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### I Applications:

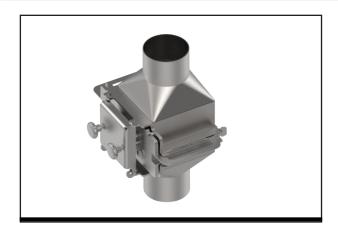
ProMag separators of series PFM-R monitor pneumatic conveying systems with a maximum operating pressure of 1 bar.

#### I Description of functions:

The magnetic separator that is integrated in the pipe line monitors the product flowing through for magnetizable contamination. The arrangement of the magnetic rods ensures the magnetic control of the whole pipe cross sections and guarantees that seized metallic particles are held tight.

# ProMag

PFM-R





## I Product requirements:

Important for bulk materials: The product to be monitored must be dry, powdery or small-sized. It must not be abrasive!

### I Housing:

Material: AISI 304

Surface:

glass bead blasted outside, ground inside Connection via smooth connections according to DIN EN 10217 (other designs to be agreed upon) max. operating pressure: 1bar

## I Magnetic material:

High energy neodymium magnets that remove even the finest metal contaminants are used.

Magnetic material:

Energie procuct max.  $342 \text{ kJ/m}^3$ Coercive force HcJ >= 876 kA/mRemanence B<sub>R</sub> max. 1370 mTActive surface: max. 950 mTOperating temperature max.  $80^{\circ}\text{C}$ 

## I Product description:

The magnetic separator can directly be welded into the tube pipe system. As an alternative it is also available with flanges or SMS-couplings. The magnetic separator can thus be safely and interchangeably installed into pipelines under pressure.

The filter rods in the housing interior are so arranged that the whole tube's cross section is controlled by the magnetic monitoring field. Particles passing by thus hardly have a chance to flow through the magnetic separator without direct contact towards one of the magnetic rods. Seized metallic particles are held tight by the extremely strong neodymium magnetic rods and are not carried away by the product flow.

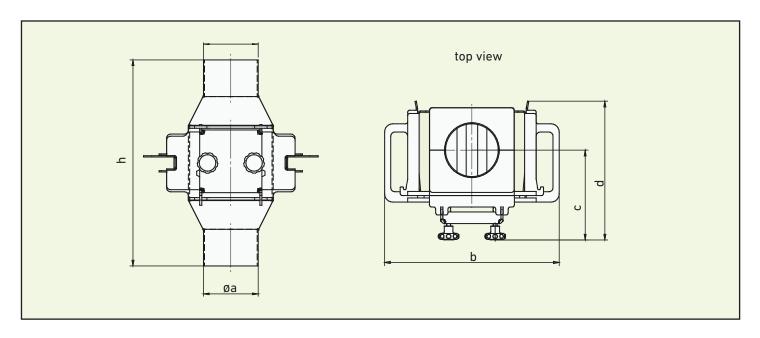
The magnetic insertion is fixed by a swivellable locking unit at the casing's body. After the extraction of the insertion the unit remains at the casing.

After the drawing of the magnetic insertion there is no further installed equipment within the casing – this ensures an easy cleaning



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	DN		magnetic bars	øa	b	С	d	h	kg
Type PFM-R									
NW 65	65	2,5"	5	76,1	374	193	286	450	15
NW 80	80	3"	5	88,9	374	193	286	450	16
NW 100	100	4"	5	108	374	193	286	450	17
NW 125	125	5"	7	133	424	218	336	500	24
NW 150	150	6"	7	159	424	218	336	500	25

## I Cleaning:

Open the star handles and swivel the locking unit downwards for cleaning the insertion. Pull the insertion out of the casing.

Lateral guide rails at the casing support the user They carry the weight until the insertion is completely pulled out. Furthermore, hand grips located beside the centre of gravity are at your disposal.

The operator removes the magnetic plug-in unit from the EasyClean-stripping device outside the product range

As soon as the magnetic insertion is removed, the metallic particles separate from the stripping unit and fall down.



#### I ATEX:

ProMag systems have been tested for freedom from ignition sources in accordance with EU Directive 94/9/EC. All machines are also suitable for use in ATEX Zone 20 (dust) provided the design is adapted accordingly.