



# **IDM 331**

# **Differential Pressure Transmitter** for Liquids and Gases

Stainless Steel Sensor

accuracy according to IEC 60770: 0.5 % FSO

#### Differential pressure

from 0 ... 20 mbar up to 0 ... 16 bar

#### **Output signals**

2-wire: 4 ... 20 mA 3-wire: 0 ... 10 V

#### **Special characteristics**

- differential pressure wet / wet
- permissible static pressure -onesidedup to 30 times of differential pressure range
- compact design
- mechanical robust and reliable at dynamic pressures as well as shock and vibration

#### **Optional versions**

- IS-version Ex ia = intrinsically safe for gases and dust
- different electrical and mechanical connections
- customer specific versions

IDM 331 The differential is pressure transmitter for industrial applications and is based on a piezoresistive stainless steel sensor, which can be pressurized on both sides with fluids or gases compatible with SST 1.4404 (316L) and 1.4435 (316L).

The compact design allows an integration of the IDM 331 in machines and applications with limited space. The IDM 331 calculates the difference between the pressure on the positive and the negative side and converts it into a proportional electrical signal.

#### Preferred areas of use are



Plant and machine engineering



**Energy industry** 

### Preferred used for



Water







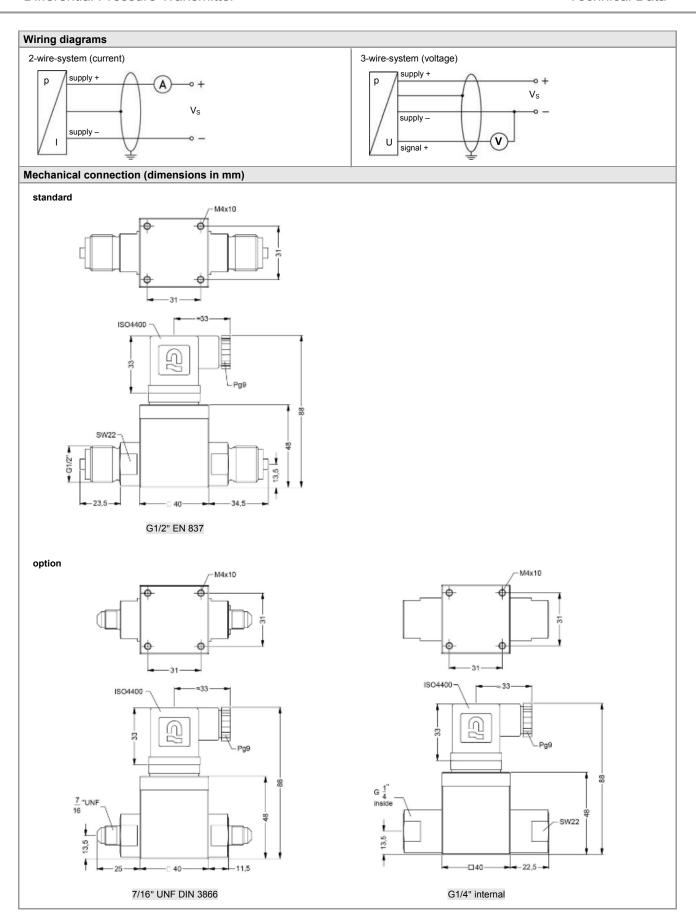


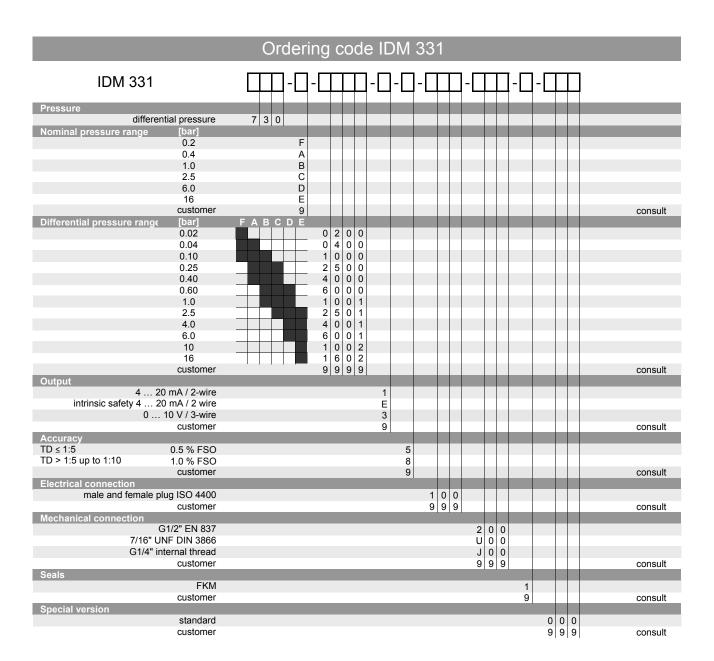
# **Differential Pressure Transmitter**

Input pressure range						
Nominal pressure [bar]	0.2	0.4	1	2.5	6	16
Differential pressure range [bar]						
TD 1:1	0 0.2	0 0.4	0 1	0 2.5	0 6	0 16
up to	up to	up to	up to	up to	up to	up to
TD 1:10	0 0.02	0 0.04	0 0.1	0 0.25	0 0.6	0 1.6
Permissible static pressure,	0.5	1	3	6	20	60
one-sided [bar]	0.5	'	3	0	20	00

