Fortress Interlocks

Product Data Sheet

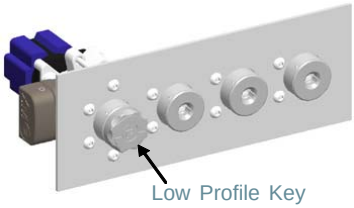
XMR & XMSR

Modular Key Exchange Units with Rotary Switches

XMR2-CLIN-02040**E**
Enclosure (Sealed)

XMR3-CLIN-03240**C**
Concealed Enclosure

XMR1-CLIN-02040**P**
Panel Mounted (Sealed)



XMR4-CLIN-02040**P**
Back of Board Panel Mounted

Description

The **XMR** and **XMSR** (full stainless steel version) are modular key exchange units. These units are fitted with rotary switch(es) that can be used for power or control isolation.

Multiple lock variants are used to exchange one or more keys for a number of other keys. These devices form the link between isolation devices and access locks. Any combination of isolation / access keys are possible. The **XMR** and **XMSR** can be fitted with 20A, 32A, 63A or 150A switches. The 20A and 32A switches can be fitted behind each module. The 63A and 150A switches must not have any switch fitted behind the immediately adjacent module(s). There are four mounting options - Panel, Enclosure, Back of Board Panel mounted using M-BOB adaptor(s) and Concealed.

- Horizontal and vertical mounting
- Locks Tested to over 1,000,000 operations
- Switches tested to 75,000 operations
- Durable plated bodies (XMR)
- Stainless steel bodies (XMSR)
- Patented sequencing system with up to 13,000 different sequences in a XMR10
- Easy to configure
- Sequential or non sequential key operation
- Extend or trim-down units and use surplus modules elsewhere
- Minimal maintenance
- Slim and attractive design
- Sealed units are rated IP67
- Concealed units and Back of Board units are rated IP50

Operation

Single Lock Units

Removal of the key operates the switch contacts

Multiple Lock Units

Keys used to gain access are mechanically trapped until other keys from the isolation points are inserted and turned. Only when all isolation keys are inserted can an access key be removed. Removing the access keys mechanically traps the isolation keys in place. The isolation keys change the switch contacts.

Typical Application

Single Lock Units

To Isolate power before using the key in an extended system.

Multiple Lock Units

The key exchange unit allows a number of secondary functions, following an initial action e.g. opening several guard doors (at the same time) on a machine once the power supply to the machine has been isolated.

Construction XMR

Body Housing: Die-cast zinc body with pearl bronze finish.
Internals: All stainless steel contact components.
Lock Mechanism: CL or ML lock types are of die-cast zinc body with stainless steel operating mechanism.
Key: Stainless steel.
Enclosure: Polycarbonate

CL & ML Keys are sold separately

Construction XMSR

Body Housing: All stainless steel
Internals: All stainless steel
Lock Mechanism: CLS or MLS lock types are of all stainless steel
Key: All stainless steel
Dustcover: All stainless steel
Enclosure: Polycarbonate

Options XMR and XMSR

- Panel or enclosure mounting
- Stainless steel spring-loaded dust cover (XMR only, standard on XMSR)
- Lock portions may be CL or ML for XMR or CLS or MLS for XMSR
- Colour Coding of locks and keys available
- 20A, 32A, 63A or 150A switches
- 4NO or 2NO 2NC Switch contacts
- Metal Enclosures tailored to suit
- Low Profile key for enhanced Back of Board Mounting

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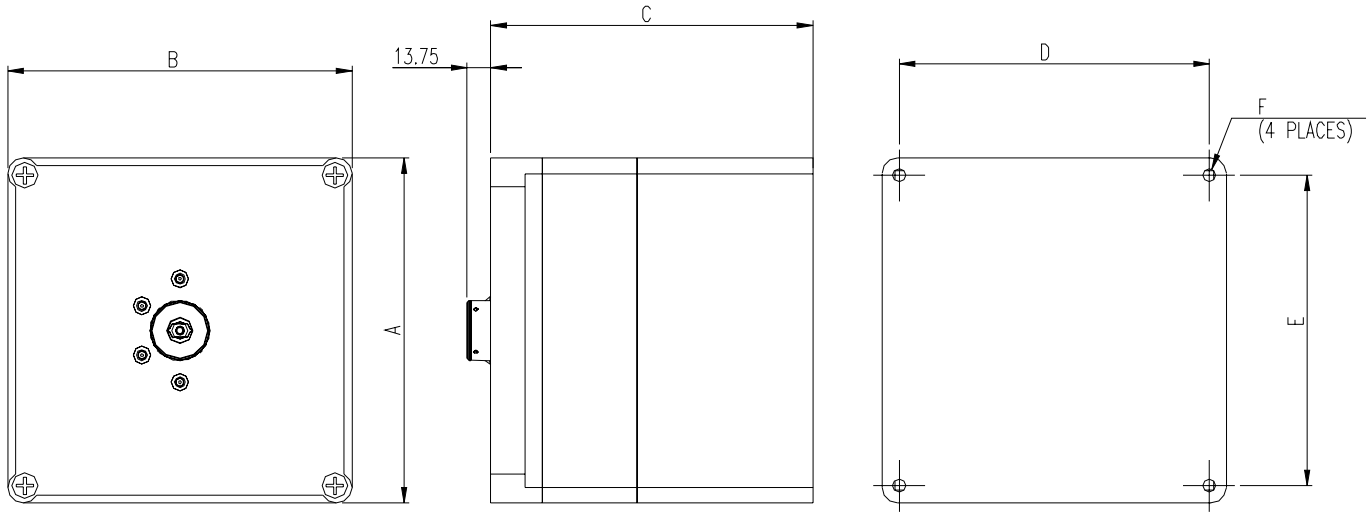
Technical Data Sheet

