

MOTORIZED PULLEY 1000H & 1000HD

Ø 1000 mm



The RULMECCA 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 Motorized Pulley

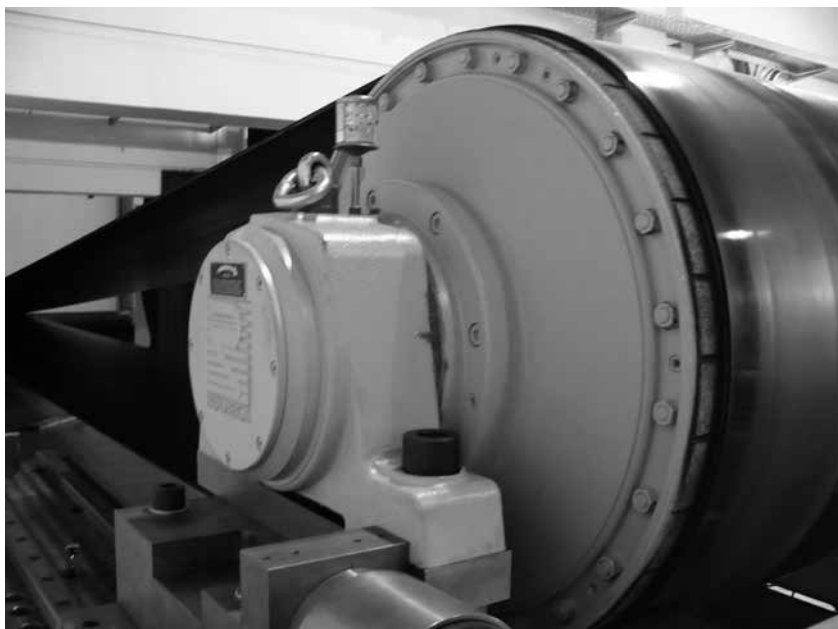
- Crowned mild steel shell + ceramic lagging, outside diameter 1020mm.
- Mild steel shafts.
- Totally enclosed cast iron brackets,
- Shell lagged with a 10mm bonded ceramic lagging,
- Bearing houses from cast steel.
- Gear 3-stage boxes from cast steel.
- Sealing system with degree of protection IP66/67 (EN60034-5).
- Terminal box from cast iron.
- 3-phase induction motors with 3 phase single voltage,
- Possible 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 50.000 operational hours.
- Regreasable labyrinth seals with automatic greasing system,
- Special speeds available on request,

Please Note!

- Environmental consideration: page 72/73
- Technical precautions: page 75 ff.,
- Optional extras: page 65,
- Connection diagram: page 91 ff.



MOTORIZED PULLEY 1000H & 1000HD

Optional extras



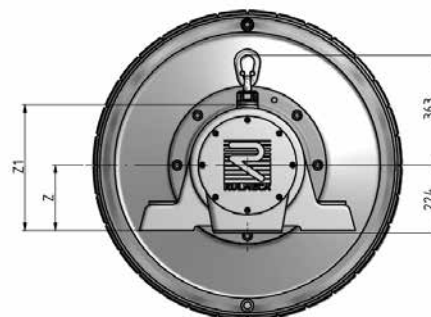
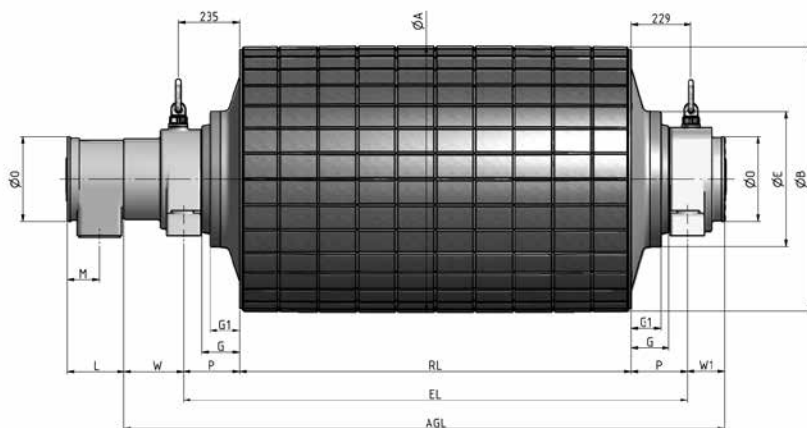
SPECIFICATIONS	1000HD
Different types and shapes of ceramic lagging	x
Mechanical backstop RL + 0	x
External brake shaft RL + 0	x
Allowable ambient temperatures -25°C until +40°C	Std.
Insulation class H with synthetic oil	Std.
Motor protection and Control by 3 bimetallic thermal protectors connected in 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 2014/34EG	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 on request and after checking the technical feasibility	x
CSA approved motors	x

