200		112M-4	15000	18000	74
92.5	392	1.7	15.1	8.7	MN CE 200		112M-4	15000	18000	74
116	313	2.5	12.1	8.7	MN CE 200		112M-4	15000	18000	74
137	266	2.12	10.3	8.7	MN CE 200		112M-4	15000	18000	74

<b>P<sub>1</sub>=5.5kW n<sub>1</sub>=1400rpm</b>									
--------------------------------------------------	--	--	--	--	--	--	--	--	--





1.19	39670	2	1175	28.8	MN C3E 543		132S-4	180000	190000	791
1.54	30780	2.5	912	25.8	MN C3E 542		132S-4	150000	160000	667
1.88	25080	3.15	743	25.8	MN C3E 542		132S-4	150000	160000	667
1.51	31410	1.8	930	20.8	MN C3E 446		132S-4	125000	132000	485
1.79	26460	2.36	784	20.8	MN C3E 446		132S-4	125000	132000	485
2.19	21560	2.65	639	19.8	MN C3E 445		132S-4	112000	118000	485
2.55	18570	3	550	19.8	MN C3E 445		132S-4	112000	118000	485
2.6	18200	2.12	539	17.8	MN C3E 429		132S-4	100000	106000	485
3.25	14530	2.65	430	17.8	MN C3E 429		132S-4	100000	106000	485
3.15	15020	2.12	445	15.8	MN C3E 428		132S-4	90000	97500	321
3.94	11990	2.5	355	15.8	MN C3E 428		132S-4	90000	97500	321
4.65	10180	3	301	15.8	MN C3E 428		132S-4	90000	97500	321
3.94	11990	1.9	355	13.2	MN C3E 355		132S-4	71000	80000	289
4.65	10180	2.12	301	13.2	MN C3E 355		132S-4	71000	80000	289
4.88	9690	1.9	287	13.2	MN C3E 354		132S-4	71000	80000	276

**TECHNICAL DATA**

<b>P<sub>1</sub> = 5.5kW n<sub>1</sub> = 1400rpm</b>										
n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	P <sub>t</sub> KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
5.22	9060	2.8	268	15.8		<b>MN C3E 428</b>	<b>132S-4</b>	90000	97500	353
6.28	7690	2.5	223	22.4		<b>MN C2E 428</b>	<b>132S-4</b>	90000	97500	346
7.46	6480	3.15	188	22.4		<b>MN C2E 428</b>	<b>132S-4</b>	90000	97500	346
5.22	9060	2.36	268	13.2		<b>MN C3E 355</b>	<b>132S-4</b>	71000	80000	289
6.71	7040	2.36	209	13.2		<b>MN C3E 355</b>	<b>132S-4</b>	71000	80000	289
6.28	7690	1.8	223	19.8		<b>MN C2E 355</b>	<b>132S-4</b>	71000	80000	282
7.46	6480	2.36	188	19.8		<b>MN C2E 355</b>	<b>132S-4</b>	71000	80000	282
5.75	8220	1.9	243	12.5		<b>MN C3E 354</b>	<b>132S-4</b>	71000	80000	276
6.86	6890	1.9	204	12.5		<b>MN C3E 354</b>	<b>132S-4</b>	71000	80000	276
6.38	7570	1.5	219	18		<b>MN C2E 354</b>	<b>132S-4</b>	71000	80000	269
7.57	6380	2	185	18		<b>MN C2E 354</b>	<b>132S-4</b>	71000	80000	269
9.15	5280	2.65	153	18		<b>MN C2E 354</b>	<b>132S-4</b>	71000	80000	269
10.6	4550	3.15	132	18		<b>MN C2E 354</b>	<b>132S-4</b>	71000	80000	269
6.87	6880	1.4	204	10.6	<b>MN C3E 353</b>		<b>132S-4</b>	60000	67000	269
6.36	7600	1.12	220	15.2	<b>MN C2E 353</b>		<b>132S-4</b>	60000	67000	269
7.54	6400	1.5	186	15.2	<b>MN C2E 353</b>		<b>132S-4</b>	60000	67000	269
9.12	5300	1.9	154	15.2	<b>MN C2E 353</b>		<b>132S-4</b>	60000	67000	269
11.7	4130	2.65	120	15.2	<b>MN C2E 353</b>		<b>132S-4</b>	60000	67000	269
13.6	3560	3.15	103	15.2	<b>MN C2E 353</b>		<b>132S-4</b>	60000	67000	269
17	2840	3.55	82.3	15.2	<b>MN C2E 353</b>		<b>132S-4</b>	60000	67000	269
9.57	5050	1.4	146	12.5	<b>MN C2E 280</b>		<b>132S-4</b>	47500	53000	171
11	4160	1.8	127	12.5	<b>MN C2E 280</b>		<b>132S-4</b>	47500	53000	171
12.8	3770	2.12	109	12.5	<b>MN C2E 280</b>		<b>132S-4</b>	47500	53000	171
16.1	3010	2.5	87.1	12.5	<b>MN C2E 280</b>		<b>132S-4</b>	47500	53000	171
18.4	2630	2.36	76.1	12.5	<b>MN C2E 280</b>		<b>132S-4</b>	47500	53000	171
21.4	2260	3	65.6	12.5	<b>MN C2E 280</b>		<b>132S-4</b>	47500	53000	171
11.6	4370	1.18	121	10.2	<b>MN C2E 241</b>		<b>132S-4</b>	30000	35500	142
13.5	3590	1.4	104	10.2	<b>MN C2E 241</b>		<b>132S-4</b>	30000	35500	142
16.9	2860	1.7	83	10.2	<b>MN C2E 241</b>		<b>132S-4</b>	30000	35500	142
19.3	2500	1.8	72.5	10.2	<b>MN C2E 241</b>		<b>132S-4</b>	30000	35500	142
22.4	2150	2.24	62.4	10.2	<b>MN C2E 241</b>		<b>132S-4</b>	30000	35500	142
28.1	1720	2.8	49.8	10.2	<b>MN C2E 241</b>		<b>132S-4</b>	30000	35500	142
33.1	1460	2.8	42.3	10.2	<b>MN C2E 241</b>		<b>132S-4</b>	30000	35500	142
39	1240	2.8	35.9	10.2	<b>MN C2E 241</b>		<b>132S-4</b>	30000	35500	142
39.8	1260	1.7	35.2	15.5	<b>MN CE 241</b>		<b>132S-4</b>	30000	35500	162
48	1040	2.65	29.1	15.5	<b>MN CE 241</b>		<b>132S-4</b>	30000	35500	162
55.8	890	3.75	25.1	15.5	<b>MN CE 241</b>		<b>132S-4</b>	30000	35500	162
16.9	2860	1.06	83	9.1	<b>MN C2E 240</b>		<b>132S-4</b>	30000	35500	133
19.3	2500	1	72.5	9.1	<b>MN C2E 240</b>		<b>132S-4</b>	30000	35500	133
19.5	2480	1.25	62.4	9.1	<b>MN C2E 240</b>		<b>132S-4</b>	30000	35500	133
28.1	1720	1.7	49.8	9.1	<b>MN C2E 240</b>		<b>132S-4</b>	30000	35500	133
33.1	1460	1.8	42.3	9.1	<b>MN C2E 240</b>		<b>132S-4</b>	30000	35500	133
39	1240	1.8	35.9	9.1	<b>MN C2E 240</b>		<b>132S-4</b>	30000	35500	133
39.6	1260	1.06	35.3	11.2	<b>MN CE 240</b>		<b>132S-4</b>	30000	35500	126
47.9	1040	1.6	29.3	11.2	<b>MN CE 240</b>		<b>132S-4</b>	30000	35500	126
55.6	900	2.24	25.2	11.2	<b>MN CE 240</b>		<b>132S-4</b>	30000	35500	126
69.6	720	3.35	20.1	11.2	<b>MN CE 240</b>		<b>132S-4</b>	30000	35500	126

## TECHNICAL DATA





**P<sub>1</sub> = 5.5kW n<sub>1</sub> = 1400rpm**

n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
82.1	610	3	17.1	11.2	MN CE 240		132S-4	30000	35500	142
92.5	540	3.35	15.1	11.2	MN CE 240		132S-4	30000	35500	142
55.6	900	1.5	25.2	8.5	MN CE 201		132S-4	19000	22400	110
69.6	720	2.12	20.1	8.5	MN CE 201		132S-4	19000	22400	110
92.5	540	2.24	15.1	8.5	MN CE 201		132S-4	19000	22400	110
116	431	3	12.1	8.5	MN CE 201		132S-4	19000	22400	110
137	365	2.8	10.3	8.5	MN CE 201		132S-4	19000	22400	110
47.9	1040	1.06	29.3	8.5	MN CE 201		132S-4	19000	22400	110
69.6	720	1.25	20.1	8.7	MN CE 200		132S-4	15000	18000	107
82.1	610	1.12	17.1	8.7	MN CE 200		132S-4	15000	18000	107
92.5	540	1.25	15.1	8.7	MN CE 200		132S-4	15000	18000	107
116	431	1.8	12.1	8.7	MN CE 200		132S-4	15000	18000	107
137	365	1.6	10.3	8.7	MN CE 200		132S-4	15000	18000	107

**P<sub>1</sub> = 7.5kW n<sub>1</sub> = 1400rpm**





1.19	54150	1.9	1176	33.5		MN C3E 695	132M-4	250000	265000	1414
1.41	45630	2.8	991	33.5		MN C3E 695	132M-4	250000	265000	1414
1.41	45580	2.12	990	28.8		MN C3E 543	132M-4	180000	190000	791
1.81	35520	2.8	771	28.8		MN C3E 543	132M-4	180000	190000	791
1.54	41980	1.9	912	25.8		MN C3E 542	132M-4	150000	180000	700
1.88	34200	2.36	743	25.8		MN C3E 542	132M-4	150000	180000	700
2.24	28820	3.15	626	25.8		MN C3E 542	132M-4	150000	180000	700
2.81	22910	2.8	498	20.8		MN C3E 446	132M-4	125000	132000	485
3.27	19730	2.65	429	19.8		MN C3E 445	132M-4	112000	118000	427
4.09	15750	3.35	342	19.8		MN C3E 445	132M-4	112000	118000	427
3.83	16810	2.24	365	17.8		MN C3E 429	132M-4	100000	106000	374
4.93	13080	2.8	284	17.8		MN C3E 429	132M-4	100000	106000	374
6.33	10190	3.55	221	17.8		MN C3E 429	132M-4	100000	106000	374
7.42	8880	2.8	189	26.5		MN C2E 429	132M-4	100000	106000	363
4.65	13880	2.12	301	15.8		MN C3E 428	132M-4	90000	97500	353
5.22	12350	2	268	15.8		MN C3E 428	132M-4	90000	97500	353
6.71	9610	2.24	209	15.8		MN C3E 428	132M-4	90000	97500	353
6.28	10490	1.9	223	22.4		MN C2E 428	132M-4	90000	97500	346
7.46	8840	2.24	188	22.4		MN C2E 428	132M-4	90000	97500	346
9.15	7200	3.15	153	22.4		MN C2E 428	132M-4	90000	97500	346
4.65	13880	1.6	301	13.2		MN C3E 355	132M-4	71000	80000	289
5.22	12350	1.8	268	13.2		MN C3E 355	132M-4	71000	80000	289
6.71	9610	1.8	209	13.2		MN C3E 355	132M-4	71000	80000	289
6.28	10490	1.32	223	19.8		MN C2E 355	132M-4	71000	80000	282
7.46	8840	1.7	188	19.8		MN C2E 355	132M-4	71000	80000	282
9.15	7200	2.36	153	19.8		MN C2E 355	132M-4	71000	80000	282
11.7	5610	3.15	119	19.8		MN C2E 355	132M-4	71000	80000	282
5.75	11210	1.4	243	12.5		MN C3E 354	132M-4	71000	80000	276
9.12	7230	1.9	153	18		MN C2E 354	132M-4	71000	80000	269
10.6	6200	2.24	132	18		MN C2E 354	132M-4	71000	80000	269
13.6	4830	2.8	103	18		MN C2E 354	132M-4	71000	80000	269