Standard   2-wire   4 20 mA / V <sub>s</sub> = 12 36 V <sub>pc</sub>   Option IS-version   2-wire   4 20 mA / V <sub>s</sub> = 14 28 V <sub>pc</sub>   Option IS-version   3-wire   0 10 V / V <sub>s</sub> = 14 28 V <sub>pc</sub>   Option IS-version   3-wire   0 10 V / V <sub>s</sub> = 14 28 V <sub>pc</sub>   Option IS-version   3-wire   0 10 V / V <sub>s</sub> = 14 28 V <sub>pc</sub>   Option IS-version   3-wire   0 10 V / V <sub>s</sub> = 14 28 V <sub>pc</sub>   Option IS-version   0 10 V / V <sub>s</sub> = 14 28 V <sub>pc</sub>   Option IS-version   0 10 V   V <sub>s</sub> = 14 28 V <sub>pc</sub>   Option IS-version   0 10 V   Option IS-ver									
Option 12-wrision   2-wire   3 -wire   0 10 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Output signal / Supply								
Option 3-wire   3-wire   0 10 V   V   V   s = 14 36 V <sub>DC</sub>	Standard	2-wire: 4 20 mA / V <sub>S</sub> = 12	2 36 V <sub>DC</sub>						
Performance   Accuracy	Option IS-version	2-wire: 4 20 mA / V <sub>S</sub> = 14	4 28 V <sub>DC</sub>						
For ranges of max, input pressure P <sub>N</sub> > 1 bar (codes C, D, E)	Option 3-wire	3-wire: 0 10 V / $V_S = 14$	4 36 V <sub>DC</sub>						
\$ ± 0.5 % FSO   differential pressure range with TD 1 frou pto 1:0)   5 to 1:1 % FSO   6 to 10 for ranges of max. Input pressure range with TD 1 frou to 1:10)   5 to 1:0 % FSO   5 ± 1 % FSO   differential pressure range with TD 1 frou to 10 to 50 % from nominal pressure)    Permissible load   current 2 wire   6 to 10 km from 1 from 1 frou to 10 to 50 % from nominal pressure)    Permissible load   current 2 wire   7 km frou from 1 frou from 1 fr	Performance	·							
\$ ± 0.5 % FSO   differential pressure range with TD 1 frou pto 1:0)   5 to 1:1 % FSO   6 to 10 for ranges of max. Input pressure range with TD 1 frou to 1:10)   5 to 1:0 % FSO   5 ± 1 % FSO   differential pressure range with TD 1 frou to 10 to 50 % from nominal pressure)    Permissible load   current 2 wire   6 to 10 km from 1 from 1 frou to 10 to 50 % from nominal pressure)    Permissible load   current 2 wire   7 km frou from 1 frou from 1 fr									
\$\frac{\text{\$\cong \text{ (differential pressure range with TD > 1.5 up to 1.10)}{ for ranges of max. Input pressure range with TD > 50 to 10 % from nominal pressure)} \	Nocardoy	< + 0.5 % FSO (differential press	sure range with TD from 1:1 up to 1:5)						
for ranges of max. input pressure P <sub>N</sub> ≤ 1 bar (codes A, 8, F)									
\$± 0.5 % FSO   differential pressure range with TD Foon 100 to 50 % from nominal pressure)									
S ± 1 % FSO   differential pressure range with TD > 50 to 10 % from nominal pressure									
Current 2-wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3 - wire: R <sub>ms</sub> = 1 (Vs – Vs min) / 0.02 A) Ω   voltage3									
voltage 3-wire: R <sub>min</sub> = 10 kΩ     voltage 3-wire: R <sub>min</sub> = 10 kΩ     voltage 4-wire: R <sub>min</sub> = 10 kΩ     voltage 4-wi	Permissible load								
Influence effects   Supply:   0.05 % FSO / 10 V   10 odd   0.05 % FSO /									
load:	Influence effects								
Long term stability	imacined checks	11.2							
Response time	Long term stability								
