

PRESSURE SWITCHES
PRESSURE DIFFERENCE SWITCHES
VACUUM SWITCHES



**Customisation for low volumes
at affordable costs,
to make YOU competitive**

COMPACT



PROCESS



INDUSTRIAL



FLAMEPROOF



with
IECEX
CoC

Baseefa
APPROVED



www.orion-instruments.com

About Us

Established in 1977, Kaustubha Udyog, now an ISO 9001:2008 company, has emerged as a leading manufacturer of pressure switches, with a customer base spanning a wide spectrum : Light & Heavy Engineering, Automation Systems, Paint Systems, Gas Mixing Systems, Boilers, Process Industries, R & D Labs, Medical Equipments and Space & Defence Applications.

We make pressure switches from vacuum to 600 bar, available in fixed differential, adjustable differential and pressure difference models. We also supply flameproof switches for applications in hazardous areas and various media like oil, water, steam, saline, paints, corrosive and non-corrosive gases.

Many of our pressure switches are today working silently and reliably on Machine Tools, Lubrication Systems, Compressors and highly sensitive and vital Medical Equipments.

Our wide-ranging product mix, our obsession with quality, very competitive pricing and the willingness to work to customer needs and budgets has seen us multiplying our turnover every year.

If you do not find an answer to your needs in our product range, we will work with you to evolve a right and cost effective solution tailored to your unique needs.

We shall be happy to hear from you.

ABOUT QUALITY

Quality assurance is an attitude of everyone at Kaustubha Udyog. The emphasis from everyone at Kaustubha Udyog is not on defect detection, but on defect prevention and elimination. The QA team is not under Production and reports directly to Management.

CUSTOM DESIGN

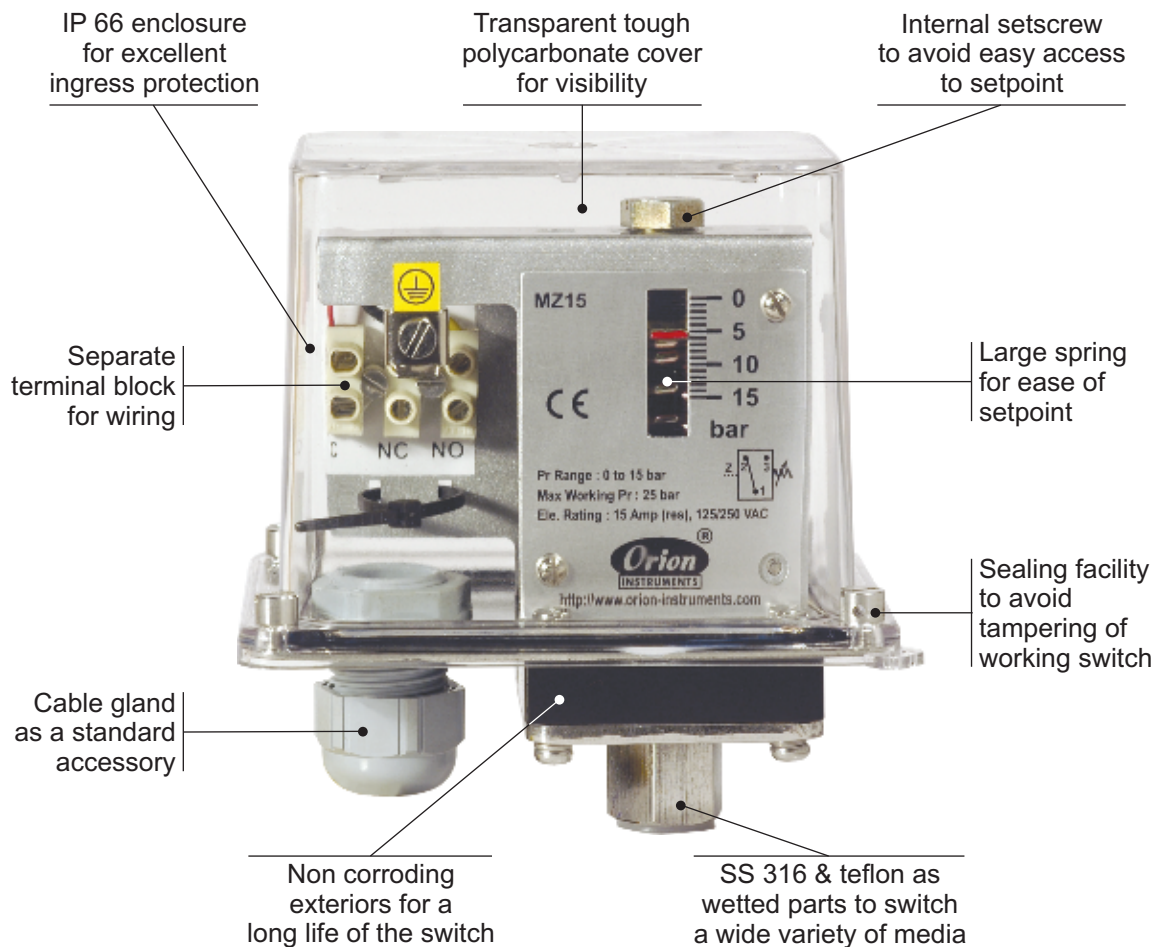
This catalogue lists most of the popular models of Orion and Parus pressure switches. A variety of other nonstandard models are not listed.

