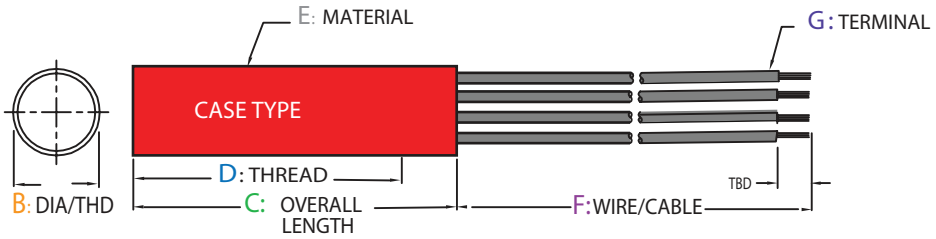
HD Part Number Nomenclature

The standard part number includes the sensor type, case type, case diameter, terminal type as well as any special modifications.
Please contact Sensoronix if you need more detailed information.



CASE TYPES	DESCRIPTION	A
	SMOOTH	0
	ALL THREAD	1
	HEX HEAD	2
	KNURL HEAD	3
	CONNECTOR HEAD	4
	WRENCH FLAT HEAD	5
	SMOOTH / THREAD	6
	WITH FLANGE	7

HD X X X - X X 0

- HD X X X — Linear Speed & Direction Sensor
- HD X X X — Case Type
- HD X X X — Case Diameter "B"

		METRIC	
1/4" (0.250")	2X		
3/8" (0.375")	3X	M-8	08
15/32" (0.468")	4X	M-12	12
1/2" (0.500")	5X	M-16	16
5/8" (0.625")	6X	M-18	18
3/4" (0.750")	7X	M-20	20
7/8" (0.875")	8X	M-22	22
Others	9X		

- HD X X X - X X 0 — Terminal "G"

Connector	0
Conn. & Wire	1
Conn. & Cable	2
Lead Wires	3
Cables	4

- HD X X X - X X 0 — Vary With Special Modifications
- HD X X X - X X 0 — Fixed Number (0)

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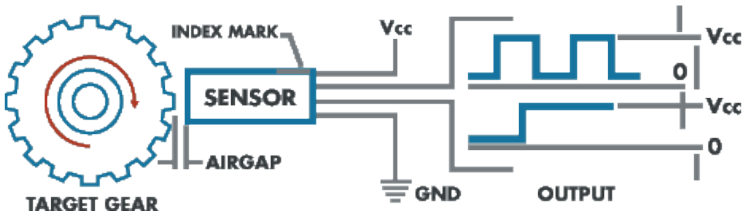
Hall Effect Speed & Direction Sensor (HD)

Non-contact magnetic sensors that measure the distortion of magnetic fields and thus provide precise measurements of speed and direction. Output #1 is digital square wave and measures the speed of target wheel or gear. Output #2 is a DC level that when the target wheel rotates clockwise, the output signal # 2 produces logic High, and when the target wheel rotates counter clockwise, the output signal # 2 produces logic low. Output signal #1 will be 50% duty cycle with proper alignment of sensor and target gear.



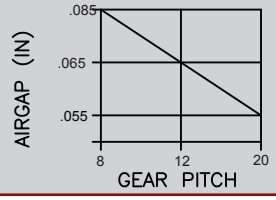
Target: Ferrous Material Gear Tooth with range of Min. 4 to 32 Gear Pitch

Frequency: 15 kHz Max

$P = \frac{N + 2}{OD}$ P = Gear Pitch, N = Num. of Teeth, OD = Outside Diameter

Output Type: Digital (Square Wave) TTL compatible

Gear Pitch vs. Airgap Graph



Example of Common Applications

Automotive, Aerospace, Off Highway & Military

Applications: Car, Motorcycle, Boat Speed and Direction Measurement, Airplane, Helicopter, Tank, Military Equipment, Dynamometer, Transmission, Traction Control, Armored Vehicles, Missiles, Mining Equipment, Hydraulics.

