Fortress Interlocks

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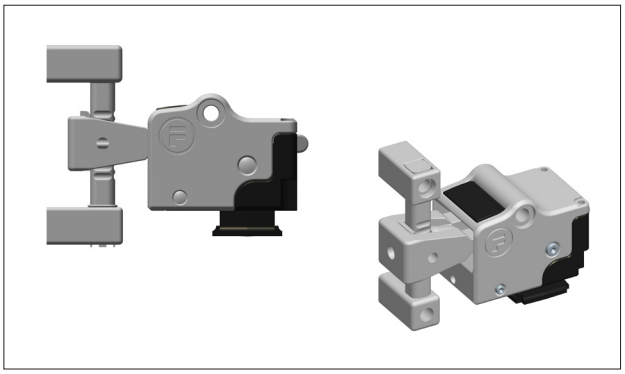
Datasheet

Head Modules

*pro*AT Head & Tongue Actuator



Images above show a TA2T6 (left handed)

*pro*AT Head & Tongue Actuator

- Heavy duty tongue unit.
- Ideal for fast, frequent access.
- 4 position fixing at 90° increments allowing on site handing change.
- Misalignment tolerance of +/- 12mm.
- 12mm Overtravel allowance.
- Retention force 10,000N when top fixing is used.
- Can be fitted with lock-out devices for additional safety.
- Mounted upside down it is self cleaning, ideal for dusty environments.

*pro*AT Head & Tongue Technical Specification

Housing Materials	Zinc Alloy to BSEN12844 Stainless Steel to BS3146
Paint Finish	Gloss powder coat on passivated zinc alloy
Colour	Black and Stainless Steel
Retention Force (locked)	10,000N
Mechanical Life	>1,000,000 Switching Cycles
Performance Level	PLe
B10d	5,000,000
Ambient Temperature	-5°C to 80°C (23°F to 176°F)

*pro*AT Head Options & Ordering Information

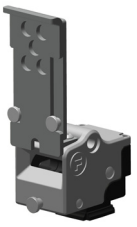
Part Number	Item No.	Description
T6	ITM-00038819	proAT Head
T7	ITM-00038824	proAT Head c/w Drop Down Lockout
T8	ITM-00038830	proAT Head c/w ATL Lock-Out Clip

* The Item No. or Part No. can be quoted for quotation and ordering purposes

*pro*AT Tongue Options & Ordering Information

Part No.	Item No.	Item No.
TA1	AT Tongue Front Handing	ITM-00038780
TA2	AT Tongue Left Handing	ITM-00038806
TA3	AT Tongue Back Handing	ITM-00038807
TA4	AT Tongue Right Handing	ITM-00038808

