



# Pneumatic Test Plugs

Technical Guide D10.13

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



01.24 | DRAINAGE | D10.13 PNEUMATIC PIPE PLUGS

## Application

A range of inflatable plugs for blocking, flow diversion and air/hydrostatic testing of pipelines.

## Product Attributes

Standard Schrader valve (tyre valve) on all plugs

Extensive size range available from 20 up to 2400 mm plugs

Plugs will fit out of round pipes

## Quality

ISO 9001:2008 Quality Management Standard

*We are the supply partner of choice for New Zealand's civil construction industry, specialising in water and infrastructure based solutions.*

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	¾ " 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	¾ " 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

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