

BETAMINI

The User Friendly OEM Switch







"BETAMINI" - THE QUALITY OEM SWITCH

Over 35 years BETA designed and produced the best pressure and temperature switches for our customers. This has given us valuable and detailed experience of industrial needs. It resulted in a high quality OEM instrument: the "BETAMINI"!

The growing demand for high quality, reliable products has increased the need for better components. No OEM can afford to be less than certain about the components behind his nameplate! Afterall, the weakest component determines your overall strength.

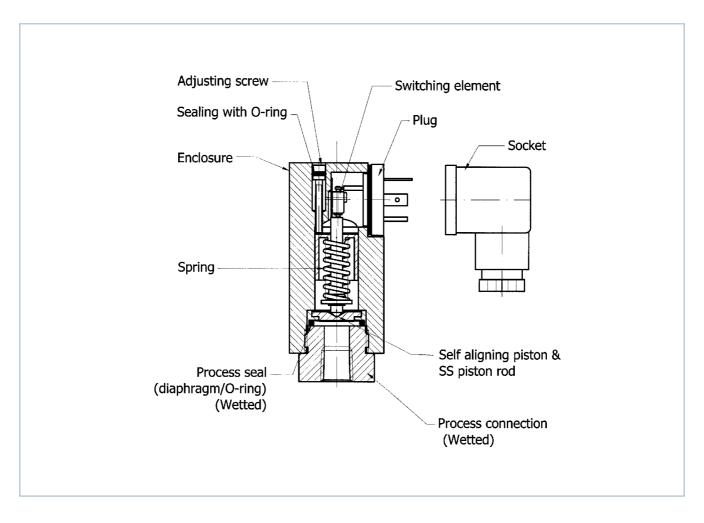
The "BETAMINI" fulfils the need for a high quality OEM pressure-, and temperature switch with build-in reliability. BETA can deliver the right switch for your needs!

OUR SWITCHES WILL DO WHAT YOU WANT! JUST TRY IT!

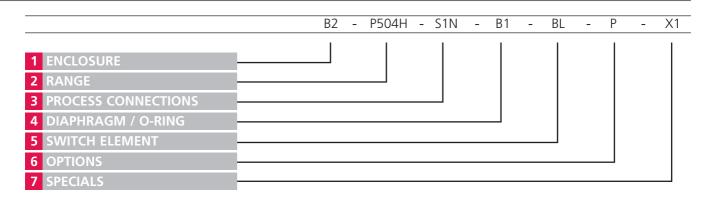
- Ready for use: WORLDWIDE!
- Field adjustable.
- Maintenance free.
- CE-mark.
- RINA approved.
- High overrange pressure, up to 600 bar.

- Wide ranges, -1 to 540 barg.
- Wide choices in wetted parts.
- IP 65 rating.
- Excellent repeatability.
- Vibration resistant.

THE "BETAMINI": YOUR SPECIAL IS OUR STANDARD!



GUIDE OF HOW TO SELECT YOUR BETAMINI SWITCH



TO SELECT YOUR SWITCH

Follow section 1 through 5

If required: For "Optional" and "Special" accessories

Follow section 6 or 7.

Ambient temperature: Standard: -30 to +80°C

Repeatability: ± 0.5% of Full Range* (± 1°C for temperature switch)

measured at 20°C ambient temperature acc. to ANSI/I.S.A.-S51.1-1979.

PRESSURE SWITCHES

ENCLOSURE

B2 - P504H - S1B - B1 BL X1

ENCLOSURE CODE	CLASSIFICATION	CLASSIFICATION ELECTRICAL CONNECTION Weathertight (IP65) Hirschmann Plug connection DIN 43650-A		EARTH TERMINAL
B2				Standard (Via plug)

RANGES for Pressure switches

B1 -**B2** - P504H - S1B -X1

RANGE CODE	ADJUSTABLE RANGE	TYPICAL DEADBAND	MAX. OVERRANGE PRESSURE	PROOF PRESSURE
P 502H	0,3 - 2 bar	65 mbar		
P 504H	0,3 - 4,5 bar	85 mbar	200 har	
P 506H	0,5 - 10 bar	175 mbar	200 bar	
P 508H	1,0 - 25 bar	480 mbar		600 bar
P 708H	3 - 85 bar	2,25 bar		
P 808H	5 - 170 bar	5 bar	400 bar	
P 908H	10 - 300 bar	16 bar		

^{*} For standard BETA pressure switch type B2 - - - B1 - BL.

