



Remote control joysticks  
Poignées de pilotage  
à distance  
Steuerknüppel für  
Fernsteuerungen

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## Our company

Founded in 1958 the company was specialized in the production of rotary potentiometers. The company developed successfully in the market of the sensors until the 1980s when Genge&Thoma AG started to invent the first joysticks to expand the product portfolio.

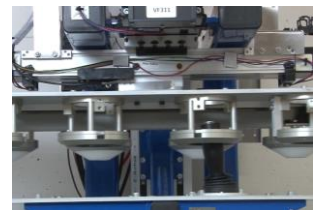
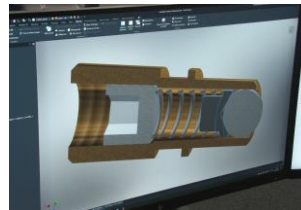
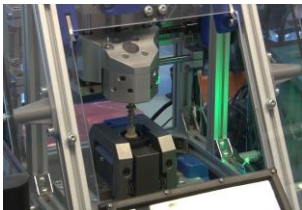
With the time the still family-owned company moved to Lengnau and later to our current location in Brügg, in the heartland of the most famous Swiss watch production sites where mechanical innovation and electrical engineering are practiced with passion. Our main focus moved more and more towards the joystick market, and we expanded our business around the world.

In 2023 we legally transferred the joysticks and sensor business to the newly founded GT Joysticks AG to better focus on our core activities.

## What we offer

Our goal is, to have the perfect joystick solution for your needs. That for we have expanded our portfolio continuously over the past decades and can offer you the whole range from small thumb joysticks to rigid ones for heavy applications.

We are proud to offer everything in house, from the first contact with our sales team through development to modern in-house assembly and quality control. Thanks to this, we are able to offer you an efficient and fast development process for new joysticks, fully adapted to your needs. With a broad team of electrical, IT and mechanical engineers we have all the knowledge inhouse, which we need to develop a new product.



## Our joystick portfolio

An overview about our most common joysticks for remote controls

Page 04	SK197	Up to three axis, potentiometer technology
Page 08	SK315	The small one with Hall effect technology
Page 10	SK220	The thumb joystick
Page 12	SK60	For heavy duty remote controls

# SK197 For remote controls



## The unconventional joystick family

The SK 197 family of modular joysticks offers several options with different haptic characteristics to choose from. It's available in various configurations and has up to 3 axes depending on the handle.

In the core of the joystick is a well proven potentiometer. Our modular design solutions can deliver the most common communication paired with different technical solutions.

The multifunctional and flexible design allows for the ability to fit well into a wide range of applications, especially for remote controls.

Please contact us, it will be our pleasure to suggest an individual joystick solution for your specific needs. Your custom solution is our standard.

