

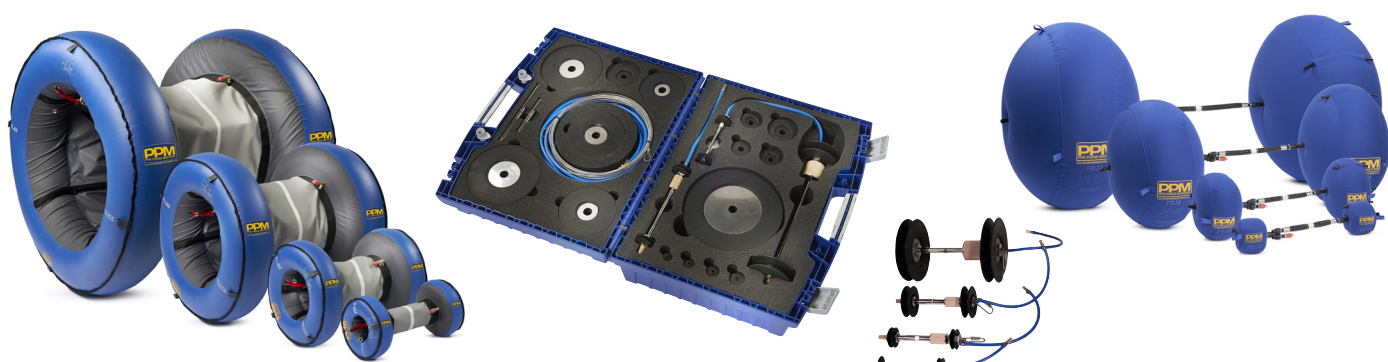
# PPM

PIPE PURGE MASTERS

MARCH 2022

## COMPLETE BROCHURE

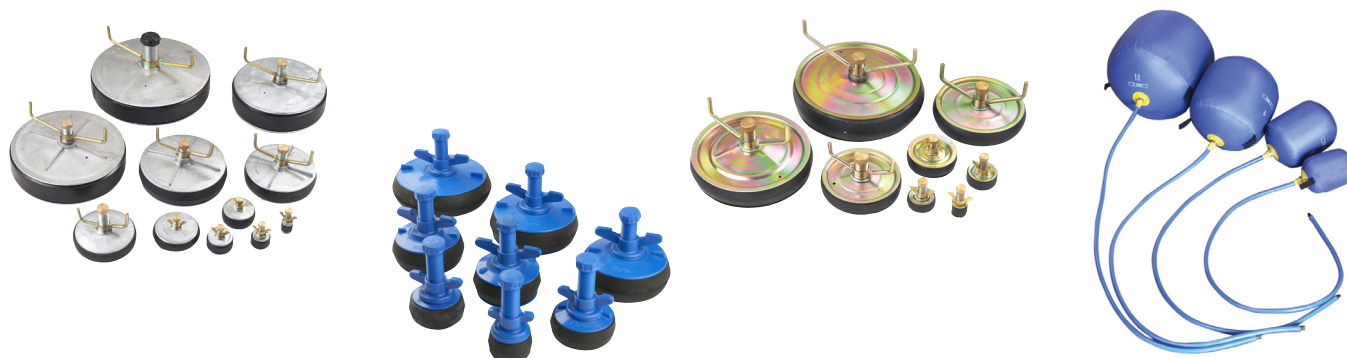
### PIPE PURGING SYSTEMS



### PURGE OXYGEN MONITOR



### PIPE STOPPERS





## SPECIALIZED FABRICATION EQUIPMENT GROUP

### Introduction to S.F.E. Group

S.F.E. Group was founded in 2019 after the merger of three world leading OEM's in the field of pipe fabrication tooling and machinery: B&B Pipe and Industrial Tools LLC (USA), Mathey Dearman Inc. (USA) and TAG Pipe Equipment Specialists (UK). Most recently the S.F.E Group has completed the acquisition of the Axxair Group (France).

S.F.E. Group offers a wide range of products and is continuously exploring new product design and development, as well as add-on acquisitions to enhance its portfolio and to fulfil increasing industries' demands.

With offices and warehousing on 4 continents, 120 employees and more than 250 partnerships and distributors worldwide, S.F.E. Group prides itself in consistently offering the highest standard of both product quality and service to all its customers.

S.F.E. Group looks forward to welcoming you into its global network as a partner, distributor or end user customer and remains at your disposal at any time.



UNITED STATES HEAD OFFICE - HOUSTON



INTERNATIONAL HEAD OFFICE - FRANCE

### OUR BRANDS

 <b>MATHEY DEARMAN</b> Where There's Pipe, There's Mathey! PIPE FLAME CUTTING AND BEVELLING PIPE ALIGNMENT AND REFORMING CLAMPS PIPE RIGGING EQUIPMENT <a href="http://www.MATHEY.COM">www.MATHEY.COM</a>	 <b>B&amp;B Pipe &amp; Industrial Tools</b> The Pipe Fabricators Source PIPE JACK AND STANDS MEGA ROLLERS AND STANDS MATERIAL HANDLING EQUIPMENT <a href="http://www.BBPIPETOOLS.COM">www.BBPIPETOOLS.COM</a>	 <b>TAG</b> PIPE EQUIPMENT SPECIALISTS World Leading Manufacturer of Pipe Beveling and Cutting Machines PIPE BEVELLING MACHINES PIPE COLD CUTTING MACHINES <a href="http://www.TAG-PIPE.COM">www.TAG-PIPE.COM</a>	 <b>AXXAIR</b> Innovative Orbital Solutions ORBITAL CUTTING / BEVELLING AND FACING ORBITAL WELDING <a href="http://www.AXXAIR.COM">www.AXXAIR.COM</a>	 <b>PPM</b> PIPE PURGE MASTERS Purging Solutions for the perfect pipe weld! PIPE PURGING SYSTEMS PURGE OXYGEN MONITOR PIPE S'YOBERS <a href="http://www.PURGEMASTERS.COM">www.PURGEMASTERS.COM</a>	 <b>FIT-UP PRO</b> By Mathey Dearman The Pipe Fitters Companion FIT-UP AND ALIGNMENT TOOLS LAYOUT AND MARKING TOOLS <a href="http://www.FIT-UP-PRO.COM">www.FIT-UP-PRO.COM</a>
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## Introduction to Pipe Purge Masters (PPM)

With the merger in 2019 of B&B Pipe and Industrial Tools LLC (USA), Mathey Dearman Inc. (USA) and TAG Pipe Equipment Specialists (UK) and the recent addition in 2022 of Axxair (France) into Specialized Fabrication Equipment (S.F.E.) Group, the various product groups offered by the original manufacturers have been re-aligned and integrated into the overall S.F.E. Group product range whilst keeping their own brand identity.

Backed by nearly 25 years of development, S.F.E. Group is proud to present its brand dedicated to pipe purging products, applications and solutions: **Pipe Purge Masters (PPM)**. With the PPM brand, S.F.E. Group not only wishes to highlight the focus on pipe purging products, but also supply the growing demand and diverse applications on-site, of pipe purging equipment in the industries that it already serves and intertwine with other product applications within S.F.E. Group, such as the orbital welding offered under the Axxair brand.

As an OEM, S.F.E. Group prides itself being renowned for its innovations, ground-breaking developments and creative designs within the Pipe Purge Masters' product range. With its engineering capabilities, customer-oriented focus and flexibility, the PPM brand provides the possibility to design out-of-the-box pipe purging solutions to fulfil customers' projects' specific needs in particular and to cater for an ever-evolving industry in general.

The PPM brand portfolio consists of a comprehensive range of pipe purging equipment: **inflatable pipe purge bag systems**, formed **double seal purge systems**, **purge oxygen monitors**, inflatable as well as mechanical **pipe stoppers** and accessories.

Pipe Purge Masters' products are available from the international S.F.E. Group branches on 4 continents, as well as from S.F.E. Group's extensive and continuously expanding global network of partners and distributors.

Get in touch for any pipe purging application.



### PIPE PURGING SYSTEMS



PPM's range of purge systems greatly reduces the purging time and gives significant gas savings while producing a top quality weld.

### PURGE OXYGEN MONITOR



PPM also offers a full range of weld purge monitoring systems to accurately measure the level of oxygen inside the weld chamber to obtain high quality purity welding.

### PIPE STOPPERS



In addition to the purging systems and purge monitors, PPM also offers an extensive range of pipe stoppers: inflatable stoppers available in all shapes, sizes and materials, as well as expanding stoppers available in nylon, steel and aluminium. PPM also provides tailor made pipe stopper solutions.

