JTP
Cubic Bevel Gearbox

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2D/3D CAD

JACTON®



Descriptions

JACTON Modular Design Spiral Bevel Gearboxes with Cubic Housing

- **JTP Series:** Solid shaft input, Solid shaft output.
- **JTPH Series:** Solid shaft input, Hollow shaft output with keyway.
- **JTPF Series:** Input Motor Flange(IEC), Solid shaft output.
- **JTPG Series:** Input Motor Flange(IEC), Hollow shaft output with keyway.

The bevel gearbox offers a robust, powerful and compact design, for right angle power transmission. The practical cubic shape of bevel gearboxes allow universal mounting possibilities on every kind of machines. They are proven in the market for their versatility, very low backlash and low transmission error. The design comprises of ball bearings for quiet operation and tapered bearings for higher radial load capacity. Application in Pulp and paper industry, food processing, off-shore industry, mining and mineral industry, paper machine drives, pulper drives, blowers, pumps, vacuum pump drives and flooding pump stations.

Key Features

- Ultra Compact Design. All-round machined symmetrical housing, and all-round tapped holes for universal mounting, 6 possible mounting positions.
- Gear ratios of 1:1, 1.5:1, 2:1, 3:1, 4:1 and 5:1 are actual ones.
- Power Ratings up to 156 kW. Torque Ratings up to 1199 N.m.
- Gear transmission average efficiency up to 94%.
- 2-way, 3-way and 4-way Configurations. Allows both horizontal and vertical shafts. Custom 5-way.
- Solid Shaft, Hollow Shaft, and Direct motor mount or via motor flanges.
- Various Shafts Arrangements, Rotation Directions and Mounting Positions available.
- High efficiency, high transmission capacity, low backlash, noiseless operation, low running temperature and long service life.

Ambient Conditions

- Installation site: Indoor
- Ambient temperature: –10°C to 50°C
- Humidity: 95% or less
- Altitude: 1,000 m or lower
- Atmosphere: There shall be no corrosive or explosive gas, vapor, and dew condensation, and there shall be minimal dust.

Materials

We use the best materials to guarantee the performance and lifetime of the bevel gearboxes that you purchased.

Housing

- HT250 Cast Iron, High-strength Casting housing(JTP90 - JTP280). Aluminum alloy housing (JTP65 - JTP140). Cube-shaped, all-round machined symmetrical housing. Custom Stainless Steel 304 or 316 (Corrosion-resistant Stainless Steel Gearbox).

Spiral Bevel Gears

- High purity rugged alloy steel 20CrMnTi, Carburizing and Quenching, Case Hardened and Lapped in Pairs.

Input Shaft and Output Shaft

- Hardened and tempered alloy steel 40Cr as standard. Custom Stainless Steel 304 or 316 (Corrosion-resistant Stainless Steel Gearbox).

Bearing

- Equipped with Tapered Roller Bearings with heavy load capacity. Custom reinforced bearings for higher radial and axial load. Custom corrosion resistant stainless steel bearings.

Oil Seals

- Double-lip Oil Seal, High Dust-proof and Oil leak proof.

Lubricants

- Applications with high speeds and/or high daily duty cycle, Gear oil #320 lubrication is recommended. But applications with low input speed and low daily duty cycle, #0 or #00 lithium grease is recommended. All aluminum alloy gearboxes models (JTP65 - JTP140) with #00 lithium grease for lubrication.
  - **Note:** For input speeds 1500 rpm a change in oil level may be required in combination with a breather(vent)

Materials



Selection Guide

Calculation Formulas

■ **(01)** Gear Ratio = Input Speed (rpm) / Output Speed (rpm)

■ **(02)** Required Output Torque (N.m)

- Calculate the Corrected Output Torque (N.m) = Required Output Torque (N.m) x f1
- Calculate the Corrected Output Power (kW) = Required Output Torque (N.m) x Output Speed (rpm) / 9550.
- Calculate the Input Power (kW) = Output Power (kW) / Efficiency (Gearbox efficiency is 95% after initial running in).

The ratings for bevel gearboxes in this catalogue are based on a service factor of 1.00. For other operating conditions, the application power or torque must be multiplied by the appropriate service factor, to determine the equivalent gear drive power rating. A bevel gearbox should be selected with a rated capacity equal to or greater than the equivalent rating. Below table designates recommended Service Factors for various conditions of load, power source, and duration of service.

● Service Factors f1

Driven Machine Load Characteristic	Operating Time per Day		
	≤ 2 hours	2-10 hours	10-24 hours
Uniform (Light Shocks)	1.00 (1.00)	1.00 (1.25)	1.25 (1.50)
Medium Shocks	1.00 (1.25)	1.25 (1.50)	1.50 (1.75)
Heavy Shocks	1.25 (1.50)	1.50 (1.75)	1.75 (2.00)

- **Note:** please use these data inside the brackets when "frequent starts and stops" refers to more than 10 starts per hour.
- **Note:** time specified for intermittent and occasional service refers to total operating time per day.

* **Uniform (Light Shocks) driven machine:** generators, conveyor belts, apron conveyor, ventilators, agitators and mixers for uniform densities, filling and packing stations, gear wheel pumps, feed servos of machine tools, filling machines, elevators, light screw conveyors, light conveyor belts, blowers, small agitators, control machines, assembly lines, auxiliary drives for machine tools, centrifuges, packaging machinery.

* **Medium Shocks driven machine:** lifts, swing gear on cranes, pit ventilators, agitators and mixers for unequal densities, piston pumps, timber processing machines, paper processing machines, winches, auxiliary drives in ships, textile machines, reel winders, plate conveyors, calenders, balancing machines, heavy-duty conveyor belts, sheet metal bending machines, road-building machinery, planing machines, shears, extruders, main drives for machine tools, kneading machines, weaving looms, light table rollers.

* **Heavy Shocks driven machine:** punches, shears, rolling and smelting machines, heavy-duty centrifuges, heavy-duty supply pumps, edge runners, vibrating machines, cutting machines, brick works machines, heavy-duty lifts, excavators, heavy-duty mixers, presses, muller mixers, rolling mills, heavy-duty table rollers, cold reduction mills, stone crushers, eccentric presses, cutter heads, folding machines, rubber belt conveyors (batch loads), bark peeling drums, run ning gears, punching presses, piston pumps, rotary furnaces, mills, plate filters.

■ **(03)** Duty Cycle per Hour (% Running time) = working time (minutes) ÷ 60 minutes

■ **(04) Thermal Power Limit (P_T)**

After the gearbox size has been determined, it is necessary to verify the thermal operating conditions, which means to verify if the selected gearbox can operate in the required conditions without risk of over-heating of the oil lubricant and of the components.

