

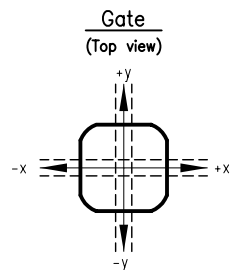
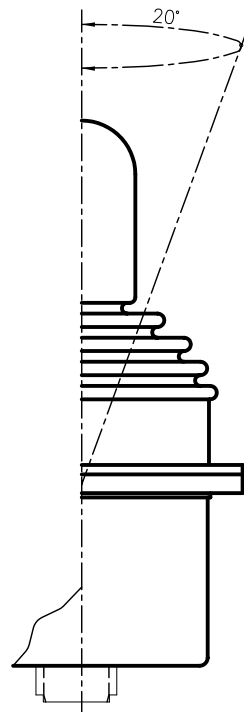
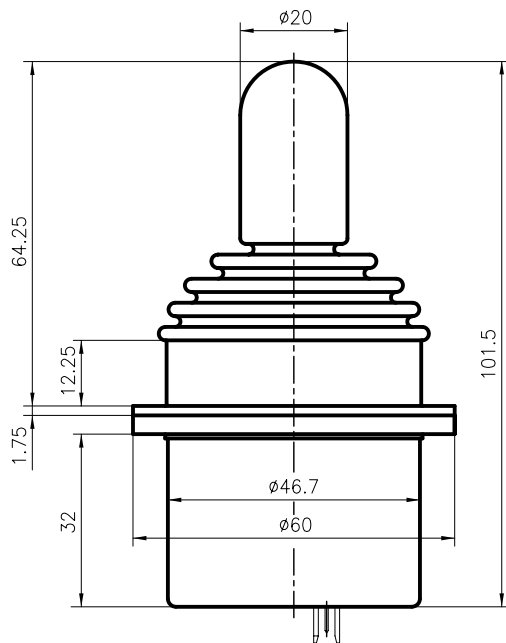
Description	
Joystick Type SK 60-0240E	
Number of axis	2-axis, x- and y-axis
Operation by	Handle 48-203 (sealed)
Crossguide	light
Center tab	-
Retaining spring	strong Z-Nr. 50-116
Switch function	3-1-3 per axis
Switchcontact α	$\pm 3.333'$
Notches	7 per axis

Electrical characteristics	
Resistance value	
Power dissipation	
Contact rating	Zero potential difference between segments 5 V DC, 5mA
Type of switch	
Operating voltage	max. 30V DC

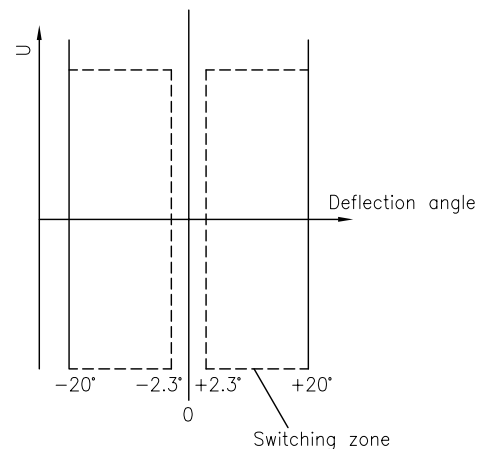
Axis	Potentiometer side		Connector side	
	Direction	Colour/Number	Center tab	Joystick in Mid-Position
x-Axis	↑ +x	47	44	open
		46		-
	45	closed		
Wiper	↓ -x	48	44	open
		43		-
		42		closed
y-Axis	↑ +y	37	34	open
		36		-
	35	closed		
Wiper	↓ -y	38	34	open
		33		-
		32		closed
		31		-

