

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				
	4	3	55.11	0.10	28.91	705	0.36	350	6.7	
			37.89	0.15	19.27	470				
			74.79	0.16	23.13	587				
			55.11	0.22	16.52	403				
0.09/0.12	2	3	37.89	0.32	11.56	283	0.43	330	6	
			2	28.95	0.41	8.86				212
				21.33	0.56	6.55				157
		14.67		0.82	4.43	106				
		2	11.81	1.01	3.55	85				
			3	55.11	0.22	22.02				538
37.89	0.32			15.42	376					
2	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

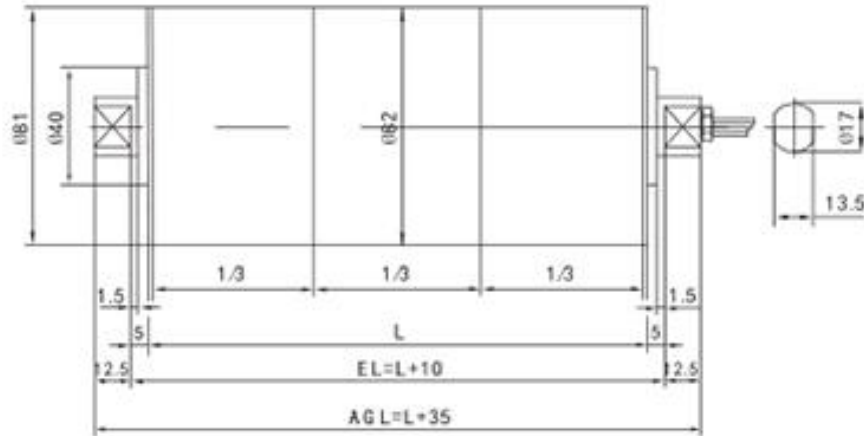
Specifications	Drum motor	Idler pulley
Shell		
Mild steel crowned	1	1
Mild steel cylindrical	2	2
Stainless steel(std. 304) crowned	2	2
Stainless steel(std. 304) cylindrical	2	2
End housing (front & rear)		
Cast aluminium	1	1
Shaft (front & rear)		
Mild steel	1	1
Stainless steel(std. 304)	2	2
Gear box & 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

