



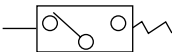
Mechanical pressure switch for coolant (for low pressure)

CPE Series

- Pressure adjusting range: 0.05 to 0.8 MPa



JIS symbol



Specifications

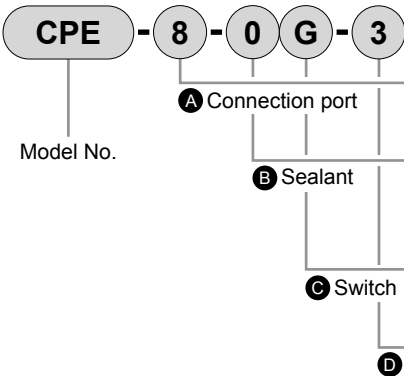
1 MPa = 10 bar

Item	CPE
Working fluid	Coolant, air, other non-corrosive liquids, gases
Rated pressure MPa	0 (≈0 psi, 0 bar) to 1.0 (≈150 psi, 10 bar)
Proof pressure (water pressure) MPa	1.5 (≈220 psi, 15 bar)
Pressure adjusting range MPa	0.05 (≈7.3 psi, 0.5 bar) to 0.8 (≈120 psi, 8 bar)
Fluid temperature °C	0 (32°F) to 50 (122°F)
Ambient temperature °C	0 (32°F) to 50 (122°F)
Port size	Rc1/4
Micro switch	Z-15GD-B (OMRON)
Contact array	1ab
Hysteresis MPa	0.04 (≈5.8 psi) or less (set pressure 0.05 (≈7.3 psi) to 0.3 (≈44 psi)) 0.1 (≈15 psi) or less (set pressure 0.31 (≈45 psi) to 0.8 (≈120 psi))
Repeatability MPa	±0.02 (≈2.9 psi, 0.2 bar)
Allowable operation frequency times/min.	20
Rated voltage	100 VAC, 200 VAC, 24 VDC
Insulation resistance MΩ	100 or more (with 500 VDC megger)
Weight kg	0.58
Mounting orientation	Vertical direction with the adjusting screw up
Degree of protection	IP65 (dust proof/jet-proof) equivalent

Micro switch rated

Load circuit		Non-inductive load (A)				Inductive load (A)			
		Resistance load		Lamp load		Inductive load		Electric motor load	
		N.C	N.O	N.C	N.O	N.C	N.O	N.C	N.O
Voltage	125 VAC	15		3	1.5	15		3	2.5
	250 VAC	15		2.5	1.25	15		3	1.5
	30 VDC	6		3	1.5	5		5	2.5

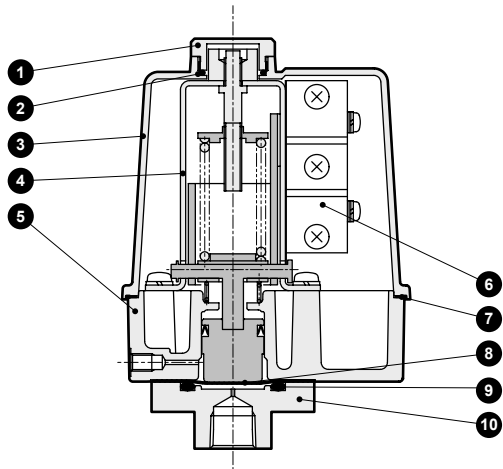
How to order



Code	Description
A Connection port	
8	Rc1/4 downward
B Sealant	
0	Nitrile rubber
B	Fluoro rubber
C Switch	
G	Standard
D Lamp	
1	For 100/200 VAC
3	For 24 VDC