Each gearbox has a **Thermal Power Limit P_T**, which is determined based on an ambient temperature of 20°C and duty cycle of 100% per hour value stated in the table at the bottom of this page, which must not be exceeded without a controlled and forced cooling. In case of risk of exceeding the thermal power limit, the bevel gearboxes should be always lubricated exclusively with oil instead of grease. Or a larger gearbox must be selected and a check run on the other parameters.

In order to consider the real environment conditions, if different from 20°C, and the duty cycle, if different from the reference one, two factors are introduced which modify the thermal power limit, allowing the calculation of the **Corrected Thermal Power Limit P_{Tc}**

$$P_{Tc} = P_T \times f_T \times f_i$$

$P_{Tc} > P_A$ (Natural Cooling)

$P_{Tc} < P_A$ (Fan Cooling or Oil Cooling)

P_{Tc} = Corrected Thermal Power Limit (kW)

P_T = Thermal Power Limit (kW)

P_A = Actually Required Operating Power (kW)

f_T = Ambient Temperature Factor

f_i = Duty Cycle Factor referred to continuous operating over 3 hours (period of time considered to determine the thermal power limit)

● Ambient Temperature Factor f_T

Ambient Temperature °C	0	10	20	30	40	50	60
f_T	1.3	1.2	1	0.87	0.75	0.62	0.5

● Duty Cycle Factor f_i

Duty cycle per hour is the percentage of the time per hour during which the gearbox will be on-load

Duty Cycle per Hour (%)	100	80	60	40	20	10
f_i	1	1.2	1.4	1.6	1.8	2

● Thermal Power Limit (P_T)

* The selected bevel gearbox must not exceed the value of the **Corrected Thermal Power Limit P_{Tc}**, referred to the same gearbox, otherwise the oil lubricant should be cooled.
* The capacity of some gearboxes is limited by the maximum permissible temperature of the oil bath. The charts below show the **Thermal Power Limit P_T**, which can be transferred without cooling at an ambient temperature of 20°C and duty cycle of 100% per hour.

Model	JTP90	JTP110	JTP140	JTP170	JTP210	JTP240	JTP280
P_T (kW)	4.5	6.8	11	15.5	24	31	44

■ **WARNING:** The case temperature must not exceed 80°C.

Selection Guide

Sample Part Number (Example):

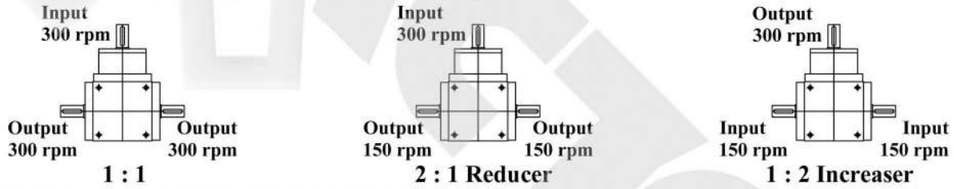
$$\frac{\text{JTP90}}{(1)} - \frac{\text{2:1}}{(2)} - \frac{\text{300R}}{(3)} - \frac{\text{150R}}{(4)} - \frac{\text{A}}{(5)} - \frac{\text{B3}}{(6)}$$

- **JTP Series:** Solid shaft input, Solid shaft output.
- **JTPH Series:** Solid shaft input, Hollow shaft output with keyway.
- **JTPF Series:** Input Motor Flange(IEC), Solid shaft output.
- **JTPG Series:** Input Motor Flange(IEC), Hollow shaft output with keyway.

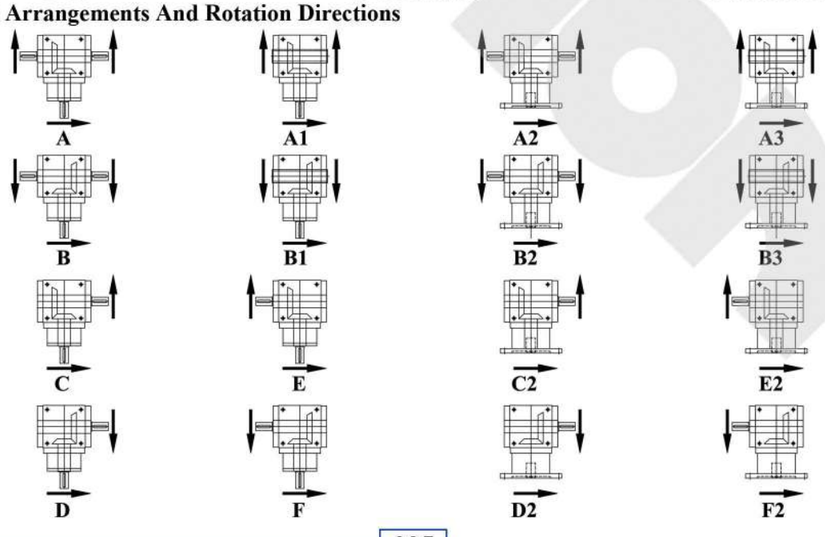
(1) Model & (2) Gear Ratios

Model	JTP65 JTPH65	JTP90 JTPH90 JTPF90 JTPG90	JTP110 JTPH110 JTPF110 JTPG110	JTP140 JTPH140 JTPF140 JTPG140	JTP170 JTPH170 JTPF170 JTPG170	JTP210 JTPH210 JTPF210 JTPG210	JTP240 JTPH240 JTPF240 JTPG240	JTP280 JTPH280 JTPF280 JTPG280
Input & Output Shafts Dia.(mm)	13	18	22	32	40	45	55	60
Gear Ratios	1:1, 2:1	1:1, 1.5:1, 2:1, 3:1, 4:1, 5:1	1:1, 1.5:1, 2:1, 3:1, 4:1, 5:1	1:1, 1.5:1, 2:1, 3:1, 4:1, 5:1	1:1, 1.5:1, 2:1, 3:1, 4:1, 5:1	1:1, 1.5:1, 2:1, 3:1, 4:1, 5:1	1:1, 1.5:1, 2:1, 3:1, 4:1, 5:1	1:1, 1.5:1, 2:1, 3:1, 4:1, 5:1
Max. Torque (Nm) Under 1500RPM	9.1	40	70	150	250	430	570	990
Max. Power (kW)	1.1	6.0	11.0	23.9	39.2	67.5	90.5	156