accuracy according to IEC 60770 - limit point adjustment (non-linearity, hysteresis, repeatability)   Thermal effects 2 (Offset and Span) / Permissible temperatures   Nominal pressure P <sub>N</sub>   [bar]   0.2   0.4   ≥ 1.0     Tolerance band   % FSO    ≤ ± 2.5   ≤ ± 2   ≤ ± 1.5     To, average   % FSO / 10 K  ± 0.4   ± 0.3   ± 0.2     In compensated range   °C    medium: -25 125 °C   electronics / environment: -25 85 °C   storage: -40 100 °C     Permissible temperatures   medium: -25 125 °C   electronics / environment: -25 85 °C   storage: -40 100 °C     Permissible temperatures   medium: -25 125 °C   electronics / environment: -25 85 °C   storage: -40 100 °C     Permissible temperatures   medium: -25 125 °C   electronics / environment: -25 85 °C   storage: -40 100 °C     Permissible temperatures   medium: -25 125 °C   electronics / environment: -25 85 °C   storage: -40 100 °C     Permissible temperatures   medium: -25 125 °C   electronics / environment: -25 85 °C   storage: -40 100 °C     Permissible temperatures   medium: -25 125 °C   electronics / environment: -25 85 °C   storage: -40 100 °C     Permissible temperatures   medium: -25 125 °C   electronics / environment: -25 85 °C   storage: -40 100 °C     Permissible temperatures   medium: -25 125 °C   electronics / environment: -25 85 °C   storage: -40 100 °C     Permissible temperatures   medium: -25 125 °C   electronics / environment: -25 85 °C   storage: -40 100 °C     Permissible temperatures   permanent   modium: -25 125 °C   electronics / environment: -25 85 °C   storage: -40 100 °C     Permissible temperatures   permanent   perman		ļ							
Nominal pressure P <sub>N</sub>   [bar]   0.2   0.4   ≥1.0									
Mominal pressure P <sub>N</sub>   [bar]   0.2   0.4   ≥1.0			. 55.5, . Spouldomity)						
Section			0.4	>10					
TC, average [% FSO / 10 K]									
In compensated range   °C	rolerance band [% FSO]								
Permissible temperatures									
relating to nominal pressure range									
Short-circuit protection   permanent   permanent   Reverse polarity protection   no damage, but also no function   emission and immunity according to EN 61326   Mochanical stability   Witbration   10 g RMS (20 2000 Hz)   Shock   100 g / 11 msec   Materials   Pressure port   stainless steel 1.4404 (316L)   Housing   aluminium, black anodized   Seals (media wetted)   FKM / others on request   Diaphragm   stainless steel 1.4443 (316L)   Pressure port   stainless steel 1.4443 (316L)   Pressure port   stainless steel 1.4404 (316L)   Pressure port   Seals (media wetted)   FKM / others on request   Diaphragm   stainless steel 1.4435 (316L)   Pressure port, seals, diaphragm   Signal output current   max. 25 mA   signal output voltage: max. 7 mA   max. 7 mA   signal output voltage: max. 7 mA   Signal output volt		medium: -25 125 °C elec	etronics / environment: -25 85 °C	storage: -40 100 °C					
Short-circuit protection   permanent   no damage, but also no function   emission and immunity according to EN 61326									
Reverse polarity protection no damage, but also no function emission and immunity according to EN 61326 memission and immunity accordinates.  **Total Canada Total EN 61326 memission and immunity accord	•								
Mechanical stability	Short-circuit protection	permanent							
