



BUFFALO CHEMICAL RESISTANT Data Sheets



RO
Resistant Orange
ACIDIC



RG
Resistant Grey
ALKALINE/CAUSTIC

Technical Information Common to Buffalo Industrial Range

PAGE 1 of 3

Protection Rating Reference Chart (IP Code AS 60529)

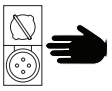

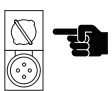



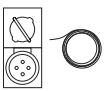

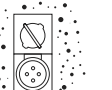






IP stands for Ingress Protection and is formed with two numbers: IPXX.

The two numbers refer to two levels of protection.

IPXX

The first digit shows the level of protection against **solid** objects.

The second digit shows the level of protection against **liquids**

Solids		Liquids	
1		1	
	Protected against a solid object greater than 50mm such as a hand		Protected against vertically falling drops of water. Limited ingress permitted
2		2	
	Protected against a solid object greater than 12.5mm such as a finger		Protected against vertically falling drops of water with enclosure tilted up to 15 degrees from the vertical. Limited ingress permitted
3		3	
	Protected against a solid object greater than 2.5mm such as a screwdriver		Protected against sprays of water up to 60 degrees from the vertical. Limited ingress permitted for three minutes
4		4	
	Protected against a solid object greater than 1mm such as a wire		Protected against water splashed from all directions. Limited ingress permitted
5		5	
	Dust Protected. Limited ingress of dust permitted. Will not interfere with operation of the equipment. Two to eight hours		Protected against jets of water. Limited ingress permitted
6		6	
	Dust tight. No ingress of dust. Two to eight hours		Water from heavy seas or water projects in powerful jets shall not enter the enclosure in harmful quantities
		7	
			Protection against the effects of immersion in water between 15cm and 1m for 30 minutes
		8	
			Protection against the effects of immersion in water under pressure for long periods
		9	
			Protection against close-range high pressure, high temperature (85°C) water jets (MAX 10 000 kPa)



**Technical Information
Common to
Buffalo
Industrial Range**





















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Unique keyways, Pin sizes and Plug body sizes in alignment with AS/NZS3123 are provided to differentiate between current ratings in Size 1 & Size 2 products to prevent larger capacity loads being plugged into smaller capacity plugs.

Product designs are compliant in accordance with AS/NZS3112 and AS/NZS3123 (Plugs, Socket-outlets and Couplers for general industrial applications).

Table 1 (pin configurations referenced in product charts)

Sockets

						
A 10A 250V~ 3 Pin	B 15A 250V~ 3 Pin	C 10A 250V~ 3 Pin	D 15A 32V~ Polarised 2 Pin	E 20A 250V~ 3 Pin	F 10A 250V~ 3 Pin	G 20A 250V~ 3 Pin
						
H 32A 250V~ 3 Pin	I 10A 500V~ 4 Pin	J 20A 500V~ 4 Pin	K 32A 500V~ 4 Pin	L 40A 500V~ 4 Pin	M 50A 500V~ 4 Pin	N 10A 500V~ 5 Pin
						
O 20A 500V~ 5 Pin	P 32A 500V~ 5 Pin	Q 40A 500V~ 5 Pin	R 50A 500V~ 5 Pin	S3 500V~ IEC 4 Pin Earth at 3	S6 500V~ IEC 4 Pin Earth at 6	

Temperature Performance

To cover the many varied installations/environments, the Buffalo range has been thoroughly tested and is expected to perform from temperatures down to -25°C below zero and up to 75°C. This includes the standard grey sockets, switches, combinations, and appliance inlets, along with the transparent and orange plugs.

Temperatures:
Minimum -25°C below zero
Maximum 75°C

Applications where the product is used outside of these limits may void warranty and prior to any installation TRADER reps. should be consulted.

Other Chemical resistant product range products may vary in these performance limits.



Technical Information Common to Buffalo Industrial Range
PAGE 3 of 3

Buffalo Chemical Resistance Chart

At Trader we have reconfigured the Buffalo range to align with common industry practices for the application of the grey polycarbonate front covers for switches, sockets and appliance inlets with PVC back boxes to mount various applications. Additionally plugs and extension sockets are supplied in combined transparent and orange polycarbonate materials, with transparent sections specifically provided to enable simplified viewing of internal cable connections or pin arrangements. Cord entries on both plugs & extension sockets are made with durable nylon options. Now Resistant Orange and Grey have been included to suit other environmental conditions.

All fixing screws, springs and pins exposed to the elements being produced from 304 grade stainless steel help to provide long term weather-ability and performance in many environments.

The Buffalo range is on par with many industrial products in the market and plugs and sockets are fully interchangeable and will perform in a broad range of environment. Please review the chemical performance chart for more detail and contact us with any queries.

Product Type		Enclosures (Back boxes) (PVC)	Housings for Switches, Sockets, Plugs and Appliance Inlets, as well as exposed aspects such as flaps, knobs, lock rings and latches (Polycarbonate)			
Product Colour		Back box all Colours	Grey, Transparent and Orange (plugs)	Chemical Orange	Chemical Grey	
Acids						
Weak Solutions	Hydrochloric 10%	Excellent	Excellent	Excellent	Excellent	Excellent
	Nitric 10%	Excellent	Excellent	Excellent	Excellent	Excellent
Concentrate	Sulphuric 100%	Excellent	Not Suitable	Not Suitable	Not Suitable	Not Suitable
Alkalis						
Weak Solutions	Sodium Hydroxide 10% (Caustic Soda)	Excellent	Not Suitable	Good	Excellent	Excellent
Concentrate	Potassium Hydroxide 100%	Excellent	Good	Not Suitable	Not Suitable	Excellent
Automotive						
	Petroleum	Excellent	Not Suitable	Excellent	Not Suitable	Not Suitable
	Lubrication Oils	Excellent	Not Suitable	Excellent	Fair	Fair
	Hydraulic Oil	Excellent	Not Suitable	Excellent	Fair	Fair
Solvents						
Aliphatic Hydrocarbons (Alkanes)	Methane	Good	Excellent	Excellent		
	Propane	Excellent	Excellent	Excellent		
Alcohols	Ethylene Glycol	Excellent	Excellent	Excellent		
	Glycerol (Glycerin)	Excellent	Fair	Good	Excellent	Excellent
	Methyl Alcohol (Methanol)	Excellent	Not Suitable	Good	Not Suitable	Not Suitable
	Ethyl Alcohol (Ethanol)	Excellent	Excellent	Excellent	Not Suitable	Not Suitable
Amines	Aniline	Not Suitable	Not Suitable	Not Suitable		
Aromatic Hydrocarbons	Methyl Benzene	Not Suitable	Not Suitable	Good	Fair	Fair
	Xylene	Not Suitable	Not Suitable	Good	Fair	Fair
Ethers	Dimethyl Ethyl	Excellent	Excellent	Excellent		
Ketones	Acetone	Excellent	Not Suitable	Fair	Not Suitable	Not Suitable
	Acetophenone	Not Suitable	Not Suitable	Fair	Not Suitable	Not Suitable
	Ethyl Methyl Ketone	Not Suitable	Not Suitable	Fair	Not Suitable	Not Suitable
Miscellaneous						
	Detergent	Excellent	Excellent	Excellent		
Inorganic Salts	Magensium Sulphate	Excellent	Excellent	Excellent		
Oxidising Agents						
Weak Solution	Sodium Hypochlorite 5%	Excellent	Excellent	Excellent	Excellent	Excellent
Strong Solution	Hydrogen Peroxide 30%	Excellent	Excellent	Excellent	Excellent	Excellent
Water						
	Ambient	Excellent	Excellent	Excellent	Excellent	Excellent
	Heated >60°C	Fair	Excellent	Good	Fair	Fair
	Steam	Not Suitable	Not Suitable	Not Suitable	Not Suitable	Not Suitable

Excellent	Recommended no adverse effects after extended exposure
Good	Acceptable with minimal mechanical property loss from extended exposure
Fair	Loss of mechanical property from extended exposure
Not Suitable	Not recommended for use due to poor performance and significant mechanical property loss



Range Availability for Chemical Resistant Options

Acid suitable RO (Resistant Orange) is ideal indoors as well as outside in UV areas as the materials are UV resistant. Food preparation areas and commercial kitchens where acid-based cleaners or diluted detergents are used are perfect applications. Machinery workshops where cutting oils are sprayed in the environment, automotive applications near petroleum-based chemicals or fumes, wineries, and breweries where exposure to natural citrus based acidic cleaners may occur are other applications. The TRADER RO range can be differentiated from others in the market by the dark red switch actuator on the orange body which provides great visibility in the environment.

