## **GF, GP-Series, Hydraulic Force & Pressure Gauges**



▼ Shown from left to right: GF-230B, GF-835B, GP-10S



- GF-series gauges: calibrated with dual scale reading for pressure (bar) and force (kN)
- GF-series gauges: all pressure sensing parts are sealed and dampened by glycerine for long life
- GP-series gauges: calibrated with dual scale reading for pressure in bar and psi
- Excellent readability: gauge face dimensions 100 mm
- Fast, easy installation
- Stainless steel gauge cases for corrosion resistance.

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



## **Visual Reference 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.

Page: //

130



#### 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.

Dogge 12

#### Used With

**All cylinders** 

All cylinders

5 ton RC, RSM-cylinders

10 ton RC, RCS, RSM-cylinders

All 25 ton RC-cylinders

All 50 ton RC, RR-cylinders

13 ton RCH-Series

RCS-201, 302

RCS-502, 1002

RCH-202, 302, 603

25, 30, 50 ton RC, RCS, RSM, RR

75 and 95 ton RC, RR-cylinders

150 and 200 ton RR-cylinders



10 ton VLP Presses

25 ton XLP Presses

50 ton XLP, BPR Presses

100 ton VLP, BPR Presses
200 ton VLP, BPR Presses

## **Hydraulic Force & Pressure Gauges**



#### **Maximum Indicator Pointer**

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

Can easily be installed on GP and H-Series gauges. Order model nr: BSA-881.



#### **Pressure Gauges**

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

#### **Force Gauges**

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

**GP-Series** are dry gauges. GF-Series are glycerine filled gauges. GF **GP Series** 



Pressure Range:

0 - 1000 bar

Force Range:

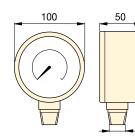
0 - 2000 kN

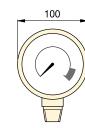
Gauge Face Diameter:

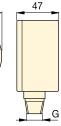
100 mm

Accuracy, % of full scale:

± 1%







**GP-serie** 

**GF-serie** 

	Gauge Type a	nd Calibration		Units per Division	Model	Thread	Gauge Adaptor			
G					Number *	G	Requ		129	
bar	psi	bar	kN				GA-1	GA-2	GA-3	
0-700	0-10.000	-	-	10 bar, 100 psi	GP-10S	½" NPTF	•	•		
0-1000	0-15.000	-	-	10 bar, 200 psi	GP-15S	½" NPTF	•	•		
-	-	0-700	0-45	10 bar, 0,5 kN	GF-5B	½" NPTF	•	•		
_	_	0-700	0-100	10 bar, 1 kN	GF-10B	½" NPTF	•	•		
_	_	0-700	0-232	10 bar, 2 kN	GF-20B	½" NPTF	•	•		
_	_	0-700	0-500	10 bar, 5 kN	GF-50B	½" NPTF	•	•		
_	_	0-700	0-124	10 bar, 1 kN	GF-120B	½" NPTF	•	•		
_	-	0-700	0-175/275	10 bar, 2 + 5 kN	GF-230B	½" NPTF	•	•		
_	_	0-700	0-450/900	10 bar, 5 + 10 kN	GF-510B	½" NPTF	•	•		
_	_	0-700	0-210/320/570	10 bar, 5 kN	GF-813B	1/4" NPTF			•	
_	_	0-700	0-232/300/500	10 bar, 5 kN	GF-835B	1/4" NPTF			•	
_	_	0-700	0-720/930	10 bar, 10 kN	GF-871B	1/4" NPTF			•	
 _	_	0-700	0-1400/2000	10 bar, 25 kN	GF-200B	1/4" NPTF			•	
 _	_	0-700	0-100	10 bar, 1 kN	GF-10B	½" NPTF	•	•		
_	_	0-700	0-232	10 bar, 2 kN	GF-20B	½" NPTF	•	•		
_	_	0-700	0-500	10 bar, 5 kN	GF-50B	½" NPTF	•	•		
_	_	0-700	0-720/930	10 bar, 10 kN	GF-871B	1/4" NPTF			•	
_	_	0-700	0-1400/2000	10 bar, 25 kN	GF-200B	1/4" NPTF			•	

GF-Series Force gauges with imperial scale reading (psi, lbs) are available by changing the suffix 'B' into 'P'.

