

'22 Series' Components

General Description

Wherever the design of a control panel requires robustness, long life and reliability, then the '22 Series' components meet the need.

As well as looking elegant in their own right, they are often used as replacement items where other, less able components, have failed.

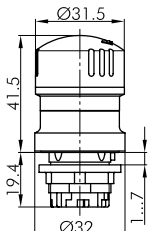
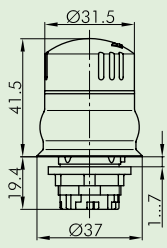
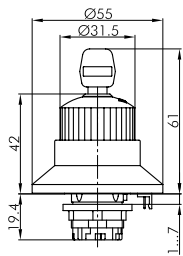
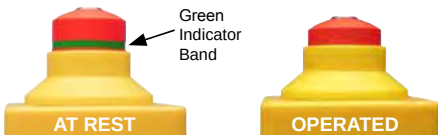
With a standard 22mm fixing, the range of actuators and contact block options lend themselves to a wide variety of applications - processing and manufacturing machines, shipbuilding, rail rolling stock, cranes & hoists, elevators and many other electromechanical applications.

Manufactured using high quality materials the actuators are available in black, charcoal or chromed metallic front bezel.

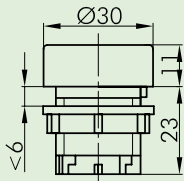
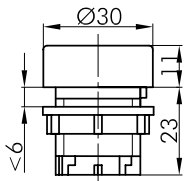
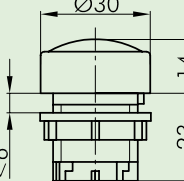
With all of the above features the '22 Series' still remains competitively priced.



Actuator Details

Image	Dimensions	Description	Catalogue No
		Emergency Stop Actuator - IP65 with position indicator*. Stayput - twist-to-reset (In accordance with EN 60068, EN ISO 13850, EN 60947-5-1 and EN 60947-5-5)	QRUV
		Emergency Stop Actuator for Hygiene and Pressure Washer Applications - IP69K No position indicator. Stayput - twist-to-reset (In accordance with EN 60068, EN ISO 13850, EN 60947-5-1 and EN 60947-5-5)	QRUVK
		Emergency Stop Actuator - IP65 with position indicator* and yellow anti-lock collar. Stayput - Key reset (In accordance with EN 60068, EN ISO 13850, EN 60947-5-1 and EN 60947-5-5)	QRBUVSE
 *Emergency Stop Position Indicator			

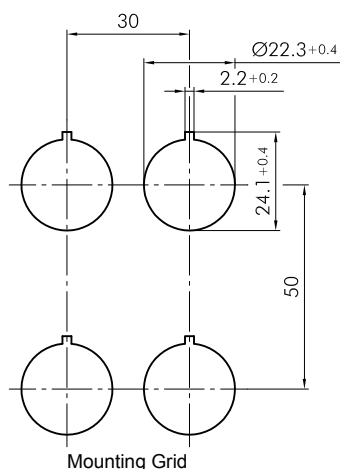
'22 Series' Components contd.

Image	Dimensions	Description	Catalogue No
		Pushbutton head with flat colour cap (Non illuminated) - IP65 Spring return action. Colour cap - no inscription. WS - White, RT - Red, GN - Green, GB - Yellow, SW - Black, BL - Blue. (Add colour code to cat no e.g. DXRTCGB) Bezel Colour Satin chrome effect Grey Bright chrome effect Black	DXRTC... DXRTG... DXRTM... DXRTS...
		Pushbutton head with illuminated flat colour cap. - IP65 Momentary action. Transparent colour caps. RT - Red, GN - Green, GB - Yellow, KL - Clear, BL - Blue. (Add colour code to cat no e.g. DXRTCGB) Bezel Colour Satin chrome effect Grey Bright chrome effect Black	DXRTL... DXRTLG... DXRTLM... DXRTLS...
		Pilot Lamp - IP65 Supplied with a transparent domed lens. RT - Red, GN - Green, GB - Yellow, KL - Clear, BL - Blue. (Add colour code to cat no e.g. DXRNBL) Bezel Colour Satin chrome effect Grey Bright chrome effect Black	DXRNKC... DXRNKG... DXRNKM... DXRNKS...
		Blank Inscription Plate Suitable for DXRTL.... range above.	BSKU
		Printed Inscription Plate Hundreds of standard printed images and text available, Contact our sales for details. Suitable for DXRTL.... range above.	BSK....
		Printed Inscription Plate Printed to customers own requirements. Suitable for DXRTL.... range above.	BSKB

Dimensions

The mounting grid shown is only applicable to full guard actuators and indicator lamps as shown above.

The mounting hole detail shown is applicable to all '22 Series' components.



Also available in the '22 Series' :-

- Emergency Stops with position indicator.
- Actuators with 'ring' illumination.
- Flat and concave actuator head.
- Key & knob actuators.
- Toggle actuator
- Wide range of accessories.

