



Code Explanation	
Product code	Coil length (metres)
NEXUS110.100	
	OD (mm)

Nexus Series (punched)

Nexuscoil Series (unpunched)

Nexus™ is a double wall polyethylene pipe, combining a smooth inner wall with a corrugated outer wall. During manufacture, the two walls are welded together. This results in a high stiffness wall section with smooth bore flow performance. Nexusflo is punched while Nexuscoil is unpunched. Nexus™ is available in the standard sizes 65mm, 110mm, 160mm as well as a new 200mm diameter.

FEATURES AND BENEFITS

- Efficient** Nexus™ smooth bore construction improves flow characteristics leading to earlier peak flow results.
- Reliable** Nexus™ smooth bore construction maintains a high water velocity in the pipe, making it self cleaning and less prone to silting up.
- Flexible** Nexus™ corrugated outer wall and polyethylene construction give it excellent flexibility and strength.
- Compatible** Nexus™ is compatible with Novaflo™ and Novacoil as well as a number of PVC pipeline products manufactured by Iplex Pipelines.
- Versatile** Nexus™ is available in the standard sizes 65mm, 110mm, 160mm as well as 200mm. The new 200mm diameter allows the possibility of designing open culverts out of some land drainage schemes thereby increasing productive area. In the Nexuscoil version 5 metre lengths are available which can be used as cost effective culvert pipes. Nexus is available in lengths as well as a large range of coil sizes and together with a range of compatible fittings this provides drainage solutions for a wide range of situations.
- Suitable** Nexus™ smooth bore construction allows installation in lower gradient situations.
- Durable** The double wall construction of Nexus™ allows Iplex Pipelines to offer a guaranteed stiffness resulting in a more robust product.
- Economical** The improved flow characteristics brought about by Nexus™ smooth bore technology can lead to savings by:
 - increasing drainage row spacings
 - decreasing pipe diameter in low gradient situations
 - decreasing pipe diameter because of better hydraulic performance.
 Nexus™ light weight and ease of installation makes this product cost effective to install.
- Quality** Nexus™ technology offers the New Zealand land drainage market a new level of performance. Nexus is manufactured in New Zealand by Iplex Pipelines using a quality system accredited to ISO 9002:1987.
- Visible** Colour coded for easy identification

PRODUCT RANGE

	Diameter OD (mm)	Length or Coil Size (metres)	Colour of pipe & stripe
Nexusflo (Punched)	65	3, 15, 30, 150	Black with blue stripe
	110	3, 15, 30, 50, 100, 450	Black with blue stripe
	160	45, 200	Black with blue stripe
	200	5	Black with blue stripe
Nexuscoil (Unpunched)	65	15, 30, 150	Black with yellow stripe
	110	5, 15, 30, 50, 100, 450	Black with yellow stripe
	160	5, 45, 200	Black with yellow stripe
	200	5	Black with yellow stripe

How to lay Nexus

NEXUSFLO can work effectively on low gradients. The minimum grade (slope) allowed for trench and pipe should be as follows:

Nexusflo nominal OD (mm)	Min. recommended gradient (%)*	Min. recommended gradient (m)*	Max. recommended gradient (m)
			Existing corrugated Novaflo™
65	0.2	1 in 500	1 in 330
110	0.1	1 in 1000	1 in 400
160	0.07	1 in 1500	1 in 1000
200	0.05	1 in 2000	n/a

*Based upon minimum recommended flow velocity of 0.2m/sec (small risk of silting, or clay particles and fine silts). Where coarse silts or fine sands could enter the pipe, steeper gradients and higher minimum flow velocities should be used. Designers and installers of Nexusflo systems should refer to NZAB Guide to Subsurface Land Drainage – May 1988 for more information.

Flow comparison chart

Nexusflo nominal OD (mm)	Comparison Flow rates (litres/second) # Pipe running full at 0.2% (1/500) gradient	
	Nexusflo	CPT (corrugated bore)**
65	0.55	0.35
110	1.75	1.3
160	4.9	3.7
200	9.2	n/a

**As described in NZAEI Guide to Subsurface Land Drainage – May 1988.

#Based upon the Drainpipe Design Chart in NZAEI Guide to Subsurface Land Drainage – May 1988.

- Independent tests on smooth bore Nexusflo showed peak flow being achieved earlier, giving equivalent of 600 litres per hectare higher early drainage.
- Nexusflo offers a guaranteed stiffness* criteria, resulting in good load bearing resistance underground. *Tested to AS2438 part 1 'Class 200'