## **G, H-Series, Hydraulic Pressure Gauges**



Shown from left to right: H4049L, G-2534R, G-4089L, G-2535L, G-4040L



# Visual Reference of System Pressure





#### **Gauge Adaptor**

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

Page: 129



#### 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.

age: 13

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

- Dual scale reading calibrated in bar and psi
- All pressure sensing parts sealed and dampened by glycerine 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)**

- Dual scale reading calibrated in bar and psi
- 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.



 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**



**CAUTION!** When lifting or pressing, always use a gauge Do not override factory setting of relief valves. Always use a gauge to check system pressure. A

gauge is your 'window' to the system. It lets you see what's going on.

See our Safety Instructions.

Page:

G **Series** 



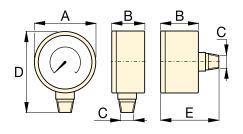
Pressure Range:

0 - 1000 bar

Face Diameter:

63 - 100 mm

Accuracy, % of full scale: ± 1,0 - 1,5%



Size	Connection	<b>Dimensions</b> (mm)							
(mm)		Α	В	С	D	E			
63	Lower Mount	63	37	½" NPTF	84	_			
63	Center Rear	63	37	½" NPTF	_	63			
100	Lower Mount	100	29	½" NPTF	121	_			
100	Lower Mount	100	49	½" NPTF	136	_			

Note: dimensions for reference only.



#### **Maximum Indicator Pointer**

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

Can easily be installed on GP and H-Series gauges. Order model nr: BSA-881.

#### **▼ SELECTION CHART**

Gauge	Pressure Range		Model Number				Major		Minor		Major		Minor	
Series			Ø 63 Ø 63 ¼" NPTF ¼" NPTF	ø 63 1⁄4" NPTF	ø 100 ø 100 ¼" NPTF ½" NPTF	Graduation		Graduation		Graduation		Graduation		
			Lower Mount   Center Rear		Lower Mount Lower Mount		bar			psi				
	(bar) (psi)		Accuracy	/: ± 1,5 %	Accuracy	/: ± 1,0 %	ø 63	ø 100	ø 63	ø 100	ø 63	ø 100	ø 63	ø 100
G-Series	0-7	0-100	G2509L	_	-	_	1	-	0,01	-	10	-	2	_
	0-11	0-160	G2510L	_	-	_	1	-	0,02	-	10	-	2	-
	0-14	0-200	G2511L	_	-	-	1	_	0,02	_	50	-	5	_
	0-20	0-300	G2512L	-	-	-	5	_	0,50	-	50	-	5	_
	0-40	0-600	G2513L	-	-	-	10	_	1	_	100	-	10	_
	0-70	0-1.000	G2514L	G2531R	-	-	10	_	1	-	100	-	20	_
	0-140	0-2.000	G2515L	-	-	-	10	_	5	-	500	-	50	_
	0-200	0-3.000	G2516L	-	-	-	50	_	5	-	500	-	50	_
	0-400	0-6.000	G2517L	G2534R	_	_	100	_	10	-	1000	-	100	_
	0-700	0-10.000	G2535L	G2537R	G4088L	G4039L	100	100	10	10	2000	1000	200	100
	0-1000	0-15.000	G2536L	G2538R	G4089L	G4040L	100	100	20	20	3000	3000	200	200
H-Series	0-700	0-10.000	-	-	H4049L	H4071L	_	100	-	10	-	1000	_	100

## T-Series, Test System Gauges



▼ Gauge shown: T-6003L



- Dual scale reading calibrated in bar and psi
- All gauges have spring-loaded backs with rubber blow-out plugs to protect case assembly in case of over-pressurization
- Integral maximum indicator pointer standard included
- 2800 and 3500 bar models include flange mounting
- ½" NPTF versions are made of high strength alloy steel
- 0.25" cone models are made of 316 stainless steel, with 403 stainless steel on 2800 and 3500 bar models.

