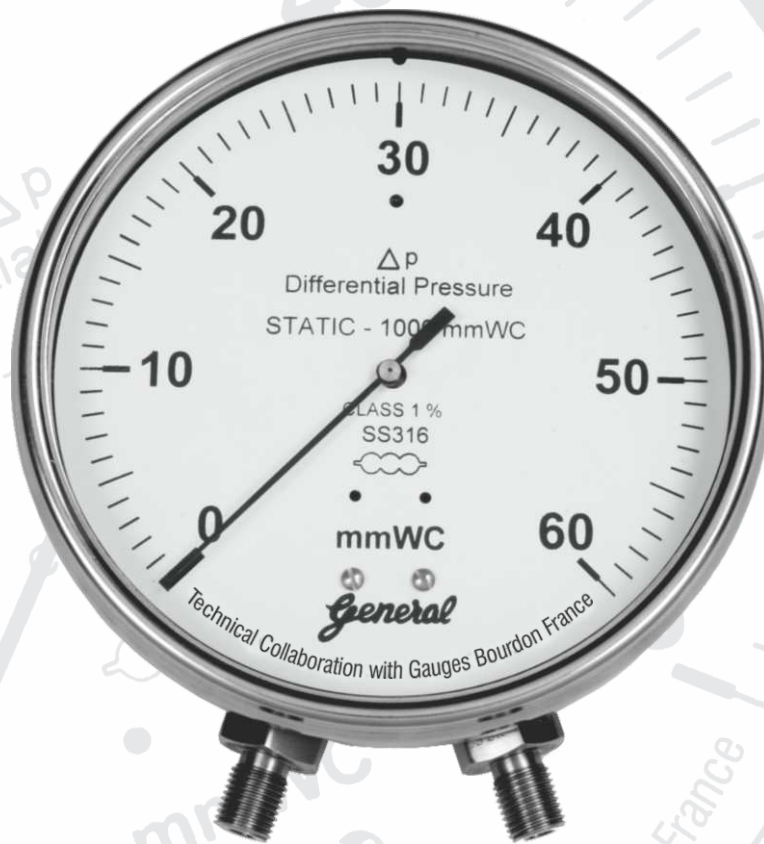




DIFFERENTIAL PRESSURE GAUGES

Differential Pr. Gauges - Bellow Type

General

MODEL : DPBL (Dry Case)

LFDPBL (Liquid Filled Case)

SFDPBL (Solid Front, Dry Case)

LSDPBL (Liquid Filled, Solid Front Case)

Features

- Bellow type construction
- Reference Standard: EN - 837
- All SS internals
- Chemical seal unit (optional) for process suitability
- Accuracy $\pm 1\%$ FSD
- A set of two stainless steel bellows mounted on a force balance enables direct reading of the actual differential pressure.
- Each Bellow of the pressure Gauge can withstand the full static pressure without any damage or shifting being caused to the instrument.



Specifications

Dial	150 mm, Aluminium, white background, black markings
Case	SS304 / SS316 with bayonet bezel
Protection	Weatherproof to IP-68 (IS:13947 part I / IEC:60529)
Window	Safety glass (Shatter proof / Toughened glass)
Pointer	Light weight, micrometer adjustable
Sensing element	Bellow
Sensor Material	SS316 / SS316L / Monel / Hastelloy-C
& Wetted Parts	SS304 / SS316
Movement	1/2" NPT (M) as standard (other on request)
Connection	Minimum 0 to 1000 mm WC; Higher range as per customer requirement
Range	Upto 60 kg/cm ² g, Higher Static Pressure on request
Static Pressure	$\pm 1\%$ FSD
Accuracy	Provided (top of the case)
Blow out disc	Ambient (-)20°C to 60°C, Media 100°C
Temperature suitability	Within $\pm 0.4\%$ FSD/10°C, when temperature changes from reference temperature of 20°C
Temperature Effect	Chemical seal units with Capillary
Optional	Liquid filled case
	External Knob for zero setting
	CE
	Atex



DP Gauge with Diaphragm Seal & Capillary

The parameters mentioned here are the standard specifications / values generally used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement. For higher temperature services above 100°C, we recommend to provide sufficient Impulse Tubing to bring down the fluid temperature .

Under Technical Collaboration with M/s. Gauges Bourdon, France

Ordering Information

MODEL

BASIC MODEL CODE

DPBL Dry Case
LFDPBL Liquid Filled Case
SFDPBL Solid Front, Dry Case
LSDPBL Liquid Filled, Solid Front Case

MOUNTING

S Bottom Entry, Surface Mounting
Y Bottom Entry, 2" Pipe Mounting
P Back Entry, Flush Panel Mounting

DIAL SIZE

150 150 mm

CASE

S4S SS 304
S6S SS 316

SENSOR

S6S SS 316
S6L SS 316L
MN4 Monel
HCC Hastelloy-C
XXX Other (Please Specify)

WETTED PARTS

S6S SS 316
S6L SS 316L
MN4 Monel
HCC Hastelloy-C
XXX Other (Please Specify)

MOVEMENT

S4S SS 304
S6S SS 316

CONNECTION

Conn	Code	Size	Code	Type	Code	Male/ Female	Code
Thread	T	1/4"	06	NPS	NS	Male	M
		3/8"	10	NPT	NT	Female	F
		1/2"	15	BSP	BP		
		3/4"	20	BSPT	BT		
		1"	25	JIS-PF	PF		
		M20	M20	JIS-PT	PT		
				Gas	GS		
				R	RR		
				Rp	RP		
				Pitch 1.5	C		

OPTION

ATX Atex
BOB Back blow out disc
CLB Colour Band
CEM CE marking
DC2 Silicone Oil filled Case
DUS Dual Scale
EXZ External Knob for Zero Adjustment
GLY Glycerine filled Case
NAC NACE
OXY O2 Cleaning
VCP Vacuum Protection
L Nil
CSU Chemical Seal
ACC Accessory
XXX Other

STATIC PRESSURE

Please Specify

UNIT

KSC kg/cm2(DP)
BAR bar(DP)
PSI psi(DP)
KPA kPa(DP)
MPA MPa(DP)
MBR mbar(DP)
MMW mm WC(DP)
CMW cm WC(DP)
MWC m WC(DP)
INW inch WC(DP)
MMH mm Hg(DP)
CMH cm Hg(DP)
INH inch Hg(DP)
XXX Other (Please specify)

