

Model BH3

Any Angle Pattern Bimetallic Thermometer

Models BH345, BH355, BH365



- Anti parallax feature for error free reading
- 100mm, 130mm and 160mm case options
- Stainless steel construction
- External zero adjustment
- Silicone filling available
- No contaminants - safe for food and chemical applications
- Can be supplied with a wide range of Rototherm thermowells

■ Introduction

The Rototherm range of Any Angle Bimetallic Thermometers allows movement of the adjustable head through 180°, through a full 360° rotation, thus allowing its position to be set for maximum readability after installation.

All welded stainless steel construction of the system/bellows assembly allow full angular adjustment of the case through 360° without the need for pointer adjustment.

The Any Angle Bimetallic Thermometer is available in either 100mm, 130mm or 160mm dial sizes with temperature ranges and stem lengths to suit most applications

■ Rototherm Quality

The BH3 Series of Any Angle Bimetallic Thermometers are designed, manufactured and tested to ISO9001:2000.

Each thermometer carries Rototherm's standard 12 month warranty.

Model BH3

Any Angle Pattern Bimetallic Thermometers

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Specification

Case & Bezel

304 Stainless steel standard. 316 Stainless steel non-standard option
Weatherproof (rated IP 65)

Dial

Non ferrous metal clearly marked to BS3693. Black characters on a white background

Window

Glass as standard. Options: Toughened glass or acrylic

Stem Material

316 Stainless steel

Stem Diameters

6.0mm, 6.3mm, 8.0mm and 12.7mm

Maximum Stem Lengths

6.0mm & 6.3mm x 500mm
8.0mm x 1000mm
12.7mm x 1500mm

Immersion Length

Minimum immersion depends on temperature range (see table)

Fitting

Plain stem for fitting with compression gland or flange

Accuracy

±1% of span

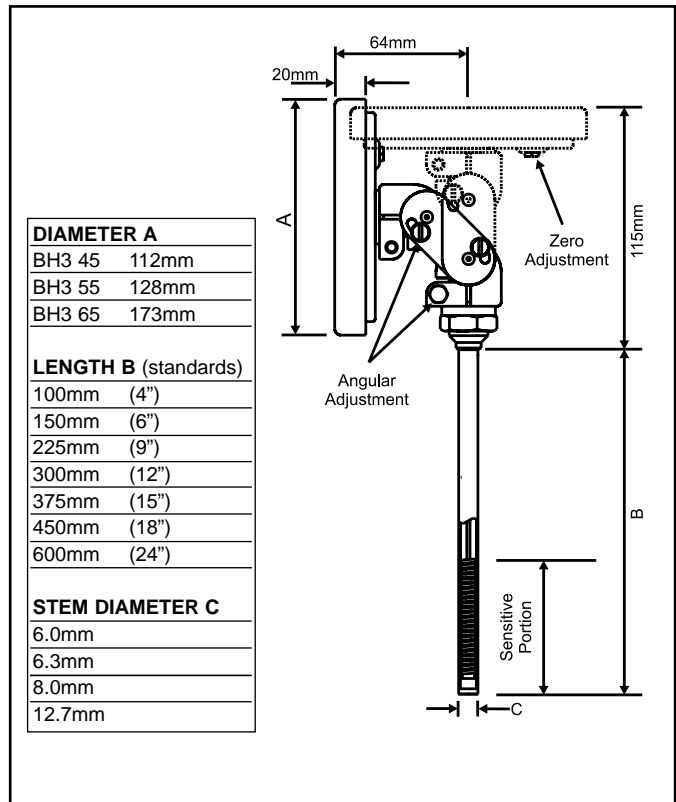
Weight

1.0 kg (average)

Options

Silicone filling (suitable for working temperatures up to 80°C only)

Dimensions & Mountings



Standard Temperature Ranges

Ranges			Sensitive Portion Length (mm)		
Single Scale	Dual Scale		Stem Diameter (mm)		
°C	°F	°C & °F	6.0/6.35	8.0	12.7
-30/+60	20/+140	n/a	65	70	95
-20/120	n/a	n/a	45	50	75
0/60	n/a	n/a	85	90	100
0/100	20/220	0/100 °C & °F	55	60	80
0/120	n/a	n/a	50	55	80
0/160	0/300	n/a	40	45	65
0/200	n/a	n/a	35	40	65
0/250*	n/a	n/a	30	35	65
50/250	n/a	50/250 °C & °F	35	40	65
0/300*	n/a	n/a	40	45	60
0/400	0/800	n/a	30	35	55
0/500	n/a	n/a	30	35	55

Note: * only available with 8mm & 12.7mm stem diameters

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Ordering Information

100mm dial

BH345

130mm dial

BH355

160mm dial

BH365

Window

Glass (Standard)

Acrylic

Toughened Glass

Stem Diameter

8.0mm is standard

(options 6.0, 6.3 or 12.7mm)

