


# ROD CENTRALIZERS

OPTIMIZE YOUR ROD STRING COMPLETION  
FOR YOUR PCP OPERATION

keep it moving 



**PCM Non Rotating Centralizers are highly recommended in all PCP completions and particularly in deviated wells to protect tubing from accelerated wear that could conduct to hole in tubing.**

One Non Rotating Centralizer is also recommended at the top of the pony rod above the rotor in order to contain eccentricity motion and dampen vibration propagation along the whole rod string.

## » BENEFITS

- Protect the surface Drivehead from excessive rod vibrations
- Eliminate or reduce tubing wear and rod string wear
- Reduce torque especially in deviated wells
- Limit eccentricity vibration and propagation into the rod string

## » FEATURES

- No special tools required
- Reduce torque in deviated wells
- Reduce workover frequency
- Only worn sleeves need to be replaced during workover



#### CONSTRUCTION

Sucker rods centralizers are made up of three components:

##### Spindle:

- AISI4140 or 55NiCrMoV7 (High strength stress resistant available upon request).

##### Medium temp. sleeve:

- Kevlar-Nylon co-polymer, to resist sand embedment. Impervious to aromatics and H2S up to 120°C.

##### High temp. sleeve:

- High resistance carbon steel with heat and surface treatment. Aromatic and Steam resistant up to 350°C.
- Sleeves tapered for easy rod tripping.

##### Rod couplings:

- Supplied by PCM or supplied by customer.

#### SPECIFICATIONS

Items are delivered:

- with plastic plugs on spindles
- grease on threads

#### INSTALLATION

When a directional survey is provided, PCM will use the unmatched PCM Design software to place the rod non rotating centralizers. The Rod Centralizer location will be selected at the most suitable location in the rod string according to the maximum load expected set by the operator.

A Rod string tally is also provided in order to facilitate rod string installation.

No special tool is required.

Only worn sleeves need to be replaced during work over.

#### LIST OF AVAILABLE ITEMS

##### SPINDLE

Available for PCM Moineau™, PCM Moineau™ HR, PCM Vulcain™

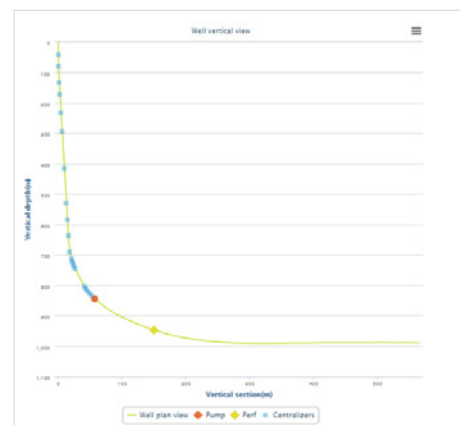
TUBING	ROD	CODE
2"3/8 - 2"7/8	3/4"	TI27803400PT
2"7/8	7/8"	TI27807800PT
3"1/2	1"	TI31210000PT
4"1/2	1"1/8	TI41211800PT
3"1/2	1"	TI312100299PT (*)

(\*) high strength raw material

##### SLEEVE MEDIUM AND HIGH TEMP

Available for PCM Moineau™, PCM Moineau™ HR, PCM Vulcain™ (depending on maximum temperature).

TUBING	ROD	CODE	Max. temp.
2"3/8	3/4"	CT23803400PT	120°C/250°F
2"7/8	3/4"	CT27803400PT	120°C/250°F
2"7/8	7/8"	CT27807800PT	120°C/250°F
3"1/2	7/8"	CT31207800PT	120°C/250°F
3"1/2	1"	CT31210000PT	120°C/250°F
4"1/2	1"	CT41210000PT	120°C/250°F
4"1/2	1"1/8	CT41211800PT	120°C/250°F
3"1/2	1"	CT31210000METPT	350°C/660°F
4"1/2	1"	CT41211800METPT	350°C/660°F
4"1/2	1"1/8	CT41211800METPT	350°C/660°F



For further information, please contact your PCM local representative :

[www.pcmals.com](http://www.pcmals.com)