Mechanical stability         10 g RMS (20 2000 Hz)           Shock         100 g / 11 msec           Materials         Pressure port         stainless steel 1.4404 (316L)           Housing         aluminium, black anodized           Seals (media wetted)         FKM / others on request           Diaphragm         stainless steel 1.4435 (316L)           Media wetted parts         pressure port, seals, diaphragm           Miscellaneous         Current consumption         signal output current: max. 25 mA           Weight         approx. 250 g           Operational life         100 million load cycles           Ingress protection         IP 65           CE-conformity         EMC Directive: 2014/30/EU           Explosion protection (only for 4 20 ma / 2 wire)           Approvals         IBEXU 08 ATEX 1125 X           DX13A-IDM 331         zone 1: II 2G Ex ia IIC T4 Gb         zone 21: II 2D Ex ia IIIC T85°C Db           Safety technical maximum values         U <sub>1</sub> = 28 V <sub>DC</sub> , I <sub>1</sub> = 93 mA, P <sub>1</sub> = 660 mW, C <sub>1</sub> ≤ 1 nF, L <sub>1</sub> ≤ 10 μH, the supply connections have an inner capacity of max. 27 nF to the housing           Permissible temperatures for environment         -25 65°C           Pin configuration         ISO 4400           Electrical connection         ISO 4400 </td <td>Reverse polarity protection</td> <td colspan="6">no damage, but also no function</td>	Reverse polarity protection	no damage, but also no function							
Vibration	Electromagnetic compatibility								
Vibration	Mechanical stability								
Shock   100 g / 11 msec	<b>/</b>	10 a RMS (20 2000 Hz)							
Materials           Pressure port         stainless steel 1.4404 (316L)           Housing         aluminium, black anodized           Seals (media wetted)         FKM / others on request           Diaphragm         stainless steel 1.4435 (316L)           Media wetted parts         pressure port, seals, diaphragm           Miscellaneous         Current consumption           Signal output vortrage:         max. 7 mA           Weight         approx. 250 g           Operational life         100 million load cycles           Ingress protection         IP 65           CE-conformity         EMC Directive: 2014/30/EU           ATEX Directive         2014/34/EU           Explosion protection (only for 4 20 mA / 2 wire)           Approvals         IBEXU 08 ATEX 1125 X           20x13A-IDM 331         zone 1: II 2G Ex ia III C T4 Gb         zone 21: II 2D Ex ia IIIC T85°C Db           Safety technical maximum values         U₁ = 28 V <sub>Dc</sub> , I₁ = 93 mA, P₁ = 660 mW, C₁ ≤ 1 nF, L₁ ≤ 10 μH, the supply connections have an inner capacity of max. 27 nF to the housing           Permissible temperatures for environment         -25 65°C           Pin configuration         ISO 4400           Electrical connection         ISO 4400           Supply + Supply - Signal + (only 3-wire)									
Pressure port         stainless steel 1.4404 (316L)           Housing         aluminium, black anodized           Seals (media wetted)         FKM / others on request           Diaphragm         stainless steel 1.4435 (316L)           Media wetted parts         pressure port, seals, diaphragm           Miscellaneous           Current consumption         signal output current: max. 25 mA signal output voltage: max. 7 mA           Weight         approx. 