



ESP Cable Solutions Co., Limited

Cable Protector & Centralizer





COMPANY PROFILE

ESP Cable Solutions Co., Limited

specializes in oilfield drilling and completion tools research and development, production and sales. We always insist to the "Integrity, Innovation, Refinement" for enterprise purposes, to "technology, service" for the founding of the team spirit. The company has 20 employees, and has 6 senior engineers and 3 professional technical qualification engineers. The company in line with customer satisfaction as the basic principle: "Scientific Management, Technique Innovation, Quality First, Customer Satisfaction", and constantly strengthen the overall competitiveness of enterprises, the company in the competition for development, in the challenge of seeking opportunities, I believe that our company will provide you with the best quality products and service to create brilliance.

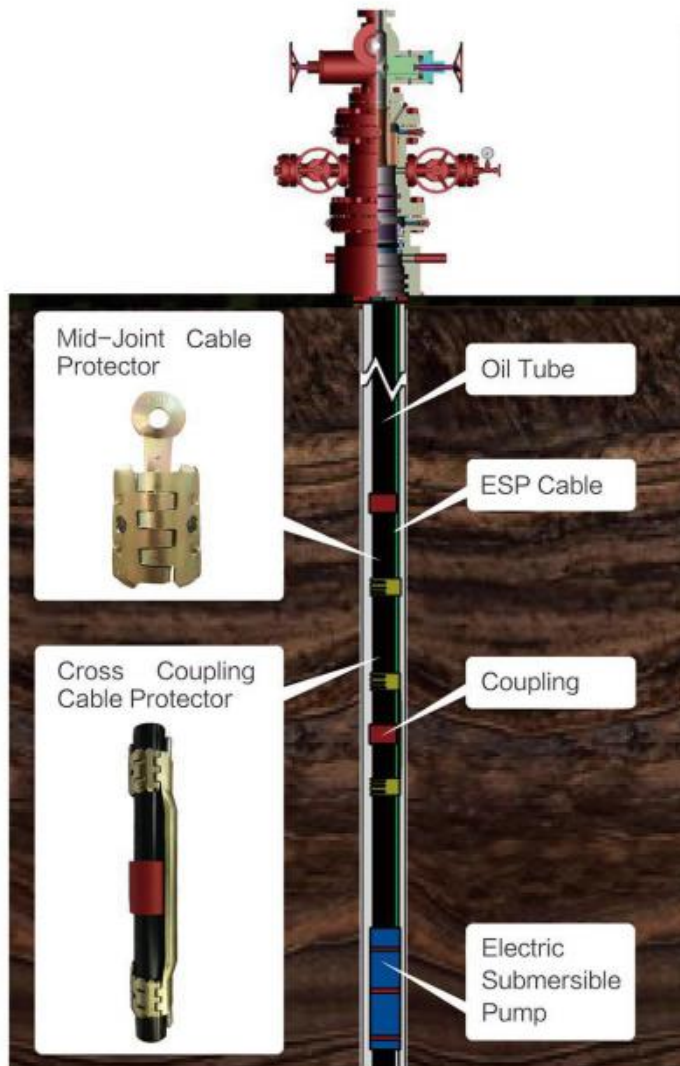


EQUIPMENT



Cable Protector

ESPCS is the most professional manufacturer for cable protectors. Stable protection of ESP cable, control line and encapsulated bundles in the wellbore.



Our cable protectors use channels to shield cables or lines as they transition across the coupling to prevent damage during installation or retrieval of completions.

Our cable protectors are widely used to protect the wide range of ESP cable, control line, umbilical lines or encapsulated bundles in the wellbore.

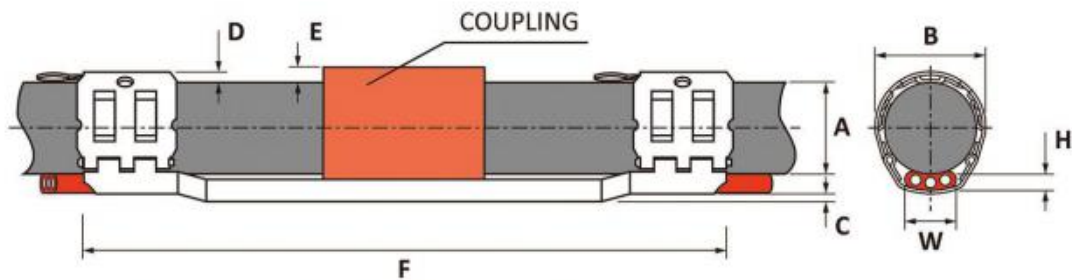
Our cable protectors uses a compressive fit design to accommodate oversize or undersize tubing per API spec and securely engage the cable or lines to the tubing.

