

# INDUSTRIAL PROCESS GAUGES

## SERIES #20

(For SOLID FRONT SAFETY PROCESS GAUGES, see Pages 6-7)

This series is designed for the rugged applications of demanding industries such as chemical, petroleum, and other services where accurate and dependable gauges are required.

### STANDARD FEATURES:

**MOVEMENT:** Stainless steel rotary geared movement with dissimilar stainless steel bushings and stainless steel link and screws.

**POINTER:** Lightweight balanced construction with Micrometer adjustment feature.

**DIAL:** Heavy gauge aluminum.

**WINDOW\*:** Glass.

**CONNECTION:** 1/4" or 1/2" NPT male connection at bottom or back of case.

**ACCURACY:** ASME/ANSI B40.1 Grade 2A (1/2%).

\* Additional options available as noted on next page.



4½", 6" and 8½" SIZES

### BOURDON TUBE:

ORDER CODE	BOURDON TUBE:	RANGES TO:
1	Phosphor bronze tubing silver brazed to brass machined socket.	1,000 psi
3	Type 316 stainless steel tubing welded to type 316 stainless steel machined socket.	10,000 psi

### STANDARD RANGES:

STANDARD DIAL RANGE	MAJOR	MINOR	ORDER CODE	AVAILABLE SIZES:			STANDARD DIAL RANGE	MAJOR	MINOR	ORDER CODE	AVAILABLE SIZES:		
				4½"	6"	8½"***					4½"	6"	8½"***
0-30" VAC.	5"	.20"	01	✓	✓	✓	0-200 psi	20 psi	2 psi	07	✓	✓	✓
30"-0-15 psi	5" & 3 psi	1" & .50 psi	21	✓	✓	✓	0-300 psi	50 psi	2 psi	08	✓	✓	✓
30"-0-30 psi	10" & 5 psi	1" & .50 psi	22	✓	✓	✓	0-400 psi	50 psi	5 psi	09	✓	✓	✓
30"-0-60 psi	10" & 10 psi	1" & 1 psi	23	✓	✓	✓	0-500 psi	50 psi	5 psi	10	✓	✓	✓
30"-0-100 psi	30" & 10 psi	2" & 1 psi	24	✓	✓	✓	0-600 psi	50 psi	5 psi	11	✓	✓	✓
30"-0-150 psi	30" & 30 psi	5" & 2 psi	25	✓	✓	✓	0-800 psi	100 psi	10 psi	12	✓	✓	✓
30"-0-200 psi	30" & 20 psi	5" & 2 psi	26	✓	✓	✓	0-1000 psi	100 psi	10 psi	13	✓	✓	✓
30"-0-300 psi	30" & 50 psi	5" & 2 psi	27	✓	✓	✓	0-1500 psi	200 psi	10 psi	14	✓	✓	✓
30"-0-400 psi	30" & 50 psi	10" & 5 psi	28	✓	✓		0-2000 psi	200 psi	20 psi	15	✓	✓	✓
30"-0-600 psi	30" & 50 psi	10" & 5 psi	74	✓	✓		0-3000 psi	500 psi	20 psi	16	✓	✓	✓
0-15 psi	1 psi	.10 psi	02	✓	✓	✓	0-5000 psi	500 psi	50 psi	17	✓	✓	✓
0-30 psi	5 psi	.20 psi	03	✓	✓	✓	0-10000 psi	1000 psi	100 psi	18	✓	✓	✓
0-60 psi	5 psi	.50 psi	04	✓	✓	✓							
0-100 psi	10 psi	1 psi	05	✓	✓	✓							
0-160 psi	20 psi	1 psi	06	✓	✓	✓							

\* Above PSI Ranges are availab" le with dual scale metric KPA or BAR scales (see page 11). Note\* 8-1/2" gauges are PSI only.

\*\* Increments may vary on 8-1/2" dials.

**AVAILABLE CASE STYLES. See Page 10 for CASE DIMENSIONS:**

**STYLE #1**

4½" Only

Aluminum Back Flange Case  
Stainless Steel Slip Fit Ring  
(Bottom or Back Connection)



**STYLE #2**

6" and 8½" Only

Aluminum Back Flange Case, Threaded Ring  
(Bottom or Back Connection)



**STYLE #5**

4½" Only

Molded Turret Case,  
Snap Ring Panel Mount Case, Hinged  
(Bottom or Back Connection)



**STYLE #6**

4½" and 6" Only

Aluminum Front Flange,  
Panel Mount Case, Hinged  
Ring, (Back Connection Only)



**STYLE #7**

4½" Only

Stainless Steel Case  
Bayonet Ring  
(Add BF for Back Flange)  
(Bottom Connection Only)



**TO ORDER:**

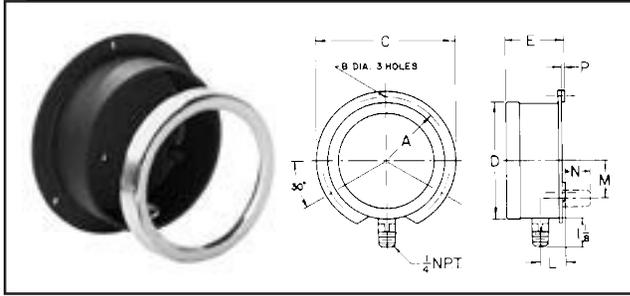
**Additional options** – To order please specify option.

