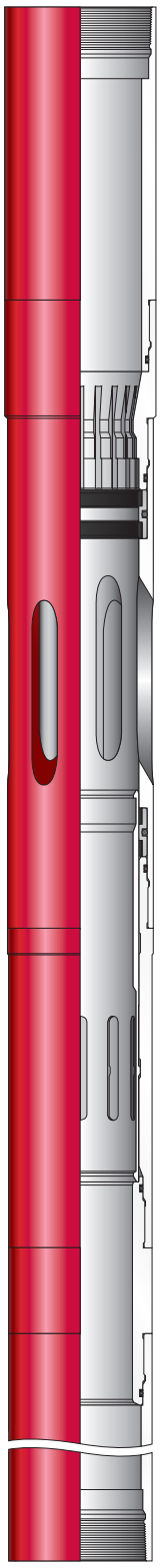
Model G2 Frac-Pack Extension



Weatherford's Model G2 frac-pack extension is a closing sleeve extension that opens and closes repeatedly with the insertion and withdrawal of the WFX crossover tool. This heavy-duty, ported extension is specifically designed for sand control in rigorous high-rate, high-pressure, gravel-packing applications, such as frac packing. The ported housing of the G2 extension is designed for maximum flow rate with minimal erosion to the extension components and the well casing. Multiple flow ports are engineered to dissipate and distribute flow to minimize unwanted turbulence.

After sand-control treatment, the G2 extension is closed to isolate the gravel-pack ports and prevent the flow of sand up the annulus and into the gravel-pack assembly. The G2 extension also allows for the effective installation of fluid-loss control or zonal isolation before the well is brought on production. The Model G2 extension uses extremely durable, bonded elastomeric seals with redundant sealing mechanisms to ensure seal integrity, even after extensive sand concentrations have flowed at high rates through the assembly. The metal components are built with high-strength steels to enable the assembly to withstand the powerful collapse forces regularly experienced in high-rate, high-pressure treatments.

Applications

- Frac packing
- Gravel packing

Features, Advantages and Benefits

- Large flow areas lessen the velocity and turbulence of sand slurries, thereby mitigating erosion-related damage to completion equipment and the well casing.
- Exit ports are phased by 60° to divide the slurry into multiple streams when exiting the work string, which dissipates slurry energy and minimizes unwanted turbulence.
- Minimal flow restriction around the tool exterior allows the slurry to flow freely, thereby reducing backpressure.
- Durable, bonded elastomeric seals help ensure the pressure integrity of the closing sleeve.
- High-strength, high-torque assembly threads allow the tool to carry heavy bottomhole assemblies (BHAs), allowing for more efficient and cost-effective completions of longer intervals. The threads also allow rotation, when necessary, to bring the BHA on depth.
- High-yield strength metals improve reliability when the G2 extension is exposed to pressure differentials, enabling deployment in high-pressure reservoirs. High-pressure differentials also occur in low- and medium-pressure reservoirs, as sand-control treatments can advance an average reservoir into a high-pressure state in an instant.

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Specifications

Standard Low Alloy Steel Assemblies

ID (in./*mm*)	OD (in./*mm*)	Length (in./*mm*)	Top Thread	Bottom Thread	Part Number
2.688 *68.28*	3.97 *100.84*	159 *4,039*	3.500 – 8 SA box	3.500 – 8 SA box	879019
4.000 *101.60*	5.81 *147.57*	182 *4,623*	5.375 – 8 SA box	4.938 – 8 SA box	914688
6.000 *152.40*	8.01 *203.45*	189 *4,801*	7.313 – 8 SA box	7.188 – 8 SA box	1215521

Standard Lower Adapters to Screen

2.688 Model G2 Closing Sleeve				
Top Thread	3.500 – 8 SA pin	3.500 – 8 SA pin	3.500 – 8 SA pin	3.500 – 8 SA pin
Bottom Thread	2 3/8 EU 8rd pin	2 3/8 NU 10rd pin	2 7/8 EU 8rd pin	2 7/8 NU 8rd pin
Part number	1142275	1142273	1142263	1142258

4.000 Model G2 Closing Sleeve				
Top Thread	5.375 – 8 SA pin	5.375 – 8 SA pin	5.375 – 8 SA pin	5.375 – 8 SA pin
Bottom Thread	3-1/2 EU 8rd pin	3-1/2 NU 10rd pin	4.000 NU 8rd pin	4-1/2 LTC pin
Part number	1142380	1142406	1142424	1142444

6.000 Model G2 Closing Sleeve		
Top Thread	7.188 – 8 SA pin	
Bottom Thread	5.00 LTC pin	5-1/2 LTC pin
Part number	1217633	1217623