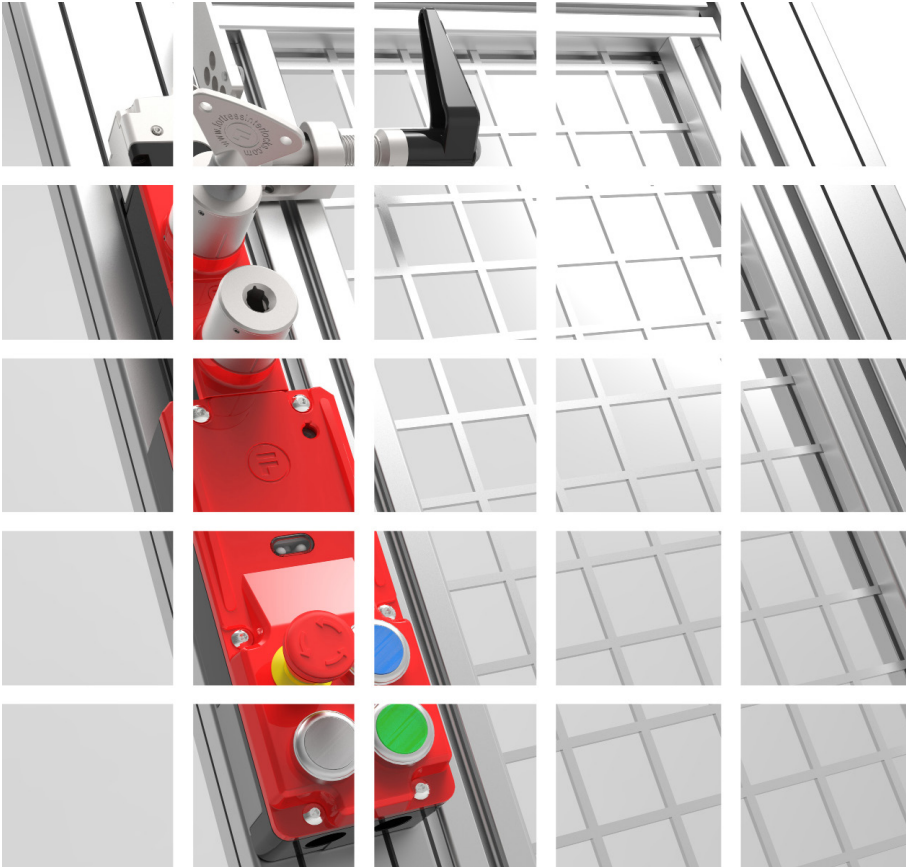




am Gard
pro Modular Safety Gate Switches
for Machine Guarding Applications



amGardpro
Part Number Configurator

Step 1: Choose the Actuator

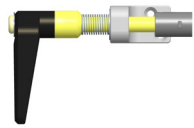
Actuators

For use with 'M' Heads

For use with 'T' Heads

For use with 'I' Heads

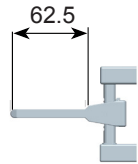
proAM Handle



| Part No. | Description |
|-----------|-------------|
| MA | AM Handle |

Turning motion holds door closed. Ideal for non locking set ups (i.e. proSTOP devices)

proAT Tongue



| Part No. | Description |
|-----------|-------------|
| TA | AT Tongue |

High strength and ease of opening makes this the most popular actuator in the amGardpro range.

proSlidebar Options



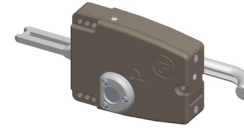
| Part No. | Description |
|-----------|---------------------------|
| TN | Slidebar without a spring |

Sliding motion holds door closed. With no return spring unit remains in the position it is left in

| Part No. | Description |
|-----------|-------------------------------|
| TS | Slidebar with a return spring |

Sliding motion holds door closed. Return spring pulls the slidebar open, preventing clashes with the head (but requires the slidebar to be held forward whilst locking)

proHandle Options



| Part No. | Description |
|-----------|--------------------------------|
| EN | proHandle, no Internal Release |

Handle motion holds door closed, but no method to open door from inside



| Part No. | Description |
|-----------|--|
| EH | proHandle (the red internal release handle only works with units with no locking (i.e. stops) or in conjunction with a pushIR unit). |

The red internal release handle only works with units with no locking (i.e. Stops) or in conjunction with a pushIR unit

proRelease IR Handle



| Part No. | Description |
|-----------|---|
| EI | proIR Handle to allow emergency release (only to be used with I6 or I7 head). |

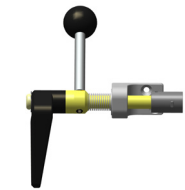
Handle motion holds door closed. Red handle overrides all locking mechanisms and opens safety contacts to allow escape release

NO Actuator Required

X

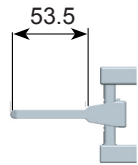
| Part No. | Description |
|-----------|----------------------|
| NO | No Actuator required |

Select this when you wish to specify head direction (Handing) but are not purchasing an actuator



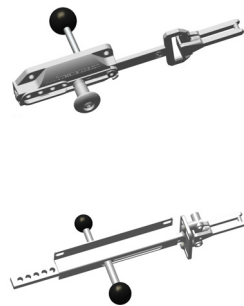
| Part No. | Description |
|-----------|---------------------------------|
| MI | AM Handle with Internal Release |

Turning motion holds door closed. Internal handle allows user to open door from inside (pushIR may be required depending on application)



| Part No. | Description |
|-----------|--|
| TK | Short AT Tongue (allows padlocks through the tongue to work as a lock out tag out, but reduces over travel). |

