

**DESCRIPTION**

APZ 2412 economy line pressure transmitters feature up to three pressure ranges selectable by the user via ZCON 100 configurator tool, allowing customers to keep a smaller inventory of spare instruments. Based on a monolithic ceramic measuring cell, highly resistive to abrasive and aggressive* media, APZ 2412 is a good fit for the applications where hydraulic shocks (water hammer) are not present. APZ 2412 features improved accuracy as compared to model APZ 2410, which in turn offers improved overpressure capability.

SPECIFICATIONS

Ranges: 1.6 bar to 400 bar
Number of ranges: up to 3, user-selectable via ZCON 100**
Pressure type: gauge
Accuracy: $\pm 0.5\%$ FS of the highest chosen range
Output: 4...20 mA / 2-wire
Sensor: ceramic thick film
Pressure port: G1/2"; G1/4"; 1/2" NPT; 1/4" NPT; M20x1.5; other.
Media temperature: -25...+135 °C
Ambient temperature: -40...+85 °C

APPLICATIONS

Pneumatics

Hydraulics***

Transportation

Water level monitoring in tanks

* Please consult the manufacturer for particular media compatibility

** ZCON 100 configurator is sold separately and provides ZERO TRIM and RANGE SWITCHING features

*** Applications with absence of excessive hydraulic shocks

Appearance, mounting kit contents and/or specifications are subject to change without prior notice. We are constantly working on further improvement of our products.
Delivery is subject to standard terms of delivery.
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TECHNICAL SPECIFICATIONS

MEASURING RANGES

Pressure range, bar* Gauge	Overpressure, bar	Burst pressure, bar	Pressure range, bar Gauge	Overpressure, bar	Burst pressure, bar
0...1.6	4.0	5.0	0...40	100	120
0...2.5	4.0	5.0	0...60	100	250
0...4.0	10	12	0...100	200	500
0...6.0	10	25	0...160	400	880
0...10	20	50	0...250	800	880
0...16	40	50	0...400	800	880
0...25	40	120			

* Transmitter can be calibrated on two or three adjacent (user-selectable via ZCON 100 configurator) pressure ranges.

PERFORMANCE

Accuracy, % of span*	≤ ±0.5
Temperature effect (% of span / 10 °C)	≤ ±0.3
Compensated range	-25...+85 °C
Power supply effect	≤ ±0.05% of span / 10 V
Load resistance effect	≤ ±0.05% of span / kOhm
Long-term stability	≤ ±0.3% of span / year
Response time (10...90%)	≤ 1 ms

* Accuracy includes non-linearity, hysteresis and non-repeatability.

OPERATING CONDITIONS

Medium temperature (depends on seal)	-25...+135 °C
Ambient temperature	-40...+85 °C
Storage temperature	-40...+85 °C
Vibration resistance	10 g RMS, 20–2000 Hz
Shock resistance	100 g / 11 ms
Service life	> 100 x 10 ⁶ cycles

MECHANICAL SPECIFICATIONS

Pressure port material	stainless steel 304 (1.4301)		
Housing material	stainless steel 304 (1.4301)		
Seal	FKM (-25...+135 °C)		
Diaphragm	ceramics Al ₂ O ₃ 96%		
Wetted parts	Diaphragm, pressure port, seal		
Pressure port	M20x1.5 EN 837; G1/2" EN 837; G1/4" DIN 3852; G1/4" EN 837; 1/4" NPT; 1/2" NPT		
Electrical connection	Ingress protection	Cross section	Cable diameter
DIN 43650A (4 pin)	IP65	1.5 mm ²	6...8 mm

ELECTRICAL SPECIFICATIONS

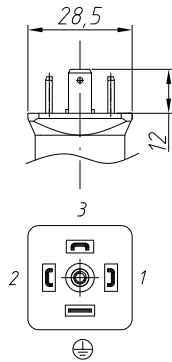
Output signal	Power supply, U _s	Load resistance, R	Power consumption
4...20 mA / 2-wire	8...32 V	≤ [(U _s - 8 V) / 0.02 A] Ohm*	< 26 mA

