

## Differential Pressure Gauges

- Smooth Pointer Motion
- Weatherproof Stainless Steel Case
- Fast Delivery



# Ashcroft® Types 1130, 1131 Differential (High) Pressure Gauge Specifications



TYPE 1130



TYPE 1131

The following gauges are most commonly used for monitoring differential pressures for filtration but can also be used for flow rate and tank level. Typical pressure ranges are from 0/5 psid up to 0/100 psid.

The Type 1130 uses a piston design where small migration of the process media is permissible.<sup>(1)</sup> It is recommended for high differential and high static pressures, up to 6000 psi. Body materials are available in Aluminum, Brass and Stainless Steel, with Buna or Viton seals.<sup>(2)</sup>

The Type 1131 is utilized for applications where migration of the process media is not permissible. The Type 1131 uses a rolling diaphragm design to separate the high and low-pressure ports to isolate the media and can see up to 3000 psi static pressures. Body materials are available in Aluminum, Brass and Stainless Steel, with Buna or Viton seals.<sup>(2)</sup>

<sup>(1)</sup> Not for use with incompatible media.

<sup>(2)</sup> Other wetted parts include 302/304 stainless steel, Teflon and ceramic.

SPECIFICATIONS	Type 1130	Type 1131
Accuracy (Ascending)	2%	2%
Migration	Minor	Zero
Range Limits	0-5 psid to 150 psid	0-5 psid to 100 psid
Maximum Static Pressure	3000 psi (6000 psi for SS)	3000 psi (all)
Actuator	Piston	Rolling Diaphragm
Case Material	Stainless Steel	Stainless Steel
Dial Size	2" (20), 2½" (25), 3½" (35), 4" (40), 4½" (45), 6" (60)	2½" (25), 3½" (35), 4" (40), 4½" (45) 6" (60)
Maximum Process Temperature	175°F / 80°C	175°F / 80°C
Body Materials	Aluminum (F), Brass (A), Stainless Steel (S)	Aluminum (F), Brass (A), Stainless Steel (S)
O-Rings/Diaphragm	Buna-N	Buna-N
Connection Size (Female)	¼ NPT (25), ½ NPT (RQ) opt.	¼ NPT (25), ½ NPT (RQ) opt.
Connection Location	In-Line (S), Lower (L), Back (B)	In-Line (S), Lower (L), Back (B)
Window	Glass	Glass
Warranty	Five Years	Five Years
<b>OPTIONS</b>		
Switches <sup>(1)</sup>	Available	Available
Front Flange (XFF)	Available	Available
Viton O-Rings/Diaphragm (XVD)	Available	Available
EPDM O-Rings/Diaphragm (XEM)	Available	Available
Glycerin Fill (L)	Standard	Standard
Silicone Fill (XGV)	Available	Available
Plastic Window (XPD)	Available	Available
Explosion Proof (XEK)	Available <sup>(2)</sup>	Available <sup>(2)</sup>
Pipe Mounting Bracket (XTM)	In-Line (only)	In-Line (only)

### (1) Applicable to Switches

- |                                  |                                  |                                  |
|----------------------------------|----------------------------------|----------------------------------|
| (XV1) 1 SPST with DIN Plug       | (XV4) 2 SPST with Terminal Strip | (XV7) 2 SPDT with DIN Plug       |
| (XV2) 1 SPST with Terminal Strip | (XV5) 1 SPDT with DIN Plug       | (XV8) 2 SPDT with Terminal Strip |
| (XV3) 2 SPST with DIN Plug       | (XV6) 1 SPDT with Terminal Strip |                                  |

(2) Specify lower or back connection for gauge (not available in-line) and switch type XV1-XV8.



### Explosion Proof Switch Information

Switches and electrical connections are mounted in an explosion proof enclosure with UL, CSA, FM and Cenelec approval. The enclosure meets Class 1, Groups B, C, D, Class 2, Groups E, F, G, Class, NEMA 7 & 9 and IP66. There are two ¾" electrical conduit connections.

