DATA SHEET

Digital Instrumentation

Digimax Plus 82-P0801/E (in the middle) with 3000 kN load cell 82-E0100/300 and 82-P0172/M printer

General description

The system, connected to any strain gauge load cell, provides data for the force verification of the testing machine. Data can be printed by a standard serial printer as, for example, our model 82-P0172 with serial cable 82-P0172/1 (see accessories), or unloaded to PC for processing and, by the relevant MS Excel template 82-P0804/E4 (see accessories), for producing the test certificate conforming to the standard in use as, for example, EN 12390-4 or ASTM C39 for concrete compression testers.
The Digimax Plus, connected to one of our load cells 82-E0100/30 to 82-E01000/500 can be supplied complete with Official or Traceable calibration certificate. See ordering information. Each cell has to be calibrated separately and the certificate refer to one cell only

Main features

- High resolution: 256,000 points (less than 0.05% of full scale)
- Large graphic display: 240x128 pixel
- Language selection: English, French, Spanish, German and Italian
- Large permanent memory: up to 960 readings
- Two RS 232 serial ports for PC and printer
- Remote control
- MS EXCEL Template available for producing calibration certificates conforming to EN/ASTM Standards

Standards

- EN 12390-4
- ASTM C39
- ASTM E74
- EN ISO 376

Specifications

CONTROLS
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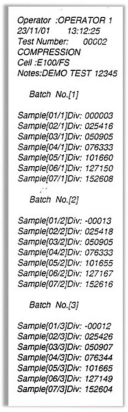
- Microprocessor based
- Clock calendar chip
- Large permanent memory to store data and test results
- Two RS 232 serial port for PC and printer
- Analogic channel for strain gauge load cells/transducers, 256,000 points resolution
- Graphic display 240x128 pixel
- Dimensions: 250x220x150 mm
- Weight approx.: 2 kg

82-P0801/E



Operator :OPERATOR 1
23/11/01 13:12:25
Test Number: 00002
COMPRESSION
Cell :E100/FS
Notes:DEMO TEST 12345

Batch No.[1]

Sample[01/1]Div: 000003
Sample[02/1]Div: 025416
Sample[03/1]Div: 050905
Sample[04/1]Div: 076333
Sample[05/1]Div: 101660
Sample[06/1]Div: 127150
Sample[07/1]Div: 152608

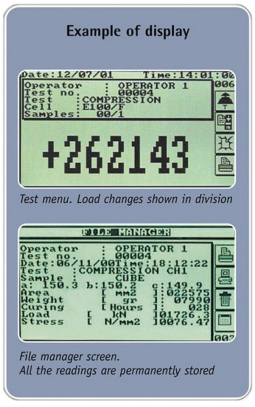
Batch No.[2]

Sample[01/2]Div: -00013
Sample[02/2]Div: 025418
Sample[03/2]Div: 050905
Sample[04/2]Div: 076333
Sample[05/2]Div: 101655
Sample[06/2]Div: 127167
Sample[07/2]Div: 152616

Batch No.[3]

Sample[01/3]Div: -00012
Sample[02/3]Div: 025426
Sample[03/3]Div: 050907
Sample[04/3]Div: 076344
Sample[05/3]Div: 101665
Sample[06/3]Div: 127149
Sample[07/3]Div: 152604

Example of print of calibration test results obtained by simply connecting the 82-P0172/M to the 82-P0801/E tester.



Example of display

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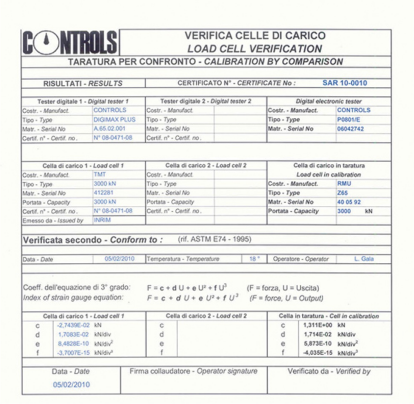
DATA SHEET



VERIFICA CELLE DI CARICO
LOAD CELL VERIFICATION
TARATURA PER CONFRONTO - *CALIBRATION BY COMPARISON*

RISULTATI - *RESULTS* — CERTIFICATO N° - *CERTIFICATE No :* SAR 10-0010

Tester digitale 1 - *Digital tester 1*		Tester digitale 2 - *Digital tester 2*		*Digital electronic tester*	
Costr. - *Manufact.*	CONTROLS	Costr. - *Manufact.*		Costr. - *Manufact.*	CONTROLS
Tipo - *Type*	DIGIMAX PLUS	Tipo - *Type*		Tipo - *Type*	P0801/E
Matr. - *Serial No*	A.65.02.001	Matr. - *Serial No*		Matr. - *Serial No*	06042742
Certif. n° - *Certif. no.*	N° 08-0471-08	Certif. n° - *Certif. no.*			

Cella di carico 1 - *Load cell 1*		Cella di carico 2 - *Load cell 2*		Cella di carico in taratura *Load cell in calibration*	
Costr. - *Manufact.*	TMT	Costr. - *Manufact.*		Costr. - *Manufact.*	RMU
Tipo - *Type*	3000 kN	Tipo - *Type*		Tipo - *Type*	Z65
Matr. - *Serial No*	412281	Matr. - *Serial No*		Matr. - *Serial No*	40 05 92
Portata - *Capacity*	3000 kN	Portata - *Capacity*		Portata - *Capacity*	3000 kN
Certif. n° - *Certif. no.*	N° 08-0471-08	Certif. n° - *Certif. no.*			
Emesso da - *Issued by*	INRiM				

Verificata secondo - *Conform to :* (rif. ASTM E74 - 1995)