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**SPECIALIZED FABRICATION EQUIPMENT**  
GROUP

*Our group policy is one of continuous improvements and acquisitions.  
Products and data tables are subject to change or vary from those illustrated.*

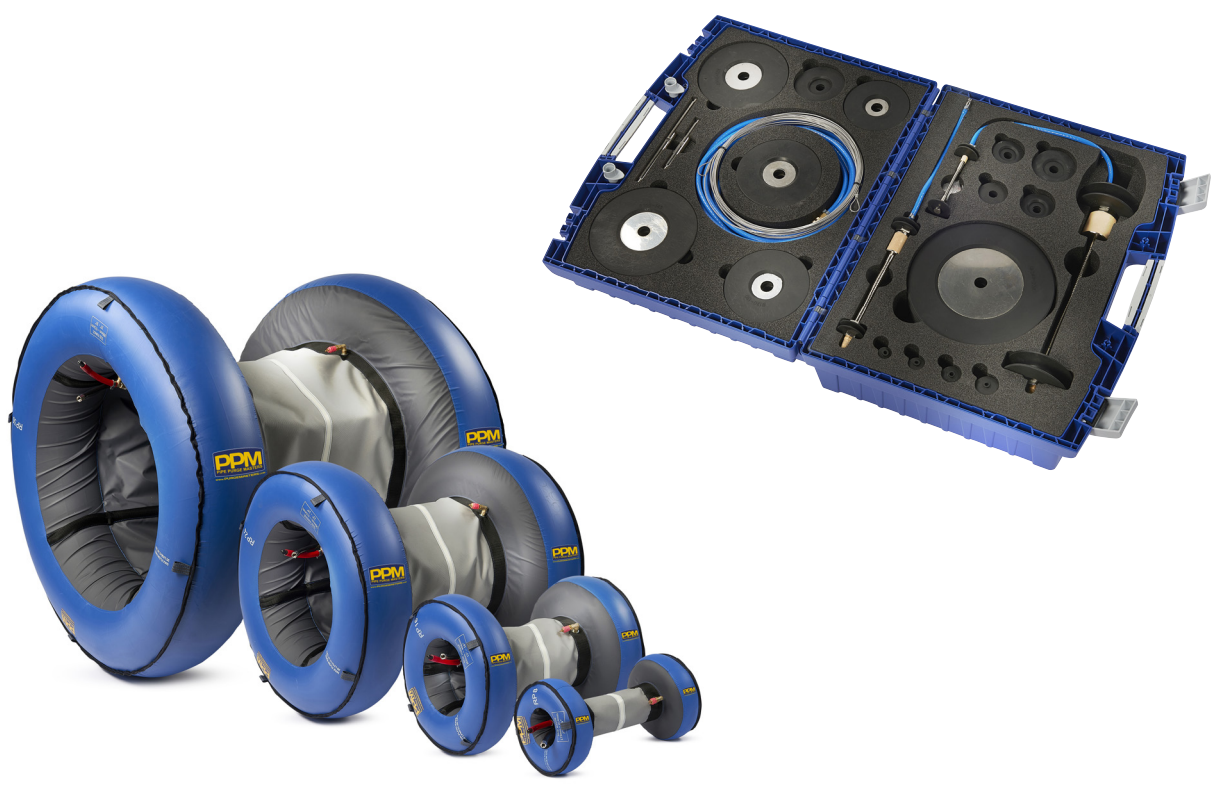
## OUR BRANDS







# PIPE PURGING SYSTEMS



When welding stainless steel, titanium and other corrosion resistant materials, the perfect environment for welding is paramount to maintaining the corrosion resistant properties.

During the welding process, the weld seam is subjected to heat and air, which can cause oxidation, if the correct processes are not adhered to.

For the best results, oxidation must be prevented.

The quality of the exotic corrosion resistant material welding is dependent on the correct purging methods to minimize or eliminate oxidation.

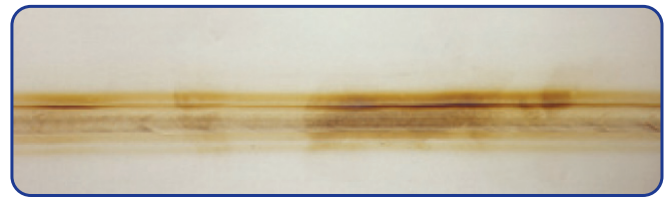
All PPM (Pipe Purge Masters) purging systems are designed to efficiently remove oxygen as fast as possible.

This can be achieved by isolating the smallest area of pipe, resulting in the fastest purge times, while also minimising the amount of purge gas used.

The pictures below show the different levels of weld quality depending on oxidation present at the point of welding.



Argon purge 12 ppm  
Vol. O<sub>2</sub> content



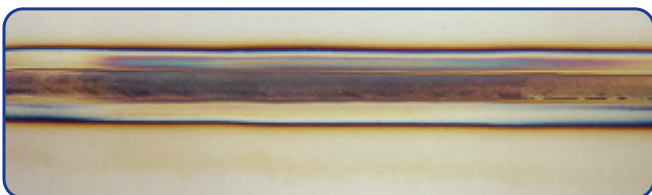
Argon purge 60 ppm  
Vol. O<sub>2</sub> content



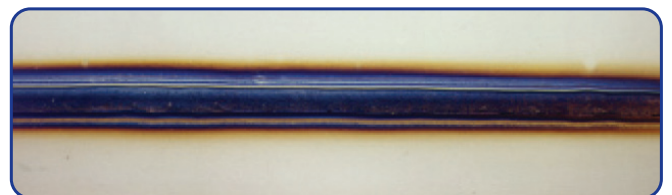
Argon purge 70 ppm  
Vol. O<sub>2</sub> content



Argon purge 200 ppm  
Vol. O<sub>2</sub> content



Argon purge 250 ppm  
Vol. O<sub>2</sub> content



Argon purge 500 ppm  
Vol. O<sub>2</sub> content

The effective welding of stainless steel, titanium and other exotic materials for the nuclear, petrochemical, pharmaceutical, semi-conductor, aerospace and food industries requires the proper tools to create a perfect weld environment.

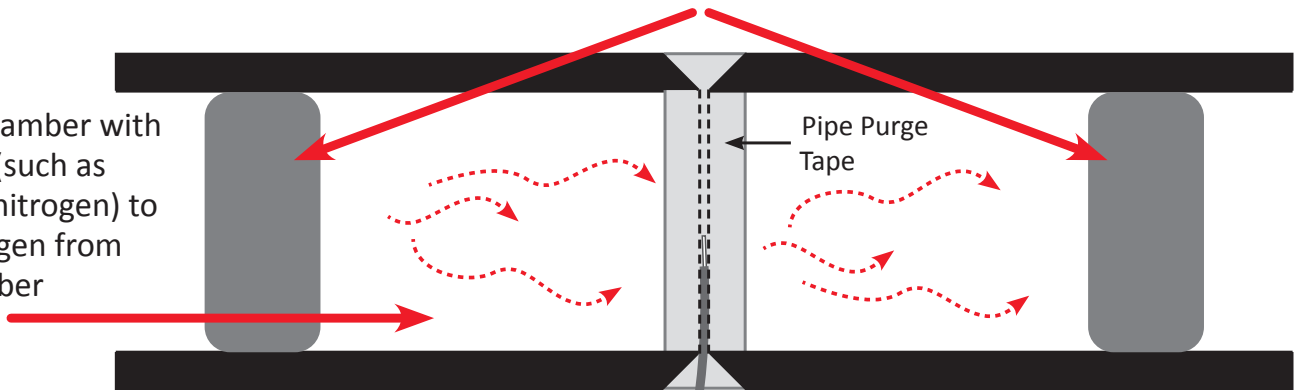
Purging equipment and its use have a major impact on preventing oxidation and improving final weld quality. The basic principles of purging can be seen below.

PPM supplies a comprehensive range of systems to create the correct welding environment, whatever the application.

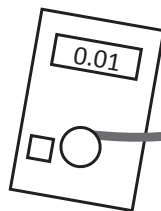
## PRINCIPLES OF PURGING

1. Create a seal (dam) either side of the weld and close off the weld gap with purge tape to create the weld chamber

2. Fill the chamber with inert gas (such as argon or nitrogen) to expel oxygen from the chamber



3. Use a weld purge monitor to recognize when the required level of oxygen has been met



4. Welding can then be carried out, guaranteeing no oxidation or discoloration of the weld

## Double inflatable pipe weld purging systems

Used for 90% of the traditional pipe weld purging applications to provide bright, shiny, oxide free weld roots. The PPM Purge Bag system is quick and easy to use, providing a very rapid weld purge. High quality materials are used in the production of these systems, guaranteeing perfect oxide-free weld roots in very little time.

4" Purge Bag system



Due to the design of this system, the volume of gas used to purge is minimized, resulting in significant reduction of both time and inert gas consumption. Return on investment can be achieved in as little as just one or two welds. These robust systems can be used over and over again paying for themselves in very little time.

## Features and advantages

- PPM's Purge Bag system dramatically reduces purging times, leading to significant savings
- **Typical purge times for 4" pipe = 1½ mins; 8" pipe = 4 mins; 12" pipe = 8 mins**
- Ready to use, connects to a dedicated and regulated gas supply. Choose any flow rate up to 20l a min.
- Gas pressure control ensures an even positive root bead with no notching
- Quick and easy to install, simplifying the process of inert gas purging
- Heat resistant up to 70°C continuously
- Use less inert gas. The volume of purge gas used is less than 2% of a conventional purge



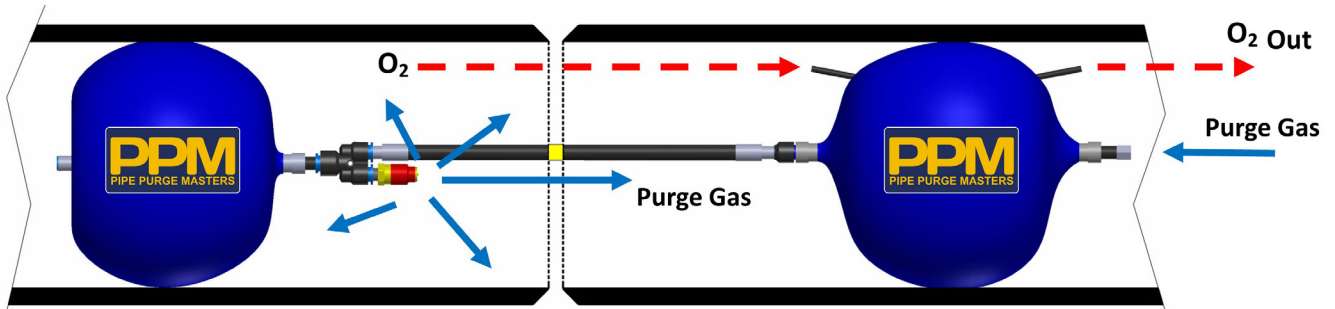


## How it works

The Purge Bag system is designed around the principle of using 2 dams, that are connected by an armoured spinal tube, to create a seal either side of the weld. These dams are just far enough away from the weld not to be affected by heat, but close enough to the joint to provide the fastest weld purge time.

