









## A REVOLUTIONARY PIPING SYSTEM WITH EXPANSION RING TECHNOLOGY

Astral PEX-a Pro, a next generation hot & cold plumbing system is made of cross-linked polyethylene pipes. The cross linking technology is a process where polyethylene molecules form links between the polymeric chain, making it the next generation plumbing system with futuristic capabilities & characteristics.

Astral PEX-a Pro system is based on expansion ring technology. The pipes & fittings are joined with simple applications of expansion using the plastic memory of the PEX-a Pro pipes. This unique joining system provides water tight, compact & recessed system with leak protection, easy renovation & chemical-free installation.

The PEX-a Pro plumbing system can also be installed using manifold hydraulic system, which provides a distribution element in a special wall mount cabinet, which supplies all draw-off points, which are connected & controlled individually. The manifold combined with pipe-in-pipe system ensures easy repair & maintenance as well as leak protection.

### **COMPONENTS OF**

THE PEX-A PRO SYSTEM

### **PEX-A PIPES**

Astral Pipes uses the best high-density polyethylene (HDPE) and the most advanced peroxide cross-linking technology in order to offer high performing PEX-a pipes. Astral's modern technology is based on the well-known peroxide cross-linking process (PEX-a), while using the latest high power infrared ray ovens.

### **PLASTIC RINGS**

The use of plastic rings, manufactured by injection moulding using special high-tech polymers, enables to offer better dimensional precision in the rings that, together with a pipe stopping system, facilitates the assembly process. The rings are available in three different colours (red, blue and white) so you can make the pipelines easily identifiable.





### **BRASS / PPSU FITTINGS**

The Astral PEX-a Pro system exclusively uses high quality brass (CW617N alloy), which complies with the most demanding EU sanitary standards.

The PEX-a Pro system is also available with PPSU (Poly Phenyl Sulfone) fittings, which are one of the highest quality plastic fittings for hot & cold water plumbing system. By using PPSU fittings, full plastic piping system is possible, without compromising any hydraulic properties.

### **FEATURES AND BENEFITS:**

- Resistance to High Temperatures & Pressures
- Low Thermal Conductivity
- Absence of Condensations
- Lightness
- Flexibility
- Plastic memory
- Nonconductive Non Corrosive
- Less noise
- Higher flows
- Long life
- Suitable for drinking water

### **UNIQUE BENEFITS OF JOINING SYSTEM**

WATERTIGHT | COMPACT | RECESSED | NO WAITING TIME LEAK PROTECTION | EASY RENOVATION











# JOINING SYSTEM

### **1. CUT THE PIPE**

Cut the pipe using a pipe cutter, making a perpendicular cut and clean the pipe end from grease and pipe chips. Fit the plastic ring on the pipe and make sure the pipe is flushed with the upper edge of the ring.

### 2. PLACE THE RING OVER THE PIPE

Insert the pipe into the ring until the pipe reaches the safety stop which exist inside the ring.

### **3. EXPAND THE PIPE**

Open the expander handles so the expansion head segments remain closed. Then insert the expansion head inside the pipe-end and start expanding the pipe by bringing together the expander handles up to the end, maintaining this position for a few seconds. Manually rotate the pipe or expander by a minimum of 10° - maximum of 45° and push it further into the pipe. Repeat this process, turning the tool between expansions (\*), until the pipe reaches the extreme of the expansion head closer to the tool.

(\*) this turning of the expansion head is only necessary while using manual expanders without rotating expanding heads (for expanders equipped with rotating expansion heads, this turning of the expansion heads is not necessary).

### NUMBER OF EXPANSIONS RECOMMENDED:

SIZE(cm)	1.6	2.0	2.5	3.2
NO. OF EXPANSIONS	4	5	7	13

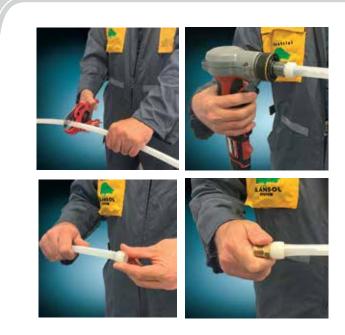


### **PRESSURE TEST**

As requested by the building standards, it is compulsory to pressure test the water pipelines before covering them. Since the expansion technology is based on the plastic memory of the PEX-a Pro pipes, the contraction increases with the time passed since the expansion was made, it is important to observe a minimum waiting time before doing a pressure test. Under normal weather conditions, Astral PEX-a Pro system joints can be tested 30 minutes after the assembly. Under severe winter conditions, we recommend to increase the waiting time.

