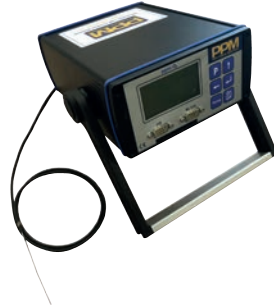




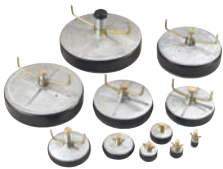
## PIPE PURGING SYSTEMS



## PURGE OXYGEN MONITORS



## PIPE STOPPERS



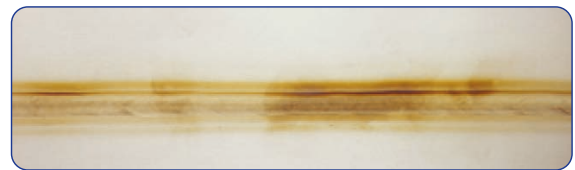


## WHY PURGE?

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 causes 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.



Argon Purge 12ppm  
Vol. O<sup>2</sup> Content



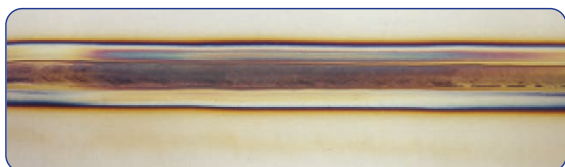
Argon Purge 60ppm  
Vol. O<sup>2</sup> Content



Argon Purge 70ppm  
Vol. O<sup>2</sup> Content



Argon Purge 200ppm  
Vol. O<sup>2</sup> Content



Argon Purge 250ppm  
Vol. O<sup>2</sup> Content



Argon Purge 500ppm  
Vol. O<sup>2</sup> Content

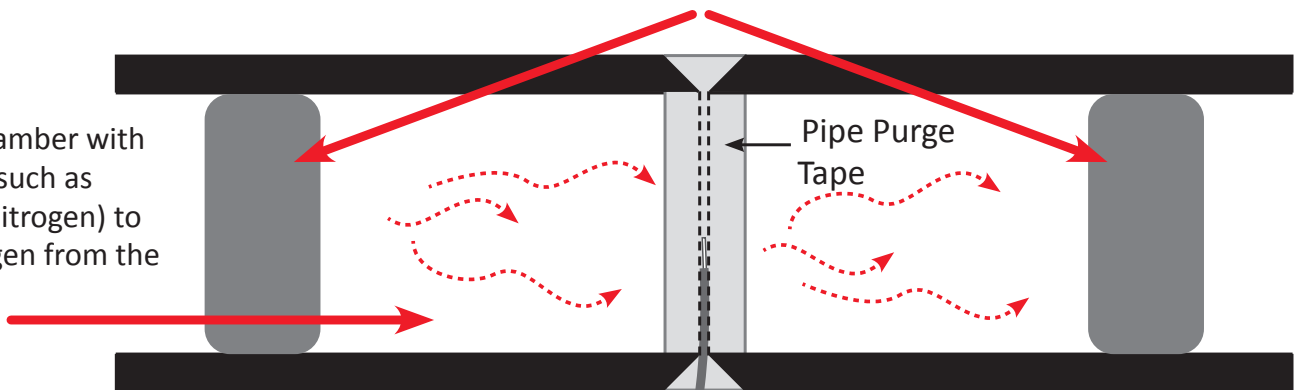
## Weld Quality

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 has 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.

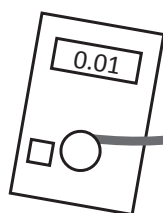
## Principles of Purging

1. Create a seal (dam) either side of the weld and close off the weld gap with E-Z Zone 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



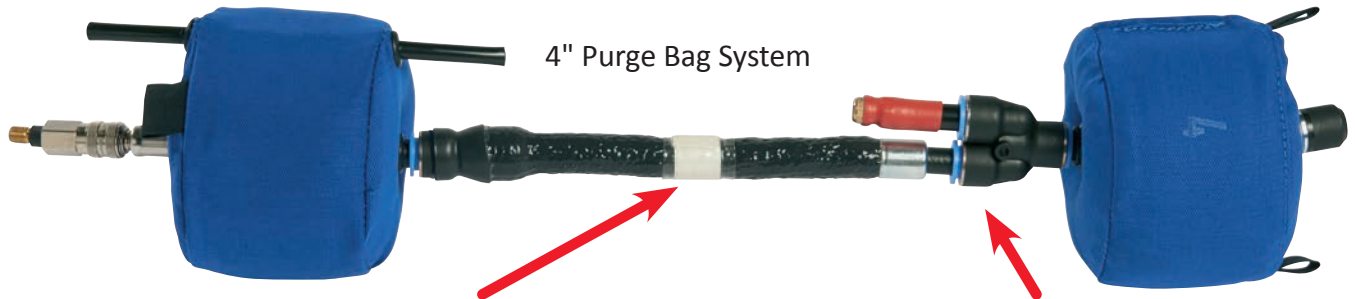
3. Use a weld purge monitor to recognize when the required level of oxygen has been met



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 Pipe Purge System is quick and easy to use providing a very rapid weld purge. High quality materials are used in the manufacture of these systems guaranteeing perfect oxide-free weld roots in very little time.



Luminous strip allows the operator to locate the centre of the bag system to the weld gap with ease



The Gas Release Valve is pre-set and sealed, so requires no adjustment

Due to the design of these systems, the volume of gas used to purge is minimized, resulting in significant savings in both time and the quantity of inert gas used. 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 Inflatable Pipe Purging Systems dramatically reduce purging times leading to significant savings in labor costs
- **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. Through the pre-set purge valve
- 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 that required for a conventional purge

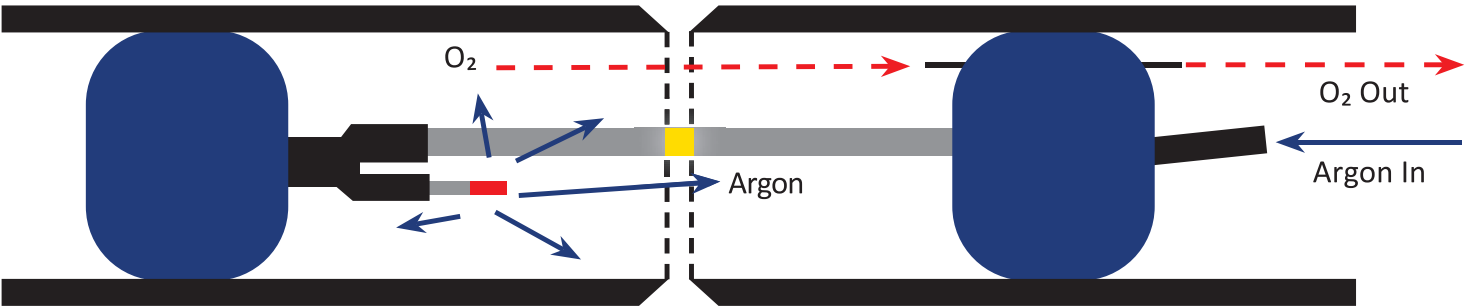


How it works

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

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 through the integral exhaust tubes in the bags. Used in conjunction with PPM’s Oxygen Monitors to indicate when the required low level of oxygen has been reached, welding can then commence, with the inert gas enabling the welder to produce an even oxidation free penetration weld bead. Afterwards, the dams are deflated simply by disconnecting the purge gas feed and the system easily withdrawn. The design of these systems means that only one gas connection is required for both dam inflation and weld purging.



