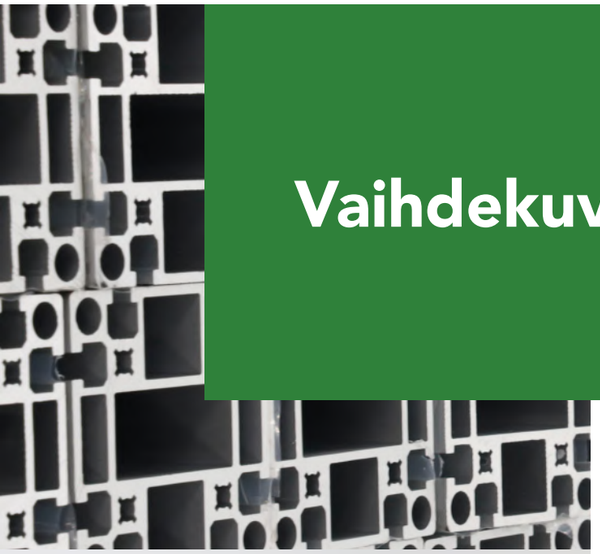
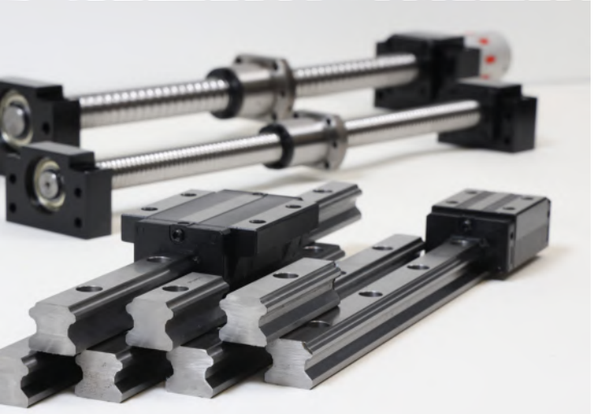
GREENLAB

Vaihdekuvasto





Kun laatu, hinta ja nopeus ratkaisevat

GREENLAB

GreenLab-alumiiniprofiili- ja -lineaarijärjestelmä

GreenLab-järjestelmään kuuluu laaja valikoima erilaisia alumiiniprofiileja ja niiden oheistuotteita, lineaareja, kuularuuveja sekä muita automaatiokomponentteja.
Nyt myös planeettavaihteet ja valmiit Toco -lineaariyksiköt.

Monipuolinen järjestelmä soveltuu kaikille teollisuudenaloille ja sillä on rajattomat käyttömahdollisuudet. Hinnastot ja tuotekuvat suunnittelusi tueksi löydät kotisivuiltamme.

GreenLab-järjestelmän ominaisuudet ovat vailla vertaa!

- Markkinoiden uusin ja edullisin
- Yhteensopiva monen muun järjestelmän kanssa
- Tuotteet suoraan valmistajalta ilman välikäsiä
- Mittava varasto, nopeat toimitukset
- Korkealaatuinen ja kestävä
- Nopea komponenttien asennus ja kokoonpano
- Yhtenäiset kiinnitysurat
- Joustava ja ympäristöystävällinen

Tuotantoautomaatio

Suunnittelemme ja rakennamme GreenLab-järjestelmän tuotteista erilaisia mekaanisia ratkaisuja, kuten hammashihna- ja ruuvikäyttöisiä lineaareja, XYZ-manipulaattoreita, siirtovaunuja, laitesuojia, testikaappeja, konerunkoja, kuljettimia sekä laajoja tuotantoautomaatioratkaisuja. Laiteratkaisut suunnitellaan asiakkaan toiveiden mukaan.

Toimintatapamme

Meiltä saat asiantuntevaa palvelua sekä ohjausta GreenLab-järjestelmän tehokkaaseen käyttöön. Meillä on vahvaa teknistä osaamista laiterakennuksen saralta yli 25 vuoden ajalta sekä laaja kumppaniverkosto, mikä takaa parhaan asiakashyödyn. Kaikki GreenLab-komponentit varastoidaan ja laitteet rakennetaan Salossa. Suurin osa tuoteluettelomme tuotteista löytyy heti varastosta ja suuretkin työstettävät komponenttitilaukset toimitetaan nopeasti laadusta tinkimättä. Tuomme asiakkaillemme ja kumppaneillemme lisäarvoa, joka perustuu kustannustehokkaaseen ja innovatiiviseen laiterakentamiseen.

Tervetuloa tutustumaan!

SISÄLLYSLUETTELO
GREENLAB

s. 3-6
PL/PF 60

s. 7-10
PL/PF 80

s. 11-14
PL/PF 120

s. 15-18
PL/PF 160

s. 19-22
WPL/WPF 60

s. 23-26
WPL/WPF 80

s. 27-30
WPL/WPF 120

s. 31-34
PBL/PBF 70

s. 35-38
PBL/PBF 90

GreenLab Finlandin Yleiset myynti- ja toimitusehdot löytyvät kotisivujemme materiaalipankista osoitteessa www.greenlab.fi.
Huomaathan, että alumiiniprofiilien, kuularuuvien ja lineaarijohteiden metrihinta on sama määrämittaisena ja kankina.

Kaikki mainitut hinnat ovat arvonlisäverottomia normaalihintoja.

Myydyn tavaran omistusoikeus säilyy GreenLabilla, kunnes kauppahinta on kokonaisuudessaan maksettu.

Maksuehto: määräytyy asiakkaan kanssa tehdyn sopimuksen mukaan.

Toimitusehto: FCA Muurla (vapaasti rahdinkuljettajalla, Incoterms 2022) tai sopimuksen mukaan

Pidätämme oikeuden hintojen muutoksiin.

PL/PF VALINTATAULUKKO

PL / PF Suositellut moottoritehot (3000rpm)

Power	PL/PF60-(i)	PL/PF80-(i)	PL/PF120-(i)	PL/PF160-(i)
50W	64, 160, 200, 256			
100W	3, 4, 5, 8, 9, 10, 12, 15, 16, 20, 25, 32, 40, 60, 80, 100, 120	64, 160, 200, 256, 320		
200W	3, 4, 5, 8, 9, 10, 12, 15, 16, 20, 25, 32, 40, 60	80, 100, 120, 160		
400W	3, 4, 5, 8, 9, 10, 12, 15, 16, 20, 25	32, 40, 60, 80	64, 100, 120, 160	
750W	(3, 4, 5, 9, 12, 16)	3, 4, 5, 8, 9, 10, 12, 15, 16, 20, 25, 32, 40	60, 80, 100	64, 120, 160, 200, 256
1000W		(3, 4, 5, 8, 9, 12, 15, 16, 20, 25, 32)	3, 4, 5, 8, 9, 10, 12, 15,16, 20, 25, 32, 40, 60	64, 80, 100, 120, 160, 200, 256
1500W		(3, 4, 5, 8, 9, 12, 15, 16, 20)	3, 4, 5, 8, 9, 10, 12, 15, 16, 20, 25, 32, 40	64, 60, 80, 100, 120, 160
2000W			3, 4, 5, 8, 9, 10, 12, 15, 16, 20, 25, 32	40, 60, 80, 100
2500W			3, 4, 5, 8, 9, 12, 15, 16, 20, 25	(3, 4, 5, 8, 9, 10, 12, 15, 16, 25), 32, 40, 60, 80, 100
3000W			(3, 4, 5, 8, 9, 12, 15, 16, 20)	3, 4, 5, 8, 9, 10, 12, 15, 16, 25, 32, 40, 60, 80
3500W			(3, 4, 5, 8, 9, 12, 15, 16)	3, 4, 5, 8, 9, 10, 12, 15, 16, 20, 25, 32, 40, 60
4500W				3, 4, 5, 8, 9, 10, 12, 15, 16, 20, 25, 32, 40
5500W				3, 4, 5, 8, 9, 10, 12, 15, 16, 20, 25, 32
7500W				3, 4, 5, 8, 9, 12, 15,16, 20, 25

Moottorin akselikokoalueet:

Vaihdesarja	PL/PF60-(i)	PL/PF80-(i)	PL/PF120-(i)	PL/PF160-(i)
Akselin halkaisija (mm)	6≤ d ≤19	8≤ d ≤22	14≤ d ≤35	19≤ d ≤42

PBL/PBF VALINTATAULUKKO

PBL / PBF Suositellut moottoritehot (3000rpm)

Power	PBL/PBF70-(i)	PBL/PBF90-(i)	PBL/PBF120-(i)
50W	100		
100W	70, 80, 90		
200W	3, 4, 5, 7, 8, 9, 10, 12, 15, 16, 20, 25, 28, 32, 35, 40, 50	90, 100	
400W	3, 4, 5, 7, 8, 9, 10, 12, 15, 16, 20, 25, 28, 32, 35	3, 4, 5, 7, 9, 10, 12, 15, 16, 20, 25, 28, 35, 40, 50, 70	90, 100
750W	(3, 4, 5, 7, 8, 9, 12)	3, 4, 5, 7, 9, 10, 12, 15, 16, 20, 25, 28, 35, 40, 50	3, 4, 5, 7, 9, 10, 12, 15, 16, 20, 25, 28, 35, 40, 70
1000W		3, 4, 5, 7, 9, 10, 12, 15, 16, 20, 25, 28	3, 4, 5, 7, 9, 10, 12, 15,16, 20, 25, 28, 35, 40
1500W		3, 4, 5, 7, 9, 10, 12, 15, 16, 20, 25, 28	3, 4, 5, 7, 9, 10, 12, 15, 16, 20, 25, 28, 35
2000W		(3, 4, 5, 7, 9, 10, 16, 20)	3, 4, 5, 7, 9, 10, 12, 15, 16, 20, 25, 28, 35
2500W			3, 4, 5, 7, 9, 10, 12, 15, 16, 20, 25, 28
3000W			(3, 4, 5, 7, 9, 10, 12, 15, 16, 20, 25, 28)
3500W			(3, 4, 5, 7, 9, 10, 12, 15, 16, 20)

Moottorin akselikokoalueet:

Vaihdesarja	PBL/PBF70	PBL/PBF90	PBL/PBF120
Akselin ahlkaisija (mm)	6≤ d ≤19	8≤ d ≤22	14≤ d ≤35

