HAWK

Instrument Accessories Electrical Warning Contact

EWC1 and EWC2

HAWK Limit-value electrical warning contacts are designed for opening or closing electric and pneumatic circuits in relation to the position of the pointer on the instrument.
These electrical contact devices are usually combined with the measuring instruments(pressure gauges and dial thermometers) for a continuous reading.
We recommend strongly the use of control relay for your system in order to increase the working life of contacts. For intrinsic safety applications, an appropriate barrier must be used for your system.

- Two functions, switches and local display
- Quick installation and easy linked to control system
- High reliability and long service life
- Dry or liquid filled version
- Fitted for pressure gauges, dial thermometers or differential pressure gauges

Features:

Sliding Contact(EWC1)

The electrical sliding contact supplies an accurate operation within an allowed hysteresis. This contact is used where the service conditions require a low switching power. Please note that this contact is very sensitive to vibration. A very slow pressure change may cause an electrical arc which can reduce its working life.
This contact requires vibrations-free applications and can not be used with the liquid filled instruments.

Magnetic Snap-Action Contact(EWC2)

This type of contact is universally to guarantee the reliable operation of gauges under vibration applications. This contact features a small permanent magnet fixed near the setting point. The magnet provides a snap action which can improve the contact rating, working life and less sensitive to vibration.
The force required to overcome the attraction of the magnet may cause an hysteresis reflects at the setting point between 2% to 5% full scale range.
This contact is used in practically all service conditions and can be used with liquid filled instruments.

Contact Material:
Silver-Nickel Alloy...Standard
(Gold-Siliver Alloy, Platinum Indium on request)

Version:
Dry version
Liquid Filled version
Ambient Temperature:
-20...+65

Window:
PC, Plain Glass, Tempered or Laminated Safety Glass

Contact Setting:
Fixed or Removable Key

Maximum Rating:
30W/50VA at 250Volts or
10W/18VA at 230Volts

Setting Point Accuracy:
150% of Instrument Accuracy

Setting Point Hystertsis:
2% to 5% of full scale range

Electrical Connection:
Cable Gland, DIN junction box or Terminal

Contact Arrangement:
Single Contact
Double Contact
Triple Contact on request

Load Ratings :

Magnetic Snap-Action Contact
(EWC2, Dry version):

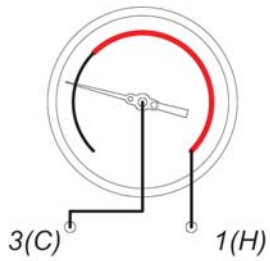
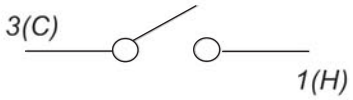
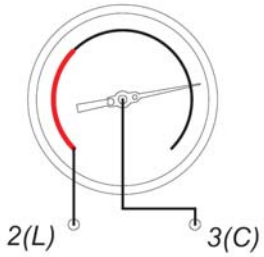
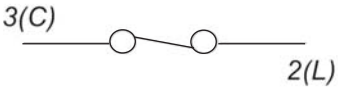
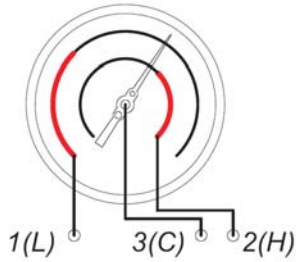
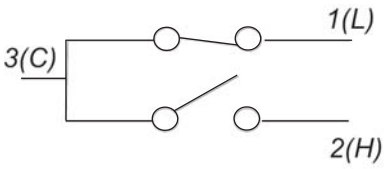
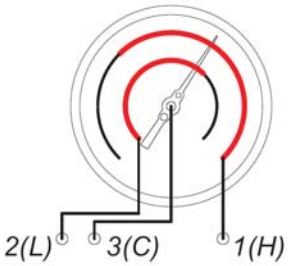
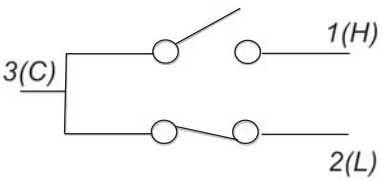
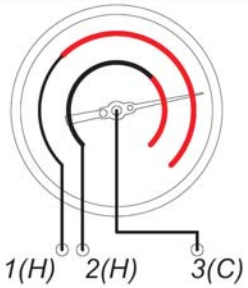
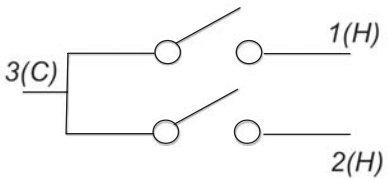
Voltage	Resistive load		Inductive load
	DC	AC	
220	100mA	120mA	65mA
110	200mA	240mA	130mA
48	300mA	450mA	200mA
24	400mA	600mA	250mA