Once ready to start purging, the system is inserted into the bore of the pipe using the luminous strip to centre the system to the weld gap.

When the gas flow is started, the dams inflate and upon reaching the pre-set pressure, the valve releases the gas gently into the weld chamber, to purge the interspace without turbulence. The oxygen is removed from the weld chamber by the inert gas through the integral exhaust tubes in the bags, enabling the welder to produce an even oxidation free penetration weld bead. Used in conjunction with PPM's oxygen monitors, indicating when the required low level of oxygen has been reached, welding can then commence. Afterwards, the dams are deflated simply by disconnecting the purge gas feed and the system easily withdrawn. The design of this system requires only one gas connection for both dam inflation and weld purging.



## Sizing and specification

PART NO	DESCRIPTION	NOMINAL PIPE SIZE		INTERNAL DIAMETER RANGE (I/D)		WEIGHT (LBS. / KG)	
PB02	2" Purge Bag system	50 mm	2"	1.49" - 2.37"	38 - 60 mm	1 lbs.	0.34 kg
PB03	3" Purge Bag system	75 mm	3"	2.17" - 3.53"	55 - 90 mm	1 lbs.	0.34 kg
PB04	4" Purge Bag system	100 mm	4"	3.51" - 4.51"	89 - 115 mm	1 lbs.	0.34 kg
PB05	5" Purge Bag system	125 mm	5"	4.14" - 5.50"	105 - 140 mm	1 lbs.	0.38 kg
PB06	6" Purge Bag system	150 mm	6"	5.32" - 6.68"	135 - 170 mm	1 lbs.	0.38 kg
PB07	7" Purge Bag system	175 mm	7"	6.30" - 7.66"	160 - 195 mm	2 lbs.	0.70 kg
PB08	8" Purge Bag system	200 mm	8"	7.09" - 8.45"	180 - 215 mm	2 lbs.	0.90 kg
PB09	9" Purge Bag system	225 mm	9"	8.08" - 9.43"	205 - 240 mm	2 lbs.	0.95 kg
PB10	10" Purge Bag system	250 mm	10"	9.26" - 10.61"	235 - 270 mm	2 lbs.	1.00 kg
PB11	11" Purge Bag system	275 mm	11"	10.03" - 11.41"	255 - 290 mm	2 lbs.	1.05 kg
PB12	12" Purge Bag system	300 mm	12"	11.03" - 12.39"	280 - 315 mm	2 lbs.	1.10 kg
<b>We strongly recommended using our Rapid Purge™ system over 12"</b>							
PB13	13" Purge Bag system	325 mm	13"	11.41" - 12.79"	290 - 325 mm	2 lbs.	1.20 kg
PB14	14" Purge Bag system	350 mm	14"	12.41" - 13.76"	315 - 350 mm	3 lbs.	1.30 kg
PB15	15" Purge Bag system	375 mm	15"	13.38" - 14.76"	340 - 375 mm	3 lbs.	1.50 kg
PB16	16" Purge Bag system	400 mm	16"	14.38" - 15.73"	365 - 400 mm	3 lbs.	1.70 kg
PB17	17" Purge Bag system	425 mm	17"	15.35" - 16.73"	390 - 425 mm	4 lbs.	1.75 kg
PB18	18" Purge Bag system	450 mm	18"	16.34" - 17.70"	415 - 450 mm	4 lbs.	1.80 kg
PB19	19" Purge Bag system	475 mm	19"	17.32" - 18.70"	440 - 475 mm	4 lbs.	1.85 kg
PB20	20" Purge Bag system	500 mm	20"	18.31" - 19.67"	465 - 500 mm	4 lbs.	1.90 kg
PB22	22" Purge Bag system	550 mm	22"	19.69" - 21.05"	500 - 535 mm	5 lbs.	2.20 kg
PB24	24" Purge Bag system	600 mm	24"	22.45" - 23.80"	570 - 605 mm	6 lbs.	2.50 kg

(Larger sizes and specials available upon request with 35 mm / 1.37" expansion range)



# RAPID PURGE™ SYSTEM

Sizes: 8 - 80" (190 - 2,044 mm)



**Purge larger diameter pipes faster than ever!**

Used for stainless, duplex, chrome steels, titanium, nickel and other alloy materials, the PPM Rapid Purge™ system enables high speed welding of larger diameter pipe joints that need to be purged.

The system is designed to enable the user to produce high quality, reliable and repeatable welding of stainless steel tube and pipe joints free from oxidation and discolouration.

A 36" diameter pipe will purge to below 0.1% oxygen in less than 10 minutes and all smaller pipes correspondingly faster. Due to the quality of the materials used, the Rapid Purge™ system can be used over and over again, reducing manufacturing costs.

The Rapid Purge™ system has been developed specifically to enable high speed purging for any pipe welding application.

## Features and advantages

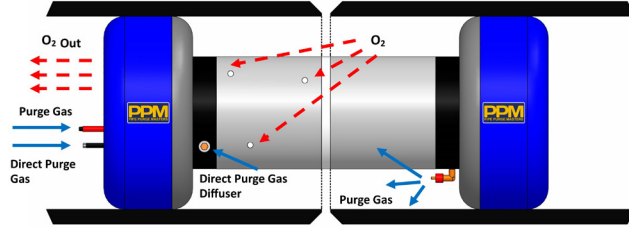
- Dramatic savings of time, gas and money can be made by using these systems.
- **Typical purge times of less than 10 minutes!**
- The unique thru-bore design of the central sleeve minimizes the area to be purged, dramatically reducing the gas consumption
- Friction free coatings allow easy movement through pipes from one joint to another, even around bends and elbows
- Ready to use, connects to a dedicated and regulated gas supply. Choose any flow rate up to 80 l/min through the twin pre-set purge valve
- A central luminous strip allows fast and accurate alignment of the system to the center-point of the weld area
- The inflatable dams and umbilical hose are covered with a heat resistant material and insulated accordingly for use at temperatures up to 250°C



## How it works

The Rapid Purge™ system for pipe and vessel purging comprises a tandem inflatable dam system connected by an umbilical hose and collar to reduce the volume being purged. A gas exhaust valve is installed between the primary and secondary dam, along with an auxiliary argon purge line. This Rapid Purge™ system valve is pre-set, making it ready to use 'straight out of the box'. Each Rapid Purge™ system is covered with heat protective material, so that the higher temperatures closer to the weld do not damage the system.

The robust design of the Rapid Purge™ system allows for many years of repeatable trouble free use.



## Sizing and specification

PART NO	DESCRIPTION	NOMINAL PIPE SIZE		INTERNAL DIAMETER RANGE (I/D)		WEIGHT (LBS. / KG)	
RP08	8" Rapid Purge system	200 mm	8"	7.09" - 8.45"	180 - 215 mm	3 lbs.	1.40 kg
RP10	10" Rapid Purge system	250 mm	10"	9.26" - 10.61"	235 - 270 mm	3 lbs.	1.70 kg
RP12	12" Rapid Purge system	300 mm	12"	11.03" - 12.39"	280 - 315 mm	4 lbs.	2.10 kg
RP14	14" Rapid Purge system	350 mm	14"	12.41" - 13.76"	315 - 350 mm	5 lbs.	2.50 kg
RP16	16" Rapid Purge system	400 mm	16"	14.38" - 15.73"	365 - 400 mm	5 lbs.	2.70 kg
RP18	18" Rapid Purge system	450 mm	18"	16.34" - 17.70"	415 - 450 mm	6 lbs.	3.00 kg
RP20	20" Rapid Purge system	500 mm	20"	18.31" - 19.67"	465 - 500 mm	7 lbs.	3.40 kg
RP22	22" Rapid Purge system	550 mm	22"	19.69" - 21.05"	500 - 535 mm	7 lbs.	3.60 kg
RP24	24" Rapid Purge system	600 mm	24"	22.45" - 23.80"	570 - 605 mm	8 lbs.	3.80 kg
RP26	26" Rapid Purge system	650 mm	26"	24.41" - 25.77"	620 - 655 mm	9 lbs.	4.50 kg
RP28	28" Rapid Purge system	700 mm	28"	26.38" - 27.74"	670 - 705 mm	12 lbs.	5.50 kg
RP30	30" Rapid Purge system	750 mm	30"	28.35" - 29.71"	720 - 755 mm	13 lbs.	6.00 kg
RP32	32" Rapid Purge system	800 mm	32"	30.32" - 31.68"	770 - 805 mm	18 lbs.	8.00 kg
RP34	34" Rapid Purge system	850 mm	34"	32.48" - 33.86"	825 - 860 mm	19 lbs.	8.50 kg
RP36	36" Rapid Purge system	900 mm	36"	34.45" - 35.81"	875 - 910 mm	20 lbs.	9.10 kg
RP38	38" Rapid Purge system	950 mm	38"	36.61" - 37.99"	930 - 965 mm	21 lbs.	9.50 kg
RP40	40" Rapid Purge system	1,000 mm	40"	38.98" - 39.95"	990 - 1015 mm	22 lbs.	9.90 kg
RP42	42" Rapid Purge system	1,050 mm	42"	40.56" - 41.91"	1,030 - 1,065 mm	29 lbs.	13.20 kg
RP44	44" Rapid Purge system	1,100 mm	44"	42.52" - 43.90"	1,080 - 1,115 mm	30 lbs.	13.70 kg
RP46	46" Rapid Purge system	1,150 mm	46"	44.29" - 45.67"	1,125 - 1,160 mm	32 lbs.	14.50 kg
RP48	48" Rapid Purge system	1,200 mm	48"	46.46" - 47.82"	1,180 - 1,215 mm	33 lbs.	15.00 kg
RP50	50" Rapid Purge system	1,250 mm	50"	48.42" - 49.80"	1,230 - 1,265 mm	35 lbs.	16.00 kg
RP52	52" Rapid Purge system	1,300 mm	52"	50.59" - 51.97"	1,285 - 1,320 mm	37 lbs.	17.00 kg
RP54	54" Rapid Purge system	1,350 mm	54"	52.36" - 53.74"	1,330 - 1,365 mm	39 lbs.	18.00 kg
RP60	60" Rapid Purge system	1,500 mm	60"	58.46" - 59.84"	1,485 - 1,520 mm	44 lbs.	20.00 kg
RP66	66" Rapid Purge system	1,650 mm	66"	64.38" - 65.73"	1,635 - 1,670 mm	55 lbs.	25.00 kg
RP72	72" Rapid Purge system	1,800 mm	72"	70.27" - 71.65"	1,785 - 1,820 mm	62 lbs.	28.00 kg
RP80	80" Rapid Purge system	2,000 mm	80"	78.35" - 79.72"	1,990 - 2,025 mm	66 lbs.	30.00 kg

