TABLE OF CONTENTS

WEKSLER®

Table of Contents

WEKSLER®

Considerations in Selecting a Pressure Gauge

RANGE

The maximum operating pressure should not exceed 75% of the full-scale range. The normal operating range should be in the middle half of the range (between 25% and 75% of the full-scale range); whenever possible.

DIAL SIZE

Select a dial size that allows you to comfortably read the dial from the normal distance when installed.

PRESSURE SYSTEM MATERIAL

The media to which the gauge will be subjected is critical to the selection of the proper material for the Bourdon tube, bellows, and socket. Consult "corrosion chart" on page 5 for proper selection of pressure system materials. Weksler models are offered with:

Phosphor bronze Bourdon tube (or bellows) with brass sockets.
316 stainless steel Bourdon tube (or bellows) with 316 stainless steel sockets.
316 stainless steel Bourdon tube with alloy steel sockets.
Monel Bourdon tubes with Monel sockets.

For applications where the above materials may not be suitable, a diaphragm seal will be necessary to protect the pressure gauge system.

ACCURACY

Select a gauge with the desired accuracy as follows:

- 1/4% – test gauges only (not for in-line service)
- 1/2% – Weksler Royal gauges (4 1/2˝ dial size and larger) and Weksler digital gauges (2 1/2˝ case size)
- 1% – Weksler Regal gauges, 100 MM Gauge, EA14 gauge
- 2-1-2% – Weksler duplex, differential and low pressure gauges
- 3-2-3% – Weksler BY12, BY42, BK72, UA15, UA20, UA25, UA35 series utility gauges

MOVEMENT

Select either a gauge with 300 series stainless steel movement for long wear or a gauge with bronze or brass movement for applications where vibration and pulsation are not present.

CASE

A wide variety of case styles and materials are offered. Determine how the gauge is to be mounted: direct, surface (wall) or flush (in panel). Determine the desired case materials: polyproylene (or phenol); aluminum (black enameled) or stainless steel (300 series).

Determine case type:

Safety
(solid front with blow-out back)

Standard
(open front with rubber blow-out disc at rear)

Note – All safety case styles are designated by a number. Standard case styles are designated by a letter.

WINDOW

A glass face is standard in most gauges. If breakage is a concern, a plastic or shatterproof glass face is optional at extra cost on most Weksler Royal and Regal gauges. (Glycerin filled and sanitary gauges have plastic face as standard).

POINTER

All Weksler gauges (except utility types) have adjustable pointers. This permits pointer repositioning during calibration check or allows maximum precision at a specific point.

TEMPERATURE

The ambient temperature to which the gauge will be subjected should not exceed 150°F. If higher temperatures are encountered the gauge must be isolated from the source of heat. The temperature of the media to which the gauge is subjected to is also critical. Gauges with phosphor bronze Bourdon tubes should not be subjected to process temperatures in excess of 150°F. Gauges with metal cases and either 316 stainless steel or monel bourdons can withstand higher process temperatures, but as temperature exceeds 150°F hardening of the gasketing and discoloration of the dial may occur. In addition, accuracy will be affected by approximately 1.5% per 100°F. Both 316 stainless steel and monel gauges in metal cases will withstand 750°F for short periods of time without rupture, but other parts of the gauge will be destroyed and calibration will be lost.

VIBRATION

If present, a glycerin filled gauge is recommended.

PULSATION

If present, a pressure snubber or throttle screw is recommended.

WARNING: Misuse, Including Excessive Pressure, Vibration, Pulsation, Temperature And Corrosion May Cause Failure That Can Result in Damage Or Injury. We suggest that users of Pressure Gauges refer to American National Standard ASME B40.1 entitled "Gauges, Pressure And Vacuum Indicating Dial Type – Elastic Element" for guidance in Gauge selection. This document may be obtained from American Society of Mechanical Engineers (ASME) United Engineering Center, 345 East 47th Street, New York, N.Y. 10017.

WEKSLER®

Corrosion Chart

The primary considerations in specifying or purchasing a pressure gauge are the accuracy required and the media to be used in its application. This corrosion chart has been prepared to assist you in the selection of the gauge material that is best for your installation requirement.

The media being measured must be compatible with the wetted parts of the pressure instrument. To use the chart below, locate the media whose pressure is to be measured and select a suitable material from those available. This is a simplified chart and assumes the media temperature is below 200°F except for media with an* which must be below 100°F. Throttling devices and/or a liquid filled instrument are recommended in applications with pulsation or vibration. These recommendations are only a guide, as service life is dependent on temperature, concentrations, catalysts that may be added, or other conditions beyond our control. Consult customer service for specific applications and for any media not listed.

MEDIA APPLICATION	Pressure Instrument Material				
	Brass or bronze	Steel	316 SS	Monel	Diaphragm seals**
Acetone*	•		•	•	
Acetic Acid <40%			•		
Acetic Anhydride					•
Acetylene (Dry)		•	•		
Acrolein 100%					•
Air	•	•	•	•	
Alcohol, Ethyl	•		•	•	
Alum. Chloride >10%					•
Alum. Sulfate 10-50%					•
Ammonia Gas (Dry)		•	•		
Ammonium Chloride <40%					•
Ammonium Nitrate <50%			•		
Ammonium Sulfate <60%					•
Aniline>99%			•		
Argon	•	•	•	•	
Beer			•		
Benzidine >99%					•
Benzene <50%			•	•	
Benzoic Acid <70%					•
Boric Acid <25%			•		
Bromine (Dry)					•
Butane	•	•	•	•	
Butyric Acid <10%					•
Calcium Chloride <80%					•
Calcium Hydroxide <50%					•
Carbon Dioxide	•	•	•	•	
Carbon Monoxide (Dry) >99%	•		•	•	
Chlorine (Dry)					•
Chlorine (Moist)					•
Chloroform (Dry)			•	•	
Chromic Acid					•
Citric Acid 10-50%			•		
Corn Oil			•		

MEDIA APPLICATION	Pressure Instrument Material				
	Brass or bronze	Steel	316 SS	Monel	Diaphragm seals**
Crude Oil (Sour)				•	
Crude Oil (Sweet)			•	•	
Ethyl Acetate	•		•	•	
Ethylene Oxide >99%*	•		•	•	
Ferric Chloride <40%					•
Ferric Sulfate <10%			•		
Ferrous Chloride <30%					•
Ferrous Sulfate <50%					•
Fluorine Gas (Dry) No Air				•	
Formaldehyde <95%			•	•	
Formic Acid*					•
Freons		•	•		
Furfural <10%					•
Gasoline (Flowing)	•		•		
Glycerin >99%	•	•	•	•	
Hydrobromic Acid					•
Hydrochloric Acid					•
Hydrofluoric Acid					•
Hydrofluosilic Acid					•
Hydrogen(2)	•		•		
Hydrogen Peroxide <50%					•
Kerosene	•	•	•	•	
Lactic Acid <70%*(2)			•		
Magnesium Chloride <40%					•
Mercury >99%			•		
Milk			•		
Naphtha >99%	•	•	•	•	
Naphthalene >99%			•	•	
Nickel Chloride >99%					•
Nitric Acid <95%*			•		
Nitrogen	•	•	•	•	
Oleic Acid	•				•
Oxalic Acid*					•

MEDIA APPLICATION	Pressure Instrument Material				
	Brass or bronze	Steel	316 SS	Monel	Diaphragm seals**
Oxygen (Gas)(1)	•		•	•	
Palmitic Acid >99%*			•		
Phosphoric Acid <80%*			•		
Picric Acid <10%			•		
Propane (Dry) DOT Quality	•	•	•	•	
Sea Water (Flowing)				•	
Silver Nitrate <70%					•
Sodium Bicarbonate <20%			•	•	
Sodium Bisulfate <30%					•
Sodium Carbonate <40%			•	•	
Sodium Chromate <60%	•	•	•	•	
Sodium Cyanide*		•	•		
Sodium Hydroxide < 40%				•	
Sodium Hypochlorite <25%					•
Sodium Phosphate,Tri <60%		•	•	•	
Sodium Silicate <50%		•	•	•	
Sodium Sulfide <50%					•
Stannous Chloride <10%					•
Steam (Use siphon)	•	•	•	•	
Stearic Acid			•		
Sulfur Dioxide (Dry) >99%					•
Sulfur Trioxide (Dry) >99%					•
Sulfuric Acid					•
Tannic Acid <80%		•	•	•	
Tartaric Acid <50%			•	•	
Tin Chloride (ous) <10%					•
Toluene >99%	•	•	•	•	
Turpentine >98%	•	•	•	•	
Water (tap)	•		•	•	
Whiskey			•		
Zinc Chloride <25%*					•
Zinc Sulphate <40%					•

(1) Monel and 316 stainless steel are acceptable for oxygen service, provided the instrument has been cleaned for service and is free from oil. Order variation X6B.

(2) Over 1000 psi–entire system must be 316 stainless steel.

*Media temperature must be below 100°F.

**Any standard Bourdon tube or bellows material may be used in conjunction with a diaphragm seal (with bellows use a Viton or Kalrez diaphragm), but the gauge selection should take into consideration the corrosive environment in which it is to operate.

Table revised June 1st, 2005

WEKSLER®

Test Gauges
±0.25% Accuracy

STANDARD FEATURES

Movement: Precision design, stainless steel rotary gear type. Wear-resistant, and virtually frictionless for long, accurate service.

Dial & Pointer: Mirrored dial and balanced knife-edge aluminum pointer permits reading without parallax error. Dial surface is white, with black numerals and graduations in a full 270° arc. Graduation lines are same width as the knife edge on pointer.

Dial Sizes: 4½˝, 6˝

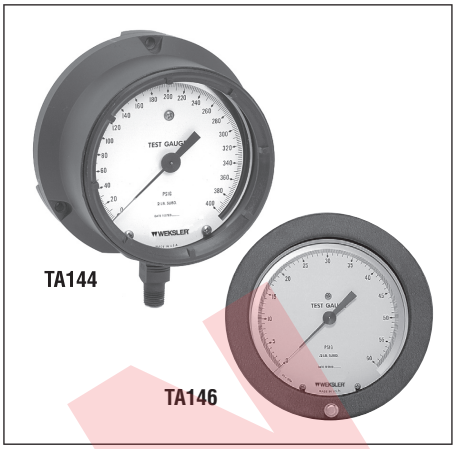
Connection Location: ¼ or ½ male NPT

Case: Choice of two black enameled die cast aluminum cases, solid front, safety type

Style 4: Back flanged type, bayonet ring, for surface or direct mounting. Bottom connected.

Style 6: Hinged front flush mount type, back connected.

Test Gauges are designed specifically for periodic bench testing and recalibration of production type gauges. They are also recommended for use in test cells such as on research projects, and as portable instruments for field inspectors and traveling engineers. Test gauges are not suggested for continuous duty in service installations.



STANDARD RANGES

RANGE CODE	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
PC	0-15 psi	1 psi	.25 psi
PC	0/15 psi	1 psi	0.05 psi
PD	0/30 psi	2 psi	0.10 psi
PE	0/60 psi	5 psi	0.20 psi
PF	0/100 psi	5 psi	0.50 psi
PG	0/160 psi	10 psi	1.0 psi
PH	0/200 psi	10 psi	1.0 psi
PJ	0/300 psi	20 psi	1.0 psi
PK	0/400 psi	20 psi	2.0 psi

STANDARD RANGES

RANGE CODE	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
PM	600 psi	0/50 psi	2.0 psi
PO	800 psi	0/50 psi	5.0 psi
PP	1000 psi	0/50 psi	5.0 psi
PR	1500 psi	0/100 psi	5.0 psi
PS	2000 psi	0/100 psi	10.0 psi
PT	3000 psi	0/200 psi	10.0 psi
PV	5000 psi	0/500 psi	20 psi
PY	10,000 psi	0/1000 psi	50 psi

BOURDON TUBE AND SOCKET

CATALOG NO.	BOURDON TUBE & SOCKET MATERIAL	DIAL SIZE
TA14(2)	Phosphor Bronze Tube, Brass Socket	4½˝
TA16(2)		6˝
TA24	K Monel Tube, and Socket	4½˝
TA26		6˝

NOTES:

(1) The accuracy of measurement is influenced by the ambient temperature. The Weksler test gauge is calibrated to be accurate to within ¼ of 1% of full scale range at 77°F. (25°C). Using the gauge in ambient temperatures other than this requires the application of a correction of 0.02% of the indicated pressure for each 1°F. The correction is minus if the temperature is higher and plus if lowe than 77°F.

(2) 0/400 psi maximum range.

(3) Refer to page 30 for case dimensions.

HOW TO ORDER

T A 1 4 4 P K 4 L W

1. Basic 4-digit Catalog No. From Table Above
2. Case Style “4” (Bottom Connection) or “6” (Back Connection)
3. Range Code From Range Tables Above
4. Thread Size: 4 = ¼ NPT Male (standard; 2 = ½ NPT Male
5. Connection Location: L = Lower (Bottom); or R = Rear (Back)
6. Dial Color: W = White (Standard), B = Black (Optional)

WEKSLER®

General Purpose Digital Gauge Type DG42P ±½% of Span Terminal Point Accuracy

STANDARD FEATURES

The Weksler DG42P offers 0.5% of span accuracy, while the stainless steel sensor and socket make this product suitable not only for dry air applications but for other media as well.

This product offers selectable units of measure so rather than purchasing one gauge for each unit of measure required, the solution is one gauge for multiple units of measure.

The DG42P is standard with many features not offered, or offered only as options, on competitor's digital gauge products, such as peak hold and 4½ digit display. When compared to mechanical gauges the DG42P offers overall enhanced value.

- Enhanced value versus mechanical gauges
- No-nonsense accuracy – ±0.5% full scale accuracy
- Easy-to-read – 4½ digit display with ½˝ character size, optional backlite display feature to enhance visibility
- Versatile – nine engineering units and stainless steel sensor suitable for a variety of applications
- Standard features – max.-pressure indication; ranges from vacuum to 19,999 psi, including compound
- Competitively priced and can be customized for OEM applications

PRODUCT SPECIFICATIONS

Type no.:	DG42P
Accuracy:	±0.5% of span
Case Size:	2½˝
Case Material:	Noryl®
Wetted Parts:	17-4 PH stainless steel sensor; 316 stainless steel socket
Socket Size:	¼ NPT
Connection:	Lower
Ranges:	Vac. thru 19,999 psi (see engineering units below for other units of measurement)
Battery:	Two AAA alkaline batteries; approximately 1000 hours battery life

Overpressure:	Vac. 0/1000	0/3000-0/5000	0/19,999
Proof:	200%	150%	120%
Burst:	800%	300%	150%

Cycle Life:	10^8 cycles 20/80% F.S. with negligible performance loss
Vibration:	Less than ±0.1% F.S. effect for 0/2000 Hz at 20 g's in any axis
Shock:	Less than ±0.05% F.S. effect for 100 g's, 20msec shock in any axis
Operating Temp.:	–10°C to 60°C (14°F to 140°F)
Storage Temp.:	–20°C to 70°C (-4°F to 158°F) (maximum temperature shift is .028% per °F from –20°F to 180°F starting at 68°F. For vacuum and 30 psi ranges the maximum temperature shift is .04%)
Update Rate:	100ms
Agency Approvals:	CE EN 61326 (1998); CE EN 61326 Annex A (heavy industrial)
Packaging:	Individual carton
Opt'l. Features:	±0.25% of span accuracy; backlite; 3, 9, 12 o'clock connections; Alternate socket configurations – upon application; Customized keypad; Protective boot; Bulk packaging

DISPLAY

Type:	LCD
Display Digits:	4½

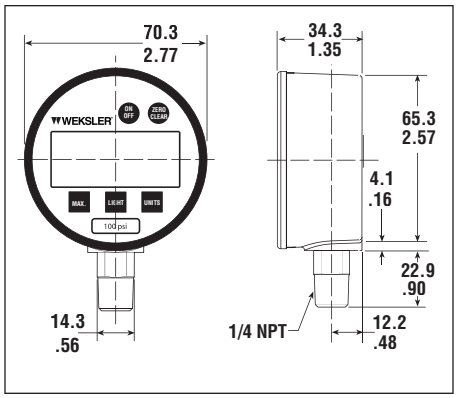
Display Resolution:	Full Scale Numerical Value	Display Resolution
	>=-15>0	–XX.000
	>0 <2	X.0000
	>=2 <20	XX.000
	>=20 <200	XXX.00
	>=200 <2000	XXXX.0
	>=2000 <19,999	XXXXX

Character Height:	0.5˝
Backlight:	OFF by default
Battery:	Four-level battery indication

KEYBOARD FUNCTIONS

On/Off:	Manually turns unit on and off (four options: never, 5 min., 10 min., 20 min.)
Backlite (optional):	Manually turns backlite on and off (four programmable auto on/off options)
Maximum (Peak Hold):	Displays max. value when activated
Zero/Clear:	Zeros display or clears max. value when activated
Engineering Units:	psi, in.Hg, cmHg, mmHg, kPa, MPa, bar, kg/cm², ftH₂O
Field Calibration:	Zero and span

W-DG42P GAUGE DIMENSIONS



CATALOG NUMBERS

Dial Size	**2½˝**
Connection Location	**Bottom**
Connection NPT	**¼**
Range	
30˝/0/vac.	W-DG42PVC4L
0-15 psi	W-DG42PPC4L
0-30 psi	W-DG42PPD4L
0-60 psi	W-DG42PPE4L
0-100 psi	W-DG42PPF4L
0-160 psi	W-DG42PPG4L
0-200 psi	W-DG42PPH4L
0-300 psi	W-DG42PPJ4L
0-600 psi	W-DG42PPM4L
0-800 psi	W-DG42PPO4L
0-1000 psi	W-DG42PPP4L
0-2000 psi	W-DG42PPS4L
0-3000 psi	W-DG42PPT4L
0-5000 psi	W-DG42PPV4L
0-10,000 psi	W-DG42PPY4L
0-15,000 psi	W-DG42PPZ4L
0-20,000 psi	W-DG42PP24L

TO ORDER SPECIFY 10 DIGIT CATALOG NUMBER FROM TABLE ABOVE

ROYAL & REGAL GAUGES

WEKSLER®

Royal Process Gauges
±0.5% Accuracy
316 SS Tube and Socket

STANDARD FEATURES

Movement: All 300 series stainless steel
Pointer: Geared micrometer adjustable, balanced
Dial: White enameled aluminum with black graduations and numerals 270° Arc
Dial Sizes: 4½″
Thread Size: ¼ male NPT; ½ male NPT
Connection Location: Lower (Bottom), Back (Rear)
Case: Polypropylene safety case (solid front, blow-out back) suitable for surface or direct mounting (standard).
Bourdon Tube: 316 stainless steel
Socket: 316 stainless steel

AA44

PRESSURE RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
PC	0-15 psi	1 psi	.25 psi
PD	0-30 psi	5 psi	.5 psi
PE	0-60 psi	10 psi	1 psi
PF	0-100 psi	10 psi	1 psi
PG	0-160 psi	20 psi	2 psi
PH	0-200 psi	20 psi	2 psi
PJ	0-300 psi	50 psi	5 psi
PK	0-400 psi	50 psi	5 psi
PM	0-600 psi	100 psi	10 psi
PO	0-800 psi	100 psi	10 psi
PP	0-1000 psi	100 psi	10 psi
PR	0-1500 psi	200 psi	10 psi
PS	0-2000 psi	200 psi	20 psi
PT	0-3000 psi	500 psi	20 psi
PV	0-5000 psi	500 psi	50 psi
PY	0-10,000 psi	1000 psi	100 psi
PZ	0-15,000 psi	3000 psi	100 psi
P2	0-20,000 psi	2000 psi	200 psi

VACUUM RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
VC	30″-0 Hg. Vac	3″	.2″

DESCRIPTION

CATALOG NO.	GAUGE TYPE	OPTIONAL CASE STYLE	
		LOWER CONNECT	BACK CONNECT
AA44	Standard “Dry” Gauge	#4 Aluminum Safety	#4 Aluminum Safety #6 Aluminum Flush
AS44	Hermetically Sealed “Dry” Gauge		
AY44	Glycerin Filled Gauge		

COMPOUND RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
CA	30″-0- 15 psi	5″ & 3 psi	.5″/.2 psi
CB	30″-0- 30 psi	10″ & 5 psi	1″/.5 psi
CC	30″-0- 60 psi	10″ & 10 psi	1″/ 1 psi
CD	30″-0-100 psi	30″ & 10 psi	2″/ 1 psi
CE	30″-0-150 psi	30″ & 20 psi	5″/ 2 psi
CF	30″-0-200 psi	30″ & 20 psi	5″/ 2 psi
CG	30″-0-300 psi	30″ & 50 psi	10″/ 5 psi
CI	30″-0-600 psi	30″ & 100 psi	10″/10 psi

NOTES:
1. Royal Gauges are calibrated in accordance with ASME B40.1 Grade 2A (±1/2%).
2. Metric dials can be furnished.

HOW TO ORDER

A A 4 4 2 P F 4 L W ( )

1. Basic 4-digit Catalog No. From Table Above
2. Case Style from above table
3. Range Code From Range Tables Above
4. Thread Size: 4 = ¼ Npt Male (Standard); 2 = ½ Npt Male
5. Connection Location: L = Lower (Bottom), R = Back (Rear)
6. Dial Color: W = White
7. If Any Gauge Options Are Desired – Specify Option Code(s) From Page 37

WEKSLER®

Royal Process Gauges
±0.5% Accuracy
K Monel Tube and Monel 400 Socket

STANDARD FEATURES

Movement: All 300 series stainless steel

Pointer: Geared micrometer adjustable, balanced

Dial: White enameled aluminum with black graduations and numerals 270° Arc

Dial Sizes: 4½″

Thread Size: ¼ male NPT; ½ male NPT

Connection Location: Lower (Bottom), Back (Rear)

Case: Polypropylene safety case (solid front, blow-out back) suitable for surface or direct mounting (standard).

Bourdon Tube: K-Monel

Socket: Monel 400

PRESSURE RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
PC	0-15 psi	1 psi	.25 psi
PD	0-30 psi	5 psi	.5 psi
PE	0-60 psi	10 psi	1 psi
PF	0-100 psi	10 psi	1 psi
PG	0-160 psi	20 psi	2 psi
PH	0-200 psi	20 psi	2 psi
PJ	0-300 psi	50 psi	5 psi
PK	0-400 psi	50 psi	5 psi
PM	0-600 psi	100 psi	10 psi
PO	0-800 psi	100 psi	10 psi
PP	0-1000 psi	100 psi	10 psi
PR	0-1500 psi	200 psi	10 psi
PS	0-2000 psi	200 psi	20 psi
PT	0-3000 psi	500 psi	20 psi
PV	0-5000 psi	500 psi	50 psi
PY	0-10,000 psi	1000 psi	100 psi

VACUUM RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
VC	30″-0 Hg. Vac	3″	.2″

DESCRIPTION

CATALOG NO.	GAUGE TYPE	OPTIONAL CASE STYLE	
		LOWER CONNECT	BACK CONNECT
AA24	Standard “Dry” Gauge	#4 Aluminum Safety	#4 Aluminum Safety #6 Aluminum Flush
AS24	Hermetically Sealed “Dry” Gauge		
AY24	Glycerin Filled Gauge		

COMPOUND RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
CA	30″-0- 15 psi	5″ & 3 psi	.5″/.2 psi
CB	30″-0- 30 psi	10″ & 5 psi	1″/.5 psi
CC	30″-0- 60 psi	10″ & 10 psi	1″/ 1 psi
CD	30″-0-100 psi	30″ & 10 psi	2″/ 1 psi
CE	30″-0-150 psi	30″ & 20 psi	5″/ 2 psi
CF	30″-0-200 psi	30″ & 20 psi	5″/ 2 psi
CG	30″-0-300 psi	30″ & 50 psi	5″/ 2 psi
CI	30″-0-600 psi	30″ & 100 psi	10″/ 5 psi

NOTES:

1. Royal Gauges are calibrated in accordance with ASME B40.1 Grade 2A (±1/2%).
2. Metric dials can be furnished.

HOW TO ORDER

A A 2 4 2 P F 4 L W ( )

1. Basic 4-digit Catalog No. From Table Above
2. Case Style from above table
3. Range Code From Range Tables Above
4. Thread Size: 4 = ¼ Npt Male (Standard); 2 = ½ Npt Male
5. Connection Location: L = Lower (Bottom), R = Back (Rear)
6. Dial Color: W = White
7. If Any Gauge Options Are Desired – Specify Option Code(s) From Page 37

WEKSLER®

Royal Process Gauges
±0.5% Accuracy
6˝, 8½˝ Dial Size

STANDARD FEATURES

Movement: All 300 series stainless steel

Pointer: Geared micrometer adjustable, balanced

Dial: White enameled aluminum with black graduations and numerals 270° Arc

Dial Sizes: 6˝, 8½˝

Thread Size: ¼ male NPT; ½ male NPT

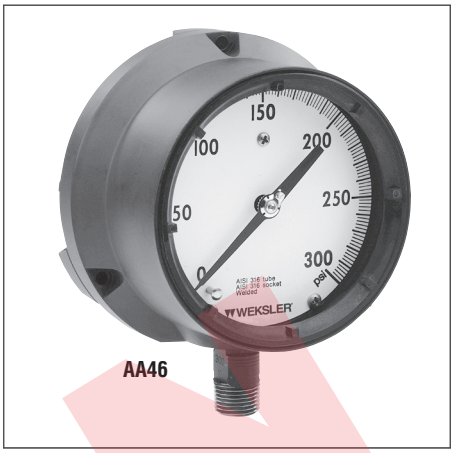
Connection Location: Lower (Bottom), Back (Rear)

Case: Aluminum safety case (solid front, blow-out back) suitable for surface or direct mounting.

Optional Case Style:
(6˝ size only)
Back connect #6 Alumium Flush

Bourdon Tube: See Table Below

Socket: See Table Below



AA46

PRESSURE RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
PC	0-15 psi	1 psi	.25 psi
PD	0-30 psi	5 psi	.5 psi
PE	0-60 psi	10 psi	1 psi
PF	0-100 psi	10 psi	1 psi
PG	0-160 psi	20 psi	2 psi
PH	0-200 psi	20 psi	2 psi
PJ	0-300 psi	50 psi	5 psi
PK	0-400 psi	50 psi	5 psi
PM	0-600 psi	100 psi	10 psi
PO	0-800 psi	100 psi	10 psi
PP	0-1000 psi	100 psi	10 psi
PR	0-1500 psi	200 psi	10 psi
PS	0-2000 psi	200 psi	20 psi
PT	0-3000 psi	500 psi	20 psi
PV	0-5000 psi	500 psi	50 psi
PY	0-10,000 psi	1000 psi	100 psi
PZ	0-15,000 psi	3000 psi	100 psi
P2	0-20,000 psi	2000 psi	200 psi

COMPOUND RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
CA	30˝-0- 15 psi	5˝& 3 psi	.5˝/.2 psi
CB	30˝-0- 30 psi	10˝& 5 psi	1˝/.5 psi
CC	30˝-0- 60 psi	10˝& 10 psi	1˝/ 1 psi
CD	30˝-0-100 psi	30˝& 10 psi	2˝/ 1 psi
CE	30˝-0-150 psi	30˝& 20 psi	5˝/ 2 psi
CF	30˝-0-200 psi	30˝& 20 psi	5˝/ 2 psi
CG	30˝-0-300 psi	30˝& 50 psi	10˝/ 5 psi
CI	30˝-0-600 psi	30˝& 100 psi	10˝/10 psi

VACUUM RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
VC	30˝-0 Hg. Vac	3˝	.2˝

BOURDON TUBE AND SOCKET

CATALOG NO.	BOURDON TUBE & SOCKET MATERIAL	DIAL SIZE	GAUGE TYPE
AA16	Brass/ Bronze	6˝	Dry
AS16		6˝	Herm. Seal.
AY16		6˝	Liq. Fill
AA26	Monel	6˝	Dry
AS26		6˝	Herm. Seal.
AY26		6˝	Liq. Fill
AA46	316 SS	6˝	Dry
AS46		6˝	Herm. Seal.
AY46		6˝	Liq. Fill
AA48		8½˝	Dry (only)

NOTES:

1. Royal Gauges are calibrated in accordance with ASME B40.1 Grade 2A (±1/2%).
2. Metric dials can be furnished.

HOW TO ORDER

A A 4 6 4 P F 4 L W ( )

1. Basic 4-digit Catalog No. From Table Above
2. Case Style from above table
3. Range Code From Range Tables Above
4. Thread Size: 4 = ¼ Npt Male (Standard); 2 = ½ Npt Male
5. Connection Location: L = Lower (Bottom), R = Back (Rear)
6. Dial Color: W = White
7. If Any Gauge Options Are Desired – Specify Option Code(s) From Page 37

WEKSLER®

Royal Receiver Gauges
±0.5% Accuracy

STANDARD FEATURES

Movement: All 300 series stainless steel
Pointer: Geared micrometer adjustable, balanced
Dial: White enameled aluminum with black graduations and numerals 270° Arc
Dial Sizes: 4½˝
Thread Size: ¼ male NPT; ½ male NPT
Connection Location: Lower (Bottom), Back (Rear)
Case: Polypropylene safety case (solid front, blow-out back) suitable for surface or direct mounting (standard).

Bourdon Tube: 316 stainless steel
Socket: 316 stainless steel

Receiver gauges are used with a transmitter (transducer) to translate distant point air signals into units of pressure, temperature, liquid level or flow. Outer scale marked with equal increments of transmitted signal, inner scale graduated with units of specific measured variable (i.e.: square root, %).

AR44

STANDARD RANGES (3-15 PSI SIGNAL)

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
OC	0-100	1 psi	.25 psi
OH	0-10 Sq. Rt.	5 psi	.5 psi

NOTES:
1. Royal Gauges are calibrated in accordance with ASME B40.1 Grade 2A (±1/2%).

BOURDON TUBE AND SOCKET

CATALOG NO.	BOURDON TUBE & SOCKET MATERIAL	DIAL SIZE	GAUGE TYPE	OPTIONAL CASE STYLE	
				LOWER CONNECT	BACK CONNECT
AR44	316 SS	4½˝	Receiver	#4 Style Alum. Safety	#6 Style Alum. Flush

HOW TO ORDER

A R 4 4 2 O C 4 L W ( )

1. Basic 4-digit Catalog No. From Table Above
2. Polypropylene Case Style “2”
3. Range Code From Range Tables Above
4. Thread Size: 4 = ¼ Npt Male (Standard); 2 = ½ Npt Male
5. Connection Location: L = Lower (Bottom), R = Back (Rear)
6. Dial Color: W = White
7. If Any Gauge Options Are Desired – Specify Option Code(s) From Page 37

WEKSLER®

3½˝ Regal Industrial Gauge
±1.0% Accuracy

STANDARD FEATURES

Available in 3½˝ dial sizes, Regal pressure gauges are liquid fillable and field convertible for panel mounting. Both zero and span adjustments are standard. The gauge is available dry, liquid-filled weatherproof or hermetically sealed.

- Designed for safety and long life
- All stainless, all-welded construction for long life
- ASME Grade 1A, 1% accuracy full scale
- No stop pin to mask false zero reading – ensures safety and process control
- 5-year limited warranty

BA43

PRESSURE RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
PC	0-15 psi	1 psi	.25 psi
PD	0-30 psi	5 psi	.5 psi
PE	0-60 psi	10 psi	1 psi
PF	0-100 psi	10 psi	1 psi
PG	0-160 psi	20 psi	2 psi
PH	0-200 psi	20 psi	2 psi
PJ	0-300 psi	50 psi	5 psi
PK	0-400 psi	50 psi	5 psi
PM	0-600 psi	100 psi	10 psi
PO	0-800 psi	100 psi	10 psi
PP	0-1000 psi	100 psi	10 psi
PR	0-1500 psi	200 psi	10 psi
PS	0-2000 psi	200 psi	20 psi
PT	0-3000 psi	500 psi	20 psi
PV	0-5000 psi	500 psi	50 psi
PY	0-10,000 psi	1000 psi	100 psi
PZ	0-15,000 psi	3000 psi	100 psi

VACUUM RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
VC	30˝-0 Hg. Vac	3˝	.2˝

BOURDON TUBE AND SOCKET

CATALOG NO.	BOURDON TUBE & SOCKET MATERIAL	DIAL SIZE	GAUGE TYPE	OPTIONAL CASE STYLE	
				LOWER CONNECT	BACK CONNECT
BA13	Brass/Bronze[1]	3½˝	Dry	"X" Style SS	"X" Style SS
BS13			Herm. Sealed		Back Flanged
BY13			Liquid Fill		"U" Style SS
BA43	316 SS		Dry	Back Flanged	U-Clamp
BS43			Herm. Sealed		"V" Style SS
BY43			Liquid Fill		Front Flanged

COMPOUND RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
CA	30˝-0- 15 psi	5˝ & 3 psi	.5˝/.2 psi
CB	30˝-0- 30 psi	10˝ & 5 psi	1˝/.5 psi
CC	30˝-0- 60 psi	10˝ & 10 psi	1˝/ 1 psi
CD	30˝-0-100 psi	30˝ & 10 psi	2˝/ 1 psi
CE	30˝-0-150 psi	30˝ & 20 psi	5˝/ 2 psi
CF	30˝-0-200 psi	30˝ & 20 psi	5˝/ 2 psi
CG	30˝-0-300 psi	30˝ & 50 psi	10˝/ 5 psi
CI	30˝-0-600 psi	30˝ & 100 psi	10˝/10 psi

NOTES:

1. Brass/Bronze maximum range is 1000 psi.

HOW TO ORDER

B A 4 3 Y P F 4 L W ( )

1. Basic 4-digit Catalog No. From Table Above
2. Stainless Steel Case Style "Y" Standard
3. Range Code From Range Tables Above
4. Thread Size: 4 = ¼ Npt Male (only)
5. Connection Location: L = Lower (Bottom), R = Back (Rear)
6. Dial Color: W = White
7. If Any Gauge Options Are Desired – Specify Option Code(s) From Page 37

WEKSLER®

4½˝ Regal Industrial Gauge ±1.0% Accuracy

STANDARD FEATURES

Movement: All 300 series stainless steel

Pointer: Geared micrometer adjustable, balanced

Dial: White enameled aluminum with black graduations and numerals 270° Arc

Dial Sizes: 4½˝

Thread Size: ¼ male NPT; ½ male NPT

Connection Location: Lower (Bottom), Back (Rear)

Case: Polypropylene safety case (solid front, blow-out back) suitable for surface or direct mounting (standard).

Bourdon Tube: Bronze

Socket: Brass

BA14

PRESSURE RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
PC	0-15 psi	1 psi	.25 psi
PD	0-30 psi	5 psi	.5 psi
PE	0-60 psi	10 psi	1 psi
PF	0-100 psi	10 psi	1 psi
PG	0-160 psi	20 psi	2 psi
PH	0-200 psi	20 psi	2 psi
PJ	0-300 psi	50 psi	5 psi
PK	0-400 psi	50 psi	5 psi
PM	0-600 psi	100 psi	10 psi
PO	0-800 psi	100 psi	10 psi
PP	0-1000 psi	100 psi	10 psi

VACUUM RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
VC	30˝-0 Hg. Vac	3˝	.2˝

BOURDON TUBE AND SOCKET

CATALOG NO.	BOURDON TUBE & SOCKET MATERIAL	DIAL SIZE	GAUGE TYPE	OPTIONAL CASE STYLE	
				LOWER CONNECT	BACK CONNECT
BA14	Brass/Bronze[2]	4½˝	Dry	"X" Style SS Back Flng.	"X" Style SS Back Flng. "U" Style SS U- Clamp
BS14			Herm. Seal.	"Y" Style SS	"V" Style SS Front Flng. "Y" Style SS
BY14			Liquid Fill	#4 Style Alum. Safety	#4 Style Alum. Safety #6 Style Alum. Safety

COMPOUND RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
CA	30˝-0- 15 psi	5˝& 3 psi	.5˝/.2 psi
CB	30˝-0- 30 psi	10˝& 5 psi	1˝/.5 psi
CC	30˝-0- 60 psi	10˝& 10 psi	1˝/ 1 psi
CD	30˝-0-100 psi	30˝& 10 psi	2˝/ 1 psi
CE	30˝-0-150 psi	30˝& 20 psi	5˝/ 2 psi
CF	30˝-0-200 psi	30˝& 20 psi	5˝/ 2 psi
CG	30˝-0-300 psi	30˝& 50 psi	10˝/ 5 psi
CI	30˝-0-600 psi	30˝& 100 psi	10˝/10 psi

NOTES:

1. Regal gauges are calibrated in accordance with ASME B40.1 Grade 1A (±1%).
2. Brass/Bronze maximum range is 1000 psi.

HOW TO ORDER

B A 1 4 2 P F 4 L W ( )

1. Basic 4-digit Catalog No. from Table Above
2. Case Style from Table Above
3. Range Code From Range Tables Above
4. Thread Size: 4 = ¼ Npt Male (Standard); 2 = ½ Npt Male
5. Connection Location: L = Lower (Bottom), R = Back (Rear)
6. Dial Color: W = White
7. If Any Gauge Options Are Desired – Specify Option Code(s) From Page 37

WEKSLER®

6˝, 8½˝, 12˝ Regal Industrial Gauge ±1.0% Accuracy

STANDARD FEATURES

Movement: All 300 series stainless steel

Pointer: Geared micrometer adjustable, balanced

Dial: White enameled aluminum with black graduations and numerals 270° Arc

Dial Sizes: 6˝, 8½˝, 12

Thread Size: ¼ male NPT; ½ male NPT

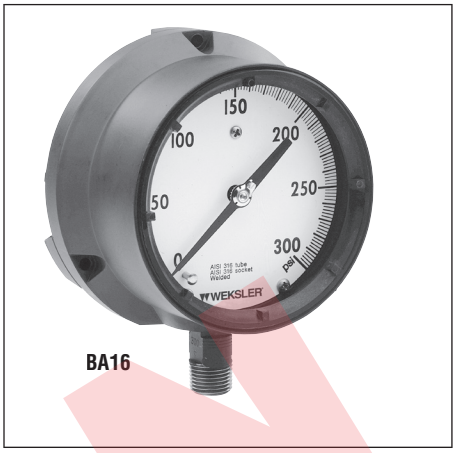
Connection Location: Lower (Bottom), Back (Rear)(3)

Case: 6˝, 8½˝ Aluminum safety case (solid front, blow-out back) suitable for surface or direct mounting (4 Style).

12˝ Aluminum (open front) Back Flanged: (E style)

Bourdon Tube: See table below

Socket: See table below



BA16

PRESSURE RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
PC	0-15 psi	1 psi	.25 psi
PD	0-30 psi	5 psi	.5 psi
PE	0-60 psi	10 psi	1 psi
PF	0-100 psi	10 psi	1 psi
PG	0-160 psi	20 psi	2 psi
PH	0-200 psi	20 psi	2 psi
PJ	0-300 psi	50 psi	5 psi
PK	0-400 psi	50 psi	5 psi
PM	0-600 psi	100 psi	10 psi
PO	0-800 psi	100 psi	10 psi
PP	0-1000 psi	100 psi	10 psi
PR	0-1500 psi	200 psi	10 psi
PS	0-2000 psi	200 psi	20 psi
PT	0-3000 psi	500 psi	20 psi
PV	0-5000 psi	500 psi	50 psi
PY	0-10,000 psi	1000 psi	100 psi
PZ	0-15,000 psi	3000 psi	100 psi
P2	0-20,000 psi	2000 psi	200 psi

VACUUM RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
VC	30˝-0 Hg. Vac	3˝	.2˝

BOURDON TUBE AND SOCKET

CATALOG NO.	BOURDON TUBE & SOCKET MATERIAL	DIAL SIZE	GAUGE TYPE	OPTIONAL CASE STYLE	
				LOWER CONNECT	BACK CONNECT
BA16	Brass/Bronze(4)	6˝	Dry	#4 Style Alum. Safety (only)	#6 Style Alum. Flush
BS16			Herm. Seal.		
BY16			Liq. Fill		
BA18	Brass/Bronze(4)	8½˝	Dry	#4 Style Alum. Safety (only)	#4 Style Alum. Safety (only)
BA49	316 SS	12˝	Dry	"E" Style Alum. Safety Back Flanged	Not Available in Back Connect

COMPOUND RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
CA	30˝-0- 15 psi	5˝& 3 psi	.5˝/.2 psi
CB	30˝-0- 30 psi	10˝& 5 psi	1˝/.5 psi
CC	30˝-0- 60 psi	10˝& 10 psi	1˝/ 1 psi
CD	30˝-0-100 psi	30˝& 10 psi	2˝/ 1 psi
CE	30˝-0-150 psi	30˝& 20 psi	5˝/ 2 psi
CF	30˝-0-200 psi	30˝& 20 psi	5˝/ 2 psi
CG	30˝-0-300 psi	30˝& 50 psi	10˝/ 5 psi
CI	30˝-0-600 psi	30˝& 100 psi	10˝/10 psi

NOTES:

1. Regal Gauges are calibrated in accordance with ASME B40.1 Grade 1A (±1%).
2. Metric dials can be furnished.
3. 12˝ avaialble in lower connect onl
4. Brass/Bronze maximum range is 1000 psi.

HOW TO ORDER

B A 1 6 4 P F 4 L W ( )

1. Basic 4-digit Catalog No. From Table Above
2. Case Style from Table Above
3. Range Code From Range Tables Above
4. Thread Size: 4 = ¼ Npt Male (Standard); 2 = ½ Npt Male
5. Connection Location: L = Lower (Bottom), R = Back (Rear)
6. Dial Color: W = White
7. If Any Gauge Options Are Desired – Specify Option Code(s) From Page 37

WEKSLER®

Regal Retard Gauge
2-1-2% Accuracy

STANDARD FEATURES

Movement: All 300 series stainless steel
Pointer: Geared micrometer adjustable, balanced
Dial: White enameled aluminum with black graduations and numerals 270° Arc
Dial Sizes: 4½˝
Thread Size: ¼ male NPT; ½ male NPT
Connection Location: Lower (Bottom), Back (Rear)
Case: Polypropylene safety case (solid front, blow-out back) suitable for surface or direct mounting (standard).

Bourdon Tube: 316 stainless steel
Socket: 316 stainless steel

A portion of the dial is expanded for better readability in that area.

BE44

STANDARD RANGES

RANGE CODE	TOTAL GRADUATION	FIGURE INTERVALS	SMALLEST GRADUATION
RA	0-15 psi	1 psi (0-5); 5 psi (5-15)	1oz. (0-5); 1 psi (5-15)
RB	0-30 psi	1 psi (0-10); 10 psi (0-30)	1oz. (0-10); 5 psi (10-30)
RE	30˝-0-30 psi	5˝ (30˝-0) 1 psi (0-5); 10 psi (0-50)	1˝ (30˝-0) 1oz. (0-5); 1 psi (0-50)
RF	30˝-0-100 psi	10˝ (0˝-30) 10 psi (0-50); 25 psi (50-100)	1˝ (0-30) 1 psi (0-50); 5 psi (50-100)

BOURDON TUBE AND SOCKET

CATALOG NO.	BOURDON TUBE & SOCKET MATERIAL	DIAL SIZE	GAUGE TYPE	OPTIONAL CASE STYLE	
				LOWER CONNECT	BACK CONNECT
BE44	316 SS	4½˝	Retard	#4 Style Alum. Safety	#6 Style Alum. Flush

NOTES:
1. Regal Gauges are calibrated in accordance with ASME B40.1 Grade 1A (±1%).

HOW TO ORDER

B E 4 4 2 R A 4 L W ( )

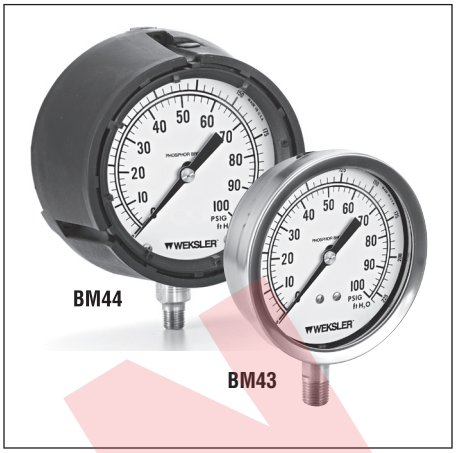
1. Basic 4-digit Catalog No. From Table Above
2. Case Style From Table Above
3. Range Code From Range Tables Above
4. Thread Size: 4 = ¼ Npt Male (Standard); 2 = ½ Npt Male
5. Connection Location: L = Lower (Bottom), R = Back (Rear)
6. Dial Color: W = White
7. If Any Gauge Options Are Desired – Specify Option Code(s) From Page 37

WEKSLER®

Regal Altitude Gauges
±1.0% Accuracy

STANDARD FEATURES

Movement: All 300 series stainless steel
Pointer: Geared micrometer adjustable, balanced
Dial: White enameled aluminum with black graduations and numerals 270° Arc
Dial Sizes: 3½˝[2], 4½˝
Thread Size: ¼ male NPT; ½ male NPT
Connection Location: Lower (Bottom), Back (Rear)
Case: 4½˝ polypropylene safety case (solid front, blow-out back) suitable for surface or direct mounting (standard). 3½˝ stainless steel case ("Y" style)
Bourdon Tube: See table below
Socket: See table below



ALTITUDE RANGES BM1

RANGE CODE	TOTAL GRADUATION	FIGURE INTERVALS	SMALLEST GRADUATION
HA	0-30 ft.	5 ft.	½ ft.
HB	0-70ft.	10 ft.	1 ft.
HC	0-100 ft.	10 ft.	1 ft.
HD	0-160 ft.	20 ft.	2 ft.
HE	0-200 ft.	20 ft.	2 ft.
HF	0-250 ft.	25 ft.	5 ft.
HG	0-300 ft.	50 ft.	5 ft.
HH	0-400 ft.	50 ft.	5 ft.
HI	0-500 ft.	50 ft.	5 ft.
HJ	0-600 ft.	100 ft.	10 ft.

ALTITUDE RANGES BN1

RANGE CODE	TOTAL GRADUATION	FIGURE INTERVALS	SMALLEST GRADUATION
HO	15 psi & 35 ft.	3 psi & 5 ft.	¼ psi & ½ ft.
HP	30 psi & 70 ft.	5 psi & 10 ft.	½ psi & 1 ft.
HQ	50 psi & 116 ft.	10 psi & 10 ft.	1 psi & 2 ft.
HW	60 psi & 140 ft.	10 psi & 20 ft.	1 psi & 2 ft.
HR	100 psi & 231 ft.	10 psi & 25 ft.	1 psi & 5 ft.
HS	150 psi & 345 ft.	20 psi & 20 ft.	2 psi & 5 ft.
HT	200 psi & 460 ft.	20 psi & 50 ft.	2 psi & 5 ft.
HU	300 psi & 690 ft.	50 psi & 50 ft.	5 psi & 10 ft.

BOURDON TUBE AND SOCKET

CATALOG NO.	BOURDON TUBE & SOCKET MATERIAL	DIAL SIZE	GAUGE TYPE	OPTIONAL CASE STYLE	
				LOWER CONNECT	BACK CONNECT
BM43	316 SS	3½˝	Altitude (only)	"X" Style SS Back Flng.	"U" Style SS U-Clamp
BN43			Altitude & PSI equivalent		"V" Style SS Front Flng "X" Style SS Back Flng
BM44	316 SS	4½˝	Altitude (only)	#4 Style Alum. Safety	#6 Style Alum. Flush
BN44			Altitude & PSI equivalent		

NOTES:
1. Regal Gauges are calibrated in accordance with ASME B40.1 Grade 1A (±1%).
2. 3½˝ available in ¼ male NPT only.

HOW TO ORDER

B M 4 4 2 H A 4 L W ( )

1. Basic 4-digit Catalog No. From Table Above
2. Case Style From Table Above
3. Range Code From Range Tables Above
4. Thread Size: 4 = ¼ Npt Male (Standard); 2 = ½ Npt Male
5. Connection Location: L = Lower (Bottom), R = Back (Rear)
6. Dial Color: W = White
7. If Any Gauge Options Are Desired – Specify Option Code(s) From Page 37

WEKSLER®

Regal Refrigerant and Ammonia Gauges ±1.0% Accuracy

STANDARD FEATURES

Movement: All 300 series stainless steel
Pointer: Geared micrometer adjustable, balanced
Dial: White enameled aluminum with black graduations and numerals 270° Arc
Dial Sizes: 3½″, 4½″, 6″
Thread Size: ¼ male NPT; ½ male NPT
Connection Location: Lower (Bottom), Back (Rear)
Case: 3½″, "Y" Style SS
4½″, #2 Polypropylene safety
6″, #4 Aluminum safety

Bourdon Tube: 316 stainless steel
Socket: 316 stainless steel

Refrigerant gauges indicate both pressure and vacuum with corresponding temperature of refrigerants.

Ammonia gauges indicate both pressure and vacuum with corresponding temperature in ammonia systems.

