

**PALMER RECORDER ORDER FORM Step 1: Select Recorder Type:** Insert Codes in boxes at bottom of page for final Part Number for product desired. Call to confirm Final Part Number before ordering!

Code	Select: Recorder Type - Select one	Check					
1	Pressure System	_____					
2	Temperature System	_____					
3	Pressure & Temperature System	_____					
4	Valve System - On/Off Valve, Standard (Valve & Test System with On/Off Valve and Pete's Plug, contact Customer Service for CP Number and Price) (NA in 12" Pelican Case)	_____					
Code	Select: Recorder Size - Select one	Check					
2	12 Inch Aluminum	_____					
8	8 Inch Aluminum	_____					
P	8 inch Pelican Case (Wall, Portable or Pipestand only, see price list for number of pens/systems available for each Recorder Mounting Type)	_____					
R	12 inch Pelican Case (Wall, Portable or Pipestand only, see price list for number of pens/systems available for each Recorder Mounting Type)	_____					
Code	Select: Mounting - Select one	Check					
2	Wall Mount - Pull Latch with Hasp, Standard	_____					
3	Flush Mount - includes Black Lever Style Handle. Not Available in Pelican Case.	_____					
4	Pipestand Mount - Pull Latch with Hasp, Standard	_____					
5	Portable - Pull Latch with Hasp - Standard	_____					
8	Pedestal Mount - 3" Slip-On Connection, Pull Latch with Hasp, Standard. Pressure Systems only. Not Available in Pelican Case.	_____					
Insert Codes for Recorder Type to left and Price to the right. (Prices can be found in the Recorder Price List)		\$_____					
Code	Select: Case Type and Color - Select one	Check					
W	Aluminum Case: White Gloss Powder Coat, Std. Opt Black Matte Powder Coat - Code B, or Gray (Med) Gloss Powder Coat - Code G	NC _____					
X	Pelican Case Codes: Black - Code B, Silver - Code S, Orange - Code O, Yellow - Code Y, OD Green - Code G, Desert Tan - Code T	NC _____					
Code	Select: Door - Select one	Check or Add \$					
G	Door with Glass Window	NC _____					
P	Door with Plexiglass Window (Standard on Pelican)	\$_____					
S	Solid Door (Call for price on Pelican Case).	NC/Call \$_____					
T	Door with Safety Glass Window - 12" only	\$_____					
D	Double Cam Latch Bar/Padlock Type Handle option for Solid Door (NA on Pelican Case, 8" Aluminum Case, Flush Mount)	\$_____					
Code	Select: Chart Drive - Select desired Clock Type below, and Select Rotation Code below that.	Check or Add \$					
1	PC-11 BOCD - SET ON: (circle choice) Min: 60, 96 Hours: 12, 24, 48 Days: 7, 8, 14, 16, 31, 32	NC _____					
2	PC-12 BOCD - SET ON: (circle choice) Min: 30, 60 Hours: 2, 4, 6, 8, 12, 24, 48 Days: 3, 4, 7	\$_____					
3	Spring Wound: 24 hr/7 day, (725 R084) Standard (All Other Rotations - Special Order - POA)	\$_____					
4	110/120V Electric Clock, 60 Hz: 7 day, Standard	N/C _____					
	110/120V Electric Clock, 60 Hz: 24 hr. Optional - Specify on Order. (All Other Rotations - Special Order - POA)	N/C _____					
Code	Select: Rotation to be set at factory	PC-11	PC-12	Spring Wound	110/120V Clock	220V Clock	Check
A	15 Min			Special Order			_____
B	30 Min		✓				_____
C	60 Min	✓	✓	Special Order		Special Order	_____
D	96 Min	✓		Special Order			_____
E	2 Hour		✓	Special Order			_____
X	3 Hour			Special Order			_____
F	4 Hour		✓	Special Order			_____
G	6 Hour		✓				_____
H	8 Hour		✓	Special Order			_____
J	12 Hour	✓	✓		Special Order		_____
K	24 Hour	✓	✓	✓	✓	Special Order	_____
L	48 Hour	✓	✓		Special Order		_____
M	3 Day		✓				_____
N	4 Day		✓				_____
P	7 Day	✓	✓	✓	✓	Special Order	_____
R	8 Day	✓					_____
S	14 Day	✓					_____
T	16 Day	✓					_____
U	31 Day	✓					_____
V	32 Day	✓					_____

Insert Recorder Type Codes and Subtotal from above for each system, and fill in boxes under Step 1 on first page. Proceed to Step 2 for Pressure and Step 3 for Temperature.

