

VF/VF

Two worm gearboxes VF series assembled together by means of a connection flange are valid solution to get high ratios. The possibility to change the positions of the 2 gearboxes makes this unit very versatile. It is preferable to select the double worm gearboxes, which works at very low speed, considering the required torque $M_2 \geq M \times s.f.$ as often the installed power exceeds the absorbed power.

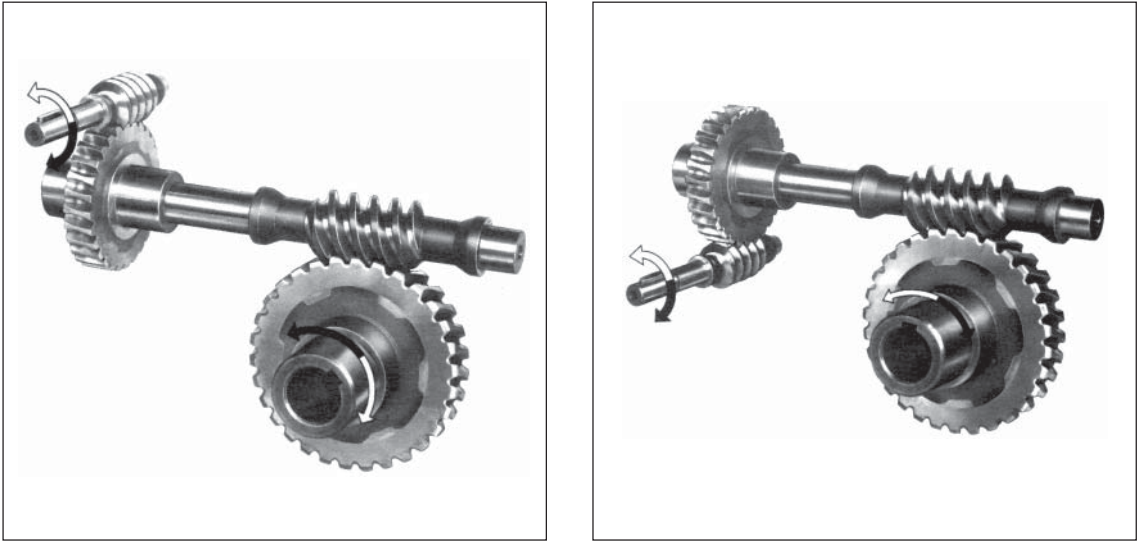


DESIGNATION

VF	30/62	A	720	V1	B3
TYPE	SIZE	VERSION	RATIO	EXECUTIONS	MOUNTING POSITION
VF/VF Gearbox	30/44	A F FC(30/62÷86/185) P	i See tables	V1 V2 V3	See VF, page 18
MVF	30/49				
	30/62				
	44/86				
	49/110				
	62/130				
	86/150				
Geared motor or gearbox with motor mounting flange	86/185				
	130/210				
	130/250				

N.B. Geared motors can be supplied without the motor (P.A.M.), but when ordering, the motorsize must be specified.

DIRECTION OF ROTATION



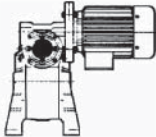
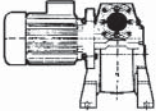
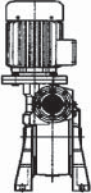

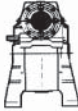

MOUNTING POSITIONS

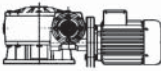
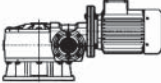
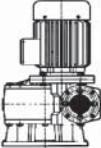
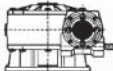
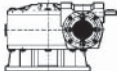
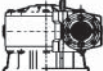
Please always specify mounting position referring to the second VF gearbox according to the table on page 18.

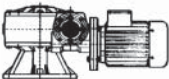
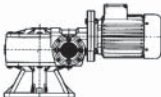
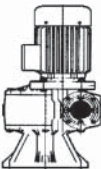
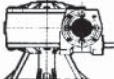
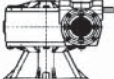
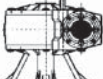
LUBRICATION

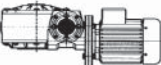
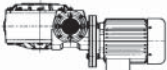
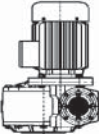



The lubrication is the same of the corresponding VF gearboxes (page 17).

MOUNTING POSITIONS

MVF.../VF.../A			VF.../VF.../A		
V1	V2	V3	V1	V2	V3
					

MVF.../VF.../FC			VF.../VF.../FC		
V1	V2	V3	V1	V2	V3
					

MVF.../VF.../F			VF.../VF.../F		
V1	V2	V3	V1	V2	V3
					

MVF.../VF.../P			VF.../VF.../P		
V1	V2	V3	V1	V2	V3
					

VF/VF

CHARACTERISTICS OF MOTORIZED DOUBLE REDUCTION GEARBOXES $n_1 = 1400$ FOR HIGHER RATIOS (WORM/WORM) MVF.../VF... SERIES

When speed $n_1 > 1400$ see on page 5 and 6.



	i	HP ₁	KW ₁	M ₂ daNm	n ₂
MVF 30/44A MVF 30/44 F MVF 30/44 p	245	*0.16	0.12	6	5.7
	350	*0.16	0.12	6	4
	420	*0.16	0.12	6	3.3
	560	*0.16	0.12	6	2.5
	700	*0.16	0.12	6	2
	840	*0.16	0.12	6	1.7
	1120	*0.16	0.12	6	1.3
	1680	*0.16	0.12	6	0.83
	2100	*0.16	0.12	6	0.67