Tabulated Drawing
Concealed Enclosure



No OF LOCKS	SWITCH CURRENT	A	B	C	D	E	F
1	20A	200	200	130	110	110	ø4.7
1	32A/63A	200	200	185	180	180	ø7.5
1	150A	300	300	240	180	180	ø7.5
2	20A	200	200	130	180	180	ø7.5
2	32A/63A	200	200	185	180	180	ø7.5
2	150A	300	300	240	180	180	ø7.5
3	20A	200	300	130	280	180	ø7.5
3	32A/63A	200	300	185	280	180	ø7.5
3	150A	300	300	240	280	180	ø7.5
4	20A	200	400	130	380	180	ø7.5
4	32A/63A	200	400	185	380	180	ø7.5
4	150A	300	400	240	380	180	ø7.5
5	20A	200	400	130	380	180	ø7.5
5	32A/63A	200	400	185	380	180	ø7.5
5	150A	300	400	240	380	180	ø7.5
6	20A	300	600	130	580	280	ø7.5
6	32A/63A	300	600	185	580	280	ø7.5
6	150A	300	600	240	580	280	ø7.5
7	20A	300	600	130	580	280	ø7.5
7	32A/63A	300	600	185	580	280	ø7.5
7	150A	300	600	240	580	280	ø7.5
8	20A	300	600	130	580	280	ø7.5
8	32A/63A	300	600	185	580	280	ø7.5
8	150A	300	600	240	580	280	ø7.5
9	20A	300	600	130	580	280	ø7.5
9	32A/63A	300	600	185	580	280	ø7.5
9	150A	300	600	240	580	280	ø7.5

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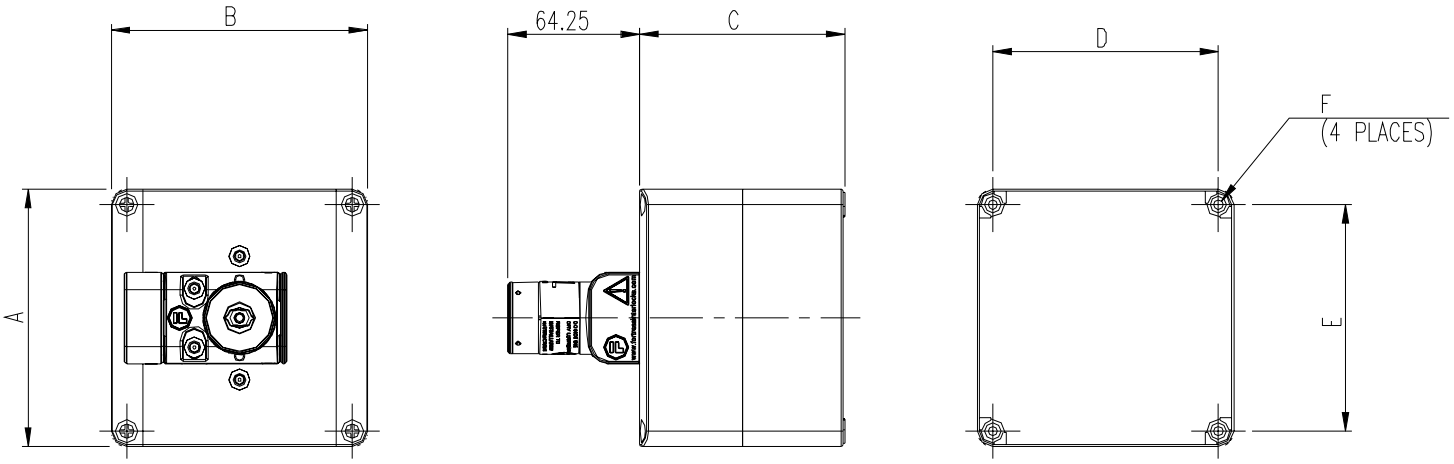
Technical Data Sheet