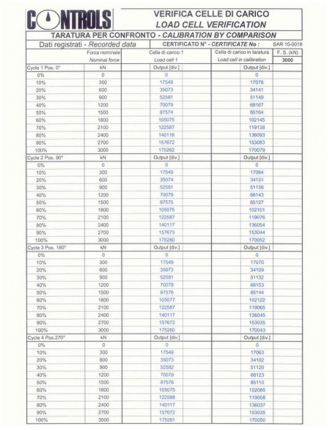
Data - *Date*		Temperatura - *Temperature*		Operatore - *Operator*	
	05/02/2010		18 °		L. Gaia

Coeff. dell'equazione di 3° grado: $F = c + d\,U + e\,U^2 + f\,U^3$ (F = forza, U = Uscita)
Index of strain gauge equation: $F = c + d\,U + e\,U^2 + f\,U^3$ (*F = force, U = Output*)

Cella di carico 1 - *Load cell 1*		Cella di carico 2 - *Load cell 2*		Cella in taratura - *Cell in calibration*	
c	-2,7439E-02 kN	c		c	1,311E+00 kN
d	1,7083E-02 kN/div	d		d	1,714E-02 kN/div
e	8,482BE-10 kN/div²	e		e	5,873E-10 kN/div²
f	-3,7007E-15 kN/div³	f		f	-4,035E-15 kN/div³

Data - *Date*	Firma collaudatore - *Operator signature*	Verificato da - *Verified by*
05/02/2010		

Final force calibration certificate obtained with the connection to PC and the 82-P0804/E4 MS EXCEL template.



VERIFICA CELLE DI CARICO
LOAD CELL VERIFICATION
TARATURA PER CONFRONTO - *CALIBRATION BY COMPARISON*
Dati registrati - *Recorded data* — CERTIFICATO N° - *CERTIFICATE No :* SAR 10-0010

	Forza nominale *Nominal force*	Cella di carico 1 *Load cell 1*	Cella di carico in taratura *Load cell in calibration*	F. S. (kN)
Cycle 1 Pos. 0°	kN	Output [div.]	Output [div.]	3000
0%	0	0	0	
10%	300	17549	17078	
20%	600	35073	34141	
30%	900	52581	51149	
40%	1200	70079	68167	
50%	1500	87574	85164	
60%	1800	105075	102145	
70%	2100	122587	119138	
80%	2400	140116	136083	
90%	2700	157673	153063	
100%	3000	175262	170079	
Cycle 2 Pos. 90°	kN	Output [div.]	Output [div.]	
0%	0	0	0	
10%	300	17549	17084	
20%	600	35074	34131	
30%	900	52581	51136	
40%	1200	70079	68143	
50%	1500	87575	85127	
60%	1800	105076	102101	
70%	2100	122587	119076	
80%	2400	140117	136054	
90%	2700	157673	153044	
100%	3000	175260	170002	
Cycle 3 Pos. 180°	kN	Output [div.]	Output [div.]	
0%	0	0	0	
10%	300	17549	17070	
20%	600	35073	34109	
30%	900	52581	51132	
40%	1200	70078	68153	
50%	1500	87576	85144	
60%	1800	105077	102122	
70%	2100	122587	119065	
80%	2400	140117	136045	
90%	2750	157672	153035	
100%	3000	175260	170043	
Cycle 4 Pos.270°	kN	Output [div.]	Output [div.]	
0%	0	0	0	
10%	300	17549	17063	
20%	600	35073	34102	
30%	900	52582	51120	
40%	1200	70079	68123	
50%	1500	87576	85110	
60%	1800	105075	102095	
70%	2100	122588	119058	
80%	2400	140117	136037	
90%	2700	157672	153039	
100%	3000	175261	170050	

Final force calibration certificate obtained with the connection to PC and the 82-P0804/E4 MS EXCEL template

82-P0172/M

Products

82-P0801/E

Digimax Plus tester for force verification. 230V, 50-60Hz, 1ph.

82-P0801/EZ

Digimax Plus 1 channel version, for use with strain gauge load cells or trasducers, display in divisions. 110V/60Hz/1ph

DATA SHEET

Accessories and consumables

82-P0172/M

24 columns serial printer. 110-230V/50-60Hz/1ph
82-Q0800/3

Serial cable RS232 and RS232-USB adapter for PC connection
82-E0100/ACC4

Official ACCREDIA (EAL) calibration certificate for the load cell connected to suitable digital tester for force verification. Calibration to EN ISO 376, 10 points, 4 cycles. (increasing forces only). Suitable for load cells from >1000 to 5000 kN.
82-E0100/TRC

Traceable calibration certificate for the load cell connected to suitable digital tester for force verification. Compatible with 5 kN up to 5000 kN capacity load cells.
82-P0804/E4

Force calibration verification MS Excel Spread sheet.
82-E0100/ACC2

Official ACCREDIA (EAL) calibration certificate for the load cell connected to suitable digital tester for force verification. Calibration to EN ISO 376, 10 points, 4 cycles. (increasing forces only). Suitable for load cells from >10 to 600 kN
82-E0100/ACC3

Official ACCREDIA (EAL) calibration certificate for the load cell connected to suitable digital tester for force verification. Calibration to EN ISO 376, 10 points, 4 cycles. (increasing forces only). Suitable for load cells from >600 to 1000 kN.
82-P0800/C

Hard plastic carrying case for 82-P0801/E tester and 82-P0171 serial printer
82-P0172/1

Serial cable for printer connection.
82-E0100/ACC1
Official ACCREDIA (EAL) calibration certificate for the load cell connected to suitable digital tester for force verification. Calibration to EN ISO 376, 10 points, 4 cycles. (increasing forces only). Suitable for load cells from >1 to 10 kN