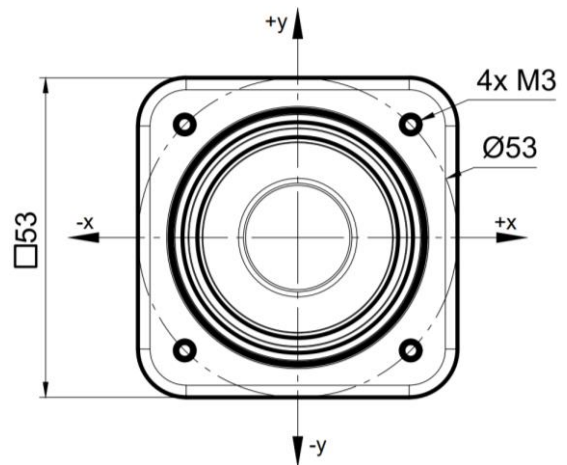
## Technical specification

Axes	Up to three axes
Technology	Potentiometer
Resetting	Self-resetting
Steps	Up to 5 steps
Deflection Angle	Up to +/- 26° depending on mechanical details
Cross guidance	Rigid/soft/none
Push button	Optional
Height above panel	48mm (1,89in)
Mounting depth	31mm (1.22in), below panel + cable
Panel cut-out	Ø 41 or 49mm (1.61in or 1.93in)
Bolt circle	53mm (2.09in) with 4 x M3 screws
Operating voltage	30V DC (standard)
Output signal	Analogue
Connection	MicroMatch
Durability	Up to 3 million full cycles
Operation temperature	-30° - +75°C (-22°F - +167°F)
Storage temperature	-40° - +85°C (-40°F - +185°F)
IP protection class	IP69/IP67 (correct mounted)
Application examples	Especially designed for remote controls, vehicles, machinery, off-shore, mobile equipment

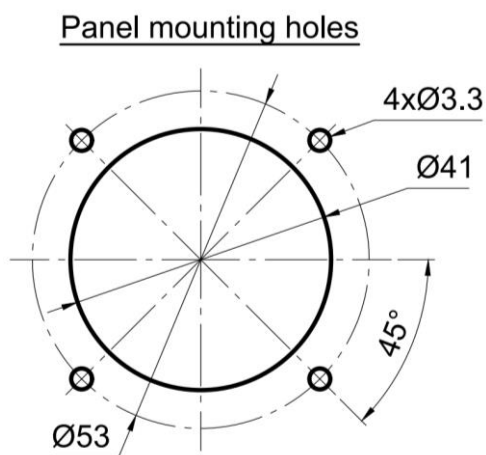


# SK197 technical drawings

Top view



Panel cut-out

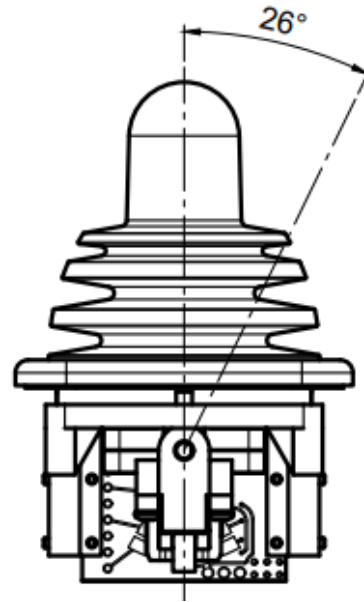
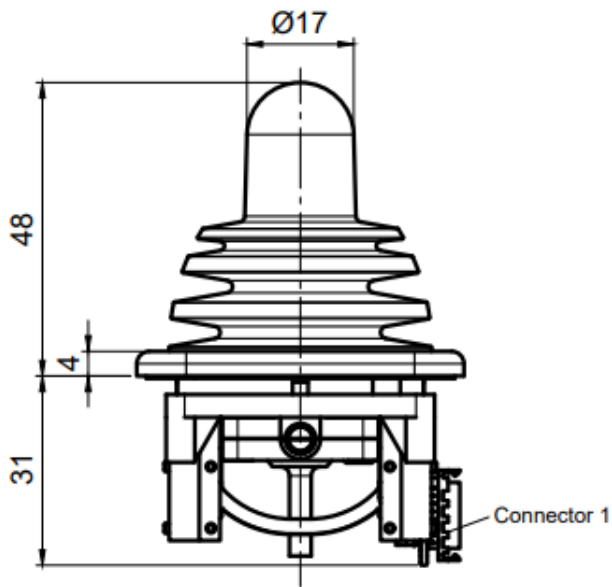


