

MOTORIZED PULLEY 165LS

Ø 165 mm



Motorized Pulley 165LS, with machined helical gear box, performs an efficiency, in a compact diameter of 165 mm only. With a min RL of 400 mm and powers ranging from 0.11kW to 1.5kW this size of motorized pulley is suitable for most duties requiring such a small diameter – e.g.:

- Light agriculture and bulk solids handling conveyors
- Mobile or portable conveyors
- As a drive unit for brush cleaners etc.

Motorized pulley 165LS has standard IP66/67 enclosure and is available in complete stainless steel execution for wash down application.

For the choice of the Motorized Pulley it is very important to know or to calculate the belt tension T1+T2 (radial load). This MUST NOT OVERCOME the “max. radial load” allowed as shown in the catalogue.

Be careful to very high belt tensions when using thick, heavy and/or large belts.

If the type 165LS cannot provide the necessary max. radial load T1+T2, you have to choose a Motorized Pulley with a bigger diameter.

STANDARD SPECIFICATION of motorized pulley

- Crowned mild steel shell, outside diameter 165mm.
- Mild steel shafts.
- Shell and shafts treated with anti-rust wax.
- Die cast aluminium bearing houses.
- Gearbox from die cast aluminium 2- and 3-stages.
- Sealing system-degree of protection IP66/67 (EN60034-5).
- Die cast aluminium terminal box with WAGO clamp.
Voltage: most common globally used voltages available. Please specify!
- 3-phase induction motor with one rated voltage – either low or high voltage
- Available in both 50Hz or 60Hz.
- Star connection (Delta connection on request).
- Motor windings with insulation class F (insulation class H on request).
- Dynamical balanced rotor.
- Two oil plugs (one with magnet).
- Minimum roller length (RL) 400mm (0.37kW: min RL 350mm).
- Max. RL 1800mm (longer RL on request).
- Standard mineral oil ISOVG150 (synthetic oil ISOVG220 on request).
- Oil change recommended every 20.000 operational hours.
- Single phase AC motors available in 0.37kW and 1.10kW, supplied with all necessary run and start capacitors (if needed) together with current depending relay.
- Without start capacitor the starting torque is 70% of the nominal torque only
- For horizontal installation (angled and vertical installation on request)

STAINLESS STEEL

Stainless steel version or rust-resistant version on request -
For an optimum design of the correct anti-corrosion performance, we need the properties of the materials being conveyed. Our sales team will offer you the best available solution.

When ordering, please specify the required voltage, electrical connection, options, brackets and idler pulleys.

- Environmental consideration: page 72/73
- Technical precautions: page 75 ff.,
- Optional extras: page 21,
- Connection diagram: page 91 ff.

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Optional extras



SPECIFICATIONS	165LS
Total stainless steel option AISI 304 range Re-greasable labyrinth seals!	On request!
Food grade oil & grease - FDA & USDA recognized - available on request	x
Dust explosion proof Motorized Pulleys - ATEX 95 - Zone 22 - for applications handling of dusty grain etc. according to European Directive 94/9/EC.	On request!
Black rubber lagging - STANDARD specifications: - Smooth lagging - Hardness 60 ±5 Shore A - Diamond lagging - Hardness 60 ±5 Shore A	o
White smooth rubber lagging (FDA). Oil, fat & grease resistant	o
Single phase motors available on request	x
Electromagnetic brake (for 5.5 kW not available)	x
Min. RL dimensions by (mm)	50
Mechanical backstop	x
Modified for vertical mounting	o
Modified for mounting between 5° - ≤90° - e.g. for magnetic separators	o
Insulation class F - Allowable ambient temperature: -25°C/+40°C	Std.
Insulation class H with synthetic oil - Allowable ambient temperature: -25°C/+40°C	x
SPECIAL motors for applications with NO belt contact	o
Low noise drives for noise sensitive areas	x
Parallel shell	x
Thermal protector	Std.
IP66/67 Compact stainless steel - AISI 304 or 316 range - terminal box	x
Straight or elbow connector with flying lead	x
Straight connector with flying lead - Stainless steel - AISI 304 range -	x
Shaft sealing system - degree of protection IP66/67 (EN60034-5)	Std.
Screened cables - a MUST together with Frequency Converters	x
Euro wide range voltage (3x220-240V / 380-415V 50 Hz) with +/-10% tolerance - DIN IEC 38 or (3x380-400V / 660-690V 50 Hz)	Std.
Special voltages - 50 and/or 60 Hz Please specify!	x
CSA approved motors - available on request only!	x

x = Optional extras

o = Available as option with certain limitations. Please refer to Technical precautions pages 75 ff.

