

Industrial Switchgear

It is important to match your switchgear to your industry for optimum performance. The right material and design can handle the toughest environment and optimise the product's longevity. 56 Series from PDL by Schneider Electric is specifically designed to withstand specific and often harsh environments, therefore it is important to understand the challenges in your environment so your switchgear can work as intended.





Make the right choice

Don't judge 56 Series by its colour

PDL 56 Series is tough and offers both IP66 and UV resistance, however did you know it is the only product of its type that offers 'real resistance' to general chemicals or neutrals, acids and alkalines?





Chemical-Resistant Orange (RO), Chemical-Resistant White (RW)

Resistance to acid-based detergents & chemicals, petroleum based products, oils/grease found in automotive workshops and long exposure to UV. Ideal for:

- High-visibility (RO)
- Hygienic aesthetics (RW)
- Indoor and outdoor use
- Water treatment plants, citrus fruit processing, wineries.





56 Series Grey (GY)

General industrial use, neutral chemicals. Resist effects of high impact, long exposure to UV. Ideal for:

- · Indoor and outdoor use
- Plant rooms, warehouses, assembly plants, aquatic centres.
- Dusty/damp environments
- Areas subjected to low and high temperatures



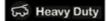


Chemical-Resistant Grey (CG)

Resistance to alkali-based chemicals/ foaming caustic and cooking oils. Ideal for:

- Food processing environments
- High temperature & pressure wash-down areas such as abattoirs, dairies, chicken processing plants.
- Indoor applications only (not UV stabilised)





WilcoROWCO Metal Clad

Cast aluminium toughness for high impact & heavy duty environments. Ideal for:

- Vandal prone areas
- Higher temperatures (80°C)
- Higher impact resistance

Application Guide

Product Selector				
Application	Environment	Best	Better	Good
Maintenance workshop	Indoors, ambient air temperature, low UV levels, cutting fluids, oils, no or minimal exposure to rain.	Neutral	Acid	Heavy Duty
Tool room or general fabrication workshop	Indoors, ambient air temperature, low UV levels, cutting fluids, oils.	Neutral	Acid	Heavy Duty
Plant rooms	Indoors, 0 °C to 40 °C, low UV levels, possible moisture/condensation, no or limited chemicals or detergent exposure.	Neutral	Acid	Heavy Duty
Pedestrian traffic areas	Indoors or outdoors, ambient air temperature, outdoors may be subjected to high UV levels and rainfall, indoors low UV and moisture, no or minimal chemicals or detergent exposure. May be prone to vandalism.	Neutral	Acid	Heavy Duty
Staff lunchroom	Indoors, 0 °C to 40 °C, low UV levels, some exposure to water, mild detergents or household cleaners. No or minimal exposure to rain. No alkaline cleaners.	Acid	Neutral	Alkaline
Public eating area	Indoors or outdoors, ambient air temperature, outdoors may be subjected to high UV levels and rainfall, indoors low UV and moisture, some exposure to water, mild detergents or household cleaners. No alkaline cleaners.	Heavy Duty	Neutral	Acid
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, no or minimal exposure to rain.	Neutral	Acid	Heavy Duty
Warehouse	Indoors, ambient air temperature, low UV levels, no exposure to rain, possible impacts from handling equipment. No or minimal exposure to rain.	Neutral	Acid	Heavy Duty
Assembly plant or fabrication area	Indoors, ambient air temperature, low UV levels, no exposure to rain, possible impacts from handling equipment. No or minimal exposure to rain.	Neutral	Acid	Heavy Duty
Alkali's washdown area (boning rooms, food processing area)	Indoors, 5 °C to 25 °C, low UV levels, foaming alkaline cleaners, 75 °C high pressure cleaners, prone to condensation.	Alkaline		
Detergent washdown (fast food preparation)	Indoors, 5 °C to 25 °C, low UV levels, mild detergents or mild household cleaners, washdown with water, prone to condensation.	Alkaline	Neutral	Acid
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, 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.	Acid		
Bottle or vat sterilising	Indoors, 5 $^{\circ}\text{C}$ to 40 $^{\circ}\text{C}$, low UV levels, exposure to detergents or sterilising agents, washdown with water, prone to condensation.	Alkaline		
Exposure to cooking Oil (chip friers etc.)	Indoors, 5 °C to 40 °C, low UV levels, exposure to cooking oils, exposure to detergents or alkali cleaners, washdown with water, prone to condensation. No acid based cleaning agents	Alkaline		

