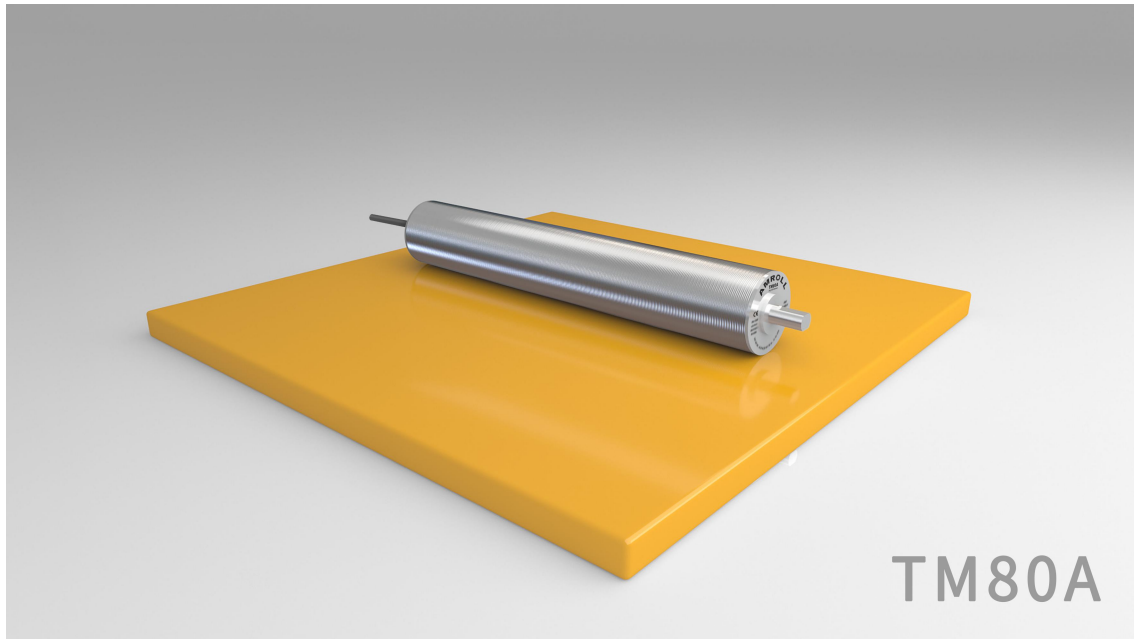




AMROLL DRUM MOTOR--TM80A

TM80A asynchronous oil immersed drum motor, The design is based on the space limitation requirement of conveying equipment and the high efficiency application of transmission system. This kind of drum motor is typically used in:

- Mini X-ray machines
- Package machines
- Dynamic weighing equipment
- Belt conveyors

TM80A drum motors have the following characters:

Drum motor shell

- Mild steel crowned shell treated with anti-rust oil
- The standard shell is coronal and the surface is machined with non-slip threads

Gear transmission

- Gears machined and honed to AGMA/DIN 6 standards to ensure low noise
- Cast aluminium gearbox

Motor

- Common global voltages at 50 Hz or 60 Hz
- AC asynchronous motor
- Motor windings insulation class F
- All motors with thermal protection
- Oil cooled electrical motor
- Cable length minimum 1.2 meters outside shaft

Sealing system

- Double shaft sealing system
- Sealing system-degree of protection IP 66/67

Oil

- Pre lubricated with oil
- Oil change recommended every 50,000 hours of operation

Other items

- Electromagnetic brakes are optional, but the length of the shell will be lengthened accordingly
- Belt speed and face width (L) on request
- International authority CE and UL safety certification
- Non-standard drum motors are available on request.

AMROLL Drum Motor TM80A-1*230V/50Hz

Power [kW/hp]	No.of poles	Gear stages	Gear ratio	Nominal belt speed [m/s]	Full load torque [Nm]	Full load belt pull [N]	Full load current [A]	Min. face width (L) [mm]	Min.L Weight [kg]
0.034/0.045	4	3	74.79	0.08	16.41	400	0.48	350	6.5
			55.11	0.10	13.11	320			
			37.89	0.15	8.73	214			
		2	28.95	0.20	6.55	160			
			21.33	0.27	4.85	118			
			14.67	0.40	3.28	80			
			11.81	0.50	2.62	64			
0.06/0.08	2	3	74.79	0.15	15.42	391	0.57	350	6.5
			55.11	0.20	11.01	269			
			37.89	0.30	7.71	188			
		2	28.95	0.39	5.91	142			
			21.33	0.52	4.37	104			
			14.67	0.76	2.95	71			
			11.81	0.95	2.36	56			
0.085/0.115	2	3	74.79	0.16	19.28	489	0.66	350	6.5
			55.11	0.22	13.77	336			
			37.89	0.32	9.63	236			
		2	28.95	0.41	7.38	177			
			21.33	0.56	5.46	131			
			14.67	0.81	3.69	89			
			11.81	1.01	2.96	71			
0.11/0.15	2	3	55.11	0.22	22.02	538	0.99	350	6.5
			37.89	0.32	15.42	376			
		2	28.95	0.42	11.82	284			
			21.33	0.56	8.74	208			
			14.67	0.82	5.90	142			
			11.81	1.02	4.72	112			

At the min. face width (L), the total weight of a drum motor grows approx.1.2 kg per 100 mm.