6.0 VAIHTEET GREENLAB

PL/PF 60

TEKNISET TIEDOT

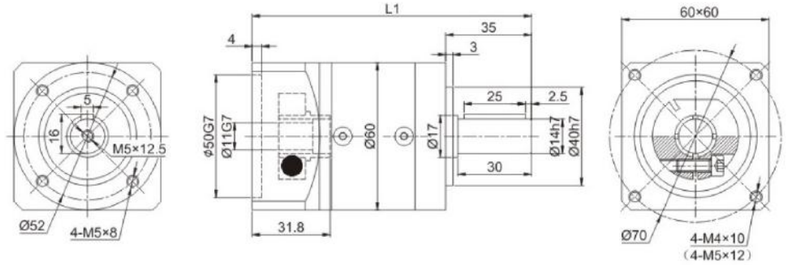
Planetary gearbox performance parameter							For motor (3000 rpm)		
S (1)	i (2)	Nominal output torque	E-stop torque	Moment of inertia	Permitted Radial Load	Permitted axial load	Motor power	Output speed	Output torque
		N.m (3)	N.m	Kgcm³	N (4)	N (4)	W (3)	rpm	N.m (3)
1	3	30	60	0,135	400	500	400 (3)	1000	3,67
	4	40	80	0,093	400	500	400 (3)	750	4,89
	5	37	74	0,078	400	500	400 (3)	600	6,11
	8	18	36	0,065	400	500	400 (3)	375	9,78
	10	13	26	0,054	400	500	400 (3)	300	12,22
2	9	30	60	0,131	400	500	400 (3)	333,33	10,77
	12	30	60	0,093	400	500	400 (3)	250	14,36
	15	30	60	0,078	400	500	400 (3)	200	17,95
	16	40	80	0,088	400	500	400 (3)	187,5	19,15
	20	40	80	0,075	400	500	400 (3)	150	23,94
	25	37	74	0,075	400	500	400 (3)	120	29,92
	32	40	80	0,064	400	500	400 (3)	93,75	38,30
	40	37	74	0,064	400	500	200 (3)	75	23,94
	64	18	36	0,064	400	500	50 (3)	46,87	9,58
3	60	40	80	0,130	400	500	200 (3)	50	34,38
	80	40	80	0,075	400	500	100 (3)	37,5	22,92
	100	40	80	0,075	400	500	100 (3)	30	28,65
	120	37	74	0,64	400	500	100 (3)	25	34,38
	160	40	80	0,064	400	500	50 (3)	18,75	18,75
	200	37	74	0,064	400	500	50 (3)	15	28,65
	256	40	80	0,064	400	500	50 (3)	11,72	36,67
	320	37	74	0,064	400	500	(3)	9,37	≤37
	512	18	36	0,064	400	500	(3)	5,86	≤18

Stage	Noise	Precision backslash	Standard backslash	Life time	Efficiency	Torsional stiffness	Degreeof protection	Weight
1	≤ 58 db(A) (5)		≤ 8 arcmin	20 000h	ŋ ≥ 96%	2.3 N.m/ arcmin	IP54	0,9 Kg
2			≤ 12 arcmin		ŋ ≥ 94%			1,1 Kg
3			≤ 15 arcmin		ŋ ≥ 90%			1,3 Kg

(1) : Stage
(2) : Ratio
(3) : When Gearbox operation torgue ≤ Rated torque, type-selection is based on motor parameter, see PL/PF selection
(4) : Radial force and axial force are the permissible force on output distance position when output speed is 100 rpm
(5) : Noise level is tested based on input speed 3000rpm and 1m distance.
(6) : Backslash is tested by 2% of rated torque

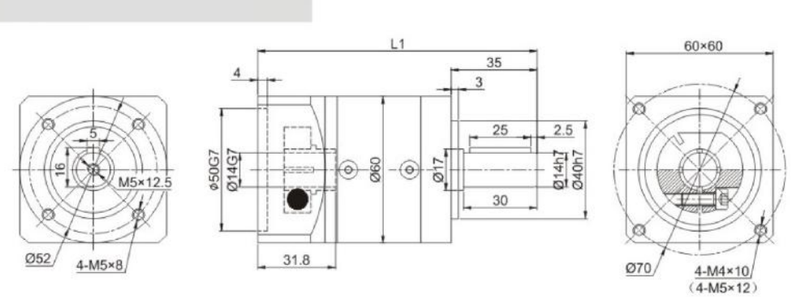
PL60 MITAT

200W



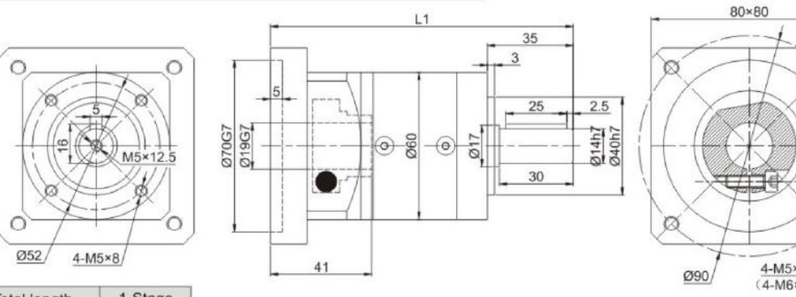
Total length	1-Stage	2-Stage	3-Stage
L1	114	127	139.5

400W



Total length	1-Stage	2-Stage	3-Stage
L1	114	127	139.5

750W

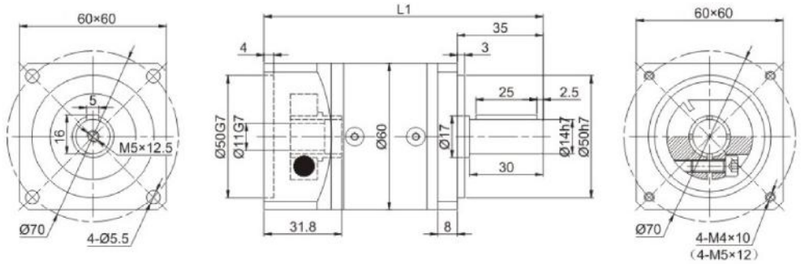


Total length	1-Stage
L1	124.5

6.0 VAIHTEET GREENLAB

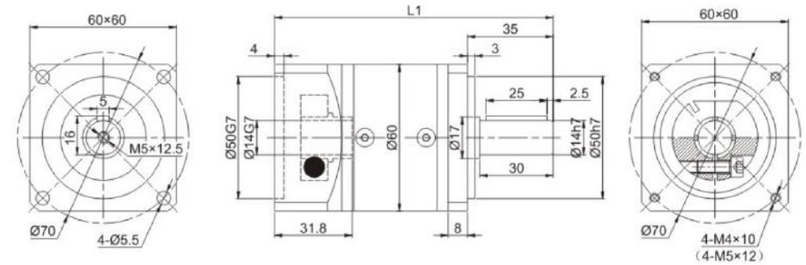
PF60 MITAT

200W



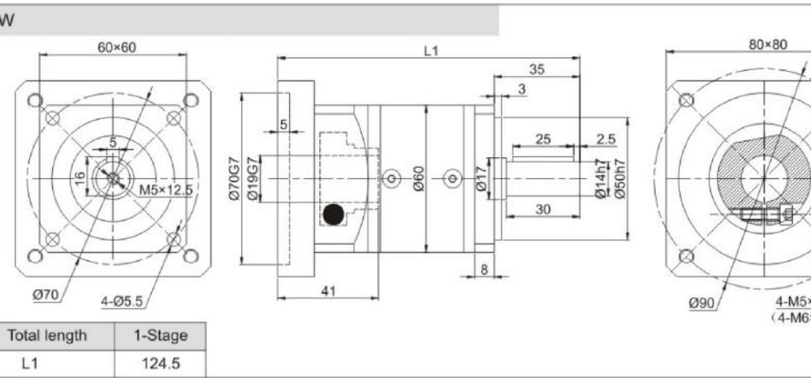
Total length	1-Stage	2-Stage	3-Stage
L1	114	127	139.5

400W



Total length	1-Stage	2-Stage	3-Stage
L1	114	127	139.5

750W



Total length	1-Stage
L1	124.5

VARASTOSSA

Tkoodi	Tuotenimi	Hinta
6.0001	PL60-5-400	185,00 €/kpl
6.0002	PL60-10-400	185,00 €/kpl
6.0003	PL60-20-400	241,00 €/kpl
6.0004	PF60-10-400	194,00 €/kpl

6.0 VAIHTEET GREENLAB

PL/PF 80

TEKNISET TIEDOT

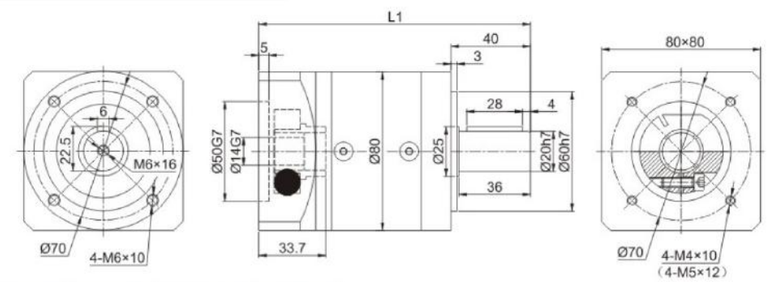
Planetary gearbox performance parameter							For motor (3000 rpm)		
S (1)	i (2)	Nominal output torque	E-stop torque	Moment of inertia	Permitted Radial Load	Permitted axial load	Motor power	Output speed	Output torque
		N.m (3)	N.m	Kgcm³	N (4)	N (4)	W (3)	rpm	N.m (3)
1	3	70	140	0,77	750	1000	750 (3)	1000	6,88
	4	110	220	0,52	750	1000	750 (3)	750	9,17
	5	105	210	0,45	750	1000	750 (3)	600	11,46
	8	43	86	0,39	750	1000	750 (3)	375	18,34
	10	27	54	0,34	750	1000	750 (3)	300	22,92
2	9	70	140	0,74	750	1000	750 (3)	333,33	20,20
	12	70	140	0,52	750	1000	750 (3)	250	26,93
	15	70	140	0,45	750	1000	750 (3)	200	33,66
	16	110	220	0,50	750	1000	750 (3)	187,5	35,91
	20	110	220	0,44	750	1000	750 (3)	150	44,89
	25	105	210	0,44	750	1000	750 (3)	120	56,11
	32	110	220	0,39	750	1000	750 (3)	93,75	71,82
	40	105	210	0,39	750	1000	750 (3)	75	89,77
	64	43	86	0,39	750	1000	200 (3)	46,87	38,30
3	60	110	220	0,70	750	1000	400 (3)	50	68,76
	80	110	220	0,50	750	1000	400 (3)	37,5	91,68
	100	110	220	0,44	750	1000	200 (3)	30	57,30
	120	105	210	0,39	750	1000	200 (3)	25	68,76
	160	110	220	0,39	750	1000	200 (3)	18,75	91,68
	200	105	210	0,39	750	1000	100 (3)	15	57,30
	256	110	110	0,39	750	1000	100 (3)	11,72	73,34
	320	105	105	0,39	750	1000	100 (3)	9,37	91,68
	512	43	86	0,39	750	1000	(3)	5,86	≤43