**TECHNICAL DATA**

<b>P<sub>1</sub> = 7.5kW n<sub>1</sub> = 1400rpm</b>										
n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
17.1	3860	4	82	18				71000	80000	269
19.5	3380	3.35	71.9	18		MN C2E 354	132M-4	71000	80000	269
4.38	14730	0.9	320	10.6	MN C3E 353		132M-4	60000	67000	233
11.7	5630	1.9	120	15.2	MN C2E 353		132M-4	60000	67000	222
13.6	4850	2.36	103	15.2	MN C2E 353		132M-4	60000	67000	222
17	3870	2.65	82.3	15.2	MN C2E 353		132M-4	60000	67000	222
19.5	3380	2.65	71.9	15.2	MN C2E 353		132M-4	60000	67000	222
22.6	2910	3.35	61.9	15.2	MN C2E 353		132M-4	60000	67000	222
28.3	2330	4	49.4	15.2	MN C2E 353		132M-4	60000	67000	222
33.4	1970	4.25	41.9	15.2	MN C2E 353		132M-4	60000	67000	222
39.8	1650	4.25	35.1	15.2	MN C2E 353		132M-4	60000	67000	222
16.1	4100	1.9	87.1	12.5	MN C2E 280		132M-4	47500	53000	171
18.4	3580	1.8	76.1	12.5	MN C2E 280		132M-4	47500	53000	171
21.4	3090	2.12	65.6	12.5	MN C2E 280		132M-4	47500	53000	171
26.7	2460	2.65	52.3	12.5	MN C2E 280		132M-4	47500	53000	171
31.5	2090	2.8	44.4	12.5	MN C2E 280		132M-4	47500	53000	171
35.4	1860	2.5	39.5	12.5	MN C2E 280		132M-4	47500	53000	171
48	1420	3.15	29.1	17.5	MN CE 280		132M-4	47500	53000	188
11.6	5680	0.9	121	10.2	MN C2E 241		132M-4	30000	35500	142
16.9	3900	1.25	83	10.2	MN C2E 241		132M-4	30000	35500	142
19.3	3410	1.32	72.5	10.2	MN C2E 241		132M-4	30000	35500	142
22.4	2940	1.6	62.4	10.2	MN C2E 241		132M-4	30000	35500	142
28.1	2350	2	49.8	10.2	MN C2E 241		132M-4	30000	35500	142
33.1	1990	2	42.3	10.2	MN C2E 241		132M-4	30000	35500	142
39	1690	2	35.9	10.2	MN C2E 241		132M-4	30000	35500	142
39.8	1710	1.25	35.2	15.5	MN CE 241		132M-4	30000	35500	162
48	1420	1.9	29.1	15.5	MN CE 241		132M-4	30000	35500	162
55.6	1220	2.8	25.1	15.5	MN CE 241		132M-4	30000	35500	162
69.9	970	4	20	15.5	MN CE 241		132M-4	30000	35500	162
82.4	830	3.75	17	15.5	MN CE 241		132M-4	30000	35500	162
89.8	760	4.25	15.6	15.5	MN CE 241		132M-4	30000	35500	162
22.4	2940	0.9	62.4	9.1	MN C2E 240		132M-4	30000	35500	101
28.1	2350	1.25	49.8	9.1	MN C2E 240		132M-4	30000	35500	101
33.1	1990	1.32	42.3	9.1	MN C2E 240		132M-4	30000	35500	101
39	1690	1.32	35.9	9.1	MN C2E 240		132M-4	30000	35500	101
47.9	1420	1.18	29.3	11.2	MN CE 240		132M-4	30000	35500	126
69.6	980	2.36	20.1	11.2	MN CE 240		132M-4	30000	35500	126
82.1	830	2.24	17.1	11.2	MN CE 240		132M-4	30000	35500	126
92.5	740	2.5	15.1	11.2	MN CE 240		132M-4	30000	35500	126
116	590	3	12.1	11.2	MN CE 240		132M-4	30000	35500	126
137	498	3.15	10.3	11.2	MN CE 240		132M-4	30000	35500	126

## TECHNICAL DATA

**P<sub>1</sub> = 7.5kW n<sub>1</sub> = 1400rpm**





n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
55.6	1220	1.12	25.2	8.5	MN CE 201		132M-4	19000	22400	110
69.6	980	1.5	20.1	8.5	MN CE 201		132M-4	19000	22400	110
82.1	830	1.5	17.1	8.5	MN CE 201		132M-4	19000	22400	110
92.5	740	1.6	15.1	8.5	MN CE 201		132M-4	19000	22400	110
116	590	2.12	12.1	8.5	MN CE 201		132M-4	19000	22400	110
137	498	2	10.3	8.5	MN CE 201		132M-4	19000	22400	110
69.6	980	0.9	20.1	8.7	MN CE 200		132M-4	15000	18000	107
92.5	740	0.9	15.1	8.7	MN CE 200		132M-4	15000	18000	107
116	590	1.32	12.1	8.7	MN CE 200		132M-4	15000	18000	107
137	498	1.18	10.3	8.7	MN CE 200		132M-4	15000	18000	107

**P<sub>1</sub> = 11kW n<sub>1</sub> = 1400rpm**

1.19	79430	1.6	1176	35.5	MN C3E 696	160M-4	250000	265000	1451
1.41	66920	2.36	991	35.5	MN C3E 696	160M-4	250000	265000	1451
1.19	79430	1.32	1176	33.5	MN C3E 695	160M-4	250000	265000	1363
1.41	66920	1.9	991	33.5	MN C3E 695	160M-4	250000	265000	1363
1.81	52150	2.65	772	33.5	MN C3E 695	160M-4	250000	265000	1363
2.15	43890	2.65	650	28.8	MN C3E 543	160M-4	180000	190000	828
2.24	42270	2.12	626	25.8	MN C3E 542	160M-4	180000	190000	828
2.68	35220	2.65	522	25.8	MN C3E 542	160M-4	180000	190000	828
3.44	27450	3.15	406	25.8	MN C3E 542	160M-4	180000	190000	828
4.88	19360	2.65	287	19.8	MN C3E 445	160M-4	112000	118000	509
2.24	42270	0.95	626	17.8	MN C3E 429	160M-4	100000	106000	411
3.25	29060	1.32	430	17.8	MN C3E 429	160M-4	100000	106000	411
3.83	24660	1.5	365	17.8	MN C3E 429	160M-4	100000	106000	411
4.93	19180	1.9	284	17.8	MN C3E 429	160M-4	100000	106000	411
6.33	14940	2.5	221	17.8	MN C3E 429	160M-4	100000	106000	411
7.55	12520	2.5	185	17.8	MN C3E 429	160M-4	100000	106000	411
7.42	13020	2	189	26.5	MN C2E 429	160M-4	100000	106000	400
8.81	10907	3	159	19.8	MN C2E 429	160M-4	100000	106000	400
10.5	9240	3.35	134	19.8	MN C2E 429	160M-4	100000	106000	400
6.28	15380	1.25	223	22.4	MN C2E 428	160M-4	90000	97500	383
7.46	12960	1.6	188	22.4	MN C2E 428	160M-4	90000	97500	383
9.15	10560	2.12	153	22.4	MN C2E 428	160M-4	90000	97500	383
11	8800	2.65	128	22.4	MN C2E 428	160M-4	90000	97500	383
14.1	6860	3.15	99.4	22.4	MN C2E 428	160M-4	90000	97500	383
6.28	15380	0.9	223	19.8	MN C2E 355	160M-4	71000	80000	289
7.46	12960	1.18	188	19.8	MN C2E 355	160M-4	71000	80000	289

## TECHNICAL DATA





<b>P<sub>1</sub> = 11 kW n<sub>1</sub> = 1400 rpm</b>									
-------------------------------------------------------	--	--	--	--	--	--	--	--	--

n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	P <sub>t</sub> KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
9.15	10560	1.6	153	19.8		<b>MN C2E 355</b>	<b>160M-4</b>	71000	80000	319
11.7	8230	2.12	119	19.8		<b>MN C2E 355</b>	<b>160M-4</b>	71000	80000	319
14.1	6860	2.5	99.4	19.8		<b>MN C2E 355</b>	<b>160M-4</b>	71000	80000	319
17.1	5660	3.15	86.1	19.8		<b>MN C2E 355</b>	<b>160M-4</b>	71000	80000	319
19.5	4960	2.8	71.9	19.8		<b>MN C2E 355</b>	<b>160M-4</b>	71000	80000	319
10.6	9100	1.5	132	18		<b>MN C2E 354</b>	<b>160M-4</b>	71000	80000	306
13.6	7090	1.9	103	18		<b>MN C2E 354</b>	<b>160M-4</b>	71000	80000	306
19.5	4960	2.24	71.9	18		<b>MN C2E 354</b>	<b>160M-4</b>	71000	80000	306
22.6	4270	2.8	61.9	18		<b>MN C2E 354</b>	<b>160M-4</b>	71000	80000	306
28.3	3410	3.75	49.4	18		<b>MN C2E 354</b>	<b>160M-4</b>	71000	80000	306
33.4	2890	3.35	41.9	18		<b>MN C2E 354</b>	<b>160M-4</b>	71000	80000	306
39.8	2430	3.35	35.1	18		<b>MN C2E 354</b>	<b>160M-4</b>	71000	80000	306
46.3	2160	3	30.3	21.2	<b>MN CE 353</b>		<b>160M-4</b>	60000	67000	271
48	2080	2.12	29.1	17.5	<b>MN CE 280</b>		<b>160M-4</b>	47500	53000	225
57.6	1730	3.15	24.3	17.5	<b>MN CE 280</b>		<b>160M-4</b>	47500	53000	225
66.5	1500	3.55	21	17.5	<b>MN CE 280</b>		<b>160M-4</b>	47500	53000	225
74.7	1340	3.35	18.7	17.5	<b>MN CE 280</b>		<b>160M-4</b>	47500	53000	225
48	2080	1.32	29.1	15.5	<b>MN CE 241</b>		<b>160M-4</b>	30000	35500	199
55.8	1790	1.9	25.1	15.5	<b>MN CE 241</b>		<b>160M-4</b>	30000	35500	199
69.9	1430	2.65	20	15.5	<b>MN CE 241</b>		<b>160M-4</b>	30000	35500	199
82.4	1210	2.5	17	15.5	<b>MN CE 241</b>		<b>160M-4</b>	30000	35500	199
89.8	1110	2.8	15.6	15.5	<b>MN CE 241</b>		<b>160M-4</b>	30000	35500	199
106	940	3	13.2	15.5	<b>MN CE 241</b>		<b>160M-4</b>	30000	35500	199
137	730	3.35	10.3	15.5	<b>MN CE 241</b>		<b>160M-4</b>	30000	35500	199

<b>P<sub>1</sub> = 15 kW n<sub>1</sub> = 1400 rpm</b>									
-------------------------------------------------------	--	--	--	--	--	--	--	--	--





1.19	108300	1.18	1176	35.5		<b>MN C3E 696</b>	<b>160L-4</b>	250000	265000	1451
1.41	91260	1.7	991	35.5		<b>MN C3E 696</b>	<b>160L-4</b>	250000	265000	1451
1.81	71110	2.24	772	35.5		<b>MN C3E 696</b>	<b>160L-4</b>	250000	265000	1451
1.81	71110	1.9	772	33.5		<b>MN C3E 695</b>	<b>160L-4</b>	250000	265000	1363
1.41	91260	1.4	991	33.5		<b>MN C3E 695</b>	<b>160L-4</b>	250000	265000	1363
2.13	60580	2.5	658	33.5		<b>MN C3E 695</b>	<b>160L-4</b>	250000	265000	1363
2.7	47760	3	519	33.5		<b>MN C3E 695</b>	<b>160L-4</b>	250000	265000	1363
3.28	39300	2.8	427	28.8		<b>MN C3E 543</b>	<b>160L-4</b>	180000	190000	828
3.44	37430	2.36	406	25.8		<b>MN C3E 542</b>	<b>160L-4</b>	150000	160000	737
3.97	32440	2.65	352	25.8		<b>MN C3E 542</b>	<b>160L-4</b>	150000	160000	737
4.74	27190	2.8	295	25.8		<b>MN C3E 542</b>	<b>160L-4</b>	150000	160000	737
5.74	22460	3.35	244	25.8		<b>MN C3E 542</b>	<b>160L-4</b>	150000	160000	737
6.85	18820	3.55	204	25.8		<b>MN C3E 542</b>	<b>160L-4</b>	150000	160000	737

## TECHNICAL DATA

<b>P<sub>1</sub>=15kW n<sub>1</sub>=1400rpm</b>										
n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
7.4	17820	3	189	40.8			MN C2E 542 160L-4	150000	160000	795
4.65	27740	2.24	301	20.8			MN C3E 446 160L-4	125000	132000	522
5.63	22910	2.65	249	20.8			MN C3E 446 160L-4	125000	132000	522
6.71	19200	2.36	209	20.8			MN C3E 446 160L-4	125000	132000	522
7.42	17770	2.12	189	31.5			MN C2E 446 160L-4	125000	132000	579
8.71	15140	3	161	31.5			MN C2E 446 160L-4	125000	132000	579
4.88	26400	2	287	19.8			MN C3E 445 160L-4	112000	118000	509
6.2	20790	2.36	226	19.8			MN C3E 445 160L-4	112000	118000	509
7.4	17420	2.24	189	19.8			MN C3E 445 160L-4	112000	118000	509
7.44	17700	1.8	188	28.5			MN C2E 445 160L-4	112000	118000	490
8.74	15080	2.65	160	28.5			MN C2E 445 160L-4	112000	118000	490
11.1	11890	3	126	28.5			MN C2E 445 160L-4	112000	118000	490
7.55	17080	1.8	185	17.8			MN C3E 429 160L-4	100000	106000	411
7.42	17750	1.4	189	26.5			MN C2E 429 160L-4	100000	106000	400
8.81	14960	2.12	159	26.5			MN C2E 429 160L-4	100000	106000	400
10.5	12600	2.5	134	26.5			MN C2E 429 160L-4	100000	106000	400
13.4	9820	3.15	104	26.5			MN C2E 429 160L-4	100000	106000	400
17.2	7650	3.75	81.3	26.5			MN C2E 429 160L-4	100000	106000	400
18.8	7030	3.15	74.6	26.5			MN C2E 429 160L-4	100000	106000	400
6.28	20980	0.95	223	22.4			MN C2E 428 160L-4	90000	97500	383
9.15	14400	1.6	153	22.4			MN C2E 428 160L-4	90000	97500	383
11	12000	1.9	128	22.4			MN C2E 428 160L-4	90000	97500	383
14.1	9350	2.36	99.4	22.4			MN C2E 428 160L-4	90000	97500	383
16.3	8110	3	86.1	22.4			MN C2E 428 160L-4	90000	97500	383
19.5	6770	2.65	71.9	22.4			MN C2E 428 160L-4	90000	97500	383
11.7	11220	1.6	119	19.8			MN C2E 355 160L-4	71000	80000	319
14.1	9350	1.9	99.4	19.8			MN C2E 355 160L-4	71000	80000	319
16.3	8110	2.36	86.1	19.8			MN C2E 355 160L-4	71000	80000	319
19.5	6770	2.12	71.9	19.8			MN C2E 355 160L-4	71000	80000	319
23.4	5640	3	59.9	19.8			MN C2E 355 160L-4	71000	80000	319
27	4890	3.35	51.9	19.8			MN C2E 355 160L-4	71000	80000	319
30.3	4350	3	46.2	19.8			MN C2E 355 160L-4	71000	80000	319
36.1	3650	3	38.7	19.8			MN C2E 355 160L-4	71000	80000	319
10.6	12400	1.12	132	18			MN C2E 354 160L-4	71000	80000	306
13.6	9700	1.4	103	18			MN C2E 354 160L-4	71000	80000	306
17.1	7720	2	82	18			MN C2E 354 160L-4	71000	80000	306
19.5	6770	1.6	71.9	18			MN C2E 354 160L-4	71000	80000	306
22.6	5830	2	61.9	18			MN C2E 354 160L-4	71000	80000	306
28.3	4650	2.8	49.4	18			MN C2E 354 160L-4	71000	80000	306
33.4	3950	2.5	41.9	18			MN C2E 354 160L-4	71000	80000	306
39.8	3310	2.5	35.1	18			MN C2E 354 160L-4	71000	80000	306
46.3	2940	3	30.3	23.6			MN CE 354 160L-4	71000	80000	287

