

# Pneumatic Test Plugs

Inflatable pneumatic pipe plugs for safe convenient pipeline testing and maintenance of low pressure pipelines.



TECHNICAL GUIDE: **TA2.1**

## Applications

---

Used to block flow for maintenance in sewer and storm water systems

Back plug for sewer air tests

Ideal for flow diversion

Some plugs offer a full bypass allowing both testing and monitoring of pipe systems

## Product Attributes

---

Natural Rubber – great sealing properties as well as excellent expansion and memory

Plugs are supplied with Schrader tyre inflation valves

Plugs will expand to fit pipes that are out of round

Lightweight, short and flexible

## Quality

---

ISO 9001:2008 Quality Management Standard

Inflatable pneumatic pipe plugs are a reliable and re-usable system for testing or blocking of pipelines.



### Application

- Blocker Plugs – Sealing plugs used to stop flow for pipeline maintenance work or as rear plugs when performing air testing.
- Bypass/Flow Through Plugs – Enables pipeline to be blocked off yet still allows access via the plug by-pass for air testing or limited flow diversion.
- Large Bypass/Flow Through Plugs – Extra-large bypass, ideal for flow diversion, enables flow to be diverted so work can be carried out downstream.

### Features

- Natural rubber – Great sealing properties as well as excellent expansion and memory.
- Mechanical bonding of premium natural rubber and end plates eliminates failures from chemical bonding.
- Custom sized and styled plugs available on request
- Safety – Through an inflation extension hose, plugs can be inflated away from the danger zone.
- Remote pole system available, enables plugs to be inserted without entering a manhole. Refer to Technical Guide TA2.2 Cherne Remote Plug System.

### Installation

- All plugs come with an extensive instruction manual, it is very important this manual is read and adhered to when using pneumatic plugs.
- Plugs are easily inflated with standard tyre inflation equipment, small plugs are easily inflated using a standard bike or foot pump, a compressor is recommended for large plugs.
- Inflation pressures are in the instruction manual and on the plug. These pressures must be adhered to when inflating the plug.
- Through utilising an air line extension plugs can be inflated from a distance, away from the danger zone or outside the manhole.

### Testing

- Manufactured in the USA by Cherne Industries an ISO9001 certified company.
- Cherne Industries have been developing and manufacturing pneumatic plugs and other pipeline testing equipment for nearly 60 years and are considered a world leader in development and innovation when it comes to pipeline maintenance and testing equipment.

**TABLE 1** Standard Pneumatic Plugs

Code	Description	Max Back Pressure	Inflation Pressure	Product Weight (kg)	Deflated Length (mm)	Inflation Valve Thread size
PLUGSP075100	Pneumatic Plug Ø 75 - 100 Standard 70 - 108mm	1,2 bar 17 psi	2,8 bar 40 psi	0.22	132	1/8 " 3mm
PLUGSP100	Pneumatic Plug Ø 100 Standard 87 - 108mm	0,9 bar 13 psi	2,1 bar 30 psi	0.25	163	3.25" 83mm
PLUGSP100150	Pneumatic Plug Ø 100 - 150 Standard 92 - 159mm	1,2 bar 17 psi	2,1 bar 30 psi	0.62	240	¼" 6.35mm
PLUGSP100200	Pneumatic Plug Ø 100 - 200 Standard 100 - 209mm	1,0 bar 15 psi	3,0 bar 45 psi	1.72	580	0.125" 3mm
PLUGSP150	Pneumatic Plug Ø 150 Standard 138 - 159mm	0.9 bar 13 psi	2,1 bar 30 psi	0.85	230	5.25" 135mm
PLUGSP150300	Pneumatic Plug Ø 150-300 Standard 140 - 311mm	1,0 bar 15 psi	3,0 bar 45 psi	3.21	630	0.25" 6.35mm
PLUGSP200400	Pneumatic Plug Ø 200 - 400 Standard 191 - 412mm	1,0 bar 15 psi	3,0 bar 45 psi	5.16	710	0.25" 6.35mm
PLUGSP300600	Pneumatic Plug Ø 300 - 600 Standard 280 - 615mm	1,0 bar 15 psi	3,0 bar 45 psi	12.18	940	0.25" 6.35mm
PLUGSP5001000	Pneumatic Plug Ø 500 - 1000 Standard 508 - 1000mm	1,72 bar 25 psi	1,72 bar 25 psi	52.2	1780	¼" 6.35mm
PLUGSP6001200	Pneumatic Plug Ø 600 - 1200 Standard 521 - 1200mm	1,72 bar 25 psi	1,72 bar 25 psi	57.0	2146	¼" 6.35mm

