GEARBOXES

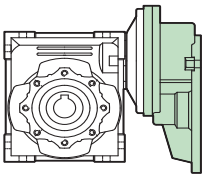
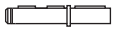
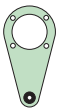
POWER AT WORK.

Worm
Gearboxes
Variators
Motors

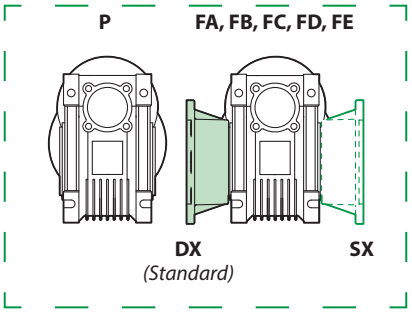
DIOGENE
your extra gear

Sati
Brain Power

Designazione / *Designation*

RIDUTTORE A VITE SENZA FINE CON PRECOPPIA / *HELICAL WORM GEARBOXES*									ACCESSORI / *ACCESSORIES*	
Riduttore *Gearbox*	Grandezza precoppia *Size pre-stage*	Grandezza riduttore *Size gearboxe*	Versione riduttore *Gearbox Version*	Posizione flangia uscita *Position Output flange*	Rapporto rid. = i *Ratio = i*	Predispos. attacco motore *Motor coupling*	Forma costruttiva *Version*	Posizione di montaggio *Mounting position*	Albero uscita *Output shaft*	Braccio di reazione *Torque arm*
VR	**063/ 040**		**P**	**-**	**R73.5**	**63**	**B5**	**U**	**AD**	**BR**
	**063/040** **063/050** **071/050** **071/063** **071/075** **080/075** **080/090** **080/110** **090/090** **090/110** **090/130**		**P** **FA** **FB** **FC** **FD** **FE**	**-** **DX** **SX**	**R61.2** **R73.5** **R75** **R88.2** **R90** **R98** **R117.5** **R120** **R122.5** **R147** **R150** **R176.4** **R180** **R235.2** **R240** **R294** **R300** (1) p.20	**63** **71** **80** **90**	**B5**	**U*** **B3** **B6** **B7** **B8** **V5** **V6** p.8	**AS**  **AD**  p.93	**BR**  p.93

Versione riduttore / *Gearbox version*



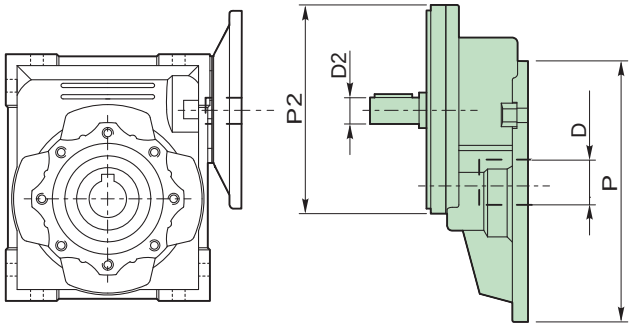
(1) Rapporti di riduzione reali del kit precoppia, consultare tab. p.20

* Dalla gr. 25 alla 63, i riduttori sono forniti in posizione U = Universale

(1) Actual reduction ratios, see table p.20

** From size 25 to 63, the gearboxes are supplied in position U = Universal*

Predisposizioni IEC / *IEC Pre-arrangements*



IEC: P / D

VR	CODICE / *CODE*	P	D	P2	D2
063/040 063/050	PR063A11	140	11	105	11
	PR063A14	140	11	105	14
071/050 071/063 071/075	PR071A14	160	14	120	14
	PR071A19	160	14	120	19
080/075 080/090 080/110	PR080A19	200	19	160	19
	PR080A24	200	19	160	24
090/090 090/110 090/130	PR090A24	200	24	160	24
	PR090A28	200	24	160	28

i = R1 x R2		Grandezza precoppia / *Size pre-stage*			
Grandezza riduttore *Size gearbox*		063	071	080	090
		IEC 140 / 11	IEC 160 / 14	IEC 200 /19	IEC 200 /24
	R2	R1 = 2.94	R1 = 2.94	R1 = 3	R1 = 2.45
VR ... / 040	25	i = 73.5			
	30	i = 88.2			
	40	i = 117.6			
	50	i = 147			
	60	i = 176.4			
	80	i = 235.2			
	100	i = 294			
VR ... / 050	25		i = 73.5		
	30		i = 88.2		
	40	i = 117.6	i = 117.6		
	50	i = 147	i = 147		
	60	i = 176.4	i = 176.4		
	80	i = 235.2	i = 235.2		
	100	i = 294			
VR ... / 063	25				
	30				
	40		i = 117.6		
	50		i = 147		
	60		i = 176.4		
	80		i = 235.2		
	100		i = 294		
VR ... / 075	25			i = 75	
	30			i = 90	
	40			i = 120	
	50		i = 147	i = 150	
	60		i = 176.4	i = 180	
	80		i = 235.2	i = 240	
	100		i = 294	i = 300	
VR ... / 090	25				i = 61.2
	30				i = 73.5
	40			i = 120	i = 98
	50			i = 150	i = 122.5
	60			i = 180	i = 147
	80			i = 240	
	100			i = 300	
VR ... /110	25				i = 61.2
	30				i = 73.5
	40				i = 98
	50				i = 122.5
	60				i = 147
	80			i = 240	i = 196
	100			i = 300	i = 245
VR ... / 130	25				
	30				
	40				
	50				
	60				
	80				i = 196
	100				i = 245

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.06								
M1 056 0.06 4P... (n1 = 1400 min^{-1})	**280**	2	6.2	5	**VP025**			439
	280	2	10.1	5	**VP030**			597
	186.7	3	4.2	7.5	**VP025**			503
	186.7	3	6.9	7.5	**VP030**			683
	140	3	3.5	10	**VP025**			553
	140	3	5.4	10	**VP030**			752
	93.3	5	2.5	15	**VP025**			633
	93.3	5	3.8	15	**VP030**			861
	70	6	2	20	**VP025**			697
	70	6	3	20	**VP030**			948
	56	7	3	25	**VP030**			1021
	46.7	8	1.6	30	**VP025**			798
	46.7	8	2.5	30	**VP030**			1085
	35	10	1.3	40	**VP025**			878
	35	10	1.9	40	**VP030**			1194
	28	12*	0.9*	50	**VP025**			946
	28	11	1.5	50	**VP030**			1286
	28	13	3.3	50	**VP040**			2475
	23.3	14*	0.7*	60	**VP025**			1006
	23.3	13	1.3	60	**VP030**			1367
	23.3	14	2.6	60	**VP040**			2630
	17.5	14*	0.9*	80	**VP030**			1504
	17.5	17	1.9	80	**VP040**			2895
	14	25	1.3	100			**VC025/030**	1620
	14	20	1.5	100	**VP040**			3118
	14	26	2.7	100			**VC030/040**	2769
	9.3	32*	0.9*	150			**VC025/030**	1830
	9.3	37	1.9	150			**VC030/040**	3169
	7	41*	0.7*	200			**VC025/030**	1830
	7	47	1.4	200			**VC030/040**	3488
	7	47	2.6	200			**VC030/050**	4788
	5.6	44*	0.8*	250			**VC025/030**	1830
	5.6	55	1.1	250			**VC030/040**	3490
	5.6	55	2	250			**VC030/050**	4840
	4.7	59	1.2	300			**VC025/040**	3490
	4.7	57	1.3	300			**VC030/040**	3490
	4.7	61	2.4	300			**VC030/050**	4840
	3.5	71*	0.9*	400			**VC025/040**	3490
	3.5	70*	0.9*	400			**VC030/040**	3490
	3.5	73	1.7	400			**VC030/050**	4840
	3.5	76	3.4	400			**VC030/063**	6270
	2.8	96*	0.6*	500			**VC030/040**	3490
	2.8	82*	0.7*	500			**VC025/040**	3490
	2.8	85	1.4	500			**VC030/050**	4840
	2.8	88	2.7	500			**VC030/063**	6270
	2.3	101*	0.6*	600			**VC025/040**	3490
	2.3	104*	0.7*	600			**VC030/040**	3490
	2.3	109	1.3	600			**VC030/050**	4840
	2.3	111	2.4	600			**VC030/063**	6270
	1.9	116*	0.5*	750			**VC025/040**	3490
	1.9	121*	0.6*	750			**VC030/040**	3490
	1.9	127	1.1	750			**VC030/050**	4840
	1.9	129	2.1	750			**VC030/063**	6270
	1.6	143*	0.5*	900			**VC025/040**	3490
	1.6	139*	0.5*	900			**VC030/040**	3490
	1.6	141	1	900			**VC030/050**	4840
	1.6	148	1.8	900			**VC030/063**	6270
	1.2	171*	0.4*	1200			**VC025/040**	3490
	1.2	166*	0.4*	1200			**VC030/040**	3490
	1.2	169*	0.7*	1200			**VC030/050**	4840
	1.2	180	1.5	1200			**VC030/063**	6270
	0.93	199*	0.7*	1500			**VC030/050**	4840
	0.9	197*	0.3*	1500			**VC025/040**	3490
	0.9	196*	0.4*	1500			**VC030/040**	3490
	0.9	204	1.1	1500			**VC030/063**	6270

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.06								
M1 056 0.06 4P... (n1 = 1400 min^{-1})	**0.9**	248	1.8	1500			**VC040/075**	7380
	0.9	259	2.7	1500			**VC040/090**	8180
	0.8	217*	0.3*	1800			**VC025/040**	3490
	0.8	218*	0.3*	1800			**VC030/040**	3490
	0.8	278	1.6	1800			**VC040/075**	7380
	0.8	291	2.4	1800			**VC040/090**	8180
	0.78	222*	0.7*	1800			**VC030/050**	4840
	0.78	225*	0.9*	1800			**VC030/063**	6270
	0.6	268*	0.2*	2400			**VC025/040**	3490
	0.6	266*	0.5*	2400			**VC030/050**	4840
	0.6	330	1.1	2400			**VC040/075**	7380
	0.6	359	1.7	2400			**VC040/090**	8180
	0.58	261*	0.2*	2400			**VC030/040**	3490
	0.58	276*	0.8*	2400			**VC030/063**	6270
	0.5	324*	0.2*	3000			**VC025/040**	3490
	0.5	307*	0.4*	3000			**VC030/050**	4840
	0.5	406	1.4	3000			**VC040/090**	8180
	0.47	319*	0.7*	3000			**VC030/063**	6270
	0.47	377*	0.8*	3000			**VC040/075**	7380
	0.4	294*	0.1*	4000			**VC025/040**	3490
	0.4	279*	0.1*	4000			**VC030/040**	3490
	0.4	300*	0.2*	3200			**VC030/040**	3490
	0.35	288*	0.3*	4000			**VC030/050**	4840
	0.35	306*	0.6*	4000			**VC030/063**	6270
	0.35	355*	0.7*	4000			**VC040/075**	7380
	0.35	365	1.3	4000			**VC040/090**	8180
	0.3	356*	0.1*	5000			**VC025/040**	3490
	0.29	311*	0.3*	4800			**VC030/050**	4840
	0.28	338*	0.1*	5000			**VC030/040**	3490
	0.28	360*	0.4*	5000			**VC030/063**	6270
	0.28	419*	0.5*	5000			**VC040/075**	7380
	0.28	431	1	5000			**VC040/090**	8180
0.09								
M1 056 0.09 2P.. (n1 = 2800 min^{-1})	**373.3**	2	3.9	7.5	**VP025**			399
	373.3	2	6.5	7.5	**VP030**			542
	280	2.6	3.4	10	**VP025**			439
	280	2.6	5	10	**VP030**			597
	186.7	3.8	2.4	15	**VP025**			503
	186.7	3.7	3.5	15	**VP030**			683
	140	4.9	1.8	20	**VP025**			553
	140	4.7	2.5	20	**VP030**			752
	112	5.9	1.5	25	**VP025**			590
	112	5.5	2.9	25	**VP030**			810
	93.3	6.4	2.3	30	**VP030**			861
	93.3	6.7	13	30	**VP025**			633
	70	8.5	1.1	40	**VP025**			697
	70	8	18	40	**VP030**			948
	56	10*	0.9*	50	**VP025**			751
	56	9.4	1.4	50	**VP030**			1021
	56	11	2.8	50	**VP040**			1964
	46.7	11*	0.7*	60	**VP025**			798
	46.7	10	1.1	60	**VP030**			1085
	46.7	12	2.3	60	**VP040**			2087
	35	13*	0.9*	80	**VP030**			1194
	35	15	1.7	80	**VP040**			2298
	28	17	1.4	100	**VP040**			2475
	28	18	1.6	100			**VC025/030**	1286
	18.7	25	1.1	150			**VC025/030**	1472
	14	31*	0.9*	200			**VC025/030**	1620
	14	39	1.8	100			**VC025/040**	2769
	9.3	54	1.2	150			**VC025/040**	3488
	9.3	43	1.6	300			**VC025/040**	3490
	7	70*	0.9*	200			**VC025/040**	3488
	7	52	1.2	400			**VC025/040**	3490
	5.6	83*	0.7*	250			**VC025/040**	3490
	5.6	71*	0.8*	500			**VC025/040**	3490

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.09								
M1 056 0.09 4P.. (n1 = 1400 min^{-1})	**280**	3	4.1	5	**VP025**			439
	280	3	6.7	5	**VP030**			597
	186.7	4	2.8	7.5	**VP025**			503
	186.7	4	4.6	7.5	**VP030**			683
	140	5	2.4	10	**VP025**			553
	140	5	3.6	10	**VP030**			752
	93.3	7	1.6	15	**VP025**			633
	93.3	7	2.5	15	**VP030**			861
	70	9	1.3	20	**VP025**			697
	70	9	2	20	**VP030**			948
	56	10	2	25	**VP030**			1021
	46.7	12	1.1	30	**VP025**			798
	46.7	12	1.7	30	**VP030**			1085
	35	15*	0.9*	40	**VP025**			878
	35	14	1.2	40	**VP030**			1194
	28	17	1	50	**VP030**			1286
	28	19	2	50	**VP040**			2475
	23.3	19*	0.9*	60	**VP030**			1367
	23.3	21	1.7	60	**VP040**			2630
	17.5	26	1.3	80	**VP040**			2895
	14	38	0.8	100			**VC025/030**	1620
	14	29	1	100	**VP040**			3118
	14	39	1.8	100			**VC030/040**	2769
	14	40	3.4	100			**VC030/050**	3800
	9.3	49*	0.6*	150			**VC025/030**	1830
	9.3	56	1.3	150			**VC030/040**	3169
	9.3	56	2.4	150			**VC030/050**	4350
	7	62*	0.5*	200			**VC025/030**	1830
	7	70*	0.9*	200			**VC030/040**	3488
	7	70	1.7	200			**VC030/050**	4788
	5.6	66*	0.5*	250			**VC025/030**	1830
	5.6	83*	0.7*	250			**VC030/040**	3490
	5.6	83	1.3	250			**VC030/050**	4840
	5.6	85	2.7	250			**VC030/063**	6270
	4.7	75*	0.4*	300			**VC025/030**	1830
	4.7	88*	0.8*	300			**VC030/040**	3490
	4.7	92	1.6	300			**VC030/050**	4840
	4.7	88	2.9	300			**VC030/063**	6270
	3.5	107*	0.3*	400			**VC025/030**	1830
	3.5	107	1.2	400			**VC030/050**	4840
	3.5	114	2.2	400			**VC030/063**	6270
	2.8	115*	0.3*	500			**VC025/030**	1830
	2.8	123	1	500			**VC030/050**	4840
	2.8	132	1.8	500			**VC030/063**	6270
	2.3	135*	0.2*	600			**VC025/030**	1830
	2.3	159*	0.9*	600			**VC030/050**	4840
	2.3	166	1.6	600			**VC030/063**	6270
	1.9	151*	0.2*	750			**VC025/030**	1830
	1.9	185*	0.8*	750			**VC030/050**	4840
	1.9	194	1.4	750			**VC030/063**	6270
	1.6	178*	0.2*	900			**VC025/030**	1830
	1.6	212*	0.7*	900			**VC030/050**	4840
	1.6	200	1	900			**VC030/063**	6270
	1.2	212*	0.1*	1200			**VC025/030**	1830
	1.2	263*	0.9*	1200			**VC030/063**	6270
	0.93	305*	0.7*	1500			**VC030/063**	6270
	0.9	247*	0.1*	1500			**VC025/030**	1830
	0.9	360	1.1	1500			**VC040/075**	7380
	0.78	304*	0.1*	1800			**VC025/030**	1830
	0.78	404	1	1800			**VC040/075**	7380
	0.58	340*	0.1*	2400			**VC025/030**	1830
	0.58	496*	0.7*	2400			**VC040/075**	7380
	0.5	609*	0.9*	3000			**VC040/090**	8180
	0.47	405*	0.1*	3000			**VC025/030**	1830
	0.35	548*	0.8*	4000			**VC040/090**	8180

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\mathbf{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.12								
M1 056 0.12 2P... (n1 = 2800 min^{-1})	**373.3**	2.7	3	7.5	**VP025**			399
	280	3.5	2.6	10	**VP025**			439
	186.7	5.1	1.8	15	**VP025**			503
	186.7	5	2.6	15	**VP030**			683
	140	6.5	1.4	20	**VP025**			553
	140	6	1.9	20	**VP030**			752
	112	7.9	1.1	25	**VP025**			590
	112	8	2.1	25	**VP030**			810
	93.3	9	1	30	**VP025**			633
	93.3	9	1.7	30	**VP030**			861
	70	11*	0.8*	40	**VP025**			697
	70	11	1.3	40	**VP030**			948
	56	13	1	50	**VP030**			1021
	56	14	2.1	50	**VP040**			1964
	46.7	14*	0.8*	60	**VP030**			1085
	46.7	16	1.7	60	**VP040**			2087
	35	20	1.3	80	**VP040**			2298
	28	23	1	100	**VP040**			2475
M1 063 0.12 4P.. (n1 = 1400 min^{-1})	**280**	4	5.1	5	**VP030**			597
	186.7	5	3.4	7.5	**VP030**			683
	140	7	2.7	10	**VP030**			752
	93.3	10	1.9	15	**VP030**			861
	70	12	1.5	20	**VP030**			948
	70	13	3.3	20	**VP040**			1824
	56	14	1.5	25	**VP030**			1021
	56	16	2.5	25	**VP040**			1964
	46.7	16	1.3	30	**VP030**			1085
	46.7	17	2.6	30	**VP040**			2087
	35	19*	0.9*	40	**VP030**			1194
	35	21	1.9	40	**VP040**			2298
	28	23*	0.8*	50	**VP030**			1286
	28	25	1.5	50	**VP040**			2475
	28	26	2.9	50	**VP050**			3397
	23.3	28	1.3	60	**VP040**			2630
	23.3	29	2.3	60	**VP050**			3610
	19.1	42	1.2	73.5		**VR063/040**		2833
	17.5	34	1	80	**VP040**			2895
	17.5	35	1.9	80	**VP050**			3973
	15.9	46	1.2	88.2		**VR063/040**		3011
	14	38*	0.8*	100	**VP040**			3118
	14	52	1.4	100			**VC030/040**	2769
	14	40	1.4	100	**VP050**			4280
	14	54	2.6	100			**VC030/050**	3800
	14	54	2.8	100			**VC030/063**	4967
	11.9	57*	0.9*	117.6		**VR063/040**		3314
	11.7	58	1.8	117.6		**VR063/050**		4548
	9.5	66*	0.7*	147		**VR063/040**		3490
	9.5	68	1.3	147		**VR063/050**		4840
	9.3	74	1	150			**VC030/040**	3169
	9.3	74	1.8	150			**VC030/050**	4350
	9.3	75	2.8	150			**VC030/063**	5686
	8	75	1.1	176.4		**VR063/050**		4840
	7.9	74*	0.6*	176.4		**VR063/040**		3490
	7	94	1.3	200			**VC030/050**	4788
	7	95	2.7	200			**VC030/063**	6259
	5.8	88*	0.8*	235.2		**VR063/050**		4840
	5.6	110	1	250			**VC030/050**	4840
	5.6	114	2	250			**VC030/063**	6270
	5.6	120	3.2	250			**VC040/075**	7380

