

# DA-600S-Catalytic



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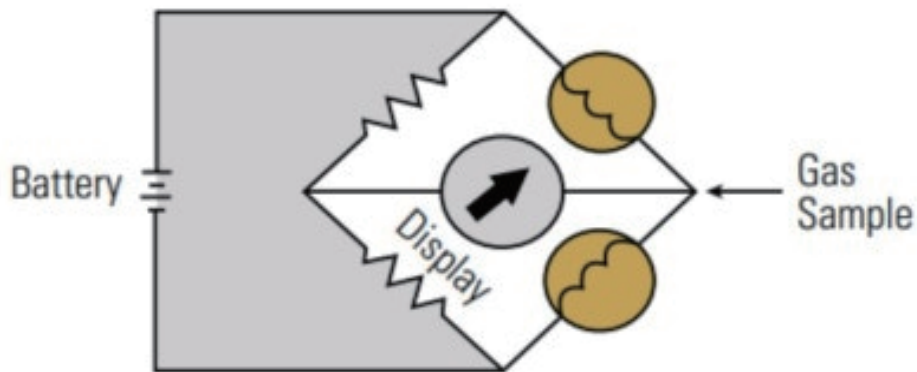
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## 제품개요

Catalytic 센서는 가연성 가스(Hydro carbon) 널리 사용되는 센서 입니다.

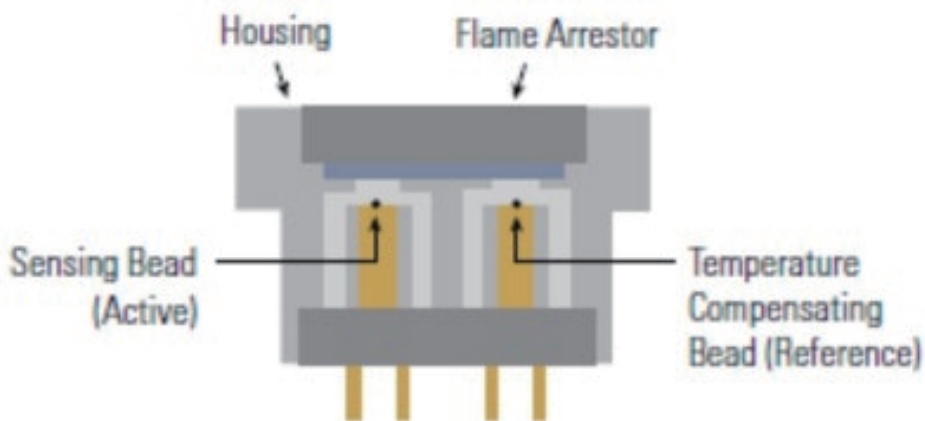
가스가 산화되면 열이 발생하고 센서는 표준 휘스톤 브릿지 유형 회로를 통해 온도 변화를 가스 농도에 비례해 센서 신호로 변환한다는 원리를 기반으로 합니다. 센서의 구성 요소는 한 쌍의 가열 코일 (기준 / 활성) 로 구성 됩니다.

활성 원소는 촉매에 내장 되어 있습니다. 반응은 촉매 표면에서 일어나고 가연성 가스는 공기 중의 산소와 외온적으로 반응하여 온도를 높입니다. 이로 인해 저항이 변경 된 값을 환산하여 측정합니다.



