TUBE TESTING GUN SET

INTRODUCTION

Find leaking heat exchangers tubes quickly and easy with the TP0631 Tube Testing Gun Set. It reveals even the smallest tube leak (pinholes). With the Tube Testing Gun Set, you can pneumatically test from 3 to 10 tubes per minute, all with significantly less operator fatigue and greater operator safety. The set comes complete with three rod and tube assemblies to test tubes from 7,2 to 32,5 mm ID.

OPERATION

Connect the Tube Testing Gun Set to plant air or an inert gas. Insert the Air Injection Gun in one end of the tube, the Plugging gun into the other and press the air control valve. Air expands the seals on both guns and pressurizes the tube. When the pressure in the tube stabilizes, release the air control valve. Any reduction of pressure will be indicated on the integral pressure gauge to reveal even the smallest tube leak. Press the relief control valve to release the pressure out of the tube and the seals on both guns release again.

FEATURES

- Interchangeable Seal and Washer Sets: allows testing of tubes from 7,2 to 32,5 mm ID.
- Compact and light weight: each gun weighs less than 1kg.
- Uses standard plant air (or gas) supplies from 2,7 to 8,5 bar.
- Standard seal material: neoprene (alternative materials on request).
- Seal holders and washers are made of Stainless Steel to prevent corrosion.
- No leakage after changing the Seal and Washer sets due to the unique sealing element of the seal holders.
- All thread connections are metric or BSP, through which debris and other impurities can be removed easily.

SEAL SETS

Neoprene seal, complete with washer sets for use with the Tube Testing Gun Set TP0631 (set for the 2 guns).

Partnumber	Tube ID. range	Appropriate seal holder
TPAN5107	7.2 – 8.5 mm	TP – 2031
TPAN5108	8.2 – 9.5 mm	TP – 2031
TPAN5109	9.5 – 10.5 mm	TP – 2031
TPAN5110	10.2 – 11.5 mm	TP – 2031
TPAN5111	11.2 – 12.5 mm	TP – 2031
TPAN5112	12.2 – 13.5 mm	TP – 2031
TPAN5212	12.2 – 13.5 mm	TP – 2081
TPAN5213	13.2 – 14.5 mm	TP – 2081
TPAN5214	14.2 – 15.5 mm	TP – 2081
TPAN5215	15.2 – 16.5 mm	TP – 2081
TPAN5216	16.2 – 17.5 mm	TP – 2081
TPAN5217	17.2 – 18.5 mm	TP – 2081
TPAN5218	18.2 – 19.5 mm	TP – 2081
TPAN5219	19.2 – 20.5 mm	TP – 2081
TPAN5220	20.2 – 21.5 mm	TP – 2081
TPAN5221	21.2 – 22.5 mm	TP – 2081
TPAN5222	22.2 – 23.5 mm	TP – 2081
TPAN5223	23.2 – 24.5 mm	TP – 2081
TPAN5224	24.2 – 25.5 mm	TP – 2081
TPAN5225	25.2 – 26.5 mm	TP – 2081
TPAN5226	26.2 – 27.5 mm	TP – 2081
TPAN5327	27.2 – 28.5 mm	TP – 2101
TPAN5328	28.2 – 29.5 mm	TP – 2101
TPAN5329	29.2 – 30.5 mm	TP – 2101
TPAN5330	30.2 – 31.5 mm	TP – 2101
TPAN5331	31.2 – 32.5 mm	TP – 2101

TPAN refers to the seal set for the tube testing gun set in Neoprene.

TUBE PLUGS

INTRODUCTION

TECO produces a range of "TECO PLUG" tube plugs, which are used in heat exchangers to maintain a safe and leak-tight seal under the most severe conditions. The TECO Plugs are used in leaking tubes or as a preventive seal. The TECO plugs are characterized by the simple, quick and especially safe installation, and also the extreme durable character of this system.

ORDERING INFORMATION

When ordering the TECO plugs, please provide the following information:

1. Tube OD and wall thickness and/or measured tube ID.
2. Thickness of tube sheet, diameter and pitch of the tubes.
3. Tube and tube sheet material.
4. Maximum pressure and temperature.
5. Type of tube-to-tube sheet joint (rolled and/or welded etc).
6. Is there a water head/divider plate, and if yes, also all the dimensions.
7. Condition of tubes and age of heat exchanger.

TECO PLUG®
INSTALLATION EQUIPMENT

The installation equipment hydraulically installs TECO plugs in seconds. The package is compact and easy to use.