BOURDON TUBE AND SOCKET

CATALOG NO.	BOURDON TUBE & SOCKET MATERIAL	DIAL SIZE	GAUGE TYPE	OPTIONAL CASE STYLE	
				LOWER CONNECT	BACK CONNECT
BP43	316 SS	3½″	Ammonia	"X" Style SS Back Flng.	"U" Style SS U-Clamp "V" Style SS Front Flng "X" Style SS Back Flng
BQ43			Refrigeration		
BP44	316 SS	4½″	Ammonia	#4 Style Alum. Safety	#6 Style Alum. Flush
BQ44			Refrigeration		
BP46	316 SS	6″	Ammonia	#4 Style Alum. Safety	#6 Style Alum. Flush
BQ46			Refrigeration		

BP AMMONIA GAUGE RANGES

DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION	RANGE CODE
30″-0-15 psi	30″ & 25 psi	5″ & 5 psi	AA
30″-0-300 psi	30″ & 25 psi	5″ & 5 psi	AB

BQ REFRIGERANT GAUGE RANGES

			R12	R22	R134A	R502
30″-0-150 psi	30″ & 25 psi	5″ & 5 psi	FH	FN	F7	F5
30″-0-300 psi	30″ & 25 psi	5″ & 5 psi	F1	FO	F8	F6
300 psi	25 psi	5 psi	FF	FM	-	F4

NOTES:

1. Any standard pressure or compound range, from 30 to 400# can be furnished for ammonia or refrigerant use, without temperature equivalent, at no additional charge
2. Figure intervals and smallest graduations above are for 4½″ and 6″ gauges. Graduations and intervals may vary for 3½″ dial sizes.

HOW TO ORDER

B P 4 4 2 A B 4 L W ( )

1. Basic 4-digit Catalog No. From Table Above
2. Case Style Code From Table Above
3. Range Code From Range Tables Above
4. Thread Size: 4 = ¼ Npt Male (Standard); 2 = ½ Npt Male
5. Connection Location: L = Lower (Bottom), R = Back (Rear)
6. Dial Color: W = White, B = Black (optional)
7. If Any Gauge Options Are Desired – Specify Option Code(s) From Page 37

WEKSLER®

100mm Gauge
±1.0 % Accuracy

STANDARD FEATURES

Movement: 300 series stainless steel
Pointer: Micrometer adjustable
Dial: White enameled aluminum
Dial Size: 100mm – dry or glycerin filled
Connection Location: 1/4 NPT or 1/2 NPT lower (bottom)
Case: Polished 304 stainless steel
Hermetically sealed
Dry version is liquid fillable in field
304 stainless steel case and bezel
Bourdon Tube & Socket: 316 stainless steel

- Suitable for a broad range of industrial applications

BA4C (DRY GAUGE)

BY4C (GLYCERIN FILLED)

PRESSURE RANGES

SPECIFY 10 DIGIT CATALOG NUMBER FROM THE TABLE BELOW

RANGE	10 DIGIT CATALOG NUMBERS			
DUAL SCALE PSI & KPA	DRY GAUGE		Glycerin FILLED GAUGE	
	1/4 NPT	1/2 NPT	1/4 NPT	1/2 NPT
.HG vac & 100-0 kPa	BA4CYVC4LW	BA4CYVC2LW	BY4CYVC4LW	BY4CYVC2LW
.30˝-0-30 psi & 100-0-200 kPa	BA4CYCB4LW	BA4CYCB2LW	BY4CYCB4LW	BY4CYCB2LW
.30˝-0-60 psi & 100-0-400 kPa	BA4CYCC4LW	BA4CYCC2LW	BY4CYCC4LW	BY4CYCC2LW
.30˝-0-150 psi & 100-0-1000 kPa	BA4CYCE4LW	BA4CYCE2LW	BY4CYCE4LW	BY4CYCE2LW
.0-15 psi & 0-100 kPa	BA4CYPC4LW	BA4CYPC2LW	BY4CYPC4LW	BY4CYPC2LW
.0-30 psi & 0-200 kPa	BA4CYPD4LW	BA4CYPD2LW	BY4CYPD4LW	BY4CYPD2LW
.0-60 psi & 0-400 kPa	BA4CYPE4LW	BA4CYPE2LW	BY4CYPE4LW	BY4CYPE2LW
.0-100 psi & 0-700 kPa	BA4CYPF4LW	BA4CYPF2LW	BY4CYPF4LW	BY4CYPF2LW
.0-160 psi & 0-1100 kPa	BA4CYPG4LW	BA4CYPG2LW	BY4CYPG4LW	BY4CYPG2LW
.0-200 psi & 0-1400 kPa	BA4CYPH4LW	BA4CYPH2LW	BY4CYPH4LW	BY4CYPH2LW
.0-300 psi & 0-2100 kPa	BA4CYPJ4LW	BA4CYPJ2LW	BY4CYPJ4LW	BY4CYPJ2LW
.0-600 psi & 0-4200 kPa	BA4CYPM4LW	BA4CYPM2LW	BY4CYPM4LW	BY4CYPM2LW
.0-1000 psi & 0-7000 kPa	BA4CYPP4LW	BA4CYPP2LW	BY4CYPP4LW	BY4CYPP2LW
.0-2000 psi & 0-14000 kPa	N/A	BA4CYPS2LW	N/A	BY4CYPS2LW
.0-3000 psi & 0-21000 kPa	N/A	BA4CYPT2LW	N/A	BY4CYPT2LW
.0-5000 psi & 0-35000 kPa	BA4CYPV4LW	BA4CYPV2LW	BY4CYPV4LW	BY4CYPV2LW
.0-10,000 psi & 0-70000 kPa	N/A	BA4CYPY2LW	N/A	BY4CYPY2LW

HOW TO ORDER

1. Select 10-digit Catalog No. From Table Above

WEKSLER®

Regal Duplex Gauges
±2-1-2% Accuracy

STANDARD FEATURES

Movement: Bronze

Pointer: Non-adjustable red and black pointers

Dial: White enameled aluminum with black graduations and numerals.

Dial Sizes: 4½˝

Thread Size: ¼ male NPT (only)

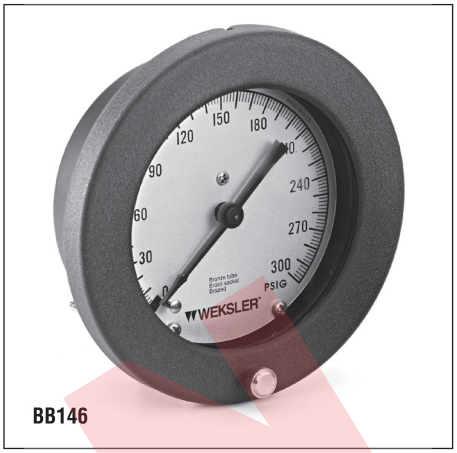
Connection Location: Lower or Rear (back)

Case: Suitable for direct or surface mounting.

Lower – (bottom) connect available in "A" style aluminum flanged case (only).

Back – (rear) connect "A" style (standard) "6" style (optional) aluminium flush

The Weksler Type BB14A duplex gauge is used to display two separate input pressures on the same gauge for comparison puposes.



BB146

CATALOG NO.	BOURDON TUBE & SOCKET MATERIAL	MAXIMUM PRESSURE (psi)	DIAL SIZE (INCHES)	STANDARD CASE
BB14	Phosphor Bronze Bourdon Forged Brass Socket	1000	4½	Style "A"

NOTE: BB1 series not available with safety cases.

NOTES:

1. Regal Duplex Gauges are calibrated in accordance with ASME B40.1 Grade A (±1%). See page 5 of this catalog for further reference to ASME B40.1.
2. Metric dials can be furnished. See Page 27.

PRESSURE RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
PD	0-30 psi	5 psi	.5 psi
PE	0-60 psi	10 psi	1 psi
PF	0-100 psi	10 psi	1 psi
PG	0-160 psi	20 psi	2 psi
PH	0-200 psi	20 psi	2 psi
PJ	0-300 psi	50 psi	5 psi
PK	0-400 psi	50 psi	5 psi
PM	0-600 psi	100 psi	10 psi
PO	0-800 psi	100 psi	10 psi
PP	0-1000 psi	100 psi	10 psi

COMPOUND RANGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
CA	30˝-0- 15 psi	10˝ & 2 & 15 psi	1˝/.5 psi
CB	30˝-0- 30 psi	10˝ & 5 psi	1˝/1 psi
CC	30˝-0- 60 psi	10˝ & 10 psi	1˝/1 psi
CD	30˝-0-100 psi	30˝ & 10 psi	2˝/1 psi
CE	30˝-0-150 psi	30˝ & 25 psi	5˝/5 psi
CF	30˝-0-200 psi	30˝ & 20 psi	5˝/5 psi
CG	30˝-0-300 psi	30˝ & 50 psi	10˝/5 psi

HOW TO ORDER

B B 1 4 A C C 4 L W ( )

1. Basic 4-digit Catalog No. From Table Above
2. Case Style Code From Table Above
3. Range Code From Range Tables Above (See notation above)
4. Thread Size: 4 = ¼ Npt Male (only)
5. Connection Location: L = Lower (Bottom); or R = Rear (Back)
6. Dial Color: W = White (Standard), B = Black (Optional)
7. If Any Gauge Options Are Desired – Specify Option Code(s) From Page 37

WEKSLER®

Regal Differential Gauges ±2-1-2% Accuracy

STANDARD FEATURES

Movement: Bronze

Pointer: Geared micrometer adjustable

Dial: White enameled aluminum. Black graduations and numerals

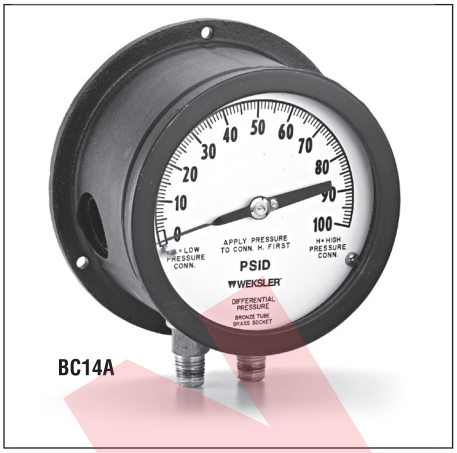
Dial Sizes: 4½˝, 6˝ (available in lower coonection only)

Thread Size: ¼ male NPT; ½ male NPT*

Connection Location: Lower (bottom) or Rear (back) 4.5˝ Lower (bottom) 6˝

Case: Suitable for direct or surface mounting. Available in "A" style aluminum case only.

To measure the difference between two pressure sources, apply high pressure, then low pressure. Read differential pressure on the gauge. BC designed with "O" at top center, BD with "O" at the left.



BC14A

BC GAUGES RANGE TABLE

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION	STATIC PRESSURE LIMITS
DA	10-0- 10 psi	2 psi	0.5 psi	30 psi
DB	15-0- 15 psi	3 psi	0.2 psi	60 psi
DC	30-0- 30 psi	5 psi	1 psi	120 psi
DD	50-0- 50 psi	10 psi	1 psi	200 psi
DE	100-0-100 psi	20 psi	2 psi	300 psi
DF	200-0-200 psi	50 psi	5 psi	600 psi
DG	300-0-300 psi	100 psi	10 psi	900 psi
DH	400-0-400 psi	100 psi	10 psi	1200 psi

BD GAUGES RANGE TABLE

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION	STATIC PRESSURE LIMITS
PB	*0-10 psi	2 psi	¼ psi	45 psi
P5	**0-20 psi	2 psi	⅕ psi	30 psi
PD	0-30 psi	5 psi	½ psi	60 psi
PE	0-60 psi	10 psi	1 psi	120 psi
PF	0-100 psi	10 psi	1 psi	200 psi
PG	0-160 psi	20 psi	2 psi	300 psi
PH	0-200 psi	20 psi	2 psi	300 psi
PJ	0-300 psi	50 psi	5 psi	450 psi
PK	0-400 psi	50 psi	5 psi	600 psi
PM	0-600 psi	100 psi	10 psi	900 psi
PO	0-800 psi	100 psi	10 psi	1200 psi
PP	0-1,000 psi	100 psi	10 psi	1500 psi

**180° dial arc

CATALOG NO.	BOURDON TUBE & SOCKET MATERIAL	DIAL SIZE (Inches)	STD. CASE
BC14 or BD14	Phosphor Bronze Forged Brass Socket	4½	Style "A"
BC16 or BD16		6	Style "A"
BC44 or BD44	Stainless Steel, 316	4½	Style "A"
BC46 or BD46		6	Style "A"

NOTES:

1. Regal Differential Gauges are calibrated in accordance with ASME B40.1 Grade A (±1%). See page 5 of this catalog for further reference to ASME B40.1.

HOW TO ORDER

B C 1 6 A D D 4 L W ( )

1. Basic 4-digit Catalog No. From Table Above
2. Case Style Code "A" (only)
3. Range Code From Range Tables Above (See notation above)
4. Thread Size: 4 = ¼ Npt Male
5. Connection Location: L = Lower (Bottom); or R = Rear (Back)
6. Dial Color: W = White (Standard), B = Black (Optional)
7. If Any Gauge Options Are Desired – Specify Option Code(s) From Page 37

WEKSLER®

Special Application Gauge Type RV14, ASME B 40.1 Grade 2A (±0.5% of span)

STANDARD FEATURES

RV14 Reid Vapor Test Gauge

The Weksler Type RV14 is a specialized pressure gauge used by the petroleum industry to measure vapor pressures of various petroleum products.

- Accuracy ASME B 40.1 Grade 2A (±0.5% of span)
- Dial Size 4½″ only
- White dial and black pointer

RV14

SPECIFICATIONS

Gauge Type Number	Dial Size (Inches)	Case & Ring Material Finish	Bourdon Tube & Tip Material (all joints welded)	Socket Material	Pressure Range (psi)	Pointer	Movement	NPT Conn.
Reid Vapor Test RV14	4½	Case: Aluminum black epoxy coated	Phosphor Bronze Tip: Brass (All joints silver brazed)	Brass	15/600	Micrometer Adjustable	Stainless steel Teflon coated, pinion and sector shaft, rotary geared	¼

STANDARD RANGES

Code	Range psi	Figure Interval	Minor Graduation
PC	0/15	1	0.1
PD	0/30	2	0.2
PE	0/60	4	0.25
PF	0/100	5	0.5
PH	0/200	10	1
PI	0/250	10	1
PJ	0/300	10	1
PM	0/600	20	2

HOW TO ORDER

R V 1 4 4 P K 4 L W

1. Basic 4-digit Catalog No. RV14
2. Case Style Code “4” (only case available)
3. Range Code From Range Tables Above
4. Thread Size: 4 = ¼ Npt Male (only thread size available)
5. Connection Location: L = Lower (Bottom)
6. Dial Color: W = White

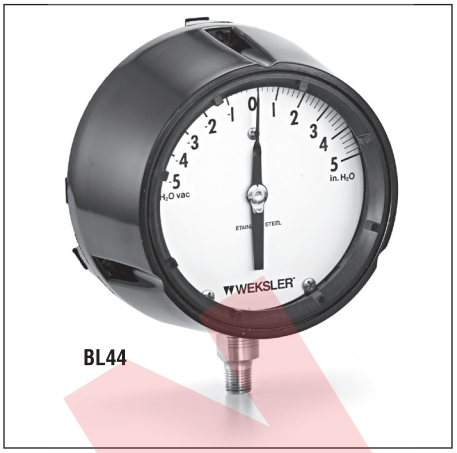
WEKSLER®

Low Pressure Gauges – Bellows Type ±2-1-2% Accuracy

STANDARD FEATURES

Movement: Bronze
Pointer: Balanced Slotted adjustable
Dial: White enameled aluminum. Black graduations and numerals
Thread Size: 1/4 male NPT; 1/2 male NPT
Connection Location: Lower or Rear (back)
Case: Style "2" polypropylene safety suitable for direct or surface mounting.

Ideal for applications under 15 psi.



BL44

RANGES FOR BELLOWS GAUGES

CODE NO.	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION	BL1 DIAL ARC	BL4 DIAL ARC
PA	0 to 5 psi	1 psi	1/16 psi	270°	270°
PB	0 to 10 psi	1 psi	1/8 psi	270°	270°
WR	10 to 0˝ Water Vac.	2˝	1/4˝	90°	–
WS	15 to 0˝ Water Vac.	3˝	1/2˝	90°	–
WT	40 to 0˝ Water Vac. & 75 mm Hg.	5˝ & 10 mm	1˝ & 1 mm	270°	180°
VD	5 to 10˝ Hg. Vac.	1˝	1/10˝	270°	270°
VA	10 to 0˝ Hg. Vac.	2˝	1/4˝	270°	270°
WW	10˝ Water Vacuum & 10˝ Water Pressure	2˝	1/2˝	180°	180°
WX	20˝ Water Vacuum & 40˝ Water Pressure	10˝	1˝	270°	270°
WY	10˝ Hg. Vacuum & 5 psi Pressure	2˝ & 1 psi	1/5˝ & .1 psi	270°	270°
WA	0 to 10˝ Water Press.	1˝	1/4˝	90°	–
WB	0 to 15˝ Water Press.	3˝	1/4˝	90°	90°
WH	0 to 20˝ Water Press.& 12oz.	1/2˝ & 1 oz.	1˝ & 1/4 oz.	180°	90°
WI	0 to 30˝ Water Press. & 18oz.	5˝ & 1 oz.	1/2˝ & 1/2 oz.	215°	–
WI	0 to 30˝ Water Press. & 18oz.	10˝ & 1 oz.	1˝ & 1/2 oz.	–	180°
WJ	0 to 40˝ Water Press. & 24 oz.	5˝ & 3 oz.	1˝ & 1/2 oz.	270°	180°
WK	0 to 60˝ Water Press. & 35 oz.	10˝ & 5 oz.	1˝ & 1 oz.	270°	270°
WL	0 to 80˝ Water Press. & 45 oz.	10˝ & 5 oz.	1˝ & 1 oz.	270°	270°
WM	0 to 100˝ Water Press. & 57 oz.	10˝ & 5 oz.	1˝ & 1 oz.	270°	270°

NOTES:
1. Regal Low Pressure Gauges are calibrated in accordance with ASME B40.1 Grade A (±1% middle third). See page 5 of this catalog for further reference to ASME B40.1.

BELLOWS AND SOCKET

CATALOG NO.	BELLOWS & SOCKET MATERIAL	DIAL SIZE	GAUGE TYPE	OPTIONAL CASE STYLE: LOWER CONNECT	OPTIONAL CASE STYLE: BACK CONNECT
BL14	Phsp. Brnz. Bellows Brass Socket	4½˝	Low Pressure	#4 Aluminum Safety	#6 Aluminum Safety
BL44	316 SS Bellows 316 SS Socket				

HOW TO ORDER

B L 4 4 2 W K 4 L W ( )

1. Basic 4-digit Catalog No. From Table Above
2. Case Style Code From Table Above
3. Range Code From Range Tables Above
4. Thread Size: 4 = 1/4 Npt Male; 2 = 1/2 Npt Male
5. Connection Location: L = Lower (Bottom); or R = Rear (Back)
6. Dial Color: W = White (Standard), B = Black (Optional)
7. If Any Gauge Options Are Desired – Specify Option Code(s) From Page 37

WEKSLER®

MIL G-18997E Gauge
±1.0% Accuracy

STANDARD FEATURES

Movement: Special heavy duty 300 series stainless steel bushed rotary movement

Pointer: Slotted adjustable type

Dial: Aluminum, white background, black numerals and graduations. Red set hand and plastic lens standard

Dial Sizes: 3½″, 4½″, 8½″

Connection: Available with:
P = 9/16-18 UNF-3A union "O" ring type, with "O" ring, tailpiece and union nut.

F = 7/16-20 UNF-2A flareless "bite" type, with ferrule and nut.

W = 6″ long, ¼″ IPS, schedule 80 Monel welding nipple.

4 = ¼ NPT male pipe thread.

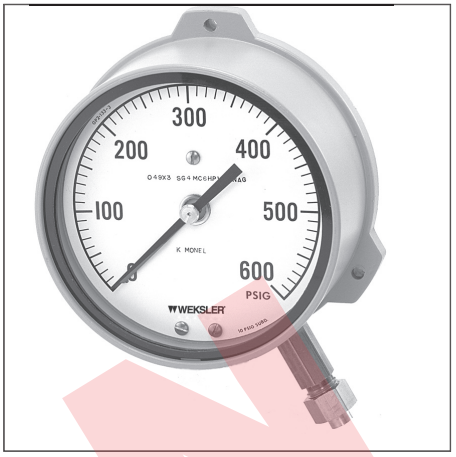
Connection Location: Back, bottom or 5 o'clock

Case: Die cast aluminum, solid front safety type, grey enamel finish, snap ring. Suitable for flush panel mounting or surface mounting.

Shock Resistant: To MIL S-901

Vibration Resistant: To MIL STD-167

Note: Flush mounting ring kit will be furnished unless otherwise specified.



PRESSURE RANGES

RANGE IDENT.	RANGE SPAN PSIG	MINOR GRDTN. PSIG 3½	4½	8½
PC	0/15	½	¼	¼
PD	0/30	½	½	¼
PE	0/60	1	1	½
PF	0/100	2	1	1
PH	0/200	5	2	1
PJ	0/300	5	5	2
PK	0/400	10	5	2
PM	0/600	10	10	5
PO	0/800	20	10	5
PP	0/1000	20	10	5
PR	0/1500	25	20	10
PS	0/2000	50	20	10
PT	0/3000	50	50	20
PV	0/5000	100	50	25
PX	0/8000	100	100	50
PY	0/10000	200	100	50

NOTE: All dimensions are approximate. Duplex and Caisson types available. Contact factory for further information.

VACUUM RANGES

RANGE IDENT.	RANGE SPAN In.Hg	MINOR GRDTN. In.Hg 3½	4½	8½
VC	0/30	½	½	¼

COMPOUND RANGES

RANGE IDENT.	RANGE SPAN	MINOR GRADUATION 3½ & 4½ VAC. in.Hg	3½ & 4½ PRESS. PSIG	8½ VAC. in.Hg	8½ PRESS. PSIG
CA	30/0/15	1	½	¼	¼
CB	30/0/30	1	½	½	¼
CC	30/0/60	2	1	1	½
CD	30/0/100	2	1	1	1
CE	30/0/150	5	2	2	1
CF	30/0/200	5	2	2	2
CG	30/0/300	10	5	5	2
CH	30/0/400	10	5	5	2
CI	30/0/600	10	10	10	5
CJ	30/0/800	10	10	10	5
CK	30/0/1000	30	10	15	10

BOURDON TUBE AND SOCKET

CATALOG NO.	BOURDON TUBE & SOCKET MATERIAL	DIAL SIZE
EA23	K Monel Tube,	3½″
EA24	and Socket	4½″
EA28	Tube, Brass Socket	8½″

HOW TO ORDER

E A 2 4 3 P M P E W B O

1. Basic 4-digit Catalog No. From Table Above
2. Case Style 3 (Only Style Available)
3. Range Code From Range Tables Above
4. Connection: P = "O" Ring; F = Flareless; 4 = ¼ NPT; or W = Welding Nipple
5. Connection Location: L = Lower (Bottom); or R = Rear (Back); or E = 5 o'clock
6. Dial Color: W = White (Standard), B = Black (Optional)
7. Cleaning: B = Cleaned for General Applications per Amendment 1
8. Flush Mounting Ring Kit: 0 = Required; X = Not Required

WEKSLER®

Available Metric Scales for Royal and Regal Gauges

kg/cm²

CODE	DUAL SCALE
MR	76-0 CMS & 30-0˝VAC
MZ	76 CMS/O/1 kg/cm² & 30˝-0-14 psi
MS	76 CMS/O/2 kg/cm² & 30˝-0-28 psi
MT	76 CMS/O/4 kg/cm² & 30˝-0-57 psi
MU	76 CMS/O/ 7 kg/cm² & 30˝-0-100 psi
MV	76 CMS/O/10 kg/cm² & 30˝-0-140 psi
MX	76 CMS/O/21 kg/cm² & 30˝-0-300 psi
MA	0-1 kg/cm² & 0-14 psi
MB	0-2 kg/cm² & 0-28 psi
MC	0-4 kg/cm² & 0-57 psi
MD	0-7 kg/cm² & 0-100 psi
ME	0-11 kg/cm² & 0-160 psi
MF	0-14 kg/cm² & 0-200 psi
MQ	0-18 kg/cm² & 0-250 psi
MG	0-21 kg/cm² & 0-300 psi
MH	0-28 kg/cm² & 0-400 psi
MP	0-35 kg/cm² & 0-500 psi
MI	0-42 kg/cm² & 0-600 psi
MJ	0-56 kg/cm² & 0-800 psi
MK	0-70 kg/cm² & 0-1000 psi
ML	0-105 kg/cm² & 0-1500 psi
M2	0-140 kg/cm² & 0-2000 psi
MM	0-210 kg/cm² & 0-3000 psi
MN	0-350 kg/cm² & 0-5000 psi
MD	0-700 kg/cm² & 0-10,000 psi

CODE	SINGLE SCALE
E1	76-0 CMS
EZ	76 CMS/O/1 kg/cm²
E2	76 CMS/O/2 kg/cm²
E3	76 CMS/O/4 kg/cm²
E4	76 CMS/O/7 kg/cm²
E5	76 CMS/O/10 kg/cm²
E7	76 CMS/O/21 kg/cm²
EA	0-1 kg/cm²
EC	0-2 kg/cm²
EF	0-4 kg/cm²
EG	0-7 kg/cm²
EH	0-11 kg/cm²
EI	0-14 kg/cm²
EJ	0-18 kg/cm²
EK	0-21 kg/cm²
EL	0-28 kg/cm²
EM	0-36 kg/cm²
EN	0-42 kg/cm²
EO	0-56 kg/cm²
EP	0-70 kg/cm²
EQ	0-105 kg/cm²
ER	0-140 kg/cm²
ES	0-210 kg/cm²
EU	0-350 kg/cm²
EV	0-700 kg/cm²

BAR

CODE	DUAL SCALE
A1	30˝/0 VAC & –1 bar
A2	30˝/0/15 psi & –1-0-1 bar
A3	30˝/0/30 psi & –1-0-2 bar
A4	30˝/0/60 psi & –1-0-4 bar
A5	30˝/0/100 psi & –1-0-7 bar
A6	30˝/0/150 psi & –1-0-10 bar
A7	30˝/0/200 psi & –1-0-14 bar
AC	0-15 psi & 0-1 bar
AD	0-30 psi & 0-2 bar
AE	0-60 psi & 0-4 bar
AF	0-100 psi & 0-7 bar
AG	0-160 psi & 0-11 bar
AH	0-200 psi & 0-14 bar
AJ	0-300 psi & 0-20 bar
AK	0-400 psi & 0-27 bar
AM	0-600 psi & 0-40 bar
AO	0-800 psi & 0-56 bar
AP	0-1,000 psi & 0-70 bar
AR	0-1,500 psi & 0-100 bar
AS	0-2,000 psi & 0-140 bar
AT	0-3,000 psi & 0-200 bar
AV	0-5,000 psi & 0-350 bar
AY	0-10,000 psi & 0-700 bar

CODE	SINGLE SCALE
B2	–1/0 bar
B3	–1/1.5 bar
B4	–1/3 bar
B5	–1/9 bar
B6	–1/15 bar
B9	–1/24 bar
BA	0/1 bar
BB	0/1.6 bar
BC	0/2.5 bar
BD	0/4 bar
BE	0/6 bar
BF	0/10 bar
BG	0/16 bar
BH	0/25 bar
BI	0/40 bar
BJ	0/60 bar
BK	0/100 bar
BL	0/160 bar
BM	0/250 bar
BN	0/400 bar
BO	0/600 bar
BP	0/1,000 bar
BQ	0/1,600 bar

kPa

CODE	DUAL SCALE
L2	30/0˝ VAC & 100/0 kPa
L3	30˝/0/15 psi & 100/0/100 kPa
L4	30˝/0/30 psi & 100/0/200 kPa
L5	30˝/0/60 psi & 100/0/400 kPa
L6	30˝/0/100 psi & 100/0/700 kPa
L7	30˝/0/150 psi & 100/0/1000 kPa
L8	30˝/0/200 psi & 100/0/1400 kPa
LA	0-15 psi & 0-100 kPa
LB	0-30 psi & 0-200 kPa
LC	0-60 psi & 0-400 kPa
LD	0-100 psi & 0-700 kPa
LE	0-160 psi & 0-1000 kPa
LF	0-200 psi & 0-1400 kPa
LG	0-300 psi & 0-2100 kPa
LH	0-400 psi & 0-2800 kPa
LI	0-600 psi & 0-4200 kPa
LJ	0-800 psi & 0-5600 kPa
LK	0-1,000 psi & 0-7000 kPa
LL	0-1,500 psi & 0-10,500 kPa
LM	0-2,000 psi & 0-14,000 kPa
LN	0-3,000 psi & 0-21,000 kPa
LO	0-5,000 psi & 0-35,000 kPa
LP	0-10,000 psi & 0-70,000 kPa

CODE	SINGLE SCALE
K1	–100/0 kPa
K2	100/0/100 kPa
K3	100/0/200 kPa
K4	100/0/400 kPa
K5	100/0/700 kPa
K6	100/0/1000 kPa
K7	100/0/14,000 kPa
KA	0-100 kPa
KB	0-200 kPa
KC	0-400 kPa
KO	0-700 kPa
KE	0-1000 kPa
KF	0-1400 kPa
KG	0-2000 kPa
KH	0-2800 kPa
KP	0-4200 kPa
KI	0-5600 kPa
KZ	0-7000 kPa
KJ	0-10,000 kPa
KK	0-15,000 kPa
KL	0-20,000 kPa
KM	0-40,000 kPa
KN	0-100,000 kPa

EQUIVALENTS

1 kPa = 0.14504 psi
1 bar = 14.5 psi = 100 kPa
1 kg/cm² = 14.22 psi
1 in. H_2O = 0.0361 psi
1cmHg = 0.1934 psi

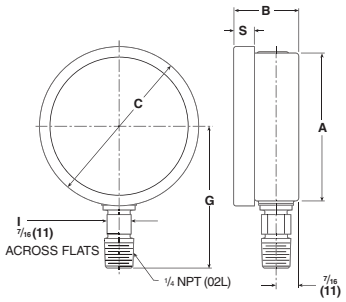
EQUIVALENTS

CONVERSION FROM PSI:
1 psi = 6.8947 kPa
1 psi = .06894 BAR
1 psi = .07031 kg/cm²

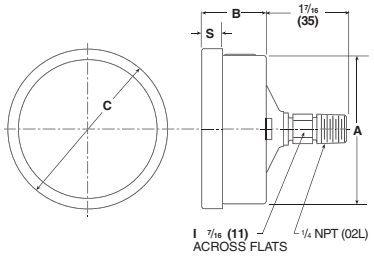
WEKSLER®

Case Styles & Dimensions
3½˝ SS Pressure Gauge

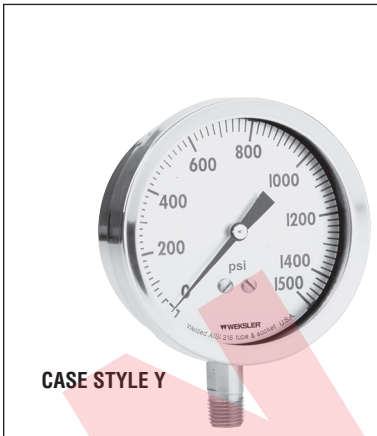
CASE STYLE "Y"



Stem Mount, Lower Connect

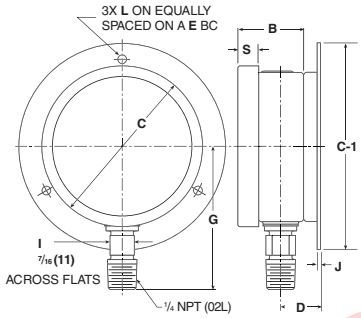


Stem Mount, Back Connect

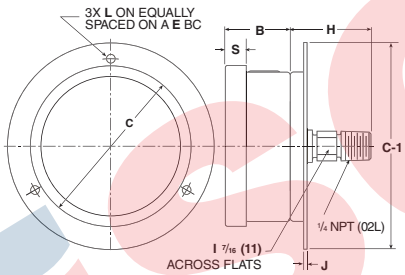


CASE STYLE Y

CASE STYLE "X"

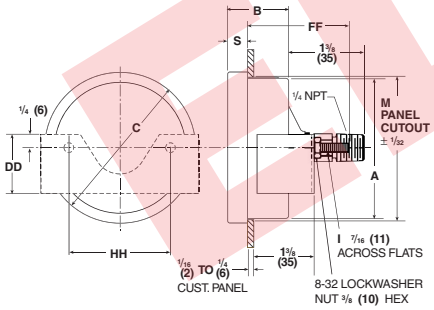


Surface Mount, Lower Connect



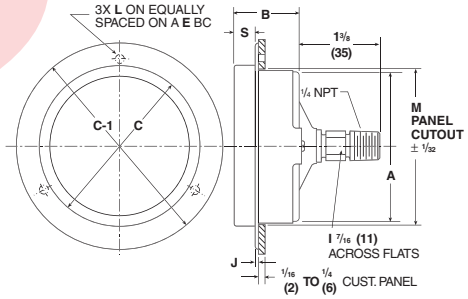
Surface Mount, Back Connect

CASE STYLE "U"



U-Clamp Panel Mount, Back Connect

CASE STYLE "V"



Flush Surface Mount, Back Connect

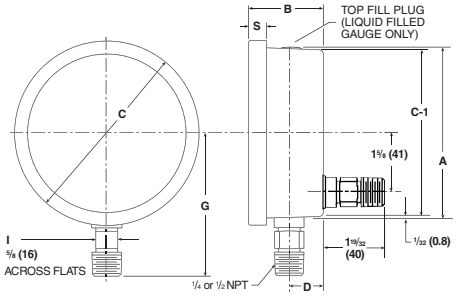
Gauge Size	A	B	C	C-1	D	DD	E	FF	G	H	HH	I	J	L	M	S	Weight Dry	Weight LF
3½ (100)	3 19/32 (91)	1 9/32 (33)	3 31/32 (100)	5 7/32 (133)	7/8 (22)	1 1/32 (26.4)	4 9/16 (106)	1 29/32 (48)	3 (76)	3 (76)	2 13/32 (61)	7/16 (11)	5/32 (4)	7/32 (6)	3 21/32 (93)	15/32 (12)	.44# .20kg	.88# .40kg

Note: Dimensions in brackets ( ) are millimeters.

WEKSLER®

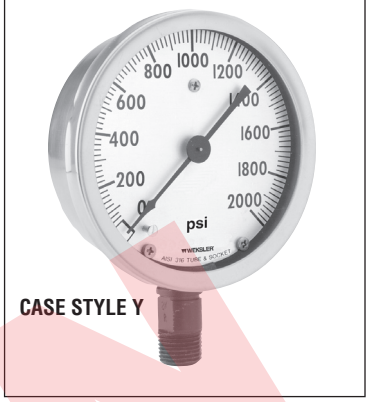
Case Styles & Dimensions
4½˝ SS Pressure Gauge

CASE STYLE "Y"



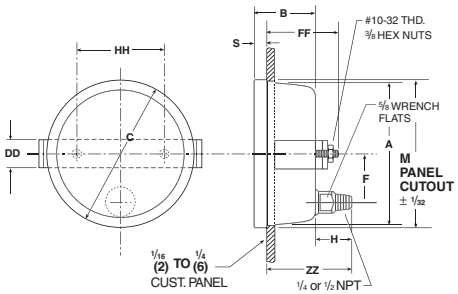
Stem Mount, Lower & Back Connect

Gauge Size	A	B	C	D	F	G	I	S	Weight Dry	Weight LF
4½ (100)	4²³⁄₃₂ (120)	2¹⁄₁₆ (52)	5³⁄₃₂ (129)	1⁵⁄₁₆ (24)	1⅝ (41)	3¹⁵⁄₁₆ (100)	⅝ (16)	1⁵⁄₃₂ (12)	1.75# .79kg	2.40# 1.1kg



CASE STYLE Y

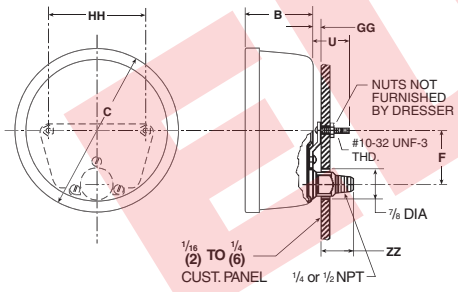
CASE STYLE "U"



U-Clamp Panel Mount, Back Connect

Gauge Size	A	B	C	DD	F	FF	H	HH	I	M	S	ZZ	Weight Dry	Weight LF
4½ (100)	4²³⁄₃₂ (120)	2¹⁄₁₆ (52)	5³⁄₃₂ (129)	1 (25)	1⅝ (41)	2⁵⁄₁₆ (59)	1⅝ (41)	3 (76)	⅝ (16)	4¹³⁄₁₆ (122)	1⁵⁄₃₂ (12)	3⁹⁄₃₂ (83)	1.75# .79kg	2.40# 1.1kg

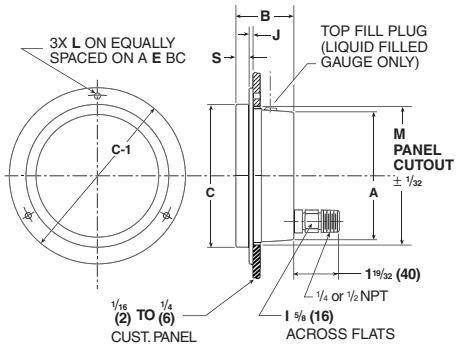
CASE STYLE "X"



Surface Mount, Back Connect

Gauge Size	A	B	C	F	GG	HH	U	ZZ	Weight Dry	Weight LF
4½ (100)	4²³⁄₃₂ (120)	2¹⁄₁₆ (52)	5³⁄₃₂ (129)	1⅝ (41)	³⁄₁₆ (5)	3 (76)	1⁷⁄₁₆ (37)	1⁷⁄₁₆ (37)	1.75# .79kg	2.40# 1.1kg

CASE STYLE "V"



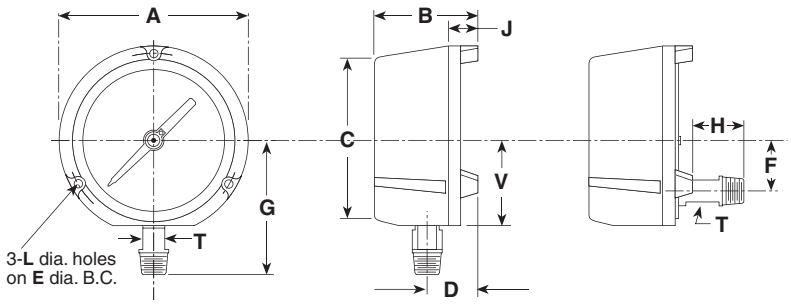
Flush Surface Mount, Back Connect

Gauge Size	A	B	C	C-1	E	I	J	L	M	S	Weight Dry	Weight LF
4½ (100)	4²³⁄₃₂ (120)	2¹⁄₁₆ (52)	5³⁄₃₂ (129)	6³⁄₃₂ (160)	5¹¹⁄₁₆ (144)	⅝ (16)	⅝₃₂ (4)	⁷⁄₃₂ (6)	4¹⁵⁄₁₆ (125)	1⁵⁄₃₂ (12)	1.75# .79kg	2.40# 1.1kg

WEKSLER®

Case Styles & Dimensions
4½˝, 6˝, 8½˝

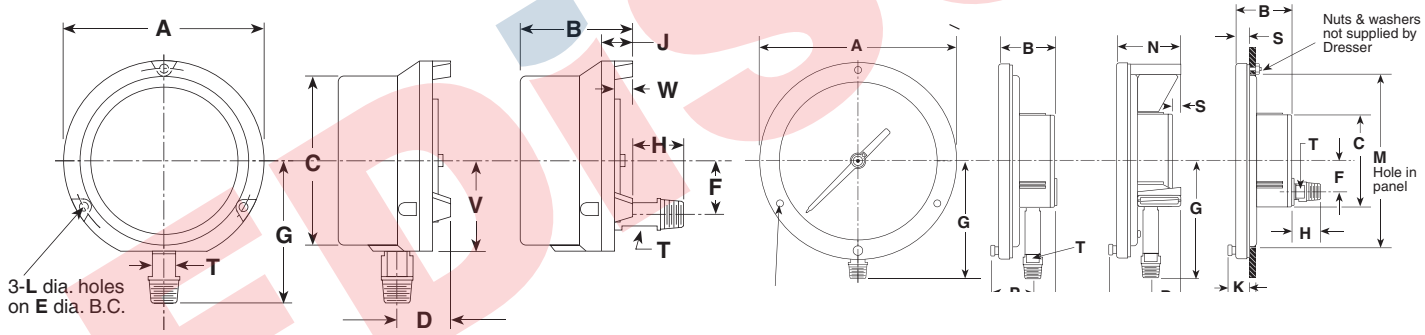
CASE STYLE "2"



Surface Mount, Lower & Back Connect
Polypropylene Safety

Dial Size Inches	A	B	C	D	E	F	G	H	J	L	T	V	Weight (lbs)
4½	5 13/16 (148)	3⅜ (86)	5 1/16 (129)	1⅝ (41)	5⅜ (137)	1⅝ (41)	3 15/16 (100)	¾ (20)	1 (25)	(6)	5/8 (16)	2⅝ (67)	2½

CASE STYLE "4"



Surface Mount, Lower & Back Connect
Aluminum Safety

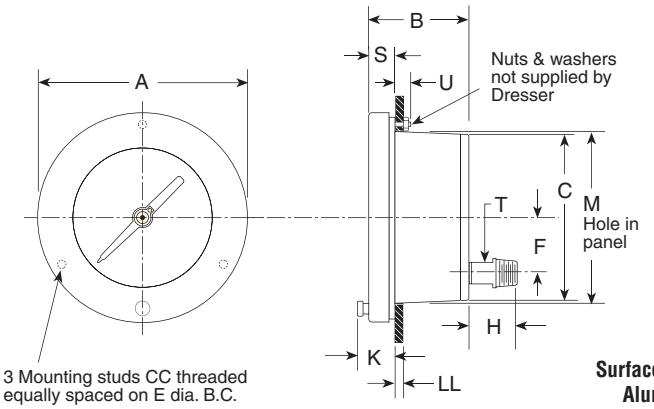
Dial Size Inches	A	B	C	D	E	F	G	H	J	K
4½	5 13/16 (148)	3 13/32 (86)	4⅞ (124)	1⅝ (41)	5⅜ (137)	1⅛ (42)	3 15/16 (100)	⅞ (20)	1 1/16 (27)	—
6	7 9/16 (192)	3½ (89)	6⅝ (162)	1⅝ (41)	7 (178)	1½ (42)	4½ (114)			
8½	10 1/16 (256)	2⅞ (73)	4¾ (121)	1 1/16 (27)	9⅝ (244)	1⅝ (41)	6 (152)	1⅜ (35)	—	1 1/16 (27)

Dial Size Inches	L	M	N	P	S	T	V	CC	LL	Wgt. (lbs)
4½	.218 (6)	—	—	2 1/16 (54)	—	5/8 (16)	2⅝ (67)	—	1/16-½ (3)(13)	2½
6										3⅛
8½		9 (228)	3 3/32 (83)	—	1 1/16 (17)	—	—	#10-24		4½

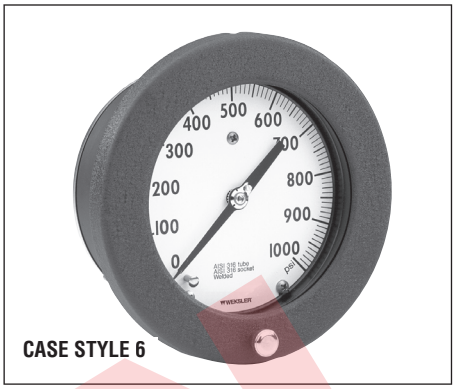
WEKSLER®

Case Styles & Dimensions
4½˝, 6˝, 8½˝

CASE STYLE "6"

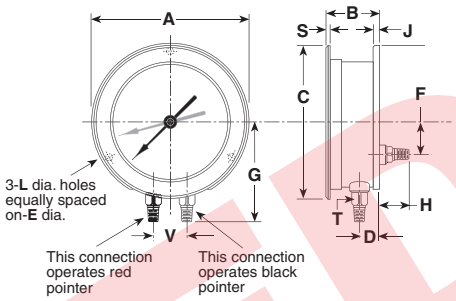


Surface Mount, Back Connect
Aluminum Flush Safety

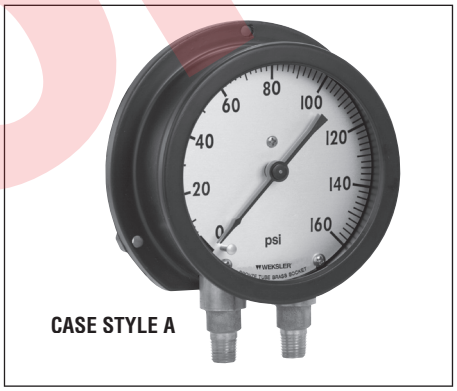


Dial Size Inches	A	B	C	E	F	H	K	M	P	S	T	U	CC	LL	Weight (lbs)
4½	6 3/32 (148)			5 3/8 (137)				4 7/8 (124)					#10-24		2½
6	7 9/16 (192)	2 7/8 (73)	4 3/4 (121)	7 (178)	1 5/8 (41)	1 3/8 (35)	1 1/16 (27)	6½ (165)	2 1/8 (54)	5/8 (16)	5/8 (16)	3/4 (19)	¼-20	1/8–1/2 (3)(13)	3

CASE STYLE "A"

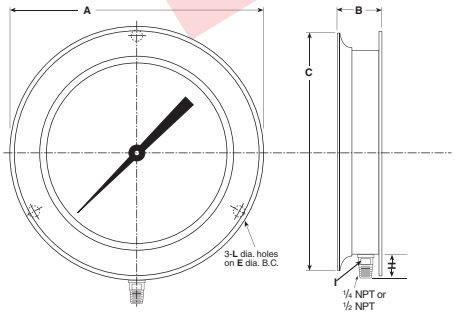


Surface Mount, Lower & Back Connect
Aluminum (Non) Safety Open Front

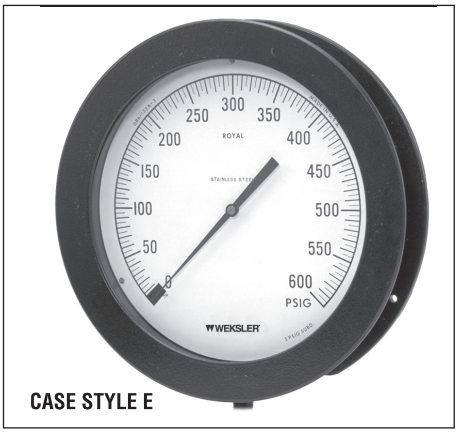


Dial Size Inches	A	B	C	D	E	F	G	H	I	J	L	V	AA	HH	Wght (lbs)
4½	5 13/16 (148)	2¼ (57)	5 7/8 (149)	27/32 (22)	5 3/8 (137)	1 1/16 (27)	3 25/32 (96)	1 17/32 (39)	19/32 (15)	3/8 (10)	7/32 (6)	1½ (38)	—	—	2.4 1.0 kg
6	7 11/16 (18)	2 5/8 (67)	6 3/32 (168)	15/16 (24)	7 (178)	1 11/16 (43)	4 15/16 (110)	5 15/32 (37)	5/8 (16)	3/16 (5)	9/32 (7)	1 5/8 (42)	—	—	3.6 1.6 kg

CASE STYLE "E"



Surface Mount, Lower Connect
Aluminum (Non) Safety Open Front



Dial Size Inches	A	B	C	D	E	G	J	K	L	M	S	Wgt (lbs)
12	14½ (368)	2 15/16 (75)	14¼ (361)	1 1/32 (26)	13½ (343)	7½ (191)	3/16 (5)	—	.281 (7)	12 11/16 (329)	3/16 (5)	8 3.6 kg

GAUGE ACCESSORIES

THROTTLING DEVICES

A throttling device should be used when a pressure gauge is subjected to rapid pressure fluctuations, which make the gauge difficult to read because of rapid pointer movement. Such a device reduces pressure impact, slows the speed and range of pointer movement, and prolongs gauge life.

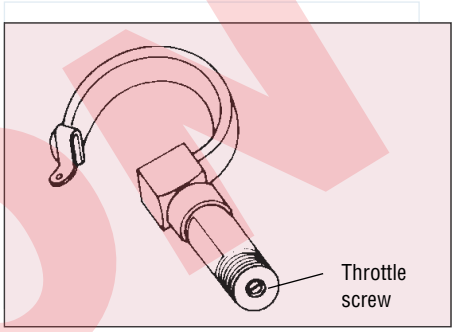
Throttling effect is obtained by installing a restricting orifice between the gauge socket connection and the bourdon tube. Several types are available: throttle screws, pressure snubbers, pulsation dampeners, Gauge Saver® and the Campbell MICRO-BEAN.

