

SLEW DRIVES



Slew Drives

Cyclo Transmissions Ltd, leading manufacturers of Planetary and Cycloidal Drives in India, introduce Slew Drives. This range of reduction gears is specifically designed for pinion and slewing ring gear drives. Simple mounting, operating reliability and versatility makes these units suitable for the most severe duties in any types of environment.

Construction Features

These drives consist of a planetary gear unit having compact dimensions, robustness and versatility. The unit is equipped with a hydraulic fail safe wet type multi-disc and electromagnetic brake. The brake is released hydraulically and electrically.

Technical Features

- The inherent compactness & high efficiency of the planetary gear have paved the way to its ever increasing employment in slewing mechanisms.
- The same applies to fluid-motor driven slewing mechanisms providing for wide range of speed control.
- Some models have eccentric mounting between the pinion axis and the casing axis.
- The design of these units optimises torque performance capacity and radial load capacity while bending stresses are kept within limits so as to give perfect meshing between pinion and gear.
- Long service life.
- Applications to fit a wide range of Electric & Hydraulic motor.
- Wide range of transmission ratios.
- Same lubrication for brake and gearing but independent of motor.

Design Features

- All the parts are designed and manufactured to high quality standards to perform under intended service. Output housing is made from cast steel that conforms to IS standards.
- All the gear parts are manufactured from high alloy steel. Optimised for best possible tooth flank and root load capacity and minimum sliding speeds. Externally toothed gears case hardened and ground, internal gears heat-treated and nitrided.
- High torque capacity achieved by careful selection of materials, heat treatment and geometrical design of the gears calculated in accordance with ISO Standards.
- All standard parts such as bearings, seals, hardware are procured directly from reputed manufacturers for genuiness and cost effectiveness.
- The Planetary gears of these Slewing units are also used in the Cypla Winches, the Track Drives, so that the complete drives are of same construction and have common parts.

Applications

- Excavators
- Truck mounted concrete pumps
- Mobile cranes
- Tower cranes
- Drilling machines
- Dock cranes & Deck cranes
- Construction cranes & conveyors
- Loading & cargo handling cranes
- Access platforms

Essential Technical Data

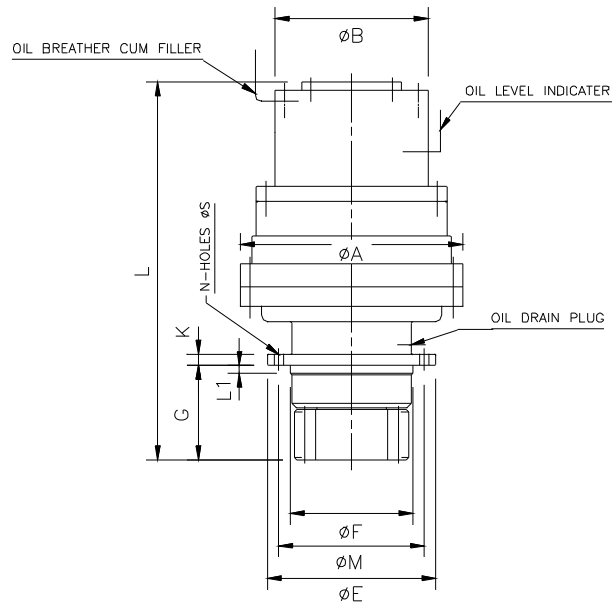
The customer shall provide the following data while ordering the Slew Drive.

Technical Data	
1) Drive unit class	: _____
2) Running time classification	: _____
3) Loading conditions	: _____
4) Output Torque	: _____
5) Output Speed	: _____
6) Start / hr.	: _____
7) Ratio	: _____
8) Mounting position of O/P Pinion	
Up Down Horizontal	
9) Output Pinion	
Module (m)	: _____ mm
No. of Teeth (z)	: _____
Width (b)	: _____ mm

