

General Specifications

Mechanical

Ball Material:	Phenolic Resin
Ball Colour:	Black
Ball Size:	38mm (1.5")
Resolution:	170 pulses/ball revolution
Tracking Force:	<20gms (nominal)
Ball Revolutions:	>6 million
Mounting:	Fixing holes to allow mounting at any angle to horizontal

Dimensions (mm):	Reference Dimensions below
Weight (g):	0.25Kg uncased
Keys:	Sealed mechanical
Key Travel:	0.4mm
Life Expectancy:	>1 million switch cycles
Operating Force:	160gf ± 50gf

Environmental

Operating Temp.:	-20°C to +60°C
Storage Temp.:	-40°C to +85°C
Relative Humidity:	95% non-condensing
Seal:	IP65
Vibration:	5G, 5-2KHz any plane

Electrical and Electronic

Supply Voltage:	5V DC ± 5%
Supply Current:	<12mA (PS2 / RS232) <20mA (USB / PS2)
Interface:	USB on 2 metre cable

General

MTBF:	60,000 hours
MTTR:	20 minutes
Warranty:	3 year standard return to base Extendable to 5 years if required

Options and Customisation

Options

Interface:	USB / PS2 / AT / RS232 / RS422 / RS485 / XT/ TTL / DEC / SUN
Mechanics:	Stainless steel bezel

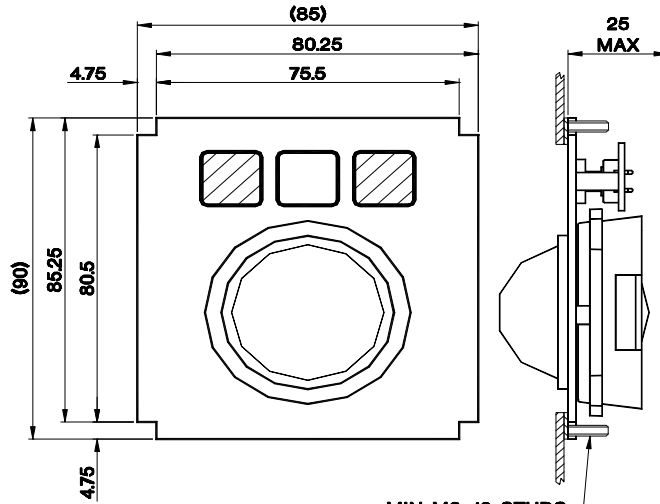
Customisation

Colour:	Full customisation of bezel colour
Trackerball:	Various colours and stainless steel
Coding:	Key operations can be customised to fit software needs
Dimensions:	Physical dimensions can be customised



Dimensions

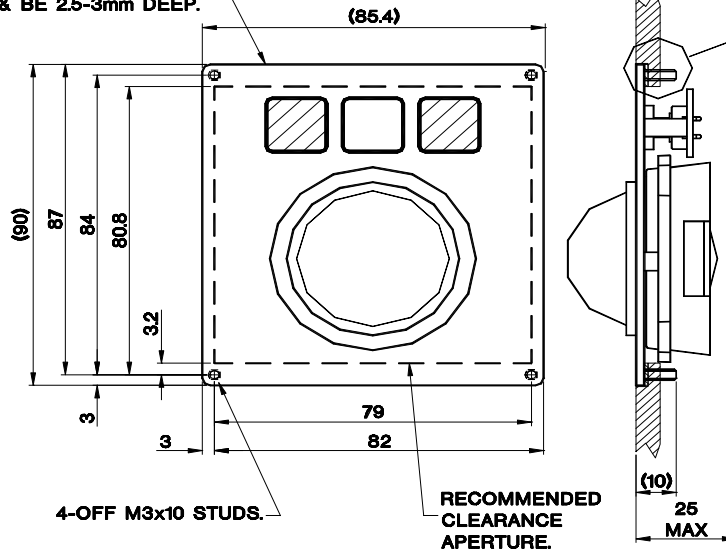
REAR MOUNT



MIN M3x10 STUDS
RECOMMENDED.

THIS IS THE PLATE OUTLINE,
NB: RECESS SHOULD CLEAR
THIS BY AT LEAST 0.5mm ALL
ROUND & BE 2.5-3mm DEEP.