Severe service applications are characterized by the presence of significant levels of pressure pulsation and/or vibration. Gauges should be protected from severe pressure pulsation by the inclusion of a dampener such as a throttle plug/screw or porous metal snubber. If the pulsation is extreme, a liquid-filled gauge, with dampener, should be used. A liquid-filled gauge will also last significantly longer than a comparable dry gauge when vibration is present. If the vibration levels are extreme, the only solution may be to remotely mount the gauge away from the source of vibration. In that case capillary tubing may be used to connect the gauge to the pressure source.

THROTTLE SCREWS

The simplest means of providing a restriction in the socket, a throttle screw, should be ordered with the gauge. Threaded or pressed into an instrument socket, the throttle screw orifice selected is based on the viscosity of the pressure fluid, rapidity of pressure fluctuations, and the amount of dampening effect desired.

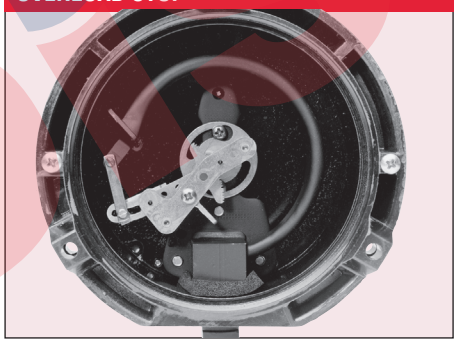
A smaller orifice should be used for low viscosities, high frequencies, high pressure and reduced pointer amplitude. To accommodate these variables, throttle screws are available in these sizes: 0.0135, 0.020, 0.031, 0.040, and 0.070 inches, in brass and stainless steel. When orifice size or service condition is not specified, a 0.020-inch orifice will be supplied on Royal pressure gauges 0.0135, on 3½″ Regal Gauges.



STATIONARY RED SET HAND

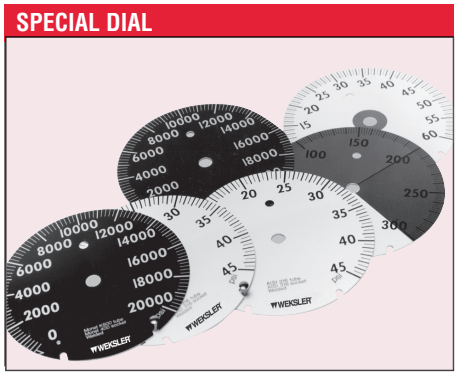
Stationary Red Set Hand
to indicate a specific pressure. Ring must be removed to move the hand.

OVERLOAD STOP



Overload Stop
to protect gauge system against extreme overpressure.

SPECIAL DIAL

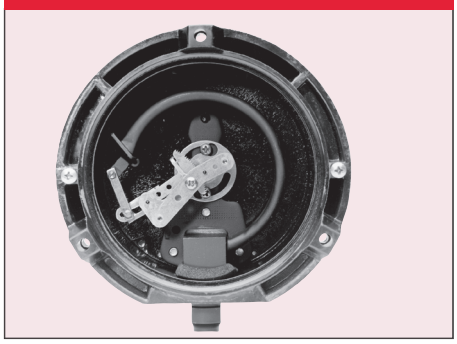


Special Dial
ranges different from standards, or custom artwork, available on application.

MAXIMUM POINTER

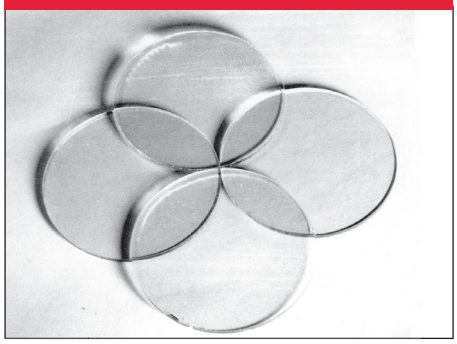
Maximum Pointer
available for gauges 4½″ size and larger. Indicates maximum pressure attained. Can be reset by a knob on outside of window.

VACUUM STOP



Vacuum Stop
to protect low range gauges against vacuum.

OPTIONAL WINDOWS



Plastic Disc – optional for glass window
Laminated Safety Glass – optional for glass window
Nonglare Glass – optional for glass window

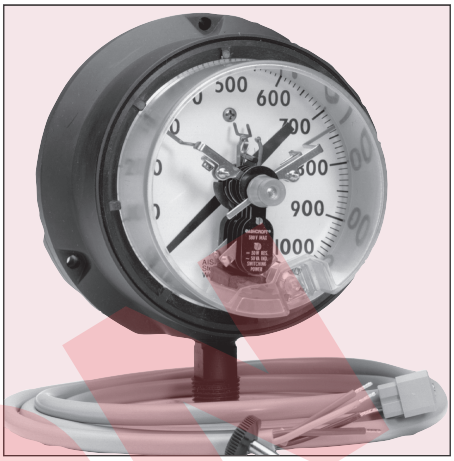
ELECTRIC WARNING CONTACTS

The electric contact feature is a switching mechanism actuated by the indicating pointer. Switch points are adjustable and can be set throughout the 270° arc. Contacts are used to activate alarms and relays. (Not recommended for continuous switching).The Weksler electric contact is an ideal accessory to turn on a signal light, sound an alarm, or operate a pump or valve. The contacts can easily be set so that a circuit can be closed or opened at a desired pressure or temperature. Settings can be easily made in the field without removing the instrument from service. Contact adjustment is made externally with a removable key to make the instrument virtually tamper proof. Contacts are equipped with adjustable magnets to eliminate chatter caused by vibration. A plug-in connector with five feet of electrical cable is standard.

STANDARD FEATURES

- High impact polycarbonate enclosure for ambient temperature up to 150°F
- Full scale contact adjustment from front of enclosure
- Available on ranges 30 psi and up
- Magnetically assisted, silver alloy contact
- Accuracy ±2% of scale arc (add to instrument accuracy)
- Rated for ¼ amp. 110 volt AC non-inductive load
- Available in: 4½″ case styles#2, #4, #6, “A”
  6″ case styles#2, #4, #6, “A”

Model	Code	Contact arrangements
2265	XED	High and low contact
	XEE	Double high contact
	XEF	Double low contact
	XEG	“OFF” at low and high, and “ON” in between



Indicating accuracy of Ashcroft Duragauge, above 300 psi with contact:
Pointer not carrying contact – 1.0%.
Pointer carrying contact – 1.5%.
For ranges below 30 psi, add an additional ½% to indicating accuracies.

TEST GAUGE CARRYING CASE

This rugged blow-molded high-density polyethylene carrying case accommodates the standard 4½″, 6 & 8½″ Regal analog test gauges. It accepts both lower and back connect gauges. A foam insert protects the gauge when not in use. Type No. 2505.

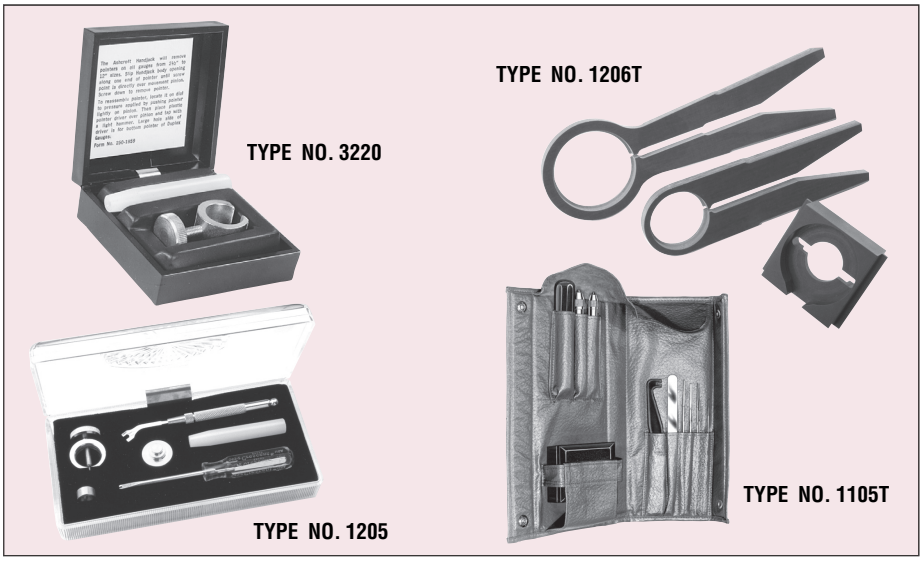
TOOLS

Hand Jack Set – gauge pointer remover and a pointer set to secure pointer to the shaft. Type No. 3220.

Ring Removal – For the 3½″ Regal gauges. Includes 2½″ and 3½″ wrench and nest. Type No. 1206T.

Small Tools – For the 3½″ Regal gauges. Includes pointer puller, span adjust wrench, slotted screw driver for pointer adjustment, pointer staker and pinion backup. Type No. 1205.

Gauge Tool Kit – A complete kit for gauge maintenance. Includes hand jack set, screw driver, five reamers, pin vise holder, wiggler and tweezer all packed in a neat carrying case. Ideal for a gauge maintenance shop. Type No. 1105T.

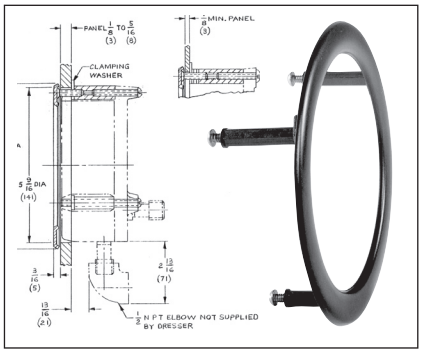


ROYAL AND REGAL GAUGE OPTIONS

CODE	DESCRIPTION
XNN	Paper Tag on Gauge
XNH	SS Tag Wired to Gauge
XMN	SS Tag Wired to Gauge
XOS	Overload Stop
XVS	Underload Stop
XTS	Throttle Screw
XDM	Dial Markings
X6B	Cleaned for Oxygen Service
XGV	Silicone Filled
XSH	Red Set Hand
XSJ	Dual Red Set Hands
XEP*	Max. Indicating Hand
XEQ*	Min. Indicating Hand
XSG	Safety Glass
XPD	Plastic Window
XC1	Certificate of Conformance
XC4	Calibration Certificate

* Not available in 3½″ Regal

TYPE 1278M FLUSH MOUNTING RING



Gauge Size (inches)	Ring O.D. (inches)	A Dia. (inches)	"B"-Three Screws Size
4½	6.000	5.625	#10-24 x 1⅝″
67.765	7.25	¼-20 x 1½″	

Used to flush-mount 4½″ and 6″ Royal and bellows type gauges. Standard finish is black; polished stainless steel finish is available at an extra charge, 4½″ and 6″.

FLUSH MOUNTING RING

CODE	DESCRIPTION	TYPE	MOUNTING MATERIAL
BF	Flush Mounting Rings*	2462	Wall Mounting
BQ		2462	Flush Mounting
56		1278M	Black
57		1278MC	Polished SS

*For 4½″ and 6″ Royal / Regal gauges manufactured after 10/1/04

TYPE A-1285

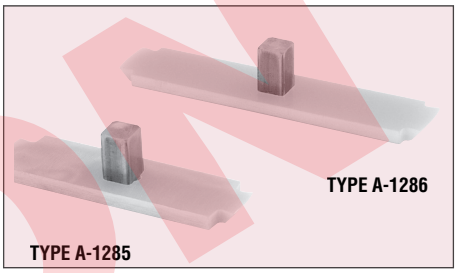
Ring Wrench – 4½″

(For installing front threaded rings in 4½″ #2, #4 safety cases)

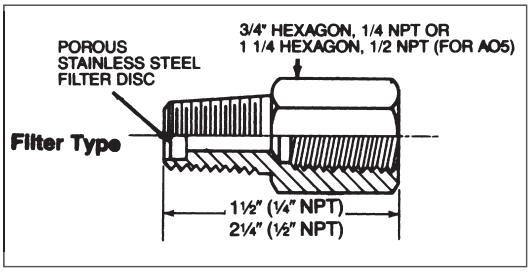
TYPE A-1286

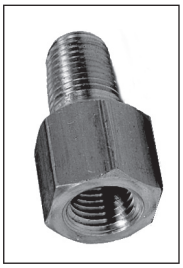
Ring Wrench – 6″

(For installing front threaded rings in 6″ #4 aluminum safety cases)



FILTER TYPE

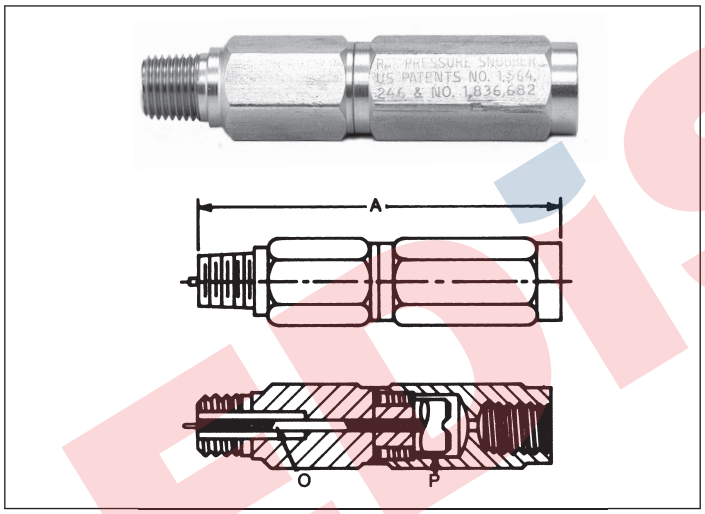




Filter Type: Snubbing element consists of a ⅜″ diameter x ⅛″ thick Micro Metallic stainless steel filter. When placed in the line just before the pressure gauge, the gauge pointer moves across the scale at a rate which is proportional to the pressure differential across the snubber element.

TYPE NUMBER	GAS OR LIQUID IN PIPE LINE	PRESSURE RANGE	CONNECTION	MATERIAL
BW 41 BW 42 BW 43	Air Water-Light Oil Heavy Oil	1,500 psi	¼ NPT	Brass
SW 41 SW 42 SW 43	Air Water-Light Oil Heavy Oil	5,000 psi	¼ NPT	SS
A05D A05E A05G	Heavy Oil Water Light Oil Air	20,000 psi	½ NPT	SS

PISTON TYPE

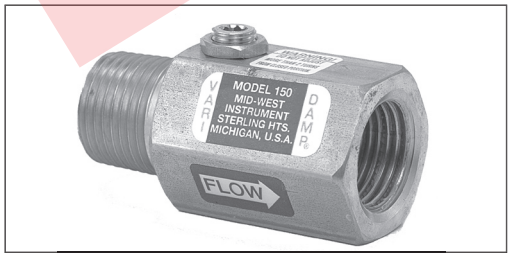


Piston Type: Shocks and pulsations are absorbed in the doughnut-shaped orifice (O) formed by the piston (P) in the tube. As the piston moves up and down with the pulsation, it automatically clears away any sediment or pipe scale that would clog a simple orifice or needle valve.

Each snubber is furnished with three pistons. The snubbing may be changed to suit individual installations by changing pistons. By using the proper piston, any of the listed snubbers can be made to operate satisfactorily from vacuum to its maximum rated pressure on any fluid compatible with the body material. These snubbers may be installed vertically, horizontally, inverted, or at any angle.

TYPE NUMBER	GAS OR LINED IN PIPE LINE	PRESSURE RANGE LBS.	PIPE SIZE AND LENGTH	MATERIAL
RS1	Air, water, steam, etc.	0-3000	¼ NPT	Brass
RS7	Thin corrosive liquid, gases	0-5,000	A = 3½″	SS
RS8	Thick corrosive liquids		½ NPT	Brass
RS6	Oil, water, etc.			SS
RS9	Thin or thick corrosive	0-10,000	A = 3⅝″	

ADJUSTABLE SNUBBER



MODEL	MAX. WORKING PRESS.	BODY MATERIAL	LENGTH O.A.	THREAD LENGTH	THREAD SIZE
MSB4	3,000	Brass	1.60	.50	¼ NPT
MSB2	3,000	Brass	2.28	.80	½ NPT
MSS4	5,000	316SS	1.60	.50	¼ NPT
MSS2	10,000	316SS	2.28	.80	½ NPT

NOTE: The adjusting screw, ball and ball retainer are Stainless Steel, Buna N Seals are standard. Teflon, Viton and Butyl Seals are available.

Adjustable Snubber

The Universal Adjustable Snubber has a ball check cut-off to block line surges, shock waves and fluid hammer; and an adjustable fine thread choke valve to tune out line pulsations. The combination of the ball cut-off and a tunable choke valve makes it an all-purpose, universal Snubber that is used on low displacement instruments such as bourdon tube gauges which require heavy dampening; and with high displacement instruments such as diaphragm, piston and bellows operated gauges, recorders and controllers, which require moderate to heavy dampening.

The adjustable choke valve is also used as a positive shut-off valve, to isolate the gauge or instrument, for servicing or replacement.

The operation of the Adjustable Snubber cut-off ball and the choke valve is shown in the chart. The cut-off ball blocks and clamps off shock and hammer transients in the line, which are above the normal pressure level in the system. The choke valve throttles and dampens out pulsations and cyclic pressure waves, and may be adjusted to dampen out to any level desired to prevent pointer oscillation on gauges, chart painting on recorders, instability in controllers or, damage to instruments, generally.

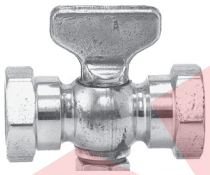
WEKSLER®

Gauge Cocks
Needle Values
Siphons

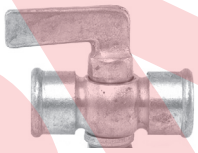
BRASS GAUGE COCKS

TYPE NO.	TYPE	CONNECTIONS	MAXIMUM PRESSURE
A10	Tee Handle	¼˝ Female	125 psi
A10E	Heavy Duty Tee Handle	¼˝ Female	200 psi
A11	Lever Handle	¼˝ Male and Female	200 psi
A12	Lever Handle	¼˝ Female	200 psi
A20	Tee Handle	½˝ Female	200 psi

TEE HANDLE COCK (A10)



HEAVY DUTY TEE HANDLE (A10E)



LEVER HANDLE COCK (A12)

BAR STOCK NEEDLE VALVES

These valves are used primarily to closely regulate fine flow. However, they may be used as a throttling device on lines where rapid and excessively pulsating pressures would tend to effect the gauge performance or mechanism.

TYPE NO.	SIZE	MATERIAL	PRESSURE & TEMP. RATING
BBV4	¼ NPT	Brass: For oil, water, gas, etc.	600 psi @ 300°F
SSV4	¼ NPT	303 Stainless Steel: For oil, water, gas, etc.	5000 psi @ 500°F
AV34	¼ NPT	Bronze: For oil, water, gas, etc.	500 psi @ 150°F
AV32	½ NPT		
AV44	¼ NPT	Carbon Steel: Parkerized and Parcolaced, for resistance to corrosion.	475 psi @ 1,000°F
AV42	½ NPT		550 psi @ 900°F 600 pssi @ 850°F 10,000 psi @ 150°F
AV74	¼ NPT	316 Stainless Steel provides greatest overall resistance to corrosion; very good for sub-zero service.	4,000 psi @ 150°F
AV72	½ NPT		

BAR STOCK NEEDLE VALVE (Brass) (BBV4)

BAR STOCK NEEDLE VALVE (AV34)

SIPHONS

When a gauge is to be used for steam pressures, a siphon filled with water is recommended between the line and gauge to prevent high temperature steam from entering the gauge bourdon tube.

TYPE NO.	SIZE	SIPHON MATERIAL	CAPACITY
A03I	1/4 NPT	Iron (Schedule 40)	500 psi and 400°F
A03B		Brass	250 psi and 400°F
CPS4		Seamless Steel, extra heavy (Schedule 80)	1,000 psi and 850°F
CPSS4		Seamless Stainless Steel XH (Schedule 80)	2,000 psi and 1000°F
CPS2	1/2 NPT	Steel (Schedule 80)	1,000 psi and 850°F
CPSS2		Seamless Stainless Steel XH (Schedule 80)	2,000 psi and 1000°F

SIPHON

GAUGE TOOLS — Hand Jack: for removing pointer. Specify Type A01. **Hand Set:** for installing pointer. Specify Type A02

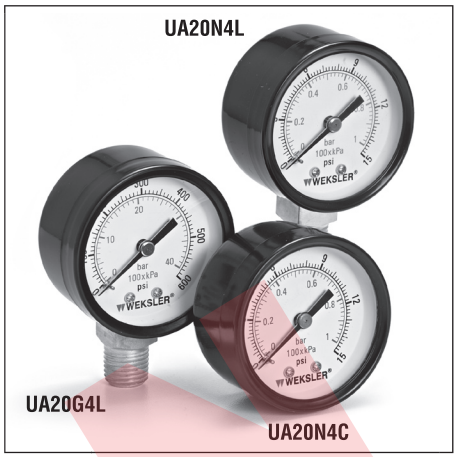
ECONOMY UTILITY GAUGES

WEKSLER®

Dry Gauges, Steel Case, Bronze Tube, Brass Socket, ±3-2-3% Accuracy

STANDARD FEATURES

- Available in 1½˝, 2˝, 2½˝ and 3½˝ sizes
- Black finish steel case and ring with plastic window
- Panel gauge case is black finish steel with studs and chrome-plated ring.
- Panel mount gauges available in 1½˝, 2˝ and 2½˝ sizes
- ⅛ NPT lower and back connection available 1½˝ size; ¼ NPT lower and back connection available in 2˝ and 2½˝ sizes; ¼ NPT lower connection available in 3½˝ size
- Dual scale dials with bar/kPa in blue (inner scale); psi in black (outer scale); on white background



CATALOG NUMBERS

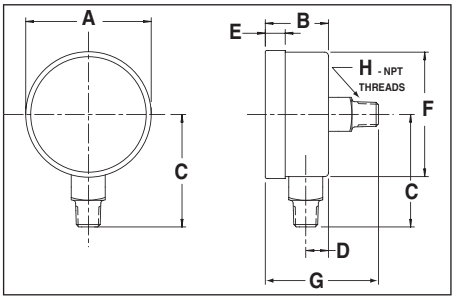
Dial Size	1½˝		2˝		2½˝		3½˝
Connection Location	Back	Bottom	Back	Bottom	Back	Bottom	Bottom
Connection NPT	⅛	⅛	¼	¼	¼	¼	¼
Range (psi/bar/kPa)							
30˝/0/ vac. and –1/0 bar (–100/0 kPa)	UA15H8C	UA15H8L	UA20H4C	UA20H4L	UA25H4C	UA25H4L	UA35H4L
30˝/0/30 psi and –1/0/2 bar (–100/0/200 kPa)	_	_	UA20J4C	UA20J4L	UA25J4C	UA25J4L	UA35J4L
30˝/0/60 psi and –1/0/4 bar (–100/0/400 kPa)	_	_	UA20K4C	UA20K4L	UA25K4C	UA25K4L	UA35K4L
30˝/0/150 psi and –1/0/10 bar (–100/0/1000 kPa)	_	_	_	_	UA25L4C	UA25L4L	UA35L4L
30˝/0/300 psi and –1/0/10 bar (–100/0/2000 kPa)	_	_	_	_	UA25M4C	UA25M4L	UA35M4L
0-15 psi and 1 bar (100 kPa)	UA15N8C	UA15N8L	UA20N4C	UA20N4L	UA25N4C	UA25N4L	UA35N4L
0-30 psi and 2 bar (200 kPa)	UA15A8C	UA15A8L	UA20A4C	UA20A4L	UA25A4C	UA25A4L	UA35A4L
0-60 psi and 4 bar (400 kPa)	UA15B8C	UA15B8L	UA20B4C	UA20B4L	UA25B4C	UA25B4L	UA35B4L
0-100 psi and 7 bar (700 kPa)	UA15C8C	UA15C8L	UA20C4C	UA20C4L	UA25C4C	UA25C4L	UA35C4L
0-160 psi and 11 bar (1100 kPa)	UA15D8C	UA15D8L	UA20D4C	UA20D4L	UA25D4C	UA25D4L	UA35D4L
0-200 psi and 14 bar (1400 kPa)	UA15E8C	UA15E8L	UA20E4C	UA20E4L	UA25E4C	UA25E4L	UA35E4L
0-300 psi and 21 bar (2100 kPa)	–	–	UA20F4C	UA20F4L	UA25F4C	UA25F4L	UA35F4L
0-600 psi and 42 bar (4200 kPa)	–	–	UA20G4C	UA20G4L	UA25G4C	UA25G4L	UA35G4

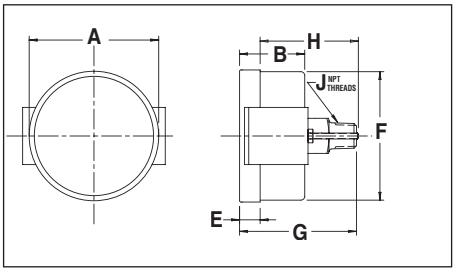
To order: specify the "catalog number" from table above. For panel mount gauges (back connection only) add "-UC" to the 7 digit catalog number. (The following catalog numbers are not available as panel mount: UA20K4C, UA20E4C, UA25K4C, UA25E4C).

GAUGE DIMENSIONS UA15, UA20, UA25, UA35

Lower Connection Gauge Size/Type		A	B	C	D		E	F
					⅛	¼		
UA15	Inch	1.66	0.99	1.45	0.33	–	0.32	1.61
	mm	42	25	37	8	–	5	41
UA20	Inch	2.08	1.13	1.80	–	0.37	0.39	2.01
	mm	53	28	46	–	9	10	51
UA25	Inch	2.48	1.13	1.95	–	0.42	0.39	2.43
	mm	63	29	50	–	11	10	62
UA35	Inch	3.47	1.16	2.68	–	0.46	0.43	3.42
	mm	88	29	68	–	12	11	87

Back Connection Gauge Size/Type		A	B	E	F	G	H
UA15	Inch	1.66	.99	0.31	1.61	1.56	⅛
	mm	42	25	8	41	40	
UA20	Inch	2.08	1.13	0.39	2.01	1.85	¼
	mm	53	29	10	51	47	
UA25	Inch	2.48	1.13	0.39	2.44	1.87	¼
	mm	63	29	10	62	47	





GAUGE DIMENSIONS UA15-UC, UA20-UC, UA25-UC

Back Connection Gauge Size/Type		A	B	E	F	G	H	J
UA15	Inch	1.78	1.00	0.20	1.62	1.60	1.24	⅛
	mm	45	25	5	41	41	31	
UA20	Inch	2.20	1.10	0.18	2.01	1.81	1.59	¼
	mm	56	28	4	51	46	40	
UA25	Inch	2.62	1.15	0.23	2.47	1.83	1.67	¼
	mm	66	29	6	63	46	42	

PANEL CUT-OUT

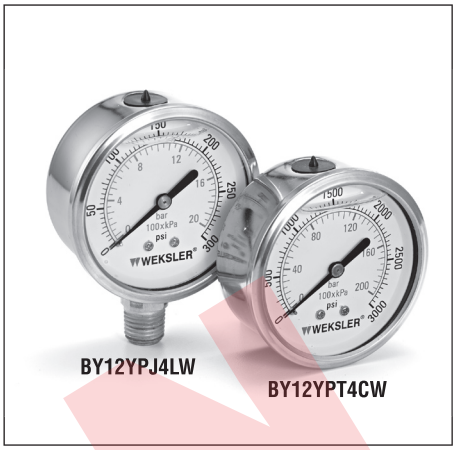
	Hole Diameter		
Panel Cut-Out	Minimum Inches (mm)	Maximum Inches (mm)	Max. Panel Thickness
1½˝ Gauge	1.615	1.665	⅛˝
2˝ Gauge	2.035	2.095	7/16˝
2½˝ Gauge	2.462	2.538	7/16˝

WEKSLER®

Liquid Filled Gauges, SS Case Bronze Tube, Brass Socket ±3-2-3% Accuracy

STANDARD FEATURES

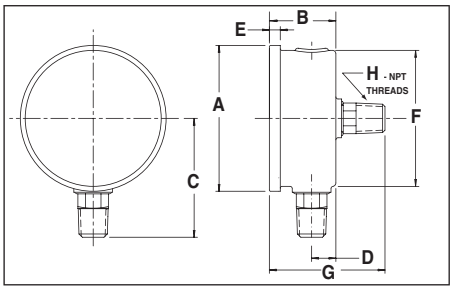
- Available in 40mm, 50mm, 63mm and 100mm sizes
- Stainless steel case and ring with plastic window
- ⅛ NPT back connection available in 40mm size; ¼ NPT lower and back connection available in 50mm and 63mm sizes; ¼ NPT lower connection available in 100mm size
- Dual scale dials with bar/kPa in blue (inner scale); psi in black (outer scale); on white background
- Panel mount kits available



CATALOG NUMBERS

Dial Size	40mm	50mm		63mm		100mm
Connection Location	Back	Back	Bottom	Back	Bottom	Bottom
Connection NPT	⅛	¼	¼	¼	¼	¼
Range (psi/bar/kPa)						
30˝0/ vac. and –1/0 bar(–100/0 kPa)	BY10YVC8CW	BY11YVC4CW	BY11YVC4LW	BY12YVC4CW	BY12YVC4LW	BY14YVC4LW
30˝0/30 psi and –1/0/2 bar (–100/0/200 kPa)	_	_	_	BY12YCB4CW	BY12YCB4LW	—
30˝0/60 psi and –1/0/4 bar (–100/0/400 kPa)	BY10YCC8CW	BY11YCC4CW	BY11YCC4LW	BY12YCC4CW	BY12YCC4LW	BY14YCC4LW
30˝0/150 psi and –1/0/10 bar (–100/0/1000 kPa)	—	—	—	BY12YCE4CW	BY12YCE4LW	—
0-15 psi and 0/1 bar (100 kPa)	—	—	—	BY12YPC4CW	—	—
0-30 psi and 0/2 bar (200 kPa)	BY10YPD8CW	BY11YPD4CW	BY11YPD4LW	BY12YPD4CW	BY12YPD4LW	BY14YPD4LW
0-60 psi and 0/4 bar (400 kPa)	BY10YPE8CW	BY11YPE4CW	BY11YPE4LW	BY12YPE4CW	BY12YPE4LW	BY14YPE4LW
0-100 psi and 0/7 bar (700 kPa)	BY10YPF8CW	BY11YPF4CW	BY11YPF4LW	BY12YPF4CW	BY12YPF4LW	BY14YPF4LW
0-160 psi and 0/11 bar (1100 kPa)	BY10YPG8CW	BY11YPG4CW	BY11YPG4LW	BY12YPG4CW	BY12YPG4LW	BY14YPG4LW
0-200 psi and 0/14 bar (1400 kPa)	—	—	—	BY12YPH4CW	BY12YPH4LW	—
0-300 psi and 0/21 bar (2100 kPa)	BY10YPJ8CW	BY11YPJ4CW	BY11YPJ4LW	BY12YPJ4CW	BY12YPJ4LW	BY14YPJ4LW
0-600 psi and 0/42 bar (4200 kPa)	—	—	—	BY12YPM4CW	BY12YPM4LW	—
0-1000 psi and 0/70 bar (7000 kPa)	BY10YPP8CW	BY11YPP4CW	BY11YPP4LW	BY12YPP4CW	BY12YPP4LW	BY14YPP4LW
0-2000 psi and 0/140 bar (14,000 kPa)	—	—	—	BY12YPS4CW	BY12YPS4LW	—
0-3000 psi and 0/210 bar (21,000 kPa)	BY10YPT8CW	BY11YPT4CW	BY11YPT4LW	BY12YPT4CW	BY12YPT4LW	BY14YPT4LW
0-5000 psi and 0/350 bar (35,000 kPa)	BY10YPV8CW	BY11YPV4CW	BY11YPV4LW	BY12YPV4CW	BY12YPV4LW	BY14YPV4LW
0/10,000 psi and 0/700 bar (70,000 kPa)	—	BY11YPY4CW	BY11YPY4LW	BY12YPY4CW	BY12YPY4LW	BY14YPY4LW

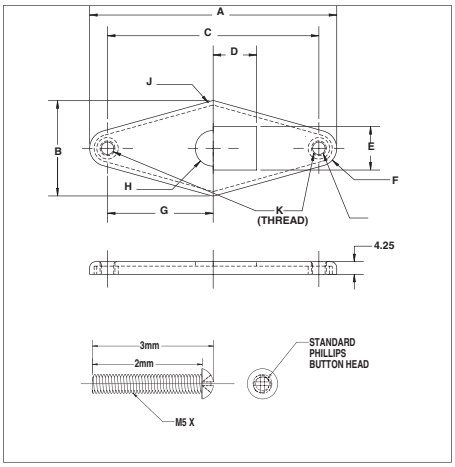
To order: specify 10-digit "catalog number" from above table. For panel mount gauges (back connection only) add "-UC" to 10-digit catalog number.



GAUGE DIMENSIONS BY10Y, BY11Y, BY12Y, BY14Y

Lower Connection Gauge Size/Type			A	B	C	D-¼	E	F
50 mm	BY11Y	Inch	2.21	1.11	1.86	0.37	0.19	2.01
		mm	56	28	47	9	5	51
63 mm	BY12Y	Inch	2.62	1.13	2.08	0.39	0.22	2.45
		mm	66	29	53	10	5	75
100 mm	BY14Y	Inch	4.29	1.42	3.14	0.46	0.29	3.88
		mm	109	36	80	12	7	98

Back Connection Gauge Size/Type			A	B	F	G	H
40 mm	BY10Y	Inch	1.78	1.00	1.61	1.62	⅛
		mm	45	25	41	41	
50 mm	BY11Y	Inch	2.21	1.11	2.02	2.05	¼
		mm	56	28	51	52	
63 mm	BY12Y	Inch	2.62	1.13	2.45	2.05	¼
		mm	66	29	62	52	



PANEL MOUNT ASSEMBLY FOR 40mm, 50mm, 63mm GAUGES

Part No.		A	B	C	D	E	F	G	H	J	K
40mm Clamp	Inch	2.36	1.02	189	0.45	0.44	0.94	0.94	0.20	0.10	M5X0.8
	mm	60	26	48	11.6	11.3	24	24	5	2.50	M5X0.8
50mm Clamp	Inch	2.83	1.26	2.36	0.57	0.56	0.47	1.18	0.24	0.10	M5X0.8
	mm	72	32	60	14.6	14.2	30	72	6	2.50	M5X0.8
63mm Clamp	Inch	3.27	1.26	2.80	0.57	0.56	0.47	1.40	0.24	0.10	M5X0.8
	mm	83	32	71	14.6	14.2	12	35.5	6	2.50	M5X0.8

WEKSLER®

Liquid Filled Gauges, Stainless Steel Case, Tube & Socket ±3-2-3% Accuracy

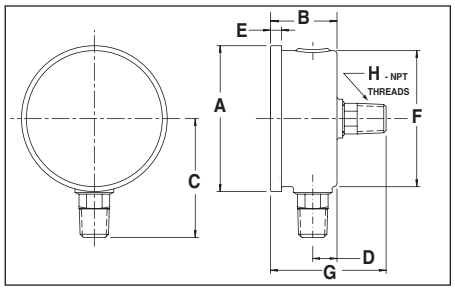
STANDARD FEATURES

- Available in 40mm, 50mm, 63mm and 100mm sizes
- Stainless steel case and ring with plastic window
- ⅛ NPT back connection available in 40mm size; ¼ NPT lower and back connection available in 50mm and 63mm sizes; ¼ NPT lower connection available in 100mm size
- Dual scale dials with bar/kPa in blue (inner scale); psi in black (outer scale); on white background
- Panel mount kits available

CATALOG NUMBERS

Dial Size	40mm	50mm		63mm		100mm
Connection Location	Back	Back	Bottom	Back	Bottom	Bottom
Connection NPT	⅛	¼	¼	¼	¼	¼
Range (psi/bar/kPa)						
30˝/0/ vac. and –1/0 bar(–100/0 kPa)	BY40YVC8CW	BY41YVC4CW	BY41YVC4LW	BY42YVC4CW	BY42YVC4LW	BY45YVC4LW
30˝/0/30 psi and –1/0/2 bar (–100/0/200 kPa)	_	_	_	BY42YCB4CW	BY42YCB4LW	—
30˝/0/60 psi and –1/0/4 bar (–100/0/400 kPa)	BY40YCC8CW	BY41YCC4CW	BY41YCC4LW	BY42YCC4CW	BY42YCC4LW	BY45YCC4LW
30˝/0/150 psi and –1/0/10 bar (–100/0/1000 kPa)	—	—	—	BY42YCE4CW	BY42YCE4LW	—
0-15 psi and 0/1 bar (100 kPa)	—	—	—	BY42YPC4CW	—	—
0-30 psi and 0/2 bar (200 kPa)	BY40YPD8CW	BY41YPD4CW	BY41YPD4LW	BY42YPD4CW	BY42YPD4LW	BY45YPD4LW
0-60 psi and 0/4 bar (400 kPa)	BY40YPE8CW	BY41YPE4CW	BY41YPE4LW	BY42YPE4CW	BY42YPE4LW	BY45YPE4LW
0-100 psi and 0/7 bar (700 kPa)	BY40YPF8CW	BY41YPF4CW	BY41YPF4LW	BY42YPF4CW	BY42YPF4LW	BY45YPF4LW
0-160 psi and 0/11 bar (1100 kPa)	BY40YPG8CW	BY41YPG4CW	BY41YPG4LW	BY42YPG4CW	BY42YPG4LW	BY45YPG4LW
0-200 psi and 0/14 bar (1400 kPa)	—	—	—	BY42YPH4CW	BY42YPH4LW	—
0-300 psi and 0/21 bar (2100 kPa)	BY40YPJ8CW	BY41YPJ4CW	BY41YPJ4LW	BY42YPJ4CW	BY42YPJ4LW	BY45YPJ4LW
0-600 psi and 0/42 bar (4200 kPa)	—	—	—	BY42YPM4CW	BY42YPM4LW	—
0-1000 psi and 0/70 bar (7000 kPa)	BY40YPP8CW	BY41YPP4CW	BY41YPP4LW	BY42YPP4CW	BY42YPP4LW	BY45YPP4LW
0-2000 psi and 0/140 bar (14,000 kPa)	—	—	—	BY42YPS4CW	BY42YPS4LW	—
0-3000 psi and 0/210 bar (21,000 kPa)	BY40YPT8CW	BY41YPT4CW	BY41YPT4LW	BY42YPT4CW	BY42YPT4LW	BY45YPT4LW
0-5000 psi and 0/350 bar (35,000 kPa)	BY40YPV8CW	BY41YPV4CW	BY41YPV4LW	BY42YPV4CW	BY42YPV4LW	BY45YPV4LW
0/10,000 psi and 0/700 bar (70,000 kPa)	—	BY41YPY4CW	BY41YPY4LW	BY42YPY4CW	BY42YPY4LW	BY45YPY4LW

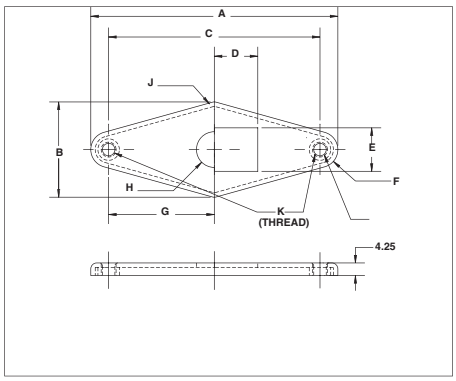
To order: specify 10-digit "catalog number" from above table. For panel mount gauges (back connection only) add "-UC" to 10-digit catalog number.



GAUGE DIMENSIONS BY40Y, BY41Y, BY42Y, BY45Y

Lower Connection Gauge Size/Type			A	B	C	D-¼	E	F
50 mm	BY41Y	Inch	2.21	1.11	1.86	0.37	0.19	2.01
		mm	56	28	47	9	5	51
63 mm	BY42Y	Inch	2.62	1.13	2.08	0.39	0.22	2.45
		mm	66	29	53	10	5	75
100 mm	BY45Y	Inch	4.29	1.42	3.14	0.46	0.29	3.88
		mm	109	36	80	12	7	98

Back Connection Gauge Size/Type			A	B	F	G	H
40 mm	BY40Y	Inch	1.78	1.00	1.61	1.62	⅛
		mm	45	25	41	41	
50 mm	BY41Y	Inch	2.21	1.11	2.02	2.05	¼
		mm	56	28	51	52	
63 mm	BY42Y	Inch	2.62	1.13	2.45	2.05	¼
		mm	66	29	62	52	



PANEL MOUNT ASSEMBLY FOR 40mm, 50mm, 63mm GAUGES

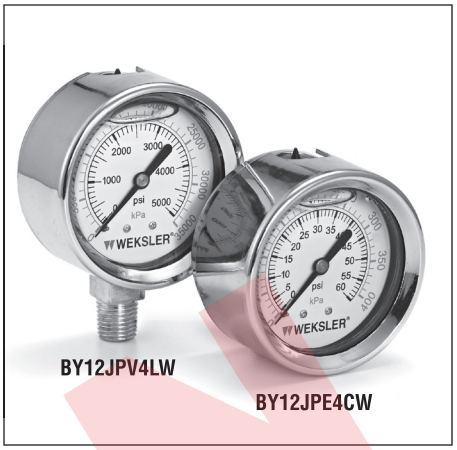
Part No.		A	B	C	D	E	F	G	H	J	K
40mm Clamp	Inch	2.36	1.02	189	0.45	0.44	0.94	0.94	0.20	0.10	M5X0.8
	mm	60	26	48	11.6	11.3	24	24	5	2.50	M5X0.8
50mm Clamp	Inch	2.83	1.26	2.36	0.57	0.56	0.47	1.18	0.24	0.10	M5X0.8
	mm	72	32	60	14.6	14.2	30	72	6	2.50	M5X0.8
63mm Clamp	Inch	3.27	1.26	2.80	0.57	0.56	0.47	1.40	0.24	0.10	M5X0.8
	mm	83	32	71	14.6	14.2	12	35.5	6	2.50	M5X0.8

WEKSLER®

Liquid Filled Gauges, Brass Case Bronze Tube, Brass Socket, ±3-2-3% Accuracy

STANDARD FEATURES

- Available in 63mm size
- Cast brass case and brass plated plastic ring with plastic window
- ¼ NPT lower and back connection available
- Dual scale dials with kPa in blue (outer scale); psi in black (inner scale); on white background



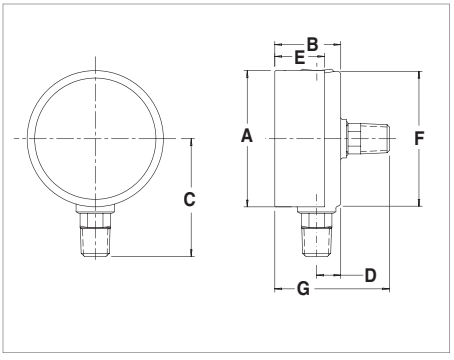
CATALOG NUMBERS

Dial Size	63mm	
Connection Location	**Back**	**Bottom**
Connection NPT	¼	¼
Range (psi & kPa)		
30˝/0/ vac. and –100/0 kPa	BY12JVC4CW	BY12JVC4LW
30˝/0/30 psi and –100/0/200 kPa		
30˝/0/60 psi and –100/0/400 kPa	BY12JCC4CW	BY12JCC4LW
30˝/0/150 psi and –100/0/1000 kPa		
0-15 psi and 100 kPa		
0-30 psi and 200 kPa	BY12JPD4CW	BY12JPD4LW
0-60 psi and 400 kPa	BY12JPE4CW	BY12JPE4LW
0-100 psi and 700 kPa	BY12JPF4CW	BY12JPF4LW
0-160 psi and 1100 kPa	BY12JPG4CW	BY12JPG4LW
0-200 psi and 1400 kPa		
0-300 psi and 2100 kPa	BY12JPJ4CW	BY12JPJ4LW
0-600 psi and 4200 kPa		
0-1000 psi and 7000 kPa	BY12JPP4CW	BY12JPP4LW
0-2000 psi and 14,000 kPa		
0-3000 psi and 21,000 kPa	BY12JPT4CW	BY12JPT4LW
0-5000 psi and 35,000 kPa	BY12JPV4CW	BY12JPV4LW
0/10,000 psi and 70,000 kPa	BY12JPY4CW	BY12JPY4LW

To order: specify 10-digit "catalog number" from above table.

GAUGE DIMENSIONS BY12J

Lower Connection Gauge Size/Type			A	B	C	D-¼	E	F
63 mm	BY12J	Inch	2.60	1.50	2.20	0.41	1.21	2.44
		mm	66	38	56	10	31	62
Back Connection Gauge Size/Type			**A**	**B**	**F**	**G**		
63 mm	BY12J	Inch	2.60	1.50	2.44	2.46		
		mm	66	38	62	62		



WEKSLER®

Low Pressure, Diaphragm Gauges, Steel Case, ±2-1-2% Accuracy

STANDARD FEATURES

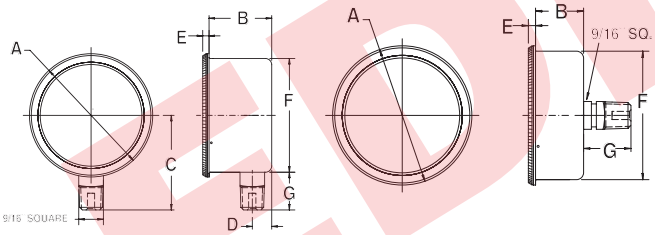
- Available in 2½″ and 3½″ sizes
- Black steel case with ¼ turn polycarbonate window
- Diaphragm capsule for sensitive low pressure measurements
- ASME B40.1 Grade A accuracy (±2-1-2%)
- Brass movement and socket
- ¼ NPT lower connection available in 2½″ and 3½″ sizes
- ¼ NPT back connection available in 2½″ size
- Panel mounting kit available for 2½″ back connection gauges

GAUGE DIMENSIONS – Lower Connection

GAUGE TYPE/SIZE			A	B	C	D	E	F	G
									¼ NPT
LOWER CONN.	BK73	INCH	2.86	1.43	2.16	.34	.18	2.59	.79
	2.5″	MM	73	36	55	9	5	66	20
	BK74	INCH	3.95	1.43	2.60	.34	.18	3.63	.79
	3.5″	MM	100	36	66	9	5	92	20

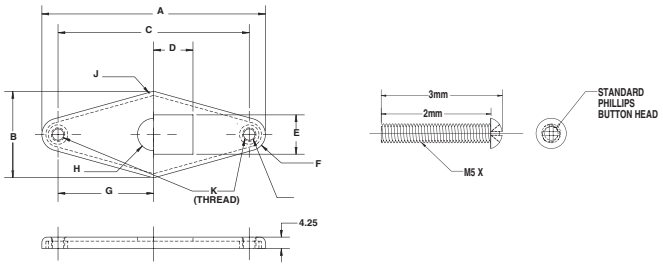
GAUGE DIMENSIONS – Back Connection

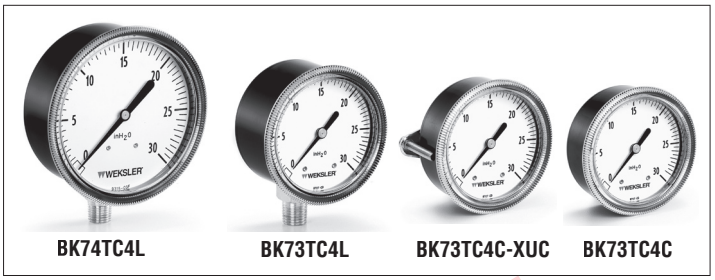
GAUGE TYPE/SIZE			A	B	E	F	G
							¼ NPT
BACK CONN.	BK73	INCH	2.86	.97	.18	2.59	1.05
	2.5″	MM	73	25	5	66	27



PANEL MOUNT ASSEMBLY for BK73

PART NO.		A	B	C	D	E	F	G	H	J	K
2½″ CLAMP	INCH	3.27	1.26	2.80	0.57	0.56	0.47	1.40	0.24	0.10	M5X0.8
	MM	83	32	71	14.6	14.2	12	35.5	6	2.50	M5X0.8





CATALOG NUMBERS

DIAL SIZE	2½″		3½″
CONNECTION LOCATION	BOTTOM	BACK*	BOTTOM
CONNECTION NPT	¼	¼	¼
STANDARD RANGES			
Pressure			
0/10 in.H_2O	BK73TA4L	BK73TA4C	BK74TA4L
0/15 in.H_2O	BK73TB4L	BK73TB4C	BK74TB4L
0/30 in.H_2O	BK73TC4L	BK73TC4C	BK74TC4L
0/60 in.H_2O	BK73TD4L	BK73TD4C	BK74TD4L
0/100 in.H_2O	BK73TE4L	BK73TE4C	BK74TE4L
0/160 in.H_2O	BK73TF4L	BK73TF4C	BK74TF4L
0/200 in.H_2O	BK73TG4L	BK73TG4C	BK74TG4L
0/300 in.H_2O	BK73TH4L	BK73TH4C	BK74TH4L
0/10 oz./in.^{2}	BK73TJ4L	BK73TJ4C	BK74TJ4L
0/15 oz./in.^{2}	BK73TK4L	BK73TK4C	BK74TK4L
0/30 oz./in.^{2}	BK73TL4L	BK73TL4C	BK74TL4L
0/60 oz./in.^{2}	BK73TM4L	BK73TM4C	BK74TM4L
0/100 oz./in.^{2}	BK73TN4L	BK73TN4C	BK74TN4L
0/160 oz./in.^{2}	BK73TP4L	BK73TP4C	BK74TP4L
0/250 oz./in.^{2}	BK73TQ4L	BK73TQ4C	BK74TQ4L
0/3 psi	BK73TR4L	BK73TR4C	BK74TR4L
0/5 psi	BK73TS4L	BK73TS4C	BK74TS4L
0/10 psi	BK73TTKL	BK73TT4C	BK74TT4L
0/15 psi	BK73TU4L	BK73TU4C	BK74TU4L
Vacuum			
15/0 in.H_2O	BK73TV4L	BK73TV4C	BK74TV4L
30/0 in.H_2O	BK73TW4L	BK73TW4C	BK74TW4L
60/0 in.H_2O	BK73TX4L	BK73TX4C	BK74TX4L
100/0 in.H_2O	BK73TY4L	BK73TY4C	BK74TY4L
200/0 in.H_2O	BK73TZ4L	BK73TZ4C	BK74TZ4L
15/0 oz./in.^{2}	BK73NL4L	BK73NL4C	BK74NL4L
30/0 oz./in.^{2}	BK73NA4L	BK73NA4C	BK74NA4L
60/0 oz./in.^{2}	BK73NB4L	BK73NB4C	BK74NB4L
100/0 oz./in.^{2}	BK73NC4L	BK73NC4C	BK74NC4L
Compound			
-10/10 in.H_2O	BK73ND4L	BK73ND4C	BK74ND4L
-30/30 in.H_2O	BK73NE4L	BK73NE4C	BK74NE4L
-30/30 oz./in.^{2}	BK73NF4L	BK73NF4C	BK74NF4L
DUAL SCALE			
Pressure			
0/15 in.H_2O and 0/9 oz./in.^{2}	BK73NG4L	BK73NG4C	BK74NG4L
0/35 in.H_2O and 0/20 oz./in.^{2}	BK73NH4L	BK73NH4C	BK74NH4L
0/60 in.H_2O and 0/35 oz./in.^{2}	BK73NJ4L	BK73NJ4C	BK74NJ4L
0/100 in.H_2O and 0/60 oz./in.^{2}	BK73NK4L	BK73NK4C	BK74NK4L

*Add XUC for panel mounting kit.
Items in red denote factory stock. Black items have longer lead times – consult price sheet.

