

# ***SWITCHES & PROXIMITY SENSORS***

## *Overview*



# ABOUT CROUZET

Crouzet is an independent company **manufacturing mechatronic components for demanding applications in Aerospace & Transportation, Energy, Building and Machinery Industry.**

Crouzet provides **Switches and Sensors, Electromechanical Actuators, Electrical Protection Equipment, Cockpit Controls, Automation Controllers and Relays, and Instrumentation Services.**

Since 1921, Crouzet has a heritage of close collaboration with customers in the development of products, from standard components to fully customized solutions.

Crouzet's customers and partners can rely on our teams worldwide to always meet and often exceed their expectations. Driven by innovation, our experts are focused on designing and delivering the right product for the right application.

Crouzet is your trusted partner of choice to face industrial challenges of today and tomorrow.

## WORLDWIDE PRESENCE



📍 HEADQUARTERS

■ SALES OFFICES

# MICROSWITCHES

# LIMIT SWITCHES

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 V~	4 A	5 A	5 A	12 A	10 A	6 A	5 A	25 A	10 A	6 A	10 A	16 A	10 A	10 A	10 A	8 A	10 A	4 A	4 A	1 A	1 A	4 A
Low Level version	1 (mA)	1 (mA)	1 (mA)	1 (mA)	1 (mA)	1 (mA)	1 (mA)	1 (mA)	1 (mA)	1 (mA)	1 (mA)	1 (mA)		1 (mA)		1 (mA)		1 (mA)	1 (mA)	1 (mA)	1 (mA)	1 (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 IP69	
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		
Explosive atmospheres																						
Irradiated environment																						
High pressure environment up to 6 bar																						
Approvals	NF/ENEC/CE	CE	CE	CE	NF CE	CE	CE	NF 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 V~
- › Ratings from 1 mA 5 V~ to 16 A 250 V~
- › 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



## PROXIMITY SENSORS

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





# 90+ 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.



### 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.



### 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.



### 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.



**AMERICAS****CANADA**

Tel.: +1 (855) 929-5465  
americas.custserv@crouzet.com

**MEXICO**

Tel.: +1 (855) 929-5465  
americas.custserv@crouzet.com

**USA**

+1 (855) 929-5465  
americas.custserv@crouzet.com

**COUNTRIES NOT LISTED**

+1 (855) 929-5465  
americas.custserv@crouzet.com

**EUROPE / MIDDLE EAST / AFRICA****BELGIUM**

Tel.: +32 (0) 2 620 06 05  
Fax: +32 (0) 2 461 00 23  
klantenservice@crouzet.com

**FRANCE**

Tel.: +33 (0) 475 802 101  
Fax: +33 (0) 475 828 900  
relationclient@crouzet.com

**GERMANY / AUSTRIA**

Tel.: +49 (0) 2103/9385930  
Fax: +49 (0) 2103/980-222  
kundenservice@crouzet.com

**ITALY**

Tel.: +39 (02) 38 594 099  
Fax: +39 (02) 82 952 104  
assistenzaclienti@crouzet.com

**SPAIN / PORTUGAL**

Tel.: +34 (91) 215 80 95  
Fax: +34 (93) 2 20 02 05  
atencionalcliente@crouzet.com

**SWITZERLAND**

Tel.: +41 (0) 225 67 57 90  
Fax: +41 (0) 565 88 02 75  
kundenservice@crouzet.com

**THE NETHERLANDS**

Tel.: +31 (0) 20-654 52 20  
klantenservice@crouzet.com

**UNITED KINGDOM**

Tel.: +44 (0) 2076 600 025  
customer.relation@crouzet.com

**COUNTRIES NOT LISTED**

Tel.: +33 (0) 475 802 102  
Fax: +33 (0) 475 828 900  
customer.relation@crouzet.com

**ASIA / PACIFIC****CHINA**

Tel.: +86 (75) 2 5303 200  
china@crouzet.com

**INDIA**

india@crouzet.com

**SOUTH KOREA**

Tel.: +82 (2) 2679 8312  
Fax: +82 (2) 2679 9888  
korea@crouzet.com

**EAST ASIA PACIFIC**

Tel.: +86 (21) 8025 7177  
Fax: +86 (21) 6107 1771  
eap@crouzet.com

**Warning:**

The product information contained in this catalogue is given purely as information and does not constitute a representation, warranty or any form of contractual commitment. Crouzet and its subsidiaries reserve the right to modify their products without notice. It is imperative that we should be consulted over any particular use or application of our products and it is the responsibility of the buyer to establish, particularly through all the appropriate tests, that the product is suitable for the use or application. Under no circumstances will our warranty apply, nor shall we be held responsible for any application (such as any modification, addition, deletion, use in conjunction with other electrical or electronic components, circuits or assemblies, or any other unsuitable material or substance) which has not been expressly agreed by us prior to the sale of our products.