



## PL300

### Applications

- Valve controls
- Joysticks / Master switches

### Features

- Small dimensions
- Design flexibility
- 5 Mio. cycles
- Excellent linearity, up to  $\pm 0.25\%$
- Very good resolution better  $0,1^\circ$

### Options

- Resistance tolerance  $\pm 10\%$
- Independent linearity  $\pm 0.25\%$
- Custom electrical angles and switch functions available
- Mechanical end stops
- Protection class IP65
- Custom shaft design
- Custom housing design
- Ball bearings / Sintered bronze bearings

Electrical Data		
Nominal resistance	1/5/10	kOhm
Resistance tolerance	$\pm 20$	%
Independent linearity	$\pm 1$	% of meas. range
Electrical angle	340	$^\circ$
Repeatability	max. 0.1	$^\circ$
Temperature coefficient of the voltage divider	50	ppm/ $^\circ\text{C}$
Recommended wiper current	max. 1	$\mu\text{A}$
Max. wiper current in case of malfunction	10	mA
Power rating P	max. 0.5	W/40 $^\circ\text{C}$
Min. life (electrical)	10 Mio.	cycles
Mechanical Data		
Mechanical range	360	$^\circ$ (continuous)
Torque (IP54)	max. 0.7	Ncm
Min. life (mechanical)	5 Mio.	cycles
Max. permitted axial shaft load	1	N
Max. permitted radial shaft load	1	N
Operating temperature	-25 ... +85	$^\circ\text{C}$
Storage temperature	-40 ... +105	$^\circ\text{C}$
Protection class	IP50	
Standards		
Insulating resistance (500 VDC, 1bar, 2s)	10	GOhm
Dielectric strength (VAC, 50Hz, 1min, 1bar)	1	kV
Vibration (Amax = 0.75mm, f = 30 ... 2000 Hz)	10	g
Shock (half sine pulse, 7 ms)	50	g

Errors and omissions excepted.  
Subject to change without notice.  
State: 15-Nov-2005