Plastic Lens  
Safety Glass Lens  
Threaded Restrictor

NIST Certificate of Accuracy  
Case Blow Out Plug  
Red Max Indicating Hand

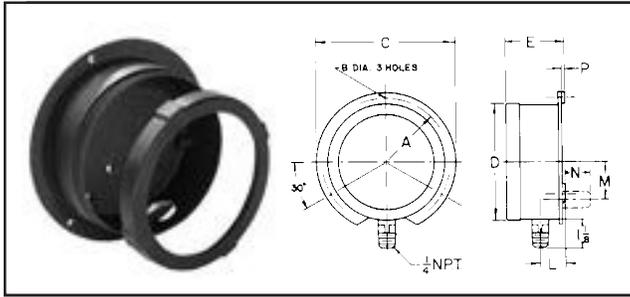
Ordering Number - Construct by selecting one item from each of the columns below:											
1	Dial Size:	2	Series Number:	3	Case Style:	4	Range Code:	5	Connection Size and Style:	6	Bourdon Tube and Socket Code:
	4½" = 4 6" = 6 8½" = 8  Example: 42071533		= 20		= 1 = 2 = 5 = 6 = 7 = 7BF		See standard range chart for code.		1 = 1/4" NPT Bottom 2 = 1/4" NPT Back 3 = 1/2" NPT Bottom 4 = 1/2" NPT Back		1 = Bronze 3 = Stainless Steel
	4		20		7		15		3		3

# CASE DIMENSIONS



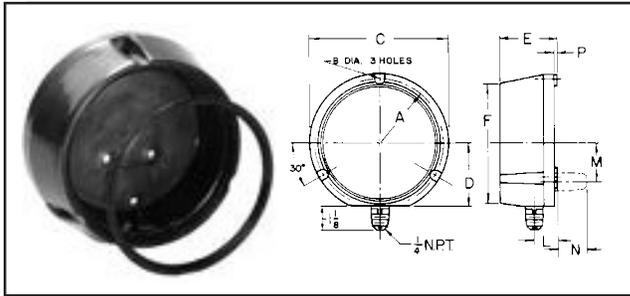
**STYLE 1 - Black Aluminum Case with Slip Ring**

SIZE	A	B	C	D	E	L	M	N	P
4½"	2.68"	.20"	5.87"	4.85"	2.15"	.84"	1.28"	1.81"	.062"



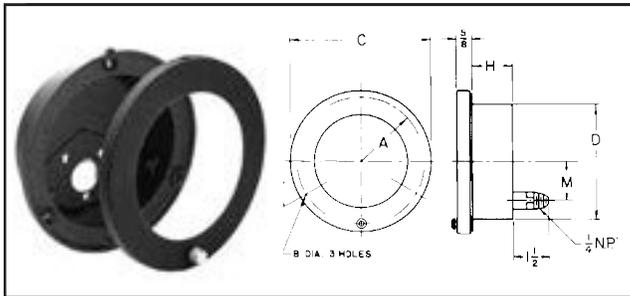
**STYLE 2 - Black Aluminum Case with Twist Ring**

SIZE	A	B	C	D	E	L	M	N	P
6"	3.38"	.20"	7.62"	6.56"	2.20"	.84"	1.41"	1.81"	.062"
8½"	4.81"	.20"	10.25"	9.19"	2.20"	.84"	1.41"	1.81"	.062"



**STYLE 5 - Phenol Turret Case for Wall, Panel or Direct Mounting**

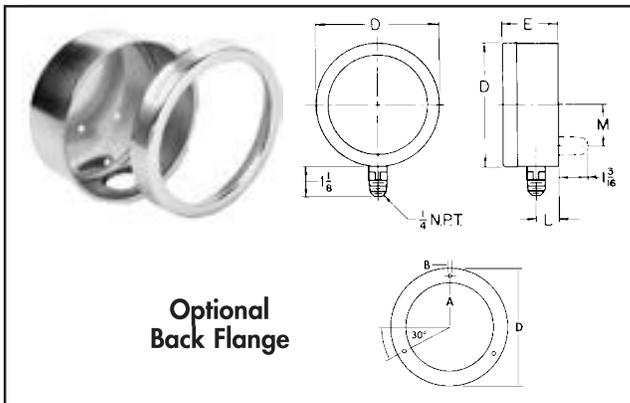
SIZE	A	B	C	D	E	F	L	M	N	P
4½"	2.69"	.22"	5.84"	2.62"	2.15"	4.93"	.875"	1.28"	1.50"	.062"



**STYLE 6 - Black Aluminum Case with Hinged Ring Front Flange**

SIZE	A	B	C	D	H	M	X
4½"	2.69"	.22"	6.00"	4.75"	1.60"	1.41"	4.81"
6"	3.50"	.22"	7.62"	6.34"	1.51"	1.41"	6.47"

X = Panel Hole Cut-Out Diameter.