250 g           Operational life         100 million load cycles           Ingress protection         IP 65           CE-conformity         EMC Directive: 2014/30/EU           ATEX Directive         2014/34/EU           Explosion protection (only for 4 20 mA / 2 wire)           Approvals         IBEX 08 ATEX 1125 X zone 1: II 2D Ex ia IIIC T85°C Db           DX13A-IDM 331         zone 1: II 2G Ex ia IIC T4 Gb zone 21: II 2D Ex ia IIIC T85°C Db           Safety technical maximum values         U <sub>i</sub> = 28 V <sub>Dc</sub> , I <sub>i</sub> = 93 mA, P <sub>i</sub> = 660 mW, C <sub>i</sub> ≤ 1 nF, L <sub>i</sub> ≤ 10 μH, the supply connections have an inner capacity of max. 27 nF to the housing           Permissible temperatures for environment         -25 65°C           Pin configuration         ISO 4400           Electrical connection         ISO 4400           Supply – Signal + (only 3-wire)         3 </td <td></td> <td colspan="7">100 97 11 11000</td>		100 97 11 11000							
Housing aluminium, black anodized  Seals (media wetted) FKM / others on request  Diaphragm stainless steel 1.4435 (316L)  Media wetted parts pressure port, seals, diaphragm  Miscellaneous  Current consumption signal output current: max. 25 mA signal output voltage: max. 7 mA  Weight approx. 250 g  Operational life 100 million load cycles  Ingress protection IP 65  CE-conformity EMC Directive: 2014/30/EU  ATEX Directive 2014/34/EU  Explosion protection (only for 4 20 mA / 2 wire)  Approvals  DX13A-IDM 331 Safety technical maximum values  Safety technical maximum values  Permissible temperatures for environment  Permissible temperatures for environment  Pin configuration  Electrical connection Supply + Supply - Signal + (only 3-wire)  Signal + (only 3-wire)		atainless atasl 4 4404 (240L)							
Seals (media wetted)         FKM / others on request           Diaphragm         stainless steel 1.4435 (316L)           Media wetted parts         pressure port, seals, diaphragm           Miscellaneous           Current consumption         signal output current: max. 25 mA signal output voltage: max. 7 mA           Weight         approx. 250 g           Operational life         100 million load cycles           Ingress protection         IP 65           CE-conformity         EMC Directive: 2014/30/EU           ATEX Directive         2014/34/EU           Explosion protection (only for 4 20 mA / 2 wire)           Approvals         IBEXU 08 ATEX 1125 X zone 21: II 2D Ex ia IIIC T85°C Db           DX13A-IDM 331         IBEXU 08 ATEX 1125 X zone 21: II 2D Ex ia IIIC T85°C Db           Safety technical maximum values         U₁ = 28 V <sub>DC</sub> , I₁ = 93 mA, P₁ = 660 mW, C₁ ≤ 1 nF, L₁ ≤ 10 μH, the supply connections have an inner capacity of max. 27 nF to the housing           Permissible temperatures for environment         -25 65°C           Pin configuration         ISO 4400           Electrical connection         ISO 4400           Supply + Supply - Signal + (only 3-wire)         3	<u> </u>	, ,							
Diaphragm		·							