RANGE

Please Specify

e.g. For 1/2"NPT(M), Code: **T15NTM**
 For M20x1.5 (F), Code: **TM20CF**

Sample Model Code: **DPBL-Y-150-S4S-S6S-S6S-S4S-T15NTM-(0-2)-BAR-25bar.g-L**

Differential Pr. Gauges Diaphragm type

General

MODEL : DPDS (Dry Case)

LFDPDS (Liquid Filled Case)

SFDPDS (Solid Front, Dry Case)

LSDPDS (Liquid Filled, Solid Front Case)

Features

- General purpose differential pressure measurement
- Sensing Element of Diaphragm
- Wetted Parts in SS316 / SS316L / Monel / Hastelloy-C (other on request)
- Non-wetted parts & Case in Stainless Steel
- Accuracy $\pm 1.6\%$ FSD
- Span of dial marking at 270 Deg Angle, even for very low ranges



Specifications

Dial	100mm / 150 mm, Aluminium, white background, black markings
Case	SS304 as standard (SS316 on request) with bayonet bezel
Protection	Weatherproof to IP-68 (IS:13947 part I / IEC:60529)
Window	Safety glass (Shatter proof / Toughened glass)
Pointer	Pointer Light weight, micrometer adjustable
Sensing element	Diaphragm
Wetted Parts	SS316 / SS316L / Monel / Hastelloy-C (other on request)
Movement	SS304 as standard (SS316 on request)
Connection	1/2" NPT (M) as standard (other on request)
Range	Any range between 0 to 160 mm WC & 0 to 4 kg/cm ² (DP) / Higher Range on request
Static Pressure	Upto 60 kg/cm ² g, Higher Static Pressure on request
Accuracy	$\pm 1.6\%$ FSD
Blow out disc	Provided (top of the case)
Temperature suitability	Ambient (-) 20°C to 60°C, Media 100°C
Temperature Effect	Within $\pm 0.5\%$ FSD/10°C, when temperature changes from reference temperature of 20°C
Optional	Liquid filled case (for Range 0 to 1000mmWC & above only) CE Atex

The parameters mentioned here are the standard specifications / values generally used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement. For higher temperature services above 100°C, we recommend to provide sufficient Impulse Tubing to bring down the fluid temperature .

Under Technical Collaboration with M/s. Gauges Bourdon, France

Ordering Information

MODEL

MODEL							
BASIC MODEL CODE DPDS Dry Case LFDPDS Liquid Filled Case SFDPDS Solid Front, Dry Case LSDPDS Liquid Filled, Solid Front Case				OPTION ATX Atex BOB Back blow out disc CLB Colour Band CEM CE marking DC2 Silicone Oil filled Case DUS Dual Scale GLY Glycerine filled Case NAC NACE OXY O2 Cleaning VCP Vacuum Protection L Nil ACC Accessory XXX Other			
MOUNTING V Bottom Entry, Local Mounting S Bottom Entry, Surface Mounting Y Bottom Entry, 2" Pipe Mounting				STATIC PRESSURE Please Specify			
DIAL SIZE 100 100 mm 150 150 mm				UNIT KSC kg/cm2(DP) BAR bar(DP) PSI psi(DP) KPA kPa(DP) MPA MPa(DP) MBR mbar(DP) MMW mm WC(DP) CMW cm WC(DP) MWC m WC(DP) INW inch WC(DP) MMH mm Hg(DP) CMH cm Hg(DP) INH inch Hg(DP) XXX Other (Please specify)			
CASE S4S SS 304 S6S SS 316				RANGE Please Specify			
SENSOR S6S SS 316 S6L SS 316L MN4 Monel HCC Hastelloy-C XXX Other (Please Specify)							
WETTED PARTS S6S SS 316 S6L SS 316L MN4 Monel HCC Hastelloy-C XXX Other (Please Specify)							
MOVEMENT S4S SS 304 S6S SS 316							
CONNECTION							
Conn	Code	Size	Code	Type	Code	Male/ Female	Code
Thread	T	1/4"	06	NPS	NS	Male	M
		3/8"	10	NPT	NT	Female	F
		1/2"	15	BSP	BP		
		3/4"	20	BSPT	BT		
		1"	25	JIS-PF	PF		
		M20	M20	JIS-PT	PT		
				Gas	GS		
				R	RR		
				Rp	RP		
				Pitch 1.5	C		

e.g. For 1/2"NPT(M), Code: **T15NTM**
 For M20x1.5 (F), Code: **TM20CF**

Sample Model Code: **DPDS-Y-150-S4S-S6S-S6S-S4S-T15NTM-(0-1000)-MMW-4kg/cm2.g-L**

High Static Pr. Differential Pr. Gauges

Diaphragm type, High Static Pressure

General

MODEL : DPDH (Dry Case)
LFDPDH (Liquid Filled Case)

Features

- General purpose differential pressure measurement
- Sensing Element of Diaphragm
- Wetted Parts in SS316 / SS316L / Monel / Hastelloy-C (other on request)
- Non-wetted parts & Case in Stainless Steel
- Accuracy $\pm 1.6\%$ FSD



Specifications

Dial	100mm / 150 mm, Aluminium, white background, black markings
Case	SS304 as standard (SS316 on request) with bayonet bezel
Protection	Weatherproof to IP-68 (IS:13947 part I / IEC:60529)
Window	Safety glass (Shatter proof / Toughened glass)
Pointer	Pointer Light weight, micrometer adjustable
Sensing element	Diaphragm
Wetted Parts	SS316 / SS316L / Monel / Hastelloy-C (other on request)
Movement	SS304 as standard (SS316 on request)
Connection	1/2" NPT (M) as standard (other on request)
Range	Any range between 0 to 1000 mm WC & 0 to 6 kg/cm ² (DP)
Static Pressure	Upto 250 kg/cm ² g, Higher Static Pressure on request
Accuracy	$\pm 1.6\%$ FSD
Blow out disc	Provided (top of the case)
Temperature suitability	Ambient (-) 20°C to 60°C, Media 100°C
Temperature Effect	Within $\pm 0.5\%$ FSD/10°C, when temperature changes from reference temperature of 20°C
Optional	Liquid filled case CE Atex

The parameters mentioned here are the standard specifications / values generally used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement. For higher temperature services above 100°C, we recommend to provide sufficient Impulse Tubing to bring down the fluid temperature .