AMROLL Drum Motor TM80A-3 *400V/50Hz

Power [kW/hp]	No.of poles	Gear stages	Gear ratio	Nominal belt speed [m/s]	Full load torque [Nm]	Full load belt pull [N]	Full load current [A]	Min. face width (L) [mm]	Min.L Weight [kg]
0.04/0.05	4	3	74.79	0.08	18.00	450	0.43	350	6.7
			55.11	0.10	14.40	360			
			37.89	0.15	9.60	240			
0.06/0.08	2	3	74.79	0.15	19.28	489	0.30	330	6
			55.11	0.20	13.77	336			
			37.89	0.30	9.63	236			
		2	28.95	0.39	7.38	177			
			21.33	0.52	5.46	131			
			14.67	0.76	3.69	89			
			11.81	0.95	2.96	71			
	4	3	55.11	0.10	28.91	705	0.36	350	6.7
			37.89	0.15	19.27	470			
0.09/0.12	2	3	74.79	0.16	23.13	587	0.43	330	6
			55.11	0.22	16.52	403			
			37.89	0.32	11.56	283			
		2	28.95	0.41	8.86	212			
			21.33	0.56	6.55	157			
			14.67	0.82	4.43	106			
			11.81	1.01	3.55	85			
0.12/0.16	2	3	55.11	0.22	22.02	538	0.53	330	6
			37.89	0.32	15.42	376			
		2	28.95	0.42	11.82	284			
			21.33	0.56	8.74	208			
			14.67	0.82	5.90	142			
			11.81	1.02	4.72	112			

At the min. face width (L), the total weight of a drum motor grows approx.1.2 kg per 100 mm.

TM80A optional list-drum motor/idler pulley

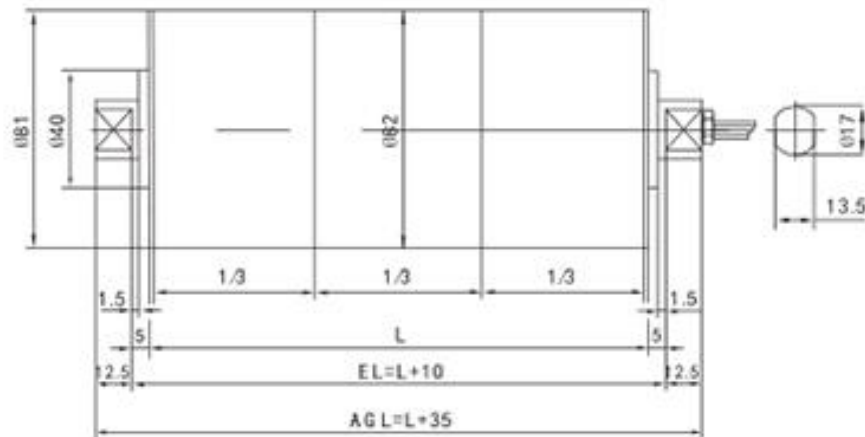
Specifications	Drum motor	Idler pulley
Shell		
Mild steel crowned	1	1
Mild steel cylindrical	2	2
Stainless steel(std. 304) crowned	2	2
Stainless steel(std. 304) cylindrical	2	2
End housing (front & rear)		
Cast aluminium	1	1
Shaft (front & rear)		
Mild steel	1	1
Stainless steel(std. 304)	2	2
Gear box & rear flange		
Cast aluminium	1	1
Electrical motors		
1 or 3-phase asynchronous motor	1	
Voltage 1*230V/50Hz or 3*400v/50Hz	1	
Most common global voltages at 50 or 60 Hz	1	
Thermal protection	1	
Lubricating oil		
No.150 gear oil	1	
Low temperature oil	2	
Food grade oil & grease (FDA and USDA)	2	
Electrical connection		
Straight cable connector	1	
Elbow stainless steel cable connector	2	
Oil resistant PVC cable	1	
LS halogen-free cable	2	
Other options		
Mechanical backstop	2	

Note:

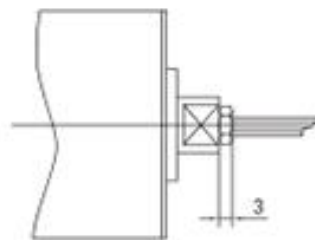
1-fitted as standard 2-optional extras

Standard Dimension

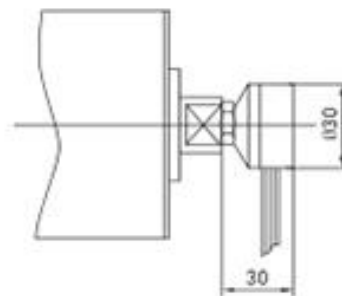
TM80A Drum motor



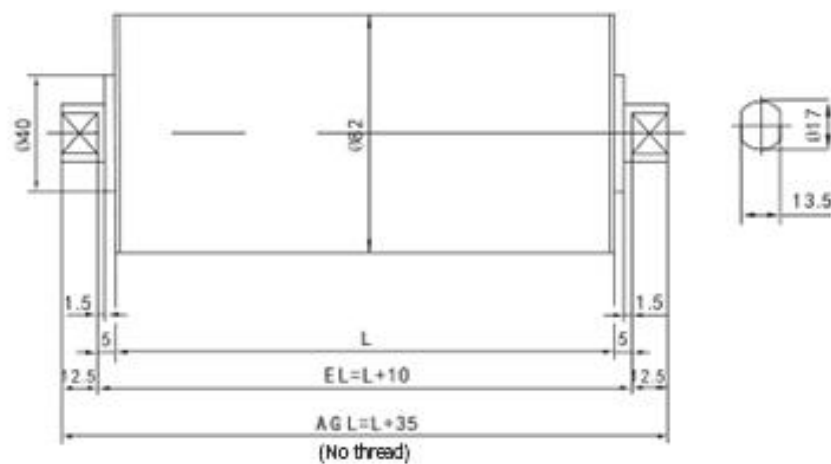
Straight cable connector

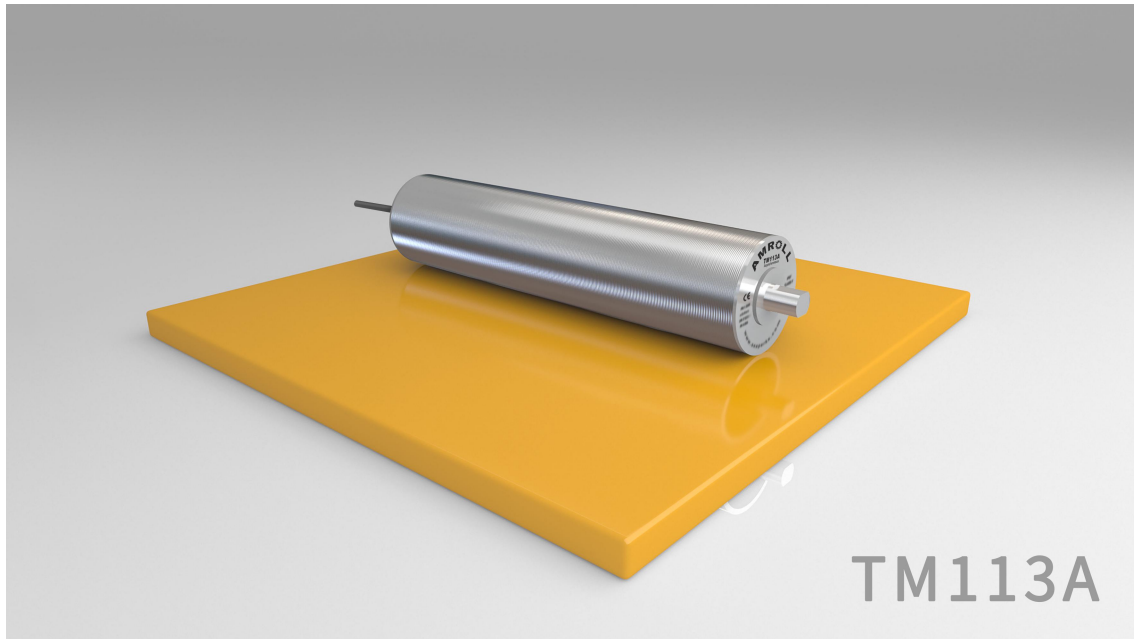


Elbow stainless steel cable connector



TM80A Idler roller





AMROLL DRUM MOTOR--TM113A

TM113A asynchronous oil immersed drum motor, can be used for transmission system space, low noise and high power have special requirements of the transmission equipment, this product in the limited transmission system space at the same time to meet the high power operation conditions and low noise demand, its ultra-high cost performance has won the unanimous favor of customers. This kind of drum motor is typically used in:

- X-ray machines (airport and station)
- Baggage check-in counters at airports
- Packaging machine
- Dynamic weighing equipment
- Belt conveyors

TM113A drum motors have the following characters:

Drum motor shell

- Mild steel crowned shell treated with anti-rust oil
- The standard shell is coronal and the surface is machined with non-slip threads

Gear transmission

- Gears machined and honed to AGMA/DIN 6 standards to ensure low noise
- Cast aluminium gearbox

Motor

- Common global voltages at 50 Hz or 60 Hz
- AC asynchronous motor
- Motor windings insulation class F
- All motors with thermal protection
- Oil cooled electrical motor
- Cable length minimum 1.2 meters outside shaft

Sealing system

- Double shaft sealing system
- Sealing system-degree of protection IP 66/67

Oil

- Pre lubricated with oil
- Oil change recommended every 50,000 hours of operation

Other items

- Electromagnetic brakes are optional, but the length of the shell will be lengthened accordingly
- Belt speed and face width (L) on request
- International authority CE and UL safety certification
- Non-standard drum motors are available on request.

AMROLL Drum Motor TM113A-1*230V/50Hz

Power [kW/hp]	No.of poles	Gear stages	Gear ratio	Nominal belt speed [m/s]	Full load torque [Nm]	Full load belt pull [N]	Full load current [A]	Min. face width (L) [mm]	Min.L Weight [kg]
0.12/0.16	4	3	60.66	0.15	49.04	868	0.84	350	15
			49.36	0.18	39.83	705			
			41.07	0.21	35.41	627			
			37.70	0.23	31.87	564			
			31.59	0.27	25.49	451			
			25.70	0.34	21.24	376			
			21.38	0.40	17.68	313			
			19.63	0.44	15.93	282			
		2	15.71	0.55	12.88	230			
			13.07	0.65	10.85	192			
			12.00	0.71	10.34	183			
	6	3	60.66	0.08	79.67	1410	1.00	350	15
			49.36	0.10	63.73	1128			
0.15/0.20	4	3	60.66	0.14	61.30	1085	1.24	350	15
			49.36	0.17	49.78	881			
			41.07	0.21	44.24	783			
			37.70	0.22	39.83	705			
			31.59	0.26	31.87	564			
			25.70	0.33	26.56	470			
			21.38	0.39	22.15	392			
			19.63	0.43	19.94	353			
		2	15.71	0.54	16.27	288			
			13.07	0.64	13.56	240			
			12.00	0.70	12.94	229			

Power [kW/hp]	No.of poles	Gear stages	Gear ratio	Nominal belt speed [m/s]	Full load torque [Nm]	Full load belt pull [N]	Full load current [A]	Min. face width (L) [mm]	Min.L Weight [kg]
0.18/0.24	4	3	60.66	0.14	73.56	1302	1.40	350	15
			49.36	0.17	59.78	1058			
			41.07	0.21	53.11	940			
			37.70	0.22	47.80	846			
			31.59	0.26	38.25	677			
			25.70	0.33	31.87	564			
			21.38	0.39	26.56	470			
			19.63	0.43	23.90	423			
		2	15.71	0.54	19.49	345			
			13.07	0.64	16.27	288			
			12.00	0.70	15.48	274			
0.23/0.31	4	3	49.36	0.17	76.33	1351	1.67	350	15
			41.07	0.20	67.86	1201			
			37.70	0.22	61.08	1081			
			31.59	0.26	48.87	865			
			25.70	0.32	40.74	721			
			21.38	0.38	33.96	601			
			19.63	0.42	30.57	541			
		2	15.71	0.53	24.97	442			
			13.07	0.63	20.79	368			
			12.00	0.68	19.78	350			

At the min. face width (L), the total weight of a drum motor grows approx.2kg per 100 mm.

AMROLL Drum Motor TM113A-3 *400V/50Hz

Power [kW/hp]	No.of poles	Gear stages	Gear ratio	Nominal belt speed [m/s]	Full load torque [Nm]	Full load belt pull [N]	Full load current [A]	Min. face width (L) [mm]	Min.L Weight [kg]
0.12/0.16	4	3	60.66	0.14	49.04	868	0.42	350	15
			49.36	0.17	39.83	705			
			41.07	0.20	35.41	627			
			37.70	0.22	31.87	564			
			31.59	0.27	25.49	451			
			25.70	0.33	21.24	376			
			21.38	0.39	17.68	313			
			19.63	0.43	15.93	282			
		2	15.71	0.54	12.88	230			
			13.07	0.64	10.85	192			
			12.00	0.70	10.34	183			
	6	3	60.66	0.09	79.67	1410	0.67	350	15
			49.36	0.11	63.73	1128			
0.15/0.20	4	3	60.66	0.14	61.30	1085	0.47	350	15
			49.36	0.17	49.78	881			
			41.07	0.20	44.24	783			
			37.70	0.22	39.83	705			
			31.59	0.26	31.87	564			
			25.70	0.32	26.56	470			
			21.38	0.39	22.15	392			
			19.63	0.42	19.94	353			
		2	15.71	0.53	16.27	288			
			13.07	0.64	13.56	240			
			12.00	0.69	12.94	229			
	6	3	49.36	0.11	79.67	1410	0.82	350	15