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.12								
M1 063 0.12 4P.. (n1 = 1400 min^{-1})	**4.8**	98*	0.7*	294		**VR063/050**		4840
	4.7	119	1.2	300			**VC030/050**	4840
	4.7	117	2.2	300			**VC030/063**	6270
	4.7	134	3.3	300			**VC040/075**	7380
	3.5	142*	0.9*	400			**VC030/050**	4840
	3.5	152	1.7	400			**VC030/063**	6270
	3.5	164	2.5	400			**VC040/075**	7380
	2.8	164*	0.7*	500			**VC030/050**	4840
	2.8	171	1.3	500			**VC030/063**	6270
	2.8	188	2	500			**VC040/075**	7380
	2.8	202	2.8	500			**VC040/090**	8180
	2.3	208	1.1	600			**VC030/063**	6270
	2.3	248	1.8	600			**VC040/075**	7380
	2.3	260	2.7	600			**VC040/090**	8180
	1.9	241*	0.9*	750			**VC030/063**	6270
	1.9	299	1.5	750			**VC040/075**	7380
	1.9	313	2.2	750			**VC040/090**	8180
	1.6	297*	0.9*	900			**VC030/063**	6270
	1.6	325	1.2	900			**VC040/075**	7380
	1.6	350	2	900			**VC040/090**	8180
	1.2	360*	0.8*	1200			**VC030/063**	6270
	1.2	399*	0.9*	1200			**VC040/075**	7380
	1.2	434	1.6	1200			**VC040/090**	8180
	1.2	448	2.8	1200			**VC050/110**	10320
	0.9	495*	0.9*	1500			**VC040/075**	7380
	0.9	518	1.4	1500			**VC040/090**	8180
	0.9	527	2.4	1500			**VC050/110**	10320
	0.8	556*	0.8*	1800			**VC040/075**	7380
	0.8	547*	0.9*	1800			**VC040/090**	8180
	0.8	592	2.1	1800			**VC050/110**	10320
	0.6	766	1.5	2400			**VC050/110**	10320
	0.58	695*	0.9*	2400			**VC040/090**	8180
	0.5	884	1.2	3000			**VC050/110**	10320
	0.35	784	1	4000			**VC050/110**	10320
	0.28	928*	0.8*	5000			**VC050/110**	10320
M1 063 0.12 6P.. (n1 = 900 min^{-1})	**180**	5	3.7	5	**VP030**			692
	120	8	2.5	7.5	**VP030**			792
	90	10	2	10	**VP030**			871
	60	14	1.4	15	**VP030**			997
	60	15	3.3	15	**VP040**			1920
	45	18	1.1	20	**VP030**			1098
	45	19	2.5	20	**VP040**			2113
	36	20	1.1	25	**VP030**			1183
	36	23	1.9	25	**VP040**			2276
	30	23*	0.9*	30	**VP030**			1257
	30	25	1.9	30	**VP040**			2419
	22.5	29*	0.7*	40	**VP030**			1383
	22.5	32	1.4	40	**VP040**			2662
	22.5	32	2.6	40	**VP050**			3654
	18	36	1.2	50	**VP040**			2868
	18	38	2	50	**VP050**			3936
	15	41*	0.9*	60	**VP040**			3047
	15	42	1.7	60	**VP050**			4183
	12.3	62	1	73.5		**VR063/040**		3283
	11.3	50*	0.7*	80	**VP040**			3354
	11.3	50	1.4	80	**VP050**			4604
	10.2	68	1.1	88.2		**VR063/040**		3488
	9	56	1	100	**VP050**			4840
	7.7	83*	0.8*	117.6		**VR063/040**		3490
	7.7	84	1.5	117.6		**VR063/050**		4840
	6.1	97	1.2	147		**VR063/050**		4840
	5.1	108	1	176.4		**VR063/050**		4840
	3.8	125*	0.7*	235.2		**VR063/050**		4840

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\mathbf{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.18								
M1 063 0.18 2P.. (n1 = 2800 min^{-1})	**373.3**	4	3.2	7.5	**VP030**			542
	280	5.2	2.5	10	**VP030**			597
	186.7	7.4	1.8	15	**VP030**			683
	140	9.5	1.3	20	**VP030**			752
	140	10	2.8	20	**VP040**			1447
	112	11	1.4	25	**VP030**			810
	112	12	2.3	25	**VP040**			1559
	93.3	13	1.2	30	**VP030**			861
	93.3	14	2.5	30	**VP040**			1657
	70	16*	0.9*	40	**VP030**			948
	70	17	1.8	40	**VP040**			1824
	70	18	3.2	40	**VP050**			2503
	56	21	1.4	50	**VP040**			1964
	56	21	2.5	50	**VP050**			2696
	46.7	24	1.2	60	**VP040**			2087
	46.7	24	2.1	60	**VP050**			2865
	35	29*	0.8*	80	**VP040**			2298
	35	30	1.5	80	**VP050**			3153
	28	34	1.2	100	**VP050**			3397
M1 063 0.18 4P.. (n1 = 1400 min^{-1})	**280**	5	3.4	5	**VP030**			597
	186.7	8	2.3	7.5	**VP030**			683
	140	10	1.8	10	**VP030**			752
	93.3	14	1.3	15	**VP030**			861
	93.3	15	2.9	15	**VP040**			1657
	70	18	1	20	**VP030**			948
	70	19	2	20	**VP040**			1824
	56	21	1	25	**VP030**			1021
	56	23	1.7	25	**VP040**			1964
	46.7	24*	0.8*	30	**VP030**			1085
	46.7	26	1.7	30	**VP040**			2087
	35	32	1.3	40	**VP040**			2298
	35	33	2.3	40	**VP050**			3153
	28	38	1	50	**VP040**			2475
	28	39	1.9	50	**VP050**			3397
	23.3	43*	0.8*	60	**VP040**			2630
	23.3	43	1.6	60	**VP050**			3610
	19.1	64*	0.8*	73.5		**VR063/040**		2833
	17.5	52	1.2	80	**VP050**			3973
	15.9	70*	0.8*	88.2		**VR063/040**		3011
	14	78*	0.9*	100			**VC030/040**	2769
	14	60*	0.9*	100	**VP050**			4280
	14	81	1.7	100			**VC030/050**	3800
	14	81	1.9	100			**VC030/063**	4967
	11.9	85*	0.6*	117.6		**VR063/040**		3314
	11.9	87	1.1	117.6		**VR063/050**		4548
	9.5	101*	0.9*	147		**VR063/050**		4840
	9.3	112	1.2	150			**VC030/050**	4350
	9.3	113	1.9	150			**VC030/063**	5686
	7.9	113*	0.7*	176.4		**VR063/050**		4840
	7	141*	0.9*	200			**VC030/050**	4788
	7	143	1.8	200			**VC030/063**	6259
	7	150	2.8	200			**VC040/075**	7380
	5.8	133*	0.6*	235.2		**VR063/050**		4840

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.18								
M1 063 0.18 4P.. (n1 = 1400 min^{-1})	**5.6**	171	1.4	250			**VC030/063**	6270
	5.6	180	2.1	250			**VC040/075**	7380
	5.6	188	3	250			**VC040/090**	8180
	4.7	183*	0.8*	300			**VC030/050**	4840
	4.7	175	1.5	300			**VC030/063**	6270
	4.7	200	2.2	300			**VC040/075**	7380
	4.7	210	3.3	300			**VC040/090**	8180
	3.5	222	1	400			**VC030/063**	6270
	3.5	246	1.7	400			**VC040/075**	7380
	3.5	259	2.4	400			**VC040/090**	8180
	2.8	257*	0.8*	500			**VC030/063**	6270
	2.8	282	1.3	500			**VC040/075**	7380
	2.8	303	1.9	500			**VC040/090**	8180
	2.3	333*	0.8*	600			**VC030/063**	6270
	2.3	362	1.1	600			**VC040/075**	7380
	2.3	390	1.8	600			**VC040/090**	8180
	1.9	435*	0.9*	750			**VC040/075**	7380
	1.9	469	1.5	750			**VC040/090**	8180
	1.6	487*	0.8*	900			**VC040/075**	7380
	1.6	526	1.3	900			**VC040/090**	8180
	1.2	622*	0.7*	1200			**VC040/075**	7380
	1.2	629	1	1200			**VC040/090**	8180
	1.2	671	1.9	1200			**VC050/110**	10320
	0.9	735*	0.8*	1500			**VC040/090**	8180
	0.9	790	1.6	1500			**VC050/110**	10320
	0.8	874*	0.8*	1800			**VC040/090**	8180
	0.8	861	1.5	1800			**VC050/110**	10320
	0.58	1113	1.1	2400			**VC050/110**	10320
	0.5	1370*	0.8*	3000			**VC050/110**	10320
M1 071 0.18 6P.. (n1 = 900 min^{-1})	**90**	16	3	10	**VP040**			1677
	60	23	2.2	15	**VP040**			1920
	45	29	1.5	20	**VP040**			2113
	45	29	2.8	20	**VP050**			2900
	36	34	1.3	25	**VP040**			2276
	36	35	2.1	25	**VP050**			3124
	30	38	1.3	30	**VP040**			2419
	30	40	2.4	30	**VP050**			3320
	22.5	47	1	40	**VP040**			2662
	22.5	49	1.8	40	**VP050**			3654
	22.5	50	3.4	40	**VP063**			4776
	18	56	1.4	50	**VP050**			3936
	18	59	2.7	50	**VP063**			5145
	15	63	1.1	60	**VP050**			4183
	15	66	2.1	60	**VP063**			5467
	15	66	2.1	60	**VP075**			5467
	12.2	95	1.2	73.5		**VR071/050**		4506
	11.3	75*	0.9*	80	**VP050**			4604
	11.3	79	1.6	80	**VP063**			6018
	11.3	79	1.6	80	**VP075**			6018
	10.2	105	1.4	88.2		**VR071/050**		4788
	9	90	1.4	100	**VP063**			6270
	9	90	1.4	100	**VP075**			6270
	7.7	126	1	117.6		**VR071/050**		4840
	7.7	131	1.8	117.6		**VR071/063**		6270
	6.1	152	1.4	147		**VR071/063**		6270
	6	148*	0.8*	147		**VR071/050**		
	5.1	168	1.2	176.4		**VR071/063**		6270
	5.1	179	1.7	176.4		**VR071/075**		7380
	3.8	197*	0.9*	235.2		**VR071/063**		6270
	3.8	211	1.2	235.2		**VR071/075**		7380
	3.1	218*	0.7*	294		**VR071/063**		6270
	3.1	235	1	294		**VR071/075**		7380

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.25								
M1 063 0.25 2P.. (n1 = 2800 min^{-1})	**373.3**	5.6	2.3	7.5	**VP030**			542
	280	7.2	1.8	10	**VP030**			597
	186.7	10	1.3	15	**VP030**			683
	186.7	11	2.9	15	**VP040**			1315
	140	13*	0.9*	20	**VP030**			752
	140	14	2	20	**VP040**			1447
	112	15	1	25	**VP030**			810
	112	17	1.6	25	**VP040**			1559
	93.3	18*	0.8*	30	**VP030**			861
	93.3	20	1.7	30	**VP040**			1657
	70	25	1.2	40	**VP040**			1824
	70	25	2.3	40	**VP040**			2503
	56	29	1	50	**VP040**			1964
	56	30	1.8	50	**VP040**			2696
	46.7	34*	0.8*	60	**VP040**			2087
	46.7	34	1.5	60	**VP040**			2865
	35	42	1.1	80	**VP040**			3153
	28	48*	0.8*	100	**VP040**			3397
	7	150	1.4	400			**VC030/063**	6270
	5.6	175	1.2	500			**VC030/063**	6270
M1 071 0.25 4P.. (n1 = 1400 min^{-1})	**280**	8	4.5	5	**VP040**			1149
	186.7	11	3.6	7.5	**VP040**			1315
	140	14	2.8	10	**VP040**			1447
	93.3	21	1.9	15	**VP040**			1657
	70	27	1.5	20	**VP040**			1824
	70	27	2.7	20	**VP050**			2503
	56	32	1.2	25	**VP040**			1964
	56	32	2.2	25	**VP050**			2696
	46.7	36	1.3	30	**VP040**			2087
	46.7	37	2.3	30	**VP050**			2865
	35	44*	0.9*	40	**VP040**			2298
	35	46	1.7	40	**VP050**			3153
	35	48	3.1	40	**VP063**			4122
	28	54	1.4	50	**VP050**			3397
	28	56	2.4	50	**VP063**			4440
	23.3	60	1.1	60	**VP050**			3610
	23.3	63	2	60	**VP063**			4719
	23.3	68	3.2	60	**VP075**			5569
	19	88	1	73.5		**VR071/050**		3889
	17.5	72*	0.9*	80	**VP050**			3973
	17.5	78	1.6	80	**VP063**			5193
	17.5	82	2.3	80	**VP075**			6130
	15.9	98	1.1	88.2		**VR071/050**		4132
	14	87	1.4	100	**VP063**			5595
	14	94	1.9	100	**VP075**			6603
	11.9	121*	0.8*	117.6		**VR071/050**		4548
	11.9	125	1.5	117.6		**VR071/063**		5945
	9.5	143	1.2	147		**VR071/063**		6270
	9.5	151	1.7	147		**VR071/075**		7380
	7.9	163	1	176.4		**VR071/063**		6270
	7.9	172	1.4	176.4		**VR071/075**		7380
	7	209	2	200			**VC040/075**	7380
	7	217	2.8	200			**VC040/090**	8174
	6	192*	0.7*	235.2		**VR071/063**		6270
	6	201	1.1	235.2		**VR071/075**		7380
	5.6	250	1.5	250			**VC040/075**	7380
	5.6	261	2.2	250			**VC040/090**	8180
	4.8	215*	0.6*	294		**VR071/063**		6270
	4.8	230*	0.9*	294		**VR071/075**		7380
	4.7	278	1.6	300			**VC040/075**	7380

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\mathbf{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.25								
M1 071 0.25 4P.. (n1 = 1400 min^{-1})	**4.7**	291	2.4	300			**VC040/090**	8180
	3.5	336	1.1	400			**VC040/075**	7380
	3.5	359	1.7	400			**VC040/090**	8180
	3.5	386	3.1	400			**VC050/110**	10320
	2.8	384*	0.8*	500			**VC040/075**	7380
	2.8	420	1.3	500			**VC040/090**	8180
	2.8	512	2.3	500			**VC050/110**	10320
	2.8	460	3.4	500			**VC063/130**	13500
	2.3	517*	0.9*	600			**VC040/075**	7380
	2.3	512	1.2	600			**VC040/090**	8180
	2.3	548	2.3	600			**VC050/110**	10320
	2.3	571	3.1	600			**VC063/130**	13500
	1.9	622*	0.7*	750			**VC040/075**	7380
	1.9	598*	0.9*	750			**VC040/090**	8180
	1.9	660	1.9	750			**VC050/110**	10320
	1.9	687	2.6	750			**VC063/130**	13500
	1.9	666	3.5	750			**VC063/150**	18000
	1.6	667*	0.8*	900			**VC040/090**	8180
	1.6	751	1.7	900			**VC050/110**	10320
	1.6	783	2.2	900			**VC063/130**	13500
	1.6	840	2.5	900			**VC063/150**	18000
	1.2	905*	0.8*	1200			**VC040/090**	8180
	1.2	943	1.3	1200			**VC050/110**	10320
	1.2	988	1.8	1200			**VC063/130**	13500
	1.2	1013	2.6	1200			**VC063/150**	18000
	0.93	1064	1.2	1500			**VC050/110**	10320
	0.9	1165	1.5	1500			**VC063/130**	13500
	0.8	1315	1.3	1800			**VC063/130**	13500
	0.8	1199	1.8	1800			**VC063/150**	18000
	0.78	1195	1.1	1800			**VC050/110**	10320
	0.6	1676*	0.7*	2400			**VC050/110**	10320
	0.6	1624	1	2400			**VC063/130**	13500
	0.6	1446	1.8	2400			**VC063/150**	18000
	0.5	1713	1.4	3000			**VC063/150**	18000
	0.47	1935*	0.8*	3000			**VC063/130**	13500
	0.4	2026*	0.9*	4000			**VC063/150**	18000
	0.35	2046*	0.6*	4000			**VC063/130**	13500
	0.3	2251*	0.7*	5000			**VC063/150**	18000
	0.28	2430*	0.5*	5000			**VC063/130**	13500
M1 071 0.25 6P.. (n1 = 900 min^{-1})	**180**	12	3.5	5	**VP040**			1331
	120	17	2.6	7.5	**VP040**			1524
	90	22	2	10	**VP040**			1677
	60	31	1.4	15	**VP040**			1920
	60	32	2.9	15	**VP050**			2635
	45	40	1.1	20	**VP040**			2113
	45	40	1.9	20	**VP050**			2900
	36	48*	0.9*	25	**VP040**			2276
	36	48	1.5	25	**VP050**			3124
	36	50	3	25	**VP063**			4084
	30	53*	0.9*	30	**VP040**			2419
	30	54	1.7	30	**VP050**			3320
	30	57	3.1	30	**VP063**			4339
	22.5	67*	0.7*	40	**VP040**			2662
	22.5	67	1.2	40	**VP050**			3654
	22.5	70	2.4	40	**VP063**			4776
	18	78	1	50	**VP050**			3936
	18	81	1.8	50	**VP063**			5145
	18	85	3	50	**VP075**			6073
	15	88*	0.8*	60	**VP050**			4183
	15	92	1.5	60	**VP063**			5467

