

Special documentation

Mounting device FHG60

For level measurements and point level detection

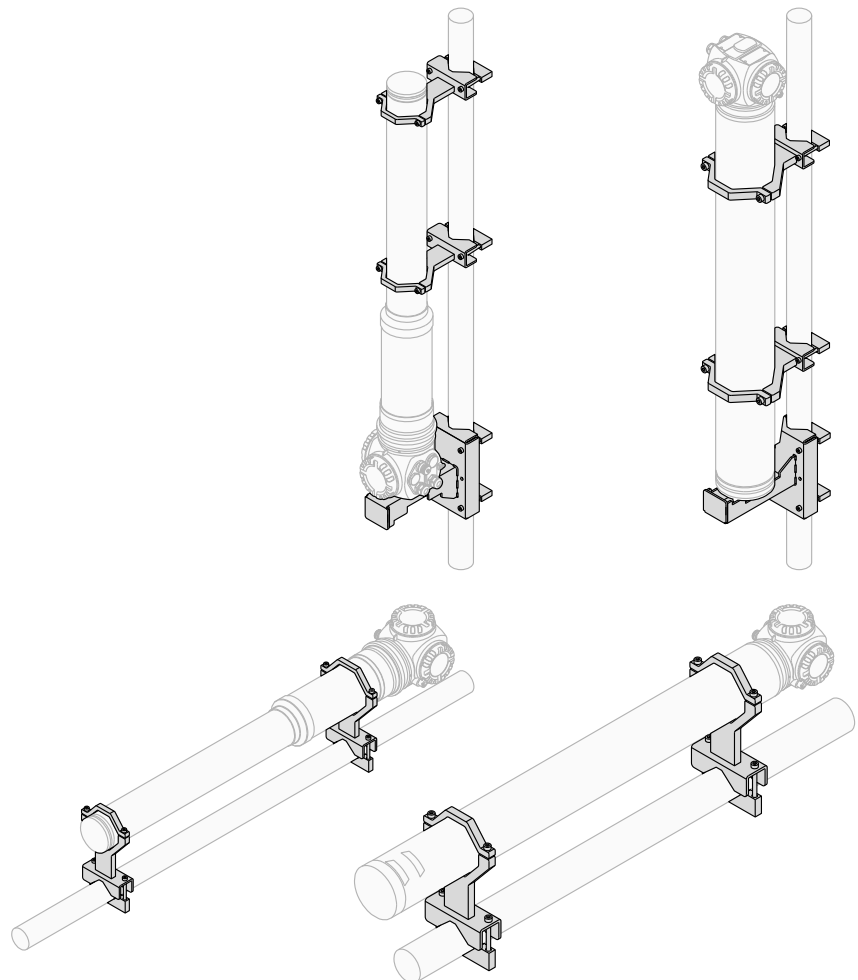


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1 About this document

1.1 Document function





This document describes the individual components of the mounting device FHG60 for the application using the help of the Gammapilto FMG60.

1.2 Symbols

1.2.1 Safety symbols

Symbol	Meaning
 A0011189-DE	DANGER! This symbol alerts you to a dangerous situation. Failure to avoid this situation will result in serious or fatal injury.
 A0011190-DE	WARNING! This symbol alerts you to a dangerous situation. Failure to avoid this situation can result in serious or fatal injury.
 A0011191-DE	CAUTION! This symbol alerts you to a dangerous situation. Failure to avoid this situation can result in minor or medium injury.
 A0011192-DE	NOTICE! This symbol contains information on procedures and other facts which do not result in personal injury.