Stage	Noise	Precision backslash	Standard backslash	Life time	Efficiency	Torsional stiffness	Degreeof protection	Weight
1	≤ 60 db(A) (5)		≤ 8 arcmin	20 000h	ŋ ≥ 96%	5,8 N.m/ arcmin	IP54	2,2 Kg
2			≤ 12 arcmin		ŋ ≥ 94%			2,7 Kg
3			≤ 15 arcmin		ŋ ≥ 90%			3,2 Kg

(1) : Stage
(2) : Ratio
(3) : When Gearbox operation torgue ≤ Rated torque, type-selection is based on motor parameter, see PL/PF selection
(4) : Radial force and axial force are the permissible force on output distance position when output speed is 100 rpm
(5) : Noise level is tested based on input speed 3000rpm and 1m distance.
(6) : Backslash is tested by 2% of rated torque

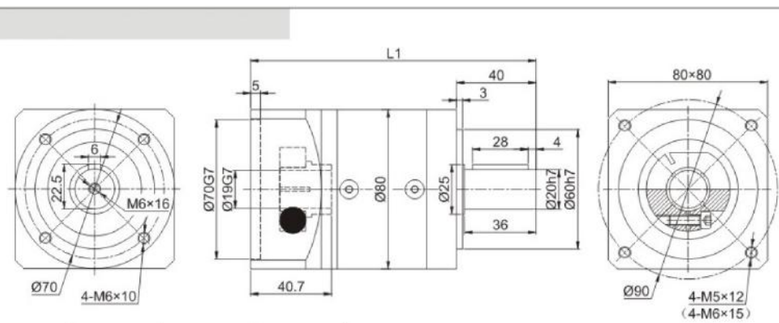
PL80 MITAT

400W



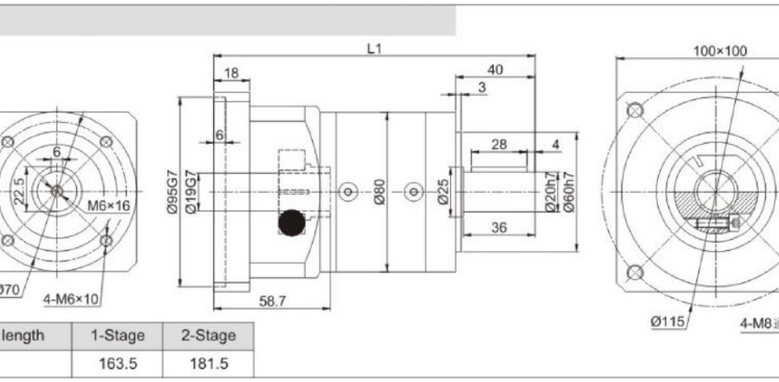
Total length	1-Stage	2-Stage	3-Stage
L1	136.5	154.5	172

750W



Total length	1-Stage	2-Stage	3-Stage
L1	143.5	161.5	179

1000W

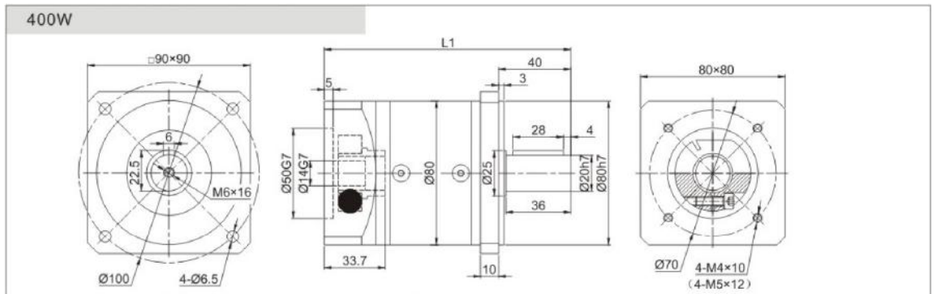


Total length	1-Stage	2-Stage
L1	163.5	181.5

6.0 VAIHTEET GREENLAB

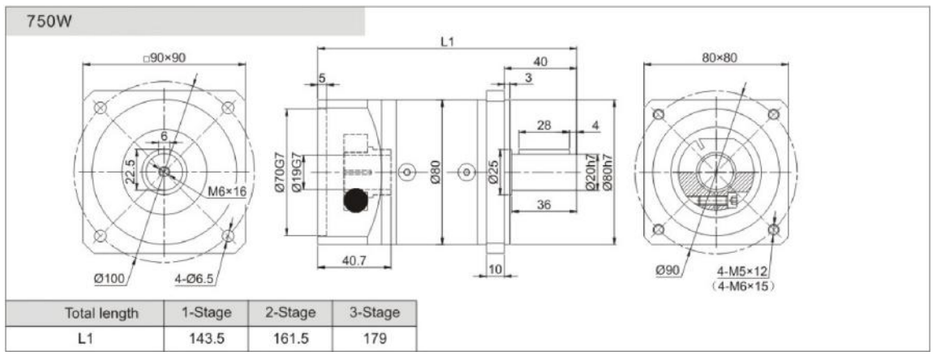
PF80 MITAT

400W



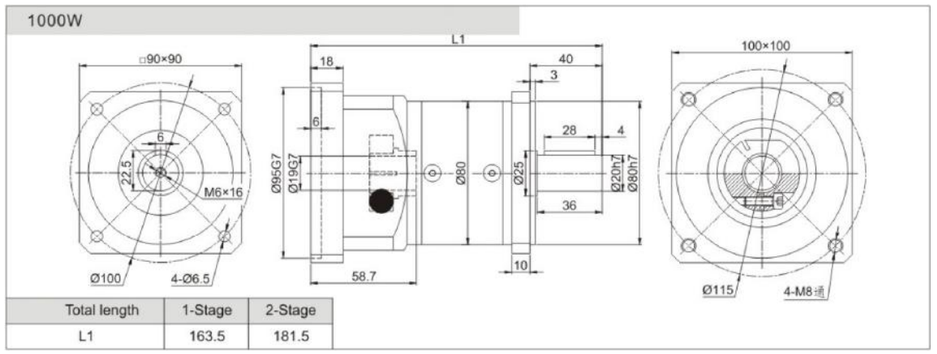
Total length	1-Stage	2-Stage	3-Stage
L1	136.5	154.5	172

750W



Total length	1-Stage	2-Stage	3-Stage
L1	143.5	161.5	179

1000W



Total length	1-Stage	2-Stage
L1	163.5	181.5

VARASTOSSA

Tkoodi	Tuotenimi	Hinta
6.0020	PL80-3-1000	252,00 €/kpl
6.0021	PL80-8-400	252,00 €/kpl
6.0022	PL80-10-750	252,00 €/kpl

PL/PF 120

TEKNISET TIEDOT

Planetary gearbox performance parameter							For motor (3000 rpm)		
S (1)	i (2)	Nominal output torque	E-stop torque	Moment of inertia	Permitted Radial Load	Permitted axial load	Motor power	Output speed	Output torque
		N.m (3)	N.m	Kgcm³	N (4)	N (4)	W (3)	rpm	N.m (3)
1	3	150	300	2,63	1750	2500	2000 (3)	1000	18,34
	4	220	440	1,79	1750	2500	2000 (3)	750	24,45
	5	185	370	1,53	1750	2500	2000 (3)	600	30,56
	8	100	200	1,32	1750	2500	2000 (3)	375	48,90
	10	63	126	1,14	1750	2500	2000 (3)	300	61,12
2	9	150	300	2,56	1750	2500	2000 (3)	333,33	53,86
	12	220	440	2,53	1750	2500	2000 (3)	250	71,82
	15	185	370	2,53	1750	2500	2000 (3)	200	89,77
	16	220	440	1,50	1750	2500	2000 (3)	187,5	95,75
	20	220	440	1,49	1750	2500	2000 (3)	150	119,69
	25	185	370	1,49	1750	2500	2000 (3)	120	149,62
	32	220	440	1,30	1750	2500	2000 (3)	93,75	191,51
	40	185	370	1,30	1750	2500	1500 (3)	75	179,54
	64	100	200	1,30	1750	2500	400 (3)	46,87	76,60
3	60	220	440	2,57	1750	2500	1000 (3)	50	171,9
	80	220	440	1,50	1750	2500	750 (3)	37,5	171,9
	100	220	440	1,49	1750	2500	750 (3)	30	214,88
	120	185	370	1,30	1750	2500	400 (3)	25	137,52
	160	220	440	1,30	1750	2500	400 (3)	18,75	183,36
	200	185	370	1,30	1750	2500	(3)	15	≤185
	256	220	440	1,30	1750	2500	(3)	11,72	≤200
	320	185	370	1,30	1750	2500	(3)	9,37	≤185
	512	100	200	1,30	1750	2500	(3)	5,86	≤100

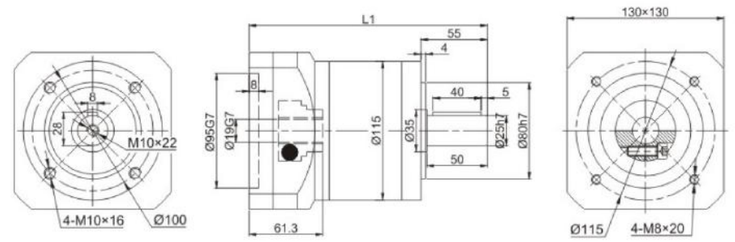
Stage	Noise	Precision backslash	Standard backslash	Life time	Efficiency	Torsional stiffness	Degreeof protection	Weight
1	≤ 65 db(A) (5)	≤ 5 arcmin	≤ 8 arcmin	20 000h	ŋ ≥ 96%	14,5 N.m/ arcmin	IP54	7,6 Kg
2		≤ 8 arcmin	≤ 12 arcmin		ŋ ≥ 94%			9,0 Kg
3		≤ 10 arcmin	≤ 15 arcmin		ŋ ≥ 90%			10,4 Kg

(1) : Stage
(2) : Ratio
(3) : When Gearbox operation torgue ≤ Rated torque, type-selection is based on motor parameter, see PL/PF selection
(4) : Radial force and axial force are the permissible force on output distance position when output speed is 100 rpm
(5) : Noise level is tested based on input speed 3000rpm and 1m distance.
(6) : Backslash is tested by 2% of rated torque

PF80 MITAT

PL120 MITAT

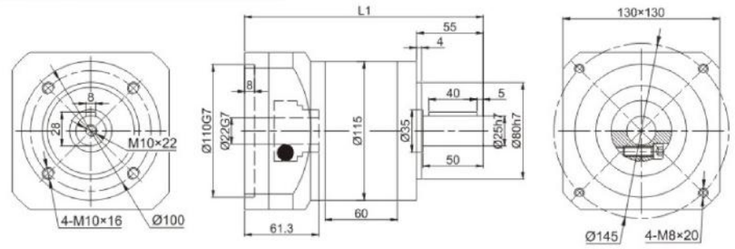
1000W



Total length	1-Stage	2-Stage	3-Stage
L1	197.5	222.2	242

注：输出扭矩＞185N.m时，输出轴直径选Φ32h7。
Note: Output torque >185 N.m, the output shaft diameter to choose Φ32h7.