WEKSLER®

Utility Gauges, ±2-1-2% Accuracy

STANDARD FEATURES

- Corrosion Resistant Stainless Steel Case and Ring, Plastic Lens.
- Balanced Adjustable Black Pointer.
- Soft soldered phosphor bronze tube with brass socket. Suitable for steam, water, air, oil, gas or any medium not corrosive to copper alloys.
- Phosphor bronze movement.
- Easy to read dial; white background with bold black numerals and graduations, 270° arc.
- 1/4 NPT bottom connection only.

EA14C

PRESSURE RANGES

CATALOG NO	DIAL RANGES	FIGURE INTERVALS	SMALLEST GRADUATION
EA14A	0- 30 psi	5 psi	½ psi
EA14B	0- 60 psi	10 psi	1 psi
EA14C	0-100 psi	10 psi	1 psi
EA14D	0-160 psi	20 psi	2 psi
EA14E	0-200 psi	20 psi	2 psi
EA14F	0-300 psi	50 psi	5 psi
EA14G	0-500 psi	50 psi	5 psi

VACUUM RANGES

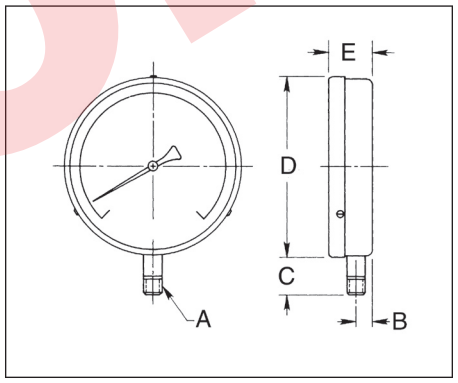
EA14H	30˝-0 Hg. Vac	5 in.	½ in.

COMPOUND RANGES

EA14J	30˝-0- 30 psi	10˝ & 5 psi	1˝ & 1 psi
EA14K	30˝-0-100 psi	15˝ & 10 psi	5˝ & 1 psi
EA14L	30˝-0-150 psi	30˝ & 25 psi	5˝ & 5 psi
EA14M	30˝-0-300 psi	30˝ & 50 psi	5˝ & 5 psi

TO ORDER: SPECIFY 5 DIGIT "CATALOG NUMBER" FROM ABOVE TABLE.

DIMENSIONS



GAUGE DIMENSIONS – EA14C

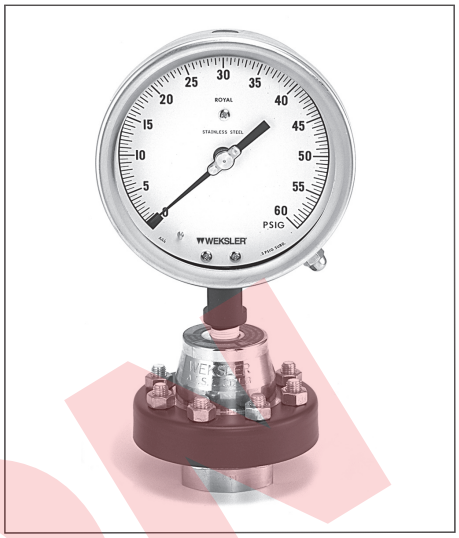
A	B	C	D	E
1/4 NPT	7/16	1 1/16	4 15/16	1 3/16
	(11)	(27)	(126)	(30)

DIAPHRAGM SEALS

WEKSLER®

Diaphragm Seals
Introduction

FOR APPLICATIONS WHERE:



- Process fluid is corrosive and could attack or destroy the instrument
- Process fluid is solid laden or viscous and could block the instrument element
- Process fluid could solidify and immobilize the instrument element; I.E. freeze or polymerize

- Corrosives	- Cleanable Systems	- Pulp & Paper
- Sanitary Systems	- Freezing Fluids	- Pharmaceuticals
- Suspended Solids	- Food, Beverage and Dairy	- Petrochemical
- Viscous Fluids	- Filtration Systems	- Water Treatment

Diaphragm seals are suitable for use with Bourdon tube type pressure gauges, recorders, transmitters, etc. Used as an attachment, the thin flexible diaphragm serves as a separating member stopping the medium from entering the gauge thereby preventing clogging and corrosion. The instrument Bourdon tube, connection and all space above the diaphragm are evacuated and solid filled with a liquid which transmits the process pressure to the instrument element through movement of the diaphragm. Diaphragm seals can be mounted directly to the instrument or remote connected with stainless steel seamless or armored capillary tubing.

When ordered with a gauge, the diaphragm seals are furnished as a complete unit, fully calibrated and tested, ready for installation.

AVAILABLE IN TWO DESIGNS

Welded or Bonded

A metal diaphragm capsule is welded to the top housing, which is then clamped to a bottom housing, providing a double, positive seal.

For applications where the pressure range is less than 15 psi, or the vacuum range is less than 30˝Hg, a Viton or Kalrez diaphragm seal is recommended. The Viton, Kalrez or Teflon diaphragm is permanently bonded to the top housing.

Either the welded or bonded design allows for the top housing and pressure instrument to be removed without losing the fill fluid. The top housing and welded or bonded diaphragm are interchangeable with all standard bottom housings.

Clamped

An elastomeric or Teflon diaphragm is clamped securely between the top and bottom housings by clamp rings, ensuring a positive seal. The top housing is contoured to match the diaphragm minimizing distortion of the diaphragm should the pressure instrument be removed. A Viton or Kalrez diaphragm enables the seal to be used on ranges below 15 psi and vacuum less than 30˝Hg.

The top housing and diaphragm are interchangeable with all standard bottom housings.

WEKSLER®

Diaphragm Seals and Isolators

Introduction

A diaphragm seal is a device which is attached to the inlet connection of a pressure instrument to isolate its measuring element from the process media. The space between the diaphragm and the instrument's pressure sensing element is solidly filled with a suitable liquid. Displacement of the liquid fill in the pressure element, through movement of the diaphragm, transmits process pressure changes directly to a gauge, transmitter, switch or any other pressure instrument. When diaphragm seals are used with pressure gauges, an additional 0.5% tolerance must be added to the gauge accuracy because of the diaphragm spring rate.

Used in a variety of process applications where corrosives, slurries, or viscous fluids may be encountered, the diaphragm seal affords protection to the instrument where:

- The process fluid being measured would normally clog the pressure element.
- Pressure element materials capable of withstanding corrosive effects of certain fluids are not available.
- The process fluid might freeze due to changes in ambient temperatures and damage the element.

All Weksler diaphragm seals, with the exception of Type 310 mini-seals, are continuous duty. Should the pressure instrument fail or be removed accidentally, the diaphragm will seat against a matching surface, preventing damage to the diaphragm or leakage of the process fluid.

When selecting a diaphragm seal, consider the following:

Seal Mounting

- Threaded – the diaphragm seal connects directly to the process by means of a female NPT thread.
- Flanged – the diaphragm seal is attached to the process by means of a flange as specified in ASME B16.5
- In-line Welded – various types of welded -in diaphragm seals for flow-thru applications.

Diaphragm Types

- Capsule – threaded-in capsule design enables the diaphragm to be removed and/or replaced.
- Welded– the diaphragm is welded directly to the top housing.
- Bonded – Teflon® or Viton® diaphragm bonded directly to the top housing.
- Clamped – metal, Viton®, Teflon®, or Kalrez® diaphragm materials are clamped between the top and bottom housing.

Top Housing

Weksler diaphragm seals (with the exception of Types 310, 320, 400, 500 & 700 series) are normally furnished with a nickel/chrome plated carbon steel top housing. An alternate housing material is 316 stainless steel. Types 310, 320, 400, 500 & 700 series come standard with a 316L stainless steel top housing. A standard fill/bleed connection allows the seal and instrument to be evacuated and filled.

Lower Housing

Lower housings are available in a variety of materials to fit your application needs. Selection of the lower housing material is important since it is in direct contact with the process media.

Diaphragm Materials

The diaphragm is in direct contact with the process, and selecting the proper diaphragm is important.

Clamping Rings

Standard is black epoxy painted carbon steel. 316 stainless steel is an available option.

Upper Flange Rings

ASME B16.5 nickel/chrome plated carbon steel flanged rings are standard. 316 stainless steel is optional

Selection Information

Warning:

All seal components should be selected considering process and ambient operating conditions to prevent misapplication. Improper application could result in failure and possible injury or property damage.

Top Housing:

The top housing includes a connection for the pressure instrument and may support the upper surface of the diaphragm. Since this component is not in contact with the process fluid, it is commonly made of steel. However, if the external atmosphere contains corrosive elements, other materials like 316 SS, may be required.

Diaphragm:

The diaphragm separates the bottom housing from the fill fluid. The diaphragm material must be compatible with the process fluid. Because of its thin cross-section, special attention must be given to diaphragm material selection. Operating temperatures must not exceed the limit for the material used. A metal diaphragm is not recommended for low pressure ranges, such as inches of water or equivalent. For such applications, use a Viton diaphragm bonded or clamped to the top housing (Type 200 and 300 seal) or a Kalrez diaphragm clamped to the top housing (Type 300 seal).

Bottom Housing:

The bottom housing material is in direct contact with the process fluid and must therefore be compatible with the process fluid.

Fill Fluids:

The fill fluid must be capable of withstanding operating process temperature. Glycerin or silicone can combine with strong oxidizing agents such as oxygen, chlorine, nitric acid and hydrogen peroxide causing fires or violent reactions. Seal assemblies intended for such applications should be filled with an inert fluid such as Halocarbon. Seals intended for use with oxygen must be manufactured completely free of oil.

Pressure Rating:

The maximum allowable pressure for the seal selected must not be exceeded. Flange seals are generally limited to the maximum rating of the flange itself. Plastic bottom housings will not withstand the same pressures as metal equivalents. Maximum allowable pressures for all materials decrease as temperatures increase.

Note: Maximum vacuum indication may not exceed 25" Hg. Consult Customer Service in Stratford, CT if higher vacuum indication is required.

Accuracy/Temperature Errors:

The addition of a liquid filled diaphragm seal to an instrument will degrade its accuracy by 0.5% (maximum). In addition, changes in ambient temperatures will introduce temperature errors because of the expansion/contraction of the fill.

Leaks:

The entire filled portion of the system must be absolutely leak tight, since any loss of fill will result in significant errors.

WEKSLER®

Selection Information
Weksler Diaphragm Seals &
Pressure Instrument Isolators

CAPSULE TYPE 100

A metal diaphragm capsule is threaded into a nickel/ chrome plated carbon steel top housing. 316 stainless steel is an optional top housing material. The capsule construction assures positive sealing at all surfaces, preventing any leakage of the filling fluid from the system. The capsule design allows for the top housing and pressure instrument to be removed without losing the fill fluid.

A Viton O-ring, compatible with all standard fill fluids, and a Teflon back-up ring provide a seal between the diaphragm capsule and the top housing. Since the diaphragm capsule is completely sealed upon being threaded into the top housing, tension of the clamping bolts has no effect on the sealing ability of the filled system. The diaphragm capsule can be replaced without replacing the entire top housing. The top housing and diaphragm capsule are interchangeable with all Weksler bottom housings.

WELDED OR BONDED TYPE 200

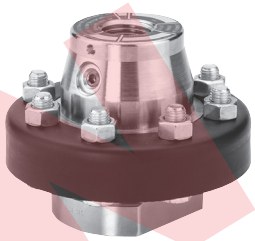
A metal diaphragm capsule is welded to the top housing, which is then clamped to a bottom housing, providing a double, positive seal. The welded design allows for the top housing and pressure instrument to be removed without losing the fill fluid. The top housing and welded diaphragm are interchangeable with all standard Weksler bottom housings. For applications where the pressure range is less than 15 psi, or the vacuum range is less than 30˝Hg, a Viton diaphragm seal is recommended. The Type 200 bonded Viton, Kalrez or Teflon diaphragm seal is similar in construction to the Type 300 clamped Viton, Kalrez or Teflon diaphragm seal. The Viton or Teflon diaphragm in the Type 200 seal is permanently bonded to the top housing, allowing the top housing and instrument to be removed without losing the fill fluid. Viton can be used with low pressure instruments such as Weksler (inches of water) bellows-type gauges.

CLAMPED TYPE 300

An elastomeric, or Teflon diaphragm is clamped securely between the top and bottom housings by clamp rings, assuring a positive seal. The top housing is contoured to match the diaphragm, minimizing distortion of the diaphragm should the pressure instrument be removed. The Type 300 series diaphragm seal is available with either a threaded or flanged process connection.

A Viton or Kalrez diaphragm enables the Type 300 seal to be used on ranges below 15 psi and vacuum less than 30˝Hg. The top housing and diaphragm are interchangeable with all standard Weksler bottom housings. A virgin TFE Teflon diaphragm is also available. Features include toughness, flexibility and fatigue resistance for superior service life. A Teflon diaphragm offers maximum corrosion resistance to most acids, caustics, alkalies, ketones, hydrocarbons and alcohols. Viton or Kalrez can be used with low pressure instruments such as Weksler bellows type gauges.

THREADED – ALL WELDED TYPE 400



The Weksler Type 400 welded diaphragm seal is recommended for use in controlling fugitive emissions and where clamped joints are not acceptable. Available with ¼, ½, ¾ and 1 NPT connections with a standard pressure rating of 7500 psi. A 15,000 psi pressure rating is achieved with high-pressure rings. Optional socket weld or butt weld process connections are available. Type 401 has a flushing connection for easy cleaning. The 400 series all welded design is available with either a 316L stainless steel, Hastelloy C or Monel lower housing. Available diaphragms include 316L stainless steel, Hastelloy C, Monel or Tantalum. A 316L stainless steel top housing is standard with all lower housing materials except Monel (where a Monel top housing is supplied).

WEKSLER®

Selection Information
Weksler Diaphragm Seals & Pressure Instrument Isolators

FLANGED – ALL WELDED TYPE 402

With flange classes of 150 thru 1500, the 402 series all welded diaphragm seal is available with a standard raised-face flange. Flat-faced or ring joint flanges are available as options. Diaphragm materials include 316L stainless steel, Hastelloy C, Monel and Tantalum. A 316L stainless steel top housing is standard with all lower housing materials except Monel (where a Monel, Tantalum or Titanium top housing is supplied). Available with 316L stainless steel, Hastelloy C, or Monel lower housings.

THREADED – ALL WELDED TYPE 500

The Weksler 500 series all welded diaphragm seal is recommended for use on applications to control fugitive emissions and where clamped joints are not acceptable. Maximum pressure rating is 500 psi. Similar in construction to the 400 series all welded seal, the 500 series is available with a 316L stainless steel, Hastelloy C or Monel lower housing. A 316L stainless steel top housing is standard with all lower housing materials except Monel or Titanium. A choice of 316L stainless steel, Hastelloy C, Monel or Tantalum diaphragms, is available. Type 501 has a flushing connection for cleaning.

MINI-SEAL TYPE 310

The compact size of the Weksler 310 mini-seal allows it to fit into space-restricted areas and is designed to protect transducers, mini-switches, and 3½″ or smaller dial size pressure gauges from corrosion, plugging or freeze- up. All welded metal construction prevents leakage of process media. It is rated for 2500 psi at 100°F and has a 316L stainless steel top housing standard. Lower housing materials include 316L stainless steel or Hastelloy C. Diaphragm materials include 316L stainless, Hastelloy C or Tantalum. ¼ NPT or ½ NPT process connection sizes are available. Instrument connection is ¼ NPT only.

QUICK CONNECT TYPE 320

Available in 1½″ or 2″ process connection sizes, the quick-connect diaphragm seal is designed especially for those applications that require ease of dismantling and re-assembly. Typical applications include the pharmaceutical, dairy, food processing, biotechnology, and filtration markets. Also included are breweries, distilleries, wineries and citrus juice production plants. Standard features include a 316L stainless steel diaphragm welded to a 316L stainless steel top housing, a fill/bleed connection, and a top housing and pressure instrument removable from the process. The 320 quick-connect seal is compatible with Tri-Clover Tri-Clamp® and Cherry Burrell® S line connections. Does not meet 3A sanitary standard 37-01.

Diaphragm material pressure and temperature limits

Diaphragm material	Maximum Pressure (psi)	Temp. limit
Teflon	2,500	–40/400°F
Viton	500	–40/350°F
Kalrez	500	30/212°F
Metal diaphragms ❷		

Bottom housing material pressure and temperature limits

Bottom housing material	Maximum Pressure (psi)	Temp. limit
Teflon	270	130°F
Kynar	200	180°F
PVC:		
Threaded❸	200	74°F
Threaded❸	125	125°F
Threaded❸	80	150°F
Flanged	75	100°F
Halar coated stainless steel		–40/300°F
All other metal lower housings		❷

Determined by pressure rating or flange class.

❷ Restricted to temperature range of fill material.

❸ A ½ NPT (maximum) threaded bottom housing is available on application. Socket weld connection is standard.

Diaphragm seal displacement

Type	Material	Maximum Displacement Cubic inches	Cubic centimeters
100, 200	Metal	0.07	1.14
200, 300	Teflon	0.14	2.23
200, 300	Viton	0.5	8
300	Kalrez	0.5	8
310	Metal	0.025	0.41
311, 312	Metal	0.032	0.52
320 (1½″ process)	Metal	0.025	0.41
320 (2″ process)	Metal	0.07	1.14
330	Metal	0.018	0.41
400	Metal	0.07	1.14
500	Metal	0.07	1.14
702/703	Metal	0.43	7
740/741	Metal	0.43	7

WEKSLER®

Specification Matrix

Weksler Diaphragm Seals & Pressure Instrument Isolators

● = AVAILABLE





Process Connection Type			Threaded	Threaded w/Flushing Connection	Raised Face Flange	Raised Face Flange w/Flushing Connection	In-line Threaded
Model No.	Code		100/200/300[1]	101/201/301[1]	102/202/302[1]	103/203/303[1]	104/204/304[1]
Process Connection Size (NPT)	Female	Male					
¼	25	02	●	●			●
½	50	04	●	●	●	●	●
¾	75	06	●	●	●	●	●
1	10	08	●	●	●	●	
1½	15				●	●	
2	20				●	●	
3	30				●	●	
4	40						
6	60						
8	80						
Diaphragm Materials							
316L stainless steel	S		100 & 200	101 & 201	102 & 202	103 & 203	104 & 204
304L stainless steel	C		100 & 200	101 & 201	102 & 202	103 & 203	104 & 204
K-Monel	P		100 & 200	101 & 201	102 & 202	103 & 203	104 & 204
Nickel	N		100 & 200	101 & 201	102 & 202	103 & 203	104 & 204
Carpenter 20	D		100 & 200	101 & 201	102 & 202	103 & 203	104 & 204
Tantalum	U		100 & 200	101 & 201	102 & 202	103 & 203	104 & 204
Hastelloy B	G		100 & 200	101 & 201	102 & 202	103 & 203	104 & 204
Hastelloy C 22	J		100 & 200	101 & 201	102 & 202	103 & 203	104 & 204
Hastelloy C 276	H		100 & 200	101 & 201	102 & 202	103 & 203	104 & 204
Teflon	T		200 & 300	201 & 301	202	203	204 & 304
Viton	Y		200 & 300	201 & 301	202	203	204 & 304
Kalrez	K		200 & 300	201 & 301	302	303	304
Titanium	TI		200	201	202	203	204
Halar Coated Monel	PH		100	101	102	103	104
Bottom Housing Materials							
Steel	B		●	●	●	●	●
304L stainless steel	CL		●	●	●	●	●
316L stainless steel	SL		●	●	●	●	●
Hastelloy B	G		●	●	●	●	●
Hastelloy C 22	J		●	●	●	●	●
Hastelloy C 276	H		●	●	●	●	●
Carpenter 20	D		●	●	●	●	●
Monel 400	M		●	●	●	●	●
Inconel 800	W		●	●	●	●	●
Nickel	N		●	●	●	●	●
PVC	V		(Socket Weld or ¼-½ NPT)		1, 1½		
Tantalum Clad SS	SU				●		
Halar® Coated SS	SH				●		
Teflon	T				1, 1½, 2		
Kynar	KY		Only¼ or ½ NPT		1, 1½, 2		
Titanium	TI		●	●	●	●	●
Pressure Ratings							
500 psi			Viton or Kalrez diaph. only	Viton or Kalrez diaph. only			Viton or Kalrez diaph. only
2500 psi			Metal & Teflon® diaph.	●			Metal & Teflon® diaph.
5000 psi	HP		100 & 200 metal				
7500 psi							
15000 psi	HP						
Flange Class							
150, 300, 600, 900 or 1500					Kalrez, Teflon, Viton, Kynar 150 only	Kalrez, Teflon, Viton, Kynar 150 only	
Instrument Connection Size							
¼	02T		●	●	●	●	●
½	04T		●	●	●	●	●
Filling Fluid							
Glycerin	CG		●	●	●	●	●
Silicone (direct to 10´ capillary)	CK		●	●	●	●	●
Silicone (over 10´ capillary)	EJ		●	●	●	●	●
Halocarbon	CF		●	●	●	●	●
Syltherm	HA		●	●	●	●	●

[1] Type 300 series not available with metallic diaphragms

WEKSLER®

Specification Matrix

Weksler Diaphragm Seals & Pressure Instrument Isolators

● = AVAILABLE





Process Connection Type			Saddle	In-line Flanged	In-line Socket Weld	In-line Butt Weld	Male/Female Threaded Mini (*Flushing Conn.)	
Model No.	Code		105/205	106/206	107/207	108	310/315*	
Process Connection Size (NPT)	**Female**	**Male**					**Female**	**Male**
¼	25	02			●	●	●	●
½	50	04		●	●	●	●	●
¾	75	06		●	●	●		●
1	10	08		●	●	●		●
1½	15			●	●	●		
2	20			●	●	●		
3	30		3˝	●				
4	40		4˝ and larger					
6	60			●				
8	80			●				
Diaphragm Materials								
316L stainless steel	S		●	●	●	●	●	
304L stainless steel	C		●	●	●	●		
K-Monel	P		●	●	●	●	●	
Nickel	N		●	●	●	●		
Carpenter 20	D		●	●	●	●		
Tantalum	U		●	●	●	●	●	
Hastelloy B	G		●	●	●	●		
Hastelloy C 22	J		●	●	●	●		
Hastelloy C 276	H		●	●	●	●	●	
Teflon	T		205	206	207	208		
Viton	Y		205	206	207	208		
Kalrez	K		205	206	207	208		
Titanium	TI		205	206	207	208		
Halar Coated Monel	PH		105	106	107	108		
Bottom Housing Materials								
Steel	B		●	●	●	●		
304L stainless steel	CL		●	●	●	●		
316L stainless steel	SL		●	●	●	●	●	
Hastelloy B	G		●	●	●	●		
Hastelloy C 22	J		●	●	●	●		
Hastelloy C 276	H		●	●	●	●	●	
Carpenter 20	D		●	●	●	●		
Monel 400	M		●	●	●	●	●	
Inconel 800	W		●	●	●	●		
Nickel	N		●	●	●	●		
PVC	V							
Tantalum Clad SS	SU							
Halar® Coated SS	SH							
Teflon	T							
Kynar	KY							
Titanium	TI		●		●	●		
Pressure Ratings								
500 psi			Viton or Kalrez diaph. only		Viton or Kalrez diaph. only	Viton or Kalrez diaph. only		
2500 psi			Metal & Teflon® diaph.		Metal & Teflon® diaph.			
5000 psi	HP							
7500 psi								
15000 psi	HP							
Flange Class								
150, 300, 600, 900 or 1500				150 & 300				
Instrument Connection Size								
¼	02T		●	●	●	●	●	
½	04T		●	●	●	●	●	
Filling Fluid								
Glycerin	CG		●	●	●	●	●	
Silicone (direct to 10´ capillary)	CK		●	●	●	●	●	
Silicone (over 10´ capillary)	EJ		●	●	●	●	●	
Halocarbon	CF		●	●	●	●	●	
Syltherm	HA		●	●	●	●	●	

WEKSLER®

Specification Matrix

Weksler Diaphragm Seals & Pressure Instrument Isolators

● = AVAILABLE

Process Connection Type				Female & Male Threaded		Female Threaded (w/Flushing Conn.)	Quick Connect	1˝ Male Flush Mini	Threaded (*Flushing Conn.)
Model No.	Code			311		312	320/321	330	400/401*
Process Connection Size (NPT)	Female	Male		Female	Male				
¼	25	02		●	●	●	●		●
½	50	04		●	●	●	●		●
¾	75	06			●	●			●
1	10	08			●	●		●	●
1½	15						●		
2	20						●		
3	30								
4	40								
6	60								
8	80								
Diaphragm Materials									
316L stainless steel	S			●		●	●	●	●
304L stainless steel	C								
K-Monel	P								●
Nickel	N								
Carpenter 20	D								
Tantalum	U			●		●			●
Hastelloy B	G								●
Hastelloy C 22	J								●
Hastelloy C 276	H			●		●			●
Teflon	T								
Viton	Y								
Kalrez	K								
Titanium	TI								●
Halar Coated Monel	PH								
Bottom Housing Materials									
Steel	B								
304L stainless steel	CL								
316L stainless steel	SL			●		●	●	●	●
Hastelloy B	G								
Hastelloy C 22	J								●
Hastelloy C 276	H			●		●			●
Carpenter 20	D								
Monel 400	M								●
Inconel 800	W								
Nickel	N								
PVC	V								
Tantalum Clad SS	SU								
Halar® Coated SS	SH								
Teflon	T								
Kynar	KY								
Titanium	TI								
Pressure Ratings									
500 psi									
2500 psi				1000		1000	●		
5000 psi	HP								
7500 psi									●
15000 psi	HP								400 only
Flange Class									
150, 300, 600, 900 or 1500									
Instrument Connection Size									
¼	02T			●		●	●	●	●
½	04T			●		●	2˝ only	●	●
Filling Fluid									
Glycerin	CG			●		●	●	●	●
Silicone (direct to 10´ capillary)	CK			●		●	●	●	●
Silicone (over 10´ capillary)	EJ			●		●	●	●	●
Halocarbon	CF			●		●	●	●	●
Syltherm	HA			●		●	●	●	●

WEKSLER®

Specification Matrix

Weksler Diaphragm Seals & Pressure Instrument Isolators

● = AVAILABLE



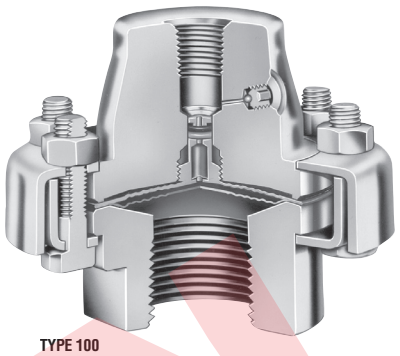

Process Connection Type			Raised Face Flange (*Flushing Conn.)	Threaded (*Flushing Conn.)	Low Pressure Flanged (*w/Flushing Conn.)	Low Pressure Threaded (*w/Flushing Conn.)
Model No.	Code		402/403*	500/501*	702/703*	740/741*
Process Connection Size (NPT)	Female	Male				
¼	25	02				●
½	50	04	●	●	●	●
¾	75	06	●	●	●	●
1	10	08	●	●	●	●
1½	15		●		●	
2	20		●		●	
3	30		●		●	
4	40					
6	60					
8	80					
Diaphragm Materials						
316L stainless steel	S		●	●	●	●
304L stainless steel	C					
K-Monel	P		●	●	●	●
Nickel	N					
Carpenter 20	D					
Tantalum	U		●	●	●	●
Hastelloy B	G			●	●	●
Hastelloy C 22	J		●	●		
Hastelloy C 276	H		●	●	●	●
Teflon	T					
Viton	Y					
Kalrez	K					
Titanium	TI			●	●	●
Halar Coated Monel	PH					
Bottom Housing Materials						
Steel	B			●		●
304L stainless steel	CL					
316L stainless steel	SL		●	●	●	●
Hastelloy B	G				●	●
Hastelloy C 22	J		●	●		
Hastelloy C 276	H		●	●	●	●
Carpenter 20	D				●	●
Monel 400	M		●	●	●	●
Inconel 800	W					
Nickel	N					
PVC	V					
Tantalum clad stainless steel	SU					
Halar® coated stainless steel	SH					
Teflon	T					
Kynar	KY					
Titanium	TI			●	●	●
Pressure Ratings						
500 psi				●	750	750
2500 psi						
5000 psi	HP					
7500 psi						
15000 psi	HP					
Flange Class						
150, 300, 600, 900 or 1500			●		150-600	
Instrument Connection Size						
¼	02T		●	●	●	●
½	04T		●	●	●	●
Filling Fluid						
Glycerin	CG		●	●	●	●
Silicone (direct to 10´ capillary)	CK		●	●	●	●
Silicone (over 10´ capillary)	EJ		●	●	●	●
Halocarbon	CF		●	●	●	●
Syltherm	HA		●	●	●	●

WEKSLER®

Diaphragm Seal
Type 100, Capsule

The comprehensive line of Weksler® diaphragm seals will meet a wide variety of application or installation requirements. Over 30,000 variations are possible with the types, connections and materials available.

- The top housing and diaphragm capsule are interchangeable with all Weksler bottom housings.
- A fill/bleed connection is standard, which permits filling the seal and instrument simultaneously after evacuation and allows the fill to flow into the completed unit.
- A Viton O-ring, compatible with all standard fill fluids, and a Teflon back-up ring provide a seal between the diaphragm capsule and the top housing.
- A thin Teflon PTFE gasket between the diaphragm and bottom housing assures a leak-tight corrosion resistant seal even at high pressure.
- Top housing and pressure instrument are removable.
- Continuous-duty design will prevent loss of process fluid if pressure instrument is removed or fails.



TYPE 100

SELECTION TABLES

Table A – Process Connection/Type Number

	Process Connection Size/Code—Inches										Type Number
	Size	¼	½	¾	1	1½	2	3	4	6	8	
Process Connection	Code	25	50	75	10	15	20	30	40	60	80	Capsule
Threaded–female NPT		•	•	•	•	•						100
Threaded–female NPT (with flushing connection)		•	•	•	•	•						101
Flanged[1]			•	•	•	•	•	•				102
Flanged (with flushing connection)			•	•	•	•	•	•				103
In-line—threaded NPT		•	•	•	•							104
Saddle								•	AND LARGER			105
In-line—butt weld		•	•	•	•	•	•					108
In-line—flanged[2]			•	•	•	•	•	•	•	•	•	106
In-line—socket weld		•	•	•	•	•	•					107

Pressure Ratings—All 2500 psi except flanged seals are per ASME B 16.5, temperature limit determined by diaphragm, bottom housing and/or filling fluid.

Table B
Diaphragm Material

Material	Code
316L stainless steel	S
304 stainless steel	C
K-Monel	P
Nickel	N
Carpenter 20	D
Tantalum[7]	U
Hastelloy B	G
Hastelloy C 22	J
Hastelloy C 276[7]	H
Halar Coated Monel	PH
Gold Plated 304 st. stl.	W

Table C
Bottom Housing Materials

Material	Code
Steel	B
304L stainless steel	C
316L stainless steel	S
Hastelloy B	G
Hastelloy C 22	J
Hastelloy C 276[7]	H
Carpenter 20	D
Monel "400"	M
Inconel "600"	W
Nickel	N
PVC[8]	V
Tantalum clad stainless steel[7,9]	SU
Halar coated stainless steel[10]	BH
Teflon flanged steel[11]	T
Kynar[13][14]	KY
Titanium[13]	TI

Table D
Instrument Connection

Size – NPT	Code
¼	02T
½	04T

Table E – Filling Fluid

Filling	Service	Connection to Instrument	Temperature Range °F	Code
Glycerin	Pressure	Direct Only	0/400	CG
Silicone	Pressure/Vacuum	Direct or Flexible Line	–40/600	CK
Halocarbon	Pressure/Vacuum in presence of strong oxidizing agent	Direct or Flexible Line	–70/300	CF
Syltherm	Pressure/Vacuum	Direct or Flexible Line	–40/750	HA

NOTES:

(1) 150, 300, 600, 900, 1500 & 2500 class flanges.

(2) 1˝150 thru 8˝300 class flanges only.

(7) Use on applications where NACE standard MR-01-75 2003 is specified.

(8) Maximum Press./Temp.
Threaded: 200 psi/74°F, 125 psi/125°F, 80 psi/150°F.
Flanged: 75 psi/100°F.

(9) Type 102 only.

(10) Type 102 only – Temp. Limits: –40/300°F.

(11) Only available in 1˝, 1 ½˝, & 2˝150 class, Types 102.
Max. Press./Temp. – 270 psi and 150°F.
Consult factory for conditions beyond these limits.

(13) On application.

(14) Maximum Pressure/Temp.: 200 psi and 180°F.

TO ORDER THIS TYPE 100 DIAPHRAGM SEAL:

1. **From Table A**...select TYPE NUMBER based on process connection, process connection size and diaphragm type/construction. (e.g., Threaded/1˝/capsule–code-10-100)
2. **From Table B**...select DIAPHRAGM MATERIAL. (e.g., 316L stainless steel–code S)
3. **From Table C**...select BOTTOM HOUSING MATERIAL. (e.g., 316 stainless steel–code S)
4. **From Table D**...select INSTRUMENT CONNECTION size. (e.g., ¼ NPT–code 02T)
5. **From Table E**...select FILLING FLUID, if diaphragm seal will be attached to instrument. (e.g., Glycerin–code CG)
6. Insert . . . WS at the end of completed product code.

Coded order: 10-100SS-02T-CG-WS

WEKSLER®

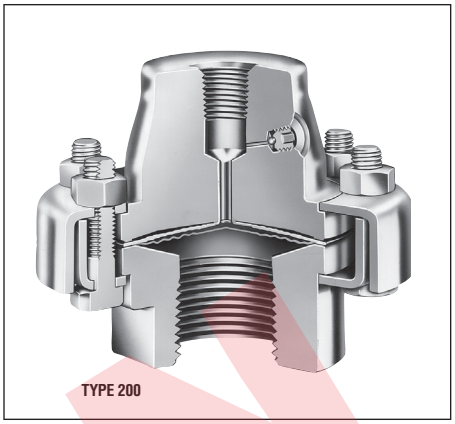
Diaphragm Seal
Type 200, Welded or Bonded

Type 200 Welded

- Teflon gasketed, continuous-duty diaphragm capsule is welded to the top housing, which is then clamped to a bottom housing.
- Fill/bleed connection is standard.
- Top housing and pressure instrument are removable.
- Available in same process connections, materials, types and sizes as the Type 100 capsule design.
- Top housing is interchangeable with all standard Weksler® bottom housings.

Type 200 Bonded Viton, Kalrez and Teflon

Similar in construction, materials, and product features to the Type 300 clamped diaphragm seal, the diaphragm in the Type 200 seal is bonded permanently to the top housing – and is the removable type.



TYPE 200

SELECTION TABLES

Table A – Process Connection/Type Number

	Process Connection Size/Code—Inches										Type Number
	Size	¼	½	¾	1	1½	2	3	4	6	8	Welded &
Process Connection	Code	25	50	75	10	15	20	30	40	60	80	Bonded[3]
Threaded–female NPT		•	•	•	•	•						200
Threaded–female NPT (with flushing connection)		•	•	•	•	•						201
Flanged[1]			•	•	•	•	•	•				202
Flanged (with flushing connection)			•	•	•	•	•	•				203
In-line—threaded NPT		•	•	•	•							204
Saddle								•	AND LARGER			205
In-line—butt weld		•	•	•	•	•	•					208
In-line—flanged[2]			•	•	•	•	•	•	•	•	•	206
In-line—socket weld		•	•	•	•	•	•					207

Pressure Ratings—All 2500 psi except flanged seals are per ASME B 16.5, temperature limit determined by diaphragm, bottom housing and/or filling fluid.

Table B
Diaphragm Material

Material	Code
316L stainless steel	S
304 stainless steel	C
K-Monel	P
Nickel	N
Carpenter 20	D
Tantalum[7]	U
Hastelloy B	G
Hastelloy C 22	J
Hastelloy C 276[7]	H
Teflon[5]	T
Viton[6]	Y
Kalrez[12]	K
Titanium	TI

Table C
Bottom Housing Materials

Material	Code
Steel	B
304L stainless steel	C
316L stainless steel	S
Hastelloy B	G
Hastelloy C 22[7]	J
Hastelloy C 276	H
Carpenter 20	D
Monel "400"	M
Inconel "600"	W
Nickel	N
PVC[8]	V
Tantalum clad stainless steel[7,9]	SU
Halar coated stainless steel[10]	BH
Teflon flanged steel[11]	T
Kynar[13][14]	KY
Titanium[13]	TI

Table D
Instrument Connection

Size – NPT	Code
¼	02T
½	04T

Table E – Filling Fluid

Filling	Service	Connection to Instrument	Temperature Range °F	Code
Glycerin	Pressure	Direct Only	0/400	CG
Silicone	Pressure/Vacuum	Direct or Flexible Line	–40/600	CK
Halocarbon	Pressure/Vacuum in presence of strong oxidizing agent	Direct or Flexible Line	–70/300	CF
Syltherm	Pressure/Vacuum	Direct or Flexible Line	–40/750	HA

NOTES:

(1) 150, 300, 600, 900, 1500 & 2500 class flanges.

(2) 1˝150 thru 8˝300 class flanges only.

(3) Metal diaphragms welded; Teflon, Kalrez & Viton diaphragms bonded.

(5) Temp. Limits: –40/400°F.

(6) Max. Pressure: 500 psi.
Temp. Limits: –40/350°F.

(7) Use on applications where NACE standard MR-01-75 2003 is specified.

(8) Maximum Press./Temp.
Threaded: 200 psi/74°F, 125 psi/125°F, 80 psi/150°F.
Flanged: 75 psi/100°F.

(9) Type 202 only.

(10) Temp. Limits: –40/300°F.

(11) Only available in 1˝, 1 ½˝, & 2˝150 class, Type 202.
Max. Press./Temp. – 270 psi and 150°F.
Consult factory for conditions beyond these limits.

(12) Max. Pressure: 500 psi
Temp. Limits: 30/212°F.

(13) On application.

(14) Maximum Pressure/Temp.: 200 psi and 180°F.

TO ORDER THIS TYPE 200 DIAPHRAGM SEAL:

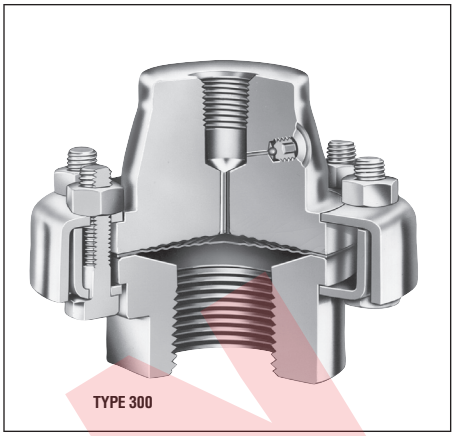
1. **From Table A**...select TYPE NUMBER based on process connection, process connection size and diaphragm type/construction. (e.g., Threaded/1˝/welded–code-10-200)
2. **From Table B**...select DIAPHRAGM MATERIAL. (e.g., 316L stainless steel–code S)
3. **From Table C**...select BOTTOM HOUSING MATERIAL. (e.g., 316 stainless steel–code S)
4. **From Table D**...select INSTRUMENT CONNECTION size. (e.g., ¼ NPT–code 02T)
5. **From Table E**...select FILLING FLUID, if diaphragm seal will be attached to instrument. (e.g., Glycerin–code CG)

Coded order: 10-200SS-02T-CG-WS

WEKSLER®

Diaphragm Seal
Type 300, Clamped

- Broad selection of materials for meeting various service applications, including Teflon, Viton and Kalrez diaphragms.
- Elastomeric diaphragm is clamped securely between the top and bottom housings by clamp rings, assuring positive seal.
- Top housing is contoured to match diaphragm, minimizing distortion of the diaphragm should the pressure instrument be removed.
- Continuous duty.
- Fill/bleed connection is standard.
- Top housing and diaphragm are nonremovable.
- Teflon, Viton and Kalrez diaphragms available in threaded and flanged inlet connections.



TYPE 300

SELECTION TABLES

Table A – Process Connection/Type Number

	Process Connection Size/Code—Inches											Type Number
	Size	¼	½	¾	1	1½	2	3	4	6	8	Clamped[4]
Process Connection	Code	25	50	75	10	15	20	30	40	60	80	
Threaded–female NPT		•	•	•	•	•						300
Threaded–female NPT (with flushing connection)		•	•	•	•	•						301
Flanged[1]			•	•	•	•	•	•				302
Flanged (with flushing connection)			•	•	•	•	•	•				303
In-line—threaded NPT		•	•	•	•							304

Pressure Ratings—All 2500 psi except flanged seals are per ASME B 16.5, temperature limit determined by diaphragm, bottom housing and/or filling fluid.

Table B
Diaphragm Material

Material	Code
Teflon[5]	T
Viton[6]	Y
Kalrez[12]	K

Table C
Bottom Housing Materials

Material	Code
Steel	B
304L stainless steel	C
316L stainless steel	S
Hastelloy B	G
Hastelloy C 22	J
Hastelloy C 276[7]	H
Carpenter 20	D
Monel "400"	M
Inconel "600"	W
Nickel	N
PVC[8]	V
Tantalum clad stainless steel[7,9]	SU
Halar coated stainless steel[10]	BH
Teflon flanged steel[11]	T
Kynar[13][14]	KY
Titanium[13]	TI

Table D
Instrument Connection

Size – NPT	Code
¼	02T
½	04T

NOTES:

(1) 150, 300, 600, 900, 1500 & 2500 class flanges except 1˝1.50.

(4) Viton diaphragm in Types 302 & 303 limited to 2˝–150 class flange.

(5) Temp. Limits: –40/400°F.

(6) Max. Pressure: 500 psi.
Temp. Limits: –40/350°F.

(7) Use on applications where NACE standard MR-01-75 2003 is specified.

(8) Maximum Press./Temp.
Threaded: 200 psi/74°F, 125 psi/125°F, 80 psi/150°F.
Flanged: 75 psi/100°F.

(9) Type 302 only.

(10) Type 302 only – Temp. Limits: –40/300°F.

(11) Only available in 1˝, 1 ½˝, & 2˝ 150 class, Type 302.
Max. Press./Temp. – 270 psi and 150°F.
Consult factory for conditions beyond these limits.

(12) Max. Pressure: 500 psi
Temp. Limits: 30/212°F.

(13) On application.

(14) Maximum Pressure/Temp.: 200 psi and 180°F.

Table E – Filling Fluid

Filling	Service	Connection to Instrument	Temperature Range °F	Code
Glycerin	Pressure	Direct Only	0/400	CG
Silicone	Pressure/Vacuum	Direct or Flexible Line	–40/600	CK
Halocarbon	Pressure/Vacuum in presence of strong oxidizing agent	Direct or Flexible Line	–70/300	CF
Syltherm	Pressure/Vacuum	Direct or Flexible Line	–40/750	HA

TO ORDER THIS TYPE 300 DIAPHRAGM SEAL:

1. **From Table A**...select TYPE NUMBER based on process connection, process connection size and diaphram type/construction. (e.g., Threaded/1˝/clamped–code-10-300)
2. **From Table B**...select DIAPHRAGM MATERIAL. (e.g., 316L stainless steel–code S)
3. **From Table C**...select BOTTOM HOUSING MATERIAL. (e.g., 316 stainless steel–code S)
4. **From Table D**...select INSTRUMENT CONNECTION size. (e.g., ¼ NPT–code 02T)
5. **From Table E**...select FILLING FLUID, if diaphragm seal will be attached to instrument. (e.g., Glycerin–code CG)
6. **Insert** . . . WS at the end of completed product code.

Coded order: 10-300SS-02T-CG-WS

WEKSLER®

"Mini" Diaphragm Seal
Type 310, 315 All-Welded

- Compact size to fit space- restricted areas
- Designed to protect transducers, mini-switches and 3½˝ or smaller pressure gauges from corrosion, plugging or freeze-up
- All-welded metal construction prevents leakage of process media
- Rated for 2500 psi at 100°F
- Fill/bleed connection is standard

TYPE 310, 315

SELECTION TABLES

Table A – Process Connection/Type Number

	Process Connection Size/Code—Inches													
	Size	**⅛**	**¼**	**½**	**¾**	**1**	**1½**	**2**	**3**	**4**	**6**	**8**	**Type Number**	**Pressure Rating[1]**
Process Connection	**Code**	**12**	**25**	**50**	**75**	**10**	**15**	**20**	**30**	**40**	**60**	**80**		
Threaded–female NPT			•	•									310 All-welded mini-seal	2500 psi @ 100°F
Threaded–female NPT			•	•									315 All-welded mini-seal with flushing connection	2500 psi @ 100°F
	Size	**⅛**	**¼**	**½**	**¾**	**1**							**Type Number**	**Pressure Rating[1]**
Process Connection	**Code**	**01**	**02**	**04**	**06**	**08**								
Threaded–male NPT		•	•	•	•	•							310	2500 psi @ 100°F

Table B
Diaphragm Material

Material	Code
316L stainless steel	S
Hastelloy C 276	H
Tantalum	U
Monel	P

Table C
Housing Materials

Bottom Material[2]	Code	Top Material[3]
316L SS	S	316L SS
Hastelloy C 276	H	316L SS
Monel	M	Monel

Table D
Instrument Connection

Size – NPT	Code
¼	02T
⅛	01T

Table E – Filling Fluid

Filling	Service	Connection to Instrument	Temperature Range °F	Code
Glycerin	Pressure	Direct Only	0/400	CG
Silicone	Pressure/Vacuum	Direct or Flexible Line	–40/600	CK
Halocarbon	Pressure/Vacuum in presence of strong oxidizing agent	Direct or Flexible Line	–70/300	CF
Syltherm	Pressure/Vacuum	Direct or Flexible Line	–40/750	HA

NOTES:
(1) For use with most 3½˝ and smaller gauges. Movementless gauge 4½˝ (exception).
(2) Other bottom housing materials on application.
(3) Top housing material is 316L SS (standard). Monel mini-seal standard with monel top housing.

TO ORDER THIS TYPE 310 DIAPHRAGM SEAL:

1. **From Table A**...select TYPE NUMBER and process connection size (e.g., ¼˝ process–code 25-310)
2. **From Table B**...select DIAPHRAGM MATERIAL. (e.g., 316L stainless steel–code S)
3. **From Table C**...select BOTTOM HOUSING MATERIAL. (e.g., 316 stainless steel–code S)
4. **From Table D**...select INSTRUMENT CONNECTION size. (e.g., ¼ NPT–code 02T)
5. **From Table E**...select FILLING FLUID, if diaphragm seal will be attached to instrument. (e.g., Glycerin–code CG)
6. **Insert** . . . WS at the end of completed product code.

