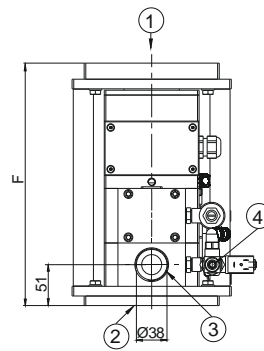
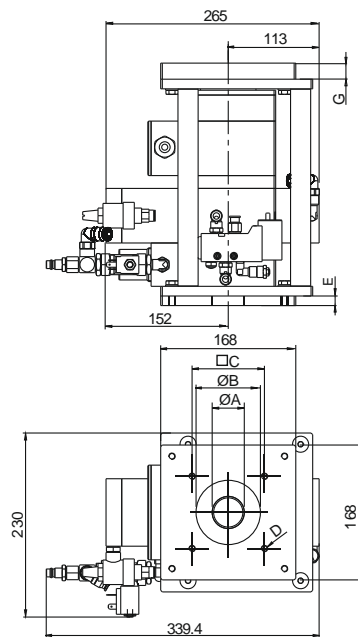


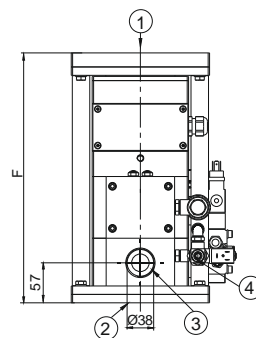
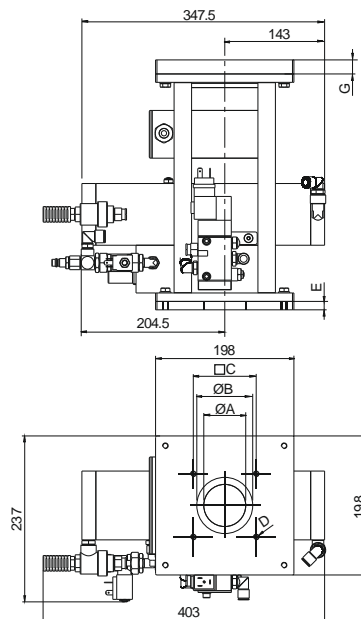
# Metal separator Metro SM 30-60

## ■ Dimensions Metro SM 30-40



- 1 Inlet (Adapter plate, tap holes Motan / Colortronic)
- 2 Material outlet (Adapter plate standard without drill holes)
- 3 Reject outlet
- 4 Compressed-air connection

## ■ Dimensions Metro SM 50-60



- 1 Inlet (Adapter plate, tap holes Motan / Colortronic)
- 2 Material outlet (Adapter plate standard without drill holes)
- 3 Reject outlet
- 4 Compressed-air connection

## ■ Technical data

| Type        | Maximum scanning sensitivity <sup>1)</sup> Ø Fe-ball | ØA | ØB | □C | D  | E  | F   | G  | Weight [kg] |
|-------------|--|----|----|----|----|----|-----|----|-------------|
| Metro SM 30 | 0.30   | 30 | 80 | 90 | M8 | 12 | 312 | 30 | 12          |
| Metro SM 40 | 0.40   | 40 | 80 | 90 | M8 | 12 | 302 | 20 | 12          |
| Metro SM 50 | 0.50   | 50 | 80 | 90 | M8 | 12 | 356 | 20 | 20          |
| SM 60       | 0.60   | 60 | 80 | 90 | M8 | 12 | 356 | 20 | 20          |

### Option Colortronic

|             |      |    |   |     |     |    |     |    |    |
|-------------|------|----|---|-----|-----|----|-----|----|----|
| Metro SM 30 | 0.30 | 30 | / | 110 | M10 | 12 | 292 | 10 | 12 |
| Metro SM 40 | 0.40 | 40 | / | 110 | M10 | 12 | 292 | 10 | 12 |
| Metro SM 50 | 0.50 | 50 | / | 110 | M10 | 12 | 346 | 10 | 20 |
| Metro SM 60 | 0.60 | 60 | / | 110 | M10 | 12 | 346 | 10 | 20 |

All dimensions in mm

<sup>1)</sup> The stated detection sensitivity (ferrous ball Ø in mm) applies for nonconductive products at the standard operation frequency and refers to the centre of the detection aperture (most disadvantageous position). Products that show intrinsic conductivity due to moisture content, electrolytes or other conductive contents may reduce the sensitivity as well as variations of product temperature, environmental effects (mechanical shocks and vibrations, electromagnetic pollution) or the set product angle. The detectable size of metal particles depends on their nature, shape and position while passing the metal detector.