Power [kW/hp]	No.of poles	Gear stages	Gear ratio	Nominal belt speed [m/s]	Full load torque [Nm]	Full load belt pull [N]	Full load current [A]	Min. face width (L) [mm]	Min.L Weight [kg]
0.18/0.24	4	3	60.66	0.14	73.56	1302	0.57	350	15
			49.36	0.17	59.78	1058			
			41.07	0.20	53.11	940			
			37.70	0.22	47.80	846			
			31.59	0.26	38.25	677			
			25.70	0.32	31.87	564			
			21.38	0.39	26.56	470			
			19.63	0.42	23.90	423			
		2	15.71	0.53	19.49	345			
			13.07	0.64	16.27	288			
			12.00	0.69	15.48	274			
0.25/0.34	4	3	49.36	0.16	82.99	1469	0.84	350	15
			41.07	0.20	73.73	1305			
			37.70	0.22	66.39	1175			
			31.59	0.26	53.11	940			
			25.70	0.32	44.29	784			
			21.38	0.38	36.89	653			
			19.63	0.42	33.22	588			
		2	15.71	0.52	27.12	480			
			13.07	0.62	22.60	400			
			12.00	0.68	21.47	380			
0.37/0.50	4	3	31.59	0.26	78.60	1391	1.13	350	15
			25.70	0.32	65.50	1159			
			21.38	0.38	54.59	966			
			19.63	0.42	49.13	870			
		2	15.71	0.52	40.14	710			
			13.07	0.62	33.45	592			
			12.00	0.68	31.86	564			

Power [kW/hp]	No.of poles	Gear stages	Gear ratio	Nominal belt speed [m/s]	Full load torque [Nm]	Full load belt pull [N]	Full load current [A]	Min. face width (L) [mm]	Min.L Weight [kg]
0.55/0.75	2	3	41.07	0.40	81.14	1436	1.24	350	15
			38.50	0.44	73.03	1293			
			31.59	0.53	59.66	1056			
			25.70	0.65	49.72	880			
			21.38	0.79	40.57	718			
			19.63	0.85	36.51	646			
		2	15.71	1.10	29.83	528			
			13.07	1.30	24.86	440			
			12.00	1.40	23.68	419			

At the min. face width (L), the total weight of a drum motor grows approx.2kg per 100 mm.

TM113A optional list-drum motor/idler pulley

Specifications	Drum motor	Idler pulley
Shell		
Mild steel crowned	1	1
Mild steel cylindrical	2	2
End housing (front & rear)		
Cast aluminium	1	1
Shaft (front & rear)		
Mild steel	1	1
Stainless steel(std. 304)	2	2
Gear box & rear flange		
Cast aluminium	1	1
Rubber lagging		
Hot vulcanized black smooth rubber lagging	2	2
White and blue rubber lagging in food quality	2	2
Urethane lagging	2	2
Sprockets for modular belting	2	2
V-grooves in the rubber lagging	3	3
Electrical motors		
1 or 3-phase asynchronous motor	1	
Voltage 1*230V/50Hz or 3*400v/50Hz	1	
Dual voltage motor	2	
Most common global voltages at 50 or 60 Hz	1	
Thermal protection	1	
Lubricating oil		
No.150 gear oil	1	
Low temperature oil	2	
Food grade oil & grease (FDA and USDA)	2	
Electrical connection		
Straight cable connector	1	
Elbow cable connector	2	
Elbow stainless steel cable connector	3	
Aluminium terminal box	2	
Stainless steel terminal box	3	
Oil resistant PVC cable	1	

Specifications	Drum motor	Idler pulley
LS halogen-free cable	2	
Screened cable (for VFD and brakes)	3	

Other options

Mechanical backstop	2	
Electromagnetic brake	2	
Modified for vertical or angled mounting	3	
Operation with VFD	2	