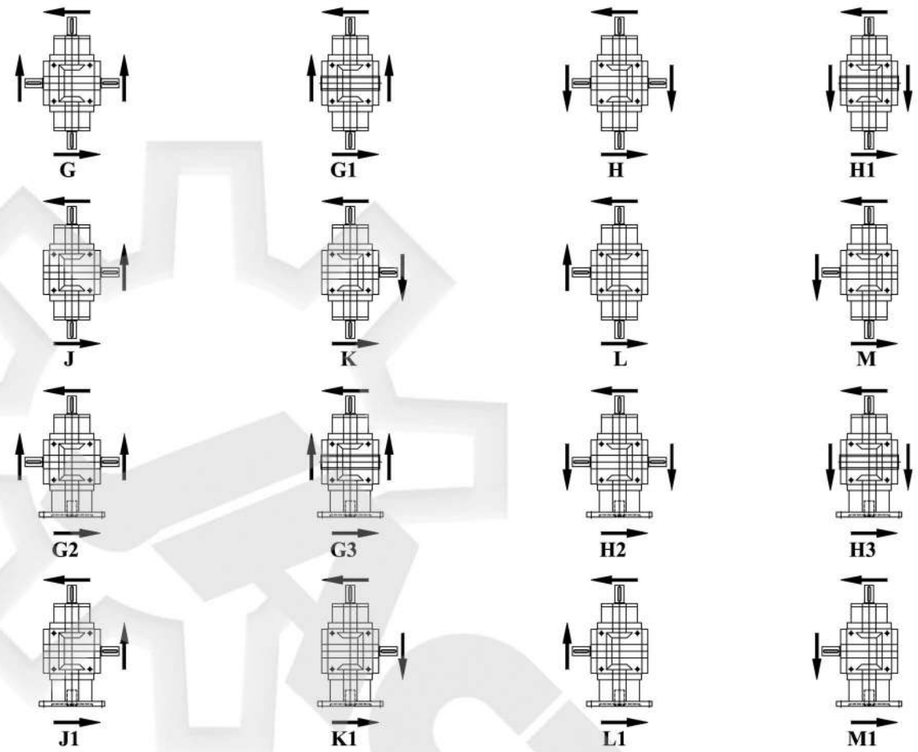
(3) Input Speed & (4) Output Speed, Below is Sample



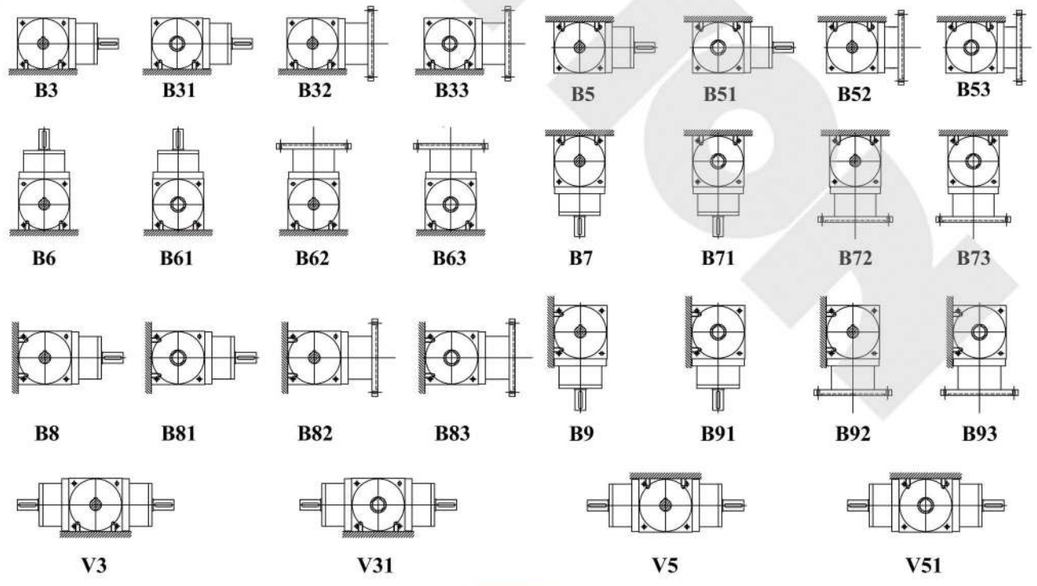
(5) Shaft Arrangements And Rotation Directions



Selection Guide



(6) Mounting Positions



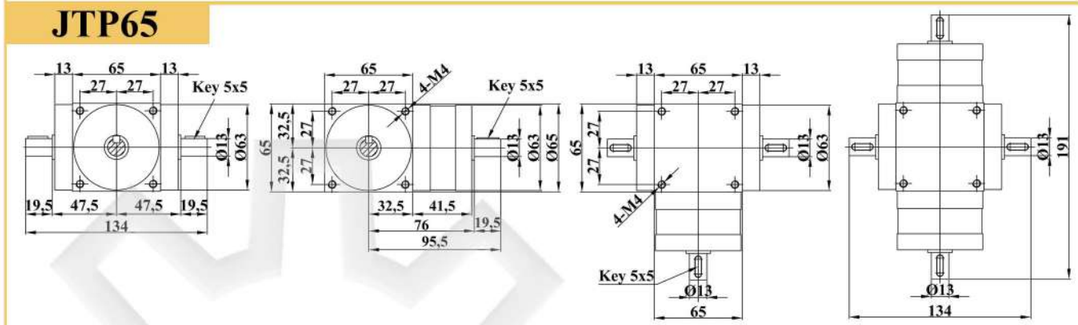
Specifications

- **JTP Series:** Solid shafts (input and output)
- **JTPH Series:** Solid shaft input, Hollow shaft output
- **JTPF Series:** Hollow shaft & Motor flange input, Solid shaft output
- **JTPG Series:** Hollow shaft & Motor flange input, Hollow shaft output