- ★ Quickly
- ★ Safely
- ★ Efficiently

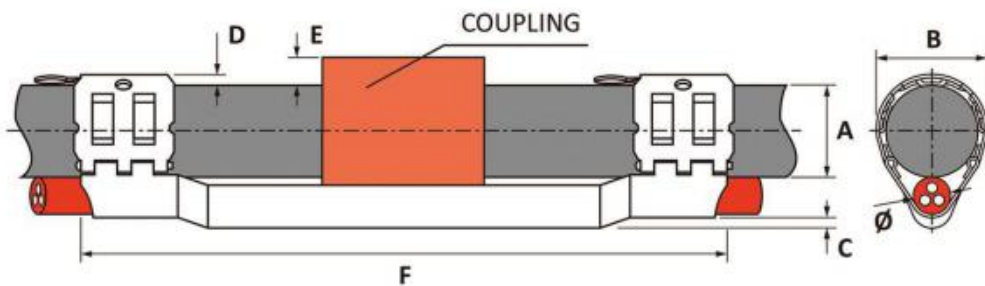


Manual and hydraulic
Tools for rapid
Installation and removal

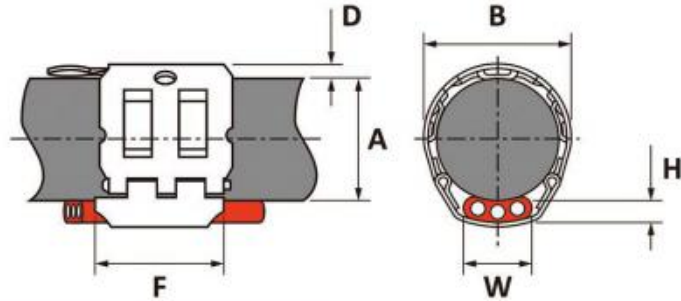
Technical Specifications



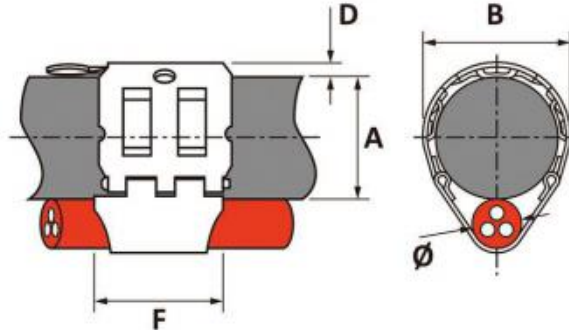
Production Tubing (A)	Collar OD (B)	Channel Offset (C)	
2-3/8"	3.16	0.39	D=0.38" for All Standard Protectors E=Coupling Dimension F=24.7" for All Standard Protectors Calculation of Running OD $A+C+H+0.12"$ (material thickness) +(Larger of D or E)
2-7/8"	3.66	0.47	
3-1/2"	4.29	0.59	
4-1/2"	5.29	0.59	
5-1/2"	6.29	0.39	
7"	7.79	0.39	



Production Tubing (A)	Collar OD (B)	Channel Offset (C)	
2-3/8"	3.16	0.39	D=0.38" for All Standard Protectors E=Coupling Dimension F=24.7" for All Standard Protectors Calculation of Running OD $A+C+Ø+0.12"$ (material thickness) +(Larger of D or E)
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7"	7.79	0.39	



Production Tubing (A)	Collar OD (B)	D=0.38" for All Standard Protectors F=3.39" for All Standard Protectors <u>Calculation of Running OD</u> A+C+H+0.12" (material thickness)
2-3/8"	3.16	
2-7/8"	3.66	
3-1/2"	4.29	
4-1/2"	5.29	
7"	7.79	

