

6. Operation

6.1 Setting of Damping

The potentiometer for adjusting the damping is located to the left of the display (see Fig. 2). The damping of the device can be adjusted in the range of 0 to 5000ms by turning the potentiometer using a suitable Phillips screwdriver.

6.2 Menu Buttons

The DMU 20 D comes standard with a display. Without a display, the device can be zeroed via the menu buttons. Zeroing is made by pressing the left menu button for at least 1 second.

6.3 Configuration Switches

3-wire variant:

1	2	3	4
Off	0 ... 10 V / 0 ... 20 mA		
On	0 ... 5 V / 4 ... 20 mA		
Off	Automatic zeroing off		
On	Zeroing active at start and after every 24h		
Nominal pressure range			
Off	1.6	4	10
On	40	250	1000
Adjustable customer-specifically			
Off	1.0	2.5	6
On	25	60	400
Off	160		
On	600		

2-wire variant:

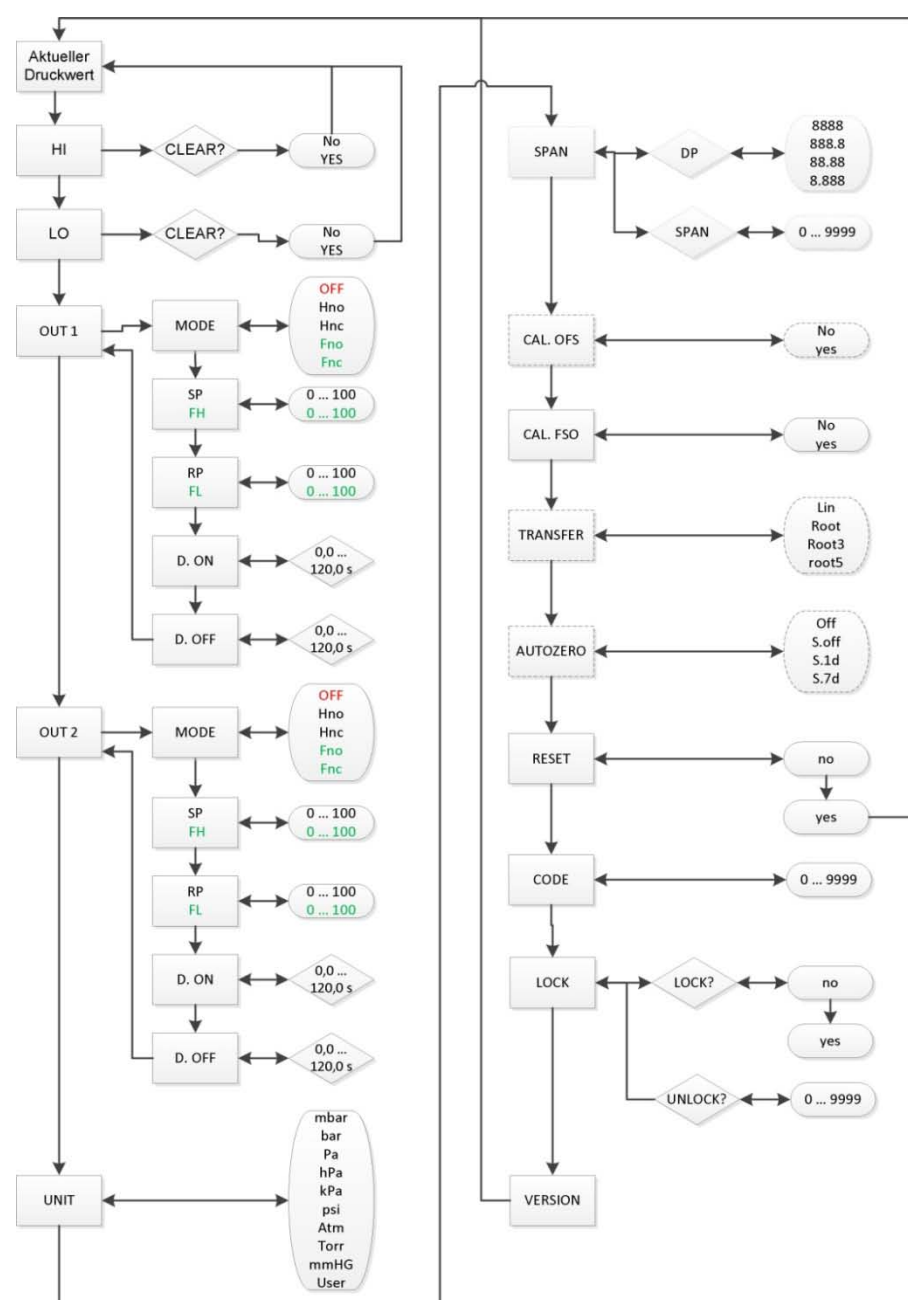
1	2	3	4
Off	Off	Automatic zeroing off	
On	Off	Zeroing active at start	
Off	On	Zeroing active at start, then every 24h	
On	On	Zeroing active at start, then every 7 days	
Nominal pressure range			
Off	1.6	4	10
On	40	50	1000
Adjustable customer-specifically			
On	1.0	2.5	6
Off	2	5	60
On	16	0	600

