Inline Helical Foot Mounting D-Series Gearbox

Inline Helical Flange Mounting D-Series Gearbox

Mini Planetary Gearbox

Planetary Gearbox VP 250

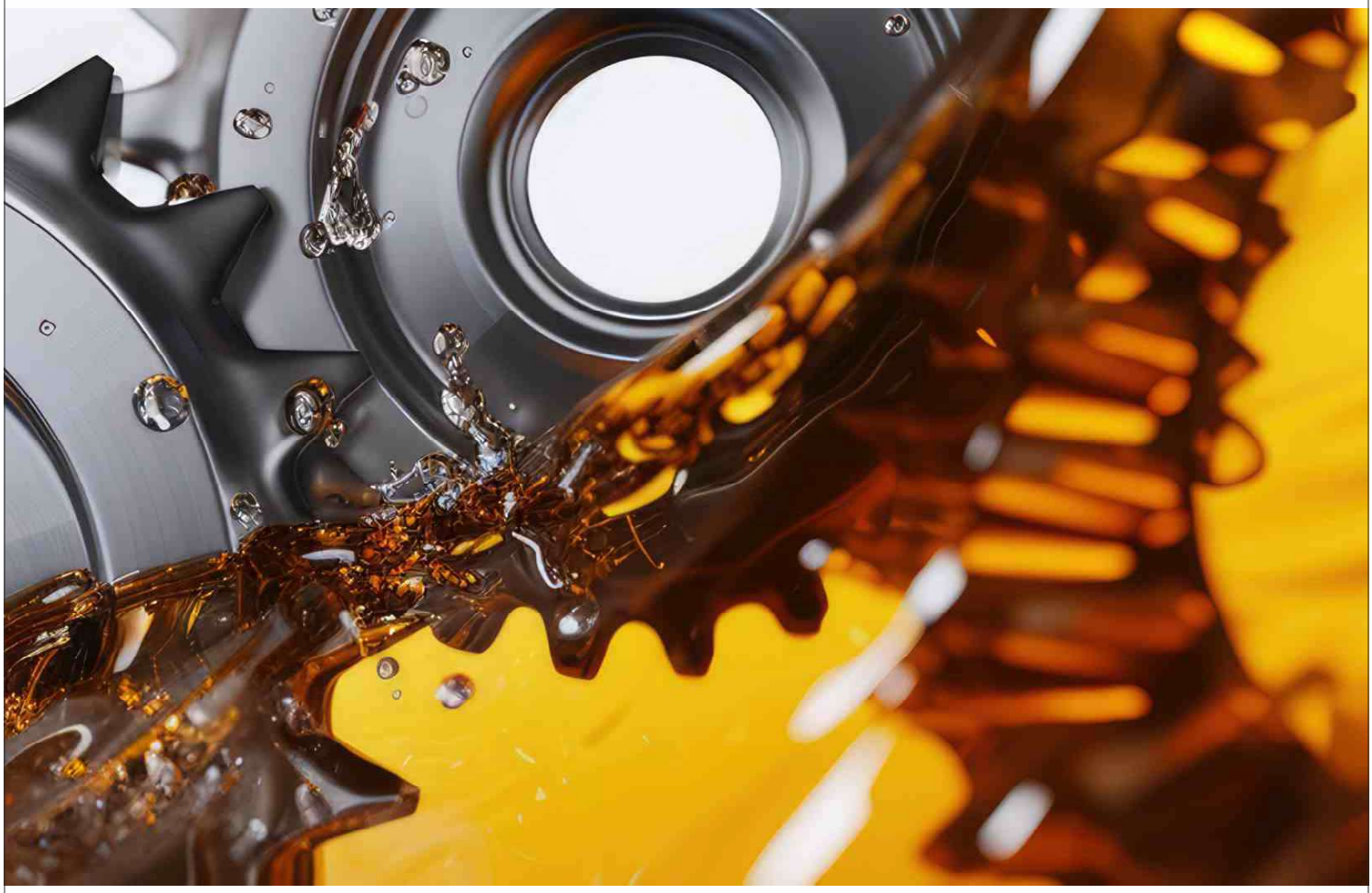
3 Phase
Induction Motor

Inline Helical
Flange Mounting
B-Series Gearbox

Inline Helical
Foot Mounting
B-Series Gearbox

TECHNICAL FEATURES

- Each gearbox is designed by optimizing the performance parameters and strict quality control measures implemented during manufacturing and assembly of gearbox
- All gears are made from Case-hardened steel 20MnCr5-SAE8620 or equivalent material. Case hardening (58-62 HRC), Quenching and Stress-relieving are done to get high quality profile ground gears as per DIN 3961 Class 6 accuracy for low noise and high efficiency.
- Housing is made of high toughness cast iron FG 260 grade. Housing is rigid and mono block in design. Sturdy and robust housing gives the gearbox high tolerance to absorb high shock load.
- Inspection surface hardness standard as per UNE7-257-72, Alignment of shaft to output flange as per DIN 42955, Shaft seal tightness test @ 1Kg/cm^2, Noise level within the limit as per VDI 2159.
- Synthetic oil VG-320 is used for lubrication.
- Largely proportioned ball bearing support on both side of the shaft ensures precise alignment of gear and reduces vibrations and wear of the gears.
- High quality sealing for to avoid oil leakage.
- Very high dynamic efficiency of 96.4% for two stage.
- Silent and vibration free unit provide ability to operate in high input speed and intermittent operation.

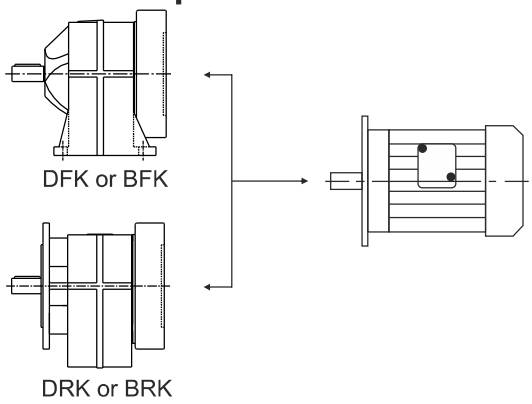


- All in-line helical gearboxes are powder coated.
- All units are suitable to fit with IEC standard motor.
- The gear box is designed to absorb high external loads i.e. Axial and Radial loads.
- All mounting details are dimensionally interchangeable with other major gearbox manufacturers.
- Completely enclosed construction allows installation in open air and hostile environment such as moisture, dusty, salty and Laden atmosphere.
- Reducer are fitted with synthetic rubber oil seals and best quality ball bearings.
- Direction of rotation of O/P shaft may be clockwise (CW) or counter clockwise (CCW) as required.

HELICAL GEAR BOX

Nomenclature

1. Hollow Input Solid Output



B F K 25 / 19.0 / 200 - 19
D F K 128 / 18.4 / 200 - 19

Type of Geared Units
D-Series (In-line Helical)
B-Series (In-line Helical)

Type of Mounting
F-Foot Mounting
R-Flange Mounting

K-With Motor
Mounting Flange

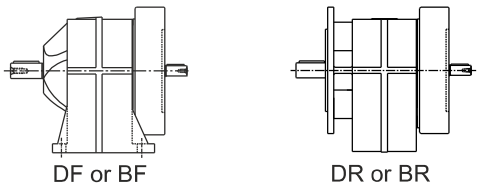
Input Shaft Bore Diameter
Ø14, Ø19, Ø24, Ø28, Ø38.

Input Flange OD
Ø160, Ø200, Ø250, Ø300

Gearbox Ratio

Model of Geared Units
D-Series 102, 128, 142, 162, 185, 160.
B-Series 20, 25, 30, 35, 45, 55.

2. Solid Input Solid Output



B F 25 / 19.0 / 19
D F 128 / 18.4 / 19

Type of Geared Units
D-Series (In-line Helical)
B-Series (In-line Helical)

Type of Mounting
F-Foot Mounting
R-Flange Mounting

Input Shaft Diameter
Ø14, Ø19, Ø22, Ø24, Ø28.

Gearbox Ratio

Model of Geared Units
D-Series 102, 128, 142, 162, 185, 160.
B-Series 20, 25, 30, 35, 45, 55.

Note : 1. All Dimensions are in mm, unless specified otherwise.

HELICAL GEAR BOX

Guideline for selection

Power rating (Refer page 14-17)
Tables give the details of power rating, output speed /ratio, of all sizes of geared motors / gear units in our production range.

Service factor
For deciding the proper size of gear unit a suitable service factor is to be considered over the motor power. For finding out the service factor, mechanical service factor f_1 and frequency starts factor f_2, as given in table 1 & 2 respectively are taken into consideration. For deciding mechanical service factor, the type of load of driven machine as given in table 4 is considered.

Symbols used

Pm	Motor power / input power / transmitted power	[kW]
n1	Input speed / motor speed	[r/min]
n2	Output speed	[r/min]
iR	Reduction ratio	
fb	Service factor	
f1	Mechanical service factor, refer table 1	
f2	Frequency starts facto r, refer table 2	
FRa	Allowable overhang load applied on middle of the output shaft extension	[N]
F	Equivalent /calculated overhang load	[N]
Wt	Weight of geared motor /gear unit	[kg.]
K	Load factor for the type of overhang member, refer table 3	
D	Pitch diameter of overhang load member	[mm]

TABLE 1:- MECHANICAL SERVICE FACTOR - f1

Duration of operation (hours per day)	Load classification of driven machine		
	Uniformed load U	Moderate shock load M	Heavy shock load H
Upto 3	0.80	1.00	1.50
Over 3 upto 10	1.00	1.25	1.75
Over 10	1.25	1.50	2.00

TABLE 2 : FREQUENCY STARTS FACTOR - f2

Starts per hour	Mechanical service factor – f1					
	0.8	1	1.25	1.5	1.75	2
1	1.00	1.00	1.00	1.00	1.00	1.00
2 to 20	1.20	1.10	1.08	1.07	1.07	1.06
21 to 40	1.30	1.20	1.17	1.18	1.15	1.08
41 to 80	1.50	1.40	1.25	1.23	1.18	1.10
81 to 160	1.60	1.50	1.35	1.30	1.20	1.15
161 to 320	2.00	1.80	1.70	1.80	1.50	1.40

Overhung load

When a sprocket / gear etc., is used at the output shaft for transmitting the power / motion to the driven motion to the driven machine, the suitability of gear unit to take the resulting radial load (acting as overhang load) is to be decided. This can be checked using the following formula,

TABLE 3 : LOAD FACTOR

Overhang member	K
Chain sprocket	1.00
Spur / helical gear	1.25
Vee belt pulley	1.50
Flat belt pulley	2.00

$$F = \frac{Pm \times 9550 \times K}{n2 \times D} \times 2000 \quad [N]$$

The calculated equivalent overhang load, using the above formula is to be compared with the allowable overhung load values given in power rating able. Condition is, F is less than or equal to FRa.

NOTE : In the above, the calculated equivalent overhung load is taken as acting at the middle of output shaft extension. If the overhang load is acting at a distance other than middle of extension, refer the details to us. If the angle at which the overhang load is acting is known, the same may also be informed.

Axial Thrust
The bearings of the output shaft are capable of taking certain amount of externally applied axial thrust loads also. If the output shaft of gearbox / geared motor is to take axial thrust or combined radial overhang load and axial thrust load, refer the full details to us .

Data required for selection
For selecting the geared motor/ gear units, following information are required,

- Power to be transmitted or electric motor, Pm in KW
- Required output speed , n2 in r/min.
- Required ratio, iR and required input speed / motor speed , n1 in r/min
- Type of driven machine or nature of load on driven machine (i.e., uniform, moderate shock, heavy shock load, etc.)
- Duration of operation per day, hours
- Connection of output shaft (direct coupling, belt drive, chain / sprocket drive, gears etc.)
- Starting frequency (no. of starts per hour)
- Type of geared motor / gear unit required
- Mounting position

HELICAL GEAR BOX

Applications and Guidelines for Selection

TABLE 4-LOAD CLASSIFICATION

Driven Machine	Type of Load
Agitators	
Pure liquids	U
Liquids and solids	M
Liquids-variable density	M
Blowers	
Centrifugal	U
Lobe	M
Vane	U
Brewing and distilling	
Bottling machinery	U
Brew kettles-continuous duty	U
Cookers - continuous duty	U
Mash tubs - continuous duty	U
Scale hopper frequent starts	M
Can filling machine	U
Cane knives	M
Car **Dumpers**	H
Car pullers	M
Clarifiers	U
Classifiers	M
Clay working machinery	
Brick press	H
Briqultte machine	H
Clay working machinery	M
Pug mill	M
Compressors	
Centrifugal	U
Lobe	M
Reciprocating	
Multi : cylinder	M
Single- cylinder	H
Conveyors – uniformly	
Loaded or fed	
Apron	U
Assembly	U
Belt	U
Bucket	U
Chain	U
Flight	U
Oven	U
Screw	U
Conveyors – heavy duty	
Not uniform fed	
Apron	M
Assembly	M
Belt	M
Bucket	M
Chain	M
Flight	M
Live roll	-
Oven	M
Reciprocating	H
Screw	M
Shaker	H
Cranes	
Main hoists	U
Bridge travel	-
Trolley travel	-
Crusher	
Ore	H
Stone	H
Sugar	M
Dredges	
Cable reels	M
Conveyors	M
Cutter head drives	H
Jig drives	H
Maneuvering winches	M
Pumps	M
Screen drive	H
Stackers	M
Utility winches	M
Dry dock cranes	
Main hoist	-
Auxiliary hoist	-
Boom luffing	-
Rolating, swing slew	-
Tracking, drive wheels	
Elevators	
Bucket – uniform load	U
Bucket – heavy load	M
Bucket - continuous	U
Centrifugal discharges	U
Escalators	U
Freight	M
Gravity discharges	U
Man lifts -	
Passenger lifts	-
Fans	
Centrifugal	U
Cooling towers	
Induced draft	-
Forced draft	-
Induced draft	M
Large, mini etc.	M
Large, industrial	M
Light smaller diameter	U
Feeders	
Apron	M
Belt M	
Disc	U
Reciprocating	H
Screw	M
Food industry	
Beef slicer	M
Cereal cooker	U
Dough mixer	M
Meat grinders	M
Rice mill machinery	
Generators – hot welding	U
Hammer Mills	H
Hoists	
Heavy duty	H
Medium duty	M
Skip hoist	M
Laundry washers reversing	M
Laundry tumblers	M
Line shafts	
Driving processing equipment	U
light	U
Other ling shafts	U
Lumber industry	
Barkers - hydraulic-mechanical	M
Burner conveyor	M
Burner conveyor	H
Chain transfer	H
Craneway transfer	H
De-braking drum	H
Edger feed	M
Gang feed	M
Gang feed	M
Live rolls	H
Log deck	H
Log haul-incline	H
Log haul-well type	H
Log tuming device	H
Main log conveyor	H
Off bearing rolls	M
Planer feed chains	M
Planer floor chains	M
Planer tilting hoist	M
Re-saw merry-go-round conveyor	M
Roll cases	H
Slab conveyor	H
Small waste conveyor-belt	U
Small waste conveyor-chain	M
Starting table	M
Tipple-hoist conveyor	M
Tipple hoist drive	M
Transfer conveyors	M
Transfer rolls	M
Tray drive	M
Trimmer feed	M
waste conveyor	M
Machine tools	
Bending roll	M
Punch press-gear driven	H
Notching press-belt driven	-
Plate planers	H
Tapping machine	H
Other machine tools main drives	M
Auxillary drives	U
Metal mills	
Draw bench carriage and main drive	M
Punch-dryer and scrubber	
rolls-reversing	-
sliters	M
Table conveyors non-reversing	
group drives	H
ndividual drives	H
reversing	-
Wire drawing and flattening machine	M
Wire winding machine	M
Mills-rotary type	
ball	M
Cement kilns	M
Dryers and coolers	M
Kilns – other than cement	M
pebble	-
Rod	
plain	M
Wedge bar	M
Tumbling barrels	H
Mixers	
Concrete mixers-continuous	M
Constant density	U
Variable density	M
Oil industry	
Chillers	M
Oil well pumping	-
Paraffin filter press	M
Rotary kilns	M
Paper Mills	
Agitators (mixers)	M
Barker- auxiliaries- hydraulic	M
Barker –mechanical	H
Barker –drum	H
Beater and pulper	M
Bleacher	U
Calenders	M
Calenders - super	H
Converting machine	-
Expect cutters – platers	M
Conveyors	U
Couch	H
Cutters – platers	H
Cylinders	M
Dryers	M
Felt stretcher	M
Felt whipper	H
Jordans	M
Log haul	H
Presses	M
Pulp machine reel	M
Stock chest	M
suction roll	M
washers and thickners	M
winders	M
Printing presses	
Pullers	
barge haul	H
Pumps	
centrifugal	U
proportioning	M
reciprocating	
single acting, 3 or more cylinders	M
double acting, 2 or more cylinders	M
single acting, 1 or two cylinders	-
double acting, single cylinders	-
rotary	
gear type	U
lobe, vane	U
Rubber and plastic industries	
Crackers	H
Laboratory equipment	M
Mixing mills	H
Refiners	M
Rubbers	M
Rubber calendars	M
Rubber mill-2 on line	U
Rubber mill 3 on line	M
Sheeter -	
Tyre building machines	-
Tyre and tube press openers	M
Tubers and strainers	M
Warming mills	M
Sand muller	
Sewage disposal equipment	
Bar screens	U
Chemical feeders	U
Collectors	U
Dewatering screws	M
Scum breakers	M
Slow or rapid mixers	M
Thickeners	M
Vacuum filter	M
Screens	
Air washing	U
Rotary- stone or gravel	M
Travelling	U
Water intake	M
Slab pushers	**M**
Steering gear	**-**
Stockers	**U**
Sugar industry	
Cane knives	M
Crushers	M
Mills	M
Textile industry	
Batchers	M
calendars	M
Cards	M
Dry cans	M
Dryers	M
Dyeing machinery	M
Knitting machines	-
Looms	M
Mangles	M
Nappers	M
Pads	M
Range drive	-
Slashers	M
Soapers	M
Spinners	M
Tenter frames	M
Washers	M
Winders	M
Windlass	
Medical Equipments	
Waste Shredder	
Ventilator	