Mounting illustration with mounting ring

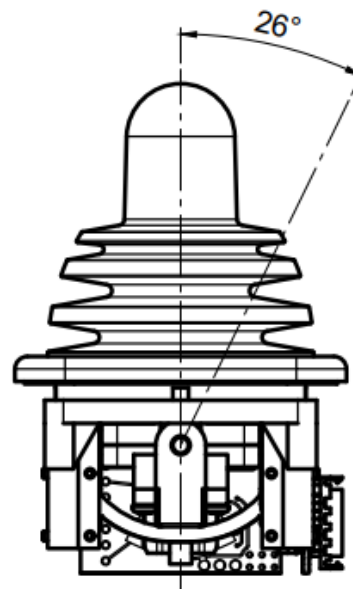
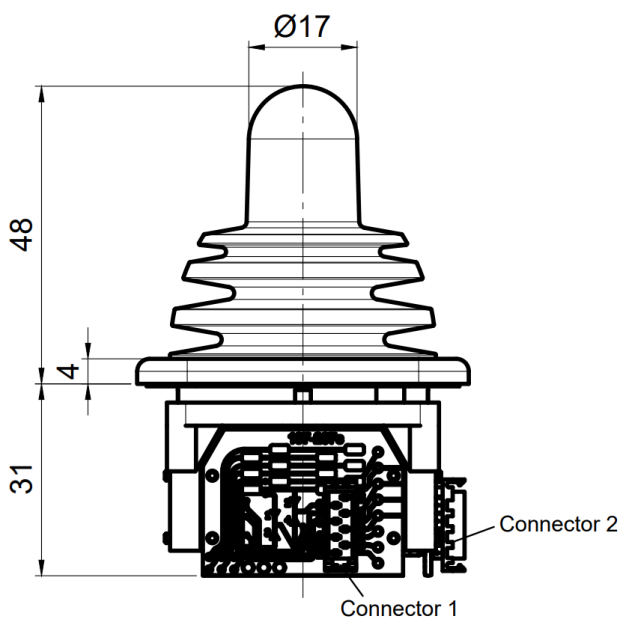


# SK197 technical drawings

## Side view one axis version

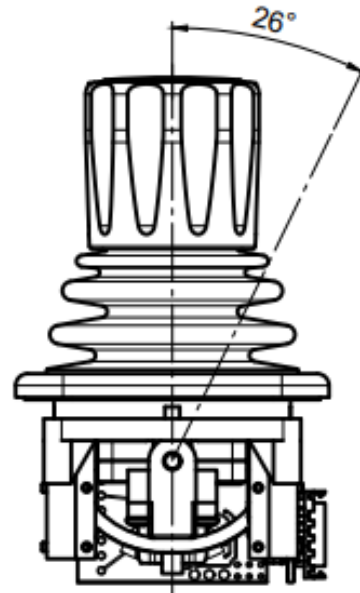
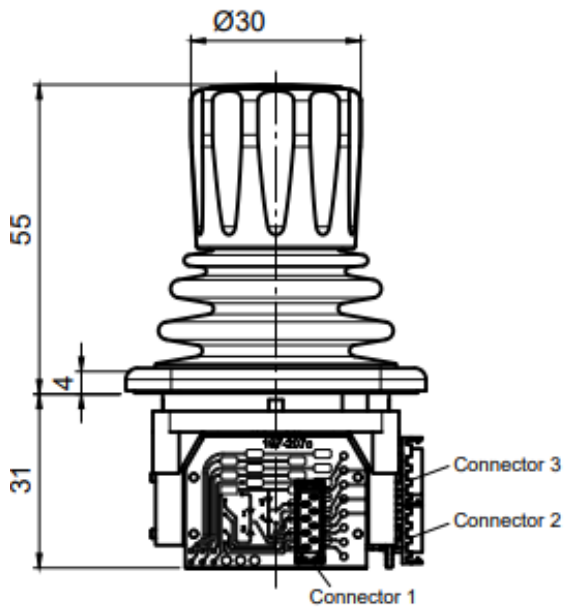