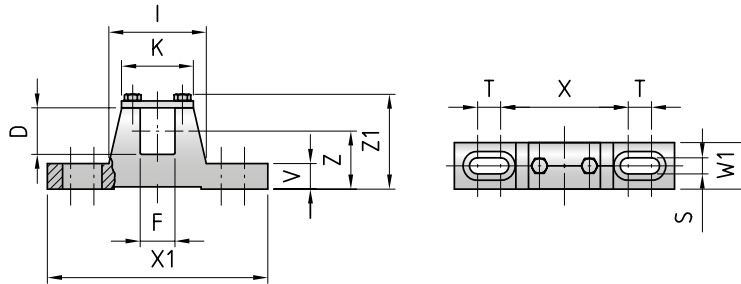
Std. = Fitted as standard

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Ø 165 mm



Mounting brackets KL40



Motorized Pulley	Material	Dimension											Weight		
		D mm	F mm	I mm	K mm	S mm	T mm	V mm	W1 mm	X mm	X1 mm	Z mm		Z1 mm	
Type															kg
165 LS	Steel	40	30	84	62	14	20	22	40	110	190	50	83	2.1	

Further product details:



https://www.rulmeca.com/contenuti/qr_code/english/165.pdf

MOTORIZED PULLEY 165LS

Ø 165 mm - 50 Hz



Motor			Nominal belt speed at Full Load 50Hz m/sec	Torque Nm	Belt Pull N	Max. Radial Load T1+T2* N	Weight in kg for STANDARD width Dimension RL in mm														per 50 mm up to 1800	Type of Bracket									
Power kW/HP	No. of Poles	Gear stages					350	400	450	500	550	600	650	700	750	800	850	900	950	1000			1050	1100							
0.11/ 0.15	12	3	0.05	170	2070	9330																		Available on request	KL40						
			0.06	141	1700		29	30.5	32	33	34	35	36.5	38	39	40	41.5	43	44	46	47										
0.37 0.50	6	3	0.13	239	2905	9330																				Available on request	KL40				
			0.16	193	2345		30	31.5	33	34	35	36	37.5	39	40	41	42.5	44	45	47	48										
	4	3	0.20	157	1910	9330	26	28	29.5	31	32	33	34	35.5	37	38	39	40.5	42	43	45	46	48					51	Available on request	KL40	
			0.25	127	1545																										
		0.32	97	1175																											
		0.40	77	930																											
2	0.50	60	73																												
	0.63	49	59																												
0.75/ 1.00	4	3	0.20	302	3665	9330																						Available on request			KL40
			0.25	248	3005		31	32.5	34	35	36	37	38.5	40	41	42	43.5	45	46	48	49										
1.10/ 1.50	4	2	0.32	189	2295	9330																		Available on request	KL40						
			0.40	162	1815		34	35	36	37	38.5	40	41	42	43.5	45	46	48	49												
	2	3	0.50	119	143	9330	34	35.5	37	38	39	40	41.5	43	44	45	46.5	48	49	51	52	52	Available on request			KL40					
			0.63	96	116																										
		0.80	72	88																											
		1.00	57	70																											
2	2	1.00	87	106	8700																										
		1.25	70	855		33	34.5	36	37	38	39	40.5	42	43	44	45.5	47	48	50	51											
1.50/ 2.00	2	3	0.40	226	2745	9330																							Available on request	KL40	
			0.50	183	2220																										
	2	2	0.63	139	1690	8700																									
			0.80	110	1340																										
		1.60	54	650																											
		2.00	42	515	6950																										
2.50	34	420																													
1.50/ 2.00	2	2	1.00	122	148	8700																		Available on request	KL40						
			1.25	98	1195																										
	2	2	1.60	75	910	6950																									
			2.00	59	720		34	35.5	37	38	39	40	41.5	43	44	45	46.5	48	49	51	52										
		2.50	48	585																											
		3.15	39	485																											

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

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Ø 165 mm - 50 Hz



Motor	Max. Radial Load T1+T2* N	Weight in kg for STANDARD width Dimension RL in mm																Type of Bracket	
		350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100		per 50 mm up to 1800
Idler Pulley UT165 LS	9330	12.5	14.0	15.5	17.0	18.5	20.0	21.5	23.0	24.5	26.0	27.5	29.0	30.5	32.0	33.5	35.0	Available on request	KL40

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



Rulmeca Motorized Pulleys in mobile Crushing & Screening. Features: Compact, reliable and requires NO maintenance!