NIPRESS

PRESSURE SWITCHES, PRESSURE TRANSMITTERS AND DIFFERENTIAL PRESSURE TRANSMITTERS











Features

- Advanced pressure measuring technologies
- Relative and absolute pressure measurement
- Devices for nearly all mediums
- Several accuracy classes
- Several mounting options
- Excellent overload resistance
- 2- or 3-wire systems

- Devices with lots of different electrical and process connections
- Solutions for rough conditions (aggressive medium, wide temperature range, dynamic pressure changes)
- Solutions for stringent hygienic requirements
- Excellent price/value ratio
- 5 years warranty

In the world of industrial metrology, monitoring and controlling the pressure of fluids and gases and the processing of the measured results are of the highest priority.

NIVELCO covers the needs of several industries and application areas with the wide selection of the **NIPRESS** family.

NIPRESS DK

Devices with or without display,

Measuring range: -1...600 bar (-14.5...8700 psi)

NIPRESS pressure switches are used in hydraulic and pneumatic applications for monitoring and controlling the pressure via switching outputs. Due to the simple handling as well as the variety of software features (switching points and hysteresis freely configurable, delay function, storing min-/max-value, scalable display and analog output signal, etc.) the pressure switches with display are especially suitable for general plant and machine construction and processing industry applications.

NIPRESS D

Measurement of vacuum, overpressure and absolute pressure, Measuring range: -1...2200 bar (-14.5...31910 psi)

NIPRESS pressure transmitters with multiple sensor technologies combined with various housing materials can be used for almost all relative or absolute fluid or gas pressure measurement tasks requiring different accuracy. Their design, high overload capability and the possibility to install the units in any physical position makes them suitable for a wide range of industrial applications..

NIPRESS DD

For differential pressure measurement, Measuring range: 0...70 bar (0...1075 psi)

NIPRESS differential pressure transmitters are available with different sensor technologies combined with compact stainless steel or cast aluminum or plastic housings. The wide variety of the product range can measure the pressure of numerous fluids and gases, monitor ventilation ducts, filters and fans in HVAC areas as well as measure the level in closed, pressurized tanks.

	PRESSURE SWITCHES						
Туре	3-wire min		3 / 4-wire mini compact				
	Silicon (inner	*	Ceramic (inne	er diaphragm)			
Sensor	Sensor seal: NBR	Process connection: Aluminum	Sensor seal: FKM (optional: EPDM)	<u>Process connection:</u> Stainless steel			
Features	■ Configurable via PC o	 Relative pressure measurement Configurable via PC or programming device 1 or 2 PNP output 		oressure measurement or programming device NP output			
Application	= Mechanical and	 Ideal for pneumatic and vacuum applications Mechanical and plant engineering HVAC 		ngineering applications for measuring, ocess technology plant engineering industry			
		Techn	ical data				
Measuring Range	–110 bar (–1	4.5145 psi)	0400 bar (l	05800 psi)			
Accuracy			%				
Process temperature		−25+85 °C (−13+185 °F)					
Ambient temperature		−25+85 °C (−13+185 °F)					
Output		1, 2 PNP					
Supply voltage		1230 V DC					
Housing	PA 6.6 black p	olycarbonate	Stainless steel				
Process connection	⅓" BSP (inr	ner tread)	¼" E	3SP			
Electrical connection	M8:	×1	M12×1				
Weight	~35 g (~	-0.1 lb)	~90 g (~0.2 lb)				
Ingress protection	IP5	4	IPé	57			
Electrical protection		Class	II (SELV)				
Options		 15 V analogue output (with only 1 PNP output) Setting of customized switching points 		25 bar [362.5 psi], FKM seal) I free application M seal measuring method zed switching points			
	TIVSLCO MARKET CE						