Handle with push-button switch	
Switch	contact
	open
	closed

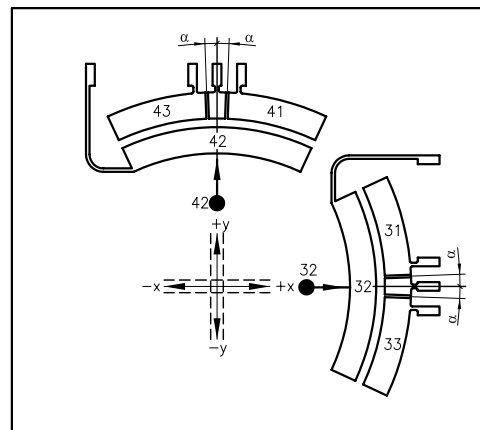
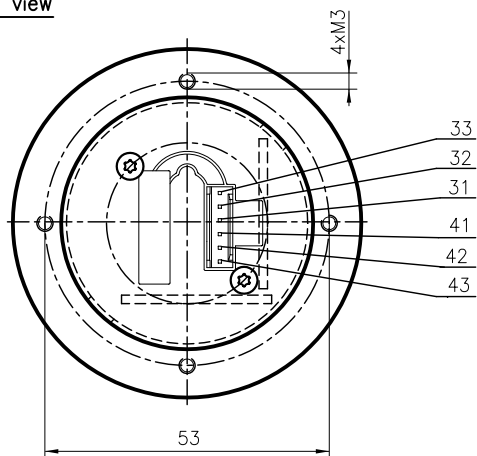
				Oberfläche	Maßstab 1:1	Position	Menge
				Datum	Name	Joystick	
				Bearb. 11.03.98	DM		
				Gepr.			
				Norm			
d	mit runden Stützen	27.01.11	MK	GENGE & THOMA AG <small>OH-2543 Lengnau/Bludenz</small>			60-0240E d
c	new Layout	13.10.04	TZ				
b	Text chanced	16.10.01					
a	measure 6.3 was 5	14.01.99	DM				
Zust.	Änderungen	Datum	Name				



Output diagram

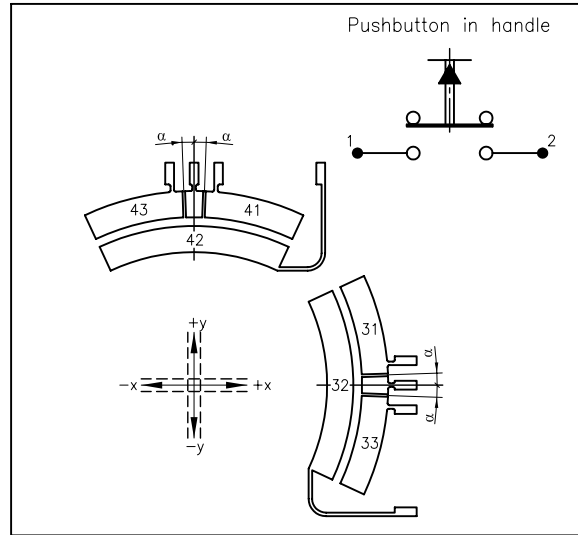
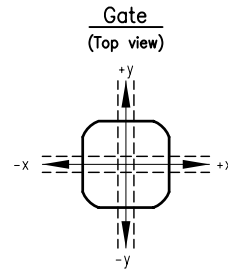
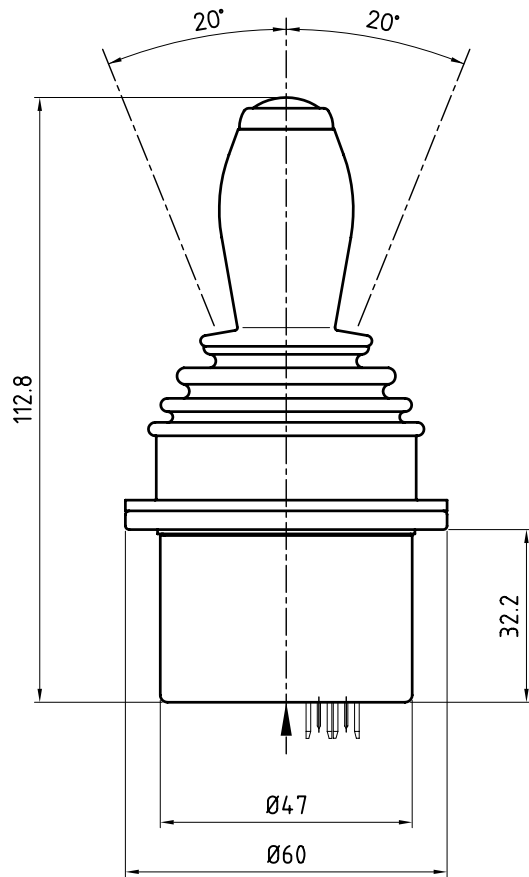


