

Wavin Hep₂O Flexible PB Push-Fit plumbing system



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The Hep₂O system is available in the sizes 15, 22 and 28 mm. The dimensioning is easy to recognize by the colour packaging:

■ 15 mm: blue ■ 22 mm: purple ■ 28 mm: orange

Abbreviations:

BSP = British Standard Pipe Thread **DZR** = Dezincification Resistant Brass

Selection of Brassware Fittings range between DZR and non-DZR families depends on local regulations applying in each market.



Article code

HXP06/15W

HXP03/22W

HXP06/22W

HXP06/28W

1. Hep2O Pipe

Description

- Cut Lengths

	Straight Standard Pipe	15 mm x 3 m length	HXP03/15W
A HO HO HO AH DE	•	28 mm x 50 m coil	HXX50/28W
Canada de la	oxygen barrier layer.	28 mm x 25 m coil	HXX25/28W
En mil	dispensers. 5 Layer pipe with internal	22 mm x 50 m coil	HXX50/22W
	Straight Coiled Lengths in SmartPack	22 mm x 25 m coil	HXX25/22W
		15 mm x 100 m coil	HXX100/15W
STATE OF THE PARTY	- Barrier	15 mm x 50 m coil	HXX50/15W
AND THE PARTY OF T	Straight Coil Pipe	15 mm x 25 m coil	HXX25/15W
		28 mm x 50 m coil	HXP50/28W
		28 mm x 25 m coil	HXP25/28W
		22 mm x 50 m coil	HXPE50/22W
Charman College	SmartPack dispensers.	22 mm x 25 m coil	HXPE25/22W
强 思	Straight Coiled Lengths in	15 mm x 200 m coil	HXPE200/15W
		15 mm x 100 m coil	HXPE100/15W
	- Standard	15 mm x 50 m coil	HXPE50/15W
AND THE REAL PROPERTY OF THE PARTY OF THE PA	Straight Coil Pipe	15 mm x 25 m coil	HXPE25/15W

Dia mm

15 mm x 6 m length

22 mm x 3 m length

22 mm x 6 m length

28 mm x 6 m length

2. Hep₂O Fittings

	Description	Dia mm	Article code
	Straight Connectors	15 mm	HD1/15W
	Straight Connectors	22 mm	HD1/22W
		28 mm	HD1/28W
	Socket Reducer	22 mm x 15 mm	HD2/22W
(const		28 mm x 22 mm	HD2/28W
	Elbow 90°	15 mm	HD5/15W
		22 mm	HD5/22W
		28 mm	HD5/28W
*			
	Elbow 90° Single Socket	15 mm	HD4/15W
6		22 mm	HD4/22W
^	Obtuse bend 135°	15 mm	HD8/15W
	Single Socket	22 mm	HD8/22W
	Equal Tee	15 mm	HD10/15W
		22 mm	HD10/16W
		28 mm	HD10/28W
	End Reduced Tee	22 x 22 x 15 mm	HD12/22W
	(dimensions: end x branch x end)	28 x 28 x 22 mm	HD12/28W
	Double End Reduced Tee	15 x 22 x 15 mm	HD 18/22W
	(dimensions: end x branch x end)	22 x 28 x 22 mm	HD 18/28W
	(Limitalistics of A Station A Orla)		



	Description	Dia mm	Article code
	Branch Reduced Tee	22 x 15 x 22 mm	HD13/22W
	(dimensions: end x branch x end)	28 x 22 x 28 mm	HD13/28W
	,	28 x 15 x 28 mm	HD13A/28W
	Branch Reduced Spigot Tee (dimensions: end x branch x end)	22 x 15 x 22 mm	HD15/22W
	Branch & One End Reduced Tee (dimensions: end x branch x end)	22 x 15 x 15 mm 28 x 22 x 22 mm	HD14/22W HD14/28W
			LID00/45\M
	Demountable	15 mm	HD62/15W
ASSE	Stop End	22 mm 28 mm	HD62/22W HD62/28W
	Tank Connector	1/2" BSP x 15 mm	HX20/15W
187	15 mm and 22 mm versions	3/4" BSP x 22 mm	HX20/22W
	for cold water only	1" BSP x 28 mm (Brass) NEW	HX20/28W
	Straight Tap Connector	1/2" BSP x 15 mm	HD25A/15W
	oualgin rap comments.	3/4" BSP x 15 mm	HD25B/15W
		3/4" BSP x 22 mm	HD25B/22W
	Tap Connector Spanners	BSP 1/2"	HX54W
	For use with HD25 and HD27 tap connectors	BSP 3/4"	HX54AW