## Side view two axis version

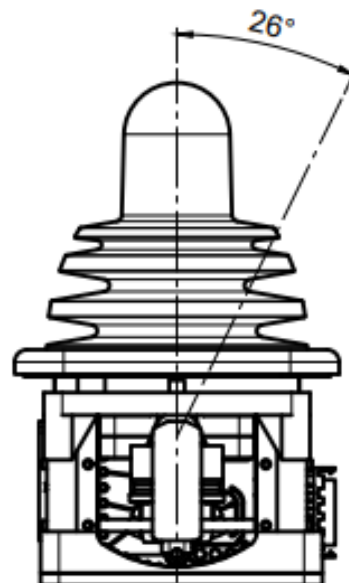
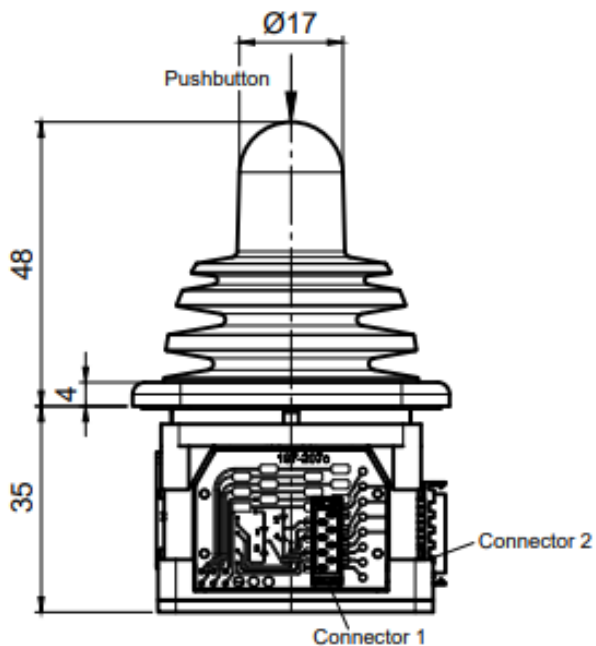


# SK197 technical drawings

## Side view three axis version



## Side view two axis step version with push button



# SK315 The small one



## Compact with many possibilities

Compact and durable multi-axis joysticks, perfectly made for industrial machines, electric vehicles or your individual application.

It comes with a low height to fit in many controls or integrated panels, but with a large handy knob to operate also with gloves.

Remarkable and unique – all axes are available with single or redundant output signals. The joysticks can be equipped with a push button if needed.

Please contact us, it will be our pleasure to suggest an individual joystick solution for your specific needs. Your solution is our standard.

## Technical specification

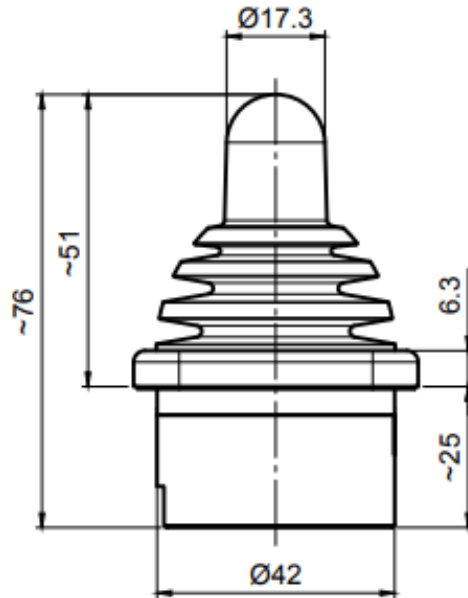
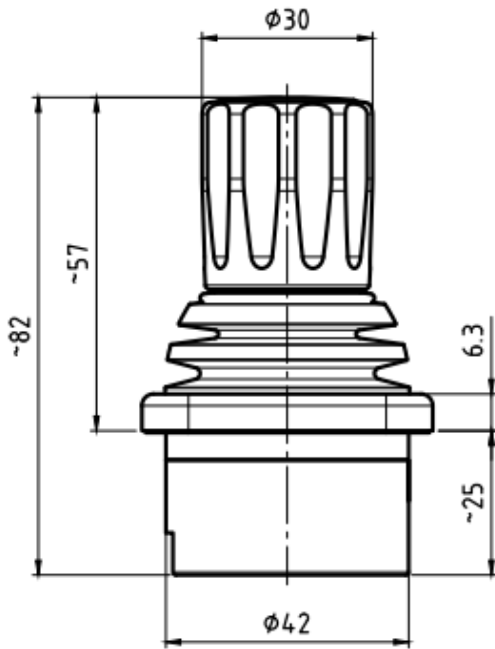
Axes	Up to 3 axes
Operating angle	X/Y axis: +/- 20° / Z axis: +/- 30°
Resetting	Self-resetting
Guidance	Soft guidance
Push button	Optional
Options	Push button, handles
Height above panel	57mm (2.24in)
Mounting depth	25mm (0.98in), below panel + cable
Panel cut-out	Ø 42.5mm (1.67in)
Bolt circle	□ 35mm (1.37in) with 4 x M3 screws
Technology	Hall-effect sensors
Operating voltage	5V DC(standard)
Output signal	0.5V – 4.5V, linear, redundant
Connection	Connector
Durability	Up to 3 million full cycles
Operation temperature	-30° - +80°C (-22°F - +176°F)
Storage temperature	-40° - +85°C (-40°F - +185°F)
IP protection class	IP67/IP65 above panel
Application examples	Vehicles, machinery, mobile equipment
Gate	Square