DK-100

DK-200

	PRESSURE SWITCHES						
Туре		3 / 8-wire n	nini compact				
	Stainless steel (inner	or flush diaphragm)	Stainless steel (flush diaphra	gm [optional: Hastelloy® C])			
Sensor	Sensor seal: FKM, welded (others on request)	<u>Process connection:</u> Stainless steel	<u>Sensor seal:</u> FKM < +200 °C (+392 °F); FFKM > +200 °C (+392 °F)	Process connection: Stainless steel			
Features		 Relative or absolute pressure measurement 1 or 2 switch outputs Rotatable and configurable 4-digit LED display module 					
Application	= Mechanical and = H = Environment	/AC	 Ideal for viscous and pasty media Food and beverage industry Medical technology Pharmaceutical industry 				
		Techni	cal data				
Measuring range	–1600 bar (–1	4.58700 psi)	–140 bar (–	14.5580 psi)			
Accuracy		p ≥ 0.4 bar (5.8 psi): 0.25%; 0.5%					
Process temperature	−40+125 °C (–40…+257 °F)	−40+125 °C (−40 −10+125 °C (+14+				
Ambient temperature	-40+85 °C (-40+185 °F) (with integrated cable -5+70 °C [+23+158 °F])						
Output	1, 2 PNP						
Supply voltage	2-wire: stan	2-wire: standard version 1336 V DC, Ex variant*: 1528 V DC; 3-wire: 1536 V DC					
Load resistance	2	-wire: $R_{max} = [(U_{Supply} - U_{Supply min.})]$	$^{\prime}$ 0.02 A], [Ω]; 3-wire: R _{min} = 10 kΩ	Ω			
Housing		Stainle	ss steel				
Process connection	¼", ½" BSP; ¾" BSP (v ¼", ½" NPT		½", ¾", 1", 1½", 2" BSP; ¾"; 1", 1½", 2" TriClamp; M20×1.5; Sanitary DN25, DN40, DN50, Flange DN40, DN50, DN80, VARIVENT® DN40/50				
Electrical connection		ISO4400, M12×1	, integrated cable				
Weight	~160 g (-	-0.35 lb)	~160250 g (~0.350.55 lb)				
Ingress protection		IPo					
Electrical protection		Class II	I (SELV)				
Options	= Ex ia, or S = Analog 420 r = Analog 010 = Integrated = Absolute pressure measuring	nA, 2-wire output V, 3-wire output cable version	= Analog 420 = Analog 010 = Integrated = Absolute pressure measuring = Hastelloy = FFKM	SIL variant* mA , 2-wire output V , 3-wire output cable version $method (p \geq 0.4 \text{ bar } [5.8 \text{ psi}])$ C membrane sealing d compatible oil			
	2.55 © ©		bar 2.8				

DK-300 DK-400

	PRESSURE SWITCHES						
Туре	3 / 5-wire mini compact						
	Stainless steel (ir	nner diaphragm)	Ceramic (inner d	iaphragm)	Stainless steel (flush diaphragm)		
Sensor	<u>Sensor seal:</u> FKM, welded	Process connection: Stainless steel	Sensor seal: FKM (optional: EPDM, up to 160 bar [2320 psi])	Process connection: Stainless steel	Sensor seal: Process connection:		
Features		= 1 or 2 F = Rotatable and configurable	pressure measurement 'NP output e 4-digit LED display module ess steel housing		= Relative or absolute pressure measurement = 1 or 2 PNP output = Rotatable and configurable 4-digit LED display module		
Application	 Mechanical and plant engineering HVAC Environmental engineering 		For rough conditions and difficult conditions Mechanical and plant engineering Environmental engineering		 Ideal for high hygienic applications Food and beverage industry Pharmaceutical industry 		
			Technical	data			
Measuring range		–1600 bar (–	14.58700 psi)		-140 bar (-14.5580 psi)		
Accuracy	p ≥ 0.4 bar (5.8 p	osi): 0.25%; 0.5%	0.5%		p ≥ 0.4 bar (5.8 psi): 0.25%; 0.5%		
Process temperature		−40…+125 °C (-40+125 °C (-40+257 °F) (silicone oil) -10+125 °C (+14+257 °F) (food grade oil)				
Ambient temperature	-40+85 °C (-40+185 °F)						
Output	1, 2 PNP						
Supply voltage		2-wire: standard version 1336 V DC, Ex variant*: 1528 V DC, 3-wire: 24 V DC, Without analog output: 1536 V DC					
Load resistance		2-wire: R _{max}	$_{\alpha} = [(U_{\text{Supply}} - U_{\text{Supply min.}})/0.$.02 A], [Ω]; 3-wire: F	$R_{min} = 10 \text{ k}\Omega$		
Housing			Stainless s	steel			
Process connection		1/4", 1/2 1/4", 1/2			½", ¾", 1" BSP; ¾", 1", 1½", 2" TriClamp; Sanitary DN25, DN40, DN50; VARIVENT® DN40/50		
Electrical connection			M12×1 / M	112×5			
Weight		~400 g (~0.88 lb)		~500 g (~1.1 lb)		
Ingress protection			IP67				
Electrical protection			Class III (S	ELV)			
Options	= Analog 420 mA, 2 -wire output = Analog 010 V, 3 -wire output = Integrated cable version (on = Absolute pressure measuring method (p ≥ 0.4 bar $[5.8$ psi]) = Abs		■ Ex ia, or SIL v ■ Analog 420 mA, ■ Analog 010 V, 3 ■ PVDF process co (only ½" BSP, up to 6/ ■ Oxygen application (up to 25 b ■ Absolute pressure me ■ EPDM seal (up to 160	2-wire output 3-wire output onnection 0 bar [870 psi]) par [362.5 psi], FKM seal) asuring method	 Ex ia variant* High-temperature version Analog 420 mA output FFKM seal Filled with food compatible oil (up to +150 °C [302 °F]) Absolute pressure measuring method (p ≥ 1 bar [14.5 psi]) 		
	DK-	-500	DK-60		DK-700		
	DK-	-	BK-00				