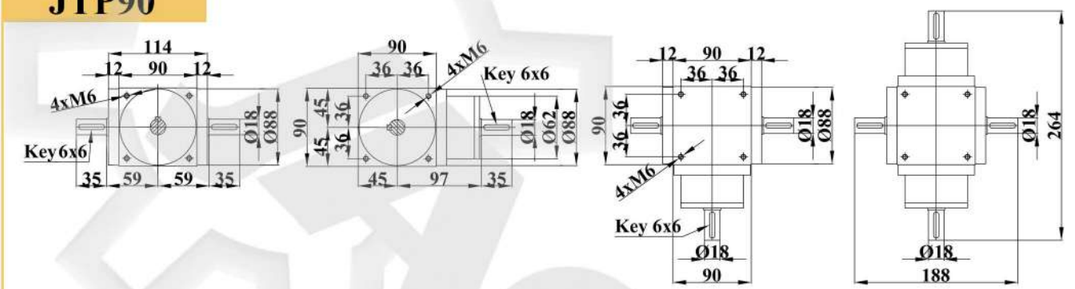
Models			JTP65 JTPH65		JTP90 JTPH90 JTPF90 JTPG90		JTP110 JTPH110 JTPF110 JTPG110		JTP140 JTPH140 JTPF140 JTPG140		JTP170 JTPH170 JTPF170 JTPG170		JTP210 JTPH210 JTPF210 JTPG210		JTP240 JTPH240 JTPF240 JTPG240		JTP280 JTPH280 JTPF280 JTPG280	
Net Weight (kg)			2		7		12		22		40		65		85		180	
Oil Level (L)			0.1		0.2		0.3		0.4		1		2		2.5		3	
Materials			Cast Iron Aluminum Stainless Steel								Cast Iron Stainless Steel							
Ratio	Input (rpm)	Output (rpm)	Nm	Kw	Nm	Kw	Nm	Kw	Nm	Kw	Nm	Kw	Nm	Kw	Nm	Kw	Nm	Kw
1:1	1500	1500	7.0	1.10	38.2	6.0	70.0	11.0	152.2	23.9	250.2	39.3	429.8	67.5	576.2	90.5	993.2	156
	1000	1000	7.0	0.73	41.1	4.3	75.0	7.9	164.3	17.2	275.0	28.8	482.3	50.5	649.4	68.0	1098	115
	750	750	7.0	0.55	43.3	3.4	78.3	6.2	170.6	13.4	290.3	22.8	519.5	40.8	694.0	54.5	1199	94.2
1.5:1	1500	1000			41.1	4.3	74.0	7.8	128.9	13.5	259.8	27.2	539.6	56.5	721.0	75.5	983.7	103
	1000	667			43.7	3.05	78.1	5.5	139.0	9.7	280.8	19.6	590.2	41.2	795.0	55.5	1082	75.5
	750	500			43.9	2.3	81.2	4.3	145.2	7.6	296.1	15.5	630.3	33.0	850.0	44.5	1156	60.5
2:1	1500	750	7.0	0.55	42.7	3.35	80.2	6.3	141.3	11.1	264.9	20.8	550.1	43.2	744.9	58.5	1121	88.0
	1000	500	7.0	0.37	44.9	2.35	85.0	4.5	149.9	7.9	284.6	14.9	599.7	31.4	800.3	41.9	1232	64.5
	750	375	7.0	0.27	45.8	1.8	87.9	3.5	157.9	6.2	295.4	11.6	641.8	25.2	860.8	33.8	1299	51.0
3:1	1500	500			42.0	2.2	85.0	4.5	151.8	8.0	275.0	14.4	529.1	27.7	800.3	41.9	1117	58.5
	1000	333			43.0	1.5	88.8	3.1	160.4	5.6	289.4	10.1	573.0	20.0	865.2	30.2	1215	42.4
	750	250			45.8	1.2	91.7	2.4	168.1	4.4	298.0	7.8	599.7	15.7	901.5	23.6	1280	33.5
4:1	1500	375			42.0	1.65	73.9	2.9	135.0	5.3	213.9	8.4	471.1	18.5	769.1	30.2	980	38.5
	1000	250			43.9	1.15	76.4	2.0	143.3	3.8	225.4	5.9	511.9	13.4	828.9	21.7	1051	27.5
	750	188			44.3	0.87	78.9	1.6	150.3	3.0	231.7	4.6	529.7	10.4	871.0	17.1	1105	21.7
5:1	1500	300			35.0	1.1	74.8	2.4	125.7	4.0	205.3	6.5	404.3	12.7	744.9	23.4	1000	31.4
	1000	200			35.8	0.75	76.4	1.6	131.3	2.8	214.9	4.5	429.8	9.0	783.1	16.4	1070	22.4
	750	150			36.9	0.58	79.6	1.3	133.7	2.1	219.7	3.5	442.5	7.0	827.7	13.0	1127	17.7

Overall Dimensions

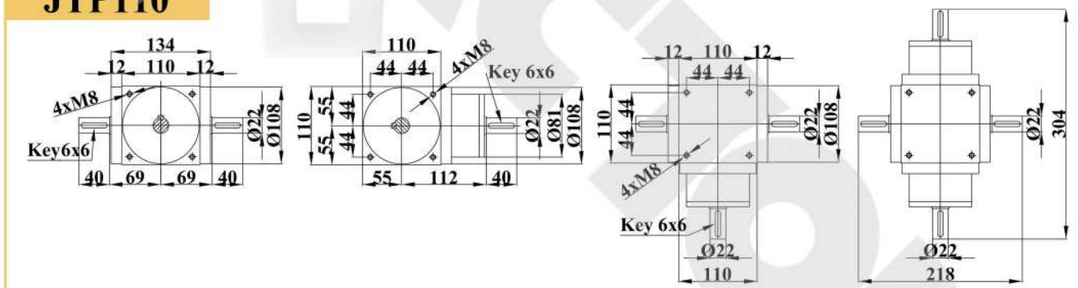
JTP65



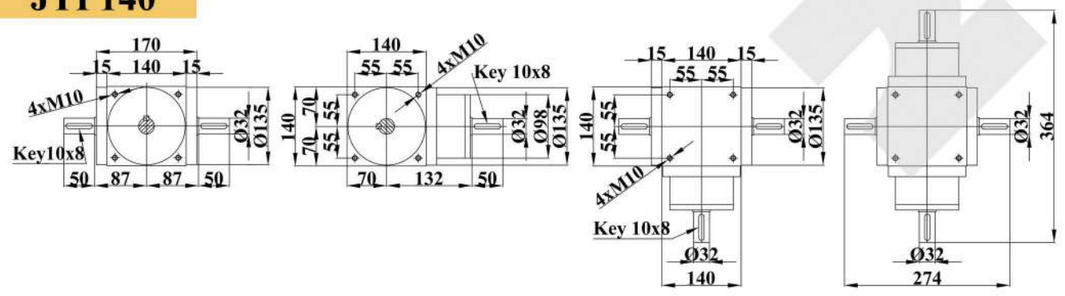
JTP90



JTP110



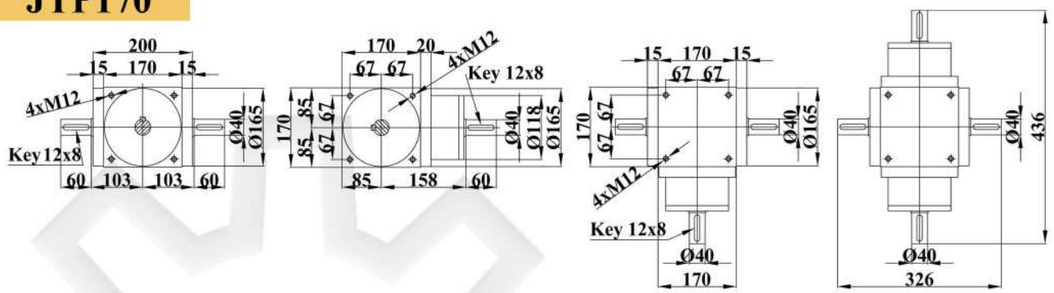
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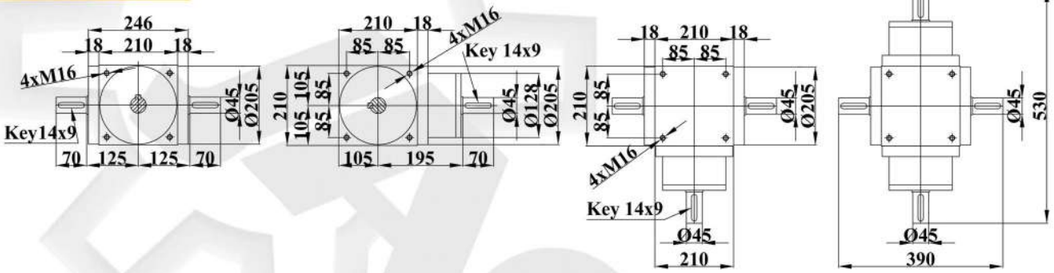
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Overall Dimensions

