

# Model 315T Metal Capacitive Differential Pressure Transmitters



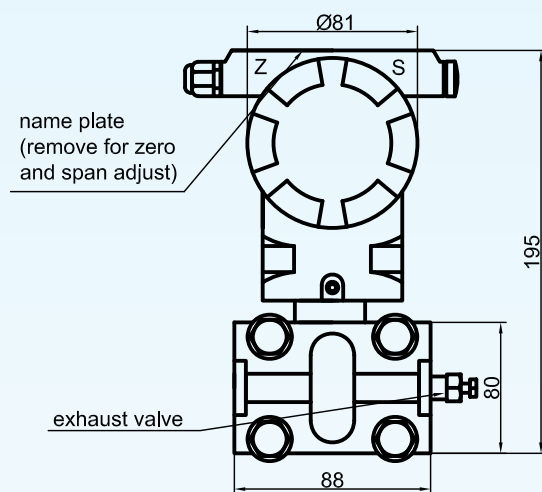
Model 315T series pressure transmitters are made of BCM 115C capacitive pressure sensors, the transmitters obtain all the specifications of it, and extend the measuring ability to gauge pressure and absolute pressure. These pressure transmitters are often used to measure the differential pressures in mbar scale with rather high accuracy, for differential pressure, gauge pressure and absolute pressure applications, the transmitter can measure them in a very wide ranges.

Thanks to the integrated electronics, output of these pressure transmitters is standard signal of 4~20 mA with HART protocol communication. Based on offsetting theory and with help of electronics, the measuring range of these pressure transmitters can be shifted upwards or downwards, extending the measurement to neighboring pressure ranges, including negative pressures which are commonly requested in vacuum world.

## Dimensions of electronic and mechanical auxiliary parts:

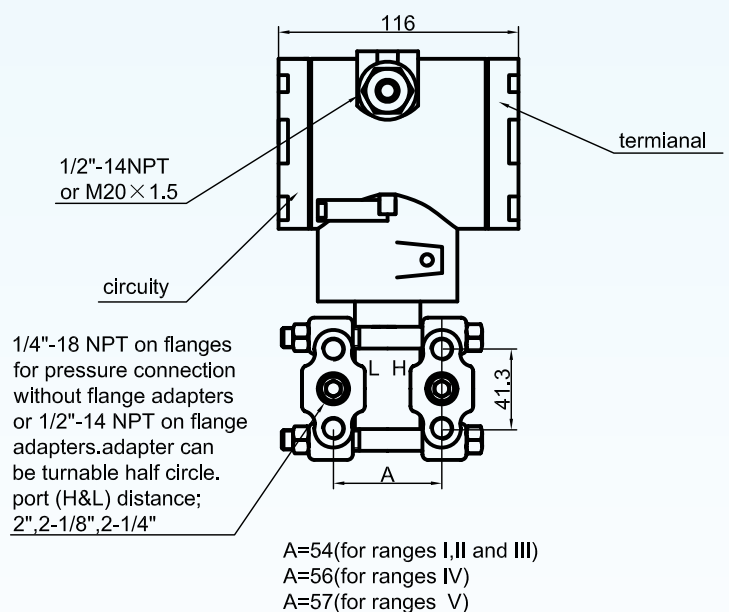


HAND-HELD COMMUNICATOR



## Features:

- pressure range:** 0/1.3-15 mbar, ... , 0/6.9-68.9 bar,D  
0/7.5-75 mbar, ... , 0/41.4-413.7 bar,G  
0/37-374 mbar, ... , 0/6.9-68.9 bar,A
- accuracy(NL):** 0.075 %fso; 0.1 %fso; 0.2 %fso; 0.5 %fso
- output signal:** 4~20 mA, with HART protocol
- system pressure:** 70, 140, 312 bar
- construction:** rigid, welded encapsulation
- explosive-proof:** Exd II CT6 (option)
- materials:** diaphragm 316L,  
option: Tantalum, Hastelloy-C or Monel  
housing: aluminam metal alloy  
flange: 316, option: Hastelloy-C or Monel
- operating temperature range:** -40 ~ +85°C
- media temperature range:** -40 ~ +120°C
- operating humidity range:** 0~100 %RH
- temperature effect on ZERO & SPAN:** <0.003 %fso/°C
- line pressure effect:** ±0.25 %fso/100bar;  
(can be modified in tube applications)
- vibration effect:** 0.05 %fso/g/200Hz (any directions)
- protection class:** IP 67