The total package includes:

- Specially designed TECO hydraulic ram.
- Air activated hydraulic pump.
- High pressure hose (3m).
- Pressure gauge.
- Storage box.

STANDARD MATERIALS

The plugs are available in the following materials:
Carbon Steel – **C**
Brass – **B**
Stainless steel 316L – **S**
Monel – **M**

For alternative materials, such as Titanium you can contact TECO.

Always ensure that you use a compatible plug for each type of tube to prevent thermal and/or chemical reactions occurring.

Replace the letter X by the code of the requested material (as mentioned above)

TECO Plug kit	Tube ID. (mm)	Complete pull rod & plug Positioner diameter	Complete pull rod extension
IPK – 100 – X	10.0 – 10.5	IPST – 100 –110 Diameter 10 mm	IPSTV–100-125-300
IPK – 105 – X	10.5 – 11.0		IPSTV–100-125-300
IPK – 110 – X	11.0 – 11.5		IPSTV–100-125-300
IPK – 115 – X	11.5 – 12.0	IPST – 115 –125 Diameter 11.5 mm	IPSTV–100-125-300
IPK – 120 – X	12.0 – 12.5		IPSTV–100-125-300
IPK – 125 – X	12.5 – 13.0		IPSTV–100-125-300
IPK – 130 – X	13.0 – 13.5	IPST – 130–145 Diameter 13 mm	IPSTV–130-165-300
IPK – 135 – X	13.5 – 14.0		IPSTV–130-165-300
IPK – 140 – X	14.0 – 14.5		IPSTV–130-165-300
IPK – 145 – X	14.5 – 15.0		IPSTV–130-165-300
IPK – 150 – X	15.0 – 15.5	IPST – 150–165 Diameter 15 mm	IPSTV–130-165-300
IPK – 155 – X	15.5 – 16.0		IPSTV–130-165-300
IPK – 160 – X	16.0 – 16.5		IPSTV–130-165-300
IPK – 165 – X	16.5 – 17.0		IPSTV–130-165-300
IPK – 170 – X	17.0 – 17.5	IPST – 170–190 Diameter 17 mm	IPSTV–170-300-300
IPK – 175 – X	17.5 – 18.0		IPSTV–170-300-300
IPK – 180 – X	18.0 – 18.5		IPSTV–170-300-300
IPK – 185 – X	18.5 – 19.0		IPSTV–170-300-300
IPK – 190 – X	19.0 – 19.5		IPSTV–170-300-300
IPK – 195 – X	19.5 – 20.0	IPST – 195–215 Diameter 19.5 mm	IPSTV–170-300-300
IPK – 200 – X	20.0 – 20.5		IPSTV–170-300-300
IPK – 205 – X	20.5 – 21.0		IPSTV–170-300-300
IPK – 210 – X	21.0 – 21.5		IPSTV–170-300-300
IPK – 215 – X	21.5 – 22.0		IPSTV–170-300-300
IPK – 220 – X	22.0 – 22.5	IPST – 220–240 Diameter 22 mm	IPSTV–170-300-300
IPK – 225 – X	22.5 – 23.0		IPSTV–170-300-300
IPK – 230 – X	23.0 – 23.5		IPSTV–170-300-300
IPK – 235 – X	23.5 – 24.0		IPSTV–170-300-300
IPK – 240 – X	24.0 – 24.5		IPSTV–170-300-300
IPK – 245 – X	24.5 – 25.0	IPST – 245–265 Diameter 24.5 mm	IPSTV–170-300-300
IPK – 250 – X	25.0 – 25.5		IPSTV–170-300-300
IPK – 255 – X	25.5 – 26.0		IPSTV–170-300-300
IPK – 260 – X	26.0 – 26.5		IPSTV–170-300-300
IPK – 265 – X	26.5 – 27.0		IPSTV–170-300-300
IPK – 270 – X	27.0 – 27.5	IPST – 270–290 Diameter 27 mm	IPSTV–170-300-300
IPK – 275 – X	27.5 – 28.0		IPSTV–170-300-300
IPK – 280 – X	28.0 – 28.5		IPSTV–170-300-300
IPK – 285 – X	28.5 – 29.0		IPSTV–170-300-300
IPK – 290 – X	29.0 – 29.5		IPSTV–170-300-300

A kit consists of : 10 pcs. plugs, 1 pcs. tube cleaning brush and 1 pcs. caliper