



MAC141-F1HAAA

Int.Servo.AC 134WS1 0.48Nm IP42 Abs



General information

Description

Int.Servo.AC 134WS1 0.48Nm IP42 Abs , WxHxL: 59x59x172 mm. 2700 RPM @ 48VDC - 1350 RPM @ 24VDC. 0.48 Nm/1.59 Nm, IP42, Incremental magnetic 8192 CPR + Absolute multiturn encoder 19bit, Next Gen MiniMAC: built-in ePLC™ and advanced Ethernet support when using Ex4 and Ex41 modules, 12-48 V nom. Peak 58 V, Ethernet Ready, Color: Black, Ø6.35x20.5 mm D-shape

Manufacture	JVL	Motor type	Integr. AC-servo - Rotating
Motor power [W]	134	Power Peak [W]	402
Duty Cycle	S1	Max Duty Cycle [%]	100
Continuous Torque	0.48	Peak torque [Nm]	1.59
Main supply [V]	12-48	Voltage type - Main	DC
Speed [Rpm]	2700	Connectivity: Without module	RS232
Encoder type	Abs. Multiturn Encoder	Encoder [Counts/rev]	8192
Fan mounted	No	Brake	External brake option
Integrated gear	No	Gear ratio	-
Integrated PLC	Yes	STO connector	No
Approval TÜV - STO	No	Approval - UL	No
PLC no. of AIN	2	PLC no. of DI	-
PLC no. of DIO	-	PLC no. of DO	2
Multifunction IOs	2		
Flange size	59x59	Protection house	IP42
Shaft size - Front [mm]	6.35mm	Protection shaft	IP42
Color	Black	Paint type	



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General information

Ambient Temperature range [°C]:

Maximum Installation Altitude [m]:

Max. Amb. Temperature range - Torque derating:

- Power Derating every 1000m over 1000m [%]:

Weight net [kg] 1.32

Country Of Origin DK

Tariff no US

Weight gross [kg] 1.43

Tariff no 85012000



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Mechanical information

Motor type	Integr. AC-servo - Rotating	Color	Black
Rotor inertia [kgcm²]	0.227	Max inertia factor	20
Encoder type	Abs. Multiturn Encoder	Encoder [Counts/rev]	8192
Precision Motor - Absolute [Deg -/+]	0.065	Precision Motor - Max Load [Deg -/+]	
Precision Motor - Repeatability [Deg -/+]	0.033		
Brake	External brake option	Brake - Go ON time [ms]	-
Brake Holding torque [Nm]	-	Brake - Go OFF time [ms]	-
Radial load [N]	75	Radial load distance [mm]	20
Axial load [N]	15		
Axial play [mm]	+/-0.05	Axial play force [N]	xxx
Front bearing type	608ZZ	Rear bearing type	607ZZ
Integrated gear	No	Gear ratio	-
Gear efficiency [%]	< -	Gear backlash [ArcMin]	-
Motor length [mm]	172.0	Motor width [mm]	59.0
Motor height [mm]	59.0	Protection house	IP42
Customer Sealing	Standard		
Flange size	59x59	Mounting holes front [mm]	5.2
Motor diameter center front [mm]	38.1	Bolt circle diameter front [mm]	66.6
Flange material	Aluminium painted Black	Flange Thickness [mm]	
Shaft Key included	-	Shaft Key Dimension	-
Shaft size - Front [mm]	6.35mm	Protection shaft	IP42
Shaft length Front [mm]	20.5	Shaft material	Steel
Approval - ROHS-3	Yes	Approval - UL	No
Approval TÜV - STO	No	Approval - ATEX	No
CAD 2D [PDF]	Download	CAD 3D [STEP]	Download
CAD 2D [DWG]	No	CAD 3D [DWG]	No