Tabulated Drawing
Sealed Enclosure



No OF LOCKS	SWITCH CURRENT	A	B	C	D	E	F
1	20 / 32 AMP	125MM	125MM	100MM	110MM	110MM	ø4.7
1	63 AMP	200MM	200MM	130MM	180MM	180MM	ø4.7
1	150 AMP	200MM	200MM	185MM	180MM	180MM	ø4.7
2	20 / 32 AMP	125MM	175MM	100MM	110MM	160MM	ø4.7
2	63 AMP	200MM	200MM	130MM	180MM	180MM	ø7.5
2	150 AMP	200MM	200MM	185MM	180MM	180MM	ø7.5
3	20 / 32 AMP	200MM	300MM	130MM	280MM	180MM	ø7.5
3	63 AMP	200MM	300MM	130MM	280MM	180MM	ø7.5
3	150 AMP	200MM	300MM	185MM	280MM	180MM	ø7.5
4	20 / 32 AMP	200MM	300MM	130MM	280MM	180MM	ø7.5
4	63 AMP	200MM	400MM	130MM	380MM	180MM	ø7.5
4	150 AMP	200MM	400MM	185MM	380MM	180MM	ø7.5
5	20 / 32 AMP	200MM	400MM	130MM	380MM	180MM	ø7.5
5	63 AMP	200MM	400MM	130MM	380MM	180MM	ø7.5
5	150 AMP	200MM	400MM	185MM	380MM	180MM	ø7.5
6	20 / 32 AMP	200MM	400MM	130MM	380MM	180MM	ø7.5
6	63 AMP	300MM	600MM	130MM	580MM	280MM	ø7.5
6	150 AMP	300MM	600MM	185MM	580MM	280MM	ø7.5
7	20 / 32 AMP	300MM	600MM	130MM	580MM	280MM	ø7.5
7	63 AMP	300MM	600MM	130MM	580MM	280MM	ø7.5
7	150 AMP	300MM	600MM	185MM	580MM	280MM	ø7.5
8	20 / 32 AMP	300MM	600MM	130MM	580MM	280MM	ø7.5
8	63 AMP	300MM	600MM	130MM	580MM	280MM	ø7.5
8	150 AMP	300MM	600MM	185MM	580MM	280MM	ø7.5
9	20 / 32 AMP	300MM	600MM	130MM	580MM	280MM	ø7.5
9	63 AMP	300MM	600MM	130MM	580MM	280MM	ø7.5
9	150 AMP	300MM	600MM	185MM	580MM	280MM	ø7.5

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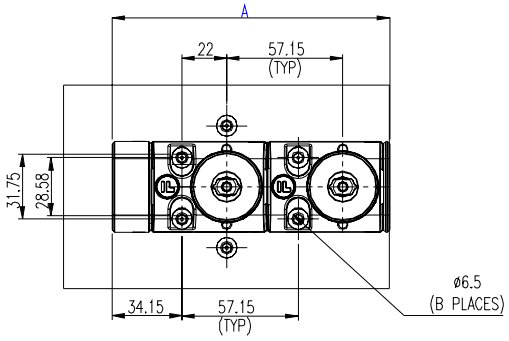
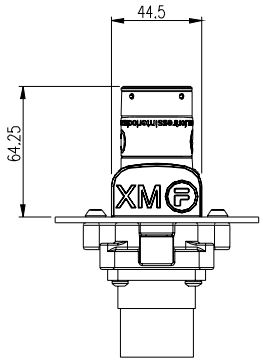
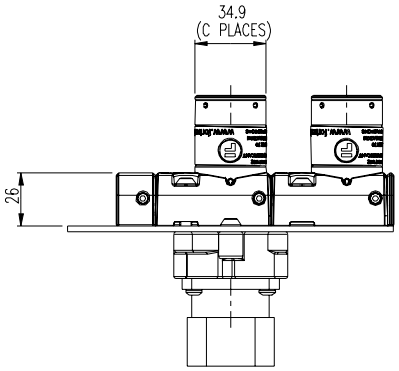
Technical Datasheet

XMR Tabulated Drawing

PRODUCT	DIM A OVERALL LENGTH	DIM B NO OF SLOTTED HOLES	DIM C NO OF CL LOCKS
XMR2	136.3	4	2
XMR3	193.45	6	3
XMR4	250.6	8	4
XMR5	307.75	10	5
XMR6	364.9	12	6
XMR7	422.05	14	7
XMR8	479.2	16	8
XMR9	536.35	18	9
XMR10	593.5	20	10