**TECHNICAL DATA**





**P<sub>1</sub>=15kW n<sub>1</sub>=1400rpm**

n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
17	7740	1.32	82.3	15.2	MN C2E 353		160L-4	60000	67000	252
19.5	6770	1.32	71.9	15.2	MN C2E 353		160L-4	60000	67000	252
22.6	5830	1.7	61.9	15.2	MN C2E 353		160L-4	60000	67000	252
28.3	4650	2	49.4	15.2	MN C2E 353		160L-4	60000	67000	252
33.4	3950	2.12	41.9	15.2	MN C2E 353		160L-4	60000	67000	252
39.8	3310	2.12	35.1	15.2	MN C2E 353		160L-4	60000	67000	252
46.3	2940	2.12	30.3	21.2	MN CE 353		160L-4	60000	67000	271
54.9	2480	3.15	25.5	21.2	MN CE 353		160L-4	60000	67000	271
70.5	1930	3.75	19.9	21.2	MN CE 353		160L-4	60000	67000	271
84.1	1620	3.75	16.7	21.2	MN CE 353		160L-4	60000	67000	271
48	2830	1.6	29.1	17.5	MN CE 280		160L-4	47500	53000	225
57.6	2360	2.36	24.3	17.5	MN CE 280		160L-4	47500	53000	225
66.5	2050	2.65	21	17.5	MN CE 280		160L-4	47500	53000	225
74.7	1820	2.36	18.7	17.5	MN CE 280		160L-4	47500	53000	225
85.5	1590	3.15	16.4	17.5	MN CE 280		160L-4	47500	53000	225
96.1	1420	3.15	14.6	17.5	MN CE 280		160L-4	47500	53000	225
124	1100	3.75	11.3	17.5	MN CE 280		160L-4	47500	53000	225
48	2830	0.95	29.1	15.5	MN CE 241		160L-4	30000	35500	199
55.8	2440	1.4	25.1	15.5	MN CE 241		160L-4	30000	35500	199
69.9	1950	2	20	15.5	MN CE 241		160L-4	30000	35500	199
82.4	1650	1.8	17	15.5	MN CE 241		160L-4	30000	35500	199
89.8	1510	2.12	15.6	15.5	MN CE 241		160L-4	30000	35500	199
106	1290	2.12	13.2	15.5	MN CE 241		160L-4	30000	35500	199
137	1000	2.5	10.3	15.5	MN CE 241		160L-4	30000	35500	199
69.6	1950	1.18	20.1	11.2	MN CE 240		160L-4	30000	35500	156
82.1	1660	1.12	17.1	11.2	MN CE 240		160L-4	30000	35500	156
92.5	1470	1.25	15.1	11.2	MN CE 240		160L-4	30000	35500	156
116	1170	1.5	12.1	11.2	MN CE 240		160L-4	30000	35500	156
137	1000	1.5	10.3	11.2	MN CE 240		160L-4	30000	35500	156

**P<sub>1</sub>=18.5kW n<sub>1</sub>=1400rpm**





1.81	87700	1.8	772	35.5	MN C3E 696	180M-4	250000	265000	1505
2.13	74720	2.36	658	35.5	MN C3E 696	180M-4	250000	265000	1505
2.7	58910	3	519	35.5	MN C3E 696	180M-4	250000	265000	1505
1.81	87700	1.5	772	33.5	MN C3E 695	180M-4	250000	265000	1417
2.13	74720	2	658	33.5	MN C3E 695	180M-4	250000	265000	1417
2.7	58910	2.36	519	33.5	MN C3E 695	180M-4	250000	265000	1417
3.2	49630	3	437	33.5	MN C3E 695	180M-4	250000	265000	1417
4.21	37770	2.8	333	28.8	MN C3E 543	180M-4	180000	190000	882
5.02	31650	3	279	28.8	MN C3E 543	180M-4	180000	190000	882
4.74	33530	2.36	295	25.8	MN C3E 542	180M-4	180000	190000	791
5.74	27700	2.8	244	25.8	MN C3E 542	180M-4	180000	190000	791

**TECHNICAL DATA**

<b>P<sub>1</sub>=18.5kW n<sub>1</sub>=1400rpm</b>										
n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	P <sub>t</sub> KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
6.85	23210	2.8	204	25.8		MN C3E 542	180M-4	180000	190000	791
8.17	19450	2.8	171	25.8		MN C3E 542	180M-4	180000	190000	791
7.4	21970	2.5	189	40.8		MN C2E 542	180M-4	180000	190000	849
8.78	18510	3.55	159	40.8		MN C2E 542	180M-4	180000	190000	849
5.63	28260	2.12	249	20.8		MN C3E 446	180M-4	125000	132000	576
6.71	23680	2	209	20.8		MN C3E 446	180M-4	125000	132000	576
4.65	34210	1.8	301	20.8		MN C3E 446	180M-4	125000	132000	576
7.42	21920	1.7	189	31.5		MN C2E 446	180M-4	125000	132000	633
8.71	18670	2.36	161	31.5		MN C2E 446	180M-4	125000	132000	633
11	14720	3	127	31.5		MN C2E 446	180M-4	125000	132000	633
4.88	32560	1.6	287	19.8		MN C3E 445	180M-4	112000	118000	541
6.2	25640	1.9	226	19.8		MN C3E 445	180M-4	112000	118000	541
7.4	21490	1.8	189	19.8		MN C3E 445	180M-4	112000	118000	541
7.44	21830	1.5	188	28.5		MN C2E 445	180M-4	112000	118000	544
8.74	18600	2.12	160	28.5		MN C2E 445	180M-4	112000	118000	544
11.1	14670	2.5	126	28.5		MN C2E 445	180M-4	112000	118000	544
13.3	12190	3	105	28.5		MN C2E 445	180M-4	112000	118000	544
16.9	9610	4.25	82.8	28.5		MN C2E 445	180M-4	112000	118000	544
18.4	8840	3.75	76.2	28.5		MN C2E 445	180M-4	112000	118000	544
8.81	18450	1.7	159	26.5		MN C2E 429	180M-4	100000	106000	454
10.5	15540	2	134	26.5		MN C2E 429	180M-4	100000	106000	454
13.4	12110	2.5	104	26.5		MN C2E 429	180M-4	100000	106000	454
17.2	9440	3.15	81.3	26.5		MN C2E 429	180M-4	100000	106000	454
18.8	8670	2.65	74.6	26.5		MN C2E 429	180M-4	100000	106000	454
11	14800	1.6	128	22.4		MN C2E 428	180M-4	90000	97500	437
14.1	11530	1.9	99.4	22.4		MN C2E 428	180M-4	90000	97500	437
16.3	10000	2.36	86.1	22.4		MN C2E 428	180M-4	90000	97500	437
19.5	8350	2.24	71.9	22.4		MN C2E 428	180M-4	90000	97500	437
23.4	6950	2.8	59.9	22.4		MN C2E 428	180M-4	90000	97500	437
27	6030	3.35	51.9	22.4		MN C2E 428	180M-4	90000	97500	437
30.3	5370	3	46.2	22.4		MN C2E 428	180M-4	90000	97500	437
36.1	4500	3	38.7	22.4		MN C2E 428	180M-4	90000	97500	437
11.7	13840	1.25	119	19.8		MN C2E 355	180M-4	71000	80000	373
14.1	11530	1.5	99.4	19.8		MN C2E 355	180M-4	71000	80000	373
16.3	10000	1.9	86.1	19.8		MN C2E 355	180M-4	71000	80000	373
19.5	8350	1.7	71.9	19.8		MN C2E 355	180M-4	71000	80000	373
23.4	6950	2.36	59.9	19.8		MN C2E 355	180M-4	71000	80000	373
27	6030	2.65	51.9	19.8		MN C2E 355	180M-4	71000	80000	373
30.3	5370	2.36	46.2	19.8		MN C2E 355	180M-4	71000	80000	373
36.1	4500	2.36	38.7	19.8		MN C2E 355	180M-4	71000	80000	373
46.1	3640	3	30.4	30		MN CE 355	180M-4	71000	80000	430
17.1	9520	1.6	82	18		MN C2E 354	180M-4	71000	80000	338
19.5	8350	1.32	71.9	18		MN C2E 354	180M-4	71000	80000	338
22.6	7190	1.6	61.9	18		MN C2E 354	180M-4	71000	80000	338

**TECHNICAL DATA**





**P<sub>1</sub> = 18.5kW n<sub>1</sub> = 1400rpm**

n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
28.3	5740	2.24	49.4	18		MN C2E 354	180M-4	71000	80000	338
33.4	4870	2	41.9	18		MN C2E 354	180M-4	71000	80000	338
39.8	4080	2	35.1	18		MN C2E 354	180M-4	71000	80000	338
54.9	3060	3.15	25.5	23.6		MN CE 354	180M-4	71000	80000	341
46.3	3630	2.5	30.3	23.6		MN CE 354	180M-4	71000	80000	341
46.3	3630	1.7	30.3	21.2		MN CE 353	180M-4	60000	67000	325
54.9	3060	2.5	25.5	21.2		MN CE 353	180M-4	60000	67000	325
70.5	2380	3.15	19.9	21.2		MN CE 353	180M-4	60000	67000	325
84.1	2000	3.15	16.7	21.2		MN CE 353	180M-4	60000	67000	325
90.6	1850	4	15.5	21.2		MN CE 353	180M-4	60000	67000	325
117	1440	4.75	12	21.2		MN CE 353	180M-4	60000	67000	325
48	3490	1.25	29.1	17.5		MN CE 280	180M-4	47500	53000	279
57.6	2910	1.9	24.3	17.5		MN CE 280	180M-4	47500	53000	279
66.5	2520	2.12	21	17.5		MN CE 280	180M-4	47500	53000	279
74.7	2250	2	18.7	17.5		MN CE 280	180M-4	47500	53000	279
85.5	1960	2.5	16.4	17.5		MN CE 280	180M-4	47500	53000	279
96.1	1750	2.65	14.6	17.5		MN CE 280	180M-4	47500	53000	279
124	1350	3	11.3	17.5		MN CE 280	180M-4	47500	53000	279
55.8	3010	1.12	25.1	15.5		MN CE 241	180M-4	30000	35500	253
69.9	2400	1.6	20	15.5		MN CE 241	180M-4	30000	35500	253
82.4	2040	1.5	17	15.5		MN CE 241	180M-4	30000	35500	253
89.8	1870	1.7	15.6	15.5		MN CE 241	180M-4	30000	35500	253
106	1590	1.7	13.2	15.5		MN CE 241	180M-4	30000	35500	253
137	1230	2	10.3	15.5		MN CE 241	180M-4	30000	35500	253

**P<sub>1</sub> = 22kW n<sub>1</sub> = 1400rpm**





1.81	104300	1.5	772	35.5		MN C3E 696	180L-4	250000	265000	1505
2.13	88850	2	658	35.5		MN C3E 696	180L-4	250000	265000	1505
2.7	70050	2.5	519	35.5		MN C3E 696	180L-4	250000	265000	1505
2.13	88850	1.7	658	33.5		MN C3E 695	180L-4	250000	265000	1417
2.7	70050	2	519	33.5		MN C3E 695	180L-4	250000	265000	1417
3.2	59030	2.5	437	33.5		MN C3E 695	180L-4	250000	265000	1417
4.11	45990	3.15	341	33.5		MN C3E 695	180L-4	250000	265000	1417
4.21	44910	2.24	333	28.8		MN C3E 543	180L-4	180000	190000	882
5.02	37640	2.65	279	28.8		MN C3E 543	180L-4	180000	190000	882
5.41	34930	2.8	259	28.8		MN C3E 543	180L-4	180000	190000	882
6.46	29280	3	217	28.8		MN C3E 543	180L-4	180000	190000	882
7.71	24540	3	182	28.8		MN C3E 543	180L-4	180000	190000	882
7.4	26130	2.5	189	42.5		MN C2E 543	180L-4	180000	190000	923
4.74	39870	2	295	25.8		MN C3E 542	180L-4	150000	160000	791
5.74	32940	2.24	244	25.8		MN C3E 542	180L-4	150000	160000	791
6.85	27600	2.36	204	25.8		MN C3E 542	180L-4	150000	160000	791
8.17	23130	2.36	171	25.8		MN C3E 542	180L-4	150000	160000	791