(Larger sizes and specials available upon request with 35 mm / 1.37" expansion range)



## Systems for the fast purging of high temperature pipework

The PPM Purge Bag and Rapid Purge™ systems are both available in heat resistant version. They are designed to use when high temperatures will be encountered during the process of pipe welding; such as pre-heated pipework, and pipes where very high temperatures are required for welding.

These versions of the inflatable pipe purging systems are heat resistant up to 350°C (662°F) for up to 24 hours, or up to 500°C (932°F) for short periods of time. The heat resistant systems are available for all pipe diameters from 3" - 80" (63 - 2,035 mm).

Mirroring the features of the standard range of inflatable purging systems, the heat resistant range comes with a central luminous band for rapid centering of the system to the weld root.

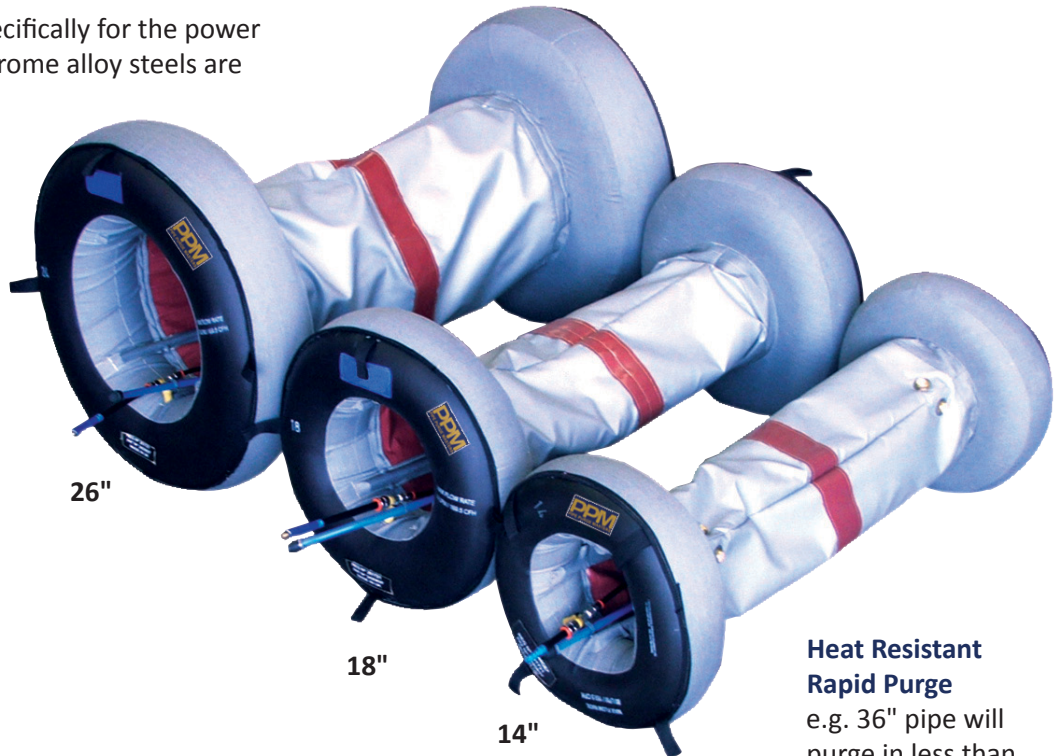
The welder can position these systems prior to pre-heating and leave them in place throughout the pre-heating, welding and post-heat treatment cycles, allowing the weld to be purged continuously for up to 24 hours if necessary.



e.g. 6" pipe will purge in less than 4 minutes!

## Features and advantages

- Heat resistant up to 350°C (662°F) for up to 24 hours, or up to 500°C (932°F) for short periods
- Available for all pipe diameters from 3" to 80" (63 to 2,044 mm)
- Designed to be flexible, for ease of insertion, use and withdrawal from pipes, bends, elbows etc.
- Suitable for 24 hour cycles including pre-heat, welding and post-weld heat treatment
- A central luminous strip allows fast and accurate alignment of the system to the center-point of the weld area
- Manufactured to nuclear quality standards with nuclear approved materials, these systems guarantee bright, shiny, coke and oxide-free welds
- Designed and manufactured specifically for the power industry where high strength chrome alloy steels are more frequently used
- Ready to use, connects to a dedicated and regulated gas supply.  
Choose any flow rate (purge bags - up to 20l/min/Rapid Purge™ up to 80l/min) through the twin pre-set purge valve



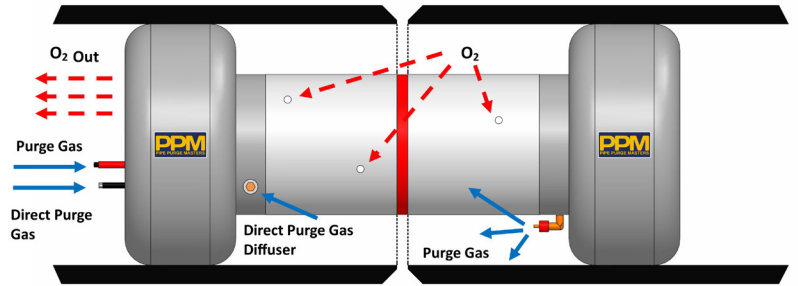
Heat Resistant Rapid Purge  
e.g. 36" pipe will purge in less than 10 minutes!





## How it works

Both the heat resistant Purge Bag system and the heat resistant Rapid Purge™ system work identically to the standard systems, but are made of a purposely designed Nomex and Kevlar mix material to withstand the temperatures typically encountered when welding exotic materials.



## Purge Bag Heat Resistant sizing and specification

PART NO	DESCRIPTION	NOMINAL PIPE SIZE		INTERNAL DIAMETER RANGE (I/D)		WEIGHT (LBS. / KG)	
PB02/HR	2" Purge Bag - Heat Resistant to 500 degrees	50 mm	2"	1.49" - 2.37"	38 - 60 mm	1 lbs.	0.40 kg
PB03/HR	3" Purge Bag - Heat Resistant to 500 degrees	75 mm	3"	2.17" - 3.53"	55 - 90 mm	1 lbs.	0.50 kg
PB04/HR	4" Purge Bag - Heat Resistant to 500 degrees	100 mm	4"	3.51" - 4.51"	89 - 115 mm	1 lbs.	0.60 kg
PB05/HR	5" Purge Bag - Heat Resistant to 500 degrees	125 mm	5"	4.14" - 5.50"	105 - 140 mm	1 lbs.	0.70 kg
PB06/HR	6" Purge Bag - Heat Resistant to 500 degrees	150 mm	6"	5.32" - 6.68"	135 - 170 mm	2 lbs.	0.90 kg
PB07/HR	7" Purge Bag - Heat Resistant to 500 degrees	175 mm	7"	6.30" - 7.66"	160 - 195 mm	2 lbs.	1.20 kg

(Larger sizes and specials available upon request with 35 mm / 1.37" expansion range)

