

Accessories

Mating Connectors



MS3106 MATING CONNECTORS (Used on Incremental Encoders)

These have sealed conductors and are screw-on, military-style connectors with solder cups on the back of the pins (can accept up to 16 gage wire) and a built-in clamping strain relief. The environmentally sealed backshell is waterproof.

Shell Size	Used with	L Max	#of Pins	BEI Part No.
MS14	EM14 or SM14	2.125"	6	MS3106F14S-6S
MS16	EM16 or SM16	2.187"	7	MS3106F16S-1S
MS18	EM18 or SM18	2.656"	10	MS3106F18-1S
MS20	EM20 or SM20	2.656"	17	MS3106F20-29S

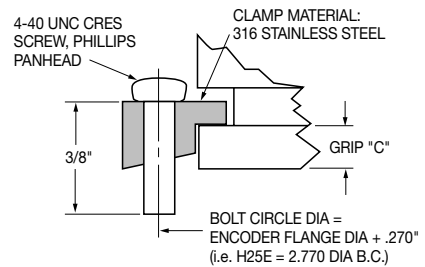
MS3116 MATING CONNECTOR (Used on 12-Bit Absolute Encoders)

These have sealed conductors and use a bayonet (push and turn) shell. Pins have solder cups on the back for 20 gage wire and a built-in clamping strain relief. The environmentally sealed backshell is waterproof.

Shell Size	Used with	L Max	#of Pins	BEI Part No.
MS14	SM14/19 or EM14/19	1.800	19	MS3116F14-19S

Synchro-Clamps

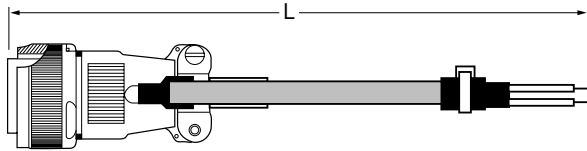
Synchro clamps are used with servo-style bearing housings ("E" style housings on the encoder model number designation) to hold the face of the encoder against a mounting plate. Clamps are placed at a radius slightly larger than the encoder mounting flange, (see illustration below) and allow for rotational alignment of the encoder during installation for machine set-up.



Grip "C"	Encoder Type	BEI Part No. (3-Piece Kit)
.093	H25E or H20E	924-31165-001
.125	H25G	924-31165-002

Cable Assemblies for Incremental Encoders

Cable assemblies for incremental encoders are built using high quality custom BEI Standard Cable (P/N 37048-003) consisting of four, low capacitance shielded twisted pairs with an overall shield, extra large conductors for power and signal ground all within an abrasion-resistant PVC jacket. Size 16 and 18 cable assemblies utilize a waterproof and UV resistant over-molded backshell.



Mating Connector Type: MS3106F14S-6S

Cable Length	BEI Part No.
10 feet	31186-1410
20 feet	31186-1420
30 feet	31186-1430

Mating Connector Type: MS3106F16S-1S

Cable Length	BEI Part No.
10 feet	31186-1610
20 feet	31186-1620
30 feet	31186-1630

Mating Connector Type: MS3106F18-1S

Cable Length	BEI Part No.
10 feet	31186-1810
20 feet	31186-1820
30 feet	31186-1830

Cable for Incremental Encoders

Both 100' and 500' reels of encoder cable are available for your own custom wiring requirements. This high quality custom BEI Standard Cable consisting of four, low capacitance shielded twisted pairs with an overall shield, extra large conductors for power and signal ground all within an abrasion-resistant PVC jacket



Cable Length	BEI Part No.
100 feet	37048-003-100
500 feet	37048-003-500

Cable Assemblies for 8-Bit Absolute Encoders

Cable assemblies for 8-Bit absolute encoders are built using the high quality custom BEI Standard Cable (P/N 37059) consisting of 12, 22 gage conductors, an overall shield and an abrasion-resistant PVC jacket.

Mating connector type: MS3106F20-29S

Cable Length	BEI Part No.
10 feet	31204-2010
20 feet	31204-2020
30 feet	31204-2030

Cable Assemblies for 12-Bit Absolute Encoders

Cable assemblies for absolute encoders are built using the high quality custom BEI Standard Cable (P/N 37063) consisting of 18, 26 gage conductors and uses larger, 22 gage conductors for power and ground. This cable has an overall shield and uses an abrasion-resistant PVC jacket.

Mating connector type: MS3116F14-19S

Cable Length	BEI Part No.
10 feet	31219-1410
20 feet	31219-1420
30 feet	31219-1430

Accessories

Couplings

Couplings are high performance, helical-cut beam style providing the best combination of torsional rigidity and compensation for shaft misalignment. They are made of aluminum and are iridite coated to resist chemical attack.

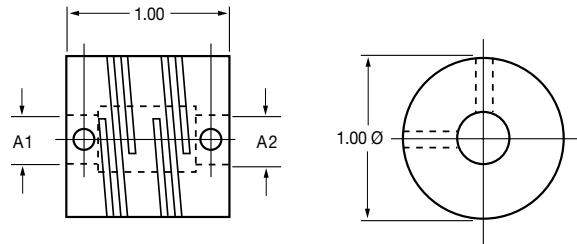


BEI Part No.	Bore Dia $+.002/-0.000$		Torsional Flexibility	Torques (Lbs-inch)		
	A1 Dia	A2 Dia		Non-Reversing	Shock or Reversing	Momentary
39074-8-8	.250	.250	.165 min/in-oz	19	9.3	37
39074-12-8	.375	.250	.315 min/in-oz	15	7.5	30
39074-12-12	.375	.375	.315 min/in-oz	15	7.5	30

1. Bore is relieved to allow shafts to nearly butt
2. Setscrews: Cup point, hex socket, #6-32. Two at each end, 90° apart.
3. Permitted axial motion from free length: $\pm .020$
4. Permissible shaft alignment: Angular up to 5°; Parallel up to .010"

Installation note:

To avoid coupling failure, be sure the shafts fit freely in the coupling bores and that the coupling is not compressed or subjected to greater deflections than specified above.



Measuring Wheel

This measuring wheel uses an 80 durometer urethane rolling surface vulcanized to an aluminum hub and then machined to a circumference of 12 inches. It is designed to be used with shafts of a nominal 3/8" diameter and should be installed with the hub side facing away from the encoder housing. Maximum recommended load in service is 15 pounds to avoid overloading the encoder bearings.

Order BEI P/N 31196-001



Protective Housing for Hollow-Shaft Encoders

This cage is designed to protect hollow-shaft style encoders from mechanical damage during handling and installation. It is used with either the HS25 or the HS35 encoder and has a side cutout to allow for tether arm placement. This cover has been designed to accept a NEMA56 standard motor face mount and can be used with either through-shaft or blind shaft styles of encoders. Protective cover kits come with installation hardware.

Order BEI P/N 26068-001

