

CAPACITANCE LINEAR GAUGES (ABSOLUTE TYPE)



7181-42



7181-61



7181-42V

pop up with air,
retract without air

- Absolute encoder, the original data remains after power off
- Shock-proof, water proof, dust proof, suitable for high speed movement, long working life
- Can be connected to display unit, or directly connected to computer or PLC

CAPACITANCE LINEAR GAUGE SPECIFICATION

Part No.	7181-41	7181-51	7181-61	7181-42	7181-41V	7181-42V
Measuring range	10mm	30mm	50mm	10mm		
Resolution	0.01mm			0.001mm	0.01mm	0.001mm
Accuracy	20μm	30μm	30μm	3μm	20μm	3μm
Hysteresis	10μm	10μm	10μm	2μm	10μm	2μm
Driving type	spring			pneumatic		
Measuring force	1.0N	1.6N	2.0N	1.0N	adjusted by air pressure	
Measuring principle	capacitance type linear encoder					
Voltage	5~24V					
Sampling frequency	8ms					
Working life	five million times					
Dust/waterproof	IP67	IP54		IP67		
Cable length	6.56ft (can be customized)					
Data output	RS485					
Net weight	.22lb	.43lb	.47lb	.22lb		

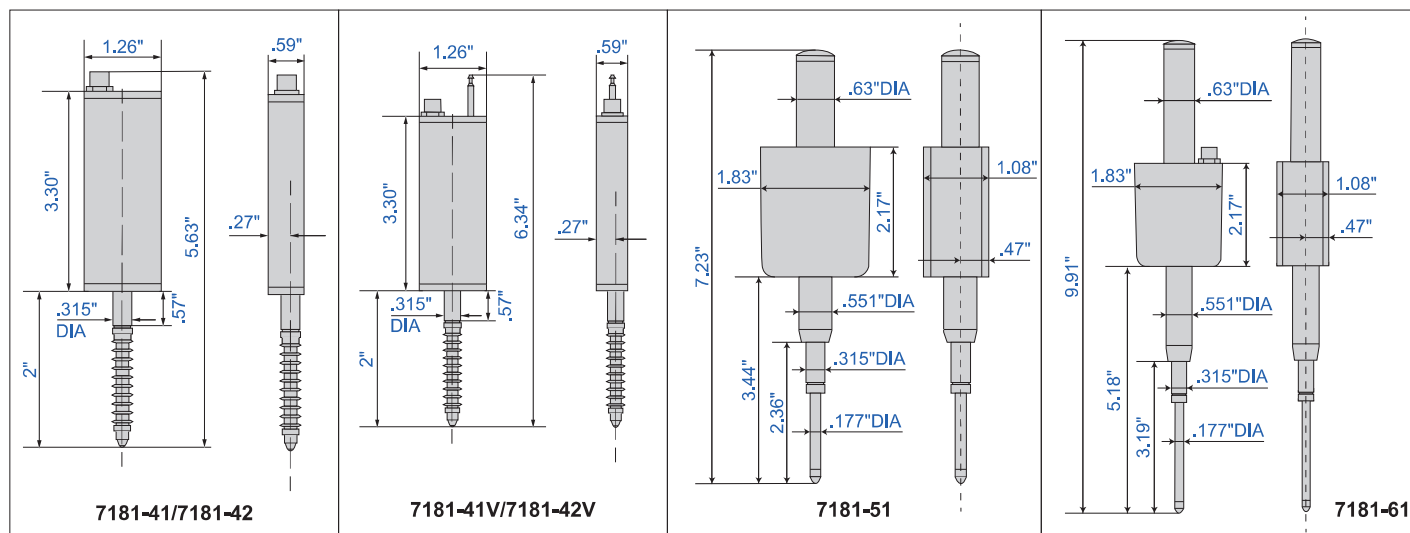
OPTIONAL ACCESSORY

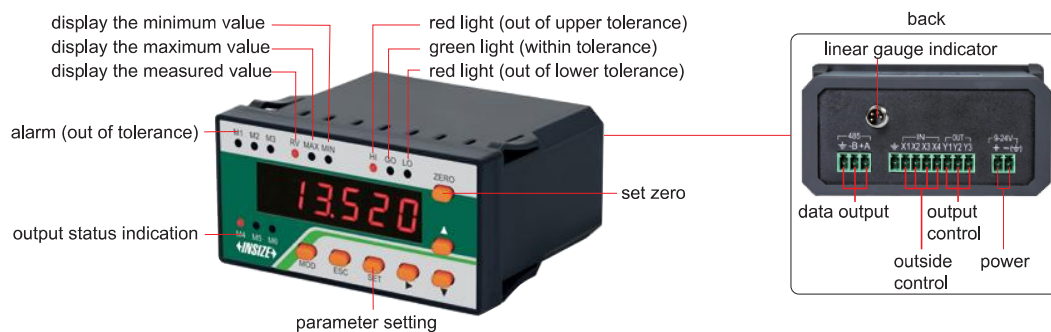
Singlechannel display unit	7181-4A
Multichannel display unit	7181-4B
Connection box	7181-4C *
Series port	7181-PORT **
Port cable	7181-P-CABLE ***

* work with optional **7181-4B**, one multichannel display unit can be connected with up to 14 connection boxes

** 4 ports, total length 2.75in

*** cable length: .79in, customized according to customer requirements





singlechannel display unit (optional)
7181-4A



multichannel display unit (optional)
7181-4B

DISPLAY UNITS SPECIFICATION (OPTIONAL)

