IR290

4 to 20 mA

4 to 20 mA REMOTE INDICATOR

- Powered by the 4 to 20 mA current loop
- It is connected in SERIES to the equipment that generates the 4 to 20 mA signal
- Ideal for applications with any device 4 to 20 mA without LCD display
- Compact and easy to use
- Configured via local adjustment
- Easy operation and maintenance
- No need for external power supply
- Makes monitoring easier in cases that the device is located in places of hard access or hazardous areas.

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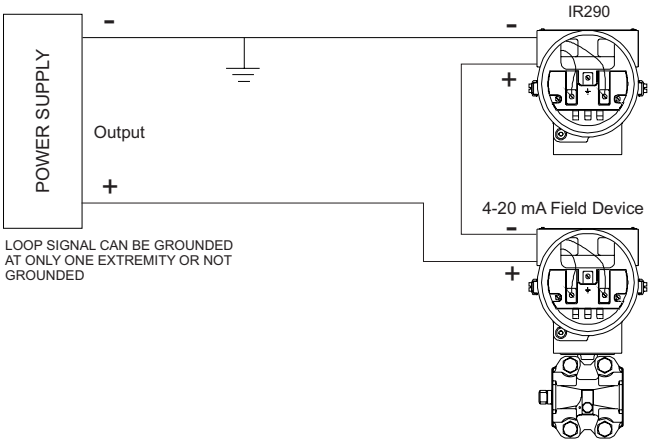
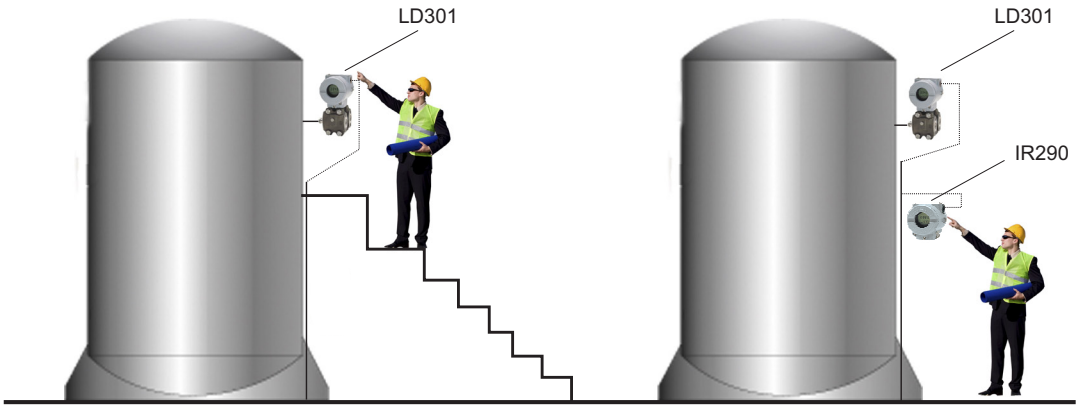
The IR290 is a field device that is connected in series to the 4 to 20 mA signal and shows in its LCD display the current value or the characterization according to the chosen unit, which facilitates the process variable visualization.

The IR290 makes easier the monitoring of field devices that do not have a LCD display installed or even if they are located in areas of hard access.

Connection Example



Example of Application



A) Situation that the field device is located in a hard access area

B) With the IR290 the monitoring of this field device is easier

Technical Characteristics

IR290 Unit Codes

CODE	UNIT DESCRIPTION	CODE	UNIT DESCRIPTION
0	Percentage (%)	39	Cubic meter per minute (m^3/min)
1	Milliampere (mA)	40	Cubic meter per hour (m^3/h)
2	Celsius degree (ºC)	41	Cubic meter per day (m^3/d)
3	Fahrenheit degree (ºF)	42	Liter per second (l/s)
4	Millimeter of water (mmH_2O)	43	Liter per minute (l/min)
5	Pound per square inch (psi)	44	Liter per hour (l/h)
6	Bar (bar)	45	Cubic foot per second (CFS)
7	Millibar (mbar)	46	Cubic foot per minute (CFM)
8	Kilogram per square centimeter (kgf/cm^2)	47	Cubic foot per hour (CFH)
9	Pascal (Pa)	48	Cubic foot per day (ft^3/d)
10	Megapascal (MPa)	49	Gallon per second (gal/s)
11	Kilopascal (kPa)	50	Gallon per minute (GPM)
12	Torricelli (Torr)	51	Gallon per hour (gal/h)
13	Atmosphere (atm)	52	Galon per day (gal/d)
14	Gram per square centimeter (gf/cm^2)	53	Barrel per second (bbl/s)
15	Inch of water (inH_2O)	54	Barrel per minute (bbl/min)

IR290 Unit Codes

CODE	UNIT DESCRIPTION	CODE	UNIT DESCRIPTION
16	Foot of water (ftH_2O)	55	Barrel per hour (bbl/h)
17	Inch of mercury (inHg)	56	Barrel per day (bbl/d)
18	Millimeter of mercury (mmHg)	57	Kilogram per cubic meter (kg/m^3)
19	Kelvin (K)	58	Gram per cubic centimeter (g/cm^3)
20	Rankine degree (ºR)	59	Pound per cubic foot (lb/ft^3)
21	Millivolt (mV)	60	Baume degree (Baume)
22	Volt (V)	61	Brix degree (Brix)
23	Ohm (Ohm)	62	Percentage of solids by weight (%sol/wt)
24	Gram per second (g/s)	63	Plato degree (Plato)
25	Gram per minute (g/min)	64	GL degree (GL)
26	Gram per hour (g/h)	65	INPM degree (INPM)
27	Kilogram per second (kg/s)	66	API degree (API)
28	Kilogram per minute (kg/min)	67	Concentration (Concentration)
29	Kilogram per hour (kg/h)	68	Ton per cubic meter (t/m^3)
30	Kilogram per day (kg/d)	69	Meter of water column (mH_2O)
31	Ton per minute (t/min)	70	Liter (l)
32	Ton per hour (t/h)	71	Cubic meter (m^3)
33	Ton per day (t/d)	72	Gallon (gal)
34	Pound per second (lb/s)	73	Cubic foot (ft^3)
35	Pound per minute (lb/min)	74	Kilogram (kg)
36	Pound per hour (lb/h)	75	Ton (t)
37	Pound per day (lb/d)	76	Pound (lb)
38	Cubic meter per second (m^3/s)		

