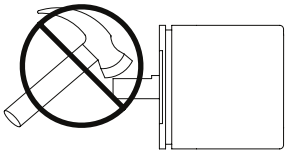
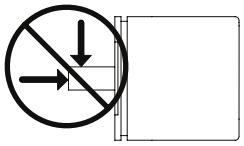
TECHNICAL BULLETIN

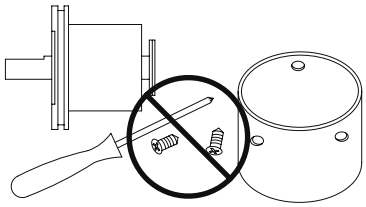
TB-539: A58HB and A58SB Installation Guide



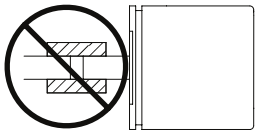
Do not shock or strike.



Do not subject shaft to excessive axial or radial shaft stresses.

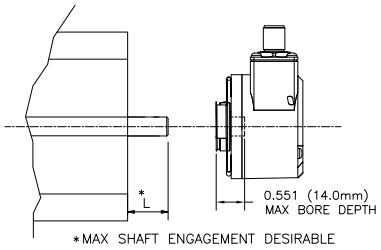


Do not disassemble.

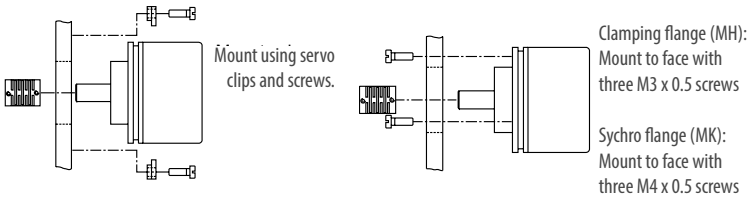


Do not use a rigid coupling.

Blind Hollow Bore Mounting (A58HB)



Solid Shaft Mounting (A58SB)



The maximum recommended motor axial endplay is ±0.030". Maximum motor TIR is 0.007".

Step 1

Slide the encoder over the motor shaft. If needed, clean the motor shaft of any burrs using a fine crocus cloth.

DO NOT USE UNDUE FORCE.

Position the encoder so that the flex mount arms just touch the mounting surface. Install screw(s) through the holes in the flex mount and tighten onto the motor securely. (Typical torque range of 115 to 160 oz-in). For additional security, add a drop of Loctite or similar threadlocker to the threads of the screws.

Step 2

Using a 2.5 mm hex wrench, tighten the setscrew in the encoder's clamping collar. (Typical torque range of 50 to 80 oz-in). For additional security, add a drop of Loctite or similar thread locker to the threads of the setscrew. Do not allow Loctite to run into the bore or onto the encoder bearings.

Step 3 (2 pt. flex mount option on Model A58HB only)

For encoders with the 2 pt. flex mount option, the home position can be adjusted by loosening the mounting screws and rotating the encoder to the desired position, then retightening the screws.

ALIGNMENT NOTE: When turning the motor shaft by hand, the rocking movement of the encoder should be minimal. If not, loosen the encoder clamping collar setscrew and rotate the encoder bore relative to the motor shaft to reposition the encoder until this movement is minimized.

When tightening the screw(s) or setscrews, avoid holding the motor shaft with anything that may scar or burr the shaft.

Removal

Loosen (do not remove) the socket head screw in the clamping collar. Then remove the flex mount screws and gently slide the encoder off the motor shaft.

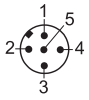
Wiring Table

For EPC-supplied mating cables, refer to wiring table provided with cable.

For CE (Conformity European) requirements, use M12 cordset with shield connected to M12 coupling nut. Trim back and insulate unused wires.

CANopen Wiring

Function	5-pin M12
+VDC	2
Ground (GND)	3
CAN_{High}	4
CAN_{Low}	5
CAN_{GND} / shield	1



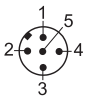
IO-Link Wiring

Function	5-pin M12
L+	1
L -	3
C/Q	4
I	2
N/C	5



J1939 Wiring

Function	5-pin M12
+VDC	2
Ground (GND)	3
CAN_{High}	4
CAN_{Low}	5
CAN_{GND} / shield	1



SSI Wiring

	8-pin M12
Ground	1
+VDC	2
SSI CLK+	3
SSI CLK-	4
SSI DATA+	5
SSI DATA-	6
PRESET	7
DIR	8
Shield	housing