In addition to the orange range a number of models will be released in Chemically resistant white, where the ore subtle aesthetic is needed such as supermarket meat and butchery areas, fish markets and delis where tiled surfaces are often used, and the bright orange option is less desirable.

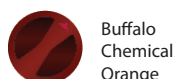
The RW models will also feature the red knob and latch to align them with the philosophy of the Litmus test colouring.

























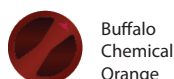
Alkaline/Caustic suitable RG (Resistant Grey) range is ideal in applications that are indoors or externally but not exposed to UV as they are non-UV resistant. The application for these products is ideal in indoor food processing areas where caustic bulk washdown foaming agents are used in the cleaning process such as in abattoirs and meat processing including fish and poultry. They are also good performers in areas where cooking oils or fatty residue may build up on surfaces. The TRADER RG range can be differentiated easily from others by the dark purple switch actuator on the mid-grey switch cover and matching back box enclosure.



Product Selection			Below details are given as examples and other environmental factors may influence the product selection			Recommended Range		
Application	Environment					Preferred	Good	Fair
	Indoor or Outdoor	Temperature	UV level	Impact	Exposure to chemicals and moisture from activities			
Maintenance / machining workshop	Indoors	Ambient air temperature	Low UV levels	Possible impacts	Limited exposure to cutting fluids, oils, no or minimal exposure to rain.			
Plant rooms	Indoors	0 °C to 40 °C	Low UV levels	Possible impacts	Possible moisture/condensation, no or limited chemicals or detergent exposure.			
Automotive workshop	Indoors	Ambient air temperature	Low to high UV levels	Possible impacts from handling equipment.	Automotive fumes or chemicals.			
Warehouse	Indoors	Ambient air temperature	Low UV levels	Possible impacts from handling equipment	No or minimal exposure to rain.			
Despatch or vehicle loading or transport area	Indoors or outdoors	Ambient air temperature	Low to high UV levels	Possible impacts from handling equipment.	Potential high exposure to rain.			
Cool room for perishable storage	Indoors	-10 °C to 15 °C	Low UV levels		Possible moisture or condensation, no or minimal chemicals or detergent exposure, minimal exposure to rain.			
Conveyor belt materials handling	Indoors or outdoors	Ambient air temperature	Low to high UV levels	May be exposed to impacts.	no to high exposure to rain.			
Assembly plant or fabrication area	Indoors	Ambient air temperature	Low UV levels	Possible impacts from handling equipment	No exposure to rain.			
Minerals processing or Furnaces	Indoors	0 °C to 75 °C	Low UV levels	Possible heavy impacts from handling equipment.	No or minimal exposure to moisture.			
Rooftop plant equipment platforms	Outdoors	Ambient air temperature -15 °C to 75 °C	High UV	Possible impacts from handling equipment.	Direct exposure to rain.			
Public car parks	Indoors or outdoors	Ambient air temperature	Low to high UV levels,	May be prone to vandalism.	None or high exposure to rain, if indoors may be affected by fumes (needs consideration).			
Car and Boat washdown	Outdoors	Ambient air temperature -15 °C to 75 °C	High UV,	May be exposed to impacts.	Direct exposure to rain, exposure to salt water or petrol fumes.			
Outdoor storage tanks or industrial ponds or silos	Outdoors	Ambient air temperature -15 °C to 75 °C	High UV,		Possible exposure to acidic chemicals or chlorine, direct exposure to rain.			
Swimming pool or aquaculture ponds	Indoors/ outdoors	Ambient air temperature -10 °C to 50 °C	Low to high UV levels	Possible impacts from handling equipment may be prone to vandalism	Possible exposure to rain, presence of chlorine.			



Product Selection			Below details are given as examples and other environmental factors may influence the product selection			Recommended Range		
Application	Environment					Preferred	Good	Fair
	Indoor or Outdoor	Temperature	UV level	Impact	Exposure to chemicals and moisture from activities			
Food processing, boning rooms or meat processing. Where large scale alkali cleaning occurs.	Indoors	5 °C to 25 °C	Low UV levels	Possible impacts	Alkali's washdown area foaming alkaline cleaners, 75 °C high pressure cleaners, prone to condensation.			
Detergent washdown (fast food preparation)	Indoors	5 °C to 25 °C	Low UV levels	Low level impact	Mild detergents or mild household cleaners, washdown with water, prone to condensation.			
Acids or citrus based cleaners (wineries, breweries, coal wash plant)	Indoors or outdoors	Ambient temperature of -5 °C to 70 °C	Low to high UV levels	Possible impacts from handling equipment	Acidic chemicals or products, possible exposure to citrus cleaners, washdown with water, no to high exposure to rain or water. No alkaline chemicals or cleaning agents.			
Bottle or vat sterilising	Indoors	5 °C to 40 °C	Low UV levels	Low level impact	Exposure to detergents or sterilising agents, washdown with water, prone to condensation.			
Exposure to cooking Oil (chip friers etc.)	Indoors	5 °C to 40 °C	Low UV levels	Low level impact	Exposure to cooking oils, exposure to detergents or alkali cleaners, washdown with water, prone to condensation. No acid based cleaning agents.			
Bottling plant	Indoors	Ambient air temperature	Low UV levels	Possible impacts from handling equipment.	No or minimal exposure to rain.			
Food preparation area or kitchen	Indoors	5 °C to 25 °C	Low UV levels	Low level impact	Mild detergents, citrus based or household cleaners, washdown with water, prone to condensation. No alkaline cleaners.			
Staff canteen style food preparation	Indoors,	0 °C to 40 °C	Low UV levels	Low level impact	Some exposure to water, mild detergents or household cleaners. No or minimal exposure to rain. No alkaline cleaners. Exposure to rainfall and moisture.			
Public eating area	Indoors or outdoors	Ambient air temperature	outdoors may be subjected to high UV levels, indoors low UV	May be prone to vandalism.	Some exposure to water, mild detergents or household cleaners. No alkaline cleaners.			
Pedestrian traffic areas	Indoors or outdoors	Ambient air temperature	outdoors may be subjected to high UV levels, indoors low UV	May be prone to vandalism.	None or minimal chemicals or detergent exposure. Exposure to rainfall and moisture.			
Toilets/wet areas	Indoors	5 °C to 40 °C	Low UV levels	Low level impact	Exposure to detergents or alkali cleaners, washdown with water, prone to condensation. No acid based cleaning agents.			
Office	Indoors	0 °C to 40 °C	Low UV levels	Low level impact	Minimal moisture or condensation, no or limited chemicals or detergent exposure.			
Outdoor BBQ's	Outdoors	Ambient air temperature -15 °C to 75 °C	High UV	May be prone to vandalism	possible exposure to animal fats or cooking oil splash, direct exposure to rain.			
Outdoor lighting	Outdoors	Ambient air temperature -15 °C to 75 °C	High UV	May be prone to vandalism	direct exposure to rain.			



CHEMICAL RESISTANT ORANGE FOR ACID APPLICATIONS



BUC310RO
BUC310RO
BUC315RO
BUC320FRO
BUC320RO
BUC332RO
BUC410RO
BUC420RO
BUC432RO
BUC440RO
BUC450RO
BUC510RO
BUC520RO
BUC532RO
BUC540RO
BUC550RO

IP66 Combination Switched Sockets

Buffalo offers an extensive range of IP66 rated Combination Switched Sockets that are available in three-pin 10A to 32A, four-pin 10A to 50A and five-pin 10A to 50A designs.

Phase links are factory fitted between switches and sockets.

Small Single phase Flat pin - 10A to 20A
 Size 1 Single & Three Phase - 10A- 20A
 Size 2 Single & Three Phase - 32A - 50A

Heavy Duty terminals are standard on all products with Double Pole switching option as standard on 3 pin products.