General

Power Supply	Power supply via 4 to 20 mA current loop. The **IR290** is connected in series with the 4 to 20 mA signal to be measured.
Input Impedance	150 Ohms.
Accuracy	0.1% of span.
Temperature Effect	0.1%/20 ºC.
Configuration	The user may choose via local adjustment the unit to be exhibited on the LCD display, the 100% and 0% values proportional to the measured current, calibrate the input current and restore the factory parameters.
Indication	LCD Indicator with 4½ numerical digits and 5 alphanumerical liquid crystal characters.
Housing Material	Injected low copper aluminum with polyester painting or 316 Stainless Steel housing, with Buna N O-Rings on cover (NEMA 4X, IP67).
Temperature Limits	Process: -20 to 75 ºC. Storage: -40 to 85 ºC.
Humidity Limits	0 to 100 % RH.
Mouting	With an optional mounting bracket, a 2” pipe can installed or fixed on the wall or panel.
Weight	0.99 kg.

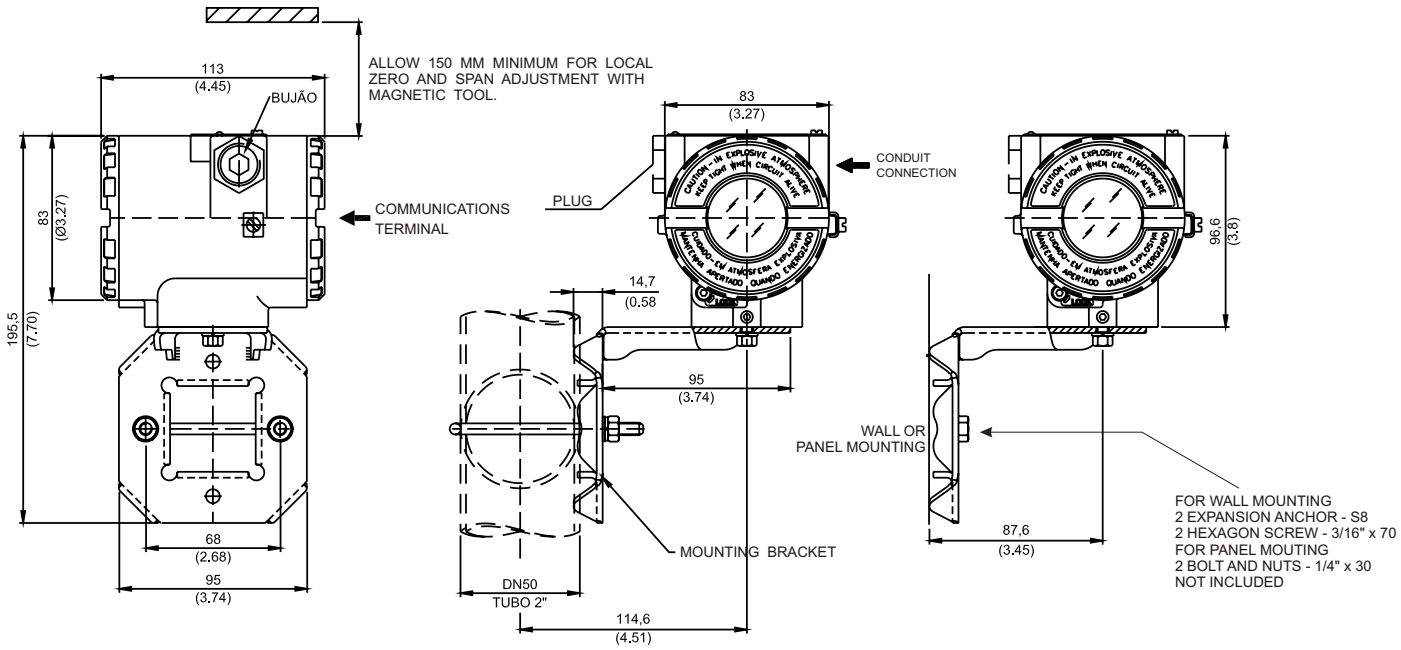
Ordering Code

MODELO		
IR290	4 to 20 mA REMOTE INDICATOR	
COD.	Local Indicator	
1	With digital indicator	
COD.	Mounting Bracket for 2" Pipe Mounting	
0	Without Bracket	
1	Carbon Steel Bracket	
2	316 SST Bracket	
COD.	Electrical Connections	
0	½ -14 NPT	
A	M20 x 1,5	
B	PG 13,5 DIN	
COD.	Options	
H0	Housing - Aluminum (IP/TYPE)	
H1	Housing - 316 SST (IP/TYPE)	
A1	Bolts - 316 SST	
ZZ	Special Options - Specify	

IR290 - 1 1 0 / * ← TYPICAL MODEL

* Leave it blank for no optional items.

Dimensional Drawing



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Specifications and information are subject to change without notice.
Up-to-date address information is available on our website.

web: www.smar.com/contactus.asp

IR290CE