

ZPDT Series

High-precision Digital Pressure Switch



UNIVERSAL

Features

- ◇ Digital display electronic pressure switch, optional two-color display
- ◇ 4-digit seven-segment LED display
- ◇ Pressure units can be converted and displayed on the screen
- ◇ Parameter values can be displayed directly on the screen

Advantages

- ◇ Monitor the system action clearly and visually, could change the setting content and backlight display mode
- ◇ The pressure is displayed on the screen, easy to read
- ◇ Main and sub display can set parameter directly, setting steps could be reduced by 3/4
- ◇ Easy to operate with the clear display



Application

- ◇ Monitor the vacuum system, optimize the working cycle
- ◇ Adjust the system circuit, improve economic benefit of vacuum system
- ◇ Square shape is more suitable for installing panel
- ◇ Suitable for all automation handling industries

Structure

- ◇ Electronic vacuum switch, solid polycarbonate case
- ◇ Vacuum connection is Rc1/8 Male thread
- ◇ 2m connecting cable
- ◇ Optional mounting bracket and panel type mounting frame

How to order

ZPDT - C NV - R1M - AB
 ① ② ③ ④ ⑤

① Series	② Pressure range	③ Output specification	④ Connection thread	⑤ Accessories
ZPDT	C - Compound P - Positive	NV - 1NPN+1 Analog(Voltage) output (1-5V) PV - 1PNP+1 Analog(Voltage) output(1-5V)	R1M - Rc1/8 male thread	Nil - Without accessory AB - A type mounting bracket BB - B type mounting bracket PS - Panel adapter PC - Panel adapter + front protective lid

Selection

Model Nil	Accessories AB	BB	PS	PC
ZPDT-CNV-R1M	ZPDT-CNV-R1M-AB	ZPDT-CNV-R1M-BB	ZPDT-CNV-R1M-PS	ZPDT-CNV-R1M-PC
ZPDT-CPV-R1M	ZPDT-CPV-R1M-AB	ZPDT-CPV-R1M-BB	ZPDT-CPV-R1M-PS	ZPDT-CPV-R1M-PC
ZPDT-PNV-R1M	ZPDT-PNV-R1M-AB	ZPDT-PNV-R1M-BB	ZPDT-PNV-R1M-PS	ZPDT-PNV-R1M-PC
ZPDT-PPV-R1M	ZPDT-PPV-R1M-AB	ZPDT-PPV-R1M-BB	ZPDT-PPV-R1M-PS	ZPDT-PPV-R1M-PC

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Technical parameters

Model		ZPDT-C (Compound)	ZPDT-P (Positive)
Rated pressure range		-100.0~100.0kPa	-0.100~1.000MPa
Setting pressure range		-103.0~103.0kPa	-0.103~1.030MPa
Withstand pressure		500kPa	1.5MPa
Fluid		Air, Non-corrosive gas/Non-flammable gas	Air, Non-corrosive gas/Non-flammable gas
Pressure unit	kPa	0.1	-
Set pressure resolution	MPa	-	0.001
	kgf/cm ²	0.001	0.01
	bar	0.001	0.01
	psi	0.01	0.1
	inHg	0.1	-
	mmHg	1	-
Power supply voltage	12 to 24V DC±10%, ripple(P-P)10% or less		
Current consumption	≤40mA (Without load)		
Switch output	Output type	Open collector (NPN or PNP)	
	load current	Max.125mA	
	Residual voltage	≤1.0V	
	Response time	≤2.5ms (Chattering-proof function: 25ms,100ms,250ms, 500ms, 1000ms, 1500ms selectable)	
Analog output	Output Voltage	1-5V ±2.5%F.S (within rated pressure range)	0.6-5V ±2.5%F.S (within rated pressure range)
	Output impedance	1kΩ	
	Linearity	±1% F.S.	
Display	Display	Three colors (Red/ Green/ Orange)display(sampling rate:5 times/sec,2 times/sec,1 time/sec for choice.)	
	Indicator accuracy	±1%F.S.±1 digit (ambient temperature: 25±3°C)	
	Repeatability	±0.3%F.S.±1 digit	
	Switch ON indicator	Orange (1 indicator)OUT1	
Environment	Enclosure	IP40	
	Ambient temp.range	0~50°C	
	Temperature characteristic	±3% F.S.of rated ambient temperature 25°C (at temp. range of 0~50°C)	
	Storage temperature	Storage: -10-60°C (No condensation or freezing)	
	Ambient humidity	Operation/ storage:35-85%HR (No condensation)	
	Withstand voltage	1000VAC in 1-min (between case and lead wire)	
	Insulation resistance	50MΩ min (500V DC) (between case and lead wire)	
	Vibration	Total amplitude 1.5mm Or 10G, 10Hz~150Hz~10Hz for 1 minute, two hours each direction of X, Y and Z	
	Shock	100m/s ² (10G) 3 times each in direction of X, Y and Z	
Port size		Rc1/8, M5	
Lead wire		Oil-resistance cable (0.15mm ²)	
Weight		67g (with 2-meter lead wire)	

