

### Motorized Pulley 1000HD, Ø 1000 mm

The RULMECA motorized pulley type 1000HD is a highly developed reliable and strong drive with an outstanding power range of 160 - 250 kW. It is able to take a high radial load and robust in design. Therefore it is especially developed for use in:

- Mining conveyors,
- Excavators,
- Stackers,
- Reclaimers,
- Heavy loaded conveyors in gravel and sand

The motorized pulley 1000HD is designed for tough, irregular, extreme and brutal working condition.

The compact design allows the design engineers to save material and cost when developing the conveyor.

A high protection rate connected with the standard labyrinth sealing system it can be used in all ambient conditions.

#### STANDARD SPECIFICATION

of the Motorized Pulley

- Crowned mild steel shell + ceramic lagging, outside diameter 1020mm.
- Mild steel shafts.
- Totally enclosed cast iron brackets,
- Shell lagged with a 10mm bonded ceramic lagging,
- Bearing houses from cast steel.
- Gear 3-stage boxes from cast steel.
- Sealing system with degree of protection IP66/67 (EN60034-5).
- Terminal box from cast iron.
- 3-phase induction motors with 3 phase single voltage,
- Std. voltages 400V, 415V, 525V, 690V, 50Hz & 460V, 575V 60Hz Please specify!
- Motor winding insulations class H,
- 3 bimetallic thermal protectors in connected series, 2 temperature resistors Pt100 and 3 PTC-resistors connected in series installed in the winding.
- Rotor dynamically balanced.
- 2 oil plugs (with magnet).

- Minimum roller length RL = 1400mm at 160kW & 1500 at 250kW,
- Synthetic oil EP220.
- First oil change recommended after 30.000 operational hours.
- Regreasable labyrinth seals with automatic greasing system,
- Special speeds available on request,

#### **Please Note!**

- Environmental conditions: page 77-78.
- Technical precautions page 81-92,
- Optional extras on page 72,
- Connection diagrams on page 100.





## Motorized Pulley 1000HD Ø 1000 mm

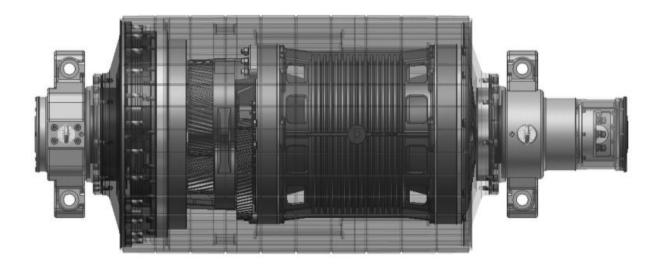
### 50 Hz

Mo <sup>*</sup> Power	tor <sub>No.</sub>	Nominal belt speed at	Torque	Belt Pull	Max. Load	min. RL	Туре		0	kg foi	r STAN	IDARD	width	1				Type of
	of	Full Load			T1+T2			RL in mm								Bracket		
	Poles	50Hz															per 50 mm	
kW/HP		m/sec	Nm	N	N			1400	1450	1500	1550	1600	1650	1700	1750	1800	up to 2500	
		2.50	30300	59400														
160.0/ 218.0	4	3.15	24400	47800	300000	1400	1000HD	4200	4270	4315	4380	4445	4510	4575	4640	4705	65 kg	AL200/
218.0		4.00	19200	37600														ALO200
		4.50	16700	32700														
		5.50	14000	27400														
		2.50*		74300														
200.0/ 272.0	4	3.15*	30600	60000	300000	1450	1000HD		4450	4520	4565	4630	4695	4760	4825	4890	65 kg	AL200/
272.0		4.00	24000	47000														ALO200
		4.50	20900	40950														
		5.50	17600	34500					1									
		2.50*	47400	92900														
250.0/	4	3.15*	38200	74900	300000	1500	1000HD			4700	4770	4815	4880	4945	5010	5075	65 kg	AL200/
340.0		4.00	30000	58800					X/////									ALO200
		4.50	26150	51250														
		5.50	22000	43100				V//////	X//////									

\* Power and speeds marked with a star can be used with 100% load at clockwise direction of rotation only! For anti-clockwise direction the motorized pulley has to be assembled in an opposite way.

Note: Please specify the outer diameter of your connection cable.

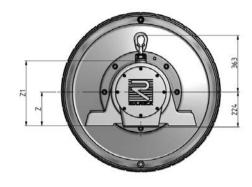
Because of high torque the start-up of the motorized pulley has to be done with a soft starter or a variable frequency drive.





# Motorized Pulley 1000 HD, Ø 1000 mm

235 ØA 229 00 00 AB BC м. <u>61</u> 6 \_G1 G Ρ W1 P RL EL AGL

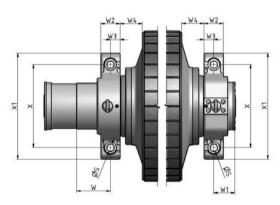


ALO

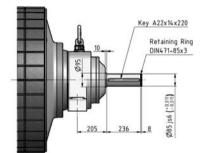
AL



		,										
А	В	D	ΙE	G	G1	L	M	0	ΙP	W	W1	W4
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1020	1014	203	520	145	114	218	122	325	215	228	143	150



#### Standard External Brake Shaft Dimension



	Bracket Dimension									
	S	S  W2  W3   X   X1  Z  Z1								
Туре	mm	mm	mm	mm	mm	mm	mm			
AL	50	130	65	560	717	215	412			
ALO	50	130	65	560	717	215	412			



## OPTIONAL EXTRAS Motorized Pulley 1000HD

#### Option

1000HD

•	
Different types and shapes of ceramic lagging	x
Mechanical backstop RL + 0	х
External brake shaft RL + 0	х
Allowable ambient temperatures -25°C until +40°C	Std.
Insulation class H with synthetic oil	Std.
Motor protection and Control by 3 bimetallic thermal protectors connected in series, 2 temperature resistors PT100 and 3 PTC-resistors connected in series	Std.
Dust Explosion proof Motorized Pulleys – ATEX95 – Zone 22 – for applications handling of dusty grain etc. according to European Directive 94/9/EC	x
Thermal winding protection	Std.
IP66/67 cast iron terminal box	Std.
Degree of protection IP66/67	Std.
Triphase single voltage (3x400V, 415V, 525V & 690V at 50Hz & 460V, 575V 60Hz) with tolerances +/-10% (DIN IEC 38)	Std.
Other voltages up to 1000V	x
CSA approved motors	x

Std. = standard

**x** = available as option