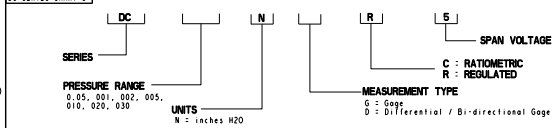


HONEYWELL  
PART NUMBER  
DC SERIES CHART 5

REV	DOCUMENT	CHANGED BY	CHECK
0	036344	SSK 18DEC07	CMH



**NOTES**

- REFERENCE CONDITIONS (UNLESS OTHERWISE NOTED): SUPPLY VOLTAGE,  $V_s = 15$  Vdc.
- $T_A = 25^\circ\text{C}$ . COMMON MODE LINE PRESSURE = 0 PSIG. PRESSURE MEASUREMENTS ARE WITH PRESSURE APPLIED TO PORT 2.
- HI/LO SPAN IS THE ALGEBRAIC DIFFERENCE BETWEEN OFFSET OUTPUT AND HI OR LO OUTPUTS.
- SHIFT IS RELATIVE TO  $25^\circ\text{C}$ .
- SHIFT IS WITHIN THE FIRST HOUR OF EXCITATION APPLIED TO THE DEVICE.
- LINEARITY IS DETERMINED USING BEST STRAIGHT LINE CURVE FIT THROUGH ZERO, 1/2 FULL SCALE, AND FULL SCALE; HYSTERESIS IS MECHANICAL ONLY.
- SPAN IS THE ALGEBRAIC DIFFERENCE OF OUTPUT END POINTS (OUTPUT AT SPECIFIED HI AND LOW OUTPUT LIMITS).
- TOTAL ERROR INCLUDES OFFSET & SPAN ERRORS, ZERO CALIBRATION, TEMPERATURE EFFECT ON ZERO AND SPAN, NONLINEARITY, HYSTERESIS, REPEATABILITY AND STABILITY OVER COMPENSATED TEMPERATURE RANGE.
- ACCURACY INCLUDES NONLINEARITY, HYSTERESIS AND REPEATABILITY.

ELECTRICAL SPECIFICATIONS					
PARAMETER	PRESSURE RANGE (1/4 H2O)	MIN	NOM	MAX	UNITS
DIFFERENTIAL	OFFSET VOLTAGE (NULL AT 0 in H2O)		3.500		V
	SPAN (HI SPAN - LO SPAN)		5.000		
	SPAN (P1 > P2)	ALL	-2.500		
	SPAN (P2 > P1)		2.500		
GAGE	OFFSET VOLTAGE (NULL AT 0 in H2O)		0.250		V
	FULL SCALE OUTPUT (P2 > P1)		5.250		
	SPAN (FULL SCALE OUTPUT - OFFSET)	ALL	5.000		
TOTAL ERROR	0.05, 01, 02		+/- 2	+/- 3	ISPAN
	05, 10, 20, 30		+/- 1	+/- 2	ISPAN
OFFSET WARM-UP SHIFT	0.05, 01, 02		20		mV
	05, 10, 20, 30		20		mV
OFFSET POSITION SENSITIVITY (+/- 1g)	0.05, 01, 02		10		mV
	05		5		mV
	10, 20, 30		1		mV
OFFSET LONG TERM DRIFT (ONE YEAR)	ALL		100		mV
ACCURACY	ALL		0.05		%FS

MAXIMUM RATINGS				
PARAMETER	PRESSURE RANGE (1/4 H2O)	MIN	MAX	UNITS
OPERATING TEMPERATURE RANGE		-25	85	$^\circ\text{C}$
STORAGE TEMPERATURE	ALL	-45	125	$^\circ\text{C}$
PROOF PRESSURE (VERIFIED BY TEST)		5	100	PSIG
BURST PRESSURE (VERIFIED BY DESIGN)	0.05, 01, 02		100	in H2O
	05, 10		150	
	20		300	
	30		450	
EXCITATION VOLTAGE		3	16	V
COMMON MODE PRESSURE	ALL		50	PSIG