Description	Dia mm	Article code
Hand-Titan Tap Connectors	BSP 1/2" x 15 mm	HD26A/15W
With rubber washer	BSP 3/4" x 15 mm	HD26B/15W
	BSP 3/4" x 22 mm	HD26B/22W
 Flexible Tap Connectors		
Hep ₂ O x BSP Nut	150 mm braided, 15 mm x 1/2" BSP	HD425A/15W
NEW	300 mm braided, 15 mm x 1/2" BSP	HD125A/15W
	300 mm braided, 15 mm x 3/4" BSP	HD125B/15W
	300 mm braided, 22 mm x 3/4" BSP (Full Bore)	HD125C/22W
	300 mm braided, 22 mm x 3/4" BSP	HD125B/22W
	500 mm braided, 15 mm x 1/2" BSP	HD225A/15W
	500 mm braided, 15 mm x 3/4" BSP	HD225B/15W
	500 mm braided, 22 mm x 3/4" BSP (Full Bore)	HD225C/22W
	500 mm braided, 22 mm x 3/4" BSP	HD225B/22W
	1000 mm braided, 15 mm x 1/2" BSP	HD325A/15W
	1000 mm braided, 22 mm x 3/4" BSP	HD325B/22W
NEW		
	300 mm white, 15 mm x 1/2" BSP	HDW125A/15W
	300 mm white, 15 mm x 3/4" BSP	HDW125B/15W
	300 mm white, 22 mm x 3/4" BSP	HDW125B/22W
	500 mm white, 15 mm x 1/2" BSP	HDW225A/15W
	500 mm white, 15 mm x 3/4" BSP	HDW225B/15W
	500 mm white, 22 mm x 3/4" BSP	HDW225B/22W
Flexible Tap Connectors		
Hep ₂ O x Hep ₂ O	300 mm braided, 15 mm x 15 mm	HD125H/15W
NEW	300 mm braided, 22 mm x 22 mm	HD125H/22W
	500 mm braided, 15 mm x 15 mm	HD225H/15W
	500 mm braided, 22 mm x 22 mm	HD225H/22W
NEW		
	300 mm white, 15 mm x 15 mm	HDW125H/15W
	300 mm white, 22 mm x 22 mm	HDW125H/22W
Flexible Tap Connectors		
Hep ₂ O x Elbow BSP Nut NEW	300 mm braided, 15 mm x 1/2" BSP	HD125D/15W
NEW		
NEW	300 mm white, 15 mm x 1/2" BSP	HDW125D/15W



	Description	Dia mm Article code	
	Elevible Ten Connectors	200 mm braided 15 mm v 1/2" PSD	HD125E/15W
A 国民	Flexible Tap Connectors Hep ₂ O x Brass Service	300 mm braided, 15 mm x 1/2" BSP 300 mm braided, 22 mm x 3/4" BSP	HD125E/15W HD125E/22W
	Valve x BSP Nut	500 mm braided, 15 mm x 1/2" BSP	HD225E/15W
	NEW	500 mm braided, 15 mm x 3/4" BSP	HD225L/15W
	NEW CONTRACTOR OF THE CONTRACT	500 mm braided, 22 mm x 3/4" BSP	HD225E/22W
			1102202/2277
	NEW	300 mm white, 15 mm x 1/2" BSP	HDW125E/15W
J-017-2		300 mm white, 22 mm x 3/4" BSP	HDW125E/22W
	Flexible Tap Connectors	300 mm braided, 15 mm x 1/2" BSP	HD125EH/15W
	Hep ₂ O x Brass Service	300 mm braided, 22 mm x 3/4" BSP	HD125EH/22W
	Valve (Handle) x BSP Nut		
	NEW		
	Flexible Tap Connectors	300 mm braided, 15 mm x M10*	HD125F/15W
	Hep ₂ O x Monobloc	300 mm braided,15 mm x M12*	HD125G/15W
	Mixers	*sold and priced as a pair	
	NEW		
	Bent Tap Connector	1/2" BSP x 15 mm	HD27/15W
	Adaptor - Female	1/2" BSP x 15 mm	HX28/15W
	BSP/Hep ₂ O Socket	3/4" BSP x 15 mm NEW	HX24/15W

