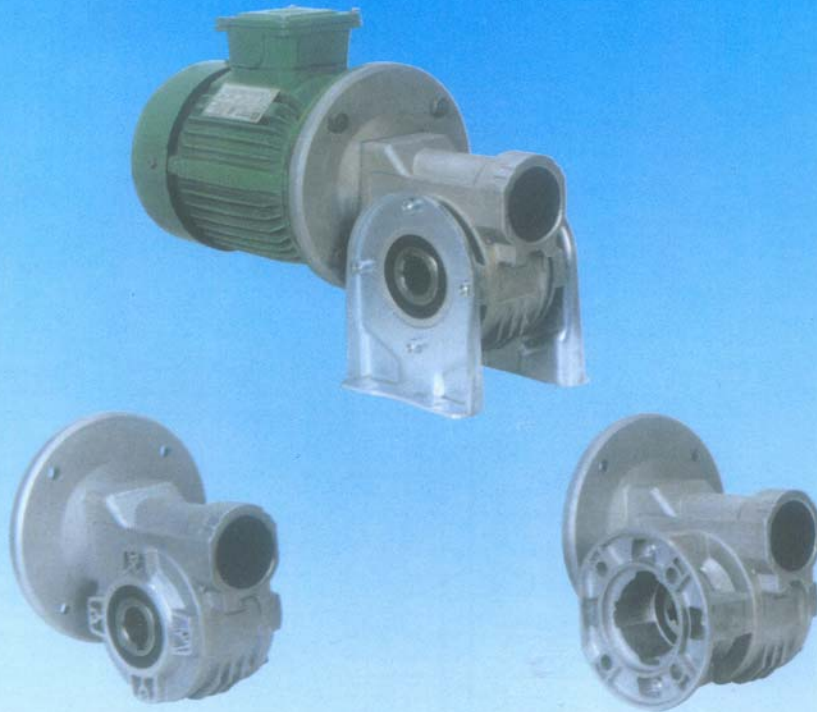




Presents

*In Alliance with an European Gear Box
Manufacturer*



Worm Gear Boxes / Geared Motors

- Aluminium Pressure Diecast Housing
- Hollow Output Shaft as Standard
- Universal Mounting with Add - on Parts for Foot / Flange Mtg
- Ratio - 7:1 to 100:1 Covering 0.12 kw to 4 kw
- Supplied with Factory Packed Long Life Lubricating Oil

Dimensions

F PA

	b	t1
030	5	16.3
045	6	20.8
050	8	28.3
063	8	28.3
63A	8	31.3
085	10	38.3
110	12	45.3

M... PA

.. PB

M... PB

R... PV

M... PV

R... FB

O*
030
045
050
063
63A
110
085

M... FB

R... FC

M... FC

R... FC

	030	045	050	063	63A (070)	085	110	
A	30	45	50	63	63	85	110	
B _{H7}	14	18	25	25	28	35	42	
C	55	65	81	120	120	135	155	
D _{H7}	9	11	16	18	18	25	25	
E	20	30	30	45	45	50	56	
F _{Max}	62.5	74	81.5	99.5	99.5	124	148	
F1	46	55	65	79	79	98	125	
G	55 ^{+0.2}	72 ^{+0.2}	82 ^{+0.2}	100 ^{+0.2}	115 ^{+0.2}	142 ^{+0.2}	170 ^{+0.2}	
I	65-66	80-81	98-100	110-111	115	145	180	
J	94	121	138.5	170	170	236.5	266	
J1	51	72	81	100	100	138	170	
J2	106	144	163	200	215	280	340	
J3	39	49	54.5	70	70	94.5	120	
L	87	100	123	144	142	182	224	
L1	30	35	38	45	45	64	74	
M	50	50-52	63-65	95	120	140	200	
N	78	98	113	133	156	180	240	
O	4 - M6x9	4 - M6x14	4 - M6x9	8 - M8x17	8 - M8x17	4 - M10x18	8 - M12x30	
O1	8.5	6.5	8.5	10.5	10.5	13	13	
O2	6.5		10.5	10.5	10.5	11	10.5	
P	3		3	3.5	4	12	5	
Q	58		68	74.5	93	93	112	
R	6		9	9	7	7	5	
R1	2		2	3	5	5	3.5	
S (FL)	55.5	-	90.5	114.5	116	111	148.5	
S1 (FC)		50.5	60.5	85	86	85	108	
T		65	65	94	90	90	130	
T1	87	68	87	90	150	165	176	
U	110	80	110	123	175	200	205	
V	60 ^{+0.05}	50 ^{+0.05}	60 ^{+0.05 +0.15}	70 ^{+0.10 +0.20}	115 ^{+0.10 +0.20}	130 ^{+0.083 +0.043}	152 ^{+0.06 0}	170 ^{+0.04 +0.08}
V1 _{h8}	50		50	68	75	75	110	
W	3		4	5	6	6	8	
X	-	-	-	M6	M6	M6	M8	
Z	6		9	12	13	13	16	
Kg (FB)	1		2.4	3	6	6	16.5	
							35	