U - Uniform Load
M - Moderate Shock Load
H - Heavy Shock Load
* - Refer to

HELICAL GEAR BOX

Guideline for selection

Example of Selection

Requirement of helical geared unit, for

Electric motor power, P_m	-	1.1 kW
Output Speed, n_2	-	100 r/min (or iR = 14.4, n1 = 1440 r/min for requirement of gear unit)
No of starts per hour	-	10
Duration of service per day	-	24 hours
Driven machine	-	Individual drives of non reversing table conveyors in Rolling Mill
Connection of output shaft	-	through chain sprocket drive sprocket dia=110 mm
Type	-	Base (Foot) mounted
Mounting	-	Horizontal shaft, foot mounting, B3

Step 1
From Table 4, the type of load is found to be H for the above driven equipment Mechanical Service factor f_1, as per Table 1 is 2.00 for type of load H and 24 hours operation per day. For 10 starts per hour, factor f_2 is 1.06 (from Table 2)
Thus, service factor, required = 2.00 x 1.06 = 2.12

Step 2
Referring to power rating table against 1.1kW motor power and looking for the listed output speed, n 2, near to the Required value of 100 r/min,
We get Geared unit size DFK 142/13.7/200-24 with n2 = 103 r/min, with fb = 1.9 which is less than the Required fb of 2.12.
Next, we can select size DFK 162/13.4/200-24 having n2 = 105 r/min with the fb available is 2.6 which is safe enough.

Step 3
Check for suitability of overhung load:

$$F = \frac{1.1 \times 9550 \times 1.0 \times 2000}{100 \times 110} = 1910N$$

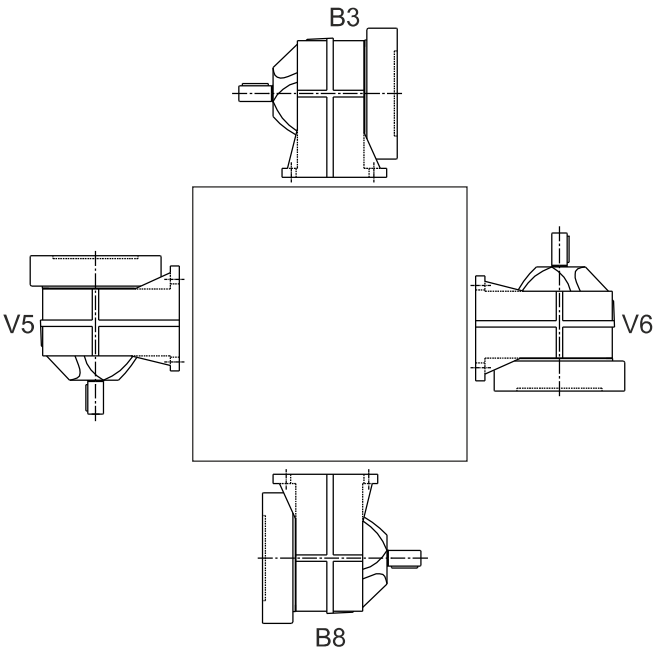
Allowable F Ra from Power rating table for selected size, DFK 162/13.4/200-24 is 7900 N.
Thus, condition F < F Ra is satisfied.
Note: The calculated overhung load F = 1910 N is considered acting at the middle of output shaft Extension length, / = 100 mm

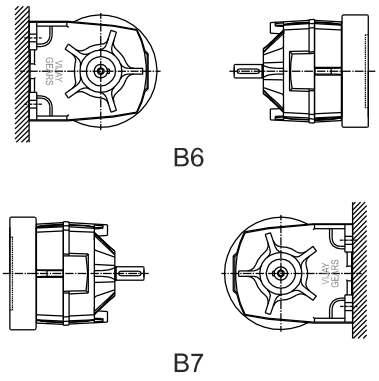
The Size of Geared unit to be ordered is, DFK 162/13.4/200-24, 105 r/min, iR = 13.4 fitted with 1.1 kW, Mounting Position of Geared Motor – B3, positional details.

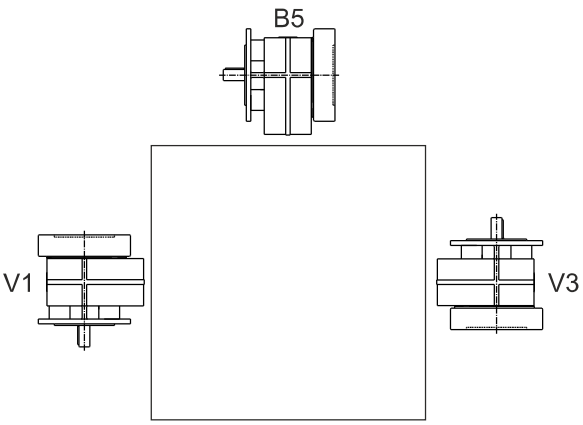
We shall be pleased to advice on drives involving special operating condition / details, namely,

- Short time or intermittent operation
- Application involving Starts / Stops / Reversals
- Applications involving reverse current braking (plugging)
- Abnormal ambient temperature
- Variable motor speed
- Geared motor using other special motors like flame proof motor, brake motor using VFD etc.,

Same Mounting Positions for D & B Series







Lubrication and Assembly Position

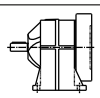
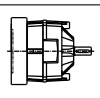
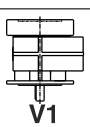
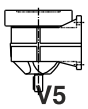
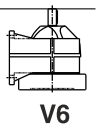
Series “D” & Series “B”

These reducers are supplied with lubricant for assembly position **B3**. In the event of assembly in any other position, the difference should be adjusted as shown in table No 5. The oil supplied is long-life and is that indicated on the **NAME PLATE**. Should any oil other than that indicated on the **NAME PLATE** be used, the lubricant contained in the gear box should be drained and the gear box filled to level with the chosen type of oil (Quantity indicated in table No 5). **Do not mix lubricants of different brand names.**

MAINTENANCE

After 500 hours of operation empty the lubricant and refill the gearbox up to the level. Once the running in period is over, check the condition of lubricant after 12000 hours of working (approx. 30 months working 14 hours a day) **(in case of synthetic oil)** or 25000 hours of working (approx. 60 months working14 hours a day) **(in case of mineral oil)** and replace when necessary.

Table No.5 Series "D & B" Approximate oil quantity in litres, depending on the type and mounting position of the geared units

				Working position								
												
				B3	B5	B6	B7	B8	V1	V3	V5	V6
Type	Quantity (Litres)		**Type**	Quantity (Litres)								
D - 102	0.5		**B - 20**	0.5								
D - 128	1.0		**B - 25**	1.0								
D - 142	1.5		**B - 30**	1.5								
D - 162	2.0		**B - 35**	1.5								
D - 185	3.0		**B - 45**	2.4								
D - 160	3.0		**B - 55**	3.0								

The same quantity in all positions

Lubricants CLP as per DIN 51517 , Part 3

TABLE NO. 6 RECOMMENDED OIL VISCOSITY

			Viscosity (mm^2/s(cSt)at40°C)	
			Input speed: n_1	
Oil type	Operating Temperature	Ambient temperature°C	500 to 1000 1/min	1000 to 1500 1/min
		-10 - +5°C	VG 100	VG 100
FL BAKU TO 4/50	-5 - +70°C	0 - +40°C	VG 320	VG 220
FL GEARSYNT 320	-25-+150°C	+35-+60°C	VG 460	VG 320

*For in put speeds n1 < 500 1/min please contact. Permissible deviation VG= ± 10%
The maximum working temperature of a lubricant is approximately 95°C,
above which its characteristics may vary substantially.

TABLE NO. 7 RECOMMENDED SYNTHETIC OILS

Viscosity mm^2/s (cSt) at 40°C	FL IBERIA	BESLUX SINCART	Mobil SHC	SHC XMP	Tivela Oil	Engranajes HPS	Klübersynth GH6	ARAL Degol	TRIBOL
VG 320	FL GEARSYNT 320	320W	632	632	WB	320	320		
VG 220	FL GEARSYNT 220	220W	630	630	WB	220	220	GS 220	800/220
VG 150	FL GEARSYNT 150	150W	629	629	WA	150	150		
VG 100	FL GEARSYNT 100	100W	-	--	WA	-	100		

TABLE NO. 8 RECOMMENDED MINERAL OILS

Viscosity mm^2/s (cSt) at 40°C	TRAXOL	FL IBERIA	Extra Gear	BP Energol	SPARTAN	Mobilgear	Shell Omala Oil	Engranajes HP	Klüberoil GEM 1	Super Tauro	ARAL Degol	Castrol Alpha	FALCON	TRIBOL
VG 320	G - 32	-	320	GR-XP 320	EP 320	632	320	320	320	320	BG 320	MW 320	CLP 320	1100 / 320
VG 220	-	FL BAKU TO 4/50	220	GR-XP 220	EP 220	630	220	220	220	220	BG 220	MW 220	CLP 220	1100 / 220
VG 150	-	-	150	GR-XP 150	EP 150	629	150	150	150	150	BG 150	MW 150	CLP 150	1100 / 150
VG 100	-	-	100	GR-XP 100	EP 100	627	100	100	100	100	BG 100	MW 100	CLP 100	1100 / 100

LUBRICANTS FOR THE FOODSTUFFS AND PHARMACEUTICALS INDUSTRY

The lubricants supplied with the reducers are as per USDA-H2 standard, which means that they may be recommended for the foodstuffs and pharmaceuticals industry, provided that there is no possible contact with food. We can supply, against order, reducers with lubricants which are as per USDA-H1 standard and can be used in foodstuffs and pharmaceuticals industry in instances where, for technical reasons, contact between foodstuffs and the lubricant may occasionally be unavoidable.

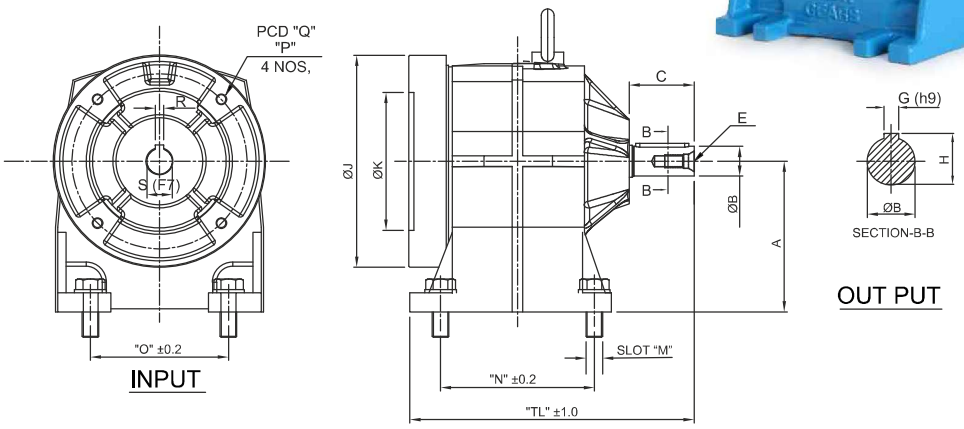
unique mechanical solution®
VIJAY GEARS

D SERIES GEARBOX


VIJAY
GEARS

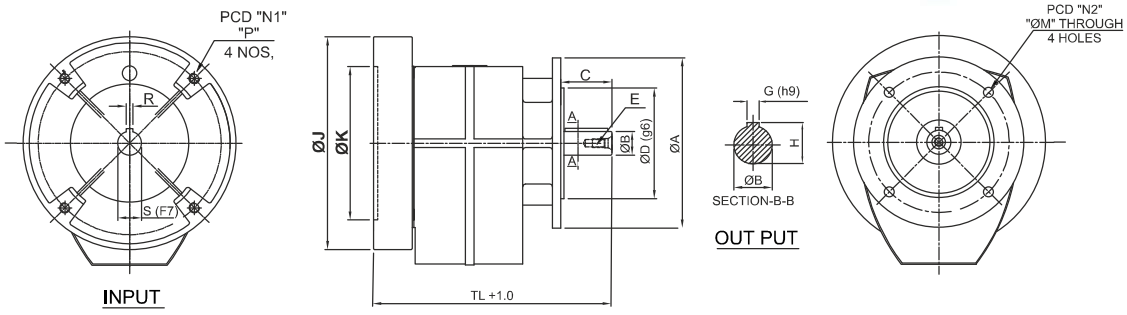
HELICAL GEAR BOX

D Series : Model DFK



MODEL NO	A	B (h6)	C	E	G (h9)	H	ØJ	Ø K(F8)	SLOT M	N	O	P	Q	R	S (F7)	TL	NET WT.
DFK-102	102	19	38	M6X1P	6	21.5	160	110	11	105	100	M8X1.25	130	5	14	186	8 kg
DFK-128	128	24	48	M8X1.25P	8	27	160/200	110/130	14	126	118	M8X1.25 M10X1.5	130/165	5/6	14/19/24	242	17 kg
DFK-142	142	28	58	M10X1.5P	8	31	200/250	130/180	14	145	130	M10X1.5 M12X1.75	165/215	6/8	19/24/28	268	21 kg
DFK-162	162	38	78	M12X1.75P	10	41	200/250	130/180	14	200	160	M10X1.5 M12X1.75P	165/215	6/8	24/28	360	34 kg
DFK-185	185	48	108	M16X2P	14	51.5	250/300	180/230	18	207	185	M12X1.75	215/265	8/10	28/38	426	51 kg
DFK-160	160	48	112	M16X2P	14	51.5	250/300	180/230	18	270	195	M12X1.75	215/265	8/10	28/38	431	62 kg