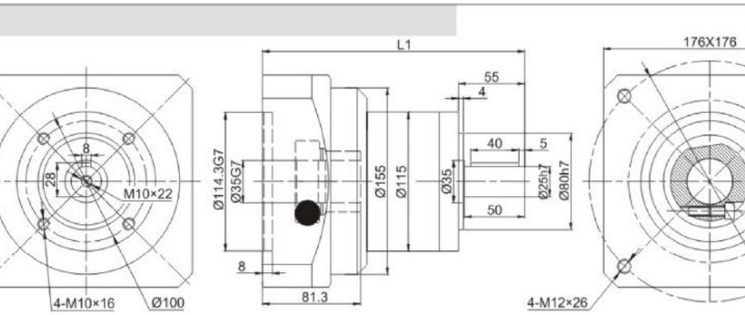
2000W



Total length	1-Stage	2-Stage	3-Stage
L1	197.5	222.2	242

注：输出扭矩＞185N.m时，输出轴直径选Φ32h7。
Note: Output torque >185 N.m, the output shaft diameter to choose Φ32h7.

3000W



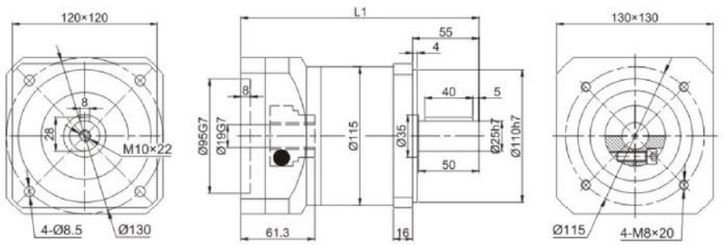
Total length	1-Stage	2-Stage
L1	217.5	242.2

注：输出扭矩＞185N.m时，输出轴直径选Φ32h7。
Note: Output torque >185 N.m, the output shaft diameter to choose Φ32h7.

6.0 VAIHTEET GREENLAB

PF120 MITAT

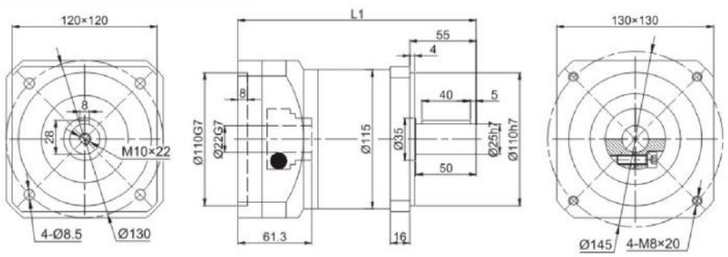
1000W



Total length	1-Stage	2-Stage	3-Stage
L1	197.5	222.2	242

注：输出扭矩＞185N.m时，输出轴直径选Φ32h7。
Note: Output torque >185 N.m, the output shaft diameter to choose Φ32h7.

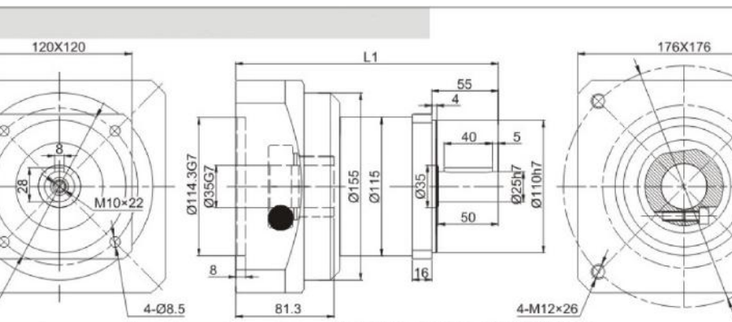
2000W



Total length	1-Stage	2-Stage	3-Stage
L1	197.5	222.2	242

注：输出扭矩＞185N.m时，输出轴直径选Φ32h7。
Note: Output torque >185 N.m, the output shaft diameter to choose Φ32h7.

3000W



Total length	1-Stage	2-Stage
L1	217.5	242.2

注：输出扭矩＞185N.m时，输出轴直径选Φ32h7。
Note: Output torque >185 N.m, the output shaft diameter to choose Φ32h7.

VARASTOSSA

Tkoodi	Tuotenimi	Hinta
6.0025	PL120-20	686,00 €/kpl

6.0 VAIHTEET GREENLAB

PL/PF 160

TEKNISET TIEDOT

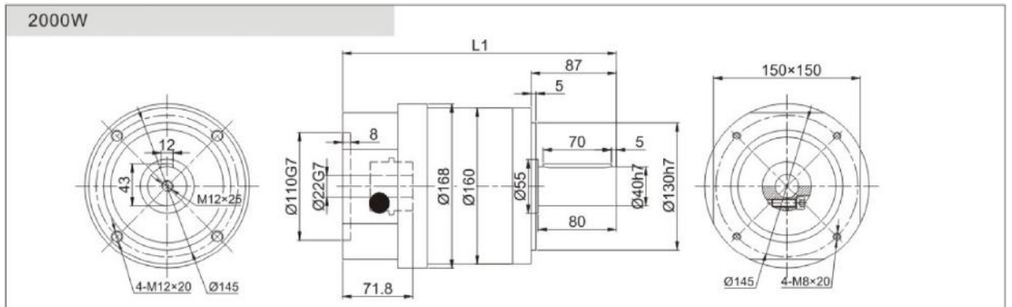
Planetary gearbox performance parameter							For motor (3000 rpm)		
S (1)	i (2)	Nominal output torque	E-stop torque	Moment of inertia	Permitted Radial Load	Permitted axial load	Motor power	Output speed	Output torque
		N.m (3)	N.m	Kgcm³	N (4)	N (4)	W (3)	rpm	N.m (3)
1	3	540	1080	12,14	5000	7000	4500 (3)	1000	41,26
	4	720	1440	7,78	5000	7000	4500 (3)	750	55,01
	5	600	1200	6,07	5000	7000	4500 (3)	600	68,76
	8	320	640	4,63	5000	7000	4500 (3)	375	110,02
	10	200	400	3,52	5000	7000	4500 (3)	300	137,52
2	9	540	1080	12,14	5000	7000	4500 (3)	333,33	121,19
	12	720	1440	12,14	5000	7000	4500 (3)	250	161,59
	15	600	1200	12,14	5000	7000	4500 (3)	200	201,98
	16	720	1440	7,47	5000	7000	4500 (3)	187,5	215,45
	20	720	1440	6,65	5000	7000	4500 (3)	150	269,31
	25	600	1200	5,81	5000	7000	4500 (3)	120	336,64
	32	720	1440	4,5	5000	7000	4500 (3)	93,75	430,90
	40	600	1200	4,5	5000	7000	4500 (3)	75	538,62
	64	320	640	4,5	5000	7000	1500 (3)	46,87	287,26
3	60	720	1440	12,14	5000	7000	3500 (3)	50	601,65
	80	720	1440	6,07	5000	7000	3000 (3)	37,5	687,60
	100	720	1440	6,07	5000	7000	2500 (3)	30	716,25
	120	600	1200	4,5	5000	7000	1500 (3)	25	515,70
	160	720	1440	4,5	5000	7000	1500 (3)	18,75	687,60
	200	600	1200	4,5	5000	7000	1000 (3)	15	573,00
	256	720	1440	4,5	5000	7000	750 (3)	11,72	550,08
	320	600	1200	4,5	5000	7000	(3)	9,37	≤600
	512	320	640	4,5	5000	7000	(3)	5,86	≤320

Stage	Noise	Precision backslash	Standard backslash	Life time	Efficiency	Torsional stiffness	Degreeof protection	Weight
1	≤ 70 db(A) (5)	≤ 5 arcmin	≤ 8 arcmin	20 000h	ŋ ≥ 96%	37,5 N.m/ arcmin	IP54	23 Kg
2		≤ 8 arcmin	≤ 12 arcmin		ŋ ≥ 94%			29,5 Kg
3		≤ 10 arcmin	≤ 15 arcmin		ŋ ≥ 90%			36 Kg

(1) : Stage
(2) : Ratio
(3) : When Gearbox operation torgue ≤ Rated torque, type-selection is based on motor parameter, see PL/PF selection
(4) : Radial force and axial force are the permissible force on output distance position when output speed is 100 rpm
(5) : Noise level is tested based on input speed 3000rpm and 1m distance.
(6) : Backslash is tested by 2% of rated torque

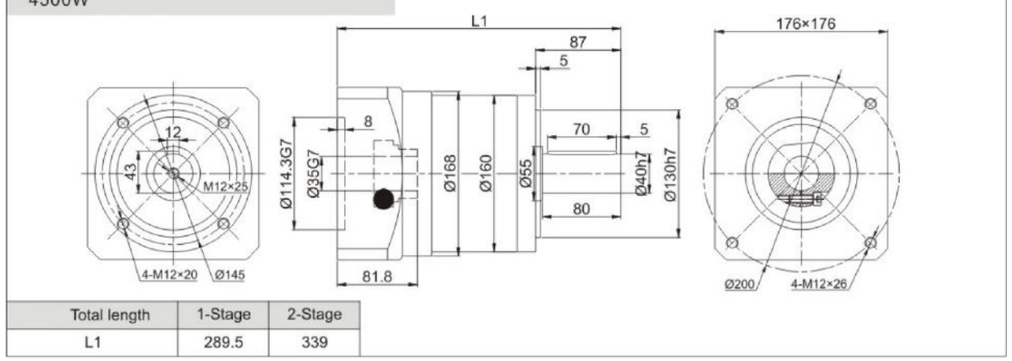
PL160 MITAT

2000W



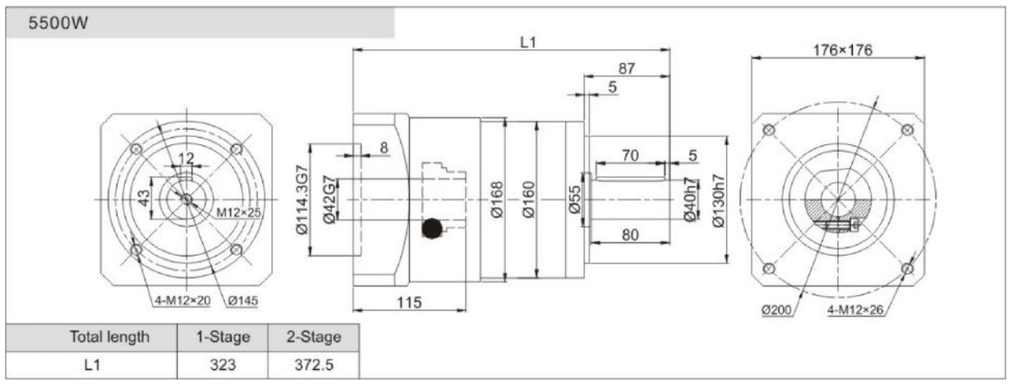
Total length	1-Stage	2-Stage	3-Stage
L1	279.5	329	341.5

