



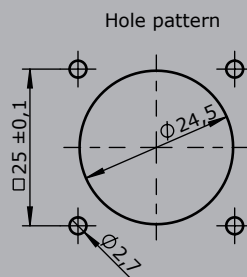
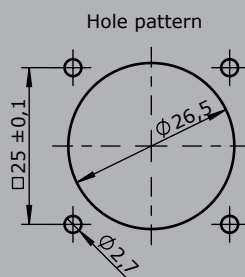
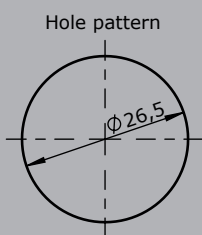
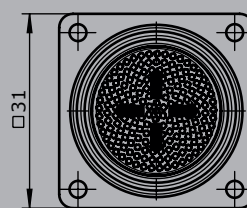
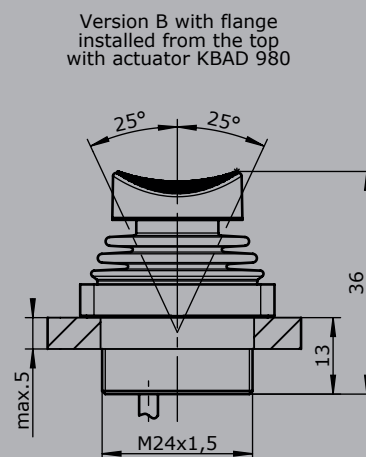
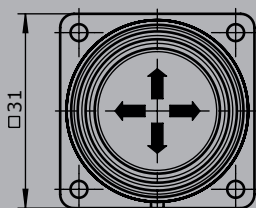
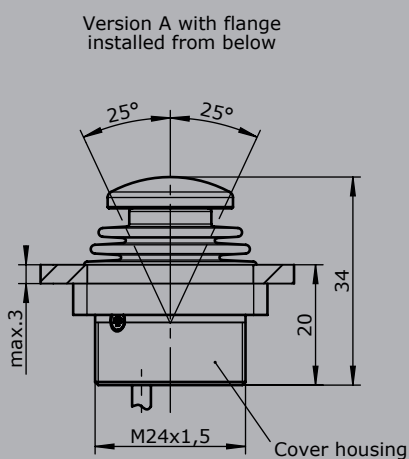
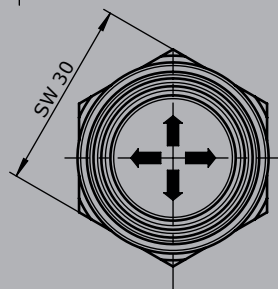
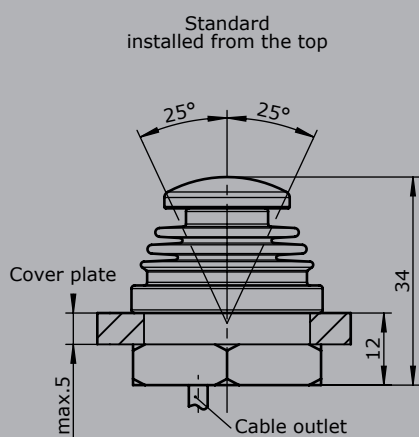
The V21 is a Mini-Joystick commonly used in electro-hydraulic applications. The V21 is especially suitable for installation in our ball grips. Long life and high reliability is ensured by the latest contactless hall-technology.

Technical data

Mechanical life	5 million operating cycles
Operating force	1,6 to 3,5N
Supply voltage	5V DC stabilized
Operation temperature	-40°C to +85°C
Degree of protection	IP67
Functional safety	PLd compatible (EN ISO 13849, complies SIL2 to DIN EN IEC 61508)



	V21	P	Example	-1	-E1032	-X
Basic unit						
V21.1	1-axis, installation from top with fixing nut					
V21	2-axis, installation from top with fixing nut					
V21.1A	1-axis, with flange, installation from below					
V21A	2-axis, with flange, installation from below					
V21.1B	1-axis, with flange, installation from top					
V21B	2-axis, with flange, installation from top					
Gate						
P	Cross gate					
P X	Special gate					
Knob						
	Standard					
1	KBAD 980					
2	KBAD 1658					
3	KBAD 1690					
Interface						
Voltage output						
0,5...2,5...4,5 V redundant by $U_b = 5 V$	1 axis				E103 1	
	2 axis				2	
	Characteristic:					
	Inverse dual (standard)				1	
	Dual				2	
SPI-Interface on request						
Special model						
X	Special / customer specified					



Actuator KBAD 1658



Actuator KBAD 1690

