



- 38 mm ball
- IP65 sealing

## 38 MM OEM TRACKBALLMODULE

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.

### GENERAL TECHNICAL SPECIFICATIONS

Sealing	: IP65 (static)
Casing material	: ABS / Polycarbonate
Ball material	: Phenolic resin
Ball colour	: Black
Ball diameter	: 38,1 mm
Weight	: 100 grams
Seal material	: PTFE
Shaft diameter	: 3 mm
Tracking force	: 50 grams nominal
Mounting angle	: Max. 90° to horizontal plane
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	: -10°C to +60°C
Relative humidity	: 95% non-condensing
Vibration	: 5G, 5-2KHz any plane

### 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. No device driver is supplied with the unit. Please use standard available drivers in your operating system. 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

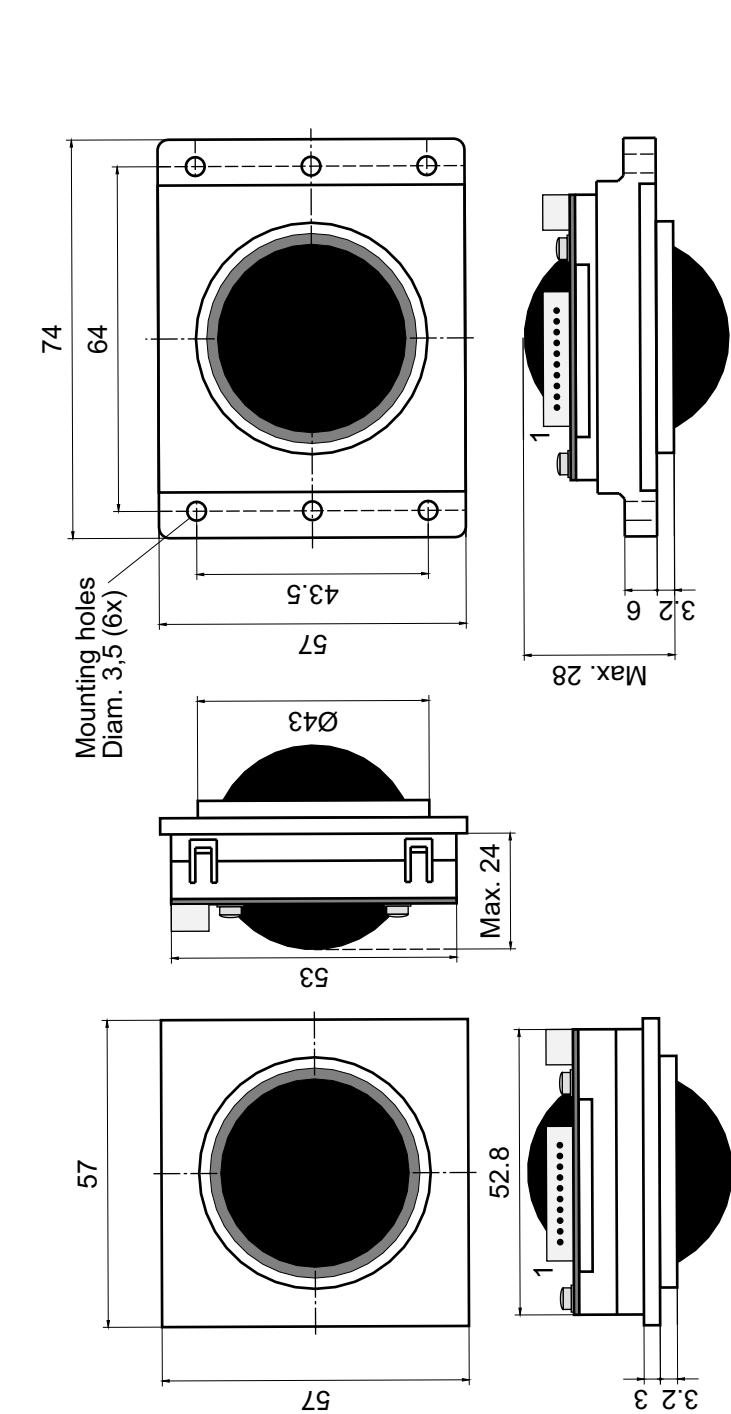
This additional backplate and mounting spacers enable the unit to absorb a very high level of abuse or impacts. When mounted properly by the end-user, this backplate will limit the hostile impacts on the ball to an acceptable level and protect shafts, bearings and other components of the unit.



### ORDER INFO

OUTPUT	ORDER NUMBER	Consisting of :
Quadrature	<b>GK38-4002</b>	P38-500420 Trackball module only IC101035 : 35 cm interconnection cable to CON 1
PS/2	<b>GK38-4502</b>	P38-560420 : Trackball module only OC6010160 : 1,6 m shielded PS/2 cable with 6 pin mini DIN plug IC040035 : 35 cm switch cable (4 wires) to CON2
USB	<b>GK38-4602</b>	P38-560420 : Trackball module only OC5010160 : 1,6 m shielded cable with USB type A plug IC040035 : 35 cm switch cable (4 wires) to CON2
OPTION	<b>AP38-1</b>	Anti-Vandal Backplate Incl, spacers, washers and screws

DIMENSIONAL DRAWING



Dim in mm.

Dip switches : leave off, for factory use only.

10 way connector (CON1)

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

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

4 way connector (CON2) for PS/2 & USB only

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.