Please contact our Sales team for further details.

Contact Blocks

The '22 Series' utilises 'Type MT' & 'Type ET' contact blocks. See pages 125-127 for details. (Also includes illuminated lamp options)



'MT... Series' (For use with the '22 and 32 Series' actuators)

General Description

The '22 and 32 Series' components share common modules.

All items are tested and approved to the latest international standards and offer excellent performance with extended life.

General Data Catalogue Ref MT..

Approvals



Storage Temperature	-50°C up to +85°C
Operating Temperature	-30°C up to +85°C For non-illuminated items -30°C up to +55°C Using incandescent lamps -30°C up to +65°C Using LED's
Operating Travel	6mm
Connections	screw connections for 2 x 2.5mm ² , IP2X.
Lamp Type/Socket	incandescent lamps, LED's / BA9s
Contact Material	silver-nickel alloy (Ag/Ni). Gold Plated Version available upon request.
Mechanical Life	1 million operations
Electrical Life	1 million cycles at rated load
Min. Current / Voltage	1 mA / 5V (Under laboratory conditions)
Contact Resistance (New State)	< 20mΩ
Bounce Time	< 10 ms
Positive Opening N/C Contact	→ to EN 60947-5-1 appendix K

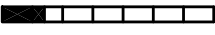
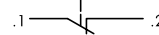
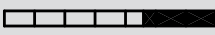
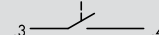
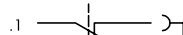
Electrical Ratings - BS EN 60947-5-1

	a.c.	d.c.
Utilisation Category	AC15 A600	DC13 Q600
Rated Insulation Voltage (Ui)	600V	600V
Rated Operational Voltage (Ue)	250V/440V	440V / 250V / 125V / 60V / 24V
Rated Operational Current (Ie)	3A/1.6A	0.12A / 0.2A / 0.4A / 1A / 2A
Breaking Capacity	10Ie	1.1Ie
Continuous thermal current (Ith)	16A	16A

Electrical Data - Pilot Lamp Bodies

Lamp Socket	BA9s
Lamp Voltage	max. 250V (CSA max. 125V)
Lamp Output	max. 2W
Definition	X1.. anode, X2.. cathode.

Contact Blocks

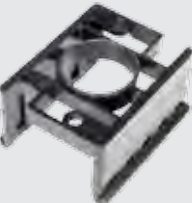
Image	Contact Details	Description	Catalogue No
	0 1 2 3 4 5 6 7 .1/.2  → .1  .2	Modular Contact Block, Momentary 1 N/C	MTO
	0 1 2 3 4 5 6 7 .3/.4  → .3  .4	Modular Contact Block, Momentary 1 N/O	MTI
	-3 -2 -1 0 1 2 3 4 5 6 7 .1/.2  → .1  .2	Modular Contact Block, Momentary, for Emergency Stop Actuators. 1 N/C safety contact switching off in an emergency and 1 N/C series contact that opens should the contact block become detached from the actuator.	MTOSF



'MT... Series' Product data continued.

Image	Contact Details	Description	Catalogue No
	X1 —  — X2	Lamp Module BA9s max. 250V 2W	ML
	X1 —  — X2	Latching Module - BA9s when used as the centre element in the module holder, it provides a maintained unit with the adjacent momentary type modules. max. 250V 2W	MFL

Mounting

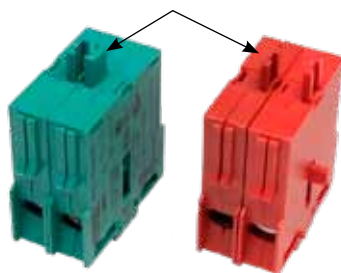
		Holder for 3 Modules Bayonet fitting on actuator. For '22 Series' only	MHR_3
		Holder for 5 Modules Bayonet fitting on actuator. N.B. Not suitable for Emergency Stop use For '22 Series' only	MHR_5
		Holder for 5 Modules Screw fitting on actuator. For '32 Series' only	MHR-5C

Other contact blocks and accessories are available within this range, please contact our Sales staff for further details.

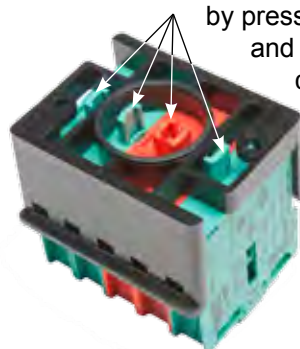
1. Up to 5 blocks in any combination can be accommodated.



2. Blocks can be reversed to suit the positions in the holder



3. When fitting blocks in the holder it is important that the actuators are free to move - reverse blocks as necessary. Ensure that all the blocks are fitted correctly by pressing any actuator and checking that all the other actuators move in unison.



‘ET... ’ (For use with ‘22 Series’ actuators)

General Data Catalogue Ref ET...

