

# MODELS-4503

## Differential Pressure Gauges



### APPLICATIONS

Differential pressures are commonly used in industrial process systems. Differential pressure gauges have two inlet ports, each connected to one of the volumes whose pressure is to be monitored. In effect, such a gauge performs the mathematical operation of subtraction through mechanical means, obviating the need for an operator or control system to watch two separate gauges and determine the difference in readings.

### STANDARD SPECIFICATION

#### Sizes

100 and 150mm

#### Case/ Bezel

AISI 316 Stainless Steel  
Bezel Stainless Steel (Bayonet type)  
Weatherproof Construction (IP 66)

#### Socket & Element

AISI 316 Stainless Steel (Standard)  
Options available

#### Movement

Stainless Steel Construction

#### Blowout Protection

Blow-out device

#### Dial

White Anodised Aluminium (Black Printing)

#### Pointer

Black Aluminium

#### Window

Laminated Safety Glass

#### Traceability

All instruments are individually calibrated and have an unique Serial Number. Calibration Certificates are issued for each gauge

#### Certification available on request

- Certificate of Conformity Traceable to National Standards
- Group Certification (Pressure Test Calibration Statement)

#### Safety

All units are manufactured with Blowout device specification and other regulatory standards including PED 2014/68/EU.

#### Installation instructions

Refer to our [Guidance On Use of Equipment](#) data sheet.

#### Accuracy class

2% Accuracy

#### Scale Range

Working Ranges & Max Static Pressure

Delta P range: Min 0.3 bar  
Max Up to Max Static Pressure

Static pressure Max 600 bar (Able to withstand full MSP on one side only)

(Maximum ratio Static to DP 10 : 1)

#### Measuring Element

St/St Bourdon Tubes (Standard)

#### Pressure Connection Thread

1/8", 1/4", 3/8", 1/2" NPT, BSP, BSPT (1/8" Threads limited to 400 bar)

Model-4503/PCD



Model-4503/PCS Surface Mounted

Model-4503/PCD Direct Mounted (Standard)

Model-4503/PCSF Flush Mounted Screw Fixing

Model-4503/PCCF Flush Mounted Clamp Fixing

#### Operating Temperature Range EN837

-20° to 60°C (-4°F to 140°F)

Options for lower/higher operating ranges (Contact Sales)

#### Temperature Error

Additional error when temperature changes from reference

Temperature of 20°C (68°F) ±0.4% for every 10°C (18°F) rising or Falling % of span

#### Optional Extras

- Monel according to ISO 15156 / NACE MR-01-75 wetted parts
- Optional dial materials & Custom markings
- Other pressure connections
- Perspex window
- Customer logo printed on dial
- Safety Pattern Type with Baffle wall, (Dimensions available on request)

#### Further options on request

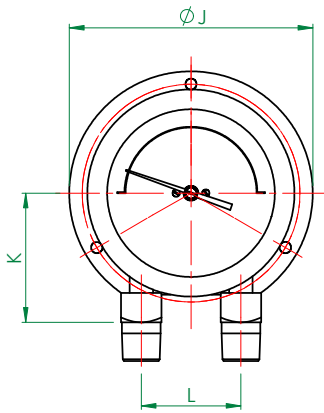
#### Available with a wide range of accessories

Syphons, Snubbers, Overrange gauge protectors, Valves, Manifolds, Diaphragm seals, Swivel adaptors, etc ensures that STEWARTS can provide you with the right product to suit any individual application or requirement.

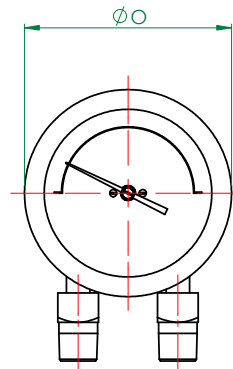
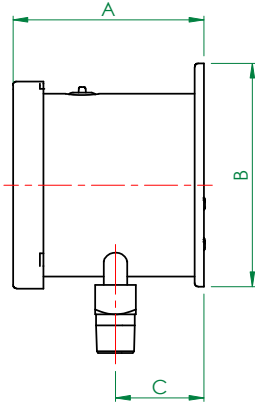
Ordering Parameters, Please state the following: SIZE, MODEL NO, SCALE RANGE, CONNECTION, PRESSURE MEDIUM & OPTIONAL EXTRAS