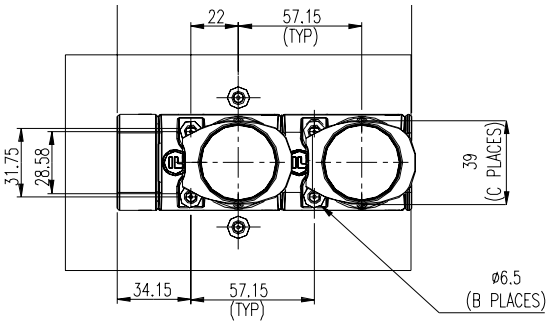


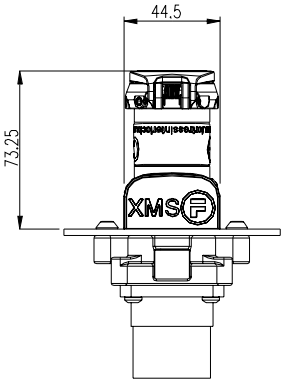


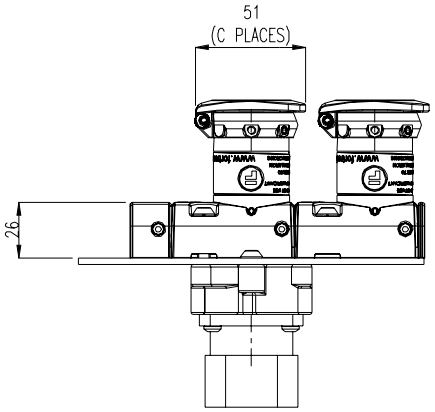


XMSR Tabulated Drawing

PRODUCT	DIM A OVERALL LENGTH	DIM B NO OF SLOTTED HOLES	DIM C NO OF CL LOCKS
XMSR2	136.3	4	2
XMSR3	193.45	6	3
XMSR4	250.6	8	4
XMSR5	307.75	10	5







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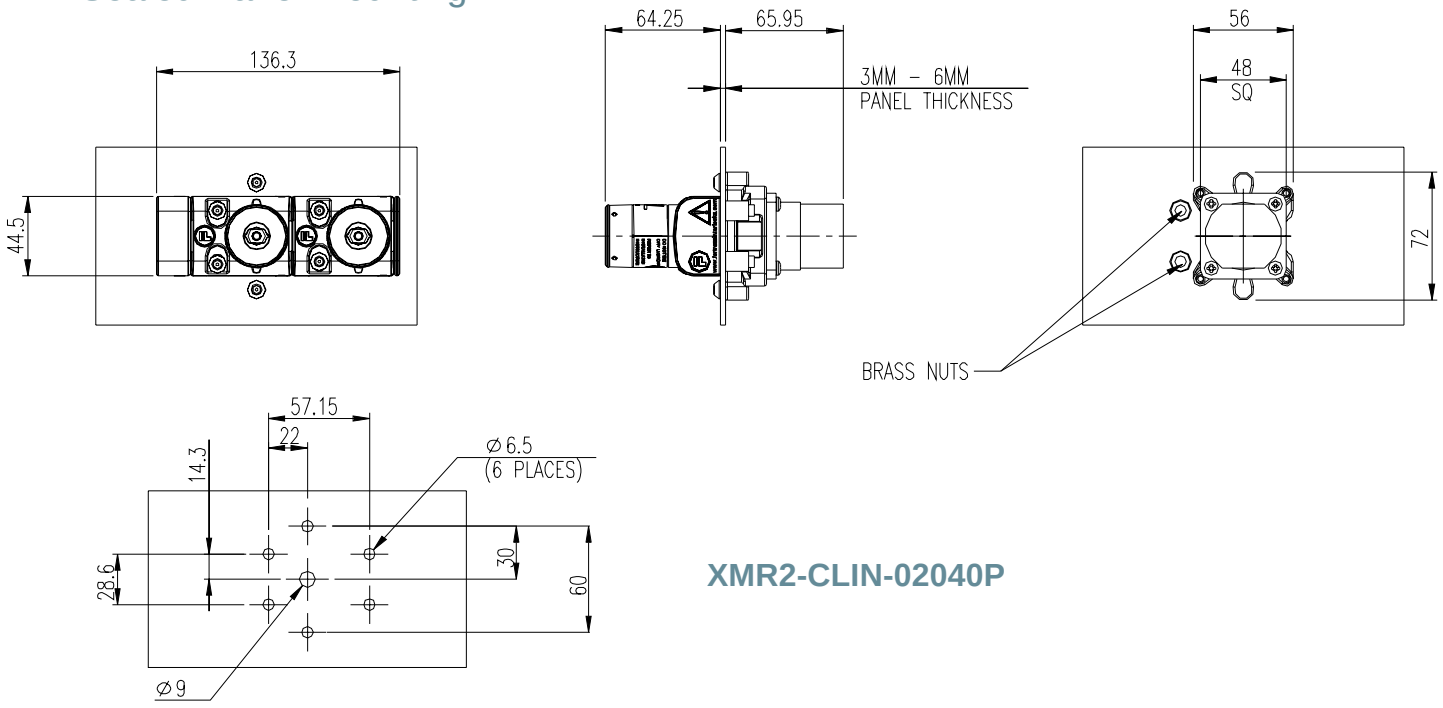
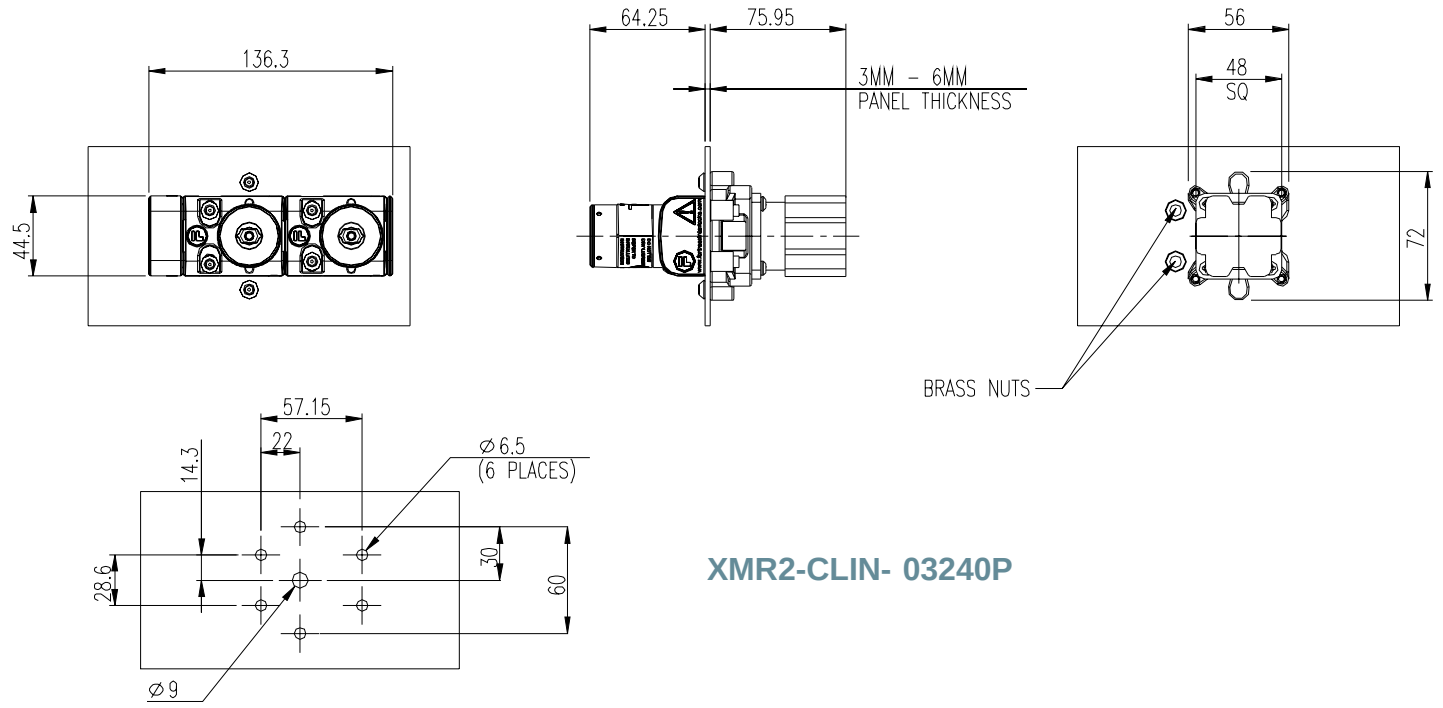
Technical Datasheet