FKM (optional: EPDM) Stainless steel (optional: PVDF only ½" BSP, up to 60 bar (870 psil)				PRESSURE TRANSMITTERS			
Season Final Caption of PDM Department State	Туре	5 / 8-wire m	ini compact		2 / 3-wire m	ini compact	
Searce and Food (captionact EPDNe) Statistics steel Statistics steel Pool (captionact EPDNe) Statistics steel Pool (captional Int Park Pool			·	Ceramic (inne			ner diaphragm)
** ** ** ** ** ** ** *	Sensor	Sensor seal:	Process connection: Stainless steel (optional: PVDF only 1/2" BSP, up to 60 bar	Sensor seal: FKM (Viton®)	Process connection:	Sensor seal: FKM (Viton®) (optional: NBR,	Process connection: Stainless steel
* Intrinsit and configuration	Features					= Relative or absolute p	oressure measurement
**Semination prices of substitutions of	redities		-			 Not suggested to use directly with mediums tending to sedimentation, crystallization or solidification Mechanical and plant engineering Refrigeration engineering Hydraulics, Energy industry 	
Accuracy 0.5% 0.5%; -1400 bar (-14.55800 psi) -1600 bar (-14.58700 psi) -1600 bar	Application	Suitable for the usage in viscous, Mechanical and Environmental engineering, for	pasty or highly contaminated media plant engineering measuring fuels, lubricants, water	sedimentation, cry Mechanical	stallization or solidification und plant engineering Hydraulics		
Accuracy 0.5% 0.5%; -10 bar (-14.50 psi): 1% P ≥ 0.4 bar (5.8 psi): 0.25%; 0.2%; 0.2%				Technic	cal data		
Accuracy 0.5% 0.5%; -10 bor (-14.50 psi): 1% Process temperature -40+125 °C (-40+257 °F) -40+125 °C (-40+257 °F) -40+125 °C (-40+257 °F) -40+125 °C (-40+185 °F) (with integrated coble: -5+70 °C [-23+158 °F]) Output 1, 2 db PNP 2-wire: 420 mA, 3-wire: 010 ∨ 2-wire: standard version 1336 ∨ DC, 3-wire: 1430 ∨ DC, 3-wire: 1430 ∨ DC Without analog output: 1536 ∨ DC Without analog output: 1536 ∨ DC Load resistance 2-wire: 8 ₃₂ ∨ DC, 3-wire: 1430 ∨ DC Bloadings Statistics 1/2, ½, ½, ½, ½, № SP, № SP, № SP, № SP, № S	Measuring range	–1600 bar (–1	4.58700 psi)	–1400 bar (–	4.55800 psi)	–1600 bar (–1	4.58700 psi)
Ambient temperature -40+125 °C (-40+25 °F) -40+125 °C (-40+25 °F) (with integrated coble: −5+70 °C [-23+158 °F) Output 1, 2 db PNP 2-wire: 420 mA, 3-wire: 010 ∨ 2-wire: standard version 1336 ∨ DC, Ex variant*: 1528 ∨ DC, 3-wire: 1430 ∨ DC Without analog output: 1536 ∨ DC Without analog output: 1536 ∨ DC Usad resistance 2-wire: R _{max} = ((U _{Sopply} , U _{Sopply} , mV _D) a-wire: R _{max} = 10 kΩ Process Connection Wijh (110 ∨ 112	Accuracy	0.5%		0.5%; -10 bar (–14.50 psi): 1%	p ≥ 0.4 bar (5.8 psi): 0.25%; 0.5%;	
Ambient temperature (with integrated cable: -5+70 °C -25+85°C (-13+185°F) (with integrated cable: -5+7 -23+158°F)		-40+125 °C (-40+257 °F)		−25+125 °C	(–13…+257 °F)	-40+125 °C (-40+257 °F)	
2-wire: standard version 1336 V DC, Ex variant*: 1528 V DC, 3-wire (010 V): 1536 V DC Without analog output: 1536 V DC Without analog output: 1536 V DC Without analog output: 1536 V DC SIL variant*: 1428 V DC 3-wire: 1430 V DC SIL variant*: 1428 V DC 3-wire: 1430 V DC SIL variant*: 1428 V DC 3-wire: 1430 V DC SIL variant*: 14		(with integrated cable: -5+70 °C		−25+85°C (−13+185 °F)		-40+85 °C (-40+185 °F) (with integrated cable: -5+70 °C [-23+158 °F])	
Ex variant*: 1528 V DC, 3-wire (010 V): 1536 V DC Without analog output: 1536 V DC Without analog output: 1536 V DC Sil. variant*: 1430 V DC Sil. variant*: 1	Output	1, 2 d	b PNP	2-wire: 420 mA, 3-wire: 010 V			
Process M,", M,", M," SP; M," NPT M20×1.5	Supply voltage	Ex variant*: 1 3-wire (010 V	528 V DC,): 1536 V DC			Ex variant*: 1 SIL variant*:	028 V DC, 1428 V DC
Process connection M,	Load resistance		2-wire: R _{max}	= $[(U_{Supply} - U_{Supply min})/0.02 \text{ A}], [\Omega]; 3\text{-wire: } R_{min} = 10 \text{ k}\Omega$			
The process connection 1/4", 1/2" NPT 1/4", 1/4" NPT 1/4", 1/4", 1/4" NPT 1/4", 1/4"	Housing						
Connection Integrated cable version Integrated cable version Integrated cable version						1/4", 1/2	" NPT;
Ingress protection Post				ISO 4400 connecto	r, M12×1 / M12×4		
Class III (SELV) Ex ia variant* Integrated cable version PVDF process connection (only ½" BSP, up to 60 bar [870 psi]) EPDM (p ≤ 160 bar [2 320 psi]), MBR seal Oxygen application (up to 25 bar [362.6 psi], FKM seal) Absolute pressure measuring method PVDF process connection (up to 25 bar [362.6 psi], FKM seal) Oxygen application (up to 25 bar [362.6 psi], FKM seal) EPDM (p ≤ 160 bar [2 320 psi]), FKM, NBR	Weight	~200 g (~	~0.44 lb)	~120 g (~0.26 lb)	~140 g (~	-0.31 lb)
= Ex ia variant* = Integrated cable version = PYDF process connection (only ½" BSP, up to 60 bar [870 psi]) = EPDM (p ≤ 160 bar [2 320 psi]), NBR seal = Oxygen application (up to 25 bar [362.6 psi], FKM seal) = Absolute pressure measuring method = EPDM seal = M12×1 (4 pin) IP67 electrical connection, plastic = Oil- and grease free version = Oxygen application (up to 25 bar [362.6 psi], FKM seal) = TEX ia, SIL variant* = Integrated cable version = Absolute pressure measurement (over 0.4 bar [5.8 psi] range) = EPDM (p ≤ 160 bar [2 320 psi]), FKM, NBF	Ingress protection	IP6	55	IP65,	IP67	IP65, IP67, IP68	
= Integrated cable version = PVDF process connection (only ½" BSP, up to 60 bar [870 psi]) = EPDM (p ≤ 160 bar [2 320 psi]), NBR seal = Oxygen application (up to 25 bar [362.6 psi], FKM seal) = Absolute pressure measuring method = EPDM seal = M12×1 (4 pin) IP67 electrical connection, plastic = Oil- and grease free version = Oxygen application (up to 25 bar [362.6 psi], FKM seal) = Oxygen application (up to 25 bar [362.6 psi], FKM seal) = EPDM seal = M12×1 (4 pin) IP67 electrical connection, plastic = Oil- and grease free version = Oxygen application (up to 25 bar [362.6 psi], FKM seal) = EPDM (p ≤ 160 bar [2 320 psi]), FKM, NBF	Electrical protection			Class III	(SELV)		
DK-800 D-200 D-300	Options	 Integrated PVDF process connection (only EPDM (p ≤ 160 bar Oxygen application (up to 2 	cable version ½" BSP, up to 60 bar [870 psi]) [2 320 psi]), NBR seal 25 bar [362.6 psi], FKM seal)	■ M12×1 (4 pin) IP67 ele ■ Oil- and grea	ctrical connection, plastic se free version	IntegratedAbsolute pressu(over 0.4 bar	cable version re measurement [5.8 psi] range)
DK-800 D-200 D-300		bar				[4]	
		DK-	800	D-:	200	D-:	300

