

Diaphragm seal testing device

Testing diaphragm seals without opening the process

Type Series MP1000



Features

- Testing the diaphragm seal without opening the process
- Detection of deformation and damage to the diaphragm (perforation, deposits, deformation, corrosion)
- For diaphragm seal systems with REconnect quick coupling device
- Suitable for battery operation
- Calibration certificate per EN 10204-3.1
- Calibration adapter for calibrators with G1/2" connection

Application

The diaphragm seal testing device enables easy testing of diaphragm seals while they remain installed - without interrupting the ongoing process. With the REconnect quick-coupling device (MK1000 series), the measuring device is disconnected from the diaphragm seal, which can then be connected directly to the testing device. This allows the proper functioning of the diaphragm seal to be tested and verified with confidence.

The factory-installed calibration adapter is used to adjust the test device to factory calibrators.

The optional storage case is designed to hold up to two diaphragm seal testing devices.

Application area

- Pharmaceutical industry
- Food industry
- Chemical and petrochemical industry
- Plant and machinery engineering
- General process technology

Constructional design

Design:	robust stainless steel case, continuously rotatable by $\pm 170^\circ$ case surface blasted
Material case:	stainless steel mat.no. 1.4301/1.4305 (304/303)
Material front cover:	stainless steel mat.no. 1.4305 (303)
Gaskets:	Silicone / NBR
Material window:	non-splintering glass
Weight:	approx. 1.8 kg
Type plate:	lasered

Measuring system

Nominal range:	0...1 bar, overload limit 3 bar
Accuracy of pressure transmitter:	$\pm 0.1\%$
Volumizer:	for checking the diaphragm diameter (dM) <ul style="list-style-type: none">■ from 24 to 27 mm■ from 34 to 40 mm with safety clip (red) to protect against misuse
Device connection:	suitable for diaphragm seals with REconnect quick coupling device
Pressure transmission fluid:	synthetic oil, free of silicone FD1 (others on request)
Calibration adapter:	suitable for pressure calibrators with G1/2" connection

Indication

Display:	<ul style="list-style-type: none">■ high-resolution graphic display with backlighting■ 4-button user guidance■ freely configurable display modes■ continuously rotatable
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Supply voltage

Battery operation:	2 x 9V block battery (not included in delivery)
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Temperature ranges