MVF 30/49A MVF 30/49 F MVF 30/49 p	240	0.16	0.12	8.5	5.8
	315	*0.16	0.12	9.5	4.4
	420	*0.16	0.12	9.5	3.3
	540	*0.16	0.12	9.5	2.6
	720	*0.16	0.12	9.5	1.9
	900	*0.16	0.12	9.5	1.6
	1120	*0.16	0.12	9.5	1.3
	1440	*0.16	0.12	9.5	0.97
	2160	*0.16	0.12	9.5	0.65
	2700	*0.16	0.12	9.5	0.52

MVF 30/62A MVF 30/62 F MVF 30/62 FC MVF 30/62 p	240	0.25	0.18	14.5	5.8
	315	0.25	0.18	18	4.4
	450	*0.25	0.18	21	3.1
	570	0.16	0.12	18.7	2.5
	720	*0.16	0.12	21	1.9
	900	*0.16	0.12	21	1.6
	1200	*0.16	0.12	21	1.2
	1520	*0.16	0.12	21	0.92
	2280	*0.16	0.12	21	0.61
	2700	*0.16	0.12	21	0.52

MVF 44/86A MVF 44/86F MVF 44/86FC MVF 44/86p	230	0.5	0.37	32	6.1
	300	0.5	0.37	34	4.7
	400	0.5	0.37	42	3.5
	525	0.33	0.25	37	2.7
	700	0.33	0.25	46	2
	920	0.25	0.18	45	1.5
	1380	*0.25	0.18	55	1
	1840	0.16	0.12	46	0.76
	2116	*0.16	0.12	49	0.66
	2760	*0.16	0.12	55	0.51

MVF 49/110A MVF 49/110F MVF 49/110FC MVF 49/110p	230	1	0.75	61	6.1
	300	1	0.75	74	4.7
	400	1	0.75	92	3.5
	540	0.75	0.56	83	2.6
	720	0.5	0.37	72	1.9
	1080	0.5	0.37	87	1.3
	1350	0.33	0.25	67	1
	1656	0.33	0.25	82	0.85
	2070	*0.33	0.25	96	0.68
	2800	0.25	0.18	84	0.5

MVF 62/130A MVF 62/130F MVF 62/130FC MVF 62/130 p	280	2.5	1.9	172	5
	400	2	1.5	180	3.5
	600	1.5	1.1	180	2.3
	760	1	0.75	152	1.8
	960	1	0.75	173	1.5
	1200	0.75	0.55	149	1.2
	1520	0.75	0.55	183	0.9
	1800	0.75	0.55	180	0.8
	2560	0.5	0.37	147	0.5
	3200	0.5	0.37	136	0.4



	i	HP ₁	KW ₁	M ₂ daNm	n ₂
MVF 86/150A MVF 86/150F MVF86/150FC MVF 86/150 p	200	4	3	253	7
	225	3	2.2	214	6.2
	300	3	2.2	265	4.7
	345	2.5	1.9	249	4.1
	460	2	1.5	260	3
	529	1.5	1.1	219	2.6
	690	1.5	1.1	260	2
	920	1	0.75	211	1.5
	1380	0.75	0.55	221	1
	1840	0.75	0.55	260	0.8
	2944	0.5	0.37	198	0.5

MVF 86/185A MVF 86/185F MVF86/185FC MVF 86/185 p	280	5.5	4	405	5
	400	4	3	385	3.5
	600	3	2.2	403	2.3
	800	2.5	1.8	420	1.8
	920	2	1.5	384	1.5
	1200	2	1.5	420	1.2
	1600	1.5	1.1	420	0.9
	1840	1	0.75	314	0.8
	2560	1	0.75	371	0.5
	3200	1	0.75	383	0.4

MVF130/210A MVF130/210p	280	7.5	5.5	550	5
	400	5.5	4	550	3.5
	600	4	3	550	2.3
	800	3	2.2	495	1.8
	920	3	2.2	527	1.5
	1200	3	2.2	630	1.2
	1600	2.5	1.8	630	0.9
	1840	2	1.5	550	0.8
	2560	2	1.5	630	0.5
	3200	1.5	1.1	550	0.4

MVF130/250A MVF130/250p	280	10	7.5	760	5
	400	7.5	5.5	752	3.5
	600	5.5	4	760	2.3
	800	4	3	658	1.8
	920	4	3	702	1.5
	1200	4	3	837	1.2
	1600	3	2.2	760	0.9
	1840	3	2.2	871	0.8
	2560	2.5	1.8	804	0.5
	3200	2.5	1.8	833	0.4

The power indicated with * are higher than those transmissible by the gearbox therefore the selection must be made according to the torque M_2 .