4500W



Total length	1-Stage	2-Stage
L1	289.5	339

5500W

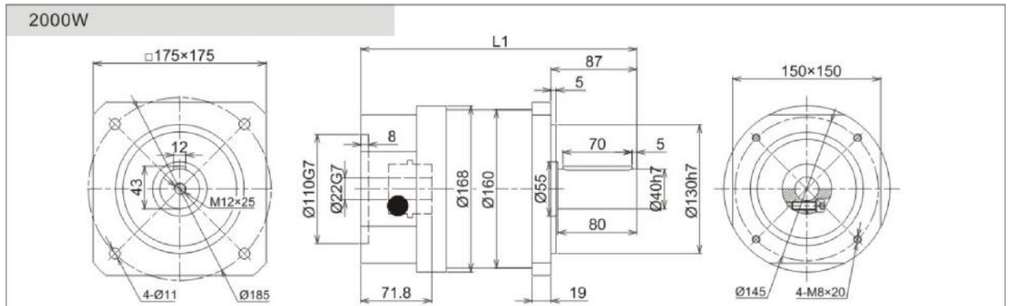


Total length	1-Stage	2-Stage
L1	323	372.5

6.0 VAIHTEET GREENLAB

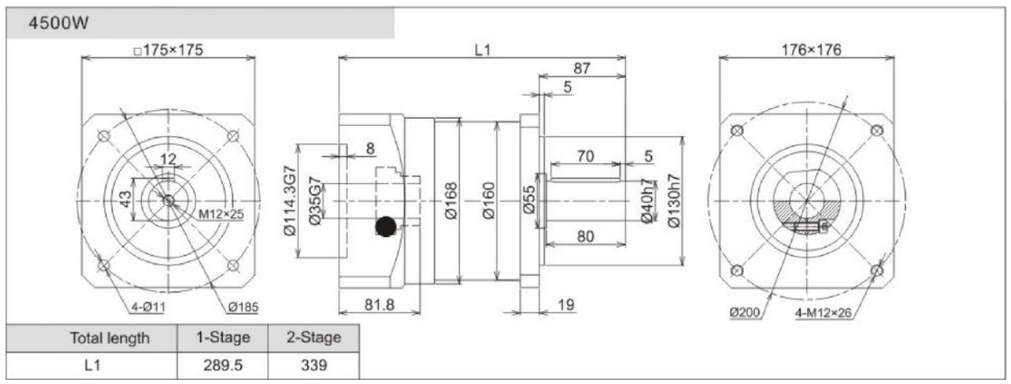
PF160 MITAT

2000W



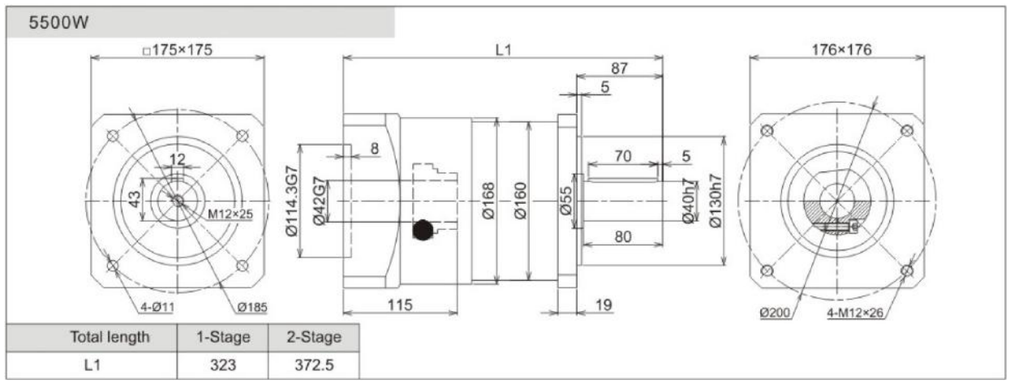
Total length	1-Stage	2-Stage	3-Stage
L1	279.5	329	341.5

4500W



Total length	1-Stage	2-Stage
L1	289.5	339

5500W



Total length	1-Stage	2-Stage
L1	323	372.5

VARASTOSSA

Tkoodi	Tuotenimi	Hinta
6.0026	PL160-20	986,00 €/kpl

6.0 VAIHTEET GREENLAB

WPL/WPF 60

TEKNISET TIEDOT

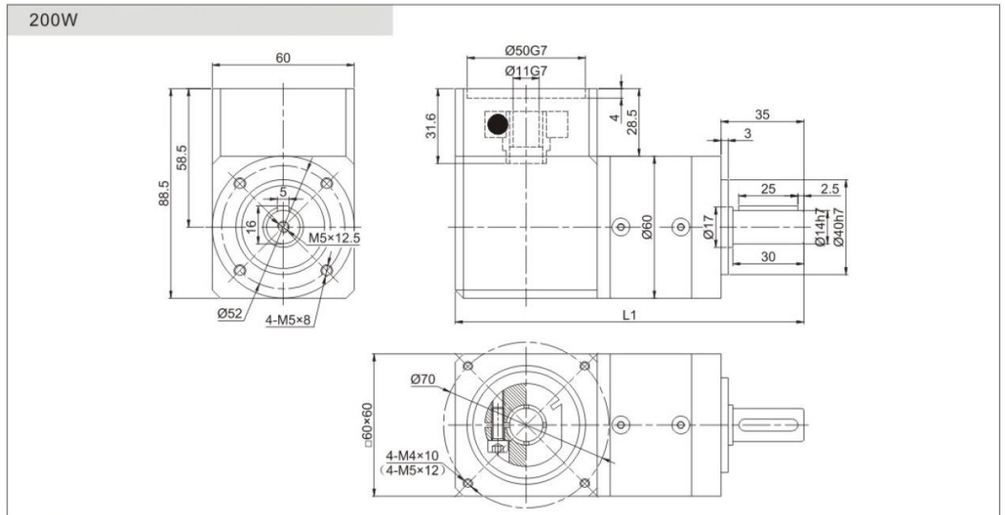
Planetary gearbox performance parameter							For motor (3000 rpm)		
S (1)	i (2)	Nominal output torque	E-stop torque	Moment of inertia	Permitted Radial Load	Permitted axial load	Motor power	Output speed	Output torque
		N.m (3)	N.m	Kgcm³	N (4)	N (4)	W (3)	rpm	N.m (3)
1	3	30	60	0,246	400	500	400 (3)	1000	3,67
	4	30	80	0,204	400	500	400 (3)	750	4,89
	5	30	74	0,189	400	500	400 (3)	600	6,11
	8	18	36	0,176	400	500	400 (3)	375	9,78
	10	13	26	0,175	400	500	400 (3)	300	12,22
2	9	30	60	0,242	400	500	400 (3)	333,33	10,77
	12	30	60	0,238	400	500	400 (3)	250	14,36
	15	30	60	0,189	400	500	400 (3)	200	17,95
	16	40	80	0,199	400	500	400 (3)	187,5	19,15
	20	40	80	0,186	400	500	400 (3)	150	23,94
	25	37	74	0,175	400	500	400 (3)	120	29,92
	32	40	80	0,175	400	500	400 (3)	93,75	38,30
	40	37	74	0,175	400	500	200 (3)	75	23,94
	64	18	36	0,175	400	500	50 (3)	46,87	9,58
3	60	40	80	0,187	400	500	200 (3)	50	34,38
	80	40	80	0,186	400	500	100 (3)	37,5	22,92
	100	40	80	0,175	400	500	100 (3)	30	28,65
	120	37	74	0,175	400	500	100 (3)	25	34,38
	160	40	80	0,175	400	500	50 (3)	18,75	18,75
	200	37	74	0,175	400	500	50 (3)	15	28,65
	256	40	80	0,175	400	500	50 (3)	11,72	36,67
	320	37	74	0,175	400	500	(3)	9,37	≤37
	512	18	36	0,175	400	500	(3)	5,86	≤18

Stage	Noise	Precision backslash	Standard backslash	Life time	Efficiency	Torsional stiffness	Degreeof protection	Weight
1	≤ 70 db(A) (5)		≤ 16 arcmin	20 000h	ŋ ≥ 94%	2,3 N.m/ arcmin	IP54	1,7 Kg
2			≤ 20 arcmin		ŋ ≥ 92%			1,9 Kg
3			≤ 23 arcmin		ŋ ≥ 88%			2,1 Kg

(1) : Stage
(2) : Ratio
(3) : When Gearbox operation torgue ≤ Rated torque, type-selection is based on motor parameter, see PL/PF selection
(4) : Radial force and axial force are the permissible force on output distance position when output speed is 100 rpm
(5) : Noise level is tested based on input speed 3000rpm and 1m distance.
(6) : Backslash is tested by 2% of rated torque