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\mathbf{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.25								
M1 071 0.25 6P.. (n1 = 900 min^{-1})	**15**	99	2.5	60	**VP075**			6453
	11.3	110	1.2	80	**VP063**			6018
	11.3	117	1.7	80	**VP075**			7103
	9	125	1	100	**VP063**			6270
	9	133	1.4	100	**VP075**			7380
	7.7	181	1.3	117.6		**VR071/063**		6270
	6.1	211	1	147		**VR071/063**		6270
	6.1	219	1.5	147		**VR071/075**		7380
	5.1	248	1.2	176.4		**VR071/075**		7380
0.37								
M1 071 0.37 2P.. (n1 = 2800 min^{-1})	**373.3**	8.3	3.4	7.5	**VP040**			1044
	280	11	2.6	10	**VP040**			1149
	186.7	16	1.9	15	**VP040**			1315
	140	20	1.4	20	**VP040**			1447
	112	25	1.1	25	**VP040**			1559
	112	25	2	25	**VP050**			2140
	93.3	29	1.2	30	**VP040**			1657
	93.3	29	2.2	30	**VP050**			2274
	70	37*	0.8*	40	**VP040**			1824
	70	37	1.6	40	**VP050**			2503
	70	38	2.9	40	**VP063**			3272
	56	44	1.2	50	**VP050**			2696
	56	45	2.3	50	**VP063**			3524
	56	47	3.5	50	**VP075**			4160
	46.7	50	1	60	**VP050**			2865
	46.7	52	1.9	60	**VP063**			3745
	46.7	55	2.9	60	**VP075**			4421
	35	62*	0.7*	80	**VP050**			3153
	35	65	1.4	80	**VP063**			4122
	35	68	2.1	80	**VP075**			4865
	28	74	1.1	100	**VP063**			4440
	28	78	1.7	100	**VP075**			5241
M1 071 0.37 4P.. (n1 = 1400 min^{-1})	**280**	11	3	5	**VP040**			1149
	186.7	16	2.4	7.5	**VP040**			1315
	140	21	1.9	10	**VP040**			1447
	140	22	3.3	10	**VP050**			1987
	93.3	31	1.3	15	**VP040**			1657
	93.3	31	2.4	15	**VP050**			2274
	70	39	1	20	**VP040**			1824
	70	40	1.8	20	**VP050**			2503
	56	47*	0.8*	25	**VP040**			1964
	56	48	1.5	25	**VP050**			2696
	56	50	2.7	25	**VP063**			3524
	46.7	53*	0.8*	30	**VP040**			2087
	46.7	55	1.5	30	**VP050**			2865
	46.7	57	2.8	30	**VP063**			3745
	35	68	1.1	40	**VP050**			3153
	35	71	2.1	40	**VP063**			4122
	35	74	3.3	40	**VP075**			4865
	28	80*	0.9*	50	**VP050**			3397
	28	83	1.6	50	**VP063**			4440
	28	88	2.5	50	**VP075**			5241
	23.3	89*	0.8*	60	**VP050**			3610
	23.3	94	1.4	60	**VP063**			4719
	23.3	98	2.0	60	**VP075**			5569

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.37								
M1 071 0.37 4P.. (n1 = 1400 min^{-1})	**17.5**	115	1.1	80	**VP063**			5193
	17.5	121	1.6	80	**VP075**			6130
	14	129*	0.9*	100	**VP063**			5595
	14.0	139	1.3	100	**VP075**			6603
	11.9	185	1	117.6		**VR071/063**		5945
	9.5	212*	0.8*	147		**VR071/063**		6270
	9.5	223	1.1	147		**VR071/075**		7380
	7.9	254*	0.9*	176.4		**VR071/075**		7380
	7	309	1.4	200			**VC040/075**	7380
	7	322	1.9	200			**VC040/090**	8174
	7	338	3.4	200			**VC050/110**	10320
	5.6	370	1	250			**VC040/075**	7380
	5.6	386	1.5	250			**VC040/090**	8180
	5.6	412	2.8	250			**VC050/110**	10320
	4.7	405	1	300			**VC040/075**	7380
	4.7	402	1.5	300			**VC040/090**	8180
	4.7	441	2.9	300			**VC050/110**	10320
	3.5	498*	0.7*	400			**VC040/075**	7380
	3.5	523	1.2	400			**VC040/090**	8180
	3.5	571	2.1	400			**VC050/110**	10320
	3.5	571	2.9	400			**VC063/130**	13500
	2.8	611*	0.9*	500			**VC040/090**	8180
	2.8	757	1.5	500			**VC050/110**	10320
	2.8	681	2.3	500			**VC063/130**	13500
	2.8	681	3.4	500			**VC063/150**	18000
	2.3	757*	0.8*	600			**VC040/090**	8180
	2.3	812	1.6	600			**VC050/110**	10320
	2.3	844	2.1	600			**VC063/130**	13500
	2.3	840	3.2	600			**VC063/150**	18000
	1.9	950	1.3	750			**VC050/110**	10320
	1.9	1017	1.7	750			**VC063/130**	13500
	1.9	986	2.4	750			**VC063/150**	18000
	1.6	1079	1.2	900			**VC050/110**	10320
	1.6	1158	1.5	900			**VC063/130**	13500
	1.6	1244	1.7	900			**VC063/150**	18000
	1.2	1396*	0.8*	1200			**VC050/110**	10320
	1.2	1462	1.2	1200			**VC063/130**	13500
	1.2	1499	1.8	1200			**VC063/150**	18000
	0.9	1623*	0.8*	1500			**VC050/110**	10320
	0.9	1674	1.1	1500			**VC063/130**	13500
	0.8	1887*	0.9*	1800			**VC063/130**	13500
	0.8	1775	1.2	1800			**VC063/150**	18000
	0.6	2141	1.2	2400			**VC063/150**	18000
	0.5	2535*	0.9*	3000			**VC063/150**	18000

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.37								
M1 080 0.37 6P.. ($n1 = 900\ min^{-1}$)	**180**	17	4.3	5	**VP050**			1827
	120	25	3.3	7.5	**VP050**			2091
	90	33	2.5	10	**VP050**			2302
	60	47	1.8	15	**VP050**			2635
	45	60	1.3	20	**VP050**			2900
	45	60	2.4	20	**VP063**			3791
	36	72	1	25	**VP050**			3124
	36	74	1.9	25	**VP063**			4084
	36	77	3.1	25	**VP075**			4820
	30	80	1.1	30	**VP050**			3320
	30	82	2.1	30	**VP063**			4339
	30	87	3.3	30	**VP075**			5122
	22.5	102	1.6	40	**VP063**			4776
	22.5	108	2.6	40	**VP075**			5637
	18	120	1.2	50	**VP063**			5145
	18	126	1.8	50	**VP075**			6073
	18	136	3.2	50	**VP090**			6719
	15	137	1	60	**VP063**			5467
	15	144	1.5	60	**VP075**			6453
	15	153	2.5	60	**VP090**			7140
	12	206	1.6	75		**VR080/075**		6952
	11.3	167*	0.8*	80	**VP063**			6018
	11.3	173	1.2	80	**VP075**			7103
	11.3	185	1.7	80	**VP090**			7859
	11.3	201	2.8	80	**VP110**			9931
	10	260	1.7	90		**VR080/075**		7380
	9	196	1	100	**VP075**			7380
	9	212	1.3	100	**VP090**			8180
	9	232	2.2	100	**VP110**			10320
	7.5	283	1.3	120		**VR080/075**		7380
	6	324	1	150		**VR080/075**		7380
	6	347	1.6	150		**VR080/090**		8180
	5	389	1.3	180		**VR080/090**		8180
	3.8	471	1.0	240		**VR080/090**		8180
	3.8	509	1.6	240		**VR080/110**		10320
	3	577	1.3	300		**VR080/110**		10320

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.55								
M1 071 0.55 2P.. (n1 = 2800 min^{-1})	**373**	12	2.3	7.5	**VP040**			1044
	280	16	1.8	10	**VP040**			1149
	280	17	3.2	10	**VP050**			1577
	187	24	1.3	15	**VP040**			1315
	186.7	24	2.4	15	**VP050**			18,5
	140	30	1	20	**VP040**			1447
	140	31	1.7	20	**VP050**			1987
	140	32	3.3	20	**VP063**			2597
	112	37*	0.8*	25	**VP040**			1559
	112	38	1.4	25	**VP050**			2140
	112	39	2.5	25	**VP063**			2797
	93.3	43*	0.8*	30	**VP040**			1657
	93.3	43	1.5	30	**VP050**			2274
	93.3	44	2.7	30	**VP063**			2973
	70	55	1.1	40	**VP050**			2503
	70	56	1.9	40	**VP063**			3272
	70	59	3.1	40	**VP075**			3862
	56	65*	0.8*	50	**VP050**			2696
	56	68	1.5	50	**VP063**			3524
	56	70	2.3	50	**VP075**			4160
	46.7	74*	0.7*	60	**VP050**			2865
	46.7	78	1.2	60	**VP063**			3745
	46.7	81	2	60	**VP075**			4421
	35	96*	0.9*	80	**VP063**			4122
	35	99	1.3	80	**VP075**			4865
	28	111*	0.7*	100	**VP063**			4440
	28	116	1	100	**VP075**			5241
M1 080 0.55 4P.. (n1 = 1400 min^{-1})	**280**	17	3.7	5	**VP050**			1577
	186.7	25	2.9	7.5	**VP050**			1805
	140	32	2.2	10	**VP050**			1987
	93.3	46	1.6	15	**VP050**			2274
	93.3	47	3.2	15	**VP063**			2973
	70	59	1.2	20	**VP050**			2503
	70	61	2.2	20	**VP063**			3272
	56	71	1	25	**VP050**			2696
	56	73	1.8	25	**VP063**			3524
	56	76	2.8	25	**VP075**			4160
	46.7	81	1	30	**VP050**			2865
	46.7	83	1.9	30	**VP063**			3745
	46.7	87	2.9	30	**VP075**			4421
	35	97	0.8*	40	**VP050**			3153
	35	105	1.4	40	**VP063**			4122
	35	108	2	40	**VP075**			4865
	35	114	3.5	40	**VP090**			5383
	28	124	1.1	50	**VP063**			4440
	28	129	1.6	50	**VP075**			5241
	28	137	2.7	50	**VP090**			5799
	23.3	140*	0.9*	60	**VP063**			4719
	23.3	146	1.4	60	**VP075**			5569
	23.3	158	2.2	60	**VP090**			6163
	18.7	205	1.2	75		**VR080/075**		6000
	17.5	180	1.1	80	**VP075**			6130
	17.5	189	1.5	80	**VP090**			6783
	17.5	201	2.6	80	**VP110**			8571
	15.6	230	1.3	90		**VR080/075**		6375
	14	206*	0.9*	100	**VP075**			6603
	14	221	1.2	100	**VP090**			7306
	14	236	2	100	**VP110**			9232
	14	268	2.4	100			**VC050/110**	10320

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.55								
M1 080 0.55 4P.. (n1 = 1400 min^{-1})	**11.7**	284	1	120		**VR080/075**		7017
	11.7	297	1.6	120		**VR080/090**		7764
	9.3	332*	0.8*	150		**VR080/075**		7380
	9.3	355	1.3	150		**VR080/090**		8180
	9.3	387	2.4	150			**VC050/110**	10320
	7.8	398	1	180		**VR080/090**		8180
	7	503	2.3	200			**VC050/110**	10320
	5.8	513	1.3	240		**VR080/110**		10320
	5.6	612	1.9	250			**VC050/110**	10320
	5.6	612	2.5	250			**VC063/130**	13500
	4.7	597	1	300		**VR080/110**		10320
	4.7	639	2	300			**VC050/110**	10320
	4.7	666	2.6	300			**VC063/130**	13500
	3.5	826	1.4	400			**VC050/110**	10320
	3.5	849	1.9	400			**VC063/130**	13500
	2.8	984	1.1	500			**VC050/110**	10320
	2.8	996	1.6	500			**VC063/130**	13500
	2.3	1181	1	600			**VC050/110**	10320
	1.9	1411*	0.9*	750			**VC050/110**	10320
	1.9	1471	1.2	750			**VC063/130**	13500
	1.6	1651*	0.8*	900			**VC050/110**	10320
	1.2	2132*	0.8*	1200			**VC063/130**	13500
	0.8	2638*	0.8*	1800			**VC063/150**	18000
	0.6	3182*	0.8*	2400			**VC063/150**	18000
M1 080 0.55 6P.. (n1 = 900 min^{-1})	**120**	38	2.2	7.5	**VP050**			2091
	90	49	1.7	10	**VP050**			2302
	90	50	3.1	10	**VP063**			3009
	60	69	1.2	15	**VP050**			2635
	60	71	2.2	15	**VP063**			3444
	45	89*	0.9*	20	**VP050**			2900
	45	90	1.6	20	**VP063**			3791
	45	93	2.9	20	**VP075**			4474
	36	109	1.3	25	**VP063**			4084
	36	124	2.1	25	**VP075**			4820
	36	117	3.5	25	**VP090**			5333
	30	123	1.4	30	**VP063**			4339
	30	128	2	30	**VP075**			5122
	22.5	152	1.1	40	**VP063**			4776
	22.5	159	1.5	40	**VP075**			5637
	22.5	168	2.7	40	**VP090**			6238
	18	181*	0.9*	50	**VP063**			5145
	18	187	1.2	50	**VP075**			6073
	18	198	2	50	**VP090**			6719
	15	207*	0.7*	60	**VP063**			5467
	15	214	1	60	**VP075**			6453
	15	224	1.6	60	**VP090**			7140
	15	242	2.8	60	**VP110**			9023
	12	306	1.1	75		**VR080/075**		6952
	11.3	262*	0.8*	80	**VP075**			7103
	11.3	275	1.1	80	**VP090**			7859
	11.3	294	1.9	80	**VP110**			9931
	10	341	1.1	90		**VR080/075**		7380
	9	315*	0.9*	100	**VP090**			8180
	9	338	1.5	100	**VP110**			10320
	7.5	441	1.4	120		**VR080/090**		8180
	6	516	1.1	150		**VR080/090**		8180
	5	578*	0.9*	180		**VR080/090**		8180
	3.8	756	1.1	240		**VR080/110**		10320

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.75								
M2 080 0.75 2P.. (n1 = 2800 min^{-1})	**373.3**	17	3	7.5	**VP050**			1433
	280	22	2.4	10	**VP050**			1577
	186.7	31	1.7	15	**VP050**			1805
	186.7	33	3.3	15	**VP063**			2359
	140	41	1.3	20	**VP050**			1987
	140	43	2.3	20	**VP063**			2597
	112	49	1	25	**VP050**			2140
	112	52	1.8	25	**VP063**			2797
	112	54	2.9	25	**VP075**			3302
	93.3	56	1.1	30	**VP050**			2274
	93.3	60	2	30	**VP063**			2973
	93.3	62	3	30	**VP075**			3509
	70	73	0.8*	40	**VP050**			2503
	70	77	1.4	40	**VP063**			3272
	70	80	2.3	40	**VP075**			3862
	70	82	3.4	40	**VP090**			4273
	56	92	1.1	50	**VP063**			3524
	56	96	1.7	50	**VP075**			4160
	56	99	2.7	50	**VP090**			4603
	46.7	106*	0.9*	60	**VP063**			3745
	46.7	107	1.3	60	**VP075**			4421
	46.7	115	2.1	60	**VP090**			4891
	35	135	1	80	**VP075**			4865
	35	143	1.6	80	**VP090**			5383
	35	152	2.6	80	**VP110**			6803
	28	159*	0.8*	100	**VP075**			5241
	28	169	1.2	100	**VP090**			5799
	28	179	2.1	100	**VP110**			7328
	9.3	424	2.8	300			**VC050/110**	10320
	7	553	2.1	400			**VC050/110**	10320
	5.6	640	1.6	500			**VC050/110**	10320
M2 080 0.75 4P.. (n1 = 1400 min^{-1})	**280**	23	2.7	5	**VP050**			1577
	186.7	34	2.1	7.5	**VP050**			1805
	140	44	1.6	10	**VP050**			1987
	140	45	3	10	**VP063**			2567
	93.3	63	1.2	15	**VP050**			2274
	93.3	64	2.2	15	**VP063**			2973
	93	66	3.5	15	**VP075**			3509
	70	81*	0.9*	20	**VP050**			2503
	70	83	1.6	20	**VP063**			3272
	70	85	2.8	20	**VP075**			3862
	56	99*	0.7*	25	**VP050**			2696
	56	100	1.3	25	**VP063**			3524
	56	102	2	25	**VP075**			4160
	46.7	112*	0.8*	30	**VP050**			2865
	46.7	114	1.4	30	**VP063**			3745
	46.7	117	2	30	**VP075**			4421
	35	97	0.8*	40	**VP050**			2298
	35	143	1	40	**VP063**			4122
	35	147	1.5	40	**VP075**			4865
	35.0	156	3	40	**VP090**			5383
	28	171*	0.8*	50	**VP063**			4440
	28	177	1.2	50	**VP075**			5241
	28	184	1.8	50	**VP090**			5800
	28	194	3.4	50	**VP110**			7328
	23.3	200	1	60	**VP075**			5569
	23.3	212	1.5	60	**VP090**			6163
	23.3	227	2.7	60	**VP110**			7787
	18.7	280*	0.9*	75		**VR080/075**		6000
	17.5	258	1.1	80	**VP090**			6783
	17.5	274	1.9	80	**VP110**			8571
	17.5	250	80	80	**VP075**			6130
	15.6	313	1	90		**VR080/075**		6375