CHARACTERISTICS OF DOUBLE REDUCTION GEARBOXES FOR HIGHER $n_1 = 1400$ RATIOS (WORM/WORM) VF.../VF... SERIES

when speed $n_1 > 1400$ see on page 5 and 6.

	i	HP ₁	KW ₁	M ₂ daNm	n ₂
VF 30/44A VF 30/44 F VF 30/44p	245	0.12	0.09	6	5.7
	350	0.09	0.07	6	4
	420	0.08	0.06	6	3.3
	560	0.06	0.05	6	2.5
	700	0.06	0.04	6	2
	840	0.05	0.04	6	1.7
	1120	0.04	0.03	6	1.3
	1680	0.03	0.02	6	0.83
	2100	0.03	0.02	6	0.67

VF 30/49A VF 30/49 F VF 30/49p	240	0.18	0.13	9.5	5.8
	315	0.14	0.11	9.5	4.4
	420	0.11	0.08	9.5	3.3
	540	0.09	0.07	9.5	2.6
	720	0.07	0.05	9.5	1.9
	900	0.07	0.05	9.5	1.6
	1120	0.06	0.04	9.5	1.3
	1440	0.05	0.04	9.5	0.97
	2160	0.04	0.03	9.5	0.65
	2700	0.04	0.03	9.5	0.52

VF 30/62A VF 30/62 F VF 30/62 FC VF 30/62p	240	0.36	0.26	20	5.8
	315	0.30	0.22	20	4.4
	450	0.22	0.16	20	3.1
	570	0.18	0.13	20	2.5
	720	0.16	0.11	20	1.9
	900	0.15	0.11	20	1.6
	1200	0.13	0.10	20	1.2
	1520	0.11	0.08	20	0.92
	2280	0.08	0.06	20	0.61
	2700	0.07	0.05	20	0.52

VF 44/86A VF 44/86 F VF 44/86 FC VF 44/86p	230	0.71	0.53	45	6.1
	300	0.66	0.49	45	4.7
	400	0.53	0.4	45	3.5
	525	0.41	0.3	45	2.7
	700	0.32	0.24	45	2
	920	0.25	0.18	45	1.5
	1380	0.2	0.15	45	1
	1840	0.16	0.12	45	0.76
	2116	0.15	0.11	45	0.66
	2760	0.13	0.1	45	0.51

VF 49/110A VF 49/110 F VF49/110FC VF 49/110p	230	1.5	1.1	90	6.1
	300	1.2	0.91	90	4.7
	400	0.97	0.73	90	3.5
	540	0.81	0.6	90	2.6
	720	0.62	0.46	90	1.9
	1080	0.52	0.39	90	1.3
	1350	0.44	0.33	90	1
	1656	0.36	0.27	90	0.85
	2070	0.31	0.23	90	0.68
	2800	0.27	0.2	90	0.5

VF 62/130A VF 62/130 F VF 62/130FC VF 62/130p	280	2.6	1.9	180	5
	400	2	1.5	180	3.5
	600	1.5	1.1	180	2.3
	760	1.2	0.89	180	1.8
	960	1	0.74	180	1.5
	1200	0.88	0.65	180	1.2
	1520	0.75	0.55	180	0.9
	1800	0.71	0.52	180	0.8
	2560	0.61	0.45	180	0.5
	3200	0.66	0.49	180	0.4

	i	HP ₁	KW ₁	M ₂ daNm	n ₂
VF 86/150A VF 86/150 F VF 86/150 FC VF 86/150p	200	4.1	3	260	7
	225	3.7	2.7	260	6.2
	300	3	2.2	260	4.7
	345	2.6	1.9	260	4.1
	460	2	1.5	260	3
	529	1.8	1.3	260	2.6
	690	1.5	1.1	260	2
	920	1.3	0.92	260	1.5
	1380	0.89	0.66	260	1
	1840	0.75	0.55	260	0.8
	2944	0.65	0.48	260	0.5

VF 86/185A VF 86/185 F VF 86/185 FC VF 86/185 p	280	5.7	4.2	420	5
	400	4.4	3.2	420	3.5
	600	3.2	2.3	420	2.3
	800	2.5	1.8	420	1.8
	920	2.2	1.6	420	1.5
	1200	2	1.5	420	1.2
	1600	1.5	1.1	420	0.9
	1840	1.3	0.98	420	0.8
	2560	1.1	0.83	420	0.5
	3200	1.1	0.8	420	0.4

VF 130/210A VF 130/210 p	280	8.6	6.3	630	5
	400	6.3	4.6	630	3.5
	600	4.9	3.6	630	2.3
	800	3.8	2.8	630	1.8
	920	3.7	2.7	630	1.5
	1200	3	2.2	630	1.2
	1600	2.5	1.8	630	0.9
	1840	2.3	1.7	630	0.8
	2560	2	1.5	630	0.5
	3200	1.8	1.3	630	0.4

VF 130/250A VF 130/250 p	280	12.1	8.9	900	5
	400	9.1	6.7	900	3.5
	600	6.8	5	900	2.3
	800	5.3	3.9	900	1.8
	920	5.3	3.9	900	1.5
	1200	4.3	3.1	900	1.2
	1600	3.5	2.6	900	0.9
	1840	3.1	2.3	900	0.8
	2560	2.8	2.1	900	0.5
	3200	2.7	2	900	0.4

N.B. : On customer's request the double gear-boxes VF.../ VF... in some cases , can be supplied with higher ratios than the standard ones(see below descriptions).


VF.../VF...	i MAX
30/44	1: 2450
30/49	1: 4200
30/62	1: 7000
44/86	1: 5600
49/110	1: 5600

From size 62/130 to size 130/250 it is possible to supply ratios up to 1:10.000.

