



PRESSURE SWITCHES

DM 600

- DIAPHRAGM SEALED PISTON ● HIGH REPEATABILITY ●
- WEATHERPROOF ENCLOSURE ● VERY COMPACT ●
- TAMPER PROOF RANGE SETTING ●



MODEL DM 601

This compact version in Switzer series 600 Pressure Switches using components of high reliability is specifically designed for OEMs such as Fire fighting, Boilers, Power Plants, SPMs.

The sensing Stainless Steel Diaphragm is welded to a Stainless Steel housing mounted external to the weatherproof instrument housing.

The mechanical movements are restricted to absolute

minimum using a diaphragm sealed piston assembly which ensures long term stability.

The instrument is in Pressure Die Cast Aluminium housing which is best suited for harsh and outdoor mountings.

The sensing element and wetted part being AISI 316 Stainless Steel as standard, it has high compatibility for process applications of air, gas, water, steam, oil and other chemicals.

GENERAL SPECIFICATIONS

Enclosure	Aluminium pressure die cast weatherproof to IP:66	Process Connection	1/4" NPT(F) & 1/2 " NPT(F) standard. Adaptors for other threads optional
Repeatability	±1% FSR (Note 1)	Max. Working Pressure	60 bar (all ranges)
Range Setting	External with lock	Max. Fluid Temperature	170°C
Ranges	Refer Ordering Matrix (Note 2 & 3)	Ambient Temperature	(-)10 to 60°C
Differential	SPDT Switch (Notes 4 & 5) Fixed : within 8 – 10%	Electrical Connection	3/4" ET Nylon Cable gland for 8 mm OD cable, standard. Metallic double compression Cable Gland optional.
Switching	2 x SPDT Switch (Notes 4, 5 & 6) Fixed : 12 – 15%	Mounting	On-line / Wall / Back panel
Switch Rating	Instrument quality snap acting microswitch.	Weight	600 Gms.
Switch Rating	15A, 250V AC	Confirmity	BS 6134 :1991
Sensor / Wetted Parts	316L SS Dgm with 316 SS wetted parts		



ORDERING MATRIX

Example

SENSOR

Diaphragm Sealed Piston — DM

ON-OFF DIFFERENTIAL

Fixed — 601

MATERIAL OF SENSOR AND WETTED PARTS

316L SS Dgm with 316 SS wetted parts — 2

RANGE

Range (in bar) MWP (in bar)

0.2 to 1.6	60	A
0.4 to 4	60	B
0.7 to 7	60	C
1.0 to 10	60	D
1.6 to 16	60	E

PROCESS CONNECTION

1/4" NPTF — 0

1/2" NPTF — 6

Others through adaptors — 9

SWITCH CODE §

SPDT, 15A, 250V AC — 3

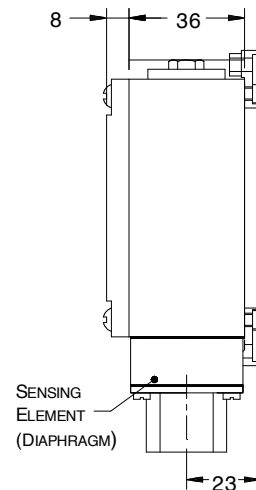
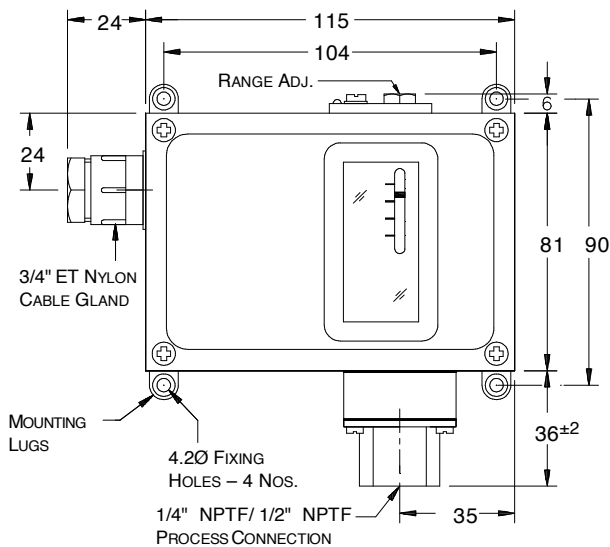
2 x SPDT, 15A, 250V AC — 33

§ DC Rating — Resistive : 0.5A 110V / 0.25A 220V / 8A 24V
— Inductive : 0.2A 110V / 0.10A 220V / 7A 24V

NOTES

- Accuracy and repeatability are same for a Pressure Switch, which is a switching device and not a measuring instrument.
- Select working range of the instrument such that the set pressure lies between 35% to 70% of range span.
- On and off settings should not exceed the upper or lower range value.
- Switching differentials are at midscale and will vary with range setting and operating conditions.
- A pressure switch is a switching device and not a measuring instrument — even though it has a scale to assist setting. For this reason, Test Certificates will not contain individual ON-OFF switching values at different scale readings. Maximum differential obtained alone will be declared, besides other specifications.
- DPDT action is achieved by 2 x SPDT switches synchronised to practical limits i.e., $\pm 2\%$ of FSR.
Contact life of microswitches are 5×10^5 switching cycles for nominal load. To quench DC sparks, use diode in parallel with inductance, ensuring polarity. A 'R-C' network is also recommended with 'R' value in Ohms equal to coil resistance and 'C' value in micro Farads equal to holding current in Amps.
- Higher process temperatures can be brought down by using longer pressure piping. Ask for piping nomogram # 441184-4.
Ensure that impulse pipework applies no stress on sensing element housing and use spanners to hold pressure port / housing when connections are made.
- DM 601 is weatherproof only if all entries and joint faces are properly sealed.
- A more versatile and wide range of Pressure & Differential Pressure Switches are available in Series 200, 020, 300, 931 & S20/920 Series upto 600 bar.
- Accuracy figures are exclusive of test equipment tolerance on the claimed values.
- All performance data guaranteed $\pm 5\%$.

MOUNTING DIMENSIONS



All dimensions are in mm

This is not a contractual document. Prior notification of changes in specifications is impracticable due to continuous improvement

FOR SWITZER'S OFFICES IN INDIA

CHECK AT:

<http://www.switzerinstrument.com/offices.htm>