

Technical Datasheet



Capsule type Pressure Gauges CP Series

Key Features

- Nominal Diameter of 100 & 150 mm
- Degree of Protection IP55 / IP67
- Stainless Steel construction as standard
- Hazardous area certification
- Blowout Protection
- Ranges available see page 2



Series Overview

The CP capsule type pressure gauges (code 3700***) are manufactured according to EN 837-3 with case and wetted parts, in stainless steel and are suitable for clean process fluid. For this reason, they are particularly suitable for installation in aggressive and corrosive environments, very common in the process industry. The optional 316 stainless steel case & ring, also make the instrument suitable for off shore installations.

The sensing element is a capsule that expands under pressure, transferring the movement to the pointer through high precision stainless steel movements.

Due to the sensitivity of this type of sensing element, overpressures are not permitted. For this reason it is suggested to select the scale with the operating pressure between 1/10 to 2/3 of fsv.

Other products

Other products we can offer :

- All stainless steel bourdon tube type pressure gauges
- Manifolds
- Diaphragm pressure gauges: Model SG



Product applications

The CP range is suitable to meet the requirements of OEM manufacturers of :

- Burners & furnace
- Air & exhaust gasses treatment system
- Low pressure systems air & gas system

The choice of models available ensures suitability for use in:

- Corrosive atmospheres
- Resistant to chemical attack
- Hazardous areas

How can we help you?

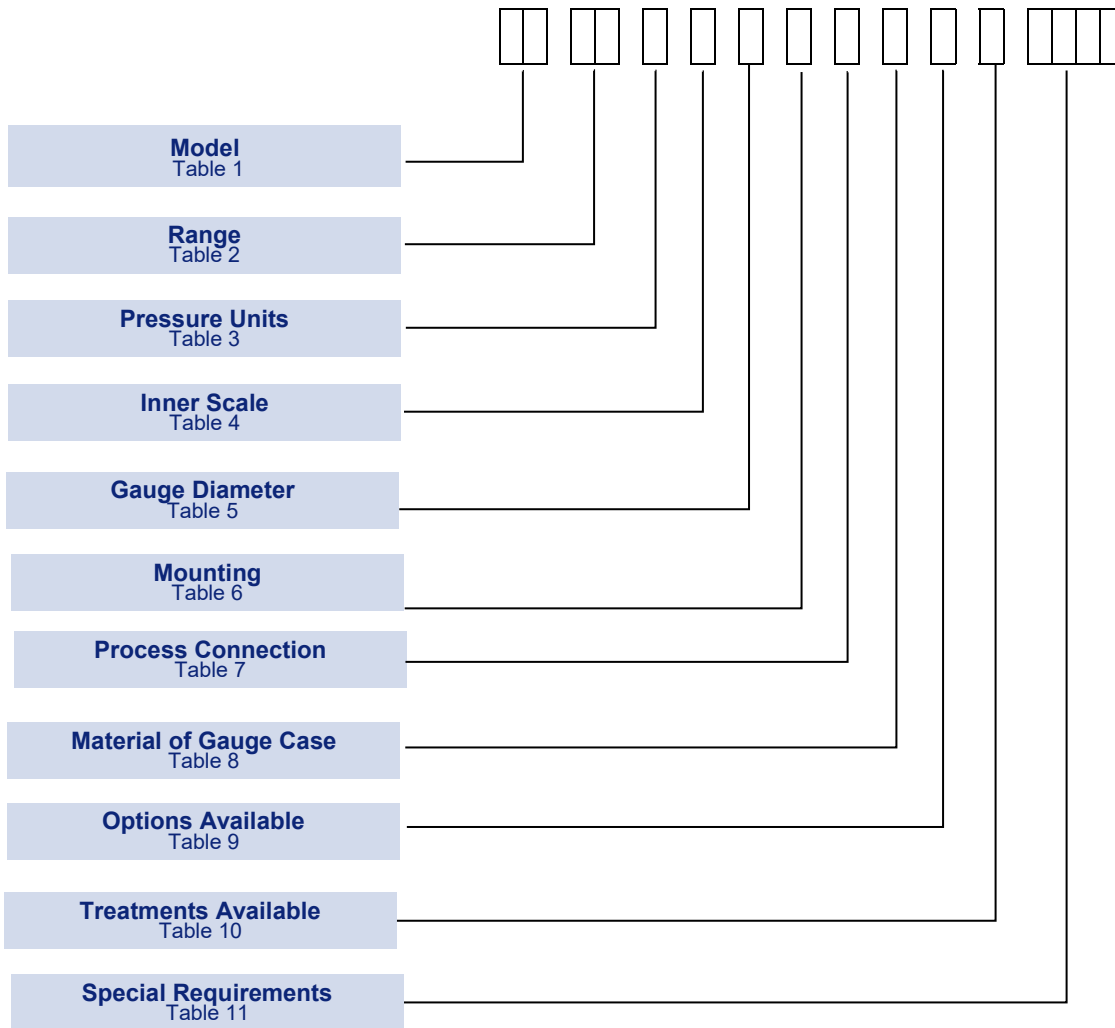
Delta Mobrey offers fast, efficient and knowledgeable support when and where you need it. Please visit our website at www.delta-mobrey.com to find your local support centre or call us on:

+44 (0) 1252 729140

Capsule type Pressure Gauge
Series: CP

How to order

Gauges can be configured by selecting codes representing the desired features from the tables that follow. The chart below, describes how the model code is built up. For assistance in configuring a switch that best suits your needs, please contact your local sales office.



Capsule type Pressure Gauge
Series: CP

NOTE: Options shaded in the following tables are the most common options and are available on the quickest lead-times and at the lowest cost.

NOTE: Only the most common options are shown in this data sheet. Should you require a feature that is not shown, please contact your local sales office for further details.

NOTE: Instruments are identified with the below codification and a unique part number 37xxxx for each combination of selection and options.

Technical Specification

Enclosure casing:	IP55 Protection for dry execution (optional IP67 casing not fillable, is available)
Pressure connection material:	AISI 316 stainless steel
Dials:	White Aluminium with black graduation on 270 °
Pointer:	Aluminium pointer
Pressure ranges:	Pressure, vacuum and compound ranges according to EN 837-3, max pressure value 400 mbar
Overpressure :	Not permitted
Casing :	Enclosure case and ring in AISI 304 stainless steel with bayonet bezel Optional 316 stainless steel
Window material :	Glass or Safety glass
Blow out :	Upper rubber cap
Process connection material:	316L stainless steel
Capsule material :	316 L stainless steel
Internal movement material:	Stainless Steel
Process connection:	Rc 1/4 (BSP), 1/4 NPT Internal, 1/2 NPT Internal, 1/2 NPT External
Accuracy:	1.6 per EN 837-3
Ambient temperature:	-10 to +50 °C
Process temperature:	-10 to +120 °C

Model

A dedicated 3700*** code is assigned to each pressure gauge with technical characteristics selected based on the options listed in the tables below

ENCLOSURE TYPES

Capsule type Pressure Gauge

Standard CP for industrial application

ATEX certified Industrial Service Pressure Gauge

ATEX service CP  II 2 G D

Gauge Diameter

CASE DIAMETERS

100mm (nominal 4")

150mm (nominal 6")

Range

Different units or special scales are available. Please contact our sales department for any clarification.

