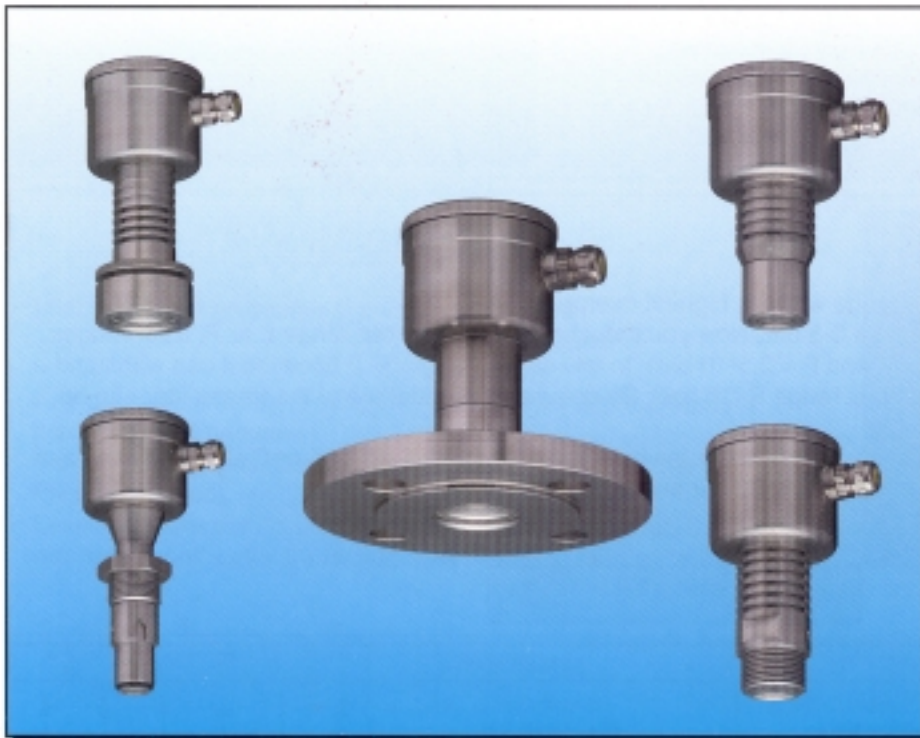




PRESSURE TRANSMITTERS FOR THE 'PULP AND PAPER INDUSTRY'



SERIES 8000

- "ALL STAINLESS" TRANSMITTERS
- STRONG DIAPHRAGMS
- RUGGED/COMPACT DESIGN
- OUTPUT 4-20 mA
- ZERO/SPAN ADJUSTABLE
- HIGH BURSTPRESSURES
- ACCURACY 0,2%
- LOCAL INDICATOR (OPTION)
- INTRINSICALLY SAFE EEx ia IIC T4

DESCRIPTION

The Klay Series 8000 electronic Pressure Transmitter has been specially designed for measuring pressure in pulp- and papermills and similar industries where plugging is a problem. These transmitters are "All Stainless" with a strong flush mounted diaphragm which can withstand high overpressures.

Zero and span are internally adjustable in wide ranges.

Klay Instruments manufactures a wide range of pressure- and level transmitters for many applications. (See overview on page 4.)

Various process connections are available.

All versions enjoy Cenelec approval for Intrinsically Safe applications.



Flush mounted diaphragm

Made by:

KLAY-INSTRUMENTS B.V.

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Our representative in your area is:

SPECIFICATIONS

Measuring ranges	: 0,1 bar to 16 bar
Output signal	: 4-20 mA, 2-wire
Adjustment	: Zero and span internally
Overall accuracy	: +/- 0,2% of adjusted span
Power supply	: 13 to 40 VDC (Exi: 17-28 VDC)
Electrical connection	: PG9 / 1/2" NPT
External load (max.)	: 550 Ohms/24 V to 1250 Ohms/40 VDC
Protection grade	: IP65
Process temperature	: -20°C to +80°C
Ambient temperature	: -20°C to +65°C
Temperature sensitivity:	+/- 0,03%/K (Ranges B and C)
	+/- 0,015%/K (Ranges D till G)
Process connections	: See pages 2 and 3
Wetted parts	: AISI 316 (standard)
	other materials may be specified
Electronic housing	: AISI 304 (standard)
	other materials may be specified
Zero elevation/suppression available	(specify)
Vacuum and compound ranges available	(specify)

Specifications can change without notice



*Model 8000-Range-W with diam 33 mm
weld-on nipple*

How to choose the right range?