Media wetted parts  Miscellaneous  Current consumption  signal output current: max. 25 mA signal output voltage: max. 7 mA  Weight  Operational life  100 million load cycles Ingress protection  IP 65  CE-conformity  EMC Directive: 2014/30/EU  Explosion protection (only for 4 20 mA / 2 wire)  Approvals  DX13A-IDM 331  Safety technical maximum values  Safety technical maximum values  Permissible temperatures for environment  Pin configuration  Electrical connection  Supply +  Supply -  Signal + (only 3-wire)  signal output current: max. 25 mA  max. 27 mA  approx. 25 up. 2014/30/EU  sagnal - (all 2 maximum values)  Signal + (only 3-wire)  Pressure port, seals, diaphragm  max. 25 mA  max. 25 mA  max. 25 mA  max. 25 mA  max. 27 mA  approx. 25 max. 7 mA  approx. 26 max. 27 mF to the housing  ISO 4400  Supply +  Supply -  Signal + (only 3-wire)  3									
Current consumption  Signal output current: max. 25 mA max. 7 mA  Weight approx. 250 g  Operational life 100 million load cycles Ingress protection IP 65  CE-conformity EMC Directive: 2014/30/EU  ATEX Directive 2014/34/EU  Explosion protection (only for 4 20 mA / 2 wire)  Approvals  DX13A-IDM 331  Safety technical maximum values  Permissible temperatures for environment  Permissible temperatures for environment  Electrical connection  Supply + Supply - Signal + (only 3-wire)  Signal + (only 3-wire)  Signal output current: max. 25 mA max. 7 mA  max. 7 ma  max. 7									
Current consumption signal output current: signal output current: signal output voltage: max. 7 mA   Weight approx. 250 g   Operational life 100 million load cycles   Ingress protection IP 65   CE-conformity EMC Directive: 2014/30/EU   ATEX Directive 2014/34/EU   Explosion protection (only for 4 20 mA / 2 wire)   Approvals IBEXU 08 ATEX 1125 X   DX13A-IDM 331 zone 1: II 2G Ex ia IIC T4 Gb zone 21: II 2D Ex ia IIIC T85°C Db   Safety technical maximum values U <sub>i</sub> = 28 V <sub>DC</sub> , I <sub>i</sub> = 93 mA, P <sub>i</sub> = 660 mW, C <sub>i</sub> ≤ 1 nF, L <sub>i</sub> ≤ 10 μH, the supply connections have an inner capacity of max. 27 nF to the housing   Permissible temperatures for environment -25 65°C   Pin configuration ISO 4400   Electrical connection ISO 4400   Supply + Supply - Signal + (only 3-wire) 3	•	pressure port, seals, diaphragm							
Signal output voltage: max. 7 mA	Miscellaneous								
Weight approx. 250 g Operational life 100 million load cycles Ingress protection IP 65 CE-conformity EMC Directive: 2014/30/EU ATEX Directive 2014/34/EU Explosion protection (only for 4 20 mA / 2 wire) Approvals DX13A-IDM 331 IBEXU 08 ATEX 1125 X Zone 1: II 2G Ex ia IIC T4 Gb Zone 21: II 2D Ex ia IIIC T85°C Db Ui = 28 VDc, Ii = 93 mA, Pi = 660 mW, Ci ≤ 1 nF, Li ≤ 10 µH, the supply connections have an inner capacity of max. 27 nF to the housing Permissible temperatures for environment Pin configuration Electrical connection ISO 4400 Supply + Supply - Signal + (only 3-wire) 3	Current consumption		mA						
Operational life         100 million load cycles           Ingress protection         IP 65           CE-conformity         EMC Directive: 2014/30/EU           ATEX Directive         2014/34/EU           Explosion protection (only for 4 20 mA / 2 wire)         IBEXU 08 ATEX 1125 X           Approvals         IBEXU 08 ATEX 1125 X           DX13A-IDM 331         zone 1: II 2G Ex ia IIC T4 Gb zone 21: II 2D Ex ia IIIC T85°C Db           Safety technical maximum values         U₁ = 28 V <sub>DC</sub> , I₁ = 93 mA, P₁ = 660 mW, C₁ ≤ 1 nF, L₁ ≤ 10 μH, the supply connections have an inner capacity of max. 27 nF to the housing           Permissible temperatures for environment         -25 65°C           Pin configuration         ISO 4400           Electrical connection         ISO 4400           Supply + Supply - Signal + (only 3-wire)         2           Signal + (only 3-wire)         3		signal output voltage: max. 7 m							