Allows padlocks through the tongue to work as a lock out tag out, but reduces over-travel



| Part No. | Description |
|-----------|--|
| TI | Slidebar with Internal handle but no return spring |

Sliding motion holds door closed. Same as a TN but IR knob allows door to be opened (but not closed) from the inside when main unit is unlocked

| Part No. | Description |
|-----------|---|
| TM | Slidebar with Internal handle c/w TK Short Tongue |

Sliding motion holds door closed. Short TK tongue allows padlock through tongue to act as a lock out. Additional lock out space at rear of slidebar



| Part No. | Description |
|-----------|--------------------------------------|
| TG | Slidebar with Internal handle for GM |

Sliding motion holds door closed. Short TK tongue allows padlock through tongue to act as a lock out. No additional lock out space at rear of slidebar



| Part No. | Description |
|-----------|--|
| TF | Slidebar with Internal handle c/w spacer behind the knob |

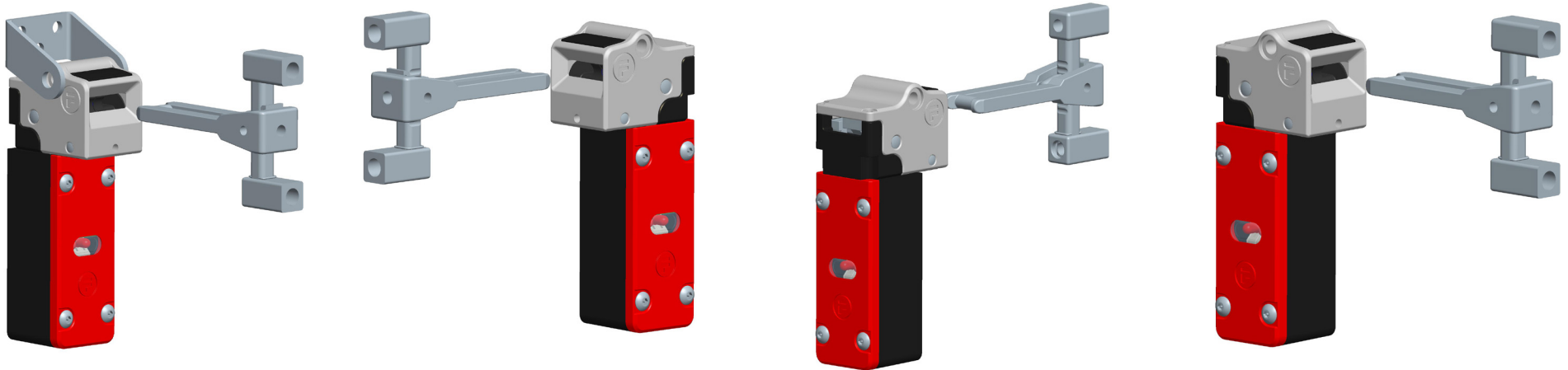
Same as a TN but IR knob allows door to be opened and closed from the inside when main unit is locked

pro i
"If no Actuator is required go to Step 3, where you can select a Head or Cap (C6)"

pro i
MI, TI, TM, TG, TF and EH work well with a pushIR unit (see step 4)

Step 2: Choose the Handing

Actuators



| Part No. | Handing Description |
|----------|---------------------|
| 1 | Front Facing |

| Part No. | Handing Description |
|----------|---------------------|
| 2 | Left Hand |

| Part No. | Handing Description |
|----------|---------------------|
| 3 | Rear Facing |

| Part No. | Handing Description |
|----------|---------------------|
| 4 | Right Hand |

pro i
 Even if you have not chosen an actuator from Step 1 you can still choose handing for the head module

pro i
 If you chosen an EI Actuator from Step 1, Front Facing, 1 and Rear Facing, 3 Handing Options are not allowed

Step 3: Choose the Head Module

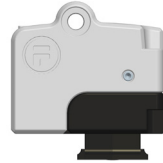
proCap Options



| Part No. | Description |
|-----------|---------------------------------------|
| C6 | To terminate assemblies without heads |

Terminates assemblies without heads

proAM Head Options



For use with actuators:
MA
MI

| Part No. | Description |
|-----------|-------------|
| M6 | proAM Head |

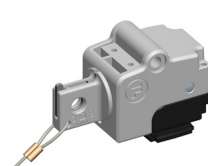
Turning motion holds door closed. Ideal for non locking set ups (i.e. proSTOP devices)



For use with actuators:
MA
MI

| Part No. | Description |
|-----------|----------------------------------|
| M7 | proAM Head c/w Drop Down Lockout |

M6 head with drop down lockout. This lockout features slides into place every time actuator is removed. Ideal for applications where lockout is to be used on every entry

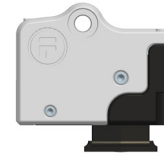


For use with actuators:
MA
MI

| Part No. | Description |
|-----------|------------------------------|
| M8 | proAM Head c/w Lock-Out Clip |

M6 head with drop down clip. Ideal for applications where lockout is not to be used on every entry

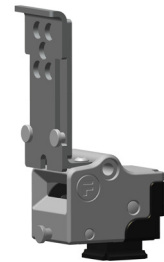
proAT Head Options



For use with actuators:
TA TS
TK TM
TI TG
TN TF
EH EN

| Part No. | Description |
|-----------|-------------|
| T6 | proAT Head |

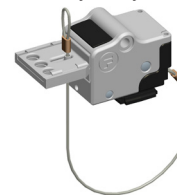
High strength and ease of opening makes this the most popular head in the amgard pro range



For use with actuators:
TA TS
TK TM
TI TG
TN TF
EH EN

| Part No. | Description |
|-----------|----------------------------------|
| T7 | proAT Head c/w Drop Down Lockout |