Bottom view



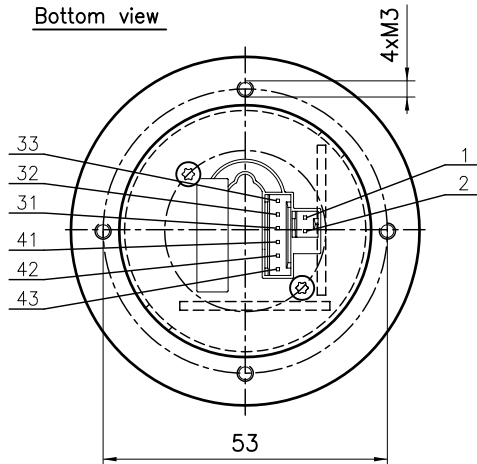
Description				
Joystick type SK 60-0477				
Number of axes	2-axes, x-axis, y-axis			
Operation by	Rubber bellow 48-203 (sealed)			
Connector:				
DUBOX Walled Header	6-poles: 76384-306			
Mating connector:				
Dubox Housing	6-poles: 65240-006			
Anti-rotation locking				
Cross guidance	soft			
Center tab				
Retaining spring	strong Z-Nr. 50-116			
Switch function	2 shift segments per axis			
Switch point α	$\pm 2.3^\circ$			
Electrical characteristics				
Resistance value				
Power dissipation				
Contact rating	Zero potential difference between segments 5 V DC, 5 mA			
Operating voltage				
Axis	Potentiometer	Connector side		
	Direction	Colour/ number	Center tab	Joystick in mid-position
x-axis	↑ +x			41 orange open
	Wiper			42 red
	↓ -x			43 brown open
y-axis	↑ +y			31 yellow open
	Wiper			32 green
	↓ -y			33 blue open
Pushbutton in handle				
Switch contact				
open				
closed				

		Oberfläche	Maßstab 1:1	Position	Menge
		Datum	Name	Joystick	
		Bearb. 30.4.07	DM		
		Gepr.			
		Norm			
		GENGE & THOMA AG		60-0477E	
		<small>AG 01-2543 Lengnau/Biel</small>		Blatt	
		<small>Dateiname: E:\Dwg_SK60\60-0477E.dwg</small>		Bl	
Zust.	Änderungen	Datum	Name		

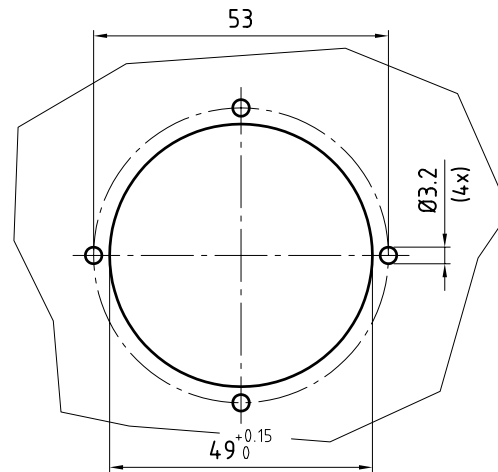


Description					
Joystick Type SK 60-0502					
Number of axes	2-axes, x-axis, y-axis				
Operation by	Handle with pushbutton (60-603)				
Plug: DUBOX Walled Header	6-poles: 76384-306 2-poles: 76384-302				
Counter plug: Dubox Housing Rotated not insertable	6-poles: 65240-006 2-poles: 65240-002				
Cross guidance	soft				
Center tab	-				
Switch funktion	2 shift segments per axis				
Switch point α	$\pm 2.3^\circ$				
Retaining spring	strong, Z-Nr. 50-116				
Electrical characteristics					
Contact rating	Zero potential difference between segments 5 V DC, 5 mA				
Type of switch	ITW-Pushbutton Switch red (Art-No. 59-112)				
Operating voltage	30V DC, 400mA				
Axes		Potentiometer		Connector side	
	Direction	Colour/ number		Joystick in mid-position	
x-axis	↑ +x			41 orange	open
	Wiper			42 red	
	↓ -x			43 brown	open
y-axis	↑ +y			31 yellow	open
	Wiper			32 green	
	↓ -y			33 blue	open
Pushbutton in handle					
Switch	Contact	1	white		
	open	2	black		