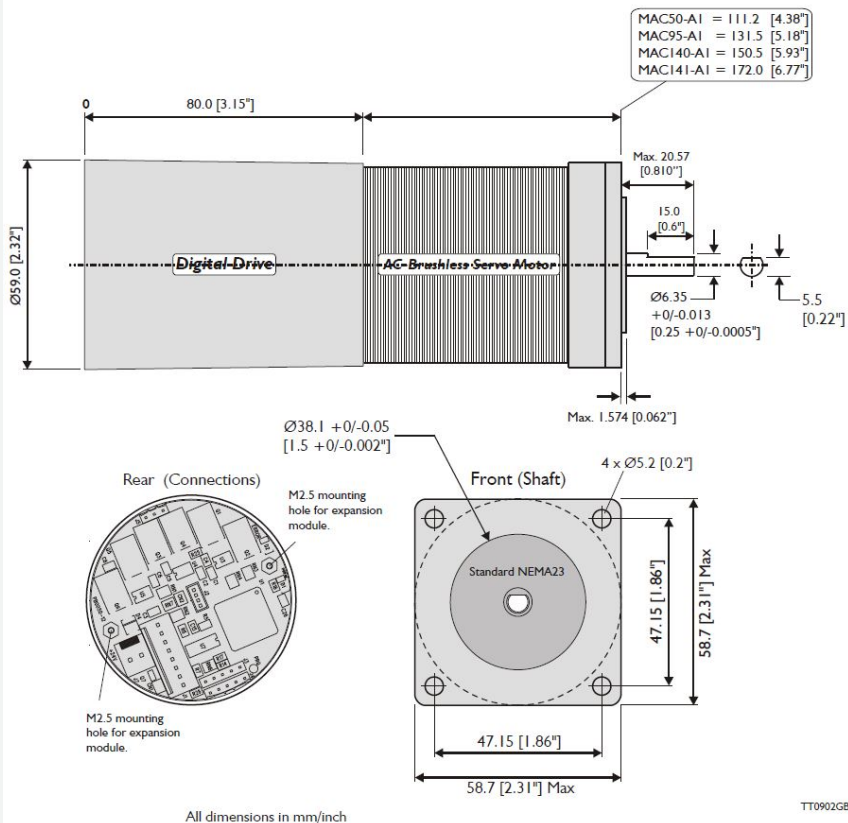


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Mechanical information

CAD 3D [EASM]	No	CAD 3D [IGES]	Download
Datasheet - pdf	Yes	User Manual	Download
REACH SVHC document	Download	Low voltage Directive	EU Declarations of Conformity
No Dual Use	Read more here		



Shaft Seal

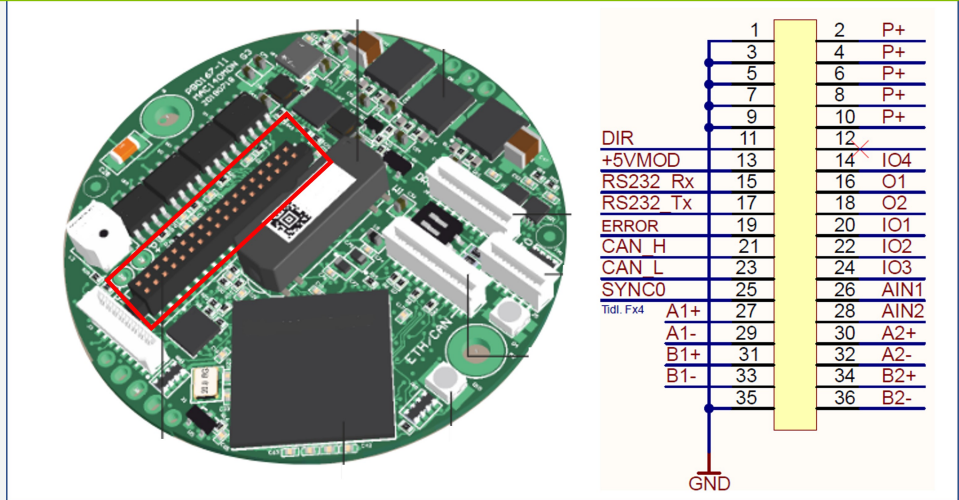


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Connector information

Motor connectors



Connector Power	Molex 2-pin Power	Connector Power Supplier
Connector Power direction	Straight	
PDO Connector Type	No	Connector PDO Supplier
Connector STO	No	
Expansion connector	Generation 2	

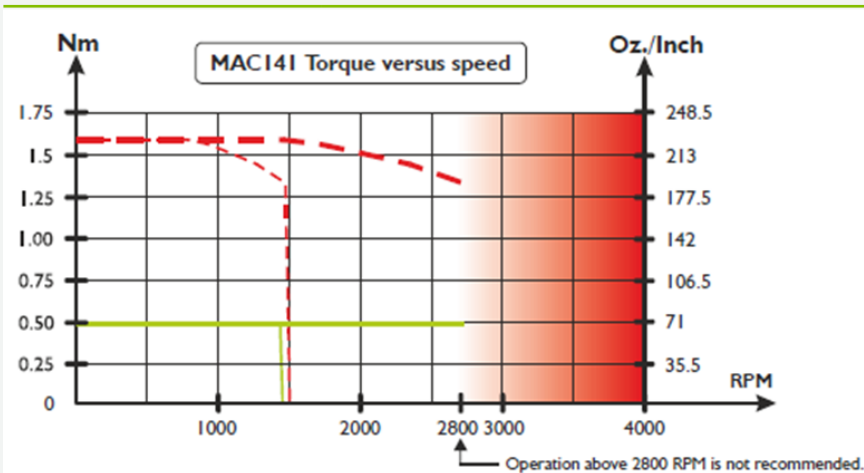


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Torque, force and Power information

