



HIRSCHMANN Automotive E-Throttle for ride by wire

**Contactless Angular Position Sensor,
Based on the Hall Effect**



**HIRSCHMANN
AUTOMOTIVE**

Product Overview HIRSCHMANN Automotive E-Throttle for ride by wire

The electronic throttle grip is a system that recognizes the driver's signal to control the speed of motorcycles, motor scooters, and all-terrain vehicles. The contactless sensor system detects the operating angle of the throttle grip and converts this information into an electrical signal that is subsequently processed by the control unit. Linear mapping of the angle of rotation lets customers set different evaluations regarding driving dynamics and performance. This sensor technology is completely redundant and consequently meets the safety requirements of electronic gas systems.

Characteristics:

- contactless redundant sensor based on the Hall effect
- immune to magnetic and electromagnetic interference thanks to integrated shielding function
- robust, even under challenging environmental conditions
- compliant with automotive standards
- application-specific rotation possible
- optional customized signal settings
- integrated switch positioned at a turning angle between 0° and -10°
- optional left rubber grip
- suitable for Euro 4 and 5 vehicles



Key Features

Parameter	Name	Min. Value	Type Value	Max. Value	Unit
Operating temperature	TOP	-20		85	°C
Rotation angle	ROT	-10		80	°
Operating torque	MOP	0.4		0.65	Nm
Supply voltage	VDD	4.5	5.0	5.5	V
Supply current	IDD		13.5	15.0	mA
Signal range	VOUT	6.0		90	%VDD
Diagnostic low	diag_low	0		4	%VDD
Diagnostic high	diag_high	96		100	%VDD
Linearity error	lin_error	-2.0		2.0	%
Synchronism error	sync_error	-2.0		2.0	%