Sizing and Specification

PART NO.	NOMINAL PIPE SIZE		WEIGHT	INTERNAL DIAMETER RANGE
PB02	50 mm	2"	1 lbs. / 0.34 kg	1.73 - 2.24 / 44 - 57 mm
PB03	75 mm	3"	1 lbs. / 0.34 kg	2.28 - 3.30 / 58 - 84 mm
PB04	100 mm	4"	1 lbs. / 0.34 kg	3.14 - 4.33 / 80 - 110 mm
PB05	125 mm	5"	1 lbs. / 0.38 kg	4.05 - 5.31 / 103 - 135 mm
PB06	150 mm	6"	1 lbs. / 0.38 kg	4.88 - 6.37 / 124 - 162 mm
PB08	200 mm	8"	2 lbs. / 0.90 kg	6.88 - 8.38 / 175 - 213 mm
PB10	250 mm	10"	2 lbs. / 1 kg	9.05 - 10.43 / 230 - 265 mm
PB12	300 mm	12"	2 lbs. / 1.1 kg	10.43 - 12.00 / 265 - 305 mm
PB14	350 mm	14"	2 lbs. / 1.3 kg	12.99 - 13.97 / 330 - 355 mm
PB16	400 mm	16"	3 lbs. / 1.7 kg	14.96 - 15.94 / 380 - 405 mm
PB18	450 mm	18"	3 lbs. / 1.8 kg	16.92 - 17.91 / 430 - 455 mm
PB20	500 mm	20"	4 lbs. / 1.9 kg	19.09 - 20.07 / 485 - 510 mm
PB22	550 mm	22"	4 lbs. / 2.2 kg	21.06 - 22.04 / 535 - 560 mm
PB24	600 mm	24"	5 lbs. / 2.5 kg	23.03 - 24.01 / 585 - 610 mm

Larger sizes and specials available on request, however Rapid Purge strongly recommended over 12"







# RAPID PURGE™ SYSTEM

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

PATENTED  
PRODUCT

## Purge larger diameter pipes faster than ever!

Used for Stainless, duplex, chrome steels, titanium, nickel and other alloy materials, the PPM Pipe Purge Bag System™ systems enable high speed welding of larger diameter pipe joints that have to be purged.

Designed to enable the user to produce high quality, reliable and repeatable welding of stainless steel tube and pipe joints to ensure a very fast weld purge time and a very high quality weld root, free from oxidation and discoloration.

A 36" diameter pipe will purge to below 0.1% oxygen in less than 10 minutes and all smaller pipes correspondingly faster.

Dramatic savings of time, gas and money can be made by using these systems.

Due to the quality of the materials used, the Rapid Purge™ systems can be used over and over again further reducing manufacturing costs.

As with all of the PPM Pipe Purge Bag System inflatable purging systems, the Rapid Purge™ come with pre-set valves, so are ready to use 'straight out of the box'.

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



## Features and Advantages

- **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 volume of gas required
- 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 80l/min. through the twin pre-set purge valve
- A central (glow in the dark) 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

HEAT  
RESISTANT  
**250°C**



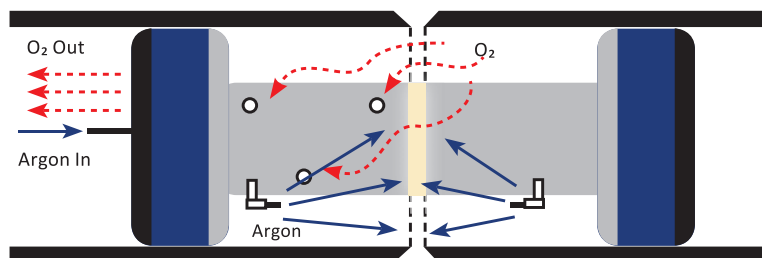
## How it works

The Rapid Purge™ Inflatable Pipe Purging Systems 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.

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™ Inflatable Pipe Weld Purging Systems allows for many years of repeatable trouble free use.



## Sizing and Specification

PART NO.	DESCRIPTION	PRODUCT SIZES		EXPANSION RANGE	WEIGHT
RP08	Rapid Purge™	200 mm	8"	7.48" - 8.46" / 190 - 215 mm	3 lbs. / 1.4 kg
RP10	Rapid Purge™	250 mm	10"	9.52" - 10.51" / 242 - 267 mm	3 lbs. / 1.7 kg
RP12	Rapid Purge™	300 mm	12"	11.45" - 12.44" / 291 - 316 mm	4 lbs. / 2.1 kg
RP14	Rapid Purge™	350 mm	14"	12.51" - 13.50" / 318 - 343 mm	5 lbs. / 2.5 kg
RP16	Rapid Purge™	400 mm	16"	14.52" - 15.51" / 369 - 394 mm	5 lbs. / 2.7 kg
RP18	Rapid Purge™	450 mm	18"	16.53" - 17.51" / 420 - 445 mm	6 lbs. / 3 kg
RP20	Rapid Purge™	500 mm	20"	18.54" - 19.52" / 471 - 496 mm	7 lbs. / 3.4 kg
RP22	Rapid Purge™	550 mm	22"	21.77" - 22.71" / 553 - 577 mm	7 lbs. / 3.6 kg
RP24	Rapid Purge™	600 mm	24"	22.51" - 23.50" / 572 - 597 mm	8 lbs. / 3.8 kg
RP26	Rapid Purge™	650 mm	26"	24.40" - 25.39" / 620 - 645 mm	9 lbs. / 4.5 kg
RP28	Rapid Purge™	700 mm	28"	26.41" - 27.40" / 671 - 696 mm	12 lbs. / 5.5 kg
RP30	Rapid Purge™	750 mm	30"	28.42" - 29.40" / 722 - 747 mm	13 lbs. / 6 kg
RP32	Rapid Purge™	800 mm	32"	30.39" - 31.37" / 772 - 797 mm	17 lbs. / 8 kg
RP36	Rapid Purge™	900 mm	36"	34.40" - 35.39" / 874 - 899 mm	20 lbs. / 9.1 kg
RP40	Rapid Purge™	1,000 mm	40"	38.97" - 39.96" / 990 - 1,015 mm	21 lbs. / 9.9 kg
RP42	Rapid Purge™	1,050 mm	42"	40.27" - 41.25" / 1,023 - 1,048 mm	29 lbs. / 13.2 kg
RP44	Rapid Purge™	1,100 mm	44"	44.29" - 45.27" / 1,125 - 1,150 mm	30 lbs. / 13.7 kg
RP48	Rapid Purge™	1,200 mm	48"	46.25" - 47.24" / 1,175 - 1,200 mm	33 lbs. / 15 kg
RP54	Rapid Purge™	1,371 mm	54"	53.50" - 54.48" / 1,359 - 1,384 mm	39 lbs. / 18 kg
RP60	Rapid Purge™	1,524 mm	60"	59.52" - 60.51" / 1,512 - 1,537 mm	44 lbs. / 20 kg
RP72	Rapid Purge™	1,828 mm	72"	71.49" - 72.48" / 1,816 - 1,841 mm	61 lbs. / 28 kg
RP80	Rapid Purge™	2,032 mm	80"	79.48" - 80.47" / 2,019 - 2,044 mm	66 lbs. / 30 kg

