Wire Potentiometer WP 75

The WP 75 is a wire potentiometer which is designed to measure position, direction, or rate of motion of moving mechanical components.

This sensor converts mechanical movement into electrical signal using a stainless steel cable wounded on a threaded drum that is coupled to a precision rotary sensor. Hence the electrical output is proportional to the distance travelled.

The advantage of this WP is its compact style which allows for flexible and easy installation. Due to its small size, precise measurement is possible even in difficult applications.

Application	
Application	0 ... 75 mm
Temperature range	-65 ... 125 °C
Max. cable acceleration	170 m/s^2
Max. cable tension	2.8 N
Shock	1,000 m/s^2 for 6 ms
Vibration	150 m/s^2 @ 10 ... 2,000 Hz

Electrical Data	
Power supply	5 V
Power supply max.	35 V
Nominal resistance	5 kΩ
Resistance tolerance	10 %
Non-linearity	0.5 %
Max. current	12 mA

Mechanical Data	
Weight w/o cable	28 g
Possible mechanical range	76.2 mm
Mounting	2 x 2-56 UNC
Tightening torque	2.5 Nm
Life expectancy	100 x 10^6 cycles
Protection	IP54
Dimensions	Ø 24.4 x 11.4 mm

Connectors and Cables	
Connector	ASL 6-06-05PA-HE
Connector loom	ASL 0-06-05SA-HE
Pin 1	U_S
Pin 2	Gnd
Pin 3	Sig
Pin 4	-
Pin 5	-
Sleeve	DR-25
Cable size	AWG 24
Cable length L	15 ... 45 cm
Various motorsports and automotive connectors on request.	
Please specify the requested cable length with your order.	

Application Hint

The WP 75 can be connected directly to most electronic control units and data logging systems.

Holder for specific mounting orientation is available on request.

The angle of the displacement cable should be in the range of ± 5 ... 10° from normal direction to avoid damaging the housing.

Do not allow the cable to snap back (freely retract). This will cause damage and void the warranty. Tension must be maintained on the cable at all times.

Please find further application hints in the offer drawing (http://www.bosch-motorsport.com).

Part Number

WP 75	**B 261 209 543**