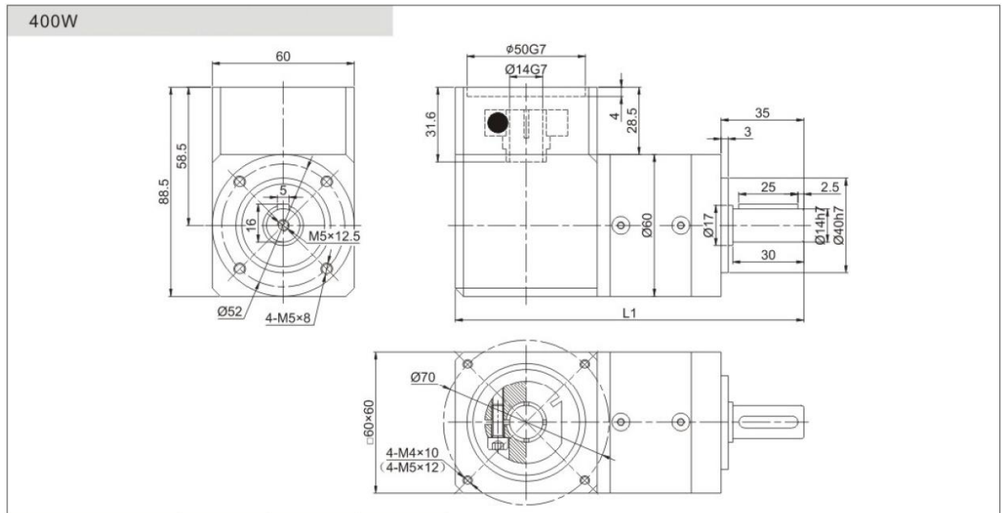
WPL60 MITAT

200W



Total length	1-Stage	2-Stage	3-Stage
L1	147	160	172.5

400W

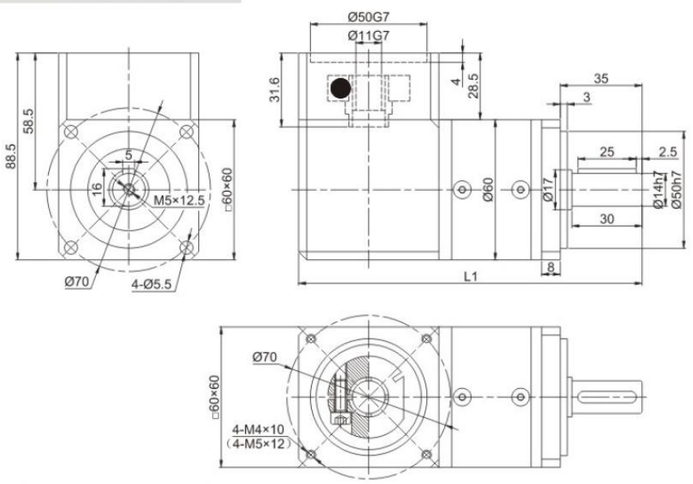


Total length	1-Stage	2-Stage	3-Stage
L1	147	160	172.5

6.0 VAIHTEET GREENLAB

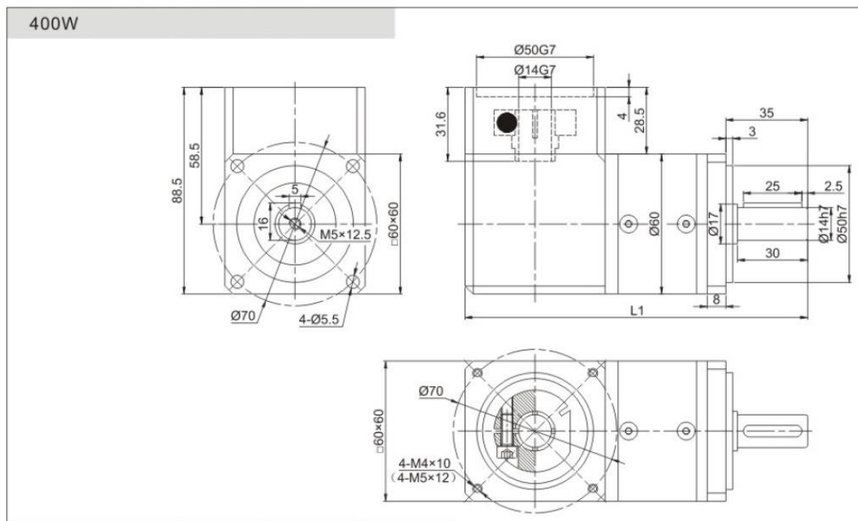
WPF60 MITAT

200W



Total length	1-Stage	2-Stage	3-Stage
L1	147	160	172.5

400W



Total length	1-Stage	2-Stage	3-Stage
L1	147	160	172.5

VARASTOSSA

Tkoodi	Tuotenimi	Hinta
6.0005	WPL60-10	367,00 €/kpl

WPL/WPF 80

TEKNISET TIEDOT

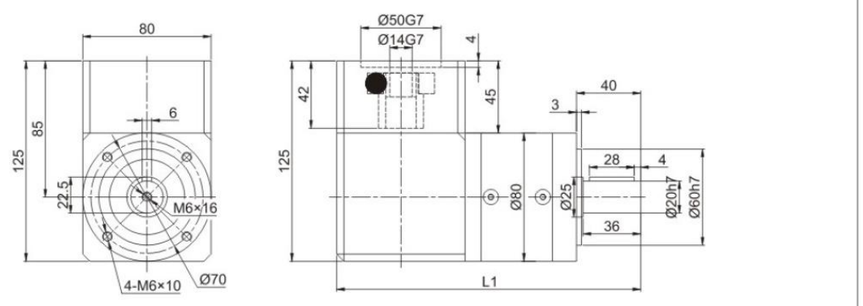
Planetary gearbox performance parameter							For motor (3000 rpm)		
S (1)	i (2)	Nominal output torque	E-stop torque	Moment of inertia	Permitted Radial Load	Permitted axial load	Motor power	Output speed	Output torque
		N.m (3)	N.m	Kgcm³	N (4)	N (4)	W (3)	rpm	N.m (3)
1	3	70	140	1,19	750	1000	750 (3)	1000	6,88
	4	110	220	0,94	750	1000	750 (3)	750	9,17
	5	105	210	0,87	750	1000	750 (3)	600	11,46
	8	43	86	0,81	750	1000	750 (3)	375	18,34
	10	27	54	0,81	750	1000	750 (3)	300	22,92
2	9	70	140	1,16	750	1000	750 (3)	333,33	20,20
	12	70	140	1,14	750	1000	750 (3)	250	26,93
	15	70	140	1,13	750	1000	750 (3)	200	33,66
	16	110	220	0,92	750	1000	750 (3)	187,5	35,91
	20	110	220	0,86	750	1000	750 (3)	150	44,89
	25	105	210	0,86	750	1000	750 (3)	120	56,11
	32	110	220	0,81	750	1000	750 (3)	93,75	71,82
	40	105	210	0,81	750	1000	750 (3)	75	89,77
	64	43	86	0,81	750	1000	200 (3)	46,87	38,30
3	60	110	220	0,93	750	1000	400 (3)	50	68,76
	80	110	220	0,92	750	1000	400 (3)	37,5	91,68
	100	110	220	0,86	750	1000	200 (3)	30	57,30
	120	105	210	1,12	750	1000	200 (3)	25	68,76
	160	110	220	0,81	750	1000	200 (3)	18,75	91,68
	200	105	210	0,81	750	1000	100 (3)	15	57,30
	256	110	220	0,81	750	1000	100 (3)	11,72	73,34
	320	105	210	0,81	750	1000	100 (3)	9,37	91,68
	512	43	86	0,81	750	1000	(3)	5,86	≤43

Stage	Noise	Precision backslash	Standard backslash	Life time	Efficiency	Torsional stiffness	Degreeof protection	Weight
1	≤ 73 db(A) (5)		≤ 16 arcmin	20 000h	η ≥ 94%	5,8 N.m/ arcmin	IP54	4,4 Kg
2			≤ 20 arcmin		η ≥ 92%			5 Kg
3			≤ 23 arcmin		η ≥ 88%			5,5 Kg

(1) : Stage
(2) : Ratio
(3) : When Gearbox operation torgue ≤ Rated torque, type-selection is based on motor parameter, see PL/PF selection
(4) : Radial force and axial force are the permissible force on output distance position when output speed is 100 rpm
(5) : Noise level is tested based on input speed 3000rpm and 1m distance.
(6) : Backslash is tested by 2% of rated torque

