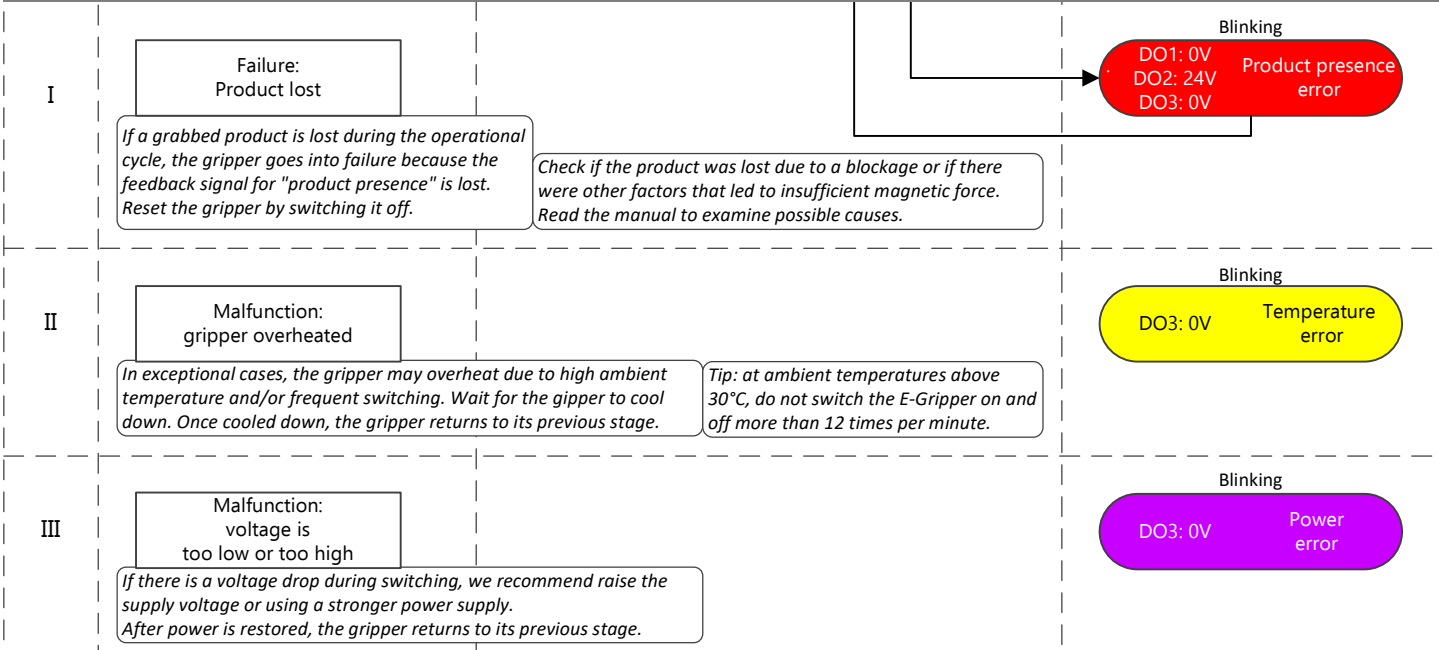


Operation flowchart E-Gripper

Stage	Operation & Input	Control logic for switch states	Output & light signals
A	Switch power ON Main: 24V	Initialization OK? Yes Magnet ON? No Product present? No	Varying colours Initialising or hardware error
B	Move gripper to workpiece <i>When the gripper is placed on a product and the light signal does not turn light blue, this may be due to too large air gap or too many perforations in the workpiece. Improve the gripper's touch to solve this problem.</i>	Yes Product present? Yes	<i>Magnet OFF, No product</i> DO1: 24V DO2: 24V Ready to start DO3: 24V
C	Switch gripper ON DI1: 24V/10ms pulse	Product present? Yes	<i>Magnet ON, product detected</i> DO1: 0V DO2: 0V Ready to move workpiece DO3: 24V
D	Move gripper to next location	No	
E	Switch gripper OFF DI2: 24V/10ms pulse		<i>Magnet OFF, product detected</i> DO1: 24V DO2: 0V Ready to grab DO3: 24V

Troubleshooting



Force setting

Optional	<table><tr><td>Magnet power setting</td><td>AI1: 0V = 100% 1 – 10V = 10% - 100%</td></tr></table>	Magnet power setting	AI1: 0V = 100% 1 – 10V = 10% - 100%	Optionally, the strength of the E-Gripper can be adjusted. This can be useful unstacking thin steel sheets to ensure they are grabbed one by one. If the analogue input is not used (0V), full power is switched on. The power of the magnet can be adjusted by varying the analog input from 1V = 10% tot 10V = 100%. Contact Goudsmit for detailed information on this application.
Magnet power setting	AI1: 0V = 100% 1 – 10V = 10% - 100%			



EU Declaration of Conformity



Manufacturer:

Goudsmit Magnetic Systems B.V.
Petunialaan 19
5582 HA Waalre
The Netherlands

Herewith we declare, on our own responsibility, that the device:

Article description: **E-Gripper / bistable electro-permanent magnet E-Gripper**

Product key(s): **HGE(Z)-SQ-xxx-xx-xx-x-x**

Meets the requirements of the following European Directives:

- EMC Directive 2014/30/EU
- Applied harmonized standard(s):
- IEC EN 61000-6-4(2007)
- RoHS-2 Directive 2011/65/EU + RoHS-3 (EU) 2015/863

UK Declaration of Conformity



Manufacturer:

Goudsmit Magnetic Systems B.V.
Petunialaan 19
5582 HA Waalre
The Netherlands

Authorized representative:

Goudsmit Magnetics (UK) Ltd
1st Floor, Riverview
The Green
Tullynacross Road
Lisburn, BT27 5SR UK

Herewith we declare, on our own responsibility, that the device:

Article description: **E-Gripper / bistable electro-permanent magnet E-Gripper**

Product key(s): **HGE(Z)-SQ-xxx-xx-xx-x-x**

Meets the requirements of the following Regulations:

- Electromagnetic Compatibility Regulations 2016
Applied designated standard(s):
 - EN 61000-6-4(2007)
- Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (as amended) (RoHS)

Waalre, The Netherlands, 25-6-2025

on behalf of Goudsmit:

Signature manufacturer:



Alwin de Bruine,
Compliance Engineer