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RANGES

B2 - **P908F** - S1B - B1 - BL - P - X1

Fluid power switches

RANGE CODE	ADJUSTABLE RANGE	TYPICAL DEADBAND	MAX. OVERRANGE PRESSURE	PROOF PRESSURE
P 904 F	12 - 55 bar	9 bar		
P 908 F	20 - 300 bar	15 bar	650 bar	700 bar
P 918 F	30 - 540 bar	20 bar		

Vacuum switches

RANGE CODE	ADJUSTABLE RANGE	TYPICAL DEADBAND	MAX. OVERRANGE PRESSURE	PROOF PRESSURE
V 506 H	-1 / 0 / +6 bar	80 / 100 / 130 mbar	200 bar	600 bar

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PROCESS CONNECTIONS

B2 - P504H - **S1B** - B1 - BL - P - X1

CODE		MATERIAL	SIZE	
NPT	BSP			
S1N	S1B	SS 316	1/4" female	
S2N	S2B	SS 316	1/2" female	
S7N ¹)	S7B ¹)	SS 316	1/2" male	
B1N ²)	B1B ²)	Brass	1/4" female	

Other sizes and materials available, Consult Factory.

- 1) **Not** on Fluid Power Pressure Switches.
- 2) **Standard** on Fluid Power Pressure Switches.

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DIAPHRAM / O-RING

B2 - P504H - S1B - **B1** - BL - P - X1

DIAPHRAGM / O-RING CODE	DIAPHRAGM	O-RING	DEADBAND MULTIPLIER
B1	BUNA-N	BUNA-N 1)	1
P1	PTFE	BUNA-N	1.5
P2	PTFE	VITON-A 3)	1.5
E6	EPDM	EPDM 1) 2)	1
N3	Neoprene	Neoprene 1) 2)	1
S0	Welded diaphragm SS 316	None 4)	3
S1	SS 316	BUNA-N	2
S2	SS 316	VITON-A 3)	2
S3	SS 316	Neoprene	2
V2	VITON-A	VITON-A 1) 2) 3)	1.5

- 1) Fluid power switches are limited to these options. (O-ring only with 316 SS piston).
- ²) Not in combination with option "P".
- 3) For process temperature > 100 °C, consult your BETA Switch Representative.
- 4) Only for 1/4" and 1/2" process connections. Not on vacuum switches

PRESSURE SWITCHES

SWITCHING ELEMENTS

P540H - S1B - B1 X1

SWITCHING CODE	USE VAC / AMP		VDC / AMP	MULTIPLIER	
BL	Standard use	250 / 3	28 / 3 (res.)	1	
BG	Gold alloy contacts	125 / 1	28 / 1 (res.)	1.5	

OPTIONS

B2 - P540H - S1B BL

CODE	USE
В	Industrial cleaning of wetted parts for oxygen services
M	Vacuum protection plate (standard SS 316)
Р	Recommended on strong process pulsations (only on "PH" range)

SPECIALS

P540H - S1B В1 BL **X1**

We can incorporate specials to meet your requirements.

These special requirements are indicated by the letter X in the modelcode or at the end of the model number, followed by a figure showing the number of specials.

Example:

"X1" at the end of model reference means one special.

at the end of model "X2" reference means two specials have been incorporated.

Details of each special must always be specified completely on enquiries and orders.

Example of specials for the BETAMINI switches are:

- Special process or flanged connections.
- Chemical seal.
- Special electrical connections.

TEMPERATURE SWITCHES

1 ENCLOSURE

B2 - T548H - D00 - S0 - BL - X1

ENCLOSURE CODE	CLASSIFICATION	ELECTRIAL CONNECTION	MATERIAL	EARTH TERMINAL
B2	Weathertight (IP65)	Hirschmann Plug connection DIN 43650-A	Aluminium	Standard (Via plug)