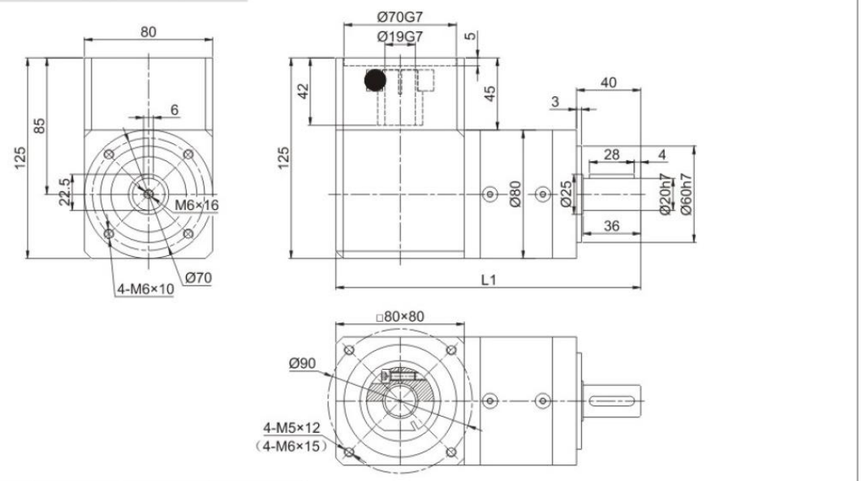
WPL80 MITAT

400W



Total length	1-Stage	2-Stage	3-Stage
L1	190	208	225.5

750W

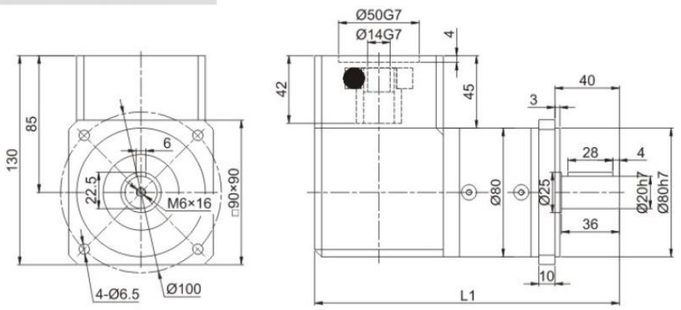


Total length	1-Stage	2-Stage	3-Stage
L1	190	208	225.5

6.0 VAIHTEET GREENLAB

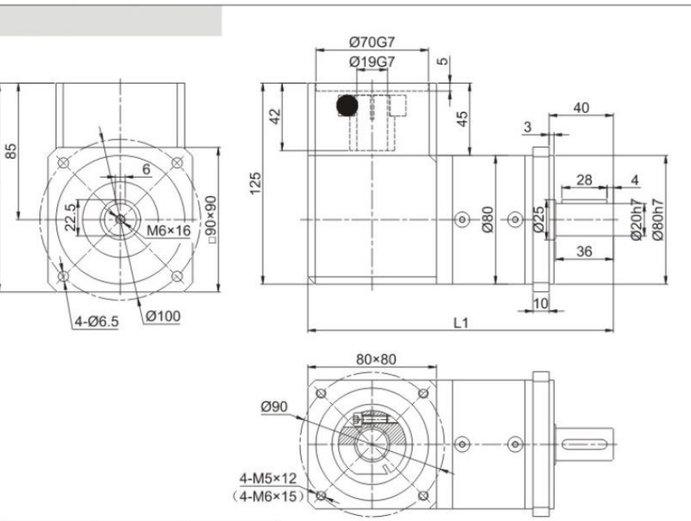
WPF80 MITAT

400W



Total length	1-Stage	2-Stage	3-Stage
L1	190	208	225.5

750W



Total length	1-Stage	2-Stage	3-Stage
L1	190	208	225.5

VARASTOSSA

Tkoodi	Tuotenimi	Hinta
6.0023	WPL80-10	810,00 €/kpl

WPL/WPF 120

TEKNISET TIEDOT

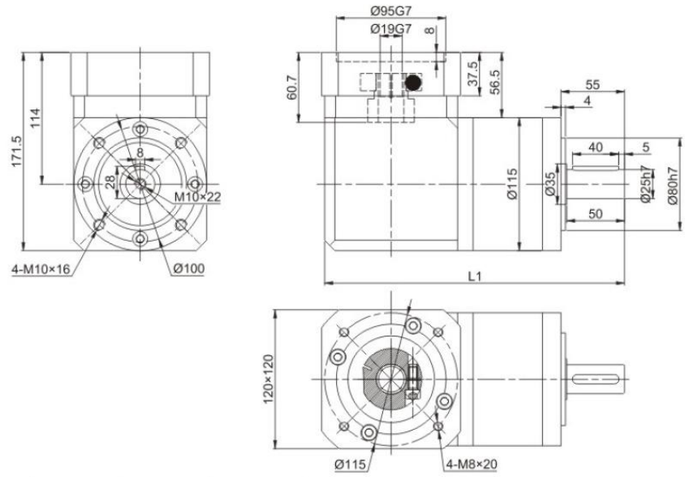
Planetary gearbox performance parameter							For motor (3000 rpm)		
S (1)	i (2)	Nominal output torque	E-stop torque	Moment of inertia	Permitted Radial Load	Permitted axial load	Motor power	Output speed	Output torque
		N.m (3)	N.m	Kgcm³	N (4)	N (4)	W (3)	rpm	N.m (3)
1	3	150	300	5,75	1750	2500	2000 (3)	1000	18,34
	4	220	440	3,91	1750	2500	2000 (3)	750	24,45
	5	185	370	3,35	1750	2500	2000 (3)	600	30,56
	8	100	200	2,89	1750	2500	2000 (3)	375	48,90
	10	63	126	2,85	1750	2500	2000 (3)	300	61,12
2	9	150	300	5,75	1750	2500	2000 (3)	333,33	53,86
	12	220	440	5,60	1750	2500	2000 (3)	250	71,82
	15	185	370	5,53	1750	2500	2000 (3)	200	89,77
	16	220	440	3,83	1750	2500	2000 (3)	187,5	95,75
	20	220	440	3,28	1750	2500	2000 (3)	150	119,69
	25	185	370	3,26	1750	2500	2000 (3)	120	149,62
	32	220	440	2,84	1750	2500	2000 (3)	93,75	191,51
	40	185	370	2,84	1750	2500	1500 (3)	75	179,54
	64	100	200	2,84	1750	2500	400 (3)	46,87	76,60
3	60	220	440	5,62	1750	2500	1000 (3)	50	171,9
	80	220	440	3,28	1750	2500	750 (3)	37,5	171,9
	100	220	440	2,84	1750	2500	750 (3)	30	214,88
	120	185	370	5,47	1750	2500	400 (3)	25	137,52
	160	220	440	2,84	1750	2500	400 (3)	18,75	183,36
	200	185	370	2,84	1750	2500	(3)	15	≤185
	256	220	440	2,84	1750	2500	(3)	11,72	≤220
	320	185	370	2,84	1750	2500	(3)	9,37	≤185
	512	100	200	2,84	1750	2500	(3)	5,86	≤100

Stage	Noise	Precision backslash	Standard backslash	Life time	Efficiency	Torsional stiffness	Degreeof protection	Weight
1	≤ 75 db(A) (5)		≤ 13 arcmin	20 000h	ŋ ≥ 94%	14,5 N.m/ arcmin	IP54	12 Kg
2			≤ 16 arcmin		ŋ ≥ 92%			14 Kg
3			≤ 20 arcmin		ŋ ≥ 88%			16 Kg

(1) : Stage
(2) : Ratio
(3) : When Gearbox operation torgue ≤ Rated torque, type-selection is based on motor parameter, see PL/PF selection
(4) : Radial force and axial force are the permissible force on output distance position when output speed is 100 rpm
(5) : Noise level is tested based on input speed 3000rpm and 1m distance.
(6) : Backslash is tested by 2% of rated torque

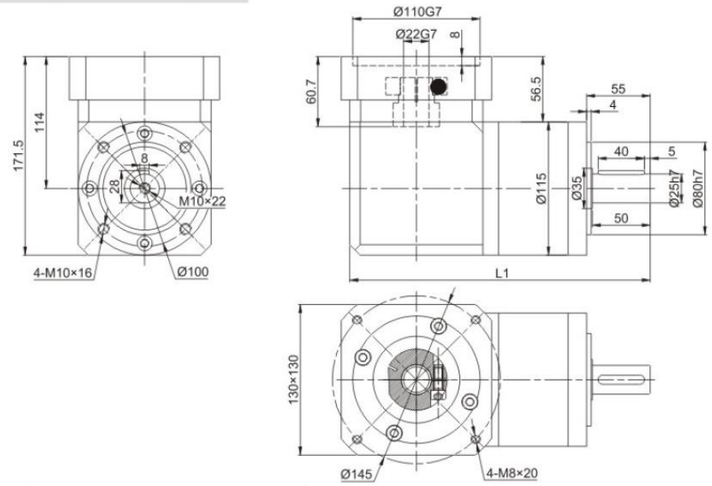
WPL120 MITAT

1000W



Total length	1-Stage	2-Stage	3-Stage
L1	259.5	284.2	304

2000W

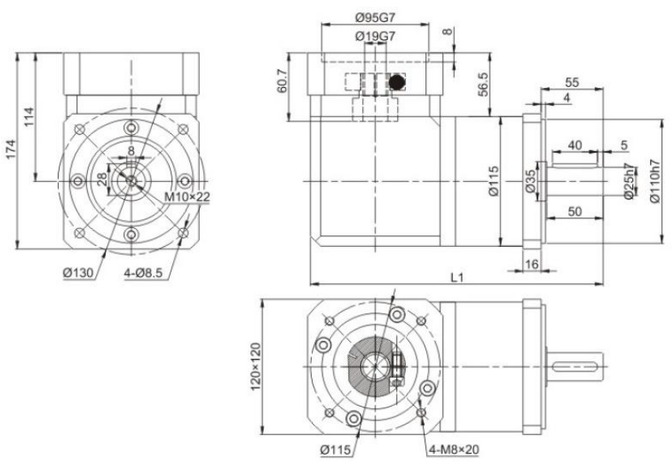


Total length	1-Stage	2-Stage	3-Stage
L1	259.5	284.2	304

6.0 VAIHTEET GREENLAB

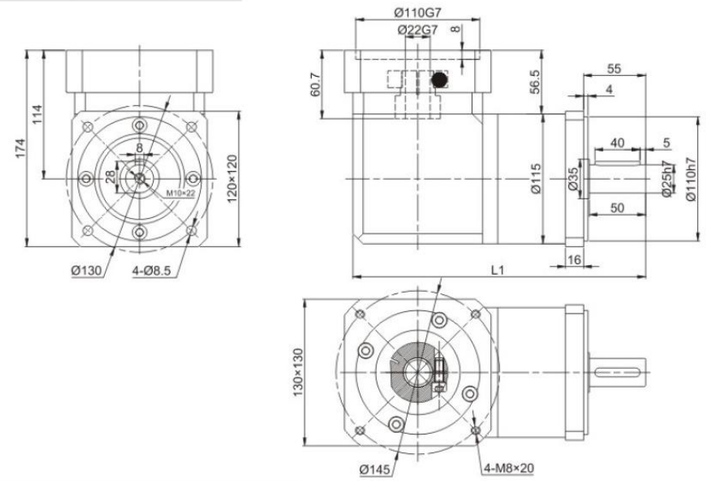
WPF120 MITAT

1000W



Total length	1-Stage	2-Stage	3-Stage
L1	259.5	284.2	304

2000W



Total length	1-Stage	2-Stage	3-Stage
L1	259.5	284.2	304

VARASTOSSA

Tkoodi	Tuotenimi	Hinta
6.0025	PL120-20	686,00 €/kpl

6.0 VAIHTEET GREENLAB

PBL/PBF 70

TEKNISET TIEDOT

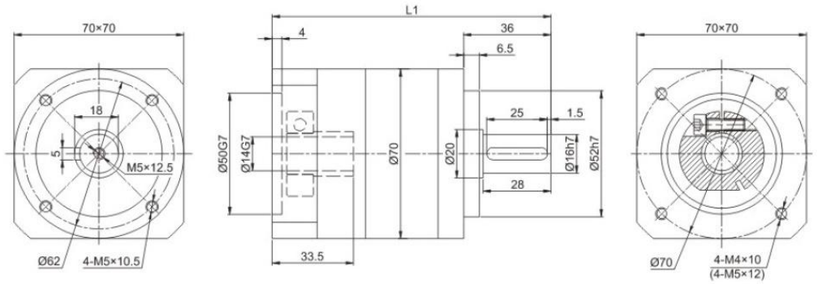
Planetary gearbox performance parameter							For motor (3000 rpm)		
S (1)	i (2)	Nominal output torque	E-stop torque	Moment of inertia	Permitted Radial Load	Permitted axial load	Motor power	Output speed	Output torque
		N.m (3)	N.m	Kgcm³	N (4)	N (4)	W (3)	rpm	N.m (3)
1	3	35	105	0,16	1000	500	750 (3)	1000	6,87
	4	50	150	0,14	1000	500	750 (3)	750	9,16
	5	50	150	0,13	1000	500	750 (3)	600	11,45
	7	40	120	0,13	1000	500	750 (3)	428,57	16,03
	8	35	105	0,13	1000	500	750 (3)	375	18,32
	9	35	105	0,13	1000	500	750 (3)	333,33	20,61
	10	22	66	0,13	1000	500	750 (3)	300	12,2
2	12	35	105	0,14	1000	500	750 (3)	250	27,48
	15	35	105	0,13	1000	500	400 (3)	200	18,3
	16	50	150	0,14	1000	500	400 (3)	187,5	19,52
	20	50	150	0,13	1000	500	400 (3)	150	24,4
	25	50	150	0,13	1000	500	400 (3)	120	30,5
	28	50	150	0,13	1000	500	400 (3)	107,14	34,16
	32	50	150	0,13	1000	500	400 (3)	93,75	39,04
	35	50	150	0,13	1000	500	400 (3)	85,71	42,7
	40	50	150	0,13	1000	500	200 (3)	75	24,44
	50	50	150	0,13	1000	500	200 (3)	60	30,55
	70	40	120	0,13	1000	500	100 (3)	42,85	21,39
	80	35	105	0,13	1000	500	100 (3)	37,5	24,45
	90	35	105	0,13	1000	500	100 (3)	33,33	27,5
	100	22	66	0,13	1000	500	50 (3)	30	15,28