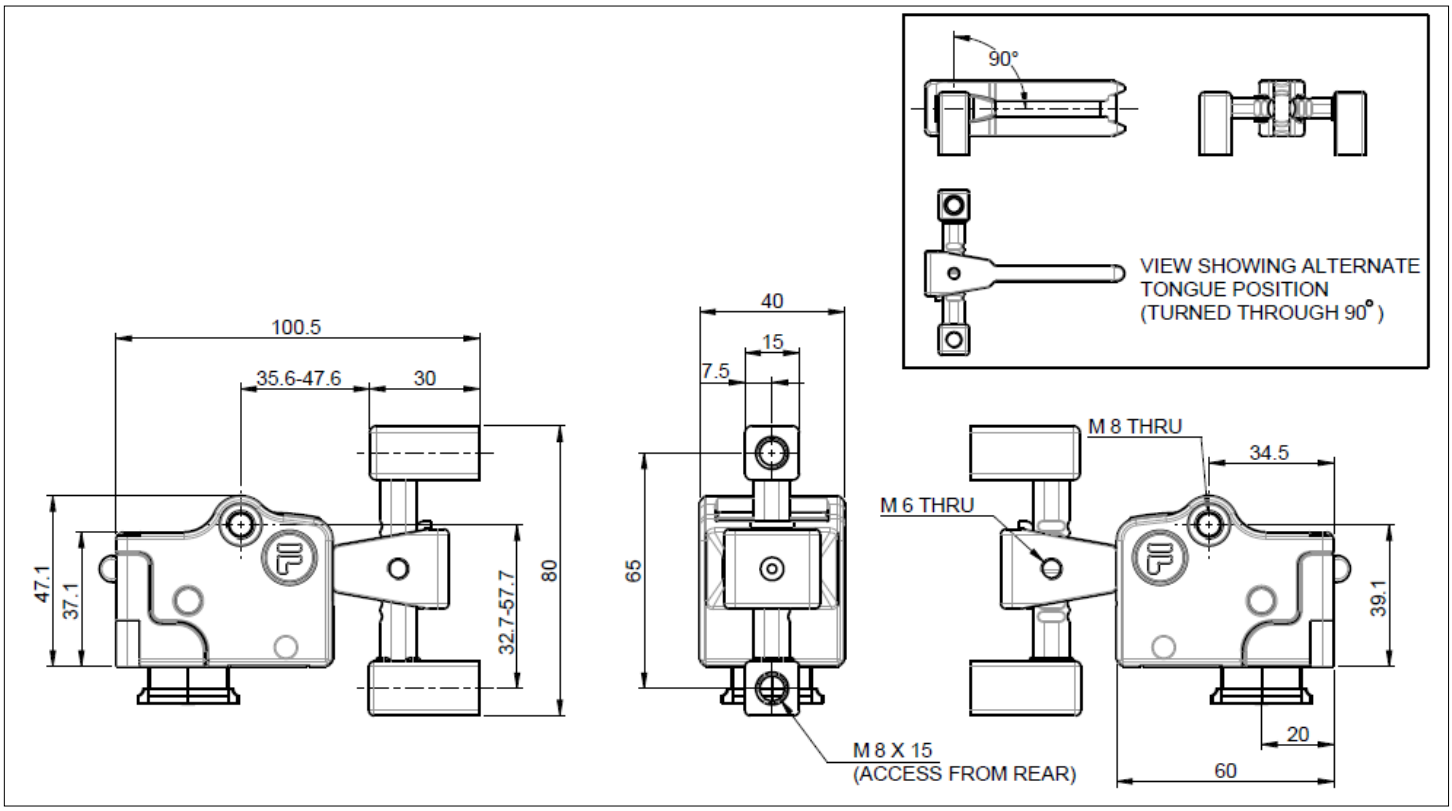
* The Item No. or Part No. can be quoted for quotation and ordering purposes



proAT Head c/w Drop Down Lockout

ATL Lock-Out Clip

Dimensional Drawing



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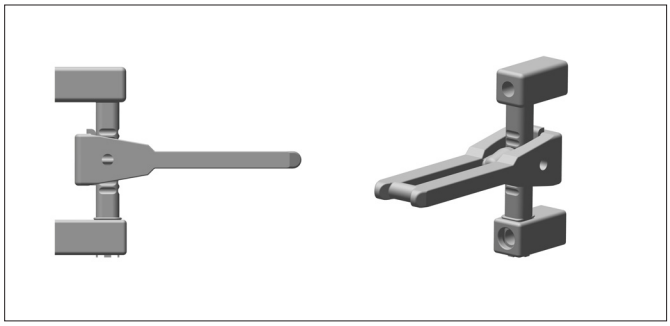
Actuators

*pro*AT Tongue



*pro*AT Tongue

- Used in conjunction with *pro*AT Head
- Heavy duty tongue unit.
- Ideal for fast, frequent access.
- Operating radius:- 900mm
- 3 position fixing at 90° increments.
- Misalignment tolerance of +/- 12mm.
- 12mm Overtravel allowance.