ELECTRICAL CONNECTIONS / PIN ASSIGNMENT

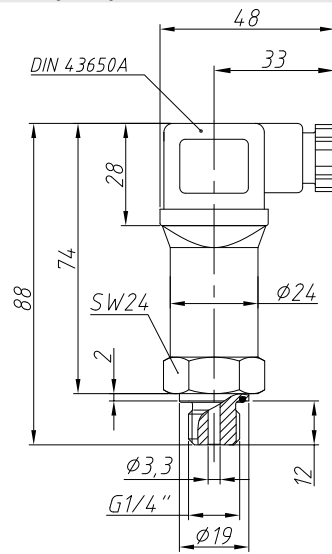
Circuits	DIN 43650A
power +	1
power -	2
calibration	3 (left disconnected)
shield	GND

ELECTRICAL CONNECTIONS, DIMENSIONS (mm)

DIN 43650A

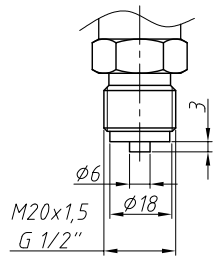


DIMENSIONS (mm)

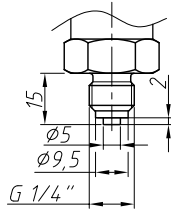


PRESSURE PORTS, DIMENSIONS (mm)

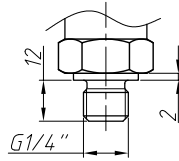
M20x1.5; G1/2" EN 837



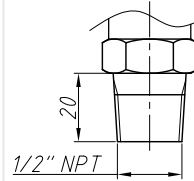
G1/4" EN 837



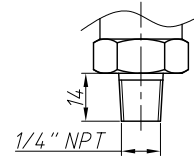
G1/4" DIN 3852



1/2" NPT



1/4" NPT



ORDERING CODE

APZ 2412		-X	-X	-XXXX	-X	-XX	-X	-XXX	-X	-XX
MEASUREMENT TYPE		Gauge	G							
UNIT OF MEASUREMENT		bar	B							
		MPa	M							
		mH ₂ O	W							
		Other (specify when ordering)	X							
UPPER RANGE LIMIT (URL)										
bar		mH ₂ O		MPa						
1.6	1600	16	1600	0.16	0160					
2.5	2500	25	2500	0.25	0250					
4.0	4000	40	4000	0.40	0400					
6.0	6000	600	6000	0.60	0600					
10	1001	100	1001	1.0	1000					
16	1601	160	1601	1.6	1600					
25	2501	250	2501	2.5	2500					
40	4001	400	4001	4.0	4000					
60	6001		6001	6.0	6000					
100	1002		1002	10	1001					
160	1602		1602	16	1601					
250	2502		2502	25	2501					
400	4002		4002	40	4001					
Other	XXXX	Other	XXXX	Other	XXXX					
Dual range	XXXX-XXXX*	Dual range	XXXX-XXXX*	Dual range	XXXX-XXXX*					
Triple range	XXXX-XXXX-XXXX*	Triple range	XXXX-XXXX-XXXX*	Triple range	XXXX-XXXX-XXXX*					
ACCURACY										
						0.5% (standard)	D			
						Other (specify when ordering)	X			
ELECTRICAL CONNECTION										
						DIN 43650A	10			
						Other (specify when ordering)	XX			
OUTPUT SIGNAL										
						4...20 mA / 2-wire	A			
						Other (specify when ordering)	X			
PRESSURE PORT										
						M20x1.5 EN 837	201			
						G1/2" EN 837	721			
						G1/4" DIN 3852	740			
						G1/4" EN 837	741			
						1/4" NPT	840			
						Other (specify when ordering)	XXX			

ORDERING CODE (CONTINUED)

APZ 2412	-X	-X	-XXXX	-X	-XX	-X	-XXX	-X	-XX
SEALS									
								FKM (-25...+135 °C)	F
								Other (specify when ordering)	X
VERSION									
								Standard	00
								Zero trim (requires ZCON 100 configurator)	01
								Dual range, zero trim (requires ZCON 100 configurator)	02
								Triple range, zero trim (requires ZCON 100 configurator)	03
								Other (specify when ordering)	XX

* Ranges for triple range and dual-range version can be chosen from adjacent single range options. The widest range comes first, followed by the next and the smallest one. For example, the range code for 6, 4 and 2.5 bar is 6000-4000-2500.

Example: APZ 2412-G-B-6000-4000-2500-D-10-A-201-F-03

ACCESSORIES

				
DZ 10 Pressure snubber	ZCON 100 Zero trim and range selection device	ANZ 200 Plug-in display for transmitters with 4-20 mA output	PZ 1024 Power supply unit	