## Rapid Purge™ Heat Resistant sizing and specification

PART NO	DESCRIPTION	NOMINAL PIPE SIZE		INTERNAL DIAMETER RANGE (I/D)		WEIGHT (LBS. / KG)	
RP08/HR	8" Rapid Purge - Heat Resistant up to 500 degrees	200 mm	8"	7.09" - 8.45"	180 - 215 mm	3 lbs.	1.40 kg
RP10/HR	10" Rapid Purge - Heat Resistant up to 500 degrees	250 mm	10"	9.26" - 10.61"	235 - 270 mm	3 lbs.	1.70 kg
RP12/HR	12" Rapid Purge - Heat Resistant up to 500 degrees	300 mm	12"	11.03" - 12.39"	280 - 315 mm	4 lbs.	2.10 kg
RP14/HR	14" Rapid Purge - Heat Resistant up to 500 degrees	350 mm	14"	12.41" - 13.76"	315 - 350 mm	5 lbs.	2.50 kg
RP16/HR	16" Rapid Purge - Heat Resistant up to 500 degrees	400 mm	16"	14.38" - 15.73"	365 - 400 mm	5 lbs.	2.70 kg
RP18/HR	18" Rapid Purge - Heat Resistant up to 500 degrees	450 mm	18"	16.34" - 17.70"	415 - 450 mm	6 lbs.	3.00 kg
RP20/HR	20" Rapid Purge - Heat Resistant up to 500 degrees	500 mm	20"	18.31" - 19.67"	465 - 500 mm	7 lbs.	3.40 kg
RP22/HR	22" Rapid Purge - Heat Resistant up to 500 degrees	550 mm	22"	19.69" - 21.05"	500 - 535 mm	7 lbs.	3.60 kg
RP24/HR	24" Rapid Purge - Heat Resistant up to 500 degrees	600 mm	24"	22.45" - 23.80"	570 - 605 mm	8 lbs.	3.80 kg
RP26/HR	26" Rapid Purge - Heat Resistant up to 500 degrees	650 mm	26"	24.41" - 25.77"	620 - 655 mm	9 lbs.	4.50 kg
RP28/HR	28" Rapid Purge - Heat Resistant up to 500 degrees	700 mm	28"	26.38" - 27.74"	670 - 705 mm	12 lbs.	5.50 kg
RP30/HR	30" Rapid Purge - Heat Resistant up to 500 degrees	750 mm	30"	28.35" - 29.71"	720 - 755 mm	13 lbs.	6.00 kg
RP32/HR	32" Rapid Purge - Heat Resistant up to 500 degrees	800 mm	32"	30.32" - 31.68"	770 - 805 mm	18 lbs.	8.00 kg
RP34/HR	34" Rapid Purge - Heat Resistant up to 500 degrees	850 mm	34"	32.48" - 33.86"	825 - 860 mm	19 lbs.	8.50 kg
RP36/HR	36" Rapid Purge - Heat Resistant up to 500 degrees	900 mm	36"	34.45" - 35.81"	875 - 910 mm	20 lbs.	9.10 kg
RP38/HR	38" Rapid Purge - Heat Resistant up to 500 degrees	950 mm	38"	36.61" - 37.99"	930 - 965 mm	21 lbs.	9.50 kg
RP40/HR	40" Rapid Purge - Heat Resistant up to 500 degrees	1,000 mm	40"	38.98" - 39.95"	990 - 1015 mm	22 lbs.	9.90 kg
RP42/HR	42" Rapid Purge - Heat Resistant up to 500 degrees	1,050 mm	42"	40.56" - 41.91"	1,030 - 1,065 mm	29 lbs.	13.20 kg
RP44/HR	44" Rapid Purge - Heat Resistant up to 500 degrees	1,100 mm	44"	42.52" - 43.90"	1,080 - 1,115 mm	30 lbs.	13.70 kg
RP46/HR	46" Rapid Purge - Heat Resistant up to 500 degrees	1,150 mm	46"	44.29" - 45.67"	1,125 - 1,160 mm	32 lbs.	14.50 kg
RP48/HR	48" Rapid Purge - Heat Resistant up to 500 degrees	1,200 mm	48"	46.46" - 47.82"	1,180 - 1,215 mm	33 lbs.	15.00 kg
RP50/HR	50" Rapid Purge - Heat Resistant up to 500 degrees	1,250 mm	50"	48.42" - 49.80"	1,230 - 1,265 mm	35 lbs.	16.00 kg
RP52/HR	52" Rapid Purge - Heat Resistant up to 500 degrees	1,300 mm	52"	50.59" - 51.97"	1,285 - 1,320 mm	37 lbs.	17.00 kg
RP54/HR	54" Rapid Purge - Heat Resistant up to 500 degrees	1,350 mm	54"	52.36" - 53.74"	1,330 - 1,365 mm	39 lbs.	18.00 kg
RP60/HR	60" Rapid Purge - Heat Resistant up to 500 degrees	1,500 mm	60"	58.46" - 59.84"	1,485 - 1,520 mm	44 lbs.	20.00 kg
RP72/HR	72" Rapid Purge - Heat Resistant up to 500 degrees	1,800 mm	72"	70.27" - 71.65"	1,785 - 1,820 mm	62 lbs.	28.00 kg
RP80/HR	80" Rapid Purge - Heat Resistant up to 500 degrees	2,000 mm	80"	78.35" - 79.72"	1,990 - 2,025 mm	66 lbs.	30.00 kg

(Larger sizes and specials available upon request with 35 mm / 1.37" expansion range)



## Purge pipes fast with minimal gas usage

PPM also manufactures the silicone Double Seal purging system that has been designed to further reduce both inert gas use and purging time. This system uses silicon discs to form an airtight seal, reducing purge times and gas usage for maximum efficiency.

There are 2 styles of silicon Double Seal systems available:

- the Gas Finger system is designed for small pipes and tubes from 16 - 38 mm i/d
- the Double Seal system is made for pipes from ¾ - 12" (16 - 320 mm)

## Features and advantages

- Extremely short purge times resulting in valuable cost savings
- Typical purge times of less than 2 minutes (e.g. an 8" pipe will purge to below 0.01% oxygen in less than 2 minutes)
- High quality silicon sealing disks that prevent them tilting or falling over inside the pipe
- Guaranteed gas tight seal
- UV and temperature resistant up to 330°C continuously or 450°C for short periods
- Suitable for purging pipes, elbows and fittings
- The silicon seal units can be separated and used as a gas finger and pipe stopper respectively
- Fully interchangeable and individually exchangeable system, reducing cost of ownership



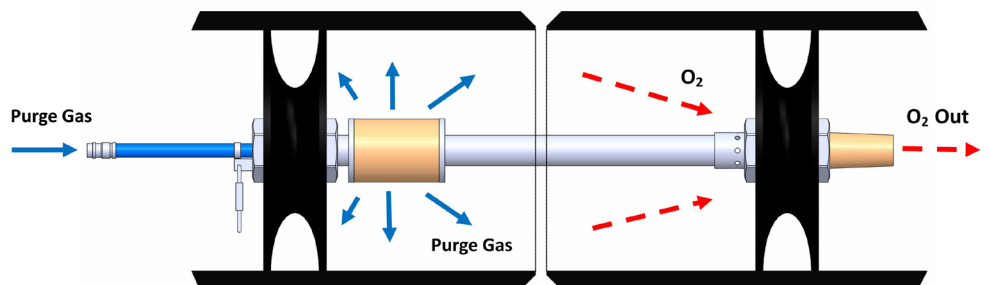
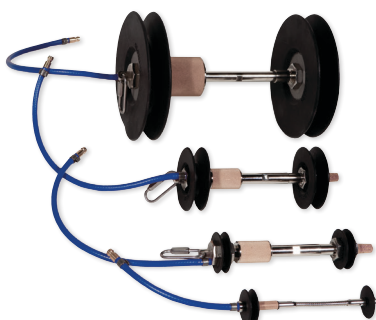
Available as a kit in 3 sizes:  
 DSK16-165 (16 - 165 mm i/d)  
 DSK16-220 (16 - 220 mm i/d)  
 DSK16-320 (16 - 320 mm i/d)

## How it works

The gas inlet and outlet are provided with twin sealing discs separated by a flexible, rigid or a spring-type tube. The design guarantees that at least one disc will always remain tight to the pipe wall creating a 100% seal. The discs are UV and temperature-resistant up to 330°C (626°F) continuously or up to 450°C (824°F) for short periods. The gas is diffused into the chamber via the built-in sintered diffuser and exits through the exhaust holes in the secondary twin disc unit.

This extremely short process of gas diffusion provides an equal gas flow and prevents any gas turbulence behind the weld, thereby minimising the risk of oxygen re-entering the welding chamber.

Besides the very short purging time, the double seal system also offers the possibility to cover various nominal pipe diameters by one pair of seals enabling highly economic use of the device. The double seal system can be purchased individually or in kit form for a range of pipe diameters.



## Double Seal kits sizing and specification - **RECOMMENDED**

PART NO	DESCRIPTION	PIPE I/D RANGE		WEIGHT (LBS. / KG)		CONNECTOR LENGTH
DSK16-165	Double Seal Kit - complete kit 16 - 165 mm i/d	0.62" - 6.49"	16 - 165 mm	24 lbs.	11.00 kg	Variable - check kit list
DSK16-220	Double Seal Kit - complete kit 16 - 220 mm i/d	0.62" - 8.66"	16 - 220 mm	33 lbs.	15.00 kg	Variable - check kit list
DSK16-320	Double Seal Kit - complete kit 16 - 320 mm i/d	0.62" - 12.59"	16 - 320 mm	42 lbs.	19.00 kg	Variable - check kit list

## Double Seal Gas Fingers

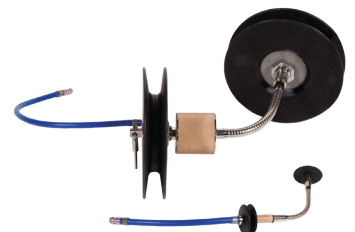
PART NO	DESCRIPTION	PIPE I/D RANGE		WEIGHT (LBS. / KG)		CONNECTOR LENGTH
DSF16-19	Double Seal Gas Finger 16 - 19 mm i/d	0.62" - 0.74"	16 - 19 mm	0.5 lbs.	0.20 kg	n/a
DSF19-24	Double Seal Gas Finger 19 - 24 mm i/d	0.74" - 0.94"	19 - 24 mm	0.5 lbs.	0.20 kg	n/a
DSF24-29	Double Seal Gas Finger 24 - 29 mm i/d	0.94" - 1.14"	24 - 29 mm	0.5 lbs.	0.20 kg	n/a
DSF29-34	Double Seal Gas Finger 29 - 34 mm i/d	1.14" - 1.33"	29 - 34 mm	0.6 lbs.	0.30 kg	n/a
DSF34-38	Double Seal Gas Finger 34 - 38 mm i/d	1.33" - 1.49"	34 - 38 mm	0.6 lbs.	0.30 kg	n/a