Sensor FKM (Viton®, up to +200 °C [392 °F]) (optional: FFKM) - Relative or absolute pressure measurement - Vacuum resistant - Sensor with low surface roughness - Relative or absolute pressure measurement - Sensor with low surface roughness - Sensor with low surface roughness - Stainless steel (optional: PVDF) (optional: EPDM) (optional: EPDM, NBR) - Relative or absolute pressure measurement - Relative or absolute pressure measurement - Relative or absolute pressure measurement		PRESSURE TRANSMITTERS						
Series and Plant Protect Stories a stories Plant Protect Plant Plant Protect Plant Pla	Туре							
Serior pt. 1907 (\$ 292 29)		Stainless steel (flush	n diaphragm)		Ceramic (flust	n diaphragm)		
**Student or udolute greater measurement **Richatery account requirement **Student or udolute greater measurement **Richatery account requirement **Student or udolute greater measurement **Richatery account requirement **Student of the more versus any polarism measurement of contaminating part made **Student of under more versus any polarism measurement of agreezow, contaminatinal, part made **Notificated using present **Indicate date to the severage indications **Notificated part the indicate **Notificated part the indi	Sensor	FKM (Viton®, up to +200 °C [392 °F])		FKM (Viton®)	Stainless steel	FKM (Viton®) (optional: EPDM,	Process connection: Stainless steel (optional: PVDF)	
Application Process	Features	■ Vacuum res	sistant	■ Relative or absolute	pressure measurement	■ Relative pressu	re measurement	
Accuracy (0.4 bar [5.8 psi] ≤ p ≤ 40 bar (580 psi); 2.025%; 0.5% 0.5%	Application	mediums and at the bottom (level) Food and beverage industry Pharmaceutical industry		contaminate	d, pasty media	 Mechanical and plant engineering Energy industry Medical technology 		
Accuracy (0.4 bar 5.8 ps) S p 5.4 0 bar (580 psi); = 0.25%; 0.5% 0.5%; 1% 0.5%; 1% 0.5% 0.5%				Technic	cal data			
S80 psil) ± 0.25%; 0.5% 0	Measuring range	–1400 bar (–14.	55800 psi)	–1600 bar (–	14.58700 psi)	060 bar (0870 psi)	
Cilicone oil, high-threps, various to to 1-300 °C 72.7° 1, 100 for 17 200 pills 100	Accuracy			0.5%	; 1%	0.5	5%	
Ambient Temperature		(silicone oil, high-temp. version up to +300°C [572°F], 160 bar [2 320 psi]), -10+125°C (+14+257°F) (food grade oil, high-temp. version up to +250°C						
Supply voltage 2-wire: standard version 832 V DC, Ex variant*: 1028 V DC, SIL variant*: 1428 V DC, 3-wire: 1430 V DC		-40+85 °C (-40+185 °F) (with integrated cable: -5+70 °C [+23+158 °F]) (with integrated cable: -5+70						
Supply voltage 3-wire: 1430 V DC	Output			2-wire: 420 mA	, 3-wire: 010 V	-		
Housing Process Connection ISO 4400 Connector, M12×1 / 4, Integrated cable version Weight	Supply voltage	2-wir	e: standard version	•	•	L variant*: 1428 V [DC,	
Process connection Process Connection Process Connection Electrical connection Weight -200 g (~0.44 lb) Options Process Procestion Options Process Connection Process Connection Electrical connection ISO 4400 connector, M12×1 / 4, Integrated cable version ISO 4400 connector, M12×1 / 4, Integrated cable version IP65, IP67, IP68 Electrical protection Class III (SELV) Exia, or SIL variant* - PVDF process connection for aggressive media) - Integrated cable version - EPDM, RFKM seal - PVDF process connection for aggressive media) - Integrated cable version - EPDM, NBR seal	Load resistance		2-wire: R _{max}	= [(U _{Supply} - U _{Supply min.})	/0.02 A], [Ω]; 3-wire: F	$R_{min} = 10 \text{ k}\Omega$		
TriClamp; M20×1.5 Sanitary DN25, DN40, DN50; Flange DN25, DN40, DN80, DN100; VARIVENT® DN40/50 Electrical connection Weight ~200 g (~0.44 lb) Ingress protection Electrical protection Class III (SELV) - Ex ia, or SIL variant* - High-temperature version - High-temperature version - High-temperature version - Hygienic version - Hygienic version - FPDM, FFKM seal - FPDM, FFKM seal - Integrated cable version - M2×1 / 4, Integrated cable version - 140 g (~0.31 lb) - 7150 g (~0.33 lb) TriClamp; M20×1.5 - M20×1	Housing		Stainles	ss steel		Stainless steel (d	optional: PVDF)	
Weight ~200 g (~0.44 lb)		TriClamp; M Sanitary DN25, E Flange DN25, DN50	20×1.5 0N40, DN50; , DN80, DN100;	¼", ½" BSP; ¼", ½" NPT;		3/4"	BSP	
Ingress protection P65, IP67, IP68	Electrical connection		ISO 44	100 connector, M12×1	/ 4, Integrated cable	version		
Class III (SELV) - Ex ia, or SIL variant* - High-temperature version - Integrated cable version - Hygienic version - EPDM, FFKM seal - EPDM, FFKM seal - EX ia, or SIL variant* - PVDF process connection - EPDM seal (p ≤ 160 bor [2 320 psi]) or FFKM seal - PTFE-coated version (only 1% accuracy) - Oxygen application (up to 25 bar [362.6 psi], FKM seal) - Integrated cable version - Integrated cable version - Integrated cable version - EPDM, NBR seal - PVDF process connection (for aggressive media) - Integrated cable version - EPDM, NBR seal	Weight	~200 g (~0).44 lb)	~140 g (~0.31 lb)	~150 g (~0.33 lb)	
= Ex ia, or SIL variant* = High-temperature version = Integrated cable version = Hygienic version = EPDM, FFKM seal = Ex ia, or SIL variant* = PVDF process connection = EPDM seal (p ≤ 160 bar [2 320 psi]) or FFKM seal = PTFE-coated version (only 1% accuracy) = Oxygen application (up to 25 bar [362.6 psi], FKM seal) = Integrated cable version, PVC cable, IP68 = M12x1 (4-pin) IP67 electrical connection = Ex ia, or SIL variant* = PVDF process connection (for aggressive media) = Integrated cable version = EPDM, NBR seal	Ingress protection			IP65, IF	² 67, IP68			
= Ex ia, or SIL variant* = High-temperature version = Integrated cable version = Hygienic version = EPDM, FFKM seal = PVDF process connection = EPDM seal (p ≤ 160 bor [2 320 psi]) or FFKM seal = PVDF process connection (for aggressive media) = PVDF process connection (for aggressive media) = PVDF process connection (for aggressive media) = Integrated cable version = EPDM, NBR seal = PVDF process connection (for aggressive media) = Integrated cable version = EPDM, NBR seal	Electrical protection			Class II	I (SELV)			
D-400 D-500 D-600	Options	 High-temperature version Integrated cable version Hygienic version 		= PVDF proce = EPDM seal (p ≤ 160 ba = PTFE-coated versic = Oxygen application (up to = Integrated cable ve	ess connection r [2 320 psi]) or FFKM seal on (only 1% accuracy) 25 bar [362.6 psi], FKM seal) ursion, PVC cable, IP68	PVDF process connectionIntegrated	on (for aggressive media) cable version	
D-400 D-500 D-600		***		E 2 11 11 11 11 11 11 11 11 11 11 11 11 1	LED LED)	
		D-40	0	D-	500	D-0	600	

