

# TDK CHS Series Humidity Sensors



TDK's CHS Series humidity sensors are compact and extremely simple to apply. Because they contain the necessary circuitry, there is no need to provide additional control circuitry or perform time-consuming calibration. With simple connection to a power supply, they will output DC at 100% relative humidity. This makes it possible to read RH directly with a voltmeter.

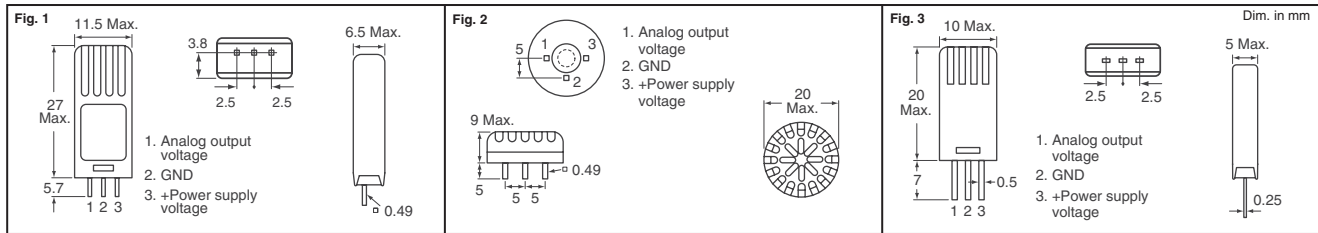


Fig.	Supply Voltage (VDC)	Measuring Range (% RH)	Nominal Accuracy RH	Digi-Key Part No.	1	10	100	TDK Part No.
1	5	5 - 95	±5%	445-2577-ND	51.01	45.92	40.82	CHS-UGS
		5 - 95	±3%	445-2578-ND	74.40	63.77	55.27	CHS-UPS
		5 - 95	±3%	445-2579-ND	74.40	63.77	55.27	CHS-UPR
2	5	5 - 90	±5%	445-2575-ND	34.01	30.61	27.21	CHS-GSS
		20 - 85	±5%	445-2576-ND	23.81	21.43	19.05	CHS-MSS

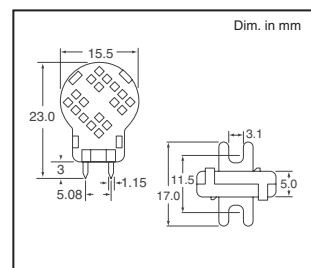
# VISHAY BC Capacitive Humidity Sensor



The capacitive atmospheric humidity sensor consists of a non-conductive foil, which is covered on both sides with a layer of gold. The dielectric constant of the foil changes as a function of the relative humidity of the ambient atmosphere, and accordingly, the capacitance value of the sensor is a measure for relative humidity.

Humidity Range (RH)	Capacitance* (pF)	Sensitivity Between 12-75% RH (pF/%RH)	Frequency (kHz)	Max. AC / DC Voltage (V)	Storage Humidity Range (RH)	Ambient Temperature Range (°C)		Digi-Key Part No.	Price Each			Vishay Part No.
						Operating	Storage		1	10	100	
10 - 90%	122 ±15%	0.4 ±0.05	1 - 1000	15	0 - 100%	0 - 85	-25 - 85	BC2325-ND	15.17	13.64	10.75	2381 691 90001

\* Capacitance at 25°C; 43% RH; 100kHz



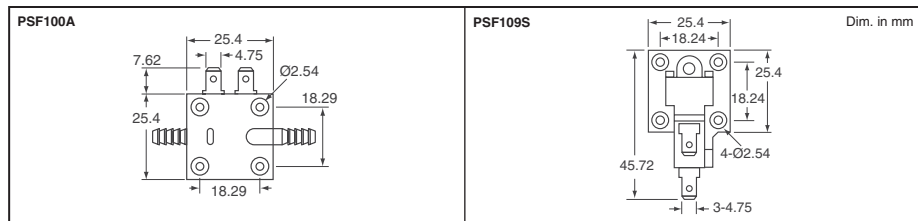
# WORLD MAGNETICS Ultra Sensitive Pressure Switches

## PSF100A Series:

Switch-type is SPST normally open, double-make/double-break. Current Rating is 40mA resistive for life in excess of twenty million cycles. • **Operating Voltage:** AC/DC-30V or less with resistive load; 120VAC neon lamp load.

