



C-Series Differential

BETA products are manufactured in The Netherlands

Enclosures:

Cast Aluminum:

Oven baked powder coating
hammertone grey

**Also available in
SS 316**

Wheaterproof **IP 66**
- EN 60529
(Nema 4X)

Repeatability:
typical 0.2% of Full Scale

Standard unit: Barg

Optional: PSI / Kg / Pa

Standard process connetion:
1/4" NPT F or BSP F

Standard Diaphragm/O-ring:
D..L/ M: Buna N / Buna N
D..H: TCP/ Buna N

For wetted parts:
more possibilities available,
see full catalogue

**BETA SWITCHES ARE,
BUILD TO LAST!**

Do you want to know more:

Please contact your local dealer
and ask for the General Bulletin.
Or contact us directly!



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Ranges for Differential switches

RANGE CODE	ADJUSTABLE DIFF. RANGE ¹⁾		TYPICAL DEADBAND ¹⁾		MAX. STATIC PRESSURE		MAX. OVERRANGE PRESSURE		PROOF PRESSURE			
	mBar / Bar	mBar	mBar / Bar	mBar	Bar		Bar		Bar			
D 302 L	12 - 75 ²⁾	mBar	7	mBar	30	Bar	30 ³⁾	Bar	35	Bar		
D 304 L	22 - 180	mBar	8	mBar								
D 306 L	25 - 450	mBar	11	mBar								
D 309 L	35 - 1250	mBar	15	mBar	10	Bar	140 ⁴⁾	Bar	140	Bar		
D 402 M	0.3 - 1.0	Bar	0.15	Bar								
D 404 M	0.5 - 2.5	Bar	0.2	Bar							50	Bar
D 406 M	1.0 - 6.0	Bar										
D 408 M	1.0 - 14.5	Bar	0.8	Bar	100	Bar	200 ⁴⁾	Bar	200	Bar		
D 506 M	5 - 20	Bar										
D 508 M	10 - 50	Bar										
D 608 M	10 - 70	Bar	1.5	Bar	140	Bar	200	Bar	200	Bar		
D 352 H	80 - 160	mBar	25	mBar								
D 354 H	100 - 500	mBar	35	mBar								
D 356 H	120 - 1450	mBar	50	mBar								
D 359 H	150 - 3450	mBar	75	mBar								

Notes:

- ¹⁾ Ranges and deadbands are given at 50% of Max. Static pressure.
All differential pressure sensors are sensitive to static pressure, both for setpoint and deadband.
- ²⁾ Range only with L1 micro switch.
- ³⁾ D...L can withstand a differential pressure P-low max. 1 bar above P-High.
- ⁴⁾ D...M, D...H can sustain full High and Low-side reversal.

IN THE FOLLOWING TABLE THE ESTIMATED INFLUENCE FOR INCREASING STATIC PRESSURE IS GIVEN.

SENSOR	SETPOINT	DEADBAND
D...L	- 0.7 mBar / Bar	= - 0.1 mBar / Bar
D...M	= + 3 mBar / Bar	+ 10 mBar / Bar
D...H	- 2 mBar / Bar	= - 0.4 mBar / Bar

Example: D...H-type Diff. setpoint: 1 bar (1000 mbar).
If static pressure increases 10 bar Diff.setpoint will be (10 x - 2 mbar) = - 20 mbar less = 980 mbar.

Note: For differential application outside above ranges consult your BETA Switch representative.

Disclaimer:

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Making the modelcode: Follow steps 1 to 5

1 Selection of enclosure type.

Conduit:	Material:	Enclosure code:
Pg 13.5	Aluminium	C1
M20 x 1.5	Aluminium	C2
3/4" NPT F	Aluminium	C3
1/2" NPT F	Aluminium	C4
M20 x 1.5	SS 316	C8
Other/ Specials	Aluminium	CX
	SS 316	CX

2 Selection of range code, see front page.

3 Selection of process connection.

Size:	Material:	Code:
1/4" NPT F	SS 316 *	S1N
1/4" BSP F	SS 316 *	S1B
1/4" NPT F	Aluminium **	A1N
1/4" BSP F	Aluminium **	A1B
1/2" NPT M	SS 316	S7N
* Only for D..H, D..D and D..M available		
** D.. L: A1N or A1B For low side only. High side: Only "L"-sensor connection		
Proces connection according to NACE standard are available. Consult your local BETA Switch Representative.		

