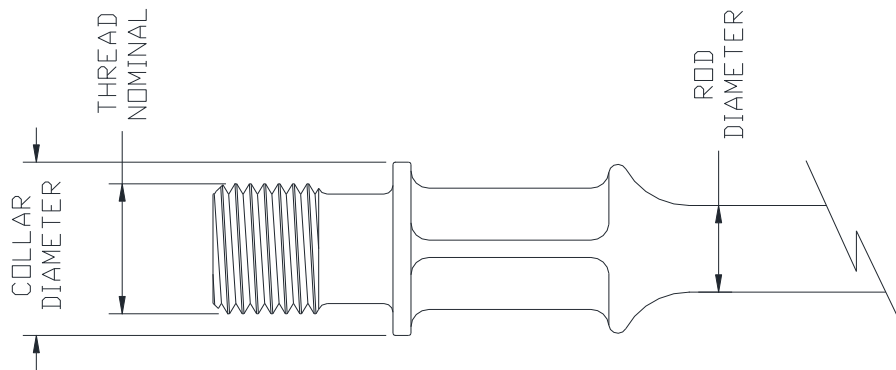




API SPECIFICATION 11B
TWENTY-SEVENTH EDITION MAY 10 2010



**GAGING FOR
SUCKER ROD, PONY ROD, POLISHED ROD, SINKER BAR, COUPLING, AND SUB-COUPLING**

455 Douglas Ave. Holland Mi 49424
Tel. 616-396-4604 Fax. 616-396-0413

Sucker Rod – Rod of standard length and diameter with externally threaded ends, used for transmitting mechanical power to a subsurface pump.

Pony Rod – Sucker rod of reduced length to place pump at the desired depth in the well.

Polished Rod – Rod of standard length with a surface to facilitate a pressure seal in a stuffing box and to provide a mechanical link between equipment inside and outside the well.

Sinker Bar – A steel rod of a specific length normally larger in diameter than the sucker rods, with externally threaded ends provided to add weight and stability to the sucker rod string.

Couplings – Internally threaded components used to connect sucker rods, sinker bars, pony rods, or polished rods.

Sub-Couplings – Internally threaded components used to connect sucker rods, sinker bars, pony rods, polished rods, or sinker bars, to the sub-surface pump or to each other where the threads are not the same size.

SUCKER ROD DATA

DIAMETER OF ROD BODY	NOMINAL THREAD DIAMETER	PITCH	COLLAR DIAMETER
1/2	3/4	10	Ø1.000
5/8	15/16	10	Ø1.250
3/4	1 1/16	10	Ø1.500
7/8	1 3/16	10	Ø1.625
1	1 3/8	10	Ø2.000
1 1/8	1 9/16	10	Ø2.250
P PREFIX REPRESENTS GAGING FOR THE PIN			
B PREFIX REPRESENTS GAGING FOR THE BOX			
ODD PREFIX NUMBERS REPRESENT THE WORKING GAGE			
EVEN PREFIX NUMBERS REPRESENT THE SETTING OR FITTING GAGE			
THREAD CLASS OF FIT 2-A OR B			
CONE RING GAGES (P4) FOR POLISHED ROD ARE SOLID DESIGN			
GO / NO-GO THREAD RINGS CAN BE OF SOLID OR ADJUSTABLE DESIGN			
1/2 INCH SIZE IS NOT IN THE API STANDARD			

Gaging for Polished Rod Pin Connections

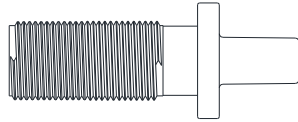
P1 Go Pin-Thread Truncated Setting-Plug Gage.

Used in setting the mating P2 ring gage and checking for square-ness and detecting wear.

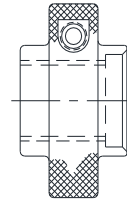
P2 Go Pin-Thread Ring Gage.

Used to verify maximum that the pitch diameter of the thread has not been exceeded (does not check 9° cone).

P1



P2



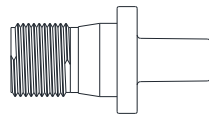
P3 Go Pin-Cone Plug Gage (Fitting Plug).

Represents the basic cone diameter and used as a master in establishing the stand-off of the mating P4 gage.

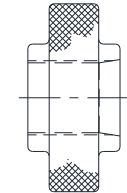
P4 Go Pin-Cone Ring Gage.