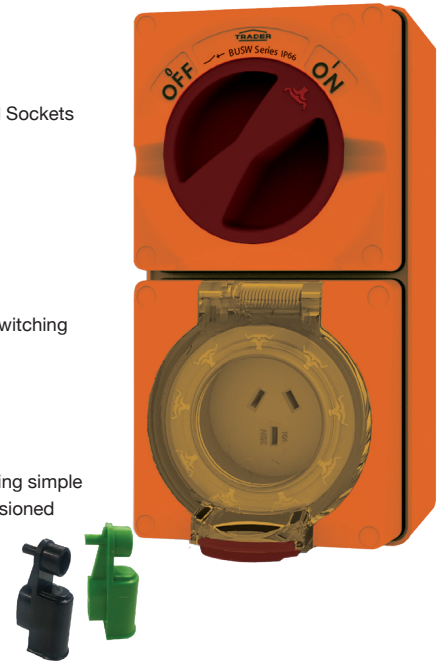
The combination switch handle has two padlocking facilities (Oval Shape 11 x 9mm) so equipment can be safely isolated.

Switch is provided with LED fitment option (not supplied).

Combination sockets feature a clear dustproof & hoseproof flap allowing simple viewing of sockets. The flap is also provided with a reliable spring-tensioned latch to keep dust & liquids out.

- Recommended screw torque for corner cover screws 0.6Nm
- Recommended torque for Earth/Neutral fixed terminals 2Nm
- Recommended torque for Switch terminals 2.5Nm

Part bag contains twin screwed connector.



Chemical Resistant Orange for Acid Applications.

General Information

Pin & Volt	Cat No.	Current Rating (A)	Pin Config	Pin Config Code (Table 1)	AC21 Rating (A)	AC23 Rating (A)	M Rating	Minimum Conductor Size (mm ²)	Maximum Conductor Size (mm ²)	Dimensions H* x W x D (mm)
3 Pin 250V~	BUC310RO	10	3 Flat	A	10	10	200	1.5	6	198x101x84
	BUC315RO	15	3 Flat	B	15	15	200	1.5	6	198x101x84
	BUC320FRO	20	3 Flat	E	20	20	200	2.5	16	198x101x84
	BUC320RO	20	3 Round	G	20	20	200	2.5	16	198x101x108
	BUC332RO	32	3 Round	H	32	20	200	6	16	198x101x108
4 Pin 500V~	BUC410RO	10	4 Round	I	10	10	200	6	16	198x101x108
	BUC420RO	20	4 Round	J	20	20	200	6	16	198x101x108
	BUC432RO	32	4 Round	K	32	20	200	6	16	198x101x108
	BUC440RO	40	4 Round	L	40	25	200	6	16	198x101x108
	BUC450RO	50	4 Round	M	50	25	200	6	16	198x101x108
5 Pin 500V~	BUC510RO	10	5 Round	N	10	10	200	2.5	6	198x101x108
	BUC520RO	20	5 Round	O	20	20	200	2.5	6	198x101x108
	BUC532RO	32	5 Round	P	32	20	200	6	16	198x101x108
	BUC540RO	40	5 Round	Q	40	25	200	6	16	198x101x108
	BUC550RO	50	5 Round	R	50	25	200	6	16	198x101x108

*Note: Height of product excludes conduit plugs

Certification Number:

BUC410RO, BUC420RO, BUC432RO, BUC440RO,
 BUC450RO, BUC510RO, BUC520RO,
 BUC532RO, BUC540RO, BUC550RO : GMA-520261
 BUC310RO, BUC315RO, BUC320FRO: GMA-513502
 BUC320RO, BUC332RO: GMA-520239

GSM Electrical (Australia) Pty Ltd

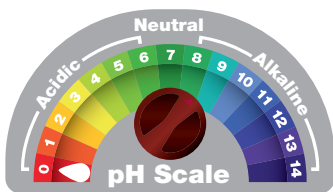
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www.gsme.com.au



Data Specification Sheet
November 2024

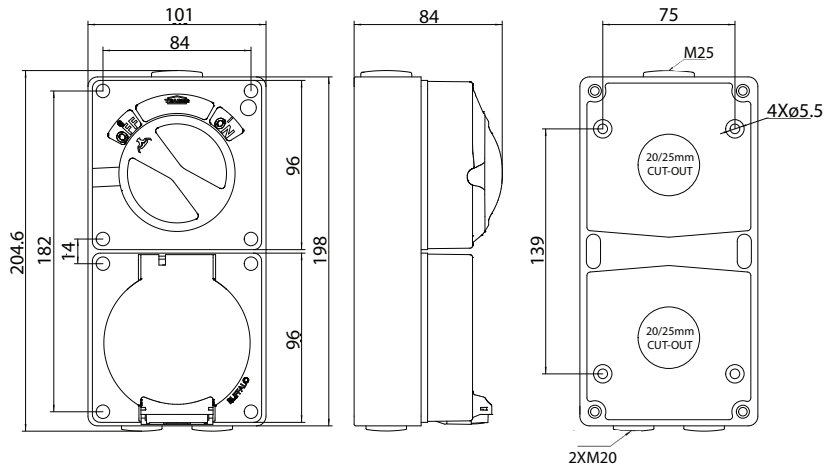
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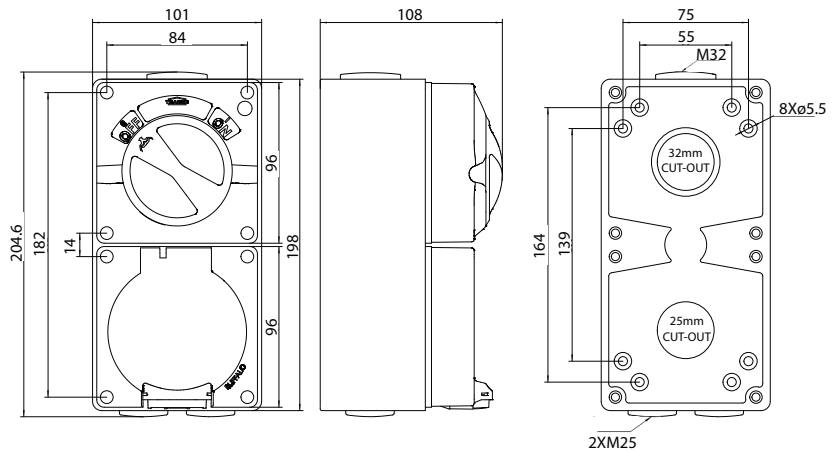
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- BUC310RO
- BUC315RO
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- BUC440RO
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- BUC520RO
- BUC532RO
- BUC540RO
- BUC550RO

Combination Switched Sockets Dimensional Drawings

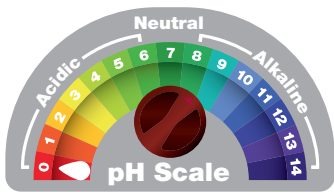
Flat Pin Models



Round Pin Models



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Small Single Phase
Flat pin
10A to 20A



Size 1
Single/Three Phase
10A - 20A



Size 2
Single/Three Phase
32A - 50A



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November 2024



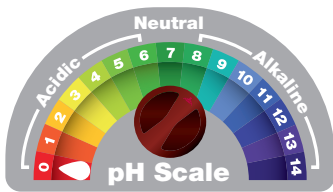
BUSW210RO
BUSW220RO
BUSW232RO
BUSW310RO
BUSW320RO
BUSW332RO
BUSW363RO

IP66 Heavy Duty Switches / Switch Disconnectors

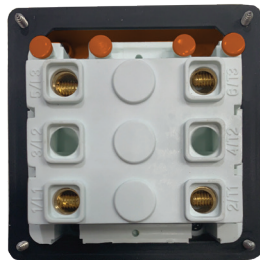


- The Buffalo switches have recently been updated with testing for categorization for Isolation and are now marked for use as switch disconnectors.
- The 10A to 20A models have been certified in accordance with AS/NZS3133 and 10A,20A,32A, and 63A have also been tested complied with IEC and AS 60947-3 with the 32A and 63A models being listed on a certificate of suitability.
- The same heavy duty switches are used in our Combinations are available as individual switches for isolation and control applications.
- Heavy Duty terminals with diameter 7.6mm terminals suitable for 25mm² cable.
- Switch supplied with a large, easy to use knob, suitable for use with heavy industrial gloves. Has a positive, rotary action.
- Switch Knob features two Oval Shape (11 x 9mm) lock off facilities. Suits 9.0mm padlock staple.
- Conduit plugs provided with rubber gaskets to assist IP rating and to aid secure fitment.
- Raised ON/OFF marking to allow visibility in dusty environments.
- Laser etched product marking (no adhesive labels that fall off).
- LED Drill out facility for LED indicators (not supplied).
- Approved to AS/NZS3133 (10A - 20A), AS 60947-3 (Over 32A).(All models tested in accordance and comply with both standards)
- Range includes Double and Three Pole. See the table for product detail as some configurations vary.
- All models have been tested and comply with AS/NZS 3133 M200 motor rating as shown in the table.
- Chemical Resistant Orange for Acid Applications
- In addition, the Utilization category of AC23A for motors and highly inductive loads is rated at Ie=10A for the 10A models, Ie=20A for 20A, Ie=32 for 32A Models and Ie=50A for 63A.
- Pollution Degree: 2
- Recommended screw torque for corner cover screws 0.6Nm
- Recommended torque for Earth/Neutral fixed terminals 2Nm
- Recommended torque for Switch terminals 2.5Nm

