

38 mm TRACKBALLMODULE

RUGGED TRACKBALL FOR REAR/FRONT PANEL MOUNTING

Sealing IP65 (static); PS/2, USB or phase quadrature output

The GK38 series are ruggedised professional trackballs for harsh industrial environments. The double-sided seal ring provides a sealing to **IP65** static (ball in rest). Stainless steel shafts and bearings ensure a solid and precise pointer control. The unit can be used for **frontpanel mounting** (remove the mounting bracket) or for **backpanel mounting**.



GK38-XXXX

• SPECIFICATIONS

Sealing	IP65 (static)	Mounting angle	Max. 90° to horizontal plane
Casing material	ABS/Polycarbonate	Lifetime - Ball revolutions	>= 2 million
Ball material	Phenolic resin	Supply voltage (GK38-4002)	5 Vdc +/- 5%
Ball colour	Black	Supply current (GK38-4002)	10 mA Typ
Ball diameter	38,1 mm	Storage temperature	-25°C to +80°C
Weight	100 grams	Operating temperature	-10°C to +60°C
Seal material	PTFE Composite	Relative humidity	95% non-condensing
Shaft diameter	3 mm	Vibration	5G, 5-2KHz any plane
Tracking force	50 grams nom		

• CONNECTIVITY

The **GK38-4502** is **PS/2** compatible. The **GK38-4602** can be plugged into any **USB** port or hub. Both types are supplied with 1,6m long shielded straight cables and external switch cables.

The **GK38-4002** has **phase quadrature output**: X1(Y1) leads X2(Y2) when motion of ball in positive X(Y) direction. It is supplied with a 10-way connection cable of 35 cm.

* Due to the increasing differences of the mouse port specifications of the various PC manufacturers, we do recommend that this unit should be tested on the final PC configuration and operating system prior to installing it in series

• OPTIONAL ANTI-VANDAL BACKPLATE

This additional backplate and mounting spacers enable the unit to absorb a very high level of abuse or impacts. When mounted properly by the end-user, this backplate will limit the hostile impacts on the ball to an acceptable level and protect shafts, bearings and other components of the unit.

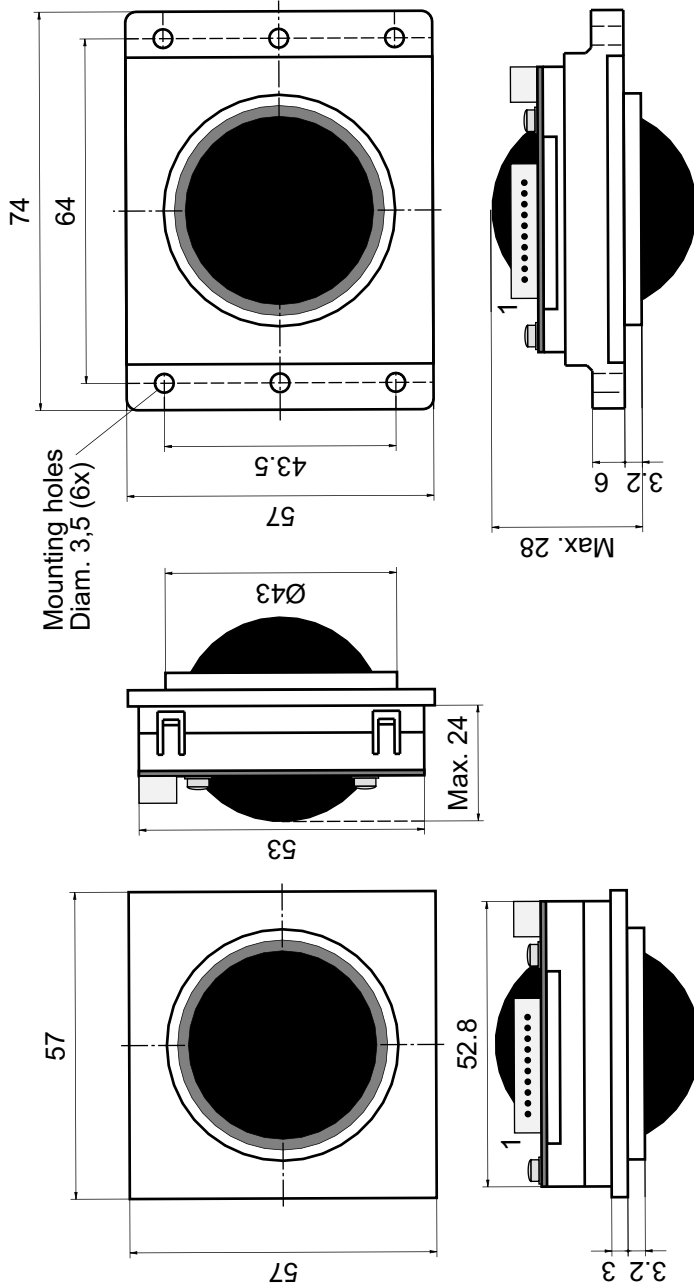
• ORDERING INFO

Output	Order Number	Consisting of :
Quadrature	GK38-4002	P38-500420 Trackball module only IC101035 : 35 cm interconnection cable to CON 1
PS/2	GK38-4502	P38-540420 : Trackball module only OC6010160 : 1,6 m shielded cable with 6 pin mini DIN plug IC040035 : 35 cm switch cable (4 wires) to CON2
USB	GK38-4602	P38-550420 : Trackball module only OC5010160 : 1,6 m shielded cable with USB type A plug IC040035 : 35 cm switch cable (4 wires) to CON2

Option for all GK38 trackball types	
Anti-Vandal Backplate Incl, spacers, washers and screws	AP38-1

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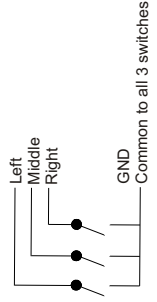
• DIMENSIONAL DRAWING



4 way connector (CON2)

Pin	Switch Input
1	Left Switch
2	Middle Switch
3	Right Switch
4	GND

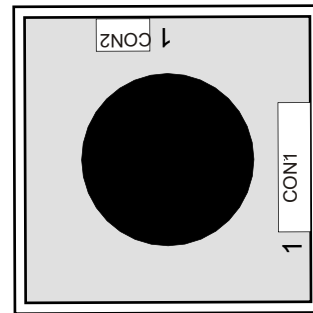
Connector type : JST PH Series 2,0mm pitch.
Mating connector : JST KR Series 2,0mm pitch.



10 way connector (CON1)

Pin	Quadrature	PS/2 or USB
1	X1	X1
2	X2	X2
3	Y1	Y1
4	Y2	Y2
5	-	-
6	-	-
7	Vcc	Vcc
8	Data/D-	Data/D-
9	CLK/D+	CLK/D+
10	GND	GND

Connector type : JST PH Series 2,0mm pitch.
Mating connector : JST KR Series 2,0mm pitch.



Dim in mm.

The company reserves the right to alter without prior knowledge the specification or design of any standard product or service.



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