Sealed Panel Mounting



XMR2-CLIN-02040P



XMR2-CLIN- 03240P

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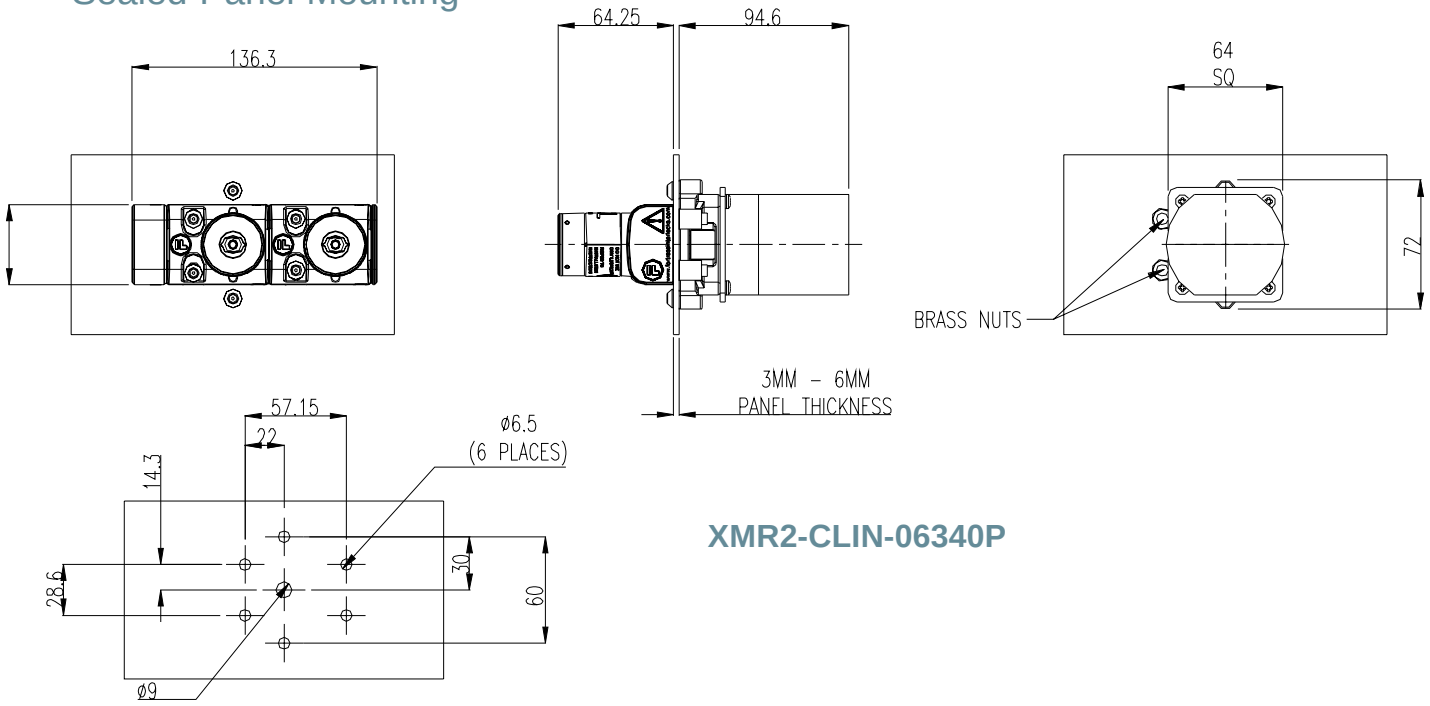
Technical Datasheet