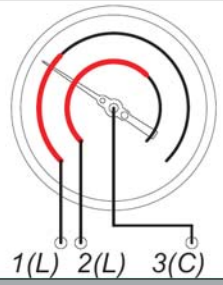
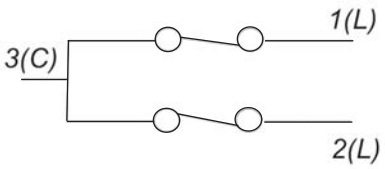
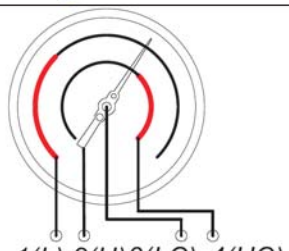
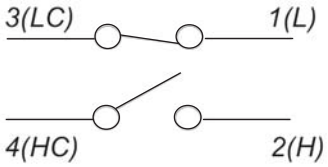
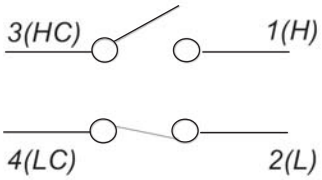
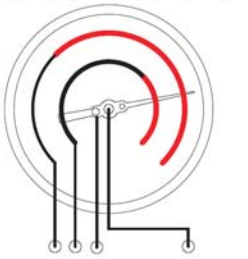
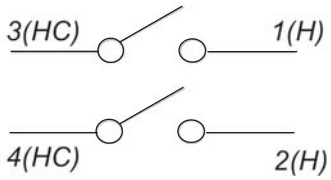
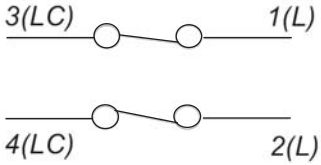
Sliding Contact
(EWC1, Dry version):

Voltage	Resistive load		Inductive load
	DC	AC	
220	40mA	45mA	25mA
110	80mA	90mA	45mA
48	120mA	170mA	70mA
24	200mA	350mA	100mA

