

# GUARDBOX

How to make easier the control of your valves



Distributed in the UK by:

**Power-tork**  
VALVE AUTOMATION EQUIPMENT



A deep analysis of the market has enabled us to design and produce a complete set of components for position monitoring for both manual and actuated valves able to meet the real application requirements and to be perfectly in line with the international standards required. **GUARDBOX** limit switch box is a product designed for demanding application in extreme environments and where there are requested high standards for safety and reliability products. **GUARDBOX** will be the right partner to monitoring your valves.



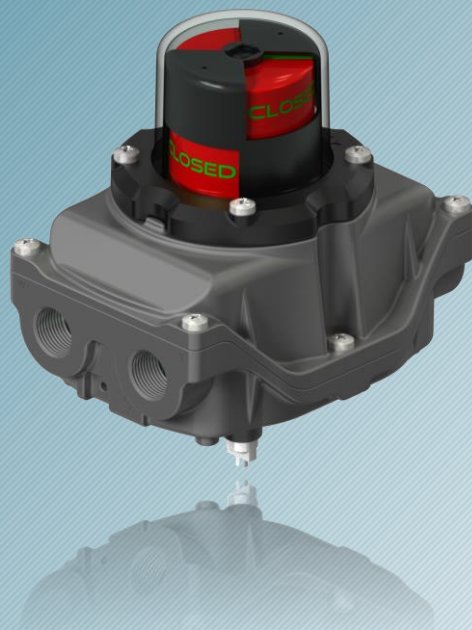


# GUARDBOX

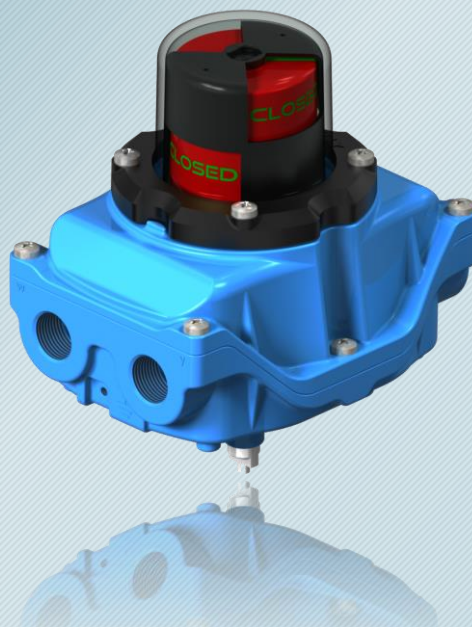
PRODUCT RANGE



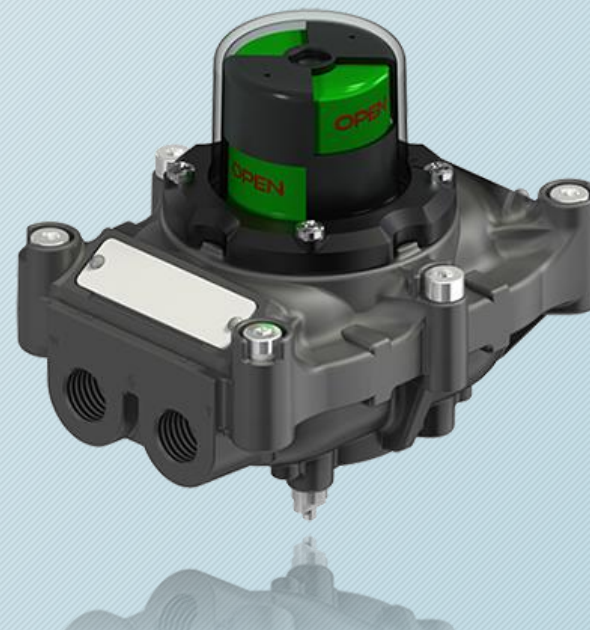
GP SERIES



GI SERIES



GD SERIES



# GUARDBOX

easy on field products design



In the early stage of the product design we thought about “what happens when you install the product”. We identified the possible changes that could be made in order to facilitate the installation and commissioning operator even under difficult circumstances and consequently we have created a series of amendments that have been incorporated into our standard limit switch box. All of this means “**easy on field**” and can be found in our products. Discover how to make the control of your valve easier!





