



CD52 Explosion-Protected Construction Pressure Switch

OUTLINE

This is a pressure switch developed principally to detect draft pressure of a power plant. With a stainless steel bellows applied to the minute pressure detecting element, this pressure switch demonstrates high precision and excellent corrosion resistance.

FEATURES

- A stainless steel bellow is applied to the minute pressure detecting element.
- This pressure switch demonstrates high precision and excellent corrosion resistance, principally applied to the detection of draft pressure in a thermal plant.
- Setting and locking can be performed from the exterior without removing the cover.

* In case of selecting pressure gauge, choose the pressure range which can be used in between 30~65% of full scale, so that the gauge can give its full capacity.

SPECIFICATION

Kind of explosion proof construction :

Explosion-proof (d2G4)

Fluid :

Gas

Operating condition :

Hazardous area. The details refer to explanation column of explosion-protected construction.

Mounting :

Panel mounting

Connection :

G3/8B(PF), G1/2B(PF), R1/2(PT), 1/2NPT

※For other connections, please contact us.

Weeted parts material :

Bellows 316Lst.st.

Tank · socket 316st.st.

Pressure range :

-2~+2→2~10kPa (-200~+200→200~1000mmH₂O)

Proof- pressure :

±2.4~+12kPa (±240~+1200mmH₂O)

(Depending on range)

Operating temperature :

-5~40°C (Fluid : -20~80°C)

Accuracy :

1%max.P.

Temperature coefficient :

0.05%max.P./°C

Dead band :

0.5kPa or less (50mmH₂O or less)

Switch :

Micro switch

Number of contact :

One contact or two contact

Setting system :

External adjustment type With setting lock

Outlet for electric wire :

Conduit type

Construction :

Outdoor type (IP54)

Case material · finishing :

Aluminium alloy die casting (ADC12) · Gray

Weight :

Approx. 7.6kg

SPECIFICATION 2

Electric characteristics :

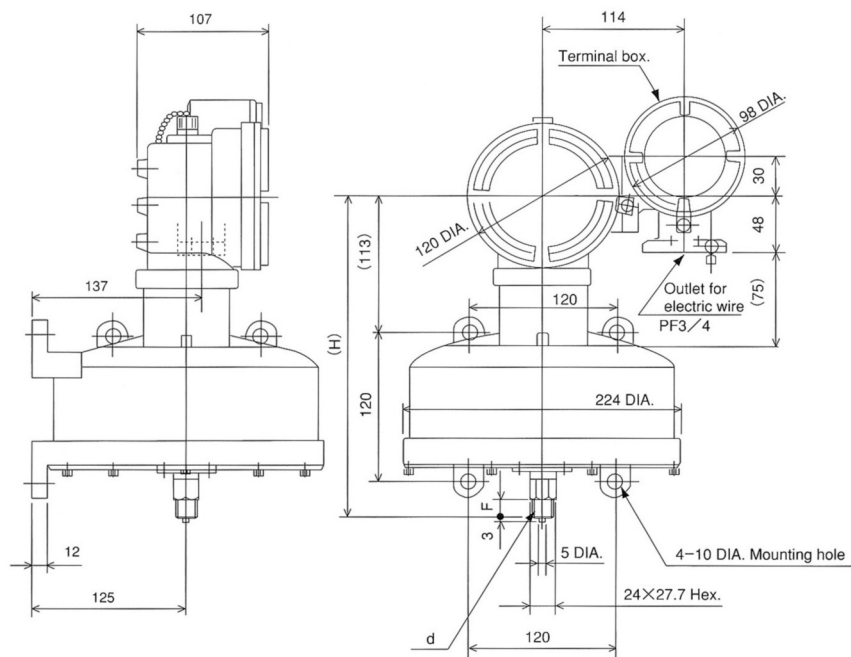
	Rating		Withstand voltage	Insulation resistance
	Load resistance	Inductive load		
125V AC	15 A	15 A	1500V AC Between terminal and case 1 minute	500V DC 100MΩ over Between terminal and case
250V AC	15 A	15 A		
125V DC	0.4 A	0.03 A		
30V DC	2 A	1 A		
• Inductive load : Power factor more (AC) Time-constant 7ms or less (DC)				

Pressure range & dead band · Proof-pressure :

Pressure range kPa(mmH ₂ O) (Pressure setting range)	Dead band kPa(mmH ₂ O)		Proof-pressure kPa(mmH ₂ O)
	One contact	Two contact	
-2~+2 (-200~+200)	0.5 or less (50 or less)	0.5 or less (50 or less)	±2.4 (±240)
-3~+7 (-300~+700)	0.5 or less (50 or less)	0.5 or less (50 or less)	-3.6 (-360) +8.4 (+840)
-5~+5 (-500~+500)	0.5 or less (50 or less)	0.5 or less (50 or less)	±6 (±600)
+1~+5 (+100~+500)	0.5 or less (50 or less)	0.5 or less (50 or less)	+6 (+600)
+2~+10 (+200~+1000)	0.5 or less (50 or less)	0.5 or less (50 or less)	+12 (+1200)