*pro*AT Tongue Technical Specification

Materials	Stainless Steel to BS3146
Operating Force	5N
Retention Force Locked	10,000N
Mechanical Life	>1,000,000 Switching Cycles
Performance Level	PLe
B10d	5,000,000
Ambient Temperature	-5°C to 80°C (23°F to 176°F)

*pro*AT Tongue Options

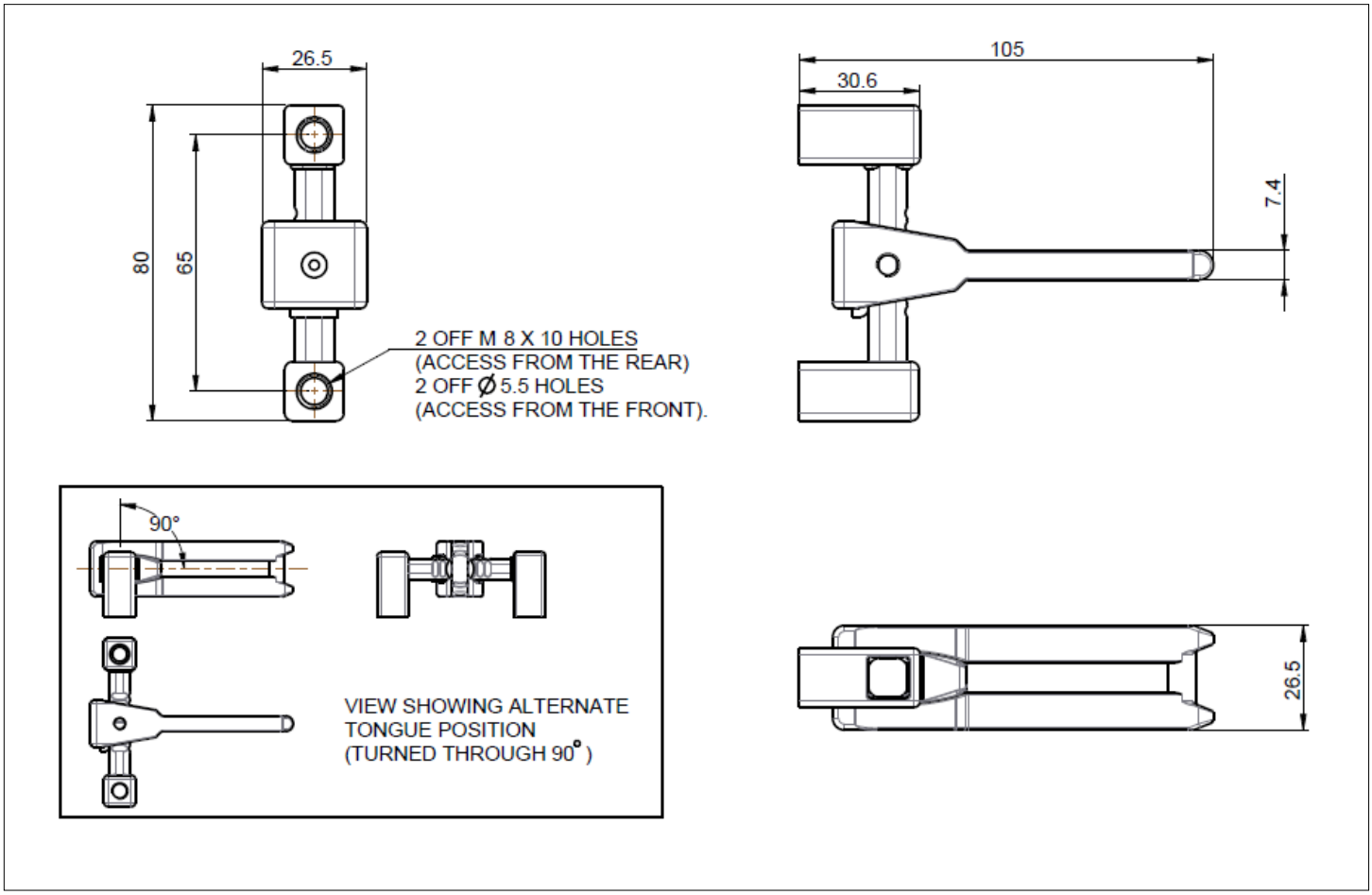
Part Number	Description
TA1	AT Tongue Front Handing
TA2	AT Tongue Left Handing
TA3	AT Tongue Back Handing
TA4	AT Tongue Right Handing

*pro*AT Tongue Ordering Information

Part No.	Item No.
TA1	ITM-00038780
TA2	ITM-00038806
TA3	ITM-00038807
TA4	ITM-00038808

* Item No. or Part No. can be quoted for quotation and ordering purposes.