Sealed Panel Mounting



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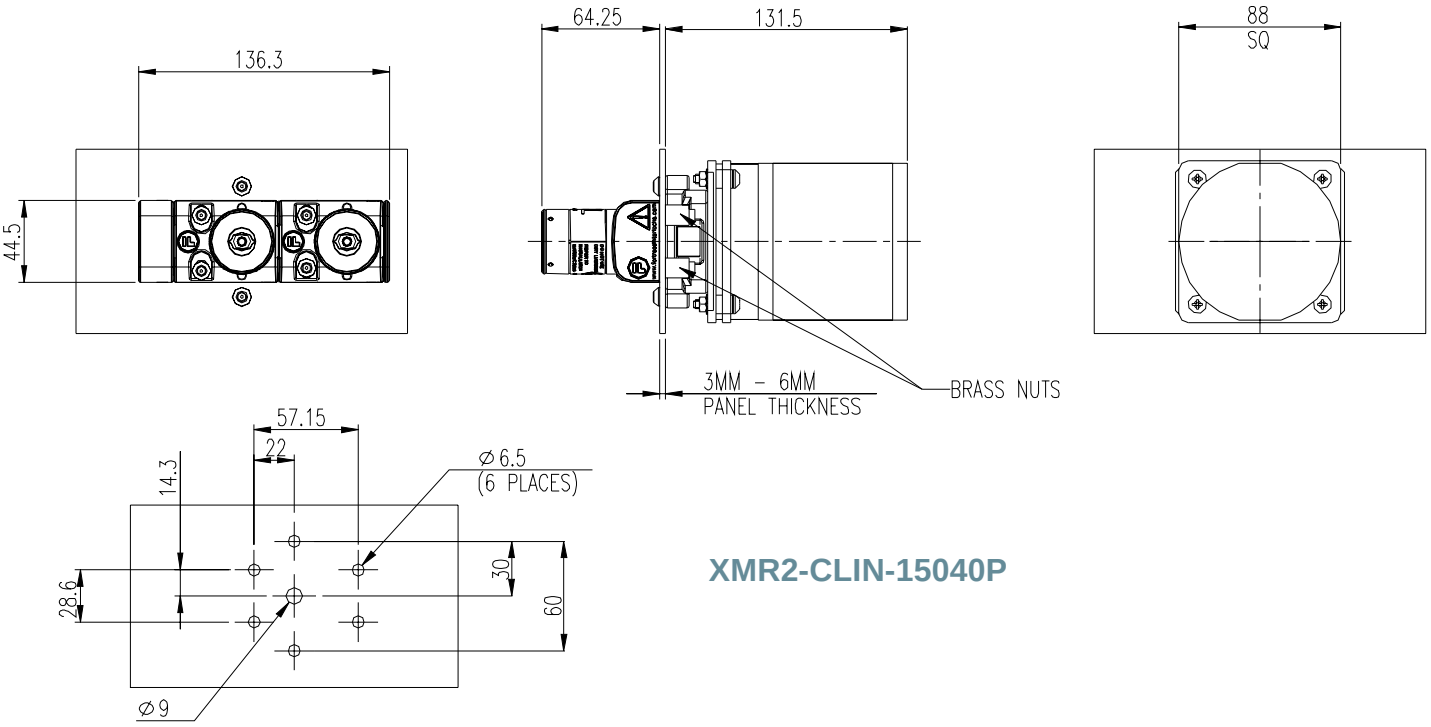