### Wheatstone Bridge Circuit

Figure 1



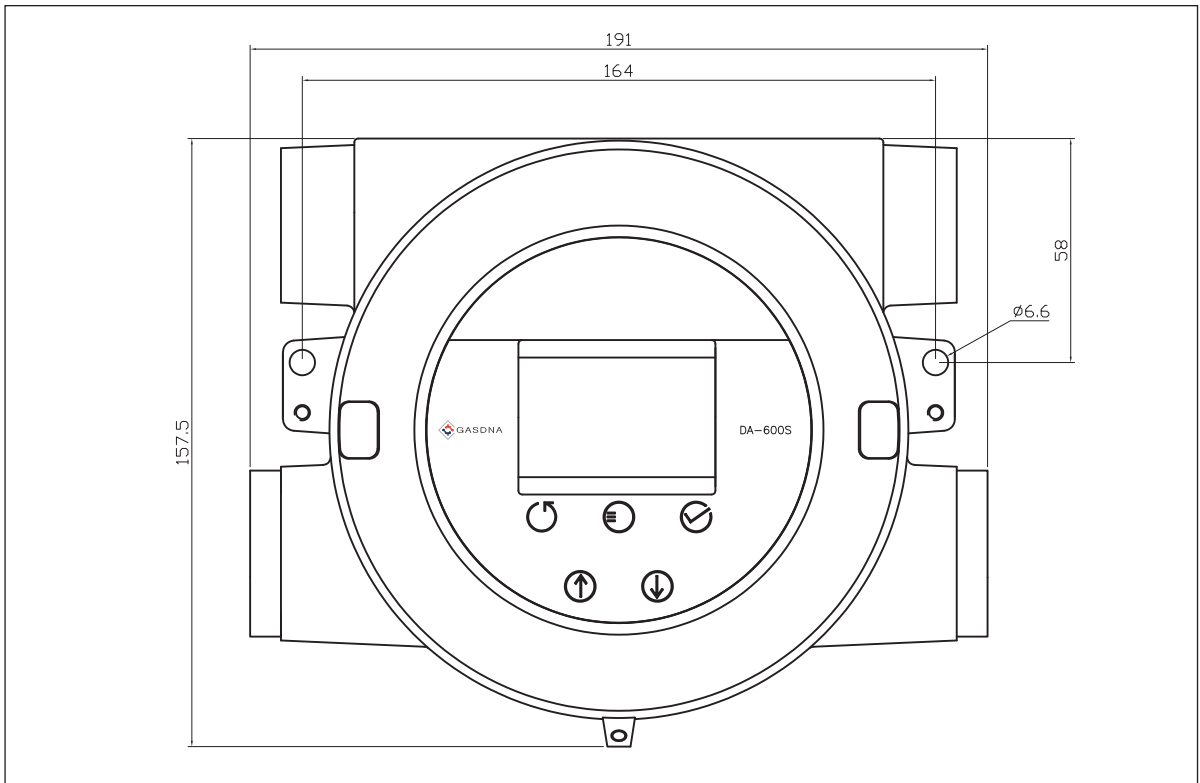
### Combustible Gas Sensor

## 제품 사양

구 분	내 용
Measuring Range	0~100 %LEL
Size	191(W) x 158(H) x 135(D)
Weight	3.8kg
Display	2.4" TFT LCD
Screen size	48.96mm × 36.72mm(2.4inch)
Screen display	5magnetic switches with led confirmation
Warning light	RGB Color :RED, Orange, Green
Measuring principle	Catalytic
Measuring gas	Gas list 참조
Detection Time(T90)	>25 초이내
Temperature	-40℃~55℃
Humidity	0~95%RH(Non condensing)
Mechanical interface	2 x 3/4" NPT
INPUT POWER	DC 20~30V, Maximum power of 10Watts
Outputs	4-20mA, Rs485 modbus, Relay x 2SPST(220V AC : 0.3A)
Certification	Ex db IIC T6 Gb(IP6X), Ex tb IIIC T85℃ Db(IP6X)
Measuring method	Sampling