## Sizing and specification

PART NO.	DESCRIPTION	PIPE I/D RANGE		WEIGHT (LBS. / KG)		CONNECTOR LENGTH
DS16-19	Double Seal purge system - Flexible 16 - 19 mm i/d	0.62" - 0.74"	16 - 19 mm	1.5 lbs.	0.65 kg	3.94" / 100 mm
DS19-24	Double Seal purge system - Flexible 19 - 24 mm i/d	0.74" - 0.94"	19 - 24 mm	1.5 lbs.	0.70 kg	3.94" / 100 mm
DS24-29	Double Seal purge system - Flexible 24 - 29 mm i/d	0.94" - 1.14"	24 - 29 mm	1.5 lbs.	0.75 kg	3.94" / 100 mm
DS29-34	Double Seal purge system - Flexible 29 - 34 mm i/d	1.14" - 1.33"	29 - 34 mm	1.5 lbs.	0.75 kg	3.94" / 100 mm
DS34-38	Double Seal purge system - Flexible 34 - 38 mm i/d	1.33" - 1.49"	34 - 38 mm	1.5 lbs.	0.80 kg	3.94" / 100 mm
<b>DS38-43 to DS290-320 are supplied with rigid connector as standard, flexible on request</b>						
DS38-43	Double Seal purge system - Rigid 38 - 43 mm i/d	1.49" - 1.69"	38 - 43 mm	1.5 lbs.	0.85 kg	3.94" / 100 mm
DS43-48	Double Seal purge system - Rigid 43 - 48 mm i/d	1.69" - 1.88"	43 - 48 mm	2 lbs.	0.90 kg	3.94" / 100 mm
DS47-53	Double Seal purge system - Rigid 47 - 53 mm i/d	1.85" - 2.08"	47 - 53 mm	2 lbs.	0.95 kg	3.94" / 100 mm
DS52-58	Double Seal purge system - Rigid 52 - 58 mm i/d	2.04" - 2.28"	52 - 58 mm	2 lbs.	1.00 kg	3.94" / 100 mm
DS64-72	Double Seal purge system - Rigid 64 - 72 mm i/d	2.51" - 2.83"	64 - 72 mm	2 lbs.	1.10 kg	3.94" / 100 mm
DS78-86	Double Seal purge system - Rigid 78 - 86 mm i/d	3.07" - 3.38"	78 - 86 mm	3 lbs.	1.20 kg	3.94" / 100 mm
DS90-101	Double Seal purge system - Rigid 90 - 101 mm i/d	3.54" - 3.97"	90 - 101 mm	3 lbs.	1.30 kg	3.94" / 100 mm
DS100-112	Double Seal purge system - Rigid 100 - 112 mm i/d	3.93" - 4.40"	100 - 112 mm	3 lbs.	1.40 kg	3.94" / 100 mm
DS120-130	Double Seal purge system - Rigid 120 - 130 mm i/d	4.72" - 5.11"	120 - 130 mm	3 lbs.	1.50 kg	3.94" / 100 mm
DS124-138	Double Seal purge system - Rigid 124 - 138 mm i/d	4.88" - 5.43"	124 - 138 mm	3 lbs.	1.60 kg	3.94" / 100 mm
DS144-155	Double Seal purge system - Rigid 144 - 155 mm i/d	5.66" - 6.10"	144 - 155 mm	4 lbs.	1.70 kg	3.94" / 100 mm
DS150-165	Double Seal purge system - Rigid 150 - 165 mm i/d	5.90" - 6.49"	150 - 165 mm	4 lbs.	1.80 kg	7.08" / 180 mm
DS197-206	Double Seal purge system - Rigid 197 - 206 mm i/d	7.75" - 8.11"	197 - 206 mm	4 lbs.	2.00 kg	7.08" / 180 mm
DS209-220	Double Seal purge system - Rigid 209 - 220 mm i/d	8.22" - 8.66"	209 - 220 mm	5 lbs.	2.20 kg	7.08" / 180 mm
DS246-257	Double Seal purge system - Rigid 246 - 257 mm i/d	9.68" - 10.11"	246 - 257 mm	5 lbs.	2.40 kg	7.08" / 180 mm
DS260-280	Double Seal purge system - Rigid 260 - 280 mm i/d	10.23" - 11.02"	260 - 280 mm	5 lbs.	2.60 kg	7.08" / 180 mm
DS290-320	Double Seal purge system - Rigid 290 - 320 mm i/d	11.41" - 12.59"	290 - 320 mm	6 lbs.	3.00 kg	7.08" / 180 mm



Single Gas Finger for smaller pipe and tubes



Shown with flexible hose connection for purging elbows and fittings.



# PPM

PIPE PURGE MASTERS

## PURGE OXYGEN MONITOR







# HANDY PURGE 100 SELF CALIBRATING WELD PURGE MONITOR

Measures oxygen levels down to 0.01% (100ppm)

SELF CALIBRATING

## The entry level, welders' toolbox monitor

Inert gas welding requires the exclusion of oxygen from the weld zone during the welding process. Prior to the welding process, the residual oxygen concentration must be reduced to a required minimum. The Handy Purge 100 is specifically designed to indicate oxygen concentration up to 0.01% and to exactly measure oxygen concentration up to 0.1%. Within this range, it is absolutely safe to weld and produce an oxygen-free weld seam (exceptions include special metals such as titanium, zirconium, etc.).

The Handy Purge 100 can be used both for continuous monitoring during the welding process and for taking samples. Routine inspections for quality control are extremely simplified using this device. The analyser works with all purge systems and argon welding systems. It is small, easy to handle and has a rugged enclosure.

## Features and advantages

- Self calibrating
- Minimum waiting time. The device indicates exactly when the residual oxygen concentration of a purge gas is low enough to start welding.
- Reduced purge gas consumption. Exact monitoring of the residual oxygen avoids unnecessary purge gas consumption and allows producing oxygen-free weld seams
- Top-quality weld seams
- Top quality is guaranteed, as too early welding and hence porous, coloured or even charred weld seams can be avoided
- Duplex / stainless steel. The Handy Purge 100 can be used for all stainless steel, duplex and certain titanium welding applications
- Eliminates guess work



NEW AND IMPROVED



Plastic carry case box (HP100SCP7)



Replacement sensor (HP100SCS)

## The kit consists of:

- Handy Purge 100 Monitor
- 1 m hose with flow adapter
- Stainless steel probe
- Vacuum hand pump
- Plastic carry case
- Instructions
- Calibration certificate

## Technical specification

DESCRIPTION	MEASUREMENTS
Part Number	HP100SC
Measuring range	0.01 % - 20.9 % Oxygen (O <sub>2</sub> ) (10ppm - 209,000ppm)
Accuracy	at 20% ± 0.2% at 2% ± 0.02%
Dimensions	6" x 3" x 1" / 155 x 81 x 38 mm
Power source	Battery type PP3 9V
Display	LCD (Liquid Crystal Display)
Weight	0.5 lbs. / 0.20 kg
SHIPPING WEIGHTS AND DIMENSIONS	
Dimensions	9.05" x 7.48" x 1.96" / 230 x 190 x 50 mm
Weight	1.5 lbs. / 0.60 kg



# PPM

PIPE PURGE MASTERS

## PIPE STOPPERS



## Expandable test plugs for purging and general pipe blocking

Pipe stoppers (or drain plugs) are used to temporarily seal the end of a pipe or opening for many different testing applications. Pipe stoppers are mainly used to seal off from water, gases and foreign objects in newly laid pipes, or pipework systems that are under repair.

PPM's range of pipe stoppers is available in a number of different styles to suit many applications for pipe sizes from 1½ - 72" (38 mm - 1,829 mm). Special pipe stoppers are also available for pressure testing.

## How it works

The pipe stopper consists of a central spindle/shaft on which two plates are fitted with a natural rubber tyre (ring) between them. A wing nut on the shaft moves the two plates together, compressing the tyre and making the seal in the pipe. These stoppers can also be supplied with a hollow shaft version for screwing on standard hose connections or for using fixed or free nipple caps.

Expandable pipe stoppers are available in three different types.

### Nylon plugs - 1½ - 6" (38 mm - 150 mm)

Nylon plugs are the standard drain plugs for testing leak tightness of foul water lines at the time of installation. Furthermore, the range of sizes make these plugs ideal for a number of other applications in the water and gas industries as well as applications in all other industries where pipes are used or where there are holes to be blocked.



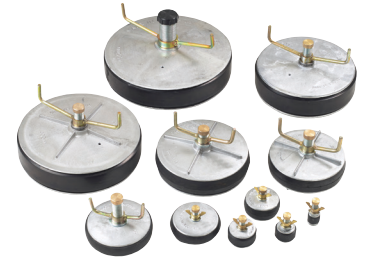
### Nylon expanding pipe stopper specification

PART NO.	PIPE SIZE INTERNAL NOMINAL DIAMETER		WILL FIT PIPES WITH INTERNAL DIAMETER		MINIMUM INSERTION INTO PIPE	OVERALL LENGTH	DIAMETER OF WATERWAY	MAXIMUM ALLOWABLE BACK PRESSURE	WEIGHT (LBS. / KG)	
NES38	1½"	38 mm	1.49 - 1.65"	38 - 42 mm	36 mm	58 mm	n/a solid	15 psi	1 lbs.	0.05 kg
NES50	2"	50 mm	1.90 - 2.44"	48.5 - 62.2 mm	36 mm	110 mm	0.5" bsp	15 psi	1 lbs.	0.05 kg
NES63	2½"	63 mm	2.55 - 3.03"	65 - 77 mm	36 mm	110 mm	0.5" bsp	10 psi	1 lbs.	0.10 kg
NES75	3"	75 mm	2.91 - 3.38"	74 - 86 mm	36 mm	110 mm	0.5" bsp	10 psi	1 lbs.	0.10 kg
NES88	3½"	88 mm	3.22 - 3.77"	82 - 96 mm	36 mm	110 mm	0.5" bsp	10 psi	1 lbs.	0.10 kg
NES100	4"	100 mm	3.74 - 4.13"	95 - 105 mm	36 mm	110 mm	0.5" bsp	5 psi	1 lbs.	0.15 kg
NES115	4½"	115 mm	4.48 - 4.88"	114 - 124 mm	36 mm	110 mm	0.5" bsp	5 psi	1 lbs.	0.20 kg
NES125	5"	125 mm	4.60 - 5.00"	117 - 127 mm	40 mm	110 mm	0.5" bsp	5 psi	1 lbs.	0.20 kg
NES150	6"	150 mm	5.74 - 6.10"	146 - 155 mm	42 mm	110 mm	0.5" bsp	5 psi	1 lbs.	0.25 kg

All plugs conform to British Standards BS8005 for low pressure testing and sealing of pipes.