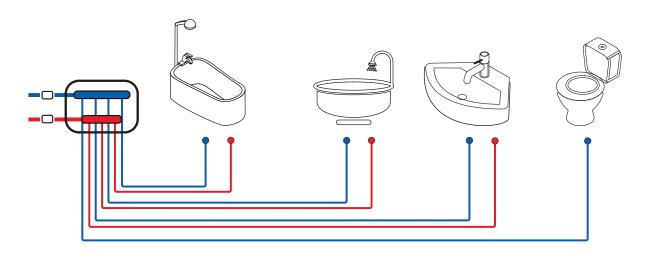
### 4. INSERT THE FITTING BODY IN THE PIPE

Release the pipe from the expander and insert the body of the fitting into the pipe-end immediately, pressing the body of the fitting for a few seconds until the pipe shrinks enough to hold the fitting properly, making sure that the plastic ring is in contact with the end of the fitting.



## TYPES OF INSTALLATION

Astral PEX-a Pro flexible plumbing systems can be designed and installed using conventional T-fitting, serial or manifold installation method. The choice of system and design is up to the user, but no matter the installation method, with Astral's extensive range of products and fittings, we always provide the best solutions to save on installation time and costs.



### **DISTRIBUTION WITH SINGLE CONNECTIONS**

This system has single individual piping with manifold for hot and cold water as shown in picture. In this case, water flows through the single pipe only and the draw-off point collects it.

### LARGE FLOW DISTRIBUTION

This system has double hot water terminals with two pipe connections and is used wherever large water flow is required. In this case large quantity of water can be achieved with low pressure loss.

The major benefits of these systems are as under:

- Reduced circuit length
- High comfort with reduced hot water availability times
- Possibility of easily intercepting draw-off points on the manifold

### **DISTRIBUTION WITH CLOSED CIRCUIT**

This system has draw-off points through double inlet terminals. In this system, no supply pipes are connected individually to the manifold. Only one pipe for hot water and one for cold water go through all the connections creating a closed circuit. The major benefits of this type of installation are:

- Hygienically ideal due to free of dead sections
- Manifold with a reduced number of outputs
- Requires less units of pipes
- Having pressure balance and allowing large flow rates

## **EXPANSION RING SYSTEM** SHRINK-FIT

K	8	2	PEX-a F CO HSN CODI	L
Size (cm)	Length (meter)	Pro	duct Code	Price (₹) per pc.
1.6	100	PEX	ATB161810A	7,800.00
2.0	100	PEX	ATB201910A	10,000.00
2.5	50	PEX	ATB252350A	7,400.00
3.2	50	PEX	ATB322950A	12,700.00



(cm)	(meter)		(Nos.)	per pc.
1.6	5	PEXATB161805A	50	390.00
2.0	5	PEXATB201905A	40	500.00
2.5	5	PEXATB252305A	25	740.00
3.2	5	PEXATB322905A	15	1,270.00



Size (cm)	<b>Length</b> (meter)	Product Code	<b>Price (₹)</b> per pc.
1.6	100	PEXATGR16181A	12,495.00
2.0	50	PEXATGR20195A	8,400.00



(cm)	(meter)		per pc.
1.6	100	PEXATGA16181A	12,495.00
2.0	50	PEXATGA20195A	8,400.00





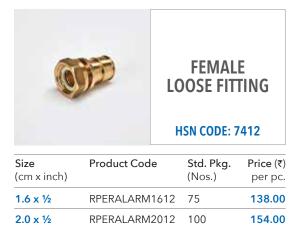




### FEMALE ADAPTER

HSN CODE: 7412

Size (cm x inch)	Product Code	<b>Std. Pkg.</b> (Nos.)	Price (₹) per pc.
1.6 x ½	RPERALARH1612	150	130.00
2.0 x ½	RPERALARH2012	125	150.00
2.0 x ¾	RPERALARH2034	100	170.00
2.5 x ½	RPERALARH2512	75	235.00
2.5 x ¾	RPERALARH2534	75	280.00
2.5 x 1	RPERALARH251	50	382.00
3.2 x ¾	RPERALARH3234	40	600.00
3.2 x 1	RPERALARH321	35	660.00
3.2 X 1¼	RPERALARH32114	24	950.00





