GAS MEASUREMENT

RECORDING CHARTS, DISPOSABLE PENS AND PEN ARMS

g Graphic Controls

Industrial Products

A TRADITION OF EXCELLENCE AND A FUTURE OF INNOVATION

Graphic Controls
Buffalo, NY

Graphic Controls is a world leader of recording charts and high quality disposable pens, pen arms, inks and accessories. We manufacture charts and pens to fit the majority of recorders in use today.

The enormous variety of recording charts made by Graphic Controls includes circular, strip, rectangular and fanfold charts...ink-writing, heat-sensitive, pressure-sensitive and electrosensitive. These charts are used in instruments that record physical measurements such as: temperature, pressure, humidity, flow, liquid level, electric current and voltage...magnetic, seismic and similar information.

Graphic Controls is a single-source supply for your total recording chart requirements. And we bring more than 50 years of experience to bear on the custom design of charts to fill special needs...for any application.

Graphic Controls
Industrial Products

For Your Gas Measurement System:
Recording Charts and Disposable Pens from
GRAPHIC CONTROLS.

Graphic Controls manufactures the charts and disposable pens we sell...so we've taken the time to make sure they work well...Together.

- Optimal 7 mil thickness to provide stiffness and curl control for use in the field under normal and high stress conditions.
- All disposable pens are designed to meet exacting environmental and performance standards to ensure consistent high quality.
- Easy recording retrofit with patented POSILOC™ Pen Arms.
- Compatibility with OEM specifications to ensure continued reliable performance, that meet or exceed American Gas Association (AGA) specifications.
- Our manufacturing facility has obtained ISO 9001-2000 certification. We are especially proud to be among the manufacturers who have received certification to this exacting standard on our first application. You can be assured that every product we offer meets the highest quality standards and will provide you with reliable performance in the most demanding and critical operations.

Quality System

Quality
Endorsed
Company
ISO 9001

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Products for the Gas Industry

Recording Charts and Disposable Pens
Tailored to Your Measurement Requirements

Series 72™ and 79™ Scannable Pens

All Temperature Pens

Array A (Barton, Rockwell 3-Pen Recorders)

	Part Number	Description
.800″	82-79-0414-06	Temperature Scan Green
.537″	82-79-0312-06	Differential Red
	82-72-0111-06	Static Scan Black
.237″	82-72-0113-06	Static Scan Blue

U.S. Patent #4,337,471-Bias Cut Pens

Array B (American Meter, Foxboro, Mercury 3-Pen Recorders)

	Part Number	Description
.800″	82-79-0412-06	Differential Scan Red
.539″	82-72-0211-06	Static Scan Black
	82-72-0213-06	Static Scan Blue
.237″	82-72-0114-06	Temperature Scan Green

U.S. Patent #4,337,471-Bias Cut Pens

Look for our "Gas Flame" logo on Series 72™ and Series 79™ Disposable Pens:

- The intense black ink in our Static Pens allows you to forget about retracing!
- Our redesigned bias cut nib covering design provides enhanced visibility while arcing the pens and setting the time lag.
- Our continued commitment to excellence for all of our Gas Measurement Products ensures your satisfaction.

Series 72™ and 79™ Scannable Pens are designed to produce consistently CLEAN, SCANNABLE charts.

- Broader line width assures reliable scanner processing.
- Exclusive Graphic Controls inks virtually eliminate skips and estimations.
- All temperature ink ensures a solid, scannable trace in all types of climates.
- Pen Arrays can be calibrated to a 15 minute time lag (.090″) between Differential and Static pens on the Zero Line of a 24 hour chart.
- Scannable pens allow you to increase the number of charts that can be scanned and will improve the accuracy of your billing operation.

All Temperature Pens

Array A (Barton, Rockwell 3-Pen Recorders)

	Part Number	Description
.800″	82-79-3414-06	Temperature Scan Green
.537″	82-79-3312-06	Differential Red
.237″	82-72-3111-06	Static Scan Black
	82-72-3113-06	Static Scan Blue

U.S. Patent #4,337,471-Bias Cut Pens

Array B (American Meter, Foxboro, Mercury 3-Pen Recorders)

	Part Number	Description
.800″	82-79-3412-06	Differential Scan Red
.539″	82-72-3211-06	Static Scan Black
.237″	82-72-3213-06	Static Scan Blue
	82-72-3114-06	Temperature Scan Green

U.S. Patent #4,337,471-Bias Cut Pens

Series 72™ and 79™ Fine Line Pens for Integrators offer performance advantages to gas industry companies that process their charts manually.