**TABLE 2** Bypass Pneumatic Plugs

Code	Description	Max Back Pressure	Inflation Pressure	Product Weight (kg)	Deflated Length (mm)	Inflation Valve Thread Size	Bypass Diameter (NPT)
PLUGSPBP100	Pneumatic Plug Ø 100 Bypass 83 - 108mm	1,5 bar 22 psi	2,8 bar 40 psi	0.7	203	MIV	¼ " F
PLUGSPBP100150	Pneumatic Plug Ø 100 - 150 Bypass 95 - 159mm	1,2 bar 17 psi	2,4 bar 35 psi	1.1	273	1/8 " 3mm	¼ " F
PLUGSPBP150	Pneumatic Plug Ø 150 Bypass 144 - 159mm	0.9 bar 13 psi	2,4 bar 35 psi	1.0	178	1/8 " 3mm	1 ½" F
PLUGSPBP150300	Pneumatic Plug Ø 150 - 300 Bypass 140 - 311mm	1 bar 15 psi	3 bar 45 psi	4.30	630	1/8 " 3mm	1" M
PLUGSPBP200400	Pneumatic Plug Ø 200 - 400 Bypass 191 - 412mm	1 bar 15 psi	3 bar 45 psi	7.20	711	¼" 6.35mm	2" M
PLUGSPBP300600	Pneumatic Plug Ø 300 - 600 Bypass 280 - 615mm	1 bar 15 psi	3 bar 45 psi	15.9	940	¼" 6.35mm	2" M
PLUGSPBP6001200	Pneumatic Plug Ø 600 - 1200 Bypass 510 - 1270mm	1 bar 15 psi	1,72 bar 25 psi	56.7	2146	¼" 6.35mm	3" M

**FIG. 1** Standard Pneumatic Plug**FIG. 2** Bypass Pneumatic Plug

**TABLE 3** Large Bypass Pneumatic Plugs

Code	Description	Max Back Pressure	Inflation Pressure	Product Weight (kg)	Deflated Length (mm)	Inflation Valve Thread size	Bypass Diameter (NPT)
PLUGSPBP200300L	Pneumatic Plug Ø 200 - 300 Bypass 178 - 311mm	1 bar 15 psi	3 bar 45 psi	5.5	470	¼ " 6.35mm	6" M
PLUGSPBP300450L	Pneumatic Plug Ø 300 - 450 Bypass 286 - 464mm	1 bar 15 psi	3 bar 45 psi	12.7	630	¼ " 6.35mm	6" M

**TABLE 4** Accessories

Code	Description
HOSEA06C	Hose 6m Air c/w Inflation Fittings
PLUGV1/4	Plug Inflation Valve ¼"

**FIG. 3** Large Bypass Pneumatic Plug**FIG. 4** Air Hose 6m

Scan for more  
information

**Disclaimer:** While every effort has been made to ensure that the information in this document is correct and accurate, users of Hygrade Water product or information within this document must make their own assessment of suitability for their particular application. Product dimensions are nominal only, and should be verified if critical to a particular installation. No warranty is either expressed, implied, or statutory made by Hygrade Water unless expressly stated in any sale and purchase agreement entered into between Hygrade Water and the user.

January 2024