*Larger sizes and specials available on request*

## Systems for the fast Purging of High Temperature Pipework

The PPM Pipe Purge Bag and Rapid Purge Systems are both available as heat resistant versions.

Designed for 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 our inflatable pipe purging systems are heat resistant up to 350°C (572°F) for up to 24 hours, or up to 500°C for short periods of time, as with the standard systems, 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 band for rapid centering of the system to the weld root for the fastest set up times.

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.

## Features and Advantages

- Heat resistant up to 350°C (572°F) for up to 24 hours, or up to 500°C 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 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



*e.g. 7" Pipe will purge in less than 4 minutes!*



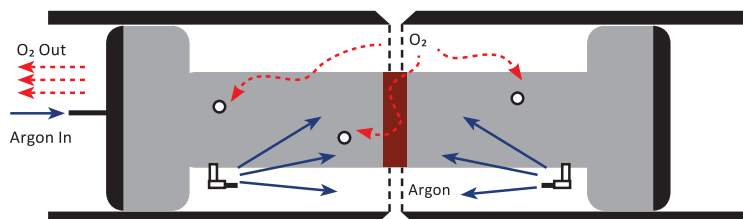
**Heat Resistant  
Rapid Purge**

*e.g. 36" Pipe will purge  
in less than 10 minutes!*



## How it works

Both the Heat Resistant Pipe Purge System and the Heat Resistant Rapid Purge™ System work identically to the standard systems, but are made using a purposely designed Nomex and Kevlar mix material to withstand the temperatures typically encountered when welding exotic materials.



## Sizing and Specification

PART NO.	DESCRIPTION	PRODUCT SIZES		EXPANSION RANGE	WEIGHT
PB03/HR	Purge Bag Heat Resistant	76 mm	3"	2.48" - 2.95" / 63 - 75 mm	2 lbs. / 1.1 kg
PB04/HR	Purge Bag Heat Resistant	100 mm	4"	3.62" - 3.93" / 92 - 100 mm	2 lbs. / 1.2 kg
PB05/HR	Purge Bag Heat Resistant	125 mm	5"	4.44" - 4.92" / 113 - 125 mm	2 lbs. / 1.25 kg
PB06/HR	Purge Bag Heat Resistant	150 mm	6"	5.43" - 5.90" / 138 - 150 mm	2 lbs. / 1.3 kg
PB07/HR	Purge Bag Heat Resistant	175 mm	7"	6.41" - 6.88" / 163 - 175 mm	3 lbs. / 1.4 kg
RP08/HR	Rapid Purge™ Heat Resistant	200 mm	8"	7.48" - 8.46" / 190 - 215 mm	3 lbs. / 1.4 kg
RP10/HR	Rapid Purge™ Heat Resistant	250 mm	10"	9.52" - 10.51" / 242 - 267 mm	3 lbs. / 1.7 kg
RP12/HR	Rapid Purge™ Heat Resistant	300 mm	12"	11.45" - 12.44" / 291 - 316 mm	4 lbs. / 2.1 kg
RP14/HR	Rapid Purge™ Heat Resistant	350 mm	14"	12.51" - 13.50" / 318 - 343 mm	5 lbs. / 2.5 kg
RP16/HR	Rapid Purge™ Heat Resistant	400 mm	16"	14.52" - 15.51" / 369 - 394 mm	5 lbs. / 2.7 kg
RP18/HR	Rapid Purge™ Heat Resistant	450 mm	18"	16.53" - 17.51" / 420 - 445 mm	6 lbs. / 3 kg
RP20/HR	Rapid Purge™ Heat Resistant	500 mm	20"	18.54" - 19.52" / 471 - 496 mm	7 lbs. / 3.4 kg
RP22/HR	Rapid Purge™ Heat Resistant	550 mm	22"	21.77" - 22.71" / 553 - 577 mm	7 lbs. / 3.6 kg
RP24/HR	Rapid Purge™ Heat Resistant	600 mm	24"	22.51" - 23.50" / 572 - 597 mm	8 lbs. / 3.8 kg
RP26/HR	Rapid Purge™ Heat Resistant	650 mm	26"	24.40" - 25.39" / 620 - 645 mm	9 lbs. / 4.5 kg
RP28/HR	Rapid Purge™ Heat Resistant	700 mm	28"	26.41" - 27.40" / 671 - 696 mm	12 lbs. / 5.5 kg
RP30/HR	Rapid Purge™ Heat Resistant	750 mm	30"	28.42" - 29.40" / 722 - 747 mm	13 lbs. / 6 kg
RP32/HR	Rapid Purge™ Heat Resistant	800 mm	32"	30.39" - 31.37" / 772 - 797 mm	17 lbs. / 8 kg
RP36/HR	Rapid Purge™ Heat Resistant	900 mm	36"	34.40" - 35.39" / 874 - 899 mm	20 lbs. / 9.1 kg
RP40/HR	Rapid Purge™ Heat Resistant	1,000 mm	40"	38.99" - 39.96" / 990 - 1,015 mm	21 lbs. / 9.9 kg
RP42/HR	Rapid Purge™ Heat Resistant	1,050 mm	42"	40.27" - 41.25" / 1,023 - 1,048 mm	29 lbs. / 13.2 kg
RP44/HR	Rapid Purge™ Heat Resistant	1,100 mm	44"	44.29" - 45.27" / 1,125 - 1,150 mm	30 lbs. / 13.7 kg
RP48/HR	Rapid Purge™ Heat Resistant	1,200 mm	48"	46.25" - 47.24" / 1,175 - 1,200 mm	33 lbs. / 15 kg
RP54/HR	Rapid Purge™ Heat Resistant	1,371 mm	54"	53.50" - 54.48" / 1,359 - 1,384 mm	39 lbs. / 18 kg
RP60/HR	Rapid Purge™ Heat Resistant	1,524 mm	60"	59.52" - 60.51" / 1,512 - 1,537 mm	44 lbs. / 20 kg
RP72/HR	Rapid Purge™ Heat Resistant	1,828 mm	72"	71.49" - 72.48" / 1,816 - 1,841 mm	61 lbs. / 28 kg
RP80/HR	Rapid Purge™ Heat Resistant	2,031 mm	80"	79.48" - 80.47" / 2,019 - 2,044 mm	66 lbs. / 30 kg