**TECHNICAL DATA**

<b>P<sub>1</sub> = 22kW n<sub>1</sub> = 1400rpm</b>										
n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	P <sub>t</sub> KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
7.4	26130	2	189	40.8		MN C2E 542	180L-4	150000	160000	849
8.78	22020	3	159	40.8		MN C2E 542	180L-4	150000	160000	849
11.3	17160	3.35	124	40.8		MN C2E 542	180L-4	150000	160000	849
6.71	28160	1.6	209	40.8		MN C3E 446	180L-4	125000	132000	576
7.42	26060	1.4	189	31.5		MN C2E 446	180L-4	125000	132000	633
8.71	22200	2	161	31.5		MN C2E 446	180L-4	125000	132000	633
11	17500	2.5	127	31.5		MN C2E 446	180L-4	125000	132000	633
8.74	22120	1.8	160	28.5		MN C2E 445	180L-4	112000	118000	544
11.1	17440	2.12	126	28.5		MN C2E 445	180L-4	112000	118000	544
13.3	14500	2.5	105	28.5		MN C2E 445	180L-4	112000	118000	544
18.4	10520	3.15	76.2	28.5		MN C2E 445	180L-4	112000	118000	544
16.9	11430	3.55	82.8	28.5		MN C2E 445	180L-4	112000	118000	544
10.5	18480	1.7	134	26.5		MN C2E 429	180L-4	100000	106000	454
13.4	14400	2.12	104	26.5		MN C2E 429	180L-4	100000	106000	454
17.2	11220	2.65	81.3	26.5		MN C2E 429	180L-4	100000	106000	454
18.8	10310	2.24	74.6	26.5		MN C2E 429	180L-4	100000	106000	454
22.3	8680	3.15	62.9	26.5		MN C2E 429	180L-4	100000	106000	454
28.6	6770	4.25	49	26.5		MN C2E 429	180L-4	100000	106000	454
34.1	5670	4	41.1	26.5		MN C2E 429	180L-4	100000	106000	454
40.7	4750	4	34.4	26.5		MN C2E 429	180L-4	100000	106000	454
14.1	13720	1.6	99.4	22.4		MN C2E 428	180L-4	100000	106000	437
16.3	11890	2	86.1	22.4		MN C2E 428	180L-4	100000	106000	437
19.5	9920	1.8	71.9	22.4		MN C2E 428	180L-4	100000	106000	437
23.4	8270	2.36	59.9	22.4		MN C2E 428	180L-4	100000	106000	437
27	7170	2.8	51.9	22.4		MN C2E 428	180L-4	100000	106000	437
30.3	6380	2.5	46.2	22.4		MN C2E 428	180L-4	100000	106000	437
36.1	5350	2.5	38.7	22.4		MN C2E 428	180L-4	100000	106000	437
46.1	4330	3.35	30.4	35.5		MN CE 428	180L-4	100000	106000	495
16.3	11890	1.6	86.1	19.8		MN C2E 355	180L-4	71000	80000	373
19.5	9920	1.4	71.9	19.8		MN C2E 355	180L-4	71000	80000	373
23.4	8270	2	59.9	19.8		MN C2E 355	180L-4	71000	80000	373
27	7170	2.24	51.9	19.8		MN C2E 355	180L-4	71000	80000	373
30.3	6380	2	46.2	19.8		MN C2E 355	180L-4	71000	80000	373
36.1	5350	2	38.7	19.8		MN C2E 355	180L-4	71000	80000	373
46.1	4330	2.5	30.4	30		MN CE 355	180L-4	71000	80000	430
46.3	4310	2.12	30.3	23.6		MN CE 354	180L-4	71000	80000	341
54.9	3640	2.65	25.5	23.6		MN CE 354	180L-4	71000	80000	341
59.5	3360	2.5	23.5	23.6		MN CE 354	180L-4	71000	80000	341
70.6	2830	2.8	19.8	23.6		MN CE 354	180L-4	71000	80000	341
46.3	4310	1.5	30.3	21.2		MN CE 353	180L-4	60000	67000	325
54.9	3640	2.12	25.5	21.2		MN CE 353	180L-4	60000	67000	325
70.5	2830	2.65	19.9	21.2		MN CE 353	180L-4	60000	67000	325
84.1	2370	2.65	16.7	21.2		MN CE 353	180L-4	60000	67000	325

**TECHNICAL DATA**

<b>P<sub>1</sub>=22kW n<sub>1</sub>=1400rpm</b>									
-------------------------------------------------	--	--	--	--	--	--	--	--	--





n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	Pt KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
90.6	2200	3.35	15.5	21.2	MN CE 353		180L-4	60000	67000	325
117	1710	4	12	21.2	MN CE 353		180L-4	60000	67000	325
139	1430	4	10	21.2	MN CE 353		180L-4	60000	67000	325
48	4150	1.06	29.1	17.5	MN CE 280		180L-4	47500	53000	279
57.6	3460	1.6	24.3	17.5	MN CE 280		180L-4	47500	53000	279
66.5	3000	1.8	21	17.5	MN CE 280		180L-4	47500	53000	279
74.7	2670	1.6	18.7	17.5	MN CE 280		180L-4	47500	53000	279
85.5	2330	2.12	16.4	17.5	MN CE 280		180L-4	47500	53000	279
96.1	2080	2.12	14.6	17.5	MN CE 280		180L-4	47500	53000	279
124	1610	2.5	11.3	17.5	MN CE 280		180L-4	47500	53000	279

<b>P<sub>1</sub>=30kW n<sub>1</sub>=1400rpm</b>									
-------------------------------------------------	--	--	--	--	--	--	--	--	--

2.7	95530	1.8	519	35.5		MN C3E 696	200L-4	250000	265000	1538
3.2	80490	2.24	437	35.5		MN C3E 696	200L-4	250000	265000	1538
4.11	62720	2.8	341	35.5		MN C3E 696	200L-4	250000	265000	1538
2.7	95530	1.5	519	33.5		MN C3E 695	200L-4	250000	265000	1450
3.2	80490	1.8	437	33.5		MN C3E 695	200L-4	250000	265000	1450
4.11	62720	2.24	341	33.5		MN C3E 695	200L-4	250000	265000	1450
4.91	52560	2.65	285	33.5		MN C3E 695	200L-4	250000	265000	1450
5.4	47790	2.65	259	33.5		MN C3E 695	200L-4	250000	265000	1450
6.84	37680	3.35	205	33.5		MN C3E 695	200L-4	250000	265000	1450
8.71	29620	3.75	161	33.5		MN C3E 695	200L-4	250000	265000	1450
10.4	24820	3.55	135	33.5		MN C3E 695	200L-4	250000	265000	1450
5.02	51330	1.9	279	28		MN C3E 543	200L-4	180000	190000	915
6.46	39920	2.24	217	28		MN C3E 543	200L-4	180000	190000	915
7.71	33460	2.24	182	28		MN C3E 543	200L-4	180000	190000	915
7.4	35630	1.8	189	42.5		MN C2E 543	200L-4	180000	190000	955
8.78	30020	2.65	159	42.5		MN C2E 543	200L-4	180000	190000	955
11.3	23390	3.35	124	42.5		MN C2E 543	200L-4	180000	190000	955
7.4	35630	1.5	189	31.5		MN C2E 542	200L-4	150000	160000	882
8.78	30020	2.12	159	31.5		MN C2E 542	200L-4	150000	160000	882
11.3	23390	2.5	124	31.5		MN C2E 542	200L-4	150000	160000	882
13.4	19710	3.75	105	31.5		MN C2E 542	200L-4	150000	160000	882
8.71	30280	1.5	161	31.5		MN C2E 446	200L-4	125000	132000	666
11	23870	1.8	127	31.5		MN C2E 446	200L-4	125000	132000	666
13.1	20110	2.65	107	31.5		MN C2E 446	200L-4	125000	132000	666
8.74	30160	1.32	160	28		MN C2E 445	200L-4	112000	118000	577
11.1	23780	1.5	126	28		MN C2E 445	200L-4	112000	118000	577
13.3	19770	1.9	105	28		MN C2E 445	200L-4	112000	118000	577
10.5	25200	1.25	134	26.5		MN C2E 429	200L-4	100000	106000	487
13.4	19640	1.6	104	26.5		MN C2E 429	200L-4	100000	106000	487

**TECHNICAL DATA**

**P<sub>1</sub>=30kW n<sub>1</sub>=1400rpm**





n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	P <sub>t</sub> KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
16.8	15670	3.35	83.2	31.5	MN C2E 446		200L-4	125000	132000	666
18.4	14340	2.8	76.2	31.5	MN C2E 446		200L-4	125000	132000	666
16.9	15590	2.65	82.8	28	MN C2E 445		200L-4	112000	118000	577
18.4	14340	2.24	76.2	28	MN C2E 445		200L-4	112000	118000	577
21.8	12080	3.15	64.2	28	MN C2E 445		200L-4	112000	118000	577
17.2	15300	1.9	81.3	26.5	MN C2E 429		200L-4	100000	106000	487
18.8	14050	1.6	74.6	26.5	MN C2E 429		200L-4	100000	106000	487
22.3	11840	2.36	62.9	26.5	MN C2E 429		200L-4	100000	106000	487
28.6	9230	3	49	26.5	MN C2E 429		200L-4	100000	106000	487
34.1	7730	3	41.1	26.5	MN C2E 429		200L-4	100000	106000	487
40.7	6480	3	34.4	26.5	MN C2E 429		200L-4	100000	106000	487
46.1	5910	3.35	30.4	26.5	MN CE 429		200L-4	100000	106000	528
46.1	5910	2.5	30.4	35.5	MN CE 428		200L-4	90000	97500	528
54.7	4980	3.75	25.6	35.5	MN CE 428		200L-4	90000	97500	528
46.1	5910	1.8	30.4	30	MN CE 355		200L-4	71000	80000	463
54.7	4980	2.65	25.6	30	MN CE 355		200L-4	71000	80000	463
70.2	3880	3	19.9	30	MN CE 355		200L-4	71000	80000	463
83.8	3250	2.8	16.7	30	MN CE 355		200L-4	71000	80000	463
46.3	5880	1.5	30.3	23.6	MN CE 354		200L-4	71000	80000	374
54.9	4960	1.9	25.5	23.6	MN CE 354		200L-4	71000	80000	374
59.5	4580	1.9	23.5	23.6	MN CE 354		200L-4	71000	80000	374
70.6	3860	2.12	19.8	23.6	MN CE 354		200L-4	71000	80000	374
91.1	2990	3.15	15.4	23.6	MN CE 354		200L-4	71000	80000	374
46.3	5880	1.06	30.3	21.2	MN CE 353		200L-4	60000	67000	398
54.9	4960	1.6	25.5	21.2	MN CE 353		200L-4	60000	67000	398
70.5	3860	1.9	19.9	21.2	MN CE 353		200L-4	60000	67000	398
84.1	3240	1.9	16.7	21.2	MN CE 353		200L-4	60000	67000	398
90.6	3000	2.5	15.5	21.2	MN CE 353		200L-4	60000	67000	398
117	2330	2.8	12	21.2	MN CE 353		200L-4	60000	67000	398
139	1950	3	10	21.2	MN CE 353		200L-4	60000	67000	398

**P<sub>1</sub>=37kW n<sub>1</sub>=1400rpm**

3.2	99270	1.8	437	35.5	MN C3E 696	225S-4	250000	265000	1608
4.11	77350	2.24	341	35.5	MN C3E 696	225S-4	250000	265000	1608
4.91	64830	2.65	285	35.5	MN C3E 696	225S-4	250000	265000	1608
5.4	58940	2.8	259	35.5	MN C3E 696	225S-4	250000	265000	1608
4.11	77350	1.8	341	33.5	MN C3E 695	225S-4	250000	265000	1520
4.91	64830	2.12	285	33.5	MN C3E 695	225S-4	250000	265000	1520
5.4	58940	2.24	259	33.5	MN C3E 695	225S-4	250000	265000	1520
6.84	46470	2.65	205	33.5	MN C3E 695	225S-4	250000	265000	1520
8.71	36530	3	161	33.5	MN C3E 695	225S-4	250000	265000	1520
10.4	30620	3	135	33.5	MN C3E 695	225S-4	250000	265000	1520

## TECHNICAL DATA

**P<sub>1</sub>=37kW n<sub>1</sub>=1400rpm**





n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	P <sub>t</sub> KW				Fr <sub>2</sub> MAX [N]		 Kg
								C	S	
8.78	37030	2.12	159	42.5		MN C2E 543	225S-4	180000	190000	1087
11.3	28850	2.8	124	42.5		MN C2E 543	225S-4	180000	190000	1087
11.3	28850	2	124	40		MN C2E 542	225S-4	150000	160000	952
13.4	24310	3	105	40		MN C2E 542	225S-4	150000	160000	952
17.2	18940	3.55	81.6	40		MN C2E 542	225S-4	150000	160000	952
18.8	17330	3.15	74.6	40		MN C2E 542	225S-4	150000	160000	952
8.71	37340	1.18	161	31.5		MN C2E 446	225S-4	125000	132000	737
11	29440	1.5	127	31.5		MN C2E 446	225S-4	125000	132000	737
13.1	24810	2.12	107	31.5		MN C2E 446	225S-4	125000	132000	737
16.8	19330	2.8	83.2	31.5		MN C2E 446	225S-4	125000	132000	737
18.4	17690	2.24	76.2	31.5		MN C2E 446	225S-4	125000	132000	737
21.8	14900	3.15	64.2	31.5		MN C2E 446	225S-4	125000	132000	737
28	11610	4	50	31.5		MN C2E 446	225S-4	125000	132000	737
33.4	9730	4	41.9	31.5		MN C2E 446	225S-4	125000	132000	737
42.5	7650	4	32.9	31.5		MN C2E 446	225S-4	125000	132000	737
46.1	7280	2.8	30.4	40		MN CE 429	225S-4	100000	106000	659
46.1	7280	2	30.4	35.5		MN CE 428	225S-4	90000	97500	598
54.7	6140	3	25.6	35.5		MN CE 428	225S-4	90000	97500	598
70.2	4780	3.15	19.9	35.5		MN CE 428	225S-4	90000	97500	598
83.8	4010	3.55	16.7	35.5		MN CE 428	225S-4	90000	97500	598
46.1	7280	1.5	30.4	30		MN CE 355	225S-4	71000	80000	543
54.7	6140	2.12	25.6	30		MN CE 355	225S-4	71000	80000	543
70.2	4780	2.5	19.9	30		MN CE 355	225S-4	71000	80000	543
83.8	4010	2.36	16.7	30		MN CE 355	225S-4	71000	80000	543
91.1	3690	3.15	15.4	30		MN CE 355	225S-4	71000	80000	543
117	2870	3.75	12	30		MN CE 355	225S-4	71000	80000	543
139	2410	4	10	30		MN CE 355	225S-4	71000	80000	543