Dimensional Drawing



Fortress Interlocks

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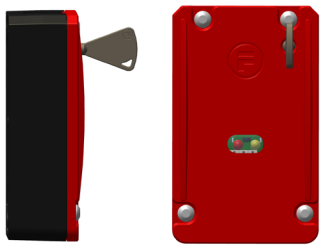
Datasheet

Electrical Switching / Locking

***pro*Lok** - Solenoid Controlled Body - Standard, Power to Lock and ASi



***pro*Lok** Solenoid Controlled Body is used to manage activities by means of a solenoid control element. There are three basic types, Standard, Power to Lock and ASi.

NOTE! Standard, Power to Lock and ASi body types have 2 derivitives, normal and releasing. The releasing version is the type that **MUST** be used if used in conjunction with any type of internal release function (push I/R) or all in one head module with IR Handle.

*pro*Lok - Standard

On supplying power to the solenoid the unit becomes unlocked. This is the recommended set up for most machine guarding applications. A special key driven override facility is included to unlock the unit in the event of a power failure. Available in Standard and Releasing Versions.

- LED indicators for status identification.
- Ideal for machines with run-down cycles
- Split voltage available on request.
- To be used with safety relay and/or safety PLC control systems.

*pro*Lok - Power to Lock

On supplying power to the solenoid the unit becomes locked. This is not the recommended set up for most machine guarding applications. However, it allows faster access and exit in the event of a power failure. Available in Standard and Releasing Versions.

- LED indicators for status identification.
- Split voltage available on request.
- To be used with safety relay and/or safety PLC control systems.

*pro*Lok - AS-interface

On supplying power to the solenoid the unit becomes unlocked. This is the recommended set up for most machine guarding applications. A special key driven override facility is included to unlock the unit in the event of a power failure. Available in Standard and Releasing Versions.

- Ideal for machines with run-down cycles
- LED indicators for status identification
- To be used with safety relay and/or safety PLC control systems.
- For use in AS-i Safe environments

*pro*Lok - Un-Monitored Solenoid

On supplying power to the solenoid the unit becomes unlocked, however only a single monitoring contact is closed. This is a popular configuration for where the solenoid performs a process control rather than safety function. A special key driven override facility is included to unlock the unit in the event of a power failure. Available in Standard and Releasing Versions.

- LED indicators for status identification.
- To be used with safety relay and/or safety PLC control systems.

Approvals

NOTICE!
If, as a result of risk assesment, it cannot be discounted that persons can be enclosed within a danger zone, the guard locks with additional removeable keys (safety keys) must be used or comparable measures must be taken - GS ET 19.

***pro*Lok Technical Specification**		**Standard *pro*Lok**	**Power to Lock *pro*Lok**	**ASi *pro*Lok**	**Un-Monitored Solenoid proLok**
Housing Materials	Zinc Alloy to BSEN12844	•	•	•	•
Paint Finishes	Gloss Powder Coat on Passivated Base Material	•	•	•	•
Ingress Protection	IP67	•	•	•	•
Mechanical Life	>1,000,000 Switching Cycles	•	•	•	•
Performance Level		PLe	PLc to PLe*	PLe	PLc to PLe*
Ambient Temperature	-5°C to + 40°C (23°F to 104°F)	•	•	•	•
Switches Conformance	DIN VDE 0060 Part 206 & IEC 947-5-1	•	•	•	•
Actuator Contact		2NC 1NO	2NC 1NO	2NC 1NO	2NC 1NO
Solenoid Contacts		2NC 1NO	1NO	2NC 1NO	1NO
Safety Circuit Switching Principal	Positive Break	•	•	•	•
Maximum Switch Current	3A	•	•		•
Minimum Switch Current	1mA at 5 VDC	•	•		•
Maxiumum Switching Voltage	230V AC Max	•	•		•
Control Voltages	24V ac/dc, 110V ac, 230V ac	•	•		•
Solenoid Power Rating	12W (Solenoid current at Nominal 24V dc = 500mA. Quasient current = 350mA).	•	•	•	•
Solenoid Rating (Duty Cycle)	100%	•	•	•	•
Solenoid Voltage	24V ac/dc, 110V ac, 230V ac	•	•		•
Solenoid Voltage Tolerance	90% to 110% of nominal	•	•	•	•
Connector Type	M12 male			•	
Cable Size	26 - 14 AWG	•	•		•
B10d	5,000,000	•	•	•	•
Quick Disconnects*	Various Options	•	•		•

