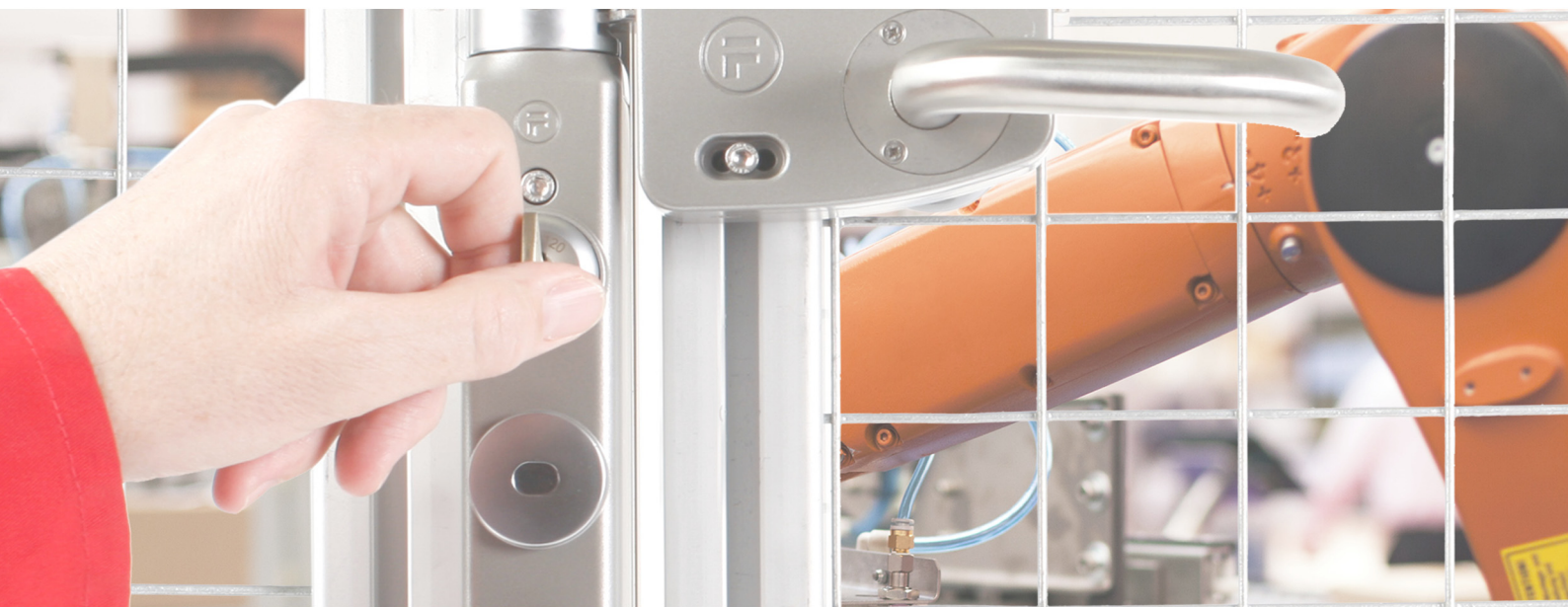


tGard Configuration Tool

Also available on our website www.fortressinterlocks.com as an online configurator