### T Series

Pressure Range:

0 - 3500 bar

Face Diameter:

162 - 192 mm

Accuracy, % of full scale:

± 0,5 - 1,5%



#### **Cone Mount Gauge Adaptor**

Contains fittings to connect  $\mbox{\em 4}''$  cone fitting gauge to  $\mbox{\em 8}''$  cone system. Kit includes 43-301 tee,

43-704 gauge adaptor and 45-116

tubing. Order model number: 83-011.

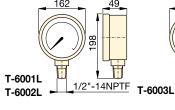


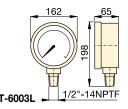


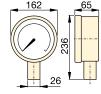
#### **Cone Mount Gauge Connector**

For connecting gauges with 0.25" cone fitting directly to model number **11-100** or **11-400** pump (page 72). May be used with other

0.25" cone systems Order model number: **43-704** 

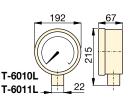






T-6007L

T-6008L



	- · · ·		n
			50
1			ENERPAC
		V	

▼ 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	Pressure Range	Model	Number	Number Intervals	Gradu- ation	Number Intervals	Gradu- ation
nange	nango	Alloy Steel	Stainless Steel	intervals	Inter- vals	intervals	Inter- vals
(bar)	(psi)	½" NPTF	0,25 cone	(bar)	(bar)	(psi)	(psi)
0-70 1)	0-1000	T-6001L	-	10	1	100	10
0-3501)	0-5000	T-6002L	-	50	5	500	50
0-7001)	0-10.000	T-6003L	T-6007L	100	10	1.000	100
0-14001)	0-20.000	-	T-6008L	200	20	1.000	100
0-28002)	0-40.000	-	T-6010L	500	20	5.000	200
0-35002)	0-50.000	-	T-6011L	500	50	5.000	200

<sup>1)</sup> Acccuracy ± 0,5%

 $<sup>^{2)}</sup>$  Acccuracy  $\pm$  1,5%

## **Digital Hydraulic Pressure Gauge**

#### ▼ Gauge shown: **DGR-2**



- · Rated for system pressure up to 1380 bar
- Displays in bar, psi, MPa and kg/cm<sup>2</sup>
- Zero reset ensures that gauge reads actual pressure
- IP65 protection, UL listed, CE and RoHS compliant
- . Batteries included, condition indicator on read-out
- Shut-off selectable menu driven
- Back-lit readout allows easy reading in less than ideal lighting
- Protective cover included.

## **DGR** Series

Pressure Range:

0 - 1380 bar

Voltage:

3 Volt (battery)

Accuracy, % of full scale:

 $\pm 0,25\%$ 



#### **Gauge Adaptor**

For easy gauge installation into almost any system, Enerpac offers a complete line of gauge adaptors. Maximum operating pressure 700 bar.

Page:

12

ø 70	41
67 ENERPAC 5	ø 68
27 hex. 18 NPTF	17,5

High Pressure Rating				Model Number	High Pro Rati		High Pressure Rating	
(bar)		(MPa)			(psi)		(kg/cm²)	
Range	Resolution	Range	Resolution		Range	Resolution	Range	Resolution
0-1380	0,1	0-140	0,01	DGR-2	0-20.000	1	0-1400	0,1

Weight: 0,23 kg.

▼ Greater accuracy and easier to read: enhance your ability to monitor and control hydraulic system pressure up to 1380 bar.



## **Gauge Adaptor Assembly**



▼ Shown: GA45GC



- 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.

## GA45GC Series

Connection 1:

3/8" NPTF male

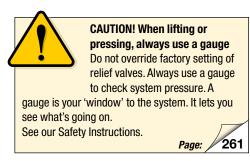
Connection 2:

CR-400 coupler

Maximum Operating Pressure:

700 bar

# 45° Angled gauge adaptor improves safe working conditions





#### **Power Box**

Tool box with hand pump, **GA45GC** gauge adaptor assembly, hose and RC, RSM, RCS, WR5 or LW16-cylinder.

Page: 55

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



