



MORPHISIS® *Annulus Swellable Packer* *For Completion Applications*

Weatherford's *MORPHISIS* series of annulus swellable packers is a fit-for-purpose modular tool kit that enables operators to install customized swellable packer systems in openhole applications and well construction projects. Installation of the modular swellable elements on standard tubulars is straightforward using Weatherford's proprietary slide-on installation tool. The short, modular elements rotate and reciprocate freely on the base pipe before setting, contributing to deployment success through tight doglegs or highly deviated well sections. When configured with Weatherford's centralizing Swell Cage® technology, deployment efficiency can be improved. The combination of Weatherford's advanced swelling elastomer technology and *MORPHISIS* modular system provides operators with ultimate control over their swellable packer requirements.

Applications

- Interzonal and point-anomaly (shale, fracture, water) isolation
- Isolation of fluid contacts
- Gas- and water-coning management
- Reservoir compartmentalization, wellbore segmentation
- Cementing and perforating placement
- Isolation, stimulation and/or frac jobs
- Straddle isolation systems
- Isolation at lateral junction or milled window
- Casing-shoe integrity/sustained casing pressure isolation

Features, Advantages and Benefits

- Fully customizable swellable isolation system enables fit-for-purpose design and operations flexibility.
- The modular system can be installed on the operator's base pipe as it is run in the hole, enabling faster run times.
- No moving parts allows for easy deployment, reducing well construction costs and required rig personnel.



Three-Packer Configuration

MORPHISIS® Annulus Swellable Packer

For Completion Applications

Features, Advantages and Benefits (continued)

- Swellable element activates through contact with wellbore fluids, sealing off the annulus enabling reseal capability for the life of the well.
- Conforming element enables isolation in irregular hole shapes and changing annular geometries.

Specifications

Basepipe size (in./mm)	2-3/8 to 7 60.3 to 177.8	
Maximum differential pressure (psi/kPa)	500/3500* Single MORPHISIS unit	
Maximum operating temperature (°F/°C)	Water swellable	280° 138°
	Oil/hybrid swellable	300° 150°
Setting time	Customizable	
Activation fluid	Aqueous or hydrocarbon	

*Depending on the number of MORPHISIS packers placed in series, standard rating is 500 psi (3,447 kPa) per packer.

Hole Size ¹ (in./mm)	Mandrel (in./mm)	Standard Element OD (in./mm)
4-3/4 120.65	2-7/8 73.03	4.50 114.30
	3-1/2 88.90	
6 152.40	3-1/2 88.90	5.65 143.51
	4-1/2 114.30	
6-1/8 155.58	3-1/2 88.90	5.75 146.05
	4-1/2 114.30	
6-1/8 155.58	3-1/2 88.90	6.15 156.21
	4-1/2 114.30	
8-1/2 215.90	5 127.00	8 203.20
	5-1/2 139.70	
	6-5/8 168.30	
	7 177.80	

¹Additional sizes are available upon request.

Options

- The MORPHISIS system offers three gauge ring options to meet specific well pressure conditions. Stop collars are available for low pressure applications, grub-screwed gauge rings for higher pressure applications, and robust torque-on gauge rings for the highest pressure applications.

For Internal Use

Link to Endeca assembly part numbers: [Morphisis Annulus Swellable Packer](#)