## Aluminium plugs - 1½ - 24" (40 mm - 600 mm)

To complement the range of nylon expanding plugs, we offer all sizes of aluminium plugs. These are provided in sizes from 1½" (40 mm) upwards and are suitable for more heavy duty applications, heat resistant up to 90°. These plugs are typically used for general sealing of pipes and purging.



### Aluminium expanding pipe stopper specification

PART NO.	PIPE SIZE INTERNAL NOMINAL DIAMETER		WILL FIT PIPES WITH INTERNAL DIAMETER		MINIMUM INSERTION INTO PIPE	OVERALL LENGTH	DIAMETER OF WATERWAY	MAXIMUM ALLOWABLE BACK PRESSURE	WEIGHT (LBS. / KG)	
	INCH	MM	MIN	MAX					LBS.	KG
AES1.5	1½"	40 mm	1.49 - 1.96"	38 - 50 mm	45 mm	94 mm	½"	30 psi	1 lbs.	0.17 kg
AES2	2"	50 mm	1.92 - 2.44"	49 - 62 mm	43 mm	90 mm	½"	30 psi	1 lbs.	0.22 kg
AES2.5	2½"	65 mm	2.44 - 3.03"	62 - 77 mm	43 mm	92 mm	½"	30 psi	1 lbs.	0.27 kg
AES3	3"	75 mm	2.87 - 3.50"	73 - 89 mm	43 mm	94 mm	½"	20 psi	1 lbs.	0.31 kg
AES3.5	3½"	90 mm	3.30 - 4.05"	84 - 103 mm	53 mm	96 mm	½"	15 psi	1 lbs.	0.36 kg
AES4	4"	100 mm	3.70 - 4.33"	94 - 110 mm	47 mm	94 mm	½"	10 psi	1 lbs.	0.36 kg
AES4.5	4½"	114 mm	4.40 - 5.11"	112 - 130 mm	56 mm	140 mm	½"	10 psi	1 lbs.	0.47 kg
AES5	5"	125 mm	4.92 - 5.59"	125 - 142 mm	60 mm	95 mm	½"	10 psi	1 lbs.	0.79 kg
AES6	6"	150 mm	5.74 - 6.61"	146 - 168 mm	48 mm	96 mm	½"	10 psi	1 lbs.	0.70 kg
AES7	7"	175 mm	6.88 - 7.87"	175 - 200 mm	64 mm	100 mm	1"	7 psi	4 lbs.	1.92 kg
AES8	8"	200 mm	7.59 - 8.66"	193 - 220 mm	64 mm	100 mm	1"	7 psi	3 lbs.	1.59 kg
AES9	9"	225 mm	8.66 - 9.44"	220 - 240 mm	64 mm	170 mm	1"	7 psi	4 lbs.	2.06 kg
AES10	10"	250 mm	9.64 - 10.62"	245 - 270 mm	73 mm	178 mm	1"	7 psi	5 lbs.	2.52 kg
AES11	11"	275 mm	10.78 - 12.91"	274 - 328 mm	100 mm	200 mm	1"	7 psi	7 lbs.	3.45 kg
AES12	12"	300 mm	11.61 - 12.79"	295 - 325 mm	77 mm	200 mm	1"	7 psi	7 lbs.	3.42 kg
AES13	13"	325 mm	12.79 - 14.17"	325 - 360 mm	120 mm	230 mm	1"	5 psi	10 lbs.	4.75 kg
AES14	14"	350 mm	13.77 - 15.15"	350 - 385 mm	110 mm	215 mm	1"	5 psi	15 lbs.	6.95 kg
AES15	15"	375 mm	14.56 - 16.14"	370 - 410 mm	110 mm	225 mm	1"	5 psi	11 lbs.	5.35 kg
AES16	16"	400 mm	15.35 - 17.12"	390 - 435 mm	110 mm	225 mm	1"	5 psi	13 lbs.	5.90 kg
AES18	18"	450 mm	17.51 - 19.48"	445 - 495 mm	110 mm	225 mm	2"	5 psi	19 lbs.	8.75 kg
AES20	20"	500 mm	19.48 - 21.65"	495 - 550 mm	145 mm	255 mm	2"	5 psi	24 lbs.	11.3 kg
AES21	21"	525 mm	19.48 - 21.65"	495 - 550 mm	145 mm	255 mm	2"	3 psi	24 lbs.	11.3 kg
AES24	24"	600 mm	21.65 - 25.59"	595 - 650 mm	145 mm	255 mm	2"	3 psi	34 lbs.	15.85 kg

All plugs conform to British Standards BS8005 for low pressure testing and sealing of pipes.



## Steel plugs - 1½ - 36" (40 mm - 900 mm)

(Larger sizes available upon request)

PPM also manufactures a range of steel plugs from 1½" (40 mm) upwards in diameter. These plugs are typically suitable for more heavy duty applications, heat resistant up to 90°. These plugs are typically used for general sealing of pipes and purging.



**Steel  
multi-lock  
stopper**

## Steel expanding pipe stopper specification

PART NO.	PIPE SIZE INTERNAL NOMINAL DIAMETER		WILL FIT PIPES WITH INTERNAL DIAMETER		MINIMUM INSERTION INTO PIPE	OVERALL LENGTH	DIAMETER OF WATERWAY	MAXIMUM ALLOWABLE BACK PRESSURE	WEIGHT (LBS. / KG)	
SES1.5	1½"	40 mm	1.45 - 1.96"	37 - 50 mm	31 mm	81.5 mm	½"	30 psi	1 lbs.	0.16 kg
SES2	2"	50 mm	1.96 - 2.40"	50 - 61 mm	32.7 mm	82.8 mm	½"	30 psi	1 lbs.	0.18 kg
SES2.5	2½"	65 mm	2.40 - 2.95"	61 - 75 mm	33.2 mm	80.5 mm	½"	30 psi	1 lbs.	0.26 kg
SES3	3"	75 mm	2.87 - 3.34"	73 - 85 mm	34 mm	80.5 mm	½"	20 psi	1 lbs.	0.28 kg
SES3.5	3½"	89 mm	3.30 - 3.93"	84 - 100 mm	41 mm	81 mm	½"	15 psi	1 lbs.	0.36 kg
SES4	4"	100 mm	3.70 - 4.25"	94 - 108 mm	37.5 mm	83.3 mm	½"	10 psi	1 lbs.	0.41 kg
SES4.5	4½"	114 mm	4.33 - 4.92"	110 - 125 mm	40 mm	83.3 mm	½"	10 psi	1 lbs.	0.58 kg
SES5	5"	125 mm	4.88 - 5.47"	124 - 139 mm	37 mm	83.3 mm	½"	10 psi	1 lbs.	0.60 kg
SES6	6"	150 mm	5.90 - 6.29"	150 - 160 mm	39.7 mm	83.3 mm	½"	10 psi	2 lbs.	0.75 kg
SES7	7"	175 mm	6.88 - 7.87"	175 - 200 mm	46 mm	130 mm	1"	7 psi	3 lbs.	1.56 kg
SES8	8"	200 mm	7.67 - 8.46"	195 - 215 mm	37 mm	130 mm	1"	7 psi	3 lbs.	1.47 kg
SES9	9"	225 mm	8.26 - 9.05"	210 - 230 mm	58 mm	150 mm	1"	7 psi	4 lbs.	1.93 kg
SES10	10"	250 mm	9.64 - 10.23"	245 - 260 mm	55 mm	150 mm	1"	7 psi	6 lbs.	2.55 kg
SES12	12"	300 mm	11.65 - 12.59"	296 - 320 mm	85 mm	150 mm	1"	7 psi	8 lbs.	3.72 kg
SES14	14"	350 mm	13.38 - 15.15"	340 - 385 mm	85 mm	210 mm	1"	5 psi	14 lbs.	6.54 kg
SES15	15"	375 mm	14.56 - 16.33"	370 - 415 mm	100 mm	210 mm	1"	5 psi	15 lbs.	7.00 kg
SES16	16"	400 mm	15.35 - 16.92"	390 - 430 mm	95 mm	210 mm	1"	5 psi	19 lbs.	8.45 kg
SES18	18"	450 mm	17.63 - 19.48"	448 - 495 mm	100 mm	220 mm	1"	5 psi	23 lbs.	10.6 kg
<b>BELOW STOPPERS ARE MULTI-LOCK</b>										
SES20	20"	500 mm	19.29 - 20.86"	490 - 530 mm	95 mm	126 mm	2"	5 psi	23 lbs.	10.38 kg
SES21	21"	525 mm	20.27 - 21.85"	515 - 555 mm	95 mm	126 mm	2"	3 psi	25 lbs.	11.28 kg
SES24	24"	600 mm	23.22 - 24.80"	590 - 630 mm	95 mm	126 mm	2"	3 psi	34 lbs.	15.57 kg
SES28	28"	700 mm	27.16 - 28.74"	690 - 730 mm	95 mm	126 mm	2"	3 psi	44 lbs.	19.90 kg
SES30	30"	750 mm	29.13 - 30.70"	740 - 780 mm	95 mm	126 mm	2"	3 psi	55 lbs.	25.09 kg
SES32	32"	800 mm	31.10 - 32.67"	790 - 830 mm	95 mm	125 mm	2"	3 psi	64 lbs.	28.90 kg
SES36	36"	900 mm	35.03 - 36.61"	890 - 930 mm	95 mm	126 mm	2"	3 psi	77 lbs.	35.08 kg

(Larger sizes available upon request)

All plugs conform to British Standards BS8005 for low pressure testing and sealing of pipes.