Gages the products 9° pin cone size. Cone plug to Cone Ring .325 ±.0015

P3



P4



Gaging for Sucker Rod and Polish Rod Pin Connections

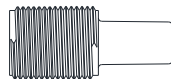
P5 No-Go Pin-Thread Truncated Setting-Plug Gage.

Used in setting the mating P6 ring gage and detecting wear.

P6 No-Go Pin-Thread Ring Gage.

Used to verify minimum pitch diameter of the thread has not been exceeded.

P5



P6



Gaging for Sucker Rod Pin Connections

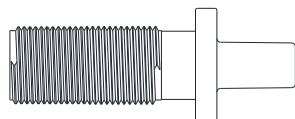
P7 Go Pin-Thread Truncated Setting-Plug Gage.

Used in setting the mating P8 ring gage and checking for square-ness and detecting wear.

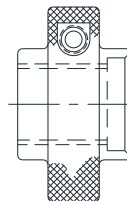
P8 Go Pin-Thread Ring Gage.

Used to verify maximum pitch diameter of the thread has not been exceeded.

P7



P8



Gaging for Sucker Rod, Polished Rod, and Sub-Coupling Box Connections

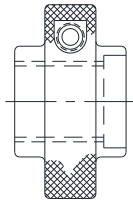
B1 Go Box-Thread Ring Gage (Checking Ring).

Used in checking B2 go box thread plug gage and square-ness of it's shoulder.

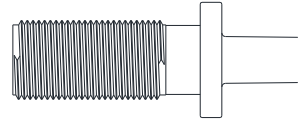
B2 Go Box-Thread Plug Gage.

Used to verify minimum pitch diameter of the thread has not been exceeded. (does not check the 9° cone).

B1



B2



Gaging for Polished Rod and Sub-Coupling Box Connections

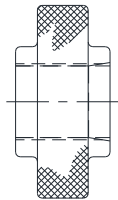
B3 Box-Cone Ring Gage (Fitting Ring).

Represent the basic cone diameter and used as a master in establishing the stand-off of mating B4 gage.

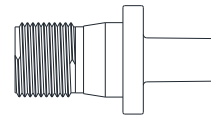
B4 Box-Cone Plug Gage.

Gages the products 9° box cone size. Cone plug to Cone Ring $.325 \pm .0015$

B3



B4



Gaging for Sucker Rod, Polished Rod, and Sub-Coupling Box Connections

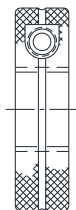
B5 No-Go Box-Thread Ring Gage (checking ring).

Used in checking B6 no-go gage.

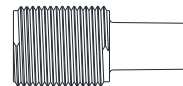
B6 No-Go Box-Thread Plug Gage.

Used to verify the maximum pitch diameter has not been exceeded.

B5



B6



Use and Summary of Working Gages

External Threads

Sucker Rod and Pony Rod Pin Connections

P8 Go Ring for maximum thread size.

The product pin shall enter the P8 ring gage to pin-shoulder face contact. A .002" feeler gage shall not enter at any point, between the face of the gage and the product pin-shoulder face.

P6 Not-Go Ring for minimum thread size.

The product pin shall not enter the P6 ring gage more than the third full turn of assembly.

Polished Rod Pin Connections

P2 Go Ring for maximum thread size.

The product pin shall enter the P8 ring gage to pin-shoulder face contact.

P6 Not-Go Ring for minimum thread size.

The product pin shall not enter the P6 ring gage more than the third full turn of assembly.

P4 Cone Ring for cone size.

The product pin shall enter the P4 cone ring gage to cone contact. When engaged, the stand-off of the gage from the pin shoulder face shall not be less than .100" or greater than .150".

Internal Threads

Sucker Rod and Pony Rod Box Connections

B2 Go Plug for minimum thread size.

The B2 plug gage shall enter the product box threads to the contact face. A .002" feeler gage shall not enter at any point, between the face of the gage and the product contact face.

B6 Not-Go Plug for maximum thread size.

The B6 plug gage shall not enter the product box threads more than the third full turn of assembly.

Polished Rod Pin Connections

B2 Go Plug for minimum thread size.

The B2 plug gage shall enter the product box threads to the contact face. The .002" feeler gage shall not enter at any point, between the face of the gage and the product contact face.

B6 Not-Go Plug for maximum thread size.

The B6 plug gage shall not enter the product box threads more than the third full turn of assembly.

B4 Cone Plug for cone size.

The B4 cone plug gage shall enter the product box threads to cone contact. When engaged, the stand-off of the gage from the box face shall not be less than .100" or greater than .150".

Information is for reference only