In case of special pressure ranges, the switches 1 and 2 have no function.

6.4 Display Features (Standard)

- 2-line LC display
- Visible area: 32.5 x 22.5 mm
- 5-digit main display, 7 segments
- Numeral height: 8 mm
- Display range: ±9999, 8-digit additional display, 14 segments
- Height: 5mm
- Bar graph, 52 segments

6.5 Menu System Structure (from Version 3.01)



6.6 Menu List

Activation	Activation of the menu with the right button
Menu HI	Shows the maximum value since last start-up Possible option: Deletion of value (CLEAR no / yes) (deletes the upper and lower max. values) Deleting the value: Press the left button → "CLEAR?" will flash in the lower line; the upper line will show "no"; the right button can be used to toggle between "yes" and "no". Acknowledge the selection by pressing the left button.
Menu LO	Shows the minimum value since last start-up Possible option: Deletion of value (CLEAR no / yes) (deletes the upper and lower min. values) Deleting the value: Press the left button → "CLEAR?" will flash in the lower line; the upper line will show "no"; the right button can be used to toggle between "yes" and "no". Acknowledge the selection by pressing the left button.
Menu OUT 1 / OUT 2	Menu item only active for available contacts → Off Deactive → Hno hysteresis, normally open → Hnc hysteresis, normally closed → Fno window, normally open → Fnc window, normally closed MODE will flash in the lower line; the upper line will show the current setting, e.g. "Hno"; the right button can be used to select the contact. Acknowledge the selection by pressing the left button.
SP FH	Values for switching points in % Setting the switching points: Press the left button → "SP %" will flash in the lower line; the upper line will show the current value; the right button can be used to adjust the value. Acknowledge the selection by pressing the left button.
RP FL	Values for switch-back points in % Setting the switch-back points: Press the left button → "SP %" will flash in the lower line; the upper line will show the current value; the right button can be used to adjust the value. Acknowledge the selection by pressing the left button.
D. ON	Switch-on delay in s Setting the switch-on delay: Press the left button → "D. ON s" will flash in the lower line; the upper line will show the current value; the right button can be used to adjust the value between 0.0 and 120.0. Acknowledge the selection by pressing the left button.
D. OFF	Switch-back delay in s Setting the switch-back delay: Press the left button → "D. OFF s" will flash in the lower line; the upper line will show the current value; the right button can be used to adjust the value between 0.0 and 120.0. Acknowledge the selection by pressing the left button.
Menu UNIT	Setting the pressure unit Adjustable units: [mbar], [bar], [Pa], [hPa], [kPa], [psi], [Atm], [torr], [mmHG], or [user] (if the USER unit has been selected the maximum display value shown can be set under the menu item "Span") Setting the unit: Press the left button → "unit" will flash in the lower line; the upper line will show the unit currently set; the right button can be used to select the unit. Acknowledge the selection by pressing the left button.