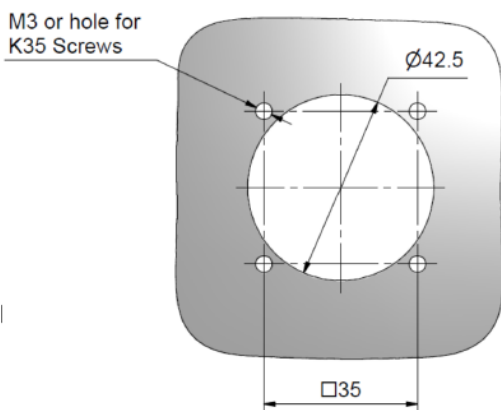


# SK315 Technical drawings

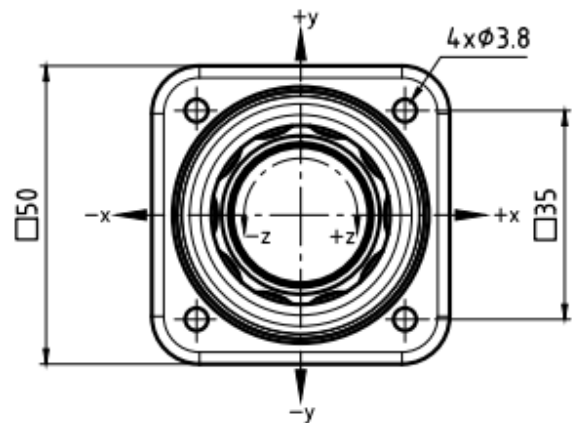
## Side view



## Panel cut-out



## Top view



# SK220 The Mini-Joystick



## Small – ergonomic – robust

The robust Mini-Joystick SK220 is designed with an ergonomic thumb-operated knob. Its technology is working on robust hall-effect sensors for contactless operations in X and Y directions. Redundancy is standard. A durable spring returns the joystick safely to the center position.

The Mini-Joysticks outstanding characteristics are high reliability, an extraordinary electromagnetic compatibility and a long life of over 5 million full cycles.

Typical applications for the Mini-Joystick are controllers, medical devices, remote controls and multi-function handles.

Please contact us, it will be our pleasure to suggest an individual joystick solution for your specific needs. Your solution is our standard.

