



INDUSTRIAL PRODUCTS DIVISION

Sales Manual Section 334  
**PRODUCT SPECIFICATION**  
 28764-A2, 81101-A, 83237-A2 & B2 and 85031-A

**Thermowells**  
**28764-A2, 81101-A,**  
**83237-A2 & B2 and**  
**85031-A**

**GENERAL DESCRIPTION**

Robertshaw thermowells are designed for use with various temperature sensors. Use of a thermowell serves two purposes; first, to protect the temperature sensor from pressures or substances which might damage the thermal element, and second, to permit removal of the sensor without opening the line in which it is installed.

**SPECIFICATIONS**

**Construction:**

**28764-A2:** ... Stainless steel, one-piece construction.

**81101-A3 and A4:** .....Copper and brass two-piece soldered construction.

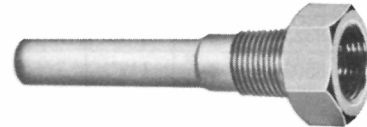
**81101-A7 and A8:** .....Stainless steel two-piece welded construction.

**83237-A2 and B2:** .....Stainless steel three-piece welded construction.

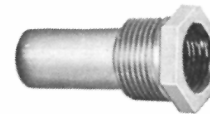
**85031-A:** ..... Stainless steel one-piece construction with beryllium copper sleeve.

**Temperature/ Pressure Ratings:**..... See Table 1.

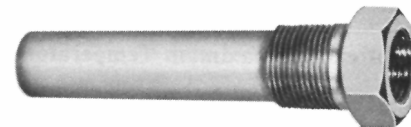
**Dimensions:** ..... See Figure 1.



No. 83237-A2 & B2



No. 81101-A Series



No. 28764-A2  
 No. 85031-A Series

**Approximate Shipping Weights:**

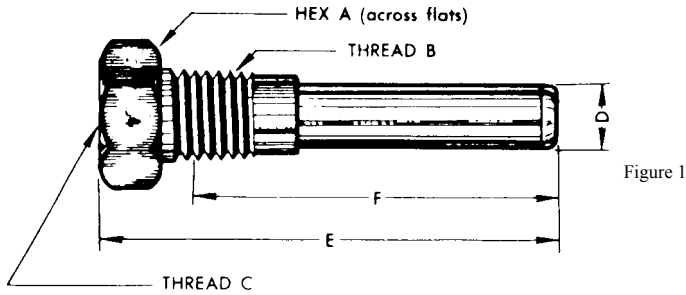
Model	Kg.	Ozs.	Model	Kg.	Ozs.
28764-A2	.51	18	83237-A2	.23	8
81101-A3	.11	4	83237-B2	.28	10
81101-A4	.11	4	85031-A1	.23	8
81101-A7	.11	4	85031-A2	.51	18
81101-A8	.11	4			

**APPLICATIONS**

Thermowell No.	Use With Temperature Sensor
28764-A2	83197-A
81101-A3, A7	99610-A3
81101-A4, A8	99610-A4
83237-A2, B2	83197-A
85031-A1, A2	85026-A & B

**ORDERING INFORMATION**

Specify: Model number.



MODEL	DIMENSIONS					
	A	THREAD B	THREAD C	D, mm (in.)	E, mm (in.)	F, mm (in.)
28764-A2	1-1/4"	3/4-14 NPT	7/8-14 UNF-2B	22 (7/8)	190 (7-15/32)	167 (6-9/16)
81101-A3, A7	1-1/8"	3/4-14 NPT	1/2-14 NPT	19 (.761)	67 (2-5/8)	51 (2)
81101-A4, A8	1-1/8"	3/4-14 NPT	1/2-14 NPT	19 (.761)	79 (3-1/8)	64 (2-1/2)
83237-A2	1-1/4"	1/2-14 NPT	7/8-14 UNF-2B	17 (11/16)	189 (7-7/16)	171 (6-17/32)
83237-B2	1-1/4"	3/4-14 NPT	7/8-14 UNF-2B	17 (11/16)	189 (7-7/16)	171 (6-17/32)
85031-A1	1-1/8"	3/4-14 NPT	7/8-14 UNF-2B	22 (7/8)	133 (5-1/4)	106 (4-3/16)
85031-A2	1-1/8"	1-11 1/2 NPT	7/8-14 UNF-2B	28 (1.10)	138 (5-7/16)	114 (4-31/64)

**TABLE 1 - TEMPERATURE PRESSURE RATINGS**

Temperature °C. (°F.)	28764-A2 bar (PSI)	81101-A3 and A4	81101-A7 and A8	83237-A2 & B2 Series bar (PSI)	85931-A1	85031-A2
-30 (-20)	586 (8500)	14 bar (200psi) max. @ 121°C. (250°F.)	35 bar (500psi) max. @ 121°C. (250°F.)	117 (1700)	345 bar (5000 psi) max. @ 204°C. (400°F.)	690 bar (10,000 psi) max. @ 204°C. (400°F.)
40 (100)	586 (8500)			117 (1700)		
95 (200)	586 (8500)			110 (1600)		
150 (300)	531 (7700)			107 (1550)		
200 (400)	493 (7150)			103 (1500)		
260 (500)	476 (6900)			100 (1450)		
315 (600)	465 (6750)			97 (1400)		
390 (700)	461 (6700)			93 (1350)		
425 (800)	441 (6400)			90 (1300)		
480 (900)	424 (6150)			86 (1250)		
540 (1000)	421 (6100)			83 (1200)		
565 (1050)	410 (5950)			69 (1000)		
595 (1100)	334 (4840)			55 (800)		
620 (1150)	269 (3900)			41 (600)		
650 (1200)	176 (2570)			28 (400)		
705 (1300)		0 (0)				

**CAUTION: Do not exceed maximum Temperature/ Pressure Ratings.**

**Robertshaw**

**U.S.A. and CANADA**

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