**P<sub>1</sub>=45kW n<sub>1</sub>=1400rpm**

8.78	45004	1.7	159	42.5		MN C2E 543	225M-4	180000	190000	1087
11.3	35090	2.24	124	42.5		MN C2E 543	225M-4	180000	190000	1087
13.4	29570	3	105	42.5		MN C2E 543	225M-4	180000	190000	1087
17.2	23040	3.55	81.6	42.5		MN C2E 543	225M-4	180000	190000	1087
18.8	21080	3.35	74.6	42.5		MN C2E 543	225M-4	180000	190000	1087
11.3	35090	1.7	124	40		MN C2E 542	225M-4	150000	160000	952
13.4	29570	2.5	105	40		MN C2E 542	225M-4	150000	160000	952
17.2	23040	3	81.6	40		MN C2E 542	225M-4	150000	160000	952
18.8	21080	2.5	74.6	40		MN C2E 542	225M-4	150000	160000	952
22.3	17760	3.35	62.9	40		MN C2E 542	225M-4	150000	160000	952
28.6	13840	4.25	49	40		MN C2E 542	225M-4	150000	160000	952
34.1	11600	4.5	41.1	40		MN C2E 542	225M-4	150000	160000	952
40.7	9720	4.25	34.4	40		MN C2E 542	225M-4	150000	160000	952

**TECHNICAL DATA**

<b>P<sub>1</sub>=45kW n<sub>1</sub>=1400rpm</b>									
-------------------------------------------------	--	--	--	--	--	--	--	--	--

n <sub>2</sub> rpm	M <sub>2</sub> Nm	f <sub>s</sub>	i	P <sub>t</sub> KW				Fr <sub>2MAX</sub> [N]		 Kg
								C	S	
46.1	8860	2.24	30.4	40		MN CE 429	225M-4	100000	106000	659
54.7	7460	3.15	25.6	40		MN CE 429	225M-4	100000	106000	659
70.2	5820	3.15	19.9	40		MN CE 429	225M-4	100000	106000	659
46.1	8860	1.7	30.4	35.5		MN CE 428	225M-4	90000	97500	598
54.7	7460	2.5	25.6	35.5		MN CE 428	225M-4	90000	97500	598
70.2	5820	2.65	19.9	35.5		MN CE 428	225M-4	90000	97500	598
83.8	4870	2.8	16.7	35.5		MN CE 428	225M-4	90000	97500	598
91.1	4480	3.55	15.4	35.5		MN CE 428	225M-4	90000	97500	598
117	3490	4.25	12	35.5		MN CE 428	225M-4	90000	97500	598
139	2930	4.75	10	35.5		MN CE 428	225M-4	90000	97500	598

<b>P<sub>1</sub>=55kW n<sub>1</sub>=1400rpm</b>									
-------------------------------------------------	--	--	--	--	--	--	--	--	--

7.4	65330	1	189	42.5		MN C2E 543	250M-4	180000	190000	1087
8.78	55040	1.4	159	42.5		MN C2E 543	250M-4	180000	190000	1087
11.3	42890	1.8	124	42.5		MN C2E 543	250M-4	180000	190000	1087
13.4	36140	2.5	105	42.5		MN C2E 543	250M-4	180000	190000	1087
17.2	28160	2.8	81.6	42.5		MN C2E 543	250M-4	180000	190000	1087
18.8	25770	2.8	74.6	42.5		MN C2E 543	250M-4	180000	190000	1087
22.3	21710	3.55	62.9	42.5		MN C2E 543	250M-4	180000	190000	1087
28.6	16920	4.25	49	42.5		MN C2E 543	250M-4	180000	190000	1087
34.1	14180	4.5	41.1	42.5		MN C2E 543	250M-4	180000	190000	1087
46.1	10830	1.8	30.4	40		MN CE 429	250M-4	100000	106000	659
54.7	9120	2.65	25.6	40		MN CE 429	250M-4	100000	106000	659
70.2	7110	2.65	19.9	40		MN CE 429	250M-4	100000	106000	659
83.8	5960	2.8	16.7	40		MN CE 429	250M-4	100000	106000	659
91.1	5480	3.75	15.4	40		MN CE 429	250M-4	100000	106000	659
117	4270	4.5	12	40		MN CE 429	250M-4	100000	106000	659
139	3580	4.75	10	40		MN CE 429	250M-4	100000	106000	659

## Mounting dimensions

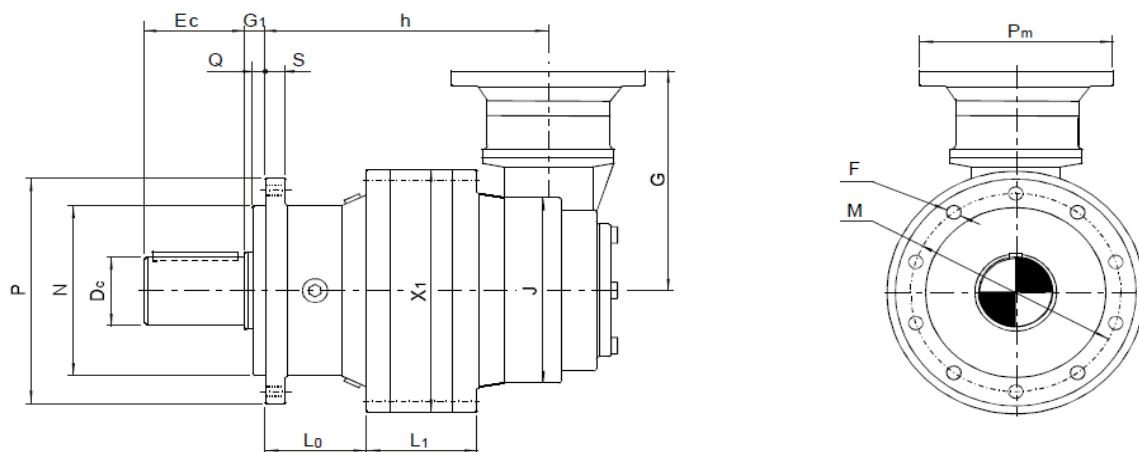
bevel-planetary gear motor

1 bevel gear pair and 1 planetary gear

right angle transmission with motor

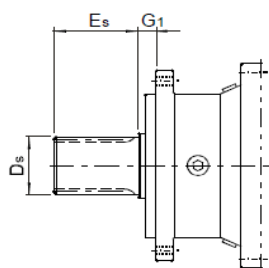
size 200~353

### MN CE200~353...R1C

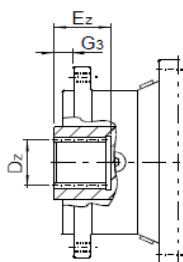


### Other shaft ends

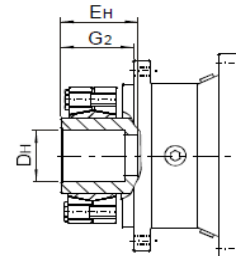
#### MN CE200~353...R1S



#### MN CE200~353...R1Z



#### MN CE200~353...R1H



- 1) for cylindrical shaft, see page 152;
- 2) for splined shaft details, see page 152;
- 3) for splined hollow shaft details, see page 153;
- 4) for hollow shaft with shrink disk details, see page 153;
- 5) for output flange details, see page 151;
- 6) can add foot on output flange, the details on page 154;
- 7) for motor dimensions, see page 155.

## Mounting dimensions

bevel-planetary gear reducer

1 bevel gear pair and 1 planetary gear

right angle transmission

size 354~429

size	X <sub>1</sub> Ø	L <sub>1</sub>	D <sub>c</sub> Ø	E <sub>c</sub> Ø	D <sub>s</sub>	E <sub>s</sub>	D <sub>H</sub> Ø	E <sub>H</sub>	D <sub>z</sub>
200	200	65	42	82	EXT 24zx2mx30	55	50	72	INT 24zx2mx30
201	200	77	50	82	EXT 24zx2mx30	55	50	72	INT 24zx2mx30
240	240	63	65	105	EXT 28zx2mx30	68	75	100	INT 28zx2mx30
241	240	56	65	105	EXT 28zx2mx30	68	75	100	INT 28zx2mx30
280	280	82	80	130	EXT 34zx2mx30	90	85	145	INT 34zx2mx30
353	353	92	90	130	EXT 40zx2mx30	90	100	140	INT 40zx2mx30

size	E <sub>z</sub>	G <sub>1</sub>	G <sub>2</sub>	G <sub>3</sub>	L <sub>0</sub>	M Ø	N Øf7	Q	P Ø	S	J Ø	h	weight
200	42.5	6	50	6	62.5	165	110	5	185	12	200	181.5	45
201	42.5	6	56	6	62.5	165	110	5	185	12	200	193.5	49
240	54	15	85	15	89	195	150	14	220	18	200	221.5	65
241	54	15	85	15	89	195	150	14	220	18	270	251.5	115
280	82	40	115	40	142	250	200	15	280	22	270	314	140
353	85	36	120	36	124	295	230	10	325	25	270	304.5	190

size	G								P <sub>m</sub>							
	motor frame								motor frame							
	80	90	100	112	132	160	180	200	80	90	100	112	132	160	180	200
200	227	227	245	245	258				200	200	250	250	300			
201		227	245	245	258					200	250	250	300			
240			245	245	258	258					250	250	300	350		
241				286	340	384	384					250	300	350	350	
280					340	384	384						300	350	350	
353					340	384	384	384					300	350	350	400

## Mounting positions and oil quantity(L)

size	B5, B53	B51	B52	V1, V3
200	1	1.6	1	1.8
201	1.2	1.9	1.2	2.1
240	1.5	2.3	1.5	2.7
241	2.6	4.3	2.6	4.8
280	3.3	5.3	3.3	6
353	4.3	6.7	4.3	7.8

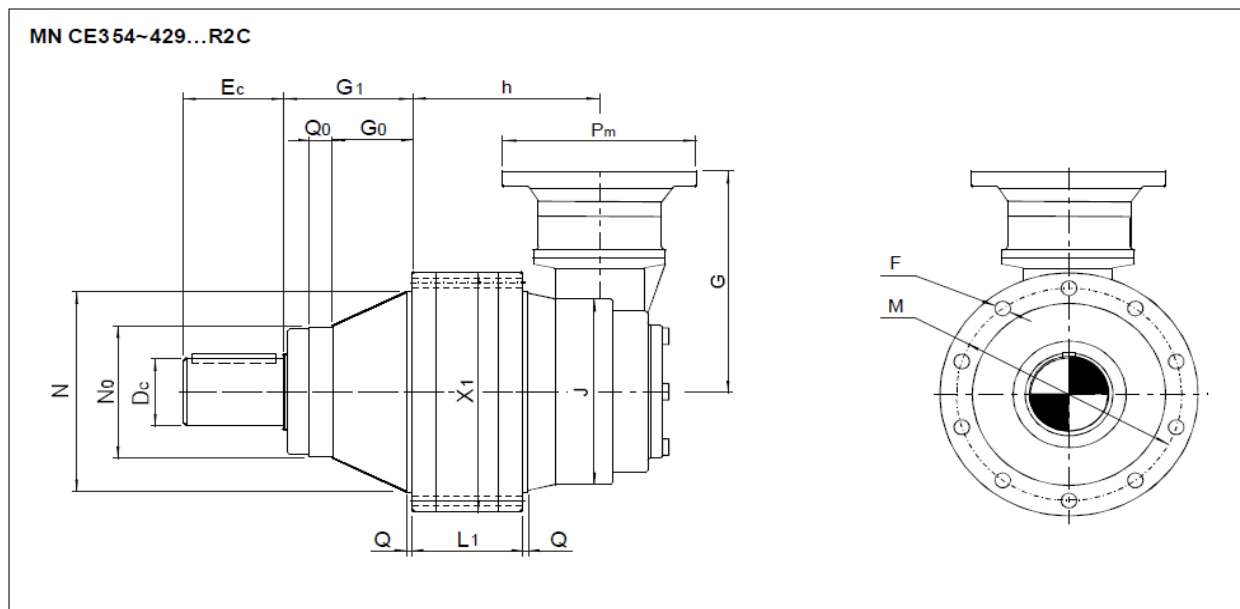
## Mounting dimensions

bevel-planetary gear motor

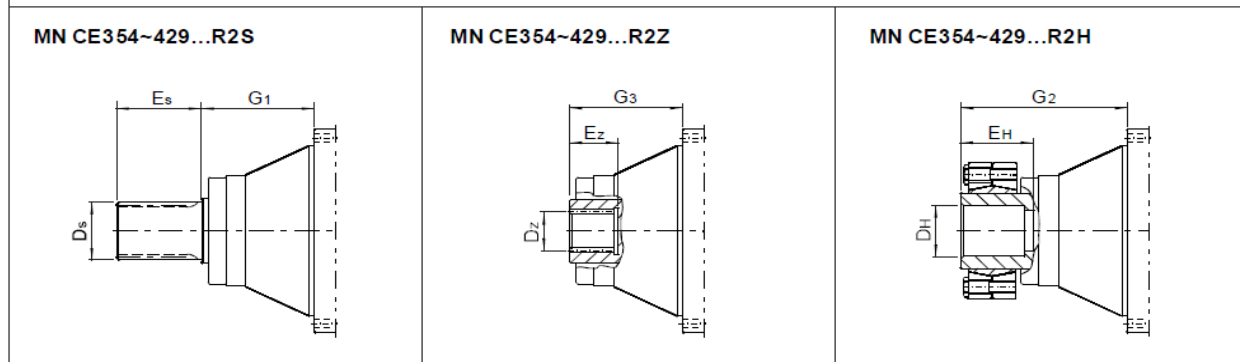
1 bevel gear pair and 1 planetary gear

right angle transmission with motor

size 354~429



### Other shaft ends



- 1) for cylindrical shaft, see page 152;
- 2) for splined shaft details, see page 152;
- 3) for splined hollow shaft details, see page 153;
- 4) for hollow shaft with shrink disk details, see page 153;
- 5) for output flange details, see page 151;
- 6) can add foot on output flange, the details on page 154;
- 7) for motor dimensions, see page 155.