Under Technical Collaboration with M/s. Gauges Bourdon, France

Ordering Information

MODEL

CONNECTION							
Conn	Code	Size	Code	Type	Code	Male/ Female	Code
Thread	T	1/4"	06	NPS	NS	Male	M
		3/8"	10	NPT	NT	Female	F
		1/2"	15	BSP	BP		
		3/4"	20	BSPT	BT		
		1"	25	JIS-PF	PF		
		M20	M20	JIS-PT	PT		
				Gas	GS		
				R	RR		
		Rp	RP				
		Pitch 1.5	C				

BASIC MODEL CODE

DPDH Dry Case
LFDPDH Liquid Filled Case

MOUNTING

S Bottom Entry, Surface Mounting
Y Bottom Entry, 2" Pipe Mounting

DIAL SIZE

100 100 mm **150** 150 mm

CASE

S4S SS 304
S6S SS 316

SENSOR

S6S SS 316
S6L SS 316L
MN4 Monel
HCC Hastelloy-C
XXX Other (Please Specify)

WETTED PARTS

S6S SS 316
S6L SS 316L
MN4 Monel
HCC Hastelloy-C
XXX Other (Please Specify)

MOVEMENT

S4S SS 304
S6S SS 316

OPTION

ATX Atex
CLB Colour Band
CEM CE marking
DC2 Silicone Oil filled Case
DUS Dual Scale
GLY Glycerine filled Case
NAC NACE
OXY O2 Cleaning
VCP Vacuum Protection
L Nil
ACC Accessory
XXX Other

STATIC PRESSURE

Please Specify

UNIT

KSC kg/cm2(DP)
BAR bar(DP)
PSI psi(DP)
KPA kPa(DP)
MPA MPa(DP)
MBR mbar(DP)
MMW mm WC(DP)
CMW cm WC(DP)
MWC m WC(DP)
INW inch WC(DP)
MMH mm Hg(DP)
CMH cm Hg(DP)
INH inch Hg(DP)
XXX Other (Please specify)

RANGE

Please Specify

e.g. For 1/2"NPT(M), Code: **T15NTM**
For M20x1.5 (F), Code: **TM20CF**

Sample Model Code: **DPDH-Y-150-S4S-S6S-S6S-S4S-T15NTM-(0-2)-BAR-25bar.g-L**

Differential Pr. Gauges Diaphragm type

±1%FSD Accuracy

General

MODEL : DPDX

Features

- Differential pressure measurement with Accuracy of $\pm 1\%$ FSD
- Sensing Element of Diaphragm
- Wetted Parts in SS316 / SS316L / Monel / other on request
- Non-wetted parts & Case in Stainless Steel
- Low Range & High Static Pressure
- Span of dial marking at 270 Deg Angle



Specifications

Dial	100 mm* / 150 mm, Aluminium, white background, black markings
Case	SS304 as standard (SS316 on request) with bayonet bezel
Protection	Weatherproof to IP-68 (IS:13947 part I / IEC:60529)
Window	Safety glass (Shatter proof / Toughened glass)
Pointer	Pointer Light weight, micrometer adjustable
Sensing element	Diaphragm
Wetted Parts	SS316 / SS316L / Monel / other on request
Movement	SS304 as standard (SS316 on request)
Connection	1/2" NPT (M) as standard (other on request)
Range	Any range between 0 to 250 mm WC & 0 to 10,000mmWC(DP) / other on request
Static Pressure	Up to 100 kg/cm ² .g (higher on request)
Accuracy	$\pm 1\%$ FSD
Blow out disc	Provided (top of the case)
Temperature suitability	Ambient (-) 20°C to 80°C, Media 100°C
Temperature Effect	Within $\pm 0.5\%$ FSD/10°C, when temperature changes from reference temperature of 20°C
Optional	CE Atex

*Note: 100 mm dial is not available in Flush Panel Mounting

The parameters mentioned here are the standard specifications / values generally used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement. For higher temperature services above 100°C, we recommend to provide sufficient Impulse Tubing to bring down the fluid temperature .

Under Technical Collaboration with M/s. Gauges Bourdon, France

Ordering Information

MODEL

MODEL																																																																													
BASIC MODEL CODE		MOUNTING		DIAL SIZE		CASE																																																																							
DPDX Differential Pressure Gauge		S Bottom Entry, Surface Mounting Y Bottom Entry, 2" Pipe Mounting P Back Entry, Flush Panel Mounting*		100 100 mm* 150 150 mm		S4S SS 304 S6S SS 316																																																																							
SENSOR		WETTED PARTS		MOVEMENT		CONNECTION																																																																							
S6S SS 316 S6L SS 316L MN4 Monel XXX Other (Please Specify)		S6S SS 316 S6L SS 316L MN4 Monel XXX Other (Please Specify)		S4S SS 304 S6S SS 316		<table border="1"> <thead> <tr> <th>Conn</th> <th>Code</th> <th>Size</th> <th>Code</th> <th>Type</th> <th>Code</th> <th>Male/ Female</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td rowspan="10">Thread</td> <td rowspan="10">T</td> <td>1/4"</td> <td>06</td> <td>NPS</td> <td>NS</td> <td>Male</td> <td>M</td> </tr> <tr> <td>3/8"</td> <td>10</td> <td>NPT</td> <td>NT</td> <td>Female</td> <td>F</td> </tr> <tr> <td>1/2"</td> <td>15</td> <td>BSP</td> <td>BP</td> <td></td> <td></td> </tr> <tr> <td>3/4"</td> <td>20</td> <td>BSPT</td> <td>BT</td> <td></td> <td></td> </tr> <tr> <td>1"</td> <td>25</td> <td>JIS-PF</td> <td>PF</td> <td></td> <td></td> </tr> <tr> <td>M20</td> <td>M20</td> <td>JIS-PT</td> <td>PT</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Gas</td> <td>GS</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>R</td> <td>RR</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Rp</td> <td>RP</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Pitch 1.5</td> <td>C</td> <td></td> <td></td> </tr> </tbody> </table>		Conn	Code	Size	Code	Type	Code	Male/ Female	Code	Thread	T	1/4"	06	NPS	NS	Male	M	3/8"	10	NPT	NT	Female	F	1/2"	15	BSP	BP			3/4"	20	BSPT	BT			1"	25	JIS-PF	PF			M20	M20	JIS-PT	PT					Gas	GS					R	RR					Rp	RP					Pitch 1.5	C		
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ATX Atex CLB Colour Band CEM CE marking DUS Dual Scale NAC NACE OXY O2 Cleaning VCP Vacuum Protection L Nil ACC Accessory XXX Other		Please Specify		KSC kg/cm2(DP) BAR bar(DP) PSI psi(DP) KPA kPa(DP) MPA MPa(DP) MBR mbar(DP) MMW mm WC(DP) CMW cm WC(DP) MWC m WC(DP) INW inch WC(DP) MMH mm Hg(DP) CMH cm Hg(DP) INH inch Hg(DP) XXX Other (Please specify)		Please Specify																																																																							

