

## **Inductive Loop Sensors IRV20 / IRT-A**

Inductive Loop Sensors IRV20 / IRT-A are used for detecting metallic bar-shaped material (pipes, profiles, etc.). The sensors IRT-A are connected via a water-tight plug to the control unit IRV20. Available in various dimensions, the IRT-A loop sensors are fitted into a resistant plastic body coated with artificial resin, ensuring that the construction is extremely robust.

The loop sensor signals are evaluated in the IRV20 control unit with consideration of the various conditions of use.

### ***Self-adjusting System***

The influence of surrounding metal masses or a mandrel bar in a pipe to be detected is automatically compensated ("Nullification")

The optimum sensitivity with respect to the material beginning in the loop sensor is automatically settled ("Material compensation").

The adjustments automatically carried out remain even after the distribution voltage has been switched off.

### ***Nullifikation***

An impulse set at the signal input "Nullifikation" releases the nullification process. During nullification, the output signal "ready" is switched off. At the same time, the switch status display blinks (red LED).

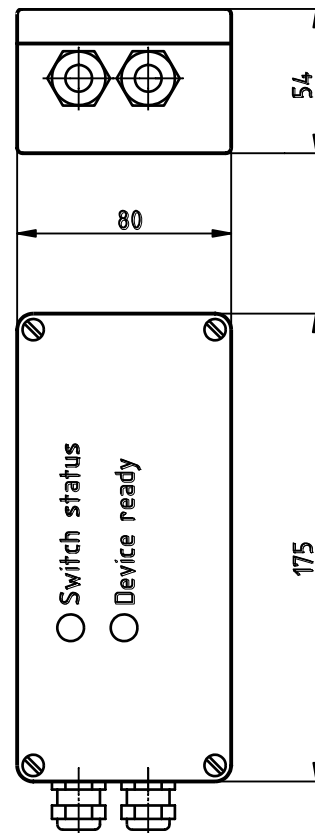
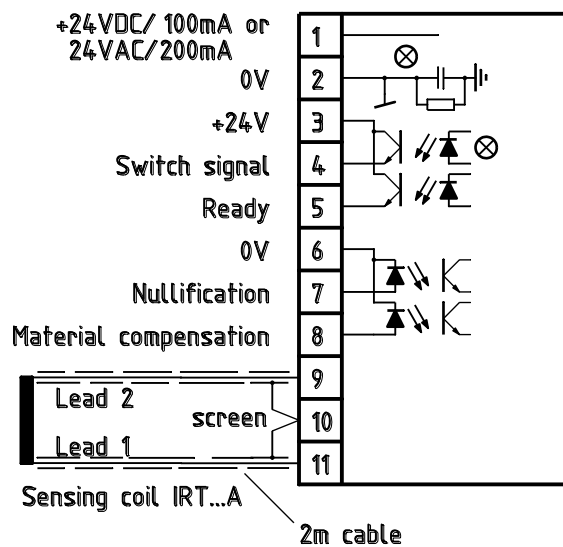
After nullification has been completed, the switch status display is dark. At the same time, the output signal "ready" is given.

### ***Material compensation***

The material to be registered must be moved in axially to the centre of the loop sensor. Then, the compensation process is started by an impulse from the signal input "Material compensation". During the compensation process, the output signal "ready" is switched off. At the same time, the switch status display blinks (red LED).

After completing the adjustment process, the switch signal is "on" (the switch status display is lit). At the same time, the output signal "ready" is given. The switch signal remains "on" until the material is removed from the loop sensor.

If the material in the loop cannot be registered even at maximum sensitivity, the maximum responsiveness is automatically set. In this case, the switch signal is "off" after the compensation process (the switch status display is dark).

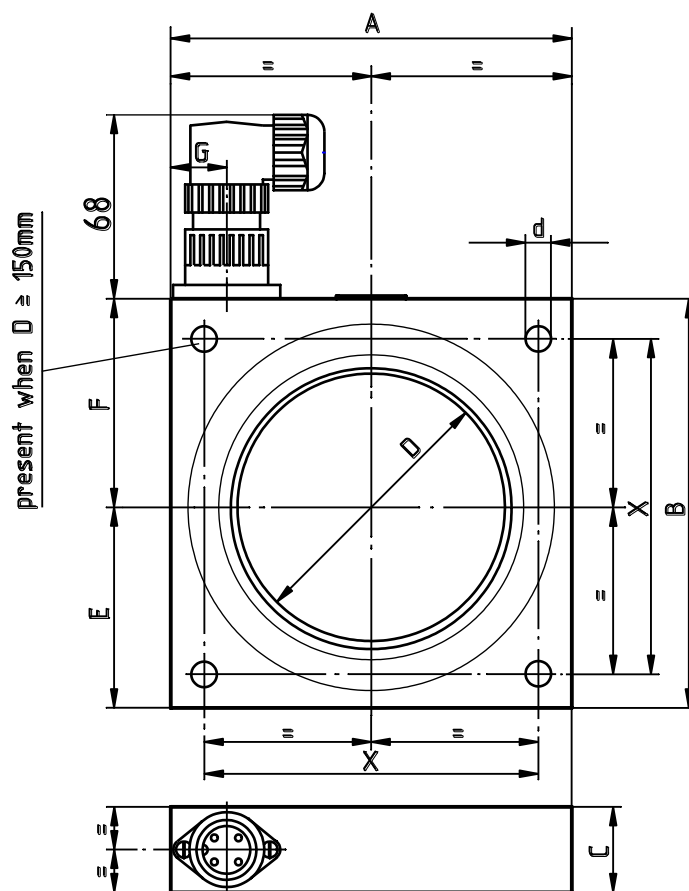


Opto-isolator outputs:  
Opto-isolator inputs:  
Terminals:

Rating 30VDC / 100mA  
Signal level 24VDC,  $R_i = 6K8$   
Max. wire cross section : 2,5mm<sup>2</sup>, stripped length: 6mm

Protection to:  
Permitted ambient temperature:

IP65  
0 to +60°C


**Available versions**

Type code	Measurements (mm)								
	D	A	B	C	E	F	G	X	d
<b>IRT 25A</b>	25	90	97	32	45	52	21	70	7
<b>IRT 40A</b>	40	100	106	32	50	56	21	80	7
<b>IRT 50A</b>	50	100	112	32	50	62	21	80	9,5
<b>IRT 60A</b>	60	120	120	32	60	60	21	95,5	9,5
<b>IRT 75A</b>	75	135	135	32	67,5	67,5	21	109,6	9,5
<b>IRT 100A</b>	100	150	153	32	75	78	21	125	9,5
<b>IRT 150A</b>	150	210	210	32	105	105	35	180	9,5
<b>IRT 200A</b>	200	260	260	32	130	130	45	220	9,5
<b>IRT 250A</b>	250	310	310	32	155	155	50	270	9,5
<b>IRT 300A</b>	300	380	380	35	190	190	90	300	12

Protection to: IP65  
 Permitted ambient temperature: 0 to + 80°C

The product specifications are based on theoretical and experimental data, and we also have a policy of continuous improvement in performance. Thus although we attempt to provide equipment which in all respects meets specifications, this cannot be ensured in all cases without written confirmation from OPTRONIC AG.