

## Types 1010, 1017 and 1220 Hydraulic Pressure Gauges With *PLUS!*™ Performance Option



- 4½" full-size Bourdon tube
- Patented Duratube™ with as welded tube construction controls stress for longer life
- "Round Cap Tip" construction lowers stresses for longer life
- Micrometer adjustable pointer.
- Exclusive Teflon coated 400 series stainless steel rotary movement for longer life
- *PLUS!*™ Performance Option:
  - Liquid-filled performance in a dry gauge
  - Fights vibration and pulsations without liquid-filled headaches
  - Order as option XLL
- Epoxy-coated system for superior corrosion resistance

Type 1010, 1017 and 1220 Ashcroft® pressure gauges are designed for use on hydraulic presses, pumps and systems using hydraulic fluid, Ashcroft general service gauge Types 1010, 1017 and 1220 with the XTR variation meet the needs of many hydraulic applications. Equipped with a slotted link and throttle screw, these gauges are available with either a psi range or a psi range with a corresponding tons-on-ram scale. Use the nomograph on the reverse page to help determine the appropriate tons-on-ram scale.

### PRODUCT SPECIFICATIONS

**Model Number:** 1010, 1017 and 1220  
**Accuracy:** ½% full scale (Grade 2A, ASME B40.100)  
**Ranges:** Vacuum – 100,000 psi\*  
**Dial Size:** 4½", 6", 8½" diameter  
**Case Material:** Black, aluminum, solid front  
**Weather Protection:** Dry Case: IP54 Liquid filled or hermetically sealed case: IP65  
**Ring:**  
   4½" & 6" Dial: Threaded reinforced black polypropylene  
   8½" Dial: Hinged, aluminum, black epoxy coated  
**Window:** Glass  
**Dial:** Aluminum, white background, black pressure scale  
**Bourdon Tube and Socket:** C510 Phos. bronze/brass (A)<sup>(1)</sup>  
   316L SS/Steel (R)<sup>(2)</sup>  
   316L SS/316L SS (S)<sup>(2)</sup>  
   K Monel/ Monel (P)<sup>(2)</sup>  
   Inconel 718 (WW)<sup>(2)(3)</sup>  
**Pointer:** Micrometer adjustable  
**Movement:** Rotary, 400 SS, Teflon® coated pinion gear and segment  
**Conn. Size:** ¼", ½" NPT, ¼" high pressure for gauges 20,000 psi and above  
**Conn. Location:** Lower or back

### PRODUCT OPTIONS

**Fill:** L-Glycerin-Standard  
 XGV-Silicone-Optional  
 XGX-Halocarbon-Optional

#### *PLUS!*™

**Performance:** XLL  
**Hermetically Sealed, IP65:** H  
**Flush Mounting Ring:** X56  
**Receiver Gauge:** XPR  
**Shatter Proof Glass Window:** XSG  
**Acrylic Window:** XPD  
**Red Set Hand:** XSH  
**Max. Pointer:** XEP

<sup>(1)</sup> Joints silver brazed, <sup>(2)</sup> Joints welded, <sup>(3)</sup> See Bulletin DU-5 1379 HP

### TEMPERATURE LIMITS

	Ambient	Process	Storage
Dry	-20/200°F <sup>(1)</sup> (-29/93°C)	-20/250°F <sup>(1)</sup> (-29/121°C)	-40/250°F (-40/121°C)
LF (glycerin)	20/150°F (7/66°C)	20/200°F (7/93°C)	0/150°F (-18/66°C)
(silicone)	-40/150°F (-40/66°C)	-40/200°F (-40/93°C)	-40/150°F (-40/66°C)
(halocarbon)	-40/150°F (-40/66°C)	-40/200°F (-40/93°C)	-40/150°F (-40/66°C)