XMR2-CLIN-15040P

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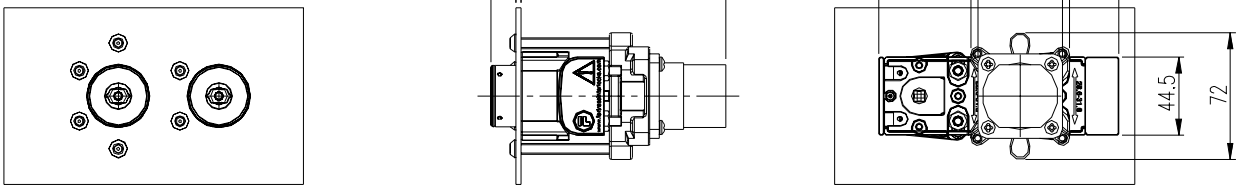
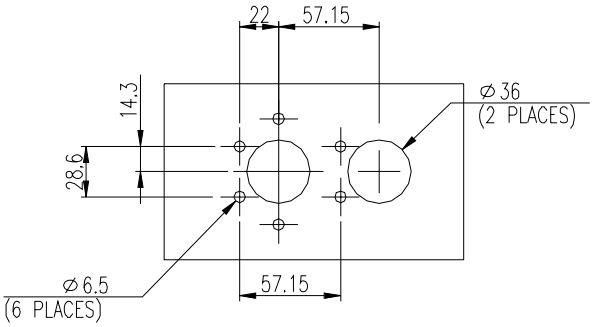
Technical Datasheet

Back of Board Panel Mounting





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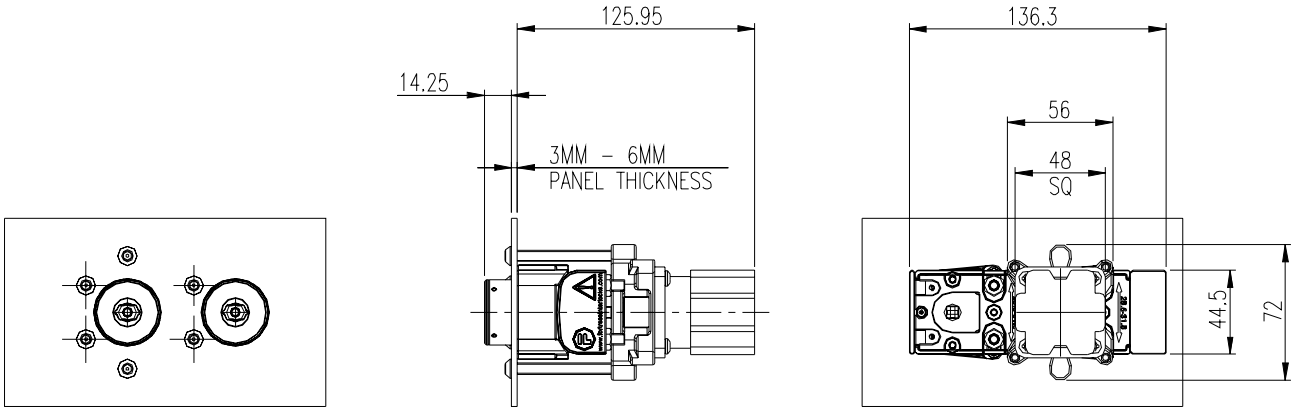