	Description	Dia mm	Article code
OB	Adaptor - Female BSP/Hep ₂ O Socket Non DZR Brass	3/8" BSP x 15 mm NEW 1/2" BSP x 15 mm 1/2" BSP x 22 mm 3/4" BSP x 22 mm 1" BSP x 28 mm	HE633/15W HE28/15W HE653/22W HE28/22W HE28/28W
Repo	Wall Flange Plate Adaptor - Female Non-DZR Brass	1/2" BSP x 15 mm NEW	HE800/15W
(d) Company	Adaptor - Male BSP/Hep ₂ O Socket DZR Brass	1/2" BSP x 15 mm 3/4" BSP x 22 mm 1" BSP x 28 mm	HX29/15W HX29/22W HX29/28W
(Carrie	Adaptor - Male BSP/Hep ₂ O Socket Non DZR Brass	3/8" BSP x 15 mm NEW 1/2" BSP x 15 mm 1/2" BSP x 22 mm 3/4" BSP x 22 mm 1" BSP x 28 mm	HE632/15W HE29/15W HE652/22W HE29/22W HE29/28W
	Adaptor - Female BSP/Hep ₂ O Spigot DZR Brass	1/2" BSP x 15 mm 3/4" BSP x 22 mm 1" BSP x 28 mm	HX30/15W HX30/22W HX30/28W
	Adaptor - Female BSP/Hep ₂ O Spigot Non DZR Brass	1/2"" BSP x 15 mm 3/4" BSP x 22 mm 1"BSP x 28 mm	HE30/15W HE30/22W HE30/28W



	Description	Dia mm		Article code
	Adaptor - Male BSP/Hep ₂ O Spigot DZR Brass	1/2" BSP x 15 mm 3/4" BSP x 22 mm 1" BSP x 28 mm		HX31/15W HX31/22W HX31/28W
	Adaptor - Male BSP/Hep ₂ O Spigot Non DZR Brass	1/2" BSP x 15 mm 3/4" BSP x 22 mm 1" BSP x 28 mm		HE31/15W HE31/22W HE31/28W
G Serv	Threaded Elbow - Female Non DZR Brass	3/8" BSP x 15 mm 1/2" BSP x 15 mm 1/2" BSP x 22 mm 3/4" BSP x 22 mm 1" BSP x 28 mm	NEW NEW NEW NEW	HE637/15W HE5/15W HE5A/22W HE5/22W HE5/28W
O and see	Threaded Elbow - Male Non DZR Brass	3/8" BSP x 15 mm 1/2" BSP x 15 mm 1/2" BSP x 22 mm 3/4" BSP x 22 mm 1" BSP x 28 mm	NEW NEW NEW NEW	HE638/15W HE5M/15W HE654/22W HE5M/22W HE5M/28W
	Draincock Brass 15 mm spigot DZR Brass	15 mm		HX32/15W
	Wall Plate Elbow	1/2" BSP x 15 mm 3/4" BSP x 22 mm		HX6/15W HX6/22W