Ingress protection	Weight								
CE-conformity EMC Directive: 2014/30/EU  ATEX Directive 2014/34/EU  Explosion protection (only for 4 20 mA / 2 wire)  Approvals IBExU 08 ATEX 1125 X	Operational life	100 million load cycles							
CE-conformity EMC Directive: 2014/30/EU  ATEX Directive 2014/34/EU  Explosion protection (only for 4 20 mA / 2 wire)  Approvals IBExU 08 ATEX 1125 X	Ingress protection	·= ·=							
ATEX Directive  Explosion protection (only for 4 20 mA / 2 wire)  Approvals  DX13A-IDM 331  Safety technical maximum values  Permissible temperatures for environment  Pin configuration  Electrical connection  Supply + Supply - Signal + (only 3-wire)  Explosion protection (only for 4 20 mA / 2 wire)  BEXU 08 ATEX 1125 X  Zone 1: II 2G Ex ia IIIC T4 Gb zone 21: II 2D Ex ia IIIC T85°C Db  Zone 21: II 2D Ex ia IIIC T85°C Db  Zone 21: II 2D Ex ia IIIC T85°C Db  IN Zone 21: II 2	CE-conformity	EMC Directive: 2014/30/EU							
Approvals DX13A-IDM 331 Safety technical maximum values	ATEX Directive								
Approvals DX13A-IDM 331 Safety technical maximum values									
DX13A-IDM 331 zone 1: II 2G Ex ia IIC T4 Gb zone 21: II 2D Ex ia IIIC T85°C Db  Safety technical maximum values $U_i = 28 \ V_{DC}, \ I_i = 93 \ mA, \ P_i = 660 \ mW, \ C_i \le 1 \ nF, \ L_i \le 10 \ \mu H,$ the supply connections have an inner capacity of max. 27 nF to the housing  Permissible temperatures for environment $-25 \dots 65^{\circ}$ C  Pin configuration  Electrical connection $\frac{\text{ISO 4400}}{\text{Supply + Supply - Signal + (only 3-wire)}}$		<u>'</u>							
Safety technical maximum values $U_i = 28 \ V_{DC}, \ I_i = 93 \ mA, \ P_i = 660 \ mW, \ C_i \le 1 \ nF, \ L_i \le 10 \ \mu H,$ the supply connections have an inner capacity of max. 27 nF to the housing Permissible temperatures for environment $-25 \dots 65^{\circ} C$ Pin configuration  Electrical connection $SO = 100 \times 10$									
Permissible temperatures for environment  -25 65°C  Pin configuration  Electrical connection  Supply + 1 Supply - 2 Signal + (only 3-wire)  -25 65°C  -25 65°C  -25 65°C  -26 65°C  -27 65°C  -28 65°C  -29 65°C  -20 65°C  -20 65°C  -20 65°C  -20 65°C	Safety technical maximum values	$U_i = 28 \text{ V}_{DC}$ , $I_i = 93 \text{ mA}$ , $P_i = 660 \text{ mW}$ , $C_i \le 1 \text{ nF}$ , $L_i \le 10 \mu\text{H}$ ,							
Pin configuration           Electrical connection         ISO 4400           Supply + Supply - Signal + (only 3-wire)         2           Signal + (only 3-wire)         3	Permissible temperatures for	· · · ·							
Supply +   1   Supply -   2   Signal + (only 3-wire)   3									
Supply +         1           Supply -         2           Signal + (only 3-wire)         3	Pin configuration								
Supply –         2           Signal + (only 3-wire)         3	Electrical connection	ISO 4400							
Signal + (only 3-wire) 3									
2 3 2 (2 7 2 2)									
Shield around pin	• , ,								
2. a b	Shield		ground pin						

## Differential Pressure Transmitter





Tel.: 03303 / 504066

Fax: 03303 / 504068