**STYLE 7 - Polished Stainless Steel Case with Twist Ring**

SIZE	A	B	C	D	E	L	M
4½"	2.68"	.22"	5.89"	5.04"	2.32"	.73"	1.28"

# AVAILABLE METRIC DIAL FOR SERIES 10 and 20

**KPA RANGES** - 4½" and 6" Standard. 8½" by Special Order

AVAILABLE METRIC DIALS				SIZE	
DIAL RANGE	MAJOR	MINOR	ORDER CODE	4½"	6"
0-100 KPA & 0-15 psi	10 KPA & 1 psi	1 KPA & .1 psi	51	✓	✓
0-200 KPA & 0-30 psi	20 KPA & 5 psi	2 KPA & .2 psi	52	✓	✓
0-400 KPA & 0-60 psi	50 KPA & 5 psi	5 KPA & .5 psi	53	✓	✓
0-690 KPA & 0-100 psi	50 KPA & 10 psi	5 KPA & 1 psi	54	✓	✓
0-1100 KPA & 0-160 psi	100 KPA & 20 psi	10 KPA & 1 psi	55	✓	✓
0-1380 KPA & 0-200 psi	200 KPA & 20 psi	10 KPA & 2 psi	56	✓	✓
0-2000 KPA & 0-300 psi	200 KPA & 50 psi	20 KPA & 2 psi	57	✓	✓
0-2700 KPA & 0-400 psi	500 KPA & 50 psi	20 KPA & 5 psi	58	✓	✓
0-3450 KPA & 0-500 psi	500 KPA & 50 psi	25 KPA & 5 psi	59	✓	✓
0-4000 KPA & 0-600 psi	500 KPA & 50 psi	50 KPA & 5 psi	60	✓	✓
0-5500 KPA & 0-800 psi	500 KPA & 100 psi	50 KPA & 5 psi	61	✓	✓
0-6900 KPA & 0-1000 psi	1000 KPA & 100 psi	50 KPA & 10 psi	62	✓	✓
0-10000 KPA & 0-1500 psi	1000 KPA & 100 psi	100 KPA & 10 psi	63	✓	✓
0-13800 KPA & 0-2000 psi	2000 KPA & 200 psi	100 KPA & 20 psi	64	✓	✓
0-20000 KPA & 0-3000 psi	2000 KPA & 500 psi	200 KPA & 20 psi	65	✓	✓
0-34500 KPA & 0-5000 psi	5000 KPA & 500 psi	200 KPA & 50 psi	66	✓	✓
0-69000 KPA & 0-10000 psi	10000 KPA & 1000 psi	500 KPA & 100 psi	67	✓	✓

**BAR RANGES** - 4½" Standard. 6" and 8½" by Special Order

AVAILABLE METRIC DIALS				SIZE
DIAL RANGE	MAJOR	MINOR	ORDER CODE	4½"
0-1 BAR & 0-15 psi	.1 BAR & 1 psi	.01 BAR & .1 psi	31	✓
0-2 BAR & 0-30 psi	.2 BAR & 5 psi	.02 BAR & .2 psi	32	✓
0-4 BAR & 0-60 psi	.5 BAR & 5 psi	.05 BAR & .5 psi	33	✓
0-7 BAR & 0-100 psi	.5 BAR & 10 psi	.05 BAR & 1 psi	34	✓
0-11 BAR & 0-160 psi	1 BAR & 20 psi	.1 BAR & 1 psi	35	✓
0-14 BAR & 0-200 psi	2 BAR & 20 psi	.1 BAR & 2 psi	36	✓
0-20 BAR & 0-300 psi	2 BAR & 50 psi	.2 BAR & 2 psi	37	✓
0-27 BAR & 0-400 psi	5 BAR & 50 psi	.2 BAR & 5 psi	38	✓
0-40 BAR & 0-600 psi	5 BAR & 50 psi	.5 BAR & 5 psi	39	✓
0-70 BAR & 0-1000 psi	10 BAR & 100 psi	.5 BAR & 10 psi	40	✓
0-100 BAR & 0-1500 psi	10 BAR & 100 psi	1 BAR & 10 psi	41	✓
0-137 BAR & 0-2000 psi	20 BAR & 200 psi	1 BAR & 20 psi	42	✓
0-200 BAR & 0-3000 psi	20 BAR & 300 psi	2 BAR & 20 psi	43	✓
0-345 BAR & 0-5000 psi	50 BAR & 500 psi	2 BAR & 50 psi	44	✓
0-680 BAR & 0-10000 psi	100 BAR & 1000 psi	5 BAR & 100 psi	45	✓