

# Universal Profibus-PA Transmitters in Connection Head with Ex-approval for Dust



ProfIPAQ-H/D and ProfIPAQ-HX/D are standard ProfIPAQ-H and ProfIPAQ-HX transmitters with connection head certified for mounting in hazardous areas containing explosive dust.

ProfIPAQ-H/D can be placed in Dust Zone 22 and must be connected to a non-incendive or FNICO certified fieldbus system.

ProfIPAQ-HX/D can be placed in Dust Zones 21 and 22 and must be connected to an intrinsic safe or FISCO certified fieldbus system.

For information about transmitter data and features, we refer to technical documentation of the ProfIPAQ-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 a minimum ingress protection of IP54 for ProfIPAQ-H/D and IP65 for ProfIPAQ-HX/D.

We recommend the use of steel for the protection tube.

Further guidelines for temperature sensor design can be found in the user instructions for ProfIPAQ-H/-HX and for electrical connections in certificate DEMKO 05 ATEX 136988X for the transmitters ProfIPAQ-H/D and ProfIPAQ-HX/D.

## Ex safety specifications

	ProfIPAQ-H/D	ProfIPAQ-HX/D
<b>Classification</b>	II 3GD T100°C EEx nL IIC T4-T6	II 1G/2D T100°C Ex ia IIC T4-T6
<b>Certificate No</b>	DEMKO 05 ATEX 136988X	DEMKO 05 ATEX 136988X
<b>Bus connection</b>	Non-incendive / FNICO certified	Intrinsic safe / FISCO certified
<b>Input (Sensor)</b>	Lo = 750 mH Co = 1000 µF	Lo = 6 mH Co = 166 nF
<b>Temperature limits</b>	-30 °C to +80 °C	-30 °C to +80 °C

## Ordering information

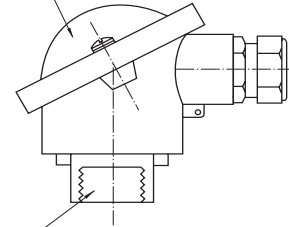
ProfIPAQ-H/D11	ProfIPAQ-H, BI-head, M24x1.5	70PPHD0111
ProfIPAQ-H/D12	ProfIPAQ-H, BI-head, ISO G1/2"	70PPHD0121
ProfIPAQ-H/D13	ProfIPAQ-H, BI-head, NPT 1/2"	70PPHD0131
ProfIPAQ-H/D21	ProfIPAQ-H, BS-head, M24x1.5	70PPHD0211
ProfIPAQ-H/D22	ProfIPAQ-H, BS-head, ISO G1/2"	70PPHD0221
ProfIPAQ-H/D23	ProfIPAQ-H, BS-head, NPT 1/2"	70PPHD0231
ProfIPAQ-H/D31	ProfIPAQ-H, DANX-head, M24x1.5	70PPHD0311
ProfIPAQ-H/D32	ProfIPAQ-H, DANX-head, ISO G 1/2"	70PPHD0321
ProfIPAQ-H/D33	ProfIPAQ-H, DANX-head, NPT 1/2"	70PPHD0331
ProfIPAQ-HX/D11	ProfIPAQ-HX, BI-head, M24x1.5	70PPHXD111
ProfIPAQ-HX/D12	ProfIPAQ-HX, BI-head, ISO G1/2"	70PPHXD121

ProfIPAQ-HX/D13	ProfIPAQ-HX, BI-head, NPT 1/2"	70PPHXD131
ProfIPAQ-HX/D21	ProfIPAQ-HX, BS-head, M24x1.5	70PPHXD211
ProfIPAQ-HX/D22	ProfIPAQ-HX, BS-head, ISO G1/2"	70PPHXD221
ProfIPAQ-HX/D23	ProfIPAQ-HX, BS-head, NPT 1/2"	70PPHXD231
ProfIPAQ-HX/D31	ProfIPAQ-HX, DANX-head, M24x1.5	70PPHXD311
ProfIPAQ-HX/D32	ProfIPAQ-HX, DANX-head, ISO G 1/2"	70PPHXD321
ProfIPAQ-HX/D33	ProfIPAQ-HX, DANX-head, NPT 1/2"	70PPHXD331

## PROFIPAQ-H/Dxy & PROFIPAQ-HX/Dxy identification

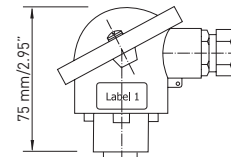
D-Dust, x-Connection head, y-Process entry

x = Connection head  
 x=1: BI  
 x=2: BS  
 x=3: DANX



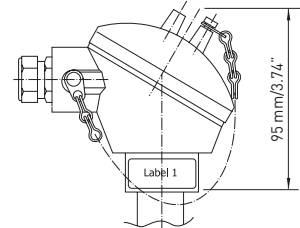
y = Process entry (thread)  
 y=1: M24x1,5  
 y=2: G 1/2"  
 y=3: NPT 1/2"

## Certified connection heads



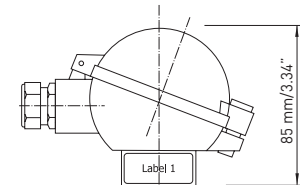
**BI**

Standard B-head



**BS**

With screw-on lid



**DANX**

With hinged lid