# MODELS-4503

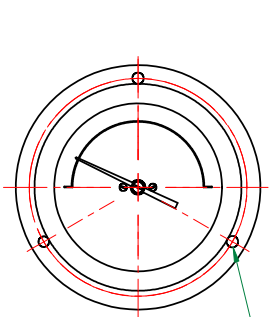
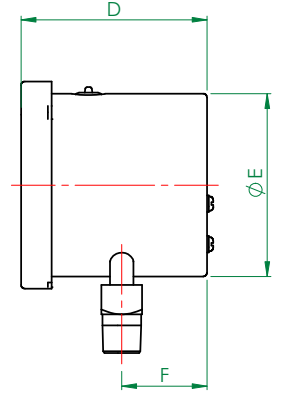
## Model-4503 Stainless Steel Case & Bourdon Tube Element



**MODEL 4503/PCS  
SURFACE MOUNTED**

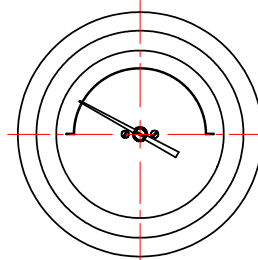
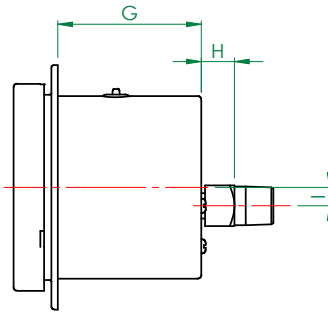


**MODEL 4503/PCD  
DIRECT MOUNTED (STANDARD)**

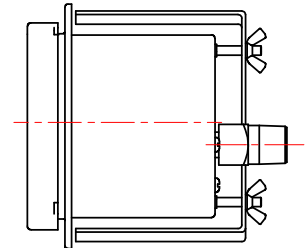


**MODEL 4503/PCSF  
FLUSH MOUNTED SCREW FIXING**

3 HOLES Ø"M"  
ON "N" PCD @120°



**MODEL 4503/PCCF  
FLUSH MOUNTED CLAMP FIXING**



NOTE: Model Nos  
Suffix model 4503 with mounting  
style shown above. i.e - PCS, PCD, etc

General Arrangement Dimensions in mm, tol' ± 1mm

Dim	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Panel cut-out
Dial Ø 4" (100mm)	104	121	48	100	99	46	78	18	10	132	70	54	6	118	112	105
6" (150mm)	104	184	45	101	159	47	72	18	10	196	103	54	6	178	161	165

## STEWART-BUCHANAN GAUGES LTD

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DATA SHEET REF: Diff4503-REV01-18



# MODELS-4901

## Differential Pressure Gauges



### APPLICATIONS

Differential pressures are commonly used in industrial process systems. Differential pressure gauges have two inlet ports, each connected to one of the volumes whose pressure is to be monitored. In effect, such a gauge performs the mathematical operation of subtraction through mechanical means, obviating the need for an operator or control system to watch two separate gauges and determine the difference in readings.

### STANDARD SPECIFICATION

#### Sizes

100 and 150mm

#### Case/ Bezel

AISI 316 Stainless Steel  
Bezel Stainless Steel (Bayonet type)  
Weatherproof Construction (IP 66)

#### Socket & Element

AISI 316 Stainless Steel (Standard)  
Options available

#### Movement

Stainless Steel Construction

#### Blowout Protection

Blow-out device

#### Dial

White Anodised Aluminium (Black Printing)

#### Pointer

Black Aluminium

#### Window

Laminated Safety Glass

#### Traceability

All instruments are individually calibrated and have a unique Serial Number. Calibration Certificates are issued for each gauge

#### Certification available on request

- Certificate of Conformity Traceable to National Standards
- Group Certification (Pressure Test Calibration Statement)

#### Safety

All units are manufactured with Blowout device specification and other regulatory standards including PED 2014/68/EU.

#### Installation instructions

Refer to our [Guidance On Use of Equipment](#) data sheet.

