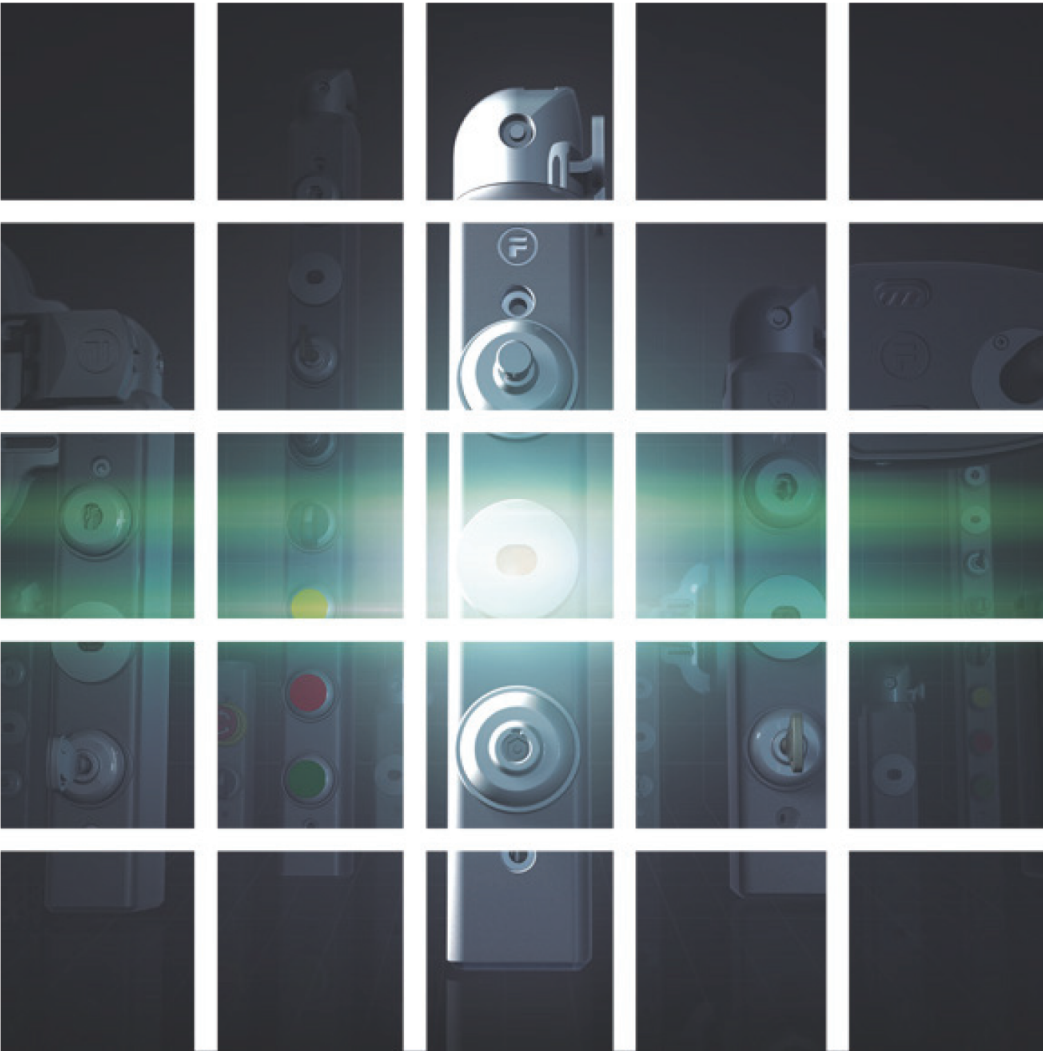


t **Gard** Integrated Control & Safety



tGard

Actuators

Fixed Actuator - TAF	Hinged Actuator - TAH	Sliding Actuator - TAS	Blank Handle - THB	Handle Actuator (no internal knob) - TEN	Handle Actuator - TEH

t Gard
Range Card

Heads

Cap - THC	Head - THM	Head & Fixed Actuator - THF	Head & Hinged Actuator - THH	Head & Sliding Actuator - THS	Head & Handle Actuator (no internal knob) - THN

