



# **DMP 331**

Industrial Pressure Transmitter for Low Pressure

Stainless Steel Sensor

accuracy according to IEC 60770: standard: 0.35 % FSO option: 0.25 / 0.1 % FSO

### Nominal pressure

from 0 ... 100 mbar up to 0 ... 60 bar

### **Output signals**

2-wire: 4 ... 20 mA 3-wire: 0 ... 20 mA / 0 ... 10 V others on request

### **Special characteristic**

- perfect thermal behaviour
- excellent long term stability
- pressure port
  G 1/2" flush from 100 mbar

### **Optional versions**

- IS-version
  Ex ia = intrinsically safe for gases and dusts
- SIL 2-according to IEC 61508 / IEC 61511
- welded pressure sensor
- customer specific versions

The pressure transmitter DMP 331 can be used in all industrial areas when the medium is compatible with stainless steel 1.4404 (316 L) or 1.4435 (316 L). Additional are different elastomer seals as well as a helium tested welded version available.

The modulare concept of the device allows to combine different stainless steel sensors and electronic modules with a variety of electrical and mechanical versions.Thus a diversity of variations is created, meeting almost all requirements in industrial applications.

### Preferred areas of use are



Plant and machine engineering



Environmental engineering (water - sewage - recycling)



Energy industry



1									
Input pressure range			0.40	0.10		0.10		i .	
Nominal pressure gauge	[bar]		0.10	0.16	0.25	0.40	0.60	1	1.6
Nominal pressure abs.	[bar]		-	-	-	0.40	0.60	1	1.6
Overpressure	[bar]	1	0.5	1	1	2	5	5	10
Burst pressure ≥	[bar]	7.5	1.5	1.5	1.5	3	7.5	7.5	15
				1	1		1	1	
Nominal pressure		2.5	4	6	10	16	25	40	60
gauge / abs.	[bar]				-				
Overpressure	[bar]	10	20	40	40	80	80	105	105
Burst pressure ≥	[bar]	15	25	50	50	120	120	210	210
Vacuum resistance			unlimited vac	uum resista	ance				
		$P_N < 1$ bar: 0	on request						
Output signal / Supply									
Standard		2-wire: 4		0 -				V <sub>s</sub> = 14 2	
Option IS-protection		2-wire: 4		V <sub>S</sub> = 10 .			SIL-version:	V <sub>S</sub> = 14 2	8 V <sub>DC</sub>
Options 3-wire		3-wire: 0	. 20 mA /	0					
		0	. 10 V /	V <sub>s</sub> = 14 .	30 V <sub>DC</sub>				
Performance									
Accuracy <sup>1</sup>		standard:	nominal pres			50 % FSO			
			nominal pres	ssure ≥ 0.4	bar: ≤ ± 0.3	35 % FSO			
	option 1:	nominal pres	ssure ≥ 0.4	bar: $\leq \pm 0.2$	25 % FSO				
		option 2:	for all nomin	al pressure	: ≤ ± 0.	10 % FSO			
Permissible load		current 2-wi			<sub>iin</sub> ) / 0.02 A] Ω				
		current 3-wi		240 Ω	-				
		voltage 3-wi		10 kΩ					
Influence effects			5 % FSO / 10				load: 0.05 %	% FSO / kΩ	
Long term stability			SO / year at i		onditions				
Response time		2-wire: ≤ 10					3-wire: ≤ 3 r	nsec	
<sup>1</sup> accuracy according to IEC 607	770 <u> </u>			arity hysteres	is reneatability)		0 1110. 201	1000	
Thermal effects (Offset an				any, nysteres	is, repeatability)				
· · · · · · · · · · · · · · · · · · ·		· •							
			1 0		- 0	40		> 0.40	
Nominal pressure P <sub>N</sub>	[bar]		-10			.40		≥ 0.40	
Tolerance band [%	6 FSO]		≤±0.75		≤ :	£ 1		≤±0.75	
Tolerance band [% in compensated range	6 FSO] [°C]				≤ :				
Tolerance band [% in compensated range Permissible temperatures	6 FSO] [°C]		≤±0.75		≤ : 0	£ 1		≤±0.75	
Tolerance band [% in compensated range	6 FSO] [°C]	medium:	≤±0.75 -2085	-40 1	≤ : 0 25 °C	£ 1		≤±0.75	
Tolerance band [% in compensated range Permissible temperatures	6 FSO] [°C]	medium: electronics /	≤±0.75	t: -40	≤ : 0 25 °C 85 °C	£ 1		≤±0.75	
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures	6 FSO] [°C]	medium:	≤±0.75 -2085		≤ : 0 25 °C 85 °C	£ 1		≤±0.75	