*Larger sizes and specials available on request*

## 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. These systems use 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:

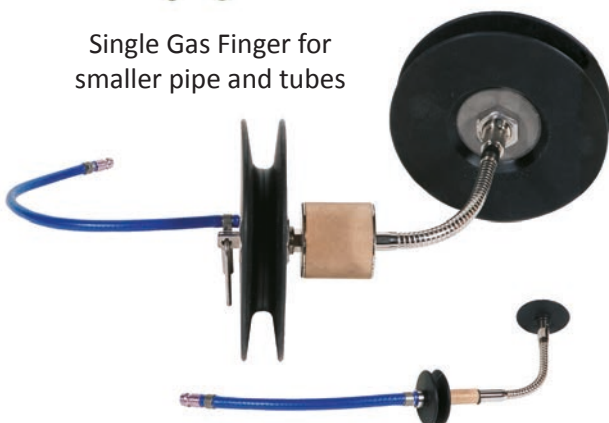
- The Gas Finger system is designed for small pipes and tubes from 16 - 38 mm i/d
- The Double Seal systems are made for pipes from  $\frac{3}{4}$  - 12" (16 - 320 mm)

## Features and Advantages

- 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



Single Gas Finger for smaller pipe and tubes



Shown with flexible hose connection for purging elbows and fittings.



Available as a kit (3 sizes)

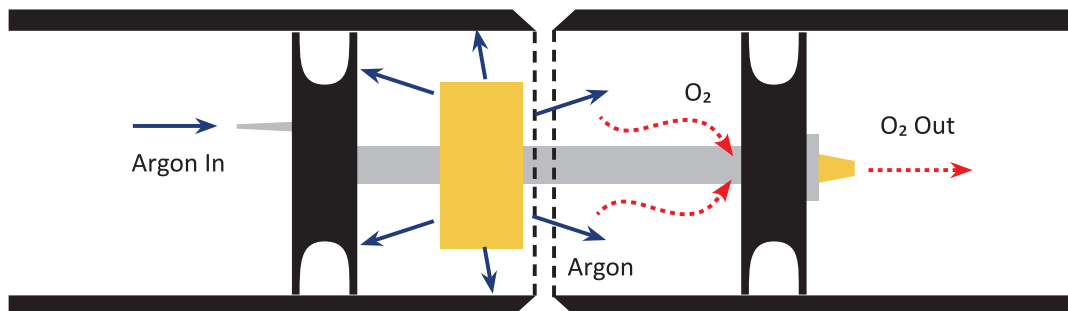
## How it works

The gas inlet and outlet are provided with twin sealing discs separated by a flexible, rigid or a spring-type tube. The design also 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 continuously or up to 450°C 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 process of gas diffusion provides an even flow of gas and prevents any gas turbulence behind the weld, thereby minimizing the risk of oxygen in the welding chamber while, at the same time, achieving an extremely short purge time. These extremely short purge times result in valuable cost savings in gas and time.

Besides the very short purging time, the Silicon Seal System also offers the possibility to cover various nominal pipe diameters by one pair of baffles 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.



## Sizing and Specification

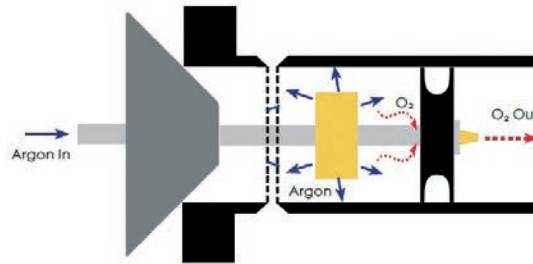
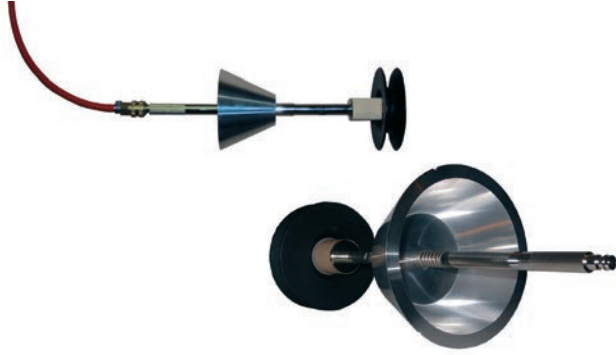
PART NO.	DESCRIPTION	PIPE I/D RANGE	HOSE LENGTH
DS16-19	Flex	0.62" - 0.74" / 16 - 19 mm	3.93" / 100 mm
DS19-24	Flex	0.74" - 0.94" / 19 - 24 mm	3.93" / 100 mm
DS24-29	Flex	0.94" - 1.14" / 24 - 29 mm	3.93" / 100 mm
DS29-34	Flex	1.14" - 1.33" / 29 - 34 mm	3.93" / 100 mm
DS34-38	Flex	1.33" - 1.49" / 34 - 38 mm	3.93" / 100 mm
DS38-43	Flexible or Rigid	1.49" - 1.69" / 38 - 43 mm	4.72" - 2.36" / 120/60 mm
DS43-48	Flexible or Rigid	1.69" - 1.88" / 43 - 48 mm	4.72" - 2.36" / 120/60 mm
DS47-53	Flexible or Rigid	1.85" - 2.08" / 47 - 53 mm	4.72" - 2.36" / 120/60 mm
DS52-58	Flexible or Rigid	2.04" - 2.28" / 52 - 58 mm	4.72" - 2.36" / 120/60 mm
DS64-72	Flexible or Rigid	2.51" - 2.83" / 64 - 72 mm	4.72" - 2.36" / 120/60 mm
DS78-86	Flexible or Rigid	3.07" - 3.38" / 78 - 86 mm	4.72" - 2.36" / 120/60 mm
DS90-101	Flexible or Rigid	3.54" - 3.97" / 90 - 101 mm	5.90" - 3.93" / 150/100 mm
DS100-112	Flexible or Rigid	3.93" - 4.40" / 100 - 112 mm	5.90" - 3.93" / 150/100 mm
DS120-130	Flexible or Rigid	4.72" - 5.11" / 120 - 130 mm	5.90" - 3.93" / 150/100 mm
DS124-138	Flexible or Rigid	4.88" - 5.43" / 124 - 138 mm	5.90" - 3.93" / 150/100 mm
DS144-155	Flexible or Rigid	5.66" - 6.10" / 144 - 155 mm	5.90" - 3.93" / 150/100 mm
DS150-165	Flexible or Rigid	5.90" - 6.49" / 150 - 165 mm	5.90" - 3.93" / 150/100 mm
DS197-206	Flexible or Rigid	7.75" - 8.11" / 197 - 206 mm	5.90" - 3.93" / 150/100 mm
DS209-220	Flexible or Rigid	8.22" - 8.66" / 209 - 220 mm	5.90" - 3.93" / 150/100 mm
DS246-257	Flexible or Rigid	9.68" - 10.11" / 246 - 257 mm	5.90" - 3.93" / 150/100 mm
DS260-280	Flexible or Rigid	10.23" - 11.02" / 260 - 280 mm	5.90" - 3.93" / 150/100 mm
DS290-320	Flexible or Rigid	11.41" - 12.59" / 290 - 320 mm	5.90" - 3.93" / 150/100 mm
DSK16-165	Complete Kit	0.62" - 6.49" / 16 - 165 mm	4.72" - 2.36" / 120/60 mm    5.90" - 3.93" / 150/100 mm
DSK16-220	Complete Kit	0.62" - 8.66" / 16 - 220 mm	4.72" - 2.36" / 120/60 mm    5.90" - 3.93" / 150/100 mm
DSK16-320	Complete Kit	0.62" - 12.59" / 16 - 320 mm	4.72" - 2.36" / 120/60 mm    5.90" - 3.93" / 150/100 mm

