

# FLAMEPROOF PRESSURE SWITCH-DIAPHRAGM

## SSKE46-1

### APPLICATIONS

- Marine applications
- Textile machineries
- Power & steel plants
- Furnace applications
- Oil & Gas, Refineries
- Petro-chemicals & Fertilizers
- Cement & Glass industries
- Railway engines & Turbines

### FEATURES

- Fix / adjustable differential
- Field adjustable set point
- Flameproof to Gas groups
- Ingress Protection IP 67
- Internal set point lock
- Rigid construction
- Scale provided



FLAMEPROOF PRESSURE SWITCH DIAPHRAGM, SSKE46-1

## DESCRIPTION

### General

**Design** : BS 6134

**Sensing element** : Diaphragm

**Repeatability** :  $\pm 0.5\%$  Full Scale

**Scale accuracy** :  $\pm 1\%$  Full Scale

**Mounting** : Bottom / Panel

**Equipment rating** : Ex d IIC T6 Gb as per IS/IEC 60079-1 : 2007

( $-10^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$ ) Zone 0, 1 & 2

**Ingress protection** : IP 65

**Maximum process temperature** :  $150^{\circ}\text{C}$

**Ambient temperature** :  $-10...60^{\circ}\text{C}$

**Set point** : Between 20 to 80 % F.S for better performance

**High voltage strength** : 0.5 to 0.6 KV between open contacts and 2 KV between contact and body

### Material of construction

**Enclosure** : Die-cast aluminum

**Top chamber** : ASTM A105 - Ni plated, AISI 304 SS

**Sensing element** : AIS 316 SS / Monel / Hastelloy - C276

**Bottom chamber** : AISI 316 SS / AISI 316L SS / Monel / Hastelloy C-276

**Wall mounting bracket** : ASTM A105 / AISI 304 SS

**2" pipe / Yoke mounting bracket** : ASTM A105 / AISI 304 SS

**Tag plate** : AISI 304 SS

### Standard version :

**Range** : As per the selection table

**Set point adjustment** : External (Field adjustable)

**Differential** : Fixed (Standard - 2...5%),

Adjustable (For code N11B - 5...12.5%)

For double contacts, Differential shall be 1.5 times

**Switch** : 1 SPDT Snap action micro switch

**Switch rating** : 15A,250 VAC / 2A,24 VDC (Standard)

**Process connection** :  $\frac{1}{4}$ " BSP (F) /  $\frac{1}{4}$ " NPT (F)

**Cable entry** : PG 13.5, single compression

### Range table :

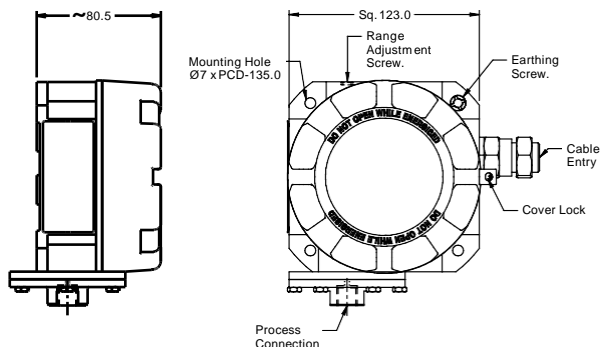
CODE	RANGE	CODE	RANGE
	"mbar"		"bar"
200	-20...+20	001	-1...0
400	-40...+40	102	-1...+2
320	3...20	104	-1...+4
560	5...60	202	0.2...2
101	10...100	404	0.4...4
252	25...250	606	0.6...6
506	50...600	110	1...10
		116	1...16
		225	2...25

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### DIMENSIONAL DRAWING

#### Diaphragm



NOTES  
1. Drawing not to scale. All dimensions are in mm.

### ORDERING CODES

<b>MODEL</b>						SSKE46-1
SSKE46-1 Flameproof Pressure Switch, Diaphragm						
<b>RANGE</b> XXX As per range table						
<b>DIAPHRAGM</b>						
S02	AISI 316 SS	S05	MONEL 400	S10	Hastelloy C-276	
<b>BOTTOM CHAMBER</b>						
S02	AISI 316 SS	S03	AISI 316L SS	S05	MONEL 400	
S10	Hastelloy C-276					
<b>SET-POINT ADJUSTMENT</b>						
E63	Internal	E64	External			
<b>CALIBRATION</b>						
E70	Falling pressure	E80	Rising pressure			
<b>MICROSWITCH TYPE</b>						
N11A	Low Deadband Contact (15A/250VAC, 2A/24VDC)	N11E	Hermetically Sealed Silver Contact (2A/24VDC)			
N11B	Adjustable Deadband Contact(15A/250VAC, 5A/24VDC)	N11F	Hermetically Sealed Gold Contact (1A/125VAC)			
N11C	Gold Plated Contact (1A/250VAC, 0.5A/28VDC)	N12A	DPDT Contact (10A/125VAC)			
N11D	Environmentally Sealed Silver Contact (5A/28VAC)					
<b>NO. OF SWITCHES</b>						
1	One	2	Two [Except for code N12A]			
<b>CABLE ENTRY</b>						
Q1	PG 13.5	Q2	½" NPT (F)	Q3	½" BSP (F)	
Q4	DIN Connector	Q5	¾" ET (F)			
<b>PROCESS CONNECTION</b>						
P23	¼" BSP (F)	P3	¼" BSP (M)	P5	3/8" BSP (M)	
P7	½" BSP (M)	P24	¼" NPT (F)	P4	¼" NPT (M)	
P8	½" NPT (M)	P28	½" NPT (F)	A25	1.5" RF 150#	
A26	1.5" RF 300#	A27	1.5" RF 600#	A31	2" RF 150#	
A32	2" RF 300#	A33	2" RF 600#			
<b>OTHER OPTIONS</b>						
E16	Calibration Certificate	E27	AISI 304 SS tag plate	E65	Wall mounting bracket	
E66	2" Pipe mounting bracket & clamp			E17	Material test certificate 3.1	
Q54	Ni-plated brass double compression cable gland					

**Ordering Example : SSKE46-1.110.S02.S02.E64.E80.N11A.1.Q1.P24/E16/E27**

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