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\mathbf{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
0.75								
M2 080 0.75 4P.. (n1 = 1400 min^{-1})	**14**	302*	0.9*	100	**VP090**			7306
	14	322	1.5	100	**VP110**			9232
	14	365	1.8	100			**VC050/110**	8198
	11.7	405	1.2	120		**VR080/090**		7764
	9.3	483*	0.9*	150		**VR080/090**		8180
	9.3	527	1.8	150			**VC050/110**	9384
	7.8	543*	0.7*	180		**VR080/090**		8180
	7	685	1.7	200			**VC050/110**	10320
	5.8	700*	0.9*	240		**VR080/110**		10320
	5.6	835	1.4	250			**VC050/110**	10320
	5.6	835	1.8	250			**VC063/130**	13500
	5.6	835	2.5	250			**VC063/150**	18000
	4.7	871	1.5	300			**VC050/110**	10320
	4.7	908	1.9	300			**VC063/130**	13500
	4.7	993	2.3	300			**VC063/150**	18000
	3.5	1126	1.1	400			**VC050/110**	10320
	3.5	1157	1.4	400			**VC063/130**	13500
	3.5	1175	2.3	400			**VC063/150**	18000
	2.8	1535*	0.8*	500			**VC050/110**	10320
	2.8	1358	1.1	500			**VC063/130**	13500
	2.8	1291	1.8	500			**VC063/150**	18000
	2.3	1645*	0.8*	600			**VC050/110**	10320
	2.3	1631	1	600			**VC063/130**	13500
	2.3	1529	1.7	600			**VC063/150**	18000
	1.9	2005*	0.9*	750			**VC063/130**	13500
	1.9	1783	1.3	750			**VC063/150**	18000
	1.6	2283*	0.8*	900			**VC063/130**	13500
	1.6	2215*	0.9*	900			**VC063/150**	18000
	1.2	2680	1	1200			**VC063/150**	18000
M2 090 0.75 6P.. (n1 = 900 min^{-1})	**120**	52	2.9	7.5	**VP063**			2734
	90	68	2.3	10	**VP063**			3009
	60	97	1.6	15	**VP063**			3444
	60	98	2.4	15	**VP075**			4065
	45	123	1.2	20	**VP063**			3791
	45	126	1.9	20	**VP075**			4474
	36	149*	0.9*	25	**VP063**			4084
	36	153	1.4	25	**VP075**			4820
	30	167	1	30	**VP063**			4339
	30	174	1.5	30	**VP075**			5122
	30	179	2.6	30	**VP090**			5667
	22.5	210*	0.8*	40	**VP063**			4776
	22.5	216	1.1	40	**VP075**			5637
	22.5	226	1.8	40	**VP090**			6238
	22.5	239	3.3	40	**VP110**			9931
	18	255	1	50	**VP075**			6073
	18	271	1.4	50	**VP090**			6719
	18	287	2.6	50	**VP110**			10320
	15	296*	0.8*	60	**VP075**			6453
	15	306	1.1	60	**VP090**			7140
	15	325	2.1	60	**VP110**			9023
	12.2	393	3.2	73.5		**VR090/110**		9614
	11.3	401	1.4	80	**VP110**			9931
	11.3	407	2.1	80	**VP130**			12989
	9.2	508	2.3	98		**VR090/110**		10320
	9	462	1.1	100	**VP110**			10320
	9	470	1.7	100	**VP130**			13500
	7.3	607	1.8	122.5		**VR090/110**		10320
	6.1	682	1.5	147		**VR090/110**		10320
	4.6	832	1.0	196		**VR090/110**		10320
	3.7	944	1.2	245		**VR090/130**		13500

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
1.10								
M2 080 1.10 2P.. (n1 = 2800 min^{-1})	**373.3**	25	2.1	7.5	**VP050**			1433
	280	33	1.7	10	**VP050**			1577
	280	33	3	10	**VP063**			2061
	186.7	48	1.2	15	**VP050**			1805
	186.7	46	2.1	15	**VP063**			2359
	186.7	50	3.3	15	**VP075**			2785
	140	62*	0.9*	20	**VP050**			1987
	140	60	1.6	20	**VP063**			2597
	140	65	2.7	20	**VP075**			3065
	112	72	1.2	25	**VP063**			2797
	112	77	2	25	**VP075**			3302
	112	81	3.1	25	**VP090**			3653
	93.3	87*	0.7*	30	**VP050**			2274
	93.3	82	1.4	30	**VP063**			2973
	93.3	89	1.9	30	**VP075**			3509
	93.3	93	3.3	30	**VP090**			3882
	70	104	1	40	**VP063**			3272
	70	114	1.4	40	**VP075**			3862
	70	120	2.3	40	**VP090**			4273
	56	137	1.1	50	**VP075**			4160
	56	145	1.8	50	**VP090**			4603
	56	150	3.3	50	**VP110**			5816
	46.7	158*	0.9*	60	**VP075**			4421
	46.7	169	1.5	60	**VP090**			4891
	46.7	176	2.7	60	**VP110**			6181
	35	201*	0.7*	80	**VP075**			4865
	35	210	1.1	80	**VP090**			5383
	35	222	1.8	80	**VP110**			6803
	28	248*	0.8*	100	**VP090**			5799
	28	263	1.4	100	**VP110**			7328
M2 090 1.10 6P.. (n1 = 900 min^{-1})	**120**	76	2	7.5	**VP063**			2734
	120	77	2.8	7.5	**VP075**			3227
	90	99	1.5	10	**VP063**			3009
	90	100	2.3	10	**VP075**			3551
	60	142	1.1	15	**VP063**			3444
	60	144	1.6	15	**VP075**			4065
	60	149	3.1	15	**VP090**			4498
	45	180*	0.8*	20	**VP063**			3791
	45	184	1.3	20	**VP075**			4474
	45	195	2.2	20	**VP090**			4951
	36	225	1	25	**VP075**			4820
	36	231	1.6	25	**VP090**			5333
	36	239	3.2	25	**VP110**			6739
	30	256	1	30	**VP075**			5122
	30	263	1.8	30	**VP090**			5667
	30	270	3.1	30	**VP110**			7161
	22.5	322*	0.9*	40	**VP075**			5637
	22.5	331	1.2	40	**VP090**			6238
	22.5	345	2.3	40	**VP110**			7882
	18	397	1	50	**VP090**			6719
	18	414	1.8	50	**VP110**			8491
	15	448*	0.8*	60	**VP090**			7140
	15	476	1.4	60	**VP110**			9023
	12.2	576	2.2	73.5		**VR090/110**		9614
	11.3	588	1	80	**VP110**			9931
	11.3	598	1.4	80	**VP130**			12989
	9.2	746	1.6	98		**VR090/110**		10320

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
1.10								
M2 090 1.10 4P.. (n1 = 1400 min^{-1})	**9**	686	1.1	100	**VP130**			13500
	7.3	890	1.2	122.5		**VR090/110**		10320
	6.1	1000	1	147		**VR090/110**		10320
	186.7	50	2.6	7.5	**VP063**			2359
	140	65	2	10	**VP063**			2597
	140	66	3	10	**VP075**			3065
	93.3	93	1.5	15	**VP063**			2973
	93.3	96	2.1	15	**VP075**			3509
	70	122	1.1	20	**VP063**			3272
	70	123	1.7	20	**VP075**			3862
	70	128	3.1	20	**VP090**			4273
	56	146*	0.9*	25	**VP063**			3524
	56	150	1.3	25	**VP075**			4160
	56	156	2.4	25	**VP090**			4603
	46.7	167	1	30	**VP063**			3745
	46.7	171	1.3	30	**VP075**			4421
	46.7	178	2.4	30	**VP090**			4891
	35	216	1	40	**VP075**			4865
	35	225	1.6	40	**VP090**			5383
	35	237	3	40	**VP110**			6803
	28	263*	0.9*	50	**VP075**			5241
	28	270	1.3	50	**VP090**			5799
	28	281	2.3	50	**VP110**			7328
	23.3	297*	0.7*	60	**VP075**			5569
	23.3	311	1	60	**VP090**			6163
	23.3	324	1.9	60	**VP110**			7787
	19	392	2.5	73.5		**VR090/110**		8298
	17.5	384	1	80	**VP090**			6783
	17.5	402	1.3	80	**VP110**			8571
	17.5	408	2.1	80	**VP130**			11210
	14.3	508	1.8	98		**VR090/110**		9133
	14	473	1	100	**VP110**			9232
	14	480	1.5	100	**VP130**			12076
	11.4	599	1.5	122.5		**VR090/110**		9838
	9.5	686	1.1	147		**VR090/110**		10320
	7.1	828*	0.8*	196		**VR090/110**		10320
	5.7	962*	0.9*	245		**VR090/130**		13500
	5.6	1224	1.2	250			**VC063/130**	13500
	5.6	1175	1.7	250			**VC063/150**	18000
	4.7	1312	1.3	300			**VC063/130**	13500
	4.7	1364	1.7	300			**VC063/150**	18000
	3.5	1671	1	400			**VC063/130**	13500
	3.5	1619	1.6	400			**VC063/150**	18000
	2.8	1991*	0.8*	500			**VC063/130**	13500
	2.8	1893	1.2	500			**VC063/150**	18000
	2.3	2510*	0.7*	600			**VC063/130**	13500
	2.3	2242	1.2	600			**VC063/150**	18000
	1.9	2616*	0.9*	750			**VC063/150**	18000

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
1.50								
M2 100 1.50 6P.. (n1 = 900 min^{-1})	**120**	105	2	7.5	**VP075**			3227
	90	137	1.7	10	**VP075**			3551
	90	138	2.7	10	**VP090**			3929
	60	196	1.2	15	**VP075**			4065
	60	201	2.1	15	**VP090**			4498
	45	255	1.1	20	**VP075**			4474
	45	258	1.5	20	**VP090**			4951
	45	264	2.7	20	**VP110**			6256
	36	311*	0.8*	25	**VP075**			4820
	36	314	1.2	25	**VP090**			5333
	36	322	2.4	25	**VP110**			6739
	36	330	3.2	25	**VP130**			8814
	30	354*	0.8*	30	**VP075**			5122
	30	358	1.3	30	**VP090**			5667
	30	363	2.3	30	**VP110**			7161
	30	377	3.1	30	**VP130**			9366
	22.5	459	1	40	**VP090**			6238
	22.5	471	1.7	40	**VP110**			7882
	22.5	478	2.3	40	**VP130**			10309
	18	565	1.3	50	**VP110**			8491
	18	573	1.8	50	**VP130**			11105
	18	589	2.7	50	**VP150**			15182
	15	649	1.1	60	**VP110**			9023
	15	659	1.4	60	**VP130**			11801
	15	678	2.1	60	**VP150**			16133
	11.3	815	1.1	80	**VP130**			12989
	11.3	841	1.5	80	**VP150**			17757
	9	955*	0.8*	100	**VP130**			13500
	9	971	1.2	100	**VP150**			18000
M2 090 1.50 4P.. (n1 = 1400 min^{-1})	**186.7**	68	1.9	7.5	**VP063**			2359
	186.7	68	2.7	7.5	**VP075**			2785
	140	89	1.5	10	**VP063**			2597
	140	90	2.2	10	**VP075**			3065
	93.3	127	1.1	15	**VP063**			2973
	93.3	130	1.5	15	**VP075**			3509
	93.3	134	3	15	**VP090**			3882
	70	166*	0.8*	20	**VP063**			3272
	70	168	1.3	20	**VP075**			3862
	70	172	2.1	20	**VP090**			4273
	56	205	1	25	**VP075**			4160
	56	210	1.6	25	**VP090**			4603
	56	218	3.1	25	**VP110**			5816
	46.7	233	1	30	**VP075**			4421
	46.7	239	1.7	30	**VP090**			4891
	46.7	246	3	30	**VP110**			6181
	35	299*	0.8*	40	**VP075**			4865
	35	307	1.2	40	**VP090**			5383
	35	319	2.2	40	**VP110**			6803
	28	368*	0.9*	50	**VP090**			5799
	28	384	1.7	50	**VP110**			7328
	23.3	424*	0.8*	60	**VP090**			6163
	23.3	442	1.4	60	**VP110**			7787
	19	535	1.9	73.5		**VR090/110**		8298
	17.5	548*	0.9*	80	**VP110**			8571
	17.5	557	1.5	80	**VP130**			11210
	14.3	693	1.3	98		**VR090/110**		9133
	14	655	1.1	100	**VP130**			12076
	11.4	817	1.1	122.5		**VR090/110**		9838
	9.5	936*	0.8*	147		**VR090/110**		10320
	7.1	1149*	0.8*	196		**VR090/130**		13500

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
1.50								
M2 090 1.50 4P.. (n1 = 1400 min^{-1})	**5.7**	962*	0.9*	245		**VR090/130**		13500
	5.6	1669*	0.9*	250			**VC063/130**	13500
	5.6	1602	1.3	250			**VC063/150**	18000
	4.7	1789	1	300			**VC063/130**	13500
	4.7	1860	1.3	300			**VC063/150**	18000
	3.5	2279*	0.7*	400			**VC063/130**	13500
	3.5	2208	1.2	400			**VC063/150**	18000
	2.8	2582*	0.9*	500			**VC063/150**	18000
	2.3	3057*	0.9*	600			**VC063/150**	18000
M2 090 1.50 2P.. (n1 = 2800 min^{-1})	**373**	35	2.7	7.5	**VP063**			1873
	280	45	2.2	10	**VP063**			2061
	280	45	3.2	10	**VP075**			2433
	186.7	66	1.6	15	**VP063**			2359
	186.7	66	2.3	15	**VP075**			2785
	140	86	1.2	20	**VP063**			2597
	140	86	1.9	20	**VP075**			3065
	140	90	2.9	20	**VP090**			3391
	112	105*	0.9*	25	**VP063**			2797
	112	105	1.4	25	**VP075**			3302
	112	110	2.3	25	**VP090**			3653
	93.3	120	1	30	**VP063**			2973
	93.3	121	1.4	30	**VP075**			3509
	93.3	127	2.4	30	**VP090**			3882
	70	156*	0.7*	40	**VP063**			3272
	70	156	1.1	40	**VP075**			3862
	70	164	1.7	40	**VP090**			4273
	70	170	3.1	40	**VP110**			5399
	56	187	1.3	50	**VP075**			4160
	56	197	1.3	50	**VP090**			4603
	56	205	2.4	50	**VP110**			5816
	46.7	215	1.1	60	**VP075**			4421
	46.7	227	1.1	60	**VP090**			4891
	46.7	236	2	60	**VP110**			6181
	35	287*	0.8*	80	**VP090**			5383
	35	299	1.3	80	**VP110**			6803
	28	358	1	100	**VP110**			7328
	9.3	878	1.9	300			**VC063/130**	13500
	7	1105	1.4	400			**VC063/130**	13500
	5.6	1305	1.1	500			**VC063/130**	13500
2.20								
M2 100 2.20 4P.. (n1 = 1400 min^{-1})	**186.7**	100	1.8	7.5	**VP075**			2785
	186.7	101	2.9	7.5	**VP090**			3081
	140	132	1.5	10	**VP075**			3065
	140	134	2.3	10	**VP090**			3391
	93.3	191	1	15	**VP075**			3509
	93.3	194	1.9	15	**VP090**			3882
	93.3	196	3.3	15	**VP110**			4905
	70	249*	0.9*	20	**VP075**			3862
	70.00	252	1.4	20	**VP090**			4273
	70	255	2.5	20	**VP110**			5399
	56	304*	0.7*	25	**VP075**			4160
	56.00	308	1.1	25	**VP090**			4603
	56	315	2.2	25	**VP110**			5816
	56	319	2.9	25	**VP130**			7607
	46.7	347*	0.7*	30	**VP075**			4421
	46.70	351	1.2	30	**VP090**			4891
	46.7	356	2	30	**VP110**			6181

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
2.20								
M2 100 2.20 4P.. (n1 = 1400 min^{-1})	**46.7**	365	2.9	30	**VP130**			8084
	35	468	1.5	40	**VP110**			6803
	35	468	2.2	40	**VP130**			8897
	30.00	456*	0.9*	40	**VP090**			5383
	28	563	1.2	50	**VP110**			7328
	28	563	1.7	50	**VP130**			9584
	28	570	2.5	50	**VP150**			13103
	23.3	648	1.0	60	**VP110**			7787
	23.3	648	1.4	60	**VP130**			10185
	23.3	657	1.9	60	**VP150**			13924
	17.5	816	1	80	**VP130**			11210
	17.5	816	1.4	80	**VP150**			15325
	14.0	976	1	100	**VP130**			12076
	14	960	1	100	**VP150**			16508
M2 112 2.20 6P.. (n1 = 900 min^{-1})	**120**	154	1.4	7.5	**VP075**			3227
	120	156	2.2	7.5	**VP090**			3570
	90	201	1.1	10	**VP075**			3551
	90	203	1.8	10	**VP090**			3929
	90	205	3.5	10	**VP110**			4965
	60	291*	0.9*	15	**VP075**			4065
	60	294	1.4	15	**VP090**			4498
	60	298	2.6	15	**VP110**			5684
	45	374*	0.7*	20	**VP075**			4474
	45	532*	0.9*	30	**VP090**			5667
	45	378	1	20	**VP090**			4951
	45	388	1.9	20	**VP110**			6256
	36	467*	0.9*	25	**VP090**			5333
	36	473	1.6	25	**VP110**			6739
	36	479	2.2	25	**VP130**			8814
	30	532	1.6	30	**VP110**			7161
	30	546	2.1	30	**VP130**			9366
	22.5	701	1.1	40	**VP110**			7882
	22.5	700	1.6	40	**VP130**			10309
	18	841*	0.9*	50	**VP110**			8491
	18	840	1.2	50	**VP130**			11105
	18	864	1.9	50	**VP150**			15182
	15	967*	0.7*	60	**VP110**			9023
	15	966	1	60	**VP130**			11801
	15	995	1.4	60	**VP150**			16133
	11.3	1214*	0.7*	80	**VP130**			12898
	11.3	1233	1.1	80	**VP150**			17757
	9	1425*	0.8*	100	**VP150**			18000
M2 090 2.20 2P.. (n1 = 2800 min^{-1})	**373.3**	51	1.8	7.5	**VP063**			1873
	373.3	50	2.6	7.5	**VP075**			2210
	280	66	1.5	10	**VP063**			2061
	280	66	2.2	10	**VP075**			2433
	280	68	3.5	10	**VP090**			2692
	186.7	97	1.1	15	**VP063**			2359
	186.7	97	1.5	15	**VP075**			2785
	186.7	100	2.7	15	**VP090**			3081
	140	128*	0.8*	20	**VP063**			2597
	140	126	1.3	20	**VP075**			3065
	140	129	2	20	**VP090**			3391
	112	154	1	25	**VP075**			3302
	112	159	1.6	25	**VP090**			3653
	112	161	3.1	25	**VP110**			4616
	93.3	178	1	30	**VP075**			3509
	93.3	185	1.7	30	**VP090**			3882
	93.3	187	3	30	**VP110**			4905