LEARN MORE

Step 1: Choose the Actuators



TAF		TAH		TAS		THB		TEN		TEH	
											
Part No.	TAF	Part No.	TAH	Part No.	TAS	Part No.	THB	Part No.	TEN	Part No.	TEH
Description	Fixed Actuator	Description	Handle Actuator - Hinged Door	Description	Handle Actuator - Sliding Door	Description	Blank Handle	Description	Handle Actuator - (no internal knob)	Description	Handle Actuator
Features & Benefits		Features & Benefits		Features & Benefits		Features & Benefits		Features & Benefits		Features & Benefits	
• Fixed Actuator suitable for mounting on either sliding or hinged doors. • Padlock through tongue. • 2500N Retention force.		• Handle actuators suitable for bracketless mounting to hinged doors. • 4mm misalignment feature. • TAH actuator can be converted to a TAS actuator on site (special tool required). • Padlock through tongue. • 2500N Retention force. • Quick bolt to Aluminium extrude (no brackets).		• Handle actuators suitable for bracketless mounting to sliding doors. • 4mm misalignment feature. • TAS actuator can be converted to a TAH actuator on site (special tool required). • Padlock through tongue. • 2500N Retention force. • Quick bolt to Aluminium extrude (no brackets).		• Blank Handle (without actuator) for use on inside of doors.		• Intuitive handle actuator giving latching feature on hinged doors. • 4mm misalignment feature. • Lock out feature. • Handling can be changed on site. • Prevents force of door slamming against interlock. • 2500N Retention force. • Quick bolt to Aluminium extrude.		• Intuitive handle actuator giving latching feature on hinged doors. • 4mm misalignment feature. • Lock out feature. • Handling can be changed on site. • Prevents force of door slamming against interlock. • 2500N Retention force. • Quick bolt to Aluminium extrude. • Internal knob allows actuator to be retracted but not extended.	

Actuators

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All Actuators to be used in combination with a THM head module.

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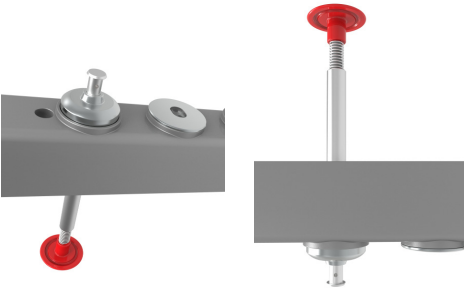
Note: The internal knob on TEH handle does not override the solenoid or lock. A TRXZ (internal release element) must be used to deliver that functionality.

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You can combine a
actuator with a head to
generate a single part
number

THF	THH	THS	THE	THN
				
Part No.	THM + TAF = THF	Part No.	THM + TAH = THH	Part No.
Description	Head module including fixed actuator	Description	Head module including hinged actuator	Description
		Description	Head module including sliding actuator	Description
		Description	Head module including handle actuator	Description
		Description	Head module including handle actuator (no internal knob)	

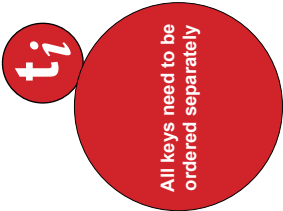
Core Elements

TRX		TRZ	
			
Part No.	TRX	Part No.	TRZ
Description	Standard 60mm Internal Release	Description	Variable length Internal Release
Features & Benefits			
• Element allows emergency exit even if unit is locked by keys and or solenoid. • Unit automatically breaks safety circuits and holds them open until unit is reset. • When present, the push IR always occupies the top element. • TRX works through wall thickness upto 60mm. • TRZ allows customer to customise length of emergency release. • Post should be supported if not going through aluminum extrude.			

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Extended version available (TRZ) - any length possible

TSN		TGN		TAB		TQB
						
Part No.	TSN	TGN		Part No.	TAB	TQB
Description	Standard Safety Lock (no key)*	Master Safety Lock (no key)*		Description	Standard Access Lock (no key)*	Master Access Lock (no key)*
Features & Benefits		Features & Benefits		Features & Benefits		
• Prevent closure of door and start up until key returned. • Safety Lock must be directly under head / cap (or under internal release element if one is fitted). • Robust radial disc tumbler lock. • >3000 combinations. • 10 mastered combinations (can be used with all 3000 individual combinations). • The key is laser marked with the Fortress key code. • No key included. *Keys Ordered Separately. • Max. No. of mechanical locks = 10.		• Only allow access with correct key. • Access keys must be directly under safety locks (or under head or internal release if no safety locks). • Robust radial disc tumbler lock. • >3000 combinations. • 10 mastered combinations (can be used with all 3000 individual combinations). • The key is laser marked with the Fortress key code. • No key included. *Keys Ordered Separately. • Max. No. of mechanical locks = 10.		• Only allow access with correct key. • Access keys must be directly under safety locks (or under head or internal release if no safety locks). • Robust radial disc tumbler lock. • >3000 combinations. • 10 mastered combinations (can be used with all 3000 individual combinations). • The key is laser marked with the Fortress key code. • No key included. *Keys Ordered Separately. • Max. No. of mechanical locks = 10.		



