

# AUSPEX CRIMP MANUAL

AUSTRALIAN OWNED



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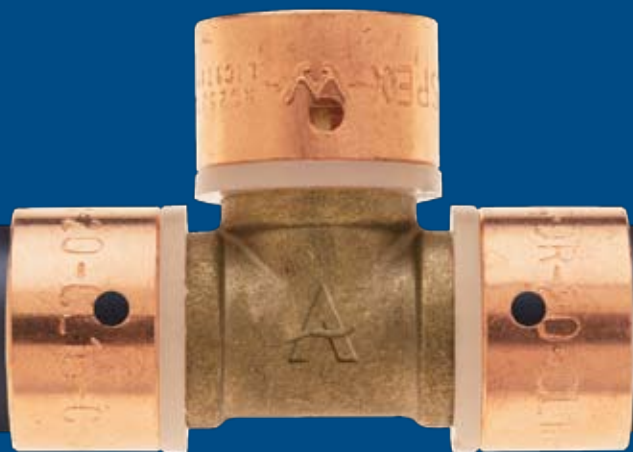
The AUSPEX CRIMP SYSTEM made for both cold and hot water applications, has revolutionised pipe fitting with its cut, fit, crimp, done process.

The crimp system comprises PE-X pipe, DR Brass fittings, copper crimp rings and a specially engineered jointing tool, ensuring that all your jobs are quick, hassle free, cost effective and of the highest quality. The fittings are manufactured to conform with the performance requirements of AS 2537.

Auspex Crimp are constantly working to improve the system to make it as plumber-friendly as possible. In the near future we will bring you newly designed Crimping Tools, which will enhance the system even further.

## ADVANTAGES OF AUSPEX CRIMP

1. Simple and quick installation.
2. Neat, compact fittings.
3. No brazing, soldering or lagging unless required by A.S.3500 (eg. When rendered into wall chases etc.)
4. The AUSPEX CRIMP system can be easily dismantled without damage to the fitting body. (see page 7)



# INSTALLATION INSTRUCTIONS

## Step 1

Measure the pipe to the correct length and using a secateur type tool, cut the pipe squarely and remove any burrs. If the pipe is witness marked, cut squarely in the centre of the mark. The end of the pipe may need to be freshly cut to ensure smooth passage for the fitting. Do not use a hacksaw.



## Step 2

If the pipe is not witness marked, use the witness marking tool to mark the correct depth, or measure the depth of the joint and mark this depth on the pipe to ensure the pipe is fully penetrated. The joint depth for all pipe sizes (16-20&25mm) is 11mm. The pipe is pushed over the barbed fitting and at the same time under the crimp ring. The fit should be firm. If the joint feels sloppy or hard to insert, check pipe and fittings. Do not use lubricants.



## Step 3

Centralise the tool jaws over the crimp ring at 90deg. to the joint. Close the tool completely to compress the crimp ring. The tool will click at final compression.



## Step 4

Check with the gauge supplied by sliding the opening of the gauge over the compressed ring. If it passes over the ring easily, the joint has been completed satisfactorily. If the gauge does not pass over the ring, the joint is under crimped. The tool should then be adjusted. (See adjustment instructions). Do not double crimp.



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## Step 5

To ensure the joint is not stressed, use a bend support or clip.



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## Step 6

Pressure test the system in accordance with A.S.3500 parts 1 & 4 or in accordance with local requirements. Cut out any defective joints. Fittings can be re-used by cutting off the compressed ring and replacing with a new ring. Ensure that no damage is done to the brass barbs when cutting off the ring or removing the pipe.

# GENERAL INSTALLATION TIPS

## 1. The Gauge

The gauge is one of the quality controls of the system. It verifies firstly that the ring has been crimped and secondly, that it has been compressed enough.

Gauging of the compressed ring should be done throughout each job.

When using the gauge, slide the opening over the compressed ring. It should slide easily over the ring. Do not place the gauge over the pipe and then move it back along the pipe and over the ring. This may not give a true reading.

If the gauge is lost, it should be replaced immediately.

## 2. Clear Plastic Ring

The plastic ring on the fitting is only there to hold the crimp ring to the fitting. It plays no part in the integrity of the joint. It may behave differently after crimping, however as a general rule, the back of this ring should be flush against the body of the fitting and the crimp ring should be attached to it. This starting position will also help to ensure full penetration of the fitting inside the pipe.

## 3. The Pipe

Pipe that comes out of the crimped ring at an angle may indicate that the pipe is not covering all of the barbs on one side. This situation may occur if a tight bend is made close to a joint or if the pipe has moved in some way prior to crimping. Where possible, crimp the fitting before making the tight bend and install a clip close to the joint between the bend and the joint. Use a bend stabiliser to avoid stress on the joint.

## 4. Coloured Plastic Rings

Auspex Crimp has a range of adaptors, which are identified by a different coloured plastic ring. Do not join Auspex pipe by using a fitting with a coloured ring. To identify the uses for these adaptors, consult your supplier or Auspex directly.