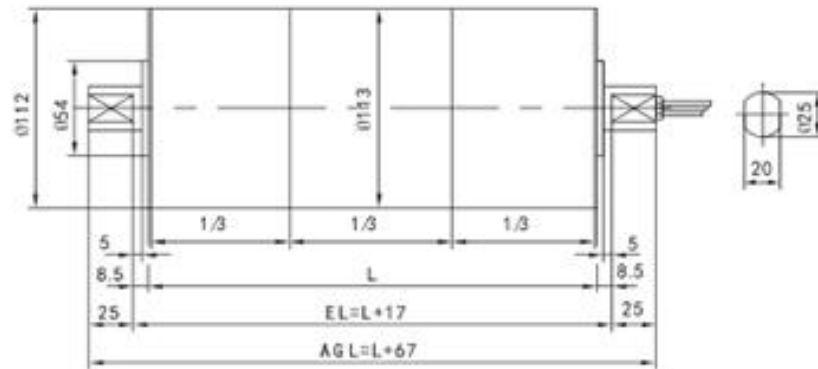
Note:

1-fitted as standard 2-optional extras

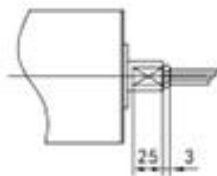
3-available as limited option but need to confirm with manufacturer

Standard Dimension

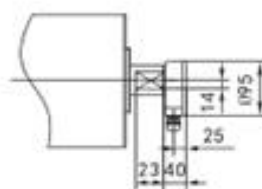
TM113A Drum motor



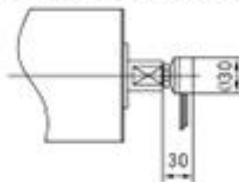
Straight cable connector



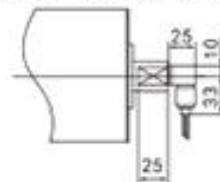
Terminal box connector



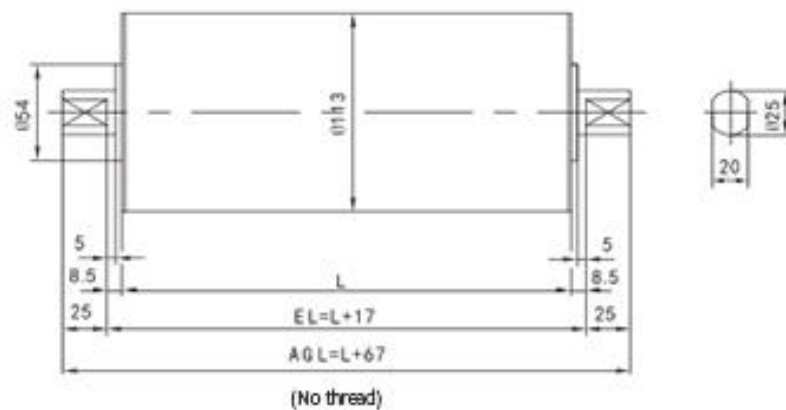
Elbow stainless steel cable connector

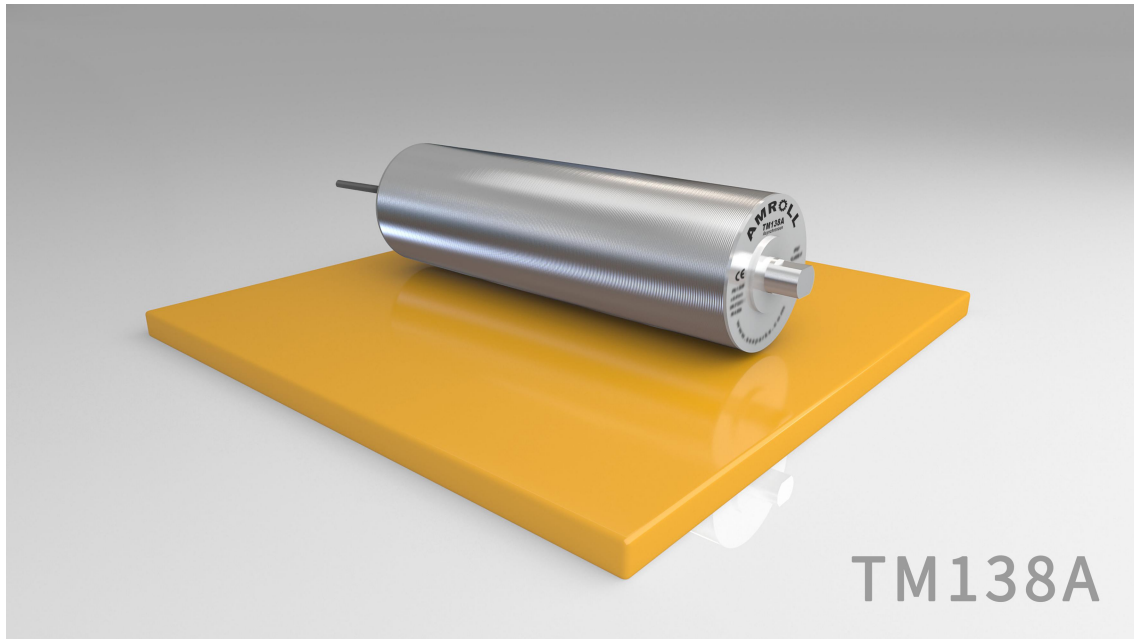


Elbow cable connector



TM113A Idler roller





AMROLL DRUM MOTOR--TM138A

TM138A asynchronous oil immersed drum motor, It is Mainly used for medium load belt conveying equipment, the effective power of the motor is up to 1.5kW. This kind of drum motor is typically used in:

- X-ray machines (airport and station)
- Baggage check-in counters at airports
- Packaging machine
- Dynamic weighing equipment
- Postal sorter
- Belt conveyors
- Belt conveyor for agricultural products

TM138A drum motors have the following characters:

Drum motor shell

- Mild steel crowned shell treated with anti-rust oil
- The standard shell is coronal and the surface is machined with non-slip threads

Gear transmission

- Gears machined and honed to AGMA/DIN 6 standards to ensure low noise
- Cast iron gearbox

Motor

- Common global voltages at 50 Hz or 60 Hz
- AC asynchronous motor
- Motor windings insulation class F
- All motors with thermal protection
- Oil cooled electrical motor
- Cable length minimum 1.2 meters outside shaft

Sealing system

- Double shaft sealing system
- Sealing system-degree of protection IP 66/67

Oil

- Pre lubricated with oil
- Oil change recommended every 50,000 hours of operation

Other items

- Electromagnetic brakes are optional, but the length of the shell will be lengthened accordingly
- Belt speed and face width (L) on request
- International authority CE and UL safety certification
- Non-standard drum motors are available on request.

AMROLL Drum Motor TM138A-3 *400V/50Hz

Power [kW/hp]	No.of poles	Gear stages	Gear ratio	Nominal belt speed [m/s]	Full load torque [Nm]	Full load belt pull [N]	Full load current [A]	Min. face width (L) [mm]	Min.L Weight [kg]
0.25/0.34	6	3	58.87	0.11	162.15	2350	0.99	340	15
			53.21	0.13	135.10	1958			
			48.36	0.14	115.85	1679			
0.37/0.50	2	3	16.87	1.19	21.87	317	0.92	340	14
			15.33	1.32	19.46	282			
	4	3	58.87	0.17	150.01	2174	1.05	340	14
			53.21	0.19	133.31	1932			
			48.36	0.21	119.99	1739			
			37.23	0.28	95.98	1391			
			29.33	0.35	75.00	1087			
			26.51	0.39	66.65	966			
			24.10	0.42	60.03	870			
			18.55	0.55	48.02	696			
		2	16.87	0.60	43.75	634			
			15.33	0.67	38.92	564			
			11.80	0.87	30.64	444			
	6	3	58.87	0.11	239.98	3478	1.50	390	17
			53.21	0.13	199.96	2898			
			48.36	0.14	171.40	2484			
0.55/0.75	2	3	58.87	0.34	111.51	1616	1.28	340	14
			53.21	0.38	99.08	1436			
			48.36	0.42	89.22	1293			
			37.23	0.54	71.35	1034			
			29.33	0.69	55.75	808			
			26.51	0.76	49.54	718			

Power [kW/hp]	No.of poles	Gear stages	Gear ratio	Nominal belt speed [m/s]	Full load torque [Nm]	Full load belt pull [N]	Full load current [A]	Min. face width (L) [mm]	Min.L Weight [kg]	
			24.10	0.84	44.57	646				
			18.55	1.10	35.67	517				
		2	16.87	1.20	32.45	471				
			15.33	1.30	28.91	419				
		4	11.80	1.70	22.77	330				
			3	58.87	0.17	222.94	3231	1.57	390	17
				53.21	0.19	198.17	2872			
				48.36	0.21	178.37	2585			
				37.23	0.27	142.69	2068			
				29.33	0.34	111.51	1616			
				26.51	0.38	99.08	1436			
				24.10	0.42	89.22	1293			
				18.55	0.54	71.35	1034			
			2	16.87	0.60	65.07	943			
				15.33	0.65	57.82	838			
				11.80	0.85	45.54	660			
0.75/1.02	2	3	58.87	0.34	152.01	2203	1.63	390	17	
			53.21	0.38	135.10	1958				
			48.36	0.41	121.65	1763				
			37.23	0.54	97.29	1410				
			29.33	0.68	76.04	1102				
			26.51	0.75	67.55	979				
			24.10	0.83	60.79	881				
			18.55	1.08	48.65	705				
		2	16.87	1.18	44.37	643				
			15.33	1.30	39.40	571				
			11.80	1.68	31.05	450				

