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Rev. 0701

# Metal separator

## M-Pulse / Digital+ / Digital

# Y

### Application

Fields of application for the Y series are the plastics and the chemical industry. The separating mechanics allows the separation of metallic objects from free-falling bulk material. The device also is appropriate for applications in which the bulk material is accumulating into the separator. By this for example injection moulding machines can be protected safely from damage caused by metallic contamination. This patented separating technique makes the Y unique. The separator can be applied flexibly in many branches.



Metal separator Y

### Function

In the upper part of the separator the sensor coil of the metal detector is situated. If metal falls through the sensor the signal is collected and processed by the operating electronics. Subsequently the electronics precisely excites the pulse for piloting the ejection flap. The flap is opened and metal is separated safely from the product stream. The robust, pneumatic driven mechanics guarantees longevity. The function of the mechanics can be monitored constantly by several alerter. Thus the device permanently ensures that all metallic pieces have really been separated from the product stream.

### Specific characteristics

- maintenance-free mechanics
- different transmission ports available
- robust, patented pneumatic-driven ejection mechanics
- appropriate for free-falling bulk material
- large range of accessories available
- all devices mechanically compatible
- compact design
- ejection monitoring



Type	Y 25		Y 35		Y 50		Y 70	
<b>Mechanical data</b>								
Height	370 mm (405 mm with flange)							
Sensor aperture model Digital Y	not available				50 mm		70 mm	
Sensor aperture model Digital+ VA und M-Pulse VA	24 mm		29 mm		45 mm		65 mm	
Material-ejection flap	Aluminium							
Material-base fram	Aluminium							
Material-protection tube <sup>2</sup>	Phenolic resin							
Payload	max. 150 kg							
Weigth	~ 18 kg							
<b>Conditions of use</b>								
Storage temperature	-10 .. 60°C							
Operating temperature	0 .. 60°C							
Protection class	IP50							
Electrical connection	s. datasheet of the control unit							
Pneumatic connection	4-6 bar, filtered, water- & oilfree; self-sealing-coupling - fitting NW 7,2							
max. drop heigth of the bulk material	0 .. 600 mm (from top edge)							
Troughput <sup>3</sup>	450 l/h		600 l/h		2.000 l/h		5.400 l/h	
<b>Sensitivity<sup>1</sup></b>								
Material - test piece	FE	SS	FE	SS	FE	SS	FE	SS
M-Pulse	0,15	0,4	0,2	0,5	0,3	0,9	0,4	0,9
Digital+	0,2	0,5	0,3	0,6	0,35	1,1	0,5	1,2
Digital	not available				0,5	1,5	0,7	2,0

Ordering code:

Elektronic

M-Pulse / Digital+ / Digital

Separator type

Y 25 - Y 70

(e.g.: Digital+ Y 70)

<sup>1</sup> The actual sensitivity depends on various factors. Unfavourable environmental conditions or vibrations can reduce the sensibility. Conductive test material can also influence the sensibility. For obliging information please contact our service or sales department. Our service includes product tests in our headquarters. (all data in mm)

<sup>2</sup> Other materials available. (glas, antistatic; wear-resistant)

<sup>3</sup> Measured with granulate PET - grain dimension 2 - 4 mm.



### Special designs & accessories

Designation	Order number
Pneumatic guard	When ordering please add option 45
Voltage and Pneumatic guard (Flap automatic switches into throw-off position at blackout or falling pressure)	When ordering please add option 40
Remote terminal (max. 3 m)	When ordering please specify
Test pieces - certified - Fe/NonFe/SS (several diameters)	on request
Pneumatic cooling (Product temperature up to 90°C)	When ordering please specify
Fan cooling (Product temperatur up to 70°C)	When ordering please specify

### Application example



Digital Y 70 for the inspection of granulates in the plastics industry

Metal separator Y

### Dimensions

Metal separator Y

