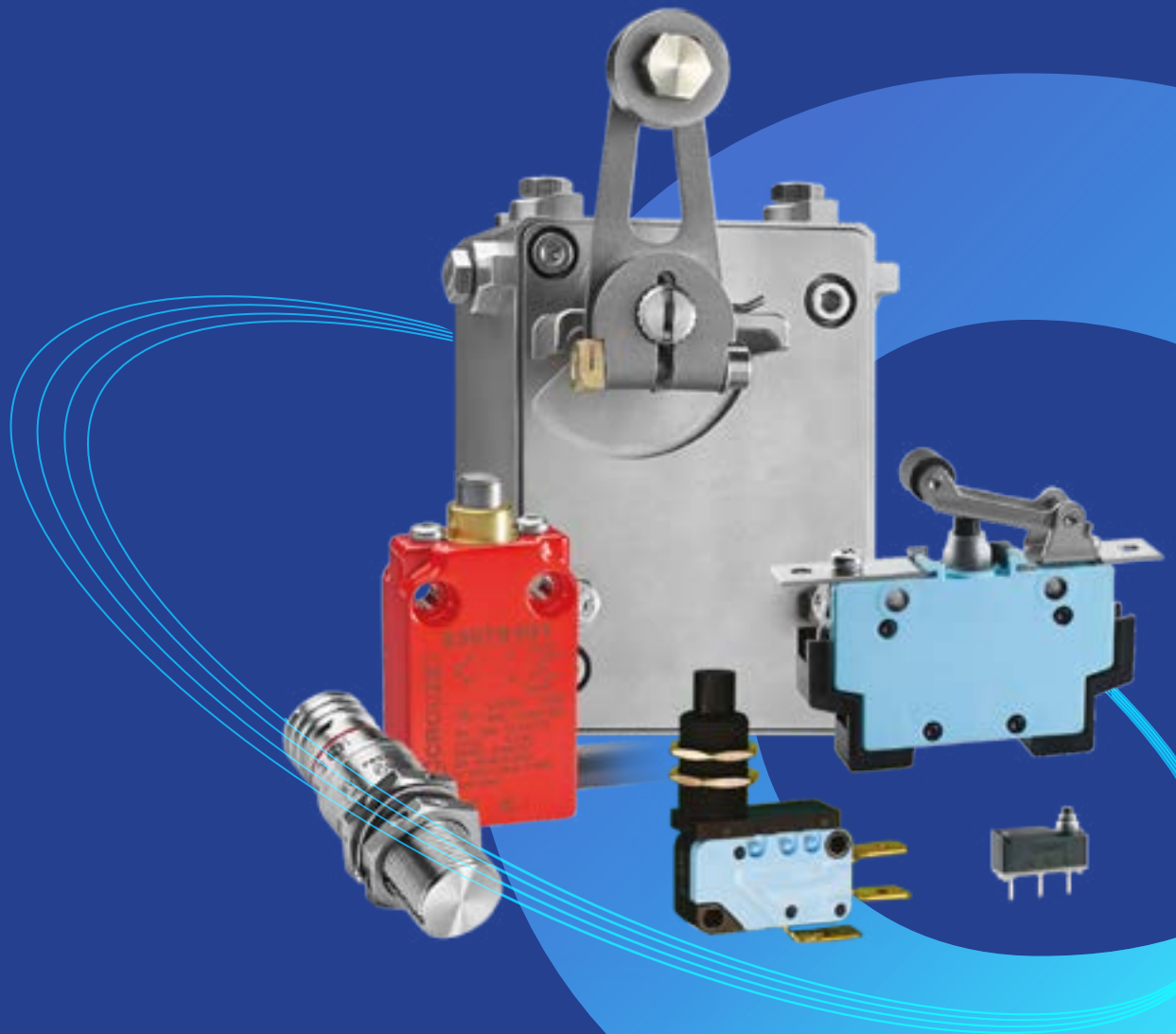


# ***SWITCHES & PROXIMITY SENSORS***

## *Overview*



# ABOUT CROUZET

100+ YEARS MANUFACTURING THE FUTURE *Together*

We design and manufacture **Mechatronic Products** to turn engineering ideas into real world applications

## OUR MARKETS



## OUR PRODUCTS



## OUR SERVICES



## WE ARE GLOBAL

**2000+ collaborators,**  
10 Manufacturing Plants,  
9 Sales Offices & 4 R&D Labs



VALENCE, **FRANCE**



VALENCE NORD, **FRANCE**



PARIS, **FRANCE**



NANTES, **FRANCE**



ORLEANS, **FRANCE**



VOUVRY, **SWITZERLAND**



CASABLANCA 1, **MOROCCO**



CASABLANCA 2, **MOROCCO**



HUIZHOU, **CHINA**



BANGALORE, **INDIA**



100+ years of customization, adaptation & co-design expertise at your service

DESIGN LAB

To meet market expectations and provide customers with the right solutions within the shortest timeframes, Crouzet has structured its processes around the different types of products available: standard products, adapted products or customers specific customized products.