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
2.20								
M2 090 2.20 2P.. (n1 = 2800 min^{-1})	**70**	234*	0.8*	40	**VP075**			3862
	70	237	1.2	40	**VP090**			4273
	70	243	2.2	40	**VP110**			5399
	56	289*	0.9*	50	**VP090**			4603
	56	296	1.7	50	**VP110**			5816
	46.7	347	1.4	60	**VP110**			6181
	38.6	398	2.1	73.5		**VR090/110**		6586
	35	444*	0.9*	80	**VP110**			6803
	35	444	1.3	80	**VP130**			8897
	28.9	516	1.5	98		**VR090/110**		7249
	28	525*	0.7*	100	**VP110**			7328
	28	525	1	100	**VP130**			9584
	23.1	617	1.2	122.5		**VR090/110**		7809
3.00								
M2 100 3.00 2P.. (n1 = 2800 min^{-1})	**373.3**	68	1.9	7.5	**VP075**			2210
	373.3	70	3	7.5	**VP090**			2446
	280	90	1.6	10	**VP075**			2433
	280	92	2.6	10	**VP090**			2692
	186.7	135	1.2	15	**VP075**			2785
	186.7	137	2	15	**VP090**			3081
	140	176	1	20	**VP075**			3065
	140	180	1.4	20	**VP090**			3391
	140	182	2.7	20	**VP110**			4285
	112	215*	0.7*	25	**VP075**			3302
	112	220	1.1	25	**VP090**			3653
	112	225	2.2	25	**VP110**			4616
	93.3	249*	0.7*	30	**VP075**			3509
	93.3	255	1.2	30	**VP090**			3882
	93.3	258	2.1	30	**VP110**			4905
	70	328*	0.8*	40	**VP090**			4273
	70	340	1.6	40	**VP110**			5399
	56	409	1.2	50	**VP110**			5816
	46.7	479	1	60	**VP110**			6181
M2 100 3.00 4P.. (n1 = 1400 min^{-1})	**186.7**	137	1.4	7.5	**VP075**			2785
	186.7	138	2.1	7.5	**VP090**			3081
	140	180	1.1	10	**VP075**			3065
	140	182	1.7	10	**VP090**			3391
	140	182	3.3	10	**VP110**			4285
	93.3	261*	0.8*	15	**VP075**			3509
	93.3	264	1.4	15	**VP090**			3882
	93.3	264	2.5	15	**VP110**			4905
	70	344	1	20	**VP090**			4273
	70	348	1.9	20	**VP110**			5399
	56	420*	0.8*	25	**VP090**			4603
	56	430	1.6	25	**VP110**			5816
	56	430	2.2	25	**VP130**			7607
	46.7	479*	0.9*	30	**VP090**			4891
	46.7	485	1.5	30	**VP110**			6181
	46.7	491	2.1	30	**VP130**			8084
	35	638	1.1	40	**VP110**			6803
	35	638	1.6	40	**VP130**			8897
	28	767*	0.9*	50	**VP110**			7328
	28	767	1.3	50	**VP130**			9584

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\boldsymbol{M_{m2} = M_2 \times fs}$

Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
3.00								
M2 100 3.00 4P.. (n1 = 1400 min^{-1})	**28**	778	1.8	50	**VP150**			13103
	23.3	884	1	60	**VP130**			10185
	23.3	896	1.4	60	**VP150**			13924
	17.5	1113*	0.8*	80	**VP130**			11210
	17.5	1113	1	80	**VP150**			15325
	14.00	1310*	0.8*	100	**VP150**			16508
M2 132 3.00 6P.. (n1 = 900 min^{-1})	**120**	212	3.1	7.5	**VP110**			4511
	90	280	2.5	10	**VP110**			4965
	90	280	3.4	10	**VP130**			6494
	60	406	1.9	15	**VP110**			5684
	60	406	2.6	15	**VP130**			7434
	45	528	1.4	20	**VP110**			6256
	45	535	1.9	20	**VP130**			8182
	45	541	2.8	20	**VP150**			11186
	36	653	1.2	25	**VP110**			6739
	36	653	1.6	25	**VP130**			8814
	36	669	2.1	25	**VP150**			12050
	30	736	1.1	30	**VP110**			7161
	30	745	1.6	30	**VP130**			9366
	30	783	1.8	30	**VP150**			12805
	22.5	955*	0.8*	40	**VP110**			7882
	22.5	955	1.2	40	**VP130**			10309
	22.5	968	1.9	40	**VP150**			14094
	18	1178	1.4	50	**VP150**			15182
	15	1357	1.1	60	**VP150**			16133
4.00								
M2 112 4.00 2P.. (n1 = 2800 min^{-1})	**373.3**	91	1.4	7.5	**VP075**			2210
	373.3	93	2.3	7.5	**VP090**			2446
	280	120	1.2	10	**VP075**			2433
	280	123	1.9	10	**VP090**			2692
	186.7	180*	0.9*	15	**VP075**			2785
	186.7	182	1.5	15	**VP090**			3081
	140	235	0.7	20	**VP075**			3065
	140	240	1.1	20	**VP090**			3391
	112	293*	0.9*	25	**VP090**			3653
	93.3	340*	0.9*	30	**VP090**			3882
M2 112 4.00 4P.. (n1 = 1400 min^{-1})	**186.7**	180	1	7.5	**VP075**			2785
	186.7	184	1.6	7.5	**VP090**			3081
	187	184	3.0	7.5	**VP110**			3893
	140	237*	0.8*	10	**VP075**			3065
	140	243	1.3	10	**VP090**			3391
	140	243	2.5	10	**VP110**			4285
	93.3	352	1	15	**VP090**			3882
	93.3	352	1.9	15	**VP110**			4905
	70	458*	0.8*	20	**VP090**			4273
	70	464	1.4	20	**VP110**			5399
	56	573	1.2	25	**VP110**			5816
	56	573	1.6	25	**VP130**			7607
	46.7	647	1.1	30	**VP110**			6181
	46.7	655	1.6	30	**VP130**			8084
	35	863*	0.8*	40	**VP110**			6803
	35	851	1.2	40	**VP130**			8897
	28	1023	1	50	**VP130**			9584
	28	1037	1.4	50	**VP150**			13103
	23.3	1179*	0.8*	60	**VP130**			10185
	23.3	1195	1.1	60	**VP150**			13924
	17.5	1484*	0.8*	80	**VP150**			15325
M2 132 4.00 6P.. (n1 = 900 min^{-1})	**120**	283	2.3	7.5	**VP110**			4511
	120	287	3.1	7.5	**VP130**			5901
	90	374	1.9	10	**VP110**			4965
	90	374	2.6	10	**VP130**			6494
	60	541	1.4	15	**VP110**			5684

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\mathbf{M_{m2} = M_2 \times fs}$

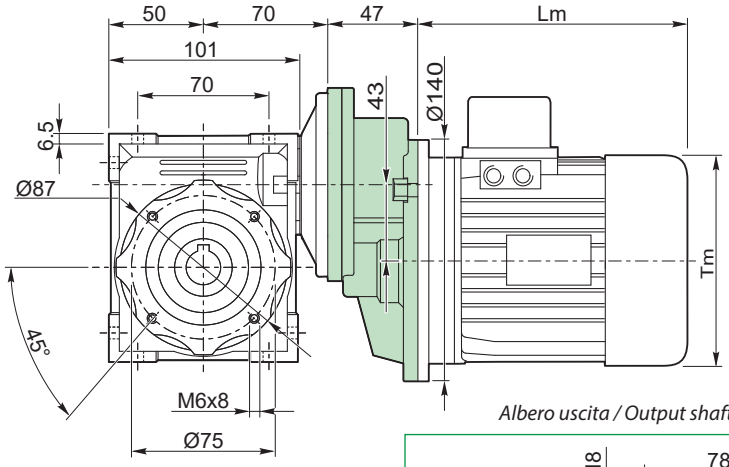
Tabella dati tecnici motoriduttori / *Table technical data gearmotors*

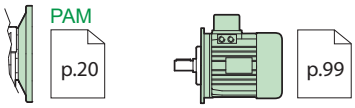
Pn_1 (kW)	n_2 (min^{-1})	M_2 (Nm)	fs	i				FR_2 (N)
4.00								
M2 132 4.00 6P.. (n1 = 900 min^{-1})	**60**	541	2	15	**VP130**			7434
	56	580	1.2	25	**VP110**			5816
	46.7	655	1.1	30	**VP110**			6181
	45	713	1.5	20	**VP130**			8182
	45	722	2.1	20	**VP150**			11186
	36	870	1.2	25	**VP130**			8814
	36	892	1.5	25	**VP150**			12050
	35	863*	0.8*	40	**VP110**			6803
	30	1006	1.2	30	**VP130**			9366
	30	1045	1.3	30	**VP150**			12805
	22.5	1291*	0.9*	40	**VP130**			10309
	22.5	1291	1.4	40	**VP150**			14094
	18	1571	1	50	**VP150**			15182
	15	1809*	0.8*	60	**VP150**			16133
5.50								
M2 132 5.50 4P.. (n1 = 1400 min^{-1})	**186.7**	253	2.2	7.5	**VP110**			3893
	140	334	1.8	10	**VP110**			4285
	140	334	2.5	10	**VP130**			5605
	93.3	484	1.4	15	**VP110**			4905
	93.3	490	1.9	15	**VP130**			6416
	70	638	1	20	**VP110**			5399
	70	645	1.4	20	**VP130**			7062
	70	645	2	20	**VP150**			9654
	56	798*	0.9*	25	**VP110**			5816
	56	788	1.2	25	**VP130**			7607
	56	788	1.5	25	**VP150**			10400
	46.7	901*	0.8*	30	**VP110**			6181
	46.7	900	1.2	30	**VP130**			8084
	46.7	934	1.3	30	**VP150**			11051
	35	1171*	0.9*	40	**VP130**			8897
	35	1171	1.3	40	**VP150**			12163
	28	1426	1	50	**VP150**			13103
	23.3	1643*	0.8*	60	**VP150**			13924
7.50								
M3 132 7.50 4P.. (n1 = 1400 min^{-1})	**186.7**	345	1.6	7.5	**VP110**			3893
	186.7	349	2.1	7.5	**VP130**			5092
	140	455	1.3	10	**VP110**			4285
	140	455	1.8	10	**VP130**			5605
	93.3	660	1	15	**VP110**			4905
	93.3	668	1.4	15	**VP130**			6416
	70	880*	0.7*	20	**VP110**			5399
	70	880	1.0	20	**VP130**			7062
	70	880	1.5	20	**VP150**			9654
	56	1074*	0.9*	25	**VP130**			7607
	56	1074	1.1	25	**VP150**			10400
	46.7	1228*	0.8*	30	**VP130**			8084
	46.7	1274*	0.9*	30	**VP150**			11051
	35	1596*	0.7*	40	**VP130**			8897
	35	1596	1	40	**VP150**			12163
	28	1971*	0.7*	50	**VP150**			13103
11.0								
M3 160 11.0 4P.. (n1 = 1400 min^{-1})	**187**	512	2.3	7.5	**VP150**			6962
	140	675	1.8	10	**VP150**			7663
	93.3	990	1.3	15	**VP150**			8771
	70	1291	1.0	20	**VP150**			9654
	56	1576*	0.8*	25	**VP150**			10400
15.0								
M3 160 15.0 4P.. (n1 = 1400 min^{-1})	**187**	698	1.7	7.5	**VP150**			6962
	140	921	1.3	10	**VP150**			7663
	93.3	1351*	0.9*	15	**VP150**			8771
	70	1760*	0.7*	20	**VP150**			9654

* **NOTA:** la coppia massima utilizzabile M_{m2} deve essere determinata utilizzando il fattore di servizio fs: $\mathbf{M_{m2} = M_2 \times fs}$

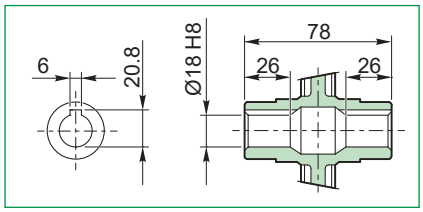
* **NOTE:** Maximun allowable torque M_{m2} must be calculated using service factor fs: $\mathbf{M_{m2} = M_2 \times fs}$

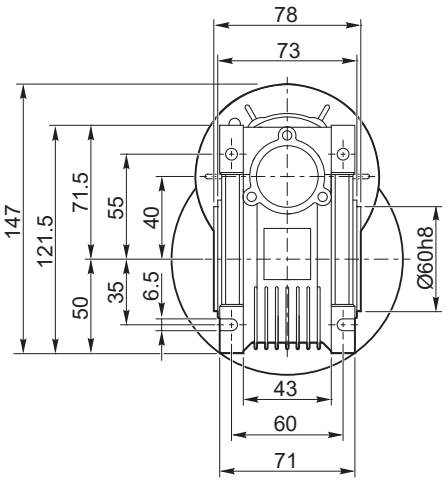
VR 063 / 040 P ...





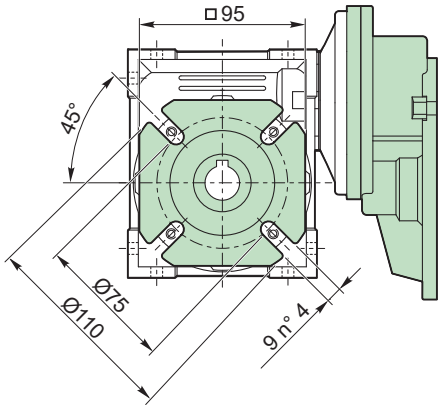
Albero uscita / Output shaft



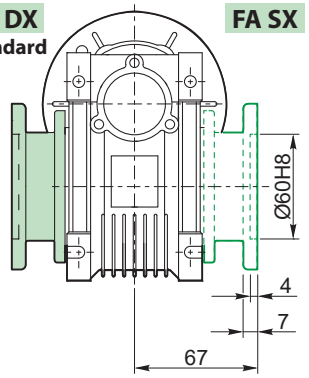


Kg
3.8 kg

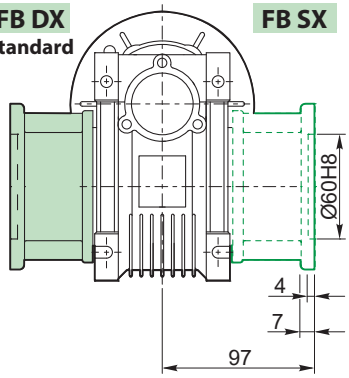
VR 063 / 040 F...

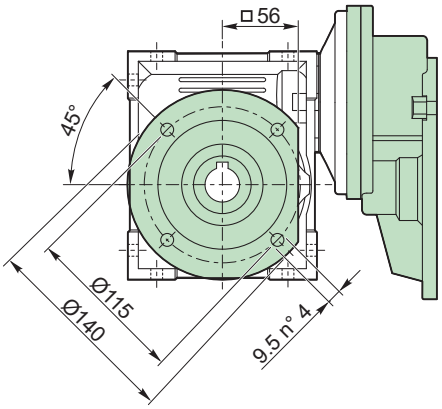


FA DX **Standard**

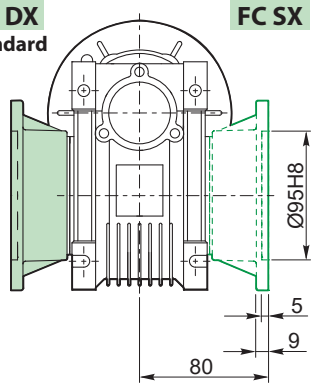


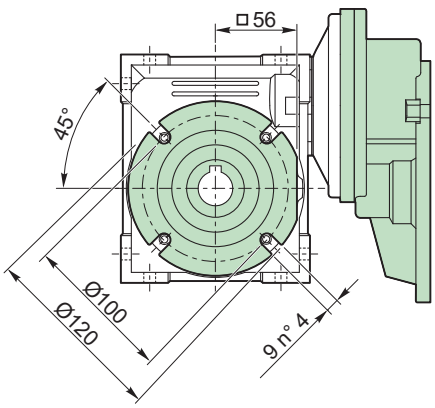
FB DX **Standard**



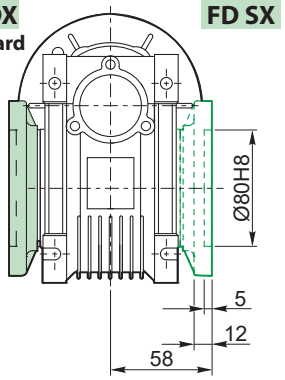


FC DX **Standard**

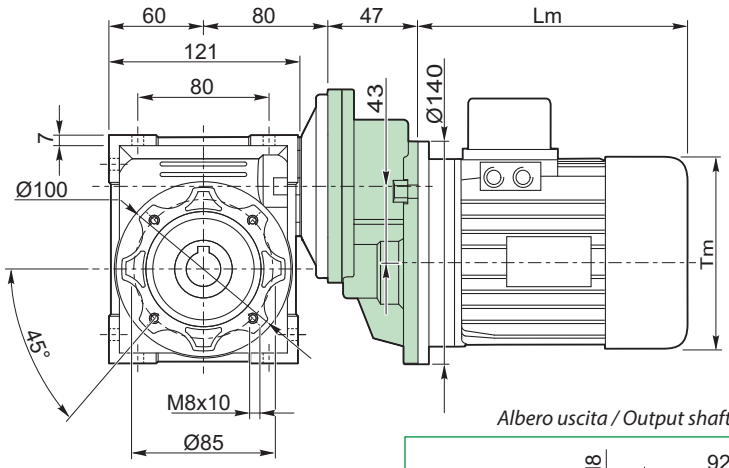


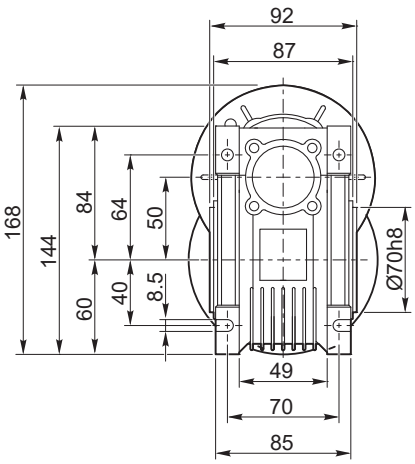


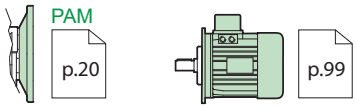
FD DX **Standard**



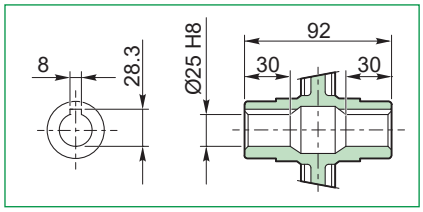
VR 063 / 050 P ...