#### Accuracy class

2% Accuracy

#### Scale Range

Working Ranges & Max Static Pressure

Delta P range:	Min	100	mbar
	Max	2	bar

Static pressure	Max	25	bar
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#### Measuring Element

St/St Diaphragm (Standard)

#### Pressure Connection Thread

1/8", 1/4", 3/8", 1/2" NPT, BSP, BSPT (1/2" Threads limited to 400 bar)

Model-4901/PCD Direct Mounted (Standard)



Model-4901/PCS Surface Mounted

Model-4901/PCD Direct Mounted (Standard)

Model-4901/PCSF Flush Mounted Screw Fixing

Model-4901/PCCF Flush Mounted Clamp Fixing

#### Operating Temperature Range EN837

-20° to 60°C (-4°F to 140°F)

[Options for lower/higher operating ranges \(Contact Sales\)](#)

#### Temperature Error

Additional error when temperature changes from reference

Temperature of 20°C (68°F) ±0.4% for every 10°C (18°F) rising or Falling % of span

#### Optional Extras

- Monel according to ISO 15156 / NACE MR-01-75 wetted parts
- Optional dial materials & Custom markings
- Other pressure connections
- Perspex window
- Customer logo printed on dial
- Safety Pattern Type with Baffle wall, S3 (Dimensions available on request)

#### Further options on request

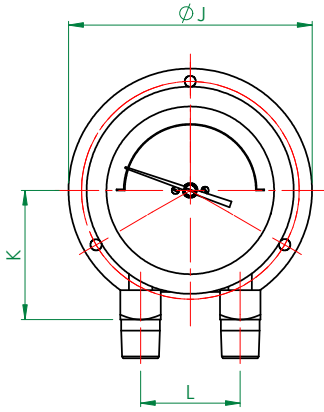
#### Available with a wide range of accessories

Syphons, Snubbers, Overrange gauge protectors, Valves, Manifolds, Diaphragm seals, Swivel adaptors, etc ensures that STEWARTS can provide you with the right product to suit any individual application or requirement.

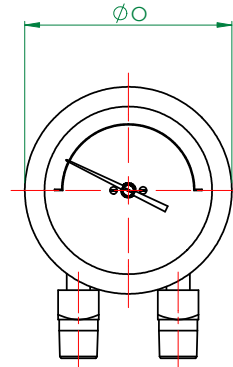
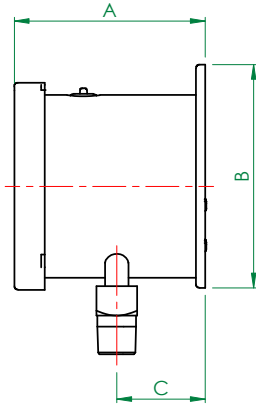
**Ordering Parameters, Please state the following:** SIZE, MODEL NO, SCALE RANGE, CONNECTION, PRESSURE MEDIUM & OPTIONAL EXTRAS

# MODELS-4901

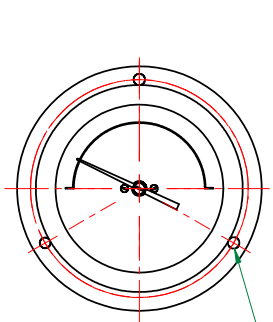
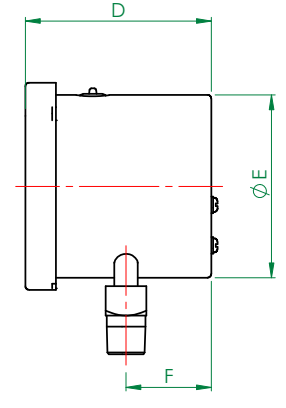
## Model-4901 Stainless Steel Case & Single Diaphragm Element



**MODEL 4901/PCS  
SURFACE MOUNTED**

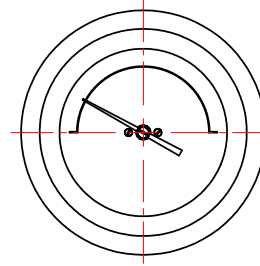
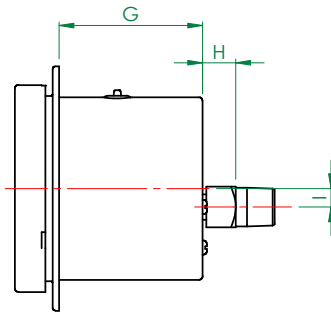