Internal structure and parts list

● CPE



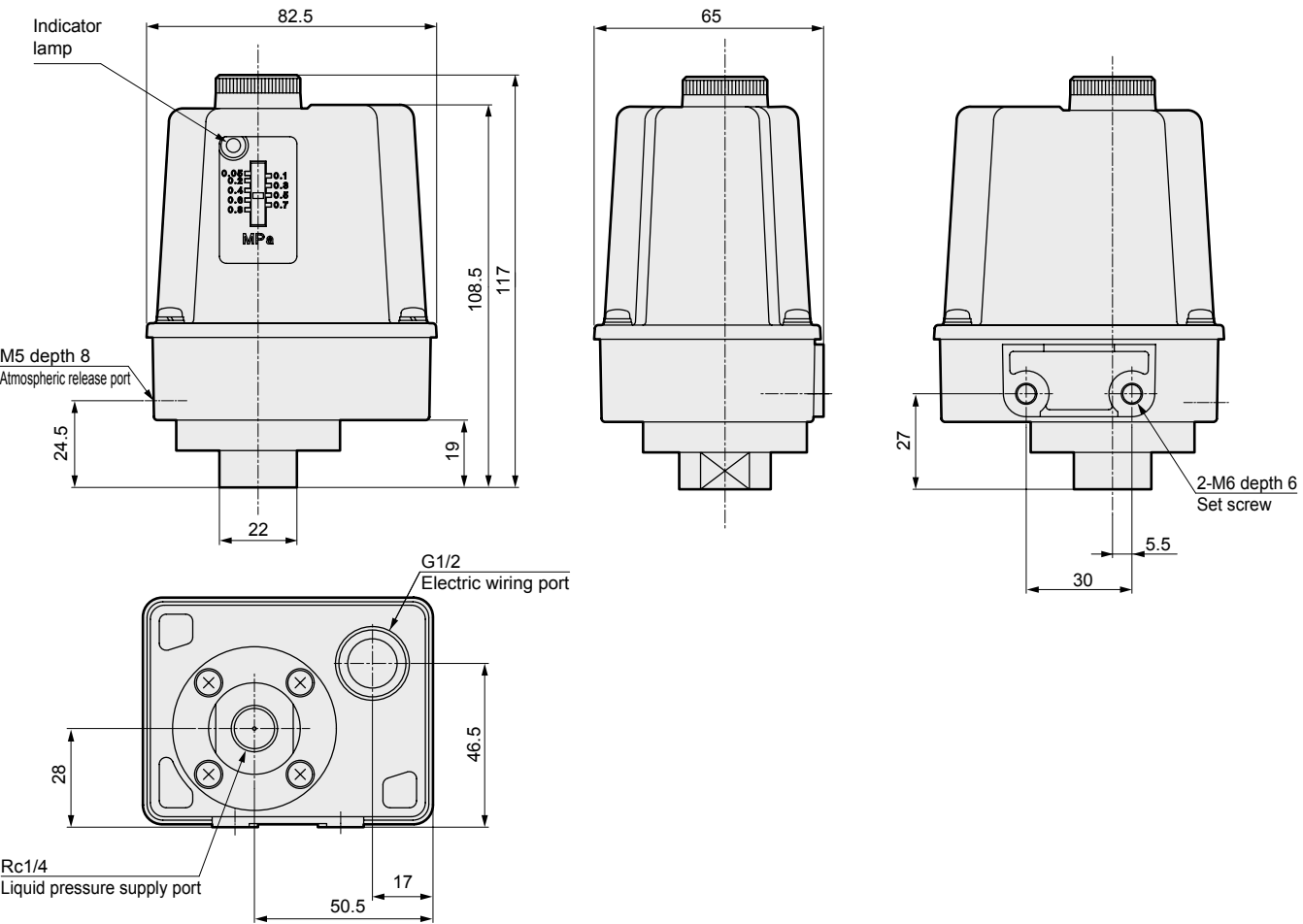
No.	Part name	Material
1	Cap	A 5056 Aluminum
2	O-ring	NBR Nitrile rubber
3	Cover	ABS ABS resin
4	Frame	SPC Steel
5	Body	ADC12 Aluminum die-casting
6	Micro switch	-
7	Gasket	NBR Nitrile rubber
8	Diaphragm	NBR(FKM) Nitrile rubber (fluoro rubber)
9	O-ring	NBR(FKM) Nitrile rubber (fluoro rubber)
10	Port	SUS 303 Stainless steel

Options are shown in ().