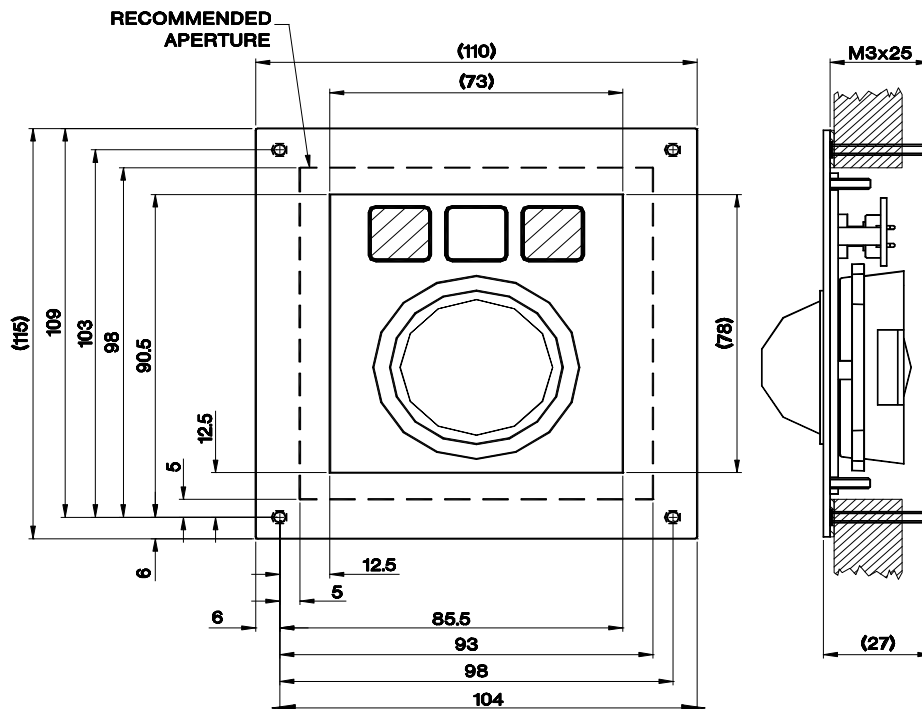
FRONT MOUNT



4-OFF M3x10 STUDS.

RECOMMENDED
CLEARANCE
APERTURE.

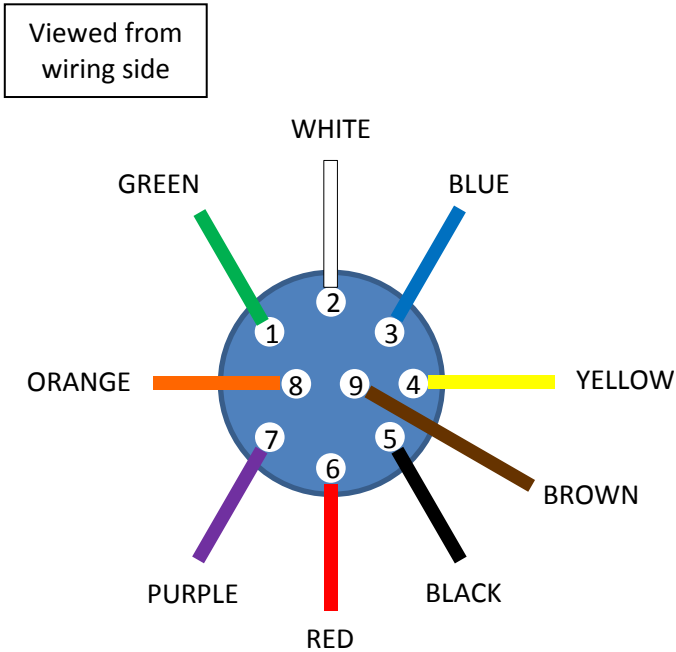
BEZEL MOUNT



BULGIN COM Connector Details

Detailed below is the wiring assembly for the BULGIN plug for connection to a SOCKET COM port.

Recommended wire gauge 24AWG.



Pin	Colour	RS232	RS422	RS485
1	Green	DCD	TX-	RTX-
2	White	RXD	RX+	
3	Blue	TXD	TX+	RTX+
4	Yellow	DTR	RX-	
5	Black	GND	GND	GND
6	Red	+5VDC	+5VDC	+5VDC
7	Purple (Violet)	RTS		
8	Orange	CTS		
9	Brown	DSR		