**MODEL 4901/PCD  
DIRECT MOUNTED (STANDARD)**

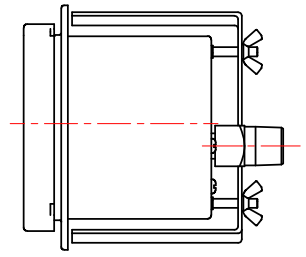


**MODEL 4901/PCSF  
FLUSH MOUNTED SCREW FIXING**

3 HOLES Ø"M"  
ON "N" PCD @120°



**MODEL 4901/PCCF  
FLUSH MOUNTED CLAMP FIXING**



NOTE: Model Nos  
Suffix model 4901 with mounting  
style shown above. i.e - PCS, PCD, etc

General Arrangement Dimensions in mm, tol' ± 1mm

Dim	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Panel cut-out
Dial Ø 4" (100mm)	104	121	48	100	99	46	78	18	10	132	70	54	6	118	112	105
6" (150mm)	104	184	45	101	159	47	72	18	10	196	103	54	6	178	161	165

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DATA SHEET REF: Diff4901-REV01-18



# MODELS-4906



## Differential Pressure Gauges

### APPLICATIONS

Differential pressures are commonly used in industrial process systems. Differential pressure gauges have two inlet ports, each connected to one of the volumes whose pressure is to be monitored. In effect, such a gauge performs the mathematical operation of subtraction through mechanical means, obviating the need for an operator or control system to watch two separate gauges and determine the difference in readings.

### STANDARD SPECIFICATION

#### Sizes

100 and 150mm

#### Case/ Bezel

AISI 316 Stainless Steel  
Bezel Stainless Steel (Bayonet type)  
Weatherproof Construction (IP 66)

#### Socket & Element

AISI 316 Stainless Steel (Standard)  
Options available

#### Movement

Stainless Steel Construction

#### Blowout Protection

Blow-out device (EN 837-1 S1)

#### Dial

White Anodised Aluminium (Black Printing)

#### Pointer

Black Aluminium

#### Window

Laminated Safety Glass

#### Traceability

All instruments are individually calibrated and have a unique Serial Number. Calibration Certificates are issued for each gauge

#### Certification available on request

- Certificate of Conformity Traceable to National Standards
- Group Certification (Pressure Test Calibration Statement)

#### Safety

All units are manufactured as Safety Pattern specification and other regulatory standards including PED 2014/68/EU.

#### Installation instructions

Refer to our [Guidance On Use of Equipment](#) data sheet.

#### Accuracy class

2% Accuracy

#### Scale Range

Working Ranges & Max Static Pressure

Delta P range:	Min	100 mbar
	Max	25 bar

Static pressure	Max	220 bar (Able to withstand full MSP on one side only)
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#### Measuring Element

St/St DP cell (Standard).

#### Pressure Connection Thread

1/8", 1/4", 3/8", 1/2" NPT, BSP, BSPT (1/2" Threads limited to 400 bar)

Model-4906/BSM Surface Mounted



Model-4906/BSM Surface Mounted  
Model-4906 Yoke Mounted

#### Operating Temperature Range EN837

-20° to 60°C (-4°F to 140°F)

Options for lower/higher operating ranges (Contact Sales)

#### Temperature Error

Additional error when temperature changes from reference

Temperature of 20°C (68°F) ±0.4% for every 10°C (18°F) rising or Falling % of span

#### Optional Extras

- Materials according to ISO 15156 / NACE MR-01-75 wetted parts
- Optional dial materials & Custom markings
- Other pressure connections
- Perspex window
- Customer logo printed on dial

