



Motorized Pulley 165E, Ø 165 mm

Motorized Pulley 165E, with machined helical gearbox, performs an efficiency of 95% of nominal power, in a compact diameter of 165 mm only. With a min. RL of 350 mm and powers ranging from 0.11 to 1.50 kW this size of Motorized Pulley is suitable for most duties requiring such a diameter of 165 mm – e.g.:

- **Agricultural and bulk solids handling conveyors**
- **Mobile or portable conveyors**
- **As drive unit for brush cleaners.**

Motorized Pulley 165E has standard IP66/67 enclosure and is available in complete stainless steel execution for wash down applications.

STANDARD SPECIFICATION of Motorized Pulley

- Crowned mild 165 mm steel shell treated with anti-rust wax
- Die cast aluminium bearing housing
- Mild steel shaft treated with anti-rust wax
- Cast iron gearbox housing – 2 or 3 stage
- Sealing system – degree of protection IP66/67 (EN60034-5)
- Compact die cast aluminium terminal box
- Voltage: Most common voltages available. Please specify!
- Wide range voltage available
- Three phase induction motor with one rated voltage – either low or high voltage
- Alternatively, star/delta connection is available
- Available in both 50 & 60 Hz
- One out of two oil plugs is fitted with a magnet to filter the oil.
- Motor winding insulation class F (H on request)
- Dynamical balanced rotor
- Oil change recommended every 10,000 operational hours
- Minimum RL 400 mm (except 0.37 kW: minimum RL 350 on request)
- Maximum RL 1800 mm
- Non standard RL lengths available
- No maintenance
- Single phase is available in 0.37 & 1.10 kW and will be supplied with a running capacitor
- **The Start capacitor is optional, but strongly recommended**
When inquiring, please note that single phase motors **without** start capacitor have a starting torque of **only 70%** of the nominal torque
- To be used in the horizontal position only!

STAINLESS STEEL options

TS7N

- Crowned shell in stainless steel – AISI 304
- Stainless steel shafts – AISI 303
- Stainless steel covered – AISI 304 – aluminium bearing housings
- Stainless steel oil plugs - AISI 304 - with magnet
- Compact stainless steel terminal box – AISI 304 range
- Alternatively, straight stainless steel connector – AISI 303 – both with flying lead.
- Re-greasable stainless steel seals – AISI 303
- Degree of protection IP66/67 (EN60034-5)
- FDA & USDA food grade grease
- Option: FDA & USDA food grade recognized oil.

- Environmental considerations: pages 72-86
- Technical precautions: page 76
- Optional extras: page 15 and back cover
- Connection Diagrams: pages 92-93.

OPTIONAL EXTRAS

Motorized Pulley 165E

Specification

165E

Total stainless steel option AISI 304 range	TS7N	Re-greasable labyrinth seals!	x
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!
TOTAL acid resistant stainless steel option - AISI 316			x
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
SPECIAL lagging available on request - e.g. hot vulcanized etc.			o
Single phase motors available on request			x
Electromagnetic brake			x
	Min. RL dimensions increases 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 powder coated aluminium terminal box - food grade approved			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
2 speed motors			o
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
Dual voltage - delta/star - connection possibility!			o
CSA approved motors - available on request only!			x

x = Optional extra's

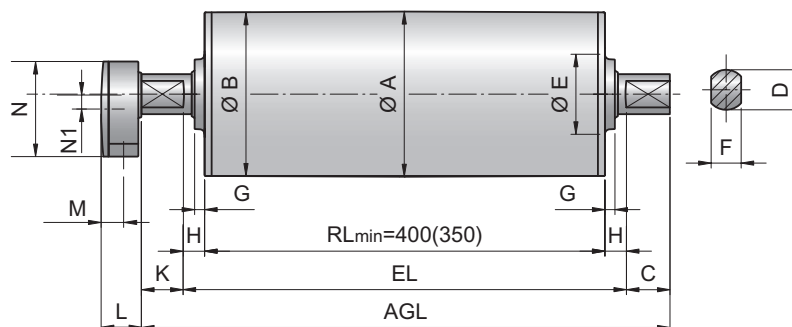
o = An option with certain limitations. Please refer to Technical precautions pages 76-86!

