



**33 25004D..** (except D05)  
with round knob

**33 25004D05**  
with dead-man button

Joy-stick controllers are electric setpoint transmitters for open-loop and closed-loop control systems with a positive mid-point position. They are used for the electronic control of electrical and hydraulic motions. A single joy-stick controller can control two motions simultaneously by moving the control lever in the appropriate direction within the maximum possible deflection range. This does not apply to the bidirectional models (single-axis) or models with a cross gate (available to order).

Joy-stick controllers are primarily intended for use on fixed control desks, transposer trucks and order picking/stacker trucks, etc.

Joy-stick controllers 33 25004D51/D52 are intended for use as setpoint transmitters for current regulators 33 43501A00/A05 and 33 43502A01.

**Also available to order:**

Models with cross gate, guide attachment and non-standard number of microswitches and microswitch functions.

### Joy-Stick Controllers

Universal or bidirectional deflection  
With or without dead-man button

### CE

These components are neither electronic nor electric appliances in the sense of the EMC regulation 89/336/EWG, but are only designed for mounting into other machines or installations, and they are not intended for end-customers.

**Subject to design modifications without prior notice.**

**Please note ordering data !**


## Technical Data

Applicable to all 33 25004D . . models			Applicable to type 33 25004D . .		D00 D03 D05	D51 D52
Deflection angle from positive mid-point position ( $\triangle$ effective electrical angle of rotation)	°	± 30	Potentiometer ± 10% rating at 40°C	kΩ W	5 2	2 x 1.8 2
Deflection torque as a function of deflection angle	Ncm	0.3 . . . 0.8	Operating voltage $U_B$	V	max. 80 $V_{ms}$	10 . . . 32 V—
Service life	cycles	> 500 000	Slider current (max.)	mA	100	—
Ambient temperature range	°C	— 30 . . . + 50	Output current (max.)	mA	—	30
Degree of protection to DIN 40 050	IP	00	Resolution referred to change in resistance	%	0.86	1.17
(according to installation)	IP	43	Change in resistance from end stop to mid-point	kΩ	0.55 (1.95 . . . 2.5 . . . 3.05)	1.8 (1.8 . . . 0 . . . 1.8)
Rating of microswitch contacts	A/V1~ A/V—	5/220 0.4/25	Output voltage $U_A$	V	$\frac{U}{2} \pm 0.11 \times U$	2 x 0 . . . $U_{st}$
Rating of NO contact on dead-man button (C05 only)	A/V1~ A/V—	1/110 0.2/24	Stabilized voltage $U_{st}$ with bridge without bridge	V V V	— — —	8 15

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### Ordering example

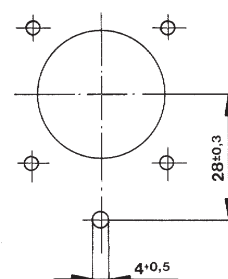
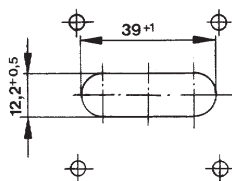
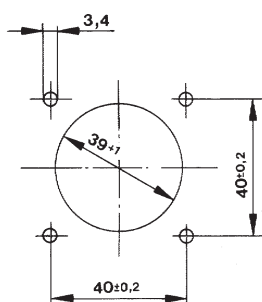
00, 03, 05, 51, 52  
corresponding to the requested model