1.2.2 Symbols for certain types of information

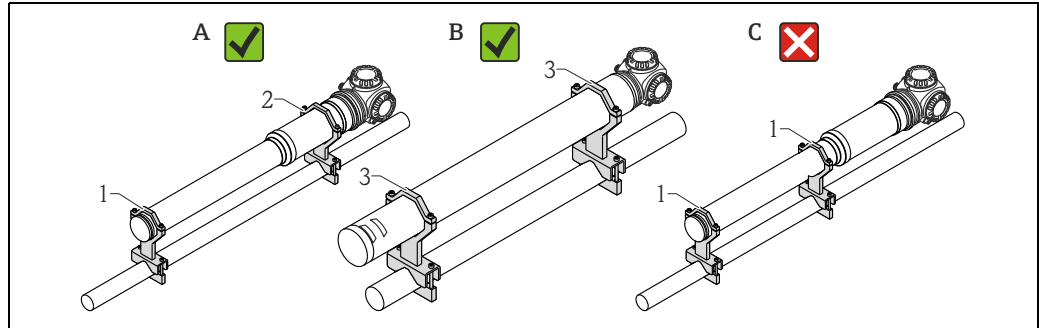
Symbol	Meaning
 A0011182	Allowed Indicates procedures, processes or actions that are allowed.
 A0011184	Forbidden Indicates procedures, processes or actions that are forbidden.
 A0011193	Tip Indicates additional information.
 A0015484	Reference to page Refers to the corresponding page number.
1, 2, ...	Series of steps

1.2.3 Symbols in graphics

Symbol	Meaning
1, 2, 3, 4, ...	Item numbers
1, 2, ...	Series of steps
A, B, C, D, ...	Views

2 Applications

2.1 Point level detection

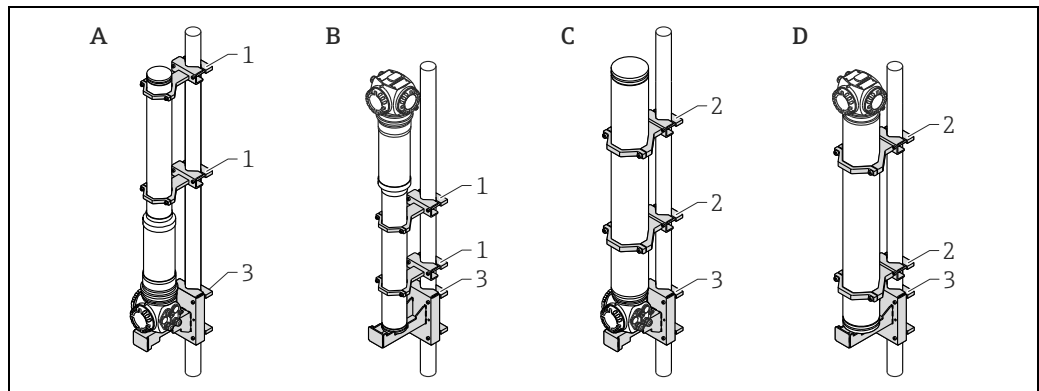


- A Point level detection, FMG60 without water cooling jacket
 B Point level detection, FMG60 with water cooling jacket
 C Such horizontal mounting not permitted

- 1 Retainer for pipe $\varnothing 80$ mm (3.15 in)
 2 Retainer for pipe $\varnothing 102$ mm (4.02 in)
 3 Retainer for water cooling jacket $\varnothing 140$ mm (5.51 in)

A0020692

2.2 Level measurement



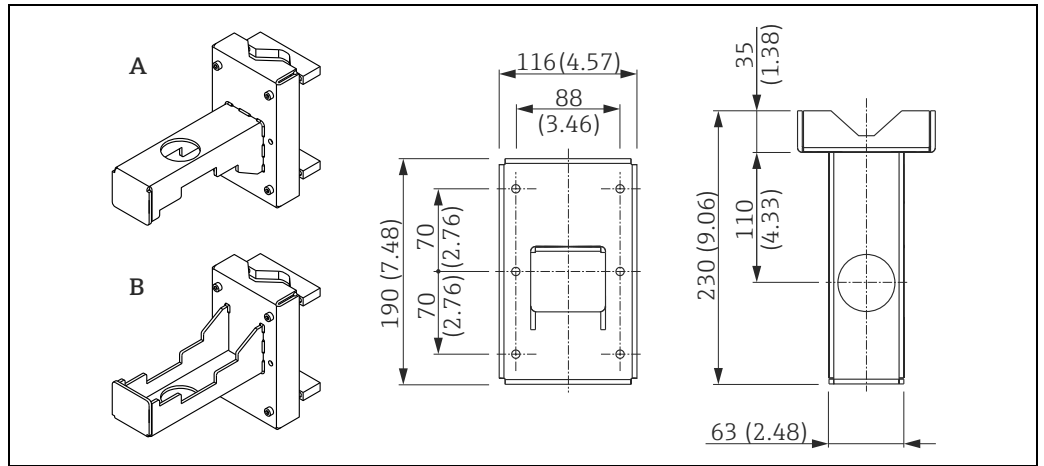
- A FMG60 without water cooling jacket (preferred)
 B FMG60 without water cooling jacket (alternative)
 C FMG60 with water cooling jacket (preferred)
 D FMG60 with water cooling jacket (alternative)