#### Further options on request

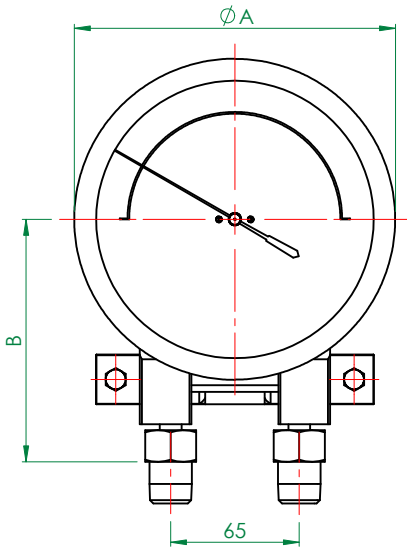
#### Available with a wide range of accessories

Syphons, Snubbers, Overrange gauge protectors, Valves, Manifolds, Diaphragm seals, Swivel adaptors, etc ensures that STEWARTS can provide you with the right product to suit any individual application or requirement.

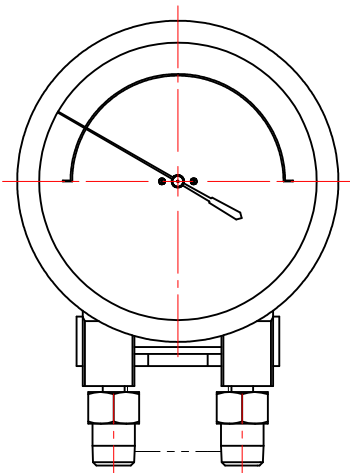
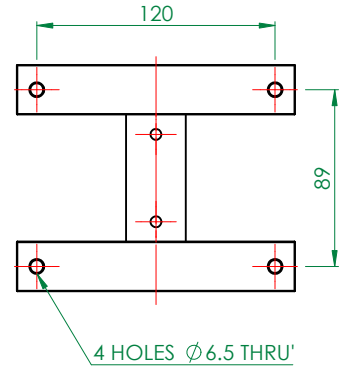
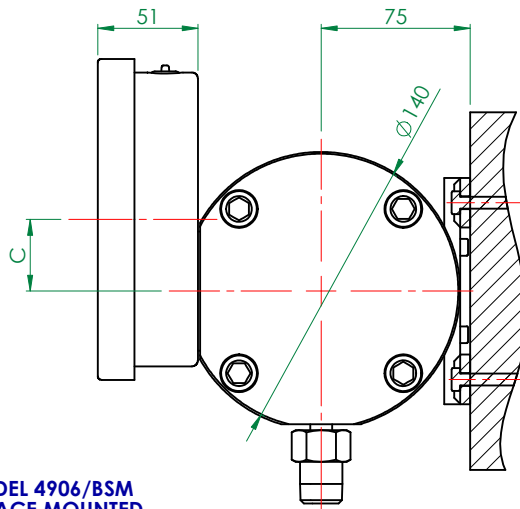
Ordering Parameters, Please state the following: SIZE, MODEL NO, SCALE RANGE, CONNECTION, PRESSURE MEDIUM & OPTIONAL EXTRAS

# MODELS-4906

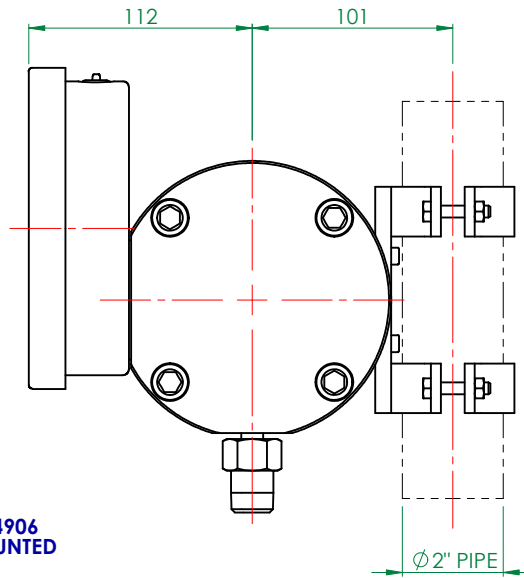
## Model-4906 Stainless Steel Case & Opposed Diaphragm Elements



**MODEL 4906/BSM  
SURFACE MOUNTED**



**MODEL 4906  
YOKE MOUNTED**



General Arrangement Dimensions in mm, tol' $\pm 1$ mm			
Dim	A	B	C
4" (100mm)	112	101	16
6" (150mm)	162	122	36

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