

Pressure transmitter Datasheet

Pressure transmitter tested and approved by Val Controls for our IDC24 range.

When using the IDC24 for advanced diagnostic, the performance of the connected sensors does affect the system overall performance. To get the best possible performance, Val Controls recommend using Val Controls approved pressure transmitters. These pressure transmitters have been tested by Val Controls in laboratory and in the field, so we can guarantee a perfect performance from the system.



FAQ

[Which pressure range to choose of pressure transmitter](#)

For hydraulic systems we recommend 0-400bar.

For pneumatic systems we recommend 0-16bar.

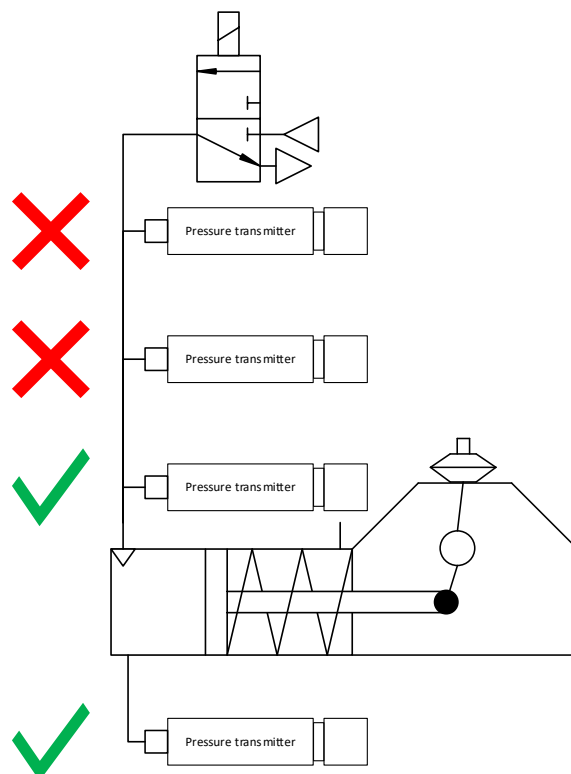
[Where to measure pressure for Spring Return \(SR\) and Double Acting \(DA\) actuators](#)

For both SR and DA systems it is important to measure the exact actuator chamber pressure.

On both SR and DA systems it is important to have the pressure transmitter located on a separate port of the actuator or as close to the actuator chamber as possible.

For best performance, the pressure transmitter has to be connected to its own port on the actuator.

On DA systems the pressure transmitter have to be located on the fully pressurized side of the actuator when starting a partial stroke.



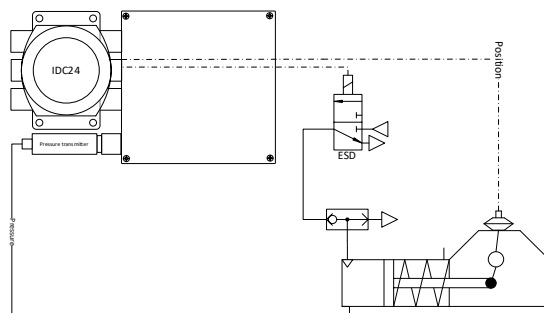
IDC24 Intelligent Diagnostic Controller

When to use internal or external mounted pressure transmitter

Using internal mounted pressure transmitter is the most simple solution and is recommended for most systems. If the IDC24 is located far away from the actuator, so corrects actuator chamber pressure measurements is not possible, external mounted pressure transmitter is recommended.