CHARACTERISTICS OF DOUBLE REDUCTION GEARBOXES FOR HIGHER RATIOS (WORM/WORM) VF.../VF... SERIES

$n_1 = 900$

VF/VF

	i	HP ₁	KW ₁	M ₂ daNm	n ₂
VF 30/44A VF 30/44F VF 30/44p	245	0.09	0.07	7	3.7
	350	0.07	0.05	7	2.6
	420	0.06	0.04	7	2.1
	560	0.05	0.04	7	1.6
	700	0.04	0.03	7	1.3
	840	0.04	0.03	7	1.1
	1120	0.03	0.02	7	0.8
	1680	0.03	0.02	7	0.54
	2100	0.02	0.02	7	0.43


VF 30/49A VF 30/49F VF 30/49p	240	0.13	0.09	10	3.8
	315	0.1	0.07	10	2.9
	420	0.08	0.06	10	2.1
	540	0.06	0.05	10	1.7
	720	0.05	0.04	10	1.3
	900	0.05	0.04	10	1
	1120	0.04	0.03	10	0.8
	1440	0.04	0.03	10	0.63
	2160	0.03	0.02	10	0.42
	2700	0.03	0.02	10	0.33

VF 30/62A VF 30/62F VF 30/62FC VF 30/62p	240	0.26	0.19	22	3.8
	315	0.22	0.16	22	2.9
	450	0.16	0.11	22	2
	570	0.13	0.1	22	1.6
	720	0.12	0.09	22	1.3
	900	0.1	0.08	22	1
	1200	0.09	0.07	22	0.75
	1520	0.08	0.06	22	0.59
	2280	0.06	0.04	22	0.39
	2700	0.06	0.04	22	0.33

VF 44/86A VF 44/86F VF 44/86FC VF 44/86p	230	0.53	0.39	50	3.9
	300	0.5	0.37	50	3
	400	0.39	0.29	50	2.3
	525	0.3	0.23	50	1.7
	700	0.24	0.18	50	1.3
	920	0.19	0.14	50	0.98
	1380	0.15	0.12	50	0.65
	1840	0.12	0.09	50	0.49
	2116	0.11	0.08	50	0.43
	2760	0.1	0.07	50	0.33

VF 49/110A VF 49/110F VF 49/110FC VF 49/110p	230	1	0.76	95	3.9
	300	0.85	0.63	95	3
	400	0.68	0.5	95	2.3
	540	0.59	0.44	95	1.7
	720	0.44	0.33	95	1.3
	1080	0.38	0.28	95	0.83
	1350	0.32	0.24	95	0.67
	1656	0.25	0.18	95	0.54
	2070	0.23	0.17	95	0.43
	2800	0.2	0.15	95	0.32

VF 62/130A VF 62/130F VF 62/130FC VF 62/130p	280	1.8	1.3	185	3.2
	400	1.4	1	185	2.3
	600	0.99	0.73	185	1.5
	760	0.84	0.62	185	1.2
	960	0.71	0.52	185	0.9
	1200	0.62	0.45	185	0.8
	1520	0.52	0.38	185	0.6
	1800	0.51	0.37	185	0.5
	2560	0.44	0.32	185	0.4
	3200	0.46	0.34	185	0.3

	i	HP ₁	KW ₁	M ₂ daNm	n ₂
VF 86/150A VF 86/150 F VF 86/150 FC VF 86/150p	200	2.8	2.1	270	4.5
	225	2.5	1.9	270	4
	300	2	1.5	270	3
	345	1.8	1.3	270	2.6
	460	1.4	1	270	2
	529	1.3	0.93	270	1.7
	690	1.1	0.78	270	1.3
	920	0.87	0.64	270	1
	1380	0.63	0.46	270	0.7
	1840	0.52	0.38	270	0.5
	2944	0.47	0.35	270	0.3


VF 86/185A VF 86/185 F VF 86/185 FC VF 86/185p	280	4	3	440	3.2
	400	3.1	2.3	440	2.3
	600	2.2	1.6	440	1.5
	800	1.8	1.3	440	1.1
	920	1.6	1.2	440	1
	1200	1.3	0.99	440	0.8
	1600	1.1	0.79	440	0.6
	1840	0.96	0.7	440	0.5
	2560	0.82	0.6	440	0.4
	3200	0.8	0.59	440	0.3

VF 130/210A VF 130/210p	280	5.9	4.4	650	3.2
	400	4.3	3.2	650	2.3
	600	3.3	2.4	650	1.5
	800	2.7	2	650	1.1
	920	2.6	1.9	650	1
	1200	2.1	1.5	650	0.8
	1600	1.7	1.2	650	0.60
	1840	1.6	1.2	650	0.5
	2560	1.4	1	650	0.4
	3200	1.3	0.96	650	0.3

VF 130/250A VF 130/250p	280	8.3	6.1	920	3.2
	400	6.3	4.6	920	2.3
	600	4.7	3.4	920	1.5
	800	3.7	2.7	920	1.1
	920	3.7	2.7	920	1
	1200	3	2.2	920	0.8
	1600	2.5	1.8	920	0.6
	1840	2.2	1.6	920	0.5
	2560	2	1.5	920	0.4
	3200	1.9	1.4	920	0.3

CHARACTERISTICS OF DOUBLE REDUCTION GEARBOXES FOR HIGHER RATIOS (WORM/WORM) VF../VF... SERIES

$n_1 = 500$

	i	HP ₁	KW ₁	M ₂ daNm	n ₂
VF 30/44A VF 30/44 F VF 30/44p	245	0.06	0.04	8	2
	350	0.05	0.04	8	1.4
	420	0.04	0.03	8	1.2
	560	0.03	0.02	8	0.89
	700	0.03	0.02	8	0.71
	840	0.03	0.02	8	0.6
	1120	0.02	0.02	8	0.45
	1680	0.02	0.01	8	0.3
	2100	0.02	0.01	8	0.24