Description	Dia mm		Article code
Wall Screw Elbow Non DZR Brass	1/2" BSP x 15 mm 1/2" BSP x 15 mm (Extended) 1/2" BSP x 22 mm 3/4" BSP x 22 mm		HE6C/15W HE6E/15W HE6CB/22W HE6C/22W
Universal Wall Plate Elbow Non DZR Brass	1/2" BSP x 15 mm		HE6A/15W
Wall Plate Elbow Non DZR Brass	1/2" BSP x 15 mm 1/2" BSP x 22 mm	NEW NEW	HE6MA/15W HE6MA/22W
Tee - Female Threaded Branch Non DZR Brass	15 mm x 1/2" BSP Branch 22 mm x 1/2" BSP Branch 22 mm x 3/4" BSP Branch	NEW NEW	HE16/15W HE16A/22W HE16/22W
Wall Plate Tee - Female Non-DZR Brass	15 mm x 1/2" BSP Branch* 15 mm x 1/2" BSP Branch 22 mm x 1/2" BSP Branch * HE7/15W has offset branch	NEW NEW NEW	HE7/15W HE7MA/15W HE7MA/22W
Cylinder Connector Spigot	1" BSP x 22 mm spigot		HX34/22W

DZR Brass



0

Description Dia mm Article code

Gate Valve - Hot/Cold
DZR Brass
Brass fitted with Hep₂O ends
(suitable for hot and cold water and

central heating)

 15 mm x 15 mm
 HX35/15W

 22 mm x 22 mm
 HX35/22W



Stopcock - Cold Water15 mm x 15 mmHX36/15WFitted with Hep2O ends22 mm x 22 mmHX36/22W(for cold water use only)



Stopcock - Cold Water25 mm MDPE/HDPEHep2O to MDPE/HDPE conversionx 22 mm Hep2OHX43/22W22 mm Hep2O to 25 mm MDPE/HDPE



Shut-off Valve 15 mm HX37/15W
With hot/cold indicator
insert (not for use with central heating)



Appliance Valve 15 mm HX38/15W With hot/cold indicator insert (not for use with central heating)



Straight Service Valve 15 mm NEW HX18/15W With hot/cold indicator insert (not for use with central heating)

	Description	Dia mm		Article code
	Angled Service Valve With hot/cold indicator insert (not for use with central heating)	15 mm	NEW	HX19/15W
	Double-Check Valve	15 mm x 15 mm		HX72/15W
	Lever Ball Valve	15 mm x 15 mm	NEW	HE37C/15W
Som for	Non-DZR Brass	22 mm x 22 mm	NEW	HE37C/22W
	(no fixing points)	28 mm x 28 mm	NEW	HE37C/28W
	(no fixing points)	20 11111 X 20 111111	11211	112010/2000
	DZR Brass	15 mm x 15 mm		HX22/15W
	(with fixing points)	22 mm x 22 mm		HX22/22W
	Suitable for hot and cold water and cen	tral heating		
	Shut-off Valve	15 mm x 15 mm	NEW	HE37A/15W
3	- Hidden Handle	22 mm x 22 mm	NEW	HE37A/22W
	Non-DZR Brass	۲۲ IIIII ۸ ۲۲ IIIII	Idean	1111017472244
	Non Den Brass			
	Shut-off Valve	15 mm x 15 mm	NEW	HE37B/15W
	- Tri-Handle	22 mm x 22 mm	NEW	HE37B/22W