* depending on application

*pro*Lok Ordering Information

Version	Control Voltage	Solenoid Voltage	Sourcing△	Part No.	Item No.
Standard	24V AC/DC	24V AC/DC	✓	SL411	ITM-00039044
Standard	110V AC	110V AC	✓	SL111	ITM-00039033
Standard	230V AC	230V AC	✓	SL211	ITM-00039040
Standard Releasing	24V AC/DC	24V AC/DC	✓	SR411	ITM-00039139
Standard Releasing	110V AC	110V AC	✓	SR111	ITM-00039130
Standard Releasing	230V AC	230V AC	✓	SR211	ITM-00039136
Power to Lock	24V AC/DC	24V AC/DC	✓	SL461	ITM-00040056
Power to Lock	110V AC	110V AC	✓	SL161	ITM-00040057
Power to Lock Releasing	24V AC/DC	24V AC/DC	✓	SR461	ITM-00040058
Power to Lock Releasing	110V AC	110V AC	✓	SR161	ITM-00040059
ASi	24V AC/DC	24V AC/DC	N/A	SL811	ITM-00039061
ASi Releasing	24V AC/DC	24V AC/C	N/A	SR811	ITM-00039154
Un-Monitored Solenoid	24V AC/DC	24V AC/DC	✓	SL416	ITM-00039049
Un-Monitored Solenoid	110V AC	110V AC	✓	SL116	ITM-00039038
Un-Monitored Solenoid	230V AC	230V AC	✓	SL216	ITM-00039043

△Sourcing ouput supplied as standard, Sinking option available on request

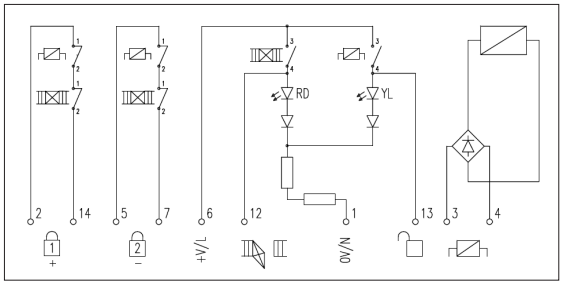
The Item No. or Part No. can be quoted for quotation and ordering purposes.

