

# DRUM DRIVES



## 500 Series

Absolute dependability, low maintenance, compactness and cost-effectiveness are the key features of the redesigned 500 series, the unparalleled line of drives for transit mixers. Eight models available for mixing capacity ranging from 1 to 14 m<sup>3</sup>.



HYDRAULIC SOLUTIONS



TRANSIT MIXERS

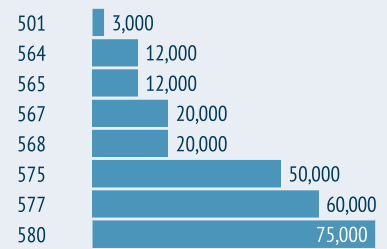
### Applicable motors

- Axial piston motors to SAE
- Standard orbit motors

### Key features

- Rotating housing flange
- Rugged design
- High torque capacity
- High load capacity
- Tilting output flange, evenly in all directions
- Mounting frame for water tank
- Water pump P.T.O.
- Speed sensor

### Torque (Nm)



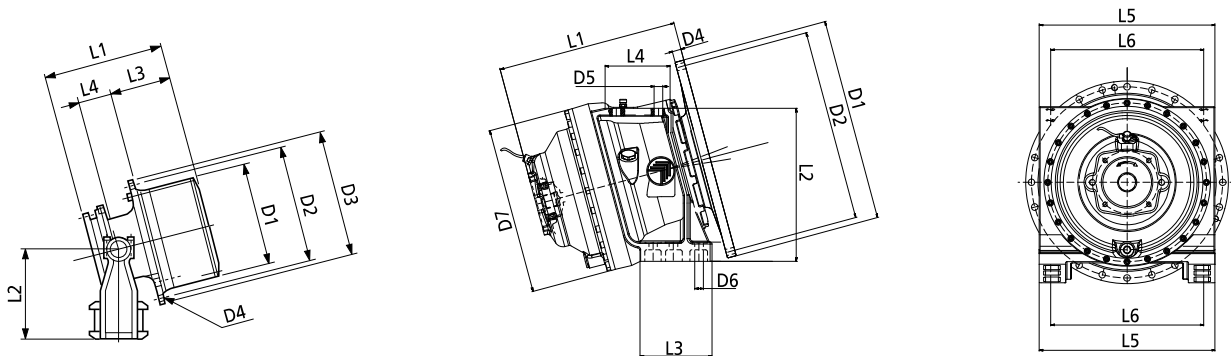
Type	Range of Ratios	Hydr. Motor Drive <sup>(1)</sup>	Max. Input Speed	Drum Capacity <sup>(2)</sup>	Weight	Oil Quantity	Design	Water Pump P.T.O.	Speed Sensor
	1:		min <sup>-1</sup>	m <sup>3</sup>	kg	L			
501	17-23-29	LS	550	0.5 - 1	45	1.5	A	-	-
564	78-161	HS	2,500	2 - 3	85	2	A	-	-
565	22	LS	550	2 - 3	70	1.5	A	-	-
567	76-90-115-128	HS	2,500	4 - 5	140	3	A	-	-
568	18-21-27	LS	550	4 - 5	130	2.5	A	-	-
575	99.3-102-141	HS	3,000	6 - 8	250	7	B	•	•
577	131	HS	3,000	8 - 10	290	8.5	B	•	•
580	130-135-140	HS	3,000	10 - 14	320	10	B	•	•

(1) LS = Low speed motor / HS = High speed motor

(2) General indication, application capacity depends on concrete slump

- = Not available

• = Available



Type	D1	D2	D3	D4	D5	D6	D7	L1	L2	L3	L4	L5	L6
501	200	222	245	13 no. 4	-	-	-	270	195	138	89	-	-
564	280	310	340	17 no. 10	-	-	-	365	240	165	85	-	-
565	280	310	340	17 no. 10	-	-	-	290	240	165	85	-	-
567	358	390	430	17 no. 18	-	-	-	435	300	210	110	-	-
568	358	390	430	17 no. 18	-	-	-	360	300	210	110	-	-
575	530	500	-	17 no. 24	22 no. 4	22 no. 6	435	450	400	188	170	460	400
577	530	500	-	17 no. 24	22 no. 4	22 no. 6	435	450	400	188	170	460	400
580	530	500	-	17 no. 24	22 no. 4	22 no. 6	435	525	400	188	170	460	400

# DRUM DRIVES FOR HYBRID CONCRETE MIXERS



## 500 Series

This solution is designed for use with medium/large mixer trucks that have medium/long delivery distances to travel. Bonfiglioli's innovative solution comprises a Bonfiglioli 500 Series gearbox coupled to an AC electric motor, providing normal power, and a DC electric motor for emergency use.



ELECTRIC SOLUTIONS



This product not only guarantees greater energy efficiency and reduced fuel consumption, but also helps cut cement mixer truck operating costs. Performance is improved too: rotation speed control is more accurate, operating noise levels are significantly lower. Finally, functionality remains higher in the event of a failure: the presence of a second backup DC motor provides reassuring redundancy and eliminates the risks and potentially hazardous situations caused by failures of the drum emptying system.

### Key benefits

- Increased energy efficiency
- Reduced fuel consumption
- Optimized gear design for maximum efficiency and minimum noise

### Torque (Nm)

577 60,000



## Gearbox data

### Ratio

- Main: 1:220
- Emergency: 1:2,200

### Max output torque

- Main: 60,000 Nm
- Emergency: 10,500 Nm

### Max input speed

- Main: 3,500 rpm
- Emergency: 2,000 rpm

### Oil quantity

- 8 lt

### Dry weight

- 328 kg

## Motor data

### Type

- Main: Induction AC
- Emergency: PM DC motor

### Rated Power

- Main: 40 kW
- Emergency: 2 kW

### Voltage

- Main: 170 VAC
- Emergency: 24 VDC

### Protection degree

- IP66

### Cooling

- Main: Liquid
- Emergency: Air forced

## Key features

Service intervals less frequent and simplified versus the standard hydraulic solution

Better drum rotation speed control

The emergency electric DC motor allows higher availability in case of machine failure

## Functional Diagram