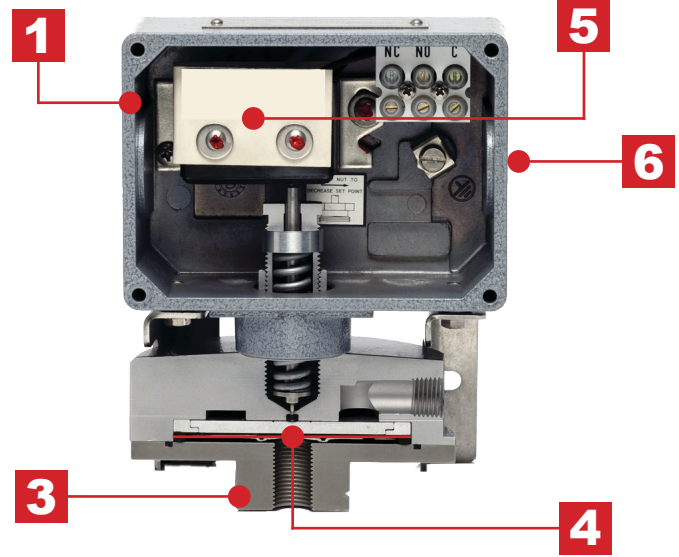
4 Selection of wetted parts.

Diaphragm:	O-ring: *	Code:
Buna N	Buna N	B1
PTFE	Buna N	P1 **
SS 316	Buna N	S1
SS 316	Viton	S2
SS 316	Teflon	S4
SS 316	EPDM	S6 **
SS 316	Welded	S0 **

** Not possible for D..H. (P1 = Standard for D..H)

* WETTED PARTS ARE NOT GUARANTEED,

against corrosion or permeation since processes vary from plant to plant and concentration of harmful fluids, gasses or solids vary from time to time in a given process. Empirical experience by users should be the final guide and alternate materials based on this are generally available. The diaphragm / O-Ring combinations are for process temperatures of -5°C to +90°C, unless otherwise indicated. For process temperatures beyond these limits please contact your BETA Switch Representative.



5 Selection of microswitches.

Rating:		Use:	Switch Code: ¹⁾
VAC.	VDC. ³⁾		
480/ 15A	28/ 0.5A	Standard	K1 ²⁾
480/ 10A	28/ 0.5A	Standaard for L-serie	L1 ²⁾
480/ 15A	125/ 0.5A	Normal DC-service	U1
125/ 1A	28/ 0.5A	For use in ³⁾ H ₂ S environment and/or for Ex ia / Ex ib applications.	G1
250/ 0.1A	30/ 0.1A	Environmental proof (IP 67)	Y1 **
250/ 0.1A	30/ 0.1A		O1
250/ 2A	30/ 2A		N1

¹⁾ For D.P.D.T action, second code figure should be specified as "2"

For example: K1 = S.P.D.T./ K2 = D.P.D.T

²⁾ VDE certified acc. to DIN EN 61 058-1:1992+A1:1993.

³⁾ Indicated ratings are for resistive DC load only.

** DC Rating not U.L. listed, although experience and third party testing confirm the D.C Voltage ratings. Consult your local BETA switch Representative.

6 Selection of options.

Description:	Option code:
Cable gland	C
For Ex i applications	I
Stainless steel tag key ringed to enclosure (Tag has 2 lines - 16 characters per line)	S
Vacuum Protection Plate	M ¹⁾

¹⁾ Standard for D..L sensor.

Accessoires:

2" Pipe mount bracket set available.

Contents :
2 x bolts M6 x 100 mm + washer & nut
Size: +/- 1.5 mm. - Material: SS 304.