

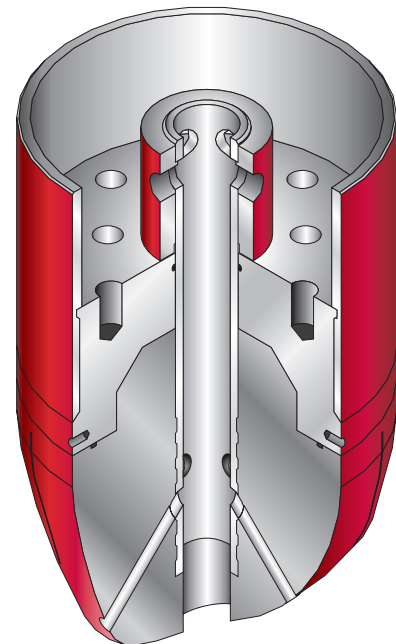


Free-Rotating Eccentric Guide Shoe

Weatherford's free-rotating eccentric guide shoe facilitates problem-free running of casing in highly deviated hole sections. The unique nose design enables the guide shoe to change orientation as casing or liners are run into the wellbore. The nose pushes against a ledge in the wellbore, which halts the progress of normal guide or float shoes. The resulting side force rotates the guide shoe away from the obstruction, thus allowing continued running of the pipe to the predetermined depth without rotation of the entire casing or liner string.

Applications

- Horizontal or high-angle wellbores
- Vertical wells in which formation lithology produces hard layers of rock with internal diameters of varying gauge
- Sidetrack and re-entry wells in which window orientation may not be known
- Heavy casing strings for which the ability to free stuck casing is limited by rig hoisting capabilities or casing design limitations



Model 204V

Features, Advantages and Benefits

- Self-aligning, PDC-drillable nose rotates with low torque to guide the casing to the path of least resistance.
- All-plastic design reduces drag as the guide shoe pushes past obstructions, expediting operations and eliminating the need to rotate the casing.
- Offset side ports provide excellent hole cleaning characteristics.
- Equipped with drill-out slots and chip breakers, this unique, short design also makes drill-out fast and simple.
- Eccentric guide shoe configurations increase efficiency in highly deviated wellbores.



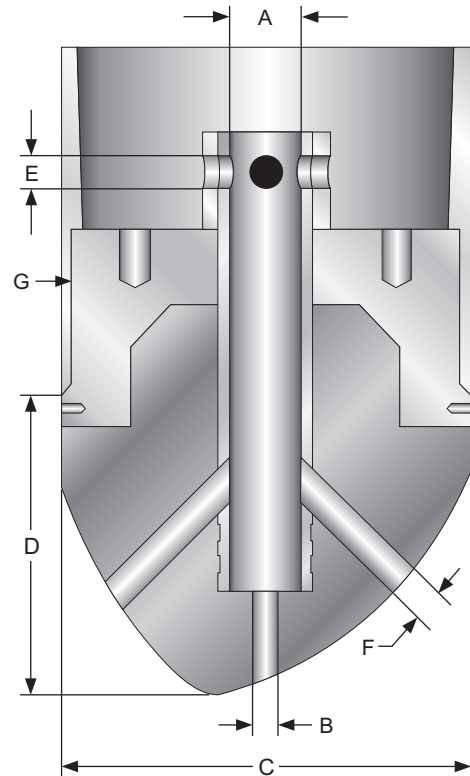
Free-Rotating Eccentric Guide Shoe

Specifications

Free-Rotating Eccentric Guide Shoe with Jets

Size* (in.)	A (in./mm)	B (in./mm)	C (in./mm)	D (in./mm)	E (in./mm)	F (in./mm)	Jet Type	G
7	2.102 53.4	1.000 25.4	7.677 195.0	20.157 512.0	4×1.260 4×32	4×1.000 4×25.4	Down	6.508-in.-6-ACME-2G
9-5/8	2.929 74.4	1.000 25.4	10.670 271.0	22.500 572.0	4×1.260 4×32	4×1.260 4×32	Down	9.125-in.-6-ACME-2G
13-3/8	2.929 74.4	1.000 25.4	14.370 365.0	26.181 665.0	4×1.260 4×32	4×1.260 4×32	Down	12.875-in.-6-ACME-2G
16	2.929 74.4	1.000 25.4	15.984 406.0	11.614 295.0	4×1.260 4×32	4×1.260 4×32	Down	15.500-in.-6-ACME-2G
18-5/8	2.929 74.4	1.000 25.4	18.620 473.0	10.905 277.0	4×1.260 4×32	4×1.260 4×32	Down	18.125-in.-4-ACME-2G
20	2.929 74.4	1.000 25.4	20.000 508.0	13.267 337.0	4×1.260 4×32	4×1.260 4×32	Down	19.500-in.-4-ACME-2G

* Other sizes available on request.



Available Configurations

- Model 204: Free-rotating eccentric nose (FREN)—downjets in nose
- Model 214: FREN—downjets in nose and up angle side ports above nose, in shell
- Model 224: FREN—downjets in nose and down angle side ports above nose, in shell