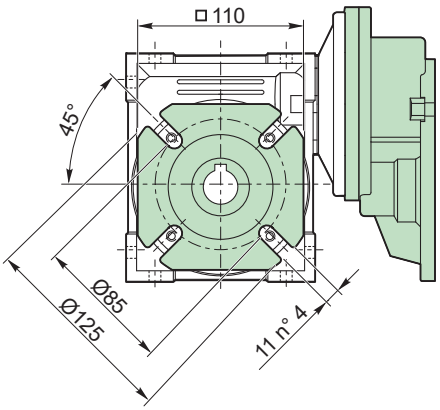


Albero uscita / Output shaft

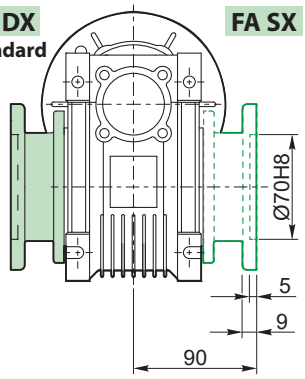


5 kg

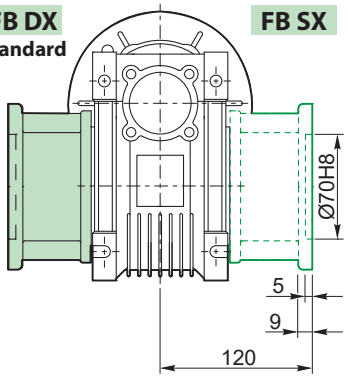
VR 063 / 050 F...

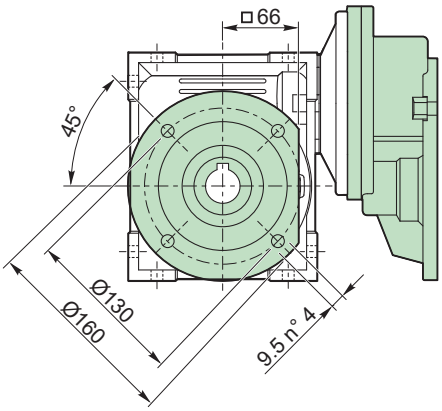


FA DX **Standard** **FA SX**

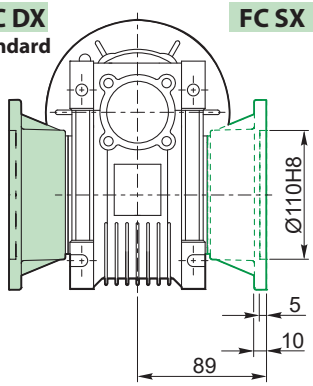


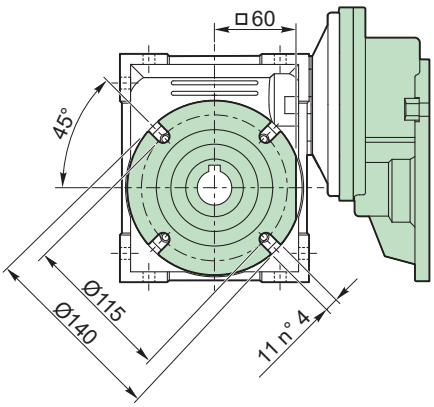
FB DX **Standard** **FB SX**



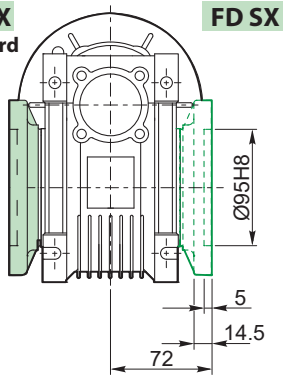


FC DX **Standard** **FC SX**

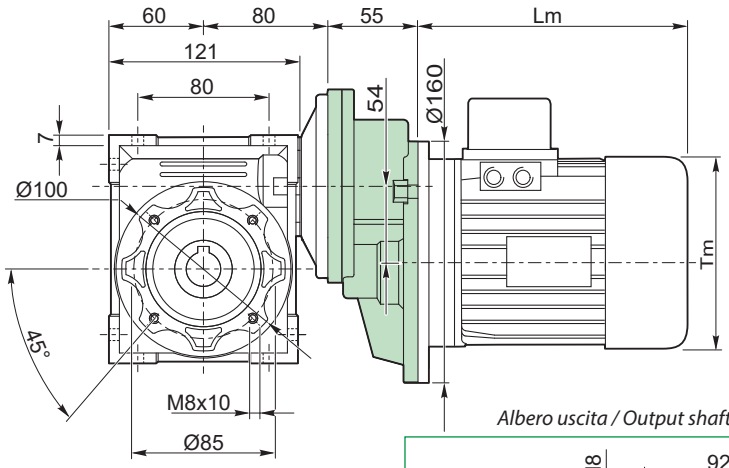


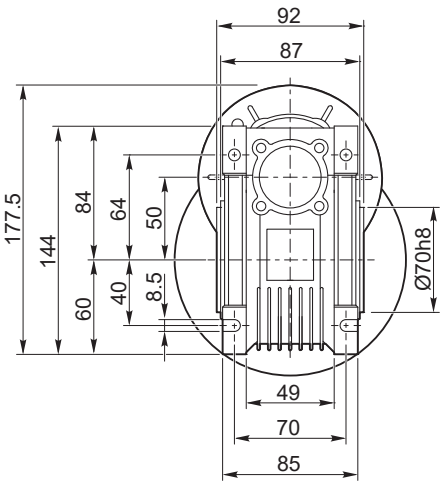


FD DX **Standard** **FD SX**



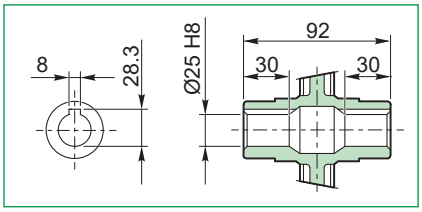
VR 071 / 050 P ...

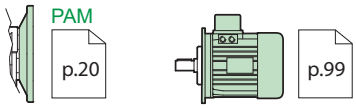




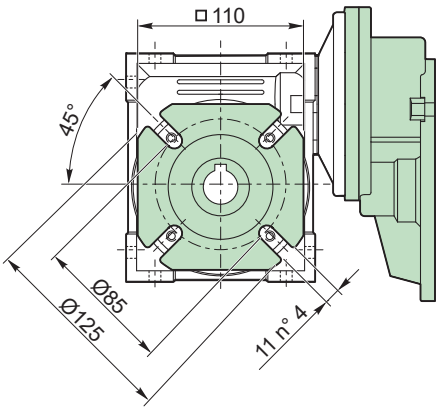
Kg
6.1 kg

Albero uscita / Output shaft

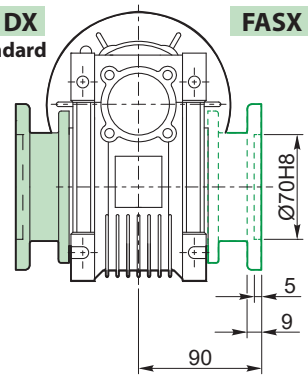




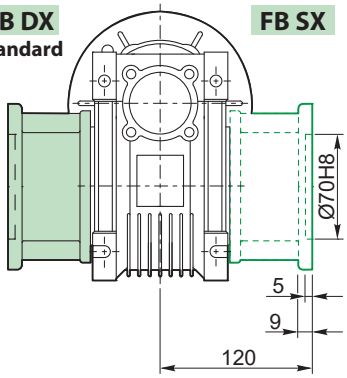
VR 071 / 050 F...

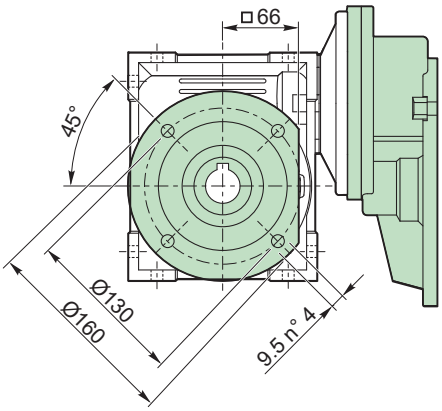


FA DX Standard **FASX**

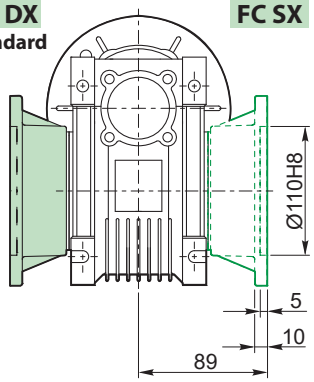


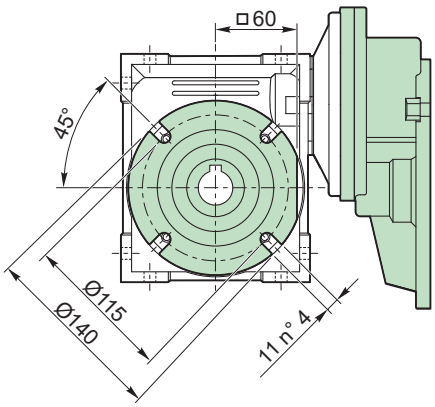
FB DX Standard **FB SX**



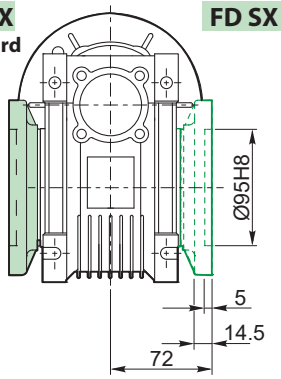


FC DX Standard **FC SX**

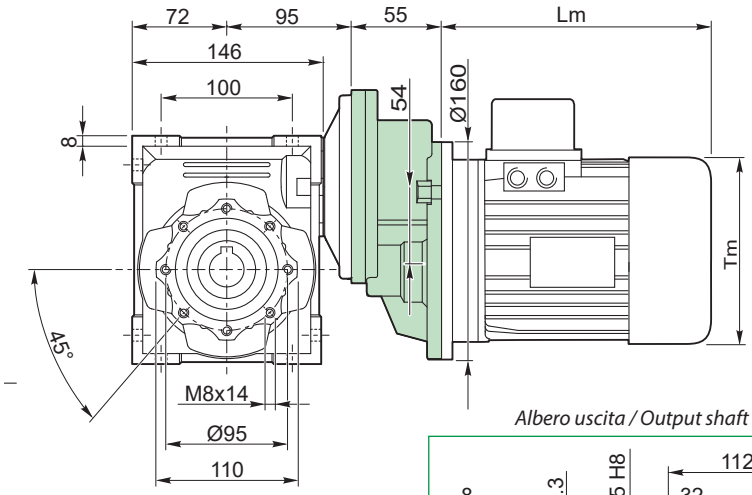


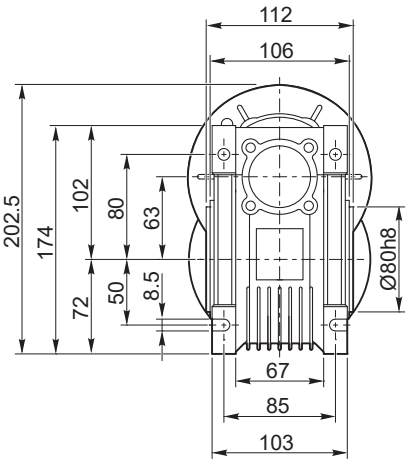


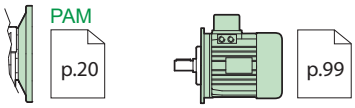
FD DX Standard **FD SX**



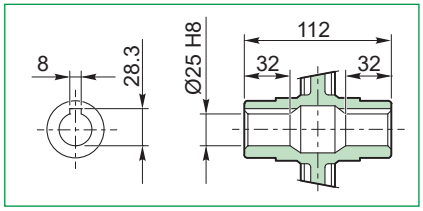
VR 071 / 063 P ...





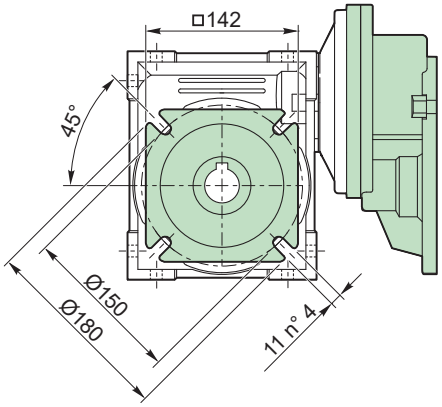


Albero uscita / Output shaft

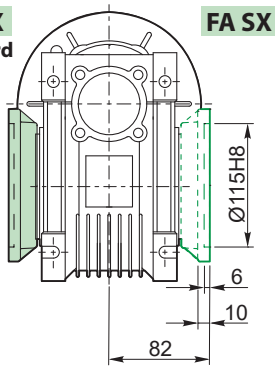


Kg
8.8 kg

VR 071 / 063 F...

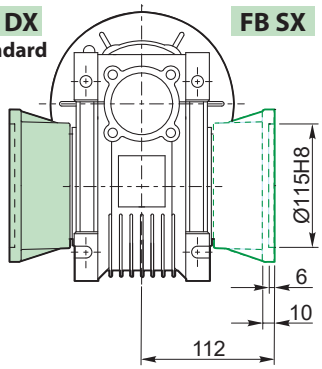


FA DX Standard

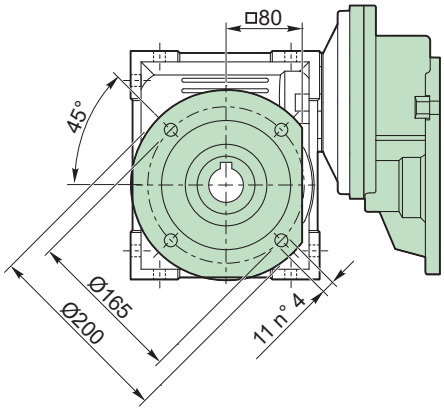


FA SX

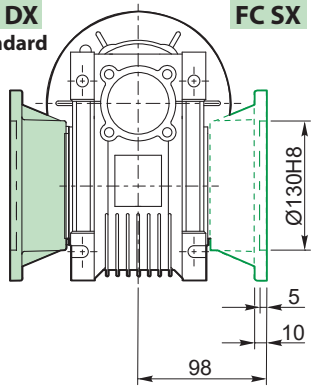
FB DX Standard



FB SX

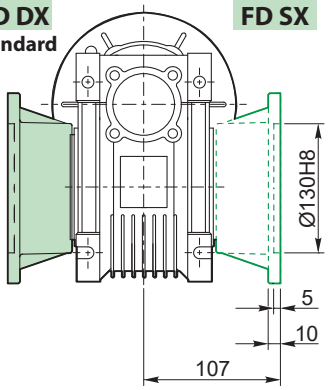


FC DX Standard

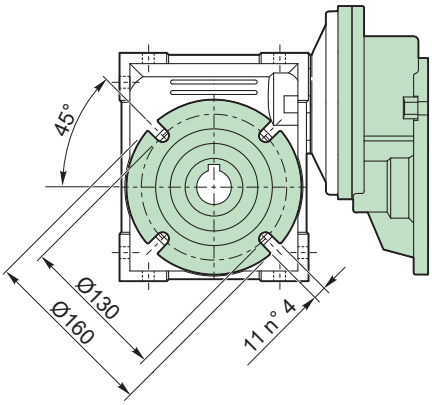


FC SX

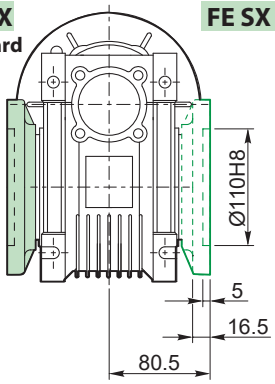
FD DX Standard



FD SX

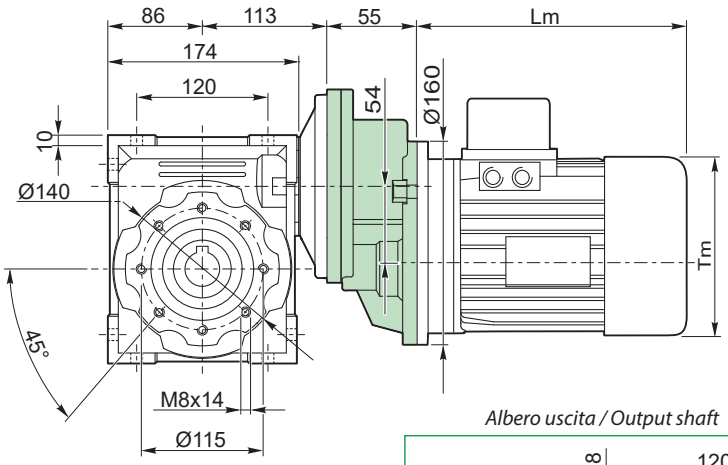


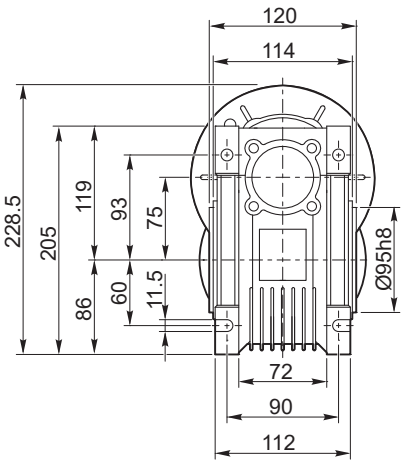
FE DX Standard

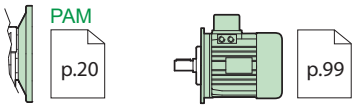


FE SX

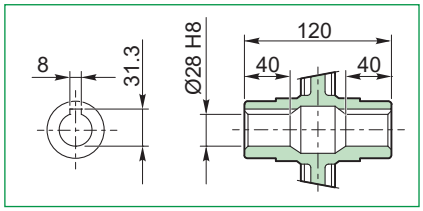
VR 071/ 075 P ...





