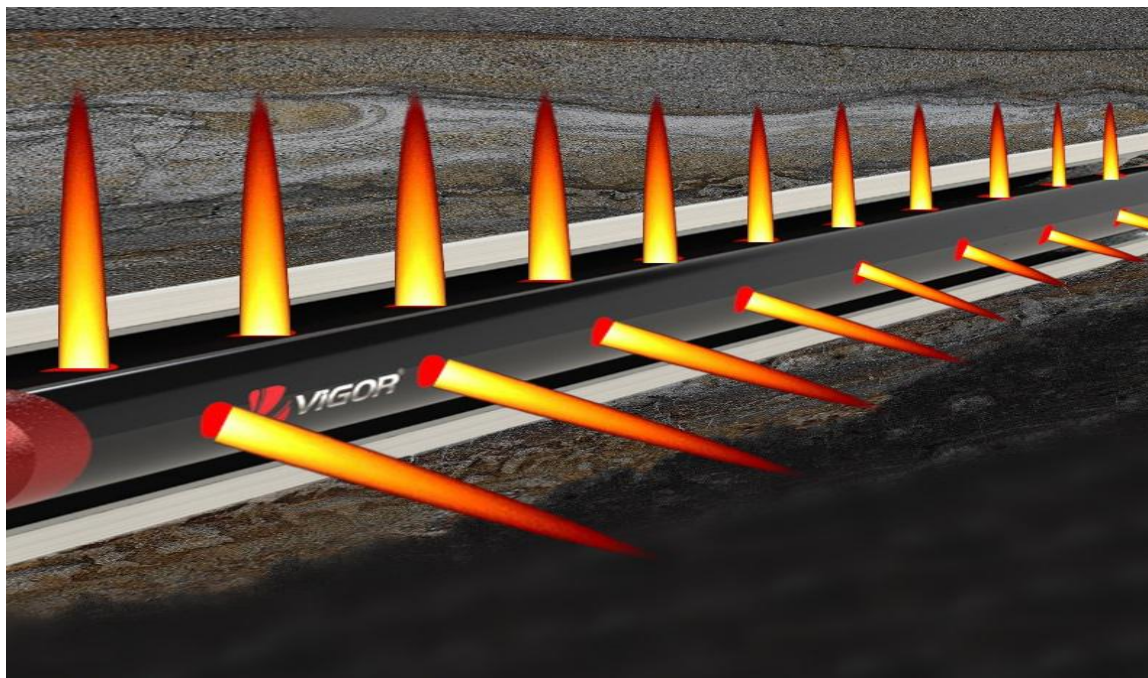


# Vigor Perforating Gun

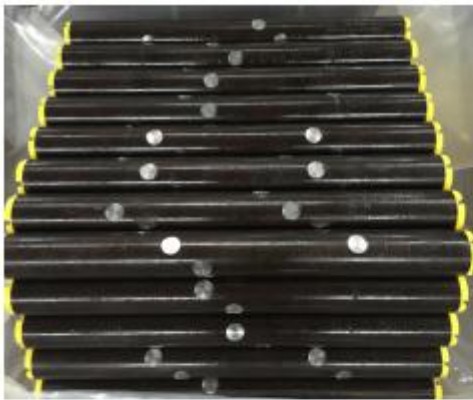
## Perforating Gun



China Vigor Perforating Guns are made of high-strength alloy steel tube, with the feature of good mechanical properties, high size precision and resistant to high temperature and pressure. There are four pressure classes: normal, high, ultra high, plus ultra high. The length, phasing degree, shot density and so on are available on request.

