

Ring sensor M-Pulse2 / Digital2

RG

Application

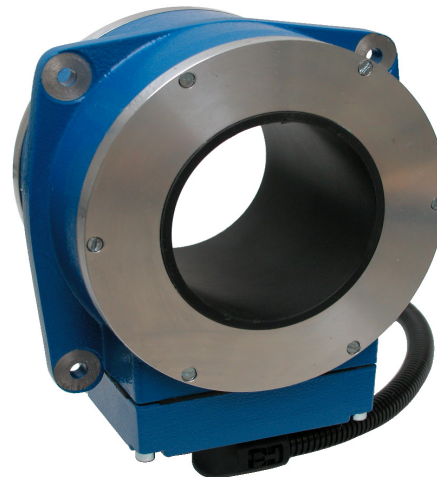
This ring detector is used in our metal separators as well as in many other branches of industry. In applications in which the performance of analog ring sensors is not sufficient the detectors of the RG series do have great advantages due to their capacity. Especially the extremely high sensitivity and the possibility to eliminate product effects with the appropriate electronics allow outstanding solutions in the fields machine protection, process control and monitoring.

Handling

Depending on the electronics operation is realised via a membrane keyboard and a LC-display. By this all important parameters can be displayed and if necessary changed easily. The sensitivity of the sensor also is adjustable this way. Precise information is stated in the documentation of the operating electronics M-PULSE2 and Digital2.

Function

Contrary to classical metal sensors the working principle of this detector is based on a system of three coils. This enables the user to analyse signals precisely and to draw conclusions on their origin. By this it is for example possible to distinguish the signals into vibrati-



Ring sensor RG

on, product or metal. This additional data allows a more sensible reaction on metallic residues. The sensors do not require maintenance or calibration.

Mounting

The sensing range of the sensor partially is situated above and under the opening of the detector. Big metal pieces can already be detected in this sector. In order to guarantee the accurate functioning of the sensor, these sectors must be kept free of metal. This so-called metal-free zones are divided into two types:

- Metal-free zones for movable pieces
- Metal-free zones for non movable pieces

The dimensions of these zones are specified in the particular data sheets.

Type	RG 25		RG 35		RG 50		RG 70		RG 100	
Mechanical data										
Heigth	95 mm								120 mm	
Inner diameter - D	25 mm		35 mm		50 mm		70 mm		102 mm	
Metal free zone for static parts	1 x inner diameter									
Metal free zone for moving parts	1,5 x inner diameter									
Conditions of use										
Storage temperature	-10 .. 60°C									
Operating temperature	0 .. 60°C									
Protection class	IP54									
Electrical connection	Supply via control unit (Attached with 1.5 m cable).									
Sensitivity ¹										
Material - test pieces ²	FE	SS	FE	SS	FE	SS	FE	SS	FE	SS
M-Pulse2	0,15	0,4	0,2	0,5	0,3	0,7	0,5	1,0	0,7	1,2
Digital2	0,2	0,5	0,3	0,6	0,35	0,9	0,6	1,1	0,8	1,3

Order code:

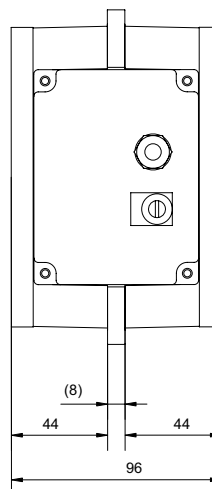
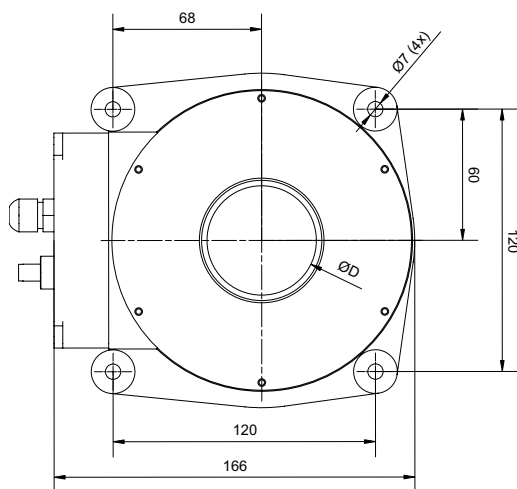
electronic

M-Pulse2 / Digital2

type of sensor

RG 25 - RG 100

(e.g.: Digital2 RG 70)



(Drawing for RG 100 on request)

¹ The actual sensitivity depends on various factors. Unfavourable environmental conditions or vibrations can decrease the sensitivity. as well as conductive test material can influence it. For precise information please contact our service or sales department. Our service includes product tests in our headquarters.

² FE → Ferrous / SS → Stainless steel