# PI-housing Models PIH-L, PIH-H, PIH-W, PIR-L, PIR-H, PIR-W

WIKA data sheet AC 80.30



#### **Applications**

- Refineries
- Oil and gas industry
- Chemical industry
- Offshore exploration and drilling
- Pulp and paper industry





#### Fig. left: Fig. right:

Model PIH-H with high screw-on lid Model PIH-W with high screw-on lid and window





Fig. left: Fig. right: Model PIH-L with flat screw-on lid Model PIR-L with M10 thread at the underside of the case

# Special features

- Explosion-protected versions
- High-quality surface coating
- Window for digital display
- 33 mm [1.3 in] pitch circle diameter for terminal block/ transmitter mounting
- Accessories for pipe mounting



The connection head of the PIH or PIR series is available with various explosion protection certifications for different ignition protection types. The fitting of different terminal blocks or transmitters is possible. A window in the upper body of the case enables the fitting of a digital display for the on-site display of the measured value. With the optional wall or pipe-mounting brackets (V-shaped-bolt adapter), vertical or horizontal mounting in the field is possible. High-quality surface coatings also enable operation in harsh environments.

Internal grounding and external equipotential bonding terminals make the field cabling simple and easily accessible.



## Specifications

#### Representation of the components



- ① Screw-on lid
- ② Sealing
- 3 Case
- ④ Product label of end device
- © Equipotential bonding terminal

Overview of versions			
Model	Description		
PIH-L	Connection head with flat screw-on lid		
РІН-Н	Connection head with high screw-on lid		
PIH-W	Connection head with high screw-on lid and window		
PIR-L	Connection head with flat screw-on lid, pipe or wall mounting		
PIR-H	Connection head with high screw-on lid, pipe or wall mounting		
PIR-W	Connection head with high screw-on lid and window, pipe or wall mounting		

Basic information					
Materials					
Case	Aluminium die-casting AlSi10Mg / AA 365.0 / JIS AC4A.2				
Screw-on lid	Aluminium die-casting AlSi10Mg / AA 3	65.0 / JIS AC4A.2			
Window	Glass				
Sealing	<ul> <li>EPDM -60 +90 °C [-76 194 °F]</li> <li>MVQ -60 +110°C [-76 230 °F], on request</li> <li>FPM -20 +110°C [-4 230 °F], on request</li> </ul>				
Case surface					
Colour	Lower body	WIKA product grey RAL 7035			
	Screw-on lid	WIKA product blue RAL 5022			
Material	<ul> <li>PE/PU (polyester/polyurethane) powder coating</li> <li>90 +/- 40 μm thickness</li> <li>Electrically conductive</li> <li>The heads have undergone a salt mist test and showed no notable effects, in accordance with ISO 4628. The scratched areas correspond to the medium evaluation method A.2 of the ISO 12944-6 criterion C5-M.</li> </ul>				
Weight					
Case with flat screw-on lid	≤ 0.85 kg [≤ 1,9 lbs]				
Case with high screw-on lid	≤ 1.0 kg [≤ 2,2 lbs]				
Case head with high screw-on lid and window	≤ 1.1 kg [≤ 2,4 lbs]				

Overview of connection threads			
Head version for direct mounting on an electrical thermometer	Left Input A	Right Input B	Bottom, to neck tube Input C
PIH-L, PIH-H, PIH-W	M20 x 1.5	Closed	M20 x 1.5, 1/2 NPT, 3/4 NPT
	M20 x 1.5	M20 x 1.5	M20 x 1.5, 1/2 NPT, 3/4 NPT
	1/2 NPT	Closed	M20 x 1.5, 1/2 NPT, 3/4 NPT
	1/2 NPT	1/2 NPT	M20 x 1.5, 1/2 NPT, 3/4 NPT
	3⁄4 NPT	Closed	<sup>1</sup> / <sub>2</sub> NPT, <sup>3</sup> / <sub>4</sub> NPT

Overview of connection threads			
Head version for pipe/wall mounting	Left Input A		Blind bore, no through-hole threads Input C
PIR-L, PIR-H, PIR-W	M20 x 1.5	M20 x 1.5	M10
	1/2 NPT	1/2 NPT	M10

Operating conditions		
Service temperature range		
Continuous operation	EPDM	-60 °C +90 °C [-76 +194 °F]
	EPDM, Ex	-60 °C +85 °C [-40 +185 °F]
Short time	EPDM	-70 °C +135 °C [-40 +230 °F]
Storage temperature range	-60 °C +110 °C [-76 +230 °F]	
Salt mist	ISO 4628 <sup>1)</sup>	
Ingress protection of the connection head	IP66	

The specified IP degree of protection applies under the following conditions:

Use of a suitable cable gland

- Use of a cable cross-section appropriate for the gland or select the appropriate cable gland for the available cable
- Adhere to the tightening torques for all threaded connections

#### Approvals

Logo	Description			Region
(Ex)	EU-type examination	certificate		European Union
	ATEX directive Hazardous areas PI*-* housing SAFEX - Ex d, Ex t	Zone 1 gas Zone 21 dust	II 2G Ex db IIC Gb II 2D Ex tb IIIC Db	
	PI*-* housing SAEEX - Ex e, Ex t	Zone 1 gas Zone 21 dust	II 2G Ex eb IIC Gb II 2D Ex tb IIIC Db	
	IECEx Hazardous areas PI*-* housing SAFEX - Ex d, Ex t	Zone 1 gas Zone 21 dust	Ex db IIC Gb Ex tb IIIC Db	International
	PI*-* housing SAEEX	2010 21 4401		
	- Ex e, Ex t	Zone 1 gas	Ex eb IIC Gb	
		Zone 21 dust	Ex tb IIIC Db	

## Dimensions in mm [in]



Input	Thread	Tightening torques in Nm
A	M20 x 1.5	20
	1⁄2 NPT	20
	3⁄4 NPT	25
В	M20 x 1.5	20
	1⁄2 NPT	20
С	½ NPT	30
	3⁄4 NPT	40
	M20 x 1.5 with lock nut	25

### Accessories

Figure		Description	Order number
	Pipe/ Wall-mounting kit	Stainless steel pipe-/wall-mounting kit for pipe diameters of 38 63 mm [1.5 2.5 in], consisting of two V-shaped pipe mounting brackets and mounting plate	14658397
	TND – Temperature Numerical Display	Indication module TND, 5-digit LC display A T38 transmitter is required for operating the TND clip-on display.	33025404



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Ordering information Model / Head-mounted design / Thread sizes

To order the described product the order number is sufficient.

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