Core Elements

Internal Release - TRX, TRZ	Safety Lock - TSN, TGN Access Lock - TAB, TQB	Safety Switch - TSM, TSS, TSP	Safety Switch & Solenoid - TSMDF, TSMELU TSSEU, TSSEU	Safety Switch & Solenoid - TSMDF, TSMEL TSSEL, TSMFL	E-Stops - TEG, TED, TEW, TEV, TET, TEM, TEP, TEI	Start Re-start - TSR / TS3	Blank - TEB	Keys - TKS & TKM
60mm Int. Release	Variable length Int. Release	TSM / TSP	Power to Un-Lock	Power to Lock				

Core Elements

<p>Illuminating Switches - Push, Selector</p> <table border="1"> <tr> <th>Push Buttons</th> <th>1 N/O Illuminated - Latching</th> <th>1 N/O & 1 N/C Illuminated</th> <th>Void Free Contacts Illuminated</th> <th>Colour</th> </tr> <tr> <td>TP1</td> <td>TJ1</td> <td>TX1</td> <td>TU1</td> <td>Red</td> </tr> <tr> <td>TP3</td> <td>TJ3</td> <td>TX3</td> <td>TU2</td> <td>Green</td> </tr> <tr> <td>TP2</td> <td>TJ2</td> <td>TX2</td> <td>TU3</td> <td>Yellow</td> </tr> <tr> <td>TP6</td> <td>TJ6</td> <td>TX6</td> <td>TU6</td> <td>Blue</td> </tr> <tr> <td>TP7</td> <td>TJ7</td> <td>TX7</td> <td>TU7</td> <td>Grey</td> </tr> </table> <p>Engraving for each button is 2 lines of 10 characters.</p> <p>2 Position Illuminated Selector Switch</p> <p>TZE Latching</p> <p>TZF Momentary</p>	Push Buttons	1 N/O Illuminated - Latching	1 N/O & 1 N/C Illuminated	Void Free Contacts Illuminated	Colour	TP1	TJ1	TX1	TU1	Red	TP3	TJ3	TX3	TU2	Green	TP2	TJ2	TX2	TU3	Yellow	TP6	TJ6	TX6	TU6	Blue	TP7	TJ7	TX7	TU7	Grey	<p>Non-Illuminating Switches - Push, Selector, Mushroom & Key Selector</p> <table border="1"> <tr> <th>Push Buttons</th> <th>1 N/O (normally open) & 1 N/C (normally closed) Push Buttons</th> <th>Void Free Contacts Push Buttons</th> <th>Colour</th> </tr> <tr> <td>TPB</td> <td>TGB</td> <td>TUB</td> <td>Black</td> </tr> <tr> <td>TPR</td> <td>TGR</td> <td>TUR</td> <td>Red</td> </tr> <tr> <td>TPG</td> <td>TGG</td> <td>TUG</td> <td>Green</td> </tr> <tr> <td>TPW</td> <td>TGW</td> <td>TUW</td> <td>White</td> </tr> <tr> <td>TPY</td> <td>TGY</td> <td>TUY</td> <td>Yellow</td> </tr> <tr> <td>TPZ</td> <td>TGZ</td> <td>TUZ</td> <td>Blue</td> </tr> </table> <p>Engraving for each button is 2 lines of 10 characters.</p> <p>Push Button</p> <p>1 N/O Mushroom Push Button</p> <p>TMB</p>	Push Buttons	1 N/O (normally open) & 1 N/C (normally closed) Push Buttons	Void Free Contacts Push Buttons	Colour	TPB	TGB	TUB	Black	TPR	TGR	TUR	Red	TPG	TGG	TUG	Green	TPW	TGW	TUW	White	TPY	TGY	TUY	Yellow	TPZ	TGZ	TUZ	Blue	<p>LED Lamps</p> <table border="1"> <tr> <th>LED Lamps</th> <th>TLB</th> <th>TLG</th> <th>TLR</th> <th>TLW</th> <th>TLV</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	LED Lamps	TLB	TLG	TLR	TLW	TLV							<p>Blue Independently Wired Switch - TSZ</p> <p>1 N/O (normally open)</p> <p>1 N/C (normally closed)</p> <p>Potentiometer - TV4</p>	<p>2 Position Selector Switch</p> <table border="1"> <tr> <th>2 Position Selector Switch</th> <th>TZA Latching 1 N/O</th> <th>TZD Momentary</th> <th>TZE Latching (Both Sides) Illuminated</th> <th>TZF Momentary Illuminated</th> <th>T3H Momentary / Latching</th> <th>TK7 Key Latching (Both Sides)</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>Engraving for 2-position selector switch is 10 characters at each switch position.</p> <p>2 Position Selector Key Switch</p> <p>TK5 Latching</p> <p>TK6 Momentary</p>	2 Position Selector Switch	TZA Latching 1 N/O	TZD Momentary	TZE Latching (Both Sides) Illuminated	TZF Momentary Illuminated	T3H Momentary / Latching	TK7 Key Latching (Both Sides)								<p>3 Position Selector</p> <table border="1"> <tr> <th>3 Position Selector Switch</th> <th>T3A Latching (Both Sides)</th> <th>T3D Momentary</th> <th>T3E Latching (Both Sides) Illuminated</th> <th>T3F Momentary Illuminated</th> <th>T3H Momentary / Latching</th> <th>TK7 Key Latching (Both Sides)</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	3 Position Selector Switch	T3A Latching (Both Sides)	T3D Momentary	T3E Latching (Both Sides) Illuminated	T3F Momentary Illuminated	T3H Momentary / Latching	TK7 Key Latching (Both Sides)							
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Base Elements

