API Specification

11AX

12th Edition, December 2006,
Addendum 2, October 2012
Specification for Subsurface
Sucker Rod Pumps and Fittings

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1.0 PRODUCT DESCRIPTION

Specification 8C includes the following requirements for product ordered and may be applicable in addition to any product-specific requirements listed in other sections identified herein:

1.1 PRODUCTS

1.1.1 API Specification 11AX – Foreword
Products are to be marked in the units in which ordered unless there is an agreement to the contrary between the purchaser and the manufacturer. The factors used for conversion of English units to SI units were taken from API Publication 2564, and are listed below:

1 inch (in.) = 25.4 millimeters (mm) exactly

1 foot (ft) = 0.3048 meters (m) exactly

1.1.2 API Specification 11AX – 1 Scope
This specification covers rod pumps and tubing pumps in commonly used bore sizes. Sufficient dimensional requirements are provided to assure interchangeability and standardization of all component parts; however, details of design are not specified. Standard materials are specified.

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2.0 PURCHASER'S RESPONSIBILITY

2.1 PURCHASER'S RESPONSIBILITY

2.1.1 API Specification 11AX – 3.2

Complete pump designations, as shown in Figure 1, include:

a. Nominal tubing size.
b. Basic bore diameter.
c. Type of pump, including type of barrel and location and type of seating assembly.
d. Barrel length.
e. Plunger length.
f. Length of each extension when used.

Table 1—Pump Designations

(1)	(2)	(3)	(4)	(5)
	Letter Designation			
	Metal Plunger Pumps		Soft-Packed Plunger Pumps	
Type of Pump	Heavy-Wall Barrel	Thin-Wall Barrel	Heavy-Wall Barrel	Thin-Wall Barrel
Rod Pumps				
Stationary Barrel, Top Anchor	RHA	RWA	—	RSA
Stationary Barrel, Bottom Anchor	RHB	RWB	—	RSB
Stationary Barrel, Bottom Anchor	RXB	—	—	—
Traveling Barrel, Bottom Anchor	RHT	RWT	—	RST
Tubing Pumps	TH	—	TP	—

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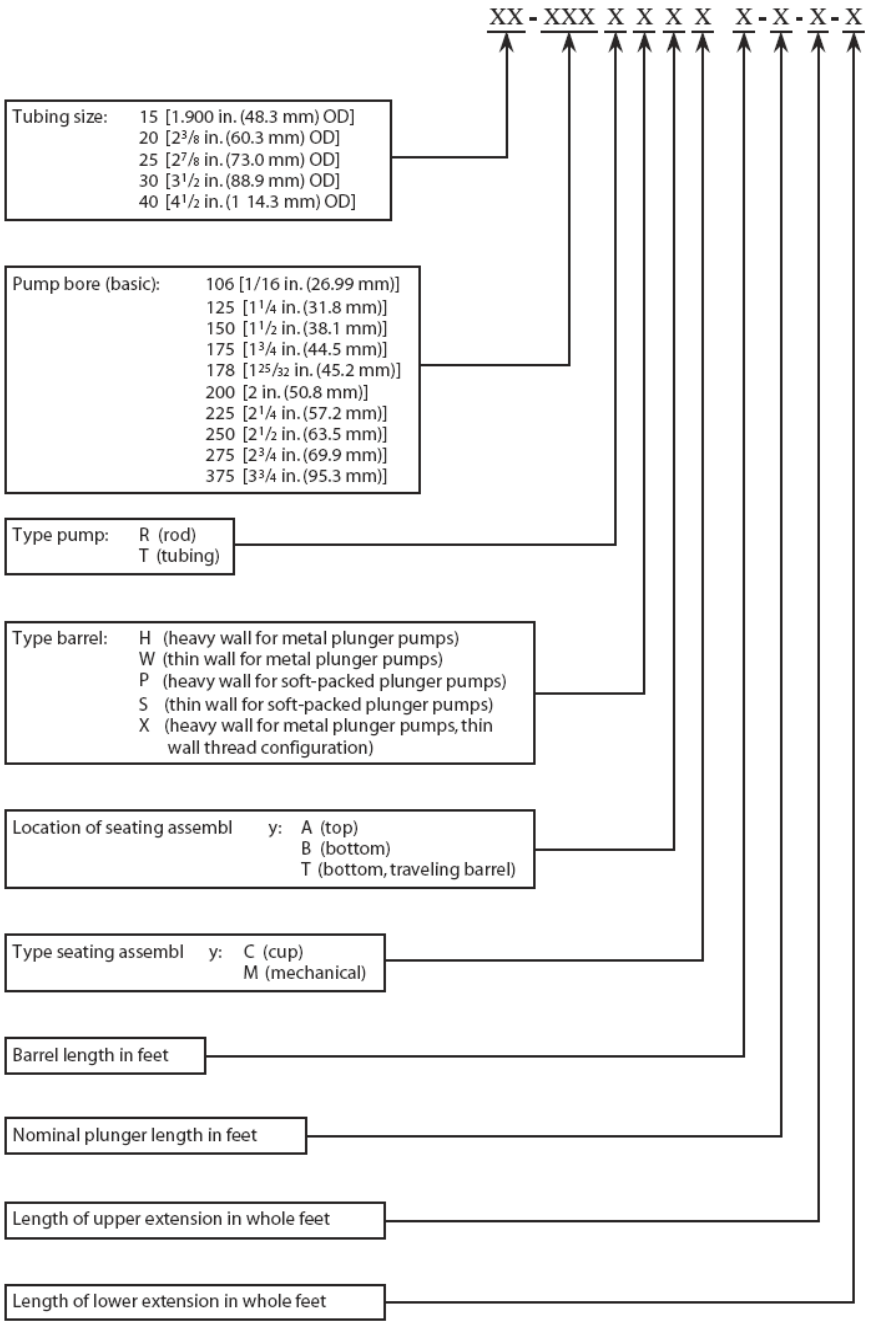


Figure 1—Pump Designations

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Example: A 1¼ in. (31.8 mm) bore rod type pump with a 10 ft (3.048 m) heavy wall barrel and 2 ft (0.610 m) upper extension, 2 ft (0.610 m) lower extension, a 4 ft (1.219 m) plunger, and a bottom cup type seating assembly for operation in 2⅜ in. (60.3 mm) tubing, would be designated as follows:

20-125 RHBC 10–4–2–2

Note: Metallic materials for subsurface sucker rod pumps for hydrogen sulfide environments are listed in NACE MR-01-76.

2.1.2 API Specification 11AX – 3.3
In addition to the pump designation described in 3.2, the purchaser must provide the following additional information:

a. Barrel material.
b. Plunger material.
c. Plunger clearance (fit).
d. Valve material.
e. Fittings materials.

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