e.g. For 1/2"NPT(M), Code: **T15NTM**
For M20x1.5 (F), Code: **TM20CF**

*Note: 100 mm dial is not available in Flush Panel Mounting

Sample Model Code: **DPDX-P-150-S4S-S6S-S6S-S4S-T15NTM-(0-1000)-MMW-20kg/cm2.g-L**

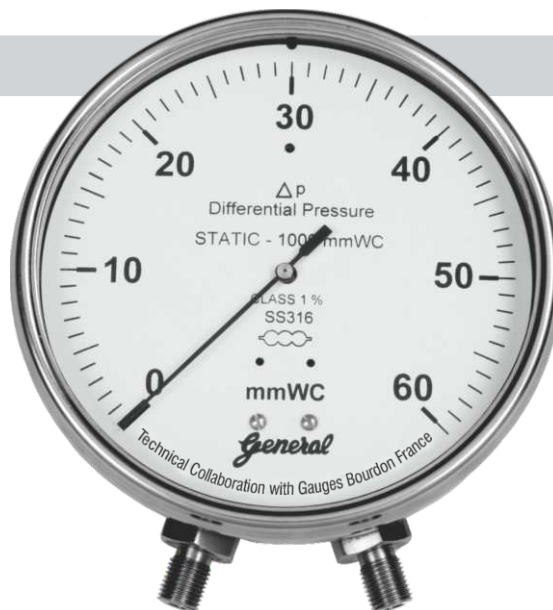
Differential Pr. Gauges-Capsule Type

General

MODEL : DPCP

Features

- Low differential pressure measurement with high accuracy
- Sensing element- Capsule in SS316L
- Screwed connection
- Accuracy $\pm 1\%$ FSD
- General stainless steel capsule differential pressure gauges are designed for measuring small differential pressures on clean & dry air or gas system



Specifications

Dial	100 mm / 150 mm, Aluminium, white background, black markings
Case	SS304 / SS316 with bayonet bezel
Protection	Weatherproof to IP-68 (IS:13947 part I / IEC:60529)
Window	Safety glass (Shatter proof / Toughened glass)
Sensing	Capsule in SS316, SS316L
Connection	½ " NPT (M) as standard (other on request)
Range	Any range between 0 to 60 mm WC to 0 to 1000 mmWC
Static Pressure	10 times the range (Maximum)
Accuracy	$\pm 1\%$ FSD
Temperature Suitability	Ambient (-)20°C to 60°C, Media 80°C
Note	Capsule type DP Gauges are recommended for non-corrosive, clean, clear (colourless) & dry Gases / Air only
Optional	CE Atex

The parameters mentioned here are the standard specifications / values generally used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement.

Under Technical Collaboration with M/s. Gauges Bourdon, France

Ordering Information

MODEL

MODEL																																																																														
BASIC MODEL CODE DPCP DP Gauge, Capsule type MOUNTING V Bottom Entry, Local Mounting S Bottom Entry, Surface Mounting Y Bottom Entry, 2" Pipe Mounting P Back Entry, Flush Panel Mounting DIAL SIZE 100 100 mm 150 150 mm CASE S4S SS304 S6S SS316 CAPSULE S6S SS316 S6L SS316L WETTED PARTS S6S SS316 S6L SS316L MOVEMENT S4S SS304 S6S SS316 CONNECTION <table border="1"> <thead> <tr> <th>Conn</th> <th>Code</th> <th>Size</th> <th>Code</th> <th>Type</th> <th>Code</th> <th>Male/ Female</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td rowspan="8">Thread</td> <td rowspan="8">T</td> <td>1/4"</td> <td>06</td> <td>NPS</td> <td>NS</td> <td>Male</td> <td>M</td> </tr> <tr> <td>3/8"</td> <td>10</td> <td>NPT</td> <td>NT</td> <td>Female</td> <td>F</td> </tr> <tr> <td>1/2"</td> <td>15</td> <td>BSP</td> <td>BP</td> <td></td> <td></td> </tr> <tr> <td>3/4"</td> <td>20</td> <td>BSPT</td> <td>BT</td> <td></td> <td></td> </tr> <tr> <td>1"</td> <td>25</td> <td>JIS-PF</td> <td>PF</td> <td></td> <td></td> </tr> <tr> <td>M20</td> <td>M20</td> <td>JIS-PT</td> <td>PT</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Gas</td> <td>GS</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>R</td> <td>RR</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Rp</td> <td>RP</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>Pitch 1.5</td> <td>C</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> OPTION ATX Atex CLB Colour Band CEM CE marking DUS Dual Scale OXY O2 Cleaning VCP Vacuum Protection L Nil ACC Accessory XXX Other STATIC PRESSURE Please Specify UNIT KSC kg/cm2(DP) BAR bar(DP) PSI psi(DP) KPA kPa(DP) MPA MPa(DP) MBR mbar(DP) MMW mm WC(DP) CMW cm WC(DP) MWC m WC(DP) INW inch WC(DP) MMH mm Hg(DP) CMH cm Hg(DP) INH inch Hg(DP) XXX Other (Please specify) RANGE Please Specify								Conn	Code	Size	Code	Type	Code	Male/ Female	Code	Thread	T	1/4"	06	NPS	NS	Male	M	3/8"	10	NPT	NT	Female	F	1/2"	15	BSP	BP			3/4"	20	BSPT	BT			1"	25	JIS-PF	PF			M20	M20	JIS-PT	PT					Gas	GS					R	RR					Rp	RP					Pitch 1.5	C			
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		Pitch 1.5	C																																																																											

e.g. For 1/2"NPT(M), Code: **T15NTM**
For M20x1.5 (F), Code: **TM20CF**

Sample Model Code: **DPCP-S-150-S4S-S6S-S6S-S4S-T15NTM-(0-60)-MMW-500mmWC.g-L**

Differential Pressure Gauges-

Diaphragm/ Piston Type

General

MODEL : DPMH (Dry Case)