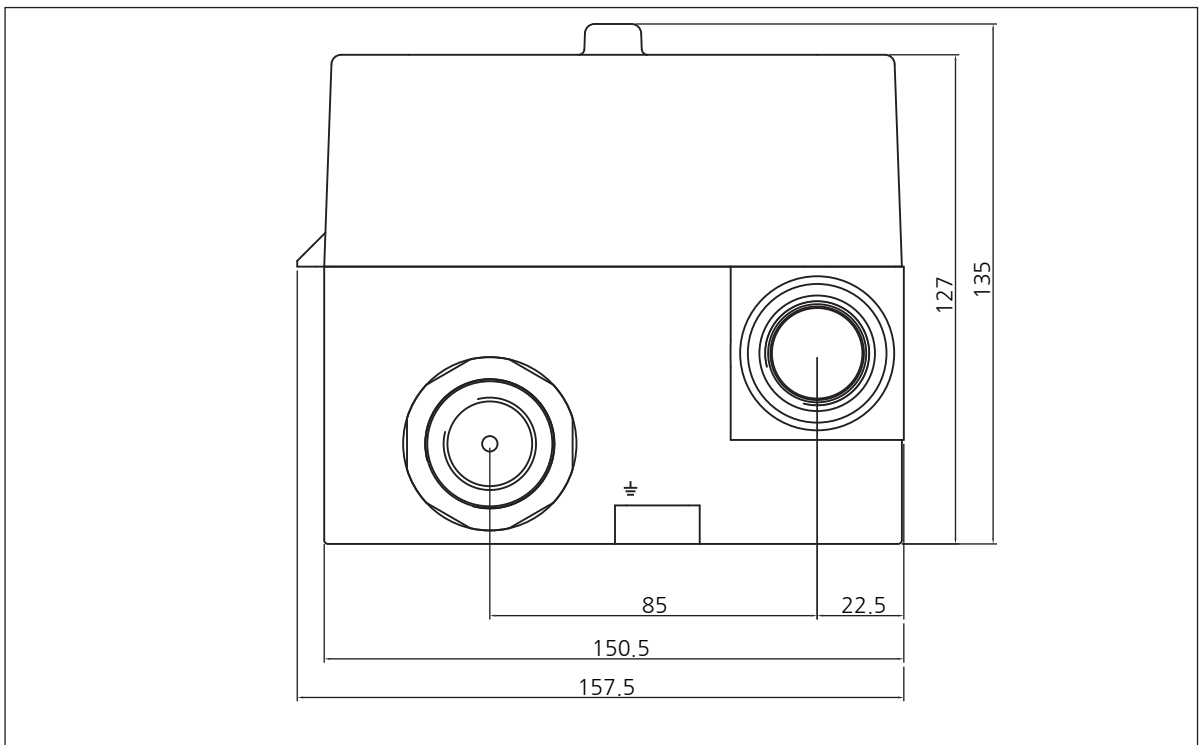
**제품도면**

1. 평면도



단위: mm

2. 측면도



단위: mm

## 가연성 가스감지기 측정 물질 리스트

No.	가스명	분자식
1	Acetaldehyde	C2H4O
2	Acetone	C3H6O
3	Acetonitrile	C2H3N
4	Acetylene	C2H2
5	Acrylonitrile(AN)	C3H3N
6	Allyl chloride	C3H5Cl
7	Ammonia	NH3
8	n-Amyl alcohol	C5H12O
9	Benzene	C6H6
10	1-Butene	C4H8
11	1,2-Butadiene	C4H6
12	2-Butanol	C4H10O
13	Isobutylene	C4H8
14	Butene(butylene)	C4H8
15	n-Butane	C4H10
16	i-Butane	C4H10
17	Butyl acetate	C6H12O2
18	Isobutyl acetate	C6H12O2
19	n-Butyl alcohol	C4H10O
20	2-Chloro-2-methylbutane	C5H11Cl
21	Cumene	C9H12
22	Cyclohexane	C6H12
23	Cyclopentane	C5H10
24	Dibutyl ether	C8H18O
25	1,2-Dichloroethane(EDC)	C2H4Cl2
26	Diethyl carbonate (DEC)	C5H10O3
27	Diethyl ether(Ethyl ether)	(C2H5)2O
28	Difluoromethane(R-32)	CH2F2
29	Diisobutylene	C8H16
30	Diisopropylamine	C6H15N
31	Diisopropyl Ether	C6H14O
32	Dimethylacetamide (DMAc)	C4H9NO
33	Dimethylamine (DMA)	(CH3)2NH
34	Dimethyl carbonate (DMC)	C3H6O3
35	Dimethyl Ether	C2H6O
36	1,4-Dioxane	C4H8O2
37	Epichlorohydrin	C3H5ClO
38	Ethane	C2H6
39	Ethanol	C2H5OH
40	Ethyl acetate	C4H8O2
41	Ethyl acrylate	C5H8O2
42	Ethyl benzene	C8H10
43	Ethylene	C2H4
44	Ethylenediamine (EDA)	C2H8N2
45	Ethyl formate	C3H6O2
46	Ethylene glycol monomethyl ether(EGME)	C3H8O2
	= 2-methoxyethanol	
	= methyl cellosolve	
47	Ethylene oxide (EO)	C2H4O

## 가연성 가스감지기 측정 물질 리스트

No.	가스명	분자식
48	n-Heptane	C7H16
49	n-Hexane	C6H14
50	isooctyl alcohol= 2-ethyl-1-hexanol	C8H18O
51	isopropyl alcohol (IPA)	C3H8O
52	Methane	CH4
53	Methoxycyclopentane	C6H12O
54	Methyl acetate	C3H6O2
55	Methyl acrylate (MA)	C4H6O2
	= Methyl acrylate Monomer (MAM)	
56	Methyl alcohol	CH3OH
57	Methyl chloride (MC , R40)	CH3Cl
58	Methylcyclohexane (MCH)	C7H14
59	Methyl ethyl ketone (MEK)	C4H8O
60	Methyl isobutyl ketone (MIBK)	C6H12O
61	2-Methacrolein	C4H6O
62	Methyl methacrylate (MMA)	C5H8O2
63	Naphtha(Petroleum Ether)	N/A
64	N-Methyl-2-pyrrolidone (NMP)	C5H9NO
65	isoOctane	C8H18
66	n-Octane	C8H18
67	n-Pentane	C5H12
68	isoPentane	C5H12
69	Propane	C3H8
70	Propionaldehyde	C3H6O
71	n-Propyl acetate	C5H10O2
72	n-Propyl alcohol	C3H8O
73	isoPropyl acetate	C5H10O2
74	Propylene glycol monoethyl ether (PGEE)	C5H12O2
75	Propylene	C3H6
76	Propylene oxide	C3H6O
77	Propylene Glycol Monomethyl Ether (PGME)	C4H10O2
78	Propylene Glycol Monomethyl Ether Acetate (PGMEA)	C6H12O3
79	Pureti TnBT	N/A
80	Styrene (SM)	C8H8
81	Tert-butylbenzene	C10H14
82	Tetrahydrofuran(THF)	C4H8O
83	Thinner	MEK 60%Heptane 30%Toluene1.8% ...
84	Toluene	C7H8
85	Trimethylamine (TMA)	C3H9N
86	Vinyl acetate	C4H6O2
87	Vinyl chloride	C2H3Cl
88	4-Vinyl-1-cyclohexene	C8H12
89	Mixed-Xylene	C8H10
90	o-Xylene	C8H10
91	p-Xylene	C8H10