RPERALARM2534

60

345.00

2.5 x ¾

Size (cm x cm)	Product Code	Std. Pkg. (Nos.)	Price (₹) per pc.
2.0 x 1.6	RPERALAMR2016	150	107.00
2.5 x 2.0	RPERALAMR2520	100	183.00
3.2 x 2.5	RPERALAMR3225	25	310.00





Size (cm x inch)	Product Code	Std. Pkg. (Nos.)	Price (₹) per pc.
1.6 x ½	RPERALARC1612	150	118.00
1.6 x ¾	RPERALARC1634	125	175.00
2.0 x ½	RPERALARC2012	125	120.00
2.0 x ¾	RPERALARC2034	100	175.00
2.0 x 1	RPERALARC201	100	220.00
2.5 x ½	RPERALARC2512	75	226.00
2.5 x ¾	RPERALARC2534	75	230.00
2.5 x 1	RPERALARC251	75	339.00
2.5x 1¼	RPERALARC25114	35	549.00
3.2 x ¾	RPERALARC3234	40	575.00
3.2 x 1	RPERALARC321	40	690.00
3.2 X 1¼	RPERALARC32114	24	835.00



(cm)		(Nos.)	per pc.
1.6	RPERALAMU16	175	101.00
2.0	RPERALAMU20	150	144.00
2.5	RPERALAMU25	75	198.00
3.2	RPERALAMU32	25	631.00

## **EXPANSION RING SYSTEM** SHRINK-FIT

		COUPLE IN PPS HSN CODE: 7	U
Size (cm)	Product Code	Std. Pkg. (Nos.)	Price (₹) per pc.
1.6	RPERPLAMU16	175	89.00
2.0	RPERPLAMU20	150	120.00
2.5	RPERPLAMU25	75	250.00
3.2	RPERPLAMU32	25	474.00



RPERPLAMR2520

RPERPLAMR3225

100

100

2.5 x 2.0

3.2 x 2.5



239.00

367.00

Code Std. Pl (Nos.)	k <b>g. Price</b> (₹) per pc.
AC16 100	187.00
AC20 75	306.00
AC25 50	584.00
AC32 24	640.00
	(Nos.) AC16 100 AC20 75 AC25 50

ELBOW IN PPSU
HSN CODE: 7412

Product Code	<b>Std. Pkg.</b> (Nos.)	<b>Price</b> (₹) per pc.
RPERPLAC16	100	176.00
RPERPLAC20	75	200.00
RPERPLAC25	50	380.00
RPERPLAC32	20	481.00
	RPERPLAC16 RPERPLAC20 RPERPLAC25	RPERPLAC16100RPERPLAC2075RPERPLAC2550





(cm x inch)		(Nos.)	per pc.
1.6 x ½	RPERALATC1612	100	244.00
2.0 x ½	RPERALATC2012	75	262.00
2.0 x ¾	RPERALATC2034	60	255.00
2.5 x ¾	RPERALATC2534	50	507.00



**TEE IN PPSU** 

HSN CODE: 7412



Size (cm)	Product Code	Std. Pkg. (Nos.)	Price (₹) per pc.
1.6	RPERPLAT16	75	214.00
2.0	RPERPLAT20	50	249.00
2.5	RPERPLAT25	30	583.00
3.2	RPERPLAT32	15	832.00



	HSN CODE: 7412		
uct Code	Std. Pkg.	Price	
	(Nos.)	perr	

**REDUCER TEE** 

(cm x cm x cm)		(Nos.)	per pc.
2.0 x 1.6 x 1.6	RPERALAT20166	50	329.00
2.0 x 1.6 x 2.0	RPERALAT20160	50	370.00
2.0 x 2.0 x 1.6	RPERALAT20206	50	353.00
2.5 x 1.6 x 2.5	RPERALAT25165	30	804.00
2.5 x 2.0 x 2.0	RPERALAT25200	30	787.00
2.5 x 2.0 x 2.5	RPERALAT25205	30	660.00
2.5 x 2.5 x 2.0	RPERALAT25250	30	652.00