**BCM SENSOR TECHNOLOGIES BVBA**

# Model 315T Metal Capacitive Differential Pressure Transmitters



## Ordering code:

example: 315T\_DP - IV - 140 - C - 0 - 22 - 3 - 2 - D1 - Cxxxx

pressure types
315T_vDP = 315T very low differential pressure transmitter
315T_DP = 315T differential pressure transmitter
315T_hDP = 315T differential pressure transmitter for high system and overload pressure applications
315T_AP = 315T absolute pressure transmitter
315T_GP = 315T gauge (relative) pressure transmitter

pressure ranges
I = 0/1.3-15 mbar for vDP
II = 0/7.5-75 mbar for DP, GP
III = 0/37-374 mbar for DP, hDP, GP, AP
IV = 0/187-1868 mbar for DP, hDP, GP, AP
V = 0/0.7-6.9 bar for DP, hDP, GP, AP
VI = 0/2.1-20.7 bar for DP, hDP, GP, AP
VII = 0/6.9-68.9 bar for DP, GP, AP
VIII = 0/20.7-206.8 bar for GP
IX = 0/41.4-413.7 bar for GP

system or overload pressure and applications
70 = 70 bar for vDP applications
140 = 140 bar for DP, AP & GP ≤ 70 bar applications
312 = 312 bar for hDP applications
420 = 420 bar for GP ≤ 140 bar applications
520 = 510 bar for GP ≤ 420 bar applications

accuracy	
A = 0.075 %FSO	C = 0.2 %FSO
B = 0.1 %FSO	D = 0.5 %FSO

explosive-proof	
0 = no explosive-proof	1 = with explosive-proof

materials: diaphragm, flange, exhaust valve
22 = 316L, 316, 316
23 = Hastelloy-C, 316, 316
24 = Monel, 316, 316
25 = Tantalum, 316, 316
26 = Hastelloy-C, Hastelloy-C, Hastelloy-C
27 = Tantalum, Hastelloy-C, Hastelloy-C
28 = Monel, Monel, Monel

display
0 = no display
1 = analogue, linear, 0 ~ 100% scale
2 = analogue, square root, 0 ~ 100% scale
3 = digital, 4 1/2 LCD, linear, 0 ~ 100% scale

mounting means
1 = 2" pipe mounting kit
2 = panel mounting kit
3 = 2" pipe flat mounting kit

exhaust valve position
D1 = side exhaust valve on top
D2 = side exhaust valve on bottom

Cxxxx: This code starts with a "C" and is followed by 4 digits, this is a customized code given by the customer who will indicate, by using this code, his desired or wished specification requested to the 315T on his order sheet. The customer can use the 4 digits to indicate the month and date when he requests this customized specification. The sales team of BCM will confirm this customized specification when sending BCM's <<Order Confirmation>>.

### Ordering code explanation: 315T\_DP-IV-140-C-0-22-3-2-D1-C0116

Model 315T\_DP differential pressure transmitter, ranges 0/187-1868 mbar, for applications with system and overload pressure range of 140 bar, the signal output is 4~20 mA with HART protocol communications with accuracy of 0.2 %fso. This transmitter is not an explosive-proof version. The materials of the diaphragm is 316L stainless steel. The flange and the exhaust valve are made of 316 stainless steel. And there is a 4-1/2 LCD digital linear display. The mounting means is panel mounting and the exhaust valve is side vent drain on top of the flange. The customer has indicated on January 16th his wished specification on his order sheet for the ordered 315T\_DP, and this customer-wished specification has to be confirmed by BCM sales team on <<Order Confirmation>>.



ISO9001 Certified Company

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