Non-DZR Brass



	Description	Dia mm		Article code
70	Ball Valve	15 mm x 15 mm	NEW	HE37D/15W
ALL .	- Chrome Lever Handle	22 mm x 22 mm	NEW	HE37D/22W
	Non-DZR Brass	28 mm x 28 mm	NEW	HE37D/28W
	Ball Valve	15 mm x 15 mm	NEW	HE37E/15W
	- Hidden Handle	22 mm x 22 mm	NEW	HE37E/22W
	Non-DZR Brass	28 mm x 28 mm	NEW	HE37E/28W
	Manifolds,	2 Port 22 x 15 mm		HX88/22W
	Closed Spigot Type Polybutylene	3 Port 22 x 15 mm		HX89/22W
	Manifolds, Socket	2 Port 22 x 15 mm		HX88B/22W
600	to Socket Type Polybutylene	3 Port 22 x 15 mm		HX89B/22W
	Manifolds, Plated Brass with	1-Port 3/4" BSP x 15 mm	NEW	HX91T/15W
	Taps	1-Port 3/4" BSP x 22 mm	NEW	HX91T/22W
C P	Modular system - can be used to	2-Port 3/4" BSP x 15 mm		HX92T/15W
9	build manifolds with any number of	3-Port 3/4" BSP x 15 mm		HX93T/15W
	ports and combinations of 15 mm and 22 mm outlets	4-Port 3/4" BSP x 15 mm		HX94T/15W
	Manifold end-caps	3/4" BSP Female		HX97 GY
		3/4" BSP Male		HX98 GY

3. Hep₂O Accessoiries

	Description	Dia mm	Article code
	Screws For use with Wall Screw Elbows series HE6 and HX6	M6 x 6 mm (100 Pack)	HE6S GR
Hepworth Hep-ti Ointing Beacan Spaay	Lubricant 400 ml Aerosol Can	Joint Lubricant Spray	HX200
0)	SmartSleeve	15 mm 22 mm 28 mm	HX60/15W HX60/22W HX60/28W
B	Copper Pipe End Protector	15 mm 22 mm	HX61/15W HX61/22W
H	Pipe Clip - Screw Type	15 mm 22 mm 28 mm	HX85/15W HX85/22W HX85/28W
3-3	Pipe Clip Spacer	15 mm 22 mm	HX86/15W HX86/22W
	Pipe Clip - Cable Type	15 mm 22 mm 28 mm	HX65/15W HX65/22W HX65/28W
	Blanking Peg For Demountable Fittings	15 mm 22 mm 28 mm	HX44/15W HX44/22W HX44/28W



	Description	Dia mm		Article code
	HepKey Plus	15 mm		HX79/15W
	For Demountable Fittings	22 mm		HX79/13W
	Tor Demountable Fittings	28 mm		HX79/28W
11		20 11111		117(13/2000
	HepTool	10 and 28 mm	NEW	HX77/10W
The state of the s	For Demountable Fittings in	15 and 22 mm	NEW	HX77/15W
	restricted access locations			
	Hep ₂ O Joint Testing Kit			HX81 GR
	Used to pressure test Hep ₂ O installations			
DA PAIR BOOK IN CO.	at site. See pages 54-55 of the Hep ₂ O			
	Installer Guide for details of test			
	procedures.			
	Terminal Back Plate	Terminal back plate		HX103 BL
		Back plate flat		HX103A GR
	Conduit Terminal	1/2" BSP x 15 mm		HX101/15W
	Cold Forming Bend Fixture	15 mm		HX75/15 GR
	Metal with passivate finish	22 mm		HX75/22 GR
	Pipe Cutters	For pipe diameter up to		
		28 mm max. (standard)		HD74 GR
J * (For pipe diameter up to		
5 /		25 mm max. (procutter)		HD75 GR
		For pipe diameter up to		11077.00
11		42 mm max. (ratchet)		HD77 GR
		For pipe diameter up to		11070.00
		28 mm max. (ratchet)		HD78 GR





4. Making connections

Jointing with Hep₂O pipe and fittings

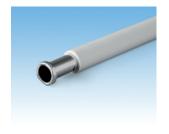
SmartSleeve™ pipe support sleeve

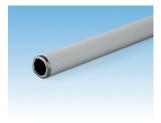
Before making a joint using Hep₂O pipe, it is essential to insert a Hep₂O SmartSleeveTM pipe support sleeve into the cut pipe end. The only exception is when connecting to the open spigot end of a Hep₂O fitting.

The SmartSleeve™ has several purposes:

- It ensures the pipe retains its circular cross-section under all operating conditions.
- It eases insertion of the pipe into the fitting.
- The profiled end of the SmartSleeve[™] helps you to check the pipe is fully inserted. See In4Sure[™] joint recognition technology.
- 1 It maintains the rigidity of the pipe within the fitting.
- O Barbs on the SmartSleeve™ lock it in the pipe, which helps ensure it is not left in the fitting when demounting.