If you do not find an answer for your particular application, please get in touch with us. We will work with you to evolve a right solution, one that is not overbuilt or underbuilt, and in the most cost-effective way.

In many cases, more than one product may provide a solution to your needs. For a cost-effective solution, compare prices and characteristics / features. Always remember that the end cost to you includes initial product price, plus the installation and also the service.



MZ PROCESS PRESSURE SWITCHES



INTRODUCTION

MZ series pressure switches have been designed for applications that require cost effective outdoor mounting, in aggressive environments. The tough polycarbonate cover, fitted on a stainless steel base, retained by SS screws offers excellent resistance to corrosion, and also allows a view of the internal scale and working of the pressure switch. The reliable microswitch offers narrow deadband, switching values, which have excellent repeatability. By using appropriate capsules and wetted parts, MZ series pressure switches can be used for thousands of applications.

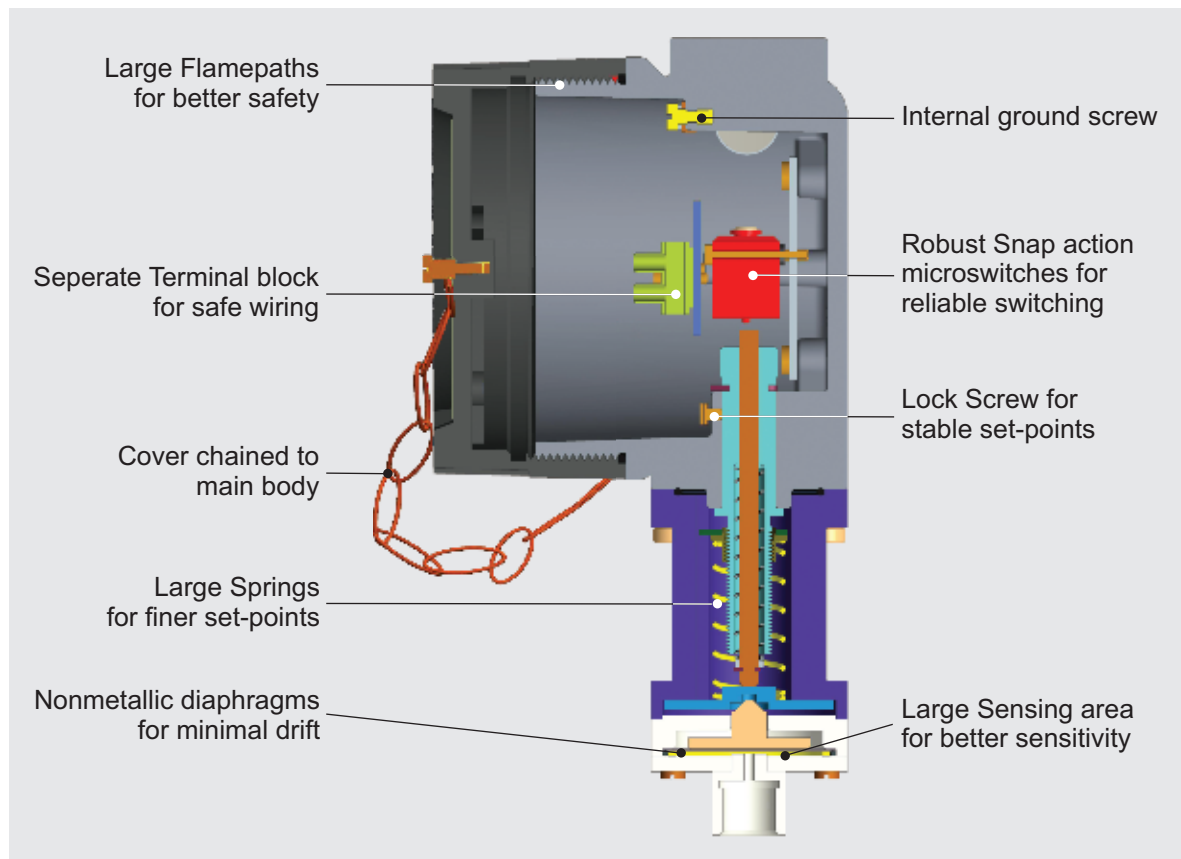
APPLICATIONS

- Power Generation
- Burners and Furnaces
- Glass and Metal Industries
- Chemical Industries
- Steel Industry
- Hydraulic, Steam and Gas Turbines
- Boilers & Compressors
- Machine tools
- Water treatment
- Sugar and Paper Mills
- Fire protection
- Surgical gas, Breweries, Milk industries
- Tyre Industry

PRODUCT SPECIFICATIONS:

- Storage temperature : Atmospheric temperature
- Operating ambient temperature : -20° C to + 60° C
- Media temperature : for rubber diaphragms 80° C max
- Can be offered for higher temperatures with other capsule combinations
- Setpoint repeatability : ± 1 % of FSR
- Enclosure : Tough transparent polycarbonate to IP 66
- Switch output : SPDT
- Process connection : $\frac{1}{4}$ "BSPF standard,
- Approximate weight : 1 kg

FA/FC/FM FLAMEPROOF PRESSURE SWITCHES



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
For rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx BAS 07 0866X	Issue No. 1	Certificate history: Issue No. 1 (2016-10-4) Issue No. 2 (2020-3-4)
Status: Current	Date of issue: 2016-10-05	Page 1 of 4
Applicant: Kvaamukha Utting 7, Panchajanya Society Kumbhari Nashik-422 008 India		
Electrical Apparatus: Flameproof Pressure Switch Optional accessory:		
Type of Protection: Ex d, Ex tb		
Marking: Ex d IIC Gb Ex tb IIC Gb T100°C (-20°C to Ta +40°C) IP68		
Approved for issue on behalf of the IECEx Certification Body:		
Position: Managing Director		
Signature: (for printed version)		
Date: 6/12/16		
<p>1. This certificate and schedule may only be reproduced in full.</p> <p>2. This certificate is not transferable and remains the property of the issuing body.</p> <p>3. The status and authenticity of this certificate may be verified by visiting the Official IECEx Website.</p>		
<p>Certificate issued by: Baseefa Rushmore Business Park Stables Lane Barton Derbyshire S41 1 9WZ United Kingdom</p> <p></p>		

Certificate Number: **Baseefa 27AT0328E6** Issued & Printed: 2016 Page 1 of 2

Baseefa

IEC - TYPE EXAMINATION CERTIFICATE

Apparatus for Protection Scheme (intended for use in Potentially Explosive Atmospheres)
Ex d, Ex tb IIC Gb

1. Type of Examination: Ex d, Ex tb IIC Gb	2. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
3. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	4. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
5. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	6. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
7. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	8. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
9. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	10. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
11. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	12. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
13. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	14. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
15. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	16. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
17. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	18. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
19. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	20. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
21. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	22. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
23. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	24. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
25. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	26. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
27. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	28. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
29. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	30. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
31. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	32. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
33. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	34. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
35. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	36. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
37. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	38. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
39. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	40. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
41. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	42. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
43. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	44. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
45. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	46. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
47. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	48. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
49. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	50. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
51. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	52. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
53. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	54. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
55. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	56. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
57. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	58. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
59. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	60. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
61. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	62. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
63. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	64. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
65. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	66. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
67. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	68. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
69. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	70. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
71. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	72. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
73. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	74. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
75. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	76. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
77. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	78. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
79. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	80. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
81. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	82. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
83. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	84. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
85. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	86. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
87. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	88. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
89. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	90. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
91. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	92. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
93. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	94. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
95. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	96. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
97. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	98. Approval of Protection Scheme: Ex d, Ex tb IIC Gb
99. Approval of Protection Scheme: Ex d, Ex tb IIC Gb	100. Approval of Protection Scheme: Ex d, Ex tb IIC Gb

This certificate is issued under the terms and conditions of Annex 2001.1.1.1. It is not a guarantee of performance and is not a warranty. It is a statement of conformity with the requirements of the IECEx Scheme.