## PSF109S Series:

Vacuum switch with Hysteresis (deadband) for motor control. Field-adjustable vacuum set point. Switch-type is SPDT normally open, normally closed. For use with AMP 2-520182-2 or equivalent.

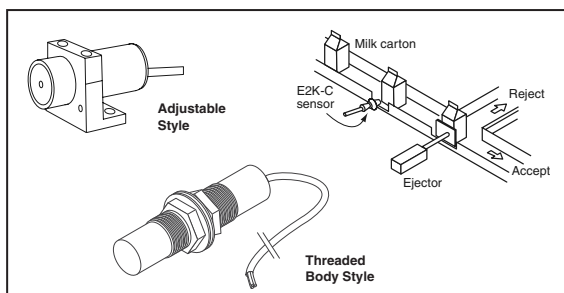


In. H <sub>2</sub> O	Tolerance	Proof Pressure	Operating Current/Voltage	Digi-Key Part No.	1	10	100	World Magnetics Part No.
<b>PSF100A Series</b>								
15.0	±20%	15 PSI	40mA 30V AC/DC	384-1005-ND	18.94	17.99	13.44	PSF100A-15.0
50.0	±20%	15 PSI	40mA 30V AC/DC	384-1006-ND	18.94	17.99	13.44	PSF100A-50.0
<b>PSF109S Series Vacuum</b>								
3 - 8	±20%	—	3A 125/250VAC	384-1007-ND	16.24	15.43	11.53	PSF109S-3-8
3 - 8	±20%	—	3A 125/250VAC	384-1020-ND	22.36	21.25	15.88	PSF109S-NPT-3-8

# OMRON Capacitive Proximity Sensors



Capacitive sensors operate similar to Inductive sensors except that a plate is used instead of a coil in the sensor's head. This plate develops a capacitive field between the sensor and ground. When an object comes within sensing distance of the sensor, the capacitive field changes which gets detected by the sensor and turns on the output. Perfect for detecting both metallic and non-metallic objects such as glass, wood, water, oils and plastics. Also works well for detecting liquids and solids in containers.



Sensing Distance	Description	Output Type	Digi-Key Part No.	Price Each	Omron Part No.
3 - 25mm	Amplified Sensor, Adjustable, NO, 10-40VDC	NPN	Z1071-ND	114.31	E2K-C25ME1
3 - 25mm	Amplified Sensor, Adjustable, NC, 10-40VDC	NPN	Z1072-ND	114.31	E2K-C25ME2
3 - 25mm	Amplified Sensor, Adjustable, NC, 90-250VAC	SCR	Z1073-ND	114.31	E2K-C25MY1
3 - 25mm	Amplified Sensor, Adjustable, NC, 90-250VAC	SCR	Z1074-ND	114.31	E2K-C25MY2
Mounting Bracket for E2K-C Sensors.....			Z1659-ND	4.54	Y92E-A34
0 - 4mm	M12, 3 Wire Sensor, THD Body, NO, 10-30VDC	PNP	Z2356-ND	91.63	E2K-X4MF1
0 - 8mm	M18, 3 Wire Sensor, THD Body, NO, 30VDC	PNP	Z2426-ND	87.32	E2K-X8MF1
0 - 15mm	M30, 3 Wire Sensor, THD Body, NO, 10-30VDC	PNP	Z2427-ND	92.53	E2K-X15MF1
0 - 4mm	M12, 3 Wire Sensor, THD Body, NO, 10-30VDC	NPN	Z2423-ND	91.63	E2K-X4ME1
0 - 8mm	M18, 3 Wire Sensor, THD Body, NO, 10-30VDC	NPN	Z2424-ND	87.32	E2K-X8ME1
0 - 15mm	M30, 3 Wire Sensor, THD Body, NO, 10-30VDC	NPN	Z2425-ND	92.53	E2K-X15ME1
0 - 8mm	M18, 2 Wire Sensor, THD Body, NO, 90-250VAC	SCR	Z2421-ND	110.68	E2K-X8MY1
0 - 15mm	M30, 2 Wire Sensor, THD Body, NO, 90-250VAC	SCR	Z2422-ND	119.75	E2K-X15MY1

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