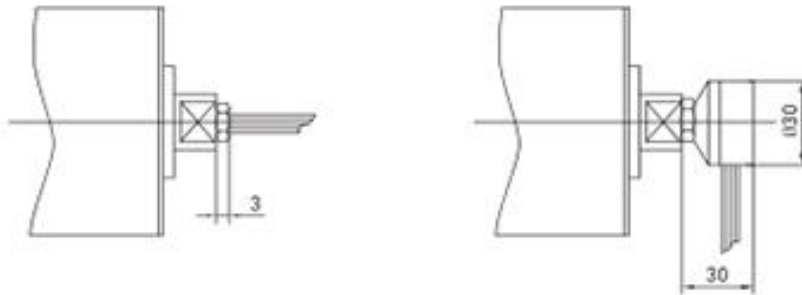
Standard Dimension

TM80A Drum motor

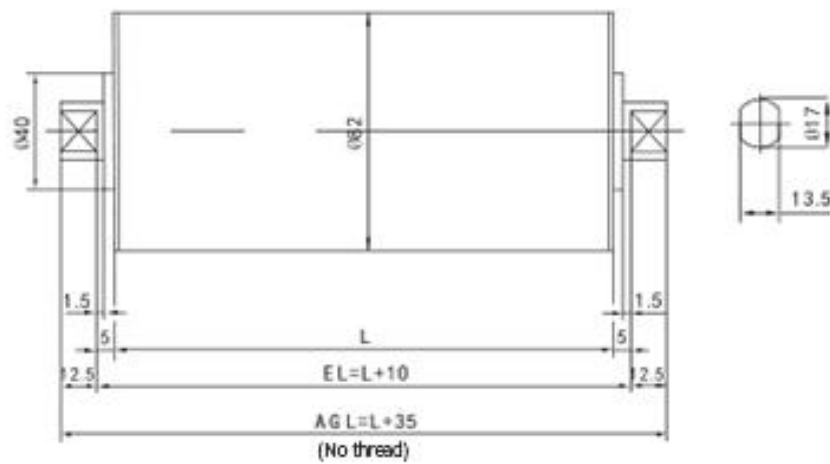


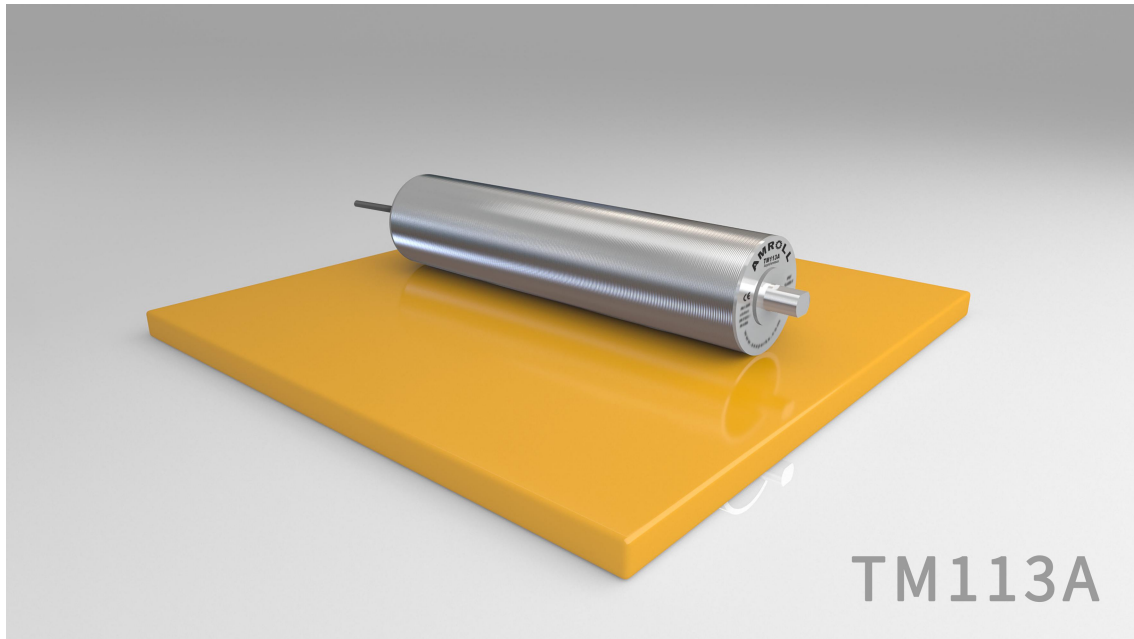
Straight cable connector

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			
			15.71	0.55	12.88	230			
	2	3	13.07	0.65	10.85	192			
			12.00	0.71	10.34	183			
			60.66	0.08	79.67	1410			
	0.15/0.20	4	3	49.36	0.10	63.73	1128	1.24	350
60.66				0.14	61.30	1085			
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			
15.71				0.54	16.27	288			
2		3	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
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	

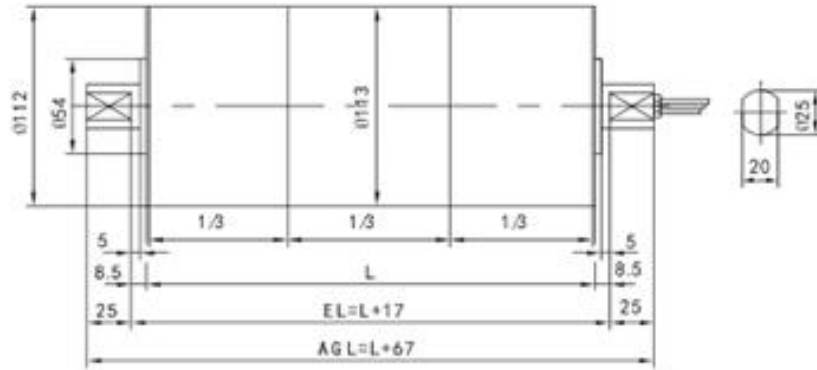
Note:

1-fitted as standard 2-optional extras

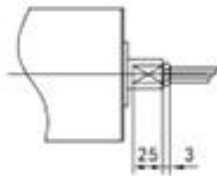
3-available as limited option but need to confirm with manufacturer