- Fine-point pen tips provide sharply defined lines.
- Thinner lines allow integrator operators to trace the flow of gas more accurately.
- Pen Arrays can be calibrated to a 15 minute time lag (.090″) between Differential and Static pens on the Zero Line of a 24 hour chart.

Important
These products are warranted to be free from all defects in material and workmanship. Because of the variety of uses to which these products may be put, seller does not warrant that they can be used for any particular purpose and disclaims all other warranties, whether expressed or implied.
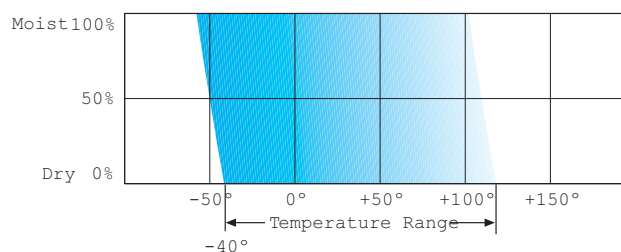
Part Number System
Gas industry pens use a 10 digit part number. The Marking Systems Guide lists gas industry pens with the appropriate recorders.

Color Code	Product Series	Packaging Quantity
1. Black		
2. Red		
3. Blue	**82-72-3114-06**	
4. Green		
N. Nonscan Green	Color Code	

Operating Range for All Temperature Pens
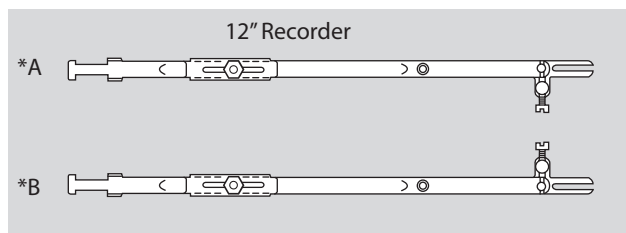
Moist 100%
50%
Dry 0%

−50°   0°   +50°   +100°   +150°

−40°

Temperature Range

Gas Industry Posiloc™ Pen Arm Guide

To Fit: American Meter

Pen Arms – For use with Series 72 & 79 Disposable Pens.

12" Recorder

*A

*B

Packaging: One pen arm per package

*Adjustable length simplifies recorder retrofit. Finger-tight control allows one pen arm to function in any position on the recorder.

Ident. Letter	Instrument Model Number/Size	Order by GC Part Number
*A	To fit all positions 12" Recorder	80-36-2490-01
*B		80-36-3030-01

12" Orifice Meter	
Temperature & Differential	80-36-0980-01
Static	80-36-0970-01

Instrument Model Number/Size	Function	Order by GC Part Number
8" Round		
Single Pen	Pressure	80-36-3330-01
	Volume	80-36-0990-01
Two Pen	Pressure	80-36-3330-01
	Volume	80-36-0990-01
	Temperature	80-36-3340-01
	Pressure	80-36-3330-01

To Fit: Barton
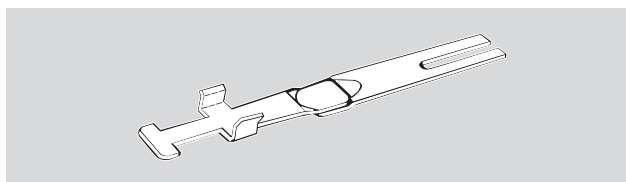
Instrument Model No.	Replacement for Mfr. part No.	Order by GC Part Number
12" Recorders	Differential & Static	80-36-2430-01
Model 202	Differential & Static	80-36-1330-01
		80-36-1340-01

To Fit: Foxboro
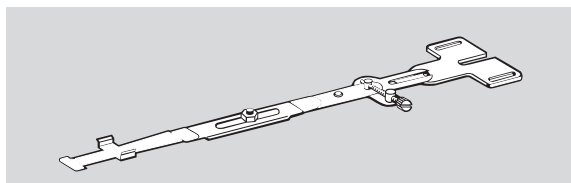

Adjustable Pen Arm

Standard Pen Arm (Fixed Length)
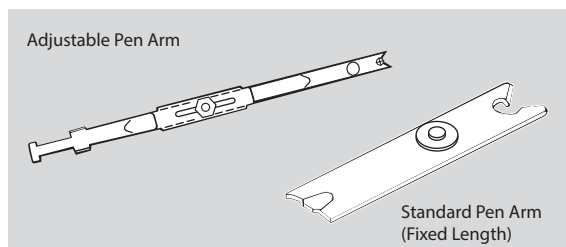
Model 39B Gas Recorder.
12" Rectangular Case. 80-36-3690-01.