LFDPMH (Liquid Filled Case)

Features

- Magnetic Diaphragm / Piston type construction
- Static pressure 35 bar & 100 bar
- Body block - Aluminium / SS316 / SS316L
- Screwed connection
- Accuracy $\pm 2\%$ FSD (Ascending)
- Unit of measurement - kg/cm², bar, mmWC



Specifications

Dial	100 mm / 150 mm, Aluminium, white background, black markings
Case & Bezel	SS304 weatherproof to IP-67 (Dry Case) / IP-68 (Liquid Filled Case) as per IS:13947 part I / IEC:60529
Window	Safety glass (Shatter proof / Toughened glass)
Sensing	Diaphragm in Viton / Piston in SS
Body Material	Aluminium / SS316 / SS316 L
Magnet	Ceramic
Spring	SS316
Connection	1/4" NPT (F) as standard (other on request)
Range	Minimum span of Range 50 mmWC (500 mmWC with Switch)
Static Pressure	35 bar & 100 bar
Accuracy	$\pm 2\%$ FSD (on Ascending Side)
Blow out disc	Provided (top of the case)
Temperature suitability	Ambient (-)20°C to 60°C, Media 80°C
Optional	Liquid filled Case (minimum Range 0 to 1000mmWC) Filling not available with Switch Switching : SPDT (Micro Switch) Voltage : 230V AC Rating Switch : 1 SPDT & 2 SPDT Current : 5 A (max) CE Atex



DP Gauge with Micro Switch

The parameters mentioned here are the standard specifications / values generally used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement.

Under Technical Collaboration with M/s. Gauges Bourdon, France

Ordering Information

MODEL

MODEL							
BASIC MODEL CODE							
DPMH	Dry Case						
LFDPMH	Liquid Filled Case						
MOUNTING							
V	Bottom Entry, Local Mounting						
S	Bottom Entry, Surface Mounting						
Y	Bottom Entry, 2" Pipe Mounting						
P	Back Entry, Flush Panel Mounting						
DIAL							
100	100 mm						
150	150 mm						
CASE							
S4S	SS 304						
S6S	SS 316						
ELEMENT							
DVT	Diaphragm in Viton						
PS6	Piston in SS316						
P6L	Piston in SS316L						
WETTED PARTS							
ALM	Aluminium						
S6S	SS 316						
S6L	SS 316L						
CONNECTION							
Conn	Code	Size	Code	Type	Code	Male/ Female	Code
Thread	T	1/4"	06	NPS	NS	Male	M
		3/8"	10	NPT	NT	Female	F
		1/2"	15	BSP	BP		
		3/4"	20	BSPT	BT		
		1"	25	JIS-PF	PF		
		M20	M20	JIS-PT	PT		
				Gas	GS		
				R	RR		
		Rp	RP				
		Pitch 1.5	C				
OPTION							
ATX	Atex						
CLB	Colour Band						
CEM	CE marking						
DC2	Silicone Oil filled Case						
DUS	Dual Scale						
GLY	Glycerine filled Case						
VCP	Vacuum Protection						
OXY	O2 Cleaning						
1DT	1SPDT Micro Switch						
2DT	2SPDT Micro Switch						
L	Nil						
ACC	Accessory						
XXX	Other						
STATIC PRESSURE							
Please Specify							
UNIT							
KSC	kg/cm2(DP)						
BAR	bar(DP)						
PSI	psi(DP)						
KPA	kPa(DP)						
MPA	MPa(DP)						
MBR	mbar(DP)						
MMW	mm WC(DP)						
CMW	cm WC(DP)						
MWC	m WC(DP)						
INW	inch WC(DP)						
MMH	mm Hg(DP)						
CMH	cm Hg(DP)						
INH	inch Hg(DP)						
XXX	Other (Please specify)						
RANGE							
Please Specify							

e.g. For 1/2"NPT(M), Code: **T15NTM**
For M20x1.5 (F), Code: **TM20CF**

Sample Model Code: **DPMH-P-150-S4S-DVT-S6S-T15NTM-(0-600)-MMW-25bar.g-L**

Mag-DP - Differential Pressure Gauges



for low Differential Pressure measurement

MODEL: DPMG

"General" make Mag-DP Gauges are designed for measuring very low differential pressures. Minimum measuring Range offered is as low as 0 to 6 mmWC(DP). The Mag-DP Gauges are suitable for measuring fan & blower pressures, filter resistance, furnace draft, and pressure drop across orifice plates, etc. Mag-DP Gauges are designed to suit Flush Panel Mounting or Surface (Projection) Mounting or Yoke (2" Pipe) Mounting as per requirement. For maximum accuracy, it is recommended to mount the Gauge in Vertical position. Suitable mounting accessories are provided with each Gauge.

Features

- Diaphragm operated, with magnetic helical Movement
- Suitable for measuring very low differential pressure
- Minimum measuring Range as low as 0 to 6 mmWC(DP)
- Silicone Rubber diaphragm (Buna-N for Hydrogen Service)
- Body material – Aluminium



Working Principle

The Mag-DP Gauge consists of a Silicone Diaphragm with integrally moulded O-Ring. The Diaphragm is locked and sealed in its position with a sealing plate & retaining ring. There is a Range Spring to which Diaphragm is connected. Depending upon the applied pressure, the displacement of the Diaphragm is transferred to the Range spring. This causes the motion of the magnet provided at one end of the Range spring. The change in magnetic field rotates the Helical movement which also is made with magnetic material and mounted on frictionless jewelled beading. The pointer is fixed on the helical movement. Thus the rotation of the helical movement is directly indicated by the Pointer above the Dial.