### Ratings for Standard and Explosion Proof Switches

SPST Switch Specifications	
Contact Rating:	10VA ac (rms) or dc (max)
Switching Current:	0.5Amp ac (rms) or dc (max)
Switch Voltage:	150 Vac/Vdc (max)
SPDT Switch Specifications	
Contact Rating:	5VA ac (rms) or dc (max)
Switching Current:	0.25Amp ac (rms) or dc (max)
Switch Voltage:	175 Vac/Vdc (max)

### How to Order... (Example) For a Type 1130 Differential Gauge Specify:

DIAL SIZE	TYPE/CASE	BODY MATERIAL	CONN. SIZE	LOCATION	VARIATIONS	RANGE
25	1130	FD	RQ	S	XXX	30 psid

# Ashcroft® Types 1132, 1133 Differential (Low) Pressure Gauge Specifications



TYPE 1132



TYPE 1133

The following gauges are also used for similar applications as Types 1130 and 1131 but with lower pressure ranges. Typically, the pressure ranges are 0/1 psid up to 0/60 psid, for the Type 1132 and lower inches of water ranges from 0/2 IWD up to 0/25 IWD for the Type 1133.

The Type 1132 uses a convoluted-diaphragm design with no migration of the process media. It is recommended for lower differential and high static pressures, up to 1500 psi. Body materials are available in Aluminum, Brass and Stainless Steel, with Buna or Viton seals.<sup>(1)</sup>

For low inches of water applications the Type 1133 is available. The Type 1133 uses a convoluted-diaphragm to sense low inches of water differentials while ensuring no migration of the process media. Maximum static pressures for ranges of 5 IWD and below is 45 psi and 500 psi for all other ranges. Body materials are only available in Aluminum, with Buna or Viton seals.<sup>(1)</sup>

<sup>(1)</sup> Other wetted parts include 302/304 stainless steel, Teflon and ceramic.

SPECIFICATIONS	Type 1132	Type 1133
Accuracy (Ascending)	2%	2%
Migration	Zero	Zero
Range Limits	0-1 psid to 60 psid	0-2 IWD to 200 IWD
Maximum Static Pressure	1500 psi (all)	45 psi below 5 IWD 500 psi (all other ranges)
Actuator	Convoluted Diaphragm	Convoluted Diaphragm
Case Material	Stainless Steel	Stainless Steel
Dial Size	2½" (25), 3½" (35), 4" (40), 4½" (45), 6" (60)	3½" (35), 4" (40), 4½" (45), 6" (60)
Maximum Process Temperature	175°F / 80°C	175°F / 80°C
Body Materials	Aluminum (F), Brass (A) Stainless Steel (S)	Aluminum (F)
O-Rings/Diaphragm	Buna-N	Buna-N
Connection Size (Female)	¼ NPT (25), ⅜ NPT (RQ) opt.	⅜ NPT (RQ)
Connection Location	In-Line (S), Lower (L), Back (B)	In-Line (S)
Window	Glass	Glass
Warranty	Five Years	Five Years
<b>OPTIONS</b>		
Switches <sup>(1)</sup>	Available	Available
Front Flange (XFF)	Available	Available
Viton O-Rings/Diaphragm (XVD)	Available	Available
EPDM O-Rings/Diaphragm (XEM)	Available	Available
Glycerin Fill (L)	Standard	N/A
Silicone Fill (XGV)	Available	N/A
Plastic Window (XPD)	Available	Available
Explosion Proof (XEK)	Available <sup>(2)</sup>	N/A
Pipe Mounting Bracket (XTM)	In-Line (only)	Available

## STANDARD RANGES

### Type 1130

psi		0-5	0-8	0-10	0-15	0-20	0-25	0-30		0-40	0-50		0-60		0-80		0-100		0-150
kPa	0-25		0-50	0-75	0-100		0-160	0-200	0-250	0-300		0-400	0-500		0-600	0-700	0-900	0-1000	
Kg/cm <sup>2</sup> -Bar	0-0.25		0-0.5	0-0.75	0-1		0-1.6	0-2	0-2.5	0-3		0-4	0-5		0-6	0-7	0-9	0-10	