	Range	mBar
Vacuum Gauge	-0.6 to 0	
	-1 to 0	
	-1.6 to 0	
	-2.5 to 0	
	-4 to 0	
	-6 to 0	√
	-10 to 0	√
	-16 to 0	√
	-25 to 0	√
	-40 to 0	√
	-60 to 0	√
	-100 to 0	√
	-160 to 0	√
	-250 to 0	√
-400 to 0	√	
Gauge Pressure Ranges	0 to 6	√
	0 to 10	√
	0 to 16	√
	0 to 25	√
	0 to 40	√
	0 to 60	√
	0 to 100	√
	0 to 160	√
	0 to 250	√
0 to 400	√	
Compound ranges	Available on request	

Pressure Units

SCALES AVAILABLE
inches H ₂ O
mBar
KPa
mmH ₂ O

Mounting

Bottom Connection, Direct
Bottom Connection, Surface, Case Mounting Plate
Central Back Connection, Direct
Central Back Connection, Flush, Cover Mounting Plate

Process Connection

R1/4
1/2-14 NPT External
G1/2B
G1/4B
M20 X 1.5
1/4-18 NPT External
Non standard

Material of Gauge Case

100mm case & ring iAISI 304 stainless steel with glass window
100mm case & ring AISI 316 stainless steel with glass window
100mm case & ring AISI 304 stainless steel with laminated safety glass
100mm case & ring AISI 316 stainless steel with laminated safety glass
150mm case & ring AISI 304 stainless steel with glass window
150mm case & ring AISI 316 stainless steel with glass window
150mm case & ring AISI 304 stainless steel with laminated safety glass
150mm case & ring AISI 316 stainless steel with laminated safety glass

Options Available

No additional options required
Tag number printed on dial face
Stainless steel tag plate.
Serial number printed on dial face
Red mark on dial
Stainless steel tag plate and red mark on dial
2" pipe mounting support stainless steel AISI 304

Treatments Available

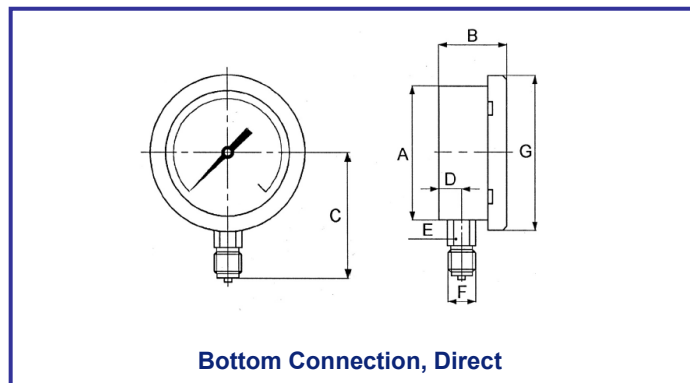
No additional treatment required
Tropicalised
Wetted parts prepared for oxygen service.

Special Requirements

Special requirements

Type of Mounting

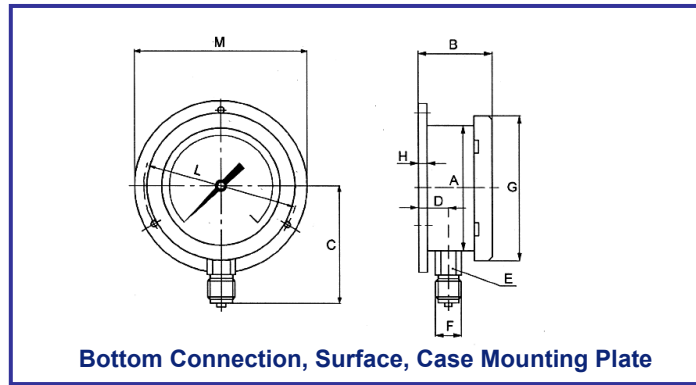
Code A



DN	A	B	C	D	E	F	G	H	I	L	M	N	Hole Ø at 120°	Weight
														No-fill
100	103	50	92	16.5	22	1/2	118							0,51
150	150	50	116	16.5	22	1/2	166							0,78