Std. = Fitted as standard

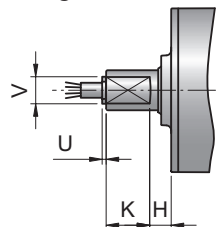


Motorized Pulley 165E, Ø 165 mm

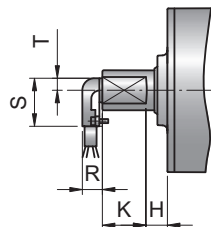
Motorized Pulley with Terminal box



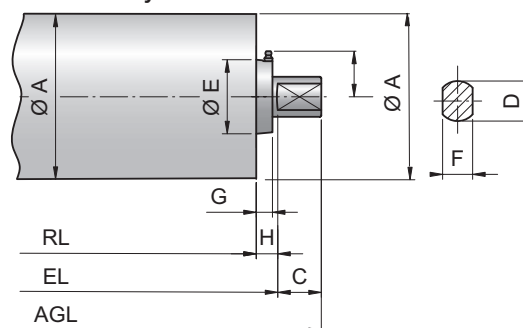
Motorized Pulley
with cable
straight connector



Elbow connector
(not for TS7N)

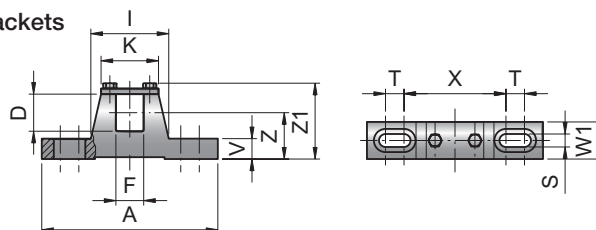


Idler Pulley TS7N version



Type	Motorized Pulley or idler Pulley (UT)										Compact terminal box				Straight connector		Elbow connector		
	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	K mm	W mm	L mm	M mm	N mm	N1 mm	U mm	V mm	R mm	S mm	T mm
165E	165	163.5	43.5	40	80	30	10	21.5	41.5	-	41	24	95	14	4	27	20	48	12
UT165E	165	-	43.5	40	75	30	16.5	21.5	-	46	→ Cylindric idler Pulley shown in TS7N version with re-greasable seals								

Mounting brackets
KL40



Type	Motorized Pulleys	Material	Bracket description	Dimensions												Weight kg
				A mm	B mm	D mm	E mm	F mm	H mm	I mm	K mm	S mm	T mm	U mm	V mm	
165E		Cast iron	KL40	190	40	40	110	30	50	110	77	14	20	81	22	1.6



Motorized Pulley 165E, 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																		Type of Bracket																			
Power kW/HP	No. of Poles	Gear stages					Dimension RL in mm																																					
							350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	per 50 mm up to 1800																					
0.11/0,15	12	3	0.06 0.08 0.10	141 106 85	1723 1293 1034	9330		29	30.5	32	33	34	35	36.5	38	39	40	41.5	43	44	46	47		KL40																				
0.37/0,50	6	3	0.13 0.16	219 178	2675 2174	9330		30	31.5	33	34	35	36	37.5	39	40	41	42.5	44	45	47	48	Available on request																					
	4	3	0.20 0.25 0.32 0.40	142 114 89 71	1739 1391 1087 869	9330	26	28	29.5	31	32	33	34	35.5	37	38	39	40.5	42	43	45	46	Available on request																					
		2	0.50 0.63 0.80 1.00	57 45 36 28	696 552 435 348																																							
		0.75/1,00	3	0.20 0.25 0.32 0.40	284 227 178 142																				3478 2782 2174 1739	9330		31	32.5	34	35	36	37	38.5	40	41	42	43.5	45	46	48	49	Available on request	
			2	0.50 0.63 0.80 1.00	114 90 71 57																				1391 1104 869 696																			
			1.10/1,50	3	0.40 0.50 0.63 0.80																				211 169 134 106																			2585 2068 1641 1293
2	1.00 1.25 1.60 2.00			85 68 53 42	1034 827 646 517																																							
1.50/2,00	3	0.63 0.80		183 144	2236 1763	9330		34	35.5	37	38	39	40	41.5	43	44	45	46.5	48	49	51	52	Available on request																					
	2	1.00 1.25 1.60 2.00		115 92 72 58	1410 1128 881 705																																							
	Idler Pulley UT165E																								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	