Stage	Noise	Precision backslash	Standard backslash	Life time	Efficiency	Torsional stiffness	Degreeof protection	Weight
1	≤ 58 db(A) (5)		≤ 5 arcmin	20 000h	η ≥ 96%	7 N.m/ arcmin	IP65	1,1 Kg
2			≤ 8 arcmin		η ≥ 94%			1,5 Kg

(1) : Stage
(2) : Ratio
(3) : When Gearbox operation torgue ≤ Rated torque, type-selection is based on motor parameter, see PBL/PBF selection
(4) : Radial force and axial force are the permissible force on output distance position when output speed is 100 rpm
(5) : Noise level is tested based on input speed 3000rpm and 1m distance.
(6) : Backslash is tested by 2% of rated torque

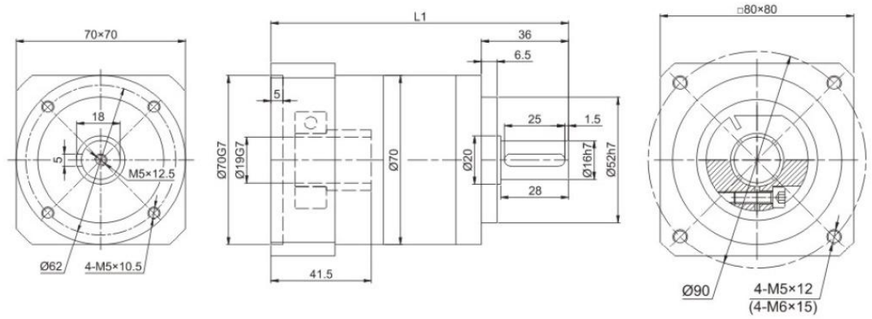
PBL 70 MITAT

400W



Total length	1-Stage	2-Stage
L1	115	137.5

750W

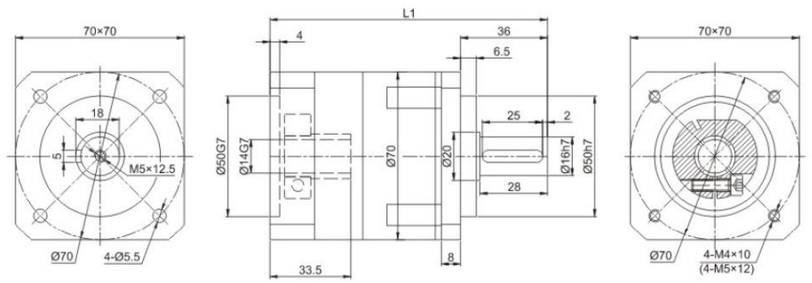


Total length	1-Stage	2-Stage
L1	123	145.5

6.0 VAIHTEET GREENLAB

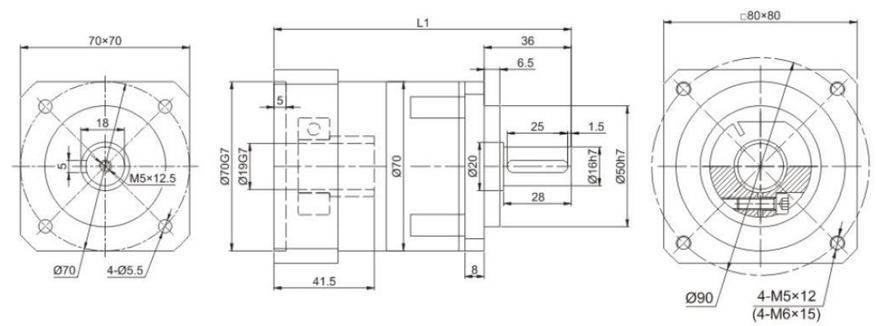
PBF 70 MITAT

400W



Total length	1-Stage	2-Stage
L1	115	137.5

750W



Total length	1-Stage	2-Stage
L1	123	145.5

VARASTOSSA

Tkoodi	Tuotenimi	Hinta
6.0006	PBL70-10	346,00 €/kpl

PBL/PBF 90

TEKNISET TIEDOT

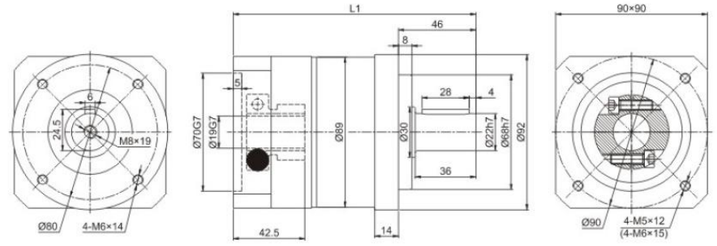
Planetary gearbox performance parameter							For motor (3000 rpm)		
S (1)	i (2)	Nominal output torque	E-stop torque	Moment of inertia	Permitted Radial Load	Permitted axial load	Motor power	Output speed	Output torque
		N.m (3)	N.m	Kgcm3	N (4)	N (4)	W (3)	rpm	N.m (3)
1	3	85	255	0,61	1600	800	1500 (3)	1000	13,74
	4	135	405	0,48	1600	800	1500 (3)	750	18,32
	5	130	390	0,47	1600	800	1500 (3)	600	22,9
	7	105	315	0,45	1600	800	1500 (3)	428,57	32,06
	9	75	225	0,44	1600	800	1500 (3)	333,33	41,22
	10	70	210	0,44	1600	800	1500 (3)	300	45,8
2	12	85	255	0,48	1600	800	1500 (3)	250	53,81
	15	85	255	0,47	1600	800	1500 (3)	200	67,26
	16	135	405	0,48	1600	800	1500 (3)	187,5	71,75
	20	135	405	0,48	1600	800	1500 (3)	150	89,69
	25	130	390	0,47	1600	800	1500 (3)	120	112,11
	28	135	405	0,45	1600	800	1500 (3)	107,14	125,56
	32	135	405	0,45	1600	800	750 (3)	93,75	71,75
	35	130	390	0,45	1600	800	750 (3)	85,71	78,48
	40	130	390	0,45	1600	800	750 (3)	75	89,69
	50	130	390	0,44	1600	800	750 (3)	60	112,11
	56	105	315	0,45	1600	800	400 (3)	53,57	66,90
	70	105	315	0,45	1600	800	400 (3)	42,85	83,3
	90	75	225	0,44	1600	800	200 (3)	33,33	53,55
	100	70	210	0,44	1600	800	200 (3)	30	59,5

Stage	Noise	Precision backslash	Standard backslash	Life time	Efficiency	Torsional stiffness	Degreeof protection	Weight
1	≤ 60 db(A) (5)		≤ 5 arcmin	20 000h	ŋ ≥ 96%	14 N.m/ arcmin	IP65	2,7 Kg
2			≤ 8 arcmin		ŋ ≥ 94%			3,3 Kg

(1) : Stage
(2) : Ratio
(3) : When Gearbox operation torgue ≤ Rated torque, type-selection is based on motor parameter, see PBL/PBF selection
(4) : Radial force and axial force are the permissible force on output distance position when output speed is 100 rpm
(5) : Noise level is tested based on input speed 3000rpm and 1m distance.
(6) : Backslash is tested by 2% of rated torque

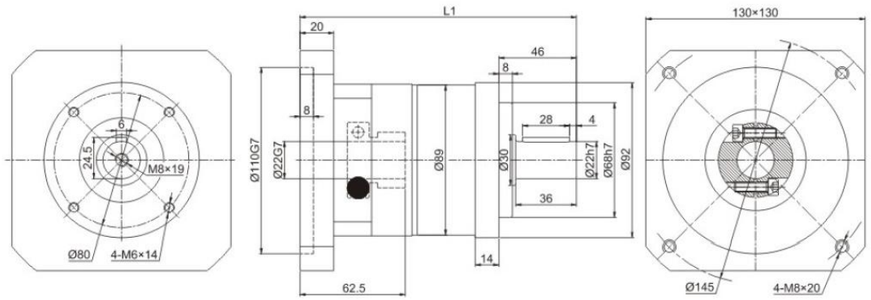
PBL 90 MITAT

750W



Total length	1-Stage	2-Stage
L1	144	180

1500W

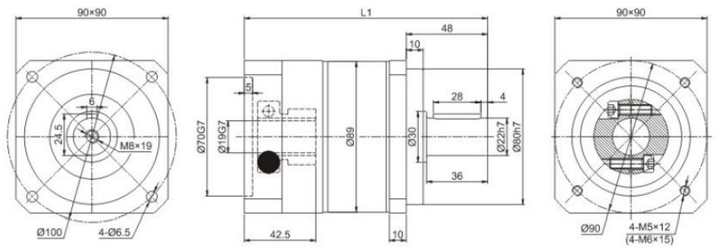


Total length	1-Stage	2-Stage
L1	164	280

6.0 VAIHTEET GREENLAB

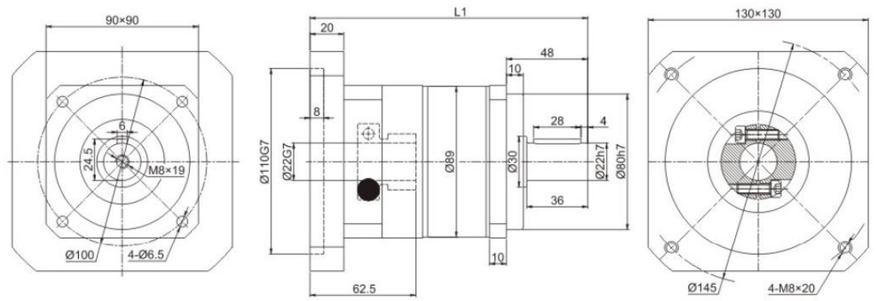
PBF 90 MITAT

750W



Total length	1-Stage	2-Stage
L1	144	180

1500W



Total length	1-Stage	2-Stage
L1	164	280

VARASTOSSA

Tkoodi	Tuotenimi	Hinta
6.0024	PBL90-10	495,00 €/kpl

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