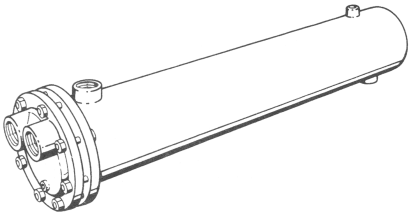
Bell & Gossett

SUBMITTAL

C-131.2A

JOB:	**REPRESENTATIVE:**	
UNIT TAG:	**ORDER NO.**	**DATE:**
ENGINEER:	**SUBMITTED BY:**	**DATE:**
CONTRACTOR:	**APPROVED BY:**	**DATE:**



8" Series
Type "WU" Heat Exchangers
"U" Tube Design

DESCRIPTION

B & G Types "WU" Heat Exchangers are of the shell and tube type. The tube bundle is of "U" bend construction with tube ends expanded into a stationary tube sheet. This construction permits ample expansion or contraction for wide temperature variations. A fluid entering the tubes is heated or cooled by a fluid being circulated through a baffled shell. The unit is designed primarily for pumped circulation through the shell.

Standard "WU" Heat Exchangers are constructed according to ASME requirements for pressure and temperatures noted in table on back.

A Manufacturers' Data Report for Pressure Vessels, Form No. U-1, as required by the previsions of the ASME Code Rules, is furnished with each unit upon request. This form is signed by an authorized inspector, holding a national Board Commission, and who is employed by an authorized inspection agency, certifying that construction conforms to the latest ASME code for pressure vessels. The ASME "U" symbol is stamped on each vessel. In addition, each unit is registered with the national Board of Boiler and pressure Vessel Inspectors.

RECOMMENDED "WU" HEAT EXCHANGER

MODEL NO. _____

HEATING SURFACE (SQ. FT.) _____

	TUBE SIDE	SHELL SIDE
1. Fluid Circulated.....		
2. Total Flow Expressed in GPM, GRH or lbs./hr.....		
3. Temperature In/Out.....	____ / ____	____ / ____
4. Transfer BTU/hr.....		
5. Pressure Drop.....		
6. Fouling Factor or Percentage of Additional Surface.....		
Note: Following applies only to fluids other than water		
7. Specific Gravity.....		
8. Specific Heat.....		
9. Latent Heat.....		
10. Viscosity**.....		
11. Thermal Conductivity.....		

APPROVALS

**Expressed in Proper Units and Temperature such as centipoises @ °F

xylem
Let's Solve Water

8 " Series Type "WU" Heat Exchangers "U" Tube Design

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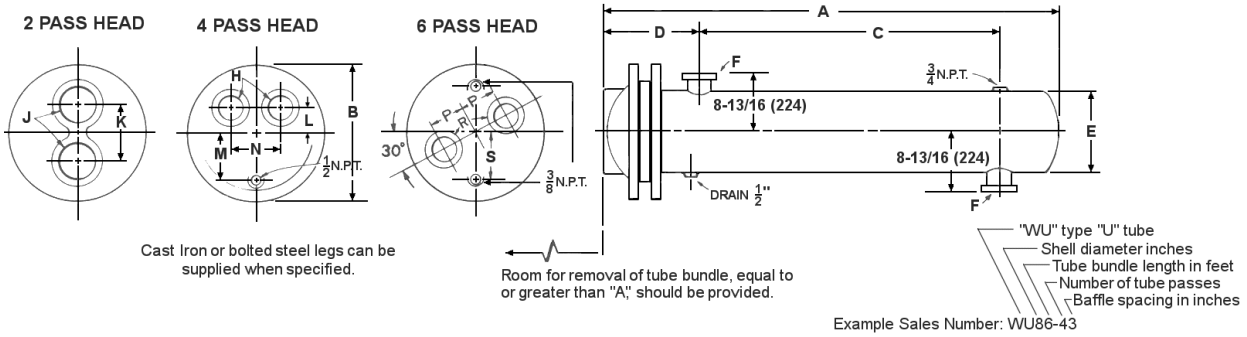

DIMENSIONS − Inches (mm)

UNIT NUMBER	2 PASS								HEATING SURFACE Sq. Ft. (Sq. M)	APPROX. SHIPPING Wt. Lbs. (Kg)
	J	K	A	B	C	D	E	F		
WU84-24	3 NPT	5 (127)	53 (1346)	12-1/2 (318)	37 (940)	8-1/2 (216)	8-5/8 (219)	4FLG	32 (3)	222 (101)
WU85-24	3 NPT	5 (127)	65 (1651)	12-1/2 (318)	49 (1245)	8-1/2 (216)	8-5/8 (219)	4FLG	41 (3.8)	258 (117)
WU86-24	3 NPT	5 (127)	77 (1956)	12-1/2 (318)	61 (1549)	8-1/2 (216)	8-5/8 (219)	4FLG	49 (4.6)	294 (133)
WU87-24	3 NPT	5 (127)	89 (2261)	12-1/2 (318)	73 (1854)	8-1/2 (216)	8-5/8 (219)	4FLG	58 (5.4)	330 (150)
WU88-24	3 NPT	5 (127)	101 (2565)	12-1/2 (318)	85 (2159)	8-1/2 (216)	8-5/8 (219)	4FLG	67 (6.2)	366 (166)
WU89-24	3 NPT	5 (127)	113 (2870)	12-1/2 (318)	97 (2464)	8-1/2 (216)	8-5/8 (219)	4FLG	75 (7)	402 (182)