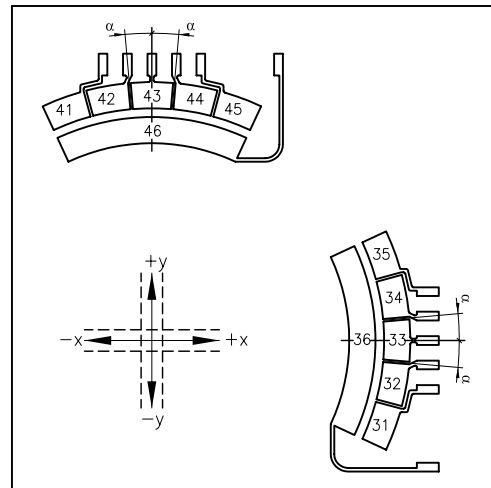
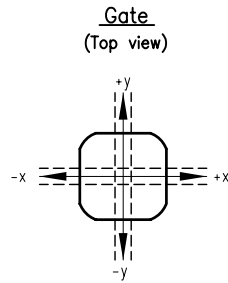
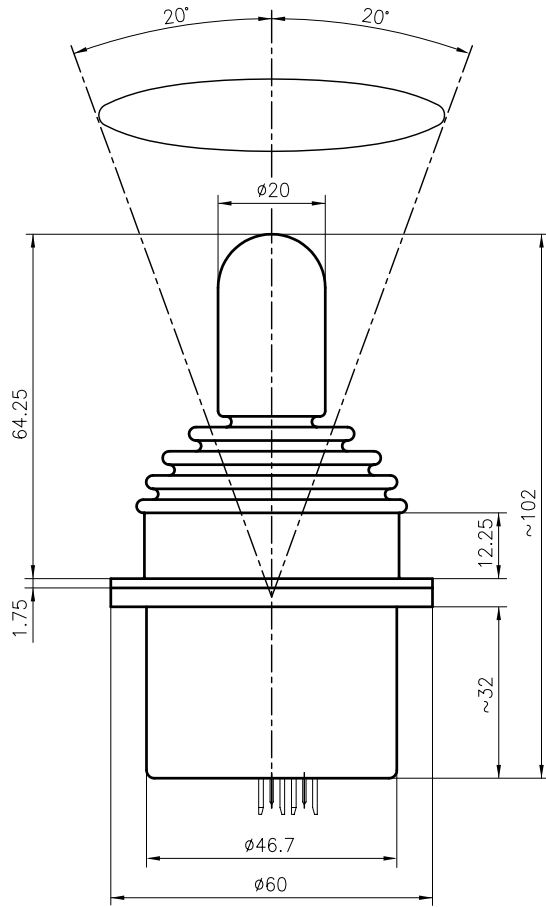
Bottom view



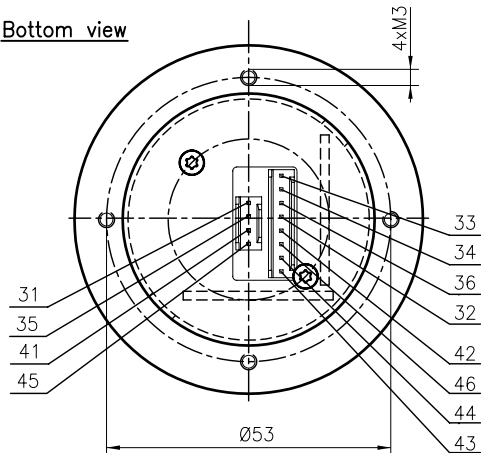
Mounting holes



		Oberfläche	Maßstab 1:1	Position	Menge
		Datum	Name	Joystick	
		Bearb. 10.12.07	TZ		
		Gepr.			
		Norm			
		GENGE & THOMA AG <small>01-2543 Lengnau/Bliz</small>			Blatt
		Dateiname: E:\DWG_SK60\60-0502Ea.dwg			Bl
a	Mit Doppel-Schleifer	06.07.11	MK	60-0502Ea	
Zust.	Änderungen	Datum	Name		