Specifications

Mounting Orientation	Diaphragm in vertical position (Consult factory for other position orientations).
Size	Nominal Size 4" (100 mm) & Case OD 4-1/2" (114 mm)
Dial	Aluminium, white background with Black markings
Housing	Die cast Aluminum Case & Bezel, with Acrylic cover, Weather proof to IP-65 as per IEC-60529. Exterior finish in coated Gray, withstands 168 hour Salt spray Corrosion Test.
Sensing Element	Silicone Rubber diaphragm with integrally molded O-ring For Hydrogen Service Diaphragm shall be Buna-N.
Process Connections	1/8" NPT(F) duplicate HP & LP Connections - One Pair at side & the other at back/rear. (1/8"NPT Plugs shall be provided for the unused connections)
Accuracy	±2% of FSD for Range 0 to 25 mmWC & above at 24 DegC ±3% of FSD for Range 0 to 10mmWC to 15 mmWC at 24 DegC ±4% of FSD for Range 0 to 6, -3 to 3, -5 to 5 mmWC at 24 DegC
Pressure Limits	(-)500 mm Hg Vacuum to 1 bar.g Pressure
Over pressure	Relief plug opens at approximately 25 psig (1.72 bar)
Temperature Limits	20 to 140°F (-6.67 to 60°C).
Weight	Approx 500 gm
Standard Accessories	Two 1/8" NPT Male plugs for duplicate process connections Two 1/8" pipe thread to rubber tubing adaptors Three flush mounting adapters & suitable screws.

Ordering Information

MODEL : DPMG- [] [] [] []

Mounting	
S	Surface
Y	2" Pipe
P	Flush Panel

RANGE
Please Specify

UNIT	
MMW	mmWC
CMW	cmWC
INW	inchWC
MBR	mbar
PAS	Pascal

CONNECTION	
BUN	Buna-N Diaphragm instead of Silicone Diaphragm
ATX	Atex
CEM	CE
L	Nil

Any special requirement on request

Sample Model Code: DPMG-P-(0-10)-MMW-L

Under Technical Collaboration with M/s. Gauges Bourdon, France

Indicating Differential Pressure Switch

General

MODEL : IDMSB (Micro switch in Bellow type)
IDNSB (NAMUR switch in Bellow type)
IDNSD (NAMUR switch in Diaphragm type)

GENERAL has been designing and manufacturing high quality Differential pressure indicating switches to suit to most of the industrial application for accurate control of the process equipments. Rigorous and continuous tests are conducted for design and quality conformance.

- Indicating Differential Pressure Switches are design to use in Pumps, Compressors, Lubrication Systems, Turbines, Generators, Boilers, Furnaces etc. in industries such as Chemical, Fertilizer, Ferrous & Non- ferrous metal, Pulp & Paper, Power, Waste Water Treatment, Refinery & Petrochemical, Synthetic Fibre, etc.



Bellow type, with Micro switch & Weather proof Case

Specifications

Dial	100/ 150 mm (for diaphragm) & 150mm (for Bellow), Aluminium dial, white background, black markings
Case	SS304 / SS316 with bayonet bezel (for WP enclosure - NAMUR & Micro switch / FP enclosure - NAMUR switch only) Die Cast Aluminium (for Micro switch with FP enclosure only)
Protection	Weatherproof to IP - 68 (IS:13947 part I / IEC:60529) Flameproof to IIA, IIB (equivalent to NEC Cl. 1, Div. 2, Gr. C & D)
Window	Safety glass
Cable Entry	1/2" NPT (F)
Switch	1 SPDT / 2 SPDT, Snap acting micro-switch Rated 5A @ 230 VAC / 3A @ 28 VDC Inductive Contacts (NAMUR), Single or Double, adjustable between 10% & 90% of the Range, Nominal Voltage, 8.32 V DC, Operating Voltage, 5 to 25 V DC
Sensing element	Bellow/ Diaphragm
Sensor Material & Wetted Parts	SS316 / SS316L / Monel / Hastelloy-C / other on request
Movement	Brass / SS304 / SS316
Set Point	Adjustable throughout the range
Mounting	Surface Mounting / 2" Pipe Mounting
Process Connection	1/2" NPT (M) as standard. Other connections optionally
Range	Minimum 0 to 250 mm WC(DP) for NAMUR switch in Diaphragm type Minimum 0 to 2500 mm WC(DP) for NAMUR switch in Bellow type Minimum 0 to 1kg/cm2(DP) for Micro switch in Bellow type Higher ranges as per customer requirement
Static Pressure	Upto 60 kg/cm2g, Higher on request
Accuracy	Bellow type with Micro switch: $\pm 1\%$ FSD (for indication) & $\pm 2\%$ FSD (for Switching) Bellow type with NAMUR switch: $\pm 1\%$ FSD (indication & switching) Diaphragm type with NAMUR switch: $\pm 1.6\%$ FSD (indication & switching)
Temperature suitability	Ambient (-)20°C to 60°C, Media 100°C
Temperature Effect	Within $\pm 0.5\%$ FSD/10°C, when temperature changes from reference temperature of 20°C
Blow out disc	Provided at top of the Case (not applicable for FP Die Cast Aluminium Case)
Optional	Diaphragm seal with Capillary CE, Atex



Diaphragm type, with NAMUR switch & Weather proof Case



Bellow type, with Micro switch, Flame proof Case & Diaphragm Seal

The parameters mentioned here are the standard specifications / values generally used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement.