# GUARDBOX

easy on field products design



3D high visibility position indicator easy adjustable on 360° without disassembly



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# GUARDBOX

easy on field products design



Easily adjustable patented cam.  
High resolution and metal spring free

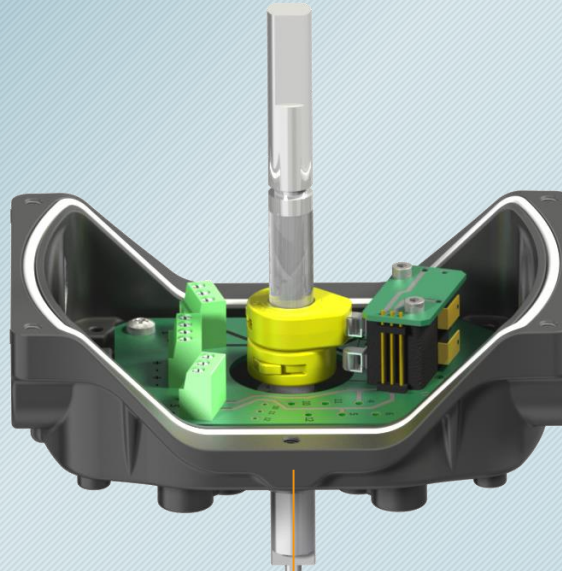
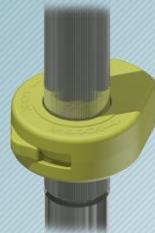


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Easy wiring to terminal strip



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easy on field design products