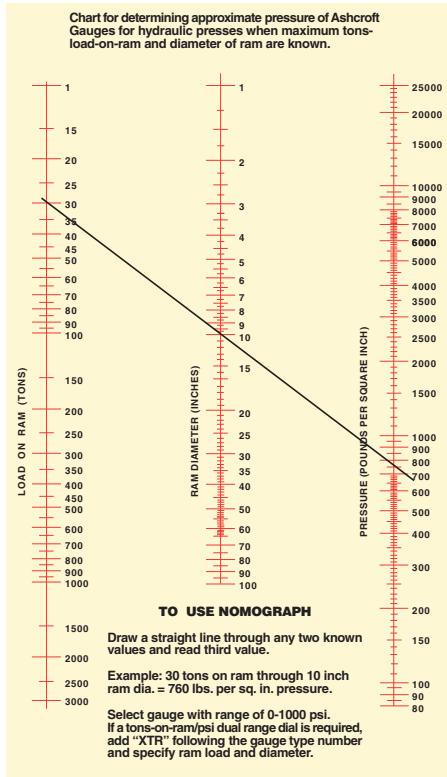
(1) Available for temperatures below -20°F, see Product Information page ASH/PI-21B for details.

**Note:** Other than discoloration of the dial and hardening of the gasketing that may occur as ambient or process temperatures exceeds 150°F, non-liquid-filled gauges with standard glass windows, can withstand continuous operating temperatures up to 250°F (121°C). Liquid-filled gauges can withstand 200°F (93°C) but glycerin fill and acrylic window will tend to yellow. Accuracy at temperatures above or below the reference ambient temperature of 68°F (20°C) will be affected by approximately .4% per 25°F. Gauges with welded joints will withstand 750°F (450°F (232°C) with silver brazed joints) for short times without rupture, although other parts of the gauge will be destroyed and calibration will be lost. For continuous use and for process or ambient temperatures above 250°F (121°C), a diaphragm seal or capillary or siphon is recommended.

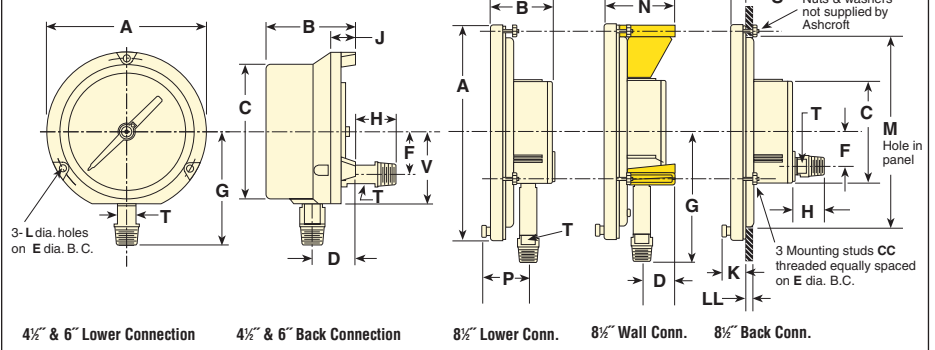
### STANDARD RANGE TABLE\*\*

Pressure – psi		
Range	Figure interval	Minor Graduation
0/60	5	1
0/100	10	1
0/160	20	2
0/250	50	5
0/400	50	5
0/600	50	5
0/800	100	10
0/1000	100	10
0/1600	200	20