								Subtotal	\$_____
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If ordering a Pressure system continue here. If ordering or combining with Temperature Systems, see Step 3.

**Step 2: Select Pressure System:** Select one Range for each system, check column, and enter Codes in boxes at bottom of page: Leave boxes blank if not needed

Low Pressure Ranges - 316SS Diaphragm						High Pressure Ranges - 316SS Helical Coil											
Code	Range	Price	1st System	2nd System	3rd System	Code	Range	Price	1st System	2nd System	3rd System	Code	Range	Price	1st System	2nd System	3rd System
P01	0/10 in of H <sub>2</sub> O					P37	0/30 PSI					P68	3/15 PSI Receiver				
P02	0/15 in of H <sub>2</sub> O					P38	0/35 PSI					P74	0-6 Bar	NC			
P03	0/20 in of H <sub>2</sub> O					P39	0/45 PSI					P75	0-10 Bar	NC			
P04	0/25 in of H <sub>2</sub> O					P40	0/50 PSI					P76	0-16 Bar	NC			
P05	0/30 in of H <sub>2</sub> O					P41	0/60 PSI					P77	0-25 Bar	NC			
P06	0/40 in of H <sub>2</sub> O					P42	0/75 PSI					P78	0-40 Bar	NC			
P07	0/50 in of H <sub>2</sub> O					P43	0/100 PSI	NC				P79	0-50 Bar	NC			
P08	0/60 in of H <sub>2</sub> O					P44	0/120 PSI	NC				P80	0-60 Bar	NC			
P09	0/100 in of H <sub>2</sub> O					P45	0/150 PSI	NC				P69	0-100 Bar	NC			
P10	0/10 in of Hg					P46	0/200 PSI	NC				P81	0-160 Bar	NC			
P11	0/30 in of Hg					P47	0/250 PSI	NC				P70	0-200 Bar				
P12	0/50 in of Hg					P48	0/300 PSI	NC				P82	0-250 Bar				
P13	0/5 kPa					P49	0/350 PSI	NC				P83	0-300 Bar				
P14	0/20 kPa					P50	0/400 PSI	NC				P84	0-400 Bar				
P15	0/80 kPa					P51	0/500 PSI	NC				P71	0-500 Bar				
P16	0/100 kPa					P52	0/600 PSI	NC					0-600 Bar				
P17	0/500 kPa					P53	0/750 PSI	NC				P85	Opt Autoclave Fitting, Code C				
P18	0/800 kPa	NC				P54	0/800 PSI	NC									
P19	0/1000 kPa	NC				P55	0/1,000 PSI	NC				P72	0-1,000 Bar Autoclave Fitting				
P20	0/2000 kPa	NC				P56	0/1,500 PSI	NC				P86	0-1,200 Bar Autoclave Fitting				
P21	0/5000 kPa	NC				P57	0/2,000 PSI	NC				P87	0-1,600 Bar Autoclave Fitting				
P22	0/10 oz/in <sup>2</sup>					P58	0/2,500 PSI	NC				P73	0-2,000 Bar Autoclave Fitting				
P23	0/15 oz/in <sup>2</sup>					P59	0/3,000 PSI										
P24	0/20 oz/in <sup>2</sup>					P60	0/4,000 PSI										
P25	0/25 oz/in <sup>2</sup>					P61	0/5,000 PSI										
P26	0/30 oz/in <sup>2</sup>					P62	0/6,000 PSI										
P27	0/50 oz/in <sup>2</sup>					P63	0/8,000 PSI										
P28	0/1 PSI						0/10,000 PSI										
P29	0/3 PSI					P64	Opt Autoclave Fitting, Code C										
P30	0/5 PSI																
P31	0/6 PSI					P65	0/15,000 PSI, Autoclave Fitting										
P32	0/8 PSI					P66	0/20,000 PSI, Autoclave Fitting										
P33	0/10 PSI																
P34	0/15 PSI					P88	0/25,000 PSI, Autoclave Fitting										
P35	0/20 PSI																
P36	0/25 PSI					P67	0/30,000 PSI, Autoclave Fitting										

**Note: - For Temperature Systems, See Step 3.**

**For Pressure and Temperature Recorders, Pressure always comes first and the highest Pressure is always listed first.**

\*Autoclave Fitting requires user supplied tubing assembly. Contact Customer Service for information.