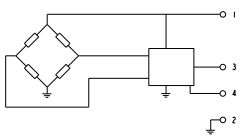
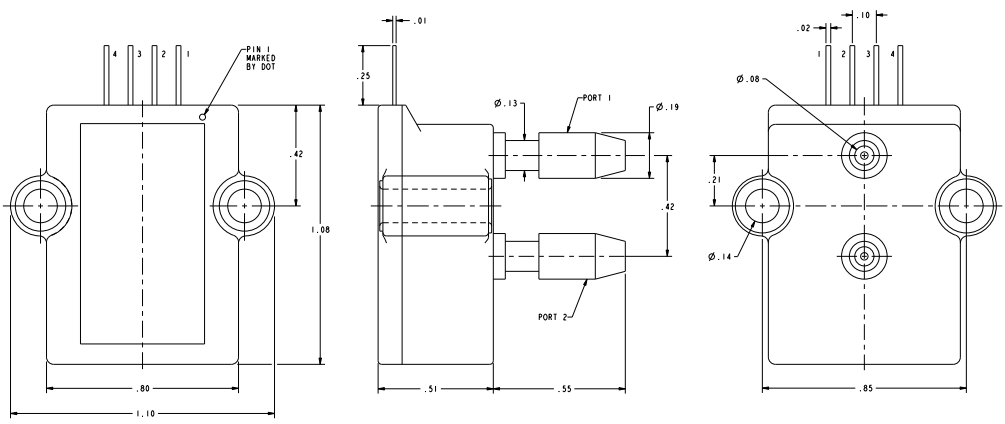
**MEDIA CAPABILITY, WETTED MATERIALS**  
(APPLY CLEAN DRY AIR ONLY)

PRESSURE: SILICON DIAPHRAGM, GLASS FILLED PORT 2  
NYLON, AND ALUMINA CERAMIC.  
(LIGHT) PRESSURE MEASURING PORT

PRESSURE: SILICON DIAPHRAGM, GLASS FILLED PORT 1  
NYLON, AND ALUMINA CERAMIC.  
(COMMON) THE VENT PORT

**PRESSURE COMPATIBILITY:**  
MEASURES DIFFERENTIAL OR GAGE PRESSURE ONLY WITH POSITIVE PRESSURE TO PORT 2. THERE WILL BE A SMALL OUTPUT VOLTAGE BETWEEN THE ACTUAL OFFSET VOLTAGE AND GROUND PROPORTIONAL TO VACUUM IF APPLIED TO PORT 2.

**RATIO METRIC OUTPUT:**  
THE OUTPUT VOLTAGE OF THE SENSOR IS NOMINALLY RATIO METRIC, PROPORTIONAL, TO THE EXCITATION VOLTAGE. FOR THIS MODEL SENSOR ALL SPECIFICATIONS WILL CHANGE PROPORTIONALLY TO ANY CHANGES IN THE EXCITATION VOLTAGE. THE EXCITATION MAY VARY BETWEEN 3 TO 16 VOLTS. ALL SPECIFICATIONS WILL NOMINALLY BE CHANGED BY A RATIO OF  $V_{excitation} / 5.0$  VOLTS. FOR EXAMPLE: IF THE EXCITATION VOLTAGE IS 3.0 VOLTS THEN BOTH THE FULL SCALE OUTPUT VOLTAGE AND THE OFFSET VOLTAGE WOULD BE 3/5TH THE SPECIFIED VALUE.



PIN OUT	
1	EXCITATION
2	COMMON
3	VEHICLE
4	NOT FOR CUSTOMER USE. DO NOT CONNECT.

CATALOG LISTINGS	
DC001NGRS	
DC002NGRS	
DC003NGRS	
DC004NGRS	
DC005NGRS	
DC006NGRS	
DC007NGRS	
DC008NGRS	
DC009NGRS	
DC010NGRS	
DC011NGRS	
DC012NGRS	
DC013NGRS	
DC014NGRS	
DC015NGRS	
DC016NGRS	
DC017NGRS	
DC018NGRS	
DC019NGRS	
DC020NGRS	
DC021NGRS	
DC022NGRS	
DC023NGRS	
DC024NGRS	
DC025NGRS	
DC026NGRS	
DC027NGRS	
DC028NGRS	
DC029NGRS	
DC030NGRS	

DESIGN UNITS: INCH	DRAWN: SK	12OCT06	
TOLERANCES UNLESS NOTED:	CHECK: CMH	12OCT06	
NO PLACES	± .004		<b>Pressure Sensor</b> THIS DRAWING COULD BE PROPRIETARY ITEM AND IS THE PROPERTY OF HONEYWELL. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE PERMISSION OF HONEYWELL. INTERPRET PER ASME Y14.3M-1994 OTHER HONEYWELL ENGINEERING STANDARDS MAY APPLY.
ONE PLACE	± .008		
TWO PLACES	± .015		
FOUR PLACES	± .030		
ANGLES	± .0005		TITLE: PRESSURE SENSOR DRAWING NO: DC SERIES CHART 6 SIZE: D TYPE: I SHEET: 1 OF 1 DATE: 18DEC07 DESIGNED BY: SK CHECKED BY: CMH APPROVED BY: SK