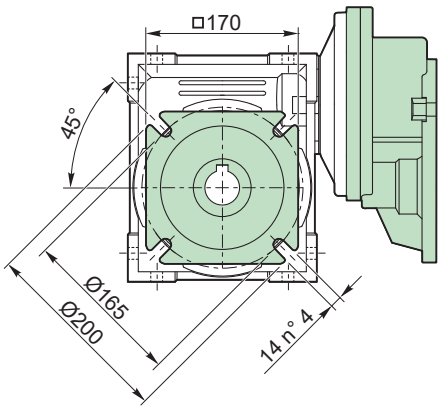


Albero uscita / Output shaft



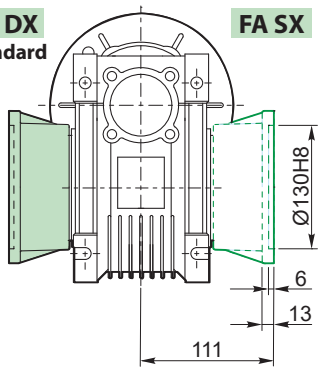
Kg
11.6 kg

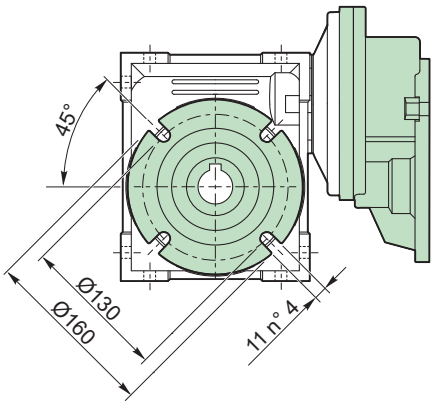
VR 071 / 075 F...



FA DX
Standard

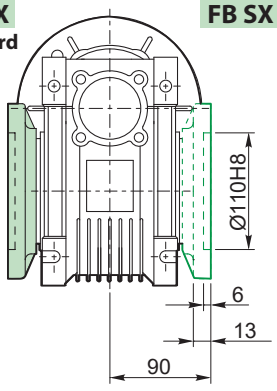
FA SX



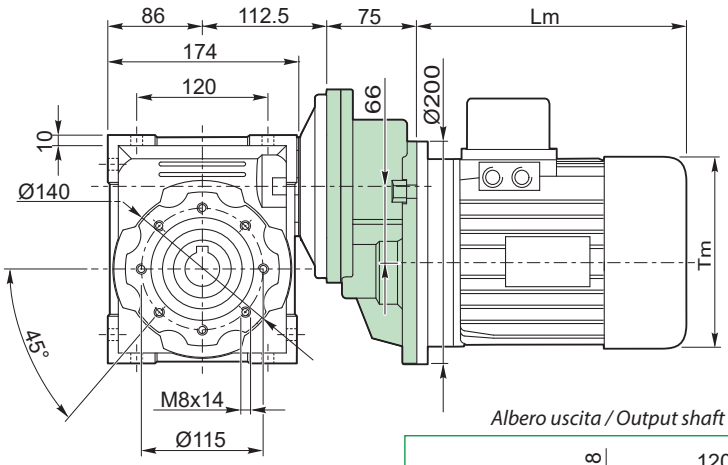


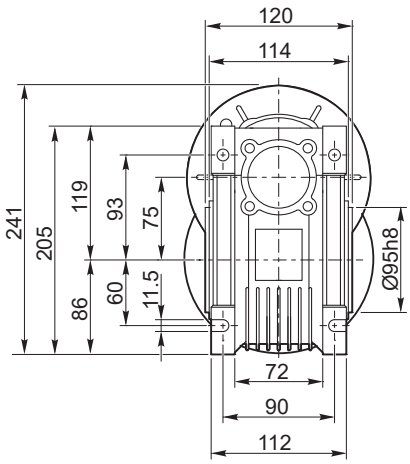
FB DX
Standard

FB SX

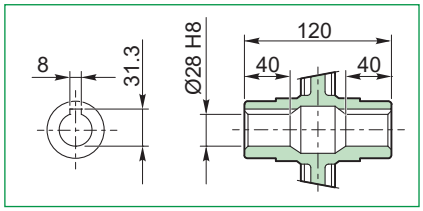


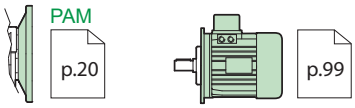
VR 080 / 075 P ...





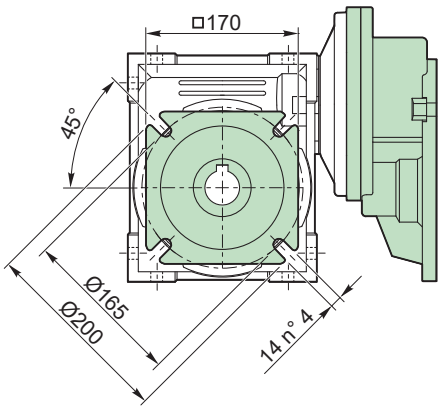
Albero uscita / Output shaft

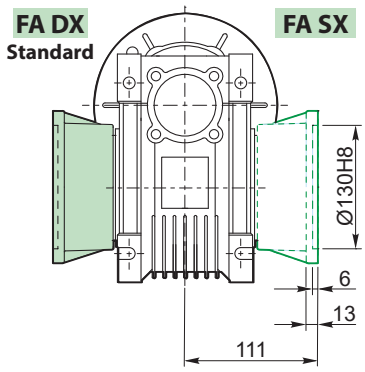


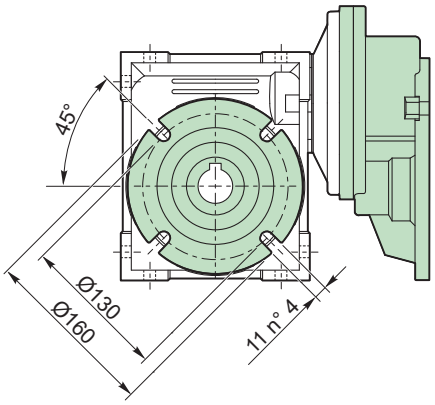


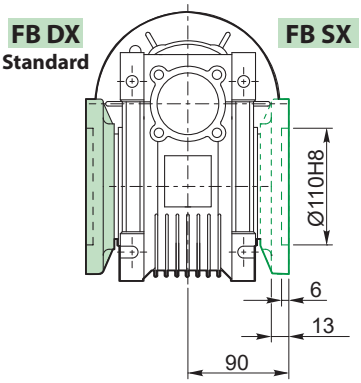
Kg
13.7 kg

VR 080 / 075 F...

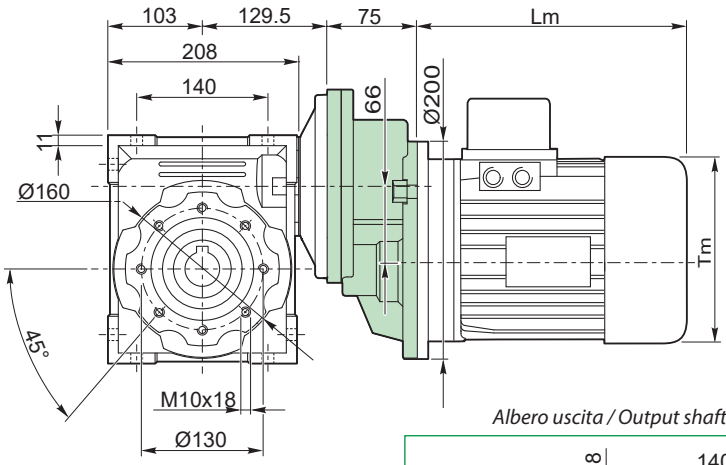


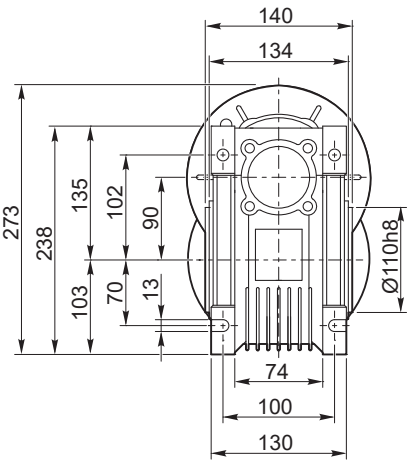




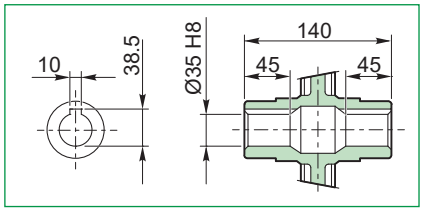


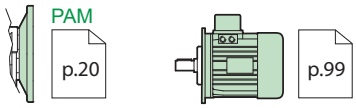
VR 080 / 090 P ...





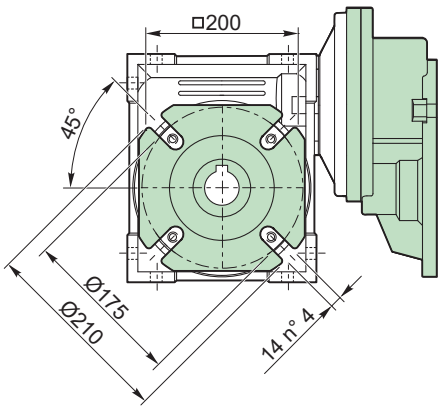
Albero uscita / Output shaft



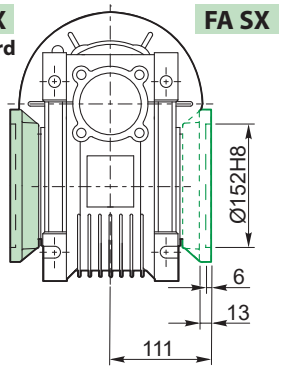


Kg
17.7 kg

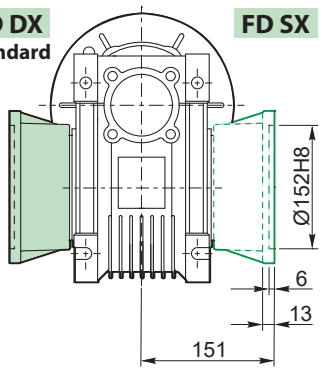
VR 080 / 090 F...

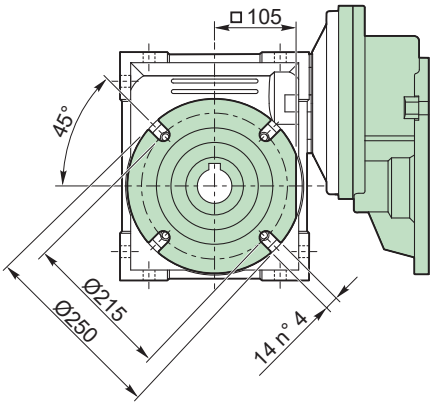


FA DX **Standard** **FA SX**

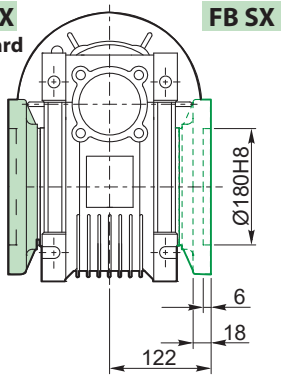


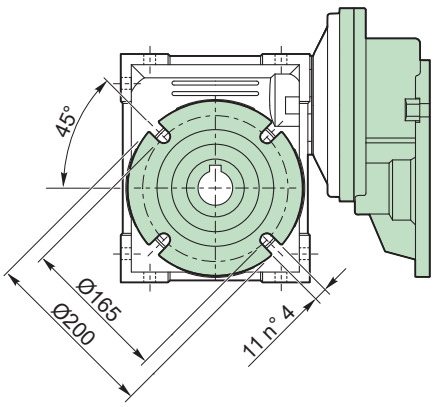
FD DX **Standard** **FD SX**



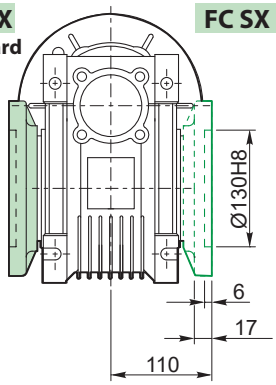


FB DX **Standard** **FB SX**

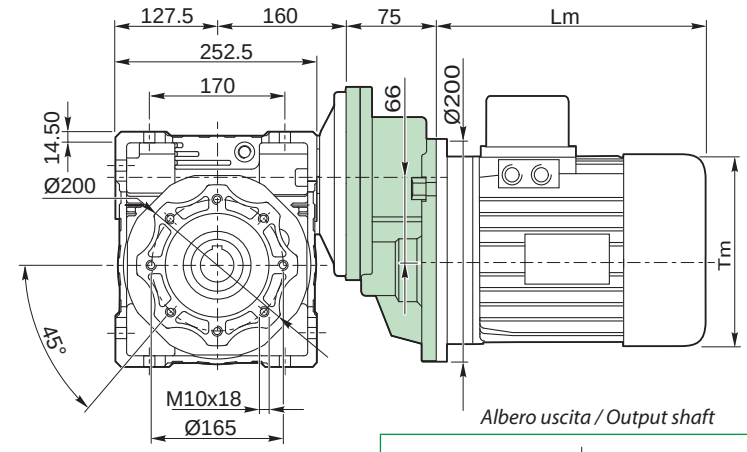


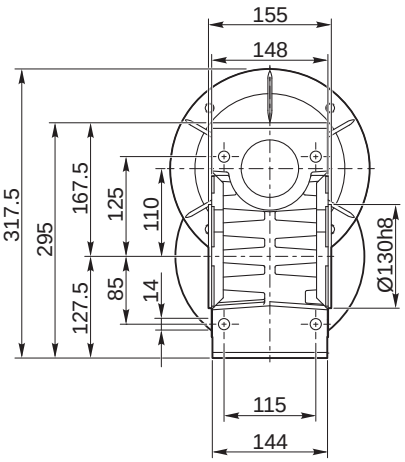


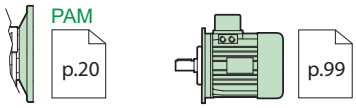
FC DX **Standard** **FC SX**



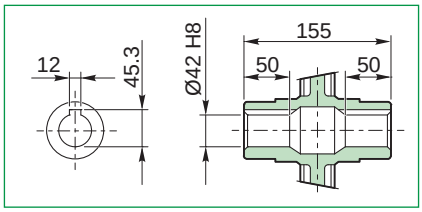
VR 080 / 110 P ...





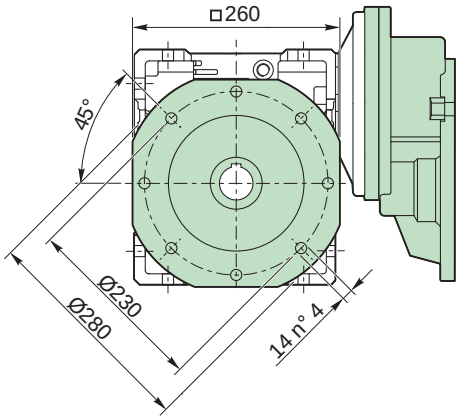


Albero uscita / Output shaft

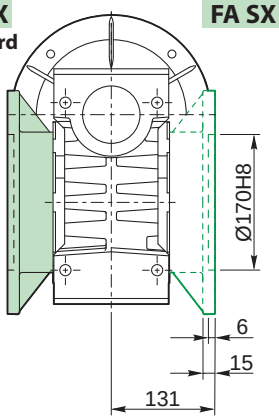


Kg
39.7 kg

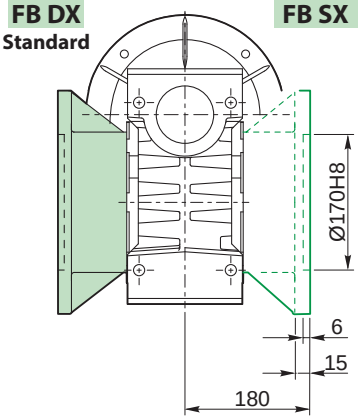
VR 080 / 110 F...



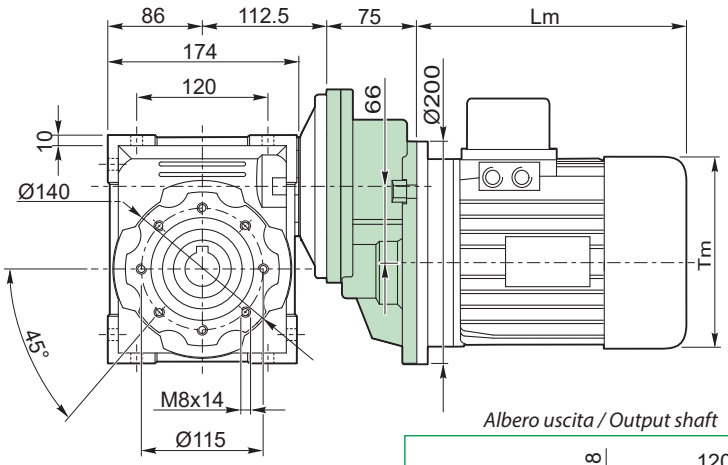
FA DX **FA SX**
Standard

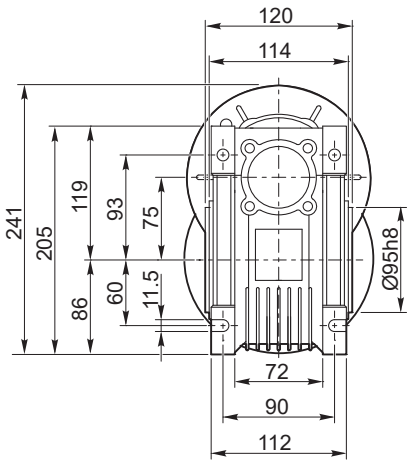


FB DX **FB SX**
Standard



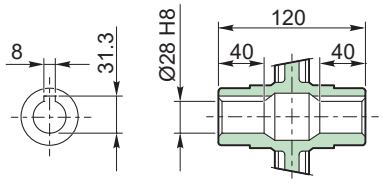
VR 090 / 075 P ...

