

GS38 Series TRACKBALL

STAINLESS STEEL VANDALPROOF

Phase quadrature output
Direct PS/2 or USB output
Sealing IP65 (static)

• GENERAL DESCRIPTION

The GS38 series are ruggedised professional trackballs for vandalproof applications. The ball and the top flange are made of quality stainless steel. 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**.



• CONNECTIVITY

The **GS38-4502** is **PS/2** compatible.

The **GS38-4602** can be plugged into any **USB** port or hub. The output cable is supplied with both types. The **GS38-4002** has **phase quadrature output**: X1(Y1) leads X2(Y2) when motion of ball in positive X(Y) direction.

** 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.*

• SPECIFICATIONS

Casing material	ABS/Polycarbonate.
Top flange material	AISI 316 Stainless steel.
Ball material	AISI 316 Stainless steel.
Ball diameter	38,1 mm.
Weight	300 grams
Seal material	PTFE Composite.
Shaft diameter	3 mm.
Tracking force :	65 grams nom.
Resolution	241 pulses per ball revolution.
Mounting angle	Max. 90° to horizontal plane.
Sealing	IP65 (static)
Lifetime - Ball revolutions	> 2 million.
Supply voltage (GK38-4002)	5 Vdc +/- 5%.
Supply current (GK38-4002)	10 mA Typ.
Storage temperature	-25°C to +80°C.
Operating temperature	0°C to +55°C.

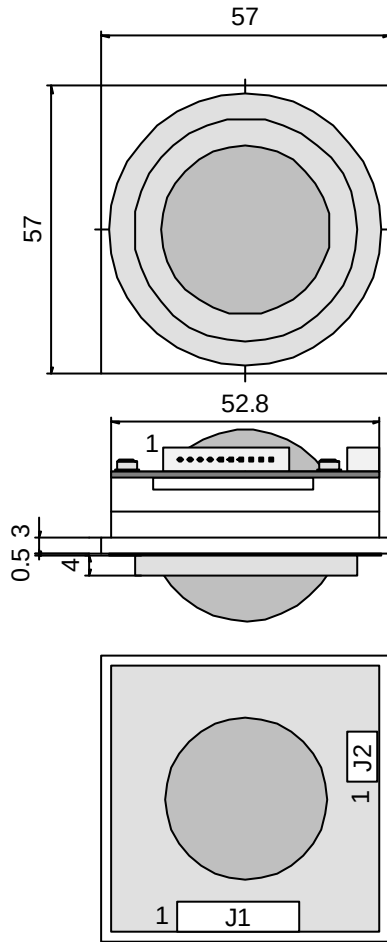
• OPTIONAL ANTI-VANDAL BACKPLATE

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.

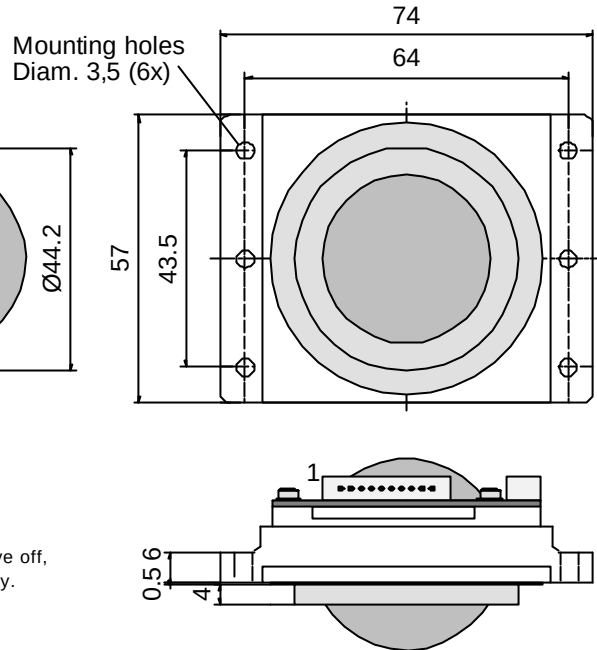
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• DIMENSIONAL DRAWING

Frontpanel version (bracket removed)



Backpanel version



Dip switches : leave off,
for factory use only.

Dim in mm.

Quadrature
(GS38-4002)

Pin	J1
1	X1
2	X2
3	Y1
4	Y2
5	-
6	-
7	+5V
8	-
9	-
10	GND

PS/2 (GS38-4502) or
USB (GS38-4602)

Pin	J2 Switch posi-
1	Left Button
2	Middle Button
3	Right button
4	GND (common)

Connector type CON1, CON2 : JST PH Series 2,0mm pitch.
Mating part to connector CON1, CON2: JST KR Series 2,0mm pitch.
Type numbers: 04KR-8M (CON2), 10KR-8M(CON1)

• ORDERING INFO

Description	Order Number
Trackball Quadrature Output supplied with : - interconnection cable (10 wires) to connect to J1	GS38-4002
Trackball PS/2 Output supplied with : - shielded cable 1,6 m long with 6 pin mini DIN plug to connect to J1 - cable (4 wires) to connect up to 3 external switches to J2	GS38-4502
Trackball USB Output supplied with : - shielded cable 1,6 m long, USB type A connector to connect to J1 - cable (4 wires) to connect up to 3 external switches to J2	GS38-4602

Option for all GS38 trackball types

Anti-Vandal Backplate incl spacers, washers and screws	AP38-1
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