PAGE 1 of 2



Heavy Duty Switch Terminals



2 Pole



3 Pole

Certification Number:

BUSW220RO, BUSW310RO, BUSW320RO: GMA-519971
 BUSW232RO, BUSW332RO, BUSW340RO, BUSW363RO: GMA-520240

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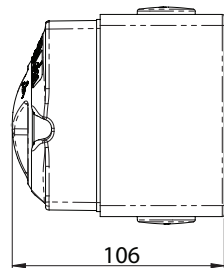
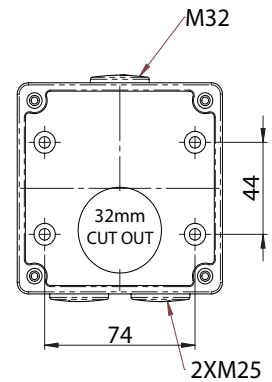
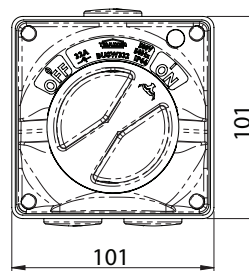
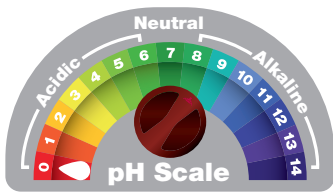


BUSW210RO
BUSW220RO
BUSW232RO
BUSW310RO
BUSW320RO
BUSW332RO
BUSW363RO

IP66 Heavy Duty Switches / Switch Disconnectors

Configuration (Ratings to IEC60947-3/AS 60947-3 and AS/NZS 3133)	Cat No.	Rated Thermal Current Ith	AC23 Rating (Ue:500V~) (Ie=(A))	Motor M Rating (A)	Minimum Conductor Size (mm ²)	Maximum Conductor Size (mm ²)	Symbol
Rated Operational Voltage Ue (50Hz):500V~ Rated Insulation Voltage Ui (~50Hz):690V Rated Short Time Withstand Icw: 1.26kA/1s Rated impulse withstand voltage Uimp (kV): 4.0kV Rated short circuit making capacity Icm (28.4Ie): 1.789kA Uninterrupted Duty	BUSW210RO	10	10	200	2.5	16	
	BUSW220RO	20	20	200	2.5	16	
	BUSW232RO	32	32	200	6	16	
Rated Operational Voltage Ue (50Hz):500V~ Rated Insulation Voltage Ui (~50Hz):690V Rated Short Time Withstand Icw: 1.26kA/1s Rated impulse withstand voltage Uimp (kV): 4.0kV Rated short circuit making capacity Icm (28.4Ie): 1.789kA Uninterrupted Duty	BUSW310RO	10	10	200	2.5	16	
	BUSW320RO	20	20	200	2.5	16	
	BUSW332RO	32	32	200	6	16	
	BUSW363RO	63	50	200	16	25	

PAGE 2 of 2



Certification Number:

BUSW220RO, BUSW310RO, BUSW320RO: GMA-519971
 BUSW232RO, BUSW332RO, BUSW340RO, BUSW363RO: GMA-520240

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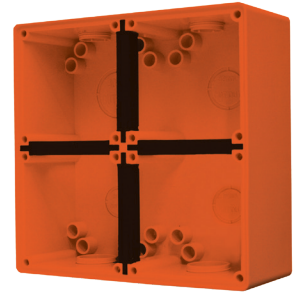
CHEMICAL RESISTANT ORANGE FOR ACID APPLICATIONS



BUBB4GRO
BUBRIDGE
BUBRIDGED

Enclosures

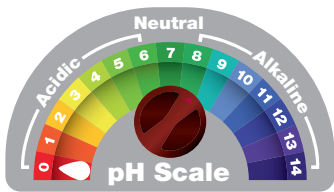
- Manufactured in industrial grade resins.
- PVC Back Boxes and Conduit Plugs.
- UV Resistance.
- Chemical Resistant Orange for Acid Applications.
- Back Boxes supplied with Reducers and Screw Caps.
- Compatible with Buffalo Chemical Resistant Orange range including:
 - BUL Lids, BUC Combinations & BUSW Switches
 - Back Boxes 4 Gang
 - Bridges provided used for cable management and to aid IP rating.
 - Ample Conduit Entries & Cut-Outs.
- Installer tip, cover all mounting screws with supplied mounting screw caps & sealant (not supplied), likewise all conduit entries should be tightened & sealed with sealant.



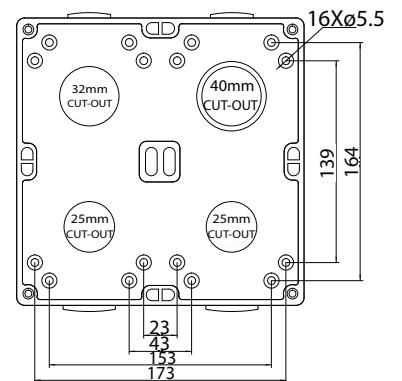
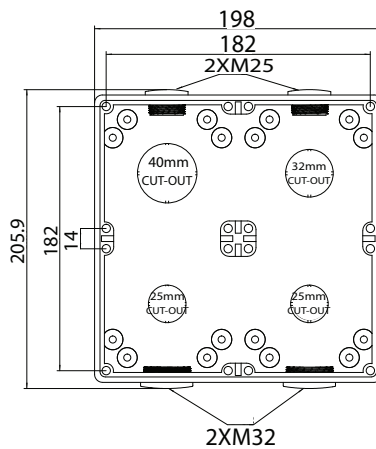
BUBRIDGE



BUBRIDGED



Description	Cat No.	Height (mm)	Width (mm)	Length (mm)	Conduit Entries	Rear Cut-Outs dia.
Enclosure Back Box 4 Gang	BUBB4GRO	63	198	198	2 x 25mm 2 x 32mm	2 x 25mm 1 x 32mm 1 x 40mm
Bridge for BUBB Back Box Range	BUBRIDGE					
Bridge Divider for BUBB Back Box Range	BUBRIDGED					