Core Elements

TSM / TSP		TSS	
			
Part No.	TSM / TSP	Part No.	TSS
Description	Safety Switch	Description	Safety Switch - No N/O monitor contact
Features & Benefits		Features & Benefits	
• Can be driven by either the operation of the head element (removal of actuator) or a mechanical lock. • Operates on dual safety circuits. • 2 positively driven force break NC contacts (uses none of the I/O pins). • IP65. • 1 Normally Open (N/O) contact giving 24V signal on I/O pin. • Red LED illumination to show door open. • First element after all mechanical elements (Head, Internal Release and Locks). • Extra retention force available (TSP).		• Can be driven by either the operation of the head element (removal of actuator) or a mechanical lock. • Operates on dual safety circuits. • 2 positively driven force break NC contacts (uses none of the I/O pins). • IP65. • First element after all mechanical elements (Head, Internal Release and Locks). • No monitor contact & no LED. • Uses 4 pins for safety circuits (no power required). • *Works with TQ1 (5 Pin QD).	
Number of Safety Circuits		2	2
Number of Control I/O		1	0



Location of safety switch in stack is first element after all mechanical elements (Head, Internal Release and Locks).

TSMDU/L	TSMEU/L	TSMFU/L	TSSEU/L	
				
Power to Un-lock		Power to Lock		
• 1 input used to energise solenoid. • Power to Lock and Power to Unlock options available. • Solenoid override key provided with power to unlock units. • First element after all mechanical elements (Head, Internal Release and Locks).				
Part No.	TSMDU / TSMDL	TSMEU / TSREL	TSMFU / TSMFL	TSSEU / TSSEL
Description	Head & solenoid safety in series TSMDU (Power to Un-lock) TSMDL (Power to Lock)	Safety on head element only TSMEU (Power to Un-lock) TSREL (Power to Lock)	Four safety circuits TSMFU (Power to Un-lock) TSMFL (Power to Lock)	Safety on head element only (no monitoring contact on head) TSSEU (Power to Un-lock) TSSEL (Power to Lock)
Features & Benefits	• 2500N retention force. • 2 X Normally closed safety circuits run through head safety switches and solenoid safety switches. • Non safety monitor circuit on head gives 24V when door opened. • Non safety monitor circuit on solenoid gives 24V when unlocked. • LED sequence: *Green = Door closed & locked *Green & Red = Door closed but unlocked *Red = Door open	• 2500N retention force. • 2 X Normally closed safety contacts driven by head only (not solenoid). • Non safety monitor circuit on head gives 24V when door opened. • Non safety monitor circuit on solenoid gives 24V when locked. • LED sequence: *Green = Door closed & locked *Green & Red = Door closed but unlocked *Red = Door open	• 2500N retention force. • Four safety circuits - 2 independent NC circuits for the head and 2 independent NC circuits for the solenoid. • Non safety monitor circuit on head gives 24V when door opened. • Non safety monitor circuit on solenoid gives 24V when unlocked. • LED sequence: *Green = Door closed & locked *Green & Red = Door closed but unlocked *Red = Door open	• 2500N retention force. • 2 X Normally closed safety contacts driven by head only (not solenoid). • Non safety monitor circuit on solenoid gives 24V when locked. • LED sequence: *Nothing = Door closed & locked *Red = Door unlocked
Number of Safety Circuits	2	2	4	2
Number of Control I/O	3	3	3	2

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90% of customers select TSMDU

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Location of safety switch in stack is first mechanical elements (Head, Internal Release and Locks).