Capsule type Pressure Gauge
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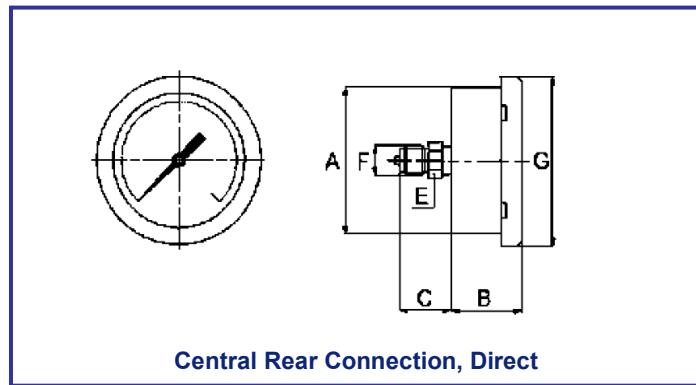
Code B



Bottom Connection, Surface, Case Mounting Plate

DN	A	B	C	D	E	F	G	H	I	L	M	N	Hole Ø at 120°	Weight
														No-fill
100	103	57	92	23.5	22	1/2	118	7		126	140		5	0,64
150	150	57	116	23.5	22	1/2	166	7		178	192		5	1,02

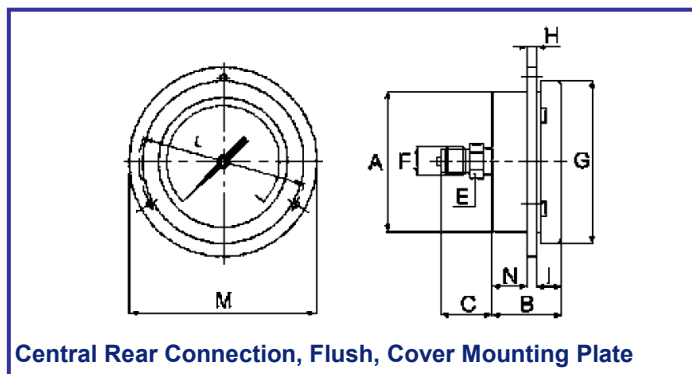
Code D



Central Rear Connection, Direct

DN	A	B	C	D	E	F	G	H	I	L	M	N	Hole Ø at 120°	Weight
														No-fill
100	103	50	38		22	1/2	118							0,51
150	150	50	38		22	1/2	166							0,78

Code F



Central Rear Connection, Flush, Cover Mounting Plate

DN	A	B	C	D	E	F	G	H	I	L	M	N	Hole Ø at 120°	Weight
														No-fill
100	103	50	38		22	1/2	118	7	19	126	140	24	5	0,60
150	150	50	38		22	1/2	166	7	19	178	192	24	5	0,91

Approvals

EUROPEAN DIRECTIVE



Pressure Equipment Directive (PED) 2014/68/EU

Compliant to PED, Module A for static Pressure > 200 Bar, SEP for Static Pressure ≤200bar

ATEX Directive 2014/34/EU



CONSTRUCTION SAFETY— Technical file storage reference SGS21ATEX0095DR

Notified body for Technical storage file : SGS Fimko Oy, Helsinki, Finland, Notified Body No 0598

- Ex h IIC T6 Gb X
- Ex h IIIC T85°C Db X

UK REGULATION



Pressure Equipment (Safety) Regulation 2016

S.I. 2016 no. 1105, as amended, Module A for static Pressure > 200 Bar, SEP for Static Pressure ≤200bar

Equipment and Protective Systems Intended for use in Potentially Explosive Atmospheres Regulation 2016



(S.I. 2016 No. 1107 as amended)

CONSTRUCTION SAFETY— Technical file storage reference BAS21UKEx0356TDR

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- Ex h IIC T6 Gb X
- Ex h IIIC T85°C Db X

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Delta Mobrey Limited

Hudson House, Albany Park Camberley, Surrey GU16 7PL, UK.

T+44 (0)1252 729140 F+44 (0)1252 729168 E sales@delta-mobrey.com W www.delta-mobrey.com