2 RANGES

B2 - **T548H** - D00 - S0 - BL - X1

RANGE CODE	ADJUSTABLE RANGE	MAX. DEADBAND	MAX. TEMPERATUI	RE	PROOF TEMPERATU	JRE	MAX. PROCESS PRES	SSURE
T 528 H	- 40 / + 40 °C		+ 125	°C	+ 200	°C		
T 548 H	0 / + 95 °C	5 °C	+ 180	°C	+ 200	°C	175	bar
T 568 H	+ 60 / + 180 °C	5 C	+ 300	°C	+ 350	°C	175	Dai
T 588 H	+ 160 / + 300 °C		+ 400	°C	+ 450	°C		

PROCESS CONNECTIONS / SENSOR BULB

B2 - T548H - **D00** - S0 - BL - X1

PROCESS CONNECTION	SENSOR CODE	TYPE OF TEMPERARTURE SENSING BULB.			
	D00	Direct record 1)	128 mm length.		
1/2"NPT (M)	D02	Direct mount. 1)	225 mm length.		
	C02	Capillary mount.	2 m. capillary length.		

All SS 316 stainless steel sensor, capillary (SS 304 armoured) and compression fitting.

4 DIAPHRAM / O-RING

B2 - T548H - D00 - **S0** - BL - X1

All temperature switches have "S0" welded diaphragm.

5 SWITCHING ELEMENTS

B2 - T548H - D00 - S0 - **BL** - X1

	SWITCHING CODE	USE	VAC / AMP	VDC / AMP	MULTIPLIER	
ı	BL	Standard use	250 / 3	28 / 3 (res.)	1	
	BG	Gold alloy contacts	125 / 1	28 / 1 (res.)	1.5	

6 OPTIONS

No options available on Temperature BETAMINI switch.

¹⁾ Not in combination with range T588H (+160/+300 °C), not recommended with T568H in case of process temperature >140 °C.

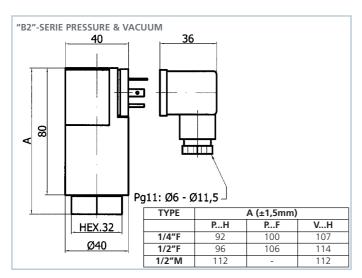
²⁾ Other capillary lengths available: "C03"- 3m., "C05"- 5m. and "C10"- 10m.

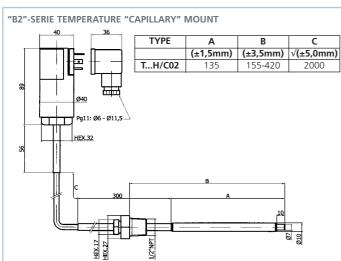
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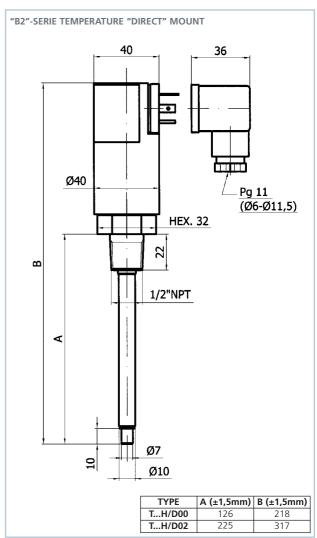
SPECIALS

B2 - T548H - D00 BL **X1**

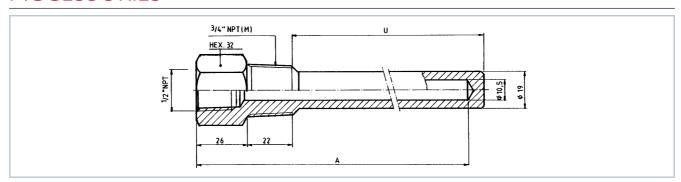
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ACCESSORIES



CODE	INSERTION LENGTH U (MM)	INSERTION ELEMENT LENGTH A (MM)	FIT TO BETA TEMP. SENSING BULB
TW 11	115	155	D00, C02, C03
TW 15	155	195	C02, C03, C05

NOTES: BETA Thermowells to be ordered as separate item. Do not include Thermowell code into the switch code.

BETA PRESSURE & TEMPERATURE SWITCHES











The "BETAMINI"- Serie switches



"BETAMINI" Pressure switch



"BETAMINI" Pressure switches with flange - "SXX"



"BETAMINI" Pressure switch with DIN11851-Sanitary seal - "X1"



"BETAMINI" Temperature switch - direct mount - "D02"

Manufacturer BETA B.V. - The Netherlands

BETA Pressure & Temperature switches

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