All SmartSleeve[™] pipe inserts are manufactured from 'food quality' 316 stainless steel and are impervious to contaminants. They are designed to be captive in the pipe but can be removed if required, using long nosed pliers. However, if damaged, the SmartSleeve[™] must not be re-used.





Inserting SmartSleeve™ into pipe.

Jointing procedure

Whichever type of Hep₂O fitting is used, the same jointing procedure should be followed.





Photo 1.

Photo 2.



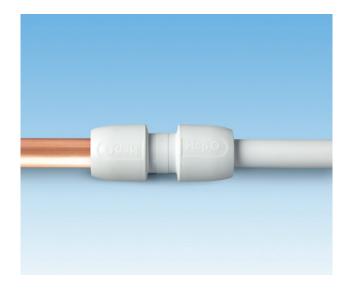
Photo 3.

Photo 4.

- Cut the pipe squarely at one of the '^' marks using recommended pipe cutters and ensure the pipe end is free from burrs.
- Insert a Hep₂O SmartSleeve[™] pipe support sleeve into the pipe end.
- Push the pipe firmly into the fitting, then use Hep₂O's unique In4Sure™ joint recognition technology to 'feel' if the pipe is fully inserted.
- **4.** Tug back on the pipe to ensure the grab-ring engages correctly and prevents the pipe withdrawing.

Jointing copper pipe to Hep₂O fittings

Hep₂O fittings have been designed to form reliable joints with metric copper pipe which conforms to BS EN 1057 - R520.



Hep₂O fittings are also compatible with copper pipe.

- **1.** Measure the pipe, allowing sufficient length for insertion into the fitting, and mark with a pencil.
- 2. Cut the copper pipe with a wheel cutter.
- 3. Carefully inspect the pipe ends for burrs or swarf.
- 4. Push the pipe firmly into the fitting.
- **5.** Tug back on the pipe to ensure the grab-ring engages correctly and prevents the pipe withdrawing.

Checking the joint using In4Sure™ joint recognition technology

Follow normal procedure to establish the insertion depth of the pipe into the fitting as previously described.

In4Sure[™] joint recognition technology then provides a further check by allowing you to 'feel' if the pipe is fully inserted.



Cut-away showing In4Sure™ joint recognition technology.

To use In4Sure™ joint recognition technology:

- **1.** Hold the centre (fixed) part of the fitting in one hand.
- **2.** After inserting the appropriate pipe sleeve, push the pipe firmly into the fitting.
- 3. While still pushing, rotate the pipe using a screwing action. If the pipe is fully inserted you will feel a 'rumbling' sensation as the profiled end of the SmartSleeve™ passes over the castellated seat inside the fitting.
- 4. Pull back to check the joint integrity.

This simple procedure is designed to give you the peace of mind that comes from knowing that the joint is good. You can also make a visual check by checking the next '^' mark is level with the end of the fitting.

Note:

New pipe insert for copper providing joint recognition will be available soon.



Demounting joints using the Hep₂O HepKey[™] system

The HepKey Plus™ is colour-coded: 15 blue, 22 purple and 28 mm orange.



HepKey Plus™.

To use HepKey Plus™:

- **1.** Place the HepKey Plus $^{\text{TM}}$ around the pipe
- 2. Clip HepKey Plus™ over the fitting
- **3.** In this position it depresses the inner release ring of the fitting.
- 4. Withdraw the pipe from the fitting.



Cut-away drawing of HepKey Plus $^{\text{TM}}$.

Note:

Before re-using the fitting we recommend applying a small amount of Jointing Lubricant Spray (code HX200) to the O-ring seal inside the fitting.



Step 1.



Step 3.



Step 2.



Step 4.

Documentation

The following documentation on the Wavin Hep₂O system is also available:

- Data sheet
- Installer Guide

Demounting sequence using HepKey Plus™.

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