Coded order: 25-310SS-02T-CG-WS

WEKSLER®

Diaphragm Seal
Type 320 Quick-Connect

The Weksler® Type 320 quick-connect diaphragm seal is designed especially for those applications that require ease of dismantling and re-assembly and do not require a 3A standard rating in accordance with sanitary standard 74-00.

Typical applications include the pharmaceutical, dairy, food processing, biotechnology, and filtration markets. Also included are breweries, distilleries, wineries and citrus juice production plants.

Standard features include:

- 316L stainless steel diaphragm welded to a 316L stainless steel top housing
- Fill/bleed connection
- Top housing and pressure instrument removable from process
- Compatible with Tri-Clover and Cherry Burrell S line connections

TYPE 320

SPECIFICATIONS

Table A – Piping System/Type Number

Type Number	Piping System	Code	Top Housing Materials[2]	Code	Diaphragm Material	Code	Instrument Connection	Code
320	1½˝[1]	15	316L SS	S	316L SS	S	¼ NPT	02T
320	2˝	20	316L SS	S	316L SS	S	¼ NPT ½ NPT	02T 04T

Table B – Filling Fluid

Filling	Service	Connection to Instrument	Temperature Range °F	Code
Glycerin	Pressure	Direct Only	0/400	CG
Silicone	Pressure/Vacuum	Direct or Flexible Line	–40/600	CK
Halocarbon	Pressure/Vacuum in presence of strong oxidizing agent	Direct or Flexible Line	–70/300	CF
Syltherm	Pressure/Vacuum	Direct or Flexible Line	–40/750	HA

NOTES:
(1) For use with most 3½˝ and smaller gauges. Movementless gauge 4½˝ (exception).
(2) Top housing material is 316L SS (standard). Monel mini-seal standard with monel top housing.

PRODUCT INFORMATION:

- The 1½˝-Type 320 is for use on most 3½˝ and smaller size gauges; the 2˝-Type 320 can be attached to gauges up through 4½˝ size.
- Quick-connect clamps, gaskets or bottom housings are not supplied.
- Can be used with pressure instruments such as gauges, switches and transducers.
- Replaces Weksler Type 110 series quick-connect diaphragm seals.
- Maximum operating pressure and temperature is determined by the gaskets and clamping devices used in the piping system.

TO ORDER THIS TYPE 320 DIAPHRAGM SEAL:

1. **From Table A**...select TYPE NUMBER & piping system size, diaphragm and top housing material, ¼˝ instrument connection (e.g., 1½˝ process, 316 stainless steel diaphragm and top housing code 15-320SX-02T)
2. **From Table B**...select FILLING FLUID if diaphragm seal will be attached to instrument. (e.g., glycerin–code CG)
3. **Insert** . . . WS at the end of completed product code.
   Coded order: 15-320SX-02T-CG-WS

WEKSLER®

Diaphragm Seal
Types 400/500, All Welded

- Recommended for use where clamped joints are not acceptable
- Assists in controlling plant emissions by helping prevent potential leakage of hazardous chemicals
- Prevents inadvertent disassembly
- All-stainless steel construction is standard. Other materials available


TYPE 400


TYPE 500

SELECTION TABLES

Table A – Process Connection/Type Number

Type No.	Process Connection	Process Connection Size/Code—Inches										Pressure Rating
		Size	¼	½	¾	1	1½	2	3	4	6	8	
		Code	25	50	75	10	15	20	30	40	60	80	
400	Threaded–female NPT		•	•	•	•							7500 psi[1][5]
401	Threaded–female NPT (with flushing connection)		•	•	•	•							7500 psi[1][5]
402	Raised face flange			•	•	•	•	•	•				Per ASME B16.5[2]
403	Raised face flange (with flushing connection)			•	•	•	•	•	•				
500	Threaded–female NPT		•	•	•	•							500 psi
501	Threaded–female NPT (with flushing connection)		•	•	•	•							500 psi

Table B
Diaphragm Material

Material	Code
316L SS	S
Hastelloy B	G
Hastelloy C 22	J
Hastelloy C 276	H
Tantalum	U
Monel	P
Titanium	TI

Table C
Housing Materials[3]

Bottom Material	Code	Top Material[4]
316L SS	SL	316L SS
Hastelloy B	G	316L SS
Hastelloy C 22	J	316L SS
Hastelloy C 276	H	316L SS
Monel	M	Monel
Titanium	TI	Titanium

Table D
Instrument Connection

Size – NPT	Code
¼	02T
½	04T

Table E – Filling Fluid

Filling	Service	Connection to Instrument	Temperature Range °F	Code
Glycerin	Pressure	Direct Only	0/400	CG
Silicone	Pressure/Vacuum	Direct or Flexible Line	–40/600	CK
Halocarbon	Pressure/Vacuum in presence of strong oxidizing agent	Direct or Flexible Line	–70/300	CF
Syltherm	Pressure/Vacuum	Direct or Flexible Line	–40/750	HA

NOTES:

(1) XHP (High Pressure Rings) with 15,000 psi rating available on Type 400 only.
(2) Flange ratings 150 class through 1500 class.
(3) Other bottom housing materials on application.
(4) Top housing material is 316L SS (standard) except for monel which has a monel top housing and titanium which has a titanium top housing.
(5) Continuous duty. For static pressures only between 2500 and 7500 psi.

TO ORDER THIS TYPE 400 & 500 DIAPHRAGM SEAL:

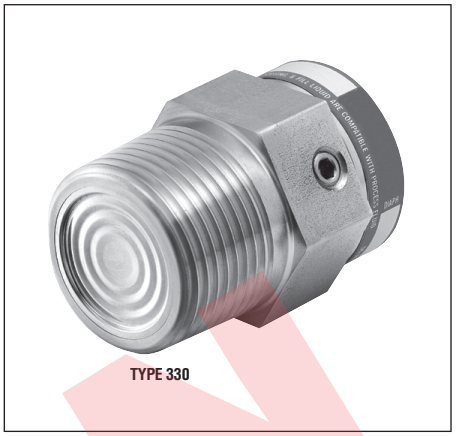
1. **From Table A**...select TYPE NUMBER & process connection size (e.g., 1˝ process–code 10-400)
2. **From Table B**...select DIAPHRAGM MATERIAL. (e.g., AISI 316L stainless steel–code S)
3. **From Table C**...select BOTTOM HOUSING MATERIAL. (e.g., AISI 316 stainless steel–code S)
4. **From Table D**...select INSTRUMENT CONNECTION size. (e.g., ¼ NPT–code 02T)
5. **From Table E**...select FILLING FLUID, if diaphragm seal will be attached to instrument. (e.g., Glycerin–code CG)
6. **Insert** . . . WS at the end of completed product code.

Coded order: 10-400SS-02T-CG-WS

WEKSLER®

Flush Mini-Diaphragm Seal Type 330 All Welded 1˝ Male NPT

- All welded metal construction, prevents leakage of process media
- Flush design eliminates pockets that could cause clogging or build-up of process media
- Diaphragm area easy to clean up
- Provided with a 1˝ MNPT process connection
- Compact size to fit space-restricted areas
- No gaskets or bolts
- For use on pressure gauges up to 3½˝ from vacuum to 1000 psi
- Top housing and diaphragm material 316L stainless steel
- ¼ & ½ NPT instrument connection
- Adds an additional 1% tolerance to the gauge



TYPE 330

SELECTION TABLES

Table A – Process Connection

Process Connection	Size	Code
Threaded – male NPT	1˝	08

Table B – Type

Description	Code
All welded flush mini-seal	330

Table C – Diaphragm Materials

Materials	Code
316L stainless steel	S

Table D – Instrument Connection

Instrument Connection	Size	Code
Threaded – female NPT	¼ NPT	02T
Threaded – female NPT	½ NPT	04T

Table E – Filling Fluid

Fill	Service	Connection to Instrument	Temperature Range °F	Code
Glycerin	Pressure	Direct Only	0/400	CG
Silicone	Pressure/Vacuum	Direct or Flexible Line	–40/600	CK
Halocarbon	Pressure/Vacuum in presence of strong oxidizing agent	Direct or Flexible Line	–70/300	CF
Syltherm	Pressure	Direct or Flexible Line	–40/750	HA

TO ORDER THIS TYPE 330 FLUSH MINI-SEAL ASSEMBLY:

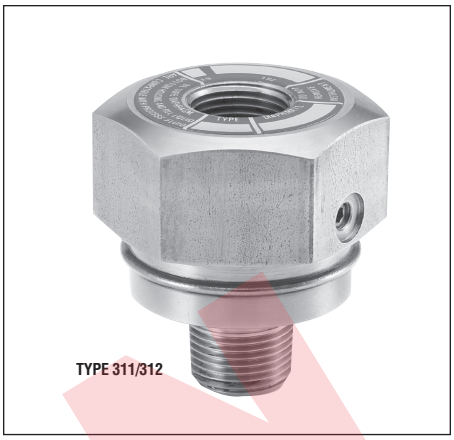
1. **From Table A**...select PROCESS CONNECTION SIZE (e.g., 08 for 1˝ male NPT)
2. **From Table B**...select TYPE (e.g., 330 for all welded flush mini-seal)
3. **From Table C**...select DIAPHRAGM MATERIAL (e.g., S for 316L stainless steel)
4. **Next**...insert X (Which indicates no lower housing)
5. **From Table D**...select INSTRUMENT CONNECTION SIZE (e.g., 02T for ¼˝ female NPT)
6. **From Table E**...select FILLING FLUID, if diaphragm seal will be attached to instrument (e.g., Glycerin – CG)
7. **Insert** . . . WS at the end of completed product code.

Coded order: 08-330-SX-02T-CG-WS

WEKSLER®

Midi-Diaphragm Seal
Type 311/312
All Welded

- All welded metal construction, prevents leakage of process media
- No gaskets or bolts
- For use on pressure gauges up to 3½″ from vacuum to 1000 psi and 4½″ gauges 100 psi to 1000 psi
- Top housing material 316L stainless steel standard
- Diaphragm materials in 316L stainless steel, hastelloy C and tantalum
- Bottom housing materials in 316L stainless steel and Hastelloy C
- ¼ NPT or ½ NPT female, ¼-½ NPT male process connections
- ¼ NPT or ½ NPT instrument connections
- Type 312 furnished with ⅛ NPT flushing connection
- Type 312 not available in male process connections


TYPE 311/312

SELECTION TABLES

Table A – Process Connection

Process Connection	Size	Code
Threaded – male NPT	¼	02
Threaded – male NPT	½	04
Threaded – male NPT	¾	06
Threaded – male NPT	1	08
Threaded – female NPT	¼	25
Threaded – female NPT	½	50

Table B – Type

Description	Code
All welded midi-seal	311
All welded midi-seal w/flushing connection	312

Table C – Diaphragm Materials

Materials	Code
316L stainless steel	S
Tantalum	U
Hastelloy C 276	H

Table D – Bottom Housing Materials

Materials	Code
316L stainless steel	S
Hastelloy C-276	H

Table E – Instrument Connection

Instrument Connection	Size	Code
Threaded – female NPT	¼ NPT	02T
Threaded – female NPT	½ NPT	04T

Table F – Filling Fluid

Fill	Service	Connection to Instrument	Temperature Range °F	Code
Glycerin	Pressure	Direct Only	0/400	CG
Silicone	Pressure/Vacuum	Direct or Flexible Line	–40/600	CK
Halocarbon	Pressure/Vacuum in presence of strong oxidizing agent	Direct or Flexible Line	–70/300	CF
Syltherm	Pressure	Direct or Flexible Line	–40/750	HA

TO ORDER THIS TYPE 311/312 MIDI-SEAL ASSEMBLY:

1. **From Table A**...select PROCESS CONNECTION SIZE (e.g., 50 for ½″ female NPT)
2. **From Table B**...select TYPE (e.g., 311 for all welded midi-seal)
3. **From Table C**...select DIAPHRAGM MATERIAL (e.g., U for Tantalum)
4. **From Table D**...select BOTTOM HOUSING MATERIAL (e.g., H for Hastelloy C)
5. **From Table E**...select INSTRUMENT CONNECTION SIZE (e.g., 02T for ¼″ female NPT)
6. **From Table F**...select FILLING FLUID, if diaphragm seal will be attached to instrument (e.g., Glycerin – CG)
7. **Insert** . . . WS at the end of completed product code.

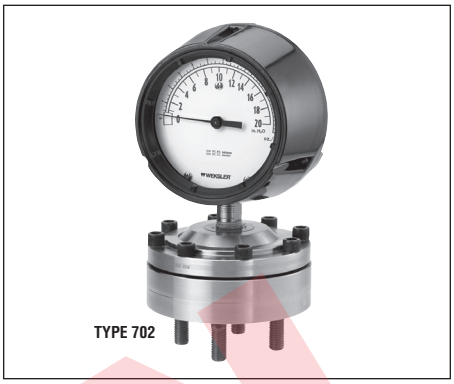
Coded order: 50-311-UH-02T-CG-WS

WEKSLER®

Instrument Isolator
Type 740, 741, 702, 703
High Displacement

- For pressure instruments ranging from 30˝ H_2O to 750 psi
- Used in instruments with large displacement actuators
- For applications requiring an impermeable metallic diaphragm
- Available in many material combinations
- Diaphragm electron beam welded to isolator body
- Furnished with fill/bleed connection


TYPE 740


TYPE 702

SELECTION TABLES

Table A – Process Connection/Type Number

Process Connection	Process Connection Size/Code – Inches[1][2] Size Code	¼ 25	½ 50	¾ 75	1 10	1½ 15	2 20	3 30	4 40	6 60	8 80	Type No.	Pressure Rating[1]
Threaded–female NPT		•	•	•	•							740	30 in.H_2O to 750 psi
Threaded–female NPT (with flushing connection)[2]		•	•	•	•							741	30 in.H_2O to 750 psi
												Type No.	Flange Rating
Raised Face Flange			•	•	•	•	•	•				702	150 to 600 class
Raised Face Flange (with flushing connection)[2]			•	•	•	•	•	•				703	150 to 600 class

(1) Per ASME B16.5.
(2) 741 and 703 seal supplied with ¼˝ flushing connection.

Table B
Diaphragm Materials[1]

Material	Code	Top Material
316L stainless steel	S	316L SS
Hastelloy B	G	316L SS
Hastelloy C 276	H	316L SS
Tantalum	U	316L SS
K-Monel	P	Monel 400
Titanium	TI	Titanium

(1) Diaphragms welded to top housing.

Table C
Bottom Housing Materials

Material	Code
Steel	C
316L stainless steel	S
Hastelloy B	G
Hastelloy C 276	H
Carpenter 20	D
Monel	M
Titanium	TI

Table D
Instrument Connection

Size – NPT	Code
¼	02T
½	04T

Table E – Filling Fluid

Filling	Service	Connection to Instrument	Temperature Range °F	Code
Glycerin[1]	Pressure	Direct Only	0/400	CG
Silicone	Pressure/Vacuum	Direct or Flexible Line	–40/600	CK
Halocarbon[2]	Pressure/Vacuum in presence of strong oxidizing agents	Direct or Flexible Line	–70/300	CF
Syltherm	Pressure/Vacuum	Direct or Flexible Line	–40/750	HA

(1) Glycerin not recommended for vacuum, compound or inches of water ranges.
(2) Halocarbon required on applications involving strong oxidizing agents.

TO ORDER THIS TYPE 740 DIAPHRAGM SEAL:

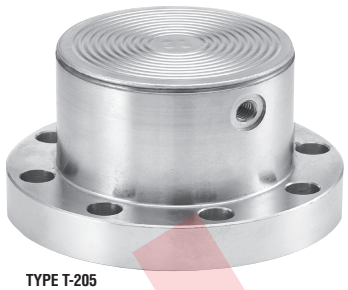
1. **From Table A**...select TYPE NUMBER and process connection size (e.g., ¼˝ process–code 50-740)
2. **From Table B**...select DIAPHRAGM MATERIAL. (e.g., Tantalum–code U)
3. **From Table C**...select BOTTOM HOUSING MATERIAL. (e.g., Hastelloy C 276–code H)
4. **From Table D**...select INSTRUMENT CONNECTION size. (e.g., ½ NPT–code 04T)
5. **From Table E**...select FILLING FLUID, if diaphragm seal will be attached to instrument. (e.g., Halocarbon–code CF)
6. **Insert** . . . WS at the end of completed product code.

Coded order: 50-740-UH-04T-CF-WS

WEKSLER®

M&G Replacement Saddle T-205 3˝ and 4˝ and Larger Flange Extended, All Welded

- Weksler® replacement assembles directly into M&G lower housings that are welded in existing piping systems
- All welded metal construction
- For use on pressure gauges up to 4½˝ from vac. to 2500 psi
- Top housing material 316L stainless steel standard
- Diaphragm materials in 316L stainless steel, Hastelloy C and tatalum
- Continuous-duty design will prevent loss of process fluid if pressure instrument is removed or fails
- ¼ or ½ NPT instrument connections
- Adds an additional ½% tolerance to the gauge



TYPE T-205

SELECTION TABLES

Table A – Process Connection

Process Connection	Size	Code
	3˝	30
	4˝ & larger	40

Table B – Type

Description	Code
M&G replacement saddle	205

Table C – Diaphragm Materials

Materials	Code
316L stainless steel	S
Tantalum	U
Hastelloy C-276	H

Table D – Bottom Housing Materials

Materials	Code
Non Required	X

Table F – Instrument Connection

Instrument Connection	Size	Code
Threaded – female NPT	¼	02T
Threaded – female NPT	½	04T

TO ORDER THIS TYPE M&G REPLACEMENT SADDLE T-205 ASSEMBLY:

1. **From Table A**...select PROCESS CONNECTION SIZE (e.g., 30 for 3˝ size)
2. **From Table B**...select TYPE (e.g., 205 for M&G replacement top housing assembly)
3. **From Table C**...select DIAPHRAGM MATERIAL (e.g., S for 316L stainless steel)
4. **From Table D**...insert (X) which indicates no lower housing
5. **From Table E**...select INSTRUMENT CONNECTION SIZE (e.g., 02T for ¼˝ female NPT)
6. **Insert (#2584) on the suffix**
7. **Insert** . . . WS at the end of completed product code.

Coded order: 30-205-X-02T-#2584-WS

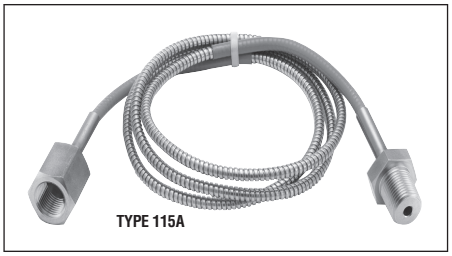
WEKSLER®

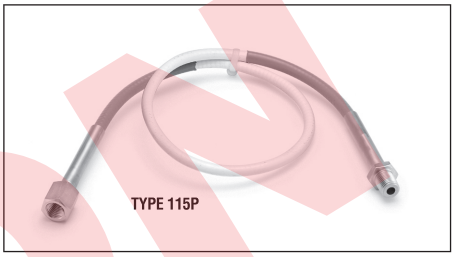
Line Assemblies
Type 1115A/1115P
All Welded

Weksler® line assemblies are offered in a wide variety of configurations to suit all of your applications. Our standard assembly is in an all welded design of 300 series stainless components. The capillary is 304 stainless steel with an O.D. of 125 x .062 I.D. A spiral wound armor shields the assembly.

1/4″ or 1/2″ male or female connections are available. Other connections available upon request. PVC jacketed line assemblies are also available.

- All welded construction
- Type 1115A is our standard stainless steel armored capillary
- Type 1115P stainless steel armored capillary, with the addition of PVC sheathing for maximum corrosion resistance
- The assemblies have standard line lengths of five feet in increments of five feet
- Line lengths in one foot increments are available with one foot being the minimum allowed, 150 feet being the maximum


TYPE 115A


TYPE 115P

SELECTION TABLES

Table A – Process Connection

Process Connection	Size	Code
Threaded – male NPT	1/4	02
Threaded – male NPT	1/2	04
Threaded – female NPT	1/4	25
Threaded – female NPT	1/2	50

Table B – Type

Description	Code
Stainless steel armored capillary	1115A
Stainless steel armored capillary w/PVC sheathing	1115P

Table C – Instrument Connection

Instrument Connection	Size	Code
Threaded – male NPT	1/4	02
Threaded – male NPT	1/2	04
Threaded – female NPT	1/4	25
Threaded – female NPT	1/2	50

Table D – Example Lengths

Example Lengths	Feet	Code
Increments of	1	001
Increments of	5	005
Increments of	25	025
Increments of	100	100

TO ORDER THIS TYPE 1115 LINE ASSEMBLY:

1. **From Table A**...select PROCESS CONNECTION SIZE (e.g., 02 for 1/4″ male NPT)
2. **From Table B**...select TYPE (e.g., 1115A for stainless steel armored)
3. **From Table C**...select INSTRUMENT CONNECTION SIZE (e.g., 25 for 1/4″ female NPT)
4. **From Table D**...determine DESIRED LENGTH (e.g., 005 for five foot long assembly)
5. **Insert** . . . WS at the end of completed product code.

Coded order: 02-1115A-25-005-WS

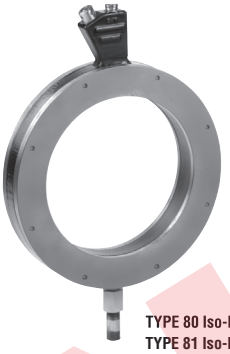
WEKSLER®

Iso-Ring, Iso-Spool
Types 80/81/85/86

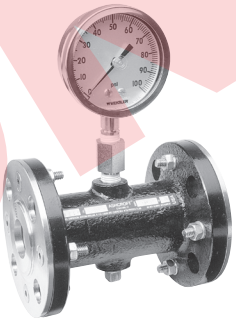
With the Weksler® Isolation Ring, the instrument is in contact with the fill fluid, not directly with the process flow. Clogging or fouling is never a problem. The Iso-Ring has a flexible inner cylinder, behind which is the fill fluid. As process liquid flows through the pipe, it exerts pressure. The pressure exerted by the fill fluid is then monitored by the instrument-sensing element. A 360-degree flexible cylinder means no plugging, assuring reliable and accurate pressure readings. A built-in threaded needle valve is provided as standard. This permits the removal of a pressure instrument for calibration, repair, or replacement without shutting down the process flow.

Adaptable to a variety of process conditions and applications, the Weksler Iso-Ring can be used for protection of instrumentation such as pressure gauges, switches, transmitters, recorders and transducers. The Iso-Ring fits between customer-supplied piping flanges like many butterfly valves, and is available for piping diameters from 2″ to 20″. It can be used at any pressure within the limitations of ASME classes 150 and 300, and even in most vacuum applications.

Weksler® Type 85 and 86 Iso-Spools are used for small-diameter piping. Designed to provide a large sensing area in the smaller pipe diameters from 1″ to 2″, the patented Iso-Spool is offered in either NPT threaded or flanged models. Type 86 is available with flat or raised-face flanges.



TYPE 80 Iso-Ring (Wafer)
TYPE 81 Iso-Ring (Bolt Thru)



TYPE 86 Iso-Spool (Flanged)

TYPE 85 Iso-Spool (Threaded)

SELECTION TABLES

Table A – Pipe Size/Type Number

Size Code	Pipe Size/Code—Inches														Type Number	Housing Material
	1	1½	2	3	4	5	6	8	10	12	14	16	18	20		
	01	15	02	03	04	05	06	08	10	12	14	16	18	20		
			•	•	•	•	•	•	•	•	•	•	•	•	80	Carbon Steel
	•	•													85(1)	
	•	•	•												86(2)	
			•	•	•	•	•	•	•						81	

Table B
Inner Flexible Wall(5)

Material	Code	Temp. Limits
Buna N	E	up to 225°F (107°)
Teflon(3)	T	up to 350°F (177°)
Silicone(4)	SI	up to 450°F (232°)
Viton	Y	up to 350°F (177°)
White Neoprene	CR	up to 225°F (107°)
Natural Rubber	NR	up to 225°F (107°

Table C
Assembly Flanges

Material	Code
Carbon steel	B
316 stainless steel	S
Chlorinated Polyvinyl Chloride	CP
Teflon Enveloped	CT
Polypropylene	PP

Table D
Instrument Connection

Size – NPT	Code
¼	02T
½	04T

NOTES:
(1) Female threaded ends.
(2) Flanged ends.
(3) Not available in sizes 12″ or larger.
(4) Iso-Spool only.
(5) Temperature limits of both wall and fill fluid must not be exceeded.

Table E – Filling Fluid

Filling	Service	Connection to Instrument	Temperature Range °F	Code
Glycerin	Pressure	Direct Only	0/400	CG
Silicone	Pressure/Vacuum	Direct or Flexible Line	–40/600	CK
Halocarbon	Pressure/Vacuum in presence of strong oxidizing agent	Direct or Flexible Line	–70/300	CF
Syltherm	Pressure/Vacuum	Direct or Flexible Line	–40/750	HA

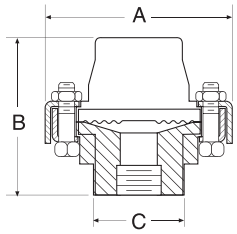
TO ORDER THIS ISO-RING/ISO-SPOOL:

1. **From Table A**...select TYPE NUMBER based on Type number and pipe size (e.g., Type 80/6″–code-8006)
2. **From Table B**...select INNER FLEXIBLE WALL (e.g., Buna N–code E)
3. **From Table C**...select ASSEMBLY FLANGE MATERIAL. (e.g., AISI 316 stainless steel–code S)
4. **From Table D**...select INSTRUMENT CONNECTION size. (e.g., ¼ NPT–code 02T)
5. **From Table E**...select FILLING FLUID, if Iso-Ring/Spool will be attached to instrument. (e.g., Glycerin–code CG)
6. **Insert** . . . WS at the end of completed product code.
   Coded order: 8006-ES-02T-CG-WS

WEKSLER®

Diaphragm Seal Dimensions

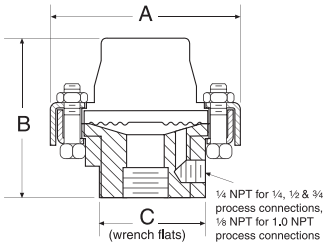
Types 100, 200, 300, 400



Types 100, 200, 300, 400 – Threaded ¼, ½, ¾, 1 NPT

A		B		C	
in	mm	in	mm	in	mm
3¾	(95)	2⅞	(73)	1 13/16	(46)

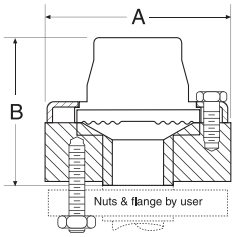
Types 101, 201, 301,401



Types 101, 201, 301, 401 – Threaded ¼, ½, ¾, 1 NPT with flushing connection

A		B		C	
in	mm	in	mm	in	mm
3¾	(95)	2⅞	(73)	1 13/16	(46)

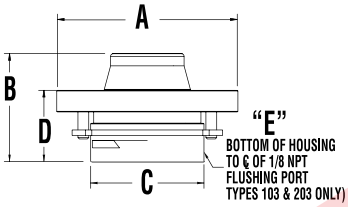
Types 102, 202, 302



Types 102, 202, 302 – Flanged ½˝, ¾˝

Flange Size	Rating #	A in	A mm	B in	B mm
	150	3½	(89)	2 15/16	(75)
½˝	300 or 600	3¾	(95)	3	(76)
	900 or 1500	4¾	(121)	3 3/16	(81)
	150	3⅞	(98)	2 13/16	(71)
¾˝	300 or 600	4⅝	(117)	3	(76)
	900 or 1500	5⅛	(130)	3 3/16	(81)

Types 102, 202, 103, 203

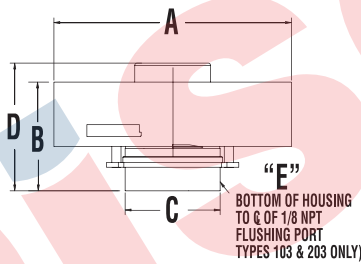


Types 102, 202, 103, 203 – Flanged 1˝ (raised face only) (1 piece bottom housing) with and without flushing connection

Flange Size	Rating #	A in.	A mm	B in.	B mm	C in.	C mm
1	150 300 or 600	4-1/4 5	(100) (127)	2-9/16	(65)	1-23/32	(69)

Flange Size	Rating #	D in.	D mm	103 & 203 only E in.	E mm
1	150 300 or 600	1-5/8	(41)	3/8	(9)

Types 102, 202, 103, 203

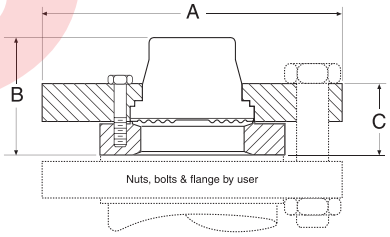


Types 102, 202, 103, 203 – Flanged 1˝ (raised face only) (1 piece bottom housing) with and without flushing connection

Flange Size	Rating #	A in.	A mm	B in.	B mm	C in.	C mm
1	900 or 1500 2500	5-7/8 6-1/4	(149) (159)	2-7/8	(73)	2-1/4	(57)

Flange Size	Rating #	D in.	D mm	103 & 203 only E in.	E mm
1	900 or 1500 2500	3-3/8	(86)	3/8	(9)

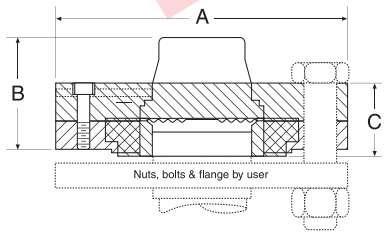
Types 102, 202, 302



Types 102, 202, 302 – Flanged (one piece bottom housing) – 1˝, 2˝, 3˝ (raised face only) – all materials except PVC, Teflon and Kynar.

Flange Size	Rating #	A in	A mm	B in	B mm	C in	C mm
	150	5	(127)			1½	(38)
1˝	300 or 600	6¼	(159)	2⅜	(61)	1½	(38)
	900 or 1500	7	(178)			1½	(38)
	150	6	(152)			1⅜	(35)
2˝	300 or 600	6½	(165)	1 15/16	(49)	1½	(38)
	900 or 1500	8½	(216)			2⅛	(54)
	150	7½	(191)	2	(51)	1⅝	(41)
3˝	300 or 600	8¼	(206)	2 1/16	(52)	1⅞	(47)
	900 or 1500	10½	(267)	2 11/16	(68)	3¼	(82)

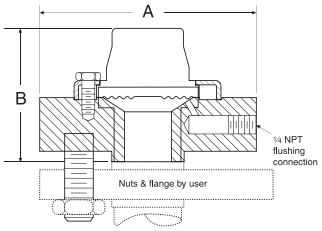
Types 102, 202, 302



Types 102, 202, 302 – Flanged (raised face only) (two piece bottom housing) – 1½˝ , 2˝ – PVC, Teflon and Kynar

Flange Size	Rating #	A in	A mm	B in	B mm	C in	C mm
1˝	150	4¼	(100)	2 3/16	(56)	1⅜	(35)
1½˝	150	5	(127)	2 5/16	(59)	1 13/32	(39)
2˝	150	6	(152)	2⅛	(54)	1 9/16	(40)

Types 103, 203, 303



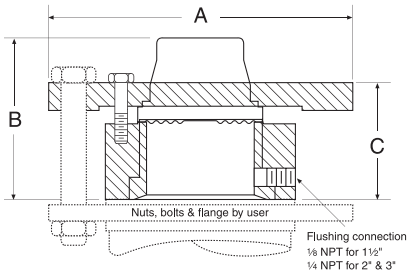
Types 103, 203, 303 – Flanged ½˝, ¾˝ with flushing connection

Flange Size	Rating #	A in	A mm	B in	B mm
	150	3½	(89)	2 15/16	(75)
½˝	300 or 600	3¾	(95)	3	(76)
	900 or 1500	4¾	(121)	3 3/16	(81)
	150	3⅞	(98)	2 13/16	(71)
¾˝	300 or 600	4⅝	(117)	3	(76)
	900 or 1500	5⅛	(130)	3 3/16	(81)

WEKSLER®

Diaphragm Seal Dimensions

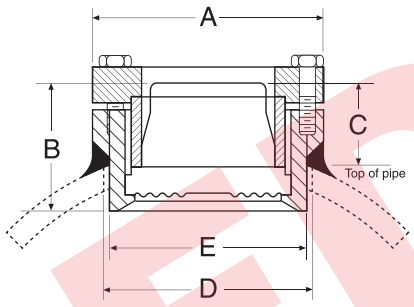
Types 103, 203, 303



Types 103, 203, 303 – Flanged 1½, 2˝, 3˝ (raised face only) (one piece bottom housing with flushing connection)

Size	Flange Rating #	A in	A mm	B in	B mm	C in	C mm
1½˝	150	5	(127)	3	(76)	2 1/16	(52)
	300 or 600	6¼	(159)				
	900 or 1500	7	(178)				
2˝	150	6	(152)	3 11/32	(84)	2⅜	(60)
	300 or 600	6½	(165)				
	900 or 1500	8½	(215)				
3˝	150	7½	(191)	3 3/32	(79)	2 7/32	(56)
	300 or 600	8¼	(210)	3 5/16	(81)	2 7/32	(57)
	900	9½	(241)	3 23/32	(94)	2¾	(70)
	1500	10½	(267)				

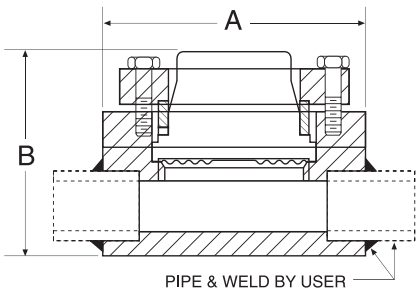
Types 105, 205



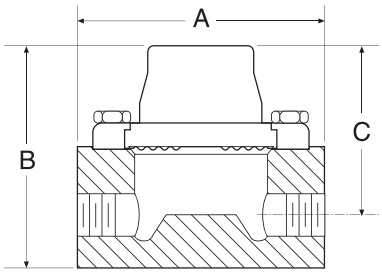
Types 105, 205 – Saddle – 4˝ Pipe only

A in	A mm	B in	B mm	C in	C mm	D in	D mm	E in	E mm
3½	(89)	1 15/16	(50)	1 3/16	(31)	3	(76)	2 31/32	(75)

Types 107, 207



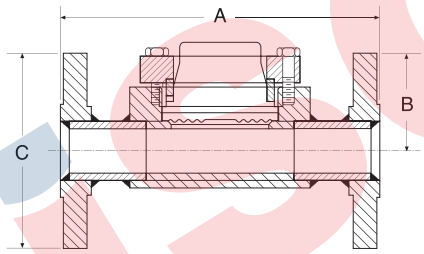
Types 104, 204, 304



Types 104, 204, 304 – In-Line Threaded ¼, ½, ¾, 1 NPT

Process Connection	A in	A mm	B in	B mm	C in	C mm
¼ NPT	4	(102)	2 5/8	(67)	2⅛	(54)
½ NPT			3⅝	(92)	2¾	(70)
¾ NPT			3⅞	(98)	3	(76)
1 NPT			3⅞	(98)	3	(76)

Types 106, 206



Types 106, 206 – In-Line Flanged – ½˝, 1˝, 1½˝, 2˝, 3˝

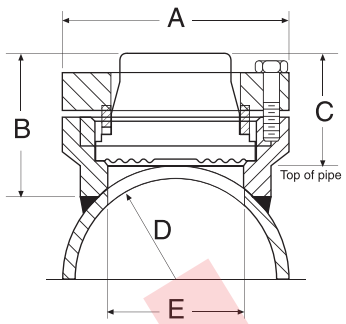
Size	Flange Rating #	A in	A mm	B in	B mm	C in	C mm
½˝	150	7	(178)	2 7/16	(62)	3½	(89)
	300	7	(178)			3⅞	(98)
1˝	150	7	(178)	2 7/16	(62)	4¼	(108)
	300	8	(203)			4⅞	(123)
1½˝	150	8	(203)	2 11/16	(68)	5	(127)
	300	9	(229)			6⅛	(155)
2˝	150	9	(229)	2 15/16	(75)	6	(152)
	300	10	(254)			6½	(165)
3˝	150	11	(279)	3⅝	(92)	7½	(229)
	300	12	(305)			8¼	(254)

Types 107, 207

Types 107, 207 – In-Line Welded – ¼˝, ½˝, ¾˝, 1˝, 1½˝, 2˝

Pipe Size	A in	A mm	B in	B mm
¼˝	4	(102)	2 11/32	(60)
½˝, ¾˝			2 11/32	(60)
1˝			2 15/32	(63)
1½˝			2 23/32	(69)
2˝			2 31/32	(75)

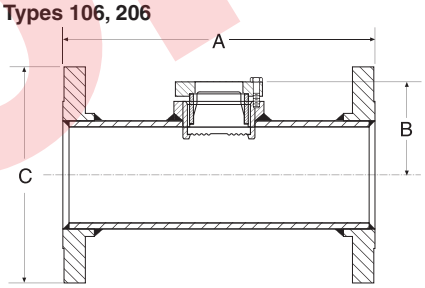
Types 105, 205



Types 105, 205 – Saddle – 3˝ Pipe only

A in	A mm	B in	B mm	C in	C mm	D in	D mm	E in	E mm
3½	(89)	2¼	(57)	1⅞	(48)	1¾	(44)	2⅛	(54)

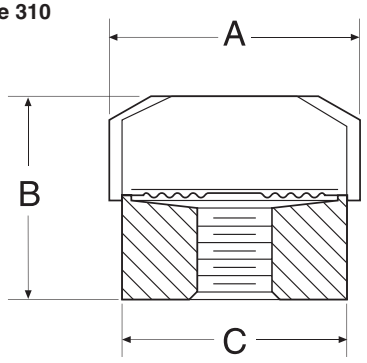
Types 106, 206



Types 106, 206 – In-Line Flanged – 4˝, 6˝, 8˝

Size	Flange Rating #	A in	A mm	B in	B mm	C in	C mm
4˝	150	13	(330)	3⅜	(86)	9	(229)
	300	14	(356)			10	(254)
6˝	150	16	(406)	4 7/16	(113)	11	(279)
	300	17	(432)			12½	(318)
8˝	150	16	(406)	5 1/16	(138)	13½	(343)

Type 310



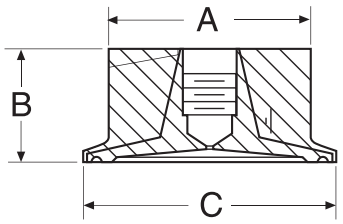
Type 310 Mini-seal – Threaded – ¼, ½ NPT

A in	A mm	B in	B mm	C in	C mm
1½	(38)	1 3/16	(30)	1 11/32	(34)

WEKSLER®

Diaphragm Seal Dimensions

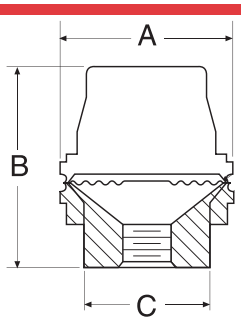
Type 320



Type 320 Quick Connect – ¼, ½ NPT

Size*	A		B		C	
	in	mm	in	mm	in	mm
1½˝	1²¹⁄₃₂	(42)	⅞	(22)	2	(50)
2˝	2	(51)	1⅛	(29)	2½	(63)

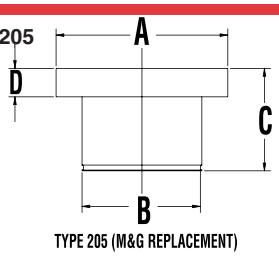
Type 500 All Welded



Type 500 All Welded – ¼, ½, ¾, 1 NPT

A		B		C	
in	mm	in	mm	in	mm
2½˝	(63)	2⅞	(73)	1¹³⁄₁₆	(46)

Type 205

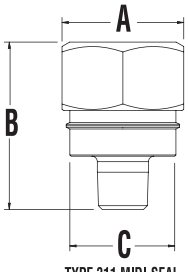


TYPE 205 (M&G REPLACEMENT)

Type 205 M&G Replacement Saddle 3˝ (4˝ and Larger)

Size*	A		B		C		D	
	in	mm	in	mm	in	mm	in	mm
3˝	3.44	(87)	2.44	(62)	1.35	(34)	0.57	(14)
4˝					2.05	(52)		

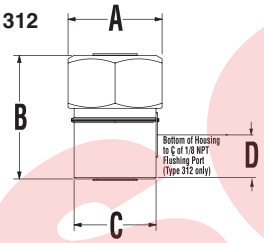
Type 311



Type 311 Midi-Seal – Male NPT Process Connection

Size	Code	A		B		C	
		in	mm	in	mm	in	mm
¼ ½ ¾ 1	02 04 06 08	2	(51)	1⅜	(35)	1¾	(44)

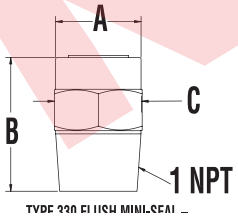
Types 311 & 312



Types 311 & 312 – Female NPT Process Connection

A		B		C		D	
in	mm	in	mm	in	mm	in	mm
2.00	(51)	2.65	(67)	1.75	(44)	0.94	(24)

Type 330

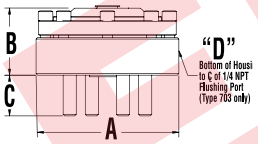


TYPE 330 FLUSH MINI-SEAL

Type 330 Flush Mini-Seal – Threaded ¼˝ & ½˝ Instrument Connection

A		B		C	
in	mm	in	mm	in	mm
2½˝	(63)	2⅞	(73)	1¹³⁄₁₆	(46)

Types 702, 703*



*with flushing connection

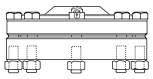
Types 702, 703 – Flanged – ½˝ through 3˝

Rating #	150#						703 Only, All Sizes	
Size	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
1/2˝	5-5/16	(135)	2-9/16	(65)	1-15/32	(37)	1-1/16	(27)
3/4˝	5-5/16	(135)	2-9/16	(65)	1-15/32	(37)	1-1/16	(27)
1˝	5-5/16	(135)	2-1/2	(64)	1-15/32	(37)	1	(25)
1-1/2˝	5-5/16	(135)	2-1/2	(64)	1-15/32	(37)	1	(25)
2˝	6	(152)	2-5/8	(67)	2-1/16	(52)	1-1/8	(29)
2-1/2˝	7-1/2	(191)	2-1/2	(64)	2-1/16	(52)	1	(25)
3˝	7-1/2	(191)	2-3/8	(60)	2-1/16	(52)	1-1/16	(27)

Rating #	300#						703 Only, All Sizes	
Size	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
1/2˝	5-5/16	(135)	2-9/16	(65)	1-15/32	(37)	1-1/16	(27)
3/4˝	5-5/16	(135)	2-3/4	(70)	2-1/16	(52)	1-1/16	(27)
1˝	5-5/16	(135)	2-3/4	(70)	2-1/16	(52)	1	(25)
1-1/2˝	6-1/2	(165)	2-3/4	(70)	2-11/16	(68)	1	(25)
2˝	6-1/2	(165)	2-5/8	(67)	2-1/16	(52)	1-1/8	(29)
2-1/2˝	7-1/2	(191)	2-5/8	(67)	2-11/16	(68)	1	(25)
3˝	8-1/2	(216)	2-5/8	(67)	2-11/16	(68)	1-1/16	(27)

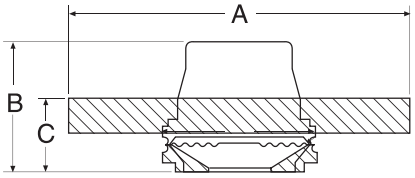
Rating #	600#						703 Only, All Sizes	
Size	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
1/2˝	5-5/16	(135)	2-3/4	(70)	1-15/32	(37)	1-1/16	(27)
3/4˝	5-5/16	(135)	2-3/4	(70)	1-15/32	(37)	1-1/16	(27)
1˝	5-5/16	(135)	2-3/4	(70)	1-15/32	(37)	1	(25)
1-1/2˝	6-1/2	(165)	2-3/4	(70)	1-15/32	(37)	1	(25)
2˝	6-1/2	(165)	2-5/8	(67)	2-1/16	(52)	1-1/8	(29)
2-1/2˝	7-1/2	(191)	2-5/8	(67)	2-1/16	(52)	1	(25)
3˝	8-1/2	(216)	2-5/8	(67)	2-1/16	(52)	1-1/16	(27)

Types 740, 741



Types 740, 741 – High Displacement – Threaded – ¼˝, ½˝, ¾˝, 1˝, 1½˝

Types 402, 403



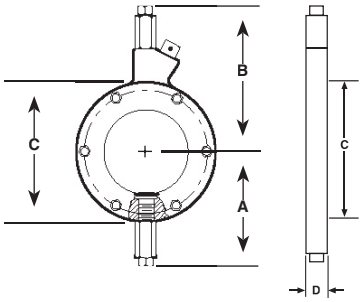
Types 402, 403 Raised Face – Flanged – 1˝, 1½˝, 2˝

Flange		Type 402						Type 403					
		A		B		C		A		B		C	
Size	Rating (#)	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
1˝	150	4¼	(108)	2⅛	(54)	1³⁄₁₆	(30)	4¼	(108)	2⅞	(73)	1¹⁵⁄₁₆	(49)
	300 or 600	5	(127)			1¼	(32)	5	(127)			2	(51)
	900 or 1500	6	(152)			1¼	(32)	6	(152)			2	(51)
1½˝	150	5	(127)	2⁷⁄₁₆	(62)	2⁷⁄₁₆	(62)	5	(127)	2¹⁵⁄₁₆	(75)	1⅞	(48)
	300 or 600	6¼	(159)					6¼	(159)				
	900 or 1500	7	(178)					7	(178)				
2˝	150	6	(152)	2¹⁵⁄₃₂	(63)	2¹⁵⁄₃₂	(63)	6	(152)	2¹⁵⁄₁₆	(75)	2³⁄₁₆	(56)
	300 or 600	6½	(165)					6½	(165)				
	900 or 1500	8½	(216)					8½	(216)				

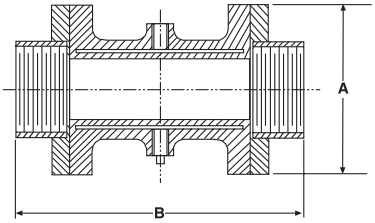
WEKSLER®

Diaphragm Seal Dimensions

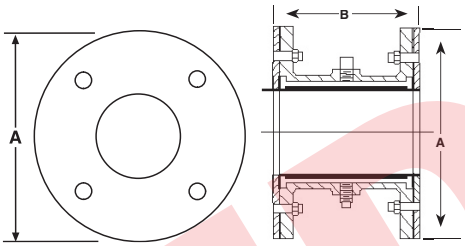
Type 80 Iso-Ring – 2″-20″



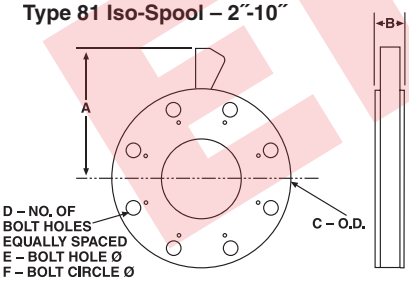
Type 85 Iso-Spool – 1″, 1½″



Type 86 Iso-Spool – 1″, 1½″, 2″



Type 81 Iso-Spool – 2″-10″



Dimensions: Table A[1]

Type	Nominal Pipe Size	A	B	C	D		Approximate Shipping Weight
					Chlorinated PVC Thickness	Carbon Steel/ 316SS Thickness	
Type 800 Iso-Ring*	2″	3.69″ (94mm)	5.22″ (133mm)	4.22″ (107mm)	2.25″ (57mm)	2.00″ (51mm)	3 lbs (1.35kg)
	3″	4.31″ (110mm)	5.84″ (148mm)	5.47″ (139mm)	2.25″ (57mm)	2.00″ (51mm)	6 lbs (2.7kg)
	4″	4.72″ (120mm)	6.25″ (159mm)	6.28″ (160mm)	1.75″ (44mm)	1.50″ (38mm)	8 lbs (3.6kg)
	5″	5.34″ (147mm)	6.88″ (187mm)	7.56″ (214mm)	1.75″ (44mm)	1.50″ (38mm)	10 lbs (4.5kg)
	6″	5.78″ (147mm)	7.34″ (187mm)	8.44″ (214mm)	1.75″ (44mm)	1.50″ (38mm)	12 lbs (5.4kg)
	8″	6.84″ (174mm)	8.38″ (213mm)	10.53″ (267mm)	1.75″ (44mm)	1.50″ (38mm)	16 lbs (7.3kg)
	10″	7.97″ (202mm)	9.53″ (242mm)	12.81″ (325mm)	1.75″ (44mm)	1.50″ (38mm)	20 lbs (9.7kg)
	12″	9.00″ (229mm)	10.53″ (267mm)	14.84″ (377mm)	N/A	1.75″ (44mm)	25 lbs (11.4kg)
	14″	10.16″ (258mm)	11.72″ (298mm)	17.20″ (437mm)	N/A	1.75″ (44mm)	50 lbs (22.7kg)
	16″	11.19″ (284mm)	12.72″ (323mm)	19.22″ (488mm)	N/A	1.75″ (44mm)	60 lbs (27.2kg)
	18″	12.31″ (313mm)	13.88″ (352mm)	21.50″ (546mm)	N/A	1.75″ (44mm)	70 lbs (31.8kg)
	20″	13.25″ (337mm)	14.78″ (375mm)	23.34″ (593mm)	N/A	1.75″ (44mm)	80 lbs (36.3kg)
Type 850 Iso-Spool (Female Threaded)	1″	3.56″ (90mm)	7.63″ (194mm)				10 lbs (4.5kg)
	1½″	4.38″ (111mm)	7.88″ (200mm)				12 lbs (5.4kg)
		Class 150	Class 300				Class 150 / Class 300
Type 860 Iso-Spool (Flanged**)	1″	4.25″ (108mm)	4.88″ (124mm)	5.38″ (136mm)			8 lbs (3.6kg) / 8 lbs (3.6kg)
	1½″	5″ (127mm)	6.13″ (156mm)	5.38″ (136mm)			10 lbs (4.5kg) / 12 lbs (5.4kg)
	2″	6″ (152mm)	–	5.38″ (136mm)			15 lbs (6.8kg) /

*Centering gages supplied with Iso-Ring.
**Specify FF (Flat Face Flange) or RF (Raised Face Flange) when ordering.
(1) All dimensions ±.12″ (3mm).