Under Technical Collaboration with M/s. Gauges Bourdon, France

Ordering Information

MODEL

BASIC MODEL CODE

IDMSB	Micro switch in Bellow type
IDNSB	NAMUR switch in Bellow type
IDNSD	NAMUR switch in Diaphragm type

MOUNTING

V	Bottom Entry, Local Mounting
S	Bottom Entry, Surface Mounting
Y	Bottom Entry, 2" Pipe Mounting
P	Back Entry, Flush Panel Mounting (for Bellow type only)

DIAL SIZE

150 150 mm

CASE

S4S	SS 304
S6S	SS 316
ALM	Die Cast Aluminium*

SENSOR

S6S	SS 316
S6L	SS 316L
MN4	Monel
HCC	Hastelloy-C
XXX	Other (Please Specify)

WETTED PARTS

S6S	SS 316
S6L	SS 316L
MN4	Monel
HCC	Hastelloy-C
XXX	Other (Please Specify)

MOVEMENT

S4S	SS 304
S6S	SS 316
BRS	Brass

CONNECTION

Conn	Code	Size	Code	Type	Code	Male/ Female	Code
Thread	T	1/4"	06	NPS	NS	Male	M
		3/8"	10	NPT	NT	Female	F
		1/2"	15	BSP	BP		
		3/4"	20	BSPT	BT		
		1"	25	JIS-PF	PF		
		M20	M20	JIS-PT	PT		
				Gas	GS		
				R	RR		
				Rp	RP		
				Pitch 1.5	C		

OPTION

1DT	1SPDT Micro Switch
2DT	2SPDT Micro Switch
1NR	NAMUR Switch, single
2NR	NAMUR Switch, double
FAB	Flame Proof Case - IIA/IIB
F2C	Flame Proof Case - IIC
FAT	Flame Proof Case - IIC (ATEX)
CLB	Colour Band
CEM	CE marking
DUS	Dual Scale
NAC	NACE
OXY	O2 Cleaning
VCP	Vacuum Protection
CSU	Chemical Seal
ACC	Accessory
XXX	Other

STATIC PRESSURE

Please Specify

UNIT

KSC	kg/cm2(DP)
BAR	bar(DP)
PSI	psi(DP)
KPA	kPa(DP)
MPA	MPa(DP)
MBR	mbar(DP)
MMW	mm WC(DP)
CMW	cm WC(DP)
MWC	m WC(DP)
INW	inch WC(DP)
MMH	mm Hg(DP)
CMH	cm Hg(DP)
INH	inch Hg(DP)
XXX	Other (Please specify)

RANGE

Please Specify

*Die Cast Aluminium Case applicable for Micro switch with Flame proof version only. Blow out disc shall not be applicable.

e.g. For 1/2"NPT(M), Code: **T15NTM**
For M20x1.5 (F), Code: **TM20CF**

Sample Model Code: **IDMSB-Y-150-S4S-S6S-S6S-S4S-T15NTM-(0-2)-BAR-25bar.g-2DT**

Flow Indicator

General

MODEL : DPFI

Features

- Differential Pressure across Orifice Plate Assembly
- Weld Neck Flange connection
- Unit of measurement direct in terms of flow unit
- Weatherproof to IP – 68

Specifications

Orifice Plate Assembly

Design	Conforms to ISA RP 3.2, DIN 1952, BS 1042, ISO-5167
Types	Square edge concentric, Quadrant edged, Conical entrance, Eccentric, Segmental
Plate material	SS304, SS316, SS316L as standard. Hastelloy-C, Monel, PP, PVC, PTFE coated, etc. can be given on request.
Orifice Bore	In accordance with ISO-5167, BS-1042, ASME MFC 3M, R.W.Miller, L.K.Spink, AGA-3
Tag Plate	In the same material as plate & is welded to orifice plate. Tag plate integral to the Orifice plate (i.e. without welding) can also be offered as a special case.
Vent / Drain	Vent or Drain holes are provided as per customer's requirement. Not drilled for orifice bores smaller than 25.4 mm
Flange Union	Weld neck, Slip on, Threaded, Socket welded with RF or RTJ facing Orifice flanges are in accordance with ANSI B16.36 with minimum flange rating of 300# for sizes up to 8" or male - female flanges in accordance with ANSI B16.5.
Pressure Tappings	Corner tappings are recommended for sizes upto 1 1/2"; Flange taps from 2" to 16"; D – D/2 taps for higher sizes.
Gasket	SS spiral wound + CAF, SS spiral wound + Grafoil, SS spiral wound + PTFE are normally supplied as per process requirement. Other materials available on request. For RTJ flanges, the plate is fixed on the plate holder. The plate holder is in Soft Iron material & acts as a gasket.
Studs / Nuts	ASTM A193 Gr.B7/A-194 Gr.2H as standard, Other material on request.
Jack Screw	Carbon Steel (C1038 heat treated)

Flow Indicator

Dial	100 / 150 mm (depending upon type of DPG), Aluminium, white background, black markings
Case	SS304 / SS316 with bayonet bezel
Protection	Weatherproof to IP-68 (IS:13947 part I / IEC:60529)
Window	Safety glass (Shatter proof / Toughened glass)
Pointer	Light weight, micrometer adjustable
Sensing	Bellow, Diaphragm or Piston (depending upon type of DPG)
Other wetted parts	SS316 / SS316L / Monel / Hastelloy-C (other on request)
Movement	SS304 / SS316
Connection	1/2" NPT (M) as standard (other on request)
Range	Minimum 0 to 1000 mm WC
Static Pressure	Upto 60 kg/cm ² g, Higher Static Pressure on request
Accuracy	±1% FSD / ±1.6% FSD / ±2% FSD ascending (depending upon type of DPG)
Blow out disc	Provided (top of the case)
Optional	Flow Indicator with NAMUR / Micro switch also available Three Valve Manifold in SS316, suitable SS tubing and associated instrument fittings



The parameters mentioned here are the standard specifications / values generally used for most of the process applications. Any other specification not appearing here also can be provided as per customer requirement.