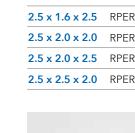
Size (cm x cm x cm)	Product Code	<b>Std. Pkg.</b> (Nos.)	Price (₹) per pc.
2.0 x 1.6 x 1.6	RPERPLAT20166	50	291.00
2.0 x 1.6 x 2.0	RPERPLAT20160	50	326.00
2.0 x 2.0 x 1.6	RPERPLAT20206	50	312.00
2.5 x 1.6 x 2.5	RPERPLAT25165	30	453.00
2.5 x 2.0 x 2.0	RPERPLAT25200	30	512.00
2.5 x 2.0 x 2.5	RPERPLAT25205	30	582.00
2.5 x 2.5 x 2.0	RPERPLAT25250	30	679.00



(cm)		(Nos.)	
1.6	RPERPLAT16	75	
2.0	RPERPLAT20	50	
2.5	RPERPLAT25	30	
3.2	RPERPLAT32	15	



Size (cm x cm x cm)	Product Code	<b>Std. Pkg.</b> (Nos.)	Price (₹) per pc.
2.0 x 1.6 x 1.6	RPERALAT20166	50	329.00
2.0 x 1.6 x 2.0	RPERALAT20160	50	370.00
2.0 x 2.0 x 1.6	RPERALAT20206	50	353.00
2.5 x 1.6 x 2.5	RPERALAT25165	30	804.00
2.5 x 2.0 x 2.0	RPERALAT25200	30	787.00
2.5 x 2.0 x 2.5	RPERALAT25205	30	660.00
2.5 x 2.5 x 2.0	RPERALAT25250	30	652.00





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Size (cm x inch)	Product Code	Std. Pkg. (Nos.)	Price (₹) per pc.
1.6 x ½	RPERALATCM1612	As Req.	275.00

RPERALATCM2012# As Req. Shrt. Intr.



2.0 x ½

Size (cm x inch)	Product Code	Std. Pkg. (Nos.)	Price (₹) per pc.
1.6 x ½	RPERALACBF162	75	382.00
2.0 x ½	RPERALACBF202	50	358.00



Size (cm)	Product Code	<b>Std. Pkg.</b> (Nos.)	<b>Price</b> (₹) per pc.
1.6	RPERALAT16	75	242.00
2.0	RPERALAT20	50	331.00
2.5	RPERALAT25	30	661.00
3.2	RPERALAT32	15	560.00

	H	REDUCE TEE	
Size (cm)	Product Code	Std. Pkg. (Nos.)	Price (₹) per pc.
2.0 x ¼	RPERALASH2014SS	25	875.00

## **EXPANSION RING SYSTEM** SHRINK-FIT

L.		-	SHUT-O BALL VA STRAIG	LVE HT
Size (cm)	Product Code	9	Std. Pkg. (Nos.)	Price (₹) per pc.
1.6	RPERALCUVA	AB16	20	1,159.00
2.0	RPERALCUVA	AB20	20	1,159.00
2.5	RPERALCUVA	AB25	20	1,492.00



2.0 x ½	RPERALASH2012 50	290.00



Product Code	<b>Std. Pkg.</b> (Nos.)	Price (₹) per pc.
RPERALAEH16	50	132.00
RPERALAEH20	50	156.00
RPERALAEH25	50	260.00
RPERALAEH32#	As Req.	Shrt. Intr.
	RPERALAEH16 RPERALAEH20 RPERALAEH25	(Nos.) RPERALAEH16 50 RPERALAEH20 50 RPERALAEH25 50

			END CA (MALE	)
Size (cm)	Product Cod	e	<b>Std. Pkg.</b> (Nos.)	Price (₹) per pc.
2.0	RPERALAEM	20	100	149.00









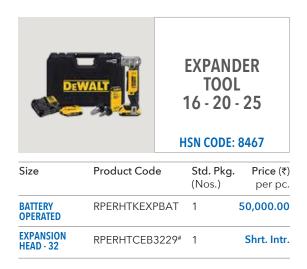
<b>Size</b> (cm)	Product Code	<b>Std. Pkg.</b> (Nos.)	Price (₹) per pc.
2.0-2.0-1.6-1.6	RPERALKZ20066	25	631.00
2.0-2.0-1.6-1.6-1.6	RPERALKBD3	25	661.00



	J	BR	LAST BO AKETS V SN CODE: :	VHITE
Size (cm x cm x cm)	Product Co	de	Std. Pkg. (Nos.)	Price (₹) per pc.
29.0x33.0x8.8	A32410A		1	1,688.00