## Metal separator Metro SM 30-60



# Metal separator Metro SM 30-60

## ■ Conditions of use

|   |  |
|---|--|
| <b>Use:</b>                               | To analyse slowly moving columns of material on the feeder of injection moulders, extruders and blow moulders. It removes even smallest metal particles from granulates, regenerates or grinding stock, even when enclosed in product. |
| <b>Bulk material classification:</b>      |  |
| • <b>Grain shape:</b>                     | Granulates, grinding stock   |
| • <b>Max. grain size:</b>                 | Ball Ø < 6 mm Metro SM 30/40, ball Ø < 10 mm Metro SM 50/60<br>Depending on the model, metal particles of Ø 0.3 mm to 23 mm can be rejected  |
| • <b>Pourability:</b>                     | Good, medium   |
| • <b>Attributes:</b>                      | Dry, damp, not abrasive, product effects (conductivity) can potentially be compensated   |
| • <b>Conveying speed:</b>                 | 0.005 to 2.0 m/sec<br>Free fall, free-fall height max. 150 mm over the top of the device or slowly moving column of material   |
| • <b>Mechanical load:</b>                 | Maximum 500 kg concentric  |
| • <b>Bulk material temperature:</b>       | Maximum +80° C   |
| • <b>Ambient conditions:</b>              | -10° C to +50° C, 25% to 85% rH, no condensation   |
| • <b>Storage and shipping conditions:</b> | -10° C to +50° C, 25% to 85% rH, no condensation   |

## ■ Scope of delivery / Design / Connections

|                           |   |  |
|---------------------------|---|--|
| <b>Scope of delivery:</b> | Complete system with integrated detection coil, diverter unit („Quick-Valve“) and remote control unit MS+ Control |  |
| <b>Mechanical design:</b> | Detection unit and diverter unit:   | aluminium anodized (options Colortronic nickel plated) |
|                           | Control enclosure:  | sheet steel, varnished, aluminium grey (RAL 9007)      |
|                           | Scanning pipe:  | PE-EL  |
|                           | Parts in contact with product:  | aluminium anodized, PE-EL, Teflon, Silicone            |
|                           | Compressed air-connection:  | 6 bar; plug nipple NW 7.2                              |
|                           | Compressed air consumption:   | approx. 50 litre / switch operation                    |
| <b>Electrical design:</b> | Control unit:   | detached, cable length 3 m                             |
|                           | Operating voltage:  | 100-240 VAC (±10%), 50/60 Hz                           |
|                           | Current consumption:  | approx. 300 mA / 115 V, approx. 150 mA / 230 V         |
|                           | Mains cable:  | 1.8 m with plug  |
|                           | Ingress protection:   | IP 65  |
|                           | Eject duration:   | adjustable from 0.05 to 60 sec                         |
|                           | Self-monitoring system:   | detection coil and outputs                             |
|                           | Scanning sensitivity:   | adjustable from 1% to 100%                             |
|                           | Operation:  | see technical data sheet for Control Unit MS+ Control  |

## ■ Accessories

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Visual alarm                                       | <input type="checkbox"/> Counter (number of metal detections) in a separate housing | <input type="checkbox"/> Adapter plate system |
| <input type="checkbox"/> Failure indication                                 |   | <input type="checkbox"/> Test samples         |
| <input type="checkbox"/> Failure and metal indication                       | <input type="checkbox"/> Push button for manual rejection in a separate housing     |   |
| <input type="checkbox"/> Audible alarm                                      | <input type="checkbox"/> 25 l Container with 3 m vacuum tube for reject material    |   |
| <input type="checkbox"/> Failure indication                                 |   |   |
| <input type="checkbox"/> Failure and metal indication                       | <input type="checkbox"/> 60 l Container with 3 m vacuum tube for reject material    |   |
| <input type="checkbox"/> Combination alarm (visual alarm and audible alarm) |   |   |
| <input type="checkbox"/> Failure indication                                 |   |   |
| <input type="checkbox"/> Failure and metal indication                       |   |   |

## ■ Options

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Compressed-air monitor | <input type="checkbox"/> Filling level monitor for reject bin with connection cable 5 m | <input type="checkbox"/> Cable set for remote control unit: 6 m, 10 m, 15 m |
| <input type="checkbox"/> US-power cable         |   |   |

## ■ Special versions / Supplementary systems

- |   |   |
|---|---|
| <input type="checkbox"/> Special supply voltages                            | <input type="checkbox"/> Magnet systems for pre-removal of ferrous metals |
| <input type="checkbox"/> Design for bulk material temperatures up to 140° C | <input type="checkbox"/> Hopper magnet                                    |
| <input type="checkbox"/> Separator surface nickel plated                    | <input type="checkbox"/> SAFEMAG inline magnet                            |
|   | <input type="checkbox"/> .....  |