Code	Select Process Connection: Select one for each system, check column. Additional adapters available on request.	1st System	2nd System	3rd System
A	1/4" NPT, Standard. If 0/10,000 PSI is chosen above, this connection will be supplied unless code C below is selected.			
B	1/2" NPT			
C	Autoclave Fitting, must be specified for 0/15,000 PSI, 0/20,000 PSI, and 0/30,000 PSI. Optional for 10,000 PSI only.			

Code	Select: Pen Color: Select one for each system, and check column.	1st System	2nd System	3rd System
1	Red			
2	Blue			
3	Green			
4	Black			

Note: - For Temperature Systems, see page 61.  
For Pressure, or Pressure and Temperature Recorders, the highest Pressure is always listed first.  
Leave boxes blank if not needed

1 spare Pen included in the same color for each pen specified. Add as new line item

If ±1/4 Chart graduation is desired, please specify on last page of order for. Top Pen ONLY. Ranges 30 to 10,000 PSI or equivalent ONLY, using standard pressure element ONLY.

Insert Pressure System, Process Connection, Pen Color Codes and Subtotal from above for each system below and carry over to the last page under Step 2.				
1st Pressure System	Leave boxes blank if not needed			
P___				Subtotal 1st Pressure System \$ _____
	P___			Subtotal 2nd Pressure System \$ _____
		P___		Subtotal 3rd Pressure System \$ _____

If ordering a Temperature System, continue here. If ordering or combining with Pressure Systems, begin with Step 2 and then continue here.

**Step 3: Select Temperature System** - Select one Range for each system, check column, and enter Codes in boxes at bottom of page:

Code	Fahrenheit Ranges	Mercury Filled			Non Toxic Fill*			Hydrocarbon Fill*			Code	Celsius Ranges	Mercury Filled			Non Toxic Fill*			Hydrocarbon Fill*		
		1st System	2nd System	3rd System	1st System	2nd System	3rd System	1st System	2nd System	3rd System			1st System	2nd System	3rd System	1st System	2nd System	3rd System	1st System	2nd System	3rd System
FA	-30°/120°F										CA	0°/60°C									
FB	0°/100°F										CB	0°/100°C									
FC	0°/120°F										CC	0°/120°C									
FD	0°/150°F										CD	0°/150°C									
FE	0°/200°F										CE	0°/200°C									
FF	0°/250°F										CF	0°/250°C									
FG	0°/300°F										CG	0°/300°C					NA	NA	NA		
FH	0°/400°F										CH	0°/350°C					NA	NA	NA	NA	NA
FJ	0°/500°F										CJ	0°/400°C					NA	NA	NA	NA	NA
FK	0°/600°F					NA	NA	NA			CK	0°/500°C					NA	NA	NA	NA	NA
FL	0°/800°F					NA	NA	NA	NA	NA	CL	0°/600°C					NA	NA	NA	NA	NA
FM	0°/1000°F					NA	NA	NA	NA	NA											

Leave boxes blank if not needed

Code	Select: Cable (Capillary) Type: Select one for each system, check column and enter code below.	1st	2nd	3rd
A	Flex Armored Capillary, 1/4" diameter, 5 ft included. Mercury Fill and Non Toxic Fill supplied in 304SS, Hydrocarbon Fill supplied in 316SS.			
B	Bendable Stiff Armor, 3/16" diameter, 5 ft included, 304SS. Mercury Filled Recorders ONLY.			

Code	Select: Cable (Capillary) Length - check column, enter code below and add for each additional foot if needed	Price	1st	2nd	3rd
01-04	1 foot (01), 2 feet (02), 3 feet (03), or 4 feet (04)	NC			
05	5 ft Standard (included), check column for system	NC			
06-99	6 ft (06) to 99 ft (99) (Mercury Fill to 25 ft, and Non Toxic Fill to 20 Ft, Hydrocarbon Fill to 99 ft).				
	1st System total length over 5 feet = _____, add _____ /foot for each foot over 5 ft: _____	\$			
	2nd System total length over 5 feet = _____, add _____ /foot for each foot over 5 ft: _____		\$		
	3rd System total length over 5 feet = _____, add _____ /foot for each foot over 5 ft: _____			\$	