VF 30/49A VF 30/49F VF 30/49p	240	0.08	0.06	11	2.1
	315	0.06	0.05	11	1.6
	420	0.05	0.04	11	1.2
	540	0.04	0.03	11	0.93
	720	0.03	0.02	11	0.69
	900	0.03	0.02	11	0.56
	1120	0.03	0.02	11	0.45
	1440	0.02	0.02	11	0.35
	2160	0.02	0.01	11	0.23
	2700	0.02	0.01	11	0.19

VF 30/62A VF 30/62F VF 30/62FC VF 30/62p	240	0.15	0.11	23	2.1
	315	0.12	0.09	23	1.6
	450	0.09	0.07	23	1.1
	570	0.08	0.06	23	0.88
	720	0.07	0.05	23	0.69
	900	0.06	0.05	23	0.56
	1200	0.05	0.04	23	0.42
	1520	0.05	0.03	23	0.33
	2280	0.04	0.03	23	0.22
	2700	0.03	0.03	23	0.19

VF 44/86A VF 44/86F VF 44/86 FC VF 44/86 p	230	0.32	0.24	54	2.2
	300	0.3	0.23	54	1.7
	400	0.24	0.18	54	1.3
	525	0.19	0.14	54	0.95
	700	0.15	0.11	54	0.71
	920	0.12	0.09	54	0.54
	1380	0.1	0.07	54	0.36
	1840	0.08	0.06	54	0.27
	2116	0.07	0.05	54	0.24
	2760	0.06	0.05	54	0.18

VF 49/110A VF 49/110F VF 49/110FC VF 49/110p	230	0.62	0.46	100	2.2
	300	0.52	0.38	100	1.7
	400	0.4	0.3	100	1.3
	540	0.36	0.27	100	0.93
	720	0.27	0.2	100	0.69
	1080	0.23	0.17	100	0.46
	1350	0.2	0.15	100	0.37
	1656	0.16	0.12	100	0.3
	2070	0.14	0.1	100	0.24
	2800	0.12	0.09	100	0.18

VF 62/130A VF 62/130F VF 62/130FC VF 62/130p	280	1.1	0.79	190	1.8
	400	0.82	0.61	190	1.3
	600	0.59	0.44	190	0.8
	760	0.51	0.37	190	0.7
	960	0.43	0.31	190	0.5
	1200	0.38	0.28	190	0.4
	1520	0.32	0.23	190	0.33
	1800	0.31	0.23	190	0.28
	2560	0.28	0.2	190	0.2
	3200	0.28	0.21	190	0.16

	i	HP ₁	KW ₁	M ₂ daNm	n ₂
VF 86/150A VF 86/150F VF 86/150FC VF 86/150p	200	1.7	1.2	280	2.5
	225	1.5	1.1	280	2.2
	300	1.2	0.89	280	1.7
	345	1.1	0.79	280	1.4
	460	0.83	0.61	280	1.1
	529	0.75	0.55	280	0.9
	690	0.64	0.47	280	0.7
	920	0.53	0.39	280	0.5
	1380	0.38	0.28	280	0.4
	1840	0.32	0.23	280	0.3
	2944	0.29	0.22	280	0.2

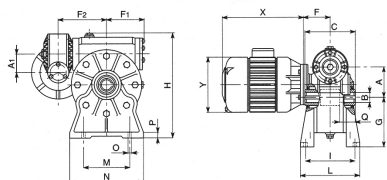
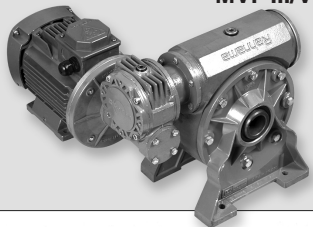
VF 86/185A VF 86/185F VF 86/185FC VF 86/185p	280	2.4	1.8	460	1.8
	400	1.9	1.4	460	1.3
	600	1.4	1	460	0.8
	800	1.1	0.79	460	0.6
	920	0.96	0.71	460	0.5
	1200	0.83	0.61	460	0.4
	1600	0.66	0.49	460	0.31
	1840	0.59	0.44	460	0.27
	2560	0.51	0.38	460	0.2
	3200	0.51	0.38	460	0.16

VF 130/210A VF 130/210p	280	3.6	2.7	680	1.8
	400	2.6	1.9	680	1.3
	600	2.1	1.5	680	0.8
	800	1.6	1.2	680	0.6
	920	1.6	1.2	680	0.5
	1200	1.3	0.96	680	0.4
	1600	1.4	1	680	0.31
	1840	1	0.75	680	0.27
	2560	0.86	0.63	680	0.2
	3200	0.84	0.62	680	0.16

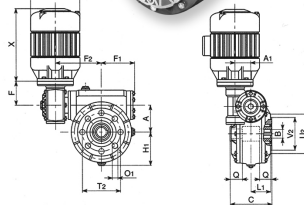
VF 130/250A VF 130/250p	280	4.9	3.6	950	1.8
	400	3.8	2.8	950	1.3
	600	2.8	2.1	950	0.8
	800	2.2	1.6	950	0.6
	920	2.2	1.6	950	0.5
	1200	1.8	1.3	950	0.4
	1600	1.5	1.1	950	0.31
	1840	1.4	1	950	0.27
	2560	1.3	0.93	950	0.2
	3200	1.2	0.91	950	0.16