	PRESSURE TRANSMITTERS					
Туре		2 / 3-wire mini compact				
	Ceramic (flush diaphragm)	Stainless steel (flush diaphragm)	Ceramic (inner diaphragm)			
Sensor	Sensor seal: FKM (Viton®) (optional: EPDM, FFKM) Sensor seal: Stainless steel (optional: PVDF)	Sensor seal: FKM (Viton®) Stainless steel (optional: EPDM)	Sensor seal: FKM (Viton®) Stainless steel (optional: EPDM)			
Features	Relative pressure measurementIdeal for measuring small system pressure	Relative pressure measurement Robust construction Modular construction	Relative or absolute pressure measurement Ideal for measuring small system pressure High overpressure resistance and a high-temperature and media resistance			
Application	Preferred media: water, fuels and oils, aggressive media, pasty or viscous media Mechanical and plant engineering Laboratory Environmental engineering	 Preferred media: water, fuels and oils Mechanical and plant engineering Energy industry Environmental engineering 	 Preferred media: water, gases, fuels and oils Mechanical and plant engineering Energy industry HVAC Laboratory Environmental engineering 			
		Technical data				
Measuring range	020 bar (0290 psi)	040 bar (0580 psi)	020 bar (0290 psi)			
Accuracy	±0.5%; p ≥ 0.6 bar (8.7 psi): ±0.25%; ±1% (PTFE-coated version)	p ≤ 0.4 bar (5.8 psi): 0.5%; p ≥ 0.4 bar (5.8 psi): 0.25%; Optional: p ≥ 0.4 bar (5.8 psi): 0.1% (only without SIL)	p ≥ 0.6 bar (8.7 psi): 0.25%; 0.5%			
Process temperature	−40+125 °C (−40+257 °F)					
Ambient temperature	-40+85 °C (-40+185 °F) (with integrated cable: -5+70 °C [-23+158 °F])					
Output		2-wire: 420 mA, 3-wire: 010 V				
Supply voltage	2-wire: 932 V DC, Ex variant*: 1428 V DC, 3-wire: 12.532 V DC	2-wire: standard version: 832 V DC, Ex variant*: 1028 V DC, SIL variant*: 1428 V DC, 3-wire: 1430 V DC	2-wire: standard version: 932 V DC, Ex variant*: 1428 V DC, 3-wire: 12.532 V DC			
Load resistance	2-wire: R _{max}	= $[(U_{Supply} - U_{Supply min.})/0.02 \text{ A}], [\Omega]; 3-wire:$	$R_{min} = 10 \text{ k}\Omega$			
Housing	Stainless steel (optional: PVDF)	Stainless steel				
Process connection	1½" BSP	³¼" BSP	¼", ½" BSP; ½" NPT; M20×1.5			
Electrical connection	ISO 4400	connector, M12×1 / M12×4, Integrated co	able version			
Weight		~200 g (~0.44 lb)				
Ingress protection		IP65, IP67, IP68				
Electrical protection		Class III (SELV)				
Options	Ex ia variant* PVDF or stainless steel process connection 99.9% aluminum oxide ceramic sensor PTFE-coating Integrated cable version Oxygen application EPDM, FFKM seal	■ Ex ia, or SIL variant* ■ Integrated cable version ■ EPDM seal ■ M12×1 (4-pin) IP67 electrical connection	Ex ia variant* 99.9% aluminum oxide ceramic sensor Integrated cable version PVDF process connection EPDM seal M12×1 (4-pin) IP67 electrical connection			
	D-700	D-800	D-900			
	D-700	D-000				

