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HELICAL GEAR BOX

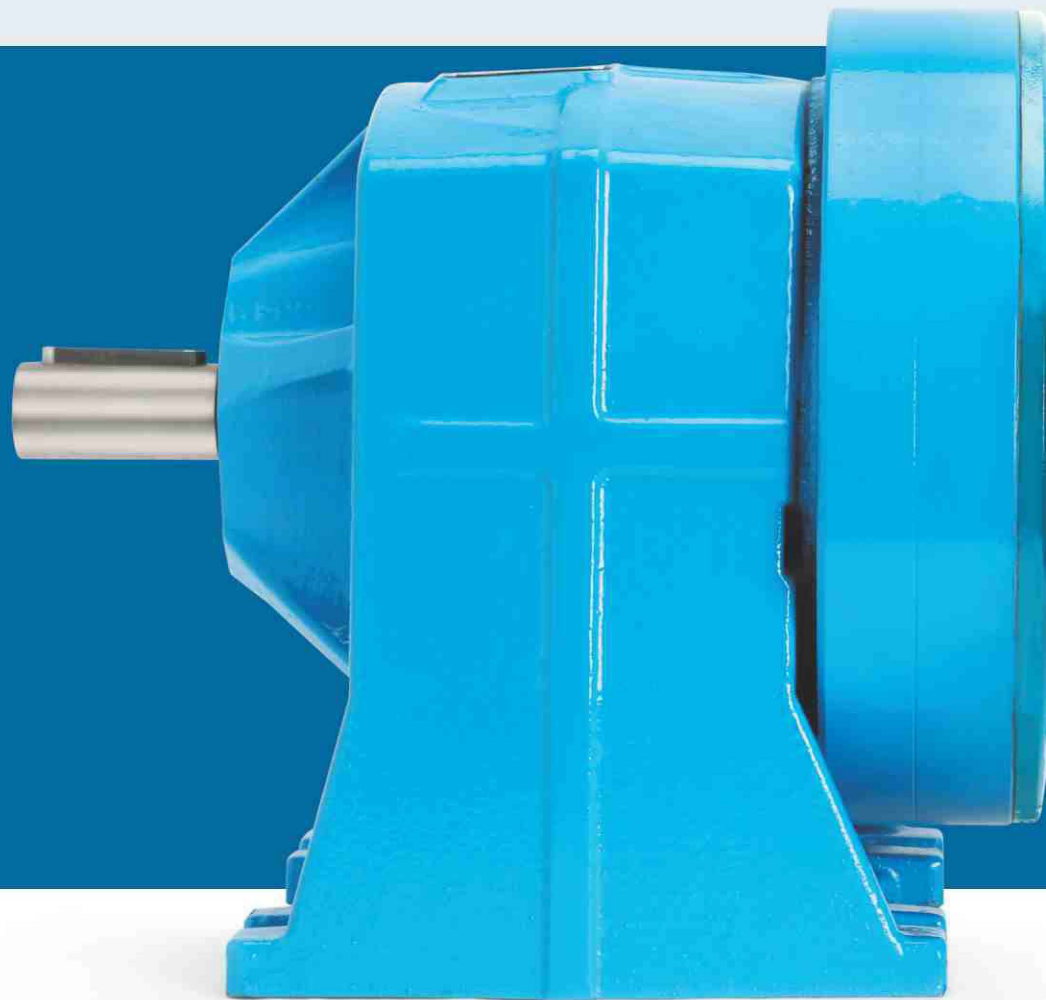
AC MOTORS

MINI PLANETARY GEAR BOX

DC MOTORS

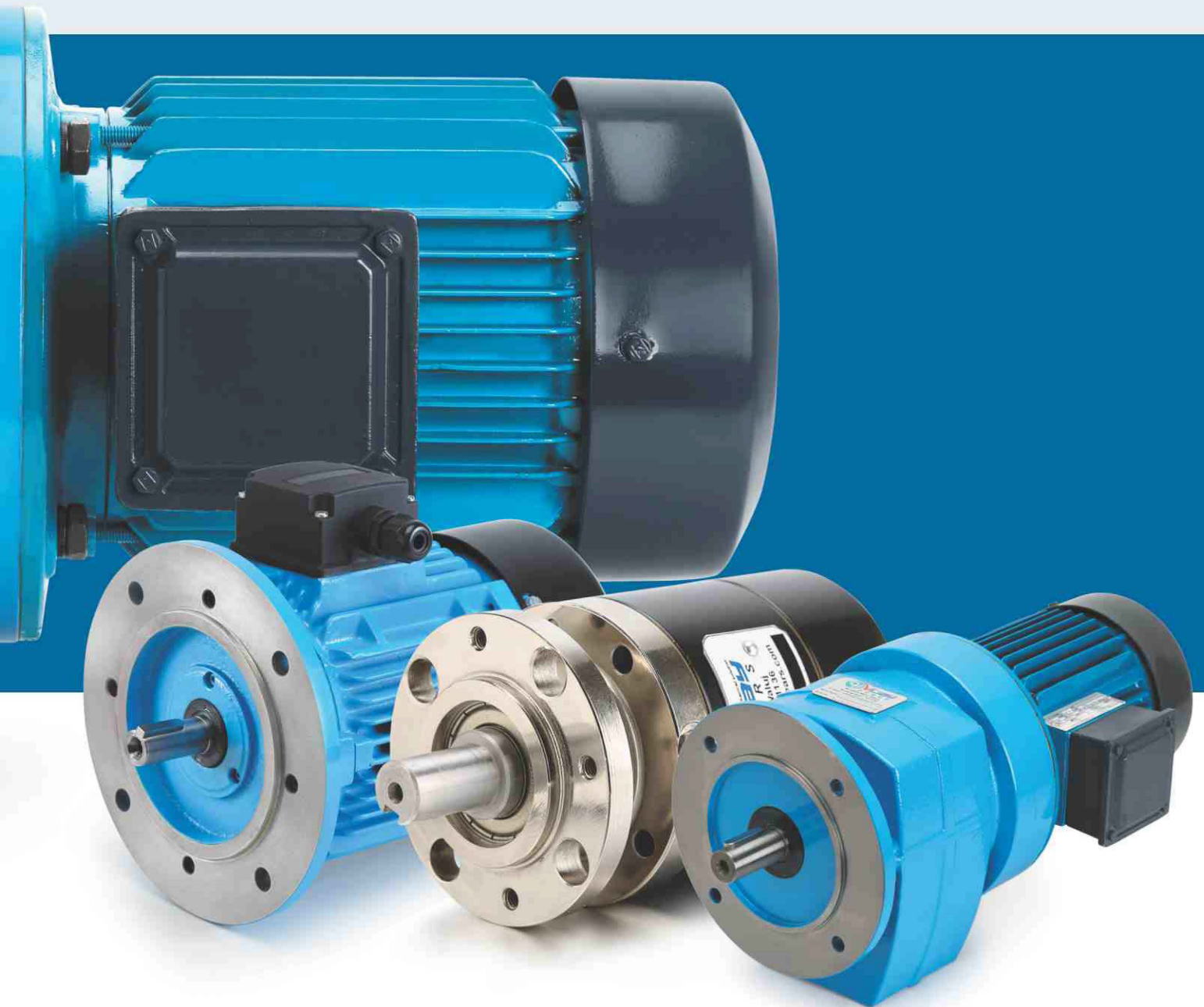
Technical Features

- ▶ 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.