Dimensions



● CPE



EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/ AD
APK/ ADK
DryAir
EX- XPLNprf
XPLNprf
HVB/ HVL
S ◇ B/ NAB
LAD/ NAD
Water- Rela
NP/NAP/ NVP
SNP
CHB/G
MXB/G
Other valves SWD/ MWD
DustColl
CVE/ CVSE
CCH/ CPE/D
LifeSci
Gas- Combus
Auto- Water
Outdoor
SpecFld
Custom
Ending

EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/
AD
APK/
ADK
DryAir
EX-
XPLNprf
XPLNprf
HVB/
HVL
S ◇ B/
NAB
LAD/
NAD
Water-
Rela
NP/NAP/
NVP
SNP
CHB/G
MXB/G
Other
valves
SWD/
MWD
DustColl
CVE/
CVSE
CCH/
CPE/D
LifeSci
Gas-
Combus
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Water
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Custom
Ending



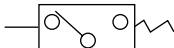
Electronic pressure switch for coolant (with digital display)

CPD Series

- Pressure adjusting range: 0 to 7 MPa



JIS symbol



Specifications

°F = 9/5°C + 32

Item	CPD
Pressure sensitive element	Stainless steel diaphragm pressure sensor
Working fluid	Coolant/other non-corrosive fluids
Rated pressure MPa	0 (≈0 psi, 0 bar) to 7 (≈1000 psi, 70 bar)
Proof pressure (water pressure) MPa	10.5 (≈1500 psi, 105 bar)
Pressure adjusting range MPa	0 (≈0 psi, 0 bar) to 7 (≈1000 psi, 70 bar)
Fluid temperature °C	0 (32°F) to 50 (122°F)
Ambient temperature °C	0 (32°F) to 50 (122°F)
Ambient humidity % RH	0 to 85 (no condensation)
Port size	Rc1/4
Display	3-digit LED display, character height 8 mm
Display accuracy (25°C)	±2%F.S. (±0.14 MPa (≈20 psi, 1.4 bar))
Temperature characteristics (0 to 50°C)	±4%F.S. (±0.28 MPa (≈41 psi, 2.8 bar))
Repeatability MPa	±0.02 (≈2.9 psi, 0.2 bar)
Power supply voltage	12 to 24 VDC ± 10% (ripple rate 1% or less)
Current consumption mA	50 or less
Output response time msec	Approx. 5
Switch output	NPN transistor open collector output 2 points
Switch output current mA	MAX 50
Switch output voltage drop V	2.4 or less
Set value hold	EEPROM
Lead wire	Oil resistant vinyl cable 4-conductor (0.2 mm ²) 1 m
Weight kg	0.36
Mounting orientation	Unrestricted
Degree of protection	IP65 (dust proof/jet-proof) or equivalent

How to order



Model No.