4

SPECIAL PRODUCTS

From the very start of a project, Crouzet Switches' experts work closely with your teams to develop the specifications. All our design, industrialization and approval expertise go into developing detection solutions that are tailored to your requirements.



3

ADAPTED PRODUCTS

Complete coordination between your project teams and our specialists, these adapted products have exactly the right levels of performance and functionality you need for your applications.



1

STANDARD PRODUCTS

A full range of microswitches, limit switches, manually operated switches and sensors, are immediately available so that you can design your system as quickly as possible.



2

PRODUCTS WITH ADDED VALUE

All our standard products can have additional factory-mounted auxiliaries or accessories, including connectors, leads, special terminals, fixings, levers, etc. Seamless integration into your equipment means you benefit from simpler logistics and optimum installation reliability.



MICROSWITCHES

ALL PRODUCTS ARE SNAP-ACTION SWITCHES

	SUB-SUBMINIATURE			SUBMINIATURE				MINIATURE			SPECIAL			STANDARD		SPECIAL		HARSH ENVIRONMENT				SEAT SWITCHES	
SERIES																							
	V5S 8320	83228 83229	V5D 83194 83141	V4/V4D 83170 8327	V4S 8318	83132 83133 83134	83151 83560	V3/V3D 83161/160 8326	V3S/V3DS 83169 8329	83139	PBX 8324	83106/109 83111/112 83154	83123	8387 8388	8383 8384	83589	83731 83732 83733	83777 83778	83770 83771	8399Ex	8399Nuc	839921**	
Max Rating @ 250 Va	4 A	5 A	5 A	12 A	10 A	6 A	5 A	25 A	10 A	6 A	10 A	16 A	5 A	10 A	10 A	8 A	10 A	4 A	4 A	1 A	1 A	4 A	
Low Level version	I (mA)	I (mA)	I (mA)	I (mA)	I (mA)	I (mA)	I (mA)	I (mA)	I (mA)	I (mA)	I (mA)	I (mA)		I (mA)		I (mA)		I (mA)	I (mA)	I (mA)	I (mA)	I (mA)	
High DC rating / Magnetic Blowout																							
Double break						Za*				Za*	Zb*	Za*		Zb*	Za*								
Positive opening operation																							
Bistable version (maintained action)																							
Sealing level	IP67 IP69				IP67 IP69		Gastight Hermetic		IP67 IP69	IP66 IP67	IP65 IP67		IP66 IP67 IP69	IP66 IP67 IP69	IP66	IP66 IP67 IP69	IP66 IP69	IP66 IP68 (4m) IP69	IP66 IP68 (18m) IP69	IP66 IP67 IP69	IP66 IP68 (18m) IP69	IP67	
High temperature (above 125 °C / 257 °F)		+140 °C +284 °F	+150 °C +302 °F	+150 °C +302 °F		+150 °C +302 °F	+250 °C +482 °F	+200 °C +392 °F											+250 °C +482 °F	+200 °C +392 °F	+250 °C +482 °F		
Low temperature (below -40 °C / -40 °F)		-55 °C -67 °F	-55 °C -67 °F				-55 °C -67 °F	-60 °C -76 °F			-50 °C -58 °F							-55 °C -67 °F	-55 °C -67 °F		-55 °C -67 °F		
Explosive atmospheres																							
Irradiated environment																							
High pressure environment up to 6 bar																							
Approvals	NF/ENEC/CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	CE	
	UL																						
	CCC		**																**				
	EAC																						

\* Za: NO and NC circuits must be used at same polarity.    Zb: NO and NC circuits are electrically separated, and can be used at opposite polarities.    \*\* Consult us

MANUALLY OPERATED SWITCHES

Crouzet offers a wide range of Pushbuttons, Toggles, Rockers, Triggers, Thumbsticks/Trim/Multiway and Thumbwheel/Selector switches for industrial use as well as for high spec applications:

- › Momentary and/or maintained action
- › 1 to 4-pole snap-action configurations / 5 A 250 Vc
- › Ratings from 1 mA 5 Vc to 16 A 250 Va
- › Protection degree: from IP40 to IP55
- › Temperature range: from -60 °C to +125 °C / -76 °F to +257 °F
- › Mechanical life up to 10 million cycles



LIMIT SWITCHES

Crouzet provides a complete range of Proximity Sensors with standard industrial features to high level performance features:

- › 2 or 3 wires configuration
- › 2 parts sensors integration with remote electronics
- › MTBF: 300,000 hours in operation
- › Temperature range: -65 °C to +125 °C / -85 °F to +257 F
- › Watertight or hermetic versions
- › High pressure operation



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