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 November 2024

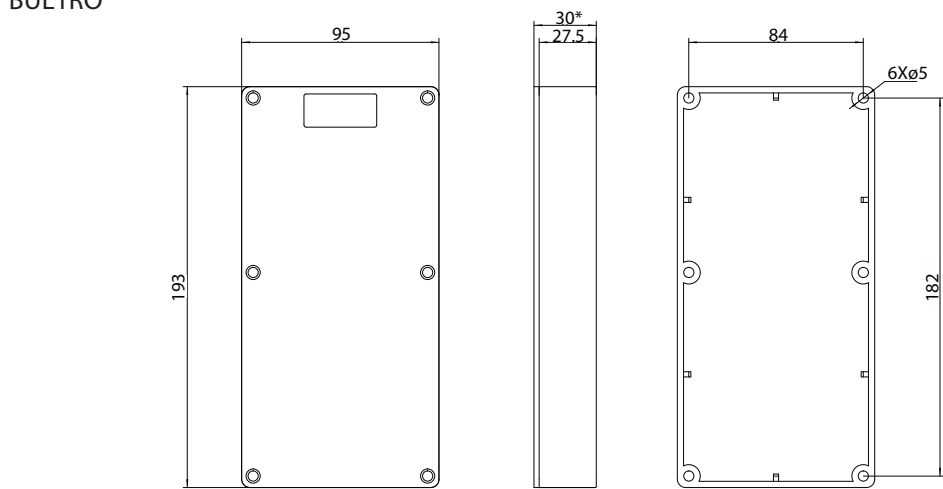
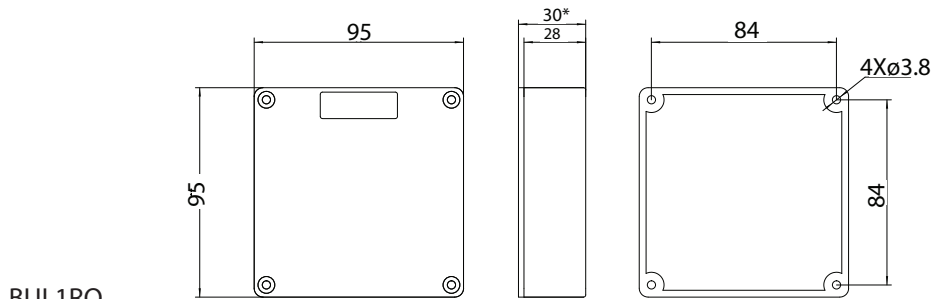
BUL1RO
BUL2RO

Enclosure Lids

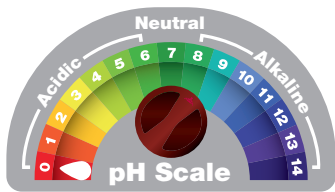
- Manufactured in industrial grade resins providing:
- UV Resistance.
- Chemical Resistant Orange for Acid Applications
- Compatible with Buffalo previous & current ranges.
- Includes sealing gaskets, cover fixing screws and cover screw caps
- Installer Tip: Fix cover screws to maximum torque levels of 0.6Nm.



Cat No.	Description	Height (mm)	Width (mm)	Length (mm)
BUL1RO	Lid for 1 Gang Enclosures	28	95	95
BUL2RO	Lid for 2 Gang Enclosures	28	95	193



*includes gasket



BU4DINRO

IP66 DIN 4 Pole Enclosures

Buffalo DIN Rail Accessory Mounting Enclosures provide a facility to mount up to 4 poles of equipment such as MCB's and RCDs - external to a switchboard in an environment needing a high level of protection.

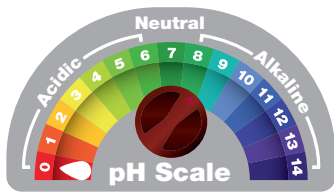
As with all Buffalo products, they are manufactured from robust, UV and good chemical resistant material to provide long reliable life in the dust and wet.

The BU4DINLED features a 250V~ LED inbuilt into the cover, which has long cables with crimped ends to allow it to be wired for power available into the module - or outgoing power available - depending on the application.

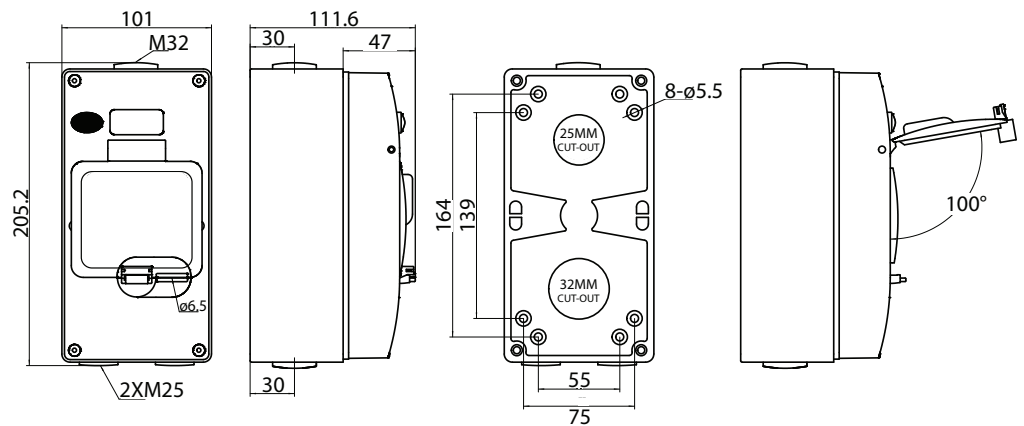
Cable length is suitable for wiring below the DIN rail and can reach easily into the lower section of switch gear installed into the enclosure.

Chemical Resistant Orange for Acid Applications

Installer Tip: Fix cover screws to maximum torque levels of 0.6Nm.



Cat No.	Description	Poles	Conduit Entries
BU4DINRO	Enclosure DIN 4 Pole	4	2 x 25mm 1 x 32mm





- BUC310RG
- BUC310RG
- BUC315RG
- BUC320FRG
- BUC320RG
- BUC332RG
- BUC410RG
- BUC420RG
- BUC432RG
- BUC440RG
- BUC450RG
- BUC510RG
- BUC520RG
- BUC532RG
- BUC540RG
- BUC550RG

IP66 Combination Switched Sockets

Buffalo offers an extensive range of IP66 rated Combination Switched Sockets that are available in three-pin 10A to 32A, four-pin 10A to 50A and five-pin 10A to 50A designs.

Phase links are factory fitted between switches and sockets.

Small Single phase Flat pin - 10A to 20A
 Size 1 Single & Three Phase - 10A- 20A
 Size 2 Single & Three Phase - 32A - 50A

Heavy Duty terminals are standard on all products with Double Pole switching option as standard on 3 pin products.

The combination switch handle has two padlocking facilities (Oval Shape 11 x 9mm) so equipment can be safely isolated.

Switch is provided with LED fitment option (not supplied).

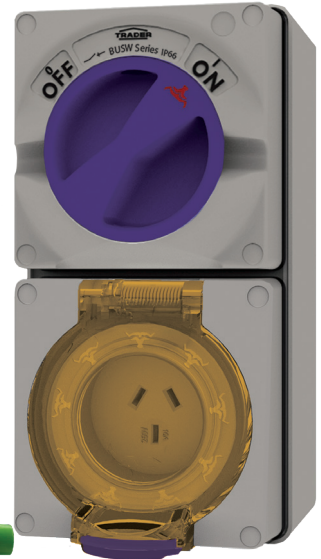
Combination sockets feature a clear dustproof & hoseproof flap allowing simple viewing of sockets. The flap is also provided with a reliable spring-tensioned latch to keep dust & liquids out.

- Recommended screw torque for corner cover screws 0.6Nm
- Recommended torque for Earth/Neutral fixed terminals 2Nm
- Recommended torque for Switch terminals 2.5Nm

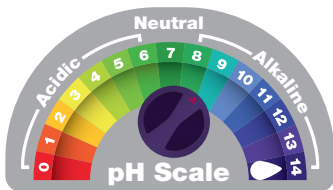
Part bag contains twin screwed connector.

Not suitable for areas of high UV.

Chemical Resistant Grey for alkaline Applications.