Datasheet

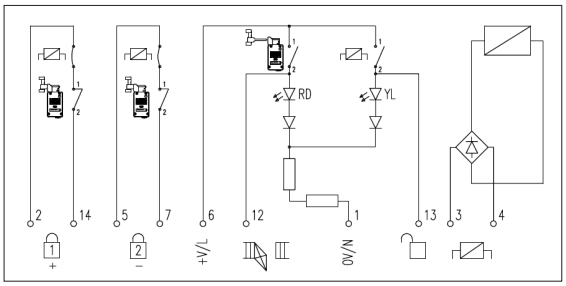
Electrical Switching / Locking

*pro*Lok - Solenoid Controlled Body - Standard, Power to Lock and ASi

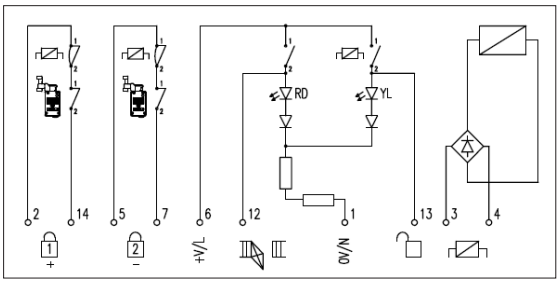
*pro*Lok Standard Wiring Diagram



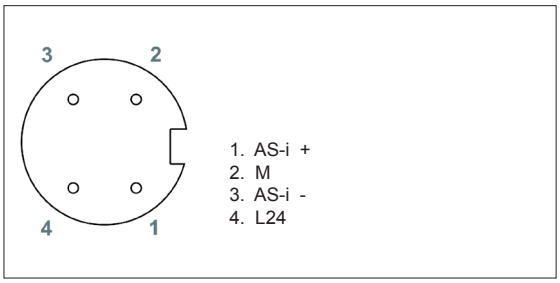
*pro*Lok Power to Lock Wiring Diagram



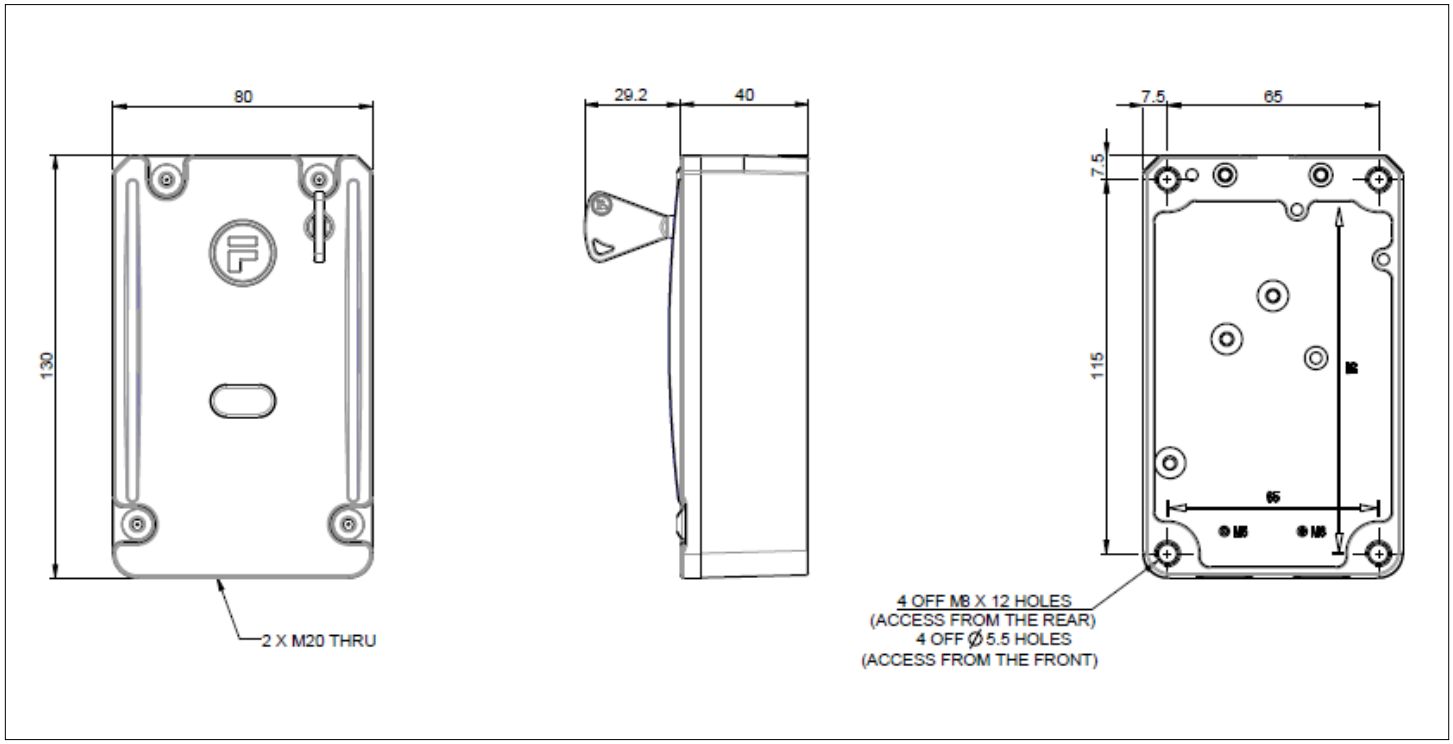
*pro*Lok Un-Monitored Solenoid Wiring Diagram