Std. = standard

x = available as option

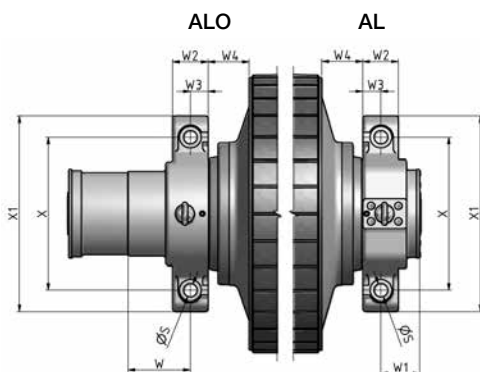
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Ø 1000 mm

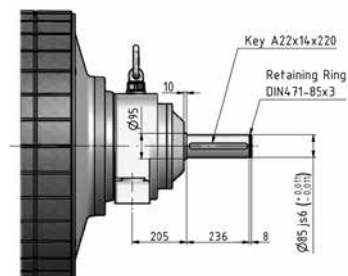


Motorized Pulley Dimension

A mm	B mm	D mm	E mm	G mm	G1 mm	L mm	M mm	O mm	P mm	W mm	W1 mm	W4 mm
1020	1014	203	520	145	114	218	122	325	215	228	143	150



Standard External Brake
Shaft Dimension



Bracket Dimension

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

MOTORIZED PULLEY 1000H

Ø 1020 mm - 50 Hz



Motor			Nominal belt speed at Full Load 50Hz m/sec	Torque Nm	Belt Pull N	Max. Radial Load T1+T2* N	Min. RL	Type	Weight in kg for STANDARD width RL in mm																				
Power kW/HP	No. of Poles	Gear stages							1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	per 50mm up to 2500								
160.0/ 218.0	6	2	3.00	25160	49330		1300	1000H																					
			3.50	21030	41240					4005	4075	4120	4185	4250	4315	4380	4445	4510	4575	4640									
			4.00	18830	36930																								
	4		2	4.50	16770	32890			1250	1000H																65 kg			
				5.50	14020	27500																							
				6.50	11310	22170																							
				7.00**	10750	21080	300					3755	3825	3870	3935	4000	4065	4130	4195	4260	4325	4390	4455						
				7.50**	10230	20060																							
				8.50	8870	17390																							
9.50	7740	15180																											
200.0/ 272.0	2	2	4.50	20960	41110		300	1000H																					
			5.50	17530	34370																								
			6.50	14130	27720																								
			7.00**	13440	26350	300			4005	4075	4120	4185	4250	4315	4380	4445	4510	4575	4640					65 kg					
			7.50**	12790	25080																								
			8.50	11089	21740	220	220																						
9.50	9670	18970																											
250.0/ 340.0	2	2	4.50	26200	51390		300	1000H																					
			5.50	21900	42950																								
			6.50	17650	34650																								
			7.00**	16800	32940	300			4255	4325	4370	4435	4500	4565	4630	4695	4760	4825						65 kg					
			7.50**	15980	31350																								
			8.50	13850	27170	220	220																						
9.50	12000	23710																											

* T1+T2 value is valid for shortest available RL – in case of any questions please contact Rulmeca sales.

** for speeds marked with double star optional gear ratios possible on request.

MOTORIZED PULLEY 1000HD

Ø 1020 mm - 50 Hz



Motor			Nominal belt speed at Full Load 50Hz m/sec	Torque Nm	Belt Pull N	Max. Radial Load T1+T2* N	Min. RL	Type	Weight in kg for STANDARD width RL in mm											per 50mm up to 2500				
Power kW/HP	No. of Poles	Gear stages							1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750		1800			
160.0/ 218.0	6	3	1.60	45540	89280	300	1450	1000 HD					4450	4520	4565	4630	4695	4760	4825	4890	65kg			
	4		2.00 **	36310	71200																			
			2.50	30300	59400																			
			3.15	24400	47800					4200	4270	4315	4380	4445	4510	4575	4640	4705						
			4.00	19200	37600																			
			4.50	16700	32700																			
200.0/ 272.0	4	3	2.00 **	45390	89000	300	1450	1000 HD													65kg			
			2.50 **	37950	74300																			
			3.15 **	30600	60000						4450	4520	4565	4630	4695	4760	4825	4890						
			4.00	24000	47000																			
			4.50	20900	40950																			
250.0/ 340.0	4	3	2.50 **	47430	93010	300	1500	1000 HD													65kg			
			3.15 **	38250	75010																			
			4.00	30000	58830						4700	4770	4815	4880	4945	5010	5075							
			4.50	26150	51250																			
			5.50	22000	43100																			

* T1+T2 value is valid for shortest available RL – in case of any questions please contact Rulmeca sales.

** 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 dimension of your power supply cable.

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