Dimensions: Table B

Type	Nominal Pipe Size	A	B	B (w/CPVC End Flanges	C	D	E	F
Type 810 Iso-Spool	2″	5.06″ (129mm)	2.00″ (51mm)	2.25″ (57mm)	6.00″ (152mm)	4	.75″ (19mm)	4.75″ (121mm)
	3″	5.81″ (148mm)	2.00″ (51mm)	2.25″ (57mm)	7.50″ (191mm)	4	.75″ (19mm)	6.00″ (152mm)
	4″	6.56″ (167mm)	1.50″ (38mm)	1.75″ (44mm)	9.00″ (229mm)	8	.75″ (19mm)	7.50″ (191mm)
	6″	7.56″ (192mm)	1.50″ (38mm)	1.75″ (44mm)	13.00″ (330mm)	8	.88″ (22mm)	9.50″ (241mm)
	8″	8.75″ (222mm)	1.50″ (38mm)	1.75″ (44mm)	13.50″ (343mm)	8	.88″ (22mm)	11.75″ (298mm)
	10″	10.00″ (254mm)	1.50″ (38mm)	1.75″ (44mm)	16.00″ (406mm)	12	1.00″ (25mm)	14.25″ (362mm)

Specifications: Table C

	Iso-Ring	Iso-Spool	Code
Housing	Carbon Steel	Carbon Steel	
Assembly Flanges	Carbon Steel	Carbon Steel	B
	316 StainlessSteel	316 Stainless Steel	S
	Chlorinated Polyvinyl Chloride[2]	Chlorinated Polyvinyl Chloride	CP
		Teflon Encased[1,3]	CT
Inner Flexible Wall[4]	Buna N . . . . . up to 225°F (107°C)		E
	Teflon[1,2] . . . . . up to 350°F (177°C)		T
	Silicone[3] . . . . . up to 450°F (232°C)		SI
	Viton[1] . . . . . up to 350°F (177°C)		Y
	White Neoprene . . . . . up to 225°F (107°C)		CR
	Natural Rubber . . . . . up to 212°F (100°C)		NR
Fill Fluid[4]	Glycerin . . . . . 0°F to 400°F (–5°C to 204°C)		CG
	Silicone . . . . . –40°F to 600°F (–29°C to 316°C)		CK
	Halocarbon . . . . . –70°F to 300°F (–29°C to 149°C)		CF
	Food Grade Silicone . . . . . 0°F to 300°F (–5°C to 149°C)		CZ
	Distilled Water . . . . . 45°F to 180°F (– °C to °C)		FJ
	Ethyl Glycol and Water . . . . . –30°F to 220°F (– °C to °C)		CT
	Propylene Glycol . . . . . –50°F to 200°F (– °C to °C)		CV

(1) Trademark of E. I. DuPont de Nemours and Company.
(2) Not available in sizes 12″ or larger .
(3) Iso-Spool only.
(4) Temperature limits of both wall and fill fluid must not be exceeded.

WEKSLER®

Diaphragm Seals
Options all Types

Optional Features	Code
316 stainless steel top housing	YT
Stainless steel clamp rings and flanged ring – includes 300 stainless steel clamping bolts (1500 psi max) – see note 1.	SE
300 series stainless steel clamping bolts (maximum pressure is 1500 psi) – see note 1.	SB
Pipe plugs for flushing connections – pipe plugs are available in the same materials as bottom housings per Table C – see pages 64-66	PU
5000 psi pressure rating – (Type 100/200 only) threaded inlet only, no flushing connection (metal diaphragm only) 7500 psi pressure rating (T-400)	HP
Welded instrument to diaphragm seal	DU
Dual flushing connections (1/2 NPT) (Limited to 2˝ thru 3˝ flanged seals	DB
Ring joint	RJ
Flat face	FF
No Teflon gasket. Special matching on bottom housing (2)	NX
Clean for gaseous oxygen or strong oxidizing agent applications (3)	6B
For accessories – see pages 166-175	—

Note (1) Stainless steel clamping bolts not available for 1˝ and larger 102, 202, 302, 103, 203, 303 flanged seals. Bolts supplied are for shipping purposes only.

Multiple Instruments Attached to Diaphragm Seals

Code	Description
XH3	02L Gauge Connection, 1/4 NPT Transducer, 02T Seal Connection
XH5	04L Gauge Connection, 1/2 NPT Switch, 02T Seal Connection
XH6	04L Gauge Connection, (2) 1/2 NPT Switches, 02T Seal Connection
XH7	02L Gauge Connection, 1/4 NPT Female Switch, 02T Seal Connection
XH8	02L Gauge Connection, (2) 1/4 NPT Instruments, 02T Seal Connection
XH9	02L Gauge Connection, 1/2 NPT Female Switch, 04T Seal Connection
XL3	02L Gauge Connection, 1/4 NPT Female Switch, 02T Seal Connection, 1/4 NPT Snubber (separate line item)

BIMETAL THERMOMETERS

WEKSLER®

RANGE

The maximum operating pressure should not exceed 75% of the full-scale range. The normal operating range should be in the middle half of the range (between 25% and 75% of the full-scale range); whenever possible.

DIAL SIZE

Select a dial size that allows you to comfortably read the dial from the normal distance when installed.

ACCURACY

All Weksler BiMetal Thermometers have an accuracy of ± 1% of the full-scale range. For accurate readings stem must be immersed at least 2 inches in liquids and 4 inches in gases.

UNDER/OVER RANGE PROTECTION

Temporary exposure to temperatures under or over 50% of the full-scale range will not impair accuracy (up to 500°F or 260°C maximum).

CASE ASSEMBLY

The case, bezel, stem and fittings are stainless steel (300 series). The head assembly is sealed to exclude dirt, dust and moisture on 3˝ and 5˝ dial sizes, all joints are welded.

DIALS

Dials are white with clear black graduations and numerals and are easy to read.

FACE

A gasketed glass window is standard on 3˝ and 5˝ dial sizes. Where breakage is a concern, a plastic or shatterproof glass window is optional at extra cost. On 1˝ and 2˝ dial sizes a plastic window is standard (no options available). Plastic windows are not suitable where head temperature exceeds 150°F (65°C).

EXTERNAL ADJUSTMENT

An external adjustment at the rear of the 3˝ and 5˝ case permits adjustment at a specific point or pointer repositioning during calibration check.

VIBRATION AND SHOCK

If present, use of either a heavy duty bimetal, MIL SPEC Bimetal or a remote mounted gas actuated thermometer is recommended.

HIGH PRESSURE OR CORROSIVE APPLICATIONS

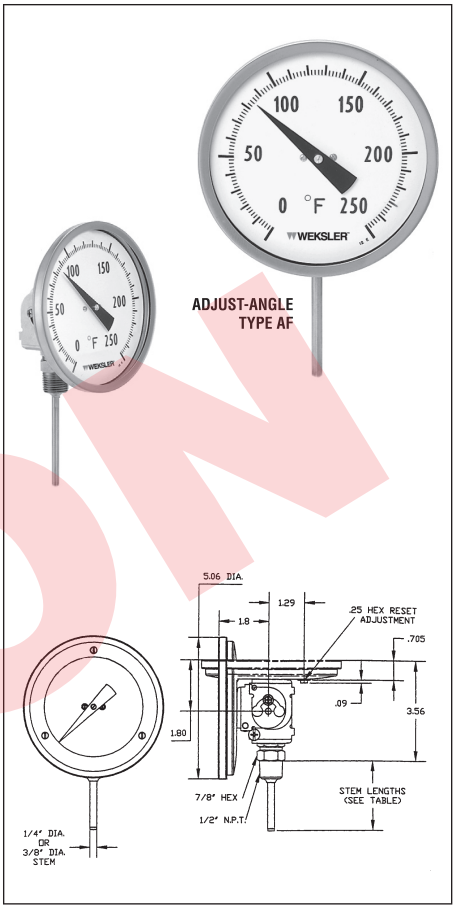
In these applications, use of a separable thermowell is recommended. In addition to protecting the thermometer, thermowells facilitate removal of the thermometer without having to shut down the system.

WEKSLER®

Adjustable Angle Type

STANDARD RANGES

- All Stainless Steel Construction
- External Recalibration Adjustment
- White dial with black markings
- Accurate to ±1% of Scale Range
- Gasketed Glass Face
- Case is sealed to exclude dirt, dust and moisture
- 3″ and 5″ dial sizes
- Angularly adjustable frame permits positioning of dial to accommodate viewing requirements



	5″ DIAL SIZE CATALOG NUMBERS[1]	
STEM LENGTH	FIXED THREAD	UNION CONNECTED
2½″	AF02	AU02
4″	AF04	AU04
6″	AF06	AU06
9″	AF09	AU09
12″	AF12	AU12
15″	AF15	AU15
18″	AF18	AU18
24″	AF24	AU24

[1]For 3″ dial size – change first digit from "A" to "C". **NOTE:** Union connected types must be used with thermowells

STANDARD RANGES

CODE	Fahrenheit
FC	–80 to 120°F
FE	–40 to 120°F
FG	0 to 150°F
FJ	0 to 200°F
FL	0 to 250°F
FM	30 to 240°F
FN	25 to 125°F
FR	50 to 300°F
FS	50 to 400°F
FT	50 to 550°F
FX	150 to 750°F†
FY	200 to 1000°F*†
	Celsius
CD	–50 to 50°C
CJ	0 to 100°C
CM	–10 to 110°C
CN	0 to 50°C
CR	0 to 150°C
CS	0 to 200°C
CU	0 to 300°C
CX	50 to 450°C†
CY	100 to 550°C*†

	DUAL SCALE		
CODE	Fahrenheit (on outside	and	Celsius (on inside)
DE	-40/120°F	and	-40/50°C
DF	40/160°F	and	-40/70°C
DN	30/130°F	and	0/55°C
DJ	0/200°F	and	-20/94°C
DL	0/250°F	and	-20/120°C
DR	50/300°F	and	10/150°C
DS	50/400°F	and	10/200°C
DT	50/550°F	and	10/290°C
DX	100/800°F*	and	40/430°C†
DY	200/1,000°F	and	100/550C*†

*Not recommended for continuous service above 800°F (425°C). For such temperatures see pg. 63.
†Minimum stem length for these ranges 4″.

SEPARABLE THERMOWELLS AVAILABLE SEE PAGES 87 TO 90

HOW TO ORDER

A F 0 6 4 4 F M X

1. Basic 4-digit Catalog No. From Table Above
2. Stem Diameter: "4" = .250″O.D. (Standard); "5" = .375″O.D. (Extra Cost)
3. Thread Size: "4" = ½ NPT Male (AF Series); "U" = ¼ NPT Male Swivel Nut (AU Series)
4. 2 Digit Range Code from Range Tables Above
5. Option(s): "X" = None Required; "9" = Option(s) Required (Extra Cost)

If option(s) are required specify: Plastic Face, Shatterproof Glass Face, Paper Tag, Stainless Steel Tag

WEKSLER®

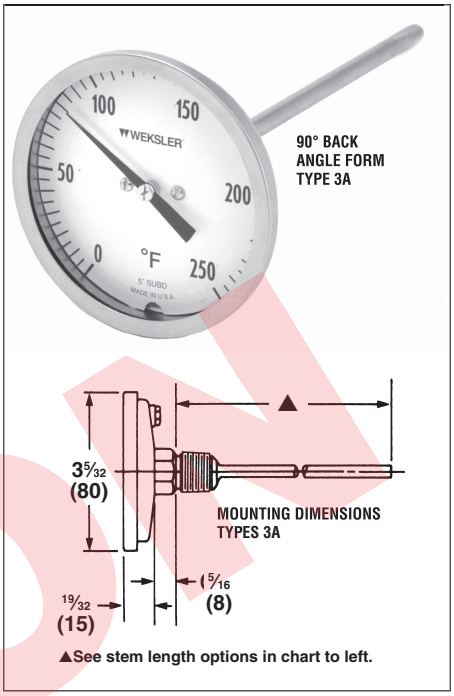
Rigid Forms – 3˝ Dial Size

STANDARD FEATURES

- All Stainless Steel Construction
- External Recalibration Adjustment
- White dial with black markings
- Accurate to ±1% of Scale Range
- Gasketed Glass Face
- Case is sealed to exclude dirt, dust and moisture
- 5˝ dial size

	CATALOG NUMBERS*			
STEM LENGTH	90° BACK ANGLE FORM	STRAIGHT FORM	90° LEFT SIDE ANGLE FORM	90° RIGHT SIDE ANGLE FORM
2½˝	3A02	3S02	3L02	3R02
4˝	3A04	3S04	3L04	3R04
6˝	3A06	3S06	3L06	3R06
9˝	3A09	3S09	3L09	3R09
12˝	3A12	3S12	3L12	3R12
15˝	3A15	3S15	3L15	3R15
18˝	3A18	3S18	3L18	3R18
24˝	3A24	3S24	3L24	3R24

Longer stem lengths available on special order (48˝ maximum on straight, left and right side forms; 72˝ on back angle)



▲See stem length options in chart to left.

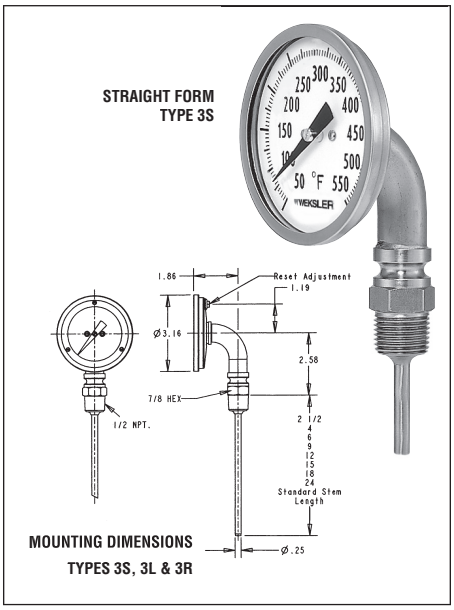
STANDARD RANGES

CODE	Fahrenheit
FC	–80 to 120°F
FE	–40 to 120°F
FG	0 to 150°F
FJ	0 to 200°F
FL	0 to 250°F
FM	30 to 240°F
FN	25 to 125°F
FR	50 to 300°F
FS	50 to 400°F
FT	50 to 550°F
FX	150 to 750°F†
FY	200 to 1000°F*†
	Celsius
CD	–50 to 50°C
CJ	0 to 100°C
CM	–10 to 110°C
CN	0 to 50°C
CR	0 to 150°C
CS	0 to 200°C
CU	0 to 300°C
CX	50 to 450°C†
CY	100 to 550°C*†

	DUAL SCALE		
CODE	Fahrenheit (on outside	and	Celsius (on inside)
DE	–40/120°F	and	–40/50°C
DF	40/160°F	and	–40/70°C
DN	30/130°F	and	0/55°C
DJ	0/200°F	and	–20/94°C
DL	0/250°F	and	–20/120°C
DR	50/300°F	and	10/150°C
DS	50/400°F	and	10/200°C
DT	50/550°F	and	10/290°C
DX	100/800°F*	and	40/430°C†
DY	200/1,000°F	and	100/550C*†

*Not recommended for continuous service above 800°F (425°C). For such temperatures see pg. 63.
†Minimum stem length for these ranges 4˝.

OPTIONAL FEATURES	
CODE	Description
EL	Liquid Filling for Catalog No's AF, 3A, 5A only
PD	Plastic Window
SG	Shatter Proof Glass
NN	Paper Tag
NH	Stainless Steel Tag
TPC	Mounting Clip for 1˝ & 2˝
DM	Dial Markings
C4	Calibration Certificate



SEPARABLE THERMOWELLS AVAILABLE
SEE PAGES 87 TO 90

HOW TO ORDER

3 S 0 4 4 4 D R X

1. Basic 4-digit Catalog No. From Table Above
2. Stem Diameter: "4" = .250˝O.D. (Standard); "5" = .375˝ O.D. (Extra Cost)
3. Thread Size: "4" = ½ NPT Male; "U" = ¼ NPT Male (Extra Cost)
4. 2 Digit Range Code from Range Tables Above
5. Option(s): "X" = Non Required Option(s) Required (Extra Cost) Select code from above table

WEKSLER®

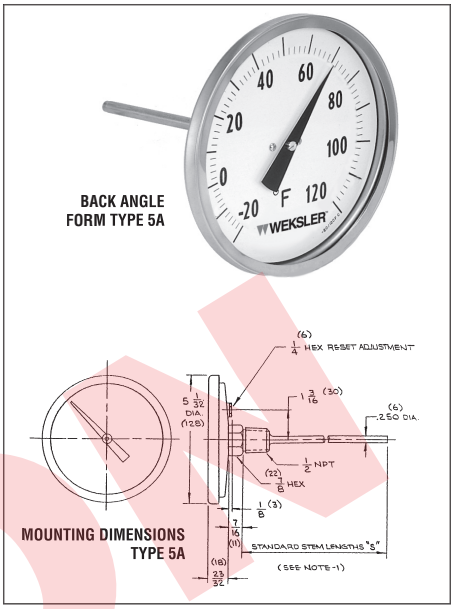
Rigid Forms – 5˝ Dial Size

STANDARD FEATURES

- All Stainless Steel Construction
- External Recalibration Adjustment
- White dial with black markings
- Accurate to ±1% of Scale Range
- Gasketed Glass Face
- Case is sealed to exclude dirt, dust and moisture
- 5˝ dial size

STEM LENGTH	CATALOG NUMBERS* 90° BACK ANGLE FORM	STRAIGHT FORM	90° LEFT SIDE ANGLE FORM	90° RIGHT SIDE ANGLE FORM
2½˝	5A02	5S02	5L02	5R02
4˝	5A04	5S04	5L04	5R04
6˝	5A06	5S06	5L06	5R06
9˝	5A09	5S09	5L09	5R09
12˝	5A12	5S12	5L12	5R12
15˝	5A15	5S15	5L15	5R15
18˝	5A18	5S18	5L18	5R18
24˝	5A24	5S24	5L24	5R24

Longer stem lengths available on special order (48˝ maximum on straight, left and right side forms; 72˝ on back angle)



STANDARD RANGES

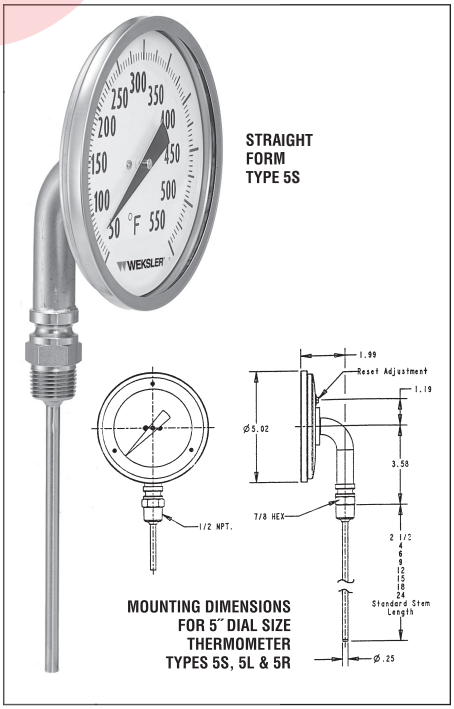
CODE	Fahrenheit
FC	–80 to 120°F
FE	–40 to 120°F
FG	0 to 150°F
FJ	0 to 200°F
FL	0 to 250°F
FM	30 to 240°F
FN	25 to 125°F
FR	50 to 300°F
FS	50 to 400°F
FT	50 to 550°F
FX	150 to 750°F†
FY	200 to 1000°F*†
	Celsius
CD	–50 to 50°C
CJ	0 to 100°C
CM	–10 to 110°C
CN	0 to 50°C
CR	0 to 150°C
CS	0 to 200°C
CU	0 to 300°C
CX	50 to 450°C†
CY	100 to 550°C*†

CODE	DUAL SCALE Fahrenheit (on outside	and	Celsius (on inside)
DE	–40/120°F	and	–40/50°C
DF	40/160°F	and	–40/70°C
DN	30/130°F	and	0/55°C
DJ	–0/200°F	and	–20/94°C
DL	0/250°F	and	–20/120°C
DR	50/300°F	and	10/150°C
DS	50/400°F	and	10/200°C
DT	50/550°F	and	10/290°C
DX	100/800°F*	and	40/430°C†
DY	200/1,000°F	and	100/550C*†

*Not recommended for continuous service above 800°F (425°C). For such temperatures see pg. 63.
†Minimum stem length for these ranges 4˝.

CODE	OPTIONAL FEATURES Description
EL	Liquid Filling for Catalog No's AF, 3A, 5A only
PD	Plastic Window
SG	Shatter Proof Glass
NN	Paper Tag
NH	Stainless Steel Tag
TPC	Mounting Clip for 1˝ & 2˝
DM	Dial Markings
C4	Calibration Certificate

SEPARABLE THERMOWELLS AVAILABLE SEE PAGES 87 TO 90



HOW TO ORDER

5 A 0 6 4 4 F J X

1. Basic 4-digit Catalog No. From Table Above
2. Stem Diameter: "4" = .250˝O.D. (Standard); "5" = .375˝ O.D. (Extra Cost)
3. Thread Size: "4" = ½ NPT Male; "U" = ¼ NPT Male (Extra Cost)
4. 2 Digit Range Code from Range Tables Above
5. Option(s): "X" = Non Required Option(s) Required (Extra Cost) Select code from above table

WEKSLER®

Heavy Duty Types – 3˝ Dial Size

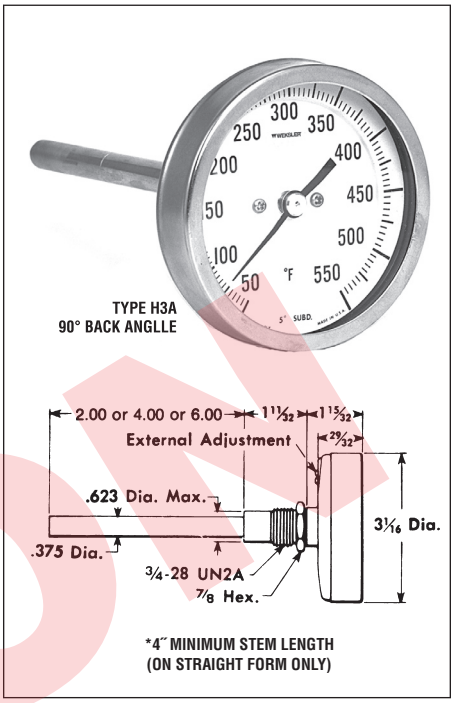
STANDARD FEATURES

- Shock and Vibration Resistant
- Stainless Steel Construction
- Plastic Crystal
- Dished Anti-Parallax Dial for Easy Reading
- External Recalibration Adjustment at Rear of Case
- Accurate to 1% of Scale Range (when tested without well)
- Interchangeable with 5˝ Scale Size "Submarine" Thermometers Having Same Stem Length
- ¾˝-28 UN2A Union Connection Assembly Must be used with Well (or Bushing)

	CATALOG NUMBERS	
STEM LENGTH	90° BACK ANGLE FORM	STRAIGHT FORM
2˝	H3A2	H3S2
4˝	H3A4	H3S4
6˝	H3A6	H3S6

NOTE: A minimum of 2˝ insertion (immersion) is required for accurate readings and proper response.

CODE	Fahrenheit
D	–40 to 120°F in 2° divs.*
H	0 to 200°F in 2° divs.
L	20 to 240°F in 2° divs.
P	50 to 300°F in 2° divs.
Q	50 to 400°F in 5° divs.
R	50 to 500°F in 5° divs.
S	50 to 750°F in 10° divs.
	Celsius
1	–50 to 50°C in 1° divs.*
2	–10 to 110°C in 1° divs.
5	0 to 150°C in 2° divs.
6	0 to 200°C in 2° divs.
8	0 to 300°C in 5° divs.



HOW TO ORDER

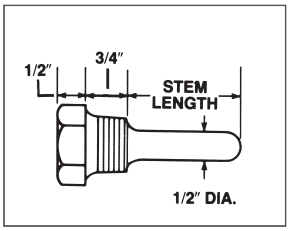
H 3 S 4 H

1. Basic 4-digit Catalog No.
2. Range Code

THERMOWELLS FOR HEAVY DUTY BIMETAL THERMOMETERS
.385˝ BORE – 3/4-28˝ FEMALE THREAD (INTERNAL)

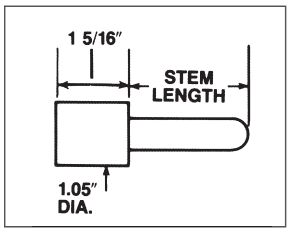
THREADED TYPE – ¾-14 NPT MALE

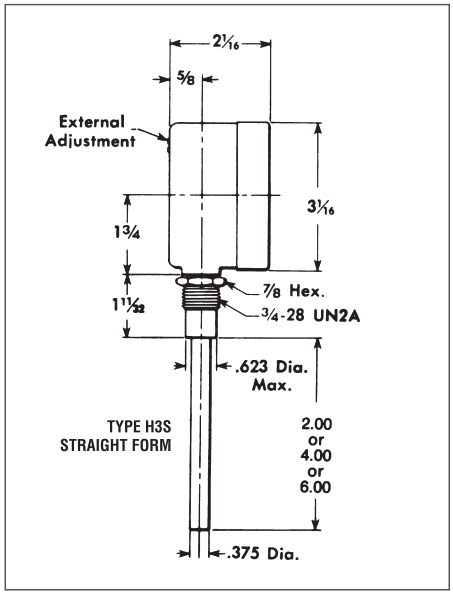
THERMOMETER STEM LENGTH	WELL LENGTH (OVERALL)	CATALOG NO. NAVAL BRASS	304 SS	MONEL
2˝	3¼˝	W3N1	W3G1	W3M1
4˝	5¼˝	W5N1	W5G1	W5M1
6˝	7¼˝	W7N1	W7G1	W7M1



WELDING/BRAZING TYPE – ¾ SOCKET WELD

THERMOMETER STEM LENGTH	WELL LENGTH (OVERALL)	CATALOG NO. PHOS. BRONZE	COPPER NICKEL	316 SS
2˝	3 5/16˝	W4R4	W4C4	W4F4
4˝	5 5/16˝	W6R5	W6C5	W6F5
6˝	7 5/16˝	W8R6	W8C6	W8F6





To Order: Specify 4 digit catalog no. from above tables

WEKSLER®

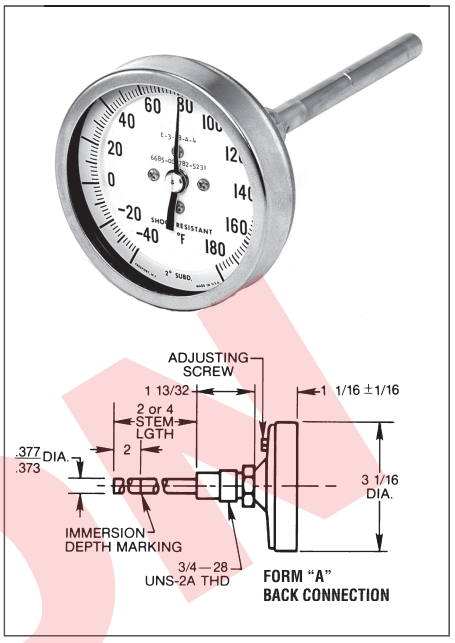
Navy Type to MIL 1-17244E

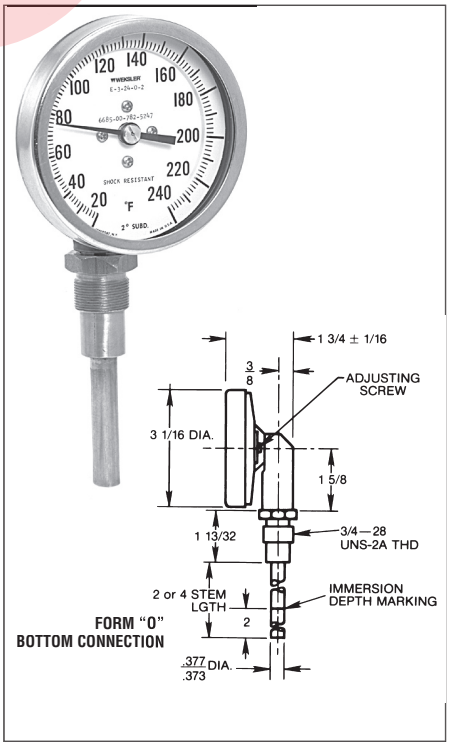
STANDARD FEATURES

- To Latest Specification MIL 1-17244E (Ships)
- Vibration Resistant to MIL STD 167D
- Shock Resistant to MIL S-901C
- All Stainless Steel Construction
- External Recalibration Adjustment
- Dished Anti-Parallax Dial
- Accurate to ± 1% of Scale Range
- All Models Listed Below Have Been Approved by NAVSEA
- ¾″-28 UN2A Union Connection Assembly Must be used with Well (or Bushing)

CATALOG NUMBER	NATIONAL STOCK NUMBER (NSN)	STEM LENGTH	RANGE °F	FORM
E318A2	6685-00-782-5244	2″	–40/180	Back
E31802	6685-00-782-5230	2″	–40/180	Bottom
E318A4	6685-00-782-5231	4″	–40/180	Back
E31804	6685-00-782-5232	4″	–40/180	Bottom
E318A4R3*	6685-00-239-6679	4″	–40/180	Back
E324A2	6685-00-782-5249	2″	20/240	Back
E32402	6685-00-782-5247	2″	20/240	Bottom
E324A4	6685-00-782-5236	4″	20/240	Back
E32404	6685-00-782-5234	4″	20/240	Bottom
E324A4R3*	6685-00-404-3715	4″	20/240	Back
E355A4	6685-00-841-1439	4″	50/550	Back
E35504	6685-00-066-6102	4″	50/550	Bottom

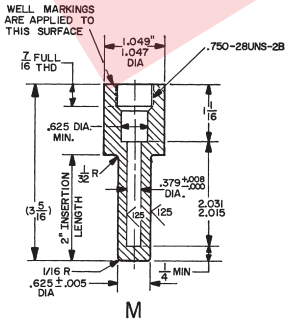
*THESE CATALOG NUMBERS (WITH "R3" AT END) ARE NAVY TYPE "ITM" WITH BOTH MAXIMUM AND MINIMUM INDICATING HANDS (RESETABLE). ALL OTHERS ARE NAVY TYPE "ITD" WITHOUT MAXIMUM AND MINIMUM INDICATING HANDS..



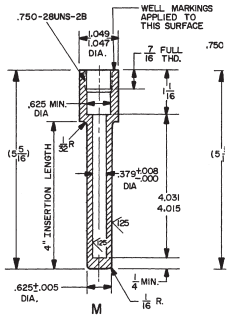


THERMOWELLS TO SPECIFICATION MIL-T-24270B (SHIPS)

MIL T-24270B WELL NO.	THERMOMETER STEM LENGTH	WELL LENGTH (OVERALL)	CATALOG NO. PHOS. BRONZE	COPPER NICKEL	316 SS
MIL-T-24270/1B(SH)	2″	3 5/16″	T4R4	T4C4	T4F4
MIL-T-24270/3B(SH)	4″	5 5/16″	T6R5	T6C5	T6F5



MIL-T-24270/1B(SH)



MIL-T-24270/3B(SH)

HOW TO ORDER

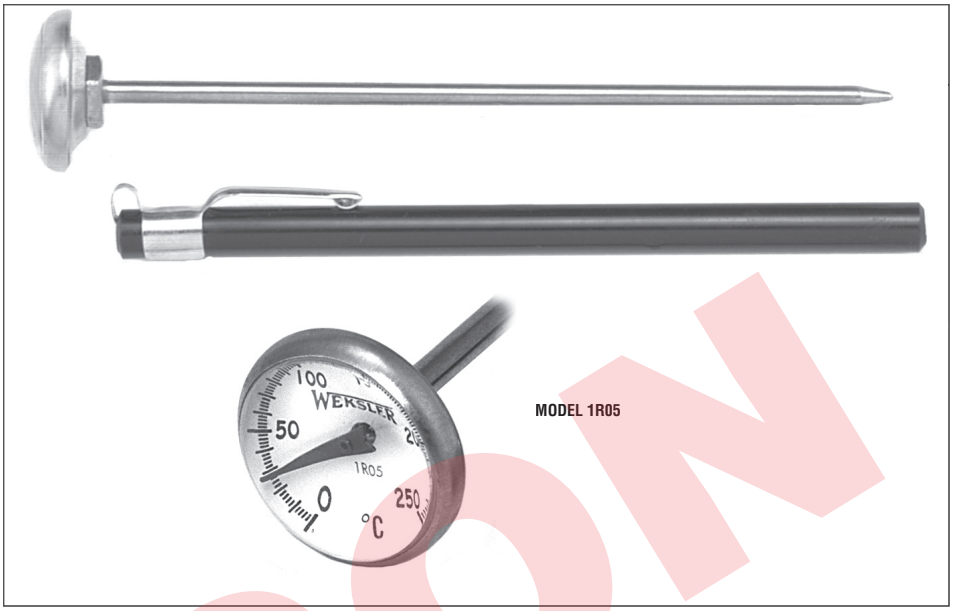
Specify complete catalog number from above table.

WEKSLER®

Pocket Bimetal

STANDARD FEATURES

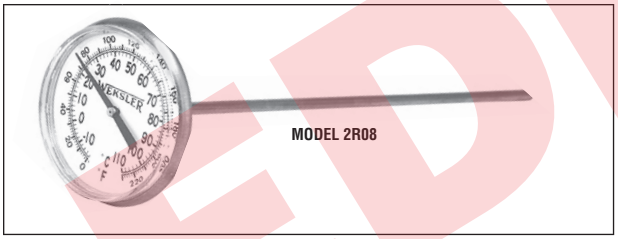
- 1″ dial
- 5″ stem length
- .142″ stem diameter
- Complete with pocket case and clip
- Standard with plastic crystal and recalibration feature

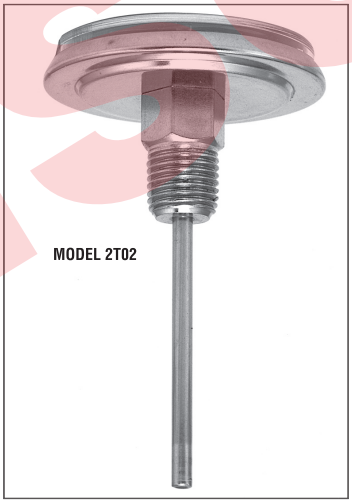


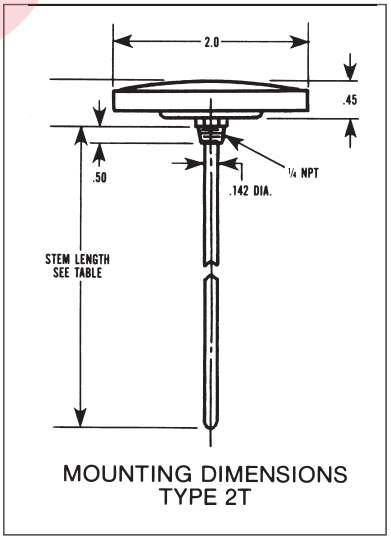
CATALOG NUMBER	STANDARD RANGES
1R05A	-40 to 160°F in 2° divs.
1R05B	25 to 125°F in 1° divs.
1R05C	0 to 220°F in 2° divs.
1R05D	50 to 550°F in 5° divs.
1R05E	-50 to 100°C in 2° divs.
1R05F	-10 to 110°C in 2° divs.
1R05G	0 to 150°C in 2° divs.
1R05H	0 to 250°C in 5° divs.

STANDARD FEATURES

- 2″ dial
- All Stainless Steel Construction
- Accurate to ±1% of Scale Range
- Dual Scale (Both °F and °C) Ranges







CATALOG NUMBER	DUAL SCALE (BOTH °F AND °C) FAHRENHEIT ON OUTER – CELSIUS ON INNER SCALE			TYPE
2R08A	–40 to 160°F in 2° divs.	and	–40 to 70°C in 2° divs.	8″ Plain Stem With Recalibration Feature
2R08B	25 to 125°F in 1° divs.	and	–5 to 50°C in 1° divs.	
2R08J	0 to 180°F in 2° divs.	and	–18 to 83°C in 1° divs.	
2R08C	0 to 220°F in 1° divs.	and	–10 to 110°C in 2° divs.	
2R08K	50 to 400°F in 5° divs.	and	10 to 106°C in 2° divs.	
2R08D	50 to 550°F in 5° divs.	and	10 to 290°C in 5° divs.	
2T02A	–40 to 160°F in 2° divs.	and	–40 to 70°C in 2° divs.	2½″ Stem ¼ NPT Fixed Thread
2T02C	0 to 220°F in 2° divs.	and	–10 to 110°C in 2° divs.	
2T04A	–40 to 160°F in 2° divs.	and	–40 to 70°C in 2° divs.	4″ Stem ¼ NPT Fixed Thread
2T04B	25 to 125°F in 1° divs.	and	–5 to 50°C in 1° divs.	
2T04C	0 to 220°F in 2° divs.	and	–10 to 110°C in 2° divs.	

HOW TO ORDER

Specify 5 digit catalog number from above tables

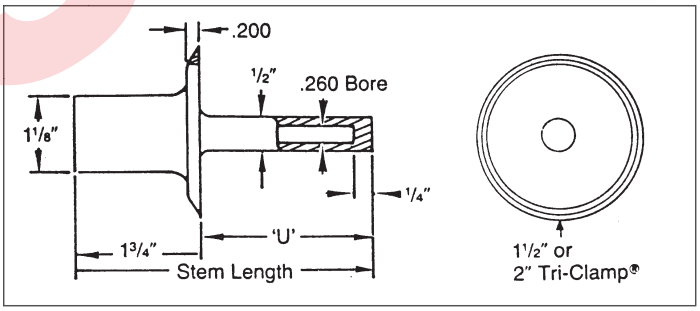
WEKSLER®

Sanitary Wells, Conversion Kit, Duct Flange

THERMOWELL MEETS USDA, FDA AND 3A SANITARY STANDARD 09-08

Sanitary instruments are designed for applications in the food, dairy, pharmaceutical, cosmetic, and beverage industries. The standard Tri-clamp fittings have no exposed threads and prevent the process from entering the instruments.

CATALOG NO.	CLAMP SIZE	STEM LENGTH	'U' DIMENSION
D8J4	1½″	4″	2½″
D8J6	1½″	6″	4½″
D9J4	2″	4″	2½″
D9J6	2″	6″	4½″

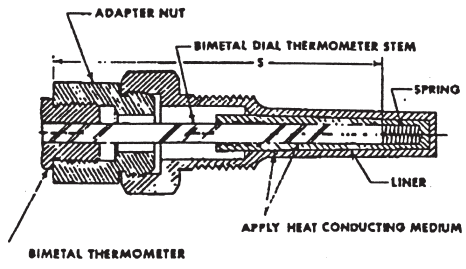


HOW TO ORDER

Order thermowell by 4 digit catalog number from table above.

BIMETAL TO INDUSTRIAL WELL CONVERSION KIT

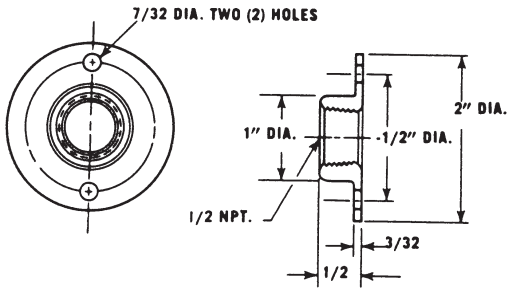
With this kit, an existing Industrial Thermometer Well can be used to accept a Bimetal Dial thermometer. Kit consisting of a liner, an adaptor nut, a spring and heat conducing medium.



SPECIFY CATALOG NUMBER "BIK-A"

½ NPT FLANGE

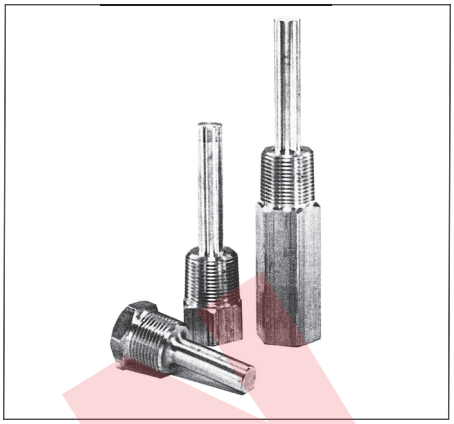
Satin finish chrome plated brass. For use in air ducts, dryers, ovens, etc.

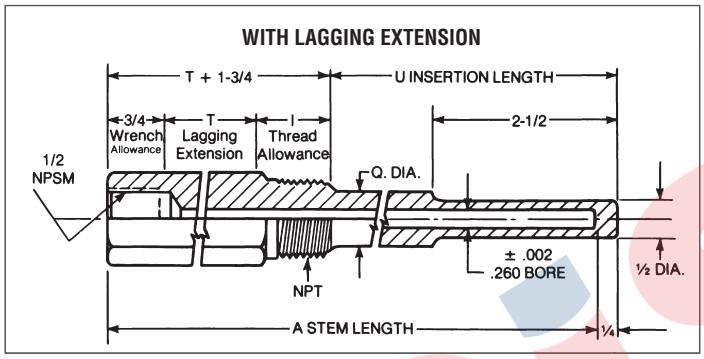


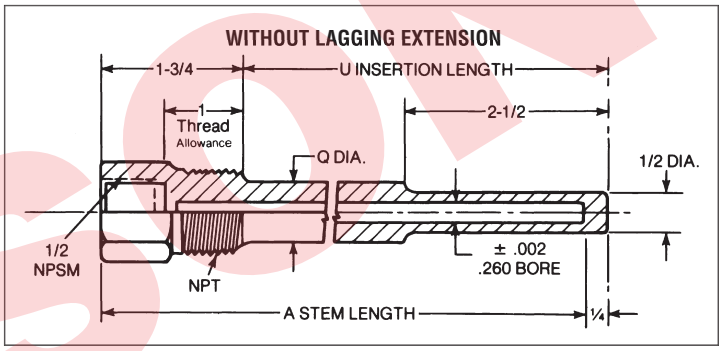
SPECIFY CATALOG NUMBER "2F2"

FOR INDUSTRIAL BIMETAL THERMOMETERS WITH .250˝ DIAMETER ELEMENTS

- .385˝ bore available for use with instruments with .375˝ diameter elements
- All Weksler standard thermowells are bored from solid bar stock







3/4 NPT – CATALOG NUMBERS

A	U	Q	BRASS	STEEL	304 SS	316 SS
4	2½	—	S3B4	S3S4	S3G4	S3J4
6	4½	¾	S3B6	S3S6	S3G6	S3J6
9	7½	¾	S3B9	S3S9	S3G9	S3J9
12	10½	¾	S3B2	S3S2	S3G2	S3J2
15	13½	¾	S3B5	S3S5	S3G5	S3J5
18	16½	¾	S3B8	S3S8	S3G8	S3J8
24	22½	¾	S3BT	S3ST	S3GT	S3JT

3/4 NPT – CATALOG NUMBERS

A	U	T	Q	BRASS	304 STEEL	316 SS	SS
6	2½	2	—	L3B6	L3S6	L3G6	L3J6
9	4½	3	¾	L3B9	L3S9	L3G9	L3J9
12	7½	3	¾	L3B2	L3S2	L3G2	L3J2
15	10½	3	¾	L3B5	L3S5	L3G5	L3J5
18	13½	3	¾	L3B8	L3S8	L3G8	L3J8
24	19½	3	¾	L3BT	L3ST	L3GT	L3JT

1 NPT – CATALOG NUMBERS

A	U	Q	BRASS	STEEL	304 SS	316 SS
4	2½	—	S4B4	S4S4	S4G4	S4J4
6	4½	⅞	S4B6	S4S6	S4G6	S4J6
9	7½	⅞	S4B9	S4S9	S4G9	S4J9
12	10½	⅞	S4B2	S4S2	S4G2	S4J2
15	13½	⅞	S4B5	S4S5	S4G5	S4J5
18	16½	⅞	S4B8	S4S8	S4G8	S4J8
24	22½	⅞	S4BT	S4ST	S4GT	S4JT

1 NPT – CATALOG NUMBERS

A	U	T	Q	BRASS	304 STEEL	316 SS	SS
6	2½	2	—	L4B6	L4S6	L4G6	L4J6
9	4½	3	⅞	L4B9	L4S9	L4G9	L4J9
12	7½	3	⅞	L4B2	L4S2	L4G2	L4J2
15	10½	3	⅞	L4B5	L4S5	L4G5	L4J5
18	13½	3	⅞	L4B8	L4S8	L4G8	L4J8
24	19½	3	⅞	L4BT	L4ST	L4GT	L4JT

Brass wells are not recommended for installations involving high pressures and/or temperatures over 400°F.
Brass cap and chain available to keep bore clean when not in use.
.260˝ bore standard. If .385˝ bore is required:
(1) Add the letter K at the end of the catalog no.;
(2) "Q" diameter is changed to 49/64˝ along entire length of insertion ("U" dimension).
For pressure – temperature rating use Table 1 on page 89.

NOTE: 2½˝ STEM THERMOMETERS USE SPECIAL LIMITED SPACE WELLS.

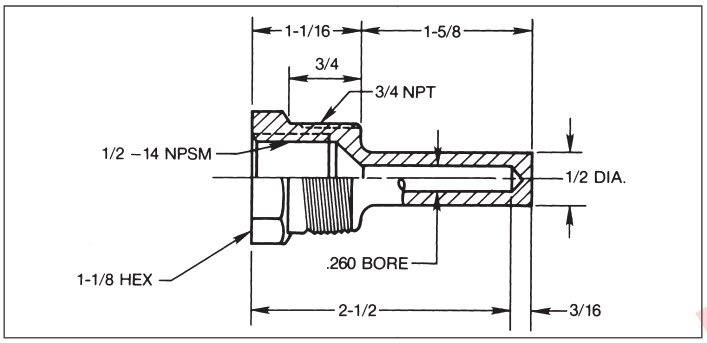
WEKSLER®

Limited Space/Heavy Duty Threaded Thermowells

LIMITED SPACE WELLS

Fits Weksler 3″ and 5″ bimetal thermometers with 2½″ stem length. It is recommended that these be used only when space is such a critical factor that wells for 4″ stem length bimetals cannot be utilized.

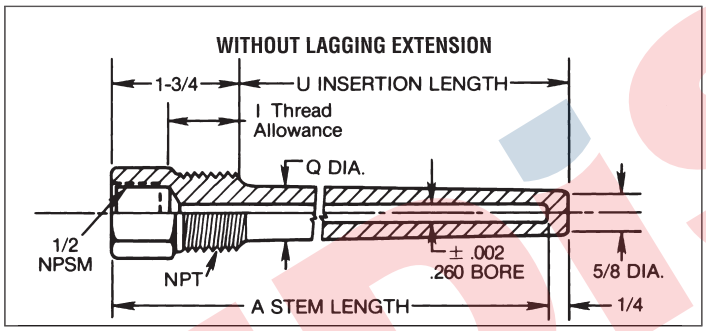
IMPORTANT NOTE: The above limited space thermowells should not be used with Weksler 3″ or 5″ bimetals with the following ranges: 25/125°F, –40/120°F, 0/150°F, 50/500°F, 150/750°F, 0/50°C, –50/50°C, 0/300°C and 100/400°C. These ranges must use thermometers with 4″ minimum stem length.

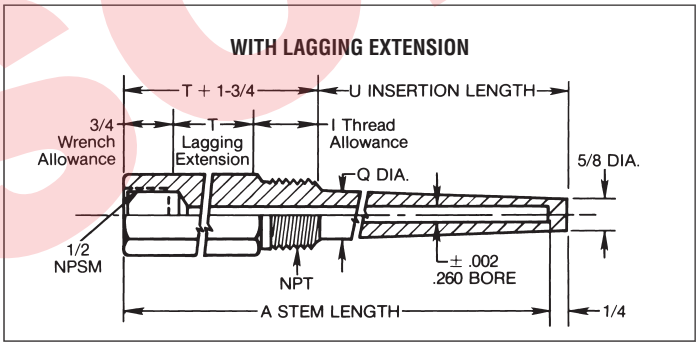


CATALOG NUMBERS				
	BRASS	STEEL	304 SS	316 SS
3/4 NPT	S3B1	S3S1	S3G1	S3J1
1 NPT	S4B1	S4S1	S4G1	S4J1

Brass wells are not recommended for installations involving high pressures and/or temperatures over 400°F.