Vacuum Accessories

ZFA

ZFE

ZFD

ZFB

ZFL

ZFP

ZVAB

ZVAC

ZVAA

ZVEA

ZVR

ZVRM

ZVCM

ZVD

ZVT

ZVS

ZPDT

ZPDE

ZPMR

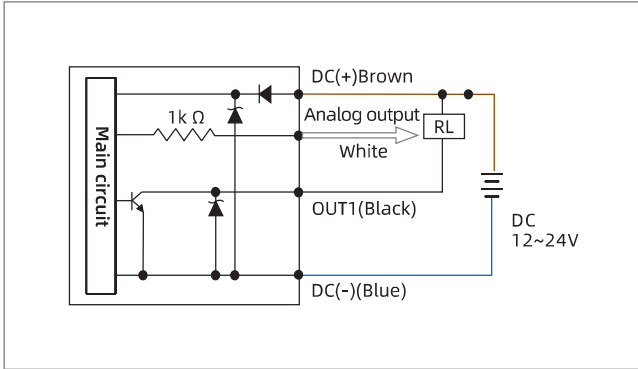
ZSA

ZPDT Series

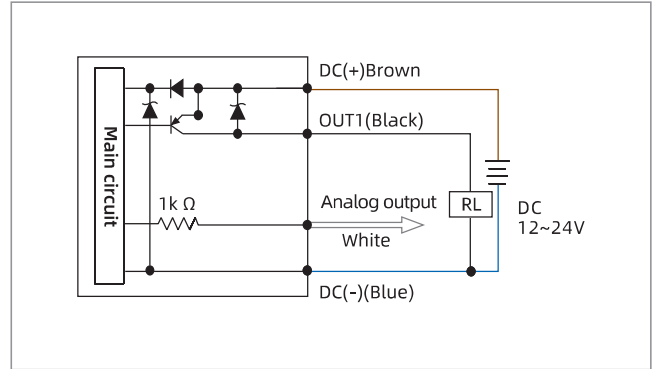
High-precision Digital Pressure Switch



Output circuit wiring diagrams

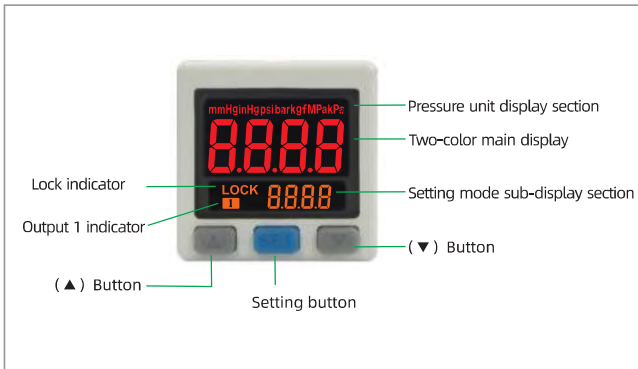


ZPDT-□NV-R1M 1NPN+Analog voltage output (1-5V)

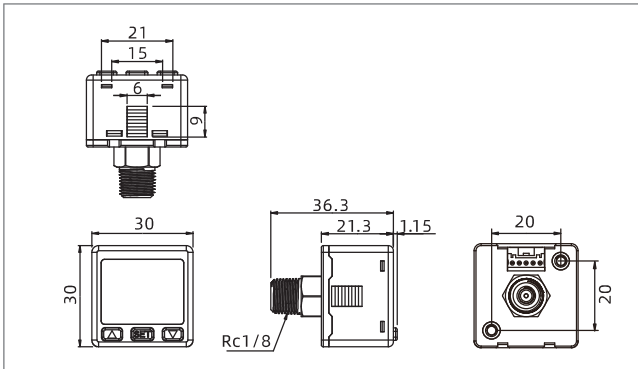


ZPDT-□PV-R1M 1PNP+Analog voltage output (1-5V)

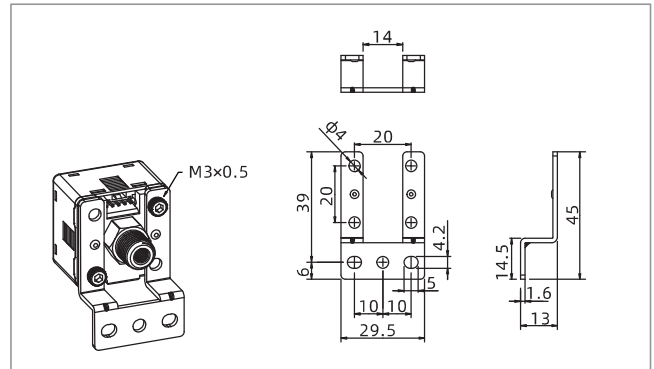
Panel instructions



Dimensions(mm)