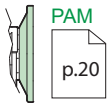


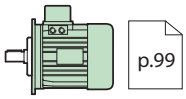


Kg
13.7 kg

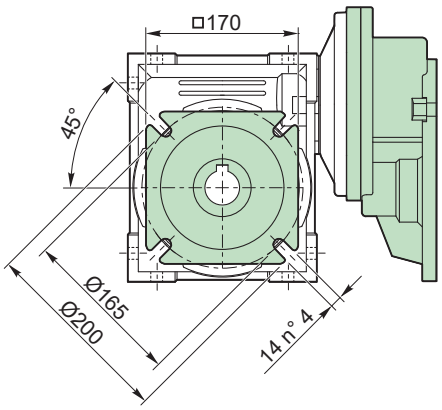
Albero uscita / Output shaft

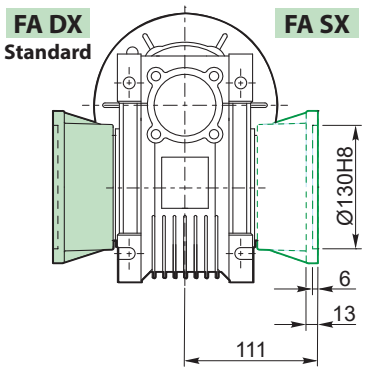


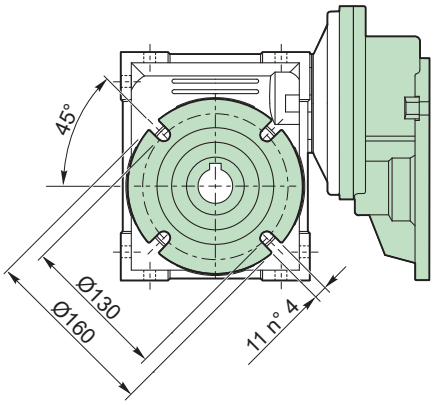


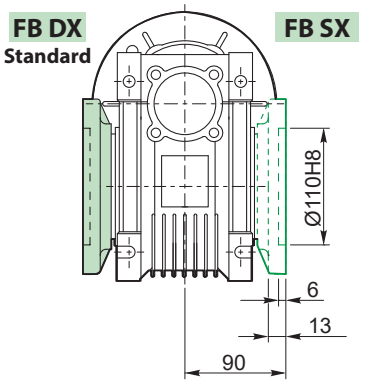


VR 090 / 075 F...

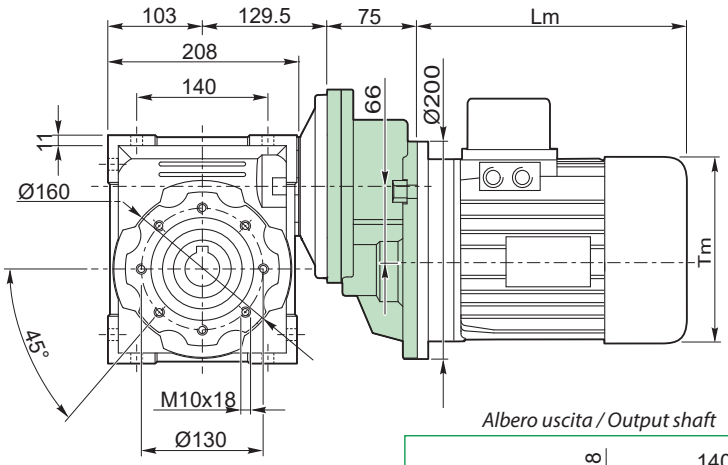


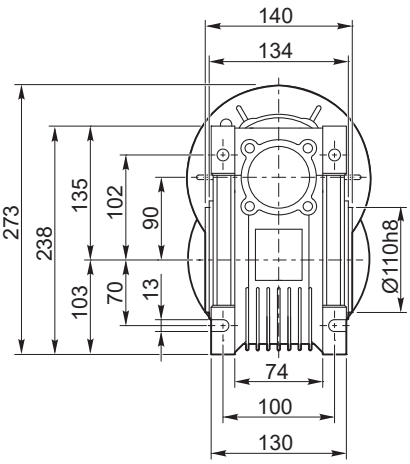






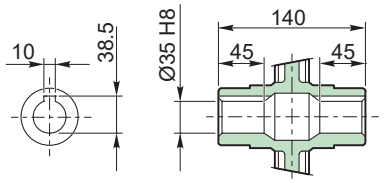
VR 090 / 090 P ...

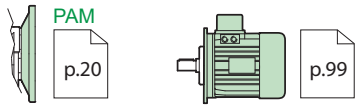




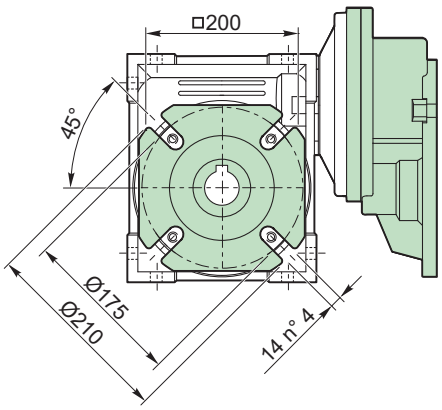
Kg
17.7 kg

Albero uscita / Output shaft

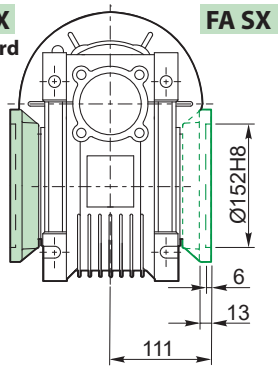




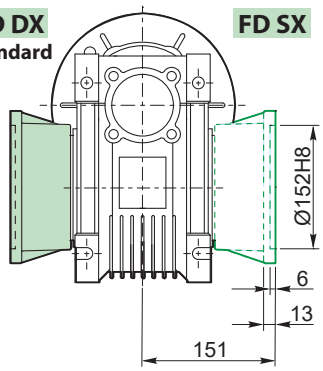
VR 090 / 090 F...

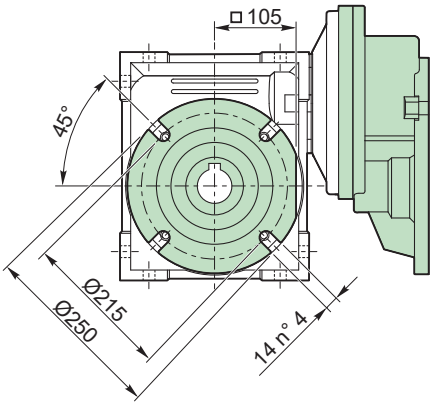


FA DX **Standard** **FA SX**

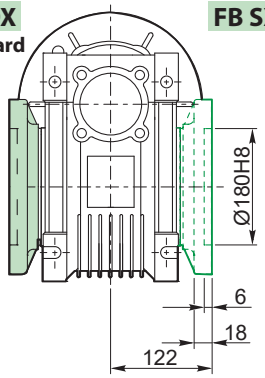


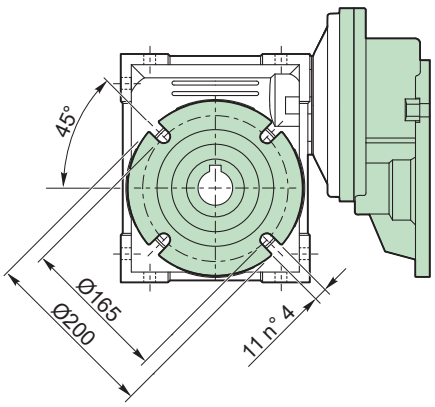
FD DX **Standard** **FD SX**



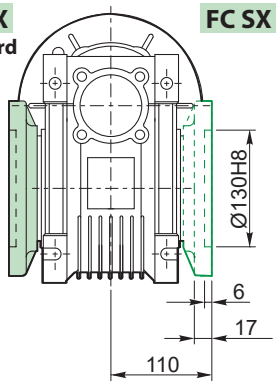


FB DX **Standard** **FB SX**

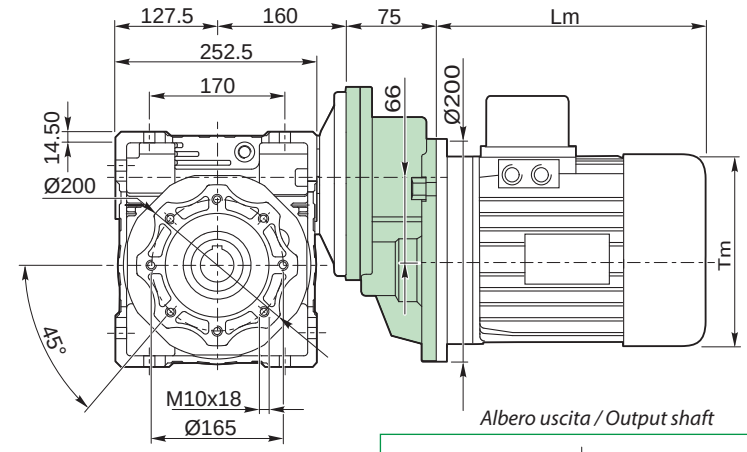


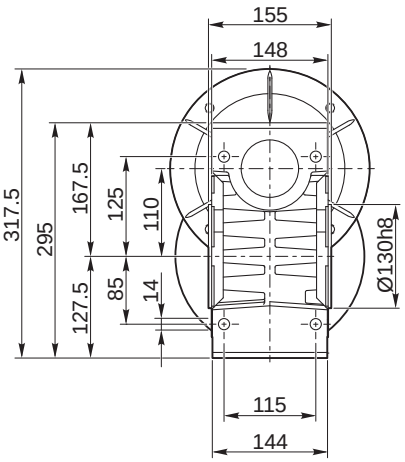


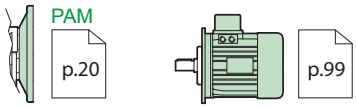
FC DX **Standard** **FC SX**



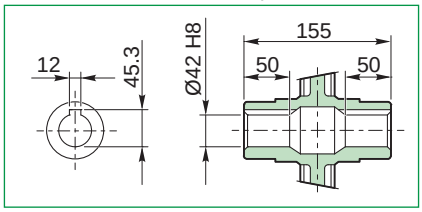
VR 090 / 110 P ...





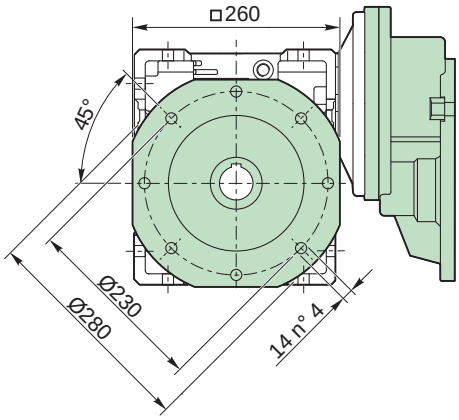


Albero uscita / Output shaft

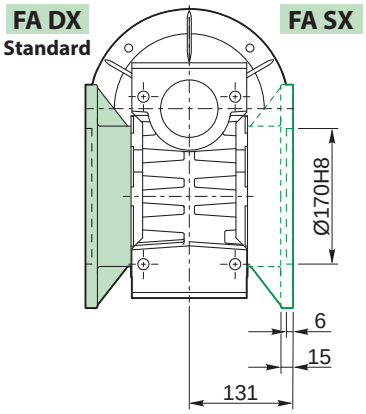


Kg
39.7 kg

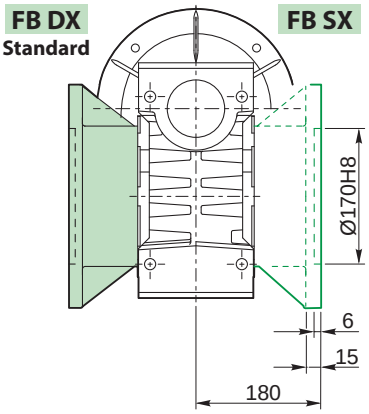
VR 090 / 110 F...



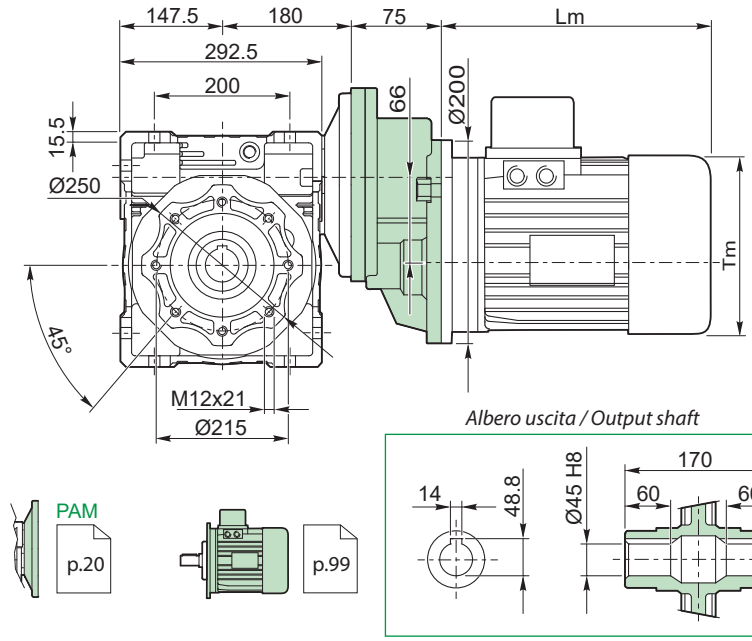
FA DX **FA SX**
Standard



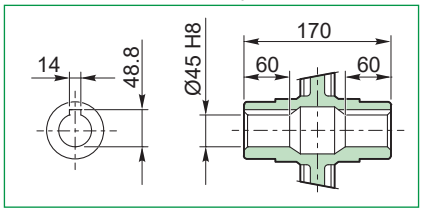
FB DX **FB SX**
Standard

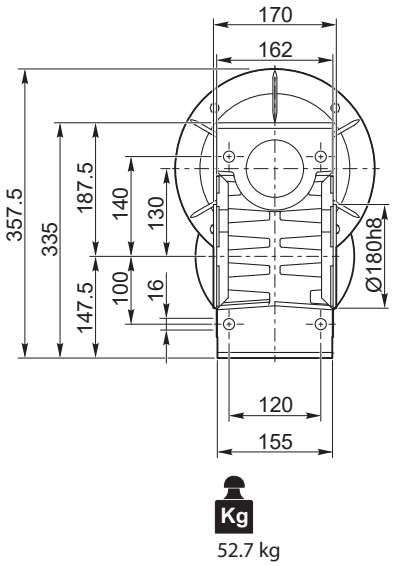


VR 090 / 130 P ...



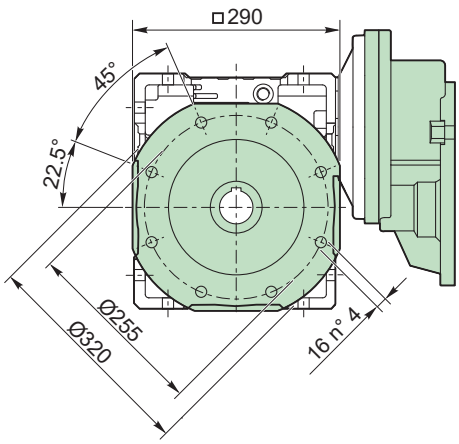
Albero uscita / Output shaft





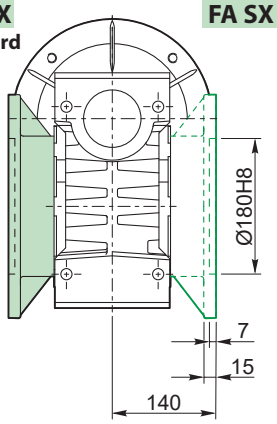
Kg
52.7 kg

VR 090 / 130 F...



FA DX
Standard

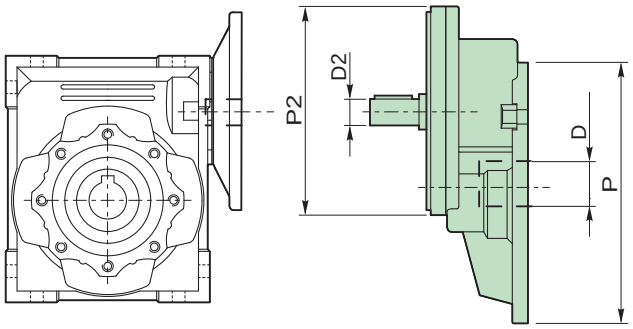
FA SX



Kit assemblaggio - Accessori / *Assembly Kit - Accessories*

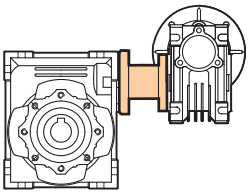
KIT PRECOPPIA / *KIT PRE-STAGE*

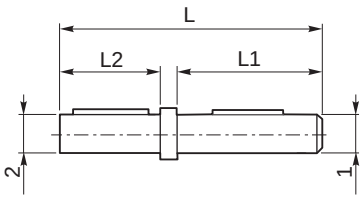
VR	CODICE / *CODE*	P	D	P2	D2	Kg
063/040 063/050	PR063A11	140	11	105	11	1.5
	PR063A14	140	11	105	14	1.5
071/050 071/063 071/075	PR071A14	160	14	120	14	2.6
	PR071A19	160	14	120	19	2.6
080/075 080/090 080/110	PR080A19	200	19	160	19	4.7
	PR080A24	200	19	160	24	4.7
090/090 090/110 090/130	PR090A24	200	24	160	24	4.7
	PR090A28	200	24	160	28	4.7

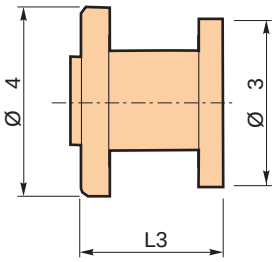


KIT COMBINAZIONE VITE SENZA FINE/ *KIT* COMBINATION *WORMGEARBOXES*

Albero di combinazione / Combination shaft *Flangia di combinazione / Combination flange*

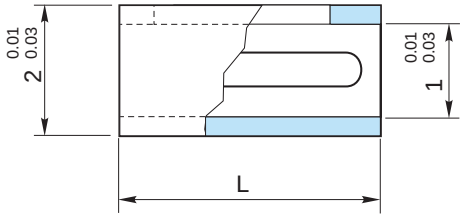






VR	CODICE / *CODE*	Albero di combinazione / *Combination shaft*					Flangia di combinazione / *Combination flange*		
		D1	D2	L1	L2	L	D3	D4	L3
025/030	KC025030A09	11	9	32	16	71.5	70	58	36.5
025/040	KC025040A11	11	11	32	18	75.5	70	75	41.5
030/040	KC030040A11	14	11	35	18	77	75	75	40
030/050	KC030050A14	14	14	37.5	24	82.5	75	89	40
030/063	KC030063A14	14	14	37.5	24	86.5	75	89	42
	KC030063A19	14	19	37.5	34	96.5			
040/075	KC040075A19	18	19	40	33.5	96	87	96	41
040/090	KC040090A24	18	24	40	43.5	106	87	96	41
050/110	KC050110A28	25	28	53.5	50	134	100	115	56.5
063/130	KC063130A28	25	28	57.5	48	127	110	115	47
063/150	KC063150A38	25	38	105	70	193	110	155	52

BC Boccola di riduzione in acciaio / *Metal shaft sleeves*



D2	11	14	19	19	24	24	28	28	38	38	42
D1	9	11	11	14	14	19	19	24	24	28	38
CODICE / CODE	BC1109	BC1411	BC1911	BC1914	BC2414	BC2419	BC2819	BC2824	BC3824	BC3828	BC4238