PAGE 1 of 2



General Information

Pin & Volt	Cat No.	Current Rating (A)	Pin Config	Pin Config Code (Table 1)	AC21 Rating (A)	AC23 Rating (A)	M Rating	Minimum Conductor Size (mm ²)	Maximum Conductor Size (mm ²)	Dimensions H* x W x D (mm)
3 Pin 250V~	BUC310RG	10	3 Flat	A	10	10	200	1.5	6	198x101x84
	BUC315RG	15	3 Flat	B	15	15	200	1.5	6	198x101x84
	BUC320FRG	20	3 Flat	E	20	20	200	2.5	16	198x101x84
	BUC320RG	20	3 Round	G	20	20	200	2.5	16	198x101x108
	BUC332RG	32	3 Round	H	32	20	200	6	16	198x101x108
4 Pin 500V~	BUC410RG	10	4 Round	I	10	10	200	6	16	198x101x108
	BUC420RG	20	4 Round	J	20	20	200	6	16	198x101x108
	BUC432RG	32	4 Round	K	32	20	200	6	16	198x101x108
	BUC440RG	40	4 Round	L	40	25	200	6	16	198x101x108
	BUC450RG	50	4 Round	M	50	25	200	6	16	198x101x108
5 Pin 500V~	BUC510RG	10	5 Round	N	10	10	200	2.5	6	198x101x108
	BUC520RG	20	5 Round	O	20	20	200	2.5	6	198x101x108
	BUC532RG	32	5 Round	P	32	20	200	6	16	198x101x108
	BUC540RG	40	5 Round	Q	40	25	200	6	16	198x101x108
	BUC550RO	50	5 Round	R	50	25	200	6	16	198x101x108

*Note: Height of product excludes conduit plugs

Certification Number:

BUC410RG, BUC420RG, BUC432RG, BUC440RG,
 BUC450RG, BUC510RG, BUC520RG,
 BUC532RG, BUC540RG, BUC550RG : GMA-520261
 BUC310RG, BUC315RG, BUC320FRG: GMA-513502
 BUC320RG, BUC332RG: GMA-520239

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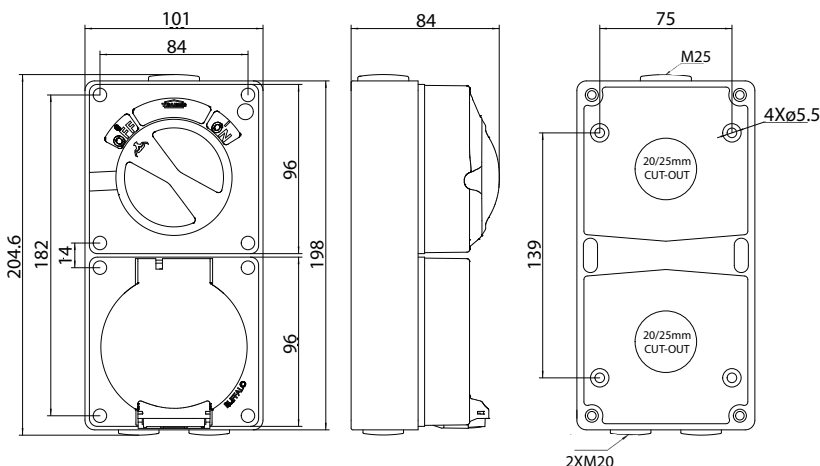
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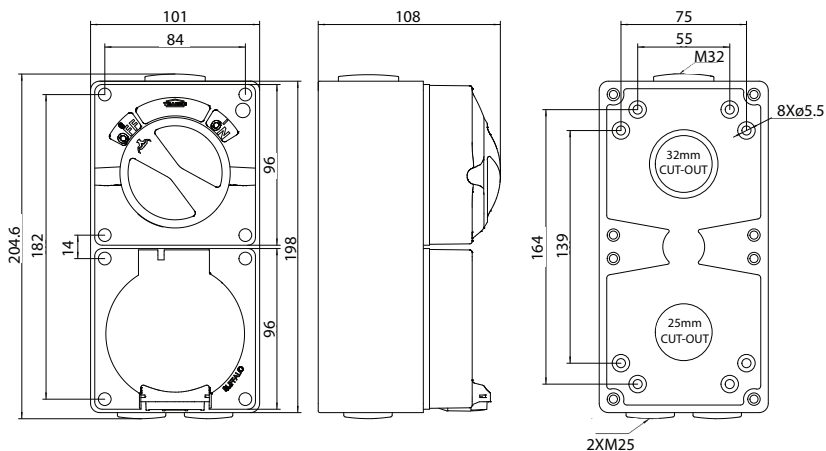
- BUC310RG
- BUC310RG
- BUC315RG
- BUC320FRG
- BUC320RG
- BUC332RG
- BUC410RG
- BUC420RG
- BUC432RG
- BUC440RG
- BUC450RG
- BUC510RG
- BUC520RG
- BUC532RG
- BUC540RG
- BUC550RG

Combination Switched Sockets Dimensional Drawings

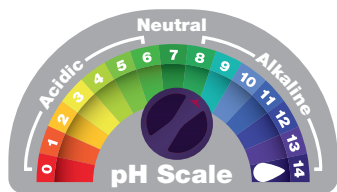
Flat Pin Models



Round Pin Models



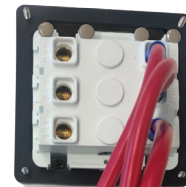
PAGE 2 of 2



Small Single Phase
Flat pin
10A to 20A



Size 1
Single/Three Phase
10A - 20A



Size 2
Single/Three Phase
32A - 50A



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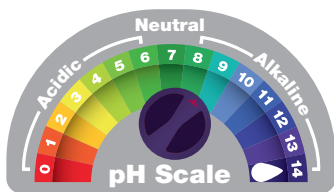
**BUSW210RG
BUSW220RG
BUSW232RG
BUSW310RG
BUSW320RG
BUSW332RG
BUSW363RG**

IP66 Heavy Duty Switches / Switch Disconnectors

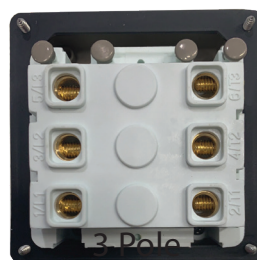
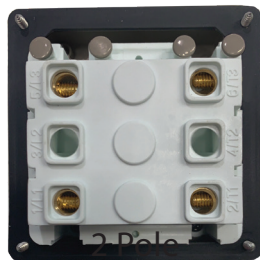


- The Buffalo switches have recently been updated with testing for categorization for Isolation and are now marked for use as switch disconnectors.
- The 10A to 20A models have been certified in accordance with AS/NZS3133 and 10A,20A,32A, and 63A have also been tested complied with IEC and AS 60947-3 with the 32A and 63A models being listed on a certificate of suitability.
- The same heavy duty switches are used in our Combinations are available as individual switches for isolation and control applications.
- Heavy Duty terminals with diameter 7.6mm terminals suitable for 25mm² cable.
- Switch supplied with a large, easy to use knob, suitable for use with heavy industrial gloves. Has a positive, rotary action.
- Switch Knob features two Oval Shape (11 x 9mm) lock off facilities. Suits 9.0mm padlock staple.
- Conduit plugs provided with rubber gaskets to assist IP rating and to aid secure fitment.
- Raised ON/OFF marking to allow visibility in dusty environments.
- Laser etched product marking (no adhesive labels that fall off).
- LED Drill out facility for LED indicators (not supplied).
- Approved to AS/NZS3133 (10A - 20A), AS 60947-3 (Over 32A).(All models tested in accordance and comply with both standards)
- Range includes Double and Three Pole. See the table for product detail as some configurations vary.
- All models have been tested and comply with AS/NZS 3133 M200 motor rating as shown in the table.
- Not suitable for areas of high UV.
- Chemical Resistant Grey for alkaline Applications
- In addition, the Utilization category of AC23A for motors and highly inductive loads is rated at Ie=10A for the 10A models, Ie=20A for 20A, Ie=32 for 32A Models and Ie=50A for 63A.
- Pollution Degree: 2
- Recommended screw torque for corner cover screws 0.6Nm
- Recommended torque for Earth/Neutral fixed terminals 2Nm
- Recommended torque for Switch terminals 2.5Nm

PAGE 1 of 2



Heavy Duty Switch Terminals



Certification Number:

BUSW220RG, BUSW310RG, BUSW320RG: GMA-519971
BUSW232RG, BUSW332RG, BUSW340RG, BUSW363RG: GMA-520240

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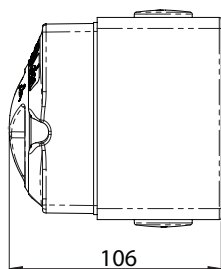
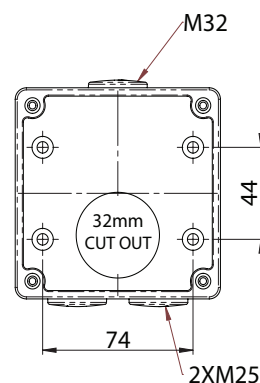
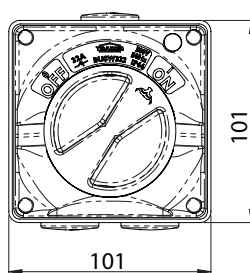
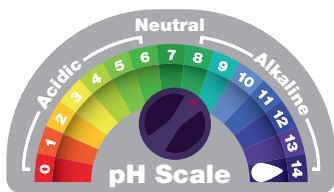