D Series : Model DRK



MODEL NO	ØA	ØB (h6)	C	ØD	E	G (h9)	H	ØJ	Ø K(F8)	ØM	N1	P	N2	R	S (F7)	TL	NET WT.
DRK-102	160	19	40	110	M6X1P	6	21.5	160	110	9	130	M8X1.25	130	5	14	186	9 kg
DRK-128	200	24	50	130	M8X1.25P	8	27	160/200	110/130	1.5	130/165	M8X1.25 M10X1.5	165	5/6	14/19/24	242	18 kg
DRK-142	200	28	60	130	M10X1.5P	8	31	200/250	130/180	11.5	165/215	M10X1.5 M12X1.75	165	6/8	19/24/28	268	22 kg
DRK-162	250	38	82	180	M10X1.75P	10	41	200/250/300	130/230	14	165/215	M10X1.5 M12X1.75P	165/215	6/8	24/28/38	360	36 kg

HELICAL GEAR BOX

Power Rating Table

D-102

INPUT POWER 0.37 KW / 0.5 HP/71

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
39	82	36.1	3850	1.1	DFK102/36.1/160-14 DRK102/36.1/160-14
45	75	31.2	3300	1.3	DFK102/31.2/160-14 DRK102/31.2/160-14
53	68	26.7	3170	1.5	DFK102/26.7/160-14 DRK102/26.7/160-14
59	57	24.1	3050	1.6	DFK102/24.1/160-14 DRK102/24.1/160-14
79	44	17.8	2930	1.8	DFK102/17.8/160-14 DRK102/17.8/160-14
89	41	15.7	2850	2.0	DFK102/15.7/160-14 DRK102/15.7/160-14
104	35	13.5	2740	2.2	DFK102/13.5/160-14 DRK102/13.5/160-14
128	25	11.0	2690	2.8	DFK102/11.0/160-14 DRK102/11.0/160-14
148	24	9.5	2620	3.1	DFK102/9.50/160-14 DRK102/9.50/160-14
178	19	7.9	2530	3.3	DFK102/7.90/160-14 DRK102/7.90/160-14
204	17	6.9	2440	3.5	DFK102/6.90/160-14 DRK102/6.90/160-14
252	13	5.6	2380	4.3	DFK102/5.60/160-14 DRK102/5.60/160-14
300	11	4.7	2310	4.9	DFK102/4.70/160-14 DRK102/4.70/160-14
344	10	4.1	2280	5.2	DFK102/4.10/160-14 DRK102/4.10/160-14

INPUT POWER 0.55 KW / 0.75 HP/80

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
89	55	15.7	2850	1.4	DFK102/15.7/200-19 DRK102/15.7/200-19
104	47	13.5	2740	1.5	DFK102/13.5/200-19 DRK102/13.5/200-19
128	41	11.0	2690	1.8	DFK102/11.0/200-19 DRK102/11.0/200-19
148	39	9.5	2620	2.0	DFK102/9.50/200-19 DRK102/9.50/200-19
178	29	7.9	2530	2.2	DFK102/7.90/200-19 DRK102/7.90/200-19
204	25	6.9	2440	2.4	DFK102/6.90/200-19 DRK102/6.90/200-19
252	20	5.6	2380	3.2	DFK102/5.60/200-19 DRK102/5.60/200-19
300	17	4.7	2310	3.7	DFK102/4.70/200-19 DRK102/4.70/200-19
344	15	4.1	2280	3.9	DFK102/4.10/200-19 DRK102/4.10/200-19

INPUT POWER 0.75 KW / 1.0 HP/80

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
89	75	15.7	2850	1.0	DFK102/15.7/200-19 DRK102/15.7/200-19
104	65	13.5	2740	1.1	DFK102/13.5/200-19 DRK102/13.5/200-19
128	55	11.0	2690	1.4	DFK102/11.0/200-19 DRK102/11.0/200-19
148	48	9.5	2620	1.5	DFK102/9.50/200-19 DRK102/9.50/200-19
178	38	7.9	2530	1.6	DFK102/7.90/200-19 DRK102/7.90/200-19
204	34	6.9	2440	1.7	DFK102/6.90/200-19 DRK102/6.90/200-19
252	26	5.6	2380	2.2	DFK102/5.60/200-19 DRK102/5.60/200-19
301	22	4.7	2310	2.5	DFK102/4.70/200-19 DRK102/4.70/200-19
344	20	4.1	2280	2.6	DFK102/4.10/200-19 DRK102/4.10/200-19

NOTE : All above ratio are also available in Solid Input Shaft

HELICAL GEAR BOX

Power Rating Table

D-128

INPUT POWER 0.37 KW / 0.5 HP/71

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
20	163	68	5380	1.1	DFK128/68.0/160-14 DRK128/68.0/160-14
27	105	51.8	5100	1.4	DFK128/51.8/160-14 DRK128/51.8/160-14
35	90	40.8	4950	1.5	DFK128/40.8/160-14 DRK128/40.8/160-14
41	70	34.1	3340	1.6	DFK128/34.1/160-14 DRK128/34.1/160-14
54	65	26.1	4500	1.7	DFK128/26.1/160-14 DRK128/26.1/160-14
65	54	21.7	4400	1.7	DFK128/21.7/160-14 DRK128/21.7/160-14
77	46	18.4	4100	1.8	DFK128/18.4/160-14 DRK128/18.4/160-14
89	39	15.8	3980	1.9	DFK128/15.8/160-14 DRK128/15.8/160-14
102	35	13.8	3900	2.0	DFK128/13.8/160-14 DRK128/13.8/160-14
128	27	11.0	3830	3.8	DFK128/11.0/160-14 DRK128/11.0/160-14

INPUT POWER 0.75 KW / 1.0 HP/80

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
35	180	40.8	4200	1.0	DFK128/40.8/200-19 DRK128/40.8/200-19
41	169	34.1	4250	1.2	DFK128/34.1/200-19 DRK128/34.1/200-19
54	129	26.1	4100	1.2	DFK128/26.1/200-19 DRK128/26.1/200-19
65	107	21.7	3900	1.3	DFK128/21.7/200-19 DRK128/21.7/200-19
77	91	18.4	3800	1.5	DFK128/18.4/200-19 DRK128/18.4/200-19
89	78	15.8	3720	1.6	DFK128/15.8/200-19 DRK128/15.8/200-19
102	68	13.8	3700	1.7	DFK128/13.8/200-19 DRK128/13.8/200-19
128	57	11.0	3660	2.2	DFK128/11.0/200-19 DRK128/11.0/200-19
152	46	9.3	3550	2.5	DFK128/9.30/200-19 DRK128/9.30/200-19
176	40	8.0	3500	2.7	DFK128/8.00/200-19 DRK128/8.00/200-19
201	34	7.0	3400	3.0	DFK128/7.00/200-19 DRK128/7.00/200-19
243	28	5.8	3250	3.7	DFK128/5.80/200-19 DRK128/5.80/200-19
288	25	4.9	3350	4.0	DFK128/4.90/200-19 DRK128/4.90/200-19
353	20	4.0	3000	4.6	DFK128/4.00/200-19 DRK128/4.00/200-19
403	17	3.5	3100	5.0	DFK128/3.50/200-19 DRK128/3.50/200-19

INPUT POWER 1.10 KW / 1.5 HP/90

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
35	326	40.8	3300	1.0	DFK128/40.8/200-24 DRK128/40.8/200-24
41	249	34.1	3350	1.1	DFK128/34.1/200-24 DRK128/34.1/200-24
54	190	26.1	3400	1.1	DFK128/26.1/200-24 DRK128/26.1/200-24
65	157	21.7	3480	1.2	DFK128/21.7/200-24 DRK128/21.7/200-24
77	133	18.4	3500	1.3	DFK128/18.4/200-24 DRK128/18.4/200-24
89	114	15.8	3450	1.4	DFK128/15.8/200-24 DRK128/15.8/200-24
102	100	13.8	3400	1.5	DFK128/13.8/200-24 DRK128/13.8/200-24
128	83	11.0	3500	1.6	DFK128/11.0/200-24 DRK128/11.0/200-24
152	70	9.3	3400	1.7	DFK128/9.30/200-24 DRK128/9.30/200-24
176	59	8.0	3400	1.9	DFK128/8.00/200-24 DRK128/8.00/200-24
201	50	7.0	3320	2.0	DFK128/7.00/200-24 DRK128/7.00/200-24
243	41	5.8	3200	2.5	DFK128/5.80/200-24 DRK128/5.80/200-24
288	36	4.9	3136	2.9	DFK128/4.90/200-24 DRK128/4.90/200-24
353	32	4.0	3030	3.1	DFK128/4.00/200-24 DRK128/4.00/200-24
403	26	3.5	3000	3.5	DFK128/3.50/200-24 DRK128/3.50/200-24

INPUT POWER 1.50 KW / 2.0 HP/90

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
35	444	40.8	2400	1.0	DFK128/40.8/200-24 DRK128/40.8/200-24
41	340	34.1	2450	1.0	DFK128/34.1/200-24 DRK128/34.1/200-24
54	259	26.1	2500	1.0	DFK128/26.1/200-24 DRK128/26.1/200-24
65	214	21.7	2600	1.0	DFK128/21.7/200-24 DRK128/21.7/200-24
77	180	18.4	2150	1.0	DFK128/18.4/200-24 DRK128/18.4/200-24
89	156	15.8	2450	1.1	DFK128/15.8/200-24 DRK128/15.8/200-24
102	136	13.8	2700	1.1	DFK128/13.8/200-24 DRK128/13.8/200-24
128	113	11.0	3300	1.2	DFK128/11.0/200-24 DRK128/11.0/200-24
152	92	9.3	3250	1.3	DFK128/9.30/200-24 DRK128/9.30/200-24
176	80	8.0	3200	1.4	DFK128/8.00/200-24 DRK128/8.00/200-24
201	68	7.0	3200	1.5	DFK128/7.00/200-24 DRK128/7.00/200-24
243	55	5.8	3120	1.8	DFK128/5.80/200-24 DRK128/5.80/200-24
288	46	4.9	3000	2.2	DFK128/4.90/200-24 DRK128/4.90/200-24
353	40	4.0	2900	2.2	DFK128/4.00/200-24 DRK128/4.00/200-24
403	34	3.5	2700	2.5	DFK128/3.50/200-24 DRK128/3.50/200-24

HELICAL GEAR BOX

Power Rating Table

D-142

INPUT POWER 0.75 KW / 1.0 HP/80

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
21	295	66.8	6700	1.0	DFK142/66.8/200-19 DRK142/66.8/200-19
28	240	50.6	6400	1.1	DFK142/50.6/200-19 DRK142/50.6/200-19
35	220	40.8	6000	1.3	DFK142/40.8/200-19 DRK142/40.8/200-19
42	178	33.8	5800	1.6	DFK142/33.8/200-19 DRK142/33.8/200-19
54	130	26.3	5450	1.6	DFK142/26.3/200-19 DRK142/26.3/200-19
65	108	21.8	5350	1.7	DFK142/21.8/200-19 DRK142/21.8/200-19
77	90	18.4	5000	1.8	DFK142/18.4/200-19 DRK142/18.4/200-19
94	80	15.0	4900	1.9	DFK142/15.0/200-19 DFK142/15.0/200-19
103	67	13.7	4820	2.0	DFK142/13.7/200-19 DRK142/13.7/200-19
126	55	11.2	4750	2.4	DFK142/11.2/200-19 DRK142/11.2/200-19
148	52	9.5	4700	3.0	DFK142/9.50/200-19 DRK142/9.50/200-19
174	40	8.1	4600	3.2	DFK142/8.10/200-19 DRK142/8.10/200-19
201	35	7.0	4600	3.5	DFK142/7.00/200-19 DRK142/7.00/200-19
243	29	5.8	4400	5.2	DFK142/5.80/200-19 DRK142/5.80/200-19
294	24	4.8	4300	6.0	DFK142/4.80/200-19 DRK142/4.80/200-19
336	22	4.2	4100	7.3	DFK142/4.20/200-19 DRK142/4.20/200-19
389	19	3.6	3900	7.8	DFK142/3.60/200-19 DRK142/3.60/200-19

INPUT POWER 1.10 KW / 1.5 HP/90

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
35	328	40.8	5600	1.0	DFK142/40.8/200-24 DRK142/40.8/200-24
42	260	33.8	5350	1.3	DFK142/33.8/200-24 DRK142/33.8/200-24
54	190	26.3	5180	1.5	DFK142/26.3/200-24 DRK142/26.3/200-24
65	158	21.8	5050	1.6	DFK142/21.8/200-24 DRK142/21.8/200-24
77	134	18.4	4850	1.7	DFK142/18.4/200-24 DRK142/18.4/200-24
94	109	15.0	4900	1.8	DFK142/15.0/200-24 DFK142/15.0/200-24
103	99	13.7	4820	1.9	DFK142/13.7/200-24 DRK142/13.7/200-24
126	86	11.2	4750	2.3	DFK142/11.2/200-24 DRK142/11.2/200-24
148	72	9.5	4600	2.7	DFK142/9.50/200-24 DRK142/9.50/200-24
174	59	8.1	4500	2.8	DFK142/8.10/200-24 DRK142/8.10/200-24
201	52	7.0	4450	3.0	DFK142/7.00/200-24 DRK142/7.00/200-24
243	42	5.8	4300	3.9	DFK142/5.80/200-24 DRK142/5.80/200-24
294	38	4.8	4200	4.5	DFK142/4.80/200-24 DRK142/4.80/200-24
336	32	4.2	4150	4.8	DFK142/4.20/200-24 DRK142/4.20/200-24
389	26	3.6	4100	5.5	DFK142/3.60/200-24 DRK142/3.60/200-24

INPUT POWER 1.50 KW / 2.0 HP/90

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
42	360	33.8	4200	1.2	DFK142/33.8/200-24 DRK142/33.8/200-24
54	259	26.3	3900	1.2	DFK142/26.3/200-24 DRK142/26.3/200-24
65	215	21.8	4300	1.2	DFK142/21.8/200-24 DRK142/21.8/200-24
77	182	18.4	4400	1.3	DFK142/18.4/200-24 DRK142/18.4/200-24
94	148	15.0	4500	1.5	DFK142/15.0/200-24 DRK142/15.0/200-24
103	135	13.7	4600	1.6	DFK142/13.7/200-24 DRK142/13.7/200-24
126	116	11.2	4550	1.7	DFK142/11.2/200-24 DRK142/11.2/200-24
148	98	9.5	4450	2.0	DFK142/9.50/200-24 DRK142/9.50/200-24
174	80	8.1	4400	2.1	DFK142/8.10/200-24 DRK142/8.10/200-24
201	71	7.0	4340	2.2	DFK142/7.00/200-24 DRK142/7.00/200-24
243	55	5.8	4200	2.9	DFK142/5.80/200-24 DRK142/5.80/200-24
294	48	4.8	4100	3.2	DFK142/4.80/200-24 DRK142/4.80/200-24
336	40	4.2	4000	3.6	DFK142/4.20/200-24 DRK142/4.20/200-24
389	35	3.6	3950	4.0	DFK142/3.60/200-24 DRK142/3.60/200-24

INPUT POWER 2.20 KW / 3.0 HP/100

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
126	170	11.2	4210	1.1	DFK142/11.2/250-28 DRK142/11.2/250-28
148	144	9.5	4150	1.4	DFK142/9.50/250-28 DRK142/9.50/250-28
174	117	8.1	4100	1.5	DFK142/8.10/250-28 DRK142/8.10/250-28
201	104	7.0	4060	1.6	DFK142/7.00/250-28 DRK142/7.00/250-28
243	81	5.8	4000	2.0	DFK142/5.80/250-28 DRK142/5.80/250-28
294	70	4.8	3900	2.3	DFK142/4.80/250-28 DRK142/4.80/250-28
392	52	3.6	3750	2.7	DFK142/3.60/250-28 DRK142/3.60/250-28

HELICAL GEAR BOX

Power Rating Table

D-162

INPUT POWER 1.10 KW / 1.5 HP/90

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
20	502	71.3	10800	1.1	DFK162/71.3/200-24 DRK162/71.3/200-24
25	430	55.8	10500	1.3	DFK162/55.8/200-24 DRK162/55.8/200-24
31	331	45.5	10000	1.6	DFK162/45.5/200-24 DRK162/45.5/200-24
42	244	33.8	9400	2.1	DFK162/33.8/200-24 DRK162/33.8/200-24
50	202	28.0	9000	2.3	DFK162/28.0/200-24 DRK162/28.0/200-24
60	171	23.6	8800	2.4	DFK162/23.6/200-24 DRK162/23.6/200-24
75	137	18.9	8600	2.4	DFK162/18.9/200-24 DRK162/18.9/200-24
105	100	13.4	7900	2.6	DFK162/13.4/200-24 DRK162/13.4/200-24
125	80	11.3	7750	2.7	DFK162/11.3/200-24 DRK162/11.3/200-24

INPUT POWER 1.50 KW / 2.0 HP/90

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
25	520	55.8	10000	1.0	DFK162/55.8/200-24 DRK162/55.8/200-24
31	448	45.5	9500	1.2	DFK162/45.5/200-24 DRK162/45.5/200-24
42	332	33.8	9000	1.4	DFK162/33.8/200-24 DRK162/33.8/200-24
50	275	28.0	8600	1.5	DFK162/28.0/200-24 DRK162/28.0/200-24
60	232	23.6	8500	1.6	DFK162/23.6/200-24 DRK162/23.6/200-24
75	187	18.9	8400	1.7	DFK162/18.9/200-24 DRK162/18.9/200-24
105	133	13.4	4600	1.8	DFK162/13.4/200-24 DRK162/13.4/200-24
125	112	11.3	4200	1.9	DFK162/11.3/200-24 DRK162/11.3/200-24
157	95	9.0	4400	2.1	DFK162/9.00/200-24 DRK162/9.00/200-24

INPUT POWER 2.20 KW / 3.0 HP/100

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
31	657	45.5	8000	1.0	DFK162/45.5/250-28 DRK162/45.5/250-28
43	487	33.8	8270	1.1	DFK162/33.8/250-28 DRK162/33.8/250-28
50	403	28.0	8030	1.3	DFK162/28.0/250-28 DRK162/28.0/250-28
60	341	23.6	7900	1.4	DFK162/23.6/250-28 DRK162/23.6/250-28
75	272	18.9	8000	1.5	DFK162/18.9/250-28 DRK162/18.9/250-28
105	195	13.4	7680	2.0	DFK162/13.4/250-28 DRK162/13.4/250-28
125	160	11.3	7500	2.2	DFK162/11.3/250-28 DRK162/11.3/250-28
157	130	9.0	7300	2.5	DFK162/9.00/250-28 DRK162/9.00/250-28
193	105	7.3	7100	3.1	DFK162/7.30/250-28 DRK162/7.30/250-28
282	75	5.0	6900	3.9	DFK162/5.00/250-28 DRK162/5.00/250-28
371	55	3.8	6500	5.2	DFK162/3.80/250-28 DRK162/3.80/250-28

INPUT POWER 3.70 KW / 5.0 HP/112

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
75	460	18.9	5900	1.0	DFK162/18.9/250-28 DRK162/18.9/250-28
105	330	13.4	6900	1.2	DFK162/13.4/250-28 DRK162/13.4/250-28
125	272	11.3	6700	1.4	DFK162/11.3/250-28 DRK162/11.3/250-28
157	219	9.0	6700	1.6	DFK162/9.00/250-28 DRK162/9.00/250-28
193	177	7.3	6600	1.9	DFK162/7.30/250-28 DRK162/7.30/250-28
282	122	5.0	6500	2.1	DFK162/5.00/250-28 DRK162/5.00/250-28
371	92	3.8	6400	3.1	DFK162/3.80/250-28 DRK162/3.80/250-28

INPUT POWER 5.50 KW / 7.5 HP

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
193	179	7.3	6000	1.00	DFK162/7.30/300-38 DRK162/7.30/300-38
282	122	5.0	6400	1.50	DFK162/5.00/300-38 DRK162/5.00/300-38
371	93	3.8	6900	1.90	DFK162/3.80/300-38 DRK162/3.80/300-38

NOTE : All above ratio are also available in Solid Input Shaft

HELICAL GEAR BOX

Power Rating Table

DFK-185

INPUT POWER 3.70 KW / 5.0 HP/112

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
32	1083	44.6	3400	1.0	DFK185/44.6/250-28
44	850	32.3	4050	1.1	DFK185/32.3/250-28
51	710	27.5	6800	1.2	DFK185/27.5/250-28
59	612	23.7	9200	1.4	DFK185/23.7/250-28
73	505	19.4	10100	1.6	DFK185/19.4/250-28
98	375	14.4	10700	2.1	DFK185/14.4/250-28
134	270	10.5	11200	2.6	DFK185/10.5/250-28

INPUT POWER 5.50 KW / 7.5 HP/132

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
51	993	27.5	6000	1.0	DFK185/27.5/300-38
59	850	23.7	6500	1.1	DFK185/23.7/300-38
73	675	19.4	6800	1.3	DFK185/19.4/300-38
98	513	14.4	8000	1.6	DFK185/14.4/300-38
134	370	10.5	9800	1.8	DFK185/10.5/300-38
155	305	9.1	10700	2.0	DFK185/9.10/300-38
207	230	6.8	10900	2.5	DFK185/6.80/300-38
288	170	4.9	11000	2.9	DFK185/4.90/300-38
371	137	3.8	10100	3.8	DFK185/3.80/300-38

INPUT POWER 7.5 KW / 10.0 HP/132

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
73	951	19.4	6300	1.0	DFK185/19.4/300-38
98	706	14.4	7800	1.2	DFK185/14.4/300-38
134	515	10.5	8500	1.5	DFK185/10.5/300-38
155	446	9.10	9300	1.7	DFK185/9.10/300-38
207	333	6.80	9800	2.0	DFK185/6.80/300-38
288	240	4.90	9900	2.3	DFK185/4.90/300-38
371	186	3.80	10000	3.0	DFK185/3.80/300-38

NOTE : All above ratio are also available in Solid Input Shaft

HELICAL GEAR BOX

Power Rating Table

D-160

INPUT POWER 2.20 KW / 3.0 HP/100

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
25	802	55.8	11500	1.2	DFK160/55.8/250-28
31	654	45.5	12000	1.4	DFK160/45.5/250-28
42	486	33.8	12600	1.9	DFK160/33.8/250-28
50	403	28.0	13000	2.2	DFK160/28.0/250-28
60	339	23.6	13500	2.8	DFK160/23.6/250-28
75	272	18.9	14000	3.3	DFK160/18.9/250-28
105	193	13.4	13900	3.9	DFK160/13.4/250-28
125	162	11.3	13700	4.4	DFK160/11.3/250-28
157	129	9.0	13500	5.1	DFK160/9.00/250-28
193	105	7.3	13400	6.0	DFK160/7.30/250-28
282	72	5.0	13200	7.3	DFK160/5.00/250-28
371	55	3.8	13000	8.6	DFK160/3.80/250-28

INPUT POWER 3.70 KW / 5.0 HP/112

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
42	815	33.8	4500	1.2	DFK160/33.8/250-28
50	675	28.0	6800	1.4	DFK160/28.0/250-28
60	569	23.6	8500	1.7	DFK160/23.6/250-28
75	455	18.9	10100	2.0	DFK160/18.9/250-28
105	323	13.4	10700	2.5	DFK160/13.4/250-28
125	272	11.3	11200	2.7	DFK160/11.3/250-28
157	217	9.0	12100	3.1	DFK160/9.00/250-28
193	176	7.3	12000	3.6	DFK160/7.30/250-28
282	120	5.0	11900	4.8	DFK160/5.00/250-28
371	92	3.8	11800	6.0	DFK160/3.80/250-28

INPUT POWER 5.50 KW / 7.5 HP/132

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
60	848	23.6	8500	1.1	DFK160/23.6/300-38
75	679	18.9	6800	1.3	DFK160/18.9/300-38
105	482	13.4	8000	1.7	DFK160/13.4/300-38
125	406	11.3	9200	1.8	DFK160/11.3/300-38
157	324	9.0	10700	2.0	DFK160/9.00/300-38
193	262	7.3	10800	2.3	DFK160/7.30/300-38
282	180	5.0	10900	3.1	DFK160/5.00/300-38
371	137	3.8	11100	3.8	DFK160/3.80/300-38

INPUT POWER 7.50 KW / 10 HP/132

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
75	926	18.9	6400	1.0	DFK160/18.9/300-38
105	657	13.4	7500	1.2	DFK160/13.4/300-38
125	554	11.3	8700	1.3	DFK160/11.3/300-38
157	441	9.00	10000	1.5	DFK160/9.00/300-38
193	358	7.30	10200	1.7	DFK160/7.30/300-38
282	245	5.00	10300	2.2	DFK160/5.00/300-38
371	186	3.80	10400	2.8	DFK160/3.80/300-38

NOTE : All above ratio are also available in Solid Input Shaft

THREE PHASE INDUCTION MOTOR

Three Phase Induction Motor

Power(KW)	Frame Size	Pole	RPM	Efficiency	Mounting
0.75	80	4	1410	IE 2	Flange
1.1	90	4	1410	IE 2	Flange

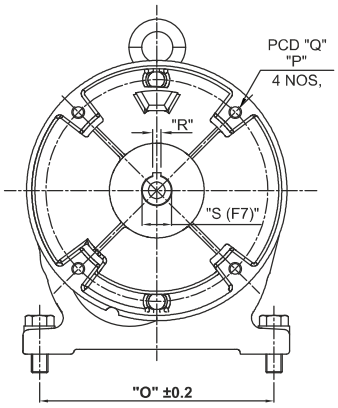
unique mechanical solution®
VIJAY GEARS

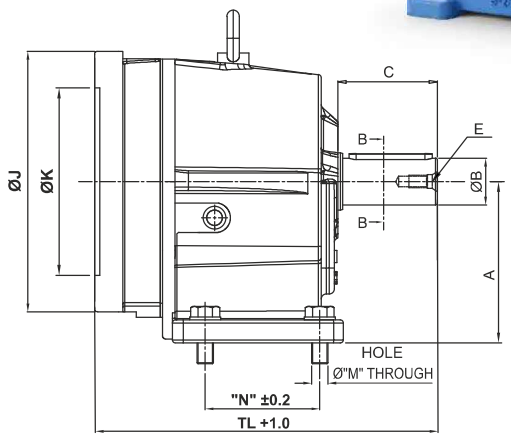
B SERIES GEARBOX

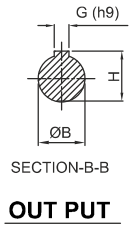

VIJAY
GEARS
B-25

HELICAL GEAR BOX

B Series : Model BFK

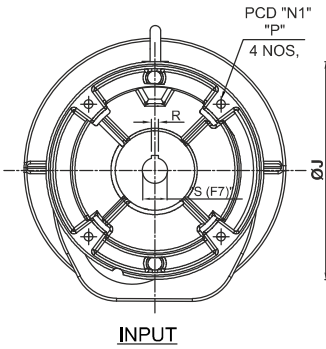


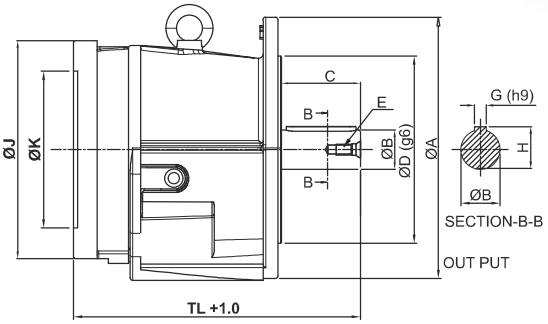


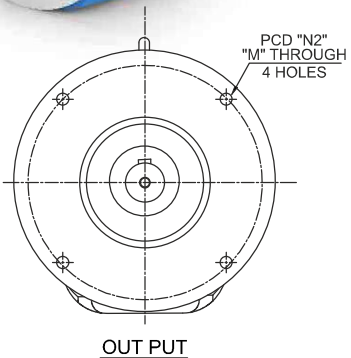


MODEL NO	A	ØB (h6)	C	E	G (h9)	H	ØJ	Ø K(F8)	HOLE ØM	N	O	P	Q	S (F7)	R	TL +0.1	NET WT.
BFK-20	100	20	40	M6X1P	6	21.5	160	110	11	60	130	M8	130	14	5	179	10.5 kg
BFK-25	110	25	50	M8X1.25P	8	28	(160) 200	110/130	11	70	160	M8/M10	130/165	19/24	5/6	243	17.7 kg
BFK-30	130	30	60	M10X1.5P	8	33	(160) 200	110/130	14	105	180	M8/M10	130/165	19/24	5/6	280	28.2 kg
BFK-35	130	35	80	M10X1.5P	10	38	(160) 200/250	110/130/180	14	105	180	M8/M10/M12	130/165/215	19,24/28	6/8/10	315	31.1 kg
BFK-45	155	45	90	M12X1.75P	14	48.8	(200)/250/300	180/230	18	110	225	M10/M12	215/265	24/28/38	8/10	329	43.4 kg
BFK-55	175	55	110	M16X2P	16	59.3	(250)/300/350	180/230/250	18	145	250	M12/M12/M16	215/265/300	28/38/42,48	8/10/12,14	385	59.1 kg
BFK-60	210	60	120	M16X2P	18	64.4	(250)/300/350	180/230/250	22	165	300	M12/M12/M16	215/265/300	28/38/42,48	8/10/12,14	440	99 kg
BFK-80	250	80	140	M20X2.5P	22	85.5	(300)/350/400	230/250/300	26	210	370	M12/M12/M16	265/300/350	38/42,48/55	10/12,14/16	560	162 kg
BFK-90	300	90	170	M20X2.5P	25	95.4	(350)/400/450	250/300/350	33	250	440	M16/M18	300/350/400	42,48/55/60	12,14/16/18	675.5	258 kg

B Series : Model BRK







MODEL NO	ØA	ØB (h6)	C	ØD	E	G (h9)	H	ØJ	Ø K(F8)	ØM	N1	P	N2	R	S (F7)	TL	NET WT.
BRK-20	160	20	40	110	M6X1P	6	22.5	160	110	9	130	M8X1.25	130	5	14	179	9.2 kg
BRK-25	200	25	50	130	M8X1.25P	8	28	200	130	11	165	M8X1.25	165	6	19/24	243	18.3 kg
BRK-30	250	30	60	180	M10X1.5P	8	33	200	130/180	11	165	M10X1.5	165	8	19/24	280	22.5 kg
BRK-35	250	35	80	180	M10X1.5P	10	38	200/250	180/230	13	165/215	M10X1.5 M12X1.75P	215	8	24/28	315	37 kg
BRK-45	300	45	90	230	M12X1.75P	14	48.8	250/300	180/230	13	215/265	M12X1.75	265	8/10	28/38	329	45.1 kg
BRK-55	300	55	110	230	M16X2P	16	59.3	250/300	180/230	13	215/265	M12X1.75	265	8/10	28/38	385	66.5 lg

HELICAL GEAR BOX

Power Rating Table

B-20

INPUT POWER 0.37 KW / 0.5 HP/71

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
39	82	36.1	3850	1.1	BFK20/36.1/160-14 BRK20/36.1/160-14
45	75	31.2	3300	1.3	BFK20/31.2/160-14 BRK20/31.2/160-14
53	68	26.7	3170	1.5	BFK20/26.7/160-14 BRK20/26.7/160-14
59	57	24.1	3050	1.6	BFK20/24.1/160-14 BRK20/24.1/160-14
79	44	17.8	2930	1.8	BFK20/17.8/160-14 BRK20/17.8/160-14
89	39	15.7	2850	2.0	BFK20/15.7/160-14 BRK20/15.7/160-14
104	35	13.5	2740	2.2	BFK20/13.5/160-14 BRK20/13.5/160-14
128	25	11.0	2690	2.8	BFK20/11.0/160-14 BRK20/11.0/160-14
148	24	9.5	2620	3.1	BFK20/9.50/160-14 BRK20/9.50/160-14
178	19	7.9	2530	3.3	BFK20/7.90/160-14 BRK20/7.90/160-14
204	17	6.9	2440	3.5	BFK20/6.90/160-14 BRK20/6.90/160-14
252	13	5.6	2380	4.3	BFK20/5.60/160-14 BRK20/5.60/160-14
300	11	4.7	2310	4.9	BFK20/4.70/160-14 BRK20/4.70/160-14
344	10	4.1	2280	5.2	BFK20/4.10/160-14 BRK20/4.10/160-14

INPUT POWER 0.55 KW / 0.75 HP/80

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
89	54	15.7	2850	1.3	BFK20/15.7/200-19 BRK20/15.7/200-19
104	47	13.5	2740	1.5	BFK20/13.5/200-19 BRK20/13.5/200-19
128	41	11.0	2690	1.8	BFK20/11.0/200-19 BRK20/11.0/200-19
148	39	9.5	2620	2.0	BFK20/9.50/200-19 BRK20/9.50/200-19
178	29	7.9	2530	2.2	BFK20/7.90/200-19 BRK20/7.90/200-19
204	25	6.9	2440	2.4	BFK20/6.90/200-19 BRK20/6.90/200-19
252	20	5.6	2380	3.2	BFK20/5.60/200-19 BRK20/5.60/200-19
300	17	4.7	2310	3.7	BFK20/4.70/200-19 BRK20/4.70/200-19
344	15	4.1	2280	3.9	BFK20/4.10/200-19 BRK20/4.10/200-19

INPUT POWER 0.75 KW / 1.0 HP/80

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
89	75	15.7	2850	1.0	BFK20/15.7/200-19 BRK20/15.7/200-19
104	65	13.5	2740	1.1	BFK20/13.5/200-19 BRK20/13.5/200-19
128	55	11.0	2690	1.4	BFK20/11.0/200-19 BRK20/11.0/200-19
148	48	9.5	2620	1.5	BFK20/9.50/200-19 BRK20/9.50/200-19
178	38	7.9	2530	1.6	BFK20/7.90/200-19 BRK20/7.90/200-19
204	34	6.9	2440	1.7	BFK20/6.90/200-19 BRK20/6.90/200-19
252	26	5.6	2380	2.2	BFK20/5.60/200-19 BRK20/5.60/200-19
301	22	4.7	2310	2.5	BFK20/4.70/200-19 BRK20/4.70/200-19
344	20	4.1	2280	2.6	BFK20/4.10/200-19 BRK20/4.10/200-19

NOTE : All above ratio are also available in Solid Input Shaft

HELICAL GEAR BOX

Power Rating Table

B-25

INPUT POWER 0.75 KW / 1.0 HP/80

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
41	168	34.2	4240	1.1	BFK25/34.2/200-19 BRK25/34.2/200-19
51	135	27.5	4270	1.3	BFK25/27.5/200-19 BRK25/27.5/200-19
62	111	22.7	4100	1.6	BFK25/22.7/200-19 BRK25/22.7/200-19
73	93	19.0	3920	1.9	BFK25/19.0/200-19 BRK25/19.0/200-19
86	79	16.2	3810	2.2	BFK25/16.2/200-19 BRK25/16.2/200-19
99	69	14.1	3700	2.4	BFK25/14.1/200-19 BRK25/14.1/200-19
118	58	11.8	3590	2.6	BFK25/11.8/200-19 BRK25/11.8/200-19
147	47	9.5	3420	3.2	BFK25/9.50/200-19 BRK25/9.50/200-19
168	41	8.3	3380	3.4	BFK25/8.30/200-19 BRK25/8.30/200-19
203	33	6.8	3310	4.2	BFK25/6.80/200-19 BRK25/6.80/200-19
222	31	6.3	3290	4.5	BFK25/6.30/200-19 BRK25/6.30/200-19
242	28	5.7	3260	4.6	BFK25/5.70/200-19 BRK25/5.70/200-19
309	22	4.5	3230	5.0	BFK25/4.50/200-19 BRK25/4.50/200-19
329	21	4.2	3190	5.2	BFK25/4.20/200-19 BRK25/4.20/200-19
359	19	3.9	3160	5.3	BFK25/3.90/200-19 BRK25/3.90/200-19
433	16	3.2	3140	5.6	BFK25/3.20/200-19 BRK25/3.20/200-19
473	14	2.9	3130	5.7	BFK25/2.90/200-19 BRK25/2.90/200-19

INPUT POWER 1.50 KW / 2.0 HP/90

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
73	186	19.0	3050	1.0	BFK25/19.0/200-24 BRK25/19.0/200-24
86	159	16.2	2940	1.0	BFK25/16.2/200-24 BRK25/16.2/200-24
99	138	14.1	2880	1.1	BFK25/14.1/200-24 BRK25/14.1/200-24
118	116	11.8	2830	1.3	BFK25/11.8/200-24 BRK25/11.8/200-24
147	93	9.5	2710	1.5	BFK25/9.50/200-24 BRK25/9.50/200-24
168	81	8.3	2640	1.7	BFK25/8.30/200-24 BRK25/8.30/200-24
203	67	6.8	2570	1.9	BFK25/6.80/200-24 BRK25/6.80/200-24
222	62	6.3	2540	2.0	BFK25/6.30/200-24 BRK25/6.30/200-24
242	56	5.7	2500	2.1	BFK25/5.70/200-24 BRK25/5.70/200-24
309	44	4.5	2470	2.3	BFK25/4.50/200-24 BRK25/4.50/200-24
329	41	4.2	2420	2.4	BFK25/4.20/200-24 BRK25/4.20/200-24
359	38	3.9	2410	2.5	BFK25/3.90/200-24 BRK25/3.90/200-24
433	31	3.2	2400	2.7	BFK25/3.20/200-24 BRK25/3.20/200-24
473	28	2.9	2490	2.8	BFK25/2.90/200-24 BRK25/2.90/200-24

NOTE : All above ratio are also available in Solid Input Shaft

HELICAL GEAR BOX

Power Rating Table

B-30

INPUT POWER 0.75 KW / 1.0 HP/80

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
54	129	26.3	3920	2.4	BFK30/26.3/200-19 BRK30/26.3/200-19
65	107	21.8	3810	2.8	BFK30/21.8/200-19 BRK30/21.8/200-19
77	90	18.4	3700	3.1	BFK30/18.4/200-19 BRK30/18.4/200-19
94	74	15.0	3590	3.5	BFK30/15.0/200-19 BRK30/15.0/200-19
103	67	13.7	3420	3.9	BFK30/13.7/200-19 BRK30/13.7/200-19
126	55	11.2	3380	4.5	BFK30/11.2/200-19 BRK30/11.2/200-19
148	47	9.5	3310	5.2	BFK30/9.50/200-19 BRK30/9.50/200-19
174	40	8.1	3290	5.9	BFK30/8.10/200-19 BRK30/8.10/200-19
201	34	7.0	3260	6.2	BFK30/7.00/200-19 BRK30/7.00/200-19
243	28	5.8	3230	6.9	BFK30/5.80/200-19 BRK30/5.80/200-19
294	24	4.8	3190	7.3	BFK30/4.80/200-19 BRK30/4.80/200-19
336	21	4.2	3160	7.9	BFK30/4.20/200-19 BRK30/4.20/200-19
392	18	3.6	3150	8.3	BFK30/3.60/200-19 BRK30/3.60/200-19

INPUT POWER 1.50 KW / 2.0 HP/90

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
54	258	26.3	3050	1.2	BFK30/26.3/200-24 BRK30/26.3/200-24
65	214	21.8	3000	1.4	BFK30/21.8/200-24 BRK30/21.8/200-24
77	180	18.4	3050	1.6	BFK30/18.4/200-24 BRK30/18.4/200-24
94	147	15.0	2940	1.8	BFK30/15.0/200-24 BRK30/15.0/200-24
103	134	13.7	2880	2.0	BFK30/13.7/200-24 BRK30/13.7/200-24
126	110	11.2	2830	2.2	BFK30/11.2/200-24 BRK30/11.2/200-24
148	93	9.5	2710	2.6	BFK30/9.50/200-24 BRK30/9.50/200-24
174	79	8.1	2640	3.1	BFK30/8.10/200-24 BRK30/8.10/200-24
201	69	7.0	2570	3.3	BFK30/7.00/200-24 BRK30/7.00/200-24
243	57	5.8	2540	3.4	BFK30/5.80/200-24 BRK30/5.80/200-24
294	47	4.8	2500	3.7	BFK30/4.80/200-24 BRK30/4.80/200-24
336	41	4.2	2470	4.1	BFK30/4.20/200-24 BRK30/4.20/200-24
392	35	3.6	2440	4.5	BFK30/3.60/200-24 BRK30/3.60/200-24

NOTE : All above ratio are also available in Solid Input Shaft

HELICAL GEAR BOX

Power Rating Table

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INPUT POWER 1.50 KW / 2.0 HP/90

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
54	258	26.3	7280	1.8	BFK35/26.3/200-24 BRK35/26.3/200-24
65	214	21.8	7250	2.1	BFK35/21.8/200-24 BRK35/21.8/200-24
77	180	18.4	7230	2.4	BFK35/18.4/200-24 BRK35/18.4/200-24
94	147	15.0	7200	2.7	BFK35/15.0/200-24 BRK35/15.0/200-24
103	134	13.7	7160	3.0	BFK35/13.7/200-24 BRK35/13.7/200-24
126	110	11.2	7120	3.4	BFK35/11.2/200-24 BRK35/11.2/200-24
148	93	9.5	6920	4.0	BFK35/9.50/200-24 BRK35/9.50/200-24
174	79	8.1	6680	4.7	BFK35/8.10/200-24 BRK35/8.10/200-24
201	69	7.0	6490	5.0	BFK35/7.00/200-24 BRK35/7.00/200-24
243	57	5.8	6380	5.6	BFK35/5.80/200-24 BRK35/5.80/200-24
294	47	4.8	6280	6.2	BFK35/4.80/200-24 BRK35/4.80/200-24
336	41	4.2	6200	7.1	BFK35/4.20/200-24 BRK35/4.20/200-24
392	35	3.6	6110	7.3	BFK35/3.60/200-24 BRK35/3.60/200-24

INPUT POWER 2.20 KW / 3.0 HP/100

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
54	378	26.3	7280	1.3	BFK35/26.3/250-28 BRK35/26.3/250-28
65	313	21.8	7250	1.4	BFK35/21.8/250-28 BRK35/21.8/250-28
77	265	18.4	7230	1.6	BFK35/18.4/250-28 BRK35/18.4/250-28
94	216	15.0	7200	1.8	BFK35/15.0/250-28 BRK35/15.0/250-28
103	197	13.7	7160	2.0	BFK35/13.7/250-28 BRK35/13.7/250-28
126	161	11.2	7120	2.3	BFK35/11.2/250-28 BRK35/11.2/250-28
148	137	9.5	6920	2.7	BFK35/9.50/250-28 BRK35/9.50/250-28
174	116	8.1	6680	3.2	BFK35/8.10/250-28 BRK35/8.10/250-28
201	101	7.0	6490	3.4	BFK35/7.00/250-28 BRK35/7.00/250-28
243	83	5.8	6380	3.8	BFK35/5.80/250-28 BRK35/5.80/250-28
294	69	4.8	6280	4.2	BFK35/4.80/250-28 BRK35/4.80/250-28
336	60	4.2	6200	4.9	BFK35/4.20/250-28 BRK35/4.20/250-28
392	52	3.6	6110	5.1	BFK35/3.60/250-28 BRK35/3.60/250-28

NOTE : All above ratio are also available in Solid Input Shaft

HELICAL GEAR BOX

Power Rating Table

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INPUT POWER 1.50 KW / 2.0 HP/90

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
20	699	71.3	9450	1.0	BFK45/71.3/200-24 BRK45/71.3/200-24
25	545	55.8	9500	1.3	BFK45/55.8/200-24 BRK45/55.8/200-24
31	446	45.5	9500	1.6	BFK45/45.5/200-24 BRK45/45.5/200-24
42	331	33.8	9480	2.2	BFK45/33.8/200-24 BRK45/33.8/200-24
50	275	28.0	9450	2.6	BFK45/28.0/200-24 BRK45/28.0/200-24
60	231	23.6	9430	3.1	BFK45/23.6/200-24 BRK45/23.6/200-24
75	185	18.9	9410	3.7	BFK45/18.9/200-24 BRK45/18.9/200-24
105	131	13.4	9390	4.9	BFK45/13.4/200-24 BRK45/13.4/200-24
125	111	11.3	9370	5.8	BFK45/11.3/200-24 BRK45/11.3/200-24
157	88	9.0	9300	6.8	BFK45/9.00/200-24 BRK45/9.00/200-24
193	72	7.3	9190	7.8	BFK45/7.30/200-24 BRK45/7.30/200-24
282	49	5.0	9050	9.0	BFK45/5.00/200-24 BRK45/5.00/200-24
371	37	3.8	8980	9.7	BFK45/3.80/200-24 BRK45/3.80/200-24

INPUT POWER 3.70 KW / 5.0 HP/112

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
50	675	28.0	9140	1.0	BFK45/28.0/250-28 BRK45/28.0/250-28
60	569	23.6	8320	1.2	BFK45/23.6/250-28 BRK45/23.6/250-28
75	455	18.9	8140	1.4	BFK45/18.9/250-28 BRK45/18.9/250-28
105	323	13.4	7830	1.9	BFK45/13.4/250-28 BRK45/13.4/250-28
125	272	11.3	7590	2.2	BFK45/11.3/250-28 BRK45/11.3/250-28
157	217	9.0	7440	2.8	BFK45/9.00/250-28 BRK45/9.00/250-28
193	176	7.3	7320	3.1	BFK45/7.30/250-28 BRK45/7.30/250-28
282	120	5.0	7160	4.3	BFK45/5.00/250-28 BRK45/5.00/250-28
371	92	3.8	7080	5.4	BFK45/3.80/250-28 BRK45/3.80/250-28

NOTE : All above ratio are also available in Solid Input Shaft

INPUT POWER 2.20 KW / 3.0 HP/100

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
31	654	45.5	9500	1.1	BFK45/45.5/250-28 BRK45/45.5/250-28
42	486	33.8	9500	1.5	BFK45/33.8/250-28 BRK45/33.8/250-28
50	403	28.0	9420	1.8	BFK45/28.0/250-28 BRK45/28.0/250-28
60	339	23.6	9390	2.1	BFK45/23.6/250-28 BRK45/23.6/250-28
75	272	18.9	9100	2.5	BFK45/18.9/250-28 BRK45/18.9/250-28
105	193	13.4	8600	3.3	BFK45/13.4/250-28 BRK45/13.4/250-28
125	162	11.3	8450	4.0	BFK45/11.3/250-28 BRK45/11.3/250-28
157	129	9.0	8360	4.7	BFK45/9.00/250-28 BRK45/9.00/250-28
193	105	7.3	8280	5.3	BFK45/7.30/250-28 BRK45/7.30/250-28
282	72	5.0	8210	7.2	BFK45/5.00/250-28 BRK45/5.00/250-28
371	55	3.8	8040	8.0	BFK45/3.80/250-28 BRK45/3.80/250-28

INPUT POWER 5.50 KW / 7.5 HP/132

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
105	482	13.4	7160	1.4	BFK45/13.4/300-38 BRK45/13.4/300-38
125	406	11.3	7100	1.6	BFK45/11.3/300-38 BRK45/11.3/300-38
157	324	9.0	6850	1.9	BFK45/9.00/300-38 BRK45/9.00/300-38
193	262	7.3	6460	2.2	BFK45/7.30/300-38 BRK45/7.30/300-38
282	180	5.0	6080	3.1	BFK45/5.00/300-38 BRK45/5.00/300-38
371	137	3.8	6020	3.8	BFK45/3.80/300-38 BRK45/3.80/300-38

INPUT POWER 7.5 KW / 10 HP/132

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
125	554	11.3	6700	1.2	BFK45/11.3/300-38
157	441	9.00	6480	1.4	BFK45/9.00/300-38
193	358	7.30	6090	1.6	BFK45/7.30/300-38
282	245	5.00	5700	2.1	BFK45/5.00/300-38
371	186	3.80	5600	2.6	BFK45/3.80/300-38

HELICAL GEAR BOX

Power Rating Table

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INPUT POWER 1.1 KW / 1.5 HP/90S

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
8.6	1169	164.0	14900	1.00	BFK55/164.0/200-24 BRK55/164.0/200-24
10.7	947	132.8	14900	1.30	BFK55/132.8/200-24 BRK55/132.8/200-24
12.8	789	110.7	14900	1.50	BFK55/110.7/200-24 BRK55/110.7/200-24
16.4	615	86.30	14800	2.00	BFK55/86.30/200-24 BRK55/86.30/200-24
19.0	532	74.70	14800	2.30	BFK55/74.70/200-24 BRK55/74.70/200-24
23.2	434	60.90	14800	2.80	BFK55/60.90/200-24 BRK55/60.90/200-24
27.9	361	50.70	14700	3.20	BFK55/50.70/200-24 BRK55/50.70/200-24
33.2	304	42.70	14700	3.60	BFK55/42.70/200-24 BRK55/42.70/200-24
39.0	258	36.30	14700	4.10	BFK55/36.30/200-24 BRK55/36.30/200-24
45.6	221	31.00	14700	4.60	BFK55/31.00/200-24 BRK55/31.00/200-24

INPUT POWER 1.5 KW / 2 HP/90L

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
10.7	1291	132.8	14900	1.00	BFK55/132.8/200-24 BRK55/132.8/200-24
12.8	1076	110.7	14900	1.10	BFK55/110.7/200-24 BRK55/110.7/200-24
16.4	838	86.30	14900	1.40	BFK55/86.30/200-24 BRK55/86.30/200-24
19.0	726	74.70	14800	1.70	BFK55/74.70/200-24 BRK55/74.70/200-24
23.2	592	60.90	14800	2.10	BFK55/60.90/200-24 BRK55/60.90/200-24
27.9	492	50.70	14800	2.40	BFK55/50.70/200-24 BRK55/50.70/200-24
33.2	415	42.70	14700	2.80	BFK55/42.70/200-24 BRK55/42.70/200-24
39.0	352	36.30	14700	3.30	BFK55/36.30/200-24 BRK55/36.30/200-24
45.6	301	31.00	14700	3.70	BFK55/31.00/200-24 BRK55/31.00/200-24
55.9	246	25.30	14700	4.30	BFK55/25.30/200-24 BRK55/25.30/200-24

INPUT POWER 2.2 KW / 3 HP/100L

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
16.7	1208	86.30	14900	1.00	BFK55/86.30/250-28 BRK55/86.30/250-28
19.3	1046	74.70	14900	1.10	BFK55/74.70/250-28 BRK55/74.70/250-28
23.6	854	60.90	14900	1.40	BFK55/60.90/250-28 BRK55/60.90/250-28
28.4	709	50.70	14900	1.70	BFK55/50.70/250-28 BRK55/50.70/250-28
33.8	598	42.70	14800	2.00	BFK55/42.70/250-28 BRK55/42.70/250-28
39.7	508	36.30	14800	2.50	BFK55/36.30/250-28 BRK55/36.30/250-28
46.4	434	31.00	14800	2.80	BFK55/31.00/250-28 BRK55/31.00/250-28
56.9	354	25.30	14700	3.30	BFK55/25.30/250-28 BRK55/25.30/250-28
80.5	250	17.90	14700	4.50	BFK55/17.90/250-28 BRK55/17.90/250-28
101.3	199	14.20	14700	5.40	BFK55/14.20/250-28 BRK55/14.20/250-28

INPUT POWER 3.7 KW / 5 HP/112M

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
28.2	1201	50.70	14900	1.00	BFK55/50.70/250-28 BRK55/50.70/250-28
33.5	1012	42.70	14900	1.20	BFK55/42.70/250-28 BRK55/42.70/250-28
39.4	860	36.30	14900	1.30	BFK55/36.30/250-28 BRK55/36.30/250-28
46.1	736	31.00	14800	1.60	BFK55/31.00/250-28 BRK55/31.00/250-28
56.5	600	25.30	14800	2.00	BFK55/25.30/250-28 BRK55/25.30/250-28
80.0	424	17.90	14700	2.80	BFK55/17.90/250-28 BRK55/17.90/250-28
100.6	337	14.20	14700	3.30	BFK55/14.20/250-28 BRK55/14.20/250-28
123.2	275	11.60	14700	3.90	BFK55/11.60/250-28 BRK55/11.60/250-28
148.2	229	09.70	14700	4.70	BFK55/09.70/250-28 BRK55/09.70/250-28
175.9	193	08.10	14700	5.40	BFK55/08.10/250-28 BRK55/08.10/250-28

NOTE : All above ratio are also available in Solid Input Shaft

HELICAL GEAR BOX

Power Rating Table

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INPUT POWER 5.5 KW / 7.5 HP/132S

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
40.0	1261	36.30	14900	1.00	BFK55/36.30/300-38 BRK55/36.30/300-38
46.7	1079	31.00	14900	1.10	BFK55/31.00/300-38 BRK55/31.00/300-38
57.3	880	25.30	14900	1.30	BFK55/25.30/300-38 BRK55/25.30/300-38
81.1	622	17.90	14800	1.90	BFK55/17.90/300-38 BRK55/17.90/300-38
102.0	495	14.20	14800	1.90	BFK55/14.20/300-38 BRK55/14.20/300-38
124.9	404	11.60	14700	2.70	BFK55/11.60/300-38 BRK55/11.60/300-38
150.3	336	09.70	14400	3.10	BFK55/09.70/300-38 BRK55/09.70/300-38
178.4	283	08.10	14200	3.70	BFK55/08.10/300-38 BRK55/08.10/300-38
209.8	240	06.90	13900	4.20	BFK55/06.90/300-38 BRK55/06.90/300-38
245.3	206	05.90	13900	4.60	BFK55/05.90/300-38 BRK55/05.90/300-38

INPUT POWER 7.5 KW / 10 HP/132M

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
57.5	1196	25.30	13800	1.00	BFK55/25.30/300-38 BRK55/25.30/300-38
81.4	845	17.90	13600	1.40	BFK55/17.90/300-38 BRK55/17.90/300-38
102.3	672	14.20	13400	1.60	BFK55/14.20/300-38 BRK55/14.20/300-38
125.3	549	11.60	13100	2.00	BFK55/11.60/300-38 BRK55/11.60/300-38
150.8	456	09.70	13100	2.40	BFK55/09.70/300-38 BRK55/09.70/300-38
179.0	384	08.10	12900	2.80	BFK55/08.10/300-38 BRK55/08.10/300-38
210.6	327	06.90	12500	3.30	BFK55/06.90/300-38 BRK55/06.90/300-38
246.2	279	05.90	12300	3.80	BFK55/05.90/300-38 BRK55/05.90/300-38
271.5	253	05.40	12000	4.00	BFK55/05.40/300-38 BRK55/05.40/300-38
319.1	215	04.60	12000	4.60	BFK55/04.60/300-38 BRK55/04.60/300-38
373.1	184	03.90	11800	5.10	BFK55/03.90/300-38 BRK55/03.90/300-38

INPUT POWER 11 KW / 15 HP/160M

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
81.7	1235	17.90	11100	1.00	BFK55/17.90/350-42 BRK55/17.90/350-42
102.7	982	14.20	11500	1.10	BFK55/14.20/350-42 BRK55/14.20/350-42
125.8	802	11.60	11400	1.30	BFK55/11.60/350-42 BRK55/11.60/350-42
151.3	667	09.70	11300	1.60	BFK55/09.70/350-42 BRK55/09.70/350-42
179.6	562	08.10	11100	1.90	BFK55/08.10/350-42 BRK55/08.10/350-42
211.3	477	06.90	11200	2.30	BFK55/06.90/350-42 BRK55/06.90/350-42
247.0	408	05.90	11100	2.60	BFK55/05.90/350-42 BRK55/05.90/350-42
272.4	370	05.40	10700	2.80	BFK55/05.40/350-42 BRK55/05.40/350-42
320.2	315	04.60	10400	3.20	BFK55/04.60/350-42 BRK55/04.60/350-42
374.4	269	03.90	10400	3.60	BFK55/03.90/350-42 BRK55/03.90/350-42

INPUT POWER 15 KW / 20 HP/160L

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
125.8	1094	11.60	9700	1.00	BFK55/11.60/350-42 BRK55/11.60/350-42
151.3	909	09.70	9600	1.20	BFK55/09.70/350-42 BRK55/09.70/350-42
179.6	766	08.10	10000	1.40	BFK55/08.10/350-42 BRK55/08.10/350-42
211.3	651	06.90	10000	1.70	BFK55/06.90/350-42 BRK55/06.90/350-42
247.0	557	05.90	9800	1.90	BFK55/05.90/350-42 BRK55/05.90/350-42
272.4	505	05.40	9700	2.10	BFK55/05.40/350-42 BRK55/05.40/350-42
320.2	430	04.60	9700	2.30	BFK55/04.60/350-42 BRK55/04.60/350-42
374.4	367	03.90	9500	2.60	BFK55/03.90/350-42 BRK55/03.90/350-42

NOTE : All above ratio are also available in Solid Input Shaft

HELICAL GEAR BOX

Power Rating Table

B-60

INPUT POWER 2.2 KW / 3 HP/100L

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
8.2	2449	174.8	21900	0.90	BFK60/174.8/250-28 BRK60/174.8/250-28
11.5	1749	124.9	21900	1.20	BFK60/124.9/250-28 BRK60/124.9/250-28
14.6	1379	98.40	21900	1.50	BFK60/98.40/250-28 BRK60/98.40/250-28
18.1	1114	79.60	21800	1.90	BFK60/79.60/250-28 BRK60/79.60/250-28
22.0	916	65.40	21800	2.30	BFK60/65.40/250-28 BRK60/65.40/250-28
26.5	762	54.40	21800	2.60	BFK60/54.40/250-28 BRK60/54.40/250-28
31.6	638	45.60	21700	3.10	BFK60/45.60/250-28 BRK60/45.60/250-28
37.5	537	38.40	21600	3.40	BFK60/38.40/250-28 BRK60/38.40/250-28
47.0	429	30.70	21500	4.00	BFK60/30.70/250-28 BRK60/30.70/250-28

INPUT POWER 3.7 KW / 5 HP/112M

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
18.0	1887	79.60	19300	1.00	BFK60/79.60/250-28 BRK60/79.60/250-28
21.9	1551	65.40	19500	1.30	BFK60/65.40/250-28 BRK60/65.40/250-28
26.3	1290	54.40	19000	1.50	BFK60/54.40/250-28 BRK60/54.40/250-28
31.4	1081	45.60	18700	1.80	BFK60/45.60/250-28 BRK60/45.60/250-28
37.3	910	38.40	18300	2.10	BFK60/38.40/250-28 BRK60/38.40/250-28
46.7	727	30.70	17500	2.70	BFK60/30.70/250-28 BRK60/30.70/250-28
55.2	614	25.90	17100	3.00	BFK60/25.90/250-28 BRK60/25.90/250-28
77.3	439	18.50	16700	3.90	BFK60/18.50/250-28 BRK60/18.50/250-28
98.1	346	14.60	16300	4.70	BFK60/14.60/250-28 BRK60/14.60/250-28

INPUT POWER 5.5 KW / 7.5 HP/132S

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
22.2	2274	65.40	17000	0.90	BFK60/65.40/300-38 BRK60/65.40/300-38
26.7	1891	54.40	16800	1.10	BFK60/54.40/300-38 BRK60/54.40/300-38
31.8	1584	45.60	16500	1.30	BFK60/45.60/300-38 BRK60/45.60/300-38
37.8	1334	38.40	16300	1.60	BFK60/38.40/300-38 BRK60/38.40/300-38
47.3	1066	30.70	15900	1.90	BFK60/30.70/300-38 BRK60/30.70/300-38
56.0	901	25.90	15600	2.30	BFK60/25.90/300-38 BRK60/25.90/300-38
78.4	643	18.50	15300	3.10	BFK60/18.50/300-38 BRK60/18.50/300-38
99.5	507	14.60	14600	3.90	BFK60/14.60/300-38 BRK60/14.60/300-38
123.0	410	11.80	14000	4.40	BFK60/11.80/300-38 BRK60/11.80/300-38

INPUT POWER 7.5 KW / 10 HP/132M

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
31.9	2153	45.60	14700	1.00	BFK60/45.60/300-38 BRK60/45.60/300-38
37.9	1812	38.40	14500	1.10	BFK60/38.40/300-38 BRK60/38.40/300-38
47.5	1449	30.70	14300	1.40	BFK60/30.70/300-38 BRK60/30.70/300-38
56.2	1224	25.90	14100	1.70	BFK60/25.90/300-38 BRK60/25.90/300-38
78.6	874	18.50	13100	2.40	BFK60/18.50/300-38 BRK60/18.50/300-38
99.8	689	14.60	12900	2.80	BFK60/14.60/300-38 BRK60/14.60/300-38
123.4	557	11.80	12700	3.30	BFK60/11.80/300-38 BRK60/11.80/300-38
150.2	458	09.70	11900	3.90	BFK60/09.70/300-38 BRK60/09.70/300-38
180.5	381	08.10	11700	4.50	BFK60/08.10/300-38 BRK60/08.10/300-38
215.6	319	06.80	11100	4.90	BFK60/06.80/300-38 BRK60/06.80/300-38

NOTE : All above ratio are also available in Solid Input Shaft

HELICAL GEAR BOX

Power Rating Table

B-60

INPUT POWER 11 KW / 15 HP/160M

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
47.6	2117	30.70	11400	1.00	BFK60/30.70/350-42 BRK60/30.70/350-42
56.4	1789	25.90	11400	1.20	BFK60/25.90/350-42 BRK60/25.90/350-42
78.9	1278	18.50	11400	1.60	BFK60/18.50/350-42 BRK60/18.50/350-42
100.1	1007	14.60	11300	1.90	BFK60/14.60/350-42 BRK60/14.60/350-42
123.8	814	11.80	11300	2.30	BFK60/11.80/350-42 BRK60/11.80/350-42
150.7	669	09.70	11300	2.80	BFK60/09.70/350-42 BRK60/09.70/350-42
181.1	557	08.10	10800	3.30	BFK60/08.10/350-42 BRK60/08.10/350-42
216.3	466	06.80	10500	3.80	BFK60/06.80/350-42 BRK60/06.80/350-42
257.0	392	05.70	10300	4.40	BFK60/05.70/350-42 BRK60/05.70/350-42
321.6	314	04.50	10200	5.10	BFK60/04.50/350-42 BRK60/04.50/350-42

INPUT POWER 15 KW / 20 HP/160L

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
78.9	1743	18.50	9200	1.20	BFK60/18.50/350-42 BRK60/18.50/350-42
100.1	1373	14.60	9200	1.50	BFK60/14.60/350-42 BRK60/14.60/350-42
123.8	1111	11.80	9200	1.80	BFK60/11.80/350-42 BRK60/11.80/350-42
150.7	913	09.70	9100	2.10	BFK60/09.70/350-42 BRK60/09.70/350-42
181.1	759	08.10	8700	2.50	BFK60/08.10/350-42 BRK60/08.10/350-42
216.3	636	06.80	8400	2.90	BFK60/06.80/350-42 BRK60/06.80/350-42
257.0	535	05.70	8200	3.30	BFK60/05.70/350-42 BRK60/05.70/350-42
321.6	428	04.50	8000	4.00	BFK60/04.50/350-42 BRK60/04.50/350-42
382.2	360	03.80	7800	4.50	BFK60/03.80/350-42 BRK60/03.80/350-42

INPUT POWER 18.5 KW / 25 HP/180M

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
79.7	2127	18.50	7800	1.00	BFK60/18.50/350-48 BRK60/18.50/350-48
101.2	1677	14.60	8500	1.20	BFK60/14.60/350-48 BRK60/14.60/350-48
125.1	1356	11.80	8500	1.40	BFK60/11.80/350-48 BRK60/11.80/350-48
152.2	1114	09.70	8500	1.70	BFK60/09.70/350-48 BRK60/09.70/350-48
183.0	927	08.10	8500	2.00	BFK60/08.10/350-48 BRK60/08.10/350-48
218.5	776	06.80	8500	2.40	BFK60/06.80/350-48 BRK60/06.80/350-48
259.7	653	05.70	8300	2.70	BFK60/05.70/350-48 BRK60/05.70/350-48
324.9	522	04.50	8300	3.30	BFK60/04.50/350-48 BRK60/04.50/350-48
386.1	439	03.80	8300	3.70	BFK60/03.80/350-48 BRK60/03.80/350-48

INPUT POWER 22 KW / 30 HP/180L

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
101.2	2039	14.60	7700	1.00	BFK60/14.60/350-48 BRK60/14.60/350-48
125.1	1649	11.80	7700	1.20	BFK60/11.80/350-48 BRK60/11.80/350-48
152.2	1355	09.70	7700	1.40	BFK60/09.70/350-48 BRK60/09.70/350-48
183.0	1127	08.10	8100	1.70	BFK60/08.10/350-48 BRK60/08.10/350-48
218.5	944	06.80	8100	1.90	BFK60/06.80/350-48 BRK60/06.80/350-48
259.7	794	05.70	7900	2.10	BFK60/05.70/350-48 BRK60/05.70/350-48
324.9	635	04.50	7900	2.40	BFK60/04.50/350-48 BRK60/04.50/350-48
386.1	534	03.80	7800	2.80	BFK60/03.80/350-48 BRK60/03.80/350-48

NOTE : All above ratio are also available in Solid Input Shaft

HELICAL GEAR BOX

Power Rating Table

B-80

INPUT POWER 5.5 KW / 7.5 HP/132S

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
13.5	3700	107.5	30800	1.10	BFK80/107.5/300-38 BRK80/107.5/300-38
16.7	2985	86.7	30800	1.30	BFK80/86.70/300-38 BRK80/86.70/300-38
20.4	2449	71.2	30800	1.50	BFK80/71.20/300-38 BRK80/71.20/300-38
24.6	2032	59.0	30700	1.90	BFK80/59.00/300-38 BRK80/59.00/300-38
30.4	1642	47.7	30700	2.30	BFK80/47.70/300-38 BRK80/47.70/300-38
36.4	1372	39.9	30700	2.80	BFK80/39.90/300-38 BRK80/39.90/300-38
43.3	1151	33.5	30600	3.10	BFK80/33.50/300-38 BRK80/33.50/300-38
61.0	818	23.8	30600	4.00	BFK80/23.80/300-38 BRK80/23.80/300-38
77.5	644	18.7	30600	4.60	BFK80/18.70/300-38 BRK80/18.70/300-38
96.1	519	15.1	30600	5.30	BFK80/15.10/300-38 BRK80/15.10/300-38

INPUT POWER 7.5 KW / 10 HP/132M

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
16.8	4057	86.70	30300	1.00	BFK80/86.70/300-38 BRK80/86.70/300-38
20.4	3328	71.20	30300	1.10	BFK80/71.20/300-38 BRK80/71.20/300-38
24.6	2761	59.00	30300	1.40	BFK80/59.00/300-38 BRK80/59.00/300-38
30.5	2231	47.70	30300	1.70	BFK80/47.70/300-38 BRK80/47.70/300-38
36.5	1864	39.90	30300	2.00	BFK80/39.90/300-38 BRK80/39.00/300-38
43.5	1565	33.50	30300	2.40	BFK80/33.50/300-38 BRK80/33.50/300-38
61.2	1111	23.80	30200	3.20	BFK80/23.80/300-38 BRK80/23.80/300-38
77.8	875	18.70	30200	3.80	BFK80/18.70/300-38 BRK80/18.70/300-38
96.4	706	15.10	30200	4.60	BFK80/15.10/300-38 BRK80/15.10/300-38
117.5	579	12.40	30200	5.40	BFK80/12.40/300-38 BRK80/12.40/300-38
141.7	480	10.30	30200	6.00	BFK80/10.30/300-38 BRK80/10.30/300-38

INPUT POWER 11 KW / 15 HP/160M

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
24.7	4035	59.00	30500	1.00	BFK80/59.00/350-42 BRK80/59.00/350-42
30.6	3261	47.70	30500	1.20	BFK80/47.70/350-42 BRK80/47.70/350-42
36.6	2725	39.90	30500	1.40	BFK80/39.90/350-42 BRK80/39.90/350-42
43.6	2287	33.50	30500	1.70	BFK80/33.50/350-42 BRK80/33.50/350-42
61.4	1624	23.80	30500	2.30	BFK80/23.80/350-42 BRK80/23.80/350-42
78.1	1278	18.70	30400	2.90	BFK80/18.70/350-42 BRK80/18.70/350-42
96.8	1031	15.10	30300	3.40	BFK80/15.10/350-42 BRK80/15.10/350-42
117.9	846	12.40	30300	4.00	BFK80/12.40/350-42 BRK80/12.40/350-42
142.2	702	10.30	30200	4.60	BFK80/10.30/350-42 BRK80/10.30/350-42
175.9	567	08.30	30200	5.40	BFK80/08.30/350-42 BRK80/08.30/350-42
210.7	474	06.90	30200	6.00	BFK80/06.90/350-42 BRK80/06.90/350-42

INPUT POWER 15 KW / 20 HP/160L

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
36.6	3716	39.9	30500	1.00	BFK80/39.9/350-42 BRK80/39.9/350-42
43.6	3118	33.5	30500	1.20	BFK80/33.5/350-42 BRK80/33.5/350-42
61.4	2215	23.8	30400	1.70	BFK80/23.8/350-42 BRK80/23.8/350-42
78.1	1743	18.7	30100	2.20	BFK80/18.7/350-42 BRK80/18.7/350-42
96.8	1407	15.1	29200	2.40	BFK80/15.1/350-42 BRK80/15.1/350-42
117.9	1154	12.4	27900	2.70	BFK80/12.4/350-42 BRK80/12.4/350-42
142.2	957	10.3	27400	3.10	BFK80/10.3/350-42 BRK80/10.3/350-42
175.9	774	8.30	27100	3.70	BFK80/8.30/350-42 BRK80/8.30/350-42
210.7	646	6.90	26500	4.20	BFK80/6.90/350-42 BRK80/6.90/350-42
250.9	542	5.80	26100	4.60	BFK80/5.80/350-42 BRK80/5.80/350-42
357.0	381	4.10	25600	6.10	BFK80/4.10/350-42 BRK80/4.10/350-42

NOTE : All above ratio are also available in Solid Input Shaft

HELICAL GEAR BOX

Power Rating Table

B-80

INPUT POWER 18.5 KW / 25.0 HP/180M

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
44.1	3806	33.5	29200	1.00	BFK80/33.5/350-48 BRK80/33.5/350-48
62.1	2704	23.8	28700	1.40	BFK80/23.8/350-48 BRK80/23.8/350-48
78.9	2128	18.7	27500	1.80	BFK80/18.7/350-48 BRK80/18.7/350-48
97.7	1717	15.1	27200	2.10	BFK80/15.1/350-48 BRK80/15.1/350-48
119.1	1409	12.4	26800	2.20	BFK80/12.4/350-48 BRK80/12.4/350-48
143.6	1169	10.3	26800	2.60	BFK80/10.3/350-48 BRK80/10.3/350-48
177.7	944	8.30	26700	3.10	BFK80/8.30/350-48 BRK80/8.30/350-48
212.8	789	6.90	26500	3.60	BFK80/6.90/350-48 BRK80/6.90/350-48
253.4	662	5.80	25700	4.10	BFK80/5.80/350-48 BRK80/5.80/350-48
360.6	465	4.10	25500	5.20	BFK80/4.10/350-48 BRK80/4.10/350-48
428.8	391	3.40	24500	5.60	BFK80/3.40/350-48 BRK80/3.40/350-48

INPUT POWER 22 KW / 30 HP/180L

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
62.1	3215	23.8	27200	1.20	BFK80/23.8/350-48 BRK80/23.8/350-48
78.9	2530	18.7	27000	1.50	BFK80/18.7/350-48 BRK80/18.7/350-48
97.7	2042	15.1	26800	1.70	BFK80/15.1/350-48 BRK80/15.1/350-48
119.1	1675	12.4	26300	1.90	BFK80/12.4/350-48 BRK80/12.4/350-48
143.6	1390	10.3	26100	2.30	BFK80/10.3/350-48 BRK80/10.3/350-48
177.7	1123	8.30	24500	2.80	BFK80/8.30/350-48 BRK80/8.30/350-48
212.8	938	6.90	23400	3.20	BFK80/6.90/350-48 BRK80/6.90/350-48
253.4	788	5.80	23400	3.40	BFK80/5.80/350-48 BRK80/5.80/350-48
360.6	553	4.10	22900	4.60	BFK80/4.10/350-48 BRK80/4.10/350-48
428.8	465	3.40	22300	5.00	BFK80/3.40/350-48 BRK80/3.40/350-48

INPUT POWER 30 KW / 40 HP/200L

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
78.9	3451	18.7	22600	1.10	BFK80/18.7/400-55 BRK80/18.7/400-55
97.7	2784	15.1	22600	1.30	BFK80/15.1/400-55 BRK80/15.1/400-55
119.1	2284	12.4	21600	1.50	BFK80/12.4/400-55 BRK80/12.4/400-55
143.6	1895	10.3	21400	1.70	BFK80/10.3/400-55 BRK80/10.3/400-55
177.7	1532	8.30	21300	2.10	BFK80/8.30/400-55 BRK80/8.30/400-55
212.8	1279	6.90	20400	2.40	BFK80/6.90/400-55 BRK80/6.90/400-55
253.4	1074	5.80	20400	2.70	BFK80/5.80/400-55 BRK80/5.80/400-55
360.6	755	4.10	20400	3.30	BFK80/4.10/400-55 BRK80/4.10/400-55
428.8	635	3.40	20100	3.80	BFK80/3.40/400-55 BRK80/3.40/400-55

NOTE : All above ratio are also available in Solid Input Shaft

HELICAL GEAR BOX

Power Rating Table

B-90

INPUT POWER 7.5 KW / 10 HP/132M

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
12.3	5542	118.5	41300	1.10	BFK90/118.5/300-38 BRK90/118.5/300-38
15.0	4526	96.80	41300	1.40	BFK90/96.80/300-38 BRK90/96.80/300-38
18.2	3736	79.90	41300	1.60	BFK90/79.90/300-38 BRK90/79.90/300-38
22.4	3034	64.90	41300	2.00	BFK90/64.90/300-38 BRK90/64.90/300-38
27.0	2521	53.90	41300	2.40	BFK90/53.90/300-38 BRK90/53.90/300-38
32.4	2101	44.90	41300	2.80	BFK90/44.90/300-38 BRK90/44.90/300-38
38.0	1793	38.30	41300	3.20	BFK90/38.30/300-38 BRK90/38.30/300-38
45.6	1494	31.90	41300	3.80	BFK90/31.90/300-38 BRK90/31.90/300-38
54.2	1256	26.90	41200	4.30	BFK90/26.90/300-38 BRK90/26.90/300-38
69.1	985	21.10	41200	4.80	BFK90/21.10/300-38 BRK90/21.10/300-38
85.9	792	16.90	41100	5.60	BFK90/16.90/300-38 BRK90/16.90/300-38