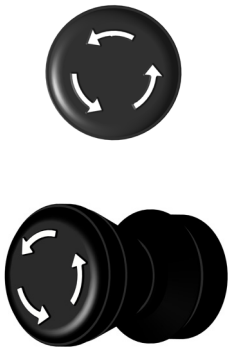
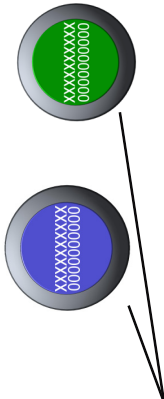
TEB		
		
Part No.	TEB	
Description	Extension Blank Element	
Features & Benefits	Can be driven by either the operation of the head element (removal of actuator) or a mechanical lock. Can be used to add extension bay to a configuration.	

TEC, TED, TEW, TEV, TET, TEM, TEP, TEI									
									
Features & Benefits		• Emergency stop element, version available with a monitoring contact or illumination. • 2 positively driven force break N/C Safety contacts. • Monitored version also has 1 output signal and this uses 1 output pin. • Illuminated version also has 1 input signal and this uses 1 input pin (it is illuminated by the controlling PLC, not by the action of pressing the e-stop). • e-Stop is always mounted at the top of any control elements, but below solenoid / head / safety switches / locks. • TEM & TEI e-stops can also be positioned at the bottom of the stack. • TED/C/W/V safety contacts are wired in series with another element in the stack e.g. TSS, to reduce pin requirements. • TET/M/P/I safety contacts are wired separately to all other elements in the stack.							
Part No.	TEC	TEW	TED	TEV	TET	TEP	TEM	TEI	
Reset Type	Twist	Pull	Twist	Twist	Twist	Pull	Twist	Twist	
Extra Features	-	-	Additional 1xNO Contact	Illuminated	-	-	Additional 1xNO Contact	Illuminated	
Number of Control I/O	0	0	1	1	0	0	1	1	
Number of Safety Circuits	0 - wired in series with TSS or TSM unit				2 - independently wired				

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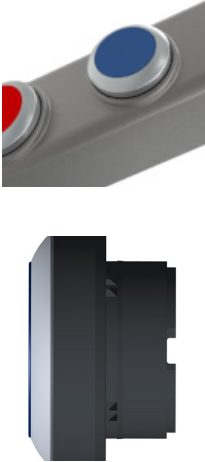
e-Stop is always mounted at the top of any control elements, but below solenoid / head / safety switches / locks. TEM & TEI e-stops can also be positioned at the bottom of the stack.

TSR		TS3		TSK	
					
Part No.	TSR	TS3		TSK	
Description	Start Re-start Switch - Blue	Start Re-start Switch - Green		Start Re-start Switch - Black Mushroom	
Features & Benefits	• TSR (Blue), TS3 (Green) & TSK (Black Mushroom) Re-start switch operating on 1 Normally Open (N/O) and 1 Normally Closed (N/C). • For Safety relay reset. • Works on own separate dual safety circuit. • Volt free contacts. • Safety circuit 1 opens on button depression. • Highest control element after e-Stop's. • Must be wired independently to all other safety switches (head / solenoid / e-stop). Laser Engraving Information: Engraving for each button is 2 lines of 10 characters. 				
Number of Control I/O	0				
Number of Safety Circuits	2				

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Location of Start Re-Start Switch in stack is highest control element after e-Stop's.

TSZ	
	
Part No.	TSZ
Description	Blue Independently Wired Change Over Switch
Features & Benefits	• Blue Independently Wired Change Over Switch operating on 1 Normally Open (N/O) and 1 Normal Closed (N/C). • For safety relay / safety PLC connection • Works on own separate supply.  Laser Engraving Information: Engraving for each button is 2 lines of 10 characters.
Number of Control I/O	3
Number of Safety Circuits	0

TV4	
	
Part No.	TV4
Description	Potentiometer 10K
Features & Benefits	• Common uses include speed control for variable frequency drives. • No centre detent. • Inputs to tGard are always assigned before outputs.
Number of Control I/O	3
Number of Safety Circuits	0