BUSW210RG
BUSW220RG
BUSW232RG
BUSW310RG
BUSW320RG
BUSW332RG
BUSW363RG

IP66 Heavy Duty Switches / Switch Disconnectors

Configuration (Ratings to IEC60947-3/AS 60947-3 and AS/NZS 3133)	Cat No.	Rated Thermal Current I _{th}	AC23 Rating (U _e :500V~) (I _e =A)	Motor M Rating (A)	Minimum Conductor Size (mm ²)	Maximum Conductor Size (mm ²)	Symbol
Rated Operational Voltage U _e (50Hz):500V~ Rated Insulation Voltage U _i (~50Hz):690V Rated Short Time Withstand I _{cw} : 1.26kA/1s Rated impulse withstand voltage U _{imp} (kV): 4.0kV Rated short circuit making capacity I _{cm} (28.4I _e): 1.789kA Uninterrupted Duty	BUSW210RG	10	10	200	2.5	16	
	BUSW220RG	20	20	200	2.5	16	
	BUSW232RG	32	32	200	6	16	
Rated Operational Voltage U _e (50Hz):500V~ Rated Insulation Voltage U _i (~50Hz):690V Rated Short Time Withstand I _{cw} : 1.26kA/1s Rated impulse withstand voltage U _{imp} (kV): 4.0kV Rated short circuit making capacity I _{cm} (28.4I _e): 1.789kA Uninterrupted Duty	BUSW310RG	10	10	200	2.5	16	
	BUSW320RG	20	20	200	2.5	16	
	BUSW332RG	32	32	200	6	16	
	BUSW363RG	63	50	200	16	25	

PAGE 2 of 2



Certification Number:

BUSW220RG, BUSW310RG, BUSW320RG: GMA-519971
 BUSW232RG, BUSW332RG, BUSW340RG, BUSW363RG: GMA-520240

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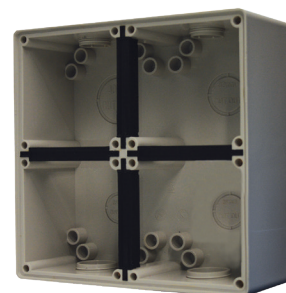
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BUBB4GRG
BUBRIDGE
BUBRIDGED

Enclosures

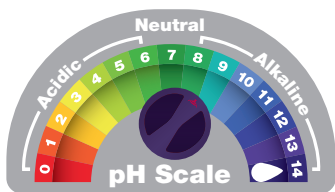
- Manufactured in industrial grade resins.
- PVC Back Boxes and Conduit Plugs.
- Not suitable for areas of high UV.
- Chemical Resistant Grey for alkaline Applications..
- Back Boxes supplied with Reducers and Screw Caps.
- Compatible with Buffalo Chemical Resistant Orange range including:
 - BUL Lids, BUC Combinations & BUSW Switches
 - Back Boxes 4 Gang
 - Bridges provided used for cable management and to aid IP rating.
 - Ample Conduit Entries & Cut-Outs.
- Installer tip, cover all mounting screws with supplied mounting screw caps & sealant (not supplied), likewise all conduit entries should be tightened & sealed with sealant.



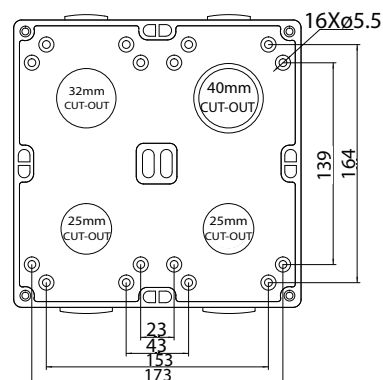
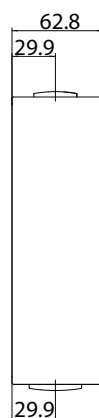
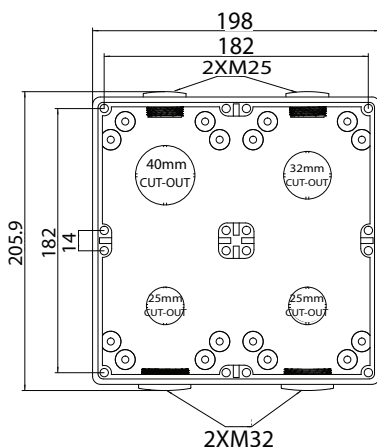
BUBRIDGE



BUBRIDGED



Description	Cat No.	Height (mm)	Width (mm)	Length (mm)	Conduit Entries	Rear Cut-Outs dia.
Enclosure Back Box 4 Gang	BUBB4GRG	63	198	198	2 x 25mm 2 x 32mm	2 x 25mm 1 x 32mm 1 x 40mm
Bridge for BUBB Back Box Range	BUBRIDGE					
Bridge Divider for BUBB Back Box Range	BUBRIDGED					



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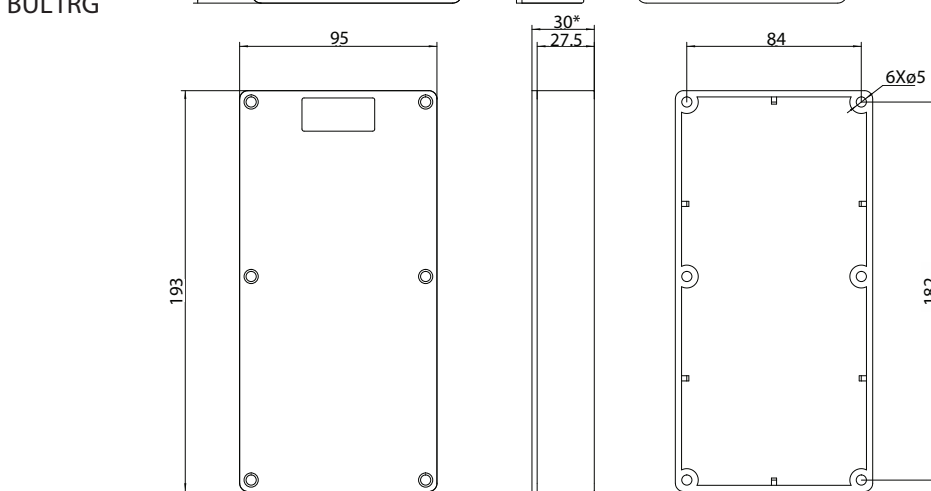
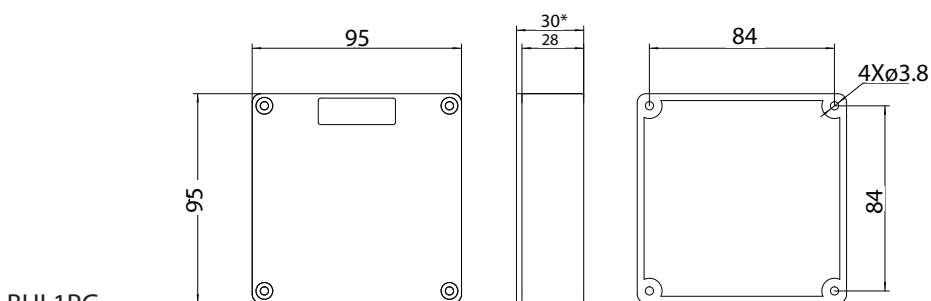
BUL1RG
BUL2RG

Enclosure Lids

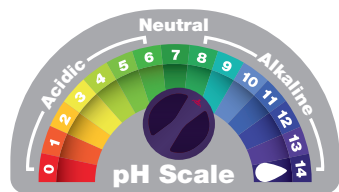
- Manufactured in industrial grade resins providing:
- Not suitable for areas of high UV.
- Chemical Resistant Grey for alkaline Applications
- Compatible with Buffalo previous & current ranges.
- Includes sealing gaskets, cover fixing screws and cover screw caps
- Installer Tip: Fix cover screws to maximum torque levels of 0.6Nm.



Cat No.	Description	Height (mm)	Width (mm)	Length (mm)
BUL1RG	Lid for 1 Gang Enclosures	28	95	95
BUL2RG	Lid for 2 Gang Enclosures	28	95	193



*includes gasket



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BU4DINRG

IP66 DIN 4 Pole Enclosures

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As with all Buffalo products, they are manufactured from robust, good chemical resistant material to provide long reliable life in the dust and wet. Not suitable for areas of high UV.

