

# EDS

Differential Pressure Switch ( Weather Proof )  
Diaphragm Type



## Special Features

- High accuracy & repeatability
- SS wetted parts
- Set point locking
- Highly reliable
- Diaphragm seals (optional)

## Applications

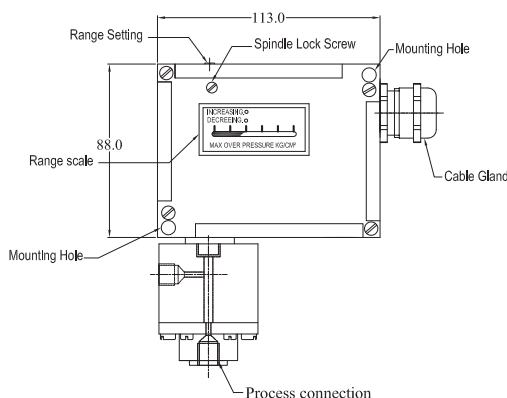
- Filter monitoring, boiler, furnace, railway engines
- Oil & gas, conventional & nuclear power plants, mines, iron & steel plants, refineries, petrochemical, food & pharmaceutical, chemical & fertilizer, cement, textile, pumps, glass, paint, pulp & paper, marine industries.

## Specifications

### Standard Version

Repeatability	:	± 0.5% F. S.
Scale unit	:	bar
Range	:	Refer "how to order"
Set point	:	Between 20 to 80% F. S. for better performance
Overpressure limit	:	150% of F. S.
Differential	:	Fixed
Mounting	:	Direct / Panel
Process connection	:	1/4" NPT (F)
Enclosure protection	:	W/P to IP 66
Enclosure material	:	Pressure die cast aluminum
Maximum process temperature	:	150 °C
Ambient temperature	:	-10 to 60 °C
Switch	:	1 SPDT, snap action micro switch
Switch rating	:	15 A, 250 VAC, 0.2 A, 220 VDC
High voltage strength	:	0.5 to 0.6 KV between open contacts and 2 KV between contacts and body
Insulation resistance	:	>100 M ohms at 500 V
Sensing element	:	<b>Diaphragm</b>
DP chamber material	:	Aluminum (for range 5 to 600 mbar)
	:	AISI 316 SS (for range 3 to 20 mbar & 1 to 25 bar)
Sensing element material	:	AISI 316L SS
Cable gland	:	PG 13.5 mm
Scale Accuracy	:	± 1.0% F. S.
Conformity	:	BS 6134

## Dimensional Details



Notes : • Drawings are not to scale. • All Dimensions are in mm.

## How to Order

## Example

### Basic Model

EDS

Range (\* Also available in AISI 316 SS & AISI 316L version. Refer DP chamber material)

Ordering Code	Range (mbar)	DP Chamber Material	Ordering Code	Range (bar)	DP Chamber Material
W020	3 to 20	AISI 316 SS	P001	0.1 to 1	AISI 316 SS
W060	5 to 60	Aluminum*	P002	0.2 to 2	AISI 316 SS
W100	10 to 100	Aluminum*	P004	0.4 to 4	AISI 316 SS
W250	25 to 250	Aluminum*	P006	0.6 to 6	AISI 316 SS
W400	40 to 400	Aluminum*	P010	1 to 10	AISI 316 SS
W600	60 to 600	Aluminum*	P016	1 to 16	AISI 316 SS
			P025	2 to 25	AISI 316 SS

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Note : Other equivalent scale units like kg/cm<sup>2</sup>, kPa, MPa, psi, mmWC etc can be provided on request.

### DP Chamber Material

SL AISI 316L SS

XX

C6 AISI 316 SS (Standard for Range 3 to 20 mbar & 1 to 25 bar only)

### Sensing Element Material

SL AISI 316L SS (Standard)

XX

### Differential

F Fixed (Standard)

A Adjustable (for ISPDT only)

Note : 1 SPDT = 3 to 5% FS

Adjustable : 1 SPDT = 5 To 12.5% F.S.