Illuminated Pushbuttons		TP1		TP2		TP3		TP6		TP7	
	Part No.										
	Description	TP1	Illuminated Push Button - Red	TP2	Illuminated Push Button - Yellow	TP3	Illuminated Push Button - Green	TP6	Illuminated Push Button - Blue	TP7	Illuminated Push Button - White
Illuminated Pushbuttons - Protruding		TG1		TG3		TG5		TG6		TG7	
	Part No.										
	Description	TG1	Protruding Illuminated Push Button - Red	TG3	Protruding Illuminated Push Button - Green	TG5	Protruding Illuminated Push Button - Yellow	TG6	Protruding Illuminated Push Button - Blue	TG7	Protruding Illuminated Push Button - White
1 N/O Illuminated Pushbuttons - Latching		TJ1		TJ2		TJ3		TJ6		TJ7	
	Part No.										
	Description	TJ1	1 N/O Illuminated Push Button (Latching) - Red	TJ2	1 N/O Illuminated Push Button (Latching) - Yellow	TJ3	1 N/O Illuminated Push Button (Latching) - Green	TJ4	1 N/O Illuminated Push Button (Latching) - Blue	TJ5	1 N/O Illuminated Push Button (Latching) - White
1 N/O & 1 N/C Illuminated Pushbuttons		TX1		TX2		TX3		TX6		TX7	
	Part No.										
	Description	TX1	1 N/O & 1 N/C Illuminated Push Button - Red	TX2	1 N/O & 1 N/C Illuminated Push Button - Yellow	TX3	1 N/O & 1 N/C Illuminated Push Button - Green	TX6	1 N/O & 1 N/C Illuminated Push Button - Blue	TX7	1 N/O & 1 N/C Illuminated Push Button - White

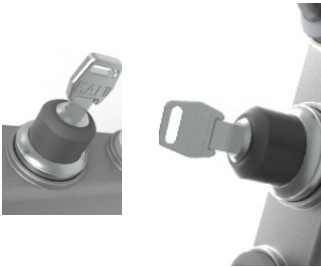
Core Elements											
	TU1		TU2		TU3		TU6		TU7		
	Part No.	TU1	Part No.	TU2	Part No.	TU3	Part No.	TU6	Part No.	TU7	
	Description	Volt Free Contacts Illuminated Push Button - Red	Description	Volt Free Contacts Illuminated Push Button - Yellow	Description	Volt Free Contacts Illuminated Push Button - Green	Description	Volt Free Contacts Illuminated Push Button - Blue	Description	Volt Free Contacts Illuminated Push Button - White	
	T2E		T2F		  Range of options: • Push Button • Protruding Push Button • 2 Position Selector Switches • Latching • Momentary Laser Engraving Information: Engraving for each button is 2 lines of 10 characters. Engraving available for 2 position selector switch is 10 characters at each switch position.						
	Part No.	T2E	Part No.	T2F							
	Description	2 Position Illuminated Selector Switch - Latching	Description	2 Position Illuminated Selector Switch - Momentary							
Features & Benefits											
1 Normally Open (N/O) Illuminated Switch for machine control.											
• Each switch uses 1 input and 1 output pin. • Inputs to the tGard stack are always assigned before outputs. • High input will illuminate the lamp, irrespective of selector.											