## 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. These systems use silicon discs to form an airtight seal, reducing purge times, and gas usage for maximum efficiency.

## Features and Advantages

- 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 to flanges



## Sizing and Specification

PART NO.	DESCRIPTION	PIPE I/D RANGE	HOSE LENGTH	
FDS16-19	Flex	0.63" - 0.75" / 16 - 19 mm	3.93" / 100 mm	
FDS19-24	Flex	0.75" - 0.94" / 19 - 24 mm	3.93" / 100 mm	
FDS24-29	Flex	0.94" - 1.14" / 24 - 29 mm	3.93" / 100 mm	
FDS29-34	Flex	1.14" - 1.34" / 29 - 34 mm	3.93" / 100 mm	
FDS34-38	Flex	1.34" - 1.50" / 34 - 38 mm	3.93" / 100 mm	
FDS38-43	Flexible or Rigid	1.50" - 1.69" / 38 - 43 mm	4.72" - 2.36" / 120/60 mm	
FDS43-48	Flexible or Rigid	1.69" - 1.89" / 43 - 48 mm	4.72" - 2.36" / 120/60 mm	
FDS47-53	Flexible or Rigid	1.85" - 2.09" / 47 - 53 mm	4.72" - 2.36" / 120/60 mm	
FDS52-58	Flexible or Rigid	2.05" - 2.28" / 52 - 58 mm	4.72" - 2.36" / 120/60 mm	
FDS64-72	Flexible or Rigid	2.52" - 2.83" / 64 - 72 mm	4.72" - 2.36" / 120/60 mm	
FDS78-86	Flexible or Rigid	3.07" - 3.39" / 78 - 86 mm	4.72" - 2.36" / 120/60 mm	
FDS90-101	Flexible or Rigid	3.54" - 3.98" / 90 - 101 mm	5.90" - 3.93" / 150/100 mm	
FDS100-112	Flexible or Rigid	3.93" - 4.41" / 100 - 112 mm	5.90" - 3.93" / 150/100 mm	
FDS120-130	Flexible or Rigid	4.72" - 5.12" / 120 - 130 mm	5.90" - 3.93" / 150/100 mm	
FDS124-138	Flexible or Rigid	4.85" - 5.43" / 124 - 138 mm	5.90" - 3.93" / 150/100 mm	
FDS144-155	Flexible or Rigid	5.67" - 6.10" / 144 - 155 mm	5.90" - 3.93" / 150/100 mm	
FDS150-165	Flexible or Rigid	5.91" - 6.50" / 150 - 165 mm	5.90" - 3.93" / 150/100 mm	
FDS197-206	Flexible or Rigid	7.76" - 8.11" / 197 - 206 mm	5.90" - 3.93" / 150/100 mm	
FDS209-220	Flexible or Rigid	8.23" - 8.66" / 209 - 220 mm	5.90" - 3.93" / 150/100 mm	
FDS246-257	Flexible or Rigid	9.69" - 10.12" / 246 - 257 mm	5.90" - 3.93" / 150/100 mm	
FDS260-280	Flexible or Rigid	10.24" - 11.02" / 260 - 280 mm	5.90" - 3.93" / 150/100 mm	
FDS290-320	Flexible or Rigid	11.92" - 12.60" / 290 - 320 mm	5.90" - 3.93" / 150/100 mm	
FDSK16-165	Complete Kit	0.63" - 6.50" / 16 - 165 mm	4.72" - 2.36" / 120/60 mm	5.90" - 3.93" / 150/100 mm
FDSK16-220	Complete Kit	0.63" - 8.66" / 16 - 220 mm	4.72" - 2.36" / 120/60 mm	5.90" - 3.93" / 150/100 mm
FDSK16-320	Complete Kit	0.63" - 12.60" / 16 - 320 mm	4.72" - 2.36" / 120/60 mm	5.90" - 3.93" / 150/100 mm





# HANDY PURGE 100 SELF CALIBRATING WELD PURGE MONITOR

*Measures oxygen levels down to 0.01% (100ppm)*

**NEW**  
Now 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 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 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 tells you exactly when the residual oxygen concentration of a purge gas is low enough to start welding. You need no longer rely on rough estimations. This saves both time and gas.
- Reduced purge gas consumption. Exact monitoring of the residual oxygen avoids unnecessary purge gas consumption and allows you to produce oxygen-free weld seams
- Top-quality weld seams
- Top quality is guaranteed, as too early welding and hence porous, colored or even charred weld seams can be avoided
- Duplex / Stainless Steel. The Handy Purge Weld Purge Monitor can be used for all stainless steel, duplex and certain titanium welding applications
- Eliminates guess work



TECHNICAL SPECIFICATIONS	
Part No.	HP100SC
Measuring range	0.01 % - 20.9 % Oxygen (O <sup>2</sup> ) (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	1 lbs. / 210 g
DIMENSIONS AND WEIGHT FOR SHIPMENT	
Dimensions	12" x 10" x 3" / 310 x 260 x 80 mm
Weight	2 lbs. / 870g

Replacement sensors and  
spares available from stock

### The kit consists of:

- Handy Purge Weld Purge Monitor
- 1m hose with flow adapter
- Stainless Steel probe
- Vacuum hand pump
- Plastic Carry Case
- Instructions
- Calibration Certificate



# HANDY PURGE PRO 5 WELD PURGE MONITOR

*The most accurate hand-held digital oxygen monitor  
Measures oxygen levels down to 0.0005% (5ppm)*

## For applications where minimal oxidation is critical

The Handy Purge Pro 5 is the ultimate hand-held Oxygen monitor, measuring the level of oxygen in the designated atmosphere down to 5ppm (parts per million)!!! The new Handy Purge Pro 5 Weld Purge Monitor is essential for reading oxygen levels for titanium welding.