	PRESSURE TRANSMITTERS					
Туре		2-wire o	compact		2 / 3-wire m	nini compact
	Stainless steel (intern	al / flush diaphragm)	Ceramic (flush	n diaphragm)	Stainless steel (i	nner diaphragm)
Sensor	Sensor seal: FKM (optional: FFKM)	Process connection: Stainless steel	Sensor seal: FKM (optional: EPDM)	Process connection: Stainless steel (optional: PVDF)	Sensor seal: —	Process connection: Stainless steel
Features	Dual-chamber cast aluming	pressure measurement um or stainless steel housing own 1:10 mmunication	high overpre = Relative pressi = Dual-chamber cast alumin	oxide ceramic sensor, ssure capability ure measurement um or stainless steel housing	Relative pressure measurement Extreme pressure resistance Welded thin film sensor High reliability, easy handling	
Application	 Absolute measurement of gases and steam Ideal for process, food and pharmaceutical industry Mechanical and plant engineering Chemical industry Paper industry Oil and gas industry 		= HART® communication = Relative measurement of gases, steam and fluids = Mechanical and plant engineering = Chemical industry, medical technology = Food and beverage industry = Paper industry = Environmental engineering		= Ideal for high pressur = Mechanical and = Labo = Hyd	plant engineering oratory
			Technic	al data		
Measuring range	0600 bar ((08700 psi)	020 bar (0290 psi)	02200 bar (029000 psi)
Accuracy	0.1	1%	0.1% (p ≥ 1 bar); 1% (PTF		0.5	5%
Process temperature	−10+125 °C (+14	+257 °F) (silicone oil) .+257 °F) (food grade oil)	−25+125 °C (-40+140 °C (-40+284 °F)	
Ambient temperature	-40+70 °C (-40+176 °F) (without display) -20+70 °C (-4+176 °F) (with display)			−25+85 °C (−13+185 °F)		
Output		420 mA, HART®			2-wire: 4. 3-wire: 0	
Supply voltage	2-		ı variant*: 1228 V D : 1328 V DC	OC,		rsion 1236 V DC 1428 V DC, 30 V DC
Load resistance	lo	2-wire: R _{max} =[(U _{Supply} – ead during HART® con	$U_{Supply min}$)/0.02 A], [Ω]; nmunication: R_{min} : 250	Ω	2-wire: $R_{max} = [(U_{Supply} - 3-wire: R_{max}]$	$-U_{Supply min.})/0.02 A], [\Omega_{in}=10 k\Omega$
Housing		Cast aluminum o	or stainless steel		Stainle	ss steel
Process connection	Sanitary DN25	Clamp; M20×1.5; , DN40, DN50, 50, DN80, DN100,	1⁄2" Ⅰ	2" BSP; NPT; N40, DN50; 50, DN80, 2", 3" RF		BSP; ernal thread)
Electrical connection	M	20×1.5 (for cable Ø5	14 mm [Ø0.20.55	"])	ISO 4400 connector	or, M12×1 / M12×4 able version
Weight		~400 g ((~0.88 lb)		~240 g (~0.53 lb)
Ingress protection		IP	67		IP65, IP	67, IP68
Electrical protection			Class III	(SELV)		
Options	 Display and operating modu Ex ia, or Ex d variant* High-temperature variant (+ EPDM, FFKM (p ≤ 100 bar [Hastelloy, or Tantalum senso Filled with food compatible (up to +150 °C [+302 °F]) 	-300 °C [572 °F]) 1 450 psi]) seal or	Display and operating modu Ex ia, or Ex d variant* PVDF process connection (o PTFE-coated version (only 1% EPDM seal	nly 1½" BSP)	Ex ia variant* Adjustability of span and of Integrated cable version M12x1 (4-pin) IP67 electrice	
	D- <i>i</i>	400	D-I	B00	D-1	C00

