## YDAC INTERNATIONAL



## **Pressure Transmitter**

**HDA 8400** 

Relative pressure

Accuracy 0.5 %

### For the medium hydrogen (Minimum order quantity 500 units)



### **Description:**

The pressure transmitter series HDA 8400 has been specially developed for use with hydrogen and for series applications, e.g. in the mobile sector. Like most of our pressure transmitter series, the HDA 8400 is based on a robust and long-life thin-film sensor.

All of the parts in contact with the fluid (sensor and pressure port) are made of stainless steel and are welded together. This means that there are no sealing points in the interior of the sensor. The possibility of leakage is excluded.

Due to the specially selected material, this HDA 8400 is especially suitable for use in hydrogen applications.

### **Technical data:**

Input data

input data												
Measuring ranges	bar	25	40	60	100	160	250	400	600	900	1050	
Overload pressures	bar	50	80	120	200	320	500	800	1000	1400	1400	
Burst pressure	bar	125	200	300	500	800		2000		3000	3000	
Mechanical connection					SF250C				-20 UN	F 2B)		
(Tightening torque, red	15 Nm, 20 Nm at 900 bar)											
G 1/4 B DIN EN 837 (20 Nm)												
					9/16-18 UNF 2A (ISO 8434-3) (25 Nm)							
Parts in contact with fluid					Stainless steel 1.4435 (Ni content ≥ 13%) Seal: Copper (Cu-DHP) (G 1/4 B); Zurcon®22							
										urcon®2	22	
					(polyure	ethane)	(9/16-1	8 UNF	2A)			
Output data												
Output signal 4 20 mA, ratiometric, others available on reque							quest					
	curacy acc. to DIN 16086, ≤ ± 0.5 % FS typ.  minal based ≤ ± 1.0 % FS max.											
terminal based												
Accuracy, B.F.S.L.					≤ ± 0.25							
					≤ ± 0.5							
Temperature compens	ation				≤ ± 0.01							
Zero point					$\leq \pm 0.02$							
Temperature compens	ation				≤ ± 0.01							
Span												
Non-linearity acc. to D	IN 160	086,		:	≤ ± 0.3	% FS n	nax.					
terminal based												
Hysteresis	·											
Repeatability	epeatability ≤ ± 0.1 % FS											
Rise time												
Long-term drift ≤ ± 0.3 % FS typ. / year												
<b>Environmental condi</b>	tions											
Compensated tempera	ature r	ange			-25 +8	35 °C						
Operating temperature range -40 +100 °C												
Storage temperature range -40 +100 °C												
Fluid temperature rand												
( € mark				EN 61000-6-1 / 2 / 3 / 4								
Vibration resistance ad	ec to				≤ 25 q							
DIN EN 60068-2-6 at 5		00 Hz		•	- <b>-</b> 0 9							
Shock resistance acc.					100 g /	6 ms / l	nalf-sine					
DIN EN 60068-2-27					500 g /							
Protection class acc. to	o DIN	EN 6052	29 1)		IP 67					-		
		20653 1)			IP 6K9k	(						
Other data												
Electrical connection <sup>2</sup>	)				M12x1,	4 pole.	availab	ole in pl	astic or	metal (	solid	
					version)							
Supply voltage					8 30 \							
when applied acc. to UL specifications					- limited energy - acc. to 9.3 UL 61010; Class 2;							
					UL 1310							
Residual ripple of supply voltage ≤ 5 %												
Life expectancy > 1 million cycles (0 100 % FS)												
Weight					~ 55 g	., .,	, -					
Note: Reverse polar	ity pro	tection o	of the s			excess	voltage	e over	ride and	short	circuit	
	, P.C	1 1		- PP' 7	J.Lugu,	55000	· c.tagt	.,				

protection are provided.

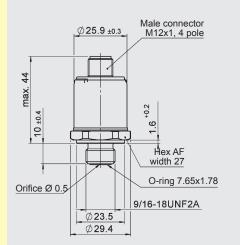
FS (Full Scale) = relative to complete measuring range

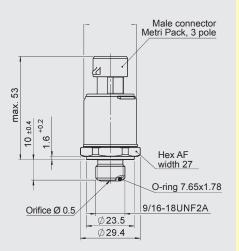
B.F.S.L. = Best Fit Straight Line 1) With mounted mating connector in corresponding protection class

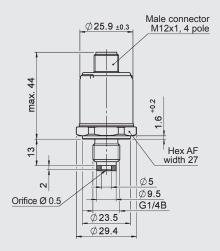
<sup>2)</sup> Other connection types/options available on request

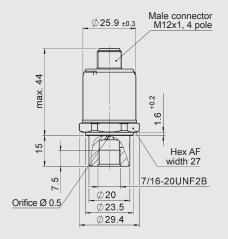
# EN 18.636.0/02.18

### **Dimensions:**

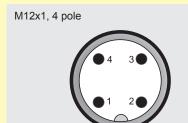




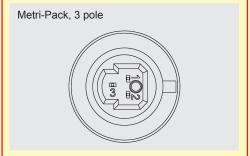




### Pin connections:



Pin	
1	Signal +
2	n.c.
3	Signal -
4	n.c.



Pin	
1	Signal -
2	Signal +
3	n.c.

### Note:

The information in this brochure relates to the operating conditions and applications described.

For applications or operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

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