1 N/O Non-Illuminated Pushbuttons	TPB		TPR		TPG		TPW		TPY		TPZ	
	Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description
	TPB	1 N/O Non-Illuminated Push Button - Black	TPR	1 N/O Non-Illuminated Push Button - Red	TPG	1 N/O Non-Illuminated Push Button - Green	TPW	1 N/O Non-Illuminated Push Button - White	TPY	1 N/O Non-Illuminated Push Button - Yellow	TPZ	1 N/O Non-Illuminated Push Button - Blue
	TGB		TGR		TGG		TGW		TGY		TGZ	
	Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description
	TGB	Protruding 1 N/O Non-Illuminated Push Button - Black	TGR	Protruding 1 N/O Non-Illuminated Push Button - Red	TGG	Protruding 1 N/O Non-Illuminated Push Button - Green	TGW	Protruding 1 N/O Non-Illuminated Push Button - White	TGY	Protruding 1 N/O Non-Illuminated Push Button - Yellow	TGZ	Protruding 1 N/O Non-Illuminated Push Button - Blue
1 N/O & 1 N/C Non-Illuminated Pushbuttons	TXB		TXR		TXG		TXW		TXY		TXZ	
	Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description
	TXB	1 N/O & 1 N/C Non-Illuminated Push Button - Black	TXR	1 N/O & 1 N/C Non-Illuminated Push Button - Red	TXG	1 N/O & 1 N/C Non-Illuminated Push Button - Green	TXW	1 N/O & 1 N/C Non-Illuminated Push Button - White	TXY	1 N/O & 1 N/C Non-Illuminated Push Button - Yellow	TXZ	1 N/O & 1 N/C Non-Illuminated Push Button - Blue

Volt Free Contacts Push Buttons		TUB		TUR		TUG		TUW		TUY		TUZ	
		Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description
		TUB	Volt Free Contacts Non-Illuminated Push Button - Black	TUR	Volt Free Contacts Non-Illuminated Push Button - Red	TUG	Volt Free Contacts Non-Illuminated Push Button - Green	TUW	Volt Free Contacts Non-Illuminated Push Button - White	TUY	Volt Free Contacts Non-Illuminated Push Button - Yellow	TUZ	Volt Free Contacts Non-Illuminated Push Button - Blue
2 Position Selector Switch		T2A		T2D		T2V		2 Position Selector Key Switch					
		Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description	Part No.	Description
		T2A	2 Position Non-Illuminated Selector Switch - Latching	T2D	2 Position Non-Illuminated Selector Switch - Momentary	T2V	2 Position Non-Illuminated Selector Switch - 1 N/O & 1 N/C			TK5	2 Position Non-Illuminated Selector Key Switch - Latching	TK6	2 Position Non-Illuminated Selector Key Switch - Momentary
1 N/O Mushroom Push Button		TMB		1 N/O Non-Illuminated Pushbuttons - Latching		TPS		Features & Benefits					
			Part No.	Description	Part No.	Description	Part No.	Description	1 N/O Switch for machine control. • Each switch uses 1 output pin. • Range of options: • Push Button • Protruding Push Button • 2 Position Selector Switches • Latching • Key Latching • Momentary • Key Momentary 1 N/O Switch & 1 N/C Switch for machine control. • Each switch uses 2 output pin. • Contacts are <u>not</u> volt free. Laser Engraving Information: Engraving for each button is 2 lines of 10 characters Engraving available for 2 position selector switch is 10 characters at each switch position.				
		Part No.	Description	Part No.	Description	Part No.	Description	 					

Core Elements

	TLB	TLG	TLR	TLW	TLY
					
Part No.	TLB	TLG	TLR	TLW	TLY
Description	LED Lamp Element - Blue	LED Lamp Element - Green	LED Lamp Element - Red	LED Lamp Element - White	LED Lamp Element - Yellow
Features & Benefits					
Lamp element for status indication can be configured to indicate machine status. • LED status indicator. • Each lamp uses 1 input pin. Laser Engraving Information: Engraving for each lamp is 2 lines of 10 characters. 					

T3A, T3D, T3E, T3F, T3H, TK7						
						
Part No.	T3A	T3D	T3E	T3F	T3H	TK7
Description	Latching (Both Sides)	Momentary	Latching (Both Sides) Illuminated	Momentary Illuminated	Momentary / Latching	Key Latching (Both Sides)
Features & Benefits						
Each 3 position selector switch uses 2 output pins. • Clockwise operation sets the lower assigned output High. • Middle position - output pins Low. • Anti-clockwise sets higher assigned output High. • Non-latching - spring return to original position. • Illumination (when selected) uses an additional 1 input pin. Laser Engraving Information: Engraving available for 3 position selector switch is 10 characters at each switch position.						