OVERALL DIMENSIONS

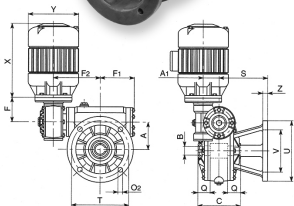
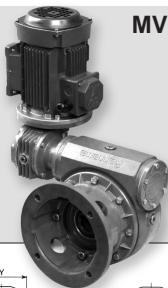
MVF .../VF.../A



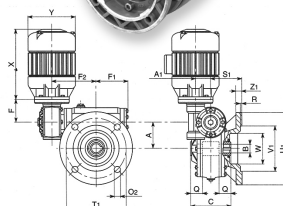
MVF .../VF.../P



MVF .../VF.../F



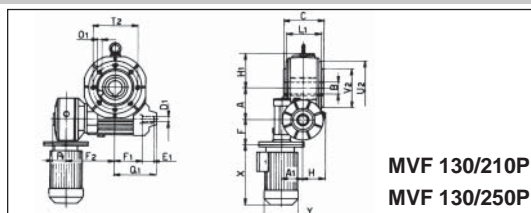
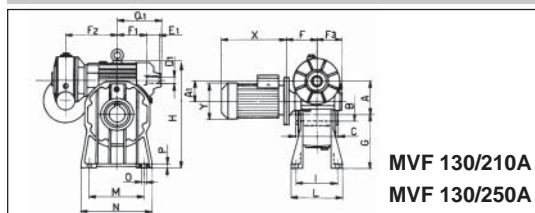
MVF .../VF.../FC



N.B.:

- From size 44 to 86 version is supplied as standard with two P cover.
- From size 110 to 185 , P version is supplied as standard with only one P cover (the customer can see the real position of P cover into correspondent photography).
- The double motorized worm gearboxes are supplied with hollow output shaft as standard.
- Only on customer's request will be supplied single or double shafts (page 32).
- On customer's request, the P version is supplied complete with reaction arm (page 32).
- Keys and threaded holes dimensions on the top of input and output shafts are on page 60.

OVERALL DIMENSIONS



N.B. Sizes 210-250 in P version are supplied as standad with two P cover.



MVF.../VF...

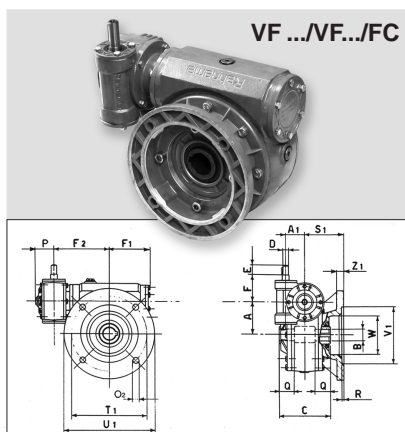
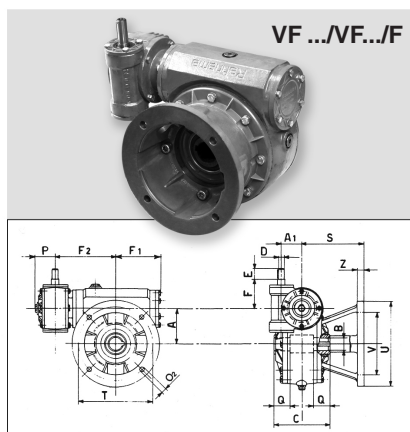
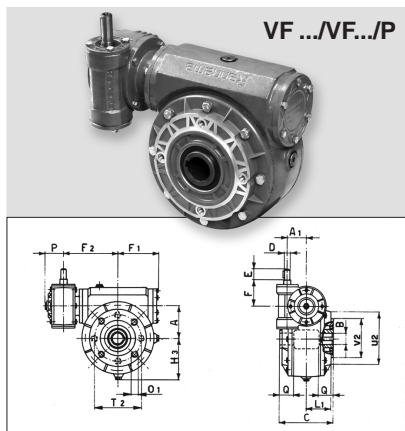
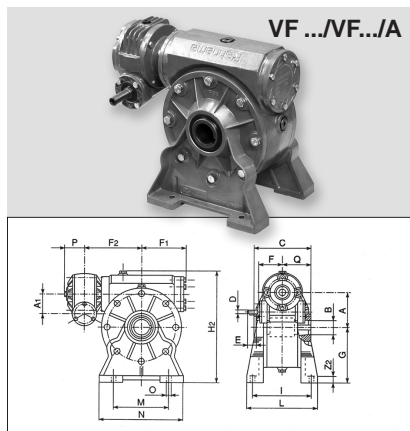
	30/44	30/49	30/62	44/86	49/110	62/130	86/150	86/185	130/210	30/250
A	44.6	49.5	62.17	86.9	110.1	130	150	185.4	210	250
A ₁	30	30	30	44.6	49.5	62.17	86.9	86.9	130	130
B _{H7}	18	25	25	35	40	45	50	60	90	110
C	66	82	120	144	155	170	190	195	260	324
D _{1h6}	—	—	—	—	—	—	—	—	48	55
E ₁	—	—	—	—	—	—	—	—	20	30
F	60	60	60	70	70	96	129.5	129.5	183	183
F ₁	50	63	80	110	138	154	179	205	242.5	271.5
F ₂	118	101.5	122.5	170	202	221	256	286	300	336.5
F ₃	—	—	—	—	—	—	—	—	154	154
G	54.5	82	100	142	170	195	218	260	335	380
H	126	138	173	248	312	348	400	457	555	645
H ₁	51	56	73	106	142	153	180	203	220	265
I	81	98.5	111	146	181	191	211	251	265	310
L	98	124	143	181	220	245	260	320	320	380
L ₁	35	37	57.5	66.5	74	78.5	83.5	91	250	310
M	52	63	95	140	200	220	240	270	340	400
N	90	110	140	220	270	310	330	360	440	520
O	8.5	8.5	10.5	10.5	12.5	16	18	22	26	33
O ₁	M6×9 (4holes)	M6×9 (4holes)	M8×14 (4holes)	M10×17 (4holes)	M12×21 (8holes)	M12×23 (8holes)	M14×23 (8holes)	M16×25 (8holes)	M16×30	M16×40
O ₂	8.5	6.5	10.5	12.5	12.5	16	18	22	22	—
P	10	12	12	14	15	18	20	22	25	30
P ₁	—	—	—	—	—	—	—	—	98	98
Q	24	22.5	40	45	45	52.5	55	65	—	—
Q ₁	—	—	—	—	—	—	—	—	283	341
R	—	3	4	4	5	5	5	6	—	—
S	60	87	116	151	179.5	197.5	220	255	—	—
S ₁	—	65.5	86	110.5	131.5	137.5	145.5	155.5	—	—
T	87	90	150	176	230	255	290	350	—	—
T ₁	—	94	150	176	230	255	290	350	—	—
T ₂	65	94	85	130	165	215	215	265	300	400
U	110	125	180	210	280	320	350	400	—	—
U ₁	—	—	180	210	280	320	350	400	—	—
U ₂	80	107.5	105	160	200	250	250	300	350	450
V _{H8}	60	70	115	152	170	180	200	280	—	—
V _{1H8}	—	—	115	152	170	180	200	280	—	—
V _{2h8}	50	68	70	110	130	180	180	230	250	350
W	—	72	80	120	170	180	200	270	—	—
Z	9	12	11	15	20	20	22	22	—	—
Z ₁	—	8.5	11	15	20	20	22	22	—	—