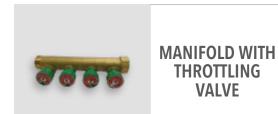
Size	<b>Size</b>	Product Code	<b>Std. Pkg.</b>	<b>Price</b> (₹)
(cm)	(inch)		(Nos.)	per pc.
1.5 - 3.	2 <mark>1⁄2 - 11⁄4</mark>	TTOOLS-1	As Req.	546.00





Size (Mtr.)	Product Code	Std. Pkg. (Nos.)	Price (₹) per pc.
5	PTFE-1205	As Req.	12.00
10	PTFE-1210	As Req.	22.00
20	PTFE-1220	As Req.	40.00

615	00	MANIFOI NORMA HSN CODE: 7	<b>NL</b>
Size (inch - nobs)	Product Code	Std. Pkg. (Nos.)	Price (₹) per pc.
3⁄4 - 2	PRETALCOL234	30	773.00



PRETALCOL334

¾ - 3

HSN CODE: 8481

20

1,056.00

Size (inch - nobs)	Product Code	Std. Pkg. (Nos.)	Price (₹) per pc.
<sup>3</sup> ⁄4 - 2	C522N00TV	30	1,245.00
<sup>3</sup> ⁄4 - 3	C523N00TV	20	1,776.00
<sup>3</sup> ⁄4 - <b>4</b>	C524N00TV	15	2,310.00

		RESCUE TAP		
Size (Ft.)	Product Code	Std. Pkg. (Nos.)	Mst. Pkg (Nos.)	<b>. Price</b> (₹) per pc.
5	RSCU-TAPE-05-CLR	120	-	150.00
5	RSCU-TAPE-05-RED	120	-	150.00
5	RSCU-TAPE-05-BLK	120	-	150.00

-				
10	RSCU-TAPE-10-CLR	120	-	250.00
10	RSCU-TAPE-10-RED	120	-	250.00
10	RSCU-TAPE-10-BLK	120	-	250.00
15	RSCU-TAPE-15-CLR	120	-	400.00
15	RSCU-TAPE-15-RED	120	-	400.00
15	RSCU-TAPE-15-BLK	120	-	400.00

### **ASTRAL'S WIDEST RANGE OF PRODUCTS**

PLUMBING PIPES & FITTINGS
CPVC PRO

Pex-a PRO

Aquarius

### SURFACE DRAINAGE SYSTEM

CABLE PROTECTION

**ANCILLARY PRODUCTS** 

**Clamps & Hangers** 

Hauraton

Wire Guard

TeleRex

MultiRex

Weld-on

#### SEWERAGE DRAINAGE **PIPES & FITTINGS**

Silencio
DrainMaster
Foamcore
DrainHulk
Underground
D-Rex
RexTP

### **INDUSTRIAL PIPES & FITTINGS**

Chem PRO Aquarius Plus

### **URBAN INFRASTRUCTURE**

Plus+StiRex Pre-StiRex

#### **AGRICULTURE PIPES & FITTINGS**

Bore-Well	
Case-Well	
Aquasafe	
AquaRex	
Geo-Rex	
Narmada-Rex	

### FIRE SPRINKLERS **PIPES & FITTINGS**

Fire PRO

### **INSULATION TUBE**

Insu PRO



#### Registered & Corporate Office: Astral Limited (formerly known as Astral Poly Technik Limited)

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### ASTRAL TOLL FREE 1800 233 7957

Please get in touch with us between 10 AM to 6 PM on Monday to Saturday except 1<sup>st</sup> & 3<sup>rd</sup>Saturday and public holidays

#### **Terms And Conditions**

- 1. PRICE: Price are Ex-
- 2. FREIGHT: Freight will be extra at actual
- 3. INSURANCE: Insurance will be extra at actual 4. DELIVERY: Within a week from the date of receipt of
- DELYCRY: Within a week notifie date or necessful of technical and commercial clear order
  WARRANTY: Warranty is only applicable against the manufacturing defects and if all the products are installed as per our standard guidelines and usage. Also the warranty is not applicable if any other brand's products are used in combination with ASTRAL brand

6. All disputes are subject to jurisdiction of Ahmedabad only THE COMPANY HOLDS THE RIGHT TO REVISE THE PRICE WITHOUT PRIOR INTIMATION

Authorised Distributor