















# INFLATABLE RINGS

## Technical Specifications

GUL produces a range of application specific inflatable type transduction rings for the inspections of large size piping (typically between 6" and 36" in diameter). Larger sizes (greater than 36") can be inspected by joining two rings of the same type or by requesting a custom size ring (up to 96"). There are a number of transducer module options for each type of ring. In most cases, each combination of ring and modules could be used in multiple applications but some may work better than the others. This comparison table provides guidance on the suitability of each ring type and modules for a variety of common applications. However, if in doubt, please contact us for further information.

RING TYPE	 Compact®				 EFC		 HT		 HD	
	MODULE TYPE				MODULE TYPE		MODULE TYPE		MODULE TYPE	
										
	EC-Trio	EC-HD	EC-30	EC-42	Standard	Adjustable	HT	Adjustable	HD	Adjustable
Application Areas										
Generic Pipe	Recommended	Suitable	Suitable	Not suitable	Recommended	Recommended	Suitable	Recommended	Not suitable	Recommended
Typical Pipe Rack	Recommended	Suitable	Suitable	Not suitable	Suitable	Recommended	Suitable	Recommended	Not suitable	Recommended
CUI	Recommended	Not suitable	Suitable	Not suitable	Suitable	Recommended	Suitable	Recommended	Not suitable	Recommended
High Temperature Pipe (100°C and 150°C)	Suitable	Suitable	Suitable	Suitable	Suitable	Suitable	Recommended	Suitable	Suitable	Suitable
Extreme High Temperature Pipe (150°C to 350°C)	Not suitable	Not suitable	Not suitable	Not suitable	Not suitable	Not suitable	Recommended	Not suitable	Not suitable	Not suitable
Tight Access	Recommended	Recommended	Recommended	Recommended	Suitable	Suitable	Suitable	Suitable	Suitable	Suitable
Generally Corroded Pipe	Recommended	Not suitable	Suitable	Suitable	Suitable	Recommended	Suitable	Recommended	Not suitable	Recommended
Test under Supports on Clean Pipe	Suitable	Recommended	Not suitable	Not suitable	Not suitable	Suitable	Not suitable	Suitable	Recommended	Suitable
Welded Supports	Suitable	Recommended	Not suitable	Not suitable	Not suitable	Suitable	Not suitable	Suitable	Recommended	Suitable
Minimize Dead Zone	Recommended	Recommended	Suitable	Not suitable	Suitable	Recommended	Suitable	Recommended	Recommended	Recommended
Pipe with Bitumen Coating	Recommended	Not suitable	Not suitable	Recommended	Not suitable	Recommended	Not suitable	Recommended	Not suitable	Recommended
Concrete Lined Pipe	Recommended	Not suitable	Not suitable	Recommended	Not suitable	Recommended	Not suitable	Recommended	Not suitable	Recommended
Soil Interface	Recommended	Recommended	Suitable	Not suitable	Suitable	Recommended	Suitable	Recommended	Recommended	Recommended
Concrete Interface	Recommended	Recommended	Not suitable	Not suitable	Not suitable	Recommended	Not suitable	Recommended	Recommended	Recommended
Buried Pipe	Suitable	Not suitable	Not suitable	Suitable	Not suitable	Recommended	Not suitable	Suitable	Not suitable	Recommended

## TECHNICAL SPECIFICATION SUMMARY *(Subject to change)*

RING TYPE	Compact®				EFC		HT		HD	
MODULE TYPE	EC-Trio	EC-HD	EC-30	EC-42	Standard	Adjustable	HT	Adjustable	HD	Adjustable
<b>Available sizes</b>										
Nominal Pipe Sizes (NPS)	5" to 40" (DN 125 to 900)				6" to 36" (DN 150 to 900)		6" to 36" (DN 150 to 900)		6" to 36" (DN 150 to 900)	
<b>Module Features</b>										
Transducer Type	EC				SD	ST	HT	ST	HD	ST
Multiple Transducer Spacing	Yes	No	No	No	No	Yes	No	Yes	No	Yes
Operating Frequency Range	Low - High	Very High	Standard	Low	Standard	Very Low - High	Standard	Very Low - High	Very High	Very Low - High
Module Connection	USB				MCX		MCX		MCX	
Module Weight	174g	160g	130g	130g	179g	260g	253g	260g	119g	260g
Quick Module Swapping	Yes				No	Yes	No	Yes	No	Yes
<b>Ring Features</b>										
Closing Mechanism	Latch				Ratchet		Ratchet		Ratchet	
Interchangeable Modules					Yes					
Coupling Method					Pneumatic					
Pressure Sensor	No				No		Yes		Yes	
Orientation Sensor	Yes				No		Yes		Yes	
Temperature Sensor	Yes				No		Yes		Yes	
Ring Joining					Yes					
Automatic Module Recognition	Yes				No		No		No	
Lightweight Design	Yes				No		No		No	
<b>Physical Characteristics</b>										
Radial Clearance	38mm [1.5"]				63mm [2.5 inch]		63mm [2.5"]		63mm [2.5"]	
Axial Clearance	14cm [5.6"]				21.5cm [8.5 inch]		21.5cm [8.5"]		21.5cm [8.5"]	
Operating Temperature	-40°C to 150°C [-40°F to 302°F]				-40°C to 150°C [-40°F to 302°F]		-40°C to 350°C [-40°F to 662°F]		-40°C to 150°C [-40°F to 302°F]	
<b>Interface</b>										
Connectivity to Wavemaker®					Multi-channel Lemo® connection cable					
Auto Ring Recognition					Yes					
Number of Channels	12 <sup>(1)</sup> or 16		24		12 <sup>(1)</sup> or 16		12 <sup>(1)</sup> or 16		12 <sup>(1)</sup> or 16	
System Compatibility					Wavemaker® G4 & Wavemaker® G4 <sup>mini</sup> <sup>(2)</sup>					

<sup>(1)</sup> Only available for 6" size.

<sup>(2)</sup> EC-HD & HD Modules require either a Wavemaker® G4<sup>mini</sup> Full, a Wavemaker® G4<sup>mini</sup> Base with Plant package or a Wavemaker® G4 with the MF option.