T6 head with drop down lockout. This lockout features slides into place every time actuator is removed. Ideal for applications where lockout is to be used on every entry



For use with actuators:
TA TS
TK TM
TI TG
TN TF
EH EN

| Part No. | Description |
|-----------|----------------------------------|
| T8 | proAT Head c/w ATL Lock-Out Clip |

T6 head with drop down clip. Ideal for applications where lockout is not to be used on every entry

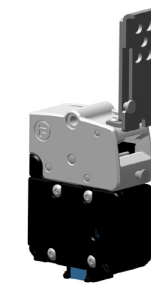
proRelease IR Handle Options



For use with actuators:
EI

| Part No. | Description |
|-----------|---|
| I6 | proIR Head (only works in conjunction with EI handle) |

Handle motion holds door closed. Red handle overrides all locking mechanisms and opens safety contacts to allow escape release



For use with actuators:
EI

| Part No. | Description |
|-----------|---|
| I7 | proIR Head c/w drop down lockout (only works in conjunction with EI handle) |

I6 head with drop down lockout. This lockout features slides into place every time actuator is removed. Ideal for applications where lockout is to be used on every entry

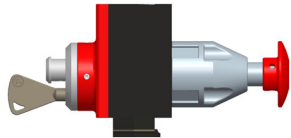
pro i
If a head module is not required, leave the part number blank and continue to Step 4

pro i
Ensure the head module you have selected works with the actuator you have selected in Step 1

Step 4: Do you want a Push IR

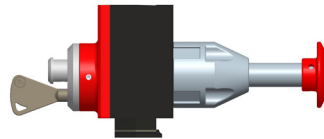
Adaptors

A PushIR will allow emergency exit even if unit is locked by keys and or solenoid. A PushIR is **not** needed if a EI Handle and I Head have already been specified. (note, a pull reset (R6, R7, R8 & R9) reduces the safety of the system).



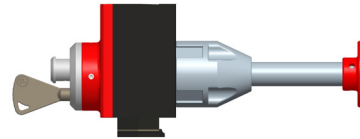
| Part No. | Push IR Description |
|----------|--|
| R1 | Key Reset (up to 40mm panel thickness) |

Same as RW but key reset to ensure all incidents are reported



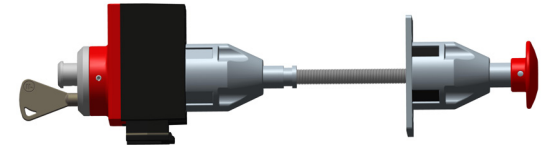
| Part No. | Push IR Description |
|----------|--|
| R2 | Key Reset (up to 60mm panel thickness) |

Same as RX but key reset to ensure all incidents are reported



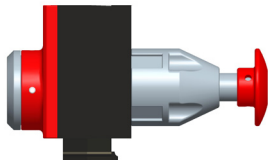
| Part No. | Push IR Description |
|----------|--|
| R3 | Key Reset (up to 80mm panel thickness) |

Same as RY but key reset to ensure all incidents are reported



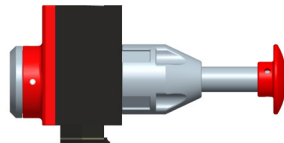
| Part No. | Push IR Description |
|----------|--|
| R4 | Key Reset (variable length - for panel thickness over 80mm and up to 1m) |

Same as RZ but key reset to ensure all incidents are reported



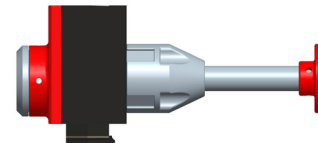
| Part No. | Push IR Description |
|----------|---|
| R6 | Pull Reset (up to 40mm panel thickness) |

Same as RW but pull reset allows door to be relocked from the inside (requires careful risk assessment to ensure this is acceptable)



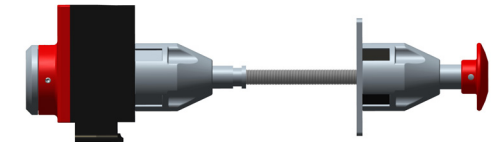
| Part No. | Push IR Description |
|----------|---|
| R7 | Pull Reset (up to 60mm panel thickness) |

Same as RX but pull reset allows door to be relocked from the inside (requires careful risk assessment to ensure this is acceptable)



| Part No. | Push IR Description |
|----------|---|
| R8 | Pull Reset (up to 80mm panel thickness) |

Same as RY but pull reset allows door to be relocked from the inside (requires careful risk assessment to ensure this is acceptable)

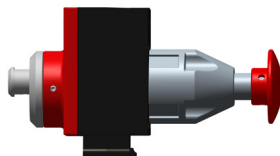


| Part No. | Push IR Description |
|----------|---|
| R9 | Pull Reset (variable length for panel thickness over 80mm and up to 1m) |

Same as RZ but pull reset allows door to be relocked from the inside (requires careful risk assessment to ensure this is acceptable)

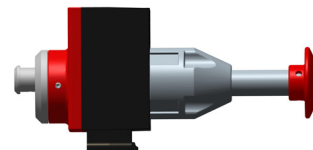
pro
i

If a Push IR is not required leave part number blank and go to Step 5



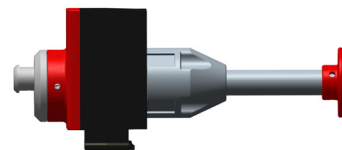
| Part No. | Push IR Description |
|----------|---|
| RW | Front Reset no key (up to 40mm panel thickness) |