RMS torque [Nm]	0.48	Peak torque [Nm]	1.59
Supply Volt 1 [V]	12	Velocity max 1 [Rpm]	700
Supply Volt 2 [V]	24	Velocity max 2 [Rpm]	1400
Supply Volt 3 [V]	48	Velocity max 3 [Rpm]	2800
Supply Volt 4 [V]		Velocity max 4 [Rpm]	



Conditions:
Supply voltage = 24 or 48VDC
Ambient temperature = 20°C
Torque setting = 100%
Load setting = 1.0

- = Peak Torque @48V
- = Average Torque @48V
- = Peak Torque @24V
- = Average Torque @24V



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Electrical information

Main supply [V]	12-48	Main supply Min-Max [V]	10-58
Voltage type - Main	DC	Main Voltage possible	
Input Voltage Frequency			
Inrush current -Main max [A]		Inrush special	No
Recommended fuse	T10A	P- isolated from Earth (Low Voltage ground (P-) isolated from housing)	No
Bus Supply Voltage Min [V]		Busvoltage Overvoltage limit [VDC]	60V
Power Dump Voltage Active Level [V]		Internal Power-Dump Resistance [Ohm]	
Internal Power-Dump Power [W]		PD connection - Int/Ext	None
External Power-Dump Resistance Minimum value [Ohm]		External Power-Dump Max Current [A]	
Control voltage (CVI/O+) [VDC]	12-28	Control Voltage (CVI) Min-Max [VDC]	12-30
PLC no. of DI	-	PLC no. of DO	2
PLC no. of DIO	-	PLC no. of AIN	2
Analogue voltage	-/+10VDC, -/+11bit	Multifunction IOs	2
Multifunction Nom. level [V]		Multifunction Maximum level [V]	
Multifunction Low trigger level [V]		Multifunction High trigger level [V]	
Resistance [Ohm]		Induction [mH]	
MTBF 100% [Year]	-	MTBF 30% [Year]	-
Temperature Error [°C]			