Stem length

Insert stem length in mm

Temperature Range

From table

Units

°C, °F or °C & °F dual scale

Silicone Filling*

Required

Not Required

Glands

1/2" BSP

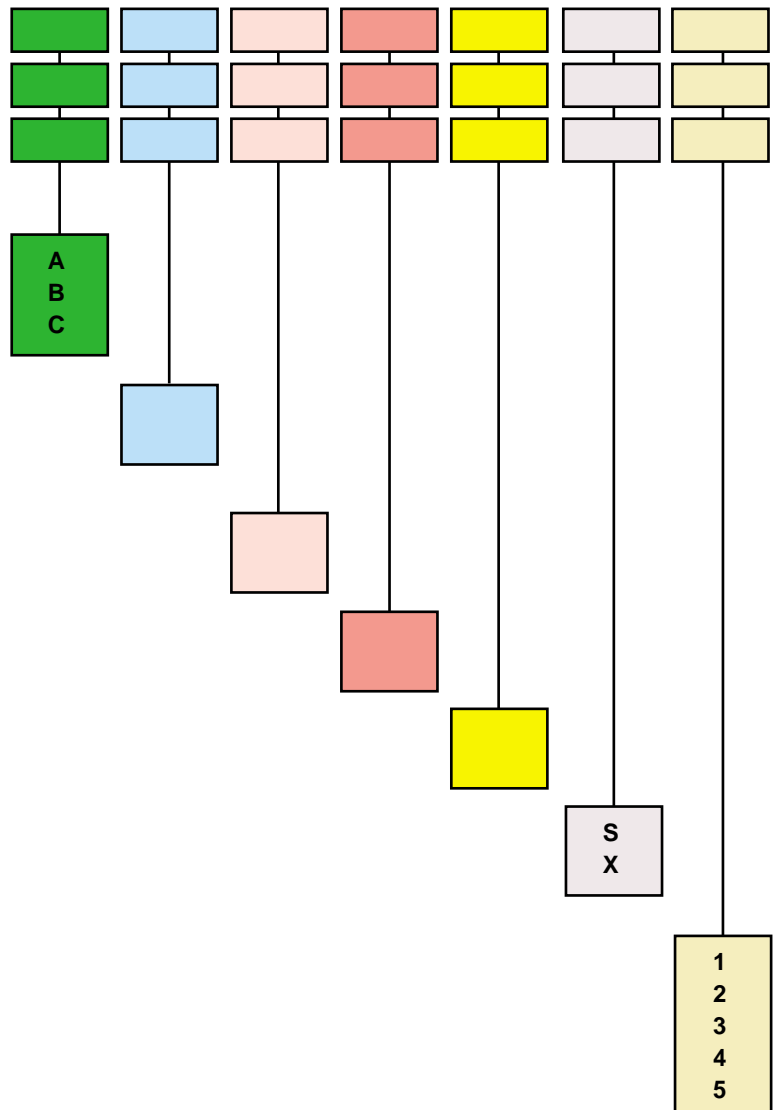
1/4" BSP

1/2" NPT

1/4" API

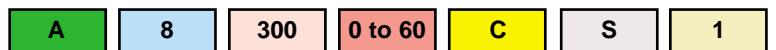
Other (State Requirement)

*Silicone filling suitable for working temperatures up to 80°C



Example Order Code

BH355



Any angle bimetallic thermometer, 130mm dial, stem diameter 8.0mm, stem length 300mm, temperature range 0 to 60°C, silicone filled with 1/2" BSP gland

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■ Accessories & Optional Features

Thermowells

Used predominantly in the power, process, pharmaceutical and petrochemical industries, thermowells are used to protect temperature indicators and sensors from process media and to enable servicing or replacement of indicators without the need to shut down plant.

Rototherm thermowells are designed to meet standards established by BSI, DIN, ASME and other authorities as well as established company standards such as BP, Shell, CEGB, ICI etc.

Thermowells are available fabricated from tube, drilled from barstock or from forgings. Full material certification including original mill and suppliers material certificates can be provided. If required NACE standard MR-01-75 requirements can be met.



Process Connections

Rototherm thermowells are available with both flanged and screwed process connections including:

FLANGES - ANSI, BS, and DIN (others also available)

SCREWED - NPT, API, BSP and ISO

Dye penetrant or radiographic inspection of welds is available if required. Flanged thermowells can also be manufactured from "one piece" forgings removing the need for welding.

Materials

Rototherm Thermowells are available in a wide variety of materials, including:

- Stainless steels (304, 316, 321 etc.)
- Carbon steel
- Brass
- Aluminium Bronze and other non ferrous alloys
- Nickel alloys - Monel, Inconel, Hastelloy etc.

Rototherm can also supply thermowells in a variety of corrosion resistant protective coatings, e.g. PTFE, PFA, Gore Fluroshield. Tantalum etc.

Rototherm's experienced engineering sales department can give advice and guidance on thermowell selection.

Please also refer to the Thermowell data sheet TW-96.

Compression Glands / Fittings

Compression glands tighten on the stem to provide liquid and gas tight seal. Once fitted the position of the thermometer can only be altered by cutting off the olive and replacing it with a new one.

Add 50mm for BSP threads (75mm for NPT threads) to desired immersion length to obtain minimum "D" dimension).



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