Cable entries codify by letter for an easy wiring identification

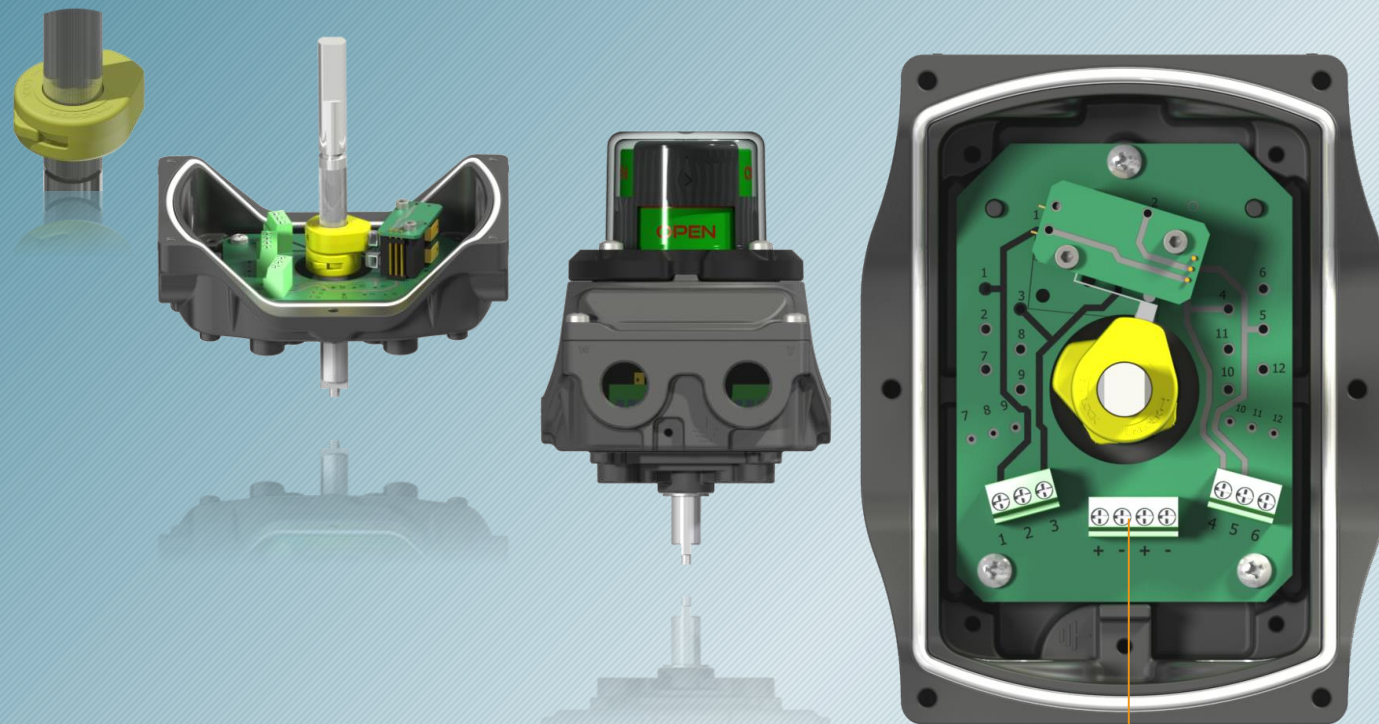


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# GUARDBOX

easy on field products design

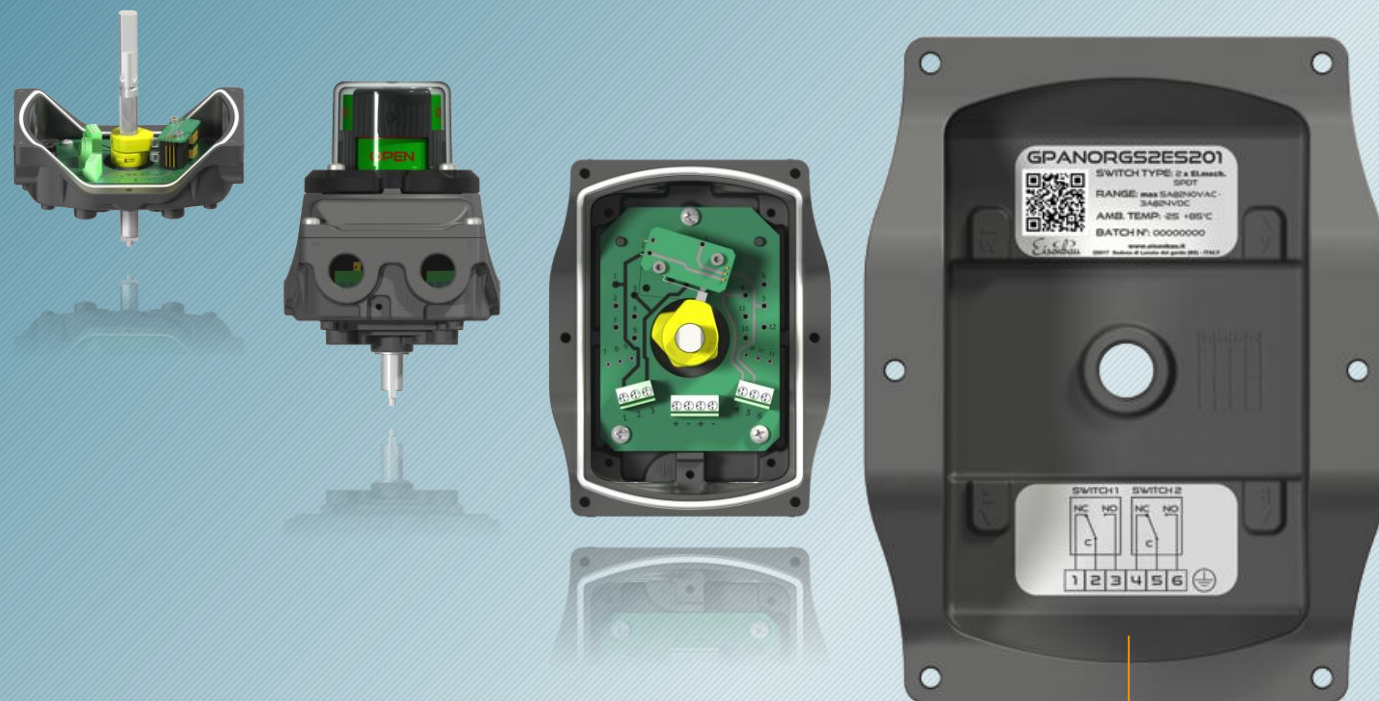


Standard 2 pole terminal strip for solenoid valve wiring



# GUARDBOX

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Wiring diagram and ID code protected inside the box.  
*Standard label is also visible externally*





# GUARDBOX

easy on field products design



QR Code to directly download manual and product certificates directly on field.