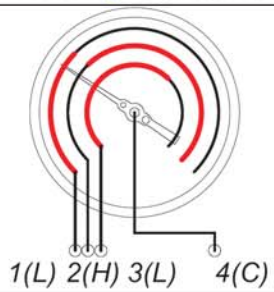
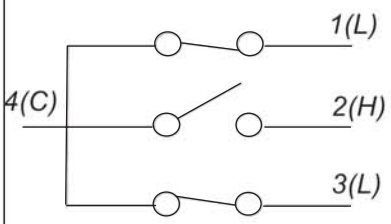
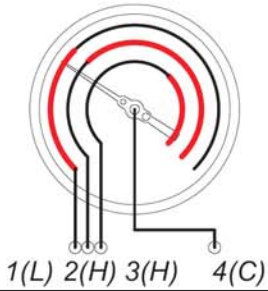
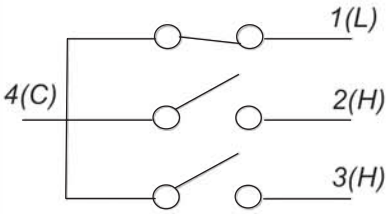
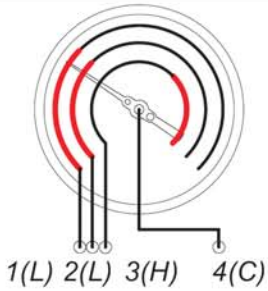
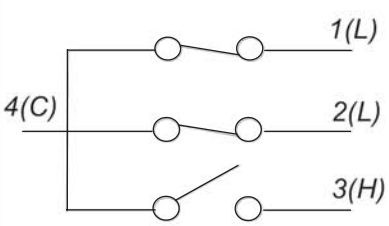
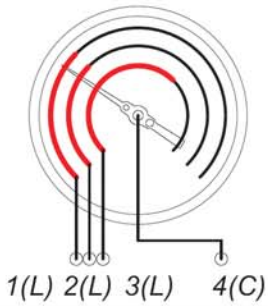
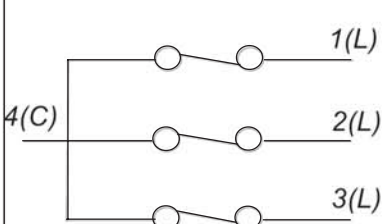
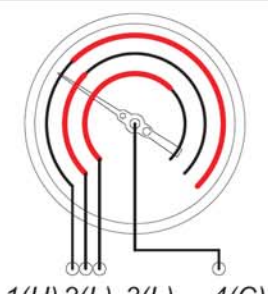
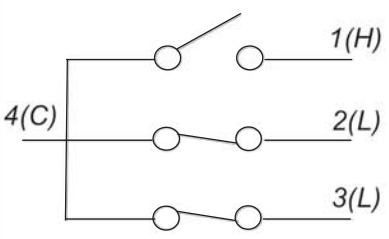
Magnetic Snap-Action Contact
(EWC2, Liquid filled version):

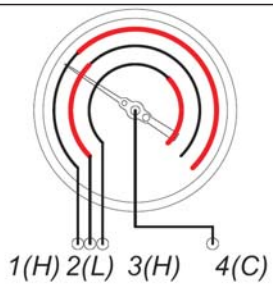
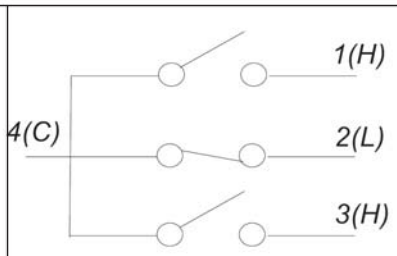
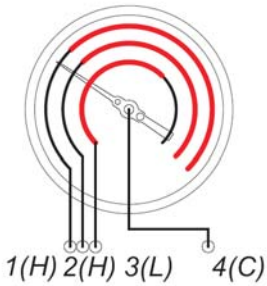
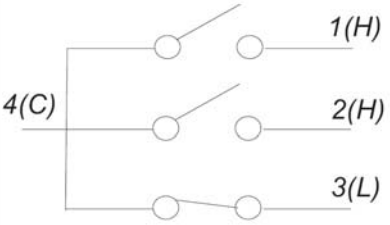
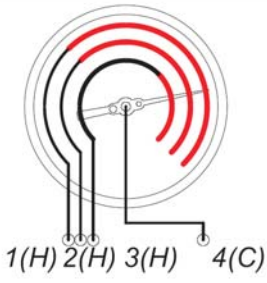
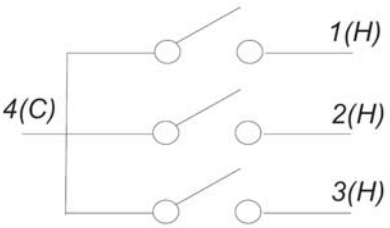
Voltage	Resistive load		Inductive load
	DC	AC	
220	65mA	90mA	40mA
110	130mA	180mA	85mA
48	190mA	330mA	130mA
24	250mA	450mA	150mA