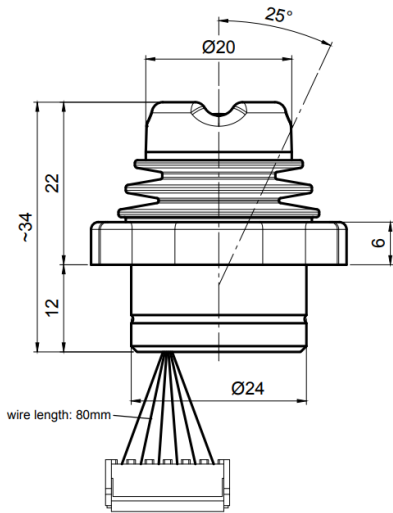
## Technical specification

Axis	1 or 2 axis version
Spring return	Ergonomic and reliable central spring return
Deflection angle	25° per semiaxis
Haptics	Soft or rigid cross guidance
Installation	Top mounted
Height above panel	22mm (0.86in)
Mounting depth	12mm (0.47in)
Panel cut-out	Ø 25mm (0.98in)
Bolt circle	35mm (1.37in) with 4 x M2.5 or K25 screws
Technology	Redundant hall effect sensors
Operating voltage	5V DC
Output signal	0.5 – 4.5V DC (standard)
Connection	Cable 80mm (3.14in) with connector JST EHR 6 pins
Durability	Up to 5 Mio. full cycles
Operation temperature	-30° - +80°C
Storage temperature	-40° - +85°C
IP protection class	IP67 if mounted correctly
Magnet compatibility	6000A/m
Weight	30g
Operating force	1.6N
Max. allowed force	4Nm
Application examples	Medical devices, controllers, multi-function handles

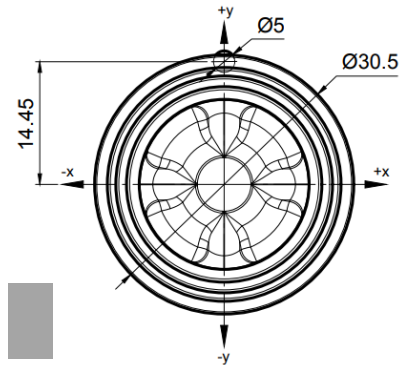


# SK220 technical drawings

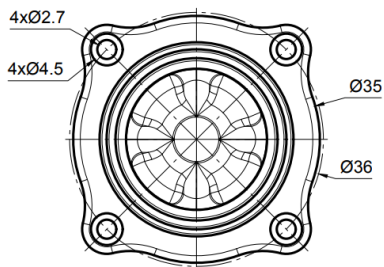
Dimensions side view



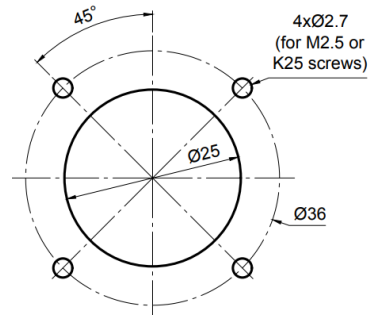
Top view without mounting flange



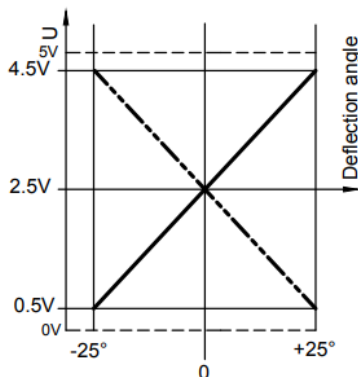
Dimensions plan view



Panel cut-out



Output diagram x1, x2, y1, y2



# SK60 CP



## For heavy duty remote controls

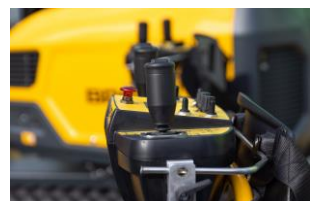
The SK 60CP base offers several options with different haptic characteristics to choose from. It's available in various configurations and has up to 3 axes depending on the handle.