Where to mount the pressure transmitter when using quick exhaust

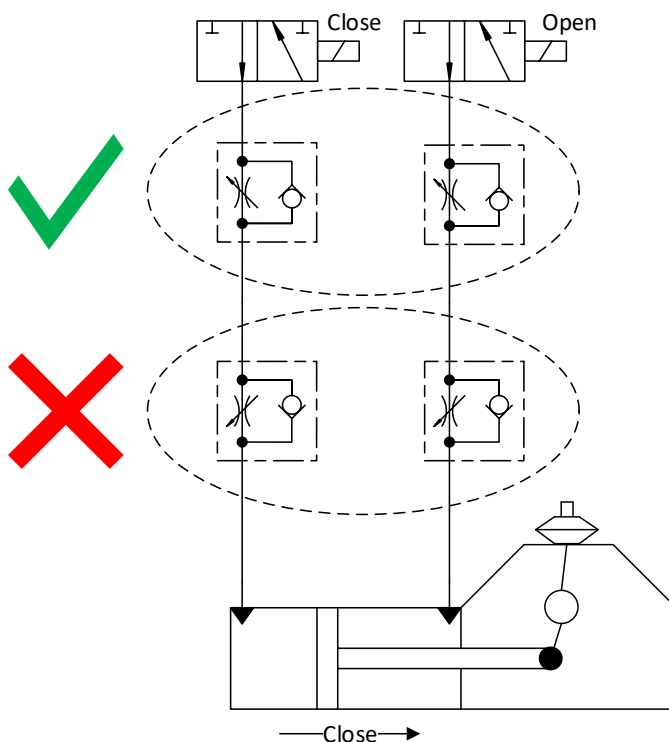
When a quick exhaust is mounted the pressure transmitter has to be mounted so it measures the actuator chamber pressure.



When using flow regulators on a DA system

For DA systems it is important to mount the flow regulators correctly for performing a Partial Stroke Test.

If the flow regulators are mounted in other ways, the test will not be done correctly.



IDC24 Intelligent Diagnostic Controller

Internal mounted - Direct mounting ex e enclosure

Input
 Mechanical connection : G1/2 B – EN 837
 Material – wetted
 0-16bar : SS316
 0-400 bar : Elgiloy

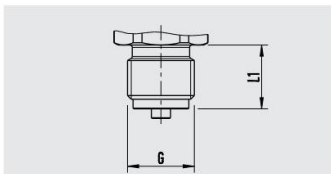
Output
 Output signal : 4-20mA – 2-wire

Certification for use in hazardous area
 EX type : Flame proof
 ATEX and IECEx : II 2G Ex db IIC T6... T1 Gb
 Ambient temperature : T6/T5/T4-T1 -40°C to 60/75/105°C

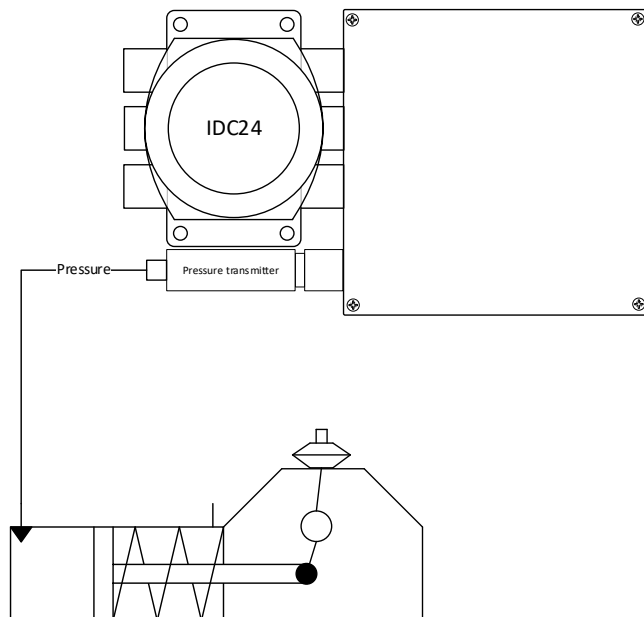
Enclosure: Material and construction
 Dimensions with terminal box : LxW approx.. 140x30mm
 Weight : Approx. 300 g
 Enclosure : SS316L
 Ingress Protection : IP67

Model selector

PT	-	A	2	0	0	3
A	Pressure range					
0016	0-16 bar					
0400	0-400 bar					
B	Mounting					
2	Direct in Ex e enclosure					
C	Terminal connection					
0	None					
D	Not used					
0	None					
E	Val Controls internal					
3	Version					



G	L1
G ½ B EN 837	20 [0.79]



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External mounted - Fitted with terminal box

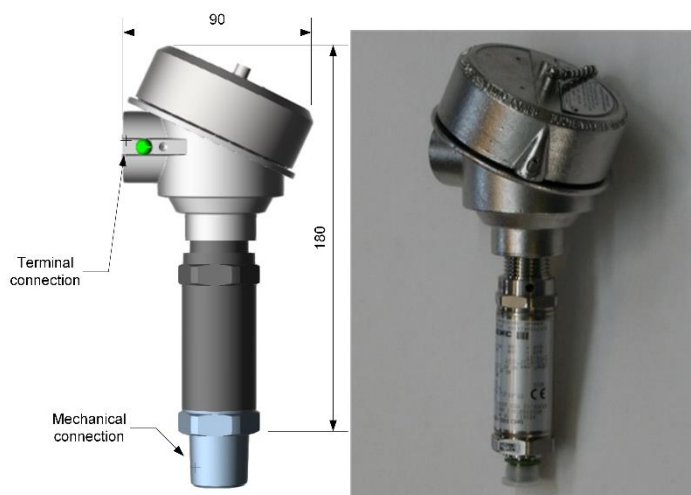
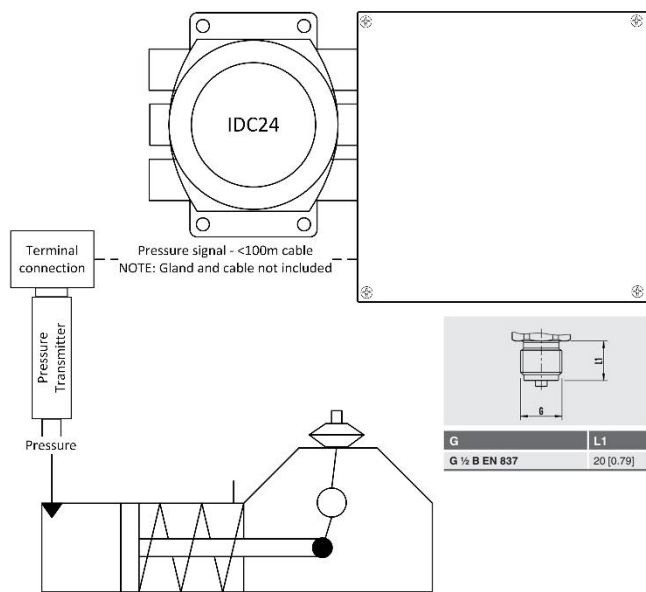
Input
 Mechanical connection : G1/2 B – EN 837
 Material – wetted : SS316
 0-16bar : Elgiloy
 0-400 bar : Elgiloy
Output
 Output signal : 4-20mA – 2-wire
Certification for use in hazardous area
 EX type : Flame proof
 ATEX and IECEx : II 2G Ex db IIC T6... T1 Gb
 Ambient temperature : T6/T5/T4-T1 -40°C to 60/75/105°C

Electrical connection terminal box
 Terminals : 0.2 – 2 mm²

Enclosure: Material and construction
 Dimensions with terminal box : LxW aprox. 180x90mm
 Weight with terminal box : Approx. 1.500 g
 Enclosure : SS316L
 Terminal box : SS316
 Ingress Protection : IP66/68

Model selector

PT	-	A	3	C	0	3
A	Pressure range					
0016	0-16 bar					
0400	0-400 bar					
B	Mounting					
3	Fitted with terminal box					
C	Terminal connection					
1	1 x M20x1.5					
2	1 x 1/2" NPT					
D	Not used					
0	None					
E	Val Controls internal					
3	Version					



DCS-PD-002-06 - Subject to modifications. We are not responsible for misprints.