## 5. Pinched Ring

When crimping fittings which are flush to frames etc, check to ensure that the crimp ring has not pinched on the back side. Rings which are pinched in this manner should be replaced.

## 6. Clips

The clips should be installed so that the pipe can move freely through the clip. Plastic clips are recommended.

### PRESSURE DERATING OF PIPES ACCORDING TO PIPE MATERIAL TEMPERATURE

	Temperature				
	20°C	40°C	60°C	80°C	95°C
	Working pressure, kPa				
<b>PN 16</b>	1600	1480	1280	1050	800
	Working pressure, P.S.I.				
<b>PN 16</b>	232	214	186	161	152

## TOOL ADJUSTMENT

Incorrect adjustment can cause under-crimping and failure of the joint.

1. Crimp joint and test with gauge.
2. If gauge passes easily over crimped ring, the tool settings are satisfactory.
3. If gauge does not pass easily over the ring, then adjust as follows:
  - With jaws in the open position, slacken off the lock nut and turn the adjusting bolt clockwise in small increments. (1/4 to 1/2 a turn only)
  - Repeat steps 1 and 2 with new joint.
  - When satisfactory, re-tighten lock nut.
4. **Check regularly and adjust tool as necessary.**



## JOINTING TO OTHER MATERIALS

Threaded fittings are available to make the transition between PE-X pipe and other materials.

## WHEN JOINING WITH COPPER

Flared copper compression to Auspex Crimp adaptors are available.

Brazing adaptors are available, designed so that one end can:

1. Fit over 15mm, 20mm and 25mm copper tube.
2. Fit into expanded 15mm, 20mm or 25mm copper tube.
3. Fit into standard copper or brass brazed fittings.
4. When brazing these adaptors they **MUST** be cold before inserting into the PE-X pipe.

## TROUBLE SHOOTING

The Auspex crimp system is simple and effective when executed in accordance with the jointing procedures in this manual. However, if sufficient care is not taken, this can result in an ineffective joint.

### Ineffective joints may occur if -

- A** The crimping tool has not been completely closed.
- B** The crimping tool is out of adjustment. Readjust tool in accordance with the instructions supplied with the tool.
- C** The copper ring has moved away from the fitting body.
- D** The crimping tool has not been centred over the copper ring.
- E** The crimping tool has not been at 90 degrees to the joint being made.
- F** The pipe has been cut badly out of square.
- G** The fitting is not fully inserted in the pipe.

### If an ineffective joint is detected -

- A** Cut out the defective joint and replace with new fitting.
- B** Cut the copper ring, remove and replace it with new copper ring and crimp again, using the same fitting body.
- C** Ensure when cutting off a ring that the barb on the fitting is not damaged.
- D** Remove the section of pipe that was under the crimp ring now removed.

# PRODUCT LIST

## Couplings

### AP011616

16mm x 16mm

### AP012020

20mm x 20mm

### AP012525

25mm x 25mm

### AP022016

20mm x 16mm

### AP022520

25mm x 20mm

### AP022516

25mm x 16mm



## Tees

### AP03161616

16mm x 16mm x 16mm

### AP03202020

20mm x 20mm x 20mm

### AP03252525

25mm x 25mm x 25mm

### AP04201616

20mm x 16mm x 16mm

### AP04202016

20mm x 20mm x 16mm

### AP04201620

20mm x 16mm x 20mm

### AP04202025

20mm x 20mm x 25mm

### AP04251616

25mm x 16mm x 16mm

### AP04251620

25mm x 16mm x 20mm

### AP04251625

25mm x 16mm x 25mm

### AP04252016

25mm x 20mm x 16mm

### AP04252020

25mm x 20mm x 20mm

### AP04252025

25mm x 20mm x 25mm

### AP04252516

25mm x 25mm x 16mm

### AP04252520

25mm x 25mm x 20mm



## For Brazing Copper Tube



### AP03161608F

16mm x 16mm x 1/2"

### AP03202008F

20mm x 20mm x 3/4"

## Elbows

### AP051616

16mm x 16mm

### AP052020

20mm x 20mm

### AP052525

25mm x 25mm

### AP052520

25mm x 20mm

### AP052016

20mm x 16mm

### AP051615M

16mm x 1/2"

### AP051615F

16mm x 1/2"

### AP052020F

20mm x 3/4"



## Lugged Elbow (male)

### AP061615S

16mm AUSPEX x 1/2"

Male B.S.P. (73mm)

### AP061615L

16mm AUSPEX x 1/2"

Male B.S.P. (88mm)

### AP061615200

16mm AUSPEX x 1/2"

Male B.S.P. 200mm Ext

### AP061615100

16mm Auspex x 1/2"

Male B.S.P. 100mm Ext

### AP062015

20mm Auspex x 1/2"

Male B.S.P.