Instrument Model Number	Adjustable Pen Arm Order by GC Part Number	Standard Pen Arm	Light Weight Pen Arm
10" Round Case and 12" Rectangular Case (Model 40) Recorders	80-36-2420-01	80-36-1190-01	80-36-3130-01
		80-36-1200-01	80-36-3140-01
		80-36-1210-01	80-36-3150-01
		80-36-1220-01	80-36-3160-01
Rectangular Case (Model 30) and 12" Round Case	80-36-2410-01	80-36-1230-01	80-36-3170-01
		80-36-1240-01	80-36-3180-01
		80-36-1250-01	80-36-3190-01
		80-36-1260-01	80-36-3200-01
		80-36-1270-01	80-36-3210-01

To Fit: Mercury

Pen Arms (Adjustable) – For use with Universal Series 72 & 79 Disposable Pens
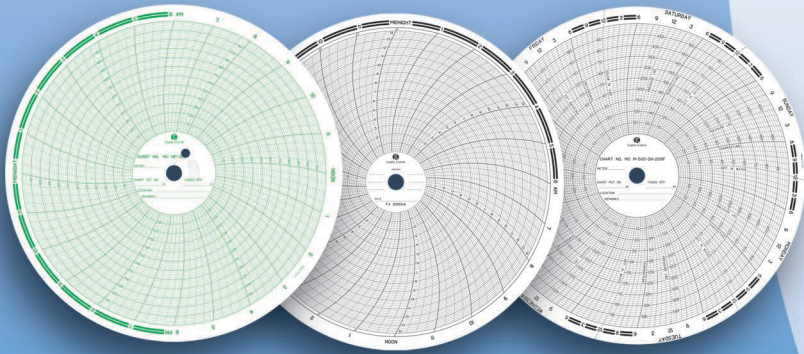

Note: These Posiloc pen arms are adjustable for length and can be used in all 3 positions.

Packaging: One per package

Instrument Model Number	Description	Order by GC Part Number
#800 Series (8") #1200 Series (12")	#1 Temperature	80-36-3710-01
	#2 Pressure	
	#3 Volume	
#900 Series (12") #700 Series (8", 10", 12")	#1 Temperature	80-36-3740-01
	#2 Pressure	
	#3 Volume	

Chart Variations

Graphic Controls offers the variations listed below to meet your unique application requirements. We can also produce private label charts designated with your company's identification to meet your organizational chart needs. Questions about additional variations of charts may be posed directly to sales representatives.

Printing:
- Scanner Gray/Blue
- Back Print
- Non-Standard Color
- Over Prints

Extra Holes:
- Readout Hole
- Special Holes

Material:
- Non-Standard Paper

American Meter/Barton

| Make & Model Number To Fit:	Size	Chart Range	Part Number
L Series – Sq. Root	11 1/8"	0-10 Sq. Root	L-10
		0-50 Sq. Root; 7 day	L-50-S
		0-100 Sq. Root; 0-250 Pressure	L-100-250
M Series – Pressure & Differential (& Temperature)	11 1/8"	0-100 Pressure; 0-20 Differential	M-100-T
		0-100 Pressure; 0-50 Differential, 0-150T	M-100-150F
MP Series – Pressure (& Pressure & Temperature)	11 1/8"	0-100 Pressure	MP-100
		0-100 Pressure, 0-150 Pressure	MP-100-0-150
		0-150 Pressure, 0-200 Temperature	MP-150-200F
MT Series – Temperature Only	11 1/8"	0-100F	MT-100
Universal Series	11 1/8"	0-100%	0-100%
		0-100%, 150 Temperature, 8 day	0-100%-150-8D
P Series – Pressure	8"	0-100 Pressure; 7 Day	P100-S
Differential Suffixes: X = 0-10; T = 0-20; TV = 0-25; No Suffix = 0-50; H = 0-100; XX = 10-0-10; TV & TV = 25-0-25			

Foxboro

898500 – First Number = Size: 8=12"; 7=10"; 6=8"; 5=6"
79801 – Third Number = Rotation: 8=24HR; 9=7 Day; L=16 Day; N-31 Day -L=7 Pt Paper

Mercury- Designated in Part Number

12" 0-100, -30-120 = P 0-100-30-0-120-12
8" 0-300, -30-120 = P 0-300-30-0-120-8

Scanner Shades

Code 006	Code 161
Shade 34	
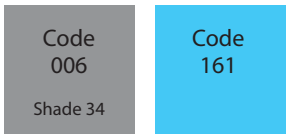
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