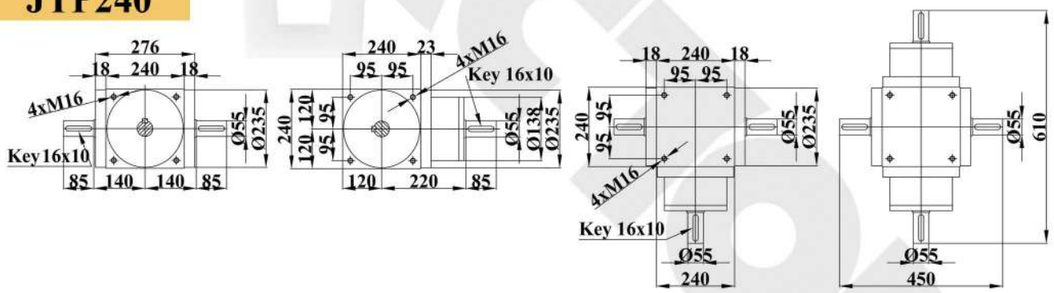
JTP170



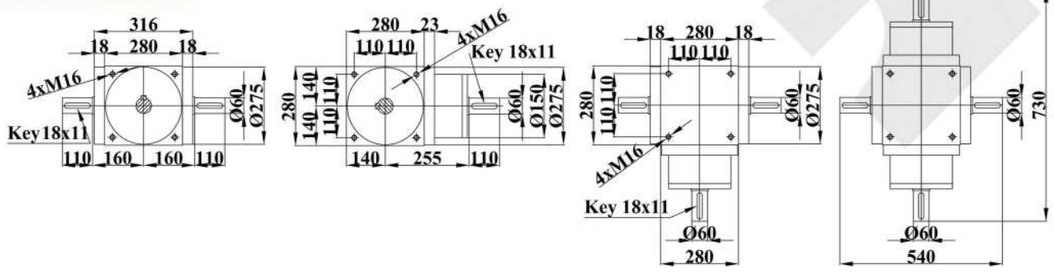
JTP210



JTP240



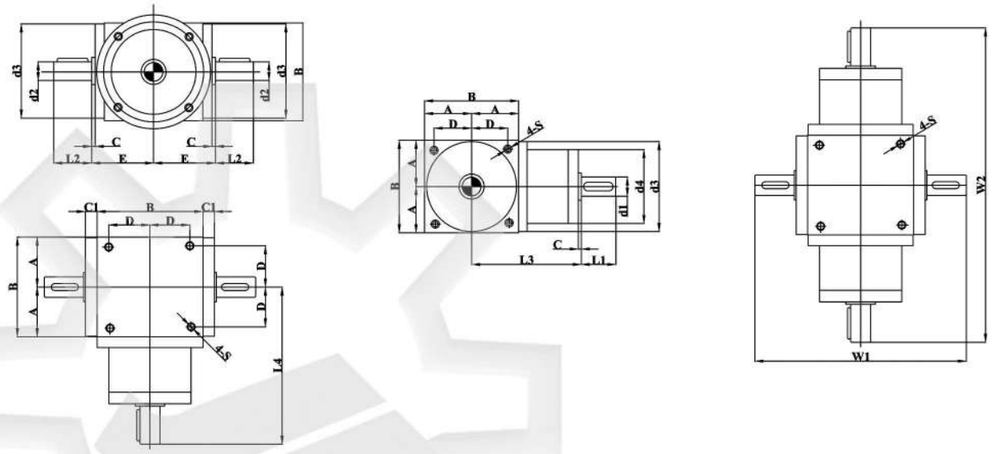
JTP280



*. Dimensions are subject to change without notice

Overall Dimensions

JTP (1:1 ~ 5:1)



Gear Ratio		1 : 1~5 : 1	1 : 1 2 : 1		3 : 1		4 : 1		5 : 1		1 : 1 2 : 1 3 : 1	4 : 1 5 : 1
Model	**B**	**d2(h7)**	**d1(h7)**	**L1**	**d1(h7)**	**L1**	**d1(h7)**	**L1**	**d1(h7)**	**L1**	**d4**	**d4**
JTP65	65	13	13	19.5							63	
JTP90	90	18	18	35	16	30	11	23	11	23	62	62
JTP110	110	22	22	40	20	35	16	30	14	25	81	72
JTP140	140	32	32	50	26	45	20	35	16	30	98	81
JTP170	170	40	40	60	32	50	26	45	22	40	118	98
JTP210	210	45	45	70	38	55	32	50	30	50	128	110
JTP240	240	55	55	85	45	70	35	55	35	55	138	120
JTP280	280	60	60	110	50	80	45	70	42	70	150	135

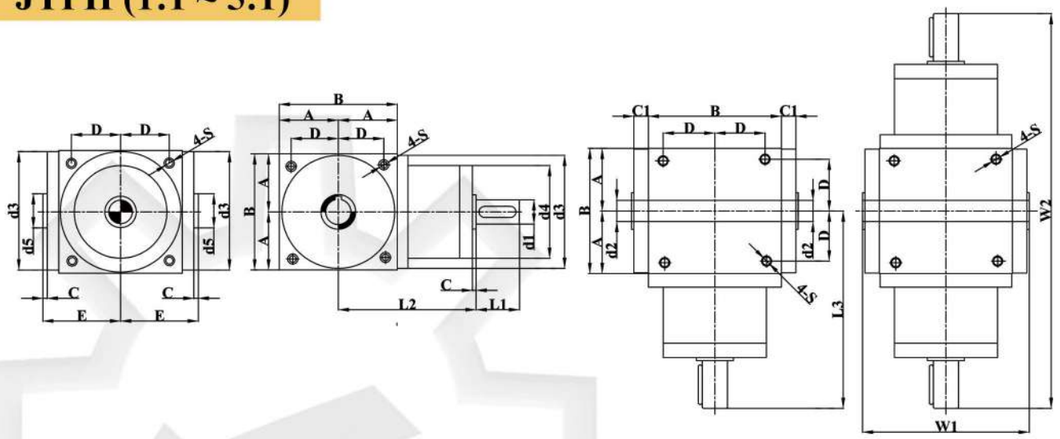
● **Note:** The **Metric Key Sizes** are following the international standard.

