



Gas filled thermometers FTh Ch - for chemical applications



Benefits

- For chemical, process engineering and food industry applications
- High measuring accuracy
- Fast response

Application

For corrosive media. Meets the most exacting measuring demands, e.g. in process engineering as well as chemical and food industry applications.

Technical specifications

Type

D4

Nominal size

100 – 160

Measuring principle

Pressurised gas filling

Accuracy class

1 (EN 13190)

Ranges °C

-20/+60, 0/60, 0/120, 0/160, 0/200, 0/300, 0/400, 0/500

Application area (EN 13190)

Continuous load: Full scale value

Short-term: 1.1 x full scale value

Operating pressure at thermowell

Max. 10 bar (Up to 300 °C)

Degree of protection

IP 65 (EN 60529)

Standard version

Connection

Stem: Stainless steel 321, Ø 10 mm, plain

Mounting position

Bottom, centre back or every angle version

Dial

Aluminium, white

Scaling black

Pointer

Aluminium, black

Zero correction

At the side

Movement

Brass

Housing

Stainless steel 304

Bayonet type bezel

Stainless steel 304

Window

Instrument glass

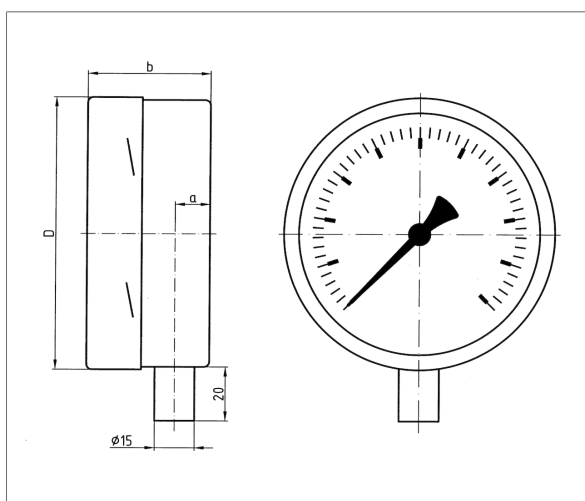


Options

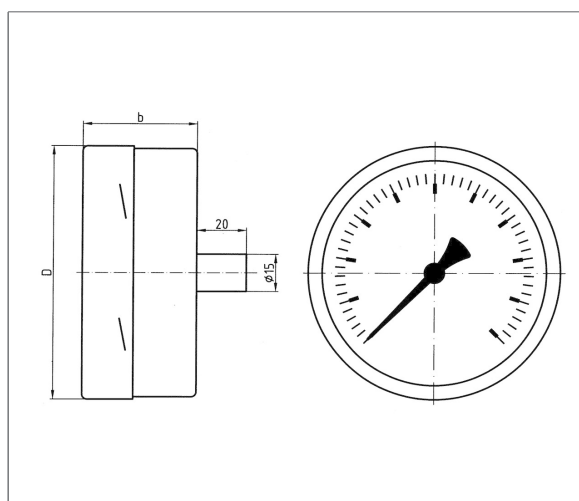
- Every angle version
- Grooved nut connection as per DIN 11851
- Other connection designs
- Other nominal sizes
- Other ranges
- Special scales
- Glycerine filling (type D8)
- Back flange
- 3-hole fixing, panel mounting bezel
- Capillary (stainless steel 321)
- Special materials
- Electrical contacts

