

Electronic Plug

Model Number: YP15-PLUG-02[B,A,C]

Features

- · Clutch mechanism
- < 50ms operation
- 196 authorization

General Description

Stainless steel electronic plug with clutch mechanism engaging in bi-directional 120° (B120), bi-directional 360° (B360), anti-clockwise (A) or clockwise (C) directions. Features: sealed keyway, contactless connection, hardened drill & punch guard, external O-ring sealing, key retention.

Warranty: 1 Year



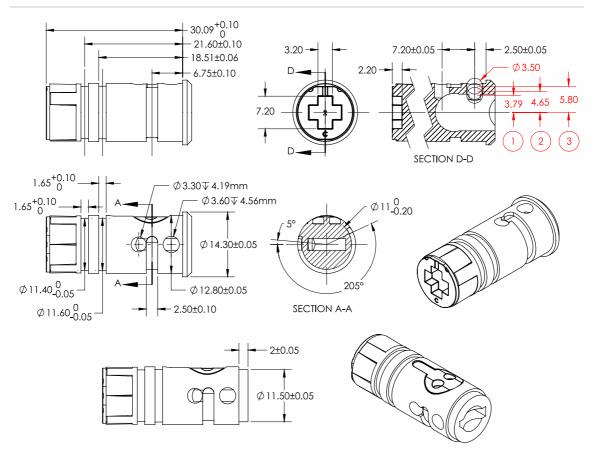


Specifications

Ratings		
Ingress protection	IEC60529	IP55
EMC/EMI	IEC61000(2,3,4,8,9)	ESD 15kV
Corrosion resistance	IEC60068-2-11	High corrosion resistance
Cold	IEC60068-2-1	-40°C
Dry Heat	IEC60068-2-2	+55°C
Damp Heat Cycle	IEC60068-2-30	+25°C - +55°C, RH >90%
Security		
Authorizations	196	
Key encryption strength	64	bits
Supported protocols	SG0	
Mechanical		
Dimensions	12.8 x 32.1	mm
Breaking torque	4	Nm
Safe sustained torque	2.5	Nm
Time from insertion to engage	50	ms
Engaging angle	32	°
Retention hole	3.3	mm
Electrical		
Drive voltage	3	V
Drive frequency	500	KHz
Power Consumption		
Actuation	6.7	mA
Operating Life		
Actuation probability	>99.0	%



Product Details



Notes

- 1. The plug may be retained using the 0.6 x 1.65mm annular groove.
- 2. The plug and lockset may be protected from the environment and dirt ingress utilising a 1x11mm O-ring in the 0.7 x 1.65mm annular groove.
- 3. A lockset mechanism may be driven by coupling to the 7.2 x 3.2 x 2.2mm cruciform cavity in the plug tailpiece.
- 4. A 3.5mm ball-bearing can be utilised for key retention. The centre of the 3.5mm bearing will be located as per highlighted dimensions 1, 2 and 3 above for conditions: key not inserted, key inserted and max travel respectively.
- 5. The tailpiece has a "home" mark that lines up with a corresponding mark on the plug body to indicate the plug home position.
- 6. The bi-direction120° clutch model (B120) will rotate freely in both directions when not engaged, and engage at ±32° from the home position upon insertion of an unauthorized key. This behaviour is symmetric at each 120° rotation of the tailpiece. The bi-direction 360° (B360) model behaves identically to the bi-directional 120° model but its behaviour repeating every 360° rotation of the tailpiece.
- 7. The clockwise (C) model will always engage in the anti-clockwise direction at the home



- position, and engage upon insertion of an authorized key inserted and rotated clockwise by 32°. This behaviour repeats only every 360°.
- 8. The anti-clockwise (A) model behaves identically to the clockwise model but in the reverse direction.
- 9. The plug does not require maintenance or lubrication for an operating life in excess of 100k cycles and no lubricants should be applied.
- 10. The plug should be protected from viscous or tacky lubricants that may seep into the clutch cavity and gum up the mechanism. The effect will be to prevent the plug from engaging.
- 11. The plug will fail to engage if turned sooner than 50ms from full key insertion.
- 12. Wiping the plug guarantees any previously issued authorizations will no longer work.