## Mounting dimensions

bevel-planetary gear motor

1 bevel gear pair and 1 planetary gear

right angle transmission with motor

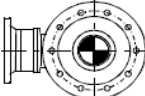
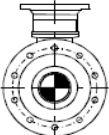
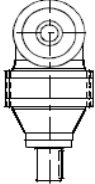
size 354~429

size	X <sub>1</sub> ∅	L <sub>1</sub>	D <sub>c</sub> ∅	E <sub>c</sub>	D <sub>s</sub>	E <sub>s</sub>	D <sub>H</sub> ∅	E <sub>H</sub>	D <sub>z</sub>
354	353	138	100	130	EXT 29zx3mx30	90	110	160	INT 29zx3mx30
355	353	139	100	130	EXT 29zx3mx30	90	110	160	INT 29zx3mx30
428	428	162	110	165	EXT 39zx3mx30	130	130	180	INT 39zx3mx30
429	428	184	120	165	EXT 39zx3mx30	130	130	180	INT 39zx3mx30

size	E <sub>z</sub>	G <sub>0</sub>	G <sub>1</sub>	G <sub>2</sub>	G <sub>3</sub>	h	J ∅	M ∅	N ∅f7	N <sub>0</sub> ∅f7	Q	Q <sub>0</sub> ∅	weight
354	75	72	141	235	141	221.5	270	314	278	225	8.5	25	205
355	75	72	141	235	141	297	376	314	278	225	8.5	25	295
428	107	135	210	320	210	310	376	390	358	230	10	40	360
429	107	135	210	320	210	332	376	390	358	230	10	40	360

size	G					P <sub>m</sub>				
	motor frame					motor frame				
	160	180	200	225	250	160	180	200	225	250
354	384	384	384			350	350	400		
355		460	460	490			350	400	450	
428		460	460	490			350	400	450	
429			460	490	490			400	450	550

## Mounting positions and oil quantity(L)

B5	B51	V1	size	B5,B53	B51	B52	V1,V3
							354
B53	B52	V3	355	7.6	12.8	7.6	14.2
			428	8.6	14.2	8.6	16
			429	8.6	14.2	8.6	16

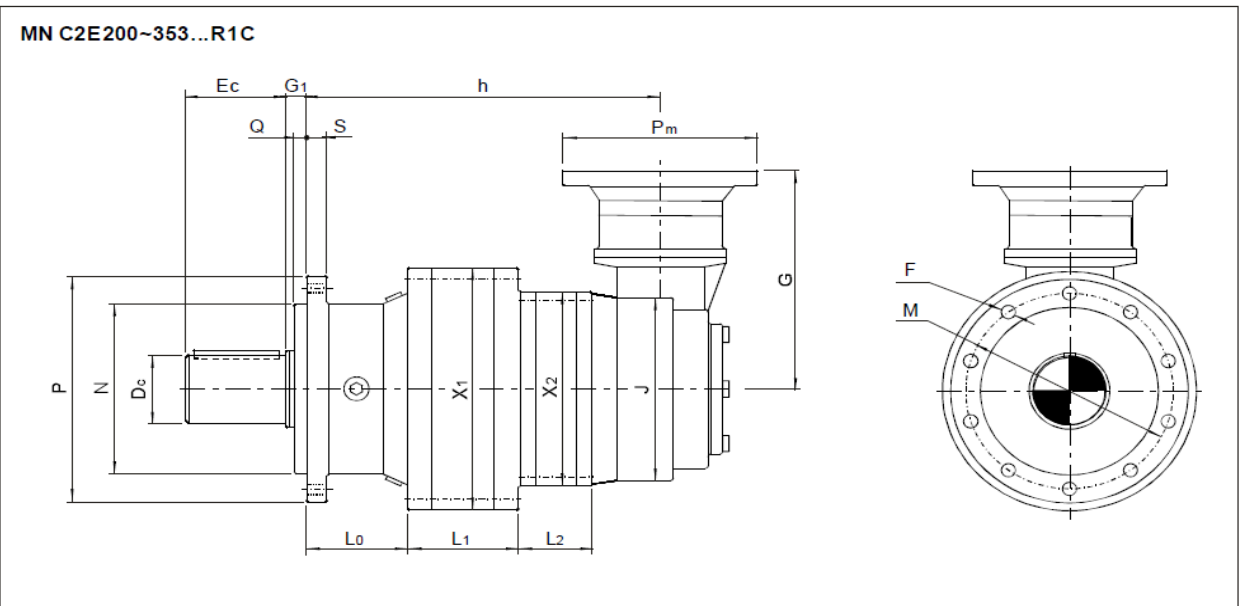
## Mounting dimensions

bevel-planetary gear motor

1 bevel gear pair and 2 planetary gear

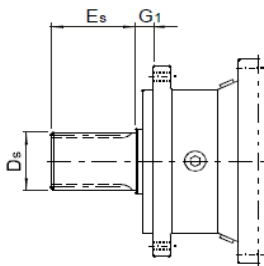
right angle transmission with motor

size 200~353

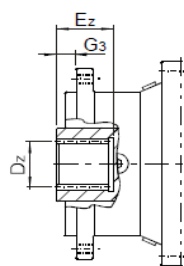


## Other shaft ends

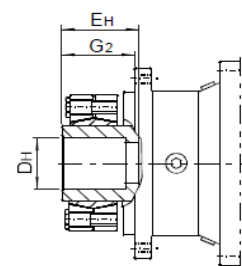
**MN C2E200~353...R1S**



**MN C2E200~353...R1Z**



**MN C2E200~353...R1H**



- 1) for cylindrical shaft, see page 152;
- 2) for splined shaft details, see page 152;
- 3) for splined hollow shaft details, see page 153;
- 4) for hollow shaft with shrink disk details, see page 153;
- 5) for output flange details, see page 151;
- 6) can add foot on output flange, the details on page 154;
- 7) for motor dimensions, see page 155.

## Mounting dimensions

bevel-planetary gear motor

1 bevel gear pair and 2 planetary gear

right angle transmission with motor

size 200~353

size	X <sub>1</sub> ∅	L <sub>1</sub>	X <sub>2</sub> ∅	L <sub>2</sub>	D <sub>c</sub> ∅	E <sub>c</sub>	D <sub>s</sub>	E <sub>s</sub>	D <sub>H</sub> ∅	E <sub>H</sub>	D <sub>z</sub>
200	200	49	200	66	42	82	EXT 24zx2mx30	55	50	72	INT 24zx2mx30
201	200	61	200	66	50	82	EXT 24zx2mx30	55	50	72	INT 24zx2mx30
240	240	63	200	66	65	105	EXT 28zx2mx30	68	75	100	INT 28zx2mx30
241	240	78	200	78	65	105	EXT 28zx2mx30	68	75	100	INT 28zx2mx30
280	280	82	240	62	80	130	EXT 34zx2mx30	90	85	145	INT 34zx2mx30
353	353	92	240	67	90	130	EXT 40zx2mx30	90	100	140	INT 40zx2mx30

size	E <sub>z</sub>	G <sub>1</sub>	G <sub>2</sub>	G <sub>3</sub>	L <sub>0</sub>	M ∅	N ∅f7	Q	P ∅	S	J ∅	h	weight
200	42.5	6	50	6	62.5	165	110	5	185	12	200	231.5	55
201	42.5	6	56	6	62.5	165	110	5	185	12	200	243.5	56
240	54	15	85	15	89	195	150	14	220	18	200	271.5	74
241	54	15	85	15	89	195	150	14	220	18	200	298.5	85
280	82	40	115	40	142	250	200	15	280	22	200	355.5	113
353	85	36	120	36	124	295	230	10	325	25	200	353	165

size	G							P <sub>m</sub>						
	motor frame							motor frame						
	71	80	90	100	112	132	160	71	80	90	100	112	132	160
200	217	227	227	245	245			160	200	200	250	250		
201	217	227	227	245	245			160	200	200	250	250		
240		227	227	245	245	258			200	200	250	250	300	
241		227	227	245	245	258			200	200	250	250	300	
280			227	245	245	258				200	250	250	300	
353				245	245	258	258				250	250	300	350

## Mounting positions and oil quantity(L)

B5	B51	V1	size	B5,B53	B51	B52	V1,V3
				200	1.4	2.3	1.4
B53	B52	V3	201	1.6	2.6	1.6	2.8
			240	1.9	3	1.9	3.4
			241	2.4	8.3	2.4	4.2
			280	3.3	5.1	3.3	5.8
			353	4.6	7	4.6	8.1

## Mounting dimensions

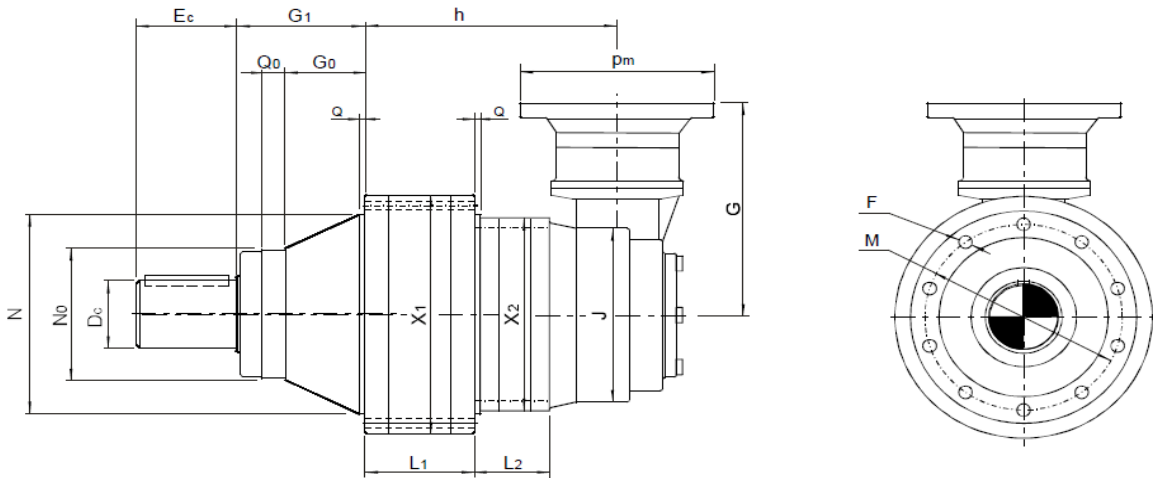
bevel-planetary gear motor

1 bevel gear pair and 2 planetary gear

right angle transmission with motor

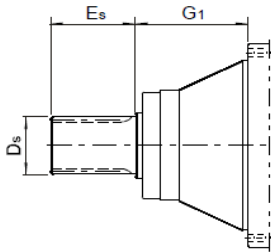
size 354~429

### MN C2E354~429...R2C

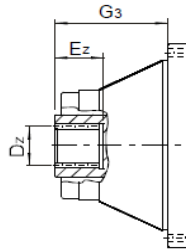


### Other shaft ends

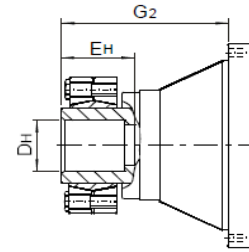
#### MN C2E354~429...R2S



#### MN C2E354~429...R2Z



#### MN C2E354~429...R2H



- 1) for cylindrical shaft, see page 152;
- 2) for splined shaft details, see page 152;
- 3) for splined hollow shaft details, see page 153;
- 4) for hollow shaft with shrink disk details, see page 153;
- 5) for output flange details, see page 151;
- 6) can add foot on output flange, the details on page 154;
- 7) for motor dimensions, see page 155.

## Mounting dimensions

bevel-planetary gear motor

1 bevel gear pair and 2 planetary gear

right angle transmission with motor

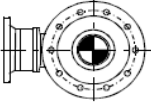
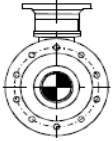
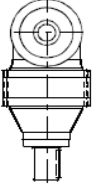
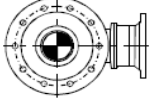

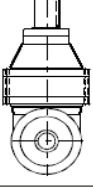
size 354~429

size	X <sub>1</sub> ∅	L <sub>1</sub>	X <sub>2</sub> ∅	L <sub>2</sub>	D <sub>c</sub> ∅	E <sub>c</sub> ∅	D <sub>s</sub>	E <sub>s</sub>	D <sub>H</sub> ∅	E <sub>H</sub>	D <sub>z</sub>
354	353	138	240	48	100	130	EXT 29zx3mx30	90	110	160	INT 29zx3mx30
355	353	139	280	101	100	130	EXT 29zx3mx30	90	110	160	INT 29zx3mx30
428	428	140	280	110	110	165	EXT 39zx3mx30	130	130	180	INT 39zx3mx30
429	428	184	353	82	120	165	EXT 39zx3mx30	130	130	180	INT 39zx3mx30

size	E <sub>z</sub>	G <sub>0</sub>	G <sub>1</sub>	G <sub>2</sub>	G <sub>3</sub>	h	J ∅	M ∅	N ∅f7	N <sub>0</sub> ∅f7	Q	Q <sub>0</sub> ∅	weight
354	75	72	141	235	141	293	270	314	278	225	8.5	25	225
355	75	72	141	235	141	329.5	270	314	278	225	8.5	25	238
428	107	135	210	320	210	340	270	390	358	230	10	40	305
429	107	135	210	320	210	354	270	390	358	230	10	40	320

size	G								P <sub>m</sub>							
	motor frame								motor frame							
	100	112	132	160	180	200	225	250	100	112	132	160	180	200	225	250
354	286	286	340	384	384				250	250	300	350	350			
355		286	340	384	384					250	300	350	350			
428			340	384	384						300	350	350			
429			340	384	384	384					300	350	350	400		

## Mounting positions and oil quantity(L)

B5	B51	V1	规格 size	B5,B53	B51	B52	V1,V3
							354
			355	6.9	10.9	6.9	12.3
			428	7.9	12.3	7.9	14.1
			429	8.7	13.7	8.7	15.5
B53	B52	V3					
							