## Single inflatable dams for blocking and testing

PPM offers a range of inflatable stoppers in various shapes and sizes, suitable for many applications. Made from a natural rubber bladder covered in waterproof polyurethane coated nylon to prevent friction and static electricity build up.

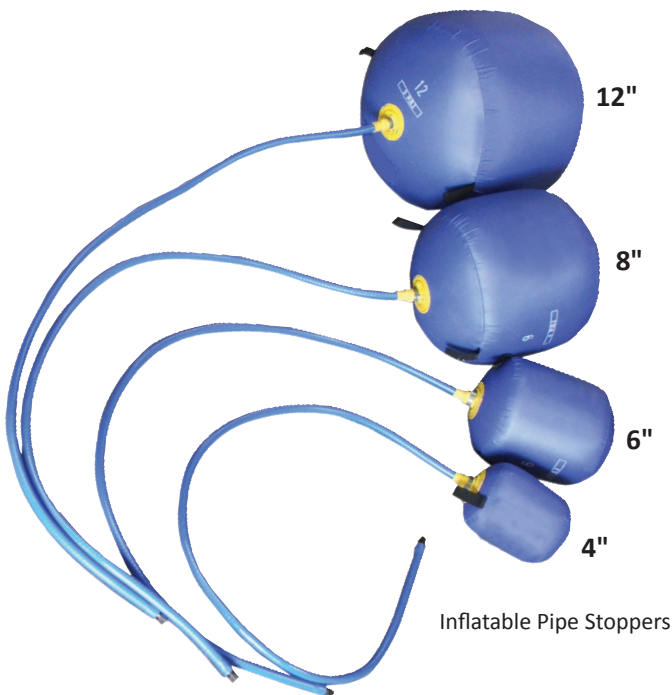
There are six different types available:

- **Cylindrical** - this stopper is generally used for blocking pipes where access is restricted
- **Spherical** - this stopper has less contact area than cylindrical stoppers, and is most suited to applications where access is further limited. Due to its shape the spherical inflatable stopper can be used at any angle
- **Square / Rectangular** - this stopper has a variety of applications, including in air conditioning ducting and venting
- **Doughnut** - this stopper requires minimal space and is perfectly suited to larger diameter pipes as there is less inflation required
- **Sausage** - this stopper has more contact area between the stopper and the pipe wall enabling it to hold back more pressure
- **Heat Resistant** - this stopper is made of a specially designed Kevlar and Nomex mix material to withstand temperatures up to 500°C (932°F) for applications involving higher temperatures such as pre heating



## Holdback pressure - unsupported back pressure is 20% of the inflation pressure

Each inflatable stopper comes with an inflation hose fitted with a Schrader valve enabling inflation with a standard airline, bicycle or foot pump.



Inflatable Pipe Stoppers



PPM's inflatable stoppers are supplied as standard with no through tube. Through tubes can be supplied on request at extra cost when the stoppers are required for weld purging applications. When deflated, the inflatable stoppers can be inserted and withdrawn with ease when access is restricted.

## Sizing and specification

PART NO	DESCRIPTION	NOMINAL PIPE SIZE		INTERNAL DIAMETER RANGE (I/D)		WEIGHT (LBS. / KG)		INFLATION PRESSURE
IPS2	2" Inflatable Pipe Stopper	2"	50 mm	1.77" - 2.16"	45 mm - 55 mm	0.74 lbs.	0.34 kg	10 psi
IPS3	3" Inflatable Pipe Stopper	3"	75 mm	2.75" - 3.14"	70 mm - 80 mm	0.74 lbs.	0.34 kg	10 psi
IPS4	4" Inflatable Pipe Stopper	4"	100 mm	3.74" - 4.13"	95 mm - 105 mm	0.74 lbs.	0.34 kg	10 psi
IPS5	5" Inflatable Pipe Stopper	5"	125 mm	4.72" - 5.11"	120 mm - 130 mm	0.83 lbs.	0.38 kg	10 psi
IPS6	6" Inflatable Pipe Stopper	6"	150 mm	5.70" - 6.10"	145 mm - 155 mm	0.83 lbs.	0.38 kg	6 psi
IPS7	7" Inflatable Pipe Stopper	7"	175 mm	6.69" - 7.08"	170 mm - 180 mm	1.54 lbs.	0.70 kg	6 psi
IPS8	8" Inflatable Pipe Stopper	8"	200 mm	7.67" - 8.07"	195 mm - 205 mm	2 lbs.	0.90 kg	6 psi
IPS9	9" Inflatable Pipe Stopper	9"	225 mm	8.66" - 9.05"	220 mm - 230 mm	2 lbs.	0.95 kg	4 psi
IPS10	10" Inflatable Pipe Stopper	10"	250 mm	9.64" - 10.03"	245 mm - 255 mm	2 lbs.	1.00 kg	4 psi
IPS11	11" Inflatable Pipe Stopper	11"	275 mm	10.62" - 11.02"	270 mm - 280 mm	2 lbs.	1.05 kg	4 psi
IPS12	12" Inflatable Pipe Stopper	12"	300 mm	11.61" - 12.00"	295 mm - 305 mm	2 lbs.	1.10 kg	3 psi
IPS13	13" Inflatable Pipe Stopper	13"	325 mm	12.59" - 12.99"	320 mm - 330 mm	3 lbs.	1.20 kg	3 psi
IPS14	14" Inflatable Pipe Stopper	14"	350 mm	13.58" - 13.97"	345 mm - 355 mm	3 lbs.	1.30 kg	3 psi
IPS15	15" Inflatable Pipe Stopper	15"	375 mm	14.56" - 14.96"	370 mm - 380 mm	3 lbs.	1.50 kg	3 psi
IPS16	16" Inflatable Pipe Stopper	16"	400 mm	15.55" - 15.94"	395 mm - 405 mm	4 lbs.	1.70 kg	3 psi
IPS17	17" Inflatable Pipe Stopper	17"	425 mm	16.53" - 16.92"	420 mm - 430 mm	4 lbs.	1.75 kg	3 psi
IPS18	18" Inflatable Pipe Stopper	18"	450 mm	17.51" - 17.91"	445 mm - 455 mm	4 lbs.	1.80 kg	2 psi
IPS19	19" Inflatable Pipe Stopper	19"	475 mm	18.50" - 18.89"	470 mm - 480 mm	4 lbs.	1.85 kg	2 psi
IPS20	20" Inflatable Pipe Stopper	20"	500 mm	19.48" - 19.88"	495 mm - 505 mm	4 lbs.	1.90 kg	2 psi
IPS21	21" Inflatable Pipe Stopper	21"	525 mm	20.47" - 20.86"	520 mm - 530 mm	5 lbs.	2.20 kg	2 psi
IPS22	22" Inflatable Pipe Stopper	22"	550 mm	21.45" - 21.85"	545 mm - 555 mm	5 lbs.	2.40 kg	2 psi
IPS24	24" Inflatable Pipe Stopper	24"	600 mm	23.42" - 23.81"	595 mm - 605 mm	5 lbs.	2.50 kg	2 psi
IPS28	28" Inflatable Pipe Stopper	28"	700 mm	27.36" - 27.75"	695 mm - 705 mm	5 lbs.	2.70 kg	2 psi
IPS30	30" Inflatable Pipe Stopper	30"	750 mm	29.33" - 29.72"	745 mm - 755 mm	6 lbs.	3.00 kg	2 psi
IPS32	32" Inflatable Pipe Stopper	32"	800 mm	31.29" - 31.69"	795 mm - 805 mm	7 lbs.	3.40 kg	1.5 psi
IPS34	34" Inflatable Pipe Stopper	34"	850 mm	33.26" - 33.66"	845 mm - 855 mm	7 lbs.	3.60 kg	1.5 psi
IPS36	36" Inflatable Pipe Stopper	36"	900 mm	35.23" - 35.62"	895 mm - 905 mm	8 lbs.	3.80 kg	1 psi
IPS42	42" Inflatable Pipe Stopper	42"	1,050 mm	41.34" - 41.73"	1,050 mm - 1,060 mm	11 lbs.	5.00 kg	0.5 psi
IPS44	44" Inflatable Pipe Stopper	44"	1,100 mm	43.11" - 43.50"	1,095 mm - 1,105 mm	12 lbs.	5.50 kg	0.5 psi
IPS48	48" Inflatable Pipe Stopper	48"	1,200 mm	47.04" - 47.44"	1,195 mm - 1,205 mm	13 lbs.	6.00 kg	0.5 psi
IPS54	54" Inflatable Pipe Stopper	54"	1,350 mm	53.35" - 53.74"	1,355 mm - 1,365 mm	17 lbs.	7.50 kg	0.5 psi
IPS60	60" Inflatable Pipe Stopper	60"	1,500 mm	58.85" - 59.25"	1,495 mm - 1,505 mm	19 lbs.	8.50 kg	0.5 psi
IPS72	72" Inflatable Pipe Stopper	72"	1,800 mm	71.45" - 71.85"	1,815 mm - 1,825 mm	24 lbs.	11.00 kg	0.5 psi

Pipe stoppers are supplied with Schrader valve

(Larger sizes available upon request with 10 mm / 0.39" expansion range)



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