# Connection head with integrated digital display module Model DIH10, standard version Model DIH10-Ex, intrinsically safe version

WIKA data sheet AC 80.11



### **Applications**

- Machine building and plant construction
- Chemical industry
- Petrochemical industry

### **Special features**

- Universal application
- Robust, compact current loop display
- User-friendly configuration
- 7-segment LED display
- Housing versions:
  - Connection head (standard)
  - Housing with pipe support



Connection head with integrated digital display module model DIH10

### Description

The model DIH10, DIH10-Ex integrated digital display module (digital indicator) is a universal, configurable, current loop display for fitting to electrical thermometers.

The robust, compact display is only applicable where a standard signal of 4 ... 20 mA is already available. When used with the housing versions, it can be an on-site display for the entire industrial sector.

Combined with the ability to rotate the connection head and the large 4-digit, 7-segment LED display is easily readable from any direction. In order to make the electrical connection, the current loop display is simple and easy to open. Buttons provide a user-friendly configuration of the display range.

To operate the connection head with a model DIH10, DIH10-Ex digital display module, a transmitter (4 ... 20 mA) for the measuring point is a precondition.

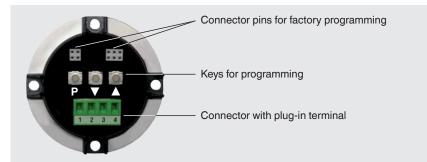




# Specifications

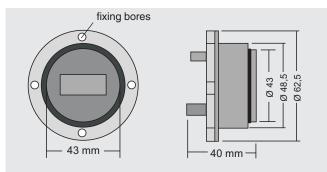
Specifications	Model DIH10, DIH10-Ex (display module)
Current loop	4 20 mA
Input impedance R <sub>i</sub> with 20 mA	$< 160 \Omega (U \le 3.2 V)$
Voltage drop	< DC 3.2 V at 20 mA Supply via current loop
Resolution	-999 9999 digit
Measuring error	±0.2 % measuring range, ±1 digit
Temperature drift	100 ppm/K
Display principle	LED, rotatable in 90° steps
Display measured value	7-segment, 8 mm high, red, 4-digit = display 9999
Overrange/Underrange	to HI / to LO
Display rate	0.1 s - 1 s - 10 s (adjustable)
Maximum voltage U <sub>i</sub>	DC 30 V
Maximum current l <sub>i</sub>	100 mA (only for model DIH10-Ex)
Maximum power P <sub>i</sub>	1 W (only for model DIH10-Ex)
<ul> <li>Permissible temperatures</li> <li>Operating temperature</li> </ul>	Model DIH10: 0 80 °C Model DIH10-Ex: 0 60 °C
Storage temperature	-20 +80 °C
Dimensions	Ø 43.0 / 48.5 / 62.5 mm x 37 mm
Housing material	Polycarbonate
Ingress protection	Front: IP67 Connection: IP20 or IP00
Weight	approx. 55 g
Electrical connection	Plug-in terminal, up to 1.5 mm <sup>2</sup> open cable ends
Programmable features	Scale range, display time, decimal point, unit (°C/°F), zero point stabilisation, programming lock, interpolating points, TAG number
Housing versions (see dimensions)	<ul> <li>Connection head (standard)</li> <li>Housing with pipe support</li> </ul>

#### Display module, operator side



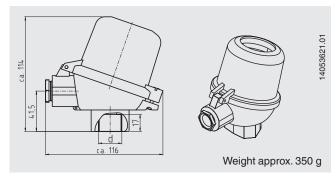
### **Dimensions in mm**

#### **Display module**



#### Housing versions

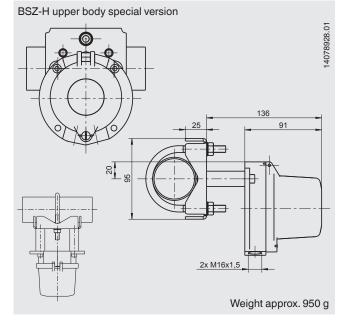
Connection head BSZ-H (standard version), model DIH10-Z-\*A (with DIH10), DIH10-Y-\*A (with DIH10-Ex)



Connection head BSZ-H (standard)			
Connection to thermometer d	<ul> <li>M24 x 1,5</li> <li>1/2 NPT</li> </ul>		
Material	Aluminium blue, lacquered 1)		
Cable gland	<ul> <li>1 x M20 x 1.5</li> <li>1 x <sup>1</sup>/<sub>2</sub> NPT</li> </ul>		
Ingress protection	IP65 (option: IP67)		

1) RAL 5022

 Housing with pipe support, model DIH10-Z-\*D (with DIH10), DIH10-Y-\*D (with DIH10-Ex)



Housing with pipe support		
Material	Aluminium blue, lacquered 1)	
Pipe support	Stainless steel	
Pipe diameter R	1" 2"	
Cable gland	2 x M16 x 1.5	
Ingress protection	IP65 (option: IP67)	

1) RAL 5022

### **Approvals**

Logo	Description	Country
CE	<ul> <li>EU declaration of conformity</li> <li>EMC directive</li> <li>EN 61326 emission (group 1, class A) and interference immunity (industrial application)</li> </ul>	European Community
Æx>	<ul> <li>ATEX directive (model DIH10-Ex) Hazardous areas</li> </ul>	
EHLEx	<ul><li>EAC (option)</li><li>Electromagnetic compatibility</li><li>Hazardous areas</li></ul>	Eurasian Economic Community
-	MTSCHS (option) Permission for commissioning	Kazakhstan

## **Certificates (option)**

- 2.2 test report
- 3.1 inspection certificate
- DKD/DAkkS calibration certificate

Approvals and certificates, see website

#### **Ordering information**

Model / Explosion protection / Scale range/ Housing / Connection from connection head to neck tube / cable gland / Options

© 01/2014 WIKA Alexander Wiegand SE & Co. KG, all rights reserved. The specifications given in this document represent the state of engineering at the time of publishing. We reserve the right to make modifications to the specifications and materials.

Page 4 of 4

WIKA data sheet AC 80.11 · 06/2016



WIKA Alexander Wiegand SE & Co. KG Alexander-Wiegand-Straße 30 63911 Klingenberg/Germany Tel. +49 9372 132-0 Fax +49 9372 132-406 info@wika.de www.wika.de