

## IPAQ-HX/D

### Universal 2-wire Transmitters in Connection Head with Ex-approval for Dust



IPAQ-HX/D is a standard IPAQ-HX transmitter with connection head certified for mounting in hazardous areas containing explosive dust. IPAQ-HX/D can be placed in Dust Zones 21 and 22.

For information about transmitter data and features, we refer to technical documentation of the IPAQ-H/-HX transmitters.

To fulfill requirements for safe operation the transmitter must be mounted in a connection head of a safe type. At the moment there are three ATEX certified heads; BI, BS and DANX, each with a choice of three different threads for mounting on a protection tube (see information to the right).

The connection heads are all made of die cast aluminum and are furnished with an Ex-classified cable gland.

The sensing element, which should be a passive element, e.g. Pt100 or thermocouple, must be placed in a one end closed protective tube. The other end of the tube connects to the connection head with an ingress protection of IP54 or better. We recommend the use of steel for the protection tube.

Further guidelines for temperature sensor design can be found in the user instructions for IPAQ-HX/D and for electrical connections in certificate DEMKO 03 ATEX 132033 is for the transmitter IPAQ-HX and DEMKO 03 ATEX 133946X for IPAQ-HX/D.

#### Ex safety specifications

**Classification** II 2 GD EEx ia IIC T4-T6

**Certificate No.** DEMKO 03 ATEX 133946X

#### Output/Supply

Max voltage to transmitter  $U_i = 30\text{ V}$

Max current to transmitter  $I_i = 100\text{ mA}$

Max power to transmitter  $P_i = 0.9\text{ W}$

Internal inductance  $L_i = 0\text{ mH}$

Internal capacitance  $C_i = 0\text{ }\mu\text{F}$

#### Input (Sensor)

Max inductance (input loop)  $L_o = 50\text{ mH}$

Max capacitance (input loop)  $C_o = 66\text{ nF}$

#### Temperature limits

-30 °C to +80 °C

#### Ordering information

IPAQ-HX/D11	IPAQ-HX,	BI-head, M24x1,5	70IPHxD111
IPAQ-HX/D12	IPAQ-HX,	BI-head, ISO G1/2"	70IPHxD121
IPAQ-HX/D13	IPAQ-HX,	BI-head, NPT 1/2"	70IPHxD131
IPAQ-HX/D21	IPAQ-HX,	BS-head, M24x1,5	70IPHxD211
IPAQ-HX/D22	IPAQ-HX,	BS-head, ISO G1/2"	70IPHxD221
IPAQ-HX/D23	IPAQ-HX,	BS-head, NPT 1/2"	70IPHxD231
IPAQ-HX/D31	IPAQ-HX,	DANX-head, M24x1,5	70IPHxD311
IPAQ-HX/D32	IPAQ-HX,	DANX-head, ISO G 1/2"	70IPHxD321
IPAQ-HX/D33	IPAQ-HX,	DANX-head, NPT 1/2"	70IPHxD331

#### IPAQ-HX/Dxy identification

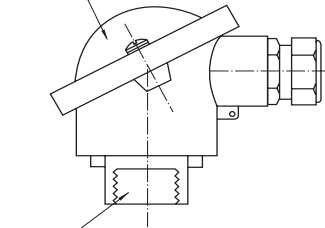
D=Dust, x=Connection head, y=Process entry

x = Connection head

x=1: BI

x=2: BS

x=3: DANX



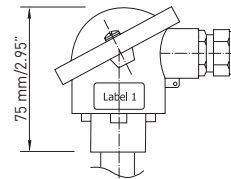
y = Process entry (thread)

y=1: M24x1,5

y=2: G 1/2"

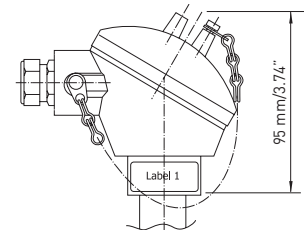
y=3: NPT 1/2"

#### Certified connection heads



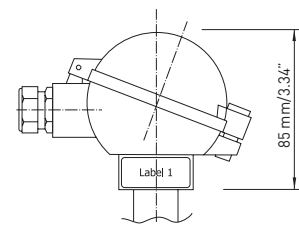
**BI**

Standard B-head



**BS**

With screw-on lid



**DANX**

With hinged lid