Menu SPAN	The range value for the display can be adjusted if the user unit has been selected Setting DP / SPAN: Press the left button → "SPAN" will be shown in the lower line; the upper line will show the value currently set. Press the left button again: "DP" will flash in the lower line; the upper line will show, for instance, 8.888; the right button can be used to change the decimal place, e.g. 88.88. Acknowledge the selection by pressing the left button. Now "SPAN" will flash in the lower line, the upper line will show the value currently set; the left button can be used to select the position, the right button can be used to change the respective numerical value. The selection is acknowledged by pressing the left button.
Menu Cal. OFS	Calibrating the offset to the currently applied value (Order code for standard design: -000) Calibrating the offset: Press the left button → "CAL. OFS?" will flash in the lower line; the upper line will show "no"; the right button can be used to toggle between "yes" and "no". Acknowledge the selection by pressing the left button.
Menu Cal. FSO	Calibrating the end point (display and analog output) to the currently applied pressure Calibrating the end point: Press the left button → "CAL. FSO?" will flash in the lower line; the upper line will show "no"; the right button can be used to toggle between "yes" and "no". Acknowledge the selection by pressing the left button.
Menu TRANSFER	Root-extracted output signal (Order code for special design: -605) → Lin Standard – Linear → root $y = x^{0.5}$ → root3 $y = x^{1.5}$ → root5 $y = x^{2.5}$ } cut off 0 ... 10%
Menu AUTOZERO	Menu item only visible if a zeroing valve is present (Value can only be read! Setting only possible via configuration switches.) (Order code: -600) → Off no automatic zeroing → S. Off upon switching-on the device → S. 1d upon switching-on and after every period of 24 hours → S. 7d upon switching-on and after every period of 7 days
Menu RESET	Resets all menu settings to the factory settings Reset: Press the left button → "RESET" will flash in the lower line; the upper line will show "no"; the right button can be used to toggle between "yes" and "no". Acknowledge the selection by pressing the left button.
Menu CODE	Activation of locking code Set all values to a value unequal to 0 and acknowledge <input type="checkbox"/> The menu item LOCK will appear in the display
Menu LOCK	Locking the menu LOCK? The right button can be used to toggle between "yes" and "no". Acknowledge the selection by pressing the left button <input type="checkbox"/> If YES is selected, the menu will be closed immediately; the measured value will be displayed. (The locking code will be deactivated if all values have been set to 0 – If the code is activated the device will automatically lock after 2 minutes or after disconnecting the electrical connection) or UNLOCK? Enter the correct code in order to have the menu displayed again.
Menu VERSION	Displays the current firmware version

6.7 Dimensions / Fastening

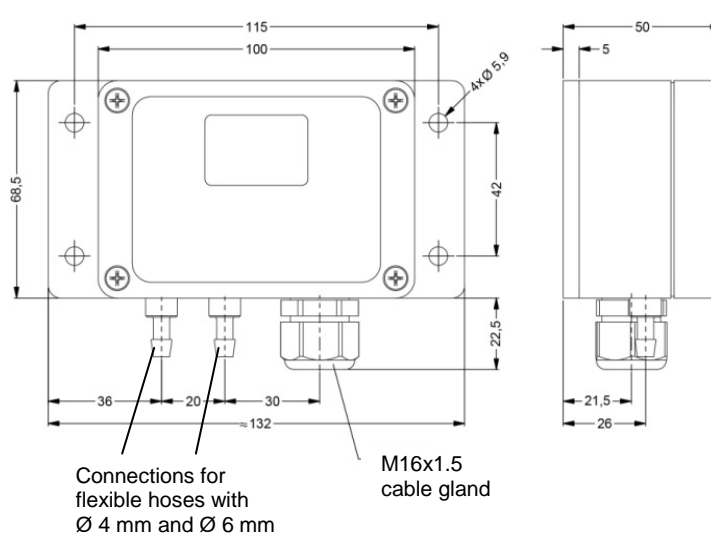
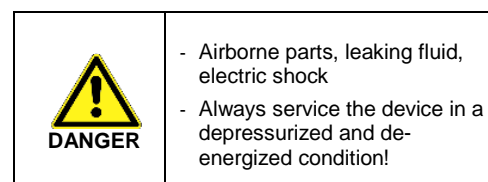