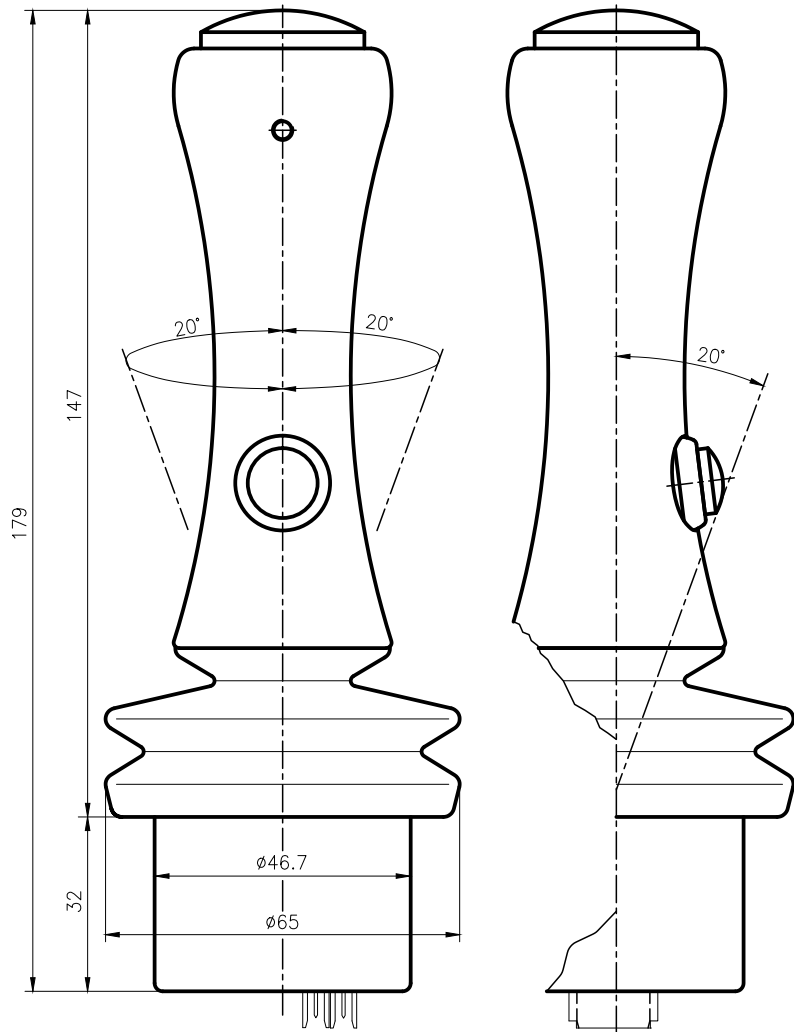


Bottom view

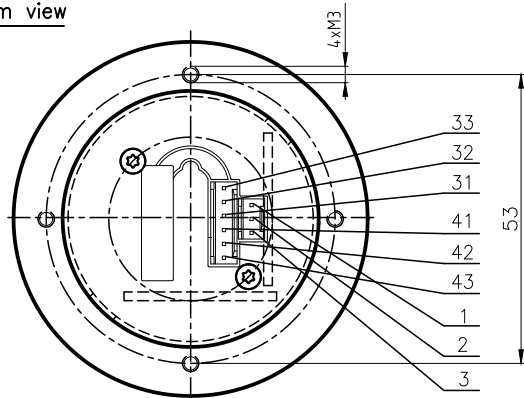


Description			
Joystick Type SK 60-0724			
Number of axis	2-axis, x- and y-axis		
Operation by	Handle 48-203 (sealed)		
Plug: DUBOX Walled Header	8-poles: 76384-308 4-poles: 76384-304		
Counter plug: Dubox Housing	8-poles: 65240-008 4-poles: 65240-004		
Crossguide	light		
Center tab	-		
Retaining spring	strong Z-Nr. 50-116		
Switch function	2-1-2 per axis		
Switchcontact α	± 5°		
Notches	5 per axis		
Electrical characteristics			
Contact rating	Zero potential difference between segments 5 V DC, 5mA		
Axis	Potentiometer side	Connector side	
	Colour/ Number	Center tab	Joystick in Mid-Position
x-Axis	↑ +x		45 open 44 open 46 43 closed 42 open 41 open
	Wiper		
	↓ -x		
y-Axis	↑ +y		35 open 34 open 36 33 closed 32 open 31 open
	Wiper		
	↓ -y		