Approvals



Storage Temperature
Operating Temperature

-50°C up to +70°C
-30°C up to +70°C For non-illuminated items
-30°C up to +55°C Using incandescent lamps
-30°C up to +65°C Using LED's

Operating Travel
Connections
Lamp Type/Socket

6mm
screw connections for 2 x 2.5mm², finger protected.
incandescent lamps, LED's / BA9s

Contact Material

silver-nickel alloy (Ag/Ni) **Gold Plated Version available upon request.**

Mechanical Life

1 million operations

Electrical Life

1 million cycles at rated load

Min. Current / Voltage

1 mA / 5V (Under laboratory conditions)

Contact Resistance (New State)

< 20mΩ

Bounce Time

NC: < 10 mS / NO: < 10 mS

Positive Opening N/C Contact

→ to EN 60947-5-1 appendix K

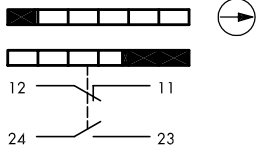
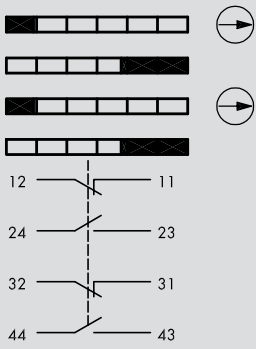
Electrical Ratings - BS EN 60947-5-1

	a.c.	d.c.
Utilisation Category	AC15	DC13
Rated Insulation Voltage (Ui)	400V	400V
Rated Operational Voltage (Ue)	400V / 250V	440V / 250V / 125V / 60V / 24V
Rated Operational Current (Ie)	3A / 5A	0.12A / 0.2A / 0.4A / 1A / 2A
Breaking Capacity	10Ie	1.1Ie
Continuous thermal current (Ith)	10A	10A

Electrical Data - Pilot Lamp Bodies

Lamp Socket	BA9s
Lamp Voltage	max. 250V (CSA max. 150V)
Lamp Output	max. 2W
Definition	X1.. anode, X2.. cathode.

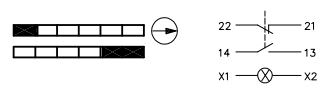
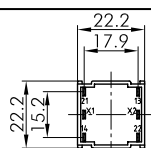
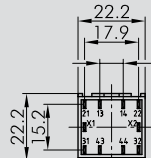
Product Data

Image	Contact Details	Description	Catalogue No
	0 1 2 3 4 5 6 12/11 24/23 	Contact Block, Momentary 1 N/C + 1 N/O	ETR
	0 1 2 3 4 5 6 12/11 24/23 32/31 44/43 	Contact Block, Momentary 2 N/C + 2 N/O	ETR2

Other contact blocks are available within this range, please contact our Sales staff for further details.



‘A.. Series’ Product Data Continued

Image	Contact Details	Description	Catalogue No
	0 1 2 3 4 5 6 22/21 14/13 	Illuminated - Momentary 1 N/C + 1 N/O 	ATL
	0 1 2 3 4 5 6 22/21 14/13 32/31 44/43 	Illuminated - Momentary 2 N/C + 2 N/O 	ATL2

Other contact blocks are available within this range, please contact our Sales staff for further details.

Accessories

Image	Description	Catalogue No
	‘16 Series’ Incandescent Lamps - T5.5K fitting 6V / 1.2W (200mA) 12V / 1.2W (100mA) 24V / 1.2W (50mA) 30V / 1.2W (40mA) 36V / 1.2W (35mA) 48V / 1.2W (25mA) 60V / 1.2W (20mA)	T5,5K-6V T5,5K-12V T5,5K-24V T5,5K-30V T5,5K-36V T5,5K-48V T5,5K-60V
	‘16 Series’ Ultra-Bright LED's - T5.5K fitting with integrated series resistor and single-wave rectifier. 24V AC/DC (7/14mA) Blue Green Red White Yellow	L5,5K24UB L5,5K24UG L5,5K24UR L5,5K24UW L5,5K24UY
	‘22 & 32 Series’ Incandescent Lamps - BA9s fitting 6V / 1.8W (300mA) 12V / 2.0W (166mA) 24V / 2.0W (80mA) 48V / 2.0W (40mA) 60V / 1.2W (20mA) 110V-130V / 2.0W (18mA)	FZR9-6 FZR9-12 FZR9-24 FZR9-48 FZR9-60-1 FZR9-130
	‘22 & 32 Series’ Ultra-Bright LED's - BA9s fitting with integrated single-wave rectifier for 230V a.c., 3mA Blue Green Red White Yellow	LD9-230UB LD9-230UG LD9-230UR LD9-230UW LD9-230UY
	Tightening Tool ‘16 Series’ ‘22 Series’	S16 S22
	Universal Lens Remover	USK