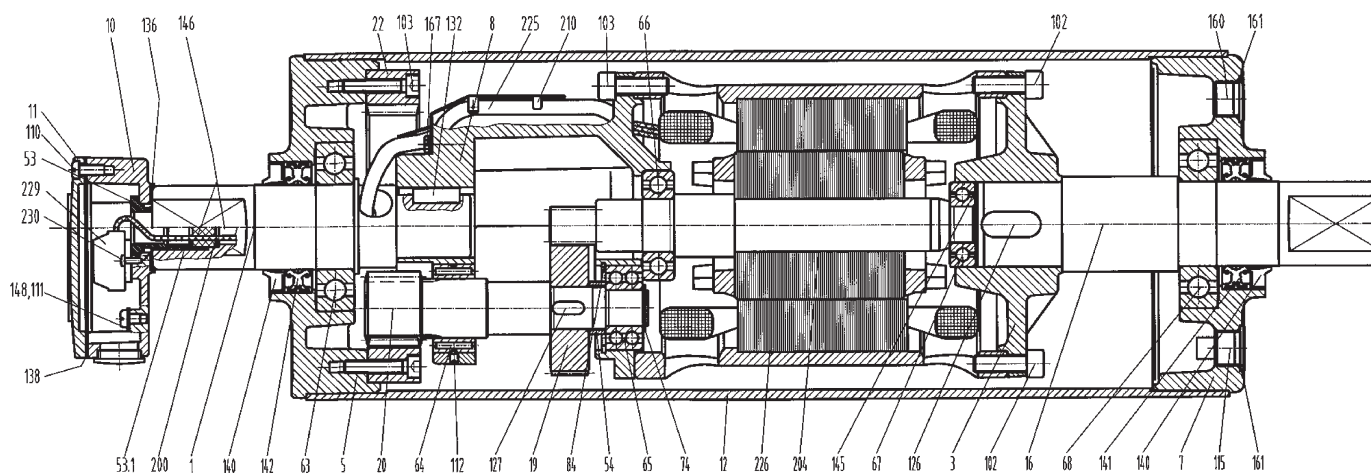


Motorized Pulley 165E

Spare parts list and sectional drawings

Pos.	Description	Pos.	Description	Pos.	Description
1	Front shaft	53	Cable seal nipple (cable option)	102	Screw
3	Rear flange	53.1	Nipple (terminal box)	103	Screw
5	Bearing housing complete with geared rim	55	Spacer bushing	110	Screw
7	Bearing housing complete	56	Spacer bushing	111	Screw
8	Gearbox	63	Ball bearing	112	Socket set screw
10	Terminal box – bottom part	64	Needle bearing	113	Screw
11	Terminal box cover	65-70	Ball bearing	114	Socket set screw
12	Shell	71	Inner race	115	Oil plug with magnet
16	Rear shaft	73	Locking ring	126	Key
19	Input wheel	74	Locking ring	127	Key
20	Output pinion	74	Locking ring	131	Key
22	Geared rim	81	Locking ring	132	Key
23	Intermediate pinion shaft	84	Locking ring	136	O-ring/Rubber seal
24	Intermediate wheel	85	Locking ring	138	Rubber seal
31	Labyrinth seal cover	86	Locking ring		
		93	Elbow or straight connector		

2-stage gearbox



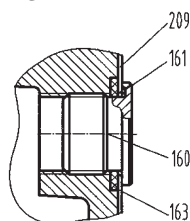


Motorized Pulley 165E

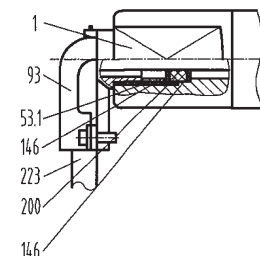
Spare parts list and sectional drawings

Pos.	Description	Pos.	Description	Pos.	Description
139	Grease nipple	156	Rectifier (not shown)	209	Stainless steel cover – oil plug end
140	Deflection seal	160	Oil plug	210	Fixing guard
141	Double lip seal	161	O-ring	223	Cable
142	Double lip seal	163	O-ring	226	Stator complete
143	O-ring	167	Screw	240	Distance ring
145	Distance washer	200	Rubber seal		
146	Washer	204	Rotor complete with pinion		
148	Washer	206	Insulated sleeve for wire protection		
150	Electromagnetic brake	208	Stainless steel cover – gear end		
150.1	Friction disc				

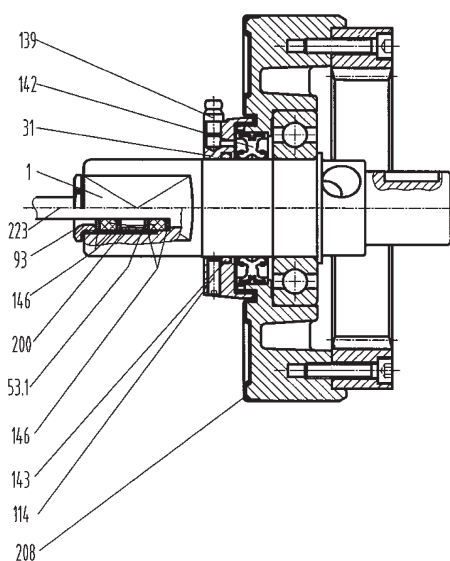
TS7N



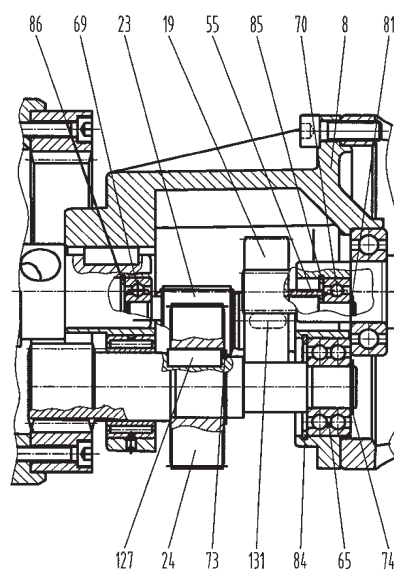
Elbow connector



TS7N with cable connection



3-stage gearbox



Electromagnetic brake