SINGLE CONTACT(2 Wire)			
Wiring Scheme	**Electrical Scheme**	**Description(Clockwise)**	**Code**
		*NO-Normal Open, Hi(Max) Contact, Contact makes (closes) when pointer reaches set point*	**2HI**
		*NC-Normal Close, Lo(Min) Contact, Contact breaks (opens) when pointer reaches set point*	**2LO**
DOUBLE CONTACT(3 Wire)			
Wiring Scheme	**Electrical Scheme**	**Description(Clockwise)**	**Code**
		*First contact breaks(opens) and second contact makes (closes) when pointer reaches set point, Lo(Min) and Hi(Max) contact*	**3LH**
		*First contact makes(closed) and second contact breaks (opens) when pointer reaches set point, Hi(Max) and Lo(Min) contact*	**3HL**
		*First contact and second contact makes(closes) when pointer reaches set point, Hi(Max) and Hi(Max) contact*	**3HH**

		*First contact and second contact breaks(opens) when pointer reaches set point, Lo(Min) and Lo(Min) contact*	**3LL**
INDEPENDENT DOUBLE CONTACT(4 Wire)			
Wiring Scheme	***Electrical Scheme***	***Description(Clockwise)***	***Code***
		*First contact breaks(opens) and second contact makes (closes) when pointer reaches set point, Lo(Min) and Hi(Max) contact*	**4LH**
		*First contact makes(closed) and second contact breaks (opens) when pointer reaches set point, Hi(Max) and Lo(Min) contact*	**4HL**
		*First contact and second contact makes(closes) when pointer reaches set point, Hi(Max) and Hi(Max) contact*	**4HH**
		*First contact and second contact breaks(opens) when pointer reaches set point, Lo(Min) and Lo(Min) contact*	**4LL**

Contact Function s:

TRIPLE CONTACT(4 Wire)			
Wiring Scheme	**Electrical Scheme**	**Description(Clockwise)**	**Code**
		*First contact breaks(opens), second contact makes(closes) and third contact breaks(opens) when pointer reaches set point, Lo(Min), Hi(Max) and Lo(Min) contact*	**LHL**
		*First contact breaks(opens), second contact makes(closes) and third contact makes(closes) when pointer reaches set point, Lo(Min), Hi(Max) and Hi(Max) contact*	**LHH**
		*First contact breaks(opens), second contact breaks(opens) and third contact makes(closes) when pointer reaches set point, Lo(Min), Lo(Min) and Hi(Max) contact*	**LLH**
		*First contact breaks(opens), second contact breaks(opens) and third contact breaks(opens) when pointer reaches set point, Lo(Min), Lo(Min) and Lo(Min) contact*	**LLL**
		*First contact makes(closes), second contact breaks(opens) and third contact breaks(opens) when pointer reaches set point, Hi(Max), Lo(Min) and Lo(Min) contact*	**HLL**

		*First contact makes(closes), second contact breaks(opens) and third contact breaks(opens) when pointer reaches set point, Hi(Max), Lo(Min) and Lo(Min) contact*	***HLH***
		*First contact makes(closes), second contact makes(closes) and third contact breaks(opens) when pointer reaches set point, Hi(Max), Hi(Max) and Lo(Min) contact*	***HHL***
		*First contact makes(closes), second contact makes(closes) and third contact makes(closes) when pointer reaches set point, HI(Max), Hi(Max) and Hi(Max) contact*	***HHH***

Electrical Connection:

Gland Cable

DIN Connector

Terminal

Order Information :