Overrides all locking mechanisms and opens safety contacts to allow escape release. Simple push reset allows quick restart. Suitable for panels upto 40mm thick



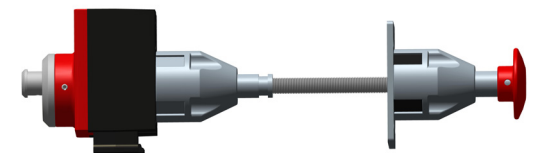
| Part No. | Push IR Description |
|----------|---|
| RX | Front Reset no key (up to 60mm panel thickness) |

Overrides all locking mechanisms and opens safety contacts to allow escape release. Simple push reset allows quick restart. Suitable for panels upto 60mm thick



| Part No. | Push IR Description |
|----------|---|
| RY | Front Reset no key (up to 80mm panel thickness) |

Overrides all locking mechanisms and opens safety contacts to allow escape release. Simple push reset allows quick restart. Suitable for panels upto 80mm thick



| Part No. | Push IR Description |
|----------|---|
| RZ | Front Reset no key (variable length for panel thickness over 80mm up to 1m) |

Overrides all locking mechanisms and open safety contacts to allow escape release. Simple push reset allows quick restart. Suitable for panels upto 300mm thick

Step 5: Choose a Extracted Key Module

Adaptors

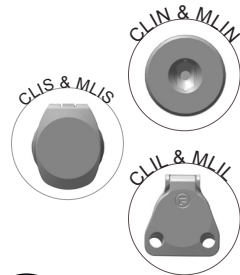


Part #

| | | | |
|---|---|--|--|
| E | K | | |
|---|---|--|--|

| Description | Part No. |
|---|----------|
| Standard Lock | L |
| Releasing Lock (must be used if a PushIR or EI Handle and Head used). | R |

| Description | Information | | Part No. |
|--|--|------|----------|
| Standard Lock no dustcover | Removed key ensures door cannot be locked until operator returns from cell with the key. Extracted version will not open door until key is removed | CLIN | 1 |
| Standard Lock with dustcover | Same as EK_1 but with dustcover for dusty environments | CLIS | 2 |
| Standard Lock with padlockable dustcover | Same as EK_3 but pad lockable dustcover allows lockout feature | CLIL | 3 |
| Masterable Lock no dustcover | Same as EK_1 but master lock allows a single key to override all locks (master key must be carefully controlled on site) | MLIN | 6 |
| Masterable Lock with dustcover | Same as EK_2 but master lock allows a single key to override all locks (master key must be carefully controlled on site) | MLIS | 7 |
| Masterable Lock with padlockable dustcover | Same as EK_3 but master lock allows a single key to override all locks (master key must be carefully controlled on site) | MLIL | 8 |



or

If you've selected an I6/I7 then select a releasing lock.

If you've selected a pushIR adaptor then select a releasing lock.

pro
i

If an Extracted Key Adaptor is not required leave part number blank and go to Step 6

Step 6: Choose a Safety Key Adaptor

Adaptors

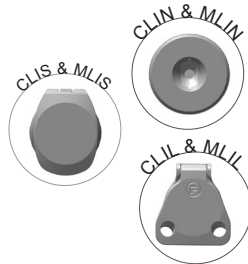


Part #

| | | | | |
|---|---|--|--|--|
| S | K | | | |
|---|---|--|--|--|

| Description | Part No. |
|---|----------|
| Standard Lock | L |
| Releasing Lock (must be used if a PushIR or EI Handle and Head used). | R |

| Description | Information | | Part No. |
|--|--|------|----------|
| Standard Lock no dustcover | Removed key ensures door cannot be locked until operator returns from cell with the key | CLIN | 1 |
| Standard Lock with dustcover | Same as SK_1 but with dustcover for dusty environments | CLIS | 2 |
| Standard Lock with padlockable dustcover | Same as SK_3 but pad lockable dustcover allows lockout feature | CLIL | 3 |
| Masterable Lock no dustcover | Same as SK_1 but master lock allows a single key to override all locks (master key must be carefully controlled on site) | MLIN | 6 |
| Masterable Lock with dustcover | Same as SK_2 but master lock allows a single key to override all locks (master key must be carefully controlled on site) | MLIS | 7 |
| Masterable Lock with padlockable dustcover | Same as SK_3 but master lock allows a single key to override all locks (master key must be carefully controlled on site) | MLIL | 8 |



or

If you've selected an I6/I7 then select a releasing lock.

If you've selected a pushIR adaptor then select a releasing lock.

If a Safety Key Adaptor is not required leave part number blank and go to Step 7

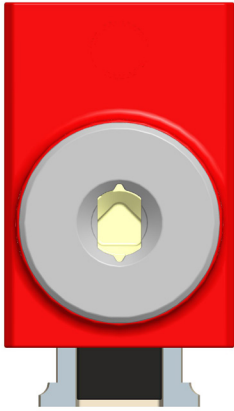
| Description | Part No. |
|--------------------------------------|----------|
| No. of Safety Lock Adaptors required | 1 - 9 |

