### **Hydraulic Force and Pressure Gauges**



▼ Shown: **GF-230P, GF-835P, GP-10S** 



- GF-Series gauges are calibrated with dual scale reading for pressure and force
- Excellent readability; 4 inch diameter gauge face
- Fast, easy installation
- · GF-Series gauges are glycerin filled
- Stainless steel gauge cases for corrosion resistance
- GP-Series gauges are calibrated with dual scale reading for psi and bar

### ▼ A GP-10S gauge is used on this press to check the hydraulic pressure required to bend a steel plate.



# Visual References for System Pressure and Force



#### **Auto-Damper Valve V-10**

For automatic control of gauge fluctuations, the **V-10** Auto-Damper Valve controls the movement of the gauge

needle by restricting oil flow in and out of the gauge. No adjustments needed.

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#### Snubber Valve V-91

Infinitely adjustable for metering oil out of a gauge. The **V-91** Snubber Valve is also suitable as a shut-off

valve to protect the gauge during high cycle applications.

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#### **Used With**

All Cylinders

All Cylinders

All 5 ton RC Cylinders

All 10 ton RC Cylinders
All 25 ton RC Cylinders

RC and RR 50 ton Cylinders
12 ton RCH-Series

RCH/RRH-20, 30 and 60 ton RCS-201, 302

RCS-502, 1002



25 ton Presses 50 ton Presses

25-50 ton Presses

100 ton Presses

150-200 ton Presses



### **Hydraulic Force and Pressure Gauges**



#### **Load Gauges**

To measure external load supported by a cylinder or jack. For pressing parts together under pre-determined loads, weighing, testing, etc.

#### **Pressure Gauges**

To measure the input pressure into cylinders, jacks or high pressure systems. Also for all testing applications.

**GP-Series** gauges are dry gauges.

GF-Series gauges are glycerin filled.

GF GP Series



Pressure Range:

0-15,000 psi

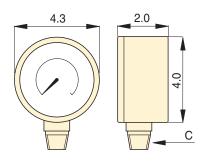
Face Diameter:

4 inch

Accuracy, % of full scale:

± 1%

#### **All Models**





#### **Maximum Indicator Pointer**

Indicator retains peak readings of pressure or force generated by the system. Order model number:

H-4000G.

Can easily be installed on GP-Series dry gauges.

6	Ga	auge Type and C	Calibration		Units per Division	Model Number*	Thread C	C	ge Ada	131
psi	bar	psi	lbs	tons				GA-1	GA-2	GA-3
0-10,000	0-700	_	_	_	100 psi, 10 bar	GP-10S	½ NPTF	•	•	
0-15,000	0-1000	_	_	_	200 psi, 10 bar	GP-15S	½ NPTF	•	•	
_	_	0-10,000	0-10,000	0-5	100 psi, 100 lbs, .1 ton	GF-5P	½ NPTF	•	•	
_	_	0-10,000	0-22,200	0-11	100 psi, 200 lbs, .2 ton	GF-10P	½ NPTF	•	•	
_	_	0-10,000	0-51,500	0-25.5	100 psi, 500 lbs, .5 ton	GF-20P	½ NPTF	•	•	
_	_	0-10,000	0-110,000	0-55	100 psi, 1000 lbs, 1 ton	GF-50P	½ NPTF	•	•	
_	_	0-10,000	0-27,000	0-13.5	100 psi, 200 lbs, .25 ton	GF-120P	½ NPTF	•	•	
_	_	0-10,000	-	0-23.5/36/65	100 psi, .5/.5/1 ton	GF-813P	1/4 NPTF			•
_	_	0-10,000	_	0-22/32	100 psi, .5/.5 ton	GF-230P	½ NPTF	•	•	
_	_	0-10,000	_	0-50/100	100 psi, 1/1 ton	GF-510P	½ NPTF	•	•	
_	-	0-10,000	0-51,500	0-25.5	100 psi, 500 lbs, .5 ton	GF-20P	½ NPTF	•	•	
-	-	0-10,000	0-11,000	0-55	100 psi, 1000 lbs, 1 ton	GF-50P	½ NPTF	•	•	
_	_	0-10,000	_	0-25.5/32.5/55	100 psi, .5/.5/.5 ton	GF-835P	1/4 NPTF			•
_	_	0-10,000	_	0-79/103	100 psi, 1/1 ton	GF-871P	1/4 NPTF			•
_	_	0-10,000	_	0-150/200	100 psi, 5/5 ton	GF-200P	1/4 NPTF			•

<sup>\*</sup> Metric scale Force Gauges are available by changing the "P" suffix to "B".