	DIFFERENTIAL TRANSMITTERS					
Туре	2-wire co		2 / 3-wire mini compact			
	Stainless steel (optio		Stainle	·		
Sensor	Sensor seal: FKM (optional: EPDM, PTFE)	<u>Process connection:</u> Stainless steel	Sensor seal: FKM	Process connection: Stainless steel		
Features	= Relative pressu = Cast alumir = Turn-do = HART® con	num housing wn 1:100	- Can be pressurized on bo	oure measurement oth sides with fluids or gases mic pressure as well as shock and vibration		
Application	= Differential pressure measurem = Mechanical and = Oil and go = Chemica = Energy ind = Food and bev = Paper i	olant engineering is industry I industry ustry, HVAC erage industry ndustry	 Differential pressure wet/wet Due to its compact size, it can be installed also in tight spaces Mechanical and plant engineering Energy industry 			
		Techn	ical data			
Measuring range	020 bar (0	290 psi)	016 bar (0232 psi)		
Accuracy	0.1%; 0.075%		0.5%	6; 1%		
Process temperature	-40+100 °C (-40+212 °F) (with silicone oil filling)		−25+125 °C	(–13+257 °F)		
Ambient temperature	Without display: -40+85 °C (-40+185 °F) With display: -20+65 °C (-4+149 °F)		−25+85 °C ((–13+185 °F)		
Output	420 mA, HART®		2-wire: 4. 3-wire: 0			
Supply voltage	Ex ia variant*: 1228 V DC, Ex d variant*: 1328 V DC			C, Ex ia variant*: 1428 V DC, 1436 V DC		
Load resistance	Load during HART® communication: R _{min} : 250 Ω		2-wire: $R_{max} = [(U_{Supply} - U_{Supply min.})/0.02 A], [\Omega];$ 3-wire: $R_{min} = 10 k\Omega$			
Housing	Cast alu	minum	Aluminum, black anodized			
Process connection	1/4" NPT (inr	ner tread)	½" BSP; ¼" BSP (inner tread); %" UNF DIN 3866			
Electrical connection	M20×1.5 (for cable Ø5	.14 mm [Ø0.20.55"])	ISO 4400 connector			
Weight	~3.5 kg (~7.7 lb)	~250 g (~0.55 lb)			
Ingress protection	IP6	7	IP65			
Electrical protection		Class I	II (SELV)			
Options	= Ex ia variant* = Display and operating module = Hastelloy® C-276 sensor = EPDM, PTFE seal = Special version up to 400 bar [5801 psi] static pressure (p ≥ 0.4 bar [5.8 psi])			variant* lug-in display		
			DD-	-300		