Baseefa
Rushmore Business Park
Stables Lane
Barton
Derbyshire
S41 1 9WZ
United Kingdom

Baseefa
Rushmore Business Park
Stables Lane
Barton
Derbyshire
S41 1 9WZ
United Kingdom

HIGH RANGE PRESSURE SWITCHES

(typically from 0.067 barg to 25 barg)



LOW RANGE PRESSURE SWITCHES

(typically from 1.5 mbarg to 250 mbarg)



HIGH RANGE PRESSURE DIFFERENCE SWITCHES

(typically from 0.1 barg to 25 barg)



LOW RANGE PRESSURE DIFFERENCE SWITCHES

(typically from 1.5 mbarg to 250 mbarg)



VACUUM SWITCHES

(typically from 760 mmHg to atmospheric pressure)



HYDRAULIC RANGE PRESSURE SWITCHES

(typically from 3 barg to 400 barg)



INTRODUCTION

FA/FC/FM pressure switches have been designed for use in areas which are potentially explosive. These can be used, by selecting an appropriate construction, for gas groups IIA, IIB and IIC. They can also be used in underground mines by selecting Grey CI flameproof heads.

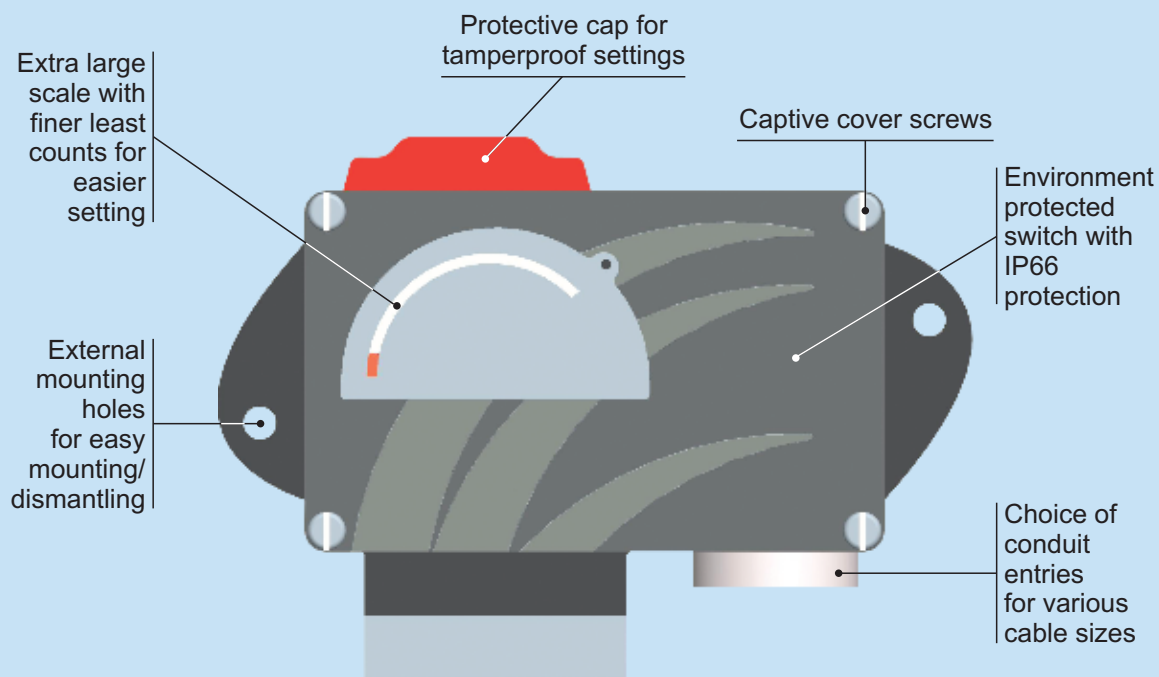
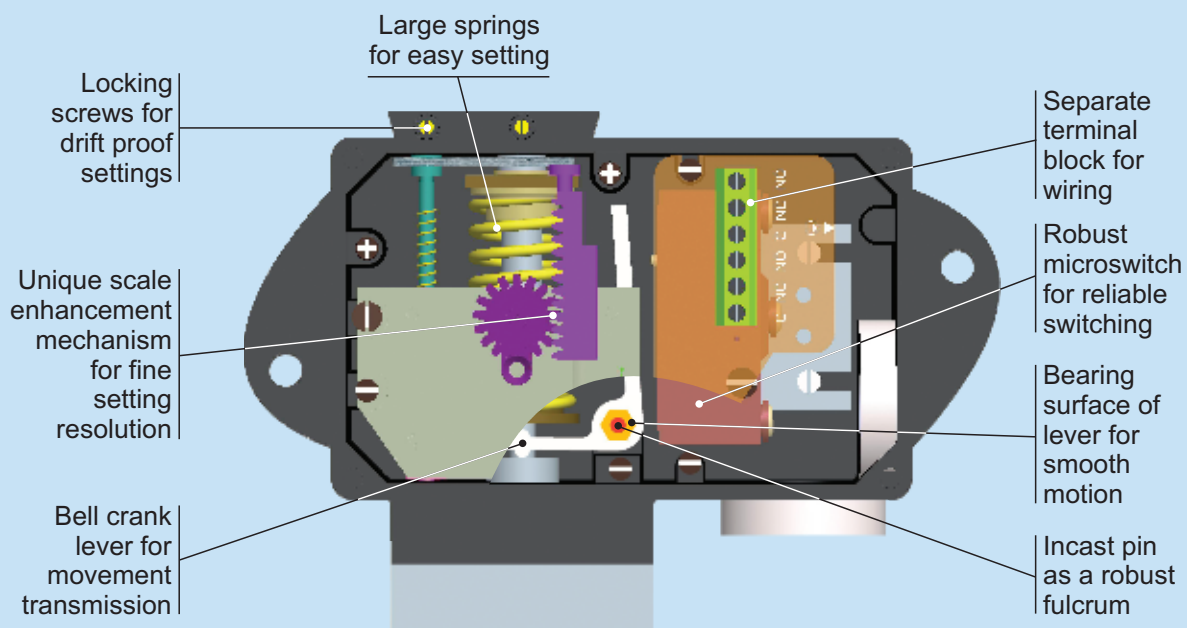
APPLICATIONS