Standard Dimension

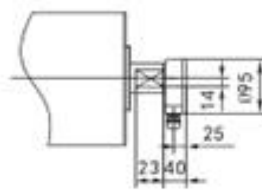
TM113A Drum motor



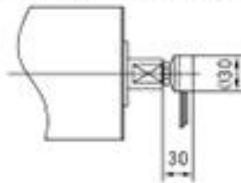
Straight cable connector



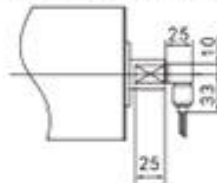
Terminal box connector



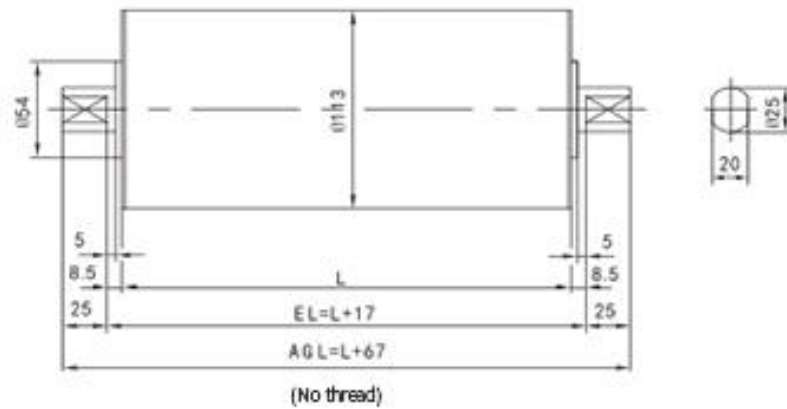
Elbow stainless steel cable connector

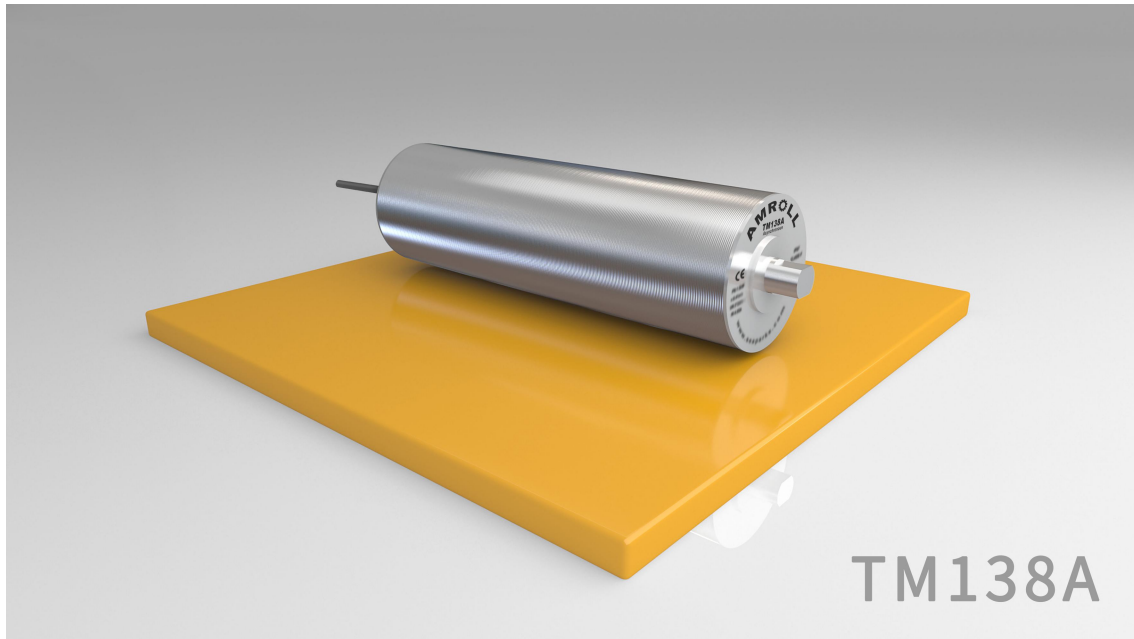


Elbow cable connector



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	315	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	305	14	
			15.33	1.32	19.46	282				
	4	3	58.87	0.17	150.01	2174	1.05	305	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				
	6	3	18.55	0.55	48.02	696	1.50	350	17	
			16.87	0.60	43.75	634				
			15.33	0.67	38.92	564				
	0.55/0.75	2	3	11.80	0.87	30.64	444	1.28	305	14
				58.87	0.11	239.98	3478			
				53.21	0.13	199.96	2898			
48.36				0.14	171.40	2484				
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					
			11.80	1.70	22.77	330					
	4	3	58.87	0.17	222.94	3231	1.57	350	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					
			2	24.10	0.42	89.22				1293	
				18.55	0.54	71.35				1034	
				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	350	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					
				2	24.10	0.83				60.79	881
					18.55	1.08				48.65	705
					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	350	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			
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