A Rated pressure

B Switch output

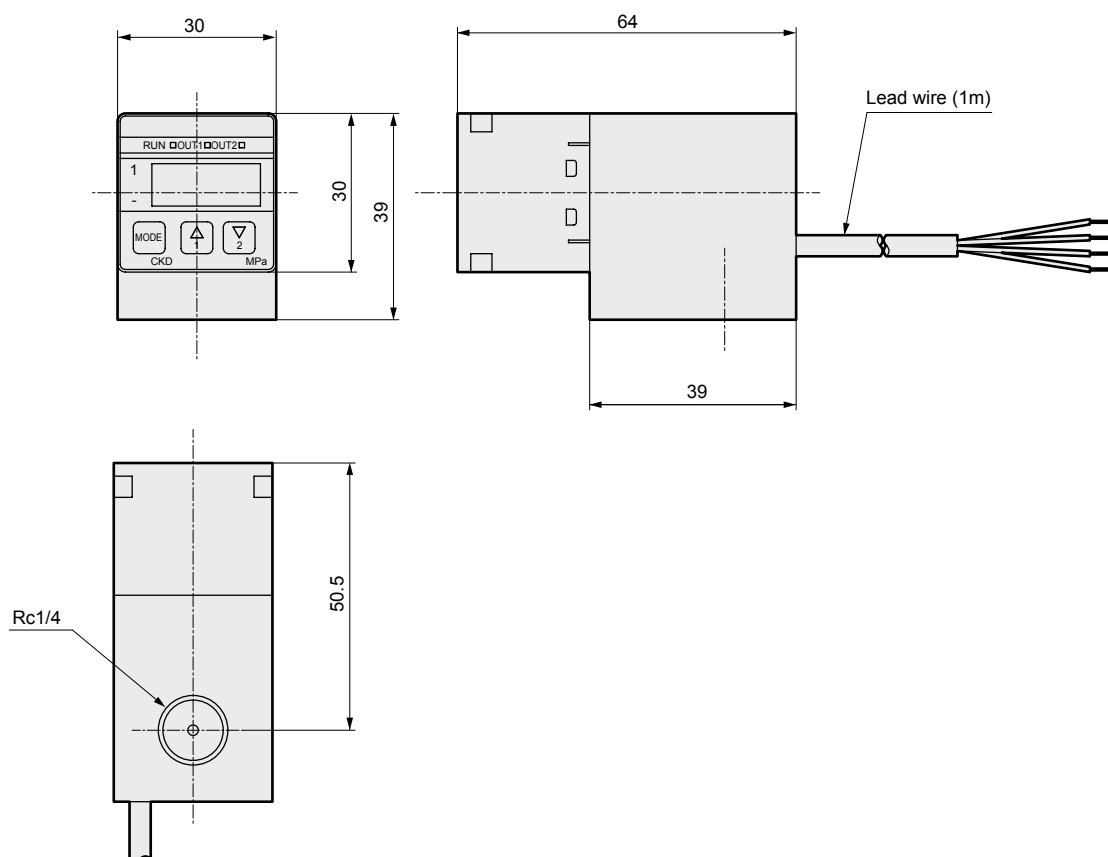
C Connection port

Code	Description
A Rated pressure	
P70	0 to 7 MPa
B Switch output	
N	NPN transistor output 2 point
C Connection port	
8	Rc1/4 downward

Dimensions

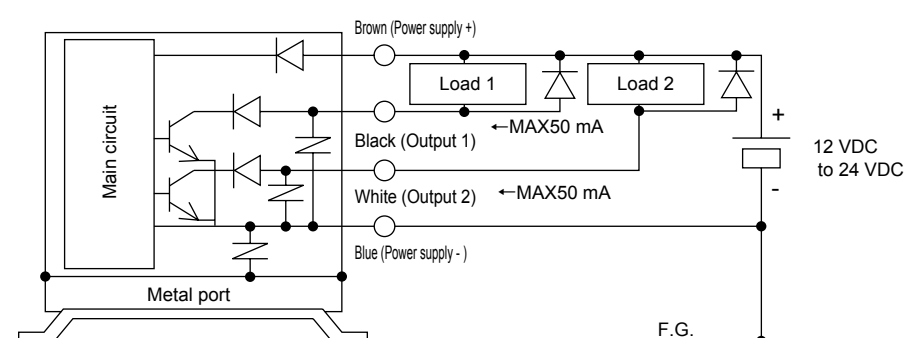


● CPD



Wiring method

Cannot be disassembled



EXA
FWD
HNB/G
USB/G
FAB/G
FGB/G
FVB
FWB/G
FHB
FLB
AB
AG
AP/ AD
APK/ ADK
DryAir
EX- XPLNprf
XPLNprf
HVB/ HVL
S ∇ B/ NAB
LAD/ NAD
Water- Rela
NP/NAP/ NVP
SNP
CHB/G
MXB/G
Other valves
SWD/ MWD
DustColl
CVE/ CVSE
CCH/ CPE/D
LifeSci
Gas- Combus
Auto- Water
Outdoor
SpecFld
Custom
Ending