# GUARDBOX

switches availability



ES type



wide range of electromechanical SPDT single pole double throw silver or gold plated contact. Available also hermetically sealed IP67 and for extremely low temperature -60°C rating 240 VAC or 24 VDC 5...0,1A.



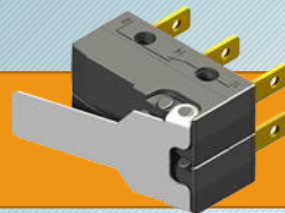


# GUARDBOX

switches availability



ED type



Electromechanical DPDT double pole double throw silver or gold plated contact. Available also hermetically sealed IP67 and for low temperature -40°C rating 240 VAC or 24 VDC 5...0,1A.

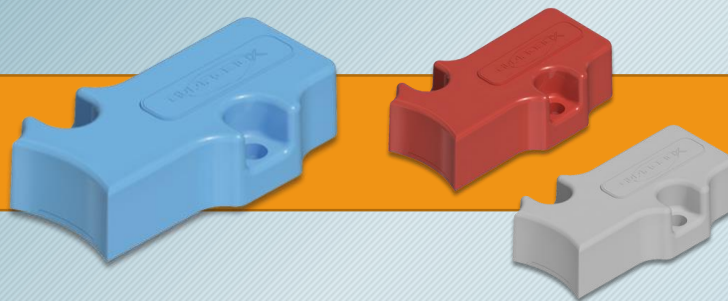


# GUARDBOX

switches availability



MS/MD type



Guardbox Magnetic proximity SPDT (MS) or DPDT (MD) dry contact hermetically sealed NC/NO switch will change status when a magnetic field is applied (Magnetic cam) rating 240VAC 0,4A or 24VDC 3A temperature range -60/+105°C.





# GUARDBOX

switches availability



PI type



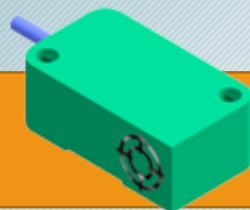
Inductive proximity sensor detect the presence of metallic objects. Their operating principle is based on a coil and high frequency oscillator that creates a field in the close surroundings of a sensing surface. The present of a metal insert inside the cam cause a change in the oscillation amplitude that change the output of the sensor. Compatible wit PLC units. Available 2/3 wire operating voltage 5....60 VDC temperature -25/+85°C.

# GUARDBOX

switches availability



PN type



Inductive proximity NAMUR sensor 2 wire not amplified whose current varies in the presence of a metal insert in the cam. Their current and voltage limits allow them to be used in hazardous environments when used with approved amplifiers. Operating 8,2 VDC temp. -25(-50)/+100°C



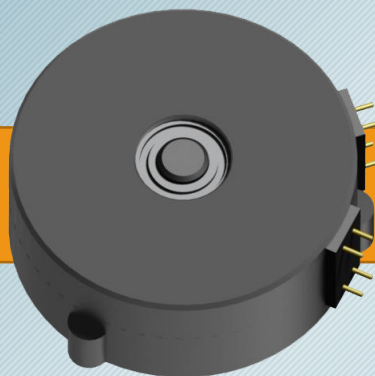


# GUARDBOX

switches availability



TX type



Position transmitter will convert the angular position of a shaft in a current signal 4-20 mA proportional to the angular position. The new Guardbox TX79 has an easy programming non contact sensing device Atex compliant. Response time <5 ms DC voltage 12..30 VDC temperature range -40 / +75°C.



# GUARDBOX

GP series *Guardbox* protection technical data



Visual indicator

Polycarbonate or glass \*

\*Visual indicator for extremely low temperature

Seal

Silicone rubber

Housing Material

Copper free aluminium \*\* or AISI316L

\*\*Aluminium surface protection Alodine plus polyester powder coated Dark Grey colour.