Joy-Stick  
33 25004D 

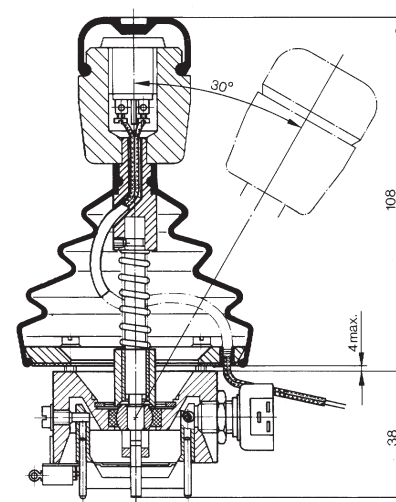
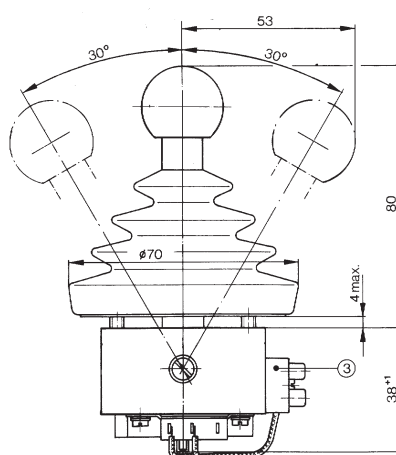
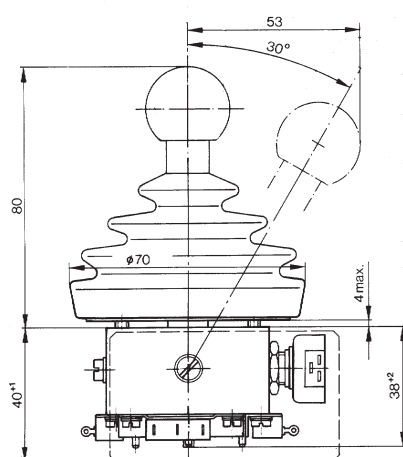
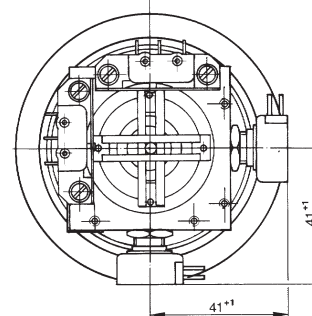
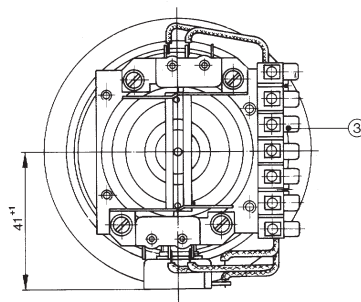
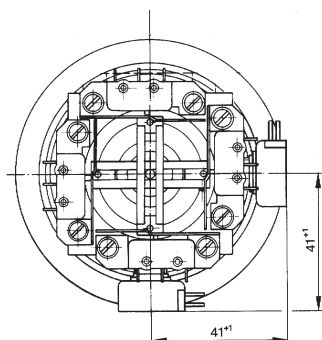
**33 25004D . .**

Model	Switching functions	Potentiometer functions
<b>Type 33 25004D00</b> , round knob 2 axes, universal deflection <sup>1)</sup> 2 Potentiometers 5 kW/2 W 4 microswitches plug-type terminals 2.8 x 0.5 mm <sup>2)</sup>		
1) With cross gate (4 deflections) to order 2) To DIN 46 244		
<b>Type 33 25004D03</b> , round Knob 1 axis, bidirectional deflection 1 potentiometer 5 kΩ/2 W 2 microswitches connecting terminals		
<b>Type 33 25004D05</b> , long knob with dead-man button 2 axes, universal deflection <sup>1)</sup> 2 potentiometers 5 kΩ/2 W plug-type terminals 2.8 x 0.5 mm <sup>2</sup>		
<b>Type 33 25004D51</b> , round knob stabilized voltage $U_{st}$ with bridge 8 V without bridge 15 V  1 axis, bidirectional deflection 1 potentiometer 2 x 1.8 kΩ/2 W 2 microswitches plug-type terminals 2.8 x 0.5 mm <sup>2)</sup> 1 voltage regulator with solder tag terminals		
<b>Type 33 25004D52</b> , round knob stabilized voltage $U_{st}$ with bridge 8 V without bridge 15 V  2 axes, universal deflection <sup>1)</sup> 2 potentiometers 2 x 1.8 kΩ/2 W 4 microswitches plug-type terminals 2.8 x 0.5 mm <sup>2)</sup> 2 voltage regulators with solder tag terminals		
1) With cross gate (4 deflections) to order 2) To DIN 46 244		

### 33 25004D .. Dimensions (mm)



Drilling patterns for desk panel (maximum material thickness 4 mm)



Type 33 25004D00  
Type 33 25004D52  
with round knob

Type 33 25004D03  
Type 33 25004D51 without terminals ③  
with round knob

Type 33 25004D05  
with long knob  
and dead-man button