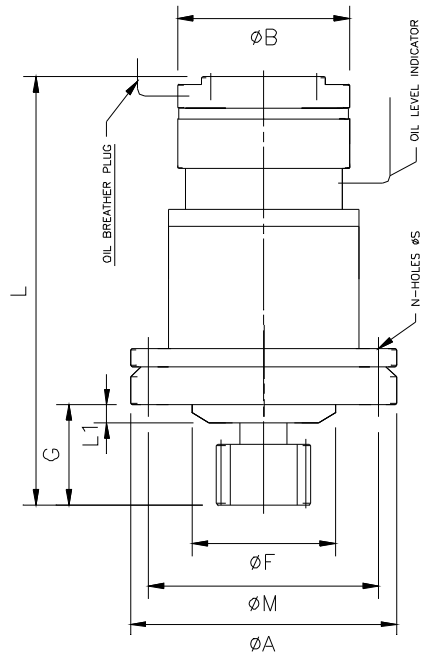
Drive	
A) Hydraulic Motor	
Manufacture / Type	: _____
Power (P)	: _____ kW
Available flow (Q)	: _____ l/min.
Nominal pressure (DP _n)	: _____ bar
Max. available pressure (DP _m)	: _____ bar
B) Electric Motor	
Manufacture / Type	: _____
Power (P)	: _____ kW
Input Speed (n)	: _____ rpm
Starting Torque (T _s)	: _____ Nm
Overload Torque (T ₁)	: _____ Nm

Specific to inform :

Dimension Sheet



Model	ϕA	ϕE	ϕF	ϕM	N	ϕS	L	G	K	L1	ϕB	Rated Torque
SR-R17	290	245	162	265	12	12.5	549	116	20	10	200	650
SRT-40	275	340	250	310	12	18	510	146	18	32	200	1000
SRT-620	290	220	160	190	12	12.5	496	124	15	10	200	700
SRT-880	275	457	230	413	8	22	530	188	28	15	200	1000



Model	ϕA	ϕF	ϕM	N	ϕS	L	G	L1	ϕB	Rated Torque
SRT-30	285	215	255	12	17	495	135	30	200	816
SRT-422	280	150	240	9	16	452	90	19	180	382
SRT-630	390	178	360	12	12	514	136	10	200	600

Lubrication

All parts are splash lubricated. Oil filler/breather together with drain plug and level plug are provided. Use only SAE recommended grades as gear lubricants. Automotive oils are not recommended. If the Drive operates under extreme conditions use of synthetic oil is recommended.

If the Drive operates in an environment where temperature fluctuations are predictable, choose an oil viscosity, which is recommended for that temperature, e.g., if it operates in cold weather use an oil whose pour point is less than the minimum ambient temperature, so that the oil circulates freely at all times. During hot weather use higher viscosity oil that will not thin out and lose its lubricating properties.

Special measures should be taken to protect the drives operating in direct sunlight at ambient temperature over 100°F. This protection can consist of a canopy over the drive or reflective paint on the drive. In extreme heating conditions a cooling device may be required to prevent the system temperature exceeding the maximum allowable temperature.

Recommended oils

Ambient Temp	5°C to 40°C	30°C to 65°C	30°C to 65°C
MOBIL	Mobilgear 629	Mobilgear 630	Mobilgear 632
SHELL	Omala EP150	OmalaEP220	OmalaEP 320
TOTAL	Carter EP 150	CaterEP 220	CarterEP 320
IND. OIL	Servomesh 150	Servomesh 220	Servomesh 220

Oil change

First oil change must be carried out after one month of operation and subsequently after every 2500 hours of working or at least every 12 months. For operating under abnormal conditions such as high temperature, severe duty, dust, moisture, oil may need to be changed more frequently. Do not mix the oil of different types even of the same make.

Mounting

All drives should be mounted on vibration free, rigid level foundation. While mounting the drive check that the breather, oil level and drain plug are in correct positions. To ensure correct alignment of the Drive, the location diameters must be within the specified tolerances and rigidly connect to the base. The reliability and long life of the Drive requires careful installation and accurate alignment of all the accessories.

Product Range

- Track Drives
- Worm Drives
- Creep Drives
- Planetary Drives
- Cycloidal Drives
- Wheel Drives
- Torque Limiter
- Centrifuge Drives
- Differential Drives
- SMP / SMR Drives
- Pump Drives
- Elevator Drives
- Conveyor Drives
- Custom Built Drives
- Helical Geared Motor

For technical clarifications please contact us at



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