

# Precision Low – Torque – Potentiometer F25REB V1

Resistance values in accordance with DIN 42822, resistance tolerance  $\pm 1\%$

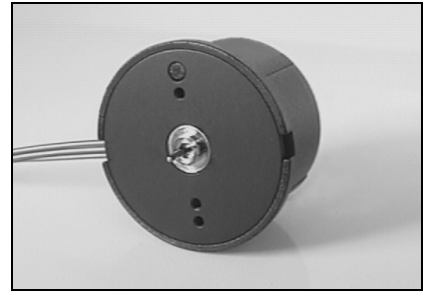
# ALTMANN

www.altmann-gmbh.de

Precision low torque potentiometers of Type F25REB have a resistance value which is standardised in accordance with DIN 43822.

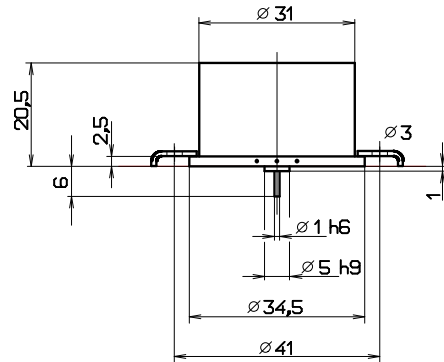
2 preresistances and the variable resistance set up the total resistance. The preresistances are firmly installed in the low torque potentiometer.

The electrical rotation angle of  $270^\circ$  is supplemented by two short-circuit segments (each  $10^\circ$ ) to the mechanical rotation angle of  $290^\circ$



### mechanical data

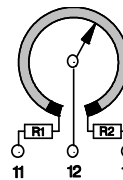
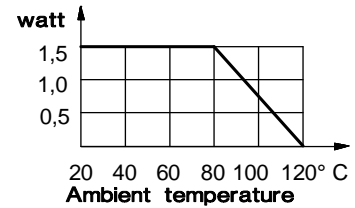
- 1.1 housing..... : reinforced glass fibre plastic
- 1.2 shaft..... : stainless steel  $\varnothing 1\text{mm}$
- 1.3 bearing..... : jewel bearing
- 1.4 resistor element..... : noble metal winding
- 1.5 slider tap / wiper tap..... : noble metal, double
- 1.6 housing protection class..... : IP 60
- 1.7 connections..... : terminal wires, 200 mm
- 1.8 mounted by ..... : clamping claws
- 1.9 mechanical rotation angle..... :  $290^\circ +5^\circ$
- 1.10 electrical rotation angle..... :  $270^\circ -1^\circ+2^\circ$
- 1.11 rotation speed..... : max. 1 rps
- 1.12 torque..... : 0,002 till 0,003 Ncm
- 1.13 rotation load life..... :  $50 \times 10^6$  slider path ( $360^\circ$ )



### electrical data

- 2.1 resistance values, standard..... : according to table
- 2.2 resistance values,max possible : 5 K-Ohm
- 2.3 resistance tolerance..... :  $\pm 1\%$
- 2.4 lowest starting resistance..... : 0,1% of overall resistance +  $0,3\Omega + R1*1$
- 2.5 linearity tolerance..... :  $\pm 0,3\%$
- 2.6 insulation resistance..... : 20 M-Ohm
- 2.7 test voltage..... : 500 V, 50 Hz
- 2.8 operating voltage..... : max. 50 V
- 2.9 power rating..... : max. 1,5 Watt
- 2.10 slider load current..... : max. 1 mA (max., load life)
- 2.11 temperature range..... :  $-50^\circ\text{C}$  till  $+100^\circ\text{C}$
- 2.12 temperature coefficient..... : 20 ppm/ $^\circ\text{C}$

### power derating curve



terminal plan

point	function	colour
1 1	winding 1	red
1 2	slider	yellow
1 3	winding 1	blue

\*1 The value applies only for version with short-circuit tracks and stops.

### accessories other types

outer housing mounting set couplings	F25RDEB: multiple version F25REB Lin.: winding linearized  F25Z160: dial surface mounting $\varnothing 160$ F25Z100: dial surface mounting $\varnothing 100$
--	--

### Standard resistance values in Ohm other values available

Ohm nominal value	Ohm R1, R2	Ohm per $270^\circ$
5 - 100 - 5	5	100
10 - 200 - 10	10	200
20 - 480 - 20	20	480
50 - 30 - 50	50	30

Sheet #: KE0102

Amendment/ Print: 18.03.08 / 20.08.10

Order #: 01200

### ALTMANN Potentiometer

Herringhauser Straße 29  
32051 Herford - Germany

P.O. Box 11 42  
32001 Herford - Germany

Phone: 05221/3404-0  
Fax: 05221/3404-29

eMail: [info@altmann-gmbh.de](mailto:info@altmann-gmbh.de)

Subject to technical  
amendments Form.#: 00000000