

DCT 531

Industrial Pressure Transmitter with RS485 Modbus RTU

Stainless Steel Sensor

accuracy according to IEC 60770:
standard: 0.25 % FSO
option: 0.1 % FSO



Nominal pressure

from 0 ... 100 mbar up to 0 ... 400 bar

output signal

RS485 with Modbus RTU protocol

Special characteristic

- ▶ pressure value
- ▶ perfect thermal behaviour
- ▶ excellent long term stability
- ▶ reset function

Optional versions



- ▶ pressure port
G 1/2" flush up to max. 40 bar
- ▶ pressure sensor welded
- ▶ customer specific versions

The DCT 531 with RS485 interface uses the communication protocol Modbus RTU which has found the way in industrial communication as an open protocol. The Modbus protocol is based on a master slave architecture with which up to 247 slaves can be questioned by a master.

Due to the usage of high quality materials and components, the DCT 531 is suitable for almost every industrial application, if the medium is compatible with stainless steel 316L.

The modular concept of the device allows customized mechanical connections, so it is easy to adapt the pressure transmitter to different conditions on-site.

Preferred areas of use are

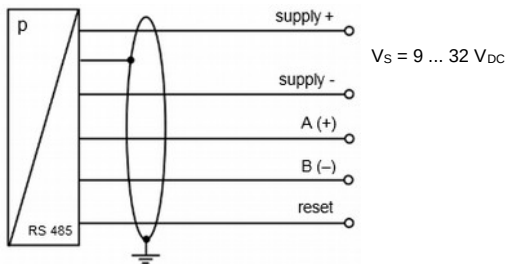
-  Plant and machine engineering
-  Energy industry

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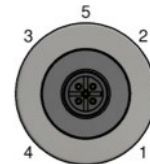
Technical Data

Wiring diagram



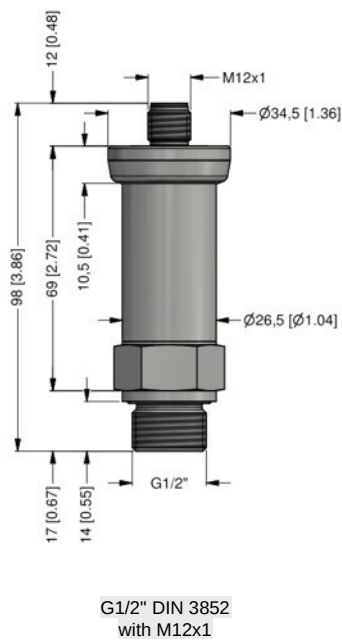
Pin configuration / electrical connection

Electrical connection	M12x1, metal (5-pin)
Supply +	1
Supply -	3
A (+)	2
B (-)	4
Reset	5
Shield	plug housing

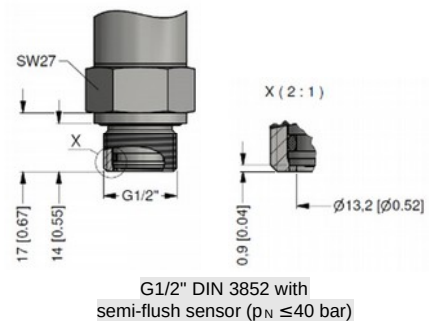
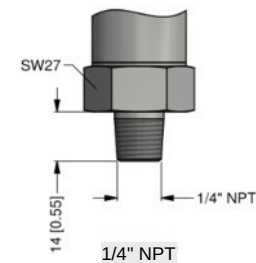
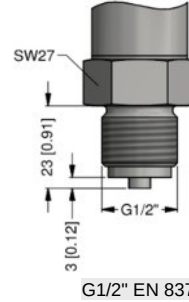
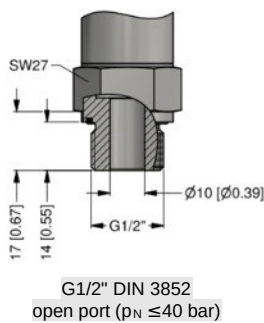
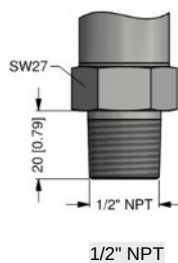
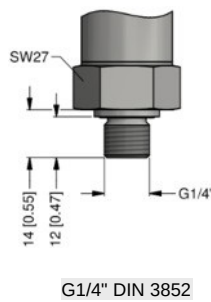


Dimensions (mm / in)

standard



option



metric threads and other versions on request

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Technical Data

Configuration Modbus RTU					
Standard configuration	001	-	1	-	1
Address					
Address	001				
	...				
	247				
Baud Rate					
4800 Bd			0		
9600 Bd			1		
19200 Bd			2		
38400 Bd			3		
Parity					
None					0
Odd					1
Even					2
Configuration code (to specify with order)					
		-		-	

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Ordering code DCT 531

DCT 531



Pressure									
	gauge		DC 7						
	absolute ¹		DC 8						
Input									
	[bar]								
	0.10	¹		1	0	0	0		
	0.16	¹		1	6	0	0		
	0.25	¹		2	5	0	0		
	0.40			4	0	0	0		
	0.60			6	0	0	0		
	1.0			1	0	0	1		
	1.6			1	6	0	1		
	2.5			2	5	0	1		
	4.0			4	0	0	1		
	6.0			6	0	0	1		
	10			1	0	0	2		
	16			1	6	0	2		
	25			2	5	0	2		
	40			4	0	0	2		
	60			6	0	0	2		
	100			1	0	0	3		
	160			1	6	0	3		
	250			2	5	0	3		
	400			4	0	0	3		
	-1 ... 0			X	1	0	2		
	customer			9	9	9	9		consult
Output									
	RS485 Modbus RTU			L	5				
Accuracy									
standard:	0.25 % FSO			2					
option:	0.10 % FSO			1					consult
	customer			9					consult
Electrical connection									
	male plug M12x1 (5-pin) / metal			N	1	1			
	customer			9	9	9			consult
Mechanical connection									
	G1/2" DIN 3852			1	0	0			
	G1/2" EN 837			2	0	0			
	G1/4" DIN 3852			3	0	0			
	G1/4" EN 837			4	0	0			
	G1/2" DIN 3852			F	0	0			
	with semi-flush sensor ²								
	G1/2" DIN 3852 open pressure port ²			H	0	0			
	1/2" NPT			N	0	0			
	1/4" NPT			N	4	0			
	customer			9	9	9			consult
Seals									
	FKM			1					
	EPDM			3					
	without (welded version) ³			2					consult
	customer			9					consult
Special version									
	standard			0	0	0			
	customer			9	9	9			consult

¹ absolute pressure possible from 0.4 bar
² not possible for nominal pressure $p_N > 40$ bar
³ welded version only with pressure ports according to EN 837, possible for $p_N \leq 40$ bar

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