### AP06252075\*

25mm Auspex x 3/4"

Male B.S.P. 75mm Ext



\*Fabricated on request.

## Lugged Elbow (female)

### AP071615

16mm Auspex x 1/2" Female

B.S.P.

### AP072020

20mm Auspex x 3/4" Female

B.S.P.



# PRODUCT LIST

## Brazing Tails

### AP0816M

16mm Male

### AP0820M

20mm Male

### AP0825M

25mm Male

### AP0816F

16mm Female

### AP0820F

20mm Female

### AP0825F

25mm Female

### AP082015F

20mm x 15mm

Female

### AP082520M

25mm x 20mm Male



## Threaded BSP Adaptors (male)

### AP091615

16mm AUSPEX x 1/2" Male B.S.P.

### AP092020

20mm AUSPEX x 3/4" Male B.S.P.

### AP092025

20mm AUSPEX x 1" Male B.S.P.

### AP092520

25mm AUSPEX x 3/4" Male B.S.P.

### AP092525

25mm AUSPEX x 1" Male B.S.P.

### AP092015

20mm x 1/2" Male B.S.P.



## Threaded BSP Adaptors (female)

### AP101615

16mm AUSPEX x 1/2" Female B.S.P.

### AP102020

20mm AUSPEX x 3/4" Female B.S.P.

### AP102015

20mm AUSPEX x 1/2" Female B.S.P.

### AP102520

25mm AUSPEX x 3/4" Female B.S.P.

### AP102525

25mm AUSPEX x 1" Female B.S.P.

### AP101615WB

16mm x 1/2" Female Winged Back Connector



## Sink Sets

### **AP11200 SE**

Side Entry Sink Sets 200mm Centres

### **AP11200RA**

Right Angle Sink Sets 200mm Centres

### **AP11RA**

Right Angle Sink Sets 300mm Centres

### **AP11SE**

Side Entry Sink Sets 300mm Centres



Covered by Watermark LN: W185 spec 038

## Shower Sets

### **AP12200BER**

Bottom Entry Shower Set 200mm Centres with Copper Riser and Lugged Elbow

### **AP12200TER**

Top Entry Shower Set 200mm Centres with Copper Riser and Lugged Elbow

### **AP12200BEC**

Bottom Entry Shower Set 200mm Centres, short Copper Riser and Auspex Barb

### **AP12200TEC**

Top Entry Shower Set 200mm Centres, short Copper Riser and Auspex Barb

### **AP12BEC**

Bottom Entry Shower Set 150mm Centres, short Copper Riser and Auspex Barb

### **AP12TEC**

Top Entry Shower Set 150mm Centres, short Copper Riser and Auspex Barb

### **AP16BS200BE**

Bottom Entry Bath/Shower 200mm Centres with 16mm Barb on cross tube

### **AP16BS200BER**

Bottom Entry Bath/Shower 200mm Centres with Copper Riser and Lugged Elbow



Covered by Watermark LN: W185 spec 038

# PRODUCT LIST

## Compression Adaptors

### AP131615

16mm AUSPEX x 15mm Copper

### AP132015

20mm AUSPEX x 15mm Copper

### AP132020

20mm AUSPEX x 20mm Copper

### AP132525

25mm AUSPEX x 25mm Copper



## System Adaptors

### AP151618PB

16mm AUSPEX x 18mm

Polybutylene Adaptor

### AP152022PB

20mm AUSPEX x 22mm

Polybutylene Adaptor

### AP151620

16mm AUSPEX x 16mm Class 20

PEX Adaptor

### AP152020

20mm AUSPEX x 20mm Class 20

PEX Adaptor



## End Caps

### AP1416

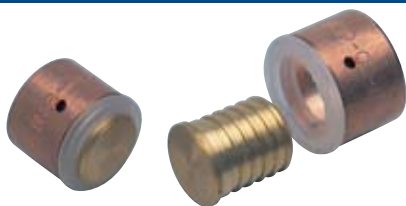
16mm

### AP1420

20mm

### AP1425

25mm



## Gauges

### AP172016

20mm x 16mm

### AP1725

25mm



## Bend Stabilisers

**AP1816**

16mm

**AP1820**

20mm



## Loose Nut and Tail (female)

**AP191615**

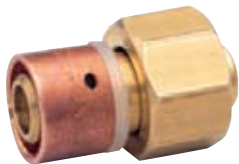
16mm AUSPEX x 1/2"

**AP192020**

20mm AUSPEX x 3/4"

**AP192525**

25mm AUSPEX x 1"



## Crimping Tools

**AP2116**

16mm

**AP2120**

20mm

**AP2125**

25mm



**GPMMAPI**

16mm - 25mm Power Mini Tool



## Spare Copper Rings (with plastic inserts)

**AP2216**

16mm

**AP2220**

20mm

**AP2225**

25mm





## **AUSPEX**

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