Total Extracted, Safety & Access Locks in one configuration is Max 9



Step 7: Choose a Access Key Adaptor

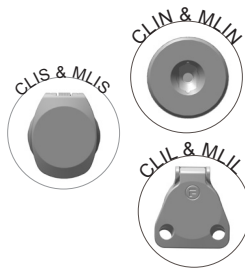
Adaptors



Part #

| | | | | |
|---|---|--|--|--|
| A | K | | | |
|---|---|--|--|--|

| Description | Part No. |
|---|----------|
| Standard Lock | L |
| Releasing Lock (must be used if a PushIR or EI Handle and Head used). | R |



| Description | Information | | Part No. |
|--|---|------|----------|
| Standard Lock no dustcover | Ensures door cannot be opened without access key. Access key could be held by authorised individuals (e.g. maintenance) or it could have been released by a seperate unit | CLIN | 1 |
| Standard Lock with dustcover | Same as AK_1 but with dustcover for dusty environments | CLIS | 2 |
| Standard Lock with padlockable dustcover | Same as AK_3 but pad lockable dustcover allows lockout feature | CLIL | 3 |
| Masterable Lock no dustcover | Same as AK_1 but master lock allows a single key to override all locks (master key must be carefully controlled on site) | MLIN | 6 |
| Masterable Lock with dustcover | Same as AK_2 but master lock allows a single key to override all locks (master key must be carefully controlled on site) | MLIS | 7 |
| Masterable Lock with padlockable dustcover | Same as AK_3 but master lock allows a single key to override all locks (master key must be carefully controlled on site) | MLIL | 8 |

If you've selected an I6/I7 then select a releasing lock.

If you've selected a pushIR adaptor then select a releasing lock.

If an Access Key Adaptor is not required leave part number blank and go to Step 8

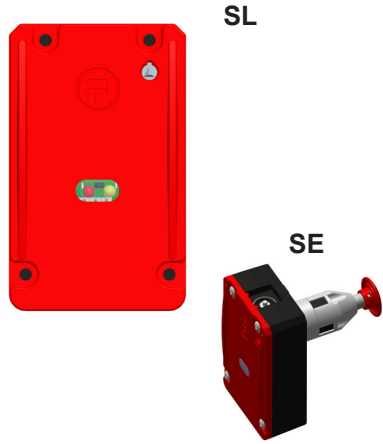
Total Extracted, Safety & Access Locks in one configuration is Max 9

| Description | Part No. |
|--------------------------------------|--------------|
| No. of Access Lock Adaptors required | 1 - 9 |

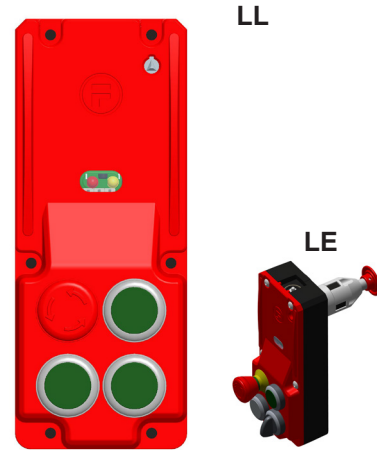
Step 8: Choose a Electrical Switching / Locking Body

Electrical Switching / Locking

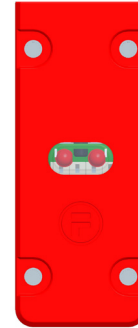
proLok Body



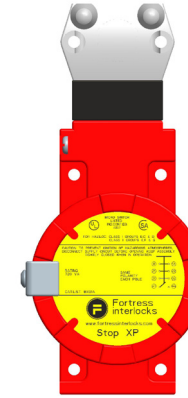
proLok+ Body



proStop Body



proStopEX/UX Body



proStop Foot



| Part No. | Description | Information |
|-----------|---|--|
| SL | Short Lok Body | Solenoid controlled safety switch. Holds door locked until signal sent to unlock. No provision for control buttons |
| SR | Short Lok Body - Releasing (must be used if a pushIR or EI handle and head used). | Same as SL but allows pushIR or EI handle to override it |
| SE | Short Lok Body - Integrated Escape Release | Same as SL but it's integrated escape release button overrides locking mechanism and opens safety contacts (Does not work with key adaptors, EI or pushIR) |

| Part No. | Description | Information |
|-----------|--|--|
| LL | Long Lok Body | Solenoid controlled safety switch. Holds door locked until signal sent to unlock. With space for control buttons |
| LR | Long Lok Body - Releasing (must be used if a pushIR or EI handle and head used). | Same as LL but allows pushIR or EI handle to override it |
| LE | Long Lok Body - Integrated Escape Release | Same as LL but it's integrated escape release button overrides locking mechanism and opens safety contacts (Does not work with key adaptors, EI or pushIR) |

| Part No. | Description | Information |
|-----------|-------------|---------------|
| ST | Stop Body | Safety switch |

| Part No. | Description | Information |
|-----------|------------------------|---|
| EX | EU Explosion Stop Body | Safety switches suitable for explosive environments with EU certification |
| UX | US Explosion Stop Body | Safety switches suitable for explosive environments with US certification |

| Part No. | Description | Information |
|-----------|--|--|
| FT | To Terminate non-switch configurations | Terminates non-switch configurations (not suitable for units with pushIR or EI handle) |

OR

If you've selected an I6/I7 then select a releasing lock.