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Electrical protection	6 FSO] [°C]	medium: electronics /	≤±0.75 -2085	t: -40	≤ : 0 25 °C 85 °C	£ 1		≤±0.75	
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Electrical protection      Short-circuit protection    Short-circuit protection	6 FSO] [°C]	medium: electronics / storage: permanent	≤ ± 0.75 -20 85 ′ environmen	t: -40 -40 1	≤ : 0 25 °C 85 °C	£ 1		≤±0.75	
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Electrical protection      Short-circuit protection    Reverse polarity protection	6 FSO] [°C] 5	medium: electronics / storage: permanent no damage,	≤ ± 0.75 -20 85 ' environmen but also no f	t: -40 1 -40 1	≤ : 0 25 °C 85 °C 00 °C	£ 1		≤±0.75	
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Electrical protection      Short-circuit protection    Short-circuit protection	6 FSO] [°C] 5	medium: electronics / storage: permanent no damage,	≤ ± 0.75 -20 85 ′ environmen	t: -40 1 -40 1	≤ : 0 25 °C 85 °C 00 °C	£ 1		≤±0.75	
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Electrical protection      Short-circuit protection    Reverse polarity protection	6 FSO] [°C] 5	medium: electronics / storage: permanent no damage,	≤ ± 0.75 -20 85 ' environmen but also no f	t: -40 1 -40 1	≤ : 0 25 °C 85 °C 00 °C	£ 1		≤±0.75	
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Electrical protection      Short-circuit protection    Reverse polarity protection      Electromagnetic compatibilities    Electromagnetic compatibilities	6 FSO] [°C] 5	medium: electronics / storage: permanent no damage, emission an	≤ ± 0.75 -20 85 ' environmen but also no f d immunity a	t: -40 1 -40 1 function	≤ : 0 25 °C 85 °C 00 °C	£ 1 . 70		≤±0.75	
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Reverse polarity protection    Electromagnetic compatibility      Mechanical stability    Total stability	6 FSO] [°C] 5	medium: electronics / storage: permanent no damage, emission an	≤ ± 0.75 -20 85 <sup>7</sup> environmen but also no 1 d immunity a 25 2000 H	t: -40 1 -40 1 function according to z) accordir	≤ : 0 25 °C 85 °C 00 °C EN 61326	£ 1 . 70 0068-2-6		≤±0.75	
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Reverse polarity protection    Electromagnetic compatibility      Mechanical stability    Vibration	6 FSO] [°C] 5	medium: electronics / storage: permanent no damage, emission an 10 g RMS (2	≤ ± 0.75 -20 85 <sup>7</sup> environmen but also no 1 d immunity a 25 2000 H	t: -40 1 -40 1 function according to z) accordir	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6	£ 1 . 70 0068-2-6		≤±0.75	
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Reverse polarity protection    Electromagnetic compatibility      Wibration    Shock      Materials    Materials	6 FSO] [°C] 5	medium: electronics / storage: permanent no damage, emission an 10 g RMS (; 500 g / 1 ms	≤ ± 0.75 -20 85 ' environmen but also no f d immunity a 25 2000 H sec	t: -40 1 -40 1 function according to z) accordir accordir	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6	£ 1 . 70 0068-2-6		≤±0.75	
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Reverse polarity protection    Electromagnetic compatibility      Wechanical stability    Vibration      Shock    Materials      Pressure port    Pressure port	6 FSO] [°C] 5	medium: electronics / storage: permanent no damage, emission an 10 g RMS (; 500 g / 1 ms stainless ste	≤ ± 0.75 -20 85 ' environmen but also no 1 d immunity a 25 2000 H sec eel 1.4404 (3	t: -40 1 -40 1 function according to z) accordir accordir 16 L)	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6	£ 1 . 70 0068-2-6		≤±0.75	