Code			Select: Bulb Type: Select one for each system, check column and enter code below.				1st	2nd	3rd
Mercury Filled	Non Toxic Fill*	Hydrocarbon Fill*	Bulb						
A	AN	Not available	45-5	6" SS Bulb	1/2" Dia.	Plain Bulb			
B	BN	Not available	45-11	6" SS Bulb	1/2" Dia.	5/8" Dia. SS Coupling			
C	CN	Not available	45-12	6" SS Bulb	1/2" Dia.	1-1/4"-18 Swivel Nut			
D	DN	Not available	45-13	4" SS Bulb	1/2" Dia.	7/8"-22 Swivel Nut			
E	EN	Not available	45-13	6" SS Bulb	1/2" Dia.	7/8"-22 Swivel Nut			
F	FN	Not available	45-13	8" SS Bulb	1/2" Dia.	7/8"-22 Swivel Nut			
G	GN	Not available	45-13	12" SS Bulb	1/2" Dia.	7/8"-22 Swivel Nut			
H	HN	Not available	45-14	15.5" SS Bulb	1/2" Dia.	1/2" NPT Process Connection			
J	JN	Not available	45-14	15.5" SS Bulb	5/8" Dia.	1/2" NPT Process Connection			
K	KN	Not available	45-14	15.5" SS Bulb	1/2" Dia.	3/4" NPT Process Connection			
L	LN	Not available	45-14	15.5" SS Bulb	5/8" Dia.	3/4" NPT Process Connection			
M	MN	Not available	45-29	12" SS Bulb	5/16" Dia.	5/8" Dia. SS Coupling			
N	Not available	Not available	45-29	12" SS Bulb	3/8" Dia.	5/8" Dia. SS Coupling			
P	PN	Not available	45-30	12" SS Bulb	5/16" Dia.	1-1/4"-18 Swivel Nut			
R	Not available	Not available	45-30	12" SS Bulb	3/8" Dia.	1-1/4"-18 Swivel Nut			
S			46-5	6" SS Bulb	3/8" Dia.	Plain Bulb			
T			46-14	15.5" SS Bulb	3/8" Dia.	1/2" NPT Process Connection			
U			46-14	15.5" SS Bulb	3/8" Dia.	3/4" NPT Process Connection			

For Bulb lengths over 12", add for each 6" or fraction thereof.

Code	Select: Pen Color - Select one for each system, check column and enter code below.	1st	2nd	3rd
1	Red			
2	Blue			
3	Green			
4	Black			

One spare pen is included in the same color for each pen specified. Add as new line item.

\* Mercury Free Bulbs, Code "L" must be added at end of part number in Step 5 of Order Form.

**Insert Temperature System, Cable, Bulb Type, Pen Codes, and Subtotal from above for each system below and carry over to the last page under Step 3.**

1st Temperature System										Subtotal 1st System		
Leave boxes blank if not needed.										\$		
2nd Temperature System										Subtotal 2nd System		
										\$		
3rd Temperature System										Subtotal 3rd System		
										\$		



**Chart Recorder Temperature Bulb Connection and Thermowell Compatibility Chart**

Thermowells • Union Connections • Flange Options for Recorder Temperature Bulbs											
	MERCURY AND NON-TOXIC FILL TEMPERATURE BULBS										HYDROCARBON FILL TEMPERATURE BULBS
	Bulb Model Number	45-12	45-13	45-14				45-30		46-14	
	Bulb Diameter	1/2"	1/2"	1/2"	1/2"	5/8"	5/8"	5/16"	3/8"	3/8"	3/8"
	Probe Connection	1-1/4"-18 Swivel Nut*	7/8"-22 Swivel Nut*	1/2" NPT	3/4" NPT	1/2" NPT	3/4" NPT	1-1/4"-18 Swivel Nut"	1-1/4"-18 Swivel Nut"	1/2" NPT	3/4" NPT
Open End	Standard Union Connection 3/4" NPT	1140-7	1150-7	1120-7	NA	1120-7	NA	1140-7	1140-7	1120-7	NA
	Standard Union Connection 1" NPT	1140-8	1150-8	1120-8	NA	1120-8	NA	1140-8	1140-8	1120-8	NA
	Extension Neck Lagging Union Connection 3/4" NPT	1141-7	1151-7	1121-7	NA	1121-7	NA	1141-7	1141-7	1121-7	NA
	Extension Neck Lagging Union Connection 1" NPT	1141-8	1151-8	1121-8	NA	1121-8	NA	1141-8	1141-8	1121-8	NA
	Surface Mount Flanged Union Connection	1141-9	1150-9	1120-9	NA	1120-9	NA	1140-9	1140-9	1120-9	NA
Closed Receptacle	Standard Thermowell	NA	1150	CP-2083	NA	CP-970	NA	NA	NA	1130	NA
	Extension Neck Lagging Thermowell	NA	1151	NA	NA	NA	NA	NA	NA	1131	NA
	Built-up Heavy Wall Thermowell	NA	1154	NA	NA	NA	NA	NA	NA	NA	NA
	Built-up Extension Neck Lagging Heavy Wall Thermowell	NA	1155	NA	NA	NA	NA	NA	NA	NA	NA
	Weld-in Thermowell	NA	1156	NA	NA	NA	NA	NA	NA	1136	NA
	Flanged Thermowell	NA	1157	NA	NA	NA	NA	NA	NA	1137	NA