When you choose the range, take the range with the highest overpressure.

Example 1: Your calibrated range must be 0-3 bar. Now you can choose between our range E or F. Both ranges can be calibrated at 0-3 bar (E = 1-4 bar and F = 2,5-10 bar). In this case take range F because it can withstand a much higher overpressure (30 bar) against range E (16 bar). By doing this, the lifetime of the transmitter can be much longer.

Example 2: Your calibrated range must be 0-10 bar. Choose between range F (2,5-10 bar) or G (7,5-16 bar). Take range G because the overpressure for range G is 80 bar and range F is 30 bar.

ORDERING CODE

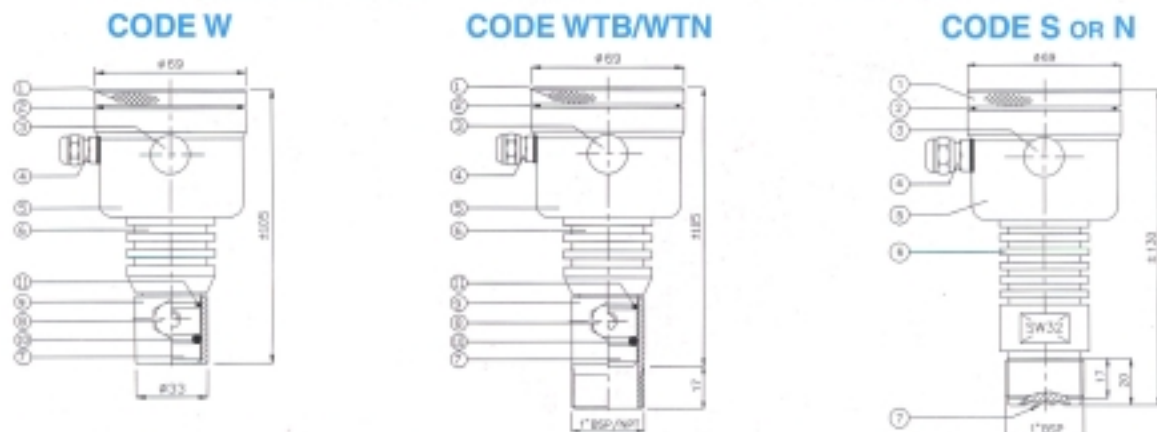
Order code			SERIES 8000-				
measuring range bar	max. overpressure bar	adjustable span range bar min. - max.	↑	↑	↑	↑	↑
0 - 0,1...0,4	6,4	0 - 0,1 / 0 - 0,4	B				
0 - 0,4...0,7	6,4	0 - 0,4 / 0 - 0,7	C				
0 - 0,7...1,5	10,5	0 - 0,7 / 0 - 1,5	D				
0 - 1 ...4	16	0 - 1 / 0 - 4	E				
0 - 2,5...10	30	0 - 2,5 / 0 - 10	F				
0 - 7,5...16	80	0 - 7,5 / 0 - 16	G				
PROCESS CONNECTIONS:							
- Weld-on nipple diam. 33 mm with viton O-ring and M8 lock screw (flush diaphragm)						W	
- Threaded nipple 1" BSP (WTB) or 1" NPT (WTN) instead of weld-on nipple diam. 33 mm (specify)						WTB	
- 1" BSP connection (flush diaphragm)						S	
- 1" NPT connection (flush diaphragm)						N	
- Other process connections, i.e. PMC, Valmet, Valcom, etc. (specify)						X	
OPTIONS:							
- Standard							
- Digital local indicator, 3 1/2 digit, programmable						S	
- Vacuum Ranges (Specify relative or absolute). Compound range available (example: -1 / +1 bar)						I	
- Intrinsically safe: CENELEC EEx ia IIC T4							V
Special versions: Specify wetted parts; Hastelloy B or C. Or specify special process connection							Ex
							G

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PROCESS CONNECTIONS AND DIMENSIONS (mm)