### **Hydraulic Pressure Gauges**



▼ Shown: H-4049L, G-2534R, G-4089L, G-2535L, G-4040L



## Visual References for System Pressure



#### GA45GC Gauge Adaptor Assembly

45° angled gauge adaptor improves safety.

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#### **Glycerin Filled (G-Series)**

- Calibrated in dual scale reading in psi and bar
- All pressure sensing parts sealed and dampened by glycerin for long life
- Includes safety blow-out disk and pressure equalizing membrane
- Gauge snubbers or needle valves recommended for high-cycle applications

#### **High-Cycle Dry Gauges (H-Series)**

- Calibrated in dual scale reading in psi and bar
- Ideal for use in many applications, specifically for high cycle and harsh environments
- Gauge snubbers or needle valves recommended to shut off gauge when not in use



#### **Gauge Adaptor**

For easy gauge installation into almost any system, Enerpac offers a complete line of gauge adaptors.

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#### **Snubber Valve**

Infinitely adjustable for metering oil out of a gauge. The V-91 Snubber Valve is also suitable as a shut-off valve to protect the gauge

during high-cycle applications.

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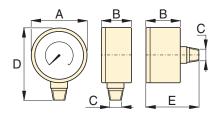
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When lifting or pressing, always use a gauge. A gauge is your "window" to the system-it lets you see what's going on.



### **Hydraulic Pressure Gauges**



Dimensions (in)											
Face Diam.	Connection	Α	В	С	D	E					
2.5	Lower Mount	2.50	1.46	1/4" NPTF	3.31	-					
2.5	Center Rear	2.50	1.46	1/4" NPTF	_	2.48					
4.0	Lower Mount	4.0	1.15	1/4" NPTF	4.80	-					
4.0	Lower Mount	4.0	1.93	½" NPTF	5.38	-					

Note: dimensions for reference only.

G H Series



Pressure Range:

0-15,000 psi

Face Diameter:

**2.5-4 inches** 

Accuracy, % of full scale: ±1% and 1½%



### Maximum Indicating Pointer

Indicator retains peak readings of pressure or force generated by the system.

Order model number: **H-4000G**. Note: For use on H-Series gauges only.

#### **▼** SELECTION CHART

Gauge Series	Pressure	e Range		Model	Number		1	ijor Jation		linor M		jor	Mir Gradu	nor	
Series			Face ø 2.5" ½ NPTF Lower Mount	Face ø 2.5" ½ NPTF Center Rear	Face ø 4" 1/4 NPTF Lower Mount	Face ø 4" ½ NPTF Lower Mount	Gradi	auon	Gradi	aation					
			Accuracy	Accuracy	Accuracy	Accuracy		(p:	si)			(bar)			
	(psi)	(bar)	±1½%	±1½%	±1%	±1%	(2.5")	(4")	(2.5")	(4")	(2.5")	(4")	(2.5")	(4")	
	0-100	0-7	G2509L	-	-	-	10	_	2	_	1	_	0,01	_	
	0-160	0-11	G2510L	-	-	-	10	1	2	-	1	-	0,02	_	
	0-200	0-14	G2511L	-	-	-	50	_	5	_	1	_	0,02	_	
	0-300	0-20	G2512L	-	-	-	50	-	5	-	5	-	0,50	_	
	0-600	0-40	G2513L	-	-	-	100	_	10	_	10	_	1	_	
G -Series	0-1,000	0-70	G2514L	G2531R	-	-	100	-	20	-	10	-	1	_	
	0-2,000	0-140	G2515L	-	-	-	500	_	50	_	10	_	2	_	
	0-3,000	0-200	G2516L	-	-	-	500	-	50	_	50	-	5	_	
	0-6,000	0-400	G2517L	G2534R	-	-	1000	_	100	_	100	_	10	_	
	0-10,000	0-700	G2535L	G2537R	G4088L	G4039L	2000	1000	200	100	100	100	10	10	
	0-15,000	0-1000	G2536L	G2538R	G4089L	G4040L	3000	3000	200	200	100	100	20	20	
H-Series	0-10,000	0-700	-	-	H4049L	H4071L	_	1000	-	100	_	100	-	10	

### **Test System Gauges**



▼ Gauge shown: T-6003L



- Calibrated for dual scale reading in psi and bar
- All gauges have spring-loaded backs with rubber blow-out plugs to protect case assembly in case of over-pressurization
- 40,000 and 50,000 psi models include flange mounting
- 1/2" NPTF versions are made of high-strength alloy steel
- .25" cone models are made of 316 stainless steel, with 403 stainless steel on 40,000 and 50,000 psi models
- Integral maximum indicator pointer standard on all gauges

#### I Series

Pressure Range:

0-50,000 psi

Face Diameter:

#### 6.4 inches

Accuracy, % of full scale:

 $\pm \frac{1}{2}\%$  and  $\pm \frac{1}{2}\%$ 



#### Cone Mount Gauge Adaptor

Contains fittings to connect .25" cone fitting gauge to .38" cone system.