- 1 Retainer for pipe $\varnothing 80$ mm (3.15 in)
 2 Retainer for water cooling jacket $\varnothing 140$ mm (5.51 in)
 3 Bracket

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3 Components

3.1 Bracket



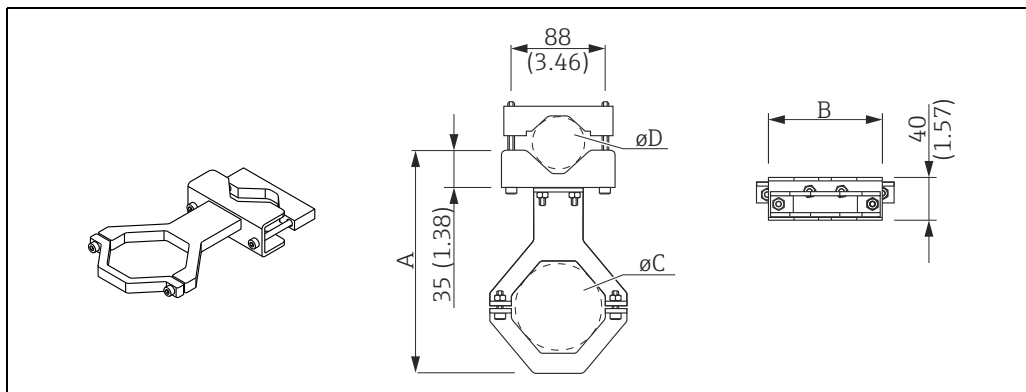
Dimensions: mm (in)

- A With preferred mounting method "housing head down" - bracket (for "level" application only)
- B With alternative mounting method "housing head up" - bracket (for "level" application only)

3.1.1 Materials

Part	Material
Screws and nuts	A4
All other parts	316L (1.4404)

3.2 Clamps



Dimensions: mm (in)

Mounting position at the FMG60	A [mm (in)]	B [mm (in)]	øC [mm (in)]	øD [mm (in)]	Mounting
Scintillator pipe	198 (7.8)	126 (4.96)	80 (3.15)	40 to 65 (1.57 to 2.56)	→ 7
Electronic pipe	210 (8.27)	150 (5.91)	102 (4.02)		→ 7
Water cooling jacket	230 (9.06)	200 (7.87)	140 (5.51)		→ 7

3.2.1 Materials

Part	Material
Screws and nuts	A4
All other parts	316L (1.4404)

4 Mounting

▲ CAUTION

Consider while mounting the device

- ▶ The mounting device must be fitted in a way such that it can withstand the weight of the Gammapilot M FMG60 under all operating conditions to be expected.
- ▶ For stability reasons the mounting version with the compartment housing pointing upwards should only be used in exceptional cases (e.g. lack of space).

4.1 Number of components

Device type	Application	Measuring range	Number	
			Bracket	Clamps
FMG60 PVT	Point level detection	200/400 mm (7.87/15.7 in)	-	2
	Level measurement	400 to 1200 mm (15.7 to 47.2 in)	1	1
		1600 to 2000 mm (63 to 78.7 in)	1	2