A robust, dust- and splash-proof joystick with resistance elements made from durable conductive plastic enable a trouble-free use in harsh environments.

The multifunctional and flexibly design allows for the ability to fit well into a wide range of applications.

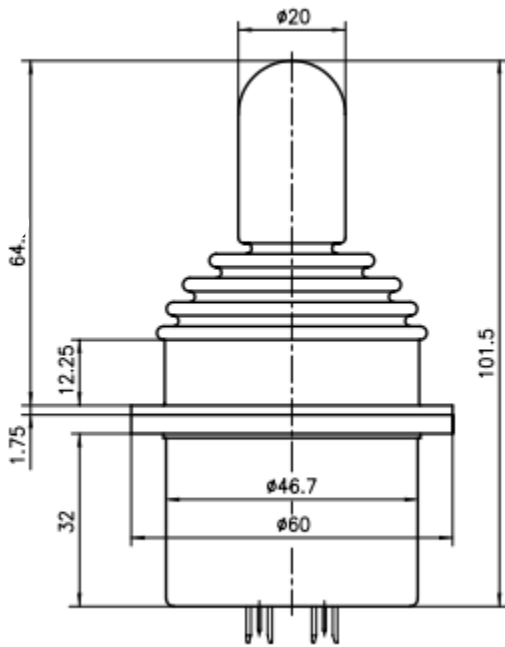
## Technical specification

Axes	2 axes (option 1 axis)
Deflection Angle	+/- 20°
Resetting	Self-resetting
Push button	Optional
Options	Connectors, push button, handles, rigid cross guidance
Height above panel	64mm (2.5in)
Mounting depth	32mm (1.3in), below panel + connector
Panel cut-out	Ø48mm (1.88in)
Bolt circle	53mm (2.08in) with 4 x M3 screws
Technology	Conductive plastic
Operating voltage	5V DC
Output signal	Analogue
Connection	Connector
Durability	Up to 3 million full cycles
Operation temperature	-30° - +80°C (-22°F - +176°F)
Storage temperature	-40° - +85°C (-40°F - +185°F)
IP protection class	IP67 (mounted above panel with mounting ring)
Fire protection	UL94-V0
Application examples	Vehicles, machinery, off-shore, mobile equipment

