

DUAL STRING HYDRAULIC PACKER

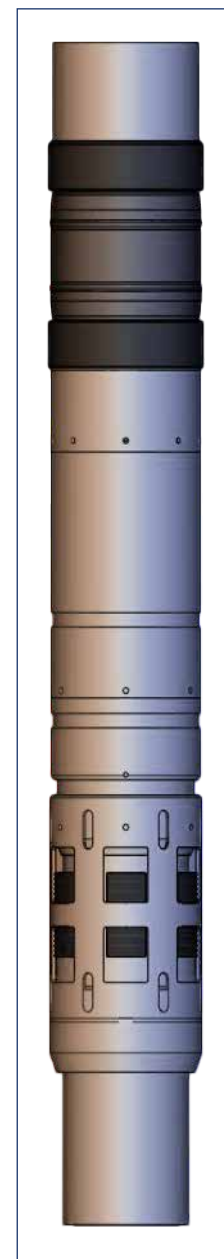


SHIELD-ESP DUAL STRING HYDRAULIC PACKER

The SHIELD-ESP packer is a single string set, retrievable packer that is contains umbilical ports for electric and control lines that are used to facilitate the installation of an electric submersible pump. M-ESP is a short, compact design make it easier for run, easier to thandle. The packer can be provided with threaded connections to accept a pack-off power cable feed-through system with cable pigtails, or a drop-through penetrator. Additional optional ports allow venting of annular pressure, fluid injection through the packer, and/or instrument wire port bypass .

SPECIAL FEATURES

- Zonal Applications
- Deviated or Horizontal Well Applications
- ESP Completions
- One Trip Hydraulic Set Operation
- Straight Pull Release, Field adjusted Shear Screw
- Seal element located above slips
- Multi-port bores for ESP Cable Feed thru
- No relative movement between electric cable and tubing avoids cable damage
- Bidirectional Slips withstand loads from above and below
- Mechanically locked in set position
- Separate gas venting string, no venting through primary or secondary strings
- Available with different material and elastomer options
- Interchangeable within various casing weights
- High Flow Volume/Low Pressure Loss Full opening ID for production string.



| Size | 7 | 7 | 9 5/8 in. | 9 5/8 in. |
|------------------------------|-----------------|-----------------|-------------------|-----------------|
| Casing Weight | 23-26# | 26-29# | 40-47# | 40-47# |
| Setting Range | 6.276-6.366 in. | 6.184-6.276 in. | 8.681 – 8.835 in. | 8.681 –8.835 in |
| Maximum OD | 6.125 in. | 6.000 in. | 8.468 in. | 8.468 in. |
| *String 1 Connection | 2-7/8 EUE Box | 2-7/8 EUE Box | 3-1/2 EUE Box | 4-1/2 EUE Box |
| String 1 ID | 2.375 in. | 2.375 in. | 2.900 in. | 3.875 in. |
| *String 2 Connection | 1.9 NUE Box | 1.9 NUE Box | 1.9 NUE Box | 1.9 NUE Box |
| String 2 ID | 1.485 in. | 1.485 in. | 1.850 in. | 1.850 in. |
| Metallic Material | L-80 | L-80 | L-80 | L-80 |
| Elastomers | HNBR/NBR | HNBR/NBR | HNBR/NBR | HNBR/NBR |
| Service Provide | Standard | Standard | Standard | Standard |
| Setting Method (Long String) | Hydraulic | Hydraulic | Hydraulic | Hydraulic |
| Trigger Pressure | 1,500 psi | 1,500 psi | 1,500 psi | 1,500 psi |
| Setting Pressure (min.) | 3000 psi | 3000 psi | 3000 psi | 3000 psi |
| Working Pressure | 5000 psi | 5000 psi | 5000 psi | 5000 psi |
| Release Type | Straight Pull | Straight Pull | Straight Pull | Straight Pull |
| **Shear Release (min.) | 40,000 lbs | 40,000 lbs | 50,000 lbs | 50,000 lbs |
| Temp. Rating | 275 F | 275 F | 275 F | 275 F |

Note:
 * Premium connections available upon request.
 * Thread Make-up Torque as per end connection.
 **Shear release is variable set.
 Other Sizes & configurations also available on the request.