<p>Foot - TBF</p> <p>Legend-TWL</p>	<p>Safety & Control Quick Disconnect Connectors</p> <table border="1"> <tr> <th>TC1</th> <th>TC2</th> <th>TC3</th> <th>TC4</th> <th>TC5</th> <th>TC7</th> <th>TC8</th> <th>TC9</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5 Pin Safety Only</td> <td>8 Pin Control Only</td> <td>8 Pin Safety & Control</td> <td>12 Pin Control Only</td> <td>12 Pin Safety & Control</td> <td>14 Pin Safety & Control</td> <td>19 Pin Safety & Control</td> <td>19 Pin Dual Safety & Control</td> </tr> </table>	TC1	TC2	TC3	TC4	TC5	TC7	TC8	TC9									5 Pin Safety Only	8 Pin Control Only	8 Pin Safety & Control	12 Pin Control Only	12 Pin Safety & Control	14 Pin Safety & Control	19 Pin Safety & Control	19 Pin Dual Safety & Control	<p>Mating Cables for Quick Disconnect Connectors</p> <table border="1"> <tr> <th>ICard mating Connector</th> <th>TC1</th> <th>TC2</th> <th>TC3</th> <th>TC4</th> <th>TC5</th> <th>TC7</th> <th>TC8</th> <th>TC9</th> </tr> <tr> <td></td> <td>M12</td> <td>M12</td> <td>M12</td> <td>M23</td> <td>M23</td> <td>M12</td> <td>M23</td> <td>M23</td> </tr> <tr> <td>No. Pins</td> <td>5</td> <td>8</td> <td>8</td> <td>12</td> <td>12</td> <td>8</td> <td>12</td> <td>19</td> </tr> <tr> <td>Connector</td> <td>2M</td> <td>5M</td> <td>10M</td> <td>20M</td> <td>20M</td> <td>20M</td> <td>20M</td> <td>20M</td> </tr> <tr> <td></td> <td>Cable-2M-TQ1</td> <td>Cable-5M-TQ1</td> <td>Cable-10M-TQ1</td> <td>Cable-20M-TQ1</td> <td>Cable-2M-TQ2</td> <td>Cable-5M-TQ2</td> <td>Cable-10M-TQ2</td> <td>Cable-20M-TQ2</td> </tr> <tr> <td></td> <td>Cable-2M-TQ3</td> <td>Cable-5M-TQ3</td> <td>Cable-10M-TQ3</td> <td>Cable-20M-TQ3</td> <td>Cable-2M-TQ4</td> <td>Cable-5M-TQ4</td> <td>Cable-10M-TQ4</td> <td>Cable-20M-TQ4</td> </tr> <tr> <td></td> <td>Cable-2M-TQ5</td> <td>Cable-5M-TQ5</td> <td>Cable-10M-TQ5</td> <td>Cable-20M-TQ5</td> <td>Cable-2M-TQ6</td> <td>Cable-5M-TQ6</td> <td>Cable-10M-TQ6</td> <td>Cable-20M-TQ6</td