HEAVY DUTY THREADED WELLS





¾ NPT – CATALOG NUMBERS

A	U	Q	STEEL	304 SS	316 SS
4	2½	—	S3S4H	S3G4H	S3J4H
6	4½	⅞	S3S6H	S3G6H	S3J6H
9	7½	⅞	S3S9H	S3G9H	S3J9H
12	10½	⅞	S3S2H	S3G2H	S3J2H
15	13½	⅞	S3S5H	S3G5H	S3J5H
18	16½	⅞	S3S8H	S3G8H	S3J8H
24	22½	⅞	S3STH	S3GTH	S3JTH

¾ NPT – CATALOG NUMBERS

A	U	T	Q	STEEL	304 SS	316 SS
6	2½	2	⅞	L3S6H	L3G6H	L3J6H
9	4½	3	⅞	L3S9H	L3G9H	L3J9H
12	7½	3	⅞	L3S2H	L3G2H	L3J2H
15	10½	3	⅞	L3S5H	L3G5H	L3J5H
18	13½	3	⅞	L3S8H	L3G8H	L3J8H
24	19½	3	⅞	L3STH	L3GTH	L3JTH

1 NPT – CATALOG NUMBERS

A	U	Q	STEEL	304 SS	316 SS
4	2½	1 1/16	S4S4H	S4G4H	S4J4H
6	4½	1 1/16	S4S6H	S4G6H	S4J6H
9	7½	1 1/16	S4S9H	S4G9H	S4J9H
12	10½	1 1/16	S4S2H	S4G2H	S4J2H
15	13½	1 1/16	S4S5H	S4G5H	S4J5H
18	16½	1 1/16	S4S8H	S4G8H	S4J8H
24	22½	1 1/16	S4STH	S4GTH	S4JTH

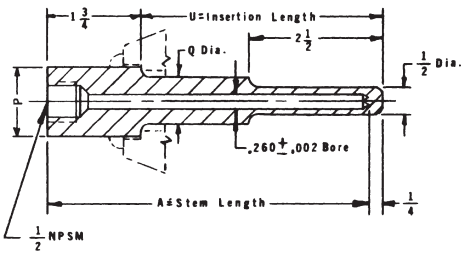
1 NPT – CATALOG NUMBERS

A	U	T	Q	STEEL	304 SS	316 SS
6	2½	2	1 1/16	L4S6H	L4G6H	L4J6H
9	4½	3	1 1/16	L4S9H	L4G9H	L4J9H
12	7½	3	1 1/16	L4S2H	L4G2H	L4J2H
15	10½	3	1 1/16	L4S5H	L4G5H	L4J5H
18	13½	3	1 1/16	L4S8H	L4G8H	L4J8H
24	19½	3	1 1/16	L4STH	L4GTH	L4JTH

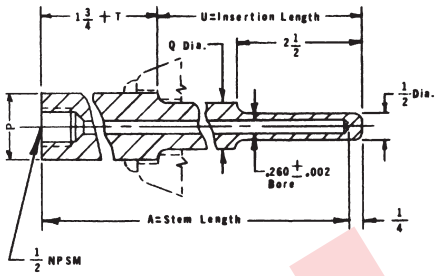
Brass cap and chain available to keep bore clean when not in use.
.260″ bore standard. If .385″ bore is required:
(1) change the last digit of the catalog no. from H to L;
(2) "Q" diameter will be 1 1/16″ on all and diameter at the end of taper (bottom of well) will be 49/64″.
For pressure and temperature rating use Table 2 on page 89.

NOTE: ALL WEKSLER STANDARD THERMOWELLS ARE BORED FROM SOLID BAR STOCK.

WITHOUT LAGGING EXTENSION



WITH LAGGING EXTENSION



3/4 NPT – CATALOG NUMBERS

A	U	Q	STEEL	304 SS	316 SS
4	2½	½	S5S4	S5G4	S5J4
6	4½	¾	S5S6	S5G6	S5J6
9	7½	¾	S5S9	S5G9	S5J9
12	10½	¾	S5S2	S5G2	S5J2
15	13½	¾	S5S5	S5G5	S5J5
18	16½	¾	S5S8	S5G8	S5J8
24	22½	¾	S5ST	S5GT	S5JT

3/4 NPT – CATALOG NUMBERS

A	U	T	Q	STEEL	304 SS	316 SS
6	2½	2	½	L5S6	L5G6	L5J6
9	4½	3	¾	L5S9	L5G9	L5J9
12	7½	3	¾	L5S2	L5G2	L5J2
15	10½	3	¾	L5S5	L5G5	L5J5
18	13½	3	¾	L5S8	L5G8	L5J8
24	19½	3	¾	L5ST	L5GT	L5JT

1 NPT – CATALOG NUMBERS

A	U	Q	STEEL	304 SS	316 SS
4	2½	½	S6S4	S6G4	S6J4
6	4½	⅞	S6S6	S6G6	S6J6
9	7½	⅞	S6S9	S6G9	S6J9
12	10½	⅞	S6S2	S6G2	S6J2
15	13½	⅞	S6S5	S6G5	S6J5
18	16½	⅞	S6S8	S6G8	S6J8
24	22½	⅞	S6ST	S6GT	S6JT

1 NPT – CATALOG NUMBERS

A	U	T	Q	STEEL	304 SS	316 SS
6	2½	2	½	L6S6	L6G6	L6J6
9	4½	3	⅞	L6S9	L6G9	L6J9
12	7½	3	⅞	L6S2	L6G2	L6J2
15	10½	3	⅞	L6S5	L6G5	L6J5
18	13½	3	⅞	L6S8	L6G8	L6J8
24	19½	3	⅞	L6ST	L6GT	L6JT

*NOMINAL PIPE SIZE ("P" DIMENSION)
3/4" Weld Connection = 1.050" Diameter
1" Weld Connection = 1.315" Diameter

Brass cap and chain available to keep bore clean when not in use.
.260" bore standard. If .385" bore is required:
(1) add the letter K to the end of the catalog no. ;
(2) "Q" dimension is changed to 49/64" along entire length of insertion ("U" dimension).
For pressure and temperature rating use Table below.

PRESSURE-TEMPERATURE RATING
(LBS. PER SQ. INCH)

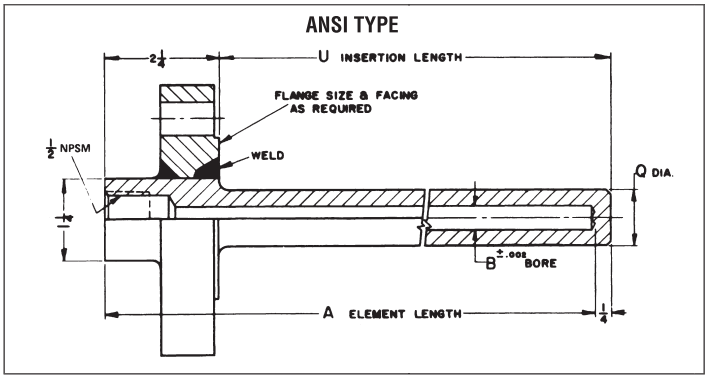
TABLE 1

MATERIAL	TEMPERATURE – °F						
	70°	200°	400°	600°	800°	1000°	1200°
Brass 5000	4200	1000	—	—	—	—	
Carbon Steel	5200	5000	4800	4600	3500	1500	—
A.I.S.I.–304	7000	6200	5600	5400	5200	4500	1650
A.I.S.I.–316	7000	7000	6400	6200	6100	5100	2500
Monel 6500	6000	5400	5300	5200	1500	—	

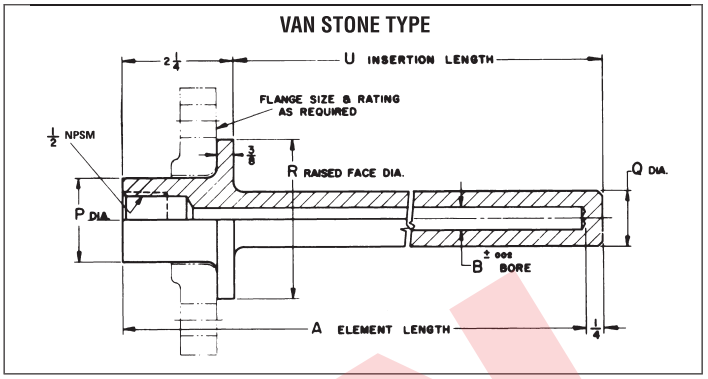
TABLE 2

MATERIAL	TEMPERATURE – °F						
	70°	200°	400°	600°	800°	1000°	1200°
Brass	5300	4250	1100	—	—	—	—
Carbon Steel	5950	5750	5450	5250	4000	1750	—
A.I.S.I.–304	7800	7050	6400	6150	6000	5190	1875
A.I.S.I.–316	7800	7800	7250	7100	6950	5800	2720
Monel	7450	6850	6150	6100	5940	1750	—

ANSI TYPE



VAN STONE TYPE



CATALOG NUMBERS

ELEM. LGTH. A	INSERT. LGTH. U	SHANK DIA. Q	STEEL	304 SS	316 SS
4	2	¾	FAS4	FAG4	FAJ4
6	4	¾	FAS6	FAG6	FAJ6
9	7	¾	FAS9	FAG9	FAJ9
12	10	¾	FAS2	FAG2	FAJ2
15	13	¾	FAFA	FAG5	FAJ5
18	16	¾	FAS8	FAG8	FAJ8
24	22	¾	FAST	FAGT	FAJT

ANSI flanged dwells are supplied as one unit with flange and well welded together.

Note: When ordering, specify flange size and rating as follows:

1″ – 150 psi	1½″ – 150 psi	2″ – 150 psi
1″ – 300 psi	1½″ – 300 psi	2″ – 300 psi
1″ – 600 psi	1½″ – 600 psi	2″ – 600 psi
1″ – 1500 psi	1½″ –1500 psi	2″ – 1500 psi

RF (raised face) furnished as standard.
FF (flat face) optional at same price when specified.
RTJ (ring type joint) available at extra cost when specified.

Brass cap and chain available to keep bore clean when not in use.

.260″ bore standard. If .385″ bore is required:
(1) add the letter K to the end of the catalog no.;
(2) "Q" diameter is changed to 7/8″ along the entire length of insertion ("U" dimension).

For pressure and temperature rating use Table 3 below.

CATALOG NUMBERS

ELEM. LGTH. A	INSERT. LGTH. U	SHANK DIA. Q	STEEL	304 SS	316 SS
4	2	¾	VLS4	VLG4	VLJ4
6	4	¾	VLS6	VLG6	VLJ6
9	7	¾	VLS9	VLG9	VLJ9
12	10	¾	VLS2	VLG2	VLJ2
15	13	¾	VLVL	VLG5	VLJ5
18	16	¾	VLS8	VLG8	VLJ8
24	22	¾	VLST	VLGT	VLJT

Van stone type wells are intended for use with separate carbon steel backing flange
(lap joint type).

Note: Backing flange not supplied unless requested. If required, specify flange size and ratings
as follows:

1″ – 150 psi	1½″ – 150 psi
1″ – 300 psi	1½″ – 300 psi
1″ – 600 psi	1½″ – 600 psi
1″ – 1500 psi	1½″ –1500 psi

PRESSURE-TEMPERATURE RATING
(LBS. PER SQ. INCH)

TABLE 3

MATERIAL	TEMPERATURE – °F						
	0°	200°	400°	600°	800°	1000°	1125°
Carbon Steel	____ UP	____	TO ____	____	2500#		
A.I.S.I.–304	____ UP	____	TO ____	____	____	2500#	
A.I.S.I.–316	____ UP	____	TO ____	____	____	____	2500#
Monel	____ UP	____	TO ____	____	2500#		

GLASS THERMOMETERS

WEKSLER®

Adjust Angle Thermometer, Mercury Free, Standard
Model A935AF5

STANDARD FEATURES

- Mercury Free.
- Molded Valox® – V-shaped black case for ranges up to and including 300°F
- Die cast black aluminum V-shaped case for ranges above 300°F.
- Glass front excludes dust and dirt.
- White aluminum scale with bold black graduations and figures.
- Mercury Free blue liquid in glass with magnifying lens for easy readability.
- Accuracy is ±1% of full scale.
- Easy adjustment permits case and stem to be rotated 360°.
- 3½˝, 6˝, 9˝ & 12˝ stems available.
- 1¼˝-18˝ NEF swivel nut.

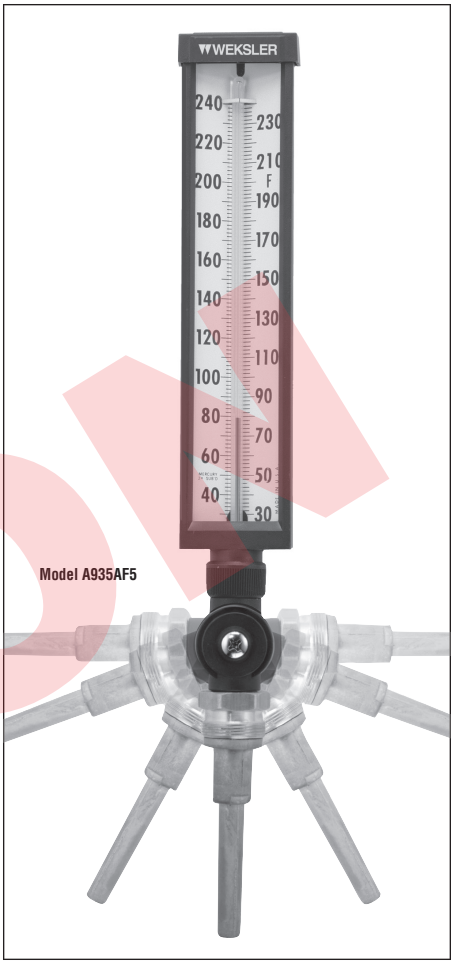
OPTIONS

- Red reading liquid in glass fill available.
- Plastic window available for both 7˝ and 9˝ scale.
- Aluminum case available for low ranges (300°F and below).
- Lower connect (straight form) and back connect (back angle form) available.

RANGES

	MINOR GRADS	RANGE CODE
FAHRENHEIT		
–40/110F	2°	F1
0/120F	1°	F2
0/160F	2°	F3
30/180F	2°	F4
30/240F	2°	F5
30/300F	5°	F6
50/400F(1)	5°	F7
50/550F(1)	5°	F8
CELCIUS		
–20/45C	1°	C1
0/50C	1°	C2
0/100C	1°	C3
0/160C(1)	2°	C4
0/200C(1)	2°	C5
0/300C(1,2)	5°	C6
DUAL SCALE		
–40/110F & –40/43C	2°	D1
0/120F & –15/48C	1°	D2
0/160F & –15/70C	2°	D3
30/180F & 0/82C	2°	D4
30/240F & 0/115C	2°	D5
30/300F & 0/150C	5°	D6
50/400F & 10/200C(1)	5°	D7
50/550F & 10/290C(1)	5°	D8

(1) Must be supplied with optional aluminum case.



Model A935AF5

HOW TO ORDER

A	9	35	A	F5	AL

1. Product Type: A = Adjust Angle Thermometer
2. Scale Size: 7 = 7˝ Scale; 9 = 9˝ Scale
3. Stem Length: 35 = 3½˝; 60 = 6˝; 90 = 9˝; 12 = 12˝
4. Connection Location: A = Adjust Angle
5. Range (see table)
6. Options: AL = Aluminum Case; PD = Plastic Window; RED = Red Spirit

WEKSLER®

Adjust Angle Air Duct Thermometer, Model D960AF2

STANDARD FEATURES

- Mercury Free.
- Molded Valox® – V-shaped black case supplied as standard.
- Glass front excludes dust and dirt.
- White aluminum scale with bold black graduations and flanges.
- Mercury Free blue liquid in glass with magnifying lens for easy readability.
- Accuracy is ± 1% of full scale.
- Easy adjustment permits case and stem to be rotated 360°.
- 3½˝, 6˝, 9˝ & 12˝ stems available.
- Protective slotted bulb guard, ¾˝ diameter aluminum stem and 3˝ diameter union flange

OPTIONS

.• Red reading liquid in glass fill available.

• Spirit fill.

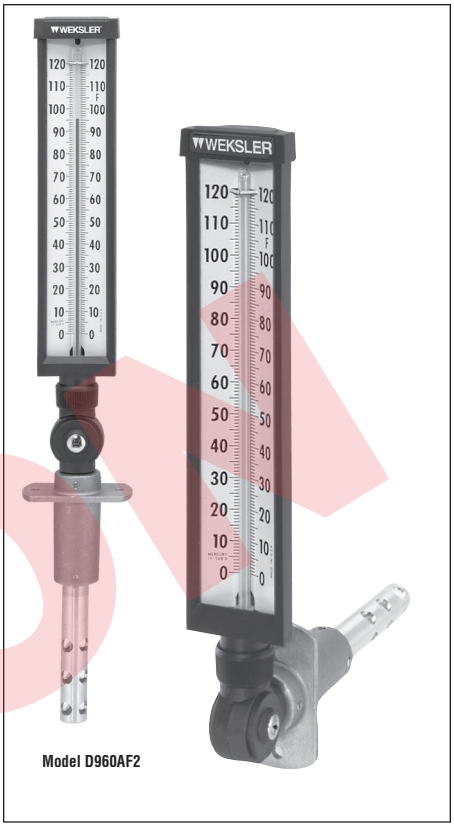
• Plastic window available for both 7˝ and 9˝ scale.

• Lagging extension.

• Aluminum case.

RANGES

MINOR FAHRENHEIT	RANGE GRADS	CODE
–40/110F	2°	F1
0/120F	1°	F2
0/160F	2°	F3
30/180F	2°	F4
30/240F	2°	F5
CELCIUS		
–20/45C	1°	C1
0/50C	1°	C2
0/100C	1°	C3
DUAL SCALE		
–40/110F & –40/43C	2°	D1
0/120F & –15/48C	1°	D2
0/160F & –15/70C	2°	D3
30/180F & 0/82C	2°	D4
30/240F & 0/115C	2°	D5



Model D960AF2

HOW TO ORDER

D	9	60	A	F2	AL

1. Product Type: A = Air Duct Thermometer
2. Scale Size: 7 = 7˝ Scale; 9 = 9˝ Scale
3. Stem Length: 35 = 3½˝; 60 = 6˝; 90 = 9˝; 12 = 12˝
4. Connection Location: A = Adjust Angle
5. Range (see table)
6. Options: AL = Aluminum Case; PD = Plastic Window; RED = Red Spirit

WEKSLER®

Adjust Angle Digital Thermometer

LIGHT-POWERED ADJUSTABLE ANGLE DIGITAL THERMOMETER

The Weksler™ light-powered industrial thermometer offers an environmentally friendly alternative to mercury-filled industrial thermometers. The light-powered industrial thermometer can help reduce inventory requirements with its switchable °F and °C feature, which offers a wide variety of ranges in a single unit (–40/300°F and –40°/150°C). The high impact ABS case can be adjusted for viewing from any angle. Stem lengths of 3½˝ and 6˝ are available and are interchangeable with standard glass column industrial thermometers. The light-powered industrial thermometer features a ½˝ LCD digital display.

SPECIFICATIONS

Switchable Range:
–40/300°F - –40/150°C

Accuracy:
1% of reading or 1° whichever is greater

Display:
½˝ LCD digits

Resolution:
1/10° between –19.9/199.9°F or 28/93°C

Update Rate:
10 seconds

Recalibration:
Internal potentiometer

Sensor:
Glass passivator thermistor

ACCESSORIES

Thermowells For Adjustable Angle Thermometers:
See page 5

PHYSICAL CHARACTERISTICS

Case:
High-impact ABS

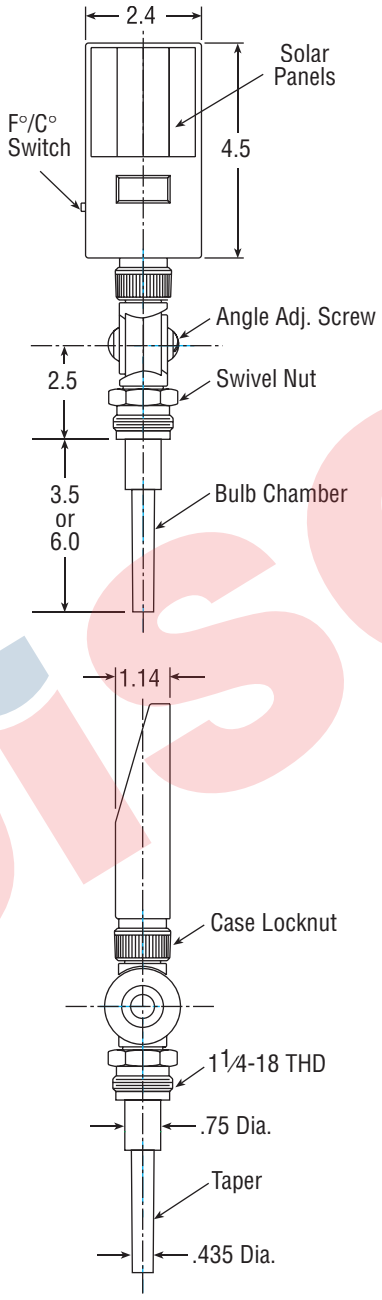
Stem Assemblies, Industrial Glass:
Full conformance with Fed. Spec. GGT-321D

Stem Lengths:
3½˝ and 6˝

Standard Connection:
1¼˝-18 NEF Swivel Nut

Weight: 10 oz.

DIMENSIONS



Model AD35AFC

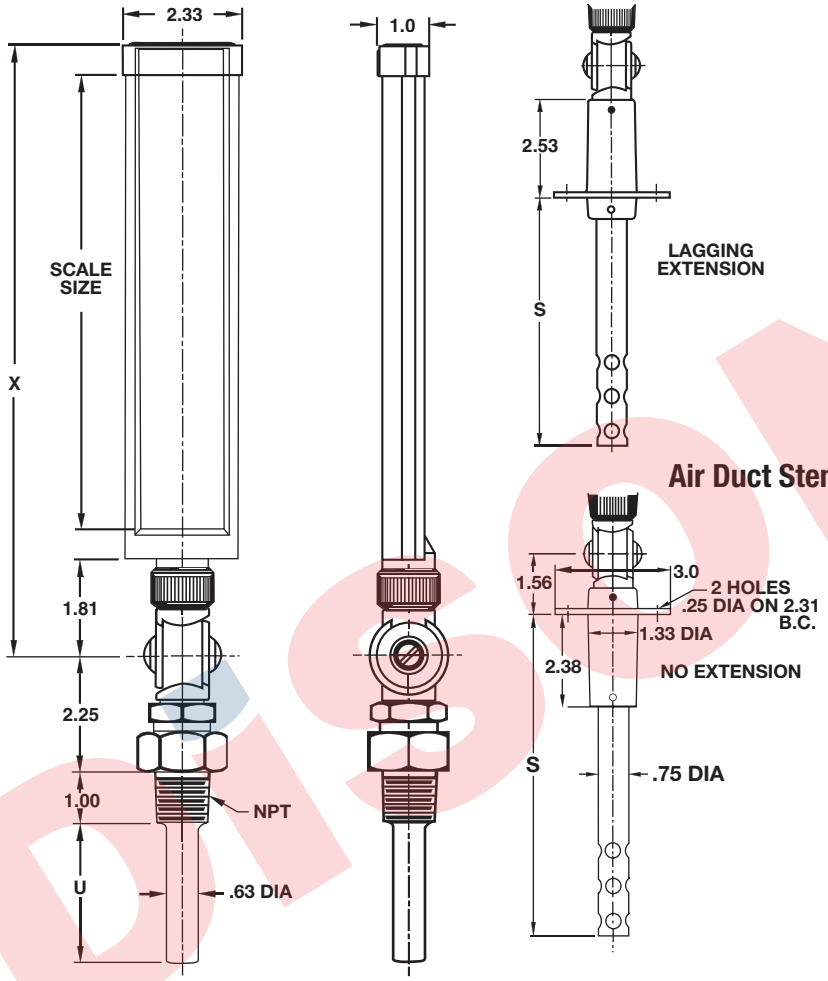
HOW TO ORDER

AD	35	A	FC

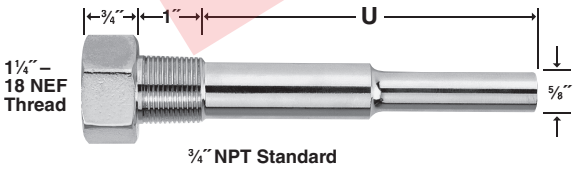
1. Product Type:
   AD = Adjust Angle Digital Thermometer
2. Stem Length: 35 = 3½˝; 60 = 6˝
4. Connection Location: A = Adjust Angle
5. Range: FC = Switchable Range –40/300°F or –40/150°C

WEKSLER®

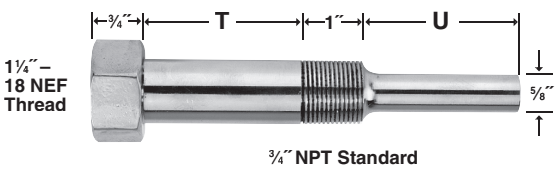
Adjust Angle and Air Duct Thermometer General Dimensions



THERMOWELLS FOR ADJUST ANGLE THERMOMETERS



THERMOMETER STEM LENGTH	"U" DIM.	¾ NPT – CATALOG NUMBER BRASS	STEEL	304 SS	316 SS
3½″	2½″	G1E3D2	G3E3D2	G6E3D2	G4E3D2
6″	5″	G1M3D2	G3M3D2	G6M3D2	G4M3D2
9″	8″	G1S3D2	G3S3D2	G6S3D2	G4S3D2
12″	11″	G1T3D2	G3T3D2	G6T3D2	G4T3D2



THERMOMETER STEM LENGTH	"T" DIM.	"U" DIM.	¾ NPT – CATALOG NUMBER BRASS	STEEL	304 SS	316 SS
3½″	1	1½″	G1E3D2B	G3E3D2B	G6E3D2B	G4E3D2B
6″	2½″	2½″	G1M3D2E	G3M3D2E	G6M3D2E	G4M3D2E
9″	2½″	5½″	G1S3D2E	G3S3D2E	G6S3D2E	G4S3D2E
12″	2½″	8½″	G1T3D2E	G3T3D2E	G6T3D2E	G4T3D2E

WEKSLER®

Navy/Marine Thermometer & Economy Thermometer

Navy/Marine Thermometer

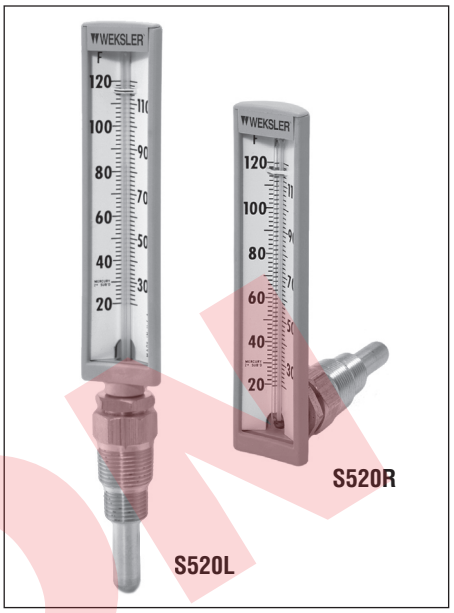
STANDARD FEATURES

- Molded Valox® – V-shaped gray case.
- White aluminum scale with bold black graduations and flanges.
- 2″ and 4″ stems available.
- 3¼″ overall length thermowell (optional) to be used with 2″ stem.
  5¼″ overall length thermowell (optional) to be used with 4″ stem.
- Red reading with magnifying lens for easy readability.

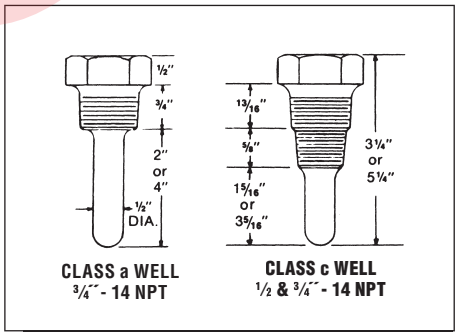
RANGES		
DUAL SCALE	MINOR GRADS	RANGE CODE
–40/110F & –40/43C	2°/2°	D1
20/180F & –5/80C	2°/2°	DØ
30/240F & 0/115C	2°/2°	D5
50/400F & 10/200C	5°/2°	D7

PART NUMBERS*		
CONNECTION LOCATION	STEM LENGTHS	
	2″	4″
Lower	S520L	S540L
Back	S520R	S540R

*Include range code (above) at end of above # to complete the part number.



THERMOWELL DIMENSIONS – ¾-28″ Female Thread (Internal)				
WELL CLASS	STEM LENGTH OF THERMOMETER	OVERALL LENGTH OF WELL	CATALOG #	
			BRASS	304SS
a	2 inch 4 inch	3¼″ 5¼″	N/A N/A	W3G1 W5G1
c	2 inch 4 inch	3¼″ 5¼″	W3B3 W5B3	W3G3 W5G3

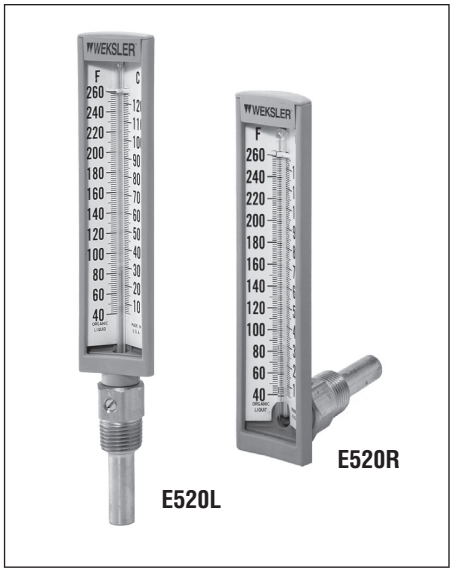


Economy Thermometer

STANDARD FEATURES

- Molded Valox® – V-shaped gray case.
- Red reading spirit filled tube with magnifying lens for easy readability.
- 40/260F and 5/125C is standard range (2°F divisions and 1°C divisions)
- White aluminum scale with bold black graduations and figures.
- 2″ stem supplied as standard.
- Supplied standard with removable ½ NPT brass well, 2″ length (1.375″ insertion).

PART NUMBERS	
CONNECTION LOCATION	2″ STEM
Lower	E520L
Back	E520R



GAS ACTUATED THERMOMETERS

WEKSLER®

Considerations in Selecting Gas Actuated Dial Thermometers

RANGE

The maximum operating pressure should not exceed 75% of the full-scale range. The normal operating range should be in the middle half of the range (between 25% and 75% of the full-scale range); whenever possible.

DIAL SIZE

Select a dial size that allows you to comfortably read the dial from the normal distance when installed.

ACCURACY

All Weksler gas actuated dial thermometers have an accuracy of ± 1% of the full-scale range. For accurate readings the entire sensitive portion of the bulb must be fully immersed into the medium being measured.

CASE

A wide variety of case styles and materials are offered. Determine how the thermometer is to be mounted: direct, surface (wall) or flush (in panel). Determine the desired case material: polypropylene, aluminum (black enameled) or stainless steel (300 series).

FACE

A gasketed glass window is standard. Where breakage is a concern, a plastic or shatterproof glass window is optional at extra cost. Plastic windows are not suitable where head temperature exceeds 150°F (65°C).

POINTER

All Weksler gas actuated thermometers have adjustable pointers. This permits pointer repositioning during calibration check or allows maximum precision at a selected point within the scale range.

MOUNTING

Weksler gas actuated thermometers are available in remote mounted types (with capillary tubing between case and sensing bulb) and direct mounted types (sensing bulb is attached directly to case). Remote mounted types allow the temperature to be read at a location remote from the actual temperature source. Remote mounting is also desirable to isolate the head (case, scale, pointer and internal parts) from the damaging effects of shock, vibration or excessive heat that may be present at the temperature source. Direct mounted thermometers are available in “adjust angle” types which allow the head of the thermometer to be positioned for the most desirable viewing angle or rigid (non-adjustable types with fixed bottom or rear connections. Direct mounted units are installed directly on pipes, tanks or other vessels.

BULB TYPES

Weksler gas actuated thermometers are available with various styles of plain bulbs or union connection bulbs. The bulb is the sensing element at the tip of the thermometer that reacts to temperature changes. The entire thermometer including the bulb, head assembly and capillary tubing (on remote types) is filled with an inert nitrogen gas offering fast response and linear dial graduations. Plain bulbs are those without threaded fittings for sensing air temperature or liquid temperatures in open tanks, vats, sinks, etc. Union connected bulbs have threaded swivel nuts that hold the bulb into a bulb fitting such as a thermowell, bushing or flange.

HIGH PRESSURE OR CORROSIVE APPLICATIONS

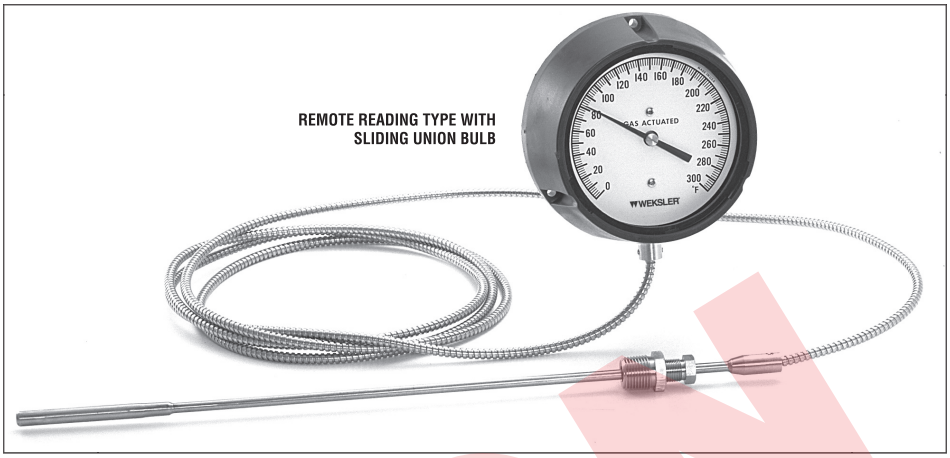
In these applications, use of a separable thermowell is recommended. In addition to protecting the thermometer, thermowells facilitate removal of the thermometer without having to shut down the system.

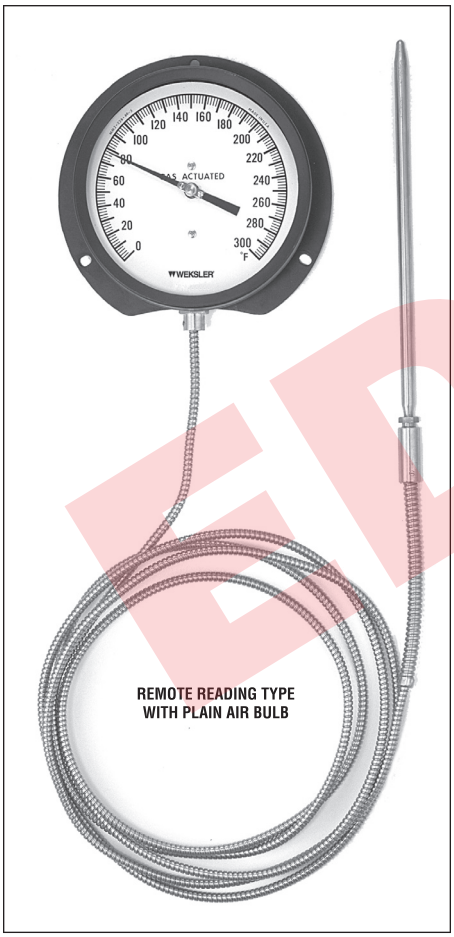
WEKSLER®

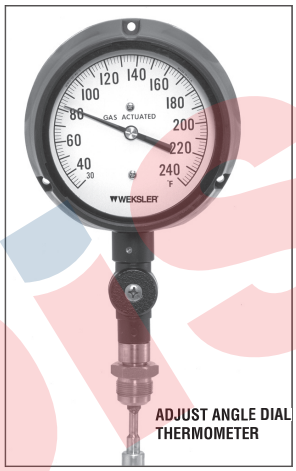
Direct or Remote Mounted Gas Actuated Dial Thermometers

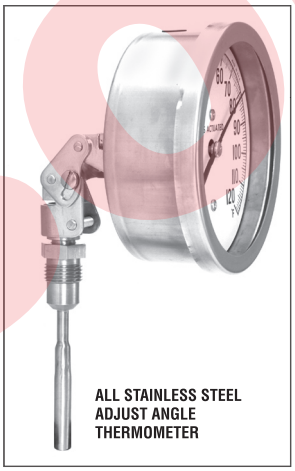
STANDARD FEATURES

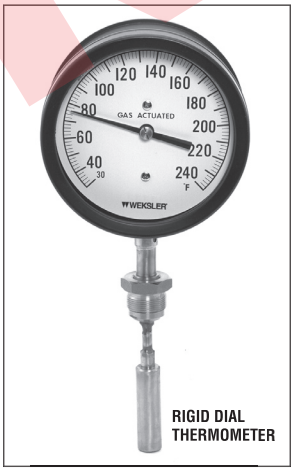
- Uniformly graduated scales
- Accurate to ± 1% of range span
- 3½″, 4½″, 6″ and 8½″ dial sizes
- Adjustable pointer
- Fast response
- Inert gas fill – ideal for applications where Mercury is prohibited
- Stainless steel bulb
- Stainless steel (302) interlocked spiral armor over stainless steel (347) capillary tubing (lengths up to 100 ft.)
- Bronze bushed rotary type brass movement – stainless steel movement optional at extra cost
- Rigid or adjustable angle forms











STANDARD TYPE "E" CAPILLARY TUBING

0.280″ O.D. Stainless Steel Interlocked Spiral (302) Armor Over Stainless Steel Capillary (347)

TABLE 1

REMOTE AND DIRECT MOUNTED TYPES

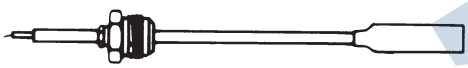
BASE CATALOG NO.	DIAL SIZE	TYPE
313B 413B 613B 813B	3½″ 4½″ 6″ 8½″	REMOTE MOUNTED
453B	4½″	ALL STAINLESS STEEL ADJUSTABLE ANGLE
333B 433B 633B 833B	3½″ 4½″ 6″ 8½″	ADJUSTABLE ANGLE
323B 423B 623B 823B	3½″ 4½″ 6″ 8½″	RIGID (NOT ADJUSTABLE)

WEKSLER®

How To Order Gas-Actuated Thermometers

TABLE 2 – BULB TYPE AND SIZE

FOR ALL MOUNTED TYPES

	CODE
PLAIN BULB FOR AIR TEMPERATURE  **12″ Long** **.375 Diameter** **Optional Fittings:** A16 Bulb Mounting Bracket	A
PLAIN BULB FOR LIQUIDS IN OPENTANKS, VATS, SINKS, ETC.  **6″ Long** **.50″ Diameter** **Optional Fittings:** A1 ½ NPT Compression Fitting A12-2 Set Screw Flange	C
PLAIN BULB WITH 12″ BENDABLE EXTENSION 	
3″ x .375″ Diameter Bulb	1
3″ x .625″ Diameter Bulb	E
SLIDING UNION CONNECTION WITH 12″ BENDABLE EXTENSION  **3″ x .375″ Diameter Bulb, ½ NPT Swivel Nut** **Optional Fittings:** All “K” Series Thermowells 2F2 Flange	3
SLIDING UNION CONNECTION WITH12″ BENDABLE EXTENSION  **3″ x .625″ Diameter Bulb, 1″-20 NEF-2B Swivel Nut** **Optional Fittings:** All “5F” Series Thermowells All ”5F” Series Bushings	N

DIRECT MOUNTED TYPES

⅜″ O.D. – ½″-14 NPSM Swivel Nut

Union Connection (fixed length)
Wells, busings or flanges required
for installation

CODE	STEM LENGTH	FITS WELL*
4	4″	4½″ O.A.
6	6″	6½″ O.A.
9	9″	9¼″ O.A.
2	12″	12¼″ O.A.

*Uses “K” Series Thermowells (See page)

⅝″ O.D. – 1″-20 NEF-2B Swivel Nut**

CODE	STEM LENGTH	FITS WELL*
J	3½″	4½″ O.A.
K	6″	6¾″ O.A.
L	9″	9¾″ O.A.
M	12″	12¾″ O.A.

**Uses “5F” Series Thermowells
“5F” Series Bushings (See page)

TABLE 3 – CASE STYLES

WALL MOUNTED TYPES

CODE	CASE TYPE
P	Molded polypropylene, Turret Type Standard – 4½″ dial size only.
A	Aluminum, Rear Flange Black Aluminum Bayonet Ring Standard – 3½″, 6″ dial sizes. Extra cost option – 4½″ dial size.
G	Aluminum, Rear Flange Chrome Like Bayonet Ring Standard – 8½″ dial size only.
X	Stainless Steel, Rear Flange Stainless Steel Bayonet Ring Extra cost option – 3½″ or 4½″ dial sizes only.

FLUSH PANEL MOUNTED STYLES

E	Aluminum Case Black Threaded Front Flange Ring Extra cost option – all dial sizes.
B	Aluminum Case, Semi-Flush Mounting Black Aluminum Bayonet Ring Extra cost option – 3½″, 4½″, 6″ dial sizes.
H	Aluminum Case, Semi-Flush Mounting Chrome like Bayonet Ring Extra cost option – 8½″ dial size only.
V	Stainless Steel Case and Bayonet Ring Front Flange – Semi-Flush Mounting Extra cost option – 4½″ dial sizes only.
W	Aluminum Case Hinged Front Plastic Bezel Extra cost option – 4½″, 6″ dial sizes only.

DIRECT MOUNTED TYPES

CODE	CASE TYPE
P	Molded polypropylene, Turret Type Standard on 4½″ dial size. (Not available in other dial sizes.)
C	Aluminum, Flangeless Black Aluminum Bayonet Ring. Standard on 3½″ and 6″ dial sizes. Extra cost option for 4½″ dial size.
I	Aluminum, Flangeless Chrome Like Bayonet Ring. Standard on 8½″ dial size. (Not available in other dial sizes.)
Y	Stainless Steel, Flangeless Stainless Steel Bayonet Ring Standard on base catalog No. 453B Extra cost option for all other 4½″ dial sizes (Not available in other dial sizes).

For complete case description and dimensions refer to pages 108-111

WEKSLER®

How To Order Gas-Actuated Dial Thermometers

TABLE 4

CONNECTION LOCATION	AVAILABILITY			
CODE	ALL SS ADJ. ANGLE	ADJUST ANGLE	RIGID TYPE	REMOTE MOUNT
C = Center Back	•	•		
L = Lower		•	•	•
R = Rear			•	•

TABLE 5

CODE	CASE FEATURE
0	None
2	Flush mounting ring and contact
F	Flush mounting ring only
C	Contact

TABLE 6

CODE	CAPILLARY TYPE
E	Stainless steel armored
Q	PVC coated
X	None required

TABLE 7 – BULB DIMENSIONS

CODE	LENGTH	DIAMETER
NE	12″	3/8 (.375)
GG	6″	1/2 (.50)
CE	3″	3/8 (.375)
CJ	3″	5/8 (.625)
EE	4″	3/8 (.375)
GE	6″	3/8 (.375)
KE	9″	3/8 (.375)
DJ	3 1/2″	5/8 (.625)
GJ	6″	5/8 (.625)
KJ	9″	5/8 (.625)
NJ	12″	5/8 (.625)

TABLE 9 – STANDARD RANGES

CODE	FAHRENHEIT
FA	–100/100
FB	–40/110
FC	–40/180
FD	–20/120
FE	0/100
FF	0/120
FG	0/150
FH	0/200
FI	0/300
FJ	0/400
FK	0/500
FL	20/240
FM	30/240
FN	50/550
FO	50/750
FP	200/1000
FQ	400/1200

CODE	DUAL (F&C)
DA	–40/104F & –40/40C
DB	–40/180F & –40/82C
DD	–20/120F & –30/50C
DD	0/120F & –20/50C
DE	0/150F & –18/66C
DF	0/300F & –20/120C
DG	0/500F & –18/260C
DH	30/240F & 0/115C
DI	50/550F & 10/290C
DJ	200/1000F & 95/540C
DK	400/1200F & 200/650C
DL	0/1000F & 18/38C
DO	50/750F & 10/399C

CODE	CELCIUS
CA	–100/100
CB	–40/180
CC	–20/120
CD	0/100
CE	0/120
CF	0/150
CG	0/200
CH	0/300
CI	0/400
CJ	0/500
CK	200/650
CM	30/50
CR	30/150

TABLE 10

CODE	LENGTH OF CAPILLARY TUBING
00	None
2	2′
12	12′
1C	100′

TABLE 8

CODE	OPTIONS
0	NONE
D	25″ bendable extension
E	30″ bendable extension

HOW TO ORDER

453B 4 Y C 0 X NE 0 FA 00 ( )

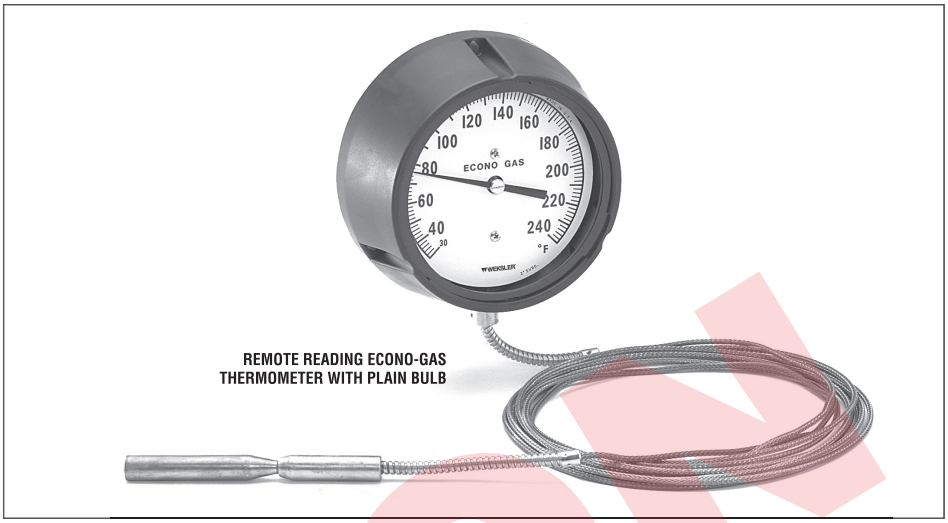
1. Specify 4-digit Base Catalog No. from Table 1
2. Add Bulb Digit from Table 2
3. Add Case Style Digit from Table 3
4. Add Connection Location Digit from Table 4
5. Add Case Feature Digit from Table 5 (enter “0” if none)
6. Add Capillary Type Digit from Table 6 (enter “X” if none required)
7. Add Bulb Dimension Digits from Table 7
8. Add Bendfable extension Length Digit Options from Table 8 (enter “0” if none required)
9. Add Range Code Digits from Table 9
10. Add Length of Capillary Digit(s) from Table 10 (enter “00” if none required)
11. Add Optional Feature Code from Page 112 if needed

WEKSLER®

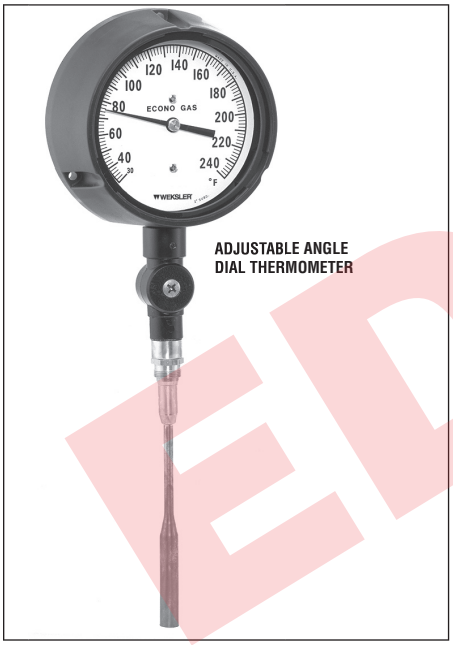
Direct or Remote Mounted Econo Gas-Actuated Thermometers

STANDARD FEATURES

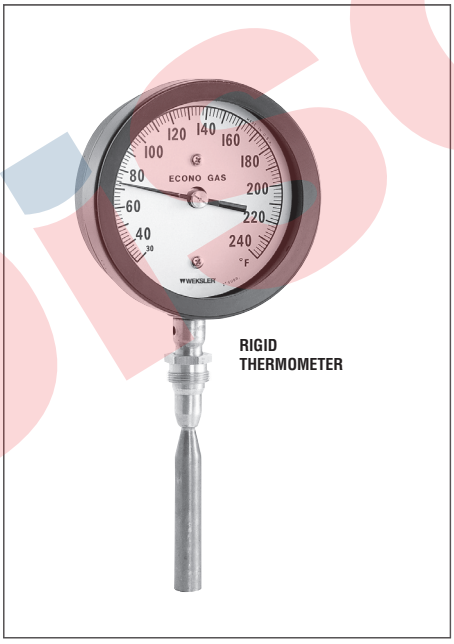
- Uniformly graduated scales
- Accurate to ± 1% of range span
- 3½˝ and 4½˝ dial sizes
- Adjustable pointer
- Fast response
- Inert gas fill – ideal for applications where Mercury is prohibited
- Copper Bulb, ½˝ diameter with brass fittings
- Bronze bushed rotary type brass movement



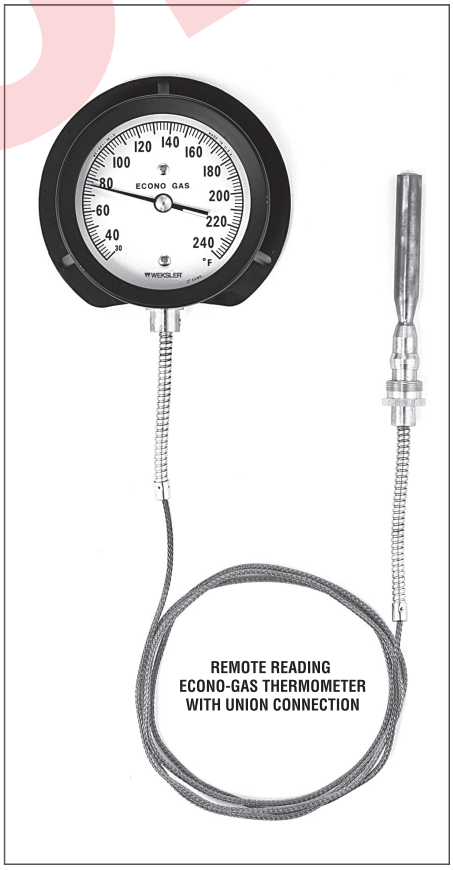
REMOTE READING ECONO-GAS THERMOMETER WITH PLAIN BULB



ADJUSTABLE ANGLE DIAL THERMOMETER



RIGID THERMOMETER



REMOTE READING ECONO-GAS THERMOMETER WITH UNION CONNECTION

STANDARD TYPE "P" CAPILLARY TUBING

0.125˝ O.D. Copper Braided Protective Covering Over Copper Capillary
AVAILABLE LENGTHS: 5, 10, 15, 20, 25 or 30 feet.