The BU4DINLED features a 250V~ LED inbuilt into the cover, which has long cables with crimped ends to allow it to be wired for power available into the module - or outgoing power available - depending on the application.

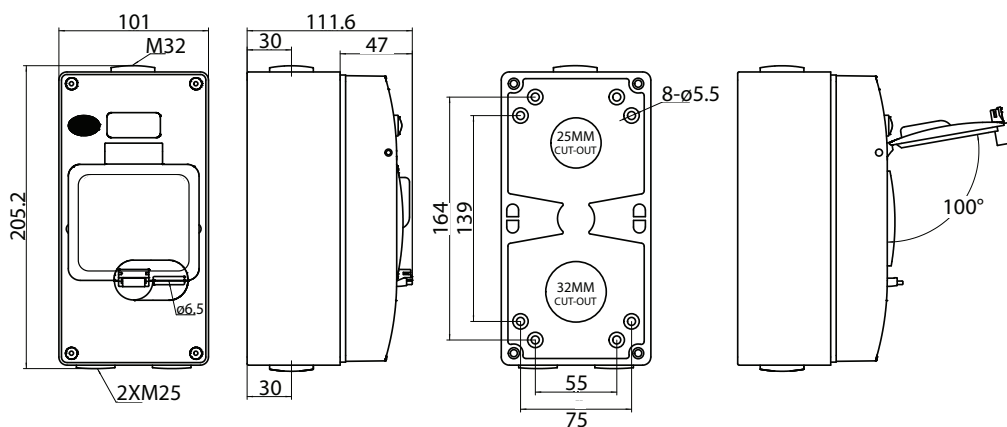
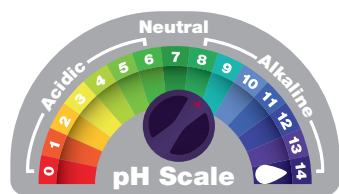
Cable length is suitable for wiring below the DIN rail and can reach easily into the lower section of switch gear installed into the enclosure.

Chemical Resistant Grey for alkaline Applications

Installer Tip: Fix cover screws to maximum torque levels of 0.6Nm.



Cat No.	Description	Poles	Conduit Entries
BU4DINRG	Enclosure DIN 4 Pole	4	2 x 25mm 1 x 32mm



BUHPG2G

*See current catalogue for further detail



Buffalo High Pressure Gasket

- BUHPG2G is suitable for use on Modular Trader Buffalo standard depth enclosures and Trader Buffalo extra deep enclosures. They are not recommended for use on the Trader Buffalo range of shallow enclosures (due to possible interference when cable glands are used) and deep enclosures.
- Tested to IPX9 Level IEC 60529
- Suitable for IP66 as well as IPX9
- For pressure & temperature applications
- 85°C Temp
- Pressure 8,000 - 10,000 kPa
- All unused conduit entries are to be sealed with PVC cement, or silicone or ensure o-rings are securely tightened.
- All internal fixings are to have caps (supplied) installed, preferably siliconed in place.
- Ideal for installations where food related residue needs to be pressure cleaned from between the cover modules, or down around the enclosures.
- Excellent for applications close to equipment that need regular hot pressure washing to maintain hygienic conditions.
- Requires slightly higher torque on corner screws as the gasket material is harder to resist the jet pressures.

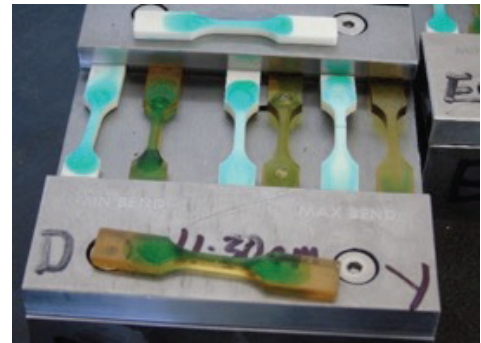
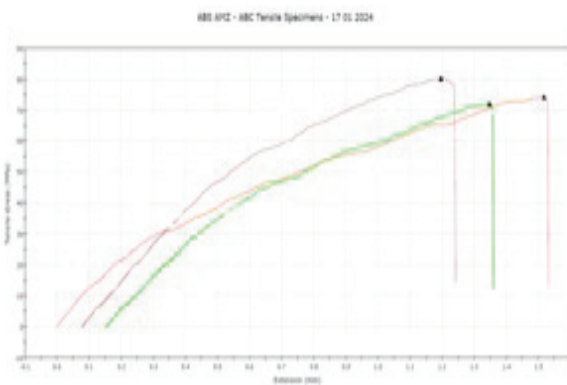


Catalogue Number	Description
BUHPG2G	Gasket Weatherproof High Pressure 2 Gang Cream for Buffalo Range

Buffalo Chemical Range Research and development

The Buffalo Chemical range has undergone lengthy testing to ensure it meets suitable performance criteria in the intended environmental conditions and provide long trouble-free performance from chemical degradation. 3rd party laboratory testing to various chemicals commonly used in the environments such as food preparation and processing areas in accordance with ISO 22088-1 and ISO 22088-3 for determination of environmental stress cracking using specially produced test pieces complying with ISO 20753 (Plastic – test specimens).

Bent strips were tested at various stain levels and subjected to chemical exposure for extended periods in a controlled environment followed by ISO 527 tensile testing to determine property loss.



In addition to the laboratory testing, products were manufactured from the specific materials and placed in the environments for lengthy exposure testing of 12 months to determine their performance in the actual cleaning conditions. They were mounted in typical areas of food processing where wash downs occur to ensure the mouldings were correctly assessing and simulated when mounted with screws tightened to normal torque levels to apply compression on gaskets and stress on mouldings to assist in indicating any potential weaknesses that may need to be addressed.



The combination of material testing programs has provided valuable insight into areas of the industrial range that require fine tuning and adjustments for the materials needed to suit the different environmental conditions particularly for the caustic suitable applications but also the alternative materials for acidic situations. Through this work the team have been able to optimize the designs and material selection to meet a wider range of applications for industry.

The format of the Buffalo Chemical Range has been developed to align with industry known colour coding and application where orange is used for the acid-based cleaning environments and a darker grey is used for the caustic cleaners.

Material selection is critical where the installation will be cleaned down using the chemical cleaners and potentially remain on the surfaces of the electrical equipment, the wrong choice can be catastrophic and pose significant safety risks. It is extremely important when making product selection choices to understand the chemicals in use and how they will be applied.

One example of this, is a caustic foaming agent may be used to clean down walls and equipment, while an acidic cleaner may be used to clean stainless steel fittings and hooks in the same area. They are both used in the environment but the effect of the caustic foaming agent will more likely impact the electrical equipment so the material should be selected to suit as its residue may sit in crevices or under the surfaces as it dries.

The Australian market has traditionally used the Orange colour in these types of products for acidic environments and darker grey for Caustic to help distinguish the different applications and limitations of performance.

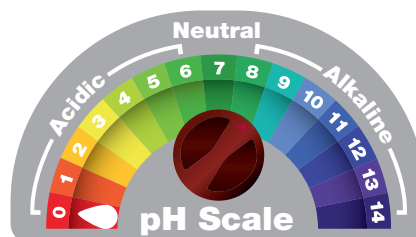
Trader has followed this philosophy, however in addition have added the feature of knob and latch colour coding to align with the Litmus scale of colour coding for pH levels. Orange having a dark red knob and latch while grey contains the dark purple. Following later in the program will be a resistant white in specific models where the applications in supermarkets and food presentation areas demand this appearance. The product will also have the red knob and latch to align with acidic performance of the orange range application.

Colours and reasoning

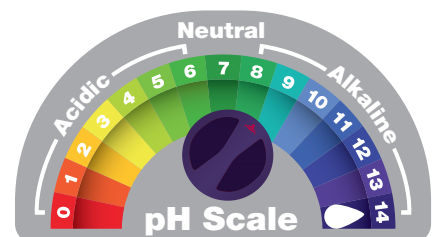
RO - Resistant Orange (Acidic and Others)

RG - Resistant Grey (Caustic/Alkaline)

RW - Resistant White (Acidic and Other)



Resistant Orange



Resistant Grey