

# DP510 Series

## Heavy Industrial – High EMI Rated

### FEATURES

- Heavy Industrial CE Approval
- 10V/m EMI Protection
- Reverse Polarity Protection
- Short Circuit Protection on Output
- 0.5%FS accuracy
- Compact Outline
- -40 to 125°C Operating Temperature
- Weatherproof

### APPLICATIONS

- ▶ Industrial Process Control and Monitoring
- ▶ Advanced HVAC Controllers
- ▶ Refrigeration Systems
- ▶ Automotive Test Stands
- ▶ Pumps and Compressors
- ▶ Hydraulic/Pneumatic
- ▶ Agriculture Equipment
- ▶ Energy and Water Management

The DP510 from DOTECH sets the price / performance standard for transducers used in demanding environments. The DP510 exceeds the latest heavy industrial CE requirements including surge protection, and is over voltage protected to 16VDC in both positive and reverse polarity. The pressure port is machined from a solid piece of 17-4PH stainless steel(316L optional). There are no O-rings, organics or welds exposed to the pressure media. This allows for a leak proof, all-metal sealed pressure system which withstands more than 10 million pressure cycles without failure.



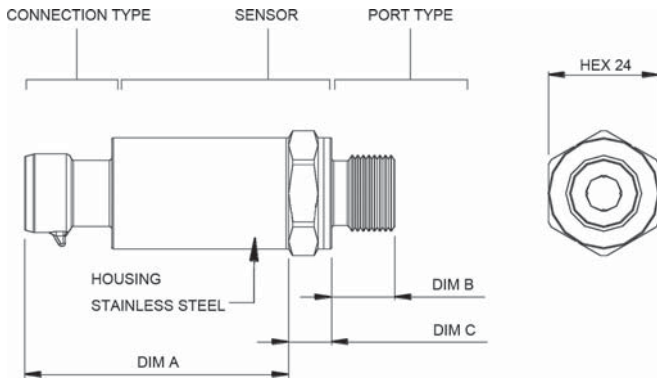
### SPECIFICATIONS

Range	0 ~ 16bar
Accuracy	±0.5%FS(RSS)
Thermal Effect on Zero	±0.05%FS/°C
Thermal Effect on Span	±0.05%FS/°C
Compensated Temp. Range	-20~85°C
Operating Temp. Range	-40 ~ 125°C(Cable Type : Max 105°C)
Power	9~30 VDC (0.5~4.5V Output : 5VDC, 0~10VDC Output : 15~30VDC)
Output	0.5~4.5, 0~5, 1~5, 0~10VDC, 4~20mA(2Wire)
Insulation Resistance	100MΩ@500VDC
Electrical Connection	Cable, Packard Connector, Mini Din Connector
Proof Pressure	X2
Burst Pressure	X5 or 1400bar, Whichever is less.
Vibration	20G, 20~200Hz
Shock	50G / 11 ms
Media-Wetted Materials	Stainless Steel 630
Weight	Mini Din Connector type : Approx. 85g (Sensor Only)

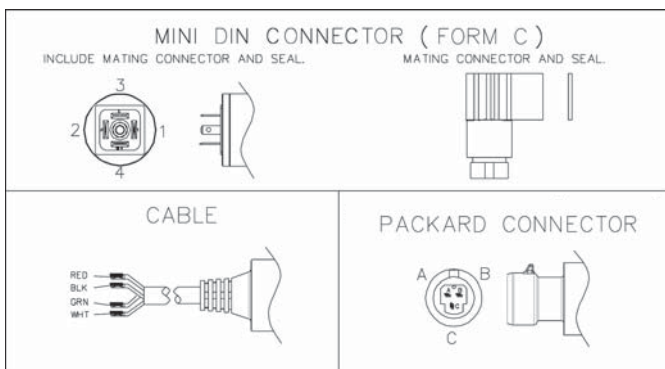
Model	Output	Connection	Options	Pressure Port	Pressure Range	Reference
DP510	3:0.5~4.5V	6:MINIDIN	00000	B:PF1/4	007 : 0 ~7bar	G : Gauge S : Sealed(≥70bar)
	4:1~5V	9:PACKARD		4:UNF7/16-20	010 : 0~10bar	
	5:4~20mA	N : CABLE 2 M		5:NPT1/4-18	020 : 0~20bar	
	6:0~5V			P:7/16-20(female)	035 : 0~35bar	
	7:0~10V			E:PT1/4	070 : 0~70bar	
	9:0.5~4.5V				200 : 0~200bar	
					350 : 0~350bar	
					700 : 0~700bar	
					01KB : 0~1,000bar	



## Housing Dimension(mm)



CODE	CONNECTION TYPE	DIM A
6	MINI DIN CONNECTOR (FORM C)	49.5
9	PACKARD CONNECTOR B	57.2
N	CABLE 2 M	55.6



PRESSURE PORT TYPE			
CODE	PORT	DIM B	DIM C REF.
B	G(PF)1/4	11.94	9.3
4	UNF 7/16-20 MALE	11.00	9.3
5	NPT1/4-18	9.91	9.3
P	UNF 7/16-20 FEMALE	10.92	11.28
E	R(PT)1/4	12.70	9.3

Note: Refer to installation instructions supplied with devices for recommended torque.

## Housing Dimension(mm)

### 1) V Output Type (0.5~4.5V / 0~5V / 1~5V / 0~10V)

번호 색상	CABLE 1/2" NPT CONDUIT	MINI DIN M12	DIN	AMP/PTE SUMITOMO	PACKARD A	PACKARD B	BAYONET	⊕ +SUPPLY ⊖ COMMON ⊖ -OUTPUT ✕ NC. PINS
	RED	1	1	1	A	B	A	
BLACK	3	2	2	B	A	C		
WHITE	2	3	3	C	C	B		
	4	4				D,E		

Output	Power
0.5~4.5V (Ratiometric)	4.75~5.25V
0.5~4.5 1~5V 0~5V	8~30V
0~10V	15~30V

Notes: 1. NC pins are reserved for factory use only. Customers should not use these connections.  
2. For cable connection, the drain wire is internally terminated to pressure port.

### 2) mA Output Type (4 ~ 20mA)

번호 색상	CABLE 1/2" NPT CONDUIT	MINI DIN DIN	M12	AMP/PTE SUMITOMO	PACKARD A	PACKARD B	BAYONET	⊕ +SUPPLY ⊖ -OUTPUT ✕ NC. PINS
	RED	1	1	1	A	B	A	
BLACK	2	3	2	B	A	B		
	3,4	2,4	3	C	C	C,D,E		

Output	Power
4~20mA	9~30V

Notes: 1. NC pins are reserved for factory use only. Customers should not use these connections.  
2. For cable connection, the drain wire is internally terminated to pressure port.