Gear Ratio									1 : 1 2 : 1		1 : 1~5 : 1	1 : 1 2 : 1
Model	**d3(h7)**	**C**	**C1**	**D**	**E**	**A**	**L2**	**L3**	**L4**	**S**	**W1**	**W2**
JTP65	63	2	13	27	47.5	32.5	19.5	76	95.5	M4	134	191
JTP90	88	2	12	36	59	45	35	97	132	M6	188	264
JTP110	108	2	12	44	69	55	40	112	152	M8	218	304
JTP140	135	2	15	55	87	70	50	132	184	M10	274	364
JTP170	165	3	15	67	103	85	60	158	218	M12	326	436
JTP210	205	2	18	85	125	105	70	195	265	M16	390	530
JTP240	235	2	18	95	140	120	85	220	305	M16	450	610
JTP280	275	2	18	110	160	140	110	255	365	M16	540	730

*. Dimensions are subject to change without notice

Overall Dimensions

JTPH (1:1 ~ 5:1)



Gear Ratio	1 : 1~5 : 1		1 : 1 2 : 1		3 : 1		4 : 1		5 : 1		1 : 1 2 : 1 3 : 1
Model	**B**	**d2(H7)**	**d5**	**d1(h7)**	**L1**	**d1(h7)**	**L1**	**d1(h7)**	**L1**	**d1(h7)**	**L1**	**d4**
JTPH65	65	13	20	13	19.5							63
JTPH90	90	16	25	18	35	16	30	11	23	11	23	62
JTPH110	110	22	35	22	40	20	35	16	30	14	25	81
JTPH140	140	28	45	32	50	26	45	20	35	16	30	98
JTPH170	170	38	55	40	60	32	50	26	45	22	40	118
JTPH210	210	45	65	45	70	38	55	32	50	30	50	128
JTPH240	240	55	75	55	85	45	70	35	55	35	55	138
JTPH280	280	60	85	60	110	50	80	45	70	42	70	150

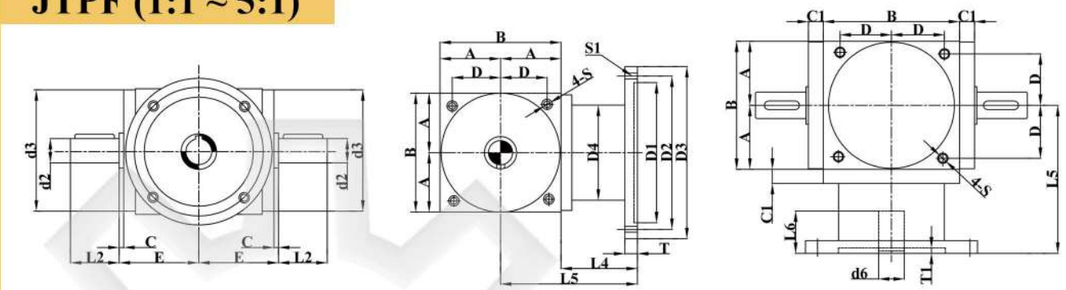
- **Note:** The **Metric Key and Keyway Sizes** are following the international standard.

Gear Ratio	4 : 1 5 : 1								1 : 1 2 : 1		1 : 1~5 : 1	1 : 1 2 : 1
Model	**d4**	**d3(h7)**	**C**	**C1**	**D**	**E**	**A**	**L2**	**L3**	**S**	**W1**	**W2**
JTPH65		63	2	13	27	47.5	32.5	76	95.5	M4	95	191
JTPH90	62	88	2	12	36	59	45	97	132	M6	118	264
JTPH110	72	108	2	12	44	69	55	112	152	M8	138	304
JTPH140	81	135	2	15	55	87	70	132	184	M10	174	364
JTPH170	98	165	3	15	67	103	85	158	218	M12	206	436
JTPH210	110	205	2	18	85	125	105	195	265	M16	250	530
JTPH240	120	235	2	18	95	140	120	220	305	M16	280	610
JTPH280	135	275	2	18	110	160	140	255	365	M16	320	730

*. Dimensions are subject to change without notice

Overall Dimensions

JTPF (1:1 ~ 5:1)



Model	B	d2(h7)	d3(h7)	A	C	C1	D	E	L2	L4	L5
JTPF90	90	18	88	45	2	12	36	59	35	65	110
JTPF110	110	22	108	55	2	12	44	69	40	75	130
JTPF140	140	32	135	70	2	15	55	87	50	102	170
JTPF170	170	40	165	85	3	15	67	103	60	130	215
JTPF210	210	45	205	105	2	18	85	125	70	140	245
JTPF240	240	55	235	120	2	18	95	140	85	145	265
JTPF280	280	60	275	140	2	18	110	160	110	175	315

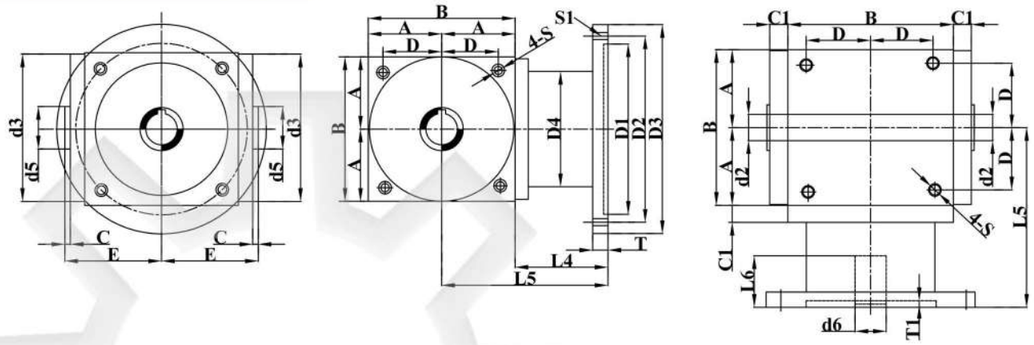
- **Note:** The **Metric Key and Keyway Sizes** are following the international standard.