Shaft

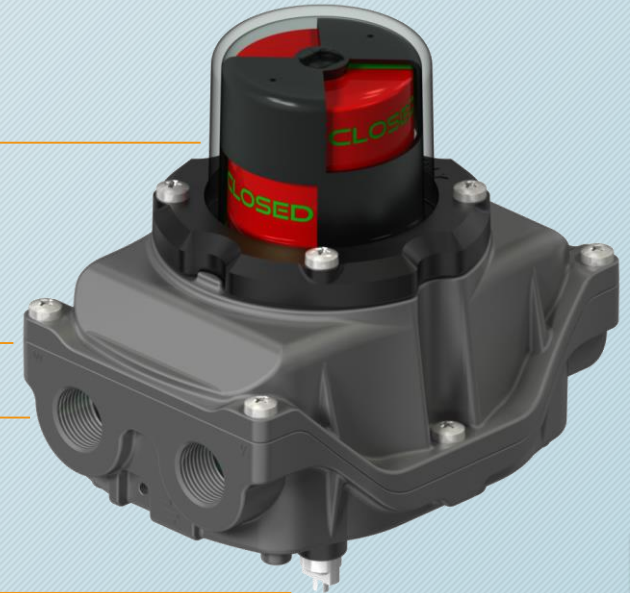
Hardened AISI316L stainless steel

Temperature range

-25°C +85°C (-60°C / +105°C option)

IP degree

IP66 – IP67





# GUARDBOX

GP series switch options



Electromechanical SPDT *silver plated* dry contact **ES** series

Electromechanical DPDT *silver plated* dry contact **ED** series

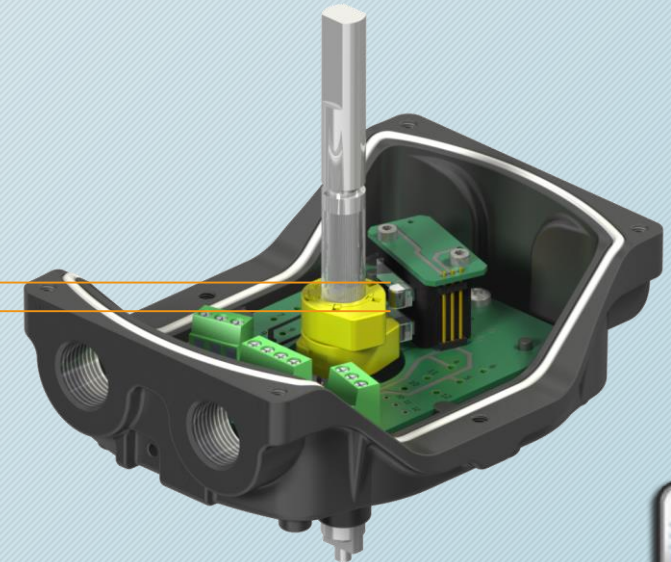
Magnetic proximity SPDT dry contact **MS** series

Magnetic proximity DPDT dry contact **MD** series

Inductive proximity 2 or 3 wire amplified P+F **PI** series

Position transmitters *4-20 mA* **TX** series

Position transmitters plus switch **TY** as special option



# GUARDBOX

GP series weatherproof IP66-IP67



GP **GUARDBOX** Protection series heavy duty enclosures available in polyester powder coated copper free aluminium or AISI316L stainless steel designed to withstand the most extreme weather conditions. Easy wiring connection to terminal block due an innovative ergonomic design of the enclosure. Ability to have up to 4 cable entries Metric or NPT as needed. Connection to shaft according to the international standard VDI/VDE3845 and ISO F05 interface to the fixture. Wide availability of brackets also available for non standard applications. 3D indicator visible on all 4 sides and fully adjustable over 360°, captive cover stainless steel locking screw to prevent loosing in operation. Wide range of multiple standard contacts or sensors available fixable inside.





# GUARDBOX

GI series *INTRINSICALLY SAFE* technical data



Visual indicator

Polycarbonate or glass \*

\*Visual indicator for extremely low temperature

Seal

Silicone rubber

Housing Material

Copper free aluminium \*\* or AISI316L

\*\*Aluminium surface protection Alodine plus polyester powder coated **RAL5015** colour.