The interface option enables the Handy Purge Pro 5 to be connected (via a cable or Bluetooth dongle) to a PC and printer to record the readings. A rechargeable battery pack and multi range power plug are standard features of the Handy Purge Pro 5, and its light weight and ergonomic shape make it the ideal portable instrument for all orbital welding applications.

The unit incorporates an internal pump and is designed for measuring rest oxygen in inert gases such as argon. This unit can be used up to 4 hours before recharging is necessary.

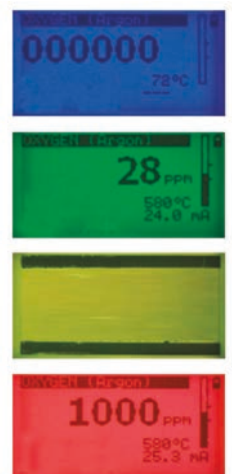
## Features and Advantages

- Measures oxygen levels down to 5ppm (parts per million)
- Rechargeable batteries, standby life approx. 4hrs
- Temperature regulated zirconium cell (maintenance free)
- Graphic display screen changes color relative to process and function
- Built-in recognition for 110V/240V power sources
- Portable for remote and difficult access sites using rechargeable batteries (supplied)
- Integrated programmable sound function
- Multi language: English, French and German
- Low permeability measuring hose for accurate measurements
- Data logging of up to 250 entries - Connects via RS 232 interface or Bluetooth

TECHNICAL DATA	
Part No.	HPP5
Measuring Range	5 - 999ppm
Dimensions	11" x 5" x 2" (L x W x H) 290 x 130 x 60 mm
Weight	2 lbs. / 0.8 kg
Supply Voltage	7 VDC, 2850 mAh rechargeable batteries



Supplied in a durable carry case



Color changing display for quick reference to monitor status



# PRO PURGE 1 WELD PURGE MONITOR

*Measures oxygen levels down to 0.00005% (0.5ppm)*

## The top of the range portable, digital oxygen monitor

- Accuracy to 0.5 ppm
- Temperature regulated maintenance free zirconium cell
- Graphic display (blue and white)
- Built-in recognition for 110V/240V power sources
- Internal battery power for up to 90min
- Integrated programmable sound function
- Date and time function for data logging
- Easy to use software
- Low permeability measure hose (FPM) for accurate measurements
- Connects via RS 232 interface, Bluetooth, CAN-Bus, AUX (AMI)
- Can be calibrated to ambient oxygen
- Software updates available
- Multi language: English, French, German, Dutch, Czech, Danish
- Data logging up to 250 entries internally or externally on a PC

The Pro Purge 1 Weld Purge Monitor is the ideal tool for many welding applications where critical weld standards are required.

Used for Production of Semi-conductors, Nuclear, Aerospace, Pharmaceutical, Energy, Dairy, Brewery and Food processing where strict welding guide lines to eliminate weld-quality issues associated with atmosphere contaminated welds are required.

The Pro Purge 1 Weld Purge Monitor enables Welders and Welding Engineers on site or in the workshop to precisely monitor rest oxygen levels to the point where precision welding can take place, resulting in "perfect conditions" for consistent high-quality repeatable welds.

The Pro Purge 1 Weld Purge Monitor contains a stabilized zirconium oxide cell with a regulated heater to maintain a cell temperature of 750°C which enables it to accurately measure levels from 206,400 ppm down to as low as 0.5 ppm.

The zirconium oxide ceramic sensor in the Pro Purge 1 provides very accurate readings, with a deviation of less than 5% in the 1 to 10 ppm range. This means that its resolution is ½ a part per million (0.5ppm).

The Pro Purge 1 Weld Purge Monitor can be unplugged for up to one hour, before the internal battery must be recharged. Making it ideal for testing weld joints in the shop, or in the field.



Connected via a Bluetooth Dongle with a range of up to 100m to a mobile phone.

Via the phone all relevant data including rest oxygen level, sensor temperature will be displayed. Using simple commands the PRO PURGE 1 can be operated remotely.



Connecting a printer via the RS232 interface. Capable of readout documentation (per second) that can be logged via a printer.

TECHNICAL DATA	
Part No	PP1
Measuring Range	0.5 - 206,400ppm
Dimensions	8" x 6" x 3" 220 x 165 x 85 mm
Weight	7 lbs. / 3.3 kg
Supply Voltage	110V/240V



## Expandable test plugs for purging and general pipe blocking

Pipe stoppers, or drain plugs, as they are sometimes known, 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 Pipe Purge System range of pipe stoppers are available in a number of different styles to suit many applications for pipe sizes from 1½ - 72". Special Pipe stoppers are also available for pressure testing.



## Aluminium Plugs - 1½ - 36" (40 mm - 900 mm)

To complement the range of nylon expanding plugs, we offer all sizes of Aluminium plugs. These are provided in sizes from 1½" upwards and are suitable for more arduous duties such as immersion in chemicals and/or higher temperatures.

## How it works

A central spindle/shaft on which two plates are fitted with a natural rubber tire (ring) between them, a wing nut on the shaft moving the two plates together compressing the tire 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.

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	APPROX. WEIGHT
	METRIC	IMPERIAL	MINIMUM	MAXIMUM					
ALUMINIUM EXPANDING PIPE STOPPERS SPECIFICATION									
AES1.5	40 mm	1½"	38 mm	50 mm	45 mm	94 mm	½"	30 p.s.i.	1 lbs. / 0.17 kg
AES2	50 mm	2"	49 mm	62 mm	43 mm	90 mm	½"	30 p.s.i.	1 lbs. / 0.22 kg
AES2.5	65 mm	2½"	62 mm	77 mm	43 mm	92 mm	½"	30 p.s.i.	1 lbs. / 0.27 kg
AES3	75 mm	3"	73 mm	89 mm	43 mm	94 mm	½"	20 p.s.i.	1 lbs. / 0.31 kg
AES3.5	90 mm	3½"	84 mm	103 mm	53 mm	96 mm	½"	15 p.s.i.	1 lbs. / 0.36 kg
AES4	100 mm	4"	94 mm	110 mm	47 mm	94 mm	½"	10 p.s.i.	1 lbs. / 0.36 kg
AES4.5	114 mm	4½"	112 mm	130 mm	56 mm	140 mm	½"	10 p.s.i.	1 lbs. / 0.47 kg
AES5	125 mm	5"	125 mm	142 mm	60 mm	95 mm	½"	10 p.s.i.	1 lbs. / 0.79 kg
AES6	150 mm	6"	146 mm	168 mm	48 mm	96 mm	½"	10 p.s.i.	1 lbs. / 0.70 kg
AES7	175 mm	7"	175 mm	200 mm	64 mm	100 mm	1"	7 p.s.i.	4 lbs. / 1.92 kg
AES8	200 mm	8"	193 mm	220 mm	64 mm	100 mm	1"	7 p.s.i.	3 lbs. / 1.59 kg
AES9	225 mm	9"	220 mm	240 mm	64 mm	170 mm	1"	7 p.s.i.	4 lbs. / 2.06 kg
AES10	250 mm	10"	245 mm	270 mm	73 mm	178 mm	1"	7 p.s.i.	5 lbs. / 2.52 kg
AES11	275 mm	11"	274 mm	328 mm	100 mm	200 mm	1"	7 p.s.i.	7 lbs. / 3.45 kg
AES12	300 mm	12"	295 mm	325 mm	77 mm	200 mm	1"	7 p.s.i.	7 lbs. / 3.42 kg
AES13	325 mm	13"	325 mm	360 mm	120 mm	230 mm	1"	5 p.s.i.	10 lbs. / 4.75 kg
AES14	350 mm	14"	350 mm	385 mm	110 mm	215 mm	1"	5 p.s.i.	15 lbs. / 6.95 kg
AES15	375 mm	15"	370 mm	410 mm	110 mm	225 mm	1"	5 p.s.i.	11 lbs. / 5.35 kg
AES16	400 mm	16"	390 mm	435 mm	110 mm	225 mm	1"	5 p.s.i.	13 lbs. / 5.9 kg
AES18	450 mm	18"	445 mm	495 mm	110 mm	225 mm	2"	5 p.s.i.	19 lbs. / 8.75 kg
AES20	500 mm	20"	495 mm	550 mm	145 mm	255 mm	2"	5 p.s.i.	24 lbs. / 11.3 kg
AES21	525 mm	21"	520 mm	575 mm	145 mm	255 mm	2"	3 p.s.i.	26 lbs. / 11.8 kg
AES24	600 mm	24"	595 mm	650 mm	145 mm	255 mm	2"	3 p.s.i.	34 lbs. / 15.85 kg