Gear Ratio	1 : 1 / 2 : 1				1 : 1 / 2 : 1			
Model	**D1 x D2 x D3**	**T1**	**T**	**D4**	**d6 x L6**	**S**	**S1**	**IEC Flange Code**
JTPF90	Φ80 x Φ100 x Φ120	3.5	11	76	9x23	M6	4xM6	56B5
	Φ95 x Φ115 x Φ140	3.5	11		11x26	M6	4xM8	63B5
	Φ110 x Φ130 x Φ160	4.0	11		14x33	M6	4xM8	71B5
JTPF110	Φ95 x Φ115 x Φ140	3.5	11	82	11x26	M8	4xM8	63B5
	Φ110 x Φ130 x Φ160	4.0	11		14x33	M8	4xM8	71B5
	Φ130 x Φ165 x Φ200	4.0	14		19x43	M8	4xM10	80B5
JTPF140	Φ130 x Φ165 x Φ200	4.0	14	104	19x43	M8	4xM10	80B5
	Φ130 x Φ165 x Φ200	4.0	14		24x53	M10	4xM10	90B5
	Φ180 x Φ215 x Φ250	4.5	16		28x63	M10	4xM12	100/112B5
JTPF170	Φ130 x Φ165 x Φ200	4.0	14	128	24x53	M12	4xM10	90B5
	Φ180 x Φ215 x Φ250	4.5	16		28x63	M12	4xM12	100/112B5
	Φ230 x Φ265 x Φ300	4.5	16		38x83	M12	4xM12	132B5
JTPF210	Φ180 x Φ215 x Φ250	4.5	16	160	28x63	M16	4xM12	100/112B5
	Φ230 x Φ265 x Φ300	4.5	16		38x83	M16	4xM12	132B5
	Φ250 x Φ300 x Φ350	6	20		42x115	M16	4xM16	160B5
JTPF240	Φ230 x Φ265 x Φ300	4.5	16	170	38x83	M16	4xM12	132B5
	Φ250 x Φ300 x Φ350	6	20		42x115	M16	4xM16	160B5
	Φ250 x Φ300 x Φ350	6	20		48x115	M16	4xM16	180B5
JTPF280	Φ250 x Φ300 x Φ350	6	20	190	42x115	M16	4xM16	160B5
	Φ250 x Φ300 x Φ350	6	20		48x115	M16	4xM16	180B5
	Φ300 x Φ350 x Φ400	6	20		55x115	M16	4xM16	200B5

*. Dimensions are subject to change without notice

Overall Dimensions

JTPG (1:1 ~ 5:1)



Model	B	d2(H7)	d3(h7)	d5	A	C	C1	D	E	L4	L5
JTPG90	90	16	88	25	45	2	12	36	59	65	110
JTPG110	110	22	108	35	55	2	12	44	69	75	130
JTPG140	140	28	135	45	70	2	15	55	87	102	170
JTPG170	170	38	165	55	85	3	15	67	103	130	215
JTPG210	210	45	205	65	105	2	18	85	125	140	245
JTPG240	240	55	235	75	120	2	18	95	140	145	265
JTPG280	280	60	275	85	140	2	18	110	160	175	315

• **Note:** The **Metric Keyway Sizes** are following the international standard.

Gear Ratio	1 : 1 / 2 : 1				1 : 1 / 2 : 1			
Model	D1 x D2 x D3	T1	T	D4	d6 x L6	S	S1	IEC Flange Code
JTPG90	Φ80 x Φ100 x Φ120	3.5	11	76	9x23	M6	4xM6	56B5
	Φ95 x Φ115 x Φ140	3.5	11		11x26	M6	4xM8	63B5
	Φ110 x Φ130 x Φ160	4.0	11		14x33	M6	4xM8	71B5
JTPG110	Φ95 x Φ115 x Φ140	3.5	11	82	11x26	M8	4xM8	63B5
	Φ110 x Φ130 x Φ160	4.0	11		14x33	M8	4xM8	71B5
	Φ130 x Φ165 x Φ200	4.0	14		19x43	M8	4xM10	80B5
JTPG140	Φ130 x Φ165 x Φ200	4.0	14	104	19x43	M8	4xM10	80B5
	Φ130 x Φ165 x Φ200	4.0	14		24x53	M10	4xM10	90B5
	Φ180 x Φ215 x Φ250	4.5	16		28x63	M10	4xM12	100/112B5
JTPG170	Φ130 x Φ165 x Φ200	4.0	14	128	24x53	M12	4xM10	90B5
	Φ180 x Φ215 x Φ250	4.5	16		28x63	M12	4xM12	100/112B5
	Φ230 x Φ265 x Φ300	4.5	16		38x83	M12	4xM12	132B5
JTPG210	Φ180 x Φ215 x Φ250	4.5	16	160	28x63	M16	4xM12	100/112B5
	Φ230 x Φ265 x Φ300	4.5	16		38x83	M16	4xM12	132B5
	Φ250 x Φ300 x Φ350	6	20		42x115	M16	4xM16	160B5
JTPG240	Φ230 x Φ265 x Φ300	4.5	16	170	38x83	M16	4xM12	132B5
	Φ250 x Φ300 x Φ350	6	20		42x115	M16	4xM16	160B5
	Φ250 x Φ300 x Φ350	6	20		48x115	M16	4xM16	180B5
JTPG280	Φ250 x Φ300 x Φ350	6	20	190	42x115	M16	4xM16	160B5
	Φ250 x Φ300 x Φ350	6	20		48x115	M16	4xM16	180B5
	Φ300 x Φ350 x Φ400	6	20		55x115	M16	4xM16	200B5

*. Dimensions are subject to change without notice

Other Products

Cubic Machine Screw Jack



- Cubic design permits any mounting position.
- High static loads, best for slow movement and low duty cycles.
- Static load capacities from 2.5 kN to 500 kN as Standard.
- Translating, Anti-rotation (keyed) and Rotating Screw configurations.
- Self locking trapezoidal screw offers maximum stroke of 7500 mm.
- Power source: Manual operation, Motor drive.
- Single jack, or synchronization of multiple jacks arrangeme

Cubic Ball Screw Jack



- Cubic design permits any mounting position.
- High duty cycle, high precision, high speed, less power and long service life.
- Static load capacities from 10 kN to 350 kN as Standard.
- Translating, Anti-rotation and Rotating Screw configurations.
- Not self-locking ball screw offers maximum stroke of 6000 mm.
- Power source: Brake motor drive. Not suited for manual operation.
- Single jack, or synchronization of multiple jacks arrangements.

Classic Machine Screw Jack



- Classic design, no need to attach any construction elements to the housing.
- High static loads, best for slow movement and low duty cycles.
- Static load capacities from 0.5 ton to 100 tons as Standard.
- Translating, Anti-rotation (keyed) and Rotating Screw configurations.
- Self locking trapezoidal screw offers maximum stroke of 7500 mm.
- Power source: Manual operation, Motor drive.
- Single jack, or synchronization of multiple jacks arrangements.