### Type 1131

psi			0-5	0-7	0-10	0-15	0-25	0-30		0-40	0-60	0-100
kPa		0-25		0-50	0-75	0-100		0-200	0-250		0-400	0-700
Kg/cm <sup>2</sup> -Bar		0-0.25		0-0.5	0-0.75	0-1		0-2	0-2.5		0-4	0-7

### Type 1132

psi		0-1		0-5	0-8	0-10	0-15	0-20	0-25	0-30		0-40	0-50	0-60
In.H <sub>2</sub> O		0-25	0-100		0-200		0-400	0-500						
kPa			0-25		0-50	0-75	0-100		0-160	0-200	0-250	0-300		0-400
Kg/cm <sup>2</sup> -Bar		0-0.075	0-0.25		0-0.5	0-0.75	0-1		0-1.6	0-2	0-2.5	0-3		0-4
mbar		0-75	0-250											

### Type 1133

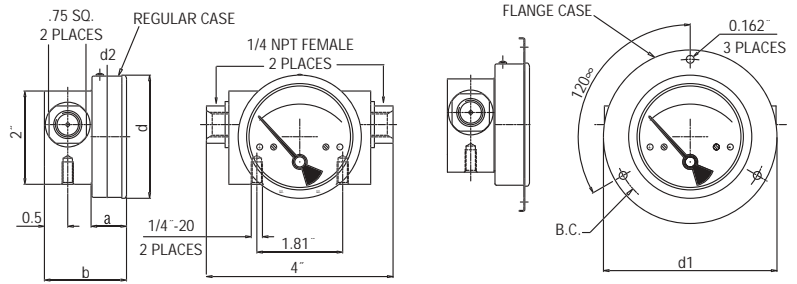
In.H <sub>2</sub> O	0-2	0-5	0-10	0-25	
mmH <sub>2</sub> O	0-50	0-125	0-250	0-600	0-1000

# Ashcroft® Differential Pressure Gauge Dimensions

## Type 1130 Dimension Drawing

Dial Size	a	b	d	d <sup>1</sup>	d <sup>2</sup>	b.c.
2"	0.70"	1.70"	2.08"	3.11"	2.04"	2.72"
2.5"	0.75"	1.75"	2.59"	3.66"	2.55"	3.26"
3.5"	0.75"	1.75"	3.26"	4.29"	3.22"	3.89"
4"	0.75"	1.75"	4.10"	5.15"	4.01"	4.76"
4.5"	0.75"	1.75"	4.71"	5.74"	4.60"	5.35"
6"	0.75"	1.75"	6.07"	7.12"	6.00"	6.73"

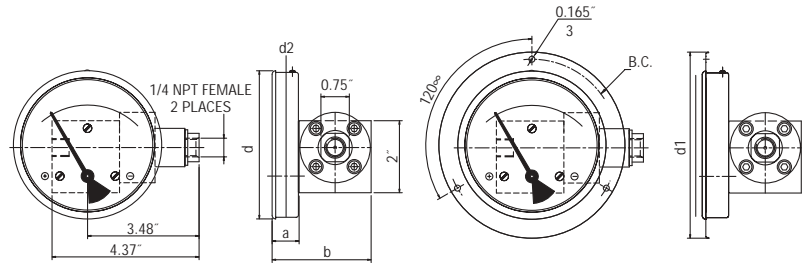
Panel Cutout = d + .040"



## Type 1131 Dimension Drawing

Dial Size	a	b	d	d <sup>1</sup>	d <sup>2</sup>	b.c.
2.5"	0.75"	2.74"	2.59"	3.66"	2.55"	3.26"
3.5"	0.75"	2.74"	3.26"	4.29"	3.22"	3.89"
4"	0.75"	2.74"	4.10"	5.15"	4.01"	4.76"
4.5"	0.75"	2.74"	4.71"	5.74"	4.60"	5.35"
6"	0.75"	2.74"	6.07"	7.12"	6.00"	6.73"