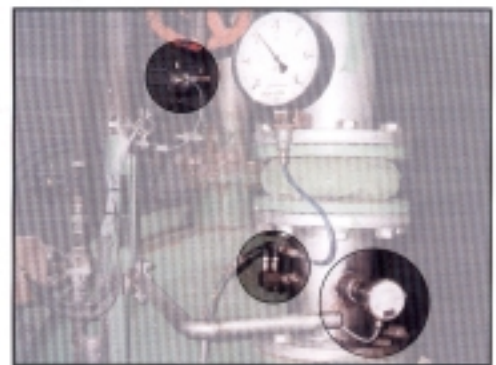


Parts description

1. Cover	AISI 304	5. Electronic housing	AISI 304	9. Weld-on nipple or threaded nipple	AISI 316
2. O-ring	EPDM	6. Foot/cooling fins	AISI 304	10. O-ring	Viton
3. Venting		7. Diaphragm ring	AISI 316	11. O-ring	Viton
4. Cable entry PG9/1/2" NPT		8. M8 lock screw	AISI 304		

APPLICATIONS

- Inlet and outlet pressures on:
 - stock cleaners
 - pressure screens
 - pulp refiners
- Any pressure line where plugging is a problem and the process pressure must be known. (For these applications also our pneumatic 1:1 transmitter type PR can be used).
- Level measurement in storage tanks (use our type 8000-SAN) or our "Intelligent" Level transmitters, series 2000 (see page 4).



Pressure measurement on the inlet and outlet of a refiner.

GENERAL INFORMATION

Temperature compensated seals

All Series 8000 units are fully temperature compensated. A temperature sensor, which monitors the process temperature, is mounted directly behind the diaphragm.

Compact electronics in SS housing

The electronic transmitters from Klay Instruments consists of a minimum number of electronic components. The electronics are fully encapsulated and are therefore unaffected by vibrations and moisture.

RFI/EMC and CE

Klay Instruments manufactures all pressure- and level transmitters according to the new RFI/EMC and CE rules.



SPECIAL LEVEL TRANSMITTERS



SERIES 8000-SAN-EXTD

The series 8000-SAN-EXTD are flange mounted level transmitters with an extended diaphragm. The extension length and diameter must be specified, always refer to our drawing no. 8000-61. The technical specifications are equal to the series 8000 mentioned in this brochure.



SERIES 8000-VALVE

The series 8000-VALVE is a combination of a level transmitter and a special ball-valve.

This design permits **flush** installation of the diaphragm and a transmitter who can be removed **without** shutting down the process. A detail brochure is available.

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Factory Klay Instruments B.V. at Dwingeloo, The Netherlands

KLAY INSTRUMENTS B.V.

Klay Instruments B.V. is a Dutch manufacturer of electronic pressure- and level transmitters, "intelligent" transmitters with HART® protocol and pressure- and level switches. We are developing and manufacturing all our instruments at our factory in Dwingeloo, The Netherlands.

Klay Instruments has a worldwide service and distribution network.

OTHER KLAY PRESSURE/LEVEL TRANSMITTERS

"INTELLIGENT" PRESSURE/LEVEL TRANSMITTERS

The Klay series 2000 is a complete range of microprocessor based pressure- and level transmitters with local display and adjustment by three pushbuttons. Zero and span can be adjusted without testpressure. The display can be used during programming to assist the operation. An engineering unit can be chosen and also the process temperature can be shown on the display. Also a damping (0-25 sec) and a current simulation (4-20 mA) can be performed. Over 40 different process connections are available including many flush diaphragm designs. The series 2000 are also available with the HART® protocol. A detailed brochure is available.



PRESSURE TRANSMITTER "PERAMIC"

The "Peramic" is an "All Stainless" pressure transmitter based on a ceramic pressure cell which can withstand high overpressures. The "Peramic" can be used for all gauge- and absolute pressure measurements on steam, liquids, gases and vapours. The available process connections are G 1/2" (1/2" BSP) or 1/2" NPT. Zero and span are internally adjustable over wide ranges. Ranges are available from 0 - 0.1 bar to 0 - 350 bar. The Peramic is also available in an "Intelligent" version, Peramic "S" (series CER-2000) including the HART® protocol. Detailed brochures of both versions are available.



FLANGE MOUNTED TRANSMITTERS

These flange mounted transmitters, series 8000-SAN, have a strong SS 316 flush diaphragm and are available with various DIN and ANSI flanges like DN 40, 50 and 80 or 1 1/2", 2" or 3". Zero and span are internally adjustable over wide ranges. Ranges are available from 0,1 bar till 16 bar. These "All Stainless" transmitters do have the Intrinsic safe certificate EEx ia IIC T4 for use in hazardous areas. Other process connections like 1 1/2" BSP are available. A detailed brochure is available.



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