Technical drawings

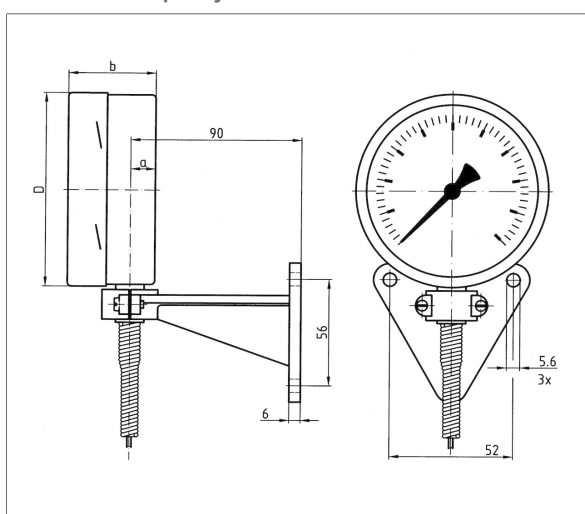
Bottom connection



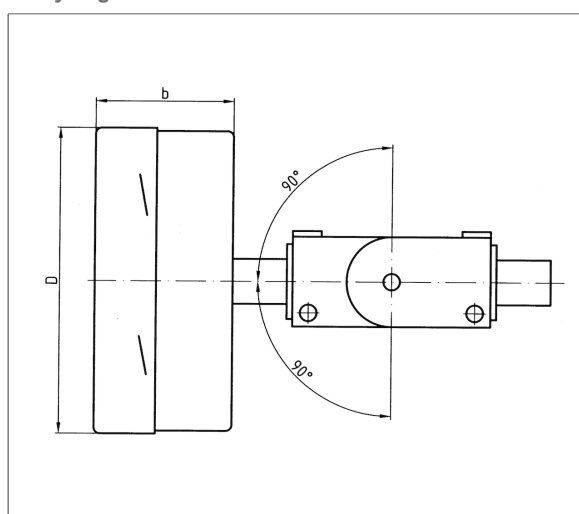
Centre back connection



Version with capillary and wall bracket



Every angle version





Dimensions (mm)

NG	a	b	D
100	13	45	101
160	13	45	161

Dimensions (mm)

NG	D	b
100	101	45
160	161	45

Dimensions (mm)

NG	b	D	d1	d2	d3
100	45	101	132	116	5,5
160	45	161	196	178	6

Dimensions (mm)

NG	a	b	D
100	13	45	101
160	13	45	161

Dimensions (mm)



NG	b1	D	d1	d2	d3
100	51	101	132	116	5,5
160	51	161	196	178	6

Dimensions (mm)

NG	b	D
100	45	101
160	45	161


Versions

FTh 100 Ch

	Housing \varnothing	Range	Type	Part no.
	100 mm	-20/+60 °C	FTh 100 Ch D402	64341402
	100 mm	0/60 °C	FTh 100 Ch D402	64361402
	100 mm	0/120 °C	FTh 100 Ch D402	64373402
	100 mm	0/160 °C	FTh 100 Ch D402	64377402
	100 mm	0/200 °C	FTh 100 Ch D402	64381402
	100 mm	0/300 °C	FTh 100 Ch D402	64389402
	100 mm	0/400 °C	FTh 100 Ch D402	64397402
	100 mm	0/500 °C	FTh 100 Ch D402	64401402
	100 mm	-20/+60 °C	FTh 100 Ch D412	64341412
	100 mm	0/60 °C	FTh 100 Ch D412	64361412
	100 mm	0/120 °C	FTh 100 Ch D412	64373412
	100 mm	0/160 °C	FTh 100 Ch D412	64377412
	100 mm	0/200 °C	FTh 100 Ch D412	64381412
	100 mm	0/300 °C	FTh 100 Ch D412	64389412
	100 mm	0/400 °C	FTh 100 Ch D412	64397412

Blue part no. = in-stock items



Housing [⊗]	Range	Type	Part no.		
	100 mm	0/500 °C	FTh 100 Ch D412	64401412	
	100 mm	-20/+60 °C	FTh 100 Ch D432	64341432	
	100 mm	0/60 °C	FTh 100 Ch D432	64361432	
	100 mm	0/120 °C	FTh 100 Ch D432	64373432	
	100 mm	0/160 °C	FTh 100 Ch D432	64377432	
	100 mm	0/200 °C	FTh 100 Ch D432	64381432	
	100 mm	0/300 °C	FTh 100 Ch D432	64389432	
	100 mm	0/400 °C	FTh 100 Ch D432	64397432	
	100 mm	0/500 °C	FTh 100 Ch D432	64401432	
		100 mm	-20/+60 °C	FTh 100 Ch D442	64341442
100 mm		0/60 °C	FTh 100 Ch D442	64361442	
100 mm		0/120 °C	FTh 100 Ch D442	64373442	
100 mm		0/160 °C	FTh 100 Ch D442	64377442	
100 mm		0/200 °C	FTh 100 Ch D442	64381442	
100 mm		0/300 °C	FTh 100 Ch D442	64389442	
100 mm		0/400 °C	FTh 100 Ch D442	64397442	
100 mm		0/500 °C	FTh 100 Ch D442	64401442	
		100 mm	-20/+60 °C	FTh 100 Ch D472	64341472
		100 mm	0/60 °C	FTh 100 Ch D472	64361472
	100 mm	0/120 °C	FTh 100 Ch D472	64373472	
	100 mm	0/160 °C	FTh 100 Ch D472	64377472	
	100 mm	0/200 °C	FTh 100 Ch D472	64381472	
	100 mm	0/300 °C	FTh 100 Ch D472	64389472	
	100 mm	0/400 °C	FTh 100 Ch D472	64397472	
	100 mm	0/500 °C	FTh 100 Ch D472	64401472	
		100 mm	-20/+60 °C	FTh 100 Ch D482	64341482
		100 mm	0/60 °C	FTh 100 Ch D482	64361482
100 mm		0/120 °C	FTh 100 Ch D482	64373482	

