

Differential Pressure Gauge with limit switch contact assembly

Measuring Unit: 2 Bourdon Tubes / 1 Pointer

Stainless Steel Case with Bayonet Ring,
Standard (DiRZCh) or with Oilfilling (DiRZChOe)

Acc. Class. 1.6
NCS 160

Models

DiRZCh 160
DiRZChOe 160

This data sheet contains information on the ordering text and the minimum pressure ranges of differential pressure gauges with bourdon tube model DiRZCh / DiRZChOe with limit switch contact assembly, as well as drawings with the position of the electrical connection.

Data sheet 5111 basically contains the details and ordering information for these basic models without limit switch contact assembly. These information are also valid for the version with limit switch contact assembly, as far as deviations are not mentioned

Model code for filled versions with limit switch contact assembly: **DiRZChOe**

A special oil filling instead of glycerine is used as **case filling**.

Detailed description to the function and the use of our limit switch contact assemblies can be found on **general information leaflet 9000**.

Further information, especially to the use of different switching operations can be found on the data sheets of the corresponding limit switch contact assemblies.

Electromechanical limit switch contact assembly data sheet **9100**
(standard- and magnet contact)

Inductive limit switch contact assembly data sheet **9200**

Electronical limit switch contact assembly data sheet **9201**

Minimum Pressure Ranges

Every pressure gauge needs directive forces of the measuring element for the operation of the limit switch contact assembly. An installation is only possible for the below mentioned pressure ranges ¹⁾

Model Limit switch contact assembly	Minimum pressure range in bar ¹⁾
1 x standard	1.0
1 x standard	1.6
1 x standard	4.0
1 x magnetic	1.6
1 x magnetic	2.5
1 x magnetic	4.0
1 x inductive	1.0
1 x inductive	1.6
1 x inductive	4.0
1 x electronic	1.0
1 x electronic	1.6
1 x electronic	4.0

¹⁾ lower pressure ranges upon request

The set point pointers for pressure gauges with 3 limit values are not all necessarily adjustable on top of each other. You should always indicate which pointers should be adjustable on top of each other, resp. where the set point pointers should be.

Because of increased contact resistances at the mechanical switch contacts you should prefer electronical limit switch contact assemblies for the filled version



Window

Laminated safety glass

Electrical Connection

• for mechanical limit switch contact assembly
(standard and magnetic contact)
Universal plug connector

• for inductive limit switch contact assembly
Terminal box

Position of the connection

right at the case (topview of the dial),
for version front flange (Fr) at the back of the case
(compare drawings on the reverse side)

The universal plug connector has got 6 connections and one ground terminal. The terminal box has got 6 connections.

Ordering Information:

The ordering code of the particular models (compare data sheet 5111, but filled version **DiRZChOe**) is being completed by the

- code letters for the model of the limit switch contact assembly
S, M, I, E and the
- code letter for the switching operation:
e.g. **1, 2, 11, 12, 21, 22** etc.,
compare data sheet 9100, 9200 resp. 9201

Examples for ordering codes:

- DiRZChOe 160-3, 0-10 bar, G ½ B, I1
- DiRZCh 160-3, Fr, ½" NPT, 0-6 bar, M12



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Case Configurations, Code Letters, Dimensional Data and Weight

Deviations compared to the basic model data sheet 5111:

- Dimensional data **b**, **b1** (front-to-back size) , see table below

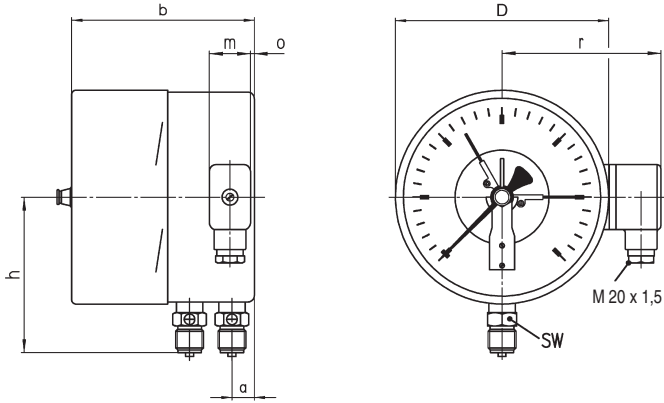
The remaining dimensions can be found on data sheet 5111.

The exact position of the plug connector, resp. the terminal box is shown on the drawings (see below).

Deviating mounting only upon request and including additional costs.

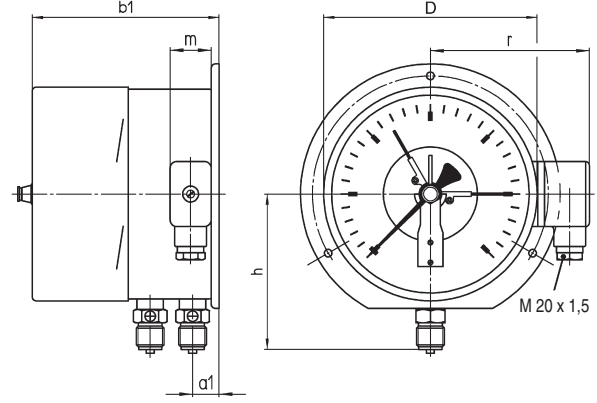
Bottom connection parallel one behind the other

Universal plug connector / Terminal box



Bottom connections parallel one behind the other, rear mounting flange for surface mounting (Rh)

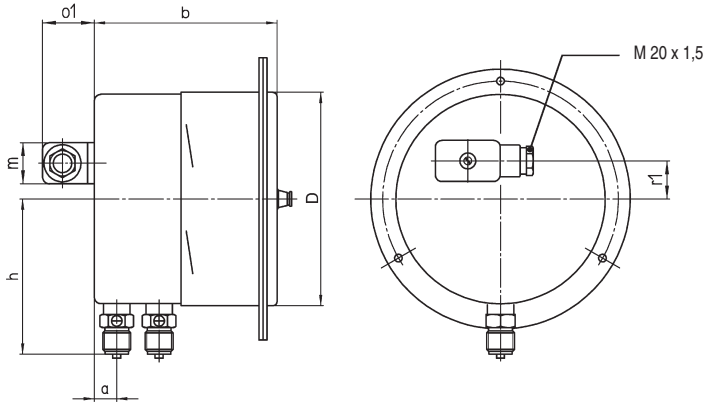
Universal plug connector / Terminal box



only model DiRCh 160 (standard version):

bottom connections parallel one behind the other
front flange for panel mounting (Fr)

Universal plug connector / Terminal Box



Version Fr = non-removable front flange for panel mounting with slotted holes and removable cover ring

Dimensional data (mm/ inches) and weights (kg / lb)

Nominal Case Size	a	a1	b	b1	D	h ±1	m	r	r1	o	o1	SW	Weight (approx.)	
													DiRChZ	DiRChZOe
160 (6")	17 .67	20.5 .80	138 5.43	141.5 5.57	161 6.34	117 4.61	31 1.22	117 4.61	27 1.06	3 .12	37 1.46	22 .87	1.800 3.96	3.800 8.38

You have to add 12 mm (0.47") to the dimensions B and B1 for two inductive or electronic limit switch contact assemblies with **the same** switching operation (I 11, I 22, resp. E 11, E 22, also for triple limit switch contact assemblies).

Technical changes, replacement of materials and errors excepted