Kit includes 43-301 tee, 43-704 gauge adaptor and 45-116 tubing.

Order model number: 83-011.

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### Cone Mount Gauge Connector

For connecting gauges with .25" cone fitting directly to model number **11-100** or

**11-400** pump. May be used with other .25" cone systems.

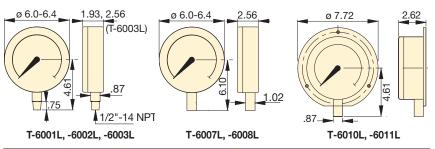
Order model number: 43-704

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An Enerpac P-2282 hand pump equipped with a T-6011L test system gauge is used for proof pressure testing of hydraulic valves.





Pressure Range			mber	Number Intervals	Graduation Intervals	Number Intervals	Graduation Intervals
nange	nange	Alloy Steel	Stainless Steel	intervais	intervals	intervais	intervals
(psi)	(bar)	½" NPTF	.25" Cone	(psi)	(psi)	(bar)	(bar)
0-1,000*	0-70	T-6001L	-	100	10	10	1
0-5,000*	0-350	T-6002L	-	500	50	50	5
0-10,000*	0-700	T-6003L	T-6007L	1,000	100	100	10
0-20,000*	0-1400	•	T-6008L	1,000	100	200	20
0-40,000**	0-2800	-	T-6010L	5,000	200	500	20
0-50,000**	0-3500	-	T-6011L	5,000	500	500	50

Accuracy: ± ½%

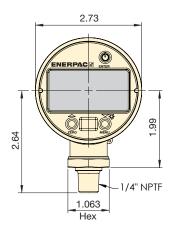
<sup>\*\*</sup> Accuracy: ± 11/2%

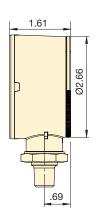
### Digital, Hydraulic Pressure Gauges

▼ Gauge shown: DGR-2



- Rated for system pressure up to 20,000 psi
- Displays in multiple units: psi, bar, mPA, kg/cm<sup>2</sup> (user selectable)
- Zero reset ensures that gauge reads actual system pressure
- Batteries included, condition indicator on read-out
- IP65 rated case design
- Shut off selectable menu driven
- UL listed, CE and RoHS compliant





Pressure Rating			ssure ting	Model Number	Pressure Rating		Pressure Rating	
(psi)		(b	ar)		(MPa) (Kg/c		/cm²)	
Range	Resolution	Range	Resolution		Range	Resolution	Range	Resolution
0-20,000	1	0-1380	0.1	DGR-2	0-140	0.01	0-1400	0.1

### **DGR** Series

Pressure Range:

0-20,000 psi

Voltage:

3 VDC (battery)

Accuracy, % of full scale:

± 0.25%



#### **Back-lit Readout**

Back-lit readout allows easy reading in less than ideal lighting.



#### **Gauge Adaptor**

For easy gauge installation into almost any system, Enerpac offers a complete line of gauge adaptors.

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Greater accuracy and easier to read: enhance your ability to monitor and control hydraulic system pressure up to 20,000 psi.



### GA45GC Series, Gauge Adaptor Assembly



▼ Shown: A45GC



- GA45GC Series
- Maximum Operating Pressure:

10,000 psi

Connection 1:

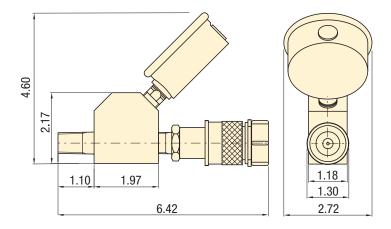
3/8" NPTF male

Connection 2:

**CR-400** Coupler

45° Angled gauge adaptor improves safe working conditions

- 45° angled gauge improves visibility
- Slim and narrow design
- Easy to fit in a broad range of systems
- Maximize controlled load movement
- Glycerin dampened gauge with dual scale
- Enerpac high-flow female coupler



Model	Gauge Port	Male End	Female End	Gauge Range			
Number				(psi)	(bar)		
GA45GC	G2535L	3/8" NPTF	CR-400	0-10,000	0-700		

▼ The Gauge Adaptor Assembly is the window to your system; allows easy reading of the pressure for safe operation.