WEKSLER®

How To Order Econo Gas Actuated Thermometers

TABLE 1

REMOTE AND DIRECT MOUNTED TYPES

BASE CATALOG NO.	DIAL SIZE	TYPE
313E 413E 613E	3½″ 4½″ 6″	REMOTE MOUNTED
333E 433E	3½″ 4½″	ADJUSTABLE ANGLE
323E 423E	3½″ 4½″	RIGID (NOT ADJUSTABLE)

TABLE 3 – CASE STYLES

WALL MOUNTED TYPES

CODE	CASE TYPE
P	Molded polypropylene, Turret Type Standard – 4½″ dial size only.
A	Aluminum, Rear Flange Black Aluminum Bayonet Ring Standard – 3½″ dial size. Extra cost option – 4½″ dial size.
X	Stainless Steel, Rear Flange Stainless Steel Bayonet Ring Extra cost option – 4½″ dial size.

FLUSH PANEL MOUNTED STYLES

E	Aluminum Case Black Threaded Front Flange Ring Extra cost option – all dial sizes.
B	Aluminum Case, Semi-Flush Mounting Black Aluminum Bayonet Ring Extra cost option
V	Stainless Steel Case and Bayonet Ring Front Flange – Semi-Flush Mounting Extra cost option – 4½″ dial sizes only.
W	Aluminum Case Hinged Front Plastic Bezel Extra cost option – 4½″ dial size.

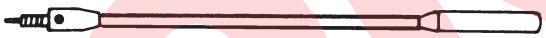
DIRECT MOUNTED TYPES

CODE	CASE TYPE
P	Molded polypropylene, Turret Type Standard on 4½″ dial size. (Not available in other dial sizes.)
C	Aluminum, Flangeless Black Aluminum Bayonet Ring. Standard on 3½″ dial size. Extra cost option for 4½″ dial size.
Y	Stainless Steel, Flangeless Stainless Steel Bayonet Ring Extra cost option for 3½″ or 4½″ dial sizes

For complete case description and dimensions refer to pages 108-111

TABLE 2 – BULB TYPE AND SIZE

FOR ALL MOUNTED TYPES

	CODE
PLAIN BULB FOR AIR TEMPERATURE  **12″ Long .375 Diameter** **Optional Fittings:** A16 Bulb Mounting Bracket	A
PLAIN BULB FOR LIQUIDS IN OPENTANKS, VATS, SINKS, ETC.  **6″ Long .50″ Diameter** **Optional Fittings:** A1 ½ NPT Compression Fitting A12-2 Set Screw Flange	C
PLAIN BULB WITH 12″ BENDABLE EXTENSION 	
3″ x .375″ Diameter Bulb	1
3″ x .625″ Diameter Bulb	E
SLIDING UNION CONNECTION WITH 12″ BENDABLE EXTENSION  **3″ x .375″ Diameter Bulb, ½ NPT Swivel Nut** **Optional Fittings:** All “K” Series Thermowells 2F2 Flange	3
SLIDING UNION CONNECTION WITH12″ BENDABLE EXTENSION  **3″ x .625″ Diameter Bulb, 1″-20 NEF-2B Swivel Nut** **Optional Fittings:** All “5F” Series Thermowells All ”5F” Series Bushings	N

DIRECT MOUNTED TYPES

½″ O.D. Bulb – ¾″-24 NS-2 Swivel Nut with Compression Fitting

Union Connection (fixed length)
Wells, busings or flanges required for installation

CODE	STEM LENGTH	FITS WELL*
J	3½″	4½″ O.A.
K	6″	6½″ O.A.

Optional Fittings: “4B Series” Thermowells
“4B Series” Bushings
All-2 Flange

WEKSLER®

How To Order Econo Gas Actuated Thermometers

TABLE 4

CONNECTION LOCATION	AVAILABILITY	
CODE	ADJUST ANGLE	RIGID TYPE
L = Lower	•	•
R = Rear		•

TABLE 5

CODE	CASE FEATURE
0	None
2	Flush mounting ring and contact
F	Flush mounting ring only
C	Contact

TABLE 6

CODE	CAPILLARY TYPE
X	None required
P	Copper with braided copper covering

TABLE 7 – BULB DIMENSIONS

CODE	LENGTH	DIAMETER
DG	3½″	½ (.50)
GG	6″	½ (.50)
CG	12″	½ (.50)

TABLE 8

CODE	OPTIONS
0	None
D	25″ bendable extension
E	30″ bendable extension

TABLE 9 – STANDARD RANGES

CODE	FAHRENHEIT	DIVISIONS
FD	–20 to 120°F	1°
FE	0 to 100°F	1°
FR	30 to 150°F	1°
FM	30 to 240°F	2°
FI	0 to 300°F	2°
CODE	**CELSIUS**	**DIVISIONS**
CM	–30 to 50°F	1°
CD	0 to 100°F	1°
CR	30 to 150°F	1°
CODE	**DUAL**	**DIVISIONS**
DL	0 to 100°F –18 to 38°C	1° 1°
DH	30 to 240°F 0 to 115°C	2° 1°

TABLE 10

CODE	LENGTH OF CAPILLARY TUBING
00	None
2	2′
12	12′
1C	100′

HOW TO ORDER

433E J V L 0 X DG 0 FD 00 ( )

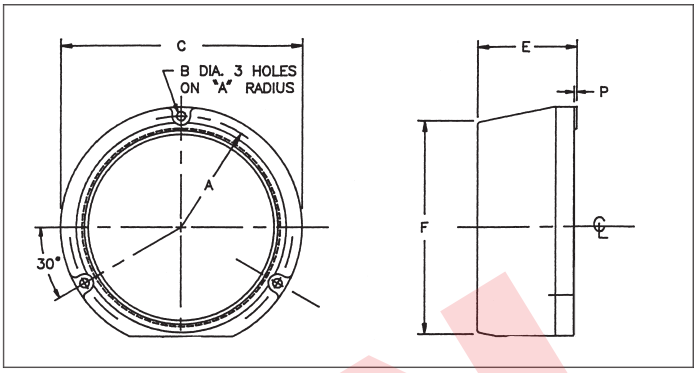
1. Specify 4-digit Base Catalog No. from Table 1
2. Add Bulb Digit from Table 2
3. Add Case Style Digit from Table 3
4. Add Connection Location Digit from Table 4
5. Add Case Feature Digit from Table 5 (enter “0” if none)
6. Add Capillary Type Digit from Table 6 (enter “X” if none required)
7. Add Bulb Dimension Digits from Table 7
8. Add Bendfable extension Length Digit Options from Table 8 (enter “0” if none required)
9. Add Range Code Digits from Table 9
10. Add Length of Capillary Digit(s) from Table 10 (enter “00” if none required)
11. Add Optional Feature Code from Page 112 if needed

SURFACE (WALL) OR DIRECT MOUNT TYPES

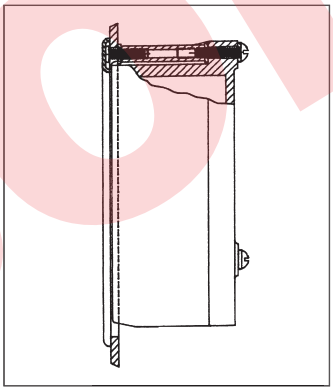
Snap-in glass retaining ring.

Standard for 4½″ remote or direct mount types (except all stainless steel adjust angle).

STYLE	DIAL SIZE(S)	MATERIAL
P	4½″ Only	Polypropylene



GAUGE SIZE		A	B	C	E	F	P
4½	INCH	2 11/16	1/4	5 13/16	2 7/16	5 1/16	1/16
	MM	68	6	148	62	129	2

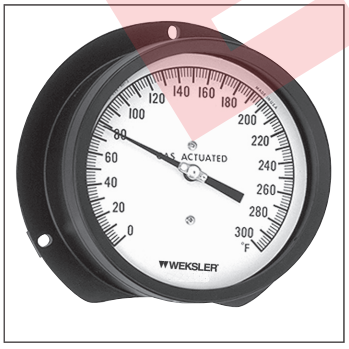


FLUSH MOUNTING RING KIT FOR STYLE "P" CASE

CATALOG NUMBER	FOR USE WITH FOR USE WITH	PANEL CUT-OUT DIAMETER
TR45	4½″ "P" Case	5.675″

Kit consists of flush mounting ring plus necessary hardware for mounting (screws, washers, spacer posts).

SURFACE (WALL) MOUNT TYPES



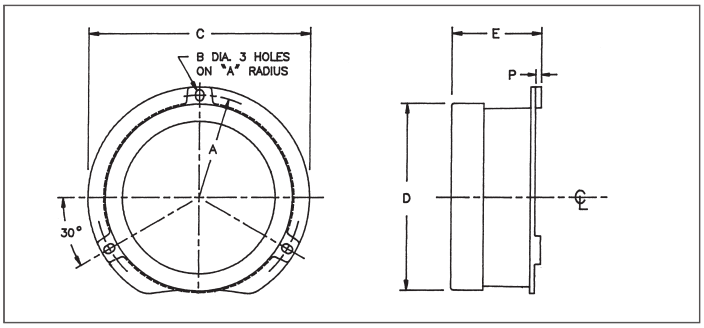
Style "A" has bayonet type glass retaining ring.

Style "G" has chrome like slip on glass retaining ring.

Style "A" is standard on 3½″ and 6″ dial size remote mount thermometers and is optional for 4½″ dial size.

Style "G" is standard on 8½″ dial size remote mount thermometers.

STYLE	DIAL SIZE(S)	MATERIAL
A	3½″-4½″-6″	Aluminum Black Textured Enamel Finish
G	8½″ Only	



GAUGE SIZE		A	B	C	E	F	P
3½	INCH	2 1/8	3/16	5	4	2 1/16	1/8
	MM	64	5	127	102	52	3
4½	INCH	2 11/16	3/16	5 1/8	4 15/16	2 7/16	1/8
	MM	68	5	149	125	62	3
6	INCH	3 3/16	1/4	7 5/8	6 7/16	2 1/2	1/8
	MM	90	6	194	164	64	3
8½	INCH	4 13/16	1/4	10 1/4	8 15/16	2 5/16	1/16
	MM	122	6	260	227	59	2

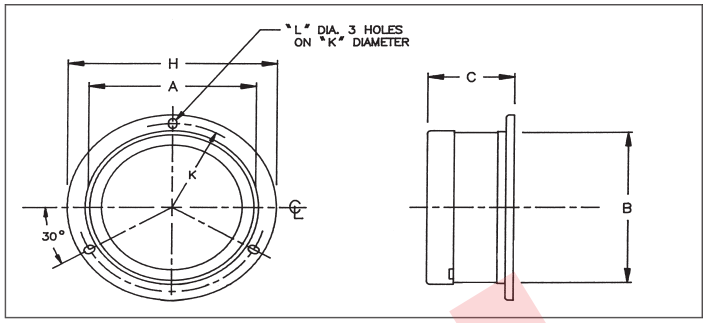
NOTE: ALL DIMENSIONS ARE APPROXIMATE.

SURFACE (WALL) MOUNT TYPES (Cont.)

BAYONET TYPE GLASS RETAINING RING

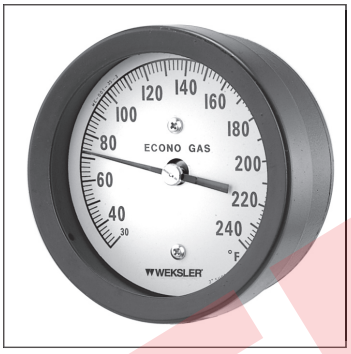
Extra cost option for 3½″ or 4½″ dial size remote mount thermometers.

STYLE	DIAL SIZE(S)	MATERIAL
X	3½″ and 4½″	Stainless Steel (300 Series)



GAUGE SIZE		A	B	C	H	K	L
3½	INCH	3 15/16	3 5/8	1 5/8	5 3/16	4 3/8	7/32
	MM	100	92	41	132	111	6
4½	INCH	4 7/8	4 9/16	2 5/16	6	5 3/8	7/32
	MM	124	116	59	152	137	6

DIRECT MOUNT TYPES (Flangless Case)

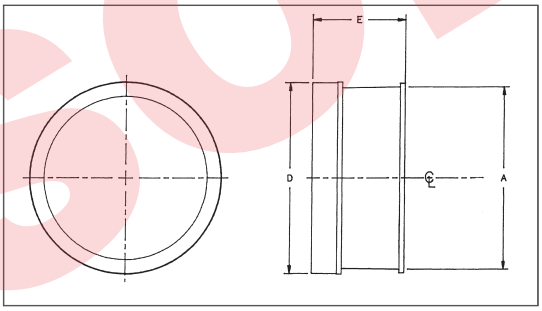


Style "C" is standard on 3½″ and 6″ dial size direct mount thermometers and is extra cost option for 4½″ dial size.

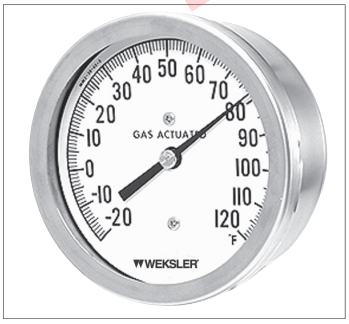
Style "I" is standard for 8½″ dial size direct mount thermometers.

Glass retaining ring is Bayonet type on style "C" and slip-on type on style "I".

STYLE	DIAL SIZE(S)	MATERIAL
C	3½″-4½″-6″	Aluminum Black Textured Enamel Finish
I	8½″ Only	



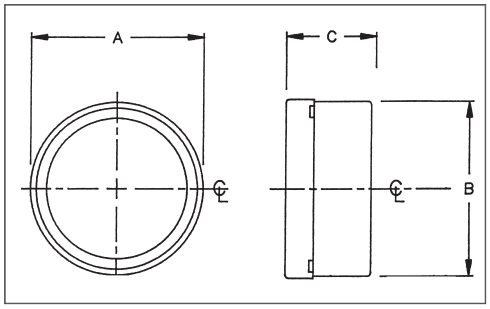
GAUGE SIZE		A	BEZEL-D BAY'NT	BEZEL-D SLIP	E
3 1/2	INCH	3 7/8	4 1/8	–	2
	MM	98	105	–	51
4 1/2	INCH	4 15/16	5	–	2 3/8
	MM	125	127	–	60
6	INCH	6 7/16	6 1/2	–	2 7/16
	MM	164	165	–	62
8 1/2	INCH	8 5/8	–	8 3/4	2 1/4
	MM	219	–	222	57



BAYONET TYPE GLASS RETAINING RING

Standard on all stainless steel adjust angle, extra cost on all other 3½″ or 4½″ dial size direct mount thermometers.

STYLE	DIAL SIZE(S)	MATERIAL
Y	3½″ and 4½″	Stainless Steel (300 Series)



GAUGE SIZE		A	B	C
3 1/2	INCH	3 15/16	3 5/8	1 5/8
	MM	100	92	41
4 1/2	INCH	4 7/8	4 9/16	2 3/16
	MM	124	116	56

NOTE: ALL DIMENSIONS ARE APPROXIMATE.

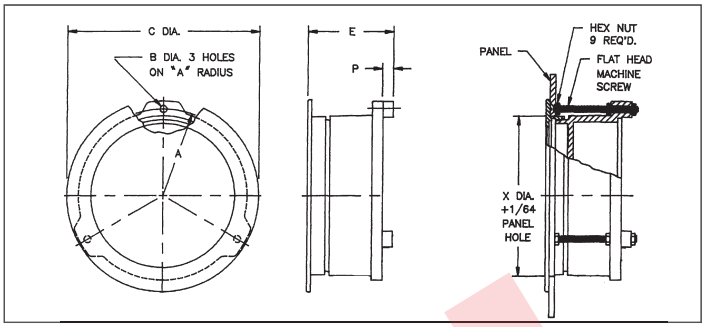
FLUSH PANEL MOUNT TYPES

Flanged threaded glass retaining ring for full flush mounting.

Extra cost option on all dial size remote mount thermometers.

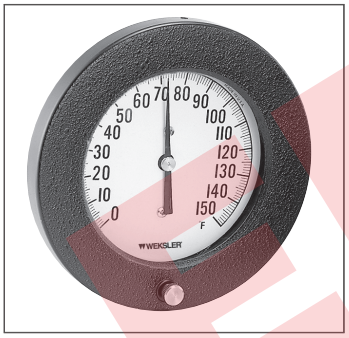
NOTE: Rear (back) connections are recommended for flush mounting. Bottom connection is also available.
NOTE: Style "E" formerly was style "AF".

STYLE	DIAL SIZE(S)	MATERIAL
E	3½″, 4½″, 6″ and 8½″	Aluminum Black Textured Enamel Finish



GAUGE SIZE		A	B	C	D	E	P	X	SCREW SIZE
3½	INCH	2 3/16	7/32	5	4 15/16	2	1/8	4	10-32 x 2½
	MM	56	6	127	125	51	3	102	
4½	INCH	2 11/16	7/32	5 7/8	6	2 7/16	3/16	5	10-32 x 2½
	MM	68	6	149	152	62	5	127	
6	INCH	3½	9/32	7 5/8	7 3/4	2 7/16	3/16	6½	¼-20 x 2½
	MM	89	7	194	197	62	5	165	
8½	INCH	4 13/16	9/32	10 1/8	10 3/8	2 5/16	1/16	9	¼-20 x 2½
	MM	122	7	257	264	59	2	229	

HINGED FRONT TYPE FOR FLUSH MOUNTING

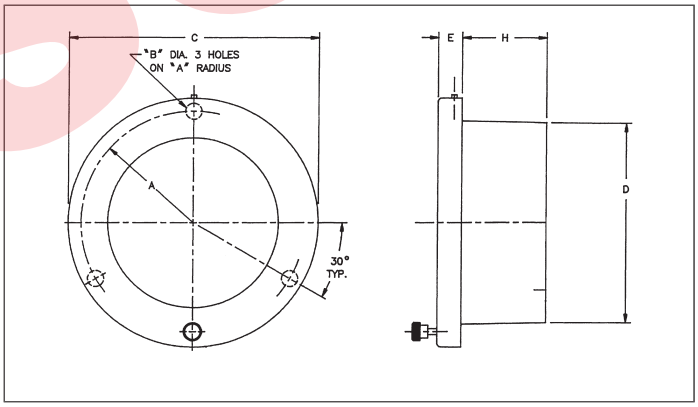


Molded plastic hinged front ring allows easy access to dial and pointer.

Extra cost option on 4½″ and 6″ dial size remote mount thermometers.

NOTE: Only available with rear (back) connection.

STYLE	DIAL SIZE(S)	MATERIAL
W	4½″ and 6″	Aluminum Black Textured Enamel Finish



GAUGE SIZE		A	B	C	D	E	H	X
4½	INCH	2 11/16	3/16	6 3/16	4 7/8	5/8	2	4 15/16
	MM	68	5	157	124	16	51	125
6	INCH	3½	3/16	7 13/16	6 5/8	5/8	1 3/4	6 7/16
	MM	89	5	198	168	16	44	164

X-PANEL HOLE CUT-OUT DIAMETER

NOTE: ALL DIMENSIONS ARE APPROXIMATE.

WEKSLER®

Case Styles, Materials, Descriptions, Dimensions

FLUSH PANEL MOUNT TYPES

Front flanged case for semi-flush mounting.

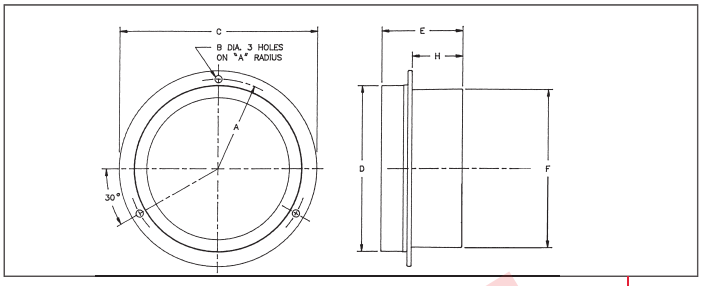
Style “B” has Bayonet type glass retaining ring.

Style “H” has chrome like slip on glass retaining ring.

Extra cost option on all remote mount thermometers.

NOTE: Only available with rear (back) connection.

STYLE	DIAL SIZE(S)	MATERIAL
B	3½″ -4½″ -6″	Aluminum Black Textured Enamel Finish
H	8½″ Only	



GAUGE SIZE		A	B	C	D	E	F	H	X
3½	INCH	2¼	¼	4 15/16	4⅛	2	3 13/16	1 1/32	3 15/16
	MM	57	6	125	105	51	97	26	100
4½	INCH	2 11/16	¼	5⅞	5	2¼	4¾	1½	4⅞
	MM	68	6	149	127	57	121	38	124
6	INCH	3½	9/32	7 9/16	6½	2 7/16	6 3/16	1 1/16	6 5/16
	MM	89	7	192	165	62	157	37	160

X-PANEL HOLE CUT-OUT DIAMETER

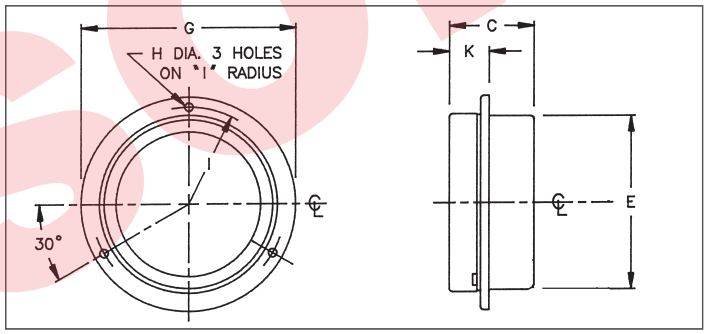
Front flanged case for semi-flush mounting.

Bayonet type glass retaining ring.

Extra cost option 4½″ dial size remote mount thermometers.

NOTE: Only available with rear (back) connection.

STYLE	DIAL SIZE(S)	MATERIAL
V	4½″	Stainless Steel (300 Series)



GAUGE SIZE		A	B	C	H	K	L
3½	INCH	1⅝	3⅝	5 3/16	7/32	2⅛	11/16
	MM	41	92	132	6	29	17
4½	INCH	2⅛	4 9/16	5 15/16	7/32	2 11/16	13/16
	MM	54	116	151	6	68	21

NOTE: ALL DIMENSIONS ARE APPROXIMATE.

WEKSLER®

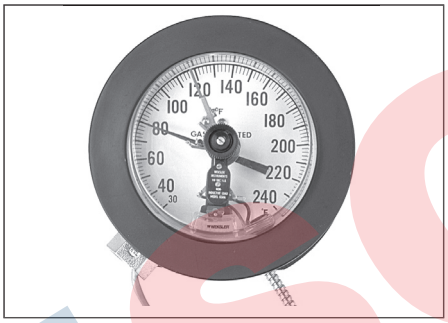
Optional Features (extra cost)

FEATURES	OPTION CODE
Plastic Lens	PD
Shatterproof Glass	SG
Movable Red Set Hand	SH
Dual Red Set Hands	ST
Markings on Dial	DM
Maximum Indicating Hand	EP
Minimum Indicating Hand	EQ
Paper Tag Attached to Instrument	NN
Stainless Steel Tag Attached by Wire	NH
Special Dials (Minimum Quantity Required)	SS

ELECTRIC CONTACTS – 4½˝ DIAL SIZE ONLY

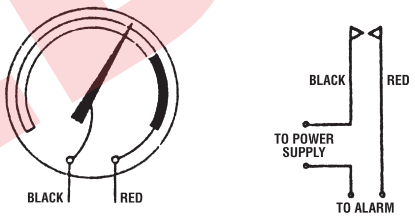
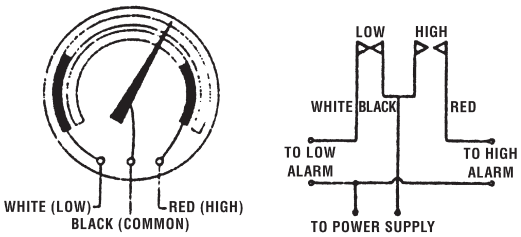
The electric contact feature is a switching mechanism actuated by the indicating pointer Switch points are adjustable and can be set throughout the 270° arc. Contacts are used to activate alarms and relays.

(Not recommended for continuous switching).



STANDARD FEATURES

- High impact polycarbonate enclosure for ambient temperature up to 150°F
- Full scale contact adjustment from front of enclosure
- Magnetically assisted, silver alloy contact
- Accuracy ±2% of scale arc (add to instrument accuracy)
- Rated for ¼ amp. 110 volt AC non-inductive load
- Available in type 2, E, W, Y cases

MODEL	GSHA	GHLDA
DESCRIPTION	Single adjustable contact designed to "make" on the rise.	Double adjustable contact designed to "make" on the rise at the high setpoint and "make" on the drop at the low setpoint "off-in-between"
CONNECTION	2´ lead wires exit side of case thru a conduit fitting.	2´ lead wires exit thru fitting in lower portion of enclosure.
WIRING DIAGRAM		

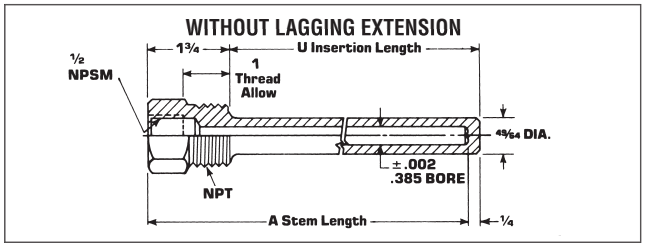
CONNECTING TUBING

TUBING TYPES	ARMOR MATERIAL	CAPILLARY MATERIAL	TUBING TYPE NO.
	PVC Over 0.280˝ O.D. Zinc Plated Steel Interlocked Spiral	Stainless Steel (347)	Q
	0.1875˝ O.D. Stainless steel (316), Smooth Bendable	Stainless Steel (347)	G
	0.125˝ O.D. Stainless Steel Braid (321)	Stainless Steel (347)	O

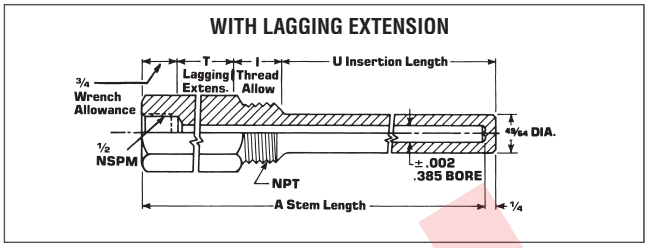
NOTE: Optional tubing types not available on "Econo Gas" type.

"K" SERIES THERMOWELLS

(Fits ⅜" O.D. Bulb with ½" NPSM Swivel Nut)



		PART NUMBERS – 3/4 NPT			
A	U	BRASS	STEEL	304 SS	316 SS
4	2½	S3B4K	S3S4K	S3G4K	S3J4K
6	4½	S3B6K	S3S6K	S3G6K	S3J6K
9	7½	S3B9K	S3S9K	S3G9K	S3J9K
12	10½	S3B2K	S3S2K	S3G2K	S3J2K

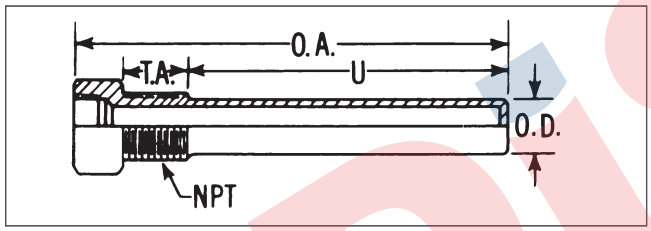


			PART NUMBERS – 3/4 NPT*			
A	U	T	BRASS	STEEL	304 SS	316 SS
6	2½	2	L3B6K	L3S6K	L3G6K	L3J6K
9	4½	3	L3B9K	L3S9K	L3G9K	L3J9K
12	7½	3	L3B2K	L3S2K	L3G2K	L3J2K

*1 NPT AVAILABLE AT EXTRA COST, CHANGE 2ND DIGIT FROM 3 TO 4.

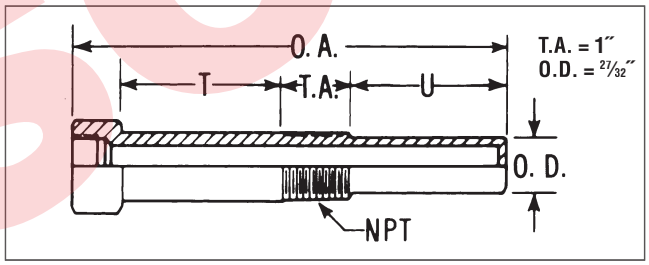
"5F" SERIES THERMOWELL

(Fits ⅝" O.D. Bulb with 1-20 NEF-2B Swivel Nut)



WITHOUT LAGGING EXTENSION

O.A.		PART NUMBERS – 3/4 NPT**			
LENGTH	U DIM.	BRASS	STEEL	304 SS	316 SS
4¼	2½	D1E5F2	D3E5F2	D6E5F2	D4E5F2
6¾	5	D1M5F2	D3M5F2	D6M5F2	D4M5F2
9¾	8	D1S5F2	D3S5F2	D6S5F2	D4S5F2
12¾	11	D1T5F2	D3T5F2	D6T5F2	D4T5F2



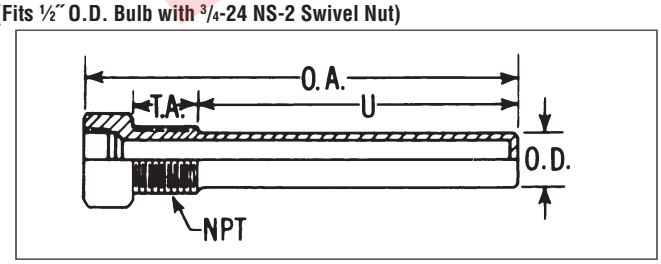
WITH LAGGING EXTENSION

O.A.	PART NUMBERS – 3/4NPT**					
LENGTH	U DIM.	T DIM.	BRASS	STEEL	304 SS	316 SS
6¾	2½	2½	D1M5F2E	D3M5F2E	D6M5F2E	D4M5F2E
9¾	5½	2½	D1S5F2E	D3S5F2E	D6S5F2E	D4S5F2E
12¾	8½	2½	D1T5F2E	D3T5F2E	D6T5F2E	D4T5F2E

**1 NPT AVAILABLE AT EXTRA COST, CHANGE 6TH DIGIT FROM 2 TO 3.

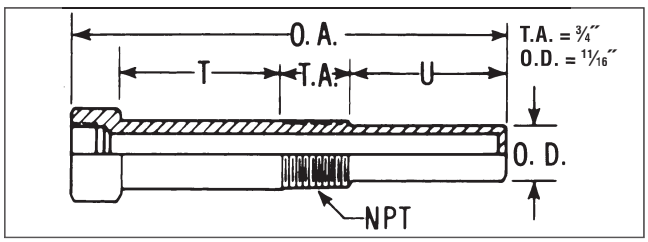
"4B" SERIES THERMOWELLS

(Fits ½" O.D. Bulb with ¾-24 NS-2 Swivel Nut)



WITHOUT LAGGING EXTENSION

O.A.		PART NUMBERS – 1/2 NPT***			
LENGTH	U DIM.	BRASS	STEEL	304 SS	316 SS
4	2¾	D1D4B1	D3D4B1	D6D4B1	D4D4B1
6½	5¼	D1V4B1	D3V4B1	D6V4B1	D4V4B1
9½	8¼	D1Z4B1	D3Z4B1	D6Z4B1	D4Z4B1
12½	11¼	D1T4B1	D3T4B1	D6T4B1	D4T4B1



WITH LAGGING EXTENSION

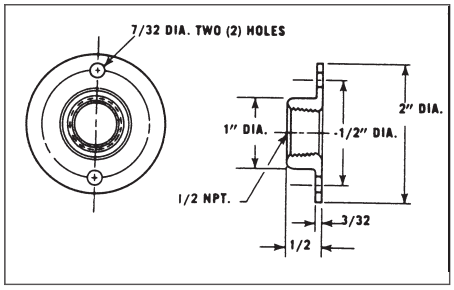
O.A.	PART NUMBERS – 1/2 NPT***					
LENGTH	U DIM.	T DIM.	BRASS	STEEL	304 SS	316 SS
6½	2¾	2½	D1V4B1E	D3V4B1E	D6V4B1E	D4V4B1E
9½	5¾	2½	D1Z4B1E	D3Z4B1E	D6Z4B1E	D4Z4B1E
12½	8¾	2½	D1T4B1E	D3T4B1E	D6T4B1E	D4T4B1E

***3/4 NPT AVAILABLE AT EXTRA COST, CHANGE 6TH DIGIT FROM 1 TO 2.

FLANGES (2˝ O.D.) For use in air ducts, dryers, ovens, etc.

½ NPT FLANGE

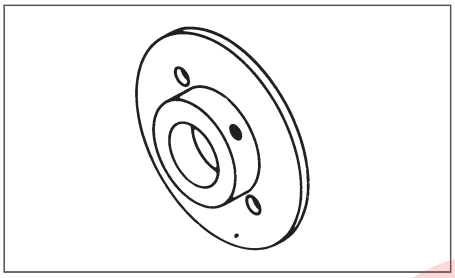
Satin finish chrome plated brass.
For use with bulb style “3” only.



PART NUMBER 2F2

SET SCREW FLANGE

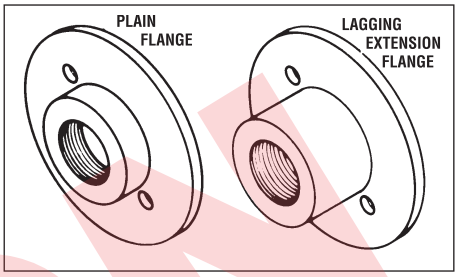
Brass.
For use on plain bulb.
(Style “C” only).



PART NUMBER A12-2

¾˝-24 NS-2 FLANGES

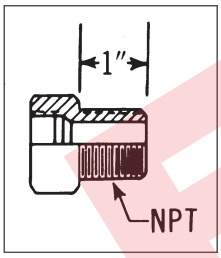
Brass.
For use with Econo-gas.
Bulb styles J, K and N only.



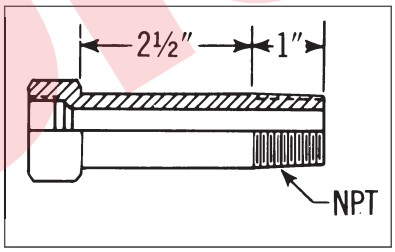
PART NUMBER A11-2 PART NUMBER A13-2

THREADED BUSHINGS

SERIES	INTERNAL THREAD	MALE THREAD	TYPE	PART NUMBER BRASS	304 SS	316 SS
“4B”	¾˝-24 NS-2	½ NPT	Standard	D124B1	D624B1	D424B1
			Lagging	D124B1E	D624B1E	D424B1E
“5F”	1˝-20 NEF-2B	¾ NPT	Standard	D145F2	D645F2	D445F2
			Lagging	D145F2E	D645F2E	D445F2E



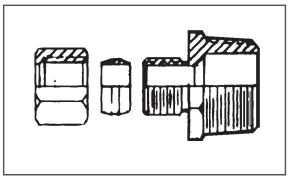
STANDARD BUSHING



LAGGING EXTENSION BUSHING

½ NPT COMPRESSION UNION

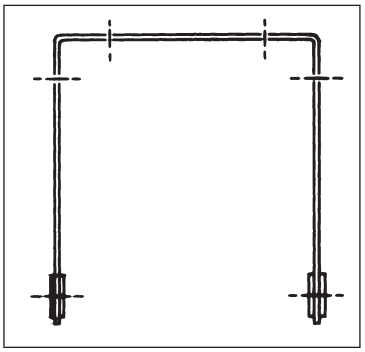
For use on ½˝ O.D. rigid extension plain bulbs. (Bulb Style “C”).



PART NUMBER	THREAD	MATERIAL
1A	½ NPT	Brass
1A-SS	½ NPT	304 SS

MOUNTING BRACKET

Used to support Type “A” air temperature bulb; 5˝ wall clearance provides good air circulation and minimum radiation effect. Nickel plated brass standard. For bulb style “A” only.



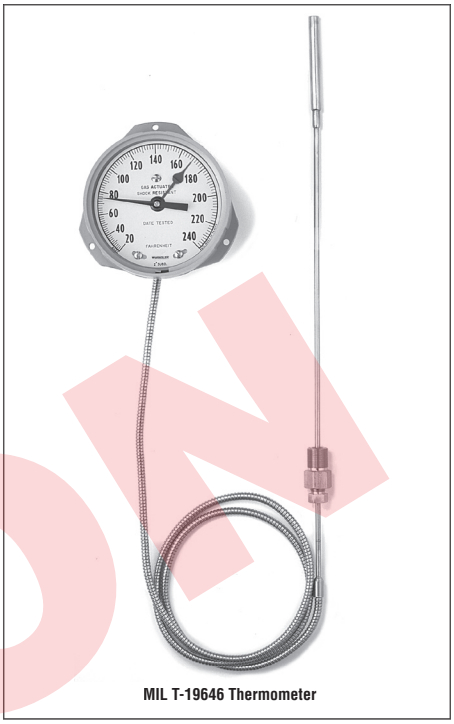
PART NUMBER A1

WEKSLER®

MIL T-19646 Thermometers

STANDARD FEATURES

- Meets requirement of specification through Amendment 7
- Inert gas fill – ideal for applications where Mercury is prohibited
- Shock Resistant to MIL-S-901C
- Vibration Resistant to MIL STD-167D
- Gray Enameled Aluminum Case, Plastic Face
- Yellow Dial with Black Figures and Graduations
- Black Adjustable Pointer
- Movable Red Reference Hand (Red Set Hand)
- Stainless Steel Spiral Armoured Capillary Tubing
- Stainless Steel Bulb Assembly



MIL T-19646 Thermometer

TABLE 1

CODE	DIAL SIZE
31G	3½″
41G	4½″
81G	8½″

TABLE 2

CODE	BULB STYLE	BULB CLASS
HV	Plain Air Temperature with Mounting Bracket	A
LJ	Flanged Bare Bulb 600 psi Flange – 4½″ Insertion	B
LN	600 psi Flange – 8″ Insertion	
LP	600 psi Flange – 10″ Insertion	
NN	1500 psi Flange – 8″ Insertion	
NP	1500 psi Flange – 10″ Insertion	
	Sliding Union Bulb with 18″ of Bendable Extension	C
PY*	3″x3⁄8″ O.D. Bulb, ¼″ – 28 Union Connection*	
SY	1 1⁄2″x3⁄8″ O.D. Bulb, ¾″ – 28 UnionConnection	
KY	3″x15⁄16″ O.D. Bulb, 1¼″ – 18 Union Connection	

*Bulb style "SY" available only with ranges -40/180°F or 20/240°F with maximum capillary length of 60 feet.

TABLE 3

CODE	MOUNTING
U	Universal connection for surface mounting
F	Universal connection with flush kit

TABLE 4

CODE	RANGE
A	-40/180°F
F	20/240°F
Y	50/550°F
M	50/750°F
W	400/1200°F

HOW TO ORDER

41G PY 00 U F 05 Y

1. Basic 3-Digit Code from Table 1
2. 2-Digit Bulb Code from Table 2
3. 2 Zeros (00)
4. Mounting Code from Table 3
5. Range Code from Table 4
6. Length of Capillary Tubing in Feet
7. Letter "Y" (Indicates Yellow Dial)

WEKSLER®

Temperature Conversion Table

NOTE: The numbers in the center of each column refer to the temperature either in degrees Celsius or Fahrenheit which it is desired to convert into the other scale. If converting from Fahrenheit degrees to Celsius degrees the equivalent temperature will be found in the left column, while if converting from degrees Celsius to degrees Fahrenheit the answer will be found in the column on the right.

–459.4 to –10			–9 to +50			51 to 110			120 to 700			710 to 1300		
C		F	C		F	C		F	C		F	C		F
–273	–459.4		–22.8	–9	15.8	10.6	51	123.8	48.9	120	248	377	710	1310
–268	–450		–22.2	–8	17.6	11.1	52	125.6	54.4	130	266	382	720	1328
–262	–440		–21.7	–7	19.4	11.7	53	127.4	60.0	140	284	388	730	1346
–257	–430		–21.1	–6	21.2	12.2	54	129.2	65.6	150	302	393	740	1364
–251	–420		–20.6	–5	23.0	12.8	55	131.0	71.1	160	320	399	750	1382
–246	–410		–20.0	–4	24.8	13.3	56	132.8	76.7	170	338	404	760	1400
–240	–400		–19.4	–3	26.6	13.9	57	134.6	82.2	180	356	410	770	1418
–234	–390		–18.9	–2	28.4	14.4	58	136.4	87.8	190	374	416	780	1436
–229	–380		–18.3	–1	30.2	15.0	59	138.2	93.3	200	392	421	790	1454
–223	–370		–17.8	0	32.0	15.6	60	140.0	98.9	210	410	427	800	1472
–218	–360		–17.2	1	33.8	16.1	61	141.8	100	212	413.6	432	810	1490
–212	–350		–16.7	2	35.6	16.7	62	143.6	104	220	428	438	820	1508
–207	–340		–16.1	3	37.4	17.2	63	145.4	110	230	446	443	830	1526
–201	–330		–15.6	4	39.2	17.8	64	147.2	116	240	464	449	840	1544
–196	–320		–15.0	5	41.0	18.3	65	149.0	121	250	482	454	850	1562
–190	–310		–14.4	6	42.8	18.9	66	150.8	127	260	500	460	860	1580
–184	–300		–13.9	7	44.6	19.4	67	152.6	132	270	518	466	870	1598
–179	–290		–13.3	8	46.4	20.0	68	154.4	138	280	536	471	880	1616
–173	–280		–12.8	9	48.2	20.6	69	156.2	143	290	554	477	490	1634
–169	–273	–459.4	–12.2	10	50.0	21.1	70	158.0	149	300	572	482	900	1652
–168	–270	–454	–11.7	11	51.8	21.7	71	159.8	154	310	590	488	910	1670
–162	–260	–436	–11.1	12	53.6	22.2	72	161.6	160	320	608	493	920	1688
–157	–250	–418	–10.6	13	55.4	22.8	73	163.4	166	330	626	499	930	1706
–151	–240	–400	–10.0	14	57.2	23.3	74	165.2	171	340	644	504	940	1724
–146	–230	–382	–9.44	15	59.0	23.9	75	167.0	177	350	662	510	950	1742
–140	–220	–364	–8.89	16	60.8	24.4	76	168.8	182	360	680	516	960	1760
–134	–210	–346	–8.33	17	62.6	25.0	77	170.6	188	370	698	521	970	1778
–129	–200	–328	–7.78	18	64.4	25.6	78	172.4	193	380	716	527	980	1796
–123	–190	–310	–7.22	19	66.2	26.1	79	174.2	199	390	734	532	990	1814
–118	–180	–292	–6.67	20	68.0	26.7	80	176.0	204	400	752	538	1000	1832
–112	–170	–274	–6.11	21	69.8	27.2	81	177.8	210	410	770	543	1010	1850
–107	–160	–256	–5.56	22	71.6	27.8	82	179.6	216	420	788	549	1020	1868
–101	–150	–238	–5.00	23	73.4	28.3	83	181.4	221	430	806	554	1030	1886
–95.6	–140	–220	–4.44	24	75.2	28.9	84	183.2	227	440	824	560	1040	1904
–90.0	–130	–202	–3.89	25	77.0	29.4	85	185.0	232	450	842	566	1050	1922
–84.4	–120	–184	–3.33	26	78.8	30.0	86	186.8	238	460	860	571	1060	1940
–78.9	–110	–166	–2.78	27	80.6	30.6	87	188.6	243	470	878	577	1070	1958
–73.3	–100	–148	–2.22	28	82.4	31.1	88	190.4	249	480	896	582	1080	1976
–67.8	–90	–130	–1.67	29	84.2	31.7	89	192.2	254	490	914	588	1090	1994
–62.2	–80	–112	–1.11	30	86.0	32.2	90	194.0	260	500	932	593	1100	2012
–56.7	–70	–94.0	–0.56	31	87.8	32.8	91	195.8	266	510	950	599	1110	2030
–51.1	–60	–76.0	0	32	89.6	33.3	92	197.6	271	520	968	604	1120	2048
–45.6	–50	–58.0	0.56	33	91.4	33.9	93	199.4	277	530	986	610	1130	2066
–40.0	–40	–40.0	1.11	34	93.2	34.4	94	201.2	282	540	1004	616	1140	2084
–38.9	–38	–36.4	1.67	35	95.0	35.0	95	203.0	288	550	1022	621	1150	2102
–37.8	–36	–32.8	2.22	36	96.8	35.6	96	204.8	293	560	1040	627	1160	2120
–36.7	–34	–29.2	2.78	37	98.6	36.1	97	206.6	299	570	1058	632	1170	2138
–35.6	–32	–25.6	3.33	38	100.4	36.7	98	208.4	304	580	1076	638	1180	2156
–34.4	–30	–22.0	3.89	39	102.2	37.2	99	210.2	310	590	1094	643	1190	2174
–33.3	–28	–18.4	4.44	40	104.0	37.8	100	212.0	316	600	1112	649	1200	2192
–32.2	–26	–14.8	5.00	41	105.8	38.3	101	213.8	321	610	1130	654	1210	2210
–31.1	–24	–11.2	5.56	42	107.6	38.9	102	215.6	327	620	1148	660	1220	2228
–30.0	–22	–7.6	6.11	43	109.4	39.4	103	217.4	332	630	1166	666	1230	2246
–28.9	–20	–4.0	6.67	44	111.2	40.0	104	219.2	338	640	1184	671	1240	2264
–27.8	–18	–0.4	7.22	45	113.0	40.6	105	221.0	343	650	1202	677	1250	2282
–26.7	–16	3.2	7.78	46	114.8	41.1	106	222.8	349	660	1220	682	1260	2300
–25.6	–14	6.8	8.33	47	116.6	41.7	107	224.6	354	670	1238	688	1270	2318
–24.4	–12	10.4	8.89	48	118.4	42.2	108	226.4	360	680	1256	693	1280	2336
–23.3	–10	14.0	9.44	49	120.2	42.8	109	228.2	366	690	1274	699	1290	2354
			10.0	50	122.0	43.3	110	230.0	371	700	1292	704	1300	2372

INTERPOLATION FACTORS

C		F
0.56	1	1.8
1.11	2	3.6
1.67	3	5.4
2.22	4	7.2
2.78	5	9.0
3.33	6	10.8
3.89	7	12.6
4.44	8	14.4
5.00	9	16.2
5.56	10	18.0