If you've selected a pushIR adaptor then select a releasing lock.

pro i
If an Electrical Switching / Locking Body is not required leave part number blank and continue to Step 10

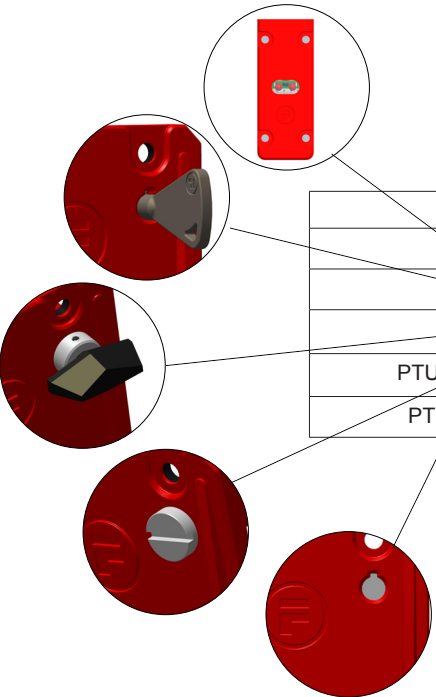
Step 9: Choose Electrical Switching / Locking Body Options



Part #

| | | |
|--|--|--|
| | | |
|--|--|--|

| Voltage Options | Part No. |
|--|----------|
| No Voltage (eg Foot) | 0 |
| 110v | 1 |
| 230v | 2 |
| 24v | 4 |
| 100v | 5 |
| 48v | 7 |
| Asi | 8 |
| 110v Solenoid / 24v Control (LOK only) | S |
| 110v Control / 24v Solenoid (LOK only) | C |



| Override Options | Part No. |
|----------------------------|----------|
| Stop/EXP/UXP | 0 |
| PTU - Key Override | 1 |
| PTU - Knob Override | 2 |
| PTU - Screwdriver Override | 3 |
| PTL (24v, 110v & ASi only) | 6 |

| Other PCB Options | proBody Types | Part No. |
|--|------------------------------|----------|
| Std & Sourcing | ALL | 1 |
| Std & Sinking | ST Only | 2 |
| Std & Sourcing (3 x NC) | ST Only | 3 |
| Std & Sourcing (Y&G LEDES) | SL, SR, LL & LR Only | 4 |
| Un-Monitored Sol & Sourcing | SL, SR, LL & LR Only | 6 |
| Un-Monitored Sol & Sourcing (Y&G LEDES) | SL, SR, LL & LR Only | 7 |
| Individual Safety Control for Sol & Actuator | SL, SR, LL, LR, SE & LE Only | 8 |

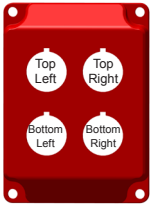
pro
1

This is ordered
by 99% of our
customers

Step 10: Choose options for Separate Option Pod or proLok+ Body

Option Pods

Separate Option Pod



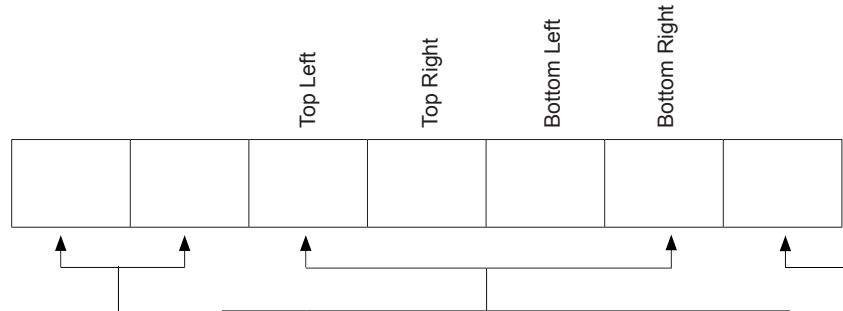
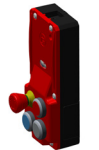
proLok+ Body with 2 hole positions



proLok+ Body with 4 hole positions



pro i
If you order just one or two push buttons we will retain the order but position them top left and top right



| Select Unit | Part No. | |
|---|----------|----------|
| Stand alone Pod with No holes on top of pod case (stand alone unit) | B | 0 |
| Pod with one hole on top of pod case for fitting to proStop Body | B | 1 |
| Pod with two holes on top of pod case for fitting to proLOK Body | B | 2 |
| proLok+ Body switch information | L | 0 |

| Part No. | Pushbutton / Lamp Options - 24v only |
|-----------|---|
| 0 | Blank |
| 1 | Red Lamp |
| 2 | Yellow Lamp |
| 3 | Green Lamp |
| 6 | Blue Lamp |
| 7 | White Lamp |
| E | E-Stop (twist reset) |
| H | E-Stop (with additional monitoring contacts, twist reset) |
| P | E-Stop (pull reset) |
| U | E-Stop (illuminated twist reset) |
| L* | Latching selector switch (illuminated) |
| M* | Momentary selector switch (illuminated) |
| A* | Latching key switch (90 degree) |
| R | Red illuminated push button non latching |
| Y | Yellow illuminated push button non latching |
| G | Green illuminated push button non latching |
| B | Blue illuminated push button non latching |
| W | White illuminated push button non latching |
| K | Black non illuminated push button non latching |

| Part No. | Sensors - 24v only |
|----------|---|
| N | No additional switch required |
| C | Coded Magnet - Left Hand (see step 2 for handling) |
| D | Coded Magnet - Right Hand (see step 2 for handling) |
| S | RFID - Left Hand (see step 2 for handling) |
| T | RFID - Right Hand (see step 2 for handling) |

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L, M & A Options can only be fitted in top right or bottom left positions

pro i
If an Option Pod or Long Lok Body is not required leave part number blank and continue to Step 11

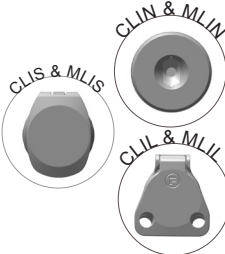
Step 11: Do you want a Key Switch Option Pod?