Ambient:	-20...50 °C
Storage:	-20...50 °C

Ambient conditions

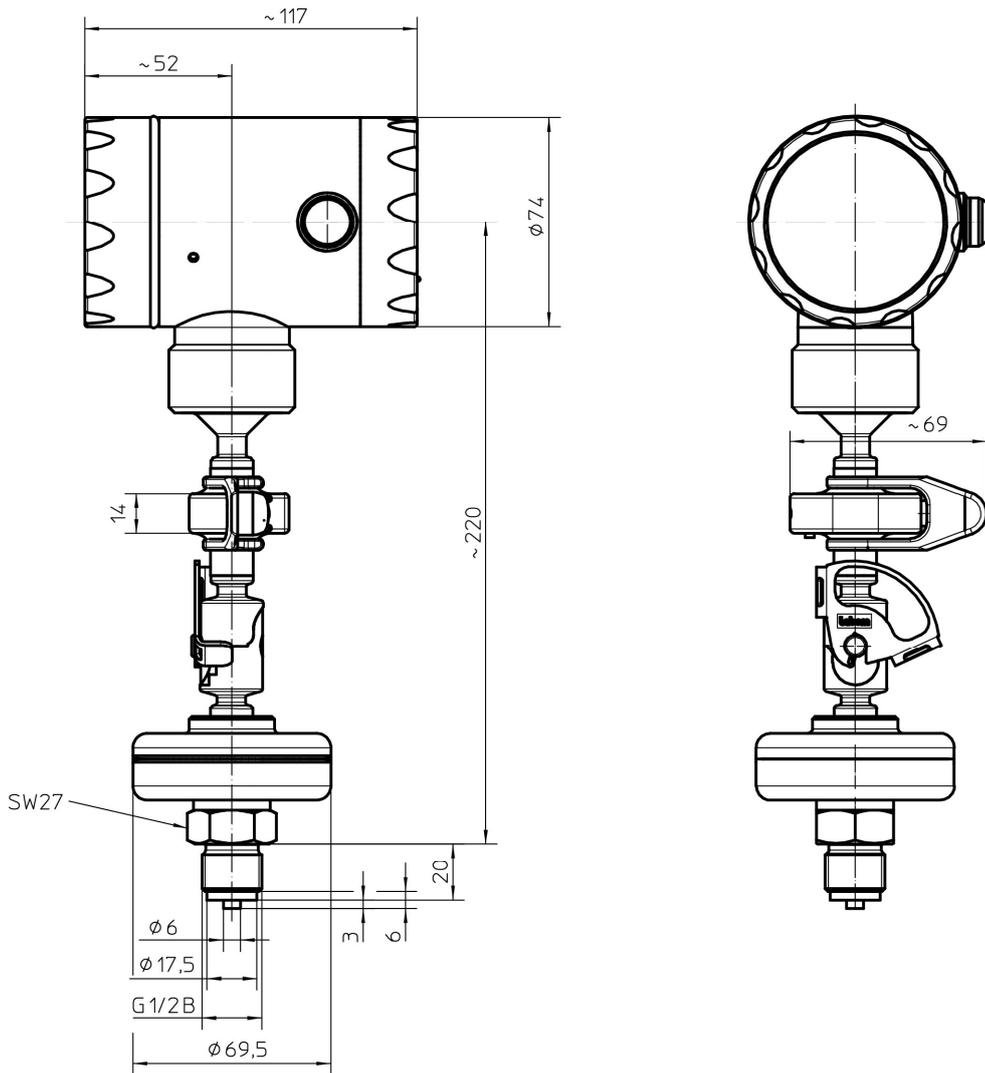
- Do not operate in humid and saline environments when the unit is separated/disassembled.
- Do not operate in dusty or particle-laden environments when the unit is separated/disassembled.

Parameterisation

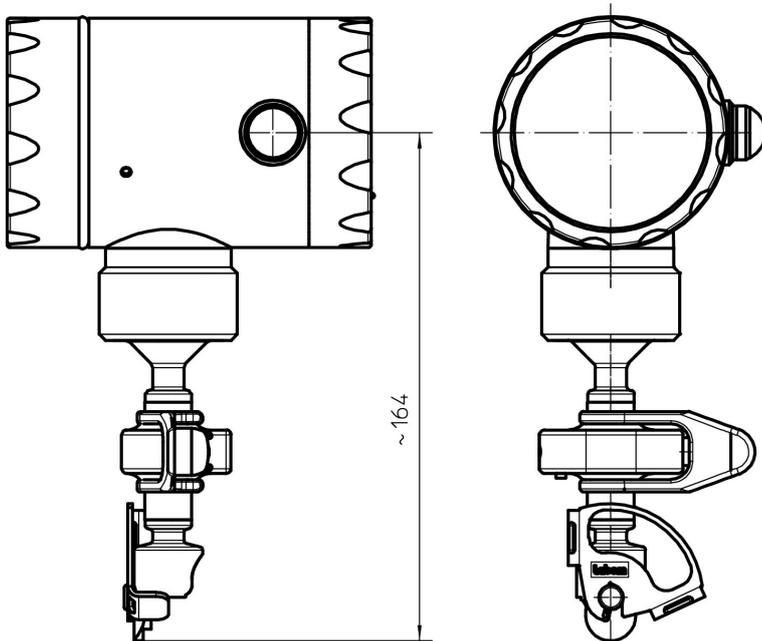
Parameter	Values	Default setting
lighting	on, off	on
language	English, German	German
	English, Chinese	as ordered
	English, Spanish, French	as ordered
	English, Polish, German	as ordered
	English, Turkish, German	as ordered
decimal point	auto, x.xxxx, xx.xxx, xxx.xx, xxxx.x, xxxxx	auto
display mode	five values, four values, three values, two values, big display	four values