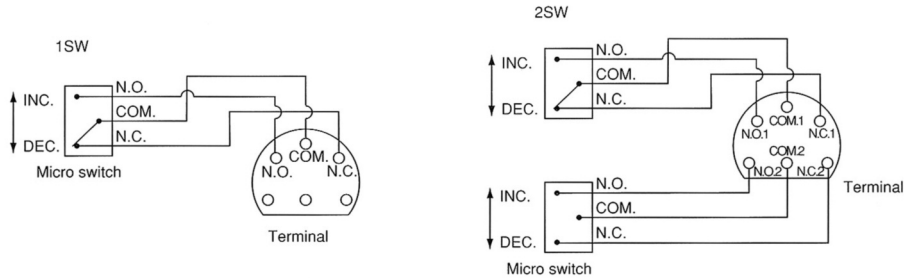
Note : In case of two contact type, setting difference of H side, L side is max. 60 % max.P.

DIMENSIONS



d	F	H
G1/2B	20	264
G3/8B	18	262

WIRING



EXPLOSION—PROOF

Explosion-protected construction :

Explosion protected—construction is a totally enclosed construction such that even if the explosive gas explodes inside the container, the container withstands the force of the explosion and there is no danger of ignition of external explosive gases. Our pressure transmitter manufactured under this basic policy are widely used in the measurement, alarm, and control of pressure in factories and business offices where combustible gases or the vapor of combustible liquids having a flash point of 40°C or less may exist.

Application range : d2G4

Explosion-protected construction : d
 Explosion class : 2 (Minimum gap with 25mm length of patch which permits the flame propagation : 0.4mm to 0.6mm)
 Ignitability : G4 (Ignition point : 135°C to 200°C, limits of temperature rise : 70 deg)
 Hazardous areas : Zone 1 or zone 2
 Objective industries : Petrochemical, chemical fibersynthetic resin, ethylene, methanol, dielectric products manufacturing, liquefied gas, electric furnace, pharmaceuticals, paints, ammonium sulfate, soda, other measurement medium or industries in which there is the danger of ignition and explosion.

Classification of hazardous areas :

Hazardous areas	Contents
Zone 0	A place where hazardous atmosphere is continuously present or present for a long period under ordinary circumstances.
Zone 1	A place where hazardous atmosphere is likely to occur under ordinary circumstances.
Zone 2	A place where hazardous atmosphere is likely to occur under abnormal circumstances.

Registered model for labor ministry inspection and approval number :

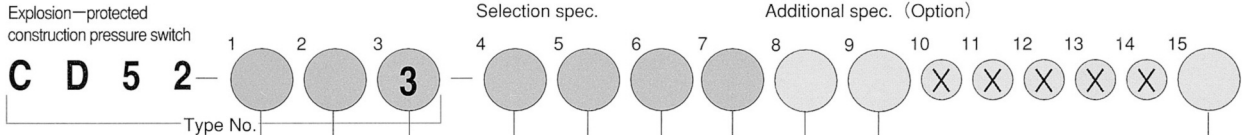
Registered model for labor ministry inspection : CD50-2 Approval number for labor ministry inspection : No. 25230	It is official approval number to represent that explosion—protected construction pressure switch conformed to explosion proof standard. It is national official approval which is examined and authorized by technology institution of industrial safety.
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Type No. constitution

Please specify Type No., each specification and range when ordering.

Note : For this Model, there is no applicable item for the figures X, but please specify X when ordering.

Explosion-protected construction pressure switch



Type No.

1 Mounting
(Number of contact)

1	One contact, Panel mounting
2	Two contact, Panel mounting

2 Connection

3	G3/8B
4	G1/2B
H	R1/2
M	1/2NPT

3 Wetted parts material

3	Bellows : 316Lst.st. Tank • socket : 316st.st.
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4 Pressure range (MPa)
(When ordering, please specify pressure range & unit.)

1	-2~2, -3~7, -5~5
2	1~5
3	2~10

5 Type of contact

1	H : Upper limit type with one contact
2	L : Lower limit type with one contact
3	HL : Upper and lower limit type with two contact
4	2H : Upper limit type with two contact
5	2L : Lower limit type with two contact

Selection spec.

Additional spec. (Option)

9 Other additional spec.

0	Nil
1	Please specify your requirement Case finishing

8 Treatment

0	Nil
1	Use no oil
2	Use no water
3	Use no oil • water

7 Outlet for electric wire (Conduit type)

2	PF1/2 female
3	PF3/4 female (Standard)
4	PF1 female

6 Switch

0	Standard type
1	Ultra high sensitivity switch
3	Standard+gold plated
4	Ultra high sensitivity switch+gold plated

15 Document

0	Nil
1	Please specify your requirement Drawing one sheet, Instruction manual, Inspection procedure, Mill sheet, Test report