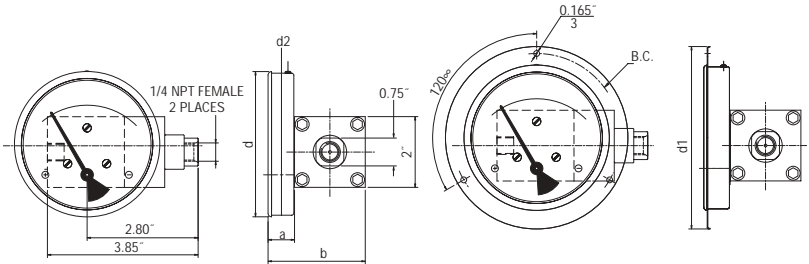
Panel Cutout = d + .040"



## Type 1132 Dimension Drawing

Dial Size	a	b	d	d <sup>1</sup>	d <sup>2</sup>	b.c.
2.5"	0.75"	2.74"	2.59"	3.66"	2.55"	3.26"
3.5"	0.75"	2.74"	3.26"	4.29"	3.22"	3.89"
4"	0.75"	2.74"	4.10"	5.15"	4.01"	4.76"
4.5"	0.75"	2.74"	4.71"	5.74"	4.60"	5.35"
6"	0.75"	2.74"	6.07"	7.12"	6.00"	6.73"

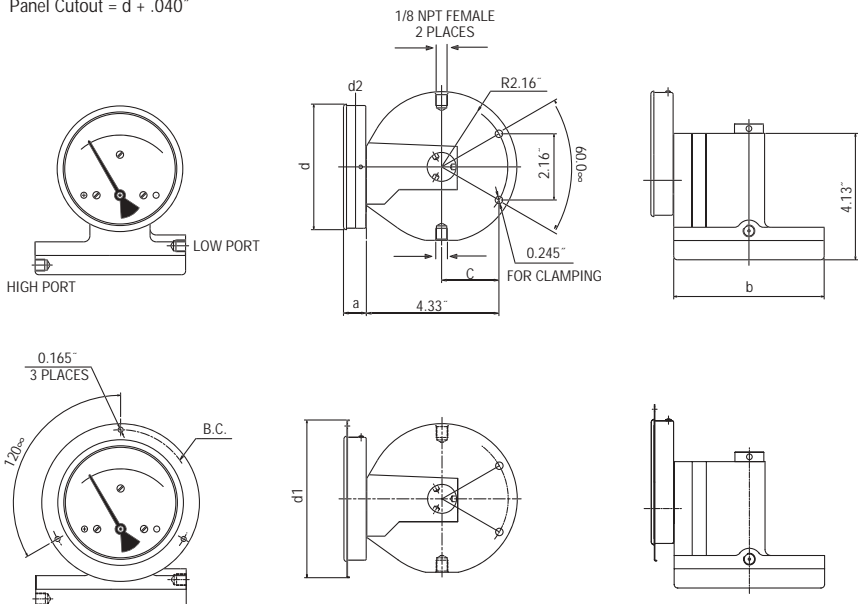
Panel Cutout = d + .040"



## Type 1133 Dimension Drawing

Dial Size	a	b	c	d	d <sup>1</sup>	d <sup>2</sup>	b.c.
3.5"	0.75"	4.92"	1.87"	3.26"	4.29"	3.22"	3.89"
4"	0.75"	4.92"	1.87"	4.10"	5.15"	4.01"	4.76"
4.5"	0.75"	4.92"	1.87"	4.71"	5.74"	4.60"	5.35"
6"	0.75"	4.92"	1.87"	6.07"	7.12"	6.00"	6.73"

Panel Cutout = d + .040"



**Measurement  
& Control**

DRESSER INSTRUMENT, DRESSER, INC.  
250 E. Main St., Stratford, CT 06614-5145  
Tel: (203) 378-8281 • Fax: (203) 385-0408  
www.ashcroft.com

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