

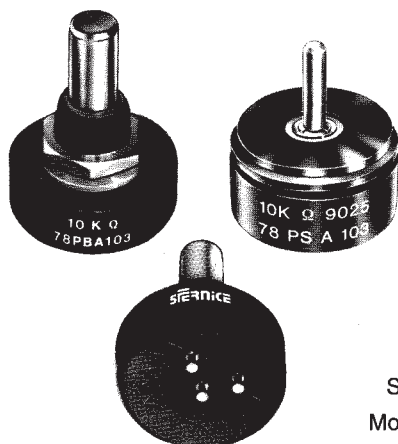


ECS

ECO

# precision rotative transducer

– conductive plastic, economic series



Low cost industrial motion transducers, conductive plastic track.

– SIZE 09  
– LONG LIFE

– BUSH OR SERVO MOUNTING  
– COMOLDED TERMINALS

Size	09			
Model	78 RS	78 RB	78 PS	78 PB

## ELECTRICAL CHARACTERISTICS

Theoretical electrical angle (TEA)	AEA - 3°		
Independent linearity (over TEA)	A $\leq \pm 1\%$ , on request: B $\leq \pm 0.5\%$ , C $\leq \pm 0.35\%$		A $\leq \pm 2\%$
Actual electrical angle (AEA)	340° $\pm 5^\circ$		
Ohmic values ( $R_T$ )	1 - 2 - 5 - 10 k $\Omega$ , on request other values		1 - 2 - 5 - 10 k $\Omega$
Ohmic value tolerances at 20°C	$\pm 20\%$ , on request $\pm 10\%$		$\pm 20\%$
Output smoothness	0.1%		
Maximum power rating at 70°C	1 W		
Wiper current	recommended: a few $\mu\text{A}$ - 1 mA max. (continuous)		
Tap (current or voltage)	1: on request		NA
Resistance load on wiper	$\geq 1.000 \times R_T$		
End voltage	0,5%		
Insulation resistance	$\geq 1000 \text{ M}\Omega$ , 500 V DC		
Dielectric strength	$\geq 500 \text{ V RMS}$ , 50 Hz		

## MECHANICAL CHARACTERISTICS

Mechanical angle (MA)	360° continuous			
on request: stops	342° $\pm 5^\circ$			
Mounting type	servo	bushing	servo	bushing
Shaft guiding	sleeve bearings			
Shaft	stainless steel			
Option: Flat or screw driver slot on shaft	on request		NA	
Termination	turrets			
Wiper	precious metal multi-finger contact			
Starting torque (N.cm)	$\leq 0,5$			
Torque on stops (N.cm)	$\geq 20$			
Weight (g)	bushing 17 g $\pm 3$ g		servo 12 g $\pm 3$ g	

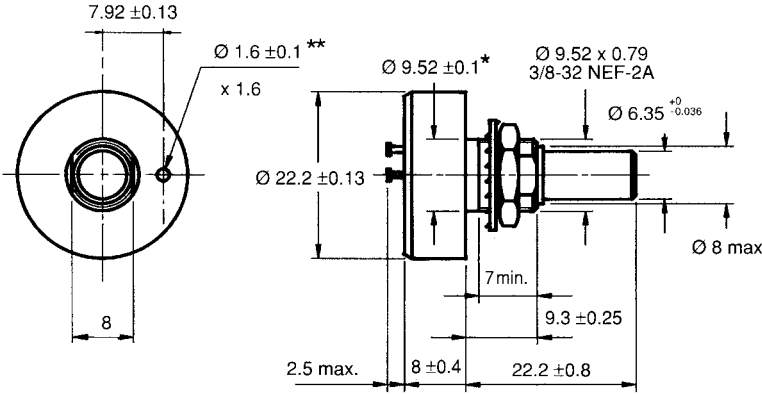
## PERFORMANCES

Life ( $10^6$ cycles)	10		3	
Temperature range	-55°C, +125°C			
Climatic category	55 / 125 / 04			
Speed rotation (RPM)	150			
Sine vibrations on 3 axes	15 g from 10 Hz to 2000 Hz			
Mechanical shocks on 3 axes	50 g - 11 ms - half sine			

# ECS

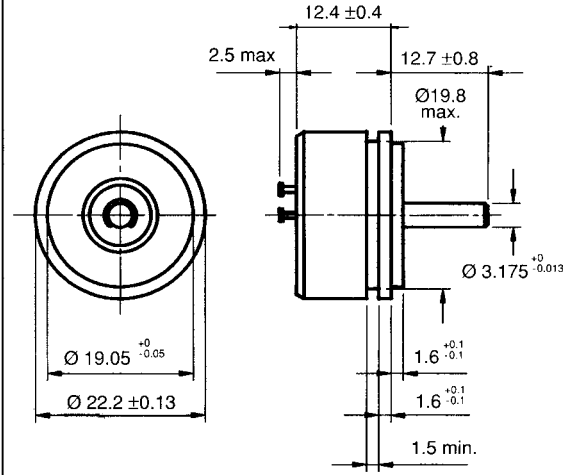
SIZE 09

78 PB  
78 RB



SIZE 09

78 PS  
78 RS



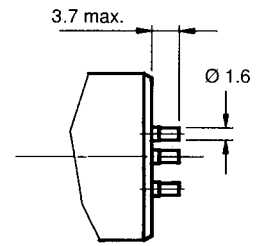
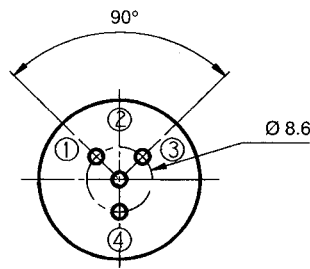
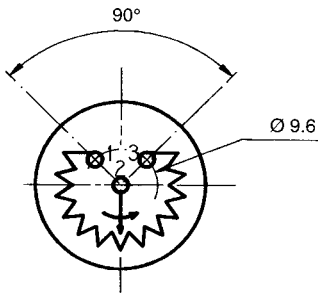
\* On request ø 10,3 mm or 12,3 mm  
\*\* Without antirotation pin on request

## REAR VIEWS

SIZE 09

STANDARD  
3 TURRETS

INTERMEDIATE  
TAP ON REQUEST ④



Dimensions in mm.  
General tolerance ±0,5 mm.

## ORDERING PROCEDURE

SERIES	MODEL	TYPE	FIXATION	MECHANICAL STOPS	LINEARITY	TAP	OHMIC VALUE	SPECIAL FEATURES
ECO	78	P	S	M	A	T	103	W...
		P R	S Servo B Bushing	on request M	A ±1% or ±2% B ±0,5% C ±0,35%	on request T: voltage U: current position to be specified	102: 1 kΩ 202: 2 kΩ 502: 5 kΩ 103: 10 kΩ	special code



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