Base Elements

					
Part No.	TBF	TQ1	TQ2	TQ3	TQ4
Description	Foot - For terminating purely mechanical configurations (no wiring).	5 Pin M12 QD	8 Pin M12 QD	8 Pin M12 QD	12 Pin M23 QD
Number of Control I/O	0	0	5	1	9
Number of Safety Circuits	0	2	0	2	0
	TQ5	TQ7	TQ8	TQ9	
					
Part No.	TQ5	TQ7	TQ8	TQ9	
Description	12 Pin M23 QD	14 Pin 7/8 UN2 QD	19 Pin M23 QD	19 Pin M23 QD	
Number of Control I/O	5	7	12	8	
Number of Safety Circuits	2	2	2	4	

Step 16: Mating Cables for Quick Disconnect Connectors



Base Elements

Quick Disconnect Mating Cable									
Part No.	Cable_-_M-TQ1			Cable_-_M-TQ2 / TQ3			Cable_-_M-TQ4 / TQ5		
No. Pins	5			8			12		
Connector	M12			M12			M23		
Pin #	Wire Colour	Function	Wire Colour	Wire Colour	TQ2 Function	TQ3 Function	Wire Colour	TQ4 Function	TQ5 Function
1	Brown	SC1 in	White	White	I/O 0	SC1 in	Brown	+24v	+24v
2	White	SC2 in	Brown	Brown	+24v	+24v	Brown/ White	I/O 0	SC1 in
3	Blue	SC1 out	Green	Green	Earth	Earth	Blue	0v	0v
4	Black	SC2 out	Yellow	Yellow	I/O 1	SC2 in	White	I/O 1	SC2 in
5	Grey	Earth	Grey	Grey	I/O 2	SC1 out	Green	I/O 2	SC1 out
6			Pink	Pink	I/O 3	SC2 out	Yellow	I/O 3	SC2 out
7			Blue	Blue	0v	0v	Grey	I/O 4	I/O 0
8			Red	Red	I/O 4	I/O 0	Pink	I/O 5	I/O 1
9							Red	I/O 6	I/O 2
10							Black	I/O 7	I/O 3
11							Violet	I/O 8	I/O 4
12							Green/ Yellow	Earth	Earth
13									
14									
15									
16									
17									
18									
19									

Part No.	Pin Heads	
Cable_-_M-TQ1		
Cable_-_M-TQ2 / TQ3		
Cable_-_M-TQ4 / TQ5		
Cable_-_M-TQ7		
Cable_-_M-TQ8 / TQ9		

Connector Type	Cable Length	Cable Part Number
TQ1	2M	Cable-2M-TQ1
	5M	Cable-5M-TQ1
	10M	Cable-10M-TQ1
	20M	Cable-20M-TQ1
TQ2	2M	Cable-2M-TQ2
	5M	Cable-5M-TQ2
	10M	Cable-10M-TQ2
	20M	Cable-20M-TQ2
TQ3	2M	Cable-2M-TQ3
	5M	Cable-5M-TQ3
	10M	Cable-10M-TQ3
	20M	Cable-20M-TQ3
TQ4	2M	Cable-2M-TQ4
	5M	Cable-5M-TQ4
	10M	Cable-10M-TQ4
	20M	Cable-20M-TQ4
TQ5	2M	Cable-2M-TQ5
	5M	Cable-5M-TQ5
	10M	Cable-10M-TQ5
	20M	Cable-20M-TQ5
TQ7	2M	Cable-2M-TQ7
	5M	Cable-5M-TQ7
	10M	Cable-10M-TQ7
	20M	Cable-20M-TQ7
TQ8	2M	Cable-2M-TQ8
	5M	Cable-5M-TQ8
	10M	Cable-10M-TQ8
	20M	Cable-20M-TQ8
TQ9	2M	Cable-2M-TQ9
	5M	Cable-5M-TQ9
	10M	Cable-10M-TQ9
	20M	Cable-20M-TQ9