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

Larger sizes available upon request





### 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.

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	APPROX. WEIGHT
	METRIC	IMPERIAL	MINIMUM	MAXIMUM					
NYLON EXPANDING PIPE STOPPERS SPECIFICATION									
NES38	38 mm	1½"	38 mm	42 mm	36 mm	58 mm	n/a solid	15 p.s.i.	1 lbs. / 0.05 kg
NES50	50 mm	2"	48.5 mm	62.2 mm	36 mm	110 mm	0.5" bsp	15 p.s.i.	1 lbs. / 0.05 kg
NES63	63 mm	2½"	65 mm	77 mm	36 mm	110 mm	0.5" bsp	10 p.s.i.	1 lbs. / 0.10 kg
NES75	75 mm	3"	74 mm	86 mm	36 mm	110 mm	0.5" bsp	10 p.s.i.	1 lbs. / 0.10 kg
NES88	88 mm	3½"	82 mm	96 mm	36 mm	110 mm	0.5" bsp	10 p.s.i.	1 lbs. / 0.10 kg
NES100	100 mm	4"	95 mm	105 mm	36 mm	110 mm	0.5" bsp	5 p.s.i.	1 lbs. / 0.15 kg
NES115	115 mm	4½"	114 mm	124 mm	36 mm	110 mm	0.5" bsp	5 p.s.i.	1 lbs. / 0.20 kg
NES125	125 mm	5"	117 mm	127 mm	40 mm	110 mm	0.5" bsp	5 p.s.i.	1 lbs. / 0.20 kg
NES150	150 mm	6"	146 mm	155 mm	42 mm	110 mm	0.5" bsp	5 p.s.i.	1 lbs. / 0.25 kg



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

PPM Pipe Purge System also manufactures a range of Steel plugs from 1½ - 72" in diameter. These plugs are typically suitable for more arduous duties such as long immersion in water and use at higher temperatures or contact with acidic or alkaline environments for which the Nylon and Aluminium plugs may be unsuitable.

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	APPROX. WEIGHT
	METRIC	IMPERIAL	MINIMUM	MAXIMUM					
STEEL EXPANDING PIPE STOPPERS SPECIFICATION									
SES1.5	40 mm	1½"	37 mm	50 mm	31 mm	81.5 mm	½"	30 p.s.i.	1 lbs. / 0.16 kg
SES2	50 mm	2"	50 mm	61 mm	32.7 mm	82.8 mm	½"	30 p.s.i.	1 lbs. / 0.18 kg
SES2.5	65 mm	2½"	61 mm	75 mm	33.2 mm	80.5 mm	½"	30 p.s.i.	1 lbs. / 0.26 kg
SES3	75 mm	3"	73 mm	85 mm	34 mm	80.5 mm	½"	20 p.s.i.	1 lbs. / 0.28 kg
SES3.5	89 mm	3½"	84 mm	100 mm	41 mm	81 mm	½"	15 p.s.i.	1 lbs. / 0.36 kg
SES4	100 mm	4"	94 mm	108 mm	37.5 mm	83.3 mm	½"	10 p.s.i.	1 lbs. / 0.41 kg
SES4.5	114 mm	4½"	110 mm	125 mm	40 mm	83.3 mm	½"	10 p.s.i.	1 lbs. / 0.58 kg
SES5	125 mm	5"	124 mm	139 mm	37 mm	83.3 mm	½"	10 p.s.i.	1 lbs. / 0.60 kg
SES6	150 mm	6"	145 mm	160 mm	39.7 mm	83.3 mm	½"	10 p.s.i.	2 lbs. / 0.75 kg
SES7	175 mm	7"	175 mm	200 mm	46 mm	130 mm	1"	7 p.s.i.	3 lbs. / 1.56 kg
SES8	200 mm	8"	195 mm	215 mm	37 mm	130 mm	1"	7 p.s.i.	3 lbs. / 1.47 kg
SES9	225 mm	9"	210 mm	230 mm	58 mm	150 mm	1"	7 p.s.i.	4 lbs. / 1.93 kg
SES10	250 mm	10"	245 mm	260 mm	55 mm	150 mm	1"	7 p.s.i.	6 lbs. / 2.55 kg
SES12	300 mm	12"	296 mm	320 mm	85 mm	150 mm	1"	7 p.s.i.	8 lbs. / 3.72 kg
SES14	350 mm	14"	340 mm	385 mm	85 mm	210 mm	1"	5 p.s.i.	14 lbs. / 6.54 kg
SES15	375 mm	15"	370 mm	415 mm	100 mm	210 mm	1"	5 p.s.i.	15 lbs. / 7.00 kg
SES16	400 mm	16"	390 mm	430 mm	95 mm	210 mm	1"	5 p.s.i.	19 lbs. / 8.45 kg
SES18	450 mm	18"	448 mm	495 mm	100 mm	210 mm	1"	5 p.s.i.	23 lbs. / 10.6 kg
SES20	500 mm	20"	495 mm	550 mm	145 mm	255 mm	2"	3 p.s.i.	25 lbs. / 11.3 kg
SES21	525 mm	21"	520 mm	575 mm	145 mm	255 mm	2"	3 p.s.i.	25 lbs. / 11.5 kg
SES24	600 mm	24"	595 mm	650 mm	145 mm	255 mm	2"	3 p.s.i.	35 lbs. / 15.85 kg