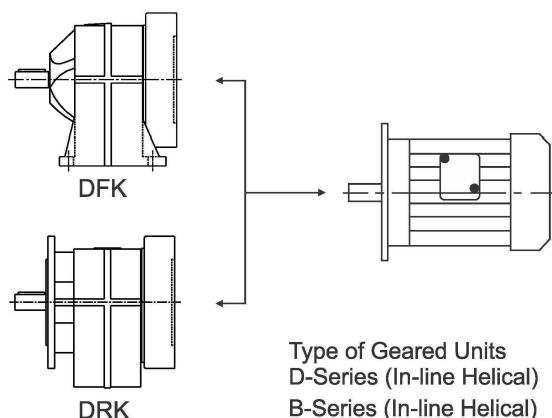
- ▶ Largely proportioned ball bearing support on both side of the shaft ensures precise alignment of gear and reduces vibrations and wear of the gears.
- ▶ High quality sealing for to avoid oil leakage.
- ▶ Very high dynamic efficiency of 96.4% for two stage.
- ▶ Silent and vibration free unit provide ability to operate in high input speed and intermittence.

- ▶ 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

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

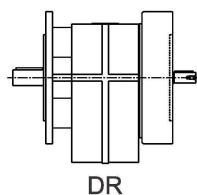
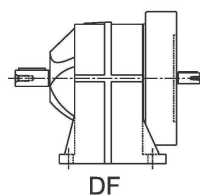
D F K 128 / 18.4 / 200 - 19

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.
B-Series 25, 30, 35.



2. Solid Input Solid Output

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

Type of Mounting
F-Foot Mounting
R-Flange Mounting

D F 128 / 18.4 / 16

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

Gearbox Ratio

Model of Geared Units
102, 128, 142, 162, 185.

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 factor, 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 - f_1

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 - f_2

Starts per hour	Mechanical service factor – f_1					
	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 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,

$$F = \frac{P_m \times 9550 \times K}{n_2 \times D} \times 2000 \quad [N]$$

The calculated equivalent overhang load, using the above formula is to be compared with the allowable overhung load values given in power rating table. 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.

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

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

U - Uniform Load
* - Refer to

M - Moderate Shock Load

H - Heavy Shock Load

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 $iR = 14.4$, $n_1 = 1440$ 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 = $2.00 \times 1.06 = 2.12$

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 $n_2 = 103$ 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 $n_2 = 105$ r/min with the fb available is 2.6 which is safe enough.

Step 3

Check for suitability of overhung load:

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

Allowable F_{Ra} from Power rating table for selected size, DFK 162/13.4/200-24 is 8300 N.

Thus, condition $F < F_{Ra}$ is satisfied.

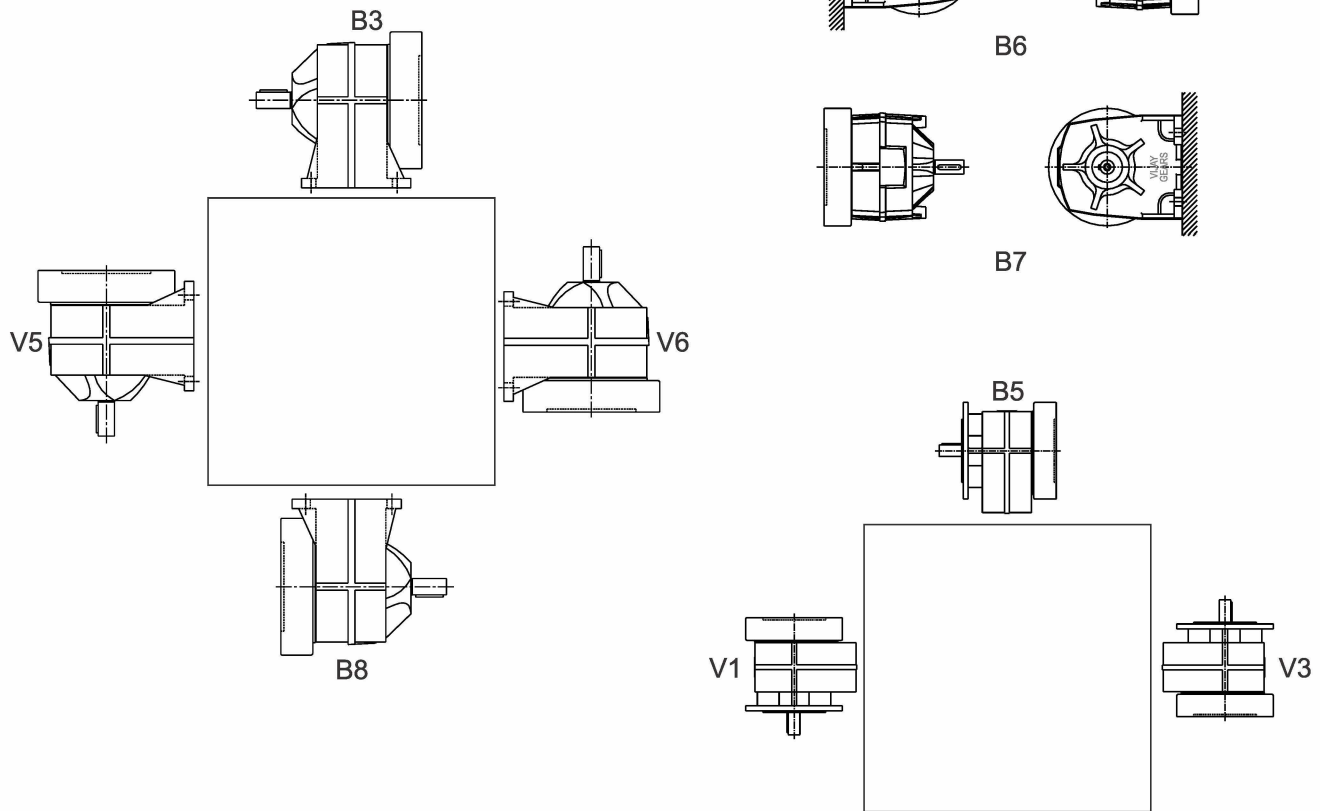
Note: The calculated overhung load $F = 1910$ N is considered acting at the middle of output shaft
Extension length, $l = 100$ mm

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.,

Mounting Positions



Lubrication and Assembly Position

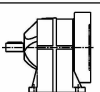
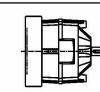
Series "D"

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 2500 hours of working (approx. 6 months working 14 hours a day) (**in case of mineral oil**) and replace when necessary.

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

		Working position								
										
Type	Quantity (Litres)	B3	B5	B6	B7	B8	V1	V3	V5	V6
D - 102	0.5	The same quantity in all positions								
D - 128	1.0									
D - 142	1.5									
D - 162	2.0									
D - 185	3.0									

Lubricants CLP as per DIN 51517 , Part 3

TABLE NO. 6 RECOMMENDED OIL VISCOSITY

Oil type	Operating Temperature	Ambient temperature°C	Viscosity (mm ² /s(cSt)at40°C)	
			Input speed: n ₁	
			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.

HELICAL GEAR BOX

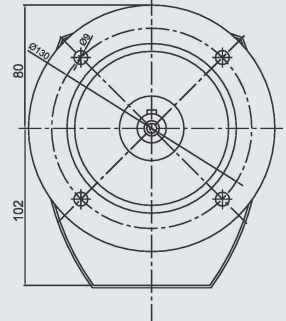
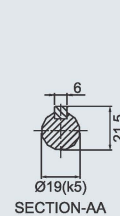
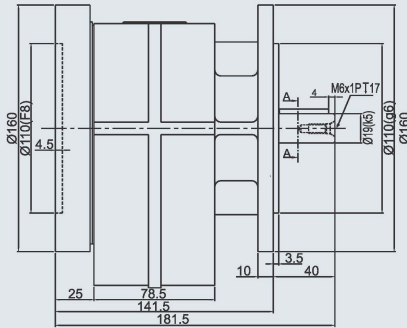
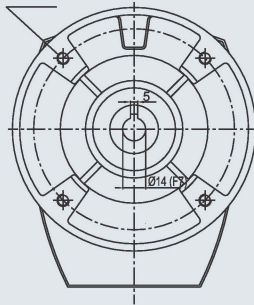
D Series :

Model DRK



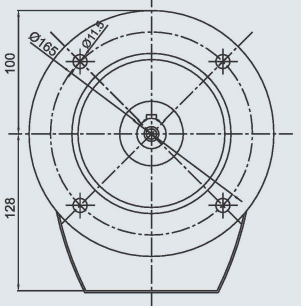
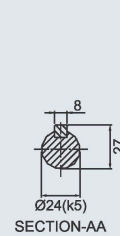
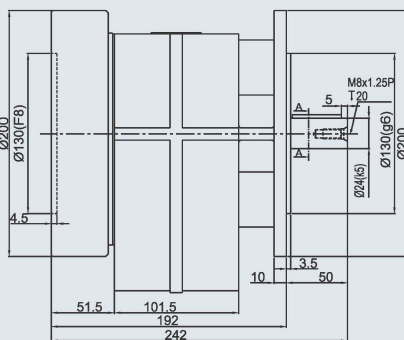
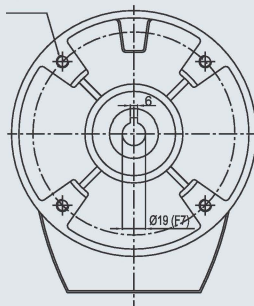
4 Holes of M8 x 1.25 P x 18 Deep
Equispaced on 130±0.1 PCD
for motor mounting

DRK 102
Net Wt. 9 kg



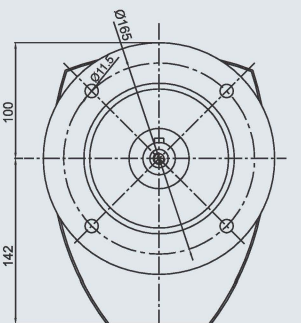
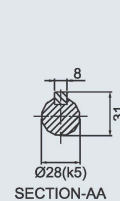
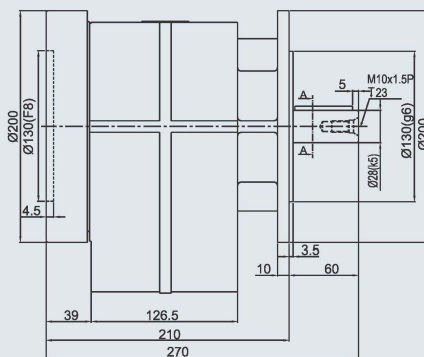
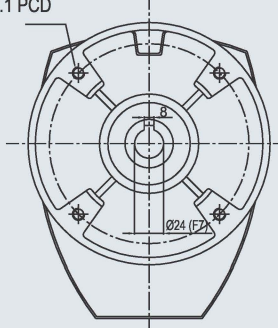
4 Holes of M10 x 1.5 P x 21 Deep
Equispaced on 165±0.1 PCD
for motor mounting

DRK 128
Net Wt. 18 kg



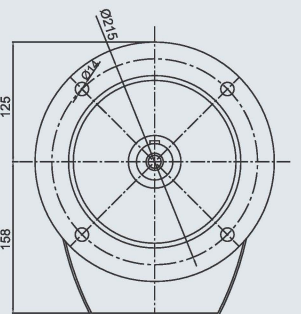
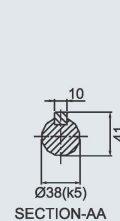
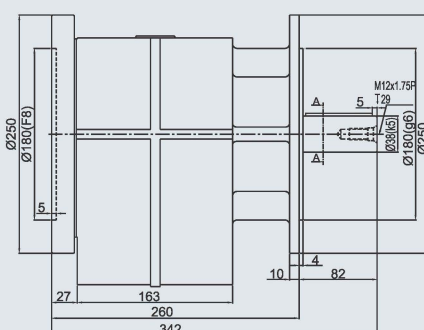
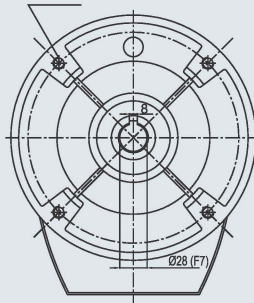
4 Holes of M10 x 1.5 P x 21 Deep
Equispaced on 165±0.1 PCD
for motor mounting

DRK 142
Net Wt. 22 kg



4 Holes of M12 x 1.75 P x 15 Deep
Equispaced on 215±0.1 PCD
for Motor Mounting

DRK 162
Net Wt. 36 kg



HELICAL GEAR BOX

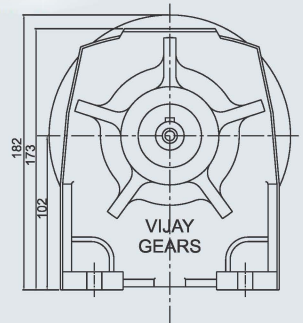
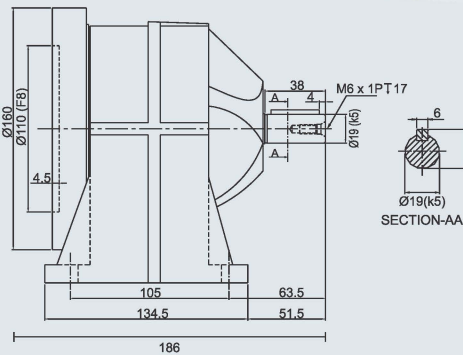
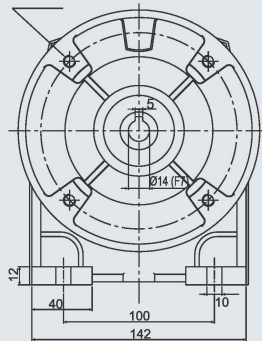
D Series :

Model DFK



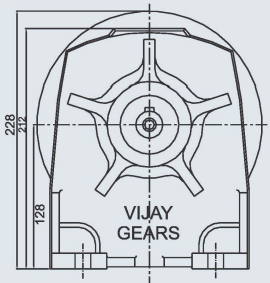
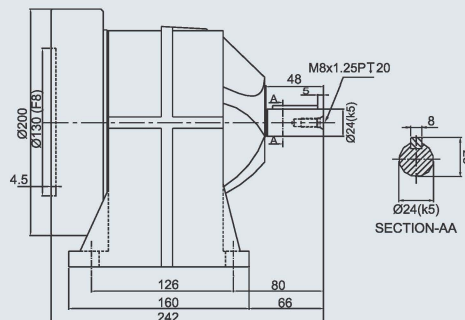
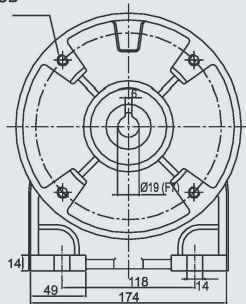
4 Holes of M8 x 1.25 P x 18 Deep
Equispaced on 130 ± 0.1 PCD
for motor mounting

DFK 102
Net Wt. 8 kg



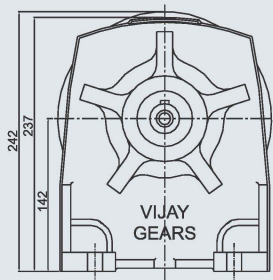
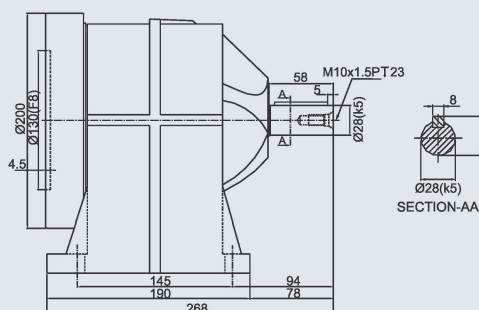
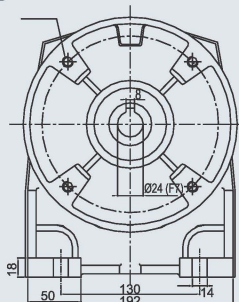
4 Holes of M10 x 1.5 P x 21 Deep
Equispaced on 165 ± 0.1 PCD
for Motor Mounting

DFK 128
Net Wt. 17 kg



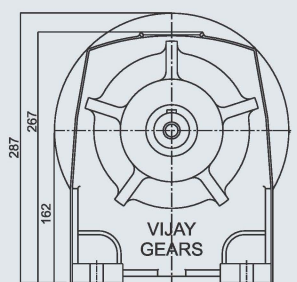
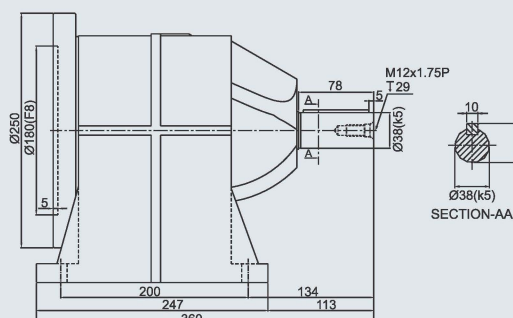
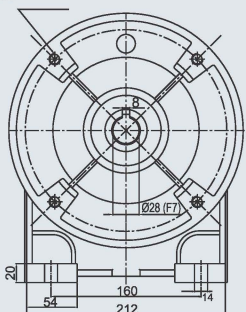
4 Holes of M10x1.5 Px21 Deep
Equispaced on 165 ± 0.1 PCD
for Motor Mounting

DFK 142
Net Wt. 21 kg



4 Holes of M12x1.75 Px15 Deep
Equispaced on 215 ± 0.1 PCD
for Motor Mounting

DFK 162
Net Wt. 34 kg



HELICAL GEAR BOX

Power Rating Table

D-102

INPUT POWER 0.37 kW

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
104	35	13.5	2740	2.2	DFK102/13.5/160-14 DRK102/13.5/160-14
128	25	11	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

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
79	61	17.8	2930	1.2	DFK102/17.8/200-19 DRK102/17.8/200-19
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	2.1	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	4.10	2280	3.9	DFK102/4.10/200-19 DRK102/4.10/200-19

INPUT POWER 0.75 kW

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
79	80	17.8	2930	1.0	DFK102/17.8/200-19 DRK102/17.8/200-19
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

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
31	90	44.8	4950	1.5	DFK128/44.8/160-14 DRK128/44.8/160-14
41	70	34.3	3340	1.6	DFK128/34.3/160-14 DRK128/34.3/160-14
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

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
31	180	44.8	4200	1.0	DFK128/44.8/200-19 DRK128/44.8/200-19
41	169	34.3	4250	1.0	DFK128/34.3/200-19 DRK128/34.3/200-19
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	9.30	3550	2.5	DFK128/9.30/200-19 DRK128/9.30/200-19
176	40	8.00	3500	2.7	DFK128/8.00/200-19 DRK128/8.00/200-19
201	34	7.00	3400	3.0	DFK128/7.00/200-19 DRK128/7.00/200-19
243	28	5.80	3250	3.7	DFK128/5.80/200-19 DRK128/5.80/200-19
288	25	4.90	3350	4.0	DFK128/4.90/200-19 DRK128/4.90/200-19
353	20	4.00	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

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
31	326	44.8	3300	1.0	DFK128/44.8/200-24 DRK128/44.8/200-24
41	249	34.3	3350	1.0	DFK128/34.3/200-24 DRK128/34.3/200-24
54	190	26.1	3400	1.0	DFK128/26.1/200-24 DRK128/26.1/200-24
65	157	21.7	3480	1.1	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

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
31	444	44.8	2400	1.0	DFK128/44.8/200-24 DRK128/44.8/200-24
41	340	34.3	2450	1.0	DFK128/34.3/200-24 DRK128/34.3/200-24
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

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
26	240	53.6	6400	1.0	DFK142/53.6/200-19 DRK142/53.6/200-19
32	220	44.6	6000	1.3	DFK142/44.6/200-19 DRK142/44.6/200-19
39	178	35.8	5800	1.5	DFK142/35.8/200-19 DRK142/35.8/200-19
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 DRK142/15.0/200-19
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	DFK142/9.5/200-19 DRK142/9.5/200-19
174	40	8.1	4600	3.2	DFK142/8.1/200-19 DRK142/8.1/200-19
201	35	7.0	4600	3.5	DFK142/7.0/200-19 DRK142/7.0/200-19
243	29	5.8	4400	5.2	DFK128/5.8/200-24 DRK128/5.8/200-24
294	24	4.8	4300	6.0	DFK142/4.8/200-19 DRK142/4.8/200-19
336	22	4.2	4100	7.3	DFK142/4.2/200-19 DRK142/4.2/200-19

INPUT POWER 1.10 kW

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
32	328	44.6	5600	1.0	DFK142/44.6/200-24 DRK142/44.6/200-24
39	260	35.8	5350	1.1	DFK142/35.8/200-24 DRK142/35.8/200-24
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 DRK142/15.0/200-24
103	99	13.7	4820	1.9	DFK142/13.7/200-24 DRK142/13.7/200-24
126	86	11.2	4750	2.3	DFK142/11.6/200-24 DRK142/11.6/200-24
148	72	9.5	4600	2.7	DFK142/9.5/200-24 DRK142/9.5/200-24
174	59	8.1	4500	2.8	DFK142/8.1/200-24 DRK142/8.1/200-24
201	52	7.0	4450	3.0	DFK142/7.0/200-24 DRK142/7.0/200-24
243	42	5.8	4300	3.9	DFK142/5.8/200-24 DRK142/5.8/200-24
294	38	4.8	4200	4.5	DFK142/4.8/200-24 DRK142/4.8/200-24
336	32	4.2	4150	4.8	DFK142/4.2/200-24 DRK142/4.2/200-24
392	26	3.6	4100	5.5	DFK142/3.6/200-24 DRK142/3.6/200-24

INPUT POWER 1.50 kW

n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
39	360	35.8	4200	1.0	DFK142/35.8/200-24 DRK142/35.8/200-24
54	259	26.3	3900	1.1	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	DFK142/9.5/200-24 DRK142/9.5/200-24
174	80	8.1	4400	2.1	DFK142/8.1/200-24 DRK142/8.1/200-24
201	71	7.0	4340	2.2	DFK142/7.0/200-24 DRK142/7.0/200-24
243	55	5.8	4200	2.9	DFK142/5.8/200-24 DRK142/5.8/200-24
294	48	4.8	4100	3.2	DFK142/4.8/200-24 DRK142/4.8/200-24
336	40	4.2	4000	3.6	DFK142/4.2/200-24 DRK142/4.2/200-24
389	35	3.6	3950	4.0	DFK142/3.6/200-24 DRK142/3.6/200-24

INPUT POWER 2.20 kW

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	DFK142/9.5/250-28 DRK142/9.5/250-28
174	117	8.1	4100	1.5	DFK142/8.1/250-28 DRK142/8.1/250-28
201	104	7.0	4060	1.6	DFK142/7.0/250-28 DRK142/7.0/250-28
243	81	5.8	4000	2.0	DFK142/5.8/250-28 DRK142/5.8/250-28
294	70	4.8	3900	2.3	DFK142/4.8/250-28 DRK142/4.8/250-28
336	58	4.2	3800	2.4	DFK142/4.2/250-28 DRK142/4.2/250-28
392	52	3.6	3750	2.7	DFK142/3.6/250-28 DRK142/3.6/250-28

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

HELICAL GEAR BOX

Power Rating Table

D-162

INPUT POWER 1.10 kW

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

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

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

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

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

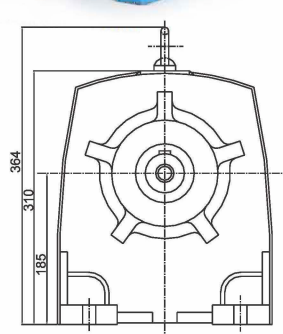
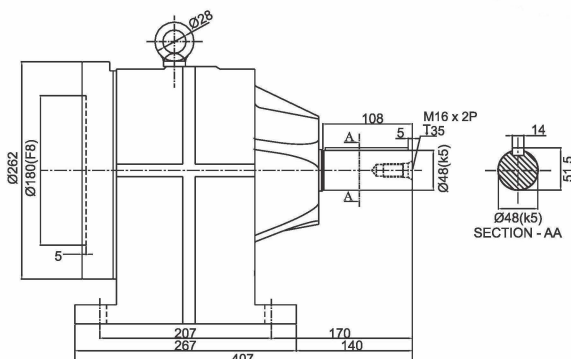
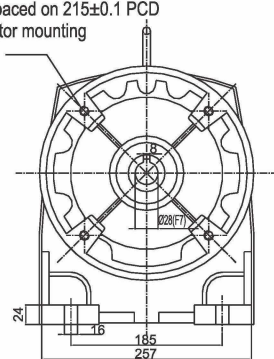
D Series :

Model DFK-185



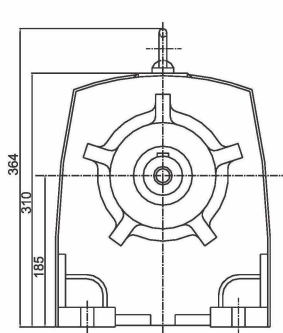
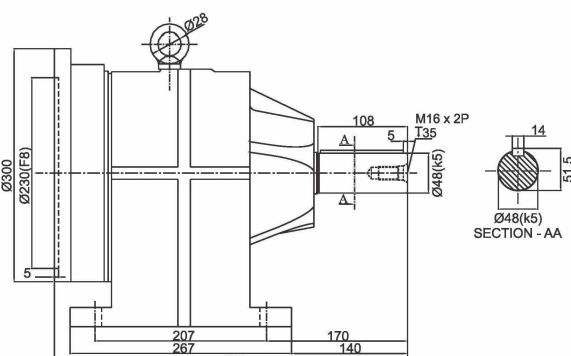
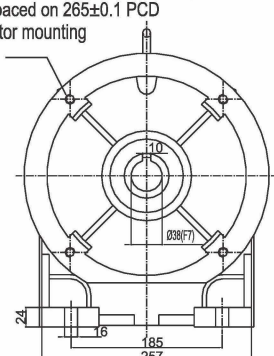
INPUT POWER 4 kW
Net Wt. 51 kg

4 Holes of M12 x 1.75 P x 14 Deep
Equispaced on 215±0.1 PCD
for motor mounting



INPUT POWER 5.5 kW
Net Wt. 57 kg

4 Holes of M12 x 1.75 P x 25 Deep
Equispaced on 265±0.1 PCD
for motor mounting



Power Rating Table

DFK-185

INPUT POWER 3.70 kW

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 DRK185/44.6/250-28
44	850	32.3	4050	1.1	DFK185/32.3/250-28 DRK185/32.3/250-28
51	710	27.5	6800	1.2	DFK185/27.5/250-28 DRK185/27.5/250-28
59	612	23.7	9200	1.4	DFK185/23.7/250-28 DRK185/23.7/250-28
73	505	19.4	10100	1.6	DFK185/19.4/250-28 DRK185/19.4/250-28
98	375	14.4	10700	2.1	DFK185/14.4/250-28 DRK185/14.4/250-28
134	270	10.5	11200	2.6	DFK185/10.5/250-28 DRK185/10.5/250-28

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

INPUT POWER 5.5 kW

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 DRK185/27.5/300-38
59	850	23.7	6500	1.1	DFK185/23.7/300-38 DRK185/23.7/300-38
73	675	19.4	6800	1.3	DFK185/19.4/300-38 DRK185/19.4/300-38
98	513	14.4	8000	1.6	DFK185/14.4/300-38 DRK185/14.4/300-38
134	370	10.5	9800	1.8	DFK185/10.5/300-38 DRK185/10.5/300-38
155	305	9.1	10700	2.0	DFK185/9.1/300-38 DRK185/9.1/300-38
207	230	6.8	10900	2.5	DFK185/6.8/300-38 DRK185/6.8/300-38
288	170	4.9	11000	2.9	DFK185/4.9/300-38 DRK185/4.9/300-38
371	137	3.8	10100	3.8	DFK185/3.8/300-38 DRK185/3.8/300-38

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

HELICAL GEAR BOX

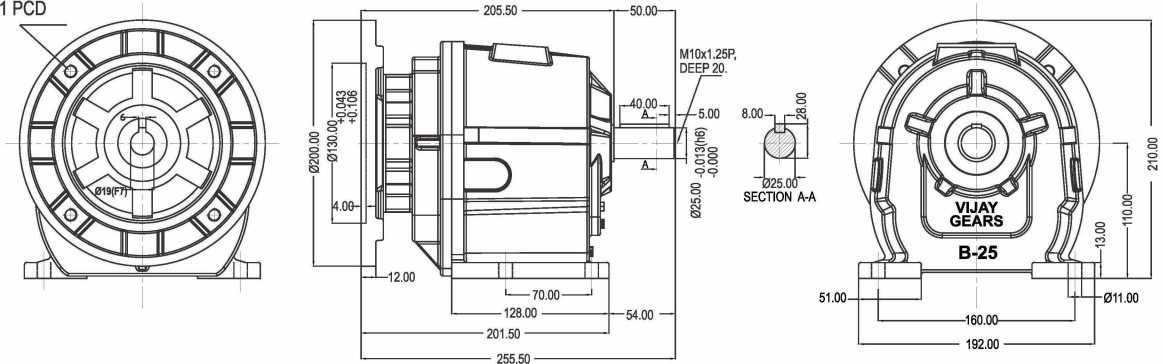
B Series :

Model BFK



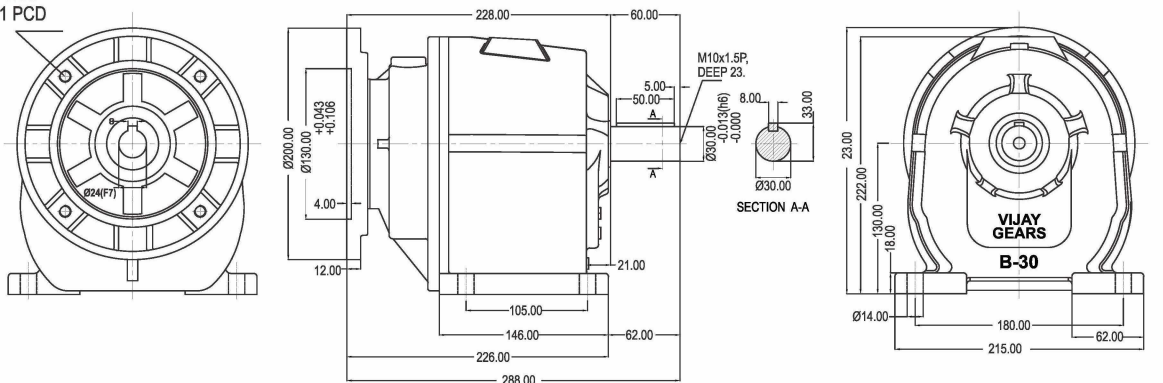
4 Holes of M10 x 1.5 P Thru
Equispaced on 165 ± 0.1 PCD
for motor mounting

BFK 25
Net Wt. 19 kg



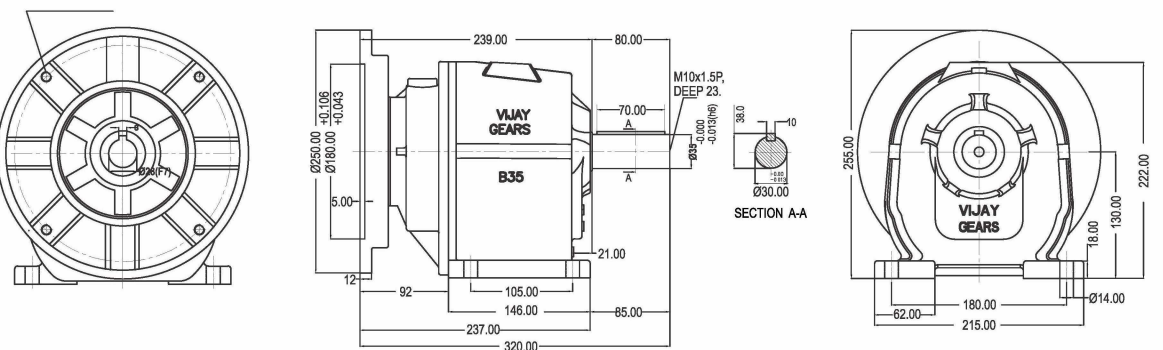
4 Holes of M10 x 1.5 P Thru
Equispaced on 165 ± 0.1 PCD
for motor mounting

BFK 30
Net Wt. 24 kg



4 Holes of M12 x 1.75 P Thru
Equispaced on 215 ± 0.1 PCD
for motor mounting

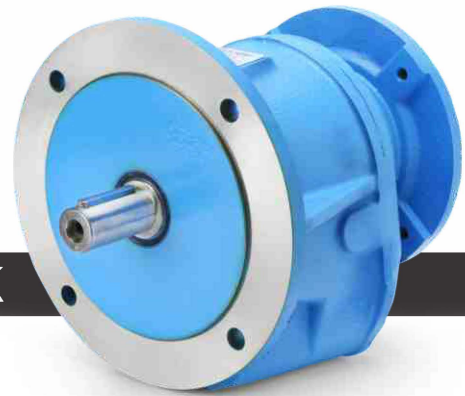
BFK 35
Net Wt. 25 kg



HELICAL GEAR BOX

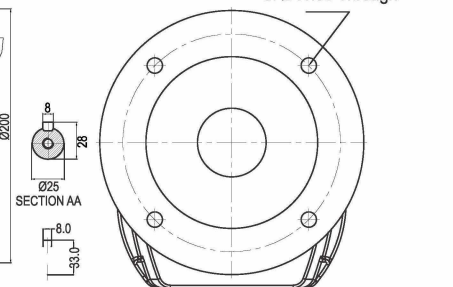
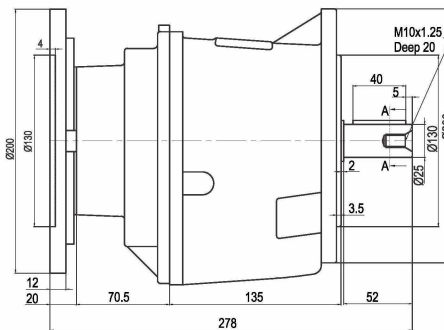
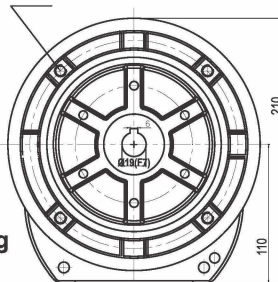
B Series :

Model BRK



4 Holes of M10 x 1.5 P Thru
Equispaced on 165 ± 0.1 PCD
for motor mounting

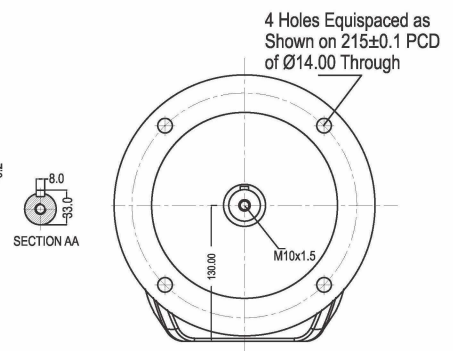
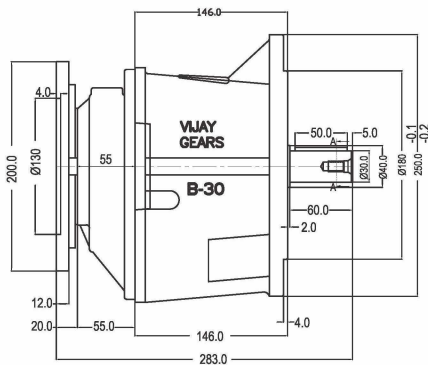
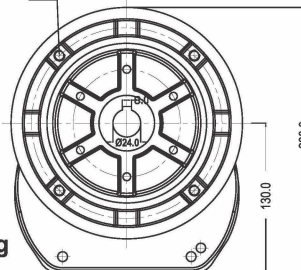
BRK 25
Net Wt. 24 kg



4 Holes Equispaced as
Shown on 165 ± 0.1 PCD
of $\varnothing 11.50$ Through

4 Holes M10 x 1.5 Equispaced as
Shown on $\varnothing 165 \pm 0.1$ PCD
Throughout

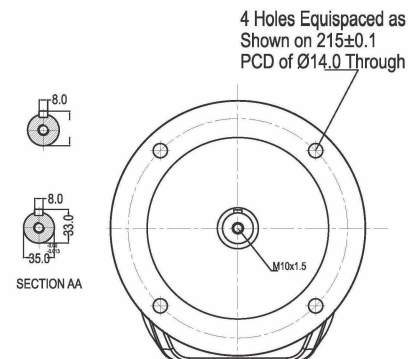
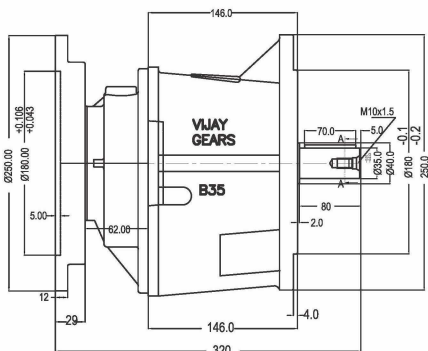
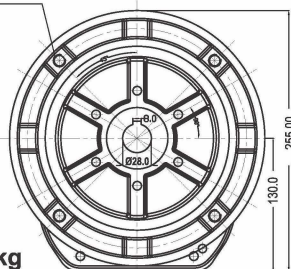
BRK 30
Net Wt. 28 kg



4 Holes Equispaced as
Shown on 215 ± 0.1 PCD
of $\varnothing 14.00$ Through

4 Holes, M12 Equispaced as
Shown on $\varnothing 215 \pm 0.1$ PCD
Through

BRK 35
Net Wt. 29 kg



4 Holes Equispaced as
Shown on 215 ± 0.1
PCD of $\varnothing 14.0$ Through

HELICAL GEAR BOX

Power Rating Table

B-25											
INPUT POWER 0.75 kW						INPUT POWER 1.50 kW					
n ₂ (O/P RPM)	M ₂ (Nm)	i _R (Ratio)	F _{Ra} (N)	f _b (Service Factor)	Model	n ₂ (O/P RPM)	M ₂ (Nm)	i _R (Ratio)	F _{Ra} (N)	f _b (Service Factor)	Model
51	134	27.5	1836	1.3	BFK25/27.5/200-19 BRK25/27.5/200-19	51	267	27.5	1830	1.0	BFK25/27.5/200-24 BRK25/27.5/200-24
72	94	19.2	1800	1.7	BFK25/19.2/200-19 BRK25/19.2/200-19	73	187	19.2	1800	1.0	BFK25/19.2/200-24 BRK25/19.2/200-24
108	63	13.0	17.30	2.1	BFK25/13.0/200-19 BRK25/13.0/200-19	108	126	13.0	1270	1.0	BFK25/13.0/200-24 BRK25/13.0/200-24
126	55	11.2	1700	2.4	BFK25/11.2/200-19 BRK25/11.2/200-19	126	109	11.2	1280	1.2	BFK25/11.2/200-24 BRK25/11.2/200-24
152	45	9.3	1620	2.9	BFK25/9.30/200-19 BRK25/9.30/200-19	152	91	9.3	1270	1.4	BFK25/9.30/200-24 BRK25/9.30/200-24
181	38	7.8	1570	3.1	BFK25/7.80/200-19 BRK25/7.80/200-19	181	77	7.8	1300	1.5	BFK25/7.80/200-24 BRK25/7.80/200-24
201	34	7.0	1550	3.3	BFK25/7.00/200-19 BRK25/7.00/200-19	201	69	7.0	1300	1.6	BFK25/7.00/200-24 BRK25/7.00/200-24
227	31	6.2	1500	3.5	BFK25/6.20/200-19 BRK25/6.20/200-19	227	61	6.2	1279	1.8	BFK25/6.20/200-24 BRK25/6.20/200-24
300	23	4.7	1460	4.3	BFK25/4.70/200-19 BRK25/4.70/200-19	300	46	4.7	1220	2.5	BFK25/4.70/200-24 BRK25/4.70/200-24
NOTE : All above ratio are also available in Solid Input Shaft											

B-30											
INPUT POWER 0.75 kW						INPUT POWER 1.50 kW					
n ₂ (O/P RPM)	M ₂ (Nm)	i _R (Ratio)	F _{Ra} (N)	f _b (Service Factor)	Model	n ₂ (O/P RPM)	M ₂ (Nm)	i _R (Ratio)	F _{Ra} (N)	f _b (Service Factor)	Model
45	153	31.6	4010	2.1	BFK30/31.6/200-19 BRK30/31.6/200-19	45	307	31.6	3060	1.0	BFK30/31.6/200-24 BRK30/31.6/200-24
53	128	26.4	3740	2.5	BFK30/26.4/200-19 BRK30/26.4/200-19	53	256	26.4	3000	1.3	BFK30/26.4/200-24 BRK30/26.4/200-24
78	87	18.0	3500	3.0	BFK30/18.0/200-19 BRK30/18.0/200-19	78	174	18.0	3000	1.6	BFK30/18.0/200-24 BRK30/18.0/200-24
96	72	14.7	3400	3.6	BFK30/14.7/200-19 BRK30/14.7/200-19	96	143	14.7	2940	1.8	BFK30/14.7/200-24 BRK30/14.7/200-24
129	53	10.9	3360	4.8	BFK30/10.9/200-19 BRK30/10.9/200-19	129	106	10.9	2800	2.5	BFK30/10.9/200-24 BRK30/10.9/200-24
148	46	9.6	3310	5.3	BFK30/9.50/200-19 BRK30/9.50/200-19	148	92	9.50	2730	2.9	BFK30/9.50/200-24 BRK30/9.50/200-24
178	38	7.9	3280	6.1	BFK30/7.90/200-19 BRK30/7.90/200-19	178	77	7.90	2620	3.1	BFK30/7.90/200-24 BRK30/7.90/200-24
196	35	7.2	3260	6.4	BFK30/7.20/200-19 BRK30/7.20/200-19	196	70	7.20	2570	3.3	BFK30/7.20/200-24 BRK30/7.20/200-24
227	30	6.2	3220	7.0	BFK30/6.20/200-19 BRK30/6.20/200-19	227	61	6.20	2520	3.6	BFK30/6.20/200-24 BRK30/6.20/200-24
261	26	5.4	3180	7.4	BFK30/5.40/200-19 BRK30/5.40/200-19	261	53	5.40	2480	4.0	BFK30/5.40/200-24 BRK30/5.40/200-24