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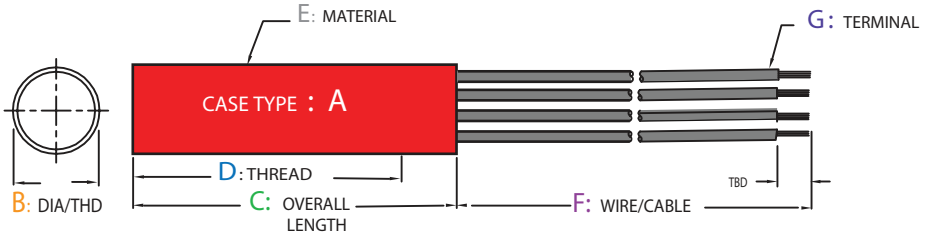
Standard (HD) Products Available



Please contact Sensoronix for more detailed information on the standard sensors listed below.
All products are custom designed to meet your exact specification requirements.

	PART #	MECHANICAL SPECIFICATIONS							ELECTRICAL SPECIFICATIONS						ENVIROMENT	
		A	B	C	D	E	F	G	INPUT VOLTAGE (VDC)	INPUT CURRENT (mA)	V OUT HIGH (VDC)	V OUT LOW (VDC)	OUTPUT CURRENT (mA)	PULL UP RESISTOR (K Ohm)	FRONT SEALED	TEMP RANGE (°C)
	5/8" Diameter Series															
	HD160-400	1	5/8 - 18	2.50	2.50	303 S.S.	12 ± 1	22 AWG, 4 CON. CBL. W/ SHLD, TEFF. INS.	5 to 18	15	V Input	0.4	20 Sink	4.7	Epoxy	-40 to 125
*	HD360-400	3	5/8 - 18	2.72	2.14	303 S.S.	72 ± 3	22 AWG, 4 CON. CBL. W/ SHLD, TEFF. INS.	5.5 to 36	15	5.0	0.6	50 Sink	4.7	Epoxy	-40 to 125
*	HD460-000	4	5/8 - 18	3.00	2.14	303 S.S.	-	CONN. M12X1, 4 PINS	5.5 to 36	20	V Input	0.6	50 Sink	4.7	303 S.S.	-40 to 85
	3/4" Diameter Series															
*	HD270-400	2	3/4 - 16	2.30	1.87	Alum.	72 ± 3	22 AWG, 4 CON. CBL. W/ SHLD, TEFF. INS.	5.5 to 36	15	5.0	0.6	50 Sink	4.7	Epoxy	-40 to 125
	M18 Diameter Series															
*	HD218-400	2	M18 x 1.5	2.80	2.05	303 S.S.	31.5 ± .5	20 AWG, 4 CON. CBL. W/ SHLD	10 to 40	15	5.0	0.6	50 Sink	4.7	303 S.S.	-40 to 125
*	HD218-410	2	M18 x 1.5	2.36	2.05	303 S.S.	31.5 ± .5	20 AWG, 4 CON. CBL. W/ SHLD	10 to 40	15	5.0	0.6	50 Sink	4.7	303 S.S.	-40 to 125
*	HD518-400	5	M18 x 1.5	2.14	1.89	303 S.S.	120 ± 3	22 AWG, 4 CON. CBL. W/ SHLD, TEFF. INS.	5.5 to 36	15	5.0	0.6	50 Sink	4.7	Epoxy	-40 to 125
	HD518-410	5	M18 x 1.5	2.14	1.89	303 S.S.	24 ± 1	22 AWG, 4 CON. CBL. W/ SHLD, TEFF. INS.	4.5 to 18	15	V Input	0.6	20 Sink	4.7	Epoxy	-40 to 125
*	HD518-420	5	M18 x 1.0	2.05	1.78	303 S.S.	12 ± .5	22 AWG, 4 CON. CBL. W/ SHLD, TEFF. INS.	5.5 to 36	20	5.0	0.6	50 Sink	4.7	303 S.S.	-40 to 125
	M20 Diameter Series															
*	HD120-400	1	M20 x 1.5	2.05	2.05	303 S.S.	39 ± .5	22 AWG, 4 CON. CBL. W/ SHLD, TEFF. INS.	6 to 36	10	5.0	0.6	50 Sink	4.7	303 S.S.	-20 to 100

*Electrical Protections
Supply Voltage : 40VDC
Reverse Polarity : -50V Reverse Transient
Load Dump : 60V

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