

Hyspec Spun Rubber Ring Joint (RRJ) Shorts

Technical Guide D1.9

Hyspec Spun Rubber Ring Joint (RRJ) short pipes are part of one of the most versatile pipeline systems available, efficiently performing in a wide range of New Zealand conditions.



Applications

Stormwater pipelines

Sewer pipelines

Low to medium pressure pipelines

Manhole entry and exit installations with starters and finishers

Compliments Hyspec RRJ pipe range

Product Attributes

Strong and durable

Flexible hydraulic joint seal

Allows for differential settlement between manhole structure and pipeline

Approvals/Standards

Hyspec Spun RRJ pipes are designed and manufactured to comply with the requirements of AS/NZS 4058 : 2007

Sustainability

Available in Hynds LC® low carbon concrete

Verifiable Carbon Footprint data available

Climate-Resilient Infrastructure

Quality/Environment/Health & Safety

ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018

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Design Specifications

- Pipes are manufactured at our Christchurch facilities and can be generally supplied as class 2, 3 and 4.
- Available in 225 – 675 mmØ.
- Designed to offer a hydraulic seal throughout the pipeline up to an internal pressure of 90 kPa (9 metre head). The Hyspec joint is designed to allow this seal while still offering the benefits of a flexible joint.
- Hyspec Spun Concrete Rubber Ring Joint Pipe Shorts are interchangeable with the standard range of Hyspec Rubber Ring Joint pipes and as detailed in D1.1 Hyspec Spun Concrete Rubber Ring Joint Pipes.
- Pipe shorts paired with starters and finishers, are often used adjacent to manhole entry and exits.
- Pipe shorts allow for differential settlement between manhole structures and the pipeline.

Installation

- Same process as for standard concrete pipe. Refer to D1.1 Hyspec Spun Concrete Pipe RRJ for further details and diagrams.



TABLE 1 Dimensions For Hynds Hyspec Spun Reinforced Concrete RRJ Pipes (Shorts)

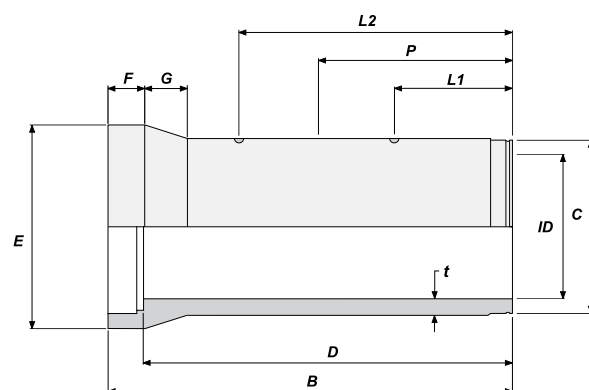
	Ref	Nominal Pipe Diameter							
		225	225 L	300	375	450	525	600	675
Internal Diameter	ID	222	222	302	380	457	533	610	686
Wall Thickness	T	30	30	32	32	39	41	45	47
Weight Of Pipe	(Kg)	51	124	96	164	237	397	494	583
Effective Length		605	1814	905	1202	1202	1725	1725	1728
Overall Length	B	670	1889	980	1282	1282	1820	1820	1820
Barrel Diameter	C	282	282	366	444	535	615	700	780
Barrel Length		600	1809	900	1197	1197	1720	1720	1720
Nominal Laying Gap		5	5	5	5	5	5	5	8
Collar Diameter	E	370	370	450	540	640	730	820	910
Collar Length	F	70	70	77	85	120	146	146	146
Bell Length	G	90	90	90	95	115	135	135	135

- Internal diameter and wall thickness values given are for Class 2.
- All dimensions are in mm and rounded up to nearest whole number.
- Weights in kg are based on a spun concrete density of 2550 kg/m³.
- Effective length values given include nominal laying gap.

TABLE 2 Hyspec Joint Performance Chart

Pipe Diameter	Recommended Offsets			Maximum Offsets		
	Offset (mm)	Offset (degrees)	Centreline Radius (m)	Offset (mm)	Offset (degrees)	Centreline Radius (m)
225	13	1.19	33	25	2.38	16
300	15	0.92	56	29	1.84	28
375	16	0.76	85	32	1.52	43
450	13	0.64	120	27	1.28	60
525	19	0.64	120	39	1.28	60
600	17	0.57	135	34	1.14	68
675	15	0.5	154	30	1	77

- Refer to D1.1 Hyspec Spun Concrete RRJ Pipe for notations and diagrams.
- Pipe Shorts are interchangeable with our standard lengths and as detailed in D1.1 Hyspec Spun Concrete Pipe RRJ.
- Pipes are manufactured at our Christchurch facilities.
- Lifting anchors are only available in pipes that are 600mm and larger diameter versions.

**FIG. 1** Technical Drawing

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Disclaimer: While every effort has been made to ensure that the information in this document is correct and accurate, users of Hynds 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 Hynds unless expressly stated in any sale and purchase agreement entered into between Hynds and the user.

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