UNIT NUMBER	4 PASS										HEATING SURFACE Sq. Ft. (Sq. M)	APPROX. SHIPPING Wt. Lbs. (Kg)
	H	L	M	N	A	B	C	D	E	F		
WU84-44	2 NPT	2 (51)	3-1/2 (89)	4 (102)	53 (1346)	12-1/2 (318)	37 (940)	8-1/2 (216)	8-5/8 (219)	4FLG	32 (3)	222 (101)
WU85-44	2 NPT	2 (51)	3-1/2 (89)	4 (102)	65 (1651)	12-1/2 (318)	49 (1245)	8-1/2 (216)	8-5/8 (219)	4FLG	41 (3.8)	258 (117)
WU86-44	2 NPT	2 (51)	3-1/2 (89)	4 (102)	77 (1956)	12-1/2 (318)	61 (1549)	8-1/2 (216)	8-5/8 (219)	4FLG	49 (4.6)	294 (133)
WU87-44	2 NPT	2 (51)	3-1/2 (89)	4 (102)	89 (2261)	12-1/2 (318)	73 (1854)	8-1/2 (216)	8-5/8 (219)	4FLG	58 (5.4)	330 (150)
WU88-44	2 NPT	2 (51)	3-1/2 (89)	4 (102)	101 (2565)	12-1/2 (318)	85 (2159)	8-1/2 (216)	8-5/8 (219)	4FLG	67 (6.2)	366 (166)
WU89-44	2 NPT	2 (51)	3-1/2 (89)	4 (102)	113 (2870)	12-1/2 (318)	97 (2464)	8-1/2 (216)	8-5/8 (219)	4FLG	75 (7)	402 (182)

UNIT NUMBER	6 PASS									HEATING SURFACE Sq. Ft. (Sq. M)	APPROX. SHIPPING Wt. Lbs. (Kg)
	P	R	S	A	B	C	D	E	F		
WU84-64	3	2 NPT	3-3/4 (95)	53 (1346)	12-1/2 (318)	37 (940)	8-1/2 (216)	8-5/8 (219)	4 FLG	26 (2.4)	222 (101)
WU85-64	3 (76)	2 NPT	3-3/4 (95)	65 (1651)	12-1/2 (318)	49 (1245)	8-1/2 (216)	8-5/8 (219)	4 FLG	33 (3.1)	258 (117)
WU86-64	3 (76)	2 NPT	3-3/4 (95)	77 (1956)	12-1/2 (318)	61 (1549)	8-1/2 (216)	8-5/8 (219)	4 FLG	41 (3.8)	294 (133)
WU87-64	3 (76)	2 NPT	3-3/4 (95)	89 (2261)	12-1/2 (318)	73 (1854)	8-1/2 (216)	8-5/8 (219)	4 FLG	48 (4.5)	330 (150)
WU88-64	3 (76)	2 NPT	3-3/4 (95)	101 (2565)	12-1/2 (318)	85 (2159)	8-1/2 (216)	8-5/8 (219)	4 FLG	55 (5.1)	366 (166)
WU89-64	3 (76)	2 NPT	3-3/4 (95)	113 (2870)	12-1/2 (318)	97 (2464)	8-1/2 (216)	8-5/8 (219)	4 FLG	62 (5.8)	402 (182)

Dimensions are subject to change. Not to be used for construction purposes unless certified.

DESIGN PRESSURES − ASME CONSTRUCTION CAST IRON & BRASS UNITS

DESIGN PRESSURES				DESIGN TEMPERATURES* TUBE & SHELL SIDE	
TUBE SIDE		SHELL SIDE			
DESIGN	TEST	DESIGN	TEST	CAST IRON	BRASS
150 psi (10 bar)	300 psi (20 bar)	150 psi (10 bar)	300 psi (20 bar)	375°F (190°C)	300°F (149°C)

*For design pressures and temperatures higher than shown, consult B & G Representative for specifications and dimensions.

Caution: A properly sized relief valve must be installed on the heated side to protect heat exchangers from possible damage due to volumetric expansion.

MATERIALS

PART	STANDARD CAST IRON UNIT	BRASS UNIT
	2, 4 & 6 Pass	2 & 4 Pass
Shell	Steel	Steel
Head	Cast Iron	Cast Brass
Tubes 3/4" O.D.	Cooper	Cooper
Tubesheets	Steel	Royal Naval Brass
Baffles	Steel	Steel
Nuts & Bolts	Steel	Steel

Xylem Inc.
8200 N. Austin Avenue
Morton Grove, IL 60053
Phone: (847)966-3700
Fax: (847)965-8379
www.bellgossett.com

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Let's Solve Water