Under Technical Collaboration with M/s. Gauges Bourdon, France

Ordering Information

MODEL CODE FOR FLOW INDICATOR ASSEMBLY *

BASIC MODEL CODE				TYPE OF ORIFICE PLATE				PLATE MATERIAL				PLATE THICKNESS				TYPE OF FLANGE				LINE SIZE / SCHEDULE				FLOW RANGE & UNIT				STATIC PRESSURE				UNIT				DP RANGE				FLANGE MATERIAL				FLANGE RATING / FACING															
DPFI DP type Flow Indicator				OCC Conical Entrance OEC Eccentric OQC Quadrant Edge Concentric OSC Square Edge Concentric OSE Segmental				S4S SS304 MN4 Monel 400 S4L SS304L HCB Hastelloy-B S6S SS316 HCC Hastelloy-C S6L SS316L TTM Titanium S6T SS316Ti TAN Tantalum 321 SS321 PTF PTFE S6P SS316+PTFE PPN Polypropylene 6LP SS316L+PTFE XXX Other (Please Specify)				OP1 3.18 mm OP2 6.35 mm OP3 9.52 mm OP4 12.70 mm XXX Other (Please Specify)				FSO Slip On FSW Socket Welded FTH Threaded FWN WN Welding Neck				Size Code Schedule Code 1/2" 15 Sch 40 S40 3/4" 20 Sch 80 S80 1" 25 Sch 160 S16 1-1/2" 40 Sch XXS XXS 2" 50 Other (Please Specify) XXX 3" 80				S4S SS304 6LP SS316L+PTFE S4L SS304L MN4 Monel 400 S6S SS316 HCB Hastelloy-B S6L SS316L HCC Hastelloy-C S6T SS316Ti TTM Titanium 321 SS321 XXX Other (Please Specify) S6P SS316+PTFE				KSC kg/cm2(DP) BAR bar(DP) PSI psi(DP) KPA kPa(DP) MPA MPa(DP) MBR mbar(DP) MMW mm WC(DP) CMW cm WC(DP) MWC m WC(DP) INW inch WC(DP) MMH mm Hg(DP) CMH cm Hg(DP) INH inch Hg(DP) XXX Other (Please specify)				Please Specify				Please Specify				KSC kg/cm2(DP) BAR bar(DP) PSI psi(DP) KPA kPa(DP) MPA MPa(DP) MBR mbar(DP) MMW mm WC(DP) CMW cm WC(DP) MWC m WC(DP) INW inch WC(DP) MMH mm Hg(DP) CMH cm Hg(DP) INH inch Hg(DP) XXX Other (Please specify)				Please Specify				S4S SS304 6LP SS316L+PTFE S4L SS304L MN4 Monel 400 S6S SS316 HCB Hastelloy-B S6L SS316L HCC Hastelloy-C S6T SS316Ti TTM Titanium 321 SS321 XXX Other (Please Specify) S6P SS316+PTFE				Conn Code Rating Code Rating Code Facing Code Flange F 1/2" 15 150 A RF RF 3/4" 20 300 B FF FF 1" 25 600 C RTJ RJ 1-1/2" 40 900 D LT LT 2" 50 1500 E LG LG 3" 80 2500 F							

e.g. For 2" (50 NB), Sch 80 Pipe, Model Code: **50S80**

e.g. For 40 NB 300# RF flange, Model Code: **40BRF**

* Model Code for DPG to be specified separately, as per the type of DPG selected (Refer DPG Catalogues)

Sample Model Code: **DPFI-OCC-S6S-OP1-FWN-50S80-F50BRF-S6S-(0-2500)-MMW-25bar.g-(0-100m3/Hr)**

In-House testing facilities for Pressure & Differential Pressure Gauges

Pressure Gauges and Differential Pressure Gauges are manufactured in technical collaboration with M/s Gauges Bourdon, France. The same are manufactured and tested in accordance with EN : 837 standard. According to the said international standard, following tests are carried out to ensure the quality of Pressure Gauges. We can carry out following tests In-House at our manufacturing plant.

1. Visual Inspection
2. Dimensional Verification
3. Accuracy Test
4. Hysteresis Test
5. Leak Test
6. Influence of Mounting Position
7. Degree of Protection
8. Effects of Mechanical Vibration
9. Effects of Mechanical Shock
10. Endurance test with Steady Pressure
11. Endurance test with Over Pressure
12. Endurance test with Cyclic Pressure
13. Safety Blow-out Test
14. Thermal stability test at rated temperature
15. Temperature effect test
16. Energy release test



Pressure Conversion Chart

General

To convert pressure from one unit to another:

1. Start at column heading with units to convert from.
2. Move down the same column to number "1".
3. Move across this row to the column with units heading you are converting to.
4. Multiply the number in this cell with the value you are converting from to get the new value in converted units.

psi	atms.	inch WC	mm WC	cm WC	oz/in ²	Kg/cm ²	inch Hg	mm Hg	cm Hg	mbar	bar	Pa (N/m ²)	KPa	MPa
1	0.0681	27.71	703.8	70.38	16	0.0704	2.036	51.715	5.17	68.95	0.0689	6,895	6.895	0.0069
14.7	1	407.2	10,343	1,034.30	235.1	1.033	29.92	760	76	1013	1.013	101,325	101.3	0.1013
0.0361	0.00246	1	25.4	2.54	0.5775	0.00254	0.0735	1.866	0.187	2.488	0.00249	248.8	0.249	0.00025
0.001421	0.000097	0.0394	1	0.1	0.0227	0.0001	0.00289	0.0735	0.00735	0.098	0.000098	9.8	0.0098	0.00001
0.01421	0.000967	0.3937	10	1	0.227	0.001	0.0289	0.735	0.0735	0.98	0.00098	98	0.098	0.0001
0.0625	0.00425	1.732	43.986	4.4	1	0.0044	0.1273	3.232	0.3232	4.31	0.00431	431	0.431	0.00043
14.22	0.968	394.1	10001	1000.1	227.6	1	28.96	735.6	73.56	980.7	0.981	98,067	98.07	0.0981
0.4912	0.03342	13.61	345.7	34.57	7.858	0.0345	1	25.4	2.54	33.86	0.0339	3,386	3.386	0.00339
0.01934	0.001316	0.536	13.61	1.361	0.31	0.00136	0.0394	1	0.1	1.333	0.001333	133.3	0.1333	0.000133
0.1934	0.01316	5.358	136.1	13.61	3.1	0.0136	0.394	10	1	13.33	0.01333	1,333	1.333	0.00133
0.0145	0.000987	0.4012	10.21	1.021	0.2321	0.00102	0.0295	0.75	0.075	1	0.001	100	0.1	0.0001
14.504	0.987	401.9	10,210	1021	232.1	1.02	29.53	750	75	1,000	1	100,000	100	0.1
0.000145	0.00001	0.00402	0.102	0.0102	0.00232	0.00001	0.000295	0.0075	0.00075	0.01	0.00001	1	0.001	0.000001
0.14504	0.00987	4.019	102.07	10.207	2.321	0.0102	0.295	7.5	0.75	10	0.01	1,000	1	0.001
145.04	9.869	4019	102,074	10,207	2321	10.2	295.3	7500	750	10,000	10	1,000,000	1,000	1