	DIFFERENTIAL TRANSMITTERS				
Туре	3-wire min		2- / 3-wire wall mountable		
Туре	Stainles	·	Silicon inner diaphragm		
Sensor	Sensor seal: FKM	Process connection: Stainless steel	Sensor seal: -	Process connection: Brass nickel plated	
Features	= Two stainless steel = Relative pressu = Display and pro = Up to 2 sw	re measurement ocess connection	= Can be used in 2	ure measurement ?- or 3-wire system mounted	
Application	Mechanical andChemicaEnergyH	 For differential pressure measurement of gases and fluids Mechanical and plant engineering Chemical industry Energy industry HVAC Food and beverage industry 		ement of gases and compressed air plant engineering VAC or under industrial conditions conditioning systems medical technology	
		lechn	ical data		
Measuring range	070 bar (0)1015 psi)	01000 mbd	ar (014 psi)	
Accuracy	2	2%		6 mbar); 6 mbar)	
Process temperature	-40+125 °C (-40+257 °F)		0+50 °C (+	32+122 °F)	
Ambient temperature	−25+85 °C (−25+85 °C (−13+185 °F)		32+122 °F)	
Output	3-wire: 4.	3-wire: 420 mA		20 mA, V / 020 mA	
Supply voltage	24 V DC	24 V DC ±10%		32 V DC; 32 V DC, ljustment: 2432 V DC	
Load resistance	500	Ω	2-wire: $R_{max} = [(U_{Supply} - 3 - wire: R_{mi})]$		
Housing	PA 6.6 black p	PA 6.6 black polycarbonate		3\$	
Process connection		" BSP; " NPT	Ø6.6 x 11 (for flexible tubes Ø6); Ø4.45 x 10 (for flexible tubes Ø4)		
Electrical connection	M20:	×1.5	M12×1.5		
Weight	~350 g (~	-0.77 lb)	~165 g (~0.36 lb)		
Ingress protection	IP6	5	IP54		
Electrical protection		Class I	II (SELV)		
Options	Options Second PNP switching output		= Automatic zo = 2× switch	git LCD display ero adjustment hing outputs measurement (only for LCD display version)	
	bar Total Co	0	5.3		
	DD-	400	DD-	-600	



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*If Ex ia or SIL version is required, please request a custom quotation based on the data in the price list. Orders based on the quotation will be considered official. NIVELCO reserves the right to change technical data without noticel.