LUBRICATION

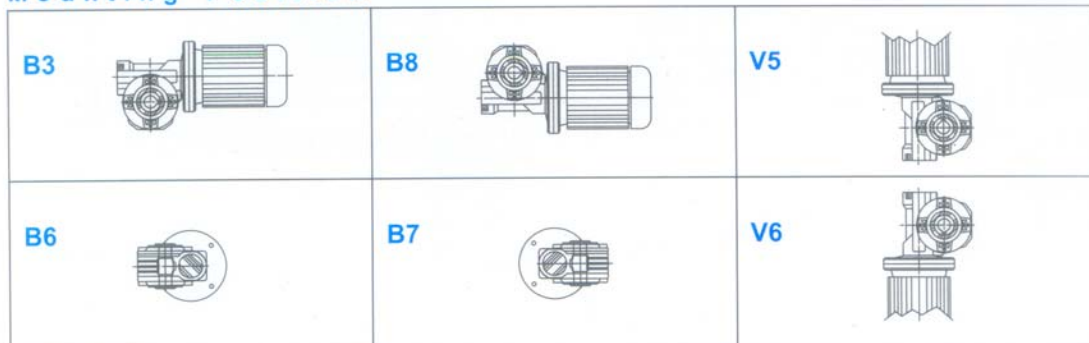
All Gears are Supplied with LONG LIFE SYNTHETIC OIL. offering atleast 8000 working hours life.

RECOMMENDED OIL FOR REFILING

MAKE	SHELL	KLUBER	IP	FINA	ESSO	
NAME OF OIL	TIVELA OIL SC320	SYNTHESO D220 EP	TELLIUM OIL VSF 320	GIRAN S 320	GLYCOLUBE RANGE 220	
TYPE / Q.TY	030 0.060 Lt.	045 0.090 Lt.	050 0.180 Lt.	063 0.40 Lt.	63A 0.40 Lt.	085 1.20 Lt.
						110* 2.4Lt. in B8 Position 2.8Lt. in B5 Position

* See oil level plugs In case of non availability of recommended oil contact us.

Mounting Position



Service Factor

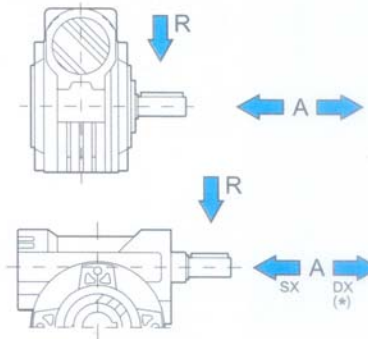
s.f. Type of load and starts per hour		Operating hours per day			
		<2h	2÷8h	8÷16h	
Continuous or Intermittent appl. with start /hour	≤ 10	Uniform	0.9	1	1.25
		Moderate	1	1.25	1.5
		Heavy	1.25	1.5	1.75
Continuous or Intermittent appl. with start /hour	> 10	Uniform	1.25	1.5	1.75
		Moderate	1.5	1.75	2
		Heavy	1.75	2	2.25