Option Pods



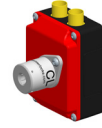
pro i

Removal of the key operates a set of safety rated switches. Common uses are: request machine stop, enable teach mode and prevent inadvertent re-start



| Description | | Part No. |
|-------------|--|----------|
| CLIN | Standard Lock no dustcover | 1 |
| CLIS | Standard Lock with dustcover | 2 |
| CLIL | Standard Lock with padlockable dustcover | 3 |
| MLIN | Masterable Lock no dustcover | 6 |
| MLIS | Masterable Lock with dustcover | 7 |
| MLIL | Masterable Lock with padlockable dustcover | 8 |

| Select Unit | Part No. |
|--|----------|
| Stand alone Pod with No holes on top of pod case (stand alone unit) | 0 |
| Pod with one hole on top of pod case for fitting to <i>pro</i> Stop Body | 1 |
| Pod with two holes on top of pod case for fitting to <i>pro</i> LOK Body | 2 |



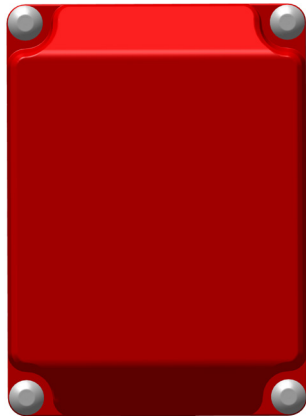
Part #

| | | | |
|---|---|--|--|
| B | K | | |
|---|---|--|--|

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If a Key Switch Option Pod is not required leave part number blank and continue to Step 12

If you require e-stops, push buttons, lamps, coded magnet switch or keyswitch option pods to be ASi enabled you must select one of the options below.



| Part No. | Description | Control | Safety | Examples |
|----------|--|---------|--------|---|
| BA1 | ASi Option pod with Control only PCB | 1 | 0 | Option pod with illuminated red, green & yellow pushbuttons. |
| BA2 | ASi Option pod with Safety only PCB | 0 | 1 | Option pod with e-stop or coded magnet. |
| BA3 | ASi Option pod with 1 Safety and 1 Control PCB | 1 | 1 | Option pod with e-stop and red, green & yellow pushbuttons or Option pod with coded magnet and red, green & yellow pushbuttons. |
| BA4 | ASi Option pod with 2 Safety only PCB | 0 | 2 | Option pod with e-stop and coded magnet. |
| BA5 | ASi Option pod with 1 Control and 2 Safety PCB | 1 | 2 | Option pod with e-stop and coded magnet and pushbuttons or Option pod with e-stop and keyswitch pod. |
| BA6 | ASi Option pod with 3 Safety only PCB | 0 | 3 | Option pod with e-stop, coded magnet, keyswitch pod and pushbuttons. |
| BA7 | ASi Option pod with 1 Control and 3 Safety PCB | 1 | 3 | Option pod with e-stop, coded magnet, keyswitch and pushbuttons. |

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Key switch option pod - if just two NC contacts are required then use a Safety PCB. If 2NC, 2NO are required use a non safety PCB.

Step 13: Quick Disconnect Connector Options



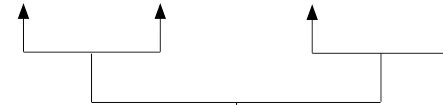
| Quick Disconnect Connector Options | | | | | | | | | | | | | | | | | | | |
|------------------------------------|-------|-------------|--------------|-------------|--------|-------------|------------|-------------|--------|-------------|--------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|
| D1 | | D2 | | D3 | | D6 | | D7 | | D8 | | D9 | | E3 | | E4 | | F2 | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| No. Pins | 5 | No. Pins | 12 | No. Pins | 8 | No. Pins | 14 | No. Pins | 10 | No. Pins | 12 | No. Pins | 12 | No. Pins | 10 | No. Pins | 19 | No. Pins | 19 |
| Max Voltage | 300v | Max Voltage | 300v | Max Voltage | 60v | Max Voltage | 30v | Max Voltage | 60v | Max Voltage | 60v | Max Voltage | 300v | Max Voltage | 300v | Max Voltage | 300v | Max Voltage | 300v |
| Connector | M12 | Connector | UN2 | Connector | M12 | Connector | M16 | Connector | M12 | Connector | M12 | Connector | M23 | Connector | UN2 | Connector | UN2 | Connector | M23 |
| 1 | Brown | 1 | Orange | 1 | White | A | Brown | 1 | White | 1 | White | 1 | Brown | 1 | Orange | 1 | Violet | 1 | Violet |
| 2 | White | 2 | Blue | 2 | Brown | C | Red/Blue | 2 | Brown | 2 | Brown | 2 | Brown/White | 2 | Blue | 2 | Red | 2 | Red |
| 3 | Blue | 3 | White/Black | 3 | Green | E | Black | 3 | Green | 3 | Green | 3 | Blue | 3 | White/Black | 3 | Grey | 3 | Grey |
| 4 | Black | 4 | Red/Black | 4 | Yellow | G | Pink | 4 | Yellow | 4 | Yellow | 4 | White | 4 | Red/Black | 4 | Red/Blue | 4 | Red/Blue |
| 5 | Grey | 5 | Green/Black | 5 | Grey | J | Green | 5 | Grey | 5 | Grey | 5 | Green | 5 | Green/Black | 5 | Blue | 5 | Green |
| | | 6 | Orange/Black | 6 | Pink | L | Blue | 6 | Pink | 6 | Pink | 6 | Yellow | 6 | Orange/Black | 6 | Green | 6 | Blue |
| | | 7 | Blue/Black | 7 | Blue | M | Orange | 7 | Blue | 7 | Blue | 7 | Grey | 7 | Red | 7 | Brown | 7 | Grey/Pink |
| | | 8 | Black/White | 8 | Red | N | Grey/Brown | 8 | Red | 8 | Red | 8 | Pink | 8 | Green/Yellow | 8 | White/Green | 8 | White/Green |
| | | 9 | Green/Yellow | | | O | Violet | 9 | Orange | 9 | Orange | 9 | Red | 9 | Black | 9 | White/Yellow | 9 | White/Yellow |
| | | 10 | Red | | | P | Red | 10 | Tan | 10 | Tan | 10 | Black | 10 | White | 10 | White/Grey | 10 | White/Grey |
| | | 11 | White | | | R | White | | | 11 | Black | 11 | Violet | | | 11 | Black | 11 | Black |
| | | 12 | Black | | | S | Grey | | | 12 | Violet | 12 | Green/Yellow | | | 12 | Green/Yellow | 12 | Green/Yellow |
| | | | | | | T | Yellow | | | | | | | | | 13 | Yellow/Brown | 13 | Yellow/Brown |
| | | | | | | U | Tan | | | | | | | | | 14 | Brown/Green | 14 | Brown/Green |
| | | | | | | | | | | | | | | | | 15 | White | 15 | White |
| | | | | | | | | | | | | | | | | 16 | Yellow | 16 | Yellow |
| | | | | | | | | | | | | | | | | 17 | Pink | 17 | Pink |
| | | | | | | | | | | | | | | | | 18 | Grey/Brown | 18 | Grey/Brown |
| | | | | | | | | | | | | | | | | 19 | Grey/Pink | 19 | Brown |