*pro*Lok ASi Wiring Diagram



Dimensional Drawing



Fortress Interlocks

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Datasheet

Electrical Switching / Locking

*pro*Stop - Non Solenoid Switch Body - Standard

Depressing the plunger breaks the dual safety circuits to shut down the motive power to the machine

*pro*Stop - Standard

Depressing the plunger breaks the dual safety circuits to shut down the motive power to the machine and makes the monitoring circuit.

- Ideal for quick access to machines with no or short run-down cycles
- LED indicators for status identification
- To be used with safety relay and/or safety PLC control systems
- European, Canadian and North American Approvals

*pro*Stop - Standard Ordering Information

Version	Control Voltage	Part No.	Item No.
Standard	24V AC/DC	ST401	ITM-00039387
Standard	110V AC	ST101	ITM-00039383
Standard	230V AC	ST201	ITM-00039386

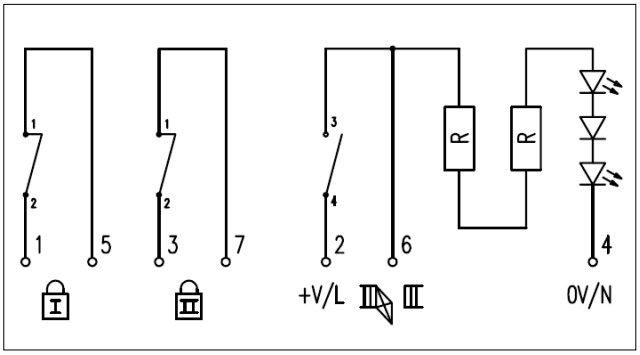
*** Sourcing output supplied as standard, Sinking oprion available on request.**
*** The Item No. or Part No. can be quoted for quotation and ordering purposes**

Approvals

*pro*Stop Technical Specification

Housing Materials	Zinc Alloy to BSEN12844
Paint Finishes	Gloss Powder Coat on Passivated Base Material
Ingress Protection	IP67
Mechanical Life	>1,000,000 Switching Cycles
Performance Level	PLe
B10d	5,000,000
Ambient Temperature	-5°C to + 60°C (23°F to 140°F)
Maximum Frequency of Ops	7,200 per hour
Connector Type	Spring Activated Vibration Proof Block
Switches Conformance	DIN VDE 0060 Part 206 & IEC 947-5-1
Switching Contact Element	2NC and 1NO
Safety Circuit Switching Principal	Positive Break (2N/C) Dual Channel
Maximum Switch Current	3A
Minimum Switch Current	1mA at 5VDC
Maxiumum Switching Voltage	230V AC Max
Utilisation Category	AC 15 or DC 13
Control Voltages	24V ac/dc, 110V ac, 230V ac
Insulating Voltage	2500V AC
Insulatiing Resistance	20M Ohm
Cable Size	28 - 24 AWG
B10d	5,000,000
DC	99%
λ_d	10%
Diagnostic Coverage	Position Monitoring
Environment	Indoor & Outdoor

Wiring Diagram - *pro*Stop



Safety Functions - *pro*Stop		Part No
Safety Function 1	Turns mechanical movement of head / lock into operation of safety contacts	ST

NOTICE!
If, as a result of risk assessment, it cannot be discounted that persons can be enclosed within a danger zone, then guard locks with additional removeable keys (safety keys) must be used or comparable measures must be taken - GS ET 19.

Datasheet

Electrical Switching / Locking

*pro*Stop - Non Solenoid Switch Body - Standard

Dimensional Drawing