Shaft

Hardened AISI316L stainless steel

Temperature range

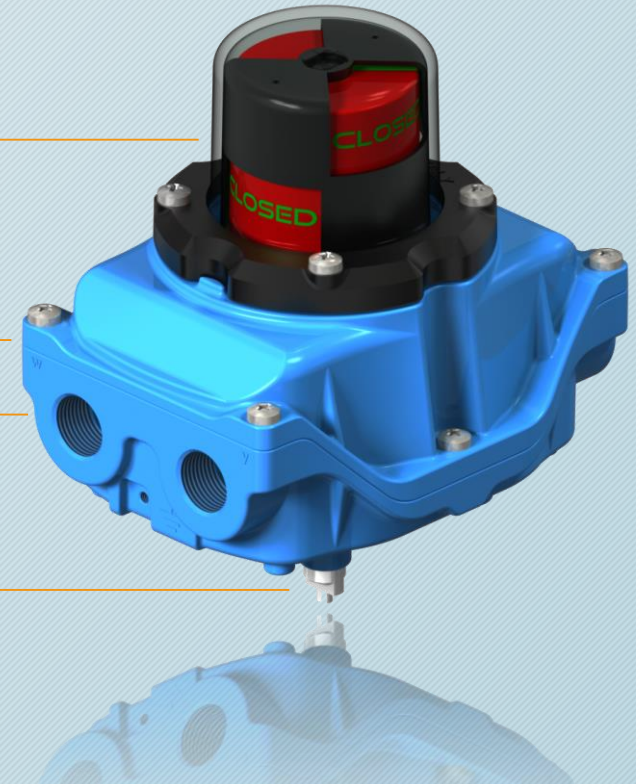
-25°C +85°C (-60°C / +105°C option)

IP degree

IP66 – IP67

Certificate

IECEX EXA 15.0007X – EXA 15 ATEX 0040X



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GI series switch options



Electromechanical SPDT **gold plated** dry contact **ES** series

Electromechanical DPDT **gold plated** dry contact **ED** series

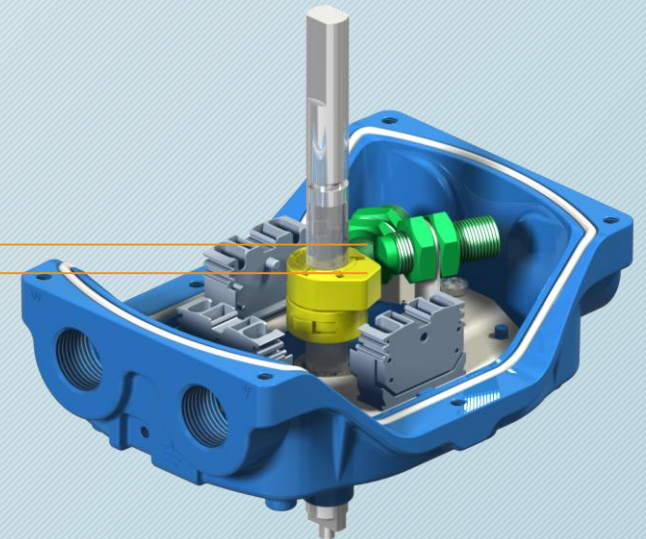
Magnetic proximity SPDT dry contact **MS** series

Magnetic proximity DPDT dry contact **MD** series

Inductive proximity **NAMUR** P+F **PN** series

Position transmitters *Ex ia* 4-20 mA **TX** series

Position transmitters *Ex ia* plus switch **TY** as special option



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# GUARDBOX

GI series intrinsically safe



GI **GUARDBOX** Intrinsically safe series derived from GP enclosures. Specifically designed to be installed into potentially explosive atmosphere GI series are certified to be used in a dust and gas explosive area, certification will cover both enclosures and contact / sensor inside. Available in polyester powder coated copper free aluminium or AISI316L stainless steel. Easy recognizable for RAL 5015 Blue colour intrinsic safety standard. Ability to have up to 4 cable entries Metric or NPT as needed. Connection to shaft according to the international standard VDI/VDE3845 and ISO F05 interface to the fixture. 3D visual indicator visible on all 4 sides and fully adjustable over 360°, captive cover stainless steel locking screw to prevent loosening in operation. Wide range of multiple standard contacts or sensors available fixable inside.



# GUARDBOX

GD series *EXPLOSION PROOF* technical data



Visual indicator

Polycarbonate or glass \*

\*Visual indicator for extremely low temperature

Seal

Silicone rubber

Housing Material

Copper free aluminium \*\* or AISI316L

\*\*Aluminium surface protection Alodine plus polyester powder coated Dark Grey colour.