> </tr> <tr> <td></td> <td>Cable-2M-TQ7</td> <td>Cable-5M-TQ7</td> <td>Cable-10M-TQ7</td> <td>Cable-20M-TQ7</td> <td>Cable-2M-TQ8</td> <td>Cable-5M-TQ8</td> <td>Cable-10M-TQ8</td> <td>Cable-20M-TQ8</td> </tr> <tr> <td></td> <td>Cable-2M-TQ9</td> <td>Cable-5M-TQ9</td> <td>Cable-10M-TQ9</td> <td>Cable-20M-TQ9</td> <td>Cable-2M-TQ9</td> <td>Cable-5M-TQ9</td> <td>Cable-10M-TQ9</td> <td>Cable-20M-TQ9</td> </tr> </table>	ICard mating Connector	TC1	TC2	TC3	TC4	TC5	TC7	TC8	TC9		M12	M12	M12	M23	M23	M12	M23	M23	No. Pins	5	8	8	12	12	8	12	19	Connector	2M	5M	10M	20M	20M	20M	20M	20M		Cable-2M-TQ1	Cable-5M-TQ1	Cable-10M-TQ1	Cable-20M-TQ1	Cable-2M-TQ2	Cable-5M-TQ2	Cable-10M-TQ2	Cable-20M-TQ2		Cable-2M-TQ3	Cable-5M-TQ3	Cable-10M-TQ3	Cable-20M-TQ3	Cable-2M-TQ4	Cable-5M-TQ4	Cable-10M-TQ4	Cable-20M-TQ4		Cable-2M-TQ5	Cable-5M-TQ5	Cable-10M-TQ5	Cable-20M-TQ5	Cable-2M-TQ6	Cable-5M-TQ6	Cable-10M-TQ6	Cable-20M-TQ6		Cable-2M-TQ7	Cable-5M-TQ7	Cable-10M-TQ7	Cable-20M-TQ7	Cable-2M-TQ8	Cable-5M-TQ8	Cable-10M-TQ8	Cable-20M-TQ8		Cable-2M-TQ9	Cable-5M-TQ9	Cable-10M-TQ9	Cable-20M-TQ9	Cable-2M-TQ9	Cable-5M-TQ9	Cable-10M-TQ9	Cable-20M-TQ9	<p>Self wire</p> <table border="1"> <tr> <th>TW1</th> <th>TV3</th> <th>TV4</th> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>12 Pin Safety & Control</td> <td>24 Pin Dual Safety & Control</td> <td>24 Pin Dual Safety & Control</td> </tr> </table>	TW1	TV3	TV4				12 Pin Safety & Control	24 Pin Dual Safety & Control	24 Pin Dual Safety & Control	<p>AS-interface</p> <table border="1"> <tr> <th>TEB84</th> <th>TEB88</th> </tr> <tr> <td></td> <td></td> </tr> <tr> <td>Up to 4 inputs, 4 outputs & 1 dual safety circuit</td> <td>Up to 8 inputs, 8 outputs & 2 dual safety circuits</td> </tr> </table>	TEB84	TEB88			Up to 4 inputs, 4 outputs & 1 dual safety circuit	Up to 8 inputs, 8 outputs & 2 dual safety circuits
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tGard **An Innovative Platform for Machine Safety**