Fig. 3: Dimension drawing of DMU 20 D

7 Maintenance / Removal from Service



In principle, the device requires no maintenance. If necessary, clean the housing of the device using a moist cloth and a non-aggressive cleaning solution.

NOTE – After dismantling, mechanical connections must be fitted with protective caps.

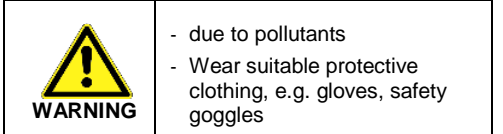
8.1 Service/Repair

Information on service / repair:

- www.afriso.com
- info@afriso.com
- service@afriso.e

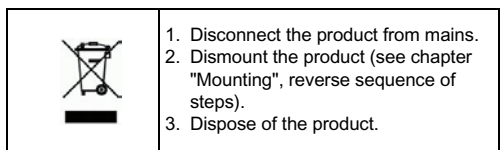
8.2 Returning the device

Get in touch with us before returning your product (service@afriso.de).



9 Decommissioning, disposal

Dispose of the product in compliance with all applicable directives, standards and safety regulations.



11 EU Declaration of Conformity

AFRISO
Technik für Umweltschutz

EU - Konformitätserklärung
EU Declaration of Conformity / Déclaration EU de conformité / Declaración de conformidad CE / Declaração de conformidade CE / Deklaracja zgodności UE

Name und Anschrift des Herstellers: AFRISO-EURO-INDEX GmbH, Lindenstraße 20, 74363 Güglingen
Manufacturer / Fabricant / Fabricante / Nome e endereço do fabricante / Produsător:
Erzeugnis: Druckmessumformer
Product / Produit / Producto / Produto / Produkt:
Typenbezeichnung: DMU 20 D
Type / Type / Tipo / Tipo / Typ:
Betriebsdaten: DC 11 – 32 V
Techn. Details / Caractéristiques / Características / Detalhes técnicos / Diate tecniche:

Wir erklären in alleiniger Verantwortung, dass das bezeichnete Erzeugnis mit den Vorschriften folgender Europäischer Richtlinien übereinstimmt:
We declare under our sole responsibility that the above mentioned product meets the requirements of the following European Directives:
Le produit mentionné est conforme aux prescriptions des Directives Européennes suivantes:
El producto indicado cumple con las prescripciones de las Directivas Europeas siguientes:
O produto indicado cumpre com as prescrições das seguintes Diretivas Europeas:
Wymieniony wyżej produkt spełnia wymagania następujących Dyrektyw Europejskich:

Elektromagnetische Verträglichkeit (2014/20/EU)
Directive Electromagnetic Compatibility / Directive compatibilité Electromagnétique / Directiva compatibilitate electromagnetică / Diretiva sobre compatibilidade eletromagnética / Dyrektywa kompatybilności elektromagnetycznej
EN 61326-1:2013

RoHS-Richtlinie (2011/65/EU)
RoHS Directive / Directive RoHS / Diretiva RoHS / Diretiva RoHS / Dyrektywa RoHS
EN IEC 63000:2018

Unterzeichner: Dr. Spalth, Geschäftsführer Technik
Signed / Signataire / Firmante / Assinado por / Podpisal:
Technical Director / Diretor Técnico / Dyrektor Techniczny

1. Oktober 2021
Datum / Date / Fecha / Data

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