

APPLICATIONS

- Perforating and cased hole logging in highly deviated and horizontal wells

FEATURES

- Common mandrel for multiple swab cup sizes
- Rigid, durable rubber swab cups

BENEFITS

- One size tool can be used for multiple casing sizes
- Flexibility with range of services



MANDREL HARDWARE SPECIFICATIONS

O.D. (in)[mm]	1-11/16 [43]
Part Number	0990-100-000-##
Max. Temp. (°F)[°C]†	400 [204]
Max. Pressure (psi)[MPa]	20,000 [138]
Length (ft)[m]	1.0 [0.31]
Weight (lbm)[kg]	5.4 [3.5]
Max. Voltage (VDC)	600
Max. Current (mA)‡	2,000
Max. Tension (lbf)[kN]	40,000 [178]
Contact Kit	0990-100-002-##
Upper Head Connection	13/16"-12 GO Box
Lower Head Connection	13/16"-12 GO Pin

† Viton O-rings need to be used above 325°F (163°C)

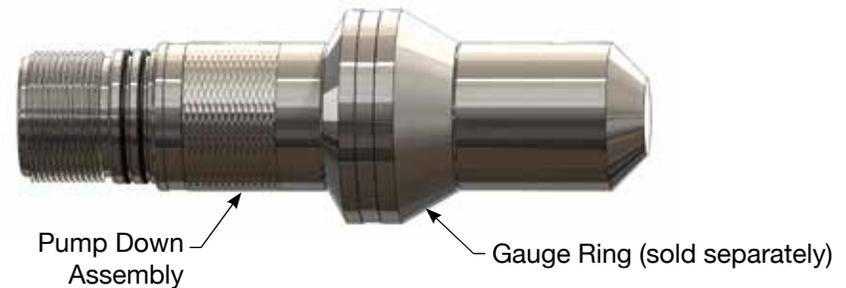
‡ Max. current 6,000mA when using high-amp contact kit

Use "HA" for high-amp - ideal for tractor operations

With the increasing complexity of wells drilled, gravity alone is not adequate for conveying wireline logging tools and perforating guns to target depth. Traditionally, expensive and time consuming operations such as tractor and E-Coil have been implemented to reach depth. It is necessary to adopt more efficient and economical means for such applications. One such method involves pumping the toolstring downhole utilizing a pump unit at surface. By increasing the cross-sectional area of the toolstring, a larger force can be generated by the fluid that is being pumped downhole by the pumping unit. With the winch driver inside the logging unit providing enough cable slack, the toolstring is effectively pumped downhole to the target depth.

Hunting's Pump Down Assemblies are available for various sizes and services. The in-line option consists of a mandrel and rigid, durable rubber swab cups. The rubber swab cups are interchangeable for different internal casing diameters with the same mandrel making it economical when operating in different casing sizes.

Perforating gun Pump Down Assemblies are also available that directly screw into the bottom of perforating guns. They utilize a metal gauge ring that acts as a swab cup. The assembly is hollow such that detonators can fit inside.



RUBBER SWAB CUPS

O.D. (in)[mm]	Assembly Part Number	Swab Cup Part Number
2 [51]	0990-100-200A	0990-100-200
2.5 [64]	0990-100-250A	0990-100-250
3 [76]	0990-100-300A	0990-100-300
3.5 [89]	0990-100-350-3	0990-301-350§
3.66 [93]	0990-100-366-3	0990-301-366§
4 [102]	0990-100-400-3	0990-301-400§
4.37 [111]	0990-100-437-3	0990-301-437§
5 [127]	0990-100-500-3	0990-301-500§

§ 3 swab cups required

PERFORATING GUN PUMP DOWN ASSEMBLIES

Gun O.D. (in)[mm]	Assembly Part Number	Gauge Ring/Swab Cup Part Number
3-1/8 [79]	0363-000-510	0363-000-516-353 (3.53in)[89.7mm]
		0363-000-516-365 (3.65in)[92.7mm]
3-3/8 [86]	0365-000-510	0363-000-516-438 (4.38in)[111.3mm]
		0363-000-516-450 (4.50in)[114.3mm]

P_Hunting-Catalog2014_002620150016