- Oil & Gas pipelines and distribution centers
- Petrochemical
- Bulk Drug & Pharma
- Automotive refuelling stations or petrol stations
- Oil refineries, rigs and processing plants
- Chemical processing plants
- Printing industries, paper and textiles
- Hospital operating theatres
- Aircraft refuelling and hangars
- Surface coating industries
- Underground coalmines
- Sewerage treatment plants
- Grain handling and storage
- Metal surface grinding, especially aluminium dusts and particles

PRODUCT SPECIFICATIONS:

- Storage Temp. : Atmospheric temperature
- Operating ambient Temp. : -20° to 60° C
- Media Temp.: 80° C max.
- Set point repeatability : $\pm 1\%$ over full range
- Enclosure details : Al grade LM6 / Grey Cast Iron Casing & Cover
- Enclosure Specifications :
Protection : IP66 Standard
Exproof to IS2148 For group II-A , II-B & II-C
Grey CI enclosure for mines (Group I applications)
- Switching elements : Choice of hermetically sealed, gold plated, DPDT etc.
- Pr. Connections : $\frac{1}{4}$ " BSP, $\frac{1}{4}$ " NPT

MD INDUSTRIAL PRESSURE SWITCHES



HIGH RANGE PRESSURE SWITCHES

(typically from 0.067 barg to 25 barg)



HIGH PROOF HIGH RANGE PRESSURE SWITCHES

(typically from 0.067 barg to 25 barg, Pmax = 70 bar)



LOW RANGE PRESSURE SWITCHES

(typically from 1.5 mbarg to 250 mbarg)



HIGH RANGE PRESSURE DIFFERENCE SWITCHES

(typically from 0.1 barg to 25 barg)



HIGH PROOF HIGH RANGE ΔP SWITCHES

(typically from 0.1 barg to 25 barg, Pmax = 200 bar)



LOW RANGE PRESSURE DIFFERENCE SWITCHES

(typically from 1.5 mbarg to 250 mbarg)



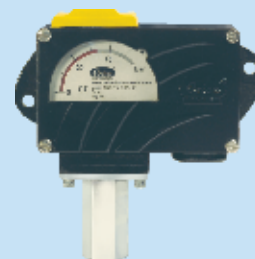
VACUUM SWITCHES

(typically from 760 mm Hg to atmospheric pressure)



HYDRAULIC RANGE PRESSURE SWITCHES

(typically from 3 barg to 400 barg)



INTRODUCTION

MD series pressure switches have been designed for applications that require robust, long lasting switches, coupled with a high accuracy and repeatability, in adverse conditions. By using appropriate capsules and wetted parts, MD series pressure switches can be used for thousands of applications. A wide choice of electrical elements including SPDT, DPDT, gold plated contacts make these switches ideal for a variety of critical applications. A wide scale, when opted for, offers ease of setting, given the smaller least counts.