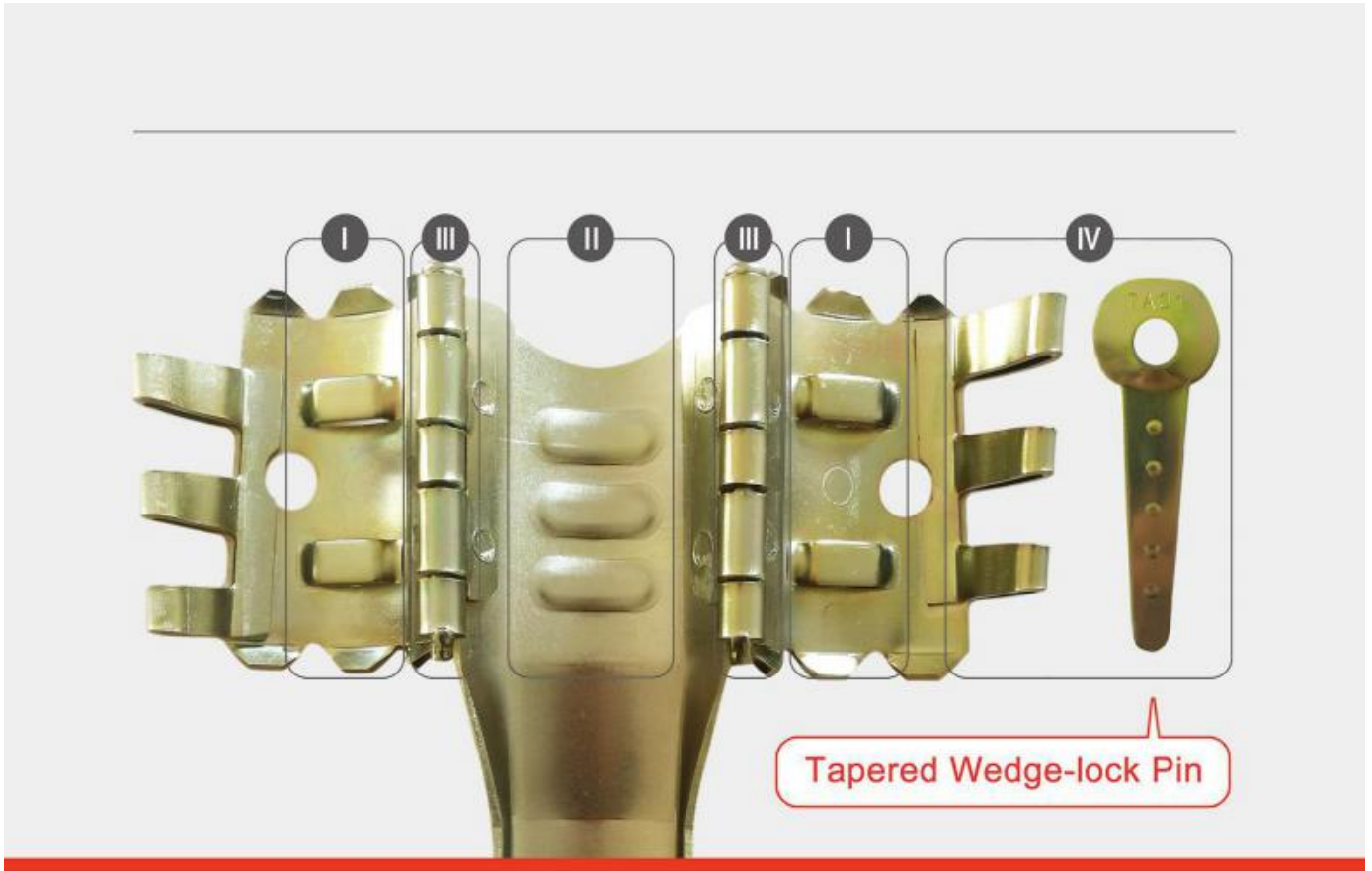


Production Tubing (A)	Collar OD (B)	D=0.38" for All Standard Protectors F=3.39" for All Standard Protectors <u>Calculation of Running OD</u> A+C+Ø+0.12" (material thickness)
2-3/8"	3.16	
2-7/8"	3.66	
3-1/2"	4.29	
4-1/2"	5.29	
7"	7.79	

* Please note that these specifications are for espcs standard sizing reference only. For actual measurements, customization requests or other enquiries, please contact Unitools representative.

- Configurations for ESP cable ,Control line , Chemical injection line
- Interchangeable design to fit tubing sizes from 2–3/8” to 7”
- Our cable protectors have double protection to resist corrosion
- Choice of hydraulic or manual tools for installation and removal
- Materials and design can be customized to user specifications

Description	Tube Size	Cable Type	Cable Size
Cable Protector 2–3/8R6–8	2–3/8"	Round	Ø6–8mm
Cable Protector 2–3/8F11/34	2–3/8"	Flat	11mm SQUARE
Cable Protector 2–3/8R32–34	2–3/8"	Round	Ø32–34mm
Cable Protector 2–7/8R6–8	2–7/8"	Round	Ø6–8mm
Cable Protector 2–7/8R30–33	2–7/8"	Round	Ø30–33mm
Cable Protector 2–7/8R34–37	2–7/8"	Round	Ø34–37mm
Cable Protector 2–7/8F11/34	2–7/8"	Flat	11mm SQUARE
Cable Protector 2–7/8F16–19/56	2–7/8"	Flat	16–19mm SQUARE
Cable Protector 2–7/8F16–19/70	2–7/8"	Flat	16–19mm SQUARE
Cable Protector 3–1/2R6–8	3–1/2"	Round	Ø6–8mm
Cable Protector 3–1/2R30–33	3–1/2"	Round	Ø30–33mm
Cable Protector 3–1/2R34–37	3–1/2"	Round	Ø34–37mm
Cable Protector 3–1/2R38–42	3–1/2"	Round	Ø38–42mm
Cable Protector 3–1/2F11/34	3–1/2"	Flat	11mm SQUARE
Cable Protector 3–1/2F16–19/60	3–1/2"	Flat	16–19mm SQUARE
Cable Protector 3–1/2F19–23/70	3–1/2"	Flat	19–23mm SQUARE
Cable Protector 4–1/2R6–8	4–1/2"	Round	Ø6–8mm
Cable Protector 4–1/2R34–37	4–1/2"	Round	Ø34–37mm
Cable Protector 4–1/2R38–42	4–1/2"	Round	Ø38–42mm
Cable Protector 4–1/2F11/34	4–1/2"	Flat	11mm SQUARE
Cable Protector 4–1/2F16–19/60	4–1/2"	Flat	16–19mm SQUARE
Cable Protector 4–1/2F19–23/60	4–1/2"	Flat	19–23mm SQUARE
Cable Protector 5–1/2R6–8	5–1/2"	Round	Ø6–8mm
Cable Protector 5–1/2R34–37	5–1/2"	Round	Ø34–37mm
Cable Protector 5–1/2R38–42	5–1/2"	Round	Ø38–42mm
Cable Protector 5–1/2F11/34	5–1/2"	Flat	11mm SQUARE
Cable Protector 5–1/2F11–16/56	5–1/2"	Flat	11–16mm SQUARE
Cable Protector 5–1/2F16–19/70DUAL	5–1/2"	Flat	19–23mm SQUARE
Cable Protector 7R6–8	7"	Round	Ø6–8mm
Cable Protector 7F11/34	7"	Flat	11mm SQUARE



Product Features

- I They will have pre-deformation to facilitate clamping ESP cable ,control line and chemical injection line.
- II Triple progressive convex pads on the channel improve gripping characteristics without compromising cable integrity.
- III Two hinge pin flanges make contact with the API tubular.
- IV Tapered wedge-lock pin with dimples to secure the clamp from slipping.

Centralizer

ESPCS is a professional manufacturer of many types centralizers, And now our company has successfully passed the certification of ISO9001, ISO14001 and OHSAS18001, what's more we passed the API Q1 and API 10D for centralizer, we insist to providing good quality products with suitable price to finding distribution partner in the world.



Welded Single Piece Bow Spring Centralizer

Features

- Produced and tested to meet API 10D specification
- Robust single piece design, suitable for onshore installation
- Tiny starting forces and restoring forces are much great than API standard
- Flexible design reduces running forces through any cased hole restrictions, has an extremely low co-efficient of friction, speed the process of running casing liners to final depth

Centralizers available in sizes from 2-7/8" to 20", please ask for more information



Semi-Rigid Centralizer



Welded Semi-Rigid Centralizer

Features

- Spiral blade and straight blade are available
- The smooth body shape reduce running force and suited to complex well designs
- Spiral blade assist with hole cleaning and cement placement, Straight blade assist in the correct placement of cement
- Size range 2-7/8" -30"