N.B. Dimensions X and Y vary according to size of the motor(page 103,104).

The types 30/44 and 30/49 P have the M6x9 tapped holes placed in a circle by 45° from each other .

OVERALL DIMENSIONS

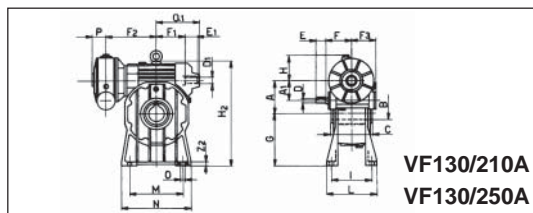
VF/VF



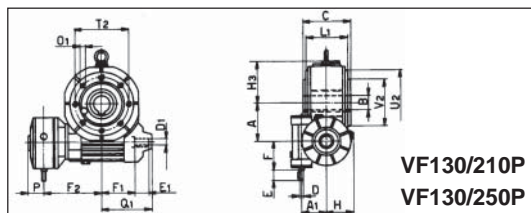
N.B.:

- From size 44 to 86, P version is supplied as standard with two P cover.
- From size 110 to 185, P version is supplied as standard with only one P cover (the customer can see the real position of P cover into correspondent photography).
- The double motorized worm gearboxes are supplied with hollow output shaft as standard.
- Only on customer's request will be supplied single or double shafts (page 32).
- On customer's request, the P version is supplied complete with reaction arm (page 32).
- Keys and threaded holes dimensions on the top of input and output shafts are on page 60.

OVERALL DIMENSIONS




VF130/210A
VF130/250A



VF130/210P
VF130/250P

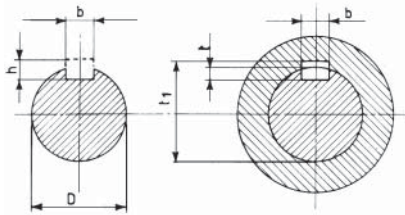
N.B. Sizes 210-250 in P version are supplied as standad with two P cover.