Part No.	7181-4A	7181-4B
Quantity of linear gauge to be connected	1 pc	4 pcs (expandable to 60 linear gauges, by connecting to connection box 7181-4C)
Display	6 digits	
Tolerance	set tolerance and make judgment with alarm and lights (out of upper tolerance, within tolerance, out of lower tolerance)	
Output control	output the tolerance judgment (out of upper tolerance, within tolerance, out of lower tolerance) to control outside devices	
Outside control	control the display units from outside (set zero, hold reading and collect data)	
Data output	connect to computer software and serial communication	
Power supply	DC 9~24V	



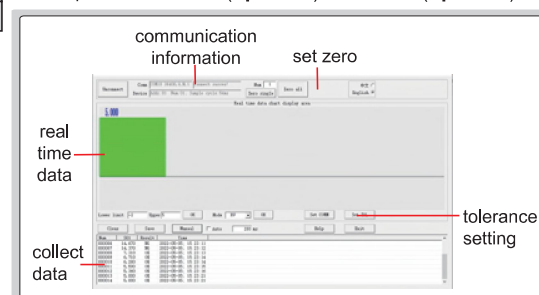
connection box (optional)
7181-4C

standard display unit computer software, adaptable to 7181-4A (optional) or 7181-4B (optional)

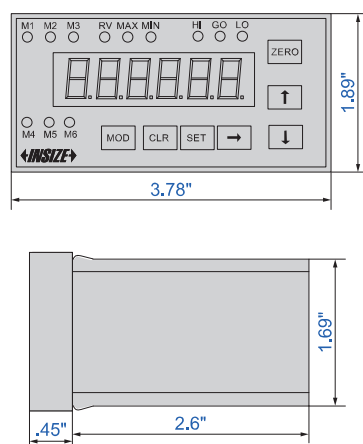
CONNECTION BOX SPECIFICATION (OPTIONAL)

Part No.	7181-4C*
Quantity of linear gauge to be connected	4 pcs

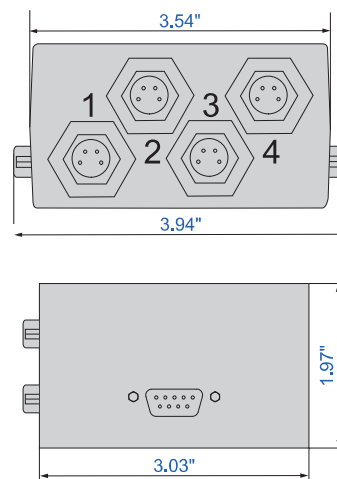
* work with optional 7181-4B, one multichannel display unit can be connected with up to 14 connection boxes



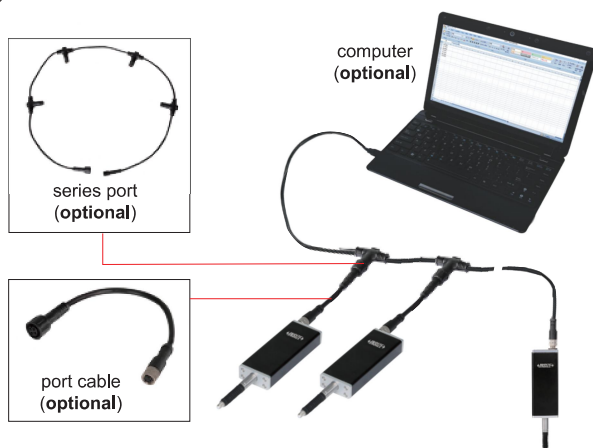
singlechannel display unit



multichannel display unit/connection box



application



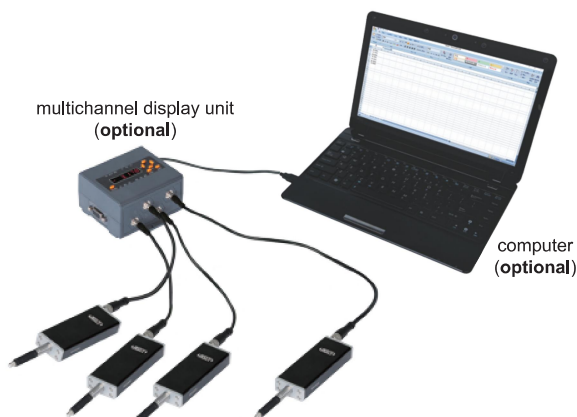
up to 30 linear gauges can be connected in series, with measurement data transmitted computer or PLC

singlechannel display unit (optional)



connected with singlechannel display unit

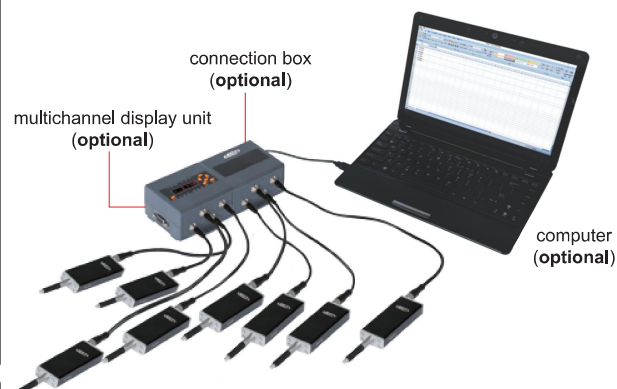
multichannel display unit (optional)



connected with multichannel display unit

connection box (optional)

multichannel display unit (optional)



up to 60 linear gauges can be connected to multichannel display and connection boxes