



# p-TRON 05 GM v2

## METAL DETECTION

**METAL SEPARATOR FOR INSTALLATION INTO HORIZONTAL OR VERTICAL SUCTION OR PRESSURE LINES WITH AUTOMATIC EJECTION OF METAL CONTAMINATION IN GRANULATES / POWDER**

**Reliable** *in Process and Detection*  
**Durable** *in Technology and Performance*  
**Easy** *in Installation and Handling*

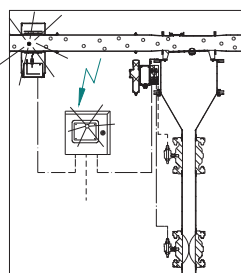


- Fast reacting reject system with powerful and permanently maintenance-free pneumatic actuator.
- Trouble free integration of the coil directly into the tubing without additional fixtures
- Standard systems for the most popular tubing diameters (38 mm to 120 mm)
- Immune against interference, this type of coil does not require a sensor tube opening and is therefore effectively shielded against interference.
- Replaceable anti-static sensing tube is completely integrated into the detector housing
- Product effect compensation – guarantees continuous sensitivity and trouble-free operation even With ‘difficult’ products ‘product effect’ cannot create false ejects.

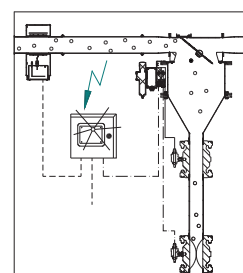
### Applications

Machinery protection  
e.g. Injection moulding machine, Product filling / trans filling

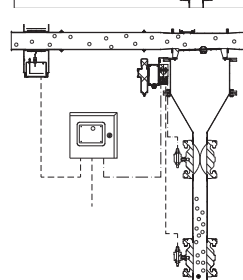
### WORKING PRINCIPLE



■ With transmitter and receiver coils an electromagnetic field is evaluated in the detector. If a metal particle enters the field the measured signal is deflected in one direction. When the metal particle leaves the field the signal is deflected in the opposite direction. If the detection thresholds are exceeded in both directions a metal signal is created.



■ In case of a metal signal the pneumatic cylinder opens the eject flap. The metal particle is redirected into the eject bin together with a small amount of conveyed material. Because the eject material bin is sealed during the conveying phase the air stream does not break down. After the eject duration period the flap is closed again automatically.



■ A dual airlock drops the ejected material into a eject bin. The dual airlock assures an even pressure in the tubing