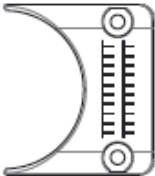
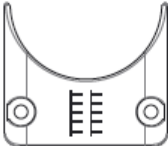
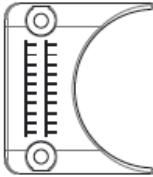
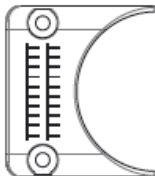
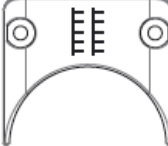
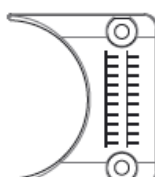
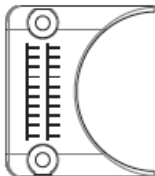
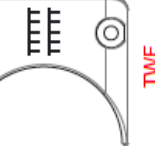
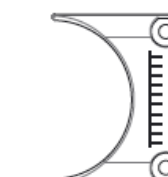
Base Elements

	TW1	TW3	TW4
	 		
	TW1	TW3	TW4
	12 Terminals	24 Terminals	24 Terminals
	6	14	10
Part No.			
Description			
Number of Control I/O			
Number of Safety Circuits			
Features & Benefits			
• For applications where the customer wishes to make their own connections. • Push fit terminals. • Cable size 26-14 AWG. • Available with 12 or 24 connections. • Control only and Safety and Control versions available. • M20 gland thread. • Requires no additional mounting to frame. • Large opening for easy wiring.			

Base Elements

		TEBB4	TEBB8
			
Part No.		TEBB4	TEBB8
Description		Up to 2 AS-i nodes	Up to 4 AS-i nodes
Number of Control I/O		Up to 4 inputs, 4 outputs	Up to 8 inputs, 8 outputs
Number of Safety Circuits		1 dual safety circuit	2 dual safety circuits
Features & Benefits			
• AS-interface base elements are used when you want to connect all of the features of tGard to an AS-i-bus. • TEBB4 Element - Connect up to 4 inputs, 4 outputs and 1 dual channel safety circuit to the bus in one stack. • TEBB8 Element - Connect up to 8 inputs, 8 outputs and 2 dual channel safety circuits to the bus in one stack. • Each node address can handle either 4 inputs and 4 outputs, or 1 dual channel safety circuits; you only get the nodes you need to maximise available bus addresses. • Extended addressing is used for the I/O nodes allowing 62 nodes on a bus; double the number possible on a standard bus. • Connections are made by the standard M12 5 pin QD. • Mating cables are available, part no. Cable-_M-TQ1;2.5.10 and 20m lengths. • Most elements are powered directly from the bus meaning only two wires are necessary to run the whole stack; the Aux power supply is required if a solenoid lock is included in the stack. • The element takes one bay to house the AS-i electronics and includes the base connection element.			

TKS		TKM	
			
Part No.	TKS	TKM	
Description	Standard Key	Master Key	
Features & Benefits			
• Torque rating 10Nm. • High corrosive resistance. • Over 5,000 non-masterable combinations available. • 10 masterable combinations available. • The key is laser marked with the Fortress key code.			

TWA, TWB, TWC, TWD, TWE, TWF, TWG, TWH					
					
					
					
Part No.	TWA, TWB, TWC, TWD, TWE, TWF, TWG, TWH				
Description	White Legend Plate				
Features & Benefits					
• For marking of control elements. • Mechanically fixed using M3 screws. • Can be mounted above or below control element (Note: When marking in the top orientation the first bay is unable to be marked). • Laser marked. • TWA, TWC, TWE & TWG- 2 lines of 10 characters. • TWB, TWD, TWF & TWH - 2 lines of 5 characters • Text can be marked upside down. • Legend plate requirement must be specified at point of ordering a tGard configuration, otherwise housing will not be drilled to accept legend plate.					

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