ZPDT-□□-R1M



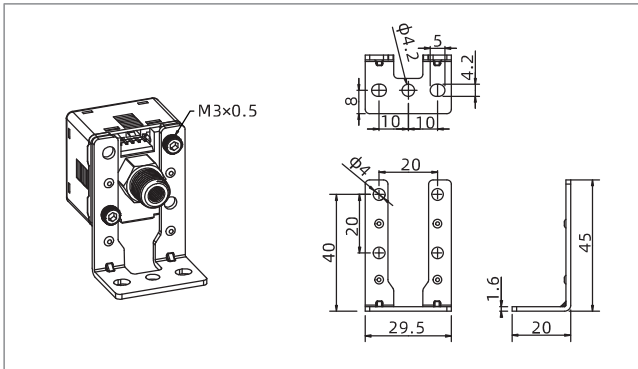
ZPDT-□□-R1M-AB Mounting bracket A type

ZPDT Series

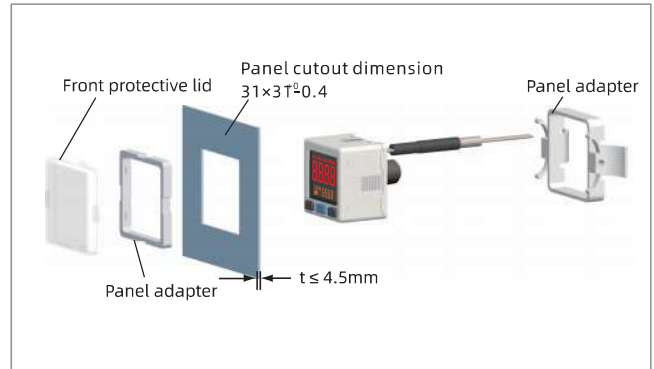
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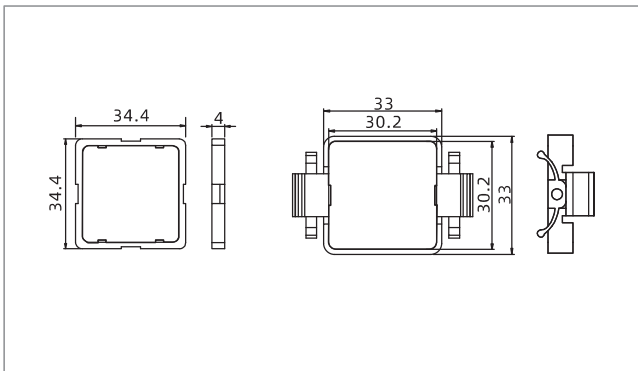
Dimensions (mm)



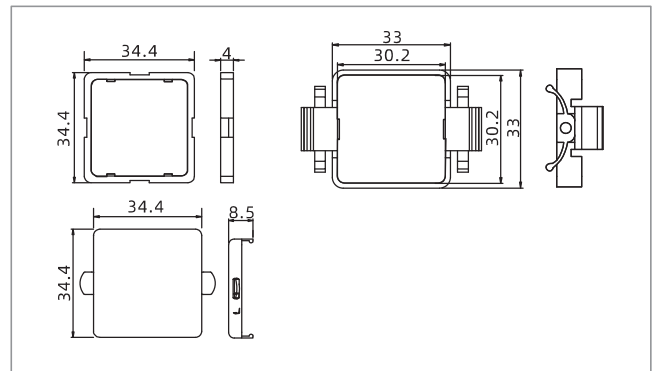
ZPDT-□□-R1M-BB Mounting bracket B type



Panel type



ZPDT-□□-R1M-PS Panel adapter



ZPDT-□□-R1M-PC Front protective lid + panel adapter

Accessories

Item	Model
Mounting bracket A type	ZPDT-A-MB
Mounting bracket B type	ZPDT-B-MB
Panel adapter	ZPDT-PS
Front protective lid + panel adapter	ZPDT-PC

Vacuum Accessories

- ZFA
- ZFE
- ZFD
- ZFB
- ZFL
- ZFP
- ZVAB
- ZVAC
- ZVAA
- ZVEA
- ZVR
- ZVRM
- ZVCM
- ZVD
- ZVT
- ZVS
- ZPDT
- ZPDE
- ZPMR
- ZSA