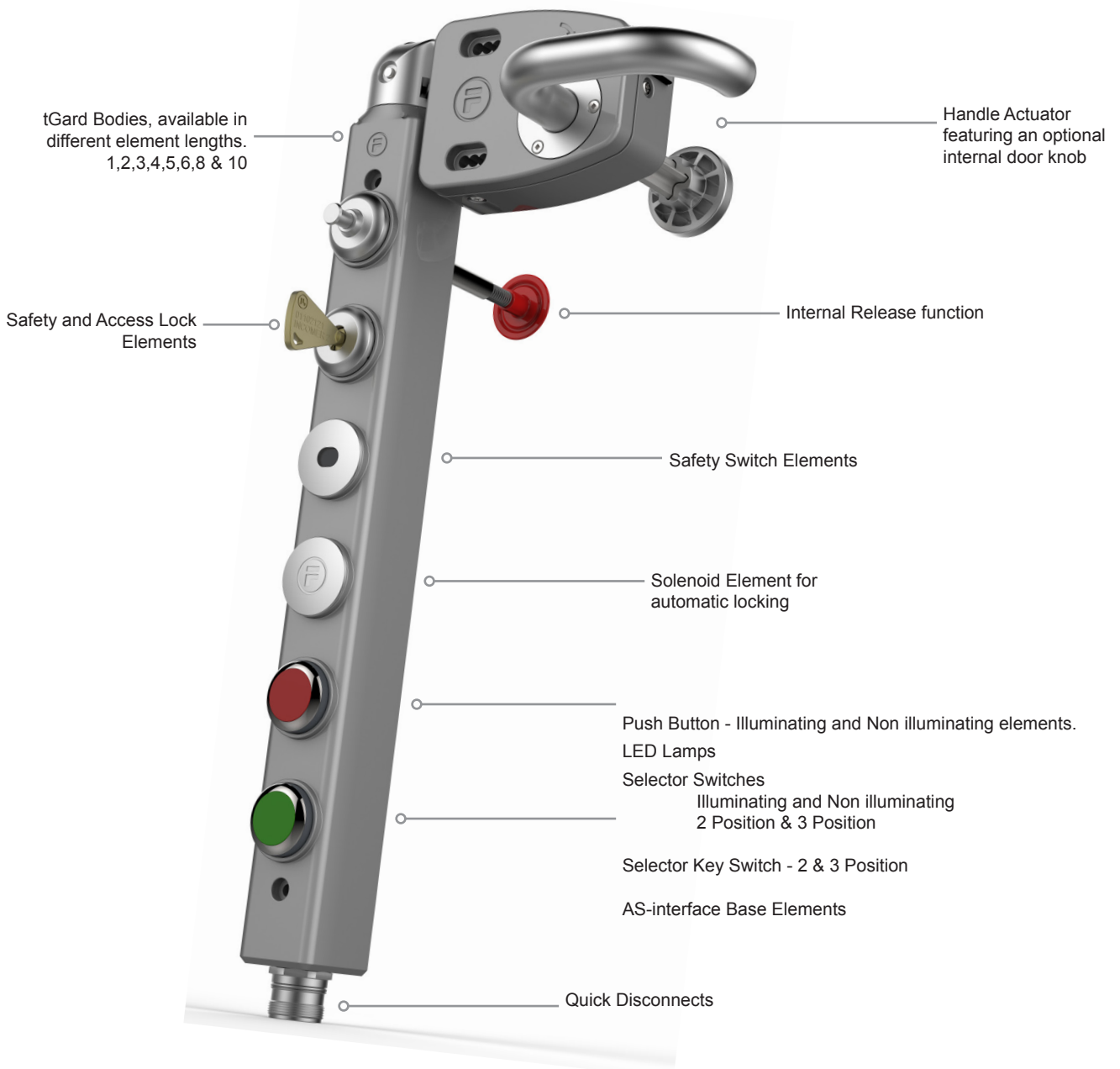
tGard is the new innovative approach to controlling access to hazardous machinery and equipment. It is a compact metal bodied system that enables the configuration of various safety products including electrical safety gate switches (with or without guard locking), mechanical trapped key interlocks, and electrical operator controls, either as separate devices or integrated into one device.

tGard offers “a customised safety solution, as standard” and is defined by a range of **tGard** elements, including selector switches, safety switches (solenoid and non solenoid), personnel keys, emergency release, push buttons, estops, indicator lamps and a choice of operating handles for both hinged and sliding guard doors. These elements are simply selected and then assembled into a robust housing, suitable for mounting onto machine guarding, providing the user with an exact configuration specific to the application.

tGard is quick and easy to install and can be mounted directly onto a flat surface, doors or extruded aluminium profiles without the need for mounting plates or brackets. It is IP65 as standard and has been designed to be fully compliant with the new machinery safety standards.

Customised Safety Solutions as Standard

- Simply Robust
- Customisable
- Future proof for future element expansion
- Easy to Install
- Quick Disconnects as standard
- Standards compliant
- Safety Gate Switches
- Trapped Key Interlocks
- Operator Control





Gard

An Innovative new Platform for Machine Safety

“Customised Safety Solutions as Standard”

- Simply Robust
- Customisable
- Standards compliant
- Future proof for future element expansion
- Easy to Install
- Quick Disconnects as standard
- Trailing Cables as standard

Configurable solutions include:

- Safety Gate Switches
- Trapped Key Interlocks
- Operator Control