Dimensions

with calibration adapter

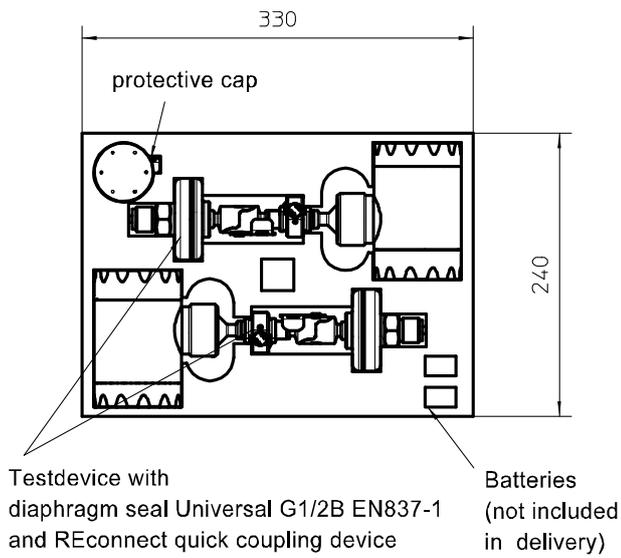


without calibration adapter



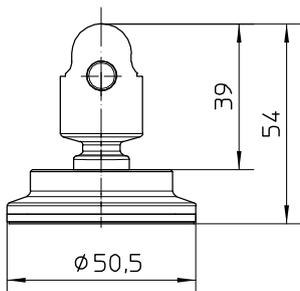
Additional features / Accessories

Storage case, suitable for two diaphragm seal testing devices and protective cap set to protect the REconnect (order details MZ2400-B11)

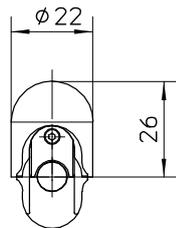


Protective cap for single systems with capillary and/or large volumes (order details MZ2400-B11) consisting of:

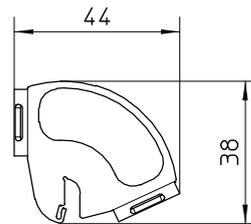
Protective cap measuring device side



Protective cap process side



Coupling bracket



Order details

Diaphragm seal testing device		
MP1000	Diaphragm seal testing device for testing diaphragm seals without opening the process	
A1053	nominal range	0...1 bar, overload limit 3 bar
F1	parameterisation	standard according to data sheet
C1	supply	suitable for battery operation, 9V block battery (not included in delivery)
M21.2	display	high-resolution graphic display, language pack (en, de), default setting German
M21.1		high-resolution graphic display, language pack (en, de), default setting English
M22.1		high-resolution graphic display, language pack (en, cn), default setting English
M22.2		high-resolution graphic display, language pack (en, cn), default setting Chinese
B50	volumizer	for checking the diaphragm diameter (dM) from 24...27 mm
B80		for checking the diaphragm diameter (dM) from 34...40 mm
L22	pressure transmission fluid	synthetic oil, free of silicone FD1
D1	calibration adapter	threaded connection G1/2 B per EN 837-1
W1201	calibration certificate	per EN 10204- 3.1, 5 measuring points

Additional features (to be indicated if required)	
W4136	storage case, suitable for two diaphragm seal testing devices and protective cap set to protect the REconnect

Order code (example): **MP1000 - A1053 - F1 - C1 - M21.2 - B50 - L22 - D1 - W1201 - W4136**

Accessories	
MZ2400-B11-L22	protective cap for systems with capillary and/or large volumes