Blue part no. = in-stock items



Housing \varnothing	Range	Type	Part no.
100 mm	0/160 °C	FTh 100 Ch D482	64377482
100 mm	0/200 °C	FTh 100 Ch D482	64381482
100 mm	0/300 °C	FTh 100 Ch D482	64389482
100 mm	0/400 °C	FTh 100 Ch D482	64397482
100 mm	0/500 °C	FTh 100 Ch D482	64401482

Blue part no. = in-stock items

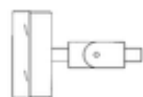
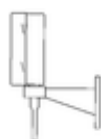
FTh 160 Ch

Housing \varnothing	Range	Type	Part no.
160 mm	-20/+60 °C	FTh 160 Ch D402	64343402
160 mm	0/60 °C	FTh 160 Ch D402	64363402
160 mm	0/120 °C	FTh 160 Ch D402	64375402
160 mm	0/160 °C	FTh 160 Ch D402	64379402
160 mm	0/200 °C	FTh 160 Ch D402	64383402
160 mm	0/300 °C	FTh 160 Ch D402	64391402
160 mm	0/400 °C	FTh 160 Ch D402	64399402
160 mm	0/500 °C	FTh 160 Ch D402	64403402
160 mm	-20/+60 °C	FTh 160 Ch D412	64343412
160 mm	0/60 °C	FTh 160 Ch D412	64363412
160 mm	0/120 °C	FTh 160 Ch D412	64375412
160 mm	0/160 °C	FTh 160 Ch D412	64379412
160 mm	0/200 °C	FTh 160 Ch D412	64383412
160 mm	0/300 °C	FTh 160 Ch D412	64391412
160 mm	0/400 °C	FTh 160 Ch D412	64399412
160 mm	0/500 °C	FTh 160 Ch D412	64403412
160 mm	-20/+60 °C	FTh 160 Ch D432	64343432
160 mm	0/60 °C	FTh 160 Ch D432	64363432
160 mm	0/120 °C	FTh 160 Ch D432	64375432
160 mm	0/160 °C	FTh 160 Ch D432	64379432
160 mm	0/200 °C	FTh 160 Ch D432	64383432

Blue part no. = in-stock items



Housing [⊗]	Range	Type	Part no.
160 mm	0/300 °C	FTh 160 Ch D432	64391432
160 mm	0/400 °C	FTh 160 Ch D432	64399432
160 mm	0/500 °C	FTh 160 Ch D432	64403432
160 mm	-20/+60 °C	FTh 160 Ch D442	64343442
160 mm	0/60 °C	FTh 160 Ch D442	64363442
160 mm	0/120 °C	FTh 160 Ch D442	64375442
160 mm	0/160 °C	FTh 160 Ch D442	64379442
160 mm	0/200 °C	FTh 160 Ch D442	64383442
160 mm	0/300 °C	FTh 160 Ch D442	64391442
160 mm	0/400 °C	FTh 160 Ch D442	64399442
160 mm	0/500 °C	FTh 160 Ch D442	64403442
160 mm	-20/+60 °C	FTh 160 Ch D472	64343472
160 mm	0/60 °C	FTh 160 Ch D472	64363472
160 mm	0/120 °C	FTh 160 Ch D472	64375472
160 mm	0/160 °C	FTh 160 Ch D472	64379472
160 mm	0/200 °C	FTh 160 Ch D472	64383472
160 mm	0/300 °C	FTh 160 Ch D472	64391472
160 mm	0/400 °C	FTh 160 Ch D472	64399472
160 mm	0/500 °C	FTh 160 Ch D472	64403472
160 mm	-20/+60 °C	FTh 160 Ch D482	64343482
160 mm	0/60 °C	FTh 160 Ch D482	64363482
160 mm	0/120 °C	FTh 160 Ch D482	64375482
160 mm	0/160 °C	FTh 160 Ch D482	64379482
160 mm	0/200 °C	FTh 160 Ch D482	64383482
160 mm	0/300 °C	FTh 160 Ch D482	64391482
160 mm	0/400 °C	FTh 160 Ch D482	64399482
160 mm	0/500 °C	FTh 160 Ch D482	64403482



Blue part no. = in-stock items