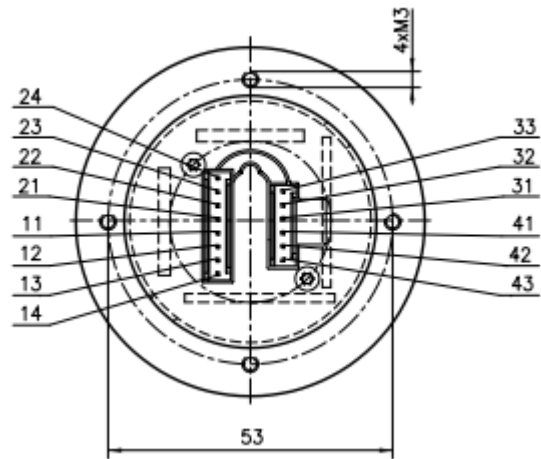


# SK60 technical drawings

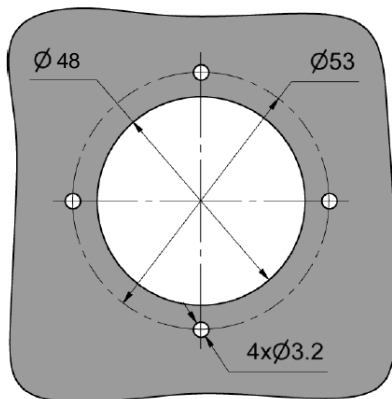
Side view



Bottom view



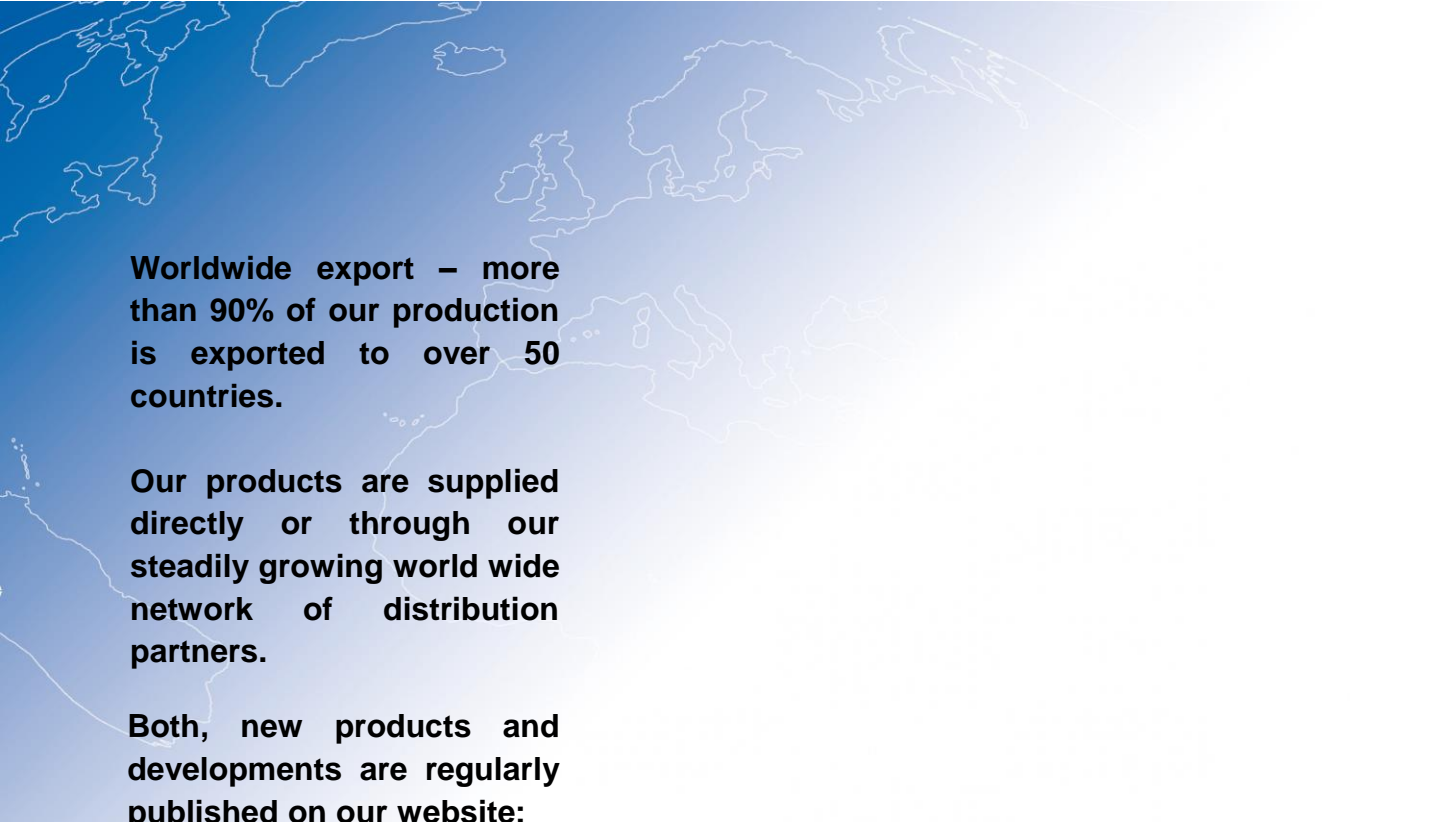
Panel cut-out



Mounting illustration with mounting ring



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