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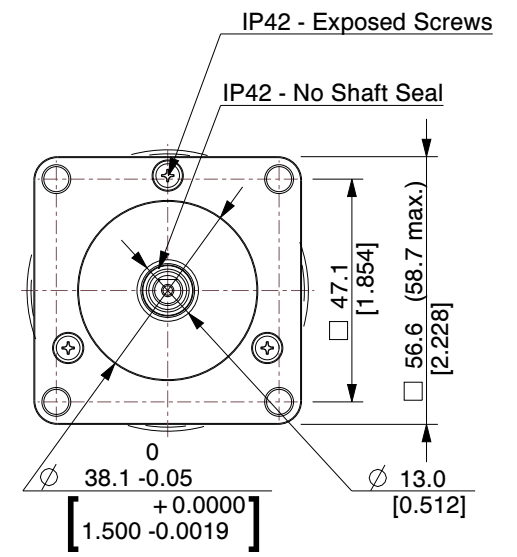
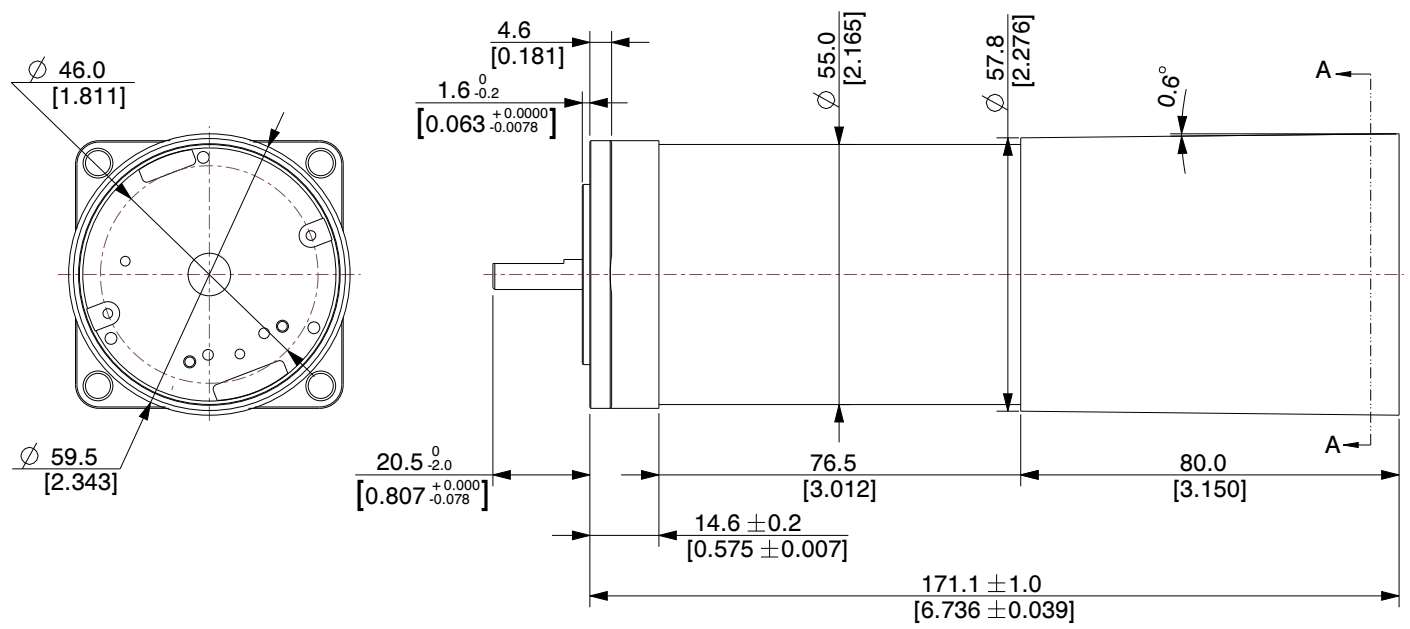
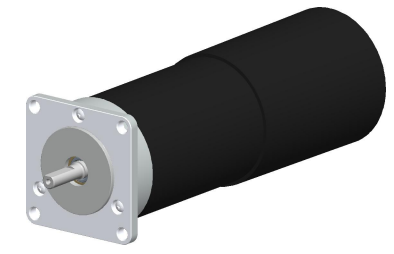
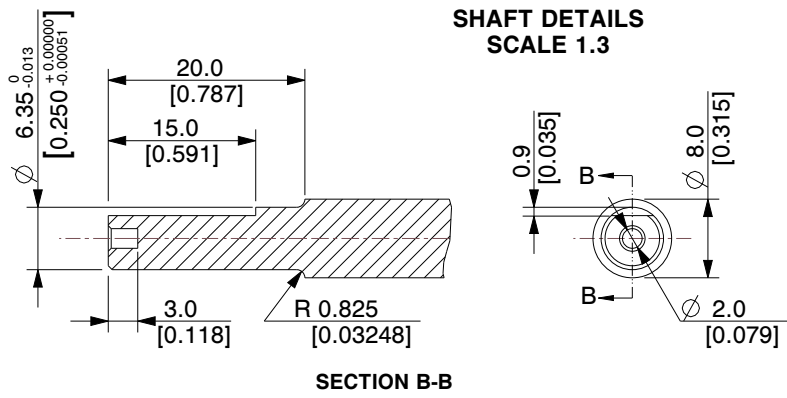
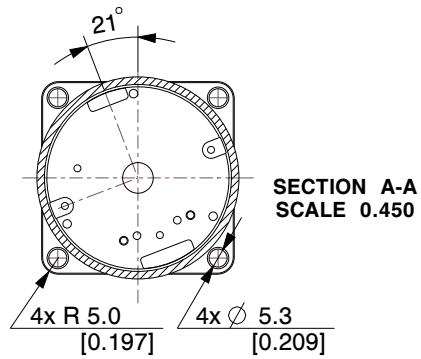
Communication information

Software MacTalk





**Connectivity:
Without module** RS232

e-PLC Files

**Connectivity:
Gen. 2 modules** Yes



NOTES:
1. Encoder Type: Incremental magnetic 8192 CPR + Absolute multturn encoder 19 bit

JVL A/S Bregnerødvej 127 DK-3460 Birkerød Denmark		 		
PART NUMBER: <p style="text-align: center;">MAC141-F1HAAA</p>				
PART DESCRIPTION: <p style="text-align: center;">Integrated Stepper Motor</p>				
		A4	SCALE	NTS
			UNIT	MM [Inch]
<small>Unless specifically stated otherwise, this drawing is the property of JVL A/S and no feature embodied herein may be disclosed except as previously authorized</small>				