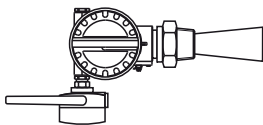


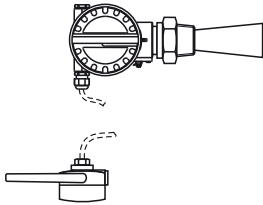
### Hazardous location

Class I, Div. 1, Groups A, B, C, D  
 Class II, Div. 1, Groups E, F, G; Class III  
 Class I, Zone 1, Group IIC

#### Compact version

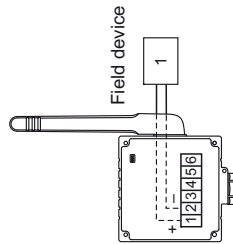


#### Remote version



Adapter active (4...20 mA + HART communication):  
 Loop-powered field device (compact or remote version)

Entity parameter:  
 $U_o / V_{oc} = 28 \text{ V DC}$   
 $I_o / I_{sc} = 99 \text{ mA}$   
 $P_o / P_o = 692 \text{ mW}$   
 $C_o = 70 \text{ nF}$   
 or  
 $L_o = 3.45 \text{ mH}$



Adapter active (Low Power Interface):  
 optional feature

Entity parameter for LPI:  
 $U_o / V_{oc} = 7.8 \text{ V DC}$   
 $I_o / I_{sc} = 1.031 \text{ A}$   
 $P_o / P_o = 1.22 \text{ W}$   
 $C_o = 9.18 \text{ } \mu\text{F}$   
 or  
 $L_o = 21.51 \text{ } \mu\text{H}$

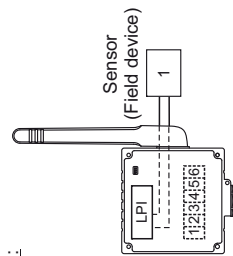


Table:  
 Permissible ambient temperature and temperature code:

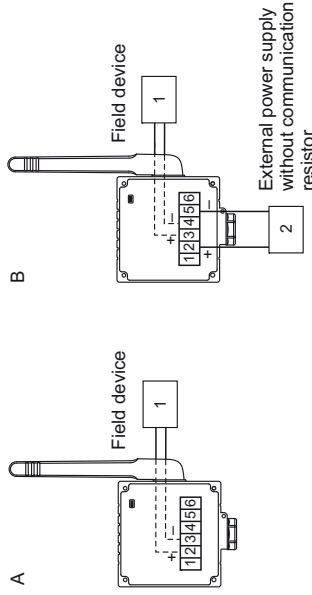
Temperature code	Permissible ambient temperature electronic compartment
T3C	-40...+60 °C
T4	-40...+50 °C

Adapter passive (4...20 mA + HART communication):

- A 4-wire field device (compact or remote version)
- B 2-wire field device with ext. power supply (compact or remote version)

#### Entity parameter for terminals 1-6:

$U_i / V_{max} = 30 \text{ V DC}$   
 $I_o / I_{max} = 100 \text{ mA}$   
 $P_o / P_o = 751 \text{ mW}$   
 $C_i = 24 \text{ nF}$   
 or  
 $L_i = 426 \text{ } \mu\text{H}$

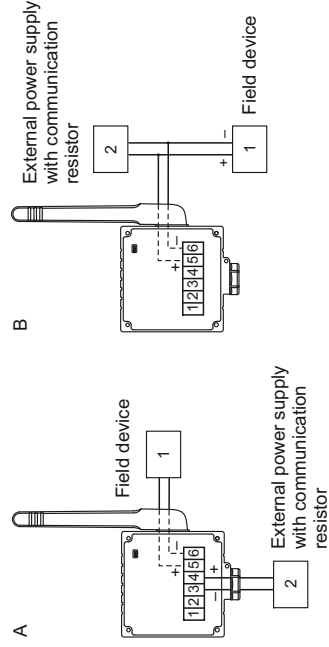


Adapter passive (only HART communication):

- A New installation parallel to HART communication (compact version)
- B Installation parallel to HART communication (remote version)

#### Entity parameter for terminals 1-6:

$U_i / V_{max} = 30 \text{ V DC}$   
 $I_o / I_{max} = 100 \text{ mA}$   
 $P_o / P_o = 751 \text{ mW}$   
 $C_i = 24 \text{ nF}$   
 or  
 $L_i = 426 \text{ } \mu\text{H}$



Intrinsically safe Ex ia for

Cl. I, Div. 1, Groups A, B, C, D and Cl. I, Zone 1, Ex ia IIC T4/T3C,  
 AEx ia IIC T4/T3C  
 Cl. II, Div. 1, Groups E, F, G, Cl. III

#### Hazardous Locations Installation

1. Installation per Electrical Code of the country in use mandatory.
2. Intrinsically safe and associated equipment connected to the SWA70 must be CSA certified for the country in use and must have entity parameters that satisfy the following conditions:  
 $V_{oc} (U_o) \leq V_{max} (U_i)$ ,  $I_{sc} (I_o) \leq I_{max} (I_i)$ ,  $P_o \leq P_i$ ,  
 $C_a (C_o) \geq C_i + C_{cable}$ ,  $L_a (L_o) \geq L_i + L_{cable}$ .
3. Warning: Substitution of components may impair intrinsic safety.  
 Avertissement : La substitution de composants peut compromettre la sécurité intrinsèque.
4. Use supply wires suitable for 5°C above surrounding.
5. Batteries may be changed in a Cl. I area known to be hazardous.  
 For Cl. II and Cl. III: WARNING - Explosion hazard - do NOT replace battery unless the area is known to be NON - hazardous.
6. Replace only with Endress+Hauser SWA70 battery pack.  
 Battery unit should not be crushed, punctured or otherwise damaged.  
 Such abuse may impair the electrical safety.
7. Dispose of used battery units in an environmentally compatible manner.  
 Observe national regulations on waste disposal.
7. Where this device (SWA70-C12\*\*\*\*) is used to replace an older version (SWA70-C11\*\*\*\* or OSWA-CC1\*\*\*\*) in an existing hazardous location installation, caution must be taken to ensure compatibility of the new IS entity parameters (per IS Control Drawing 960018577) with existing inter-connected devices as these are different from the older versions (ref. previous Control Drawing 960009795-).

Cl. I, Div. 2, Groups A, B, C, D

Cl. II and III, Div. 2, Groups F, G (only for NPT conduit entries - not for plastic enclosure F32)

1. Install per the Canadian Electrical Code using threaded metal conduit.
2. Intrinsic safety barrier not required. Max. ambient temperature: 70°C.
3. Warning: Explosion hazard - Do not disconnect or open equipment when area is known to be hazardous.  
 Avertissement : Risque d'explosion - Ne pas déconnecter ni ouvrir l'appareil si la zone est explosive.
4. Warning: Substitution of components may impair suitability for Cl. I, Div. 2.  
 Avertissement : La substitution de composants peut rendre ce matériel inacceptable pour les emplacements de Cl. I, Div. 2.

Caution: Only use the Endress+Hauser battery pack of type BU191 from serial number: 14/01/xxxxxxx as specified in the Operating instructions.

Attention : Utiliser exclusivement un bloc-pile Endress+Hauser de type BU191 mentionné dans le manuel de mise en service à partir du numéro de série : 14/01/xxxxxxx.

XA00538F-B/00/EN/14.16  
 CCS/FM10  
 CSA/B 22.11.16



71351462

CSA Control Drawing  
 960018577 B

WirelessHART-Adapter  
 SWA70  
 4...20 mA HART (IS)

Endress+Hauser   
 People for Process Automation