VF/VF

	VF.../VF...									
	30/44	30/49	30/62	44/86	49/110	62/130	86/150	86/185	130/210	130/250
										
A	44.6	49.5	62.17	86.9	110.1	130	150	185.4	210	250
A ₁	30	30	30	44.6	49.5	62.17	86.9	86.9	130	130
B _{H7}	18	25	25	35	40	45	50	60	90	110
C	66	82	120	144	155	170	190	195	260	324
D _{h6}	9	9	9	11	16	18	25	25	30	30
D _{1 h6}	—	—	—	—	—	—	—	—	48	55
E	20	20	20	30	40	45	50	50	60	60
E ₁	—	—	—	—	—	—	—	—	20	30
F	45.5	45.5	45.5	54	64.5	85	113.5	113.5	162	162
F ₁	50	63	80	110	138	154	179	205	242.5	271.5
F ₂	118	101.5	122.5	170	202	221	256	286	300	336.5
F ₃	—	—	—	—	—	—	—	—	154	154
G	54.5	82	100	142	170	195	218	260	335	380
H	53.5	53.5	53.5	71.5	56	73	106	106	153	153
H ₂	126	138	173	248	312	348	400	457	555	645
H ₃	51	56	73	106	142	153	180	203	220	265
I	81	98.5	111	146	181	191	211	251	265	310
L	98	124	143	186	220	245	260	320	320	380
L ₁	35	37	57.5	66.5	74	78.5	83.5	91	250	310
M	52	63	95	140	200	220	240	270	340	400
N	90	110	140	220	270	310	330	360	440	520
O	8.5	8.5	10.5	10.5	12.5	16	18	22	26	33
O ₁	M6×9 (4holes)	M6×9 (4holes)	M8×14 (4holes)	M10×17 (4holes)	M12×21 (8holes)	M12×23 (8holes)	M14×23 (8holes)	M16×25 (8holes)	M16×30	M16×40
O ₂	8.5	6.5	10.5	12.5	12.5	16	18	22	22	—
P	32	32	32	37	46	68	83	83	98	98
Q	26	22.5	40	45	45	55	65	60	—	—
Q ₁	—	—	—	—	—	—	—	—	283	341
R	—	3	4	4	5	5	5	6	—	—
S	60	87	116	151	179.5	197.5	220	255	—	—
S ₁	—	65.5	86	110.5	131.5	137.5	145.5	155.5	—	—
T	87	90	150	176	230	255	290	350	—	—
T ₁	—	94	150	176	230	255	290	350	—	—
T ₂	65	94	85	130	165	215	215	265	300	400
U	110	125	180	210	280	320	350	400	—	—
U ₁	—	—	180	210	280	320	350	400	—	—
U ₂	80	107.5	105	160	200	250	250	300	350	450
V _{HB}	60	70	115	152	170	180	200	280	—	—
V _{1HB}	—	—	115	152	170	180	200	280	—	—
V _{2HB}	50	68	70	110	130	180	180	230	250	350
W	—	72	80	120	170	180	200	270	—	—
Z	9	12	11	15	20	20	22	22	—	—
Z ₁	—	8.5	11	15	20	20	22	22	—	—
Z ₂	10	12	12	14	15	18	20	22	25	30
kg	3.5	4.5	7.5	18.5	40	55.5	77	111	225	325

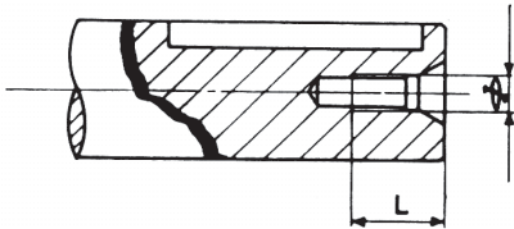
- The types 30/44 and 30/49 P have the M6x9 tapped holes placed in a circle by 45° from each other.

TABLE OF KEYWAY SIZES



	INPUT SHAFT								OUTPUT SHAFT							
	Ø	KEY	KEYWAY						Ø	KEY	KEYWAY					
	D	b×h	b	t	Tol.	t1	Tol.		D	b×h	b	t	Tol.	t1	Tol.	
VF 30	9	3×3	3	1.8		10.4			—	—	—	—	+0.1 0	—	+0.1 0	
VF44	11	4×4	4	2.5	+0.1 0	12.8	+0.1 0		18	6×6	6	3.5		20.8		
VF 49	16	5×5	5	3		18.3			25	8×7	8	4	+0.2 0	28.3	+0.2 0	
VF62	18	6×6	6	3.5		20.8			25	8×7	8	4		28.3		
VF86	25	8×7	8	4	+0.2 0	28.3	+0.2 0		35	10×8	10	5		38.3		
VF110	—	—	—	—		—			40	12×8	12	5		43.3		
VF130	30	8×7	8	4		33.3			45	14×9	14	5.5		48.8		
VF150	—	—	—	—		—			50	14×9	14	5.5		53.8		
VF185	—	—	—	—		—			60	18×11	18	7		64.4		
VF210	—	—	—	—		—			90	25×14	25	9		95.4		
VF250	—	—	—	—		—			110	28×16	28	10		116.4		

DIMENSIONS OF TAPPED HOLES ON INPUT AND OUTPUT SHAFTS



	INPUT SHAFT		OUTPUT SHAFT	
	Ø	L	Ø	L
VF 30	—	—	—	—
VF 44	—	—	M6	16
VF 49	M6	16	M8	20
VF 62	M6	16	M8	20
VF 86	M8	20	M10	25
VF 110	—	—	M12	32
VF 130	M8	20	M12	32
VF 150	—	—	M16	40
VF 185	—	—	M16	40
VF 210	—	—	M20	50
VF 250	—	—	M24	64

MAX. ADMISSIBLE RADIAL LOADS ON INPUT AND OUTPUT SHAFTS.

The values of radial and thrust loads are the same of the corresponding VF gearboxes (see page 30).

POSSIBLE ASSEMBLINGS

They are the same of the corresponding VF gearboxes and are on page 34.

Ofcourse they refer to the first gearboxes.

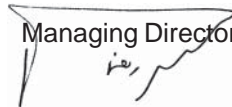
Dear Customer

Your propensity to choose our products is sincerely most of grateful. Quality promotion and achieving higher desirability needs useful and wise guidance, and any comment in this respect would be kindly appreciated.

Thank you in advance and we remain,

Yours very affectionately,

Saeid Rahnama
Managing Director

A handwritten signature in black ink, appearing to be 'Saeid Rahnama', is written over a rectangular box that contains the printed name and title.