Radial and Axial Load

N ₂ /1'	030		045		050		063/63A		085		110	
	A	R	A	R	A	R	A	R	A	R	A	R
200	12	60	18	90	24	120	36	180	50	250	60	290
150	14	70	20	100	28	140	40	200	58	290	70	330
100	16	80	22	110	30	150	46	230	60	300	75	360
75	18	90	24	120	34	170	50	250	70	350	80	400
50	20	100	26	140	38	190	60	300	80	400	92	460
25	25	125	30	180	48	250	70	380	100	500	120	600
15	28	140	40	200	56	280	80	400	116	580	140	700

N ₁ /1'	030		045		050		063/63A		085		110	
	A	R	A	R	A	R	A	R	A	R	A	R
1400	2	10	3	15	4	20	6	30	10	50	16	80

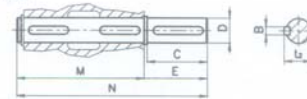
* Strong Axial loads in the DX direction are not allowed.



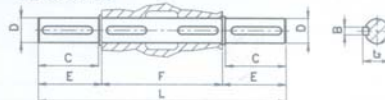
Solid Output Shafts

	B	C	D _{h6}	E	M	N	F	L	t ₂
030	5	25	14	35.5	61	95	55	126	16.3
045	6	32	18	43	70	113	65	151	20.8
050	8	52	25	60	88	146	81	200	28.3
063	8	60	25	63	127	190	120	246.4	28.3
63A	8	60	28	63	126	191	120	247	31.3
085	10	60	35	73.5	140	214	135	282	38.3
110	12	75	42	96.5	163.5	260	155	348	45.3

Single Shaft



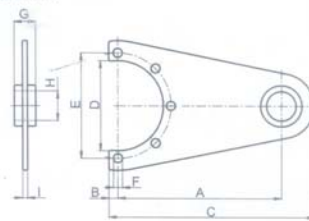
Double Shaft



Torque Arm

	A	B	C	D	E	F	G	H	I
030	100	40	158	50	65	7	14	8	4
045	100	45	158	50	65	7	14	8	4
050	100	55	173	68	94	7	14	8	4
063	150	55	235	75	90	9	20	10	6
63A	150	55	235	75	90	9	20	20	6
085	200	80	320	110	130	11	25	20	6
110	250	100	391	130	165	13	25	20	6

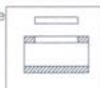
Torque Arm



Available

* Power higher than max. transmissible by the gearbox; select the unit according to the max. Torque specified in the M2 column.

B Mounting with a reduction bushing for the



* Available on specific order





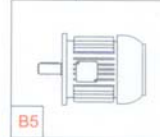



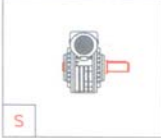


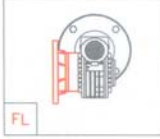

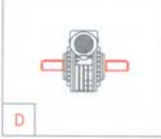
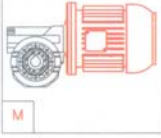
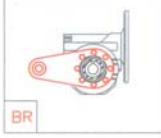
** Max intermittent power

C Motor flange position:



How to Order

P	045	FL	1/...	C	∅	71 (B5/B14)	B3
Type	Size	Mounting	Ratio	Standard	Output shaft	Motor size	Mounting position

**FOR HIGHER RATIOS IN COMPACT CONSTRUCTIONS / ALUMINIUM
DIE CAST CASINGS
AVAILABLE IN ALL MOUNTING CONSTRUCTIONS**

HELICAL - WORM TYPE

Ratios 24 : 1 To 450 : 1



DOUBLE WORM COMBINATION

Ratios 135 : 1 To 3000 : 1



Also Helical Gear Boxes / Geared Motors

Narhari Engineering Works Pvt. Ltd.

1, Shah Industrial Estate, Off. Veera Desai Road, Andheri (West), Mumbai - 400 053.
Tel. : 2673 1825, 2673 1893 Fax No. 2673 2107