# INSTRUCTION MANUAL digital pressure gauge 3321



#### Safety and use instructions

Pressure gauge should be chosen according to pressure range, technical use and specific qualities of used medium. Load limits must be met to ensure long-term accuracy of measurement. The installation and assembly can only be performed by qualified personnel.

Oxygen, acetylene, flammable gases and liquids, toxic gases and liquids,

cooling fillings and other unsafe and explosive pressure mediums require higher attention during both installation and operation and all non-standard conditions of mentioned mediums must be taken into consideration. Subjecting the pressure gauge to higher pressure shocks than designed for can cause damage. After such incressed load all pressure gauges must be replaced. Thanks to built-in batteries with long life-time the pressure gauge is not dependent on local power supply.

#### Mechanical connection

According to main technical regulations for pressure gauges. Correct and safe sealing of pressure gauges with straight thread (G, M) is done by flat packing in between bearing surface of the thread and its counterpart (cock, cylinder, loop etc.). Taper thread (NPT) sealing is done by adding a sealing material to the thread, ussually a teflon tape, thread. The Tightening force needed is individual according to particular thread and is mentioned in relevant technical standards. The correct orientation of pressure gauges face can be achieved by using a left-right nut.

### Installation

Front or rear flange can be used for pressure gauges case attachement, especially when the connecting point is not strong enough. Pressure gauges must be protected from inpurities and any major temperature fluctulation. Tightening of pressure gauge must be performed with a relevant wrench, never by the pressure gauges case itself.

#### Acceptable surroundings and working temperature

Temperature fluctulation from the mean value must be taken into consideration during installation. Temperature fluctulation has an impact on accuracy.

#### Storing conditions

Pressure gauges should be transported and stored in original packings up to the point of installation. Pressure gauges must be protected from outer damage during the storing period.

Storing temperature:  $-40^{\circ}$ C+70°C. All pressure gauges that were removed from operations should be protected from dust and moist.

## > Maintanance and operation

Pressure gauges require no maintanance and service. Tests should be performed regularly to ensure the accuracy of measurement. Tests and calibration can be done by qualified personnel with relevant equipment only.

#### Instructions

Change of desired unit is done by long press of MENU button. By moving the arrow choose UNI as unit selection, and confirm by MENU button. By moving the arrow you can choose the desired unit and confirm by MENU button.



	bar	mbar	Ра	kPa	MPa	kp/mm²	kp/cm <sup>2</sup>	atm	mmHg	mWS	psi
1 bar	1	1000	10000	100	0,1	0,01019716	1,019716	0,986923	750,062	10,19716	14,50377
1 mbar	0,001	1	100	0,1	0,001	0,0000101972	0,00101971 6	0,000986923	0,750062	0,01019716	0,01452377
1 Pa	0,00001	0,01	1	0,001	0,000001	0,000000102	0,00001019 7	0,000009869	0,00750062	0,00001019 716	0,000145038
1 kPa	0,01	10	1000	1	0,001	0,0001019716	0,01019716	0,00986923	7,50062	0,1019716	0,1450377
1 MPa	10	10000	1000000	1000	1	0,1019716	10,19716	9,86923	7500,62	101,9716	145,0377
1 kp/m m²	98,0665	98066, 5	9806650	9806,65	9,80665	1	100	96,7841	73555,9	1000	1422,3344
1 kp/c m²	0,980665	980,66 5	98066,5	98,0665	0,0980665	0,01	1	0,967841	735,559	10	14,223344
1 atm	1,01325	1013,2 5	101325	101,325	0,10325	0,01033227	1,033227	1	760	10,33227	14,6959
1 mmH g	0,00133324	1,3332 24	133,322 4	0,1333224	0,000133322	0,000013951	0,00135951	0,001315789	1	0,01360	0,019336
1 mWS	0,0980665	98,066 5	9806,65	9,80665	0,00980665	0,001	0,1	0,0967841	73,556	1	1,422327
1 psi	0,06894757	68,947 57	6894,75 7	6,894757	0,006894757	0,0070307	0,070307	0,068046	51,715217	0,70307	11

	ethyl acetate	Alcohol	Benzene	Petrol	Boric acid	Boric acid	Butanol
DDACC	Dextrin	Ethylene	Freon	Glycerol	oxygen	Paint	Lubricating oil
BRASS	diesel	Oil	Paraffin	Beer	Gas	Refined oil	Crude oil
	coal gas	Toluene	w ater				
	Acetone	Acetylene	Alun	Ammonia	Benzyl alcohol	Butane	Potassium cyan.
	sodium nitrare	Ferric nitrate	Ethyl dibrom.	Ethylcellulose	Formaldehyde	Sodium phosp.	Calcium hydrox.
	Chloroform	hydrogen cyan.	citric acid	Phosphoric acid	Gallic acid	Hydrochloric a.	Kyselina chro.
OTEEL	Acid butter	lactic acid	acetic acid	Sulphurous accid	Etching soltion	Lysol	Nickel acetate
SIEEL	Carbon dioxide	Sodium perox.	hydrogen perox.	Refined petrol	Vegetable oils	Mercury	Aluminium sulph.
	magnesium sulph.	Copper sulphate	Sodium sulphate	Zinc sulphate	Ferric sulphate	Carbon disulphi.	Carbonate amo.
	sodium carbonate	Wine	hydrogen	Glycol			
As	Dichloride eth.	Silver nitrate	Ether	Phosphorus	Glucose	Hydroxide am.	Hydroxide mus.
scheduled	Sodium hydroxide	potassium Chlor.	calcium chloride	Sodium cyanide	Knitric acid	Methyl salicyl	Nitrous oxide
manufacture							
r							