Product Selecto	<u>'1</u>			
Application	Environment	Best	Better	Good
Minerals processing or Furnaces	Indoors, 0 $^{\circ}\text{C}$ to 75 $^{\circ}\text{C}$, low UV levels, No or minimal exposure to moisture, possible heavy impacts from handling equipment.	Heavy Duty	Acid	Neutral
Outdoor storage anks or ponds or silos	Outdoors, ambient air temperature -15 $^{\circ}\text{C}$ to 75 $^{\circ}\text{C}$. High UV, possible exposure to acidic chemicals or chlorine, direct exposure to rain. Not DIP or EX.	Acid	Neutral	Heavy Duty
Despatch or vehicle pading or transport area	Indoors/outdoors, ambient air temperature, low to high UV levels, no to high exposure to rain, possible impacts from handling equipment.	Neutral	Heavy Duty	Acid
Staff or public car park	Indoors or outdoors, ambient air temperature, low to high UV levels, no to high exposure to rain, may be prone to vandalism.	Heavy Duty	Neutral	Acid
Toilets/wet areas	Indoors, 5 °C to 40 °C, low UV levels, exposure to detergents or alkali cleaners, washdown with water, prone to condensation. No acid based cleaning agents.	Alkaline	Neutral	Acid
Office	Indoors, 0 °C to 40 °C , low UV levels, minimal moisture or condensation, no or limited chemicals or detergent exposure.	Neutral	Acid	
Food preparation area or kitchen	Indoors, 5 °C to 25 °C, low UV levels, mild detergents, citrus based or household cleaners, washdown with water, prone to condensation. No alkaline cleaners.	Acid		
Rooftop plant platforms	Outdoors, ambient air temperature -15 $^{\circ}\text{C}$ to 75 $^{\circ}\text{C}$. High UV, direct exposure to rain.	Neutral	Acid	
Bottling plant	Indoors, ambient air temperature, low UV levels, no exposure to rain , possible impacts from handling equipment. No or minimal exposure to rain.	Alkaline		
Swimming pool or growing pond	Indoors/outdoors, ambient air temperature -10 °C to 50 °C, low to high UV levels, no to high exposure to rain, may be prone to vandalism, presence of chlorine.	Neutral	Acid	Heavy Duty
Boat washdown	Outdoors, ambient air temperature -15 $^{\circ}\text{C}$ to 75 $^{\circ}\text{C}$. High UV, direct exposure to rain, exposure to salt water.	Heavy Duty	Neutral	Acid
Conveyor belt	Indoors or outdoors, ambient air temperature, low to high UV levels, no to high exposure to rain, may be exposed to impacts. Not DIP or EX.	Heavy Duty	Neutral	Acid
Outdoor BBQ's	Outdoors, ambient air temperature -15 °C to 75 °C. High UV, possible exposure to animal fats or cooking oil splash, direct exposure to rain. May be prone to vandalism.	Heavy Duty	Neutral	Acid
Outdoor lighting	Outdoors, ambient air temperature -15 °C to 75 °C. High UV, direct exposure to rain. May be prone to vandalism.	Heavy Duty	Neutral	Acid

Technical Guide

Chemical Resistance Guide					
Chemical type	All Mounting Enclosures	Grey (GY) Transparent Covers	Resistant Orange (RO) Resistant White (RW) Covers	Chemical Grey (CG) Covers	Plugs
Acids					
Hydrochloric 10%	R	R	R	R	R
Nitric 10%	R	LR	R	R	(R
Acetic acid 10%	R	R	R	(R	(R
Sulphuric 100%	R	LR.	R	(R)	(R
Alkalis					
Sodium hydroxide 10% (Caustic soda)	R	NR	LR	R	LR
Potassium hydroxide 100%	(R	NR	NR	R	(R)
Sanitising solutions					
Chlorinated alkaline foaming cleaner 10%	R	NR	NR	R	LR
Ammonium sanitiser	R	NR	NR	R	LR.
Vegetable oils					
Olive oil	R	NR	NR	R	(R
Canola oil	R	NR	NR	R	(R
Solvents					
Methane	(R	R	R	-	R
Propane	R	R	R	-	R
Ethylene glycol	R	R	R	-	R
Glycerol (Glycerine)	R	LR	LR	R	R
Methyl alcohol (Methanol)	R	R	R	(R	R
Ethyl alcohol (Ethanol)	R	R	R	NR	R
Aniline	NR	NR	NR	NR	(R
Methyl benzene	NR	NR	LR	NR	(R
Xylene	NR	NR	LR.	NR	LR
Dimethyl ethyl	R	R	R	-	R
Acetone	R	LR	LR	LR.	LR
Acetophenone	NR	NR	LR	NR	LR
Ethyl methyl ketone	NR	NR	LR	NR	R
Isopropyl Alcohol	-	R	R	NR	R

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Automotive					
Unleaded Petroleum	R	NR	NR	R	
Diesel	-	R	R	NR	(R
Brake Fluid	-	NR	NR	NR	LR.
Grease at 60 °C (Rocol 12475)	-	LR	(R	-	-
Grease at 60°C (Rocol Sapphire Hi Temp	-	LR	(R	-	-
Lubricating oil (10w/40)	-	-	-	-	R
Hydraulic oil (Hf-105L)	-	-	-	-	R
Oxidising agents					
Sodium hypochlorite 5%	R	R	R	R	LR .
Hydrogen peroxide 30%	R	R	R	R	LR.
Water					
Ambient	R	R	R	R	R
Hot > 60 °C	R	R	R	R	LR
Miscellaneous					
Detergent @ 50 °C	R	L R	NR	R	LR
Magnesium sulphate	R	R	R	-	R
Salts					
Calcium Chloride 10%	R	R	R	R	LR.
Sodium Chloride 5%	R	R	R	R	R
Ammonium Hydroxide 100%	R	R	R	R	R

This table should be used as a guide only. The end user should evaluate the suitability of any chemical with any plastic.

Resistant R Limited Resistance IR Not Resistant NR

When products are required to use in environments with high concentrations of acids, bases, or oils, it is recommended to contact your local Schneider Electric office for support.