INPUT POWER 11 KW / 15 HP/160M

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
18.3	5460	79.90	41500	1.10	BFK90/79.90/350-42 BRK90/79.90/350-42
22.5	4435	64.90	41500	1.40	BFK90/64.90/350-42 BRK90/64.90/350-42
27.1	3684	53.90	41500	1.70	BFK90/53.90/350-42 BRK90/53.90/350-42
32.5	3070	44.90	41500	2.00	BFK90/44.90/350-42 BRK90/44.90/350-42
38.1	2620	38.30	41500	2.30	BFK90/38.30/350-42 BRK90/38.30/350-42
45.7	2183	31.90	41500	2.80	BFK90/31.90/350-42 BRK90/31.90/350-42
54.4	1836	26.90	41500	3.30	BFK90/26.90/350-42 BRK90/26.90/350-42
69.3	1440	21.10	41400	4.00	BFK90/21.10/350-42 BRK90/21.10/350-42
86.2	1157	16.90	41300	4.80	BFK90/16.90/350-42 BRK90/16.90/350-42
105.6	945	13.80	41300	5.60	BFK90/13.80/350-42 BRK90/13.80/350-42
128.0	780	11.40	41200	6.10	BFK90/11.40/350-42 BRK90/11.40/350-42

INPUT POWER 15 KW / 20 HP/160L

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
22.5	6048	64.90	41500	1.00	BFK90/64.90/350-42 BRK90/64.90/350-42
27.1	5024	53.90	41500	1.20	BFK90/53.90/350-42 BRK90/53.90/350-42
32.5	4187	44.90	41500	1.50	BFK90/44.90/350-42 BRK90/44.90/350-42
38.1	3573	38.30	41500	1.70	BFK90/38.30/350-42 BRK90/38.30/350-42
45.7	2977	31.90	41400	2.10	BFK90/31.90/350-42 BRK90/31.90/350-42
54.4	2504	26.90	41400	2.40	BFK90/26.90/350-42 BRK90/26.90/350-42
69.3	1964	21.10	41400	2.90	BFK90/21.10/350-42 BRK90/21.10/350-42
86.2	1578	16.90	41300	3.60	BFK90/16.90/350-42 BRK90/16.90/350-42
105.6	1289	13.80	40800	4.20	BFK90/13.80/350-42 BRK90/13.80/350-42
128.0	1064	11.40	40100	5.00	BFK90/11.40/350-42 BRK90/11.40/350-42
157.5	864	09.30	39500	5.70	BFK90/09.30/350-42 BRK90/09.30/350-42
189.6	718	07.70	39500	6.20	BFK90/07.70/350-42 BRK90/07.70/350-42

INPUT POWER 18.5KW / 25 HP/180M

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
27.4	6133	53.90	40200	1.00	BFK90/53.90/350-48 BRK90/53.90/350-48
32.8	5111	44.90	40200	1.20	BFK90/44.90/350-48 BRK90/44.90/350-48
38.5	4362	38.30	40200	1.40	BFK90/38.30/350-48 BRK90/38.30/350-48
46.2	3634	31.90	39500	1.70	BFK90/31.90/350-48 BRK90/31.90/350-48
54.9	3056	26.90	39200	2.00	BFK90/26.90/350-48 BRK90/26.90/350-48
70.0	2398	21.10	38800	2.60	BFK90/21.10/350-48 BRK90/21.10/350-48
87.1	1926	16.90	38800	3.00	BFK90/16.90/350-48 BRK90/16.90/350-48
106.7	1574	13.80	38300	3.50	BFK90/13.80/350-48 BRK90/13.80/350-48
129.3	1298	11.40	37700	4.10	BFK90/11.40/350-48 BRK90/11.40/350-48
159.1	1055	09.30	37500	4.80	BFK90/09.30/350-48 BRK90/09.30/350-48
191.6	876	07.70	37500	5.40	BFK90/07.70/350-48 BRK90/07.70/350-48
229.8	731	06.40	37500	6.00	BFK90/06.40/350-48 BRK90/06.40/350-48
269.2	624	05.50	37500	6.50	BFK90/05.50/350-48 BRK90/05.50/350-48

NOTE : All above ratio are also available in Solid Input Shaft

HELICAL GEAR BOX

Power Rating Table

B-90

INPUT POWER 22 KW / 30 HP/180L

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
32.8	6079	44.90	40200	1.00	BFK90/44.90/350-48 BRK90/44.90/350-48
38.5	5187	38.30	40200	1.20	BFK90/38.30/350-48 BRK90/38.30/350-48
46.2	4322	31.90	40200	1.40	BFK90/31.90/350-48 BRK90/31.90/350-48
54.9	3635	26.90	40200	1.70	BFK90/26.90/350-48 BRK90/26.90/350-48
70.0	2851	21.10	40200	2.10	BFK90/21.10/350-48 BRK90/21.10/350-48
87.1	2291	16.90	40200	2.50	BFK90/16.90/350-48 BRK90/16.90/350-48
106.7	1871	13.80	39900	2.90	BFK90/13.80/350-48 BRK90/13.80/350-48
129.3	1544	11.40	39900	3.40	BFK90/11.40/350-48 BRK90/11.40/350-48
159.1	1254	09.30	38900	4.10	BFK90/09.30/350-48 BRK90/09.30/350-48
191.6	1042	07.70	38000	4.70	BFK90/07.70/350-48 BRK90/07.70/350-48
229.8	869	06.40	37400	5.50	BFK90/06.40/350-48 BRK90/06.40/350-48
269.2	742	05.50	36800	6.00	BFK90/05.50/350-48 BRK90/05.50/350-48
323.5	617	04.60	36300	6.40	BFK90/04.60/350-48 BRK90/04.60/350-48

INPUT POWER 30 KW / 40 HP/200L

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
38.5	7073	38.30	37900	0.90	BFK90/38.30/400-55 BRK90/38.30/400-55
46.2	5894	31.90	37900	1.10	BFK90/31.90/400-55 BRK90/31.90/400-55
54.9	4956	26.90	37100	1.30	BFK90/26.90/400-55 BRK90/26.90/400-55
70.0	3888	21.10	36500	1.60	BFK90/21.10/400-55 BRK90/21.10/400-55
87.1	3124	16.90	35900	1.90	BFK90/16.90/400-55 BRK90/16.90/400-55
106.7	2552	13.80	35600	2.10	BFK90/13.80/400-55 BRK90/13.80/400-55
129.3	2105	11.40	34800	2.50	BFK90/11.40/400-55 BRK90/11.40/400-55
159.1	1711	09.30	34000	3.10	BFK90/09.30/400-55 BRK90/09.30/400-55
191.6	1421	07.70	33300	3.70	BFK90/07.70/400-55 BRK90/07.70/400-55
229.8	1185	06.40	32900	4.20	BFK90/06.40/400-55 BRK90/06.40/400-55
269.2	1011	05.50	32000	4.70	BFK90/05.50/400-55 BRK90/05.50/400-55
323.5	841	04.60	32000	5.30	BFK90/04.60/400-55 BRK90/04.60/400-55

INPUT POWER 37 KW / 50 HP/225S

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
54.9	6113	26.90	34600	1.00	BFK90/26.90/450-60 BRK90/26.90/450-60
70.0	4795	21.10	34300	1.30	BFK90/21.10/450-60 BRK90/21.10/450-60
87.1	3853	16.90	33800	1.60	BFK90/16.90/450-60 BRK90/16.90/450-60
106.7	3147	13.80	33800	1.70	BFK90/13.80/450-60 BRK90/13.80/450-60
129.3	2597	11.40	33400	1.60	BFK90/11.40/450-60 BRK90/11.40/450-60
159.1	2110	09.30	32800	2.40	BFK90/09.30/450-60 BRK90/09.30/450-60
191.6	1752	07.70	32200	2.90	BFK90/07.70/450-60 BRK90/07.70/450-60
229.8	1461	06.40	31600	3.30	BFK90/06.40/450-60 BRK90/06.40/450-60
269.2	1247	05.50	31100	3.50	BFK90/05.50/450-60 BRK90/05.50/450-60
323.5	1038	04.60	30800	3.90	BFK90/04.60/450-60 BRK90/04.60/450-60

INPUT POWER 45 KW / 60 HP/225M

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
70.0	5832	21.10	26600	1.00	BFK90/21.10/450-60 BRK90/21.10/450-60
87.1	4686	16.90	28200	1.30	BFK90/16.90/450-60 BRK90/16.90/450-60
106.7	3828	13.80	30200	1.40	BFK90/13.80/450-60 BRK90/13.80/450-60
129.3	3158	11.40	30200	1.70	BFK90/11.40/450-60 BRK90/11.40/450-60
159.1	2566	09.30	30200	2.10	BFK90/09.30/450-60 BRK90/09.30/450-60
191.6	2131	07.70	30200	2.50	BFK90/07.70/450-60 BRK90/07.70/450-60
229.8	1777	06.40	30200	2.80	BFK90/06.40/450-60 BRK90/06.40/450-60
269.2	1517	05.50	29900	3.10	BFK90/05.50/450-60 BRK90/05.50/450-60
323.5	1262	04.60	29600	3.40	BFK90/04.60/450-60 BRK90/04.60/450-60

NOTE : All above ratio are also available in Solid Input Shaft

PLAN

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Aurangabad - 431136
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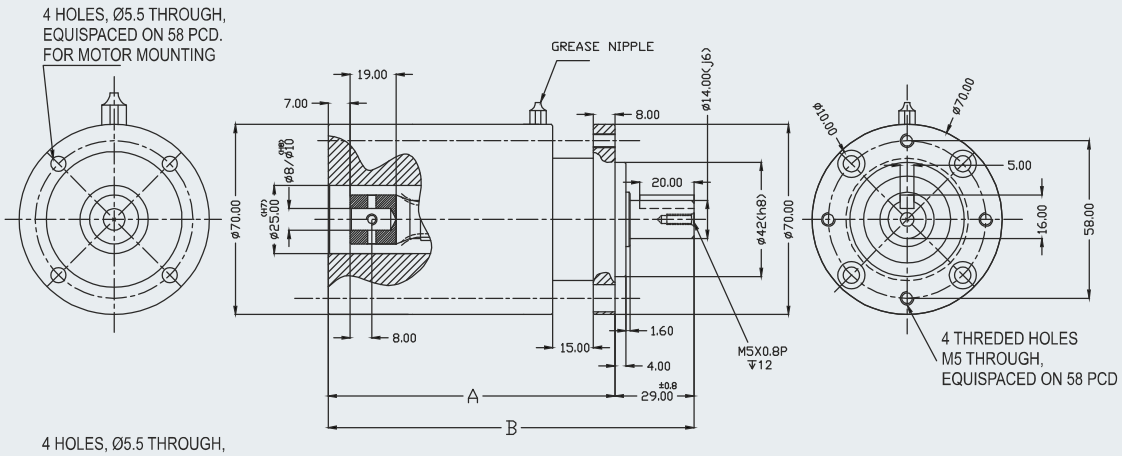
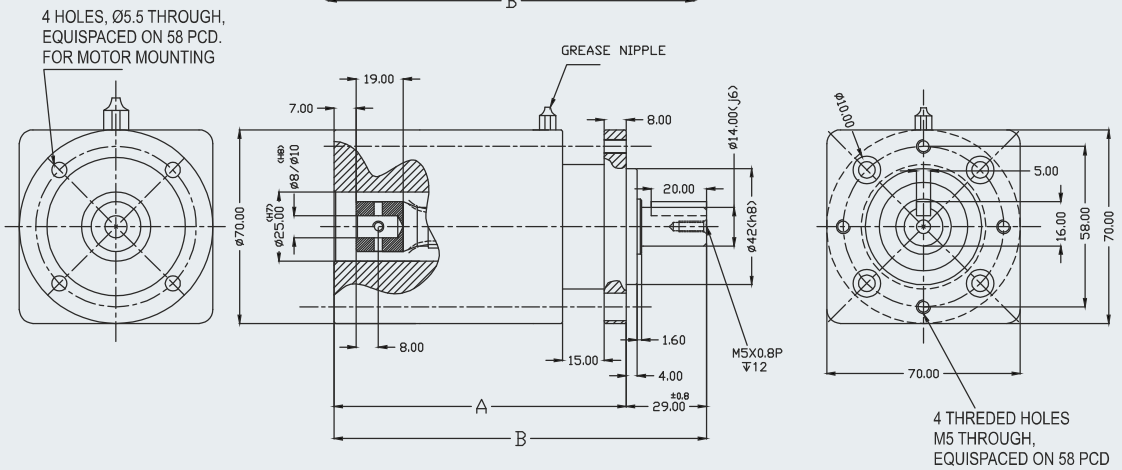
Serial Number :
VIJAY
GEARS
PMDC MOTOR WITH PLANETARY GEAR BOX
MODEL VP70R61.3BE3112
VOLT : 12V
CURRENT : 14.5A
POWER I/P : 174W
SPEED : 51RPM
POWER O/P : 103W
TORQUE : 17Nm


VIJAY GEARS
M-106/9 MIDC Waluj
Aurangabad - 431136
E-mail : sales@vijaygears.com
Serial Number :

VP 70 Series


4 HOLES, Ø5.5 THROUGH,
EQUISPACED ON 58 PCD.
FOR MOTOR MOUNTING
GREASE NIPPLE
19.00
7.00
8.00
ø14.00(J6)
ø8/ø10
ø25.00
ø70.00
20.00
ø42(h8)
8.00
15.00
1.60
4.00
29.00 ±0.8
M5X0.8P
↧12
A
B
ø10.00
ø70.00
5.00
16.00
58.00
4 THREDED HOLES
M5 THROUGH,
EQUISPACED ON 58 PCD


4 HOLES, Ø5.5 THROUGH,
EQUISPACED ON 58 PCD.
FOR MOTOR MOUNTING
GREASE NIPPLE
19.00
7.00
8.00
ø14.00(J6)
ø8/ø10
ø25.00
ø70.00
20.00
ø42(h8)
8.00
15.00
1.60
4.00
29.00 ±0.8
M5X0.8P
↧12
A
B
ø10.00
5.00
16.00
58.00
70.00
70.00
4 THREDED HOLES
M5 THROUGH,
EQUISPACED ON 58 PCD

Stages of Gear box			
Parameters	**Single Stage**	**Two Stage**	**Three Stage**
Ratio	3.69:1, 4.5:1	13.6:1, 16.6:1, 20:1	50:1, 61:1, 75:1, 91:1
Torque Capacity	3.2 Nm	14.3 Nm	30 Nm
Noise Level	≤ 62dB	≤ 62dB	≤ 62dB
Backlash	49 Arc minutes	49 Arc minutes	49 Arc minutes
Flange size	Ø70 / 70 x 70	Ø70 / 70 x 70	Ø70 / 70 x 70
Body Length (A)	78.8 $^{+/-1.0}$	92.0 $^{+/-1.0}$	107.0 $^{+/-1.0}$
Total Length (B)	107.0 $^{+/-1.0}$	121.0 $^{+/-1.0}$	136.0 $^{+/-1.0}$

Stages of Gear box	
Parameters	**Four Stage**
Ratio	185:1, 226:1, 336:1, 410:1
Torque Capacity	135 Nm
Noise Level	≤ 62dB
Backlash	49 Arc minutes
Flange size	Ø70 / 70 x 70
Body Length (A)	119.0 $^{+/-1.0}$
Total Length (B)	148.0 $^{+/-1.0}$

Note :
1. Maximum Gear Box Input Speed allowed is 3000 RPM
2. Torque Capacity for the stages above 3 with the dimensions specified, is 30Nm only
3. Torque Capacities specified above for the Stages above 3, are with different dimensions

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