## Types 1010, 1017 and 1220 Hydraulic Pressure Gauges With *PLUS!*™ Performance Option



### Dimensions

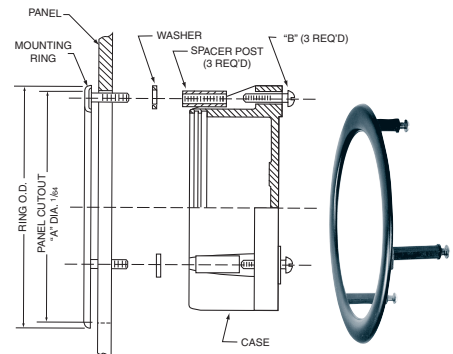


Dial Size Inches	A	B	C	D	E	F	G	H	J	K	L	M	P	S	T	V	CC	LL	Wgt (lbs)
4 1/2	5 1/16 (148)	3 3/8 (86)	4 1/8 (124)	1 1/8 (41)	5 3/8 (137)	1 1/2 (42)	3 1/16 (100)	7/8 (20)	1 1/8 (27)	—	.218 (6)	—	2 1/8 (54)	—	5/8 (16)	2 3/4 (67)	—	—	25 (Dry) 3.5 (LF)
6	7 1/16 (192)	3 1/2 (89)	6 5/8 (162)	1 1/8 (41)	7 (178)	1 1/2 (42)	4 1/8 (114)	7/8 (20)	1 1/8 (27)	—	.218 (6)	—	2 1/8 (54)	—	5/8 (16)	2 3/4 (67)	—	—	30 (Dry) 4.0 (LF)
8 1/2	10 1/16 (256)	2 1/8 (73)	4 3/4 (121)	1 1/8 (27)	9 5/8 (244)	1 5/8 (41)	6 (152)	1 3/8 (35)	—	1 1/8 (27)	—	9 (228)	—	1 1/8 (17)	—	—	#10-24	—	45 (Dry) 5.5 (LF)

### TYPE 1278M SERIES FLUSH MOUNTING RING

Used to flush mount gauge case. Standard finish is black; optional polished stainless steel finish is available.

GAUGE SIZE	RING O.D.	"A" DIA.	"B" Size of 3 Screws	"C" Size of Washers	Spacer
4 1/2	6 (152)	5 5/8 (148)	#10-24 x 1 1/8	7/16 x 1 1/4 x 5/8	1
6	7 3/4 (197)	7 3/16 (185)	#1/4-20 x 1	1 1/4 x 1 1/2 x 1/16	1 13/32



### Order Coding Example

45	1379	S	S	04	L	XEPNH	100	#
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SIZE	TYPE	SYSTEM (TUBE & SOCKET)	CASE DESIGN SOLID FRONT	PROCESS CONNECTION SIZE	CONNECTION LOCATION	OPTIONS (X VARIATIONS) <sup>(1)</sup>	RANGE	ENGINEERING UNITS <sup>(1)</sup>
(45) 4 1/2	1379	(A) Bronze tube, Brass socket <sup>(1)</sup>	(S) Dry (IP54)	(02) 1/4 NPT male <sup>(1)</sup>	(B) Back	(GV) Silicone case fill	See website for most common ranges offered	(#) PSI
(60) 6		(P) K-Monel tube, Monel 400 socket <sup>(2)</sup>	(SH) Dry, Hermetically Sealed, Field Fillable (IP65)	(04) 1/2 NPT male <sup>(1)</sup>	(D) Side (3:00)	(GX) Halocarbon case fill		(BR) Bar
(85) 8 1/2		(R) 316L SS tube, steel socket	(SL) Liquid filled (glycerin standard) (IP65)	(09) 9/16-18 UNF-2B Aminco (standard for high pressure >20,000psi)	(E) Side (9:00)	(NH) St. St. Wired Tag		(KG) Kilograms/CM2
		(S) 316L <sup>(2)</sup>		(1) Max pressure 20,000psi	(L) Lower	(TS) Throttle screw <sup>(2)</sup>		(KP) Kilopascal
					(T) Top (12:00)	(GB) Oxygen service		(IMV) Inches of Mercury Vacuum
						(PD) Acrylic window		(1) See website for more units of measure
						(SG) Safety glass		
						(EP) Maximum pointer, adjustable		
						(SH) Red set hand, stationary		
						(LL) <i>PLUS!</i> Performance		
						(56) Flush mounting ring		
						(C4) Individual calibration chart		
						(1) Others on request		
						(2) Standard with hermetically sealed or liquid filled gauge		