APPLICATIONS

- Power Generation
- Burners and Furnaces
- Glass and Metal Industries
- Chemical Industries
- Steel Industry
- Hydraulic, Steam and Gas Turbines
- Boilers & Compressors
- Machine tools
- Railway braking systems
- Water treatment
- Sugar and Paper Mills
- Fire protection
- Surgical gas, Breweries, Milk industries
- Tyre Industry
- Natural Gas, LPG storage and transportation

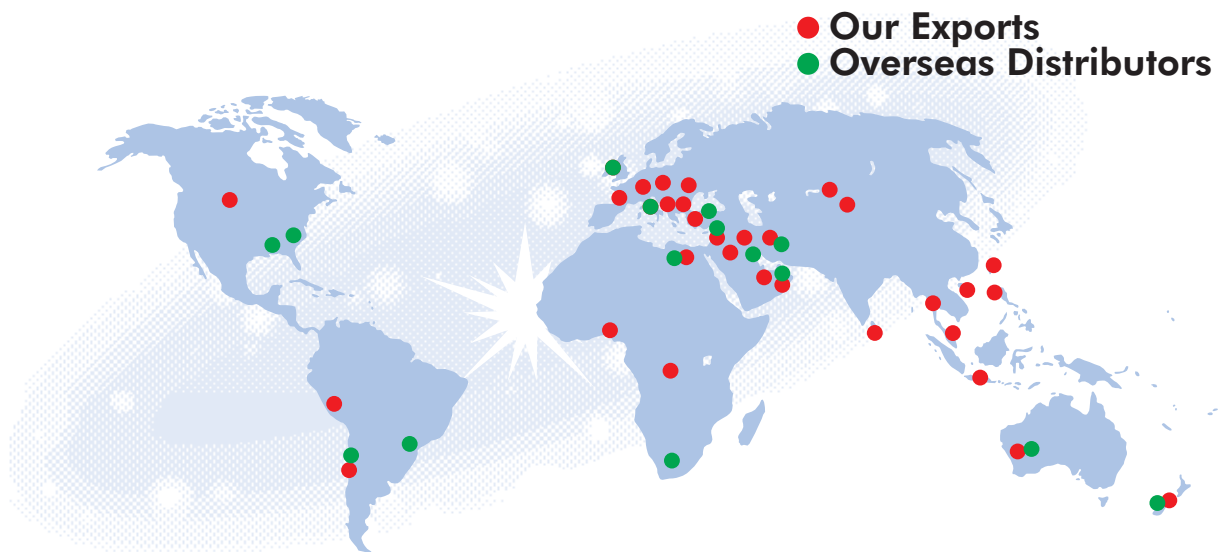
PRODUCT SPECIFICATIONS:

- Storage temperature : Atmospheric temperature
- Operating ambient temperature : -20° C to +60° C
- Media temperature : for rubber diaphragms 80° C max
- Can be offered for higher temperatures with other capsule combinations
- Setpoint repeatability : $\pm 1\%$ of FSR
- Enclosure : Die cast aluminium to IP 66
- Switch output : SPDT, DPDT, hermetically sealed, gold plated contacts
- Process connection : $\frac{1}{4}$ "BSP standard, other options like flanges, triclave clamps, diaphragm seals available.
- Approximate weight : 2 kgs (without accessories)

COMPACT



● Our Exports
● Overseas Distributors



- Seeking Alliances !
- Suchen Zusammenarbeit !
- Chercher des Alliances !
- Buscar Alianzas !

Note : As efforts are made constantly to improve both design and method of manufacture, the apparatus supplied may differ in detail from illustration and data printed. Please check the specifications while ordering



Kaustubha Udyog AN ISO9001:2008 COMPANY

S. No. 36/1/1, Sinhgad Road, Vadgaon Khurd,
Near Lokmat Press, Pune 411 041 INDIA
Tel.: +91-(0) 20-24393577 / 24393877
Telefax : +91-(0) 20-24393577 / 25460486
Email : pressure@vsnl.com

Website : <http://www.orion-instruments.com>