\*Requires use of Thermowell or Union Hub. See same column as desired Bulb.

**Chart Recorder Available Pressure and Temperature Ranges**

Chart Recorder Standard Pressure Ranges								Chart Recorder Standard Temperature Ranges	
PSI Ranges			Hg Ranges	kPa Ranges	in H <sub>2</sub> O Ranges	Bar Ranges		°F Ranges	°C Ranges
0 to 1 PSI*	0 to 75 PSI*	0 to 1,500 PSI	0 to 10 Hg	0 to 5 kPa	0 to 10 in H <sub>2</sub> O	0 to 6 Bar*	0 to 250 Bar	-30° to 120°F	0° to 60°C
0 to 3 PSI*	0 to 100 PSI*	0 to 2,000 PSI	0 to 30 Hg	0 to 20 kPa	0 to 15 in H <sub>2</sub> O	0 to 10 Bar*	0 to 300 Bar	0° to 100°F	0° to 100°C
0 to 5 PSI*	0 to 120 PSI*	0 to 2,500 PSI	0 to 50 Hg	0 to 80 kPa	0 to 20 in H <sub>2</sub> O	0 to 16 Bar*	0 to 400 Bar	0° to 120°F	0° to 120°C
0 to 6 PSI*	0 to 150 PSI*	0 to 3,000 PSI	oz/in2 Ranges	0 to 100 kPa	0 to 25 in H <sub>2</sub> O	0 to 25 Bar*	0 to 500 Bar	0° to 150°F	0° to 150°C
0 to 8 PSI*	0 to 200 PSI*	0 to 4,000 PSI	0 to 10 oz/in2	0 to 500 kPa	0 to 30 in H <sub>2</sub> O	0 to 40 Bar*	0 to 600 Bar	0° to 200°F	0° to 200°C
0 to 10 PSI*	0 to 250 PSI*	0 to 5,000 PSI	0 to 15 oz/in2	0 to 800 kPa	0 to 40 in H <sub>2</sub> O	0 to 50 Bar*	0 to 1,000 Bar	0° to 250°F	0° to 250°C
0 to 15 PSI*	0 to 300 PSI*	0 to 6,000 PSI	0 to 20 oz/in2	0 to 1,000 kPa	0 to 50 in H <sub>2</sub> O	0 to 60 Bar*	0 to 1,200 Bar	0° to 300°F	0° to 300°C
0 to 20 PSI*	0 to 350 PSI*	0 to 8,000 PSI	0 to 25 oz/in2	0 to 2,000 kPa	0 to 60 in H <sub>2</sub> O	0 to 100 Bar	0 to 1,600 Bar	0° to 400°F	0° to 350°C
0 to 25 PSI*	0 to 400 PSI*	0 to 10,000 PSI	0 to 30 oz/in2	0 to 5,000 kPa	0 to 100 in H <sub>2</sub> O	0 to 160 Bar	0 to 2,000 Bar	0° to 500°F	0° to 400°C
0 to 30 PSI*	0 to 500 PSI*	0 to 15,000 PSI	0 to 50 oz/in2			0 to 200 Bar		0° to 600°F	0° to 500°C
0 to 35 PSI*	0 to 600 PSI*	0 to 20,000 PSI						0° to 800°F	0° to 600°C
0 to 45 PSI*	0 to 750 PSI*	0 to 30,000 PSI						0° to 1,000°F	
0 to 50 PSI*	0 to 800 PSI*								
0 to 60 PSI*	0 to 1,000 PSI*								

Beige boxes are DP Recorder Ranges

\* Test & Valve Recorder Ranges