Stainless Steel Screw Jack



- Classic design, no need to attach any construction elements to
- Complete Stainless Steel Screw Jack design.
- High static loads, best for slow movement and low duty cycles.
- Static load capacities from 1 ton to 20 tons as Standard.
- Translating, Anti-rotation (keyed) and Rotating Screw configurations.
- Self locking Stainless Steel trapezoidal screw offers maximum stroke of 7500 mm.
- Power source: Manual operation, Motor drive.
- Single jack, or synchronization of multiple jacks arrangements.

Other Products

Classic Ball Screw Jack



- Classic design, no need to attach any construction elements to the housing.
- High duty cycle, high precision, high speed, less power and long service life.
- Static load capacities from 1 ton to 35 tons as Standard.
- Translating, Anti-rotation and Rotating Screw configurations.
- Not self-locking ball screw offers maximum stroke of 6000 mm.
- Power source: Brake motor drive. Not suited for manual operation
- Single jack, or synchronization of multiple jacks arrangements.

Bevel Gear Machine Screw Jack



- High efficiency, high lifting speed, high duty cycle, long lifespan.
- Spiral bevel gear mechanism are used, with 2:1, 2.5:1 and 3:1 ratios.
- Static load capacities from 400 Kg to 3500 Kg as Standard.
- Translating, Anti-rotation (keyed) and Rotating Screw configurations.
- Self locking trapezoidal screw offers maximum stroke of 6000 mm.
- Power source: Manual operation, Motor drive.
- Single jack, or synchronization of multiple jacks arrangem

Bevel Gear Ball Screw Jack



- Higher efficiency, higher lifting speed, higher duty cycle, longer lifespan.
- Spiral bevel gear mechanism are used, with 2:1, 2.5:1 and 3:1 ratios.
- Static load capacities from 400 Kg to 3500 Kg as Standard.
- Translating, Anti-rotation and Rotating Screw configurations.
- Not self-locking ball screw offers maximum stroke of 6000 mm.
- Power source: Brake motor drive. Not suited for manual operation.
- Single jack, or synchronization of multiple jacks arrangements.

Screw Jack Lifting Systems



- Lifting systems are not limited to the number of screw jacks. Commonly used are 2, 4, 6, 8 jack systems.
- Full synchronization, self-locking, precision positioning, easy installation and operation, maintenance free.
- From a few kilograms to heavy-duty several hundred tons.
- Complete lifting systems with geared motors, shafting and couplings available.
- Power source: Synchronized drive from a single electric motor.
- With Inverter driven motor, soft start and stop, variable lifting speeds are all available.

Other Products

Cubic Bevel Gearbox



- Modular design spiral bevel gearboxes with cubic housing.
- Ultra Compact Design. All-round tapped holes for universal mounting, 6 possible mounting positions.
- Gear ratios of 1:1, 2:1, 3:1, 4:1 and 5:1 are actual ones.
- Power Ratings up to 156 kW. Torque Ratings up to 1199 N.m.
- Gear transmission average efficiency up to 94%.
- 2-way, 3-way and 4-way Configurations.
- Solid Shaft, Hollow Shaft, and Direct motor mount or via motor flanges.
- High efficiency, high transmission capacity, low backlash, Noiseless operation, low running temperature and long service life.

Classic Bevel Gearbox



- Used in pairs case hardened alloy steel spiral bevel gears.
- Gear ratios of 1:1, 1.5:1, 2:1, 2.5:1, 3:1, 4:1 and 5:1 are actual ones.
- Power Ratings up to 335 kW. Torque Ratings up to 5713 N.m.
- Gear transmission average efficiency up to 94%.
- 2-way, 3-way and 4-way Configurations.
- Solid Shaft, Hollow Shaft, and Direct motor mount or via motor flanges.
- Various Shafts Arrangements, Rotation Directions and Mounting Positions available.
- High efficiency,high transmission capacity, low backlash, noiseless operation, low running temperature and long service life.

Lightweight Bevel Gearbox (Aluminium Alloy)



- Quality finished casing by die-casting, in lightweight aluminium alloy.
- Compact design, small-sized, ultra-lightweight, universal mounting.
- Utilizing carburized case-hardened spiral bevel gears
- Gear ratios of 1:1 and 2:1 are actual ones.
- Power Ratings up to 4.94 kW. Torque Ratings up to 40 N.m.
- Gear transmission average efficiency up to 94%
- 2-way and 3-way Configurations.
- High efficiency,low backlash,quiet operation, maintenance free, low running temperature and long service life.

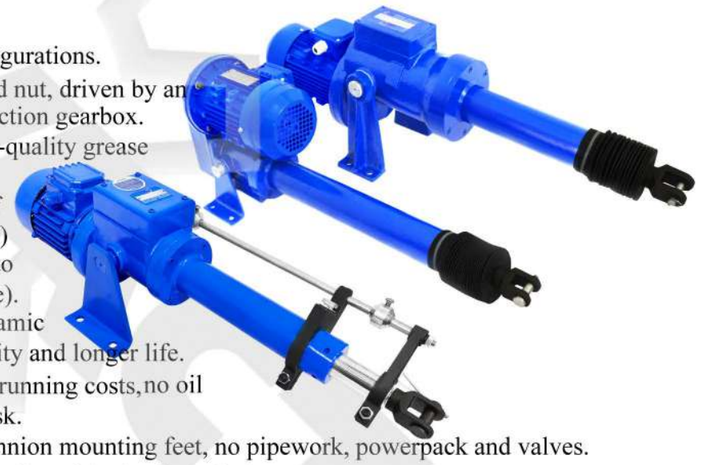
Other Products

Electric Cylinders



- Be basically screw jacks with travelling nut, but with lifting cylinder design.
- High static loads, best for slow movement and low duty cycles.
- Static load capacities from 2.5 ton to 10 tons as Standard.
- Self-locking, precise positioning, and uniform speed.
- Power source: Manual operation, Motor drive.
- Single unit, or synchronization of multiple units.
- A better choice over hydraulic actuators or pneumatic cylinders with this clean alternative, impler to install, control, low maintenance and a quieter solution.

Electric Linear Actuators



- Parallel or In-Line drive configurations.
- Self-locking ACME screw and nut, driven by an electric motor, through a reduction gearbox.
- Low maintenance due to high-quality grease and enclosed design.
- Load capacities from 100 Kgf to 15 tons as Standard (Parallel)
- Load capacities from 10 Kgf to 1000 Kgf as Standard (In-Line).
- Low noise system,higher dynamic capacity, higher speed capability and longer life.
- Low power consumption and running costs, no oil leaks, contamination or fire risk.
- Easy installation with two trunnion mounting feet, no pipework, powerpack and valves.
- Be a real alternative to pneumatic and hydraulic cylinders.

Customized and molded products