## Single inflatable dams for blocking and testing

PPM offers a range of shapes and sizes of inflatable stoppers, suitable for all 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** - These are generally used for blocking pipes where access is restricted
- **Spherical** - These stoppers have less contact area than cylindrical stoppers, and are 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** - These stoppers have a variety of applications, including in air conditioning ducting and venting.
- **Doughnut** - These stoppers require minimal space and are perfectly suited to larger diameter pipes as there is less inflation required
- **Sausage** - The design of this type gives more contact area between the stopper and the pipe wall enabling these stoppers to hold back more pressure
- **Heat Resistant** - These stoppers are made from a specially designed kevlar and nomex mix material to withstand temperatures up to 500°C for applications involving higher temperatures such as pre heating

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

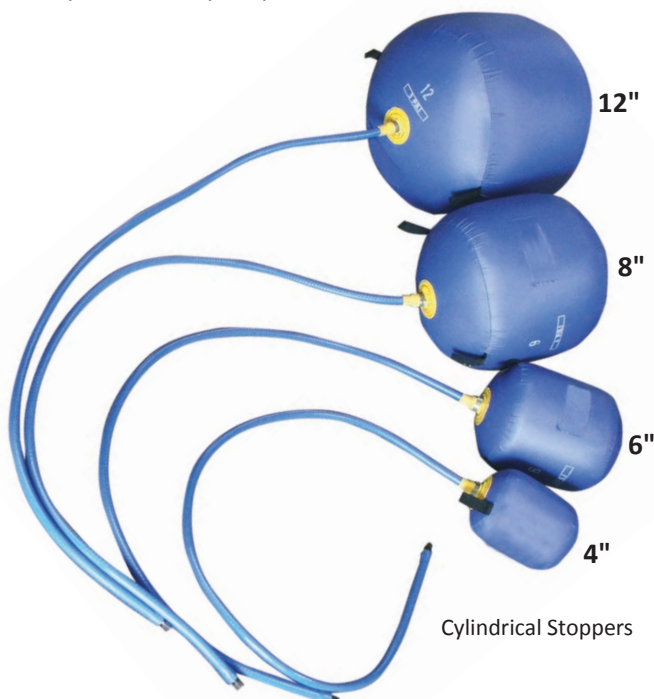


12"



16"

Heat Resistant Stopper



Cylindrical Stoppers



Doughnut Stoppers

PPM Pipe Purge System inflatable stoppers are supplied as standard with no through tube. Through tubes can be supplied when the stoppers are required for weld purging applications. When deflated, the inflatable stoppers can be inserted and withdrawn with ease.

## Sizing and Specification

PART NO.	INFLATABLE STOPPER SIZE ( mm / INCH)	MIN ID ( mm)	MAX ID ( mm)
IPS2	50 mm / 2"	1.77" / 45 mm	2.16" / 55 mm
IPS3	75 mm / 3"	2.75" / 70 mm	3.14" / 80 mm
IPS4	100 mm / 4"	3.74" / 95 mm	4.13" / 105 mm
IPS5	125 mm / 5"	4.72" / 120 mm	5.11" / 130 mm
IPS6	150 mm / 6"	5.70" / 145 mm	6.10" / 155 mm
IPS7	175 mm / 7"	6.69" / 170 mm	7.08" / 180 mm
IPS8	200 mm / 8"	7.67" / 195 mm	8.07" / 205 mm
IPS9	225 mm / 9"	8.66" / 220 mm	9.05" / 230 mm
IPS10	250 mm / 10"	9.64" / 245 mm	10.03" / 255 mm
IPS11	275 mm / 11"	10.62" / 270 mm	11.02" / 280 mm
IPS12	300 mm / 12"	11.61" / 295 mm	12.00" / 305 mm
IPS13	325 mm / 13"	12.59" / 320 mm	12.99" / 330 mm
IPS14	350 mm / 14"	13.58" / 345 mm	13.97" / 355 mm
IPS15	375 mm / 15"	14.56" / 370 mm	14.96" / 380 mm
IPS16	400 mm / 16"	15.55" / 395 mm	15.94" / 405 mm
IPS17	425 mm / 17"	16.53" / 420 mm	16.92" / 430 mm
IPS18	450 mm / 18"	17.51" / 445 mm	17.91" / 455 mm
IPS19	475 mm / 19"	18.50" / 470 mm	18.89" / 480 mm
IPS20	500 mm / 20"	19.48" / 495 mm	19.88" / 505 mm
IPS21	525 mm / 21"	20.47" / 520 mm	20.86" / 530 mm
IPS22	550 mm / 22"	21.45" / 545 mm	21.85" / 555 mm
IPS23	575 mm / 23"	22.44" / 570 mm	22.83" / 580 mm
IPS24	600 mm / 24"	23.42" / 595 mm	23.81" / 605 mm
IPS26	650 mm / 26"	25.39" / 645 mm	25.78" / 655 mm
IPS27	675 mm / 27"	26.37" / 670 mm	26.77" / 680 mm
IPS28	700 mm / 28"	27.36" / 695 mm	27.75" / 705 mm
IPS30	750 mm / 30"	29.33" / 745 mm	29.72" / 755 mm
IPS32	800 mm / 32"	31.29" / 795 mm	31.69" / 805 mm
IPS34	850 mm / 34"	33.26" / 845 mm	33.66" / 855 mm
IPS36	900 mm / 36"	35.23" / 895 mm	35.62" / 905 mm
IPS39	1,000 mm / 39"	39.17" / 995 mm	39.56" / 1,005 mm
IPS44	1,100 mm / 44"	43.11" / 1,095 mm	43.50" / 1,105 mm
IPS48	1,200 mm / 48"	47.04" / 1,195 mm	47.44" / 1,205 mm
IPS51	1,300 mm / 51"	50.98" / 1,295 mm	51.37" / 1,305 mm
IPS55	1,400 mm / 55"	54.92" / 1,395 mm	55.31" / 1,405 mm
IPS60	1,500 mm / 60"	58.85" / 1,495 mm	59.25" / 1,505 mm
IPS63	1,600 mm / 63"	62.78" / 1,595 mm	63.18" / 1,605 mm
IPS67	1,700 mm / 67"	66.73" / 1,695 mm	67.12" / 1,705 mm
IPS71	1,800 mm / 71"	70.66" / 1,795 mm	71.06" / 1,805 mm
IPS75	1,900 mm / 75"	74.60" / 1,895 mm	75.00" / 1,905 mm
IPS79	2,000 mm / 79"	78.54" / 1,995 mm	78.93" / 2,005 mm
IPS80	2,035 mm / 80"	79.92" / 2,030 mm	80.31" / 2,040 mm

*Larger sizes available upon request*



## CUSTOM STOPPERS

*Any inflatable stopper we can make*

PPM can manufacture to any size, shape and material dependant on the clients requirements any style or inflatable stopper, bag or system.

Please see examples below:

