

JOFRA PRESSURE CALIBRATORS

Product Selection Guide

J O F R A

pressure

calibration

instruments



*...because calibration is
a matter of confidence*

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JOFRA DPC-500 Documenting Pressure Calibrator

The JOFRA DPC-500 is designed for high precision calibration of pressure gauges, transmitters, digital manometers, pressure switches and overpressure valves. The documenting feature makes it possible to handle 16 work-orders, with up to 22 calibration points each and have the result uploaded to a PC via JOFRACAL calibration software.

- Accuracy to $\pm 0.025\%$ F.S. (up to 5 sensors per instrument)
- Available as an indicator or in a complete system
- 43 pressure ranges up to 1000 bar
- Interchangeable DPC-J reference sensor
- 15 standard pressure units (+ one user-definable)
- RS232 interface and JOFRACAL calibration software

Find more information in specification sheet SS-CP-2182 at www.jofra.com

JOFRA APC Advanced Pressure Calibrator

The JOFRA APC pressure calibrator is user-friendly, extremely accurate, and expandable to meet multiple applications. Features such as RS232 capability, loop sourcing, 17 engineering units, switch test, min/max readings, and mA% calculations make this an invaluable calibration instrument.

- Accuracy to $\pm(0.04\%$ of reading + 0.01% F. S.)
- Available as an indicator or in a complete system
- Pressure range vacuum to 700 bar / 10,000 psi
- External APM pressure module capability
- Reads and sources transmitters
- Supplied with fittings for NPT and BSP threads
- RS232 interface and JOFRACAL calibration software

Find more information in specification sheet SS-CP-2181 at www.jofra.com



JOFRA CPC Compact Pressure Calibrator

The JOFRA CPC pressure calibrators is designed for accuracy and ease of use. The CPC has the features needed in a pressure test and calibration tool: 17 engineering units, switch test, min/max readings, and mA reading.

- Accuracy to $\pm 0.05\%$ F. S.
- Available as an indicator or in a complete system
- Pressure range vacuum to 15 bar / 200 psi
- Measures loop current to 24 mA
- Min/max readings and switch test function
- Supplied with fittings for NPT or BSP threads
- RS232 interface and JOFRACAL calibration software

Find more information in specification sheet SS-CP-2180 at www.jofra.com

JOFRA IPI Industrial Pressure Indicator

The JOFRA IPI pressure indicator combines the ease of an analog gauge with the accuracy and easy-to-read display of a digital calibrator. The IPI offers a long battery life, high accuracy, and serial communication. The accuracy of the IPI rivals a pressure calibrator and is temperature compensated for shop or machine room applications.

- Accuracy to $\pm 0.05\%$ of F. S.
- Available as an indicator or in a complete system
- Pressure range vacuum to 700 bar / 10,000 psi
- 17 different and 1 user-definable pressure units
- Min/max readings
- RS232 interface and JOFRACAL calibration software
- ATEX and CSA certified and designed for use in potentially explosive environments

Find more information in specification sheet SS-CP-2179 at www.jofra.com



JOFRA APM Advanced Pressure Module

The JOFRA APM pressure modules extend the usage of the JOFRA APC pressure calibrator as well as the ASC300 and AMC910 multi-function signal calibrators. The modules are available in a series of accuracies, ranges, units, and pressure references from vacuum to absolute pressure.

- Accuracy to $\pm 0.01\%$ F. S.
- Pressure range vacuum to 700 bar / 10,000 psi
- 62 different modules
- Rugged and dependable for field or lab use
- Gauge, absolute, vacuum, differential, and combination modules
- Supplied with fittings for NPT and BSP threads