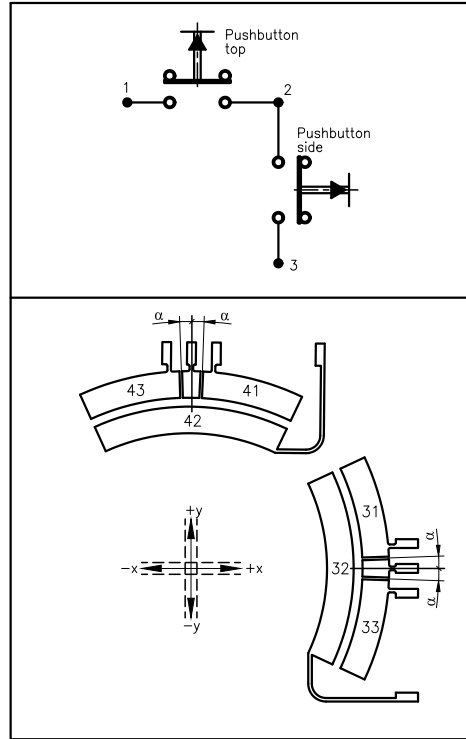
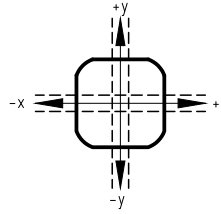
		Oberfläche	Maßstab 1:1	Position	Menge
		Datum	Name	Joystick	
		Bearb. 10.09.10	Kiener M.		
		Gepr.			
		Norm			
		GENGE & THOMA AG OT-2543 Lengnau/Bludenz			Blatt
		Dateiname: E:\Dwg\SK60\60-0724.dwg			Bl
Zust.	Änderungen	Datum	Name		



Bottom view



Gate
(Top view)



Description	
Joystick type SK 60-0764	
Number of axes	2-axes, x-axis, y-axis
Operation by	Handle with 2 pushbuttons
<u>Connector:</u> DUBOX Walled Header	6-poles: 76384-306 3-poles: 76384-303
<u>Mating connector:</u> Dubox Housing	6-poles: 65240-006 3-poles: 65240-003
Cross guidance	soft
Retaining spring	very strong Z-Nr. 60-112.02
Switch function	2 shift segments per axis
Switchpoint α	$\pm 2.3^\circ$

Electrical characteristics	
Operating voltage	max. 30V DC
Contact rating	Zero potential difference between segments 5 V DC, 5 mA
Pushbutton top type	Dome pushbutton 404119 T&H
Pushbutton top voltage	30V DC 250mA
Switch side type	ITW-Switch Nr. 59-900089
Switch side voltage	30V DC 400mA

Axes	Potentiometer		Switch function	
	Direction	Colour/number	Center tab	Joystick in mid-position
x-axis	↑ +x			41 open
	Wiper			42
	↓ -x			43 open
y-axis	↑ +y			31 open
	Wiper			32
	↓ -y			33 open

Pushbuttons			
Pushbutton top	contact	1	
	open	2	}
Pushbutton side	contact	3	
	open	2	

		Oberfläche	Maßstab 1:1	Position	Menge
		Datum	Name	<h1>Joystick</h1>	
Bearb.	03.02.11	Kiener M.			
Gepr.	01.12.16	Hess C.			
Norm					
		GENGE & THOMA AG <small>OH-2543 Lengnau/Blf</small>		60-0764	
Zust.	Änderungen	Datum	Name	Dateiname	E:\Dwg_SK60\60-0764.dwg
				Blatt	
				Bl	