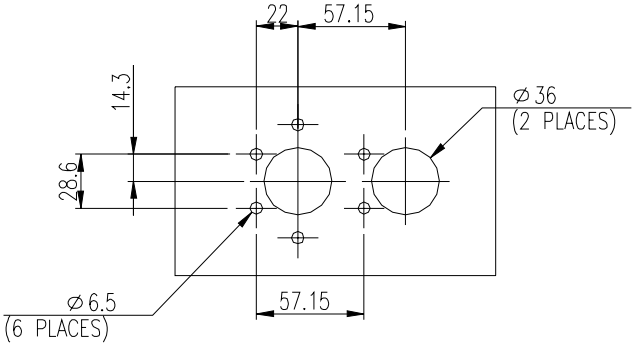

XMR2-CLIN- 03240P

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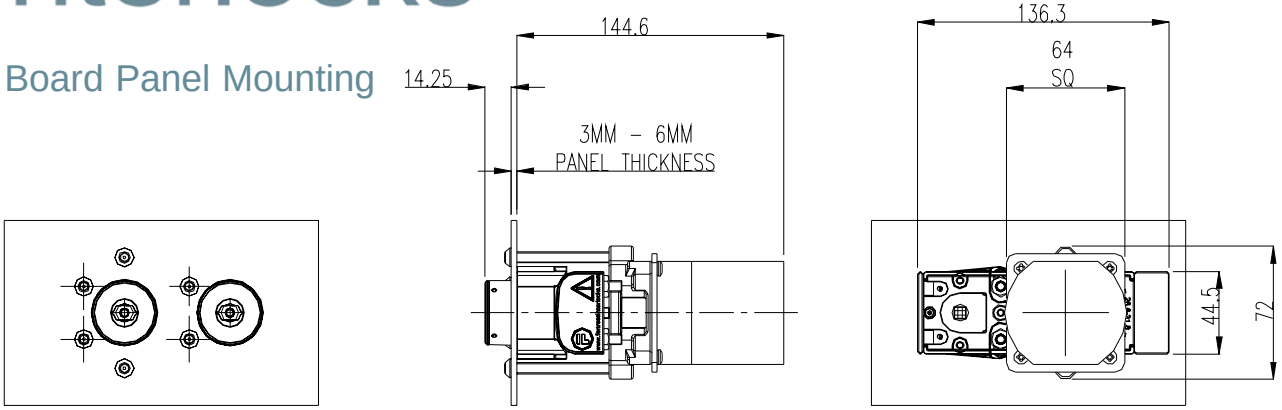
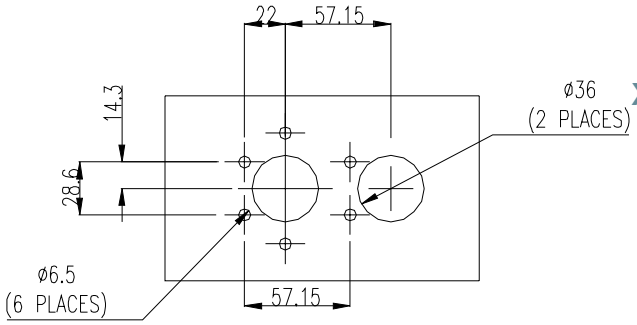
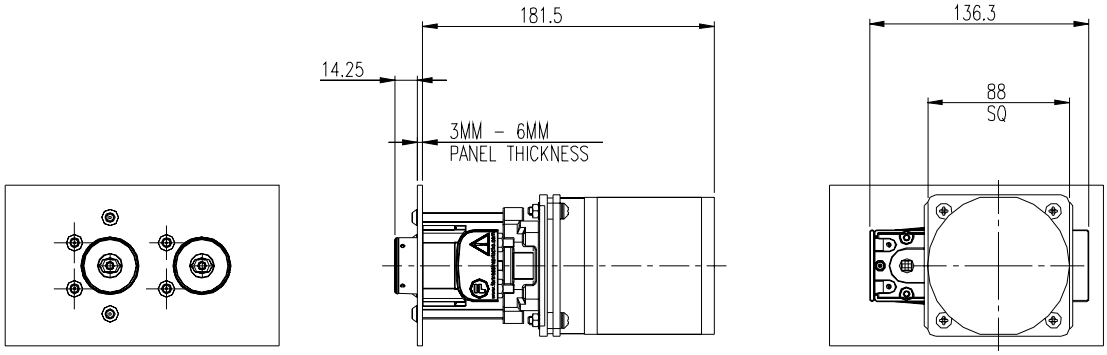
Technical Datasheet

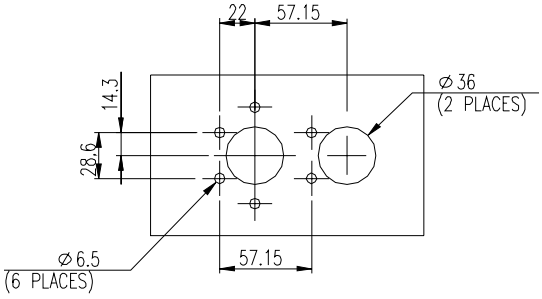
Back of Board Panel Mounting





XMR2-CLIN-06340P





XMR2-CLIN-15040P

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Add-On Modules

XMA

XMA Module(s) can be added to an existing **XMR** product for system expansion at any stage. The XMA is a zinc alloy bodied add-on module. The XMSA is a Stainless Steel bodied add-on module.

Part Number

Starting from the left and working across select a coloured option for each section heading. This will generate a part number. **Example Part Numbers:**
XMR5-CLIN-02040E, **XMSR2-CLSS-06322C**

Product	No. of Locks	Lock Type	Lock Material	Dust cover	Switch Current	Switch Contacts		Mounting
						NO	NC	
XMR	1 -	CL	Stainless steel Internals	None -	020	4	0	Enclosure (Sealed)
	2 -				032	2	2	
	3 -	ML			063			Concealed Enclosure
	4 -				150			
	5 -			Stainless steel -				
XMSR (1 to 5 only)	6 -		Full Stainless steel					Panel Mounted (Sealed)
	7 -							
	8 -							
	9 -							
	10 -							

***Sealed Enclosure and Concealed Enclosure mounted versions are only available up to 9 locks as standard.**

***P versions are supplied with M-BOB adaptor as standard but can also be Sealed Panel Mounted**

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