Shaft

Hardened AISI316L stainless steel

Temperature range

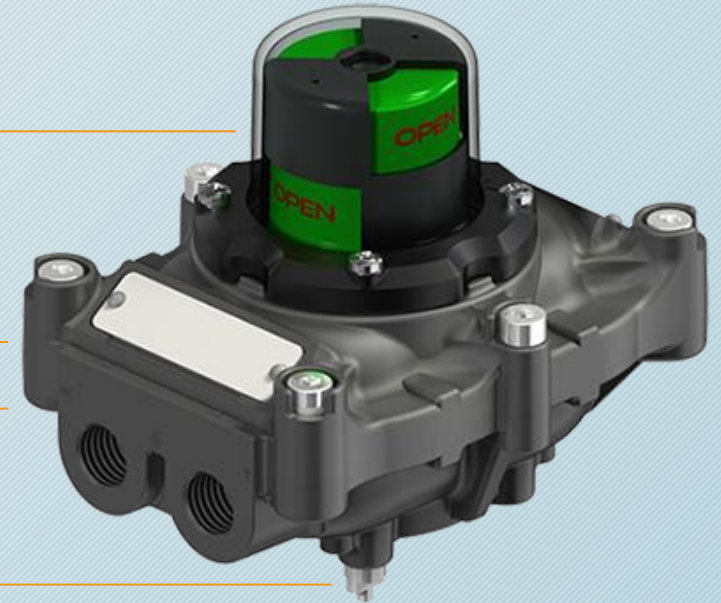
-25°C +85°C (-60°C / +105°C option)

IP degree

IP66 – IP68

certificate

iecex exa 15.0008x – exa 15 ATEX 0039x



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# GUARDBOX

GD series switch options



Electromechanical SPDT *silver plated* dry contact **ES** series

Electromechanical DPDT *silver plated* dry contact **ED** series

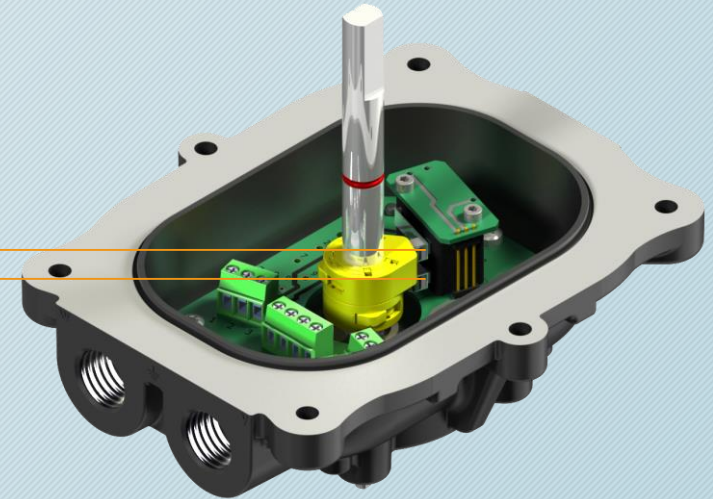
Magnetic proximity SPDT dry contact **MS** series

Magnetic proximity DPDT dry contact **MD** series

Inductive proximity 2 or 3 wire amplified P+F **PI** series

Position transmitters 4-20 mA **TX** series

Position transmitters plus switch **TY** as special option



# GUARDBOX

GD series *EXPLOSION PROOF*



GD **GUARDBOX** explosion proof series enclosures available in polyester powder coated copper free aluminium or AISI316L stainless steel designed to withstand the most extreme weather conditions. Specifically designed to be installed into hazardous location GD series are certified Ex d IIC to be used in a Gas and Dust explosive area. Ability to have up to 3 cable entries Metric or NPT as needed in a compact design. Connection to shaft according to the international standard VDI/VDE3845 and ISO F05 interface to the fixture. Wide availability of brackets also available for non standard applications. 3D indicator visible on all 4 sides and fully adjustable over 360°, captive cover stainless steel locking screw to prevent loosening in operation. Wide range of multiple standard contacts or sensors available fixable inside.