Power [kW/hp]	No.of poles	Gear stages	Gear ratio	Nominal belt speed [m/s]	Full load torque [Nm]	Full load belt pull [N]	Full load current [A]	Min. face width (L) [mm]	Min.L Weight [kg]
	4	3	48.36	0.21	243.23	3525	2.00	390	18
			37.23	0.27	194.58	2820			
			29.33	0.34	152.01	2203			
			26.51	0.38	135.10	1958			
			24.10	0.42	121.65	1763			
			18.55	0.54	97.29	1410			
		2	16.87	0.60	88.73	1286			
			15.33	0.66	78.87	1143			
			11.80	0.85	62.10	900			
1.10/1.50	2	3	48.36	0.41	178.37	2585	2.62	390	18
			37.23	0.54	142.69	2068			
			29.33	0.68	111.50	1616			
			26.51	0.75	99.08	1436			
			24.10	0.83	89.22	1293			
			18.55	1.08	71.35	1034			
		2	16.87	1.18	63.69	923			
			15.33	1.30	57.82	838			
			11.80	1.69	45.54	660			

At the min. face width (L), the total weight of a drum motor grows approx.2.5kg per 100 mm.

TM138A optional list-drum motor/idler pulley

Specifications	Drum motor	Idler pulley
Shell		
Mild steel crowned	1	1
Mild steel cylindrical	2	2
Stainless steel(std. 304) crowned	2	2
Stainless steel(std. 304) cylindrical	2	2
End housing (front & rear)		
Cast aluminium	1	1
Shaft (front & rear)		
Mild steel	1	1
Stainless steel(std. 304)	2	2
Gear box & rear flange		
Cast iron	1	1
Rubber lagging		
Hot vulcanized black smooth rubber lagging	2	2
White and blue rubber lagging in food quality	2	2
Urethane lagging	2	2
Sprockets for modular belting	2	2
V-grooves in the rubber lagging	3	3
Electrical motors		
1 or 3-phase asynchronous motor	1	
Voltage 1*230V/50Hz or 3*400v/50Hz	1	
Dual voltage motor	2	
Most common global voltages at 50 or 60 Hz	1	
Thermal protection	1	
Lubricating oil		
No.150 gear oil	1	
Low temperature oil	2	
Food grade oil & grease (FDA and USDA)	2	
Electrical connection		
Straight cable connector	1	
Elbow cable connector	2	
Elbow stainless steel cable connector	3	

Specifications	Drum motor	Idler pulley
Aluminium terminal box	2	
Stainless steel terminal box	3	
Oil resistant PVC cable	1	
LS halogen-free cable	2	
Screened cable (for VFD and brakes)	3	

Other options

Mechanical backstop	2	
Electromagnetic brake	2	
Modified for vertical or angled mounting	3	
Operation with VFD	2	

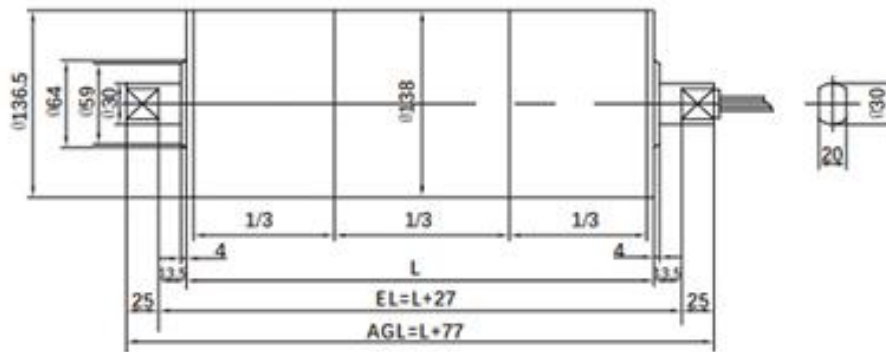
Note:

1-fitted as standard 2-optional extras

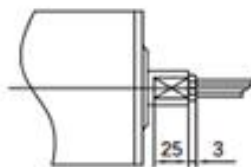
3-available as limited option but need to confirm with manufacturer

Standard Dimension

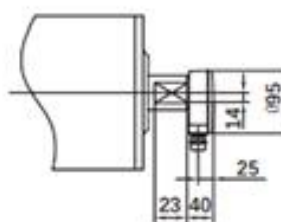
TM138A Drum motor



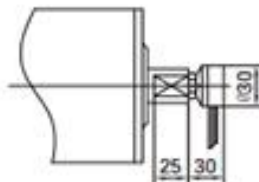
Straight cable connector



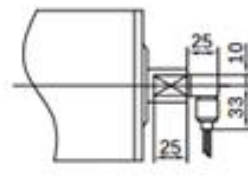
Terminal box connector



Elbow stainless steel cable connector



Elbow cable connector



TM138A Idler roller