## Mounting dimensions

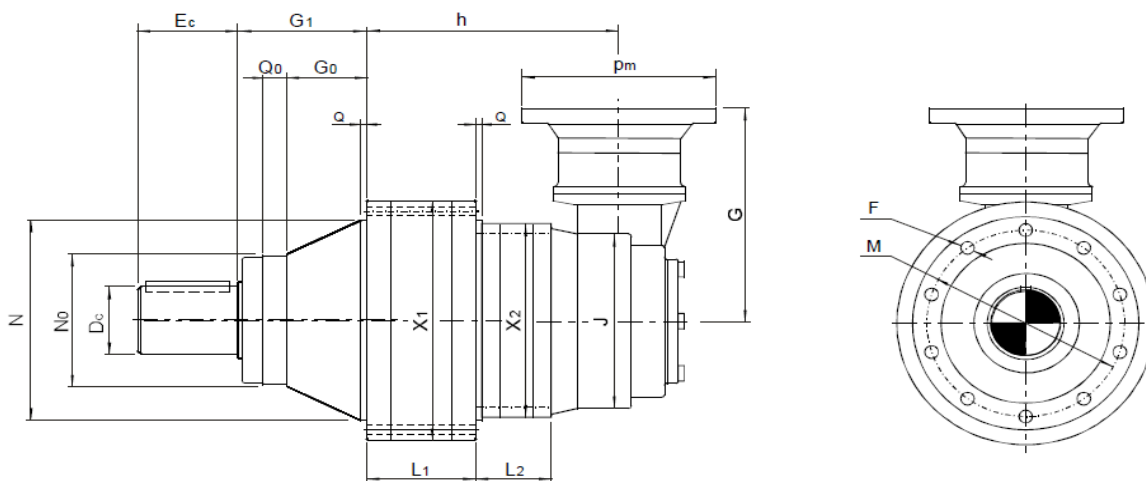
bevel-planetary gear motor

1 bevel gear pair and 2 planetary gear

right angle transmission with motor

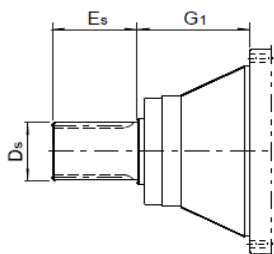
size 445~543

### MN C2E445~543...R2C

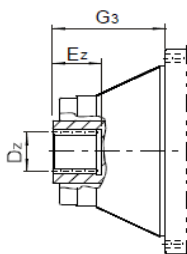


### Other shaft ends

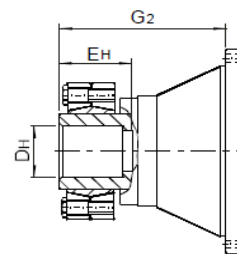
#### MN C2E445~543...R2S



#### MN C2E445~543...R2Z



#### MN C2E445~543...R2H



- 1) for cylindrical shaft, see page 152;
- 2) for splined shaft details, see page 152;
- 3) for splined hollow shaft details, see page 153;
- 4) for hollow shaft with shrink disk details, see page 153;
- 5) for output flange details, see page 151;
- 6) can add foot on output flange, the details on page 154;
- 7) for motor dimensions, see page 155.

## Mounting dimensions

bevel-planetary gear motor

1 bevel gear pair and 2 planetary gear

right angle transmission with motor

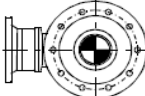
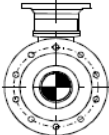
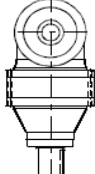
size 429~543


size	X <sub>1</sub> ∅	L <sub>1</sub>	X <sub>2</sub> ∅	L <sub>2</sub>	D <sub>C</sub> ∅	E <sub>C</sub> ∅	D <sub>S</sub>	E <sub>S</sub>	D <sub>H</sub> ∅	E <sub>H</sub>	D <sub>Z</sub>
445	445	175	353	128	130	170	EXT 42zx3mx30	130	140	205	INT 42zx3mx30
446	445	175	353	128	140	170	EXT 42zx3mx30	130	140	205	INT 42zx3mx30
542	542	199	428	159	160	210	EXT 30zx5mx30	170	170	250	INT 30zx5mx30
543	542	219	428	181	170	210	EXT 30zx5mx30	170	170	250	INT 30zx5mx30

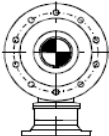
size	E <sub>Z</sub>	G <sub>0</sub>	G <sub>1</sub>	G <sub>2</sub>	G <sub>3</sub>	h	J ∅	M ∅	N ∅f7	N <sub>0</sub> ∅f7	Q	Q <sub>0</sub> ∅	重量 weight
445	110	152	227	362	227	386	270	415	385	260	13	40	411
446	110	152	227	362	227	462	376	415	385	260	13	40	502
542	120	224	279	427	279	506	376	503	460	300	13	32	717
543	120	224	279	437	279	548	376	503	460	300	13	32	790

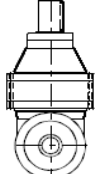
size	G								P <sub>m</sub>							
	motor frame								motor frame							
	100	112	132	160	180	200	225	250	100	112	132	160	180	200	225	250
445				384	384	384						350	350	400		
446				460	460	460	490					350	350	400	450	
542				460	460	460	490					350	350	400	450	
543				460	460	460	490	490				350	350	400	450	550

## Mounting positions and oil quantity(L)

B5		B51		V1		size	B5,B53	B51	B52	V1,V3
						445	12	18.6	12	21
446	14.3	23	14.3	26						
542	17.6	28	17.6	32						
543	21	33	21	37						

B53	
-----	-------------------------------------------------------------------------------------

B52	
-----	-------------------------------------------------------------------------------------

V3	
----	-------------------------------------------------------------------------------------

## Mounting dimensions

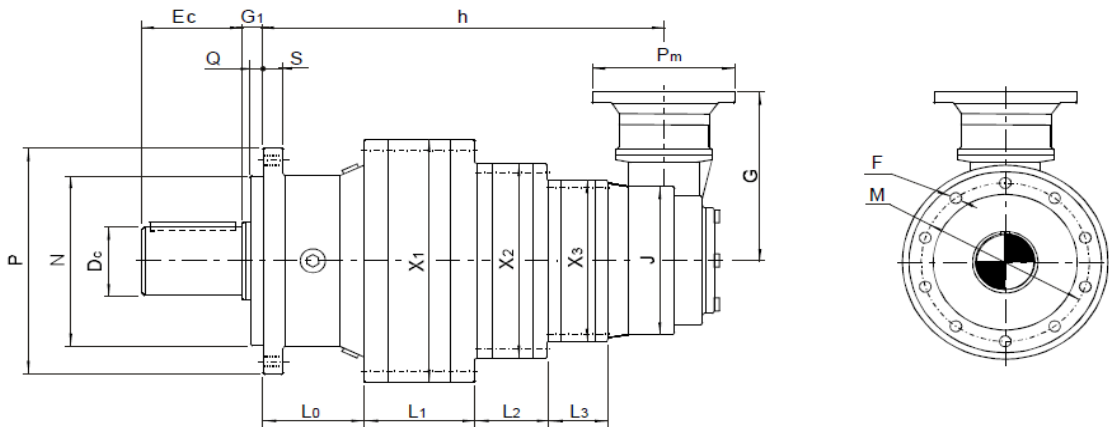
bevel-planetary gear motor

1 bevel gear pair and 3 planetary gear

right angle transmission with motor

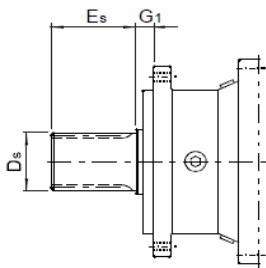
size 200~353

### MN C3E200~353...R1C

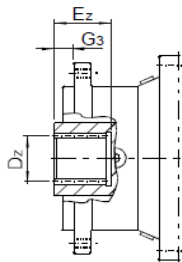


### Other shaft ends

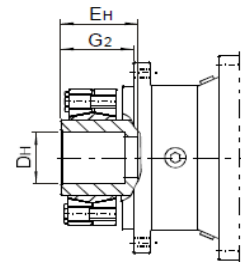
#### MN C3E200~353...R1S



#### MN C3E200~353...R1Z



#### MN C3E200~353...R1H



- 1) for cylindrical shaft, see page 152;
- 2) for splined shaft details, see page 152;
- 3) for splined hollow shaft details, see page 153;
- 4) for hollow shaft with shrink disk details, see page 153;
- 5) for output flange details, see page 151;
- 6) can add foot on output flange, the details on page 154;
- 7) for motor dimensions, see page 155.

## Mounting dimensions

bevel-planetary gear motor

1 bevel gear pair and 3 planetary gear

right angle transmission with motor

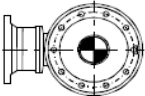
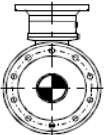
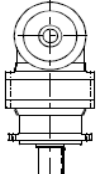
size 200~353

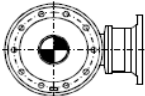
size	X <sub>1</sub> ∅	L <sub>1</sub>	X <sub>2</sub> ∅	L <sub>2</sub>	X <sub>3</sub> ∅	L <sub>3</sub>	D <sub>C</sub> ∅	E <sub>C</sub>	D <sub>S</sub>	E <sub>S</sub>	D <sub>H</sub> ∅	E <sub>H</sub>	D <sub>Z</sub>
240	240	63	200	66	200	66	65	105	EXT 28zx2mx30	68	75	100	INT 28zx2mx30
241	240	78	200	78	200	66	65	105	EXT 28zx2mx30	68	75	100	INT 28zx2mx30
280	280	82	240	62	200	66	80	130	EXT 34zx2mx30	90	85	145	INT 34zx2mx30
353	353	92	240	67	200	78	90	130	EXT 40zx2mx30	90	100	140	INT 40zx2mx30

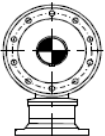
size	E <sub>Z</sub>	G <sub>1</sub>	G <sub>2</sub>	G <sub>3</sub>	L <sub>0</sub>	M ∅	N ∅f7	Q	P ∅	S	J ∅	h	weight
240	54	15	85	15	89	195	150	14	220	18	200	321.5	80
241	54	15	85	15	89	195	150	14	220	18	200	348.5	90
280	82	40	115	40	142	250	200	15	280	22	200	405.5	120
353	85	36	120	36	124	295	230	10	325	25	200	415	175

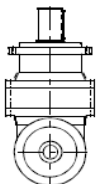
size	G							P <sub>m</sub>						
	motor frame							motor frame						
	71	80	90	100	112	132	160	71	80	90	100	112	132	160
240	217	227	227	245				160	200	200	250			
241	217	227	227	245	245			160	200	200	250	250		
280	217	227	227	245	245			160	200	200	250	250		
353				245	245	258					250	250	300	

## Mounting positions and oil quantity(L)

B5		B51		V1		size	B5,B53	B51	B52	V1,V3
						240	2.3	3.7	2.3	4.1
241	2.8	4.9	2.8	4.9						
280	3.7	6.5	3.7	6.5						
353	5.2	8.1	5.2	9.1						

B53	
-----	-------------------------------------------------------------------------------------

B52	
-----	-------------------------------------------------------------------------------------

V3	
----	-------------------------------------------------------------------------------------

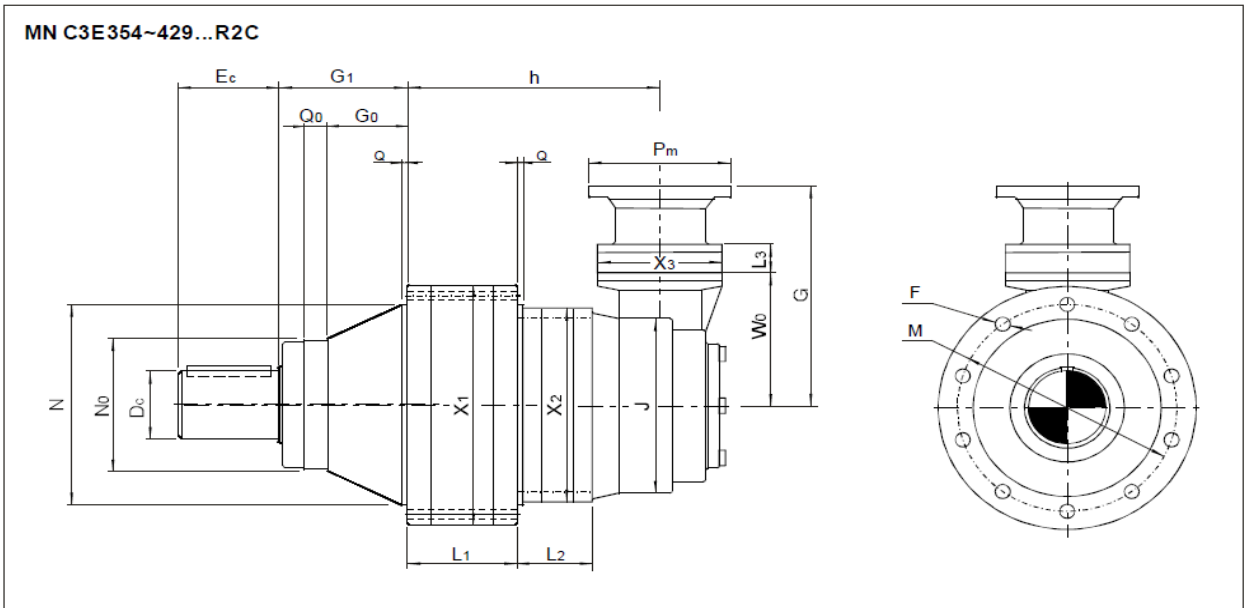
## Mounting dimensions

bevel-planetary gear motor

1 bevel gear pair and 3 planetary gear

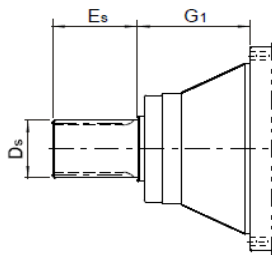
right angle transmission with motor

size 354~429

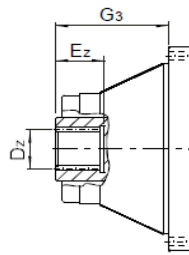


## Other shaft ends

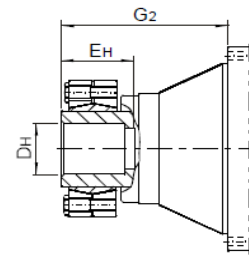
**MN C3E354~429...R2S**



**MN C3E354~429...R2Z**



**MN C3E354~429...R2H**



- 1) for cylindrical shaft, see page 152;
- 2) for splined shaft details, see page 152;
- 3) for splined hollow shaft details, see page 153;
- 4) for hollow shaft with shrink disk details, see page 153;
- 5) for output flange details, see page 151;
- 6) can add foot on output flange, the details on page 154;
- 7) for motor dimensions, see page 155.

## Mounting dimensions

bevel-planetary gear motor

1 bevel gear pair and 3 planetary gear

right angle transmission with motor

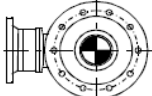
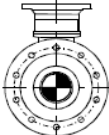
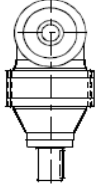
size 354~429

size	X <sub>1</sub> Ø	L <sub>1</sub>	X <sub>2</sub> Ø	L <sub>2</sub>	X <sub>3</sub> Ø	L <sub>3</sub>	D <sub>C</sub> Ø	E <sub>C</sub>	D <sub>S</sub>	E <sub>S</sub>	D <sub>H</sub> Ø	E <sub>H</sub>	D <sub>Z</sub>
354	353	138	240	48	200	48	100	130	EXT 29zx3mx30	90	110	160	INT 29zx3mx30
355	353	139	280	101	200	48	100	130	EXT 29zx3mx30	90	110	160	INT 29zx3mx30
428	428	140	280	110	200	48	110	165	EXT 39zx3mx30	130	130	180	INT 39zx3mx30
429	428	184	353	82	200	60	120	165	EXT 39zx3mx30	130	130	180	INT 39zx3mx30

size	E <sub>Z</sub>	G <sub>0</sub>	G <sub>1</sub>	G <sub>2</sub>	G <sub>3</sub>	h	J Ø	M Ø	N Øf7	N <sub>0</sub> Øf7	Q	Q <sub>0</sub>	W <sub>0</sub>	weight
354	75	72	141	235	141	293	270	314	278	225	8.5	25	225	218
355	75	72	141	235	141	329.5	270	314	278	225	8.5	25	225	231
428	107	135	210	320	210	340	270	390	358	230	10	40	225	296
429	107	135	210	320	210	354	270	390	358	230	10	40	225	316

size	G						P <sub>m</sub>					
	motor frame						motor frame					
	80	90	100	112	132	160	80	90	100	112	132	160
354	320	320	338	338	351		200	200	250	250	300	
355	320	320	338	338	351		200	200	250	250	300	
428		320	338	338	351			200	250	250	300	
429		320	338	338	351	417		200	250	250	300	350

## Mounting positions and oil quantity(L)

B5	B51	V1	size	B5,B53	B51	B52	V1,V3
							354
B53	B52	V3	355	7.3	11.6	7.6	13
			428	8.3	13	8.6	14.8
			429	9.3	14.8	9.7	16.5

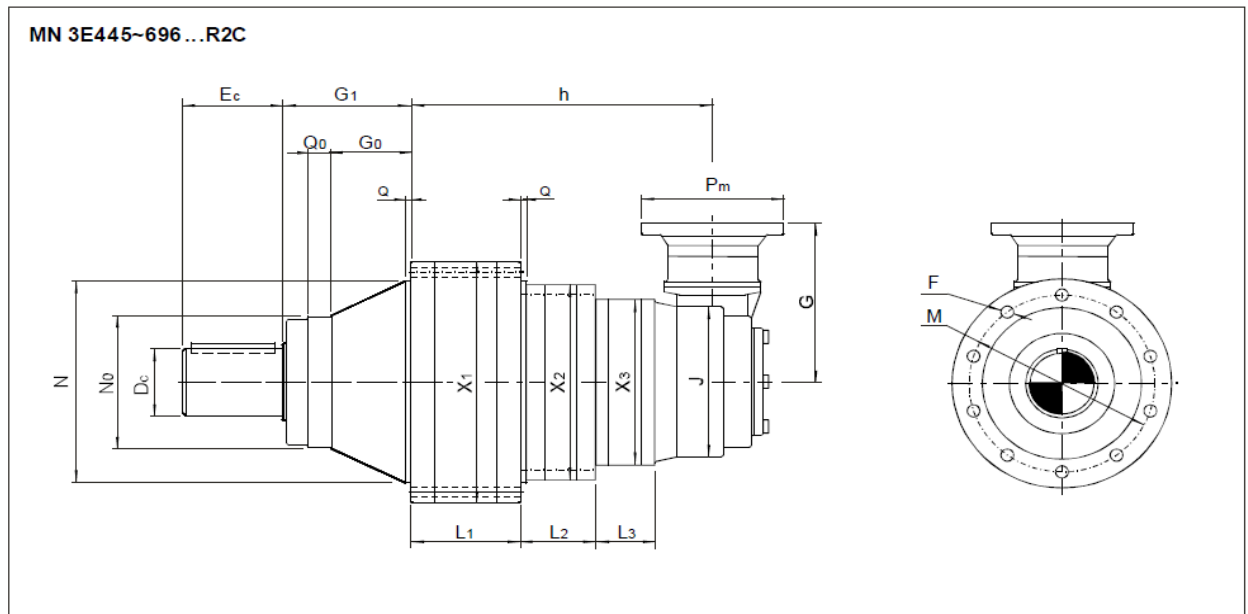
## Mounting dimensions

bevel-planetary gear motor

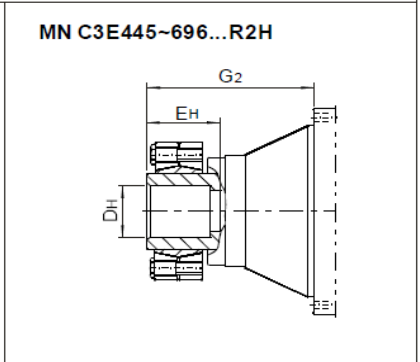
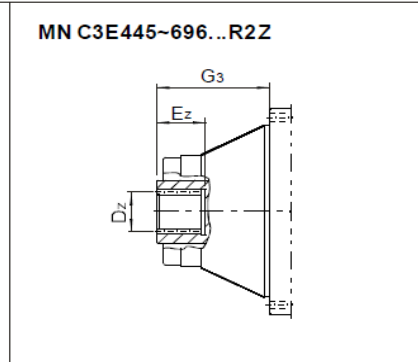
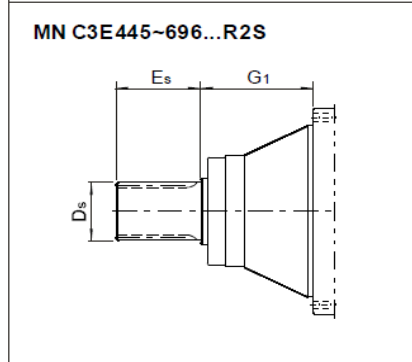
1 bevel gear pair and 3 planetary gear

right angle transmission with motor

size 445~696



## Other shaft ends



- 1) for cylindrical shaft, see page 152;
- 2) for splined shaft details, see page 152;
- 3) for splined hollow shaft details, see page 153;
- 4) for hollow shaft with shrink disk details, see page 153;
- 5) for output flange details, see page 151;
- 6) can add foot on output flange, the details on page 154;
- 7) for motor dimensions, see page 155.

## Mounting dimensions

bevel-planetary gear motor

1 bevel gear pair and 3 planetary gear

right angle transmission with motor

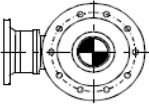
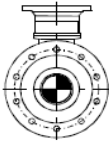
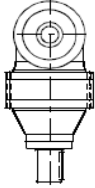
size 445~696

size	X <sub>1</sub> ∅	L <sub>1</sub>	X <sub>2</sub> ∅	L <sub>2</sub>	X <sub>3</sub> ∅	L <sub>3</sub>	D <sub>c</sub> ∅	E <sub>c</sub>	D <sub>s</sub>	E <sub>s</sub>	D <sub>H</sub> ∅	E <sub>H</sub>	D <sub>z</sub>
445	445	175	353	128	240	48	130	170	EXT 42zx3mx30	130	140	205	INT 42zx3mx30
446	445	175	353	128	280	101	140	170	EXT 42zx3mx30	130	140	205	INT 42zx3mx30
542	542	199	428	137	280	110	160	210	EXT 30zx5mx30	170	170	250	INT 30zx5mx30
543	542	219	428	181	353	82	170	210	EXT 30zx5mx30	170	170	250	INT 30zx5mx30
695	695	200	445	237	353	129	190	260	EXT 36zx5mx30	200	200	307	INT 36zx5mx30
696	695	230	445	237	353	129	200	260	EXT 36zx5mx30	200	200	307	INT 36zx5mx30

size	E <sub>z</sub>	G <sub>0</sub>	G <sub>1</sub>	G <sub>2</sub>	G <sub>3</sub>	h	J ∅	M ∅	N ∅f7	N <sub>0</sub> ∅f7	Q	Q <sub>0</sub> ∅	weight
445	110	152	227	362	227	485	270	415	385	260	13	40	430
446	110	152	227	362	227	494.5	270	415	385	260	13	40	443
542	120	224	279	427	279	536	270	503	460	300	13	32	658
543	120	224	279	437	279	570	270	503	460	300	13	32	749
695	140	-	152	318	152	724	376	635	560	-	20	-	1285
696	140	-	152	333	152	754	376	635	560	-	20	-	1373

size	G							P <sub>m</sub>						
	motor frame							motor frame						
	100	112	132	160	180	200	225	100	112	132	160	180	200	225
445	286	286	340	340	340			250	250	300	350	350		
446	286	286	340	384	384			250	250	300	350	350		
542		286	340	384	384				250	300	350	350		
543			340	384	384	384				300	350	350	400	
695			406	460	460	460	490			300	350	350	400	450
696			406	460	460	460	490			300	350	350	400	450

## Mounting positions and oil quantity(L)

B5	B51	V1	size	B5,B53	B51	B52	V1,V3
							445
			446	13.6	21	13.6	24
			542	16.9	26	16.9	30
			543	21	33	21	37
B53	B52	V3	695	29	46	29	51
			696	33	51	33	58

**TECHNICAL DATA**

Technical data for in line gear reducer



### TECHNICAL DATA

Coaxial gear reducer nominal output torque

stage	i N	Gear reducer size															
		200	201	240	241	280	353	354	355	428	429	445	446	542	543	695	696
		Mn2 N.m															
1E	3.15	1120	1830	2420	3840	5050	6310	8260	11000	12400	15700	17700	25500	36600	46000	90300	91700
	3.55	1230	1930	2600	3860	5420	6580	8640	11500	13300	16700	20600	26600	39200	47900	74300	84800
	4.0	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900
	4.5	1270	1860	2530	3370	5500	6320	8170	10900	12700	16000	19400	25900	39200	48000	72900	80900
	5.0	1220	1780	2440	3280	4770	6180	7860	10500	12700	14500	18800	25000	30900	37500	71200	86100
	5.6	920		1840		3640	4690			9540		13630					
	6.3	830		1600		3290	4130			8850		12150					
	7.1	730		1230		2220	3330			7980		9970					
	8.0	560		1010		2160	2440			6070		7490					
	9.0	500		880		1700	2140			4350		6740					
	10.0	400		830		1630	1700			4810		5340					
	11.2	360		620		1320	1260			2900		3820					
12.5	310		530		910	1100			2460		3370						
2E	12.5	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900
	15.0	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900
	18.0	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900
	20.0	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900
	21.2	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900
	25.0	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900
	28.0	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900
	30.0	1220	1780	2440	3280	4770	6180	7860	10500	12700	14500	18800	25000	30900	37500	71200	86100
	35.5	1220	1780	2440	3280	4770	6180	7860	10500	12700	14500	18800	25000	30900	37500	71200	86100
	42.5	1220	1780	2440	3280	4770	6180	7860	10500	12700							
50.0	1220	1780	2440	3280													
3E	42.5					5100	6590	8610	11500	13500	16900	21000	28000	39000			
	50.0	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900
	60.0	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900
	71.0	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900
	85.0	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900
	100	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900
	125	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900

## TECHNICAL DATA

### Coaxial gear reducer technical data

stage	i N	Gear reducer size																
		200	201	240	241	280	353	354	355	428	429	445	446	542	543	695	696	
		MN2 N.m																
3E	150	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900	
	180	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900	
	212	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900	
	250	1300	1950	2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000				
	300	1300	1950	2620	3900	5100	6590	8610	11500	13500								
	355	1220	1780	2440	3280	4770	6180	7860										
	425	1220	1780	2440	3280													
4E	212										16900	21000	28000	39000	48000	74900	83900	
	250					5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900	
	300			2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900	
	355			2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900	
	425			2620	3280	4770	6180	7860	10500	12700	14500	18800	24960	30888	37500	71200	86100	
	500			2440	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900	
	600			2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900	
	710			2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900	
	850			2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900	
	1000			2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900	
	1250			2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900	
	1500			2620	3900	5100	6590	8610	11500	13500	16900	21000	28000	39000	48000	74900	83900	
	1800			2620	3280	4770	6180	7860	10500	12700	14500	18800	24960	37500				
	2120			2440	3280	4770	6180	7860	10500	12700	14500							
	2500			2440	3280	4770	6180	7860	10500	12700								
3000			2440	3280	4770	6180	7860											

#### ATTENTION!

Selecting gear reducer is advised performing following step:

confirm the output speed  $n_2$  (using speed) and output power (using power)  $P_2$ , perform following formula to calculate torque.

$$M_2 = \frac{P_2 \times 9550}{n_2}$$

confirm service factor  $f_s$ , see page 8

perform formula  $M_2 \times f_s \leq M_{N2}$  to confirm gear motor size

verify  $n_2 \times i_N \leq m$ , see page 6

verify thermal power  $R \leq P_{TW}$ , see page 6,7