2 SPDT = 4.5 to 7.5% FS

1 DPDT = 4.5 to 7.5% FS

X

### Type of Micro Switch

1S 1 SPDT

2S 2 SPDT

1D 1 DPDT

XX

### Micro Switch Rating

Switch Code	Description	AC Rating	AC Rating (Resistive)	DC Rating (Inductive)	Available on 1 SPDT	Available on 2 SPDT
GPL	Low dead band and fixed	15 A 250 V	2 A 24 V 0.4 A 110 V 0.2 A 220 V	2 A 24 V 0.4 A 110 V 0.2 A 220 V	Fixed differential of ZDD	Fixed differential of ZDD
GPH	Standard dead band	15 A 250 V	6 A 24V 0.5 A 110 V 0.25 A 220 V	5 A 24 V 0.05 A 110 V 0.03 A 220 V	Fixed differential of ZDD	Fixed differential of ZDD
GPA	Adj. differential micro switch	15 A 250 V			Adj. differential of of ZDD	NA
GPG	Gold plated contact	1 A 125 V	0.5 A 28 V		Fixed differential of ZDD	Fixed differential of ZDD
SES	Environmentally sealed silver contact	15 A 250 V	0.4 A 125 V		Fixed differential of ZDD	Fixed differential of ZDD
SEG	Environmentally sealed gold contact		1 A 28 V		Fixed differential of ZDD	Fixed differential of ZDD
HSS	Hermetically sealed silver plated	4 A 230 V	3 A 28 V	2 A 24 V	Fixed differential of ZDD	Fixed differential of ZDD
HSG	Hermetically sealed gold plated	1 A 125 V	NA	NA	Fixed differential of ZDD	Fixed differential of ZDD
HDC	High DC rating	10 A 125 V	10 A 125 V	6 A 125 V	Fixed differential of ZDD	Fixed differential of ZDD
DPD	DPDT Micro switch	10 A 125 V	0.2 A 250 V		Fixed & adjustable differential of ZDD	NA

XXX

How to Order					Example					
<b>Calibration</b>					X					
<b>I</b>	Increasing	<b>D</b>	Decreasing	(Not applicable for adj. Differential)						
<b>Process Connections</b> (* Please mention the flange face and flange finish)					XXX					
		Through adaptors	Flanged (As per ANSI B 16.5)*							
<b>2NM</b>	1/4" NPT (M)	<b>3BM</b>	3/8" BSP (M)	<b>B09</b>		1/2" 150 #	<b>B21</b>	1" 150 #	<b>B39</b>	2" 150 #
<b>2NF</b>	1/4" NPT (F) (Standard)	<b>3BF</b>	3/8" BSP (F)	<b>B10</b>		1/2" 300 #	<b>B22</b>	1" 300 #	<b>B40</b>	2" 300 #
		<b>4BM</b>	1/2" BSP (M)	<b>B11</b>		1/2" 600 #	<b>B23</b>	1" 600 #	<b>B41</b>	2" 600 #
		<b>4BF</b>	1/2" BSP (F)	<b>B15</b>		3/4" 150 #	<b>B33</b>	1 1/2" 150 #	<b>B51</b>	3" 150 #
		<b>4NM</b>	1/2" NPT (M)	<b>B16</b>		3/4" 300 #	<b>B34</b>	1 1/2" 300 #	<b>B52</b>	3" 300 #
		<b>4NF</b>	1/2" NPT (F)	<b>B17</b>		3/4" 600 #	<b>B35</b>	1 1/2" 600 #	<b>B53</b>	3" 600 #
<b>Cable Entry</b>						XXX				
<b>DIN</b>	DIN Connection*	<b>ETE</b>	3/4" ET	<b>ECB</b>			3/4" ET DCCG Brass	<b>4PN</b>	4 PIN Connection*	
<b>PGE</b>	PG 13.5 (Std)	<b>2NP</b>	1/2" NPT (F)	<b>NPB</b>	1/2"NPT DCCG Brass		<b>7PN</b>	7 PIN Connection		
<b>ECS</b>	3/4" ET DCCG SS	<b>NPS</b>	1/2"NPT DCCG SS							
* For 1 SPDT										
<b>Optional extras</b>					XXX					
<b>FPC</b>	Custom designed dial	<b>WMB</b>	Wall Mounting Bracket ( Steel Black Painted )							
<b>STP</b>	SS tag plate	<b>2PM</b>	2" Pipe Mounting							
<b>CNS</b>	Conformity as per NACE Standard	<b>PY4</b>	2" pipe/yoke mounting bracket & 'U' clamp (AISI 304 SS)							
<b>MTC</b>	Material Test Certificate	<b>PYS</b>	2" pipe/yoke mounting bracket & 'U' clamp (AISI 316 SS)							
<b>OXS</b>	Oxygen Service	<b>TRC</b>	Calibration Certificate traceable to National / International Standards							
<b>Accessories (refer datasheet for complete specifications)</b>										
<b>CT</b>	Cooling tower	<b>GS</b>	Over load protector (gauge saver)	<b>SN</b>	Snubber					
<b>GC</b>	Gauge cock	<b>NV4</b>	Needle valve	<b>SP</b>	Siphon					
<b>DSS</b>	Diaphragm Sealed	<b>TC</b>	Sanitary Seal ( TC Clamp Type )							

\*\*\*Material test certificates will be provided for wetted parts only with chemical chemical composition testing.  
For others, please consult factory.

## Ordering Example: EDS - XXXX - XX - XX - X - XX - XXX - X - XXX - XXX - XX or XXX

Note : In 2 SPDT Instruments, there may be an error of max  $\pm 2\%$  F. S. between Micro Switches at the set point.