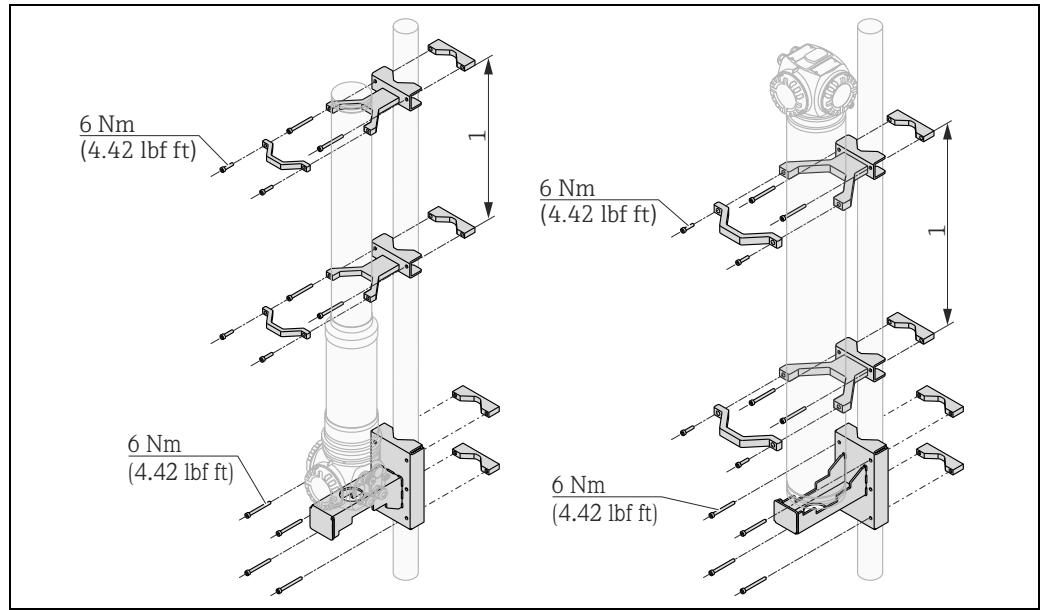
4.2 Mounting FMG60 PVT

▲ CAUTION

Consider while mounting

- ▶ For vertical mounting usage of the bracket or a support unit fitted by the customer is mandatory. Otherwise a sufficient stability and support of the Gammapilot M FMG60 is not used.
- ▶ For all measuring length of 1600 mm (63 in) or more, two retainers (level measurement) must be used.
- ▶ To prevent the damage of the detector tube the maximum torque of the retainer screws 6 Nm (4.42 lbf ft).

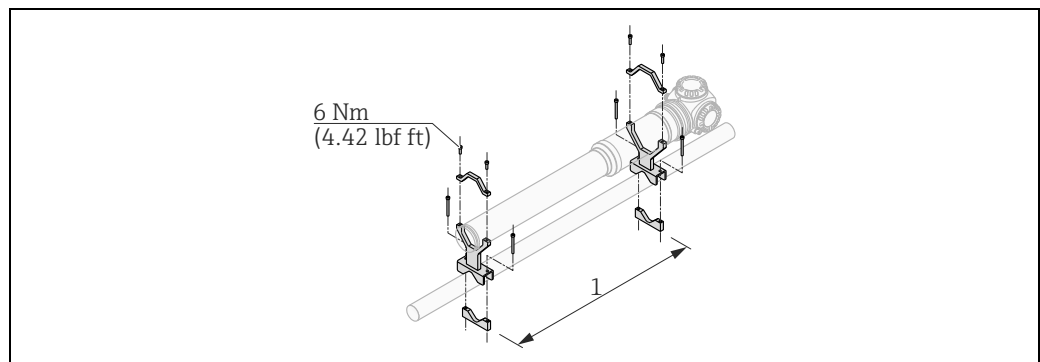
4.2.1 Level measurement



1 Spacing as large as possible

1. Mount bracket
2. Place detector onto bracket
3. Mount retainers

4.2.2 Point level detection



1 Spacing as large as possible

1. Mount lower part of retainers
2. Place detector onto retainers
3. Mount upper part of retainers

5 Ordering information

5.1 Product structure FHG60



This overview does not mark options which are mutually exclusive.

010	Application:
1	Level, FMG60 400-1200 mm measuring range
2	Level, FMG60 600-2000 mm measuring range
3	Point level switch
9	Special version, TSP-no. to be spec.
020	Mounting Clamp:
A	FMG60
B	FMG60, cooling tube
Y	Special version, TSP-no. to be spec.
020	Material:
1	316L
Y	Special version, TSP-no. to be spec.
995	Marking:
1	Tagging (TAG), see additional spec.



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