HELICAL GEAR BOX

Power Rating Table

B-35

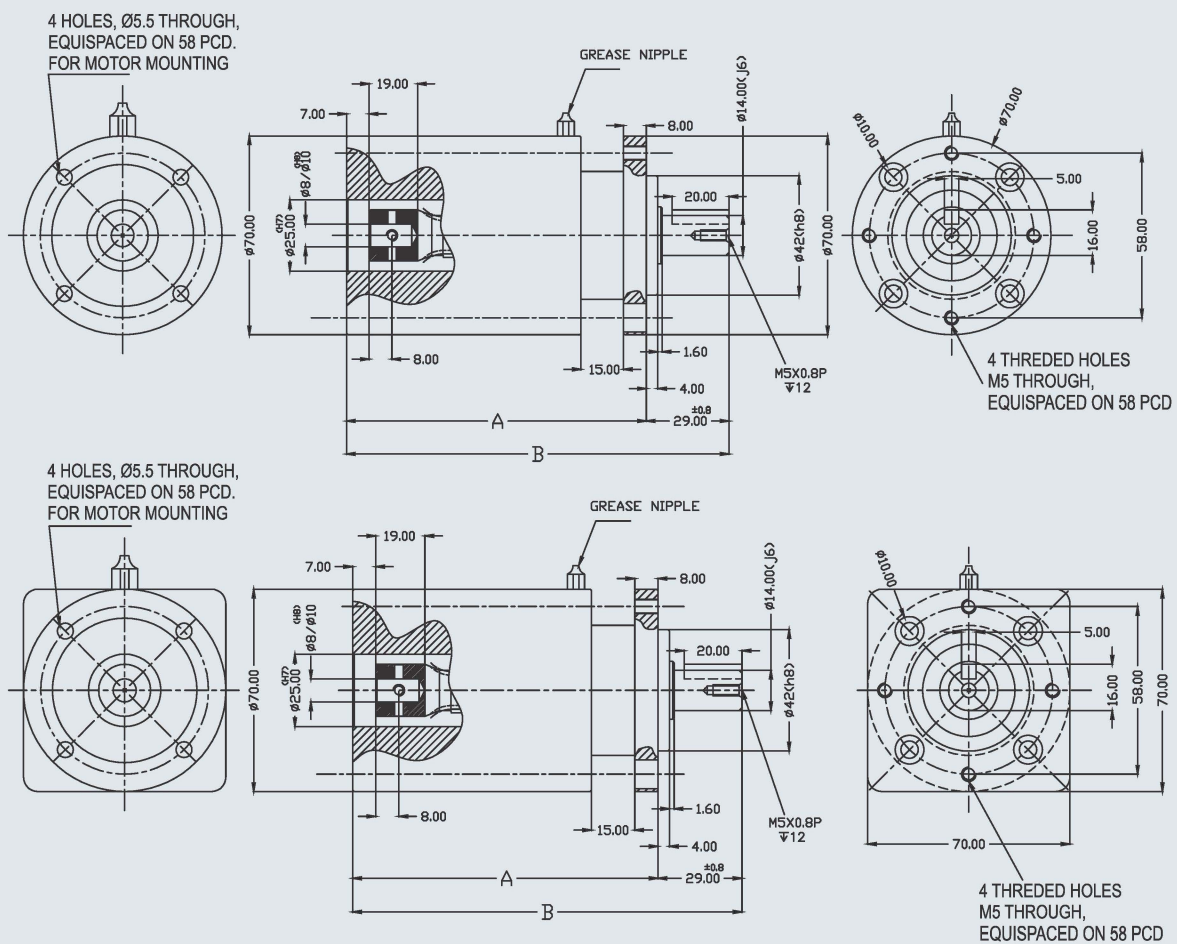
INPUT POWER 1.5 kW						INPUT POWER 2.2 kW					
n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model	n_2 (O/P RPM)	M_2 (Nm)	i_R (Ratio)	F_{Ra} (N)	f_b (Service Factor)	Model
44	306	31.6	7200	1.6	BFK35/31.6/200-24 BRK35/31.6/200-24	44	448	31.6	7200	1.0	BFK35/31.6/250-28 BRK35/31.6/250-28
53	255	26.4	7180	1.9	BFK35/26.4/200-24 BRK35/26.4/200-24	53	374	26.4	7180	1.3	BFK35/26.4/250-28 BRK35/26.4/250-28
78	174	18.0	7160	2.4	BFK35/18.0/200-24 BRK35/18.0/200-24	78	255	18.0	7160	1.6	BFK35/18.0/250-28 BRK35/18.0/250-28
95	142	14.7	7160	2.8	BFK35/14.7/200-24 BRK35/14.7/200-24	95	208	14.7	7160	1.9	BFK35/14.7/250-28 BRK35/14.7/250-28
128	105	10.9	7140	3.8	BFK35/10.9/200-24 BRK35/10.9/200-24	128	155	10.9	7140	2.6	BFK35/10.9/250-28 BRK35/10.9/250-28
146	93	9.60	7110	4.3	BFK35/9.60/200-24 BRK35/9.60/200-24	146	136	9.60	7110	2.9	BFK35/9.60/250-28 BRK35/9.60/250-28
177	76	7.90	6690	4.5	BFK35/7.90/200-24 BRK35/7.90/200-24	177	112	7.90	6690	3.1	BFK35/7.90/250-28 BRK35/7.90/250-28
194	70	7.20	6490	4.9	BFK35/7.20/200-24 BRK35/7.20/200-24	194	102	7.20	6490	3.4	BFK35/7.20/250-28 BRK35/7.20/250-28
226	60	6.20	6330	5.7	BFK35/6.20/200-24 BRK35/6.20/200-24	226	88	6.20	6330	3.9	BFK35/6.20/250-28 BRK35/6.20/250-28
259	52	5.4	6030	6.5	BFK35/5.40/200-24 BRK35/5.40/200-24	259	77	5.4	6030	4.4	BFK35/5.40/250-28 BRK35/5.40/250-28

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

MINI PLANETARY GEAR BOX



VP 70 Series





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}

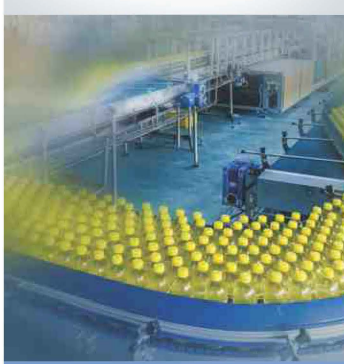
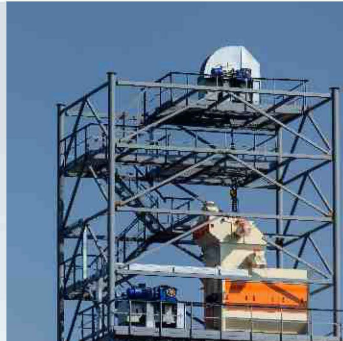
Stages of Gear box

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

Applications



Medical Equipments

Waste Shredder
Ventilator
Peristaltic Pump

Blowers

Centrifugal
Lobe
Vane

Oil industry

Chillers
Oil well pumping
Paraffin filter press
Rotary kilns

Food industry

Beef slicer
Cereal cooker
Dough mixer
Meat grinders

Cranes

Main hoists
Bridge travel
Trolley travel

Automized Gate

Industrial
Domestic
Shutter

Mixers

Concrete mixers-continuous
Constant density
Variable density

Paper Mills

Agitators (mixers)
Barker- auxiliaries- hydraulic
Barker –mechanical
Barker –drum
Beater and pulper
Bleacher
Calenders
Calenders - super
Converting machine
Expect cutters – platers
Conveyors
Couch
Cutters – platers
Cylinders
Dryers
Felt stretcher
Felt whipper
Jordans
Log haul
Presses
Pulp machine reel
Stock chest
suction roll
washers and thickeners
winders

Infrastructure

Well equipped manufacturing setup with advance robotic cell for CNC & VMC machine operations which results in good quality and energy efficient product.



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