Step 13: Quick Disconnect Connector Options

| T Wiring | | | | | | Left Hand QD | | Right Hand QD | |
|----------|---|---|---|---|---|--------------|--|---------------|--|
| T | # | # | # | # | # | | | | |



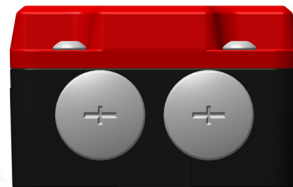
Contact Fortress engineering to be assigned T Wiring number



| | | No. Pins | Connector |
|---|---|----------|-----------|
| 0 | 0 | | |
| D | 1 | 5 | M12 |
| D | 2 | 12 | UN2 |
| D | 3 | 8 | M12 |
| D | 6 | 14 | M16 |
| D | 7 | 10 | M12 |
| D | 8 | 12 | M12 |
| D | 9 | 12 | M23 |
| E | 3 | 10 | UN2 |
| E | 4 | 19 | UN2 |
| F | 2 | 19 | M23 |



Image showing no connectors - 0 0



| | | | | | | | | | |
|----|------|----|----|----------------|----|---------------|--------|---|--------|
| D1 | | | 1 | Brown | | | | | |
| | | | 2 | White | | | | | |
| | | | 3 | Blue | | | | | |
| | | | 4 | Black | | | | | |
| | | | 5 | Grey | | | | | |
| D2 | | | 1 | Orange | 7 | Blue w/Black | | | |
| | | | 2 | Blue | 8 | Black w/White | | | |
| | | | 3 | White w/Black | 9 | Green/Yellow | | | |
| | | | 4 | Red w/Black | 10 | Red | | | |
| | | | 5 | Green w/Black | 11 | White | | | |
| | | | 6 | Orange w/Black | 12 | Black | | | |
| D3 | | | 1 | White | 5 | Grey | | | |
| | | | 2 | Brown | 6 | Pink | | | |
| | | | 3 | Green | 7 | Blue | | | |
| | | | 4 | Yellow | 8 | Red | | | |
| D4 | | | 1 | White w/Black | 5 | Orange | | | |
| | | | 2 | Black | 6 | Blue | | | |
| | | | 3 | White | 7 | Green/White | | | |
| | | | 4 | Red | | | | | |
| D5 | | | 1 | Brown | | | | | |
| | | | 2 | White | | | | | |
| | | | 3 | Blue | | | | | |
| | | | 4 | Black | | | | | |
| | | | 5 | Grey | | | | | |
| D6 | | | A | Brown | N | Grey/Brown | | | |
| | | | C | Red/Blue | O | Violet | | | |
| | | | E | Black | P | Red | | | |
| | | | G | Pink | R | White | | | |
| | | | J | Green | S | Grey | | | |
| | | | L | Blue | T | Yellow | | | |
| | | | M | Orange | U | TN | | | |
| | | | D7 | | | 1 | White | 6 | Pink |
| | | | | | | 2 | Brown | 7 | Blue |
| | | | | | | 3 | Green | 8 | Red |
| | | | | | | 4 | Yellow | 9 | Orange |
| 5 | Grey | 10 | | | | TN | | | |
| D8 | | | 1 | White | 7 | Blue | | | |
| | | | 2 | Brown | 8 | Red | | | |
| | | | 3 | Green | 9 | Orange | | | |
| | | | 4 | Yellow | 10 | TN | | | |
| | | | 5 | Grey | 11 | Black | | | |
| | | | 6 | Pink | 12 | Violet | | | |
| D9 | | | 1 | Brown | 7 | Gray | | | |
| | | | 2 | Not Used | 8 | Pink | | | |
| | | | 3 | Blue | 9 | Red | | | |
| | | | 4 | White | 10 | Black | | | |
| | | | 5 | Green | 11 | Violet | | | |
| | | | 6 | Yellow | 12 | Green/Yellow | | | |
| E1 | | | 1 | Brown | | | | | |
| | | | 2 | White | | | | | |
| | | | 3 | Blue | | | | | |
| | | | 4 | Black | | | | | |
| E2 | | | 1 | Orange | 5 | White | | | |
| | | | 2 | Blue | 6 | Red | | | |
| | | | 3 | White w/Black | 7 | Green/Yellow | | | |
| | | | 4 | Black | 8 | Red w/Black | | | |

D1



D2



D4



D9



E2