Find more information in specification sheet SS-CP-2190 at www.jofra.com



Selection Guide

	APM	DPC-500	APC010C	APC030C	APC200C	APC500C	APC01KG	APC03KG	APC05KG	APC10KG	CPC010C	CPC030C	CPC200C	IP1030C	IP1100C	IP1300C	IP1500C	IP1015G	IP101KG	IP102KG	IP103kG	IP105KG	IP110KG		
Pressure range - indicator																									
Vacuum to 0.7 bar / 10 psi			X								X														
Vacuum to 2 bar / 30 psi				X								X		X											
Vacuum to 7 bar / 100 psi													X		X										
Vacuum to 15 bar / 200 psi					X							X													
Vacuum to 21 bar / 300 psi															X										
Vacuum to 35 bar / 500 psi						X										X									
0 to 1 bar / 15 psi																	X								
0 to 70 bar / 1,000 psi							X												X						
0 to 140 bar / 2,000 psi																				X					
0 to 200 bar / 3,000 psi								X													X				
0 to 350 bar / 5,000 psi									X													X			
0 to 700 bar / 10,000 psi										X													X		
43 different pressure ranges depending on reference sensor up to 1000 bar / 14,500 psi		X																							
62 different pressure ranges up to 700 bar / 10,000 psi	X																								
Accuracy																									
up to ±0.01% F.S. depending on module	X																								
±0.025% F.S.		X																							
±(0.04% of reading + 0.01% F. S.)			X	X	X	X	X	X	X	X															
±0.05% F. S.											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Pressure range - pump systems																									
System A: 0 to 40 bar / 580 psi		O	O	O	O						O	O	O	O	O	O	O								
System B: vacuum to 40 bar / 580 psi		O			O	O						O				O	O								
System C: 0 to 350 bar / 5,000 psi		O			O	O	O	O								O			O	O	O	O			
System D: 0 to 350 bar / 5,000 psi		O			O	O	O	O								O			O	O	O	O			
System E: 0 to 700 bar / 10,000 psi		O			O	O	O	O	O										O	O	O	O	O	O	O
System F: 0 to 1,000 bar / 14,500 psi		O			O	O	O	O	O										O	O	O	O	O	O	O
Technology, features and design																									
CE compliant	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Switch test input	X	X	X	X	X	X	X	X	X	X	X	X	X												
Transmitter supply, 24 VDC	X	X	X	X	X	X	X	X	X	X															
Temperature reading	X													X	X	X	X	X	X	X	X	X	X	X	X
Temperature compensation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
mA reading	X	X	X	X	X	X	X	X	X	X	X	X	X												
Min/max reading	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JOFRACAL calibration software	X	X	X	X	X	X	X	X	X	X	X	X	X	O	O	O	O	O	O	O	O	O	O	O	O
RS232 serial interface	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
USB interface	X																								
External power input option														X	X	X	X	X	X	X	X	X	X	X	X
Low battery indicator	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Rechargeable batteries and charger	X	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Set of fittings (to connect indicator and pump) ¹	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
External DPC-J pressure sensor capability	X																								
External APM pressure sensor modules capability			O	O	O	O	O	O	O	O															
User recalibration and adjustment	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Multi-information display	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
One-key-one-function operation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Aluminum carrying case ¹	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
Protective softcase			X	X	X	X	X	X	X	X	X	X	X												
Protective boot														O	O	O	O	O	O	O	O	O	O	O	O
Traceable certificate	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Accredited certificate		O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
DNV Marine Approval Certificate			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ATEX and CSA certified to hazardous locations ²														X	X	X	X	X	X	X	X	X	X	X	X

¹ Included in pump systems

X = Delivered as standard

O = Optional accessories

² Indicator only

Ready-to-use pressure systems for the DPC-500, APC, CPC, and IPI calibrators

AMETEK offers the user several solutions for pressure generation. This line spans from a small pneumatic "bicycle" type pump to a hydraulic pump that generates up to 1,000 bar / 15,000 psi. These are durable pumps with features such as vernier valves, vent valves, manifold connections, swivel fittings, and optional O-ring materials and fittings making the pumps flexible to meet your calibration and testing applications.

For all pressure systems, the pump and the indicator are separate systems. Therefore, a replacement of the pump does not mean that you have to send the complete system for repair. Maintenance of the instrument is also made easy. Recalibration of the unit can be performed locally with an accurate pressure reference: No need to send the unit back to the manufacturer for recalibration. If you do require a factory calibration, the pump and indicator are independent and only the indicator needs to be returned.

JOFRA pressure calibrators are as standard delivered as individual indicators or as complete calibration systems ready to use in a carrying case, including pump, hose, set of fittings, batteries, test leads, user manual, and a traceable calibration certificate.

Find more information in accessory sheet AS-CP-2208 at www.jofra.com

Pump system A

DPC-500, APC, CPC, and IPI

0 to 40 bar



Pump system B

DPC-500, APC, CPC, and IPI

Vacuum to 40 bar



Pump system C

DPC-500, APC and IPI

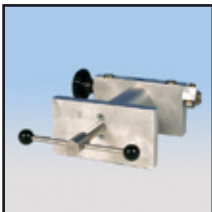
0 to 350 bar



Pump system D

DPC-500, APC and IPI

0 to 350 bar



Pump system E

DPC-500, APC and IPI

0 to 700 bar



Pump system F

DPC-500, APC and IPI

0 to 1000 bar



AMETEK Calibration Instruments is one of the world's leading manufacturers and developers of calibration instruments for temperature, pressure and process signals as well as for temperature sensors both from a commercial and a technological point of view.

JOFRA Temperature Instruments
Portable precision thermometers. Dry-block and liquid bath calibrators: 4 series, with more than 25 models and temperature ranges from -90° to 1205°C / -130° to 2200°F. All featuring speed, portability, accuracy and advanced documenting functions with JOFRACAL calibration software.

JOFRA Pressure Instruments
Convenient electronic systems ranging from -1 to 1000 bar (25 inHg to 14,500 psi) - multiple choices of pressure ranges, pumps and accuracies, fully temperature-compensated for problem-free and accurate field use.

JOFRA Signal Instruments
Process signal measurement and simulation for easy control loop calibration and measurement tasks - from handheld field instruments to laboratory reference level bench top instruments.

JOFRA / JF Marine Instruments
A complete range of calibration equipment for temperature, pressure and signal, approved for marine use.

FP Temperature Sensors
A complete range of temperature sensors for industrial and marine use.

M&G Pressure Testers
Pneumatic floating-ball or hydraulic piston dead weight testers with accuracies to 0.015% of reading.

M&G Pumps
Pressure generators from small pneumatic "bicycle" style pumps to hydraulic pumps generating up to 1,000 bar (15,000 psi).

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Pub code P-CP-2004-US Issue 0901

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