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Reverse polarity protection    Electromagnetic compatibili      Mechanical stability    Vibration      Shock    Materials      Pressure port    Housing	6 FSO] [°C]	medium: electronics / storage: permanent no damage, emission an 10 g RMS (2 500 g / 1 ms stainless ste stainless ste	≤ ± 0.75 -20 85 7 environmen but also no f d immunity a 25 2000 H sec eel 1.4404 (3 eel 1.4404 (3	t: -40 1 -40 1 function according to z) accordir accordir 16 L) 16 L)	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6	£ 1 . 70 0068-2-6 0068-2-27		≤ ± 0.75 -20 85	5
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Reverse polarity protection    Electromagnetic compatibili      Mechanical stability    Vibration      Shock    Materials      Pressure port    Housing      Option compact field housin    Percent	6 FSO] [°C]	medium: electronics / storage: permanent no damage, emission an 10 g RMS (/ 500 g / 1 ms stainless ste stainless ste stainless ste	≤ ± 0.75 -20 85 ' environmen but also no 1 d immunity a 25 2000 H sec eel 1.4404 (3 sel 1.4404 (3 sel 1.4301 (30	t: -40 1 -40 1 function according to z) accordir accordir 16 L) 16 L)	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6	£ 1 . 70 0068-2-6 0068-2-27	el plated (clar	≤ ± 0.75 -20 85	5
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Reverse polarity protection    Electromagnetic compatibili      Mechanical stability    Vibration      Shock    Materials      Pressure port    Housing	6 FSO] [°C]	medium: electronics / storage: permanent no damage, emission an 10 g RMS (2 500 g / 1 ms stainless ste stainless ste stainless ste stainless ste stainless ste	≤ ± 0.75 -20 85 7 environmen but also no f d immunity a 25 2000 H sec eel 1.4404 (3 eel 1.4404 (3 eel 1.4301 (3) FKM	t: -40 1 -40 1 function according to z) accordir accordir 16 L) 16 L)	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6	£ 1 . 70 0068-2-6 0068-2-27	el plated (clar	≤ ± 0.75 -20 85	5
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Reverse polarity protection    Electromagnetic compatibili      Mechanical stability    Vibration      Shock    Materials      Pressure port    Housing      Option compact field housin    Percent	6 FSO] [°C]	medium: electronics / storage: permanent no damage, emission an 10 g RMS (; 500 g / 1 ms stainless ste stainless ste stainless ste stainless ste stainless ste stainless ste	≤ ± 0.75 -20 85 ' environmen but also no 1 d immunity a 25 2000 H sec eel 1.4404 (3 eel 1.4404 (3 eel 1.4404 (3 eel 1.4301 (3) FKM EPDM	t: -40 1 -40 1 function according to z) accordin accordin 16 L) 16 L) 04); cable g	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6 gland M12x1.5	£ 1 . 70 0068-2-6 0068-2-27	· · ·	≤ ± 0.75 -20 85	5 5 2 8 mm)
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Reverse polarity protection    Electromagnetic compatibility      Wibration    Shock      Materials    Pressure port      Housing    Option compact field housin	6 FSO] [°C]	medium: electronics / storage: permanent no damage, emission an 10 g RMS (; 500 g / 1 ms stainless ste stainless ste stainless ste stainless ste stainless ste	≤ ± 0.75 -20 85 ' environmen' but also no 1 d immunity a 25 2000 H sec eel 1.4404 (3 eel 1.4404 (3 eel 1.4404 (3 eel 1.4301 (3 FKM EPDM welded versic	t: -40 1 -40 1 function according to z) accordin accordin 16 L) 16 L) 16 L) 04); cable g	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6 gland M12x1.5	£ 1 . 70 0068-2-6 0068-2-27	· · ·	≤ ± 0.75 -20 85	5 5 2 8 mm)
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Short-circuit protection    Reverse polarity protection      Electromagnetic compatibilit    Mechanical stability      Vibration    Shock      Materials    Pressure port      Housing    Option compact field housin      Seals    Diaphragm	6 FSO] [°C]	medium: electronics / storage: permanent no damage, emission an 10 g RMS (/ 500 g / 1 ms stainless ste stainless ste stainless ste stainless ste stainless ste stainless ste	≤ ± 0.75 -20 85 ' environmen' but also no 1 d immunity a 25 2000 H sec eel 1.4404 (3 eel 1.4404 (3 eel 1.4404 (3 eel 1.4404 (3 eel 1.4405 (3)	t: -40 1 -40 1 function according to z) accordin accordin 16 L) 16 L) 04); cable g	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6 gland M12x1.5	£ 1 . 70 0068-2-6 0068-2-27	· · ·	≤ ± 0.75 -20 85	5 5 2 8 mm)
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Short-circuit protection    Reverse polarity protection      Electromagnetic compatibilit    Mechanical stability      Vibration    Shock      Materials    Pressure port      Housing    Option compact field housin      Seals    Diaphragm      Media wetted parts    Media	ity	medium: electronics / storage: permanent no damage, emission an 10 g RMS (/ 500 g / 1 ms stainless ste stainless ste stainless ste stainless ste stainless ste stainless ste stainless ste pressure po	≤ ± 0.75 -20 85 ' environmen' but also no 1 d immunity a 25 2000 H sec eel 1.4404 (3 eel 1.4404 (3 eel 1.4404 (3 eel 1.4404 (3 eel 1.4404 (3 eel 1.4405 (3 FKM EPDM welded versic eel 1.4435 (3 rt, seals, diag	t: -40 1 -40 1 function according to z) accordir accordir 16 L) 16 L) 04); cable g 0n <sup>2</sup> (for P <sub>N</sub> ≤ 16 L) phragm	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6 gland M12x1.5	£ 1 . 70 0068-2-6 0068-2-27	· · ·	≤ ± 0.75 -20 85	5 5 2 8 mm)
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Short-circuit protection    Reverse polarity protection      Electromagnetic compatibilit    Mechanical stability      Vibration    Shock      Materials    Pressure port      Housing    Option compact field housin      Seals    Diaphragm      Media wetted parts    ² welded version only with press	6 FSO] [°C] ity ng sure por	medium: electronics / storage: permanent no damage, emission an 10 g RMS (; 500 g / 1 ms stainless ste stainless ste stainless ste stainless ste stainless ste pressure po ts according to	≤ ± 0.75 -20 85 ' environmen' but also no f d immunity a 25 2000 H sec eel 1.4404 (3 eel 1.4404 (3 eel 1.4404 (3 eel 1.4404 (3 eel 1.4404 (3 eel 1.4404 (3 eel 1.4405 (3 FKM EPDM welded versic eel 1.4435 (3 rt, seals, diap <i>EN 837</i> , <i>P</i> <sub>N</sub> ≤ 4	t: -40 1 -40 1 function according to z) accordir accordir 16 L) 16 L) 04); cable g 0n <sup>2</sup> (for P <sub>N</sub> ≤ 16 L) phragm	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6 gland M12x1.5	£ 1 . 70 0068-2-6 0068-2-27	· · ·	≤ ± 0.75 -20 85	5 5 2 8 mm)
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Short-circuit protection    Reverse polarity protection      Electromagnetic compatibilition    Shock      Materials    Pressure port      Housing    Option compact field housin      Seals    Diaphragm      Media wetted parts    2 welded version only with press      Explosion protection (only    State of the seales	6 FSO] [°C] ity ng sure por	medium: electronics / storage: permanent no damage, emission an 10 g RMS (; 500 g / 1 ms stainless ste stainless ste stainless ste standard: options: stainless ste pressure po ts according to 20 mA / 2	$\leq \pm 0.75$ -20 85 -20 85 -20 85 -20 85 -20 85 -20 85 -20 85 -20 900 H -20 2000 H -20	t: -40 1 -40 1 function according to z) accordin accordin 16 L) 16 L) 04); cable g 00 $^2$ (for P <sub>N</sub> s 16 L) phragm 40 bar	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6 gland M12x1.5 ≤ 40 bar)	£ 1 . 70 0068-2-6 0068-2-27	· · ·	≤ ± 0.75 -20 85	5 5 2 8 mm)
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Short-circuit protection    Reverse polarity protection      Electromagnetic compatibilit    Mechanical stability      Vibration    Shock      Materials    Pressure port      Housing    Option compact field housin      Seals    Diaphragm      Media wetted parts    ² welded version only with press      Explosion protection (only	6 FSO] [°C] ity ng sure por	medium: electronics / storage: permanent no damage, emission an 10 g RMS (; 500 g / 1 ms stainless ste stainless ste stainless ste standard: options: stainless ste pressure po ts according to 20 mA / 2 IBExU 10 A	$\leq \pm 0.75$ -20 85 -20 85 -20 85 -20 85 -20 85 -20 85 -20 85 -20 85 -20 2000 H -25 2000 H -25 2000 H -25 2000 H -26 200	t: -40 1 -40 1 function according to z) accordin accordin 16 L) 16 L) 04); cable g $\frac{16}{10}$ $\frac{16}{10}$ phragm 40 bar	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6 gland M12x1.5	£ 1 . 70 0068-2-6 0068-2-27	· · ·	≤ ± 0.75 -20 85	5 5 2 8 mm)
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Short-circuit protection    Reverse polarity protection      Electromagnetic compatibilition    Shock      Materials    Pressure port      Housing    Option compact field housin      Seals    Diaphragm      Media wetted parts    2 welded version only with press      Explosion protection (only    State of the seales	6 FSO] [°C] ity ng sure por	medium: electronics / storage: permanent no damage, emission an 10 g RMS (/ 500 g / 1 ms stainless ste stainless ste stainless ste stainless ste stainless ste pressure po ts according to 20 mA / 2 IBExU 10 A zone 0:	$\leq \pm 0.75$ -20 85 -20 85 -20 85 -20 85 -20 85 -20 85 -20 2000 H -20	t: -40 1 -40 1 function according to z) accordin accordin to L) 16 L) 04); cable g 01 L) phragm 40 bar / IECEX I C T4 Ga	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6 gland M12x1.5 ≤ 40 bar)	£ 1 . 70 0068-2-6 0068-2-27	· · ·	≤ ± 0.75 -20 85	5 5 2 8 mm)
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Reverse polarity protection    Reverse polarity protection      Electromagnetic compatibility    Vibration      Shock    Materials      Pressure port    Housing      Option compact field housin    Seals      Diaphragm    Media wetted parts      ² welded version only with press    Explosion protection (only      Approvals    DX19-DMP 331	6 FSO] [°C] s ity ng sure por y for 4	medium: electronics / storage: permanent no damage, emission an 10 g RMS (/ 500 g / 1 ms stainless sta stainless sta stainless sta stainless sta stainless sta pressure po ts according to 20 mA / 2 IBExU 10 A zone 0: zone 20:	$\leq \pm 0.75$ -20 85 ' environmen' but also no 1 d immunity a 25 2000 H sec 26 1.4404 (3 26 1.4405 (3 27 1.4405 (3) rt, seals, diap <i>EN 837, P<sub>N</sub></i> $\leq 4$ <b>-wire)</b> TEX 1068 X I 1G Ex ia IIC I 1D Ex ia IIC	t: -40 1 -40 1 function according to z) accordin accordin to L) 16 L) 16 L) 04); cable g 04); cable g 04); cable g 16 L) phragm 40 bar / IECEX I C T4 Ga C T 85°C D	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6 gland M12x1.5 ≤ 40 bar)	± 1 . 70 0068-2-6 0068-2-27 , brass, nicke	· · ·	≤ ± 0.75 -20 85	5 5 2 8 mm)
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Short-circuit protection    Reverse polarity protection      Electromagnetic compatibilit    Mechanical stability      Vibration    Shock      Materials    Pressure port      Housing    Option compact field housin      Seals    Diaphragm      Media wetted parts    ² welded version only with press      Explosion protection (only	6 FSO] [°C] s ity ng sure por y for 4	medium: electronics / storage: permanent no damage, emission an 10 g RMS (/ 500 g / 1 ms stainless sta stainless sta stainless sta stainless sta stainless sta pressure po ts according to 20 mA / 2 IBExU 10 A zone 0: U <sub>i</sub> = 28 V, I <sub>i</sub>	$\leq \pm 0.75$ -20 85 ' environmen' but also no 1 d immunity a 25 2000 H sec 26 1.4404 (3 26 1.4405 (3 27 1.4405 (3) 7 KM welded versic 26 1.4435 (3) 7 KM 27 1.4435 (3) 7 KM 28 1.4435 (3) 7 KM 29 M 20 1.4435 (3) 7 KM 20 1	t: -40 1 -40 1 function according to z) accordin accordin 16 L) 16 L) 16 L) 04); cable g $\frac{2}{16}$ (for P <sub>N</sub> = 16 L) phragm 40 bar / IECEX I C T4 Ga C T 85°C D = 660 mW,	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6 gland M12x1.5 ≤ 40 bar) BE 12.0027X a C <sub>i</sub> ≈ 0 nF, L <sub>i</sub> ≈ 1	± 1 . 70 0068-2-6 0068-2-27 , brass, nicke	oth	≤ ± 0.75 -20 85	5 5 2 8 mm)
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Short-circuit protection    Reverse polarity protection      Electromagnetic compatibili    Mechanical stability      Vibration    Shock      Materials    Pressure port      Housing    Option compact field housin      Seals    2      Welded version only with press      Explosion protection (only      Approvals      DX19-DMP 331	6 FSO] [°C] s ity ng sure por y for 4 values	medium: electronics / storage: permanent no damage, emission an 10 g RMS (/ 500 g / 1 ms stainless sta stainless sta stainless sta stainless sta stainless sta pressure po ts according to 20 mA / 2 IBExU 10 A zone 0: U <sub>i</sub> = 28 V, I <sub>i</sub> the supply c	$\leq \pm 0.75$ -20 85 ' environmen' but also no 1 d immunity a 25 2000 H sec 25 2000 H sec 25 2000 H sec 26 1.4404 (3 26 1.4404 (3 27 1.4404 (3 28 1.4404 (3 28 1.4404 (3 29 1.4404 (3 20 1	t: -40 1 -40 1 function according to z) accordin accordin 16 L) 16 L) 04); cable g cable g cable g / IECEx I C T4 Ga C T 85°C D = 660 mW, have an inne	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6 gland M12x1.5 ≤ 40 bar) BE 12.0027X a C <sub>i</sub> ≈ 0 nF, L <sub>i</sub> ≈ 1 er capacity of n	± 1 . 70 0068-2-6 0068-2-27 , brass, nicke , brass, nicke	oth	≤ ± 0.75 -20 85	5 5 2 8 mm)
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Short-circuit protection    Reverse polarity protection      Electrical stability    Vibration      Shock    Materials      Pressure port    Housing      Option compact field housin    Seals      Diaphragm    Media wetted parts <sup>2</sup> welded version only with press    Explosion protection (only      Approvals    DX19-DMP 331      Safety technical maximum version    Permissible temperatures for	6 FSO] [°C] s ity ng sure por y for 4 values	medium: electronics / storage: permanent no damage, emission an 10 g RMS (/ 500 g / 1 ms stainless sta stainless sta stainless sta stainless sta stainless sta pressure po ts according to 20 mA / 2 IBExU 10 A zone 0: U <sub>i</sub> = 28 V, I <sub>i</sub> the supply c in zone 0:	$\leq \pm 0.75$ -20 85 -20 85 -20 85 -20 85 -20 85 -20 2000 H -25 2000 H -25 2000 H -20 H -2	t: -40 1 -40 1 function according to z) accordin accordin 16 L) 16 L) 04); cable g cable g	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6 gland M12x1.5 ≤ 40 bar) BE 12.0027X a C <sub>i</sub> ≈ 0 nF, L <sub>i</sub> ≈ 1	± 1 . 70 0068-2-6 0068-2-27 , brass, nicke , brass, nicke	oth	≤ ± 0.75 -20 85	5 5 2 8 mm)
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Short-circuit protection    Reverse polarity protection      Electromagnetic compatibili    Mechanical stability      Vibration    Shock      Materials    Pressure port      Housing    Option compact field housin      Seals    2      welded version only with press    Explosion protection (only      Approvals    DX19-DMP 331      Safety technical maximum version    Permissible temperatures for environment	6 FSO] [°C] s ity ng sure por y for 4 values or	medium: electronics / storage: permanent no damage, emission an 10 g RMS (/ 500 g / 1 ms stainless sta stainless sta stainless sta stainless sta pressure po ts according to 20 mA / 2 IBExU 10 A zone 0: U <sub>i</sub> = 28 V, I <sub>i</sub> the supply c in zone 1 or	$\leq \pm 0.75$ -20 85 ' environmen' but also no 1 d immunity a 25 2000 H 3ec 25 2000 H 3ec 26 200 H 3ec 20 H 20	t: -40 1 -40 1 function according to z) accordin accordin 16 L) 16 L) 04); cable g cable g	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6 gland M12x1.5 ≤ 40 bar) BE 12.0027X a C <sub>i</sub> ≈ 0 nF, L <sub>i</sub> ≈ 1 er capacity of n ith p <sub>atm</sub> 0.8 bar	± 1 . 70 0068-2-6 0068-2-27 , brass, nicke , brass, nicke 0 μH, nax. 27 nF tc up to 1.1 ba	oth othe housing r	≤ ± 0.75 -20 85	5 5 2 8 mm)
Tolerance band    [%      in compensated range    Permissible temperatures      Permissible temperatures    Permissible temperatures      Permissible temperatures    Permissible temperatures      Electrical protection    Short-circuit protection      Short-circuit protection    Reverse polarity protection      Electromagnetic compatibility    Wibration      Shock    Materials      Pressure port    Housing      Option compact field housin    Seals      Diaphragm    Media wetted parts <sup>2</sup> welded version only with press    Explosion protection (only Approvals DX19-DMP 331      Safety technical maximum versible temperatures for	6 FSO] [°C] s ity ng sure por y for 4 values or	medium: electronics / storage: permanent no damage, emission an 10 g RMS (/ 500 g / 1 ms stainless sta stainless sta stainless sta stainless sta stainless sta pressure po ts according to 20 mA / 2 IBExU 10 A zone 0: U <sub>i</sub> = 28 V, I <sub>i</sub> the supply c in zone 0:	$\leq \pm 0.75$ -20 85 ' environmen' but also no 1 d immunity a 25 2000 H 3ec 25 2000 H 3ec 26 2000 H 3ec 27 2000 H 3ec 26 2000 H 3ec 26 2000 H 3ec 26 2000 H 3ec 27 2000 H 3ec 26 2000 H 3ec 26 2000 H 3ec 26 2000 H 3ec 26 2000 H 3ec 26 2000 H 3ec 27 2000 H 3ec 26 200 H 3ec 26 200 H 3ec 26 200 H 3ec 26 200 H 3ec 26 200 H 3ec 27 200 H 3ec 26 200 H 3ec 26 200 H 3ec 26 200 H 3ec 27 200 H 3ec 26 200 H 3ec 27 200 H 3ec 26 200 H 3ec 27 200 H 3ec 20 200 H 3ec 20 H 3	t: -40 1 -40 1 function according to z) accordin according to z) accordin accordin 16 L) 16 L) 04); cable g cable g cab	≤ : 0 25 °C 85 °C 00 °C EN 61326 ng to DIN EN 6 ng to DIN EN 6 gland M12x1.5 ≤ 40 bar) BE 12.0027X a C <sub>i</sub> ≈ 0 nF, L <sub>i</sub> ≈ 1 er capacity of n	E 1 . 70 0068-2-6 0068-2-27 , brass, nicke , brass, nicke 0 μH, nax. 27 nF tc up to 1.1 ba ine/signal lin	othe the housing r e: 160 pF/m	≤ ± 0.75 -20 85	5 5 2 8 mm)

## DMP 331 Industrial Pressure Transmitter



<sup>6</sup> different cable types and lengths available, permissible temperature depends on kind of cable

DMP 331 Industrial Pressure Transmitter



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	Ordering co	de DMP 3	331		
DMP 331		]-[]-[]]	]-[]-[		
Pressure gauge	1 1 0				
absolute 1 Input [bar]					_
0.10 1	1 0 0 0				
0.16 <sup>1</sup> 0.25 <sup>1</sup>	1 6 0 0 2 5 0 0				
0.40 0.60	4 0 0 0 6 0 0 0				
1.0	1 0 0 1				
1.6 2.5	1 6 0 1 2 5 0 1				
4.0 6.0	4 0 0 1 6 0 0 1				
10	1 0 0 2				
16 25	$\begin{array}{cccc} 1 & 6 & 0 & 2 \\ 2 & 5 & 0 & 2 \\ 4 & 0 & 0 & 2 \end{array}$				
40 60	6 0 0 2				
-1 0 customer	X 1 0 2 9 9 9 9				
Output					cons
4 20 mA / 2-wire 0 20 mA / 3-wire		2			
0 … 10 V / 3-wire intrinsic safety 4 … 20 mA / 2-wire	3	3			
SIL2 4 20 mA / 2-wire		S			
SIL2 with intrinsic safety 4 20 mA / 2-wire		S			
customer Accuracy	9	9			cons
standard for $P_N \ge 0.4$ bar: 0.35 % FSO		3			
pption 1 for $P_N \ge 0.4$ bar: 0.25 % FSO		5 2			
option 2: 0.10 % FSO <sup>2</sup> customer		1 9			cons
Electrical connection male and female plug ISO 4400		1 0 0	0		
male plug Binder series 723 (5-pin)		2 0	0		
cable outlet with PVC cable (IP67) <sup>3</sup> cable outlet,		T A C	0		
cable with ventilation tube (IP68) <sup>4</sup> male plug M12x1 (4-pin) / metal		M 1 0			
Bayonet MIL-C-26482 (10-6); 2 wire		BG	0		
Bayonet MIL-C-26482 (10-6); 3 wire compact field housing		B G 4 8 5 0	0		
stainless steel 1.4301 (304) customer		999			cons
Mechanical connection		0 0 1			
G1/2" DIN 3852 G1/2" EN 837			1 0 0 2 0 0		
G1/4" DIN 3852 G1/4" EN 837			3 0 0 4 0 0		
G1/2" DIN 3852 with flush sensor 5			F 0 0		
G1/2" DIN 3852 open pressure port 5					
1/2" NPT 1/4" NPT			N 0 0 N 4 0		
customer Seals			999		cons
FKM EPDM				1 3	
without (welded version) 5,	3			2	
customer Special version				9	cons
standard customer				0 0 0 9 9 9	cons
Cusiomer				9 9 9	CON
psolute pressure possible from 0.4 bar ot in combination with SIL					
andard: 2 m PVC cable without ventilation tube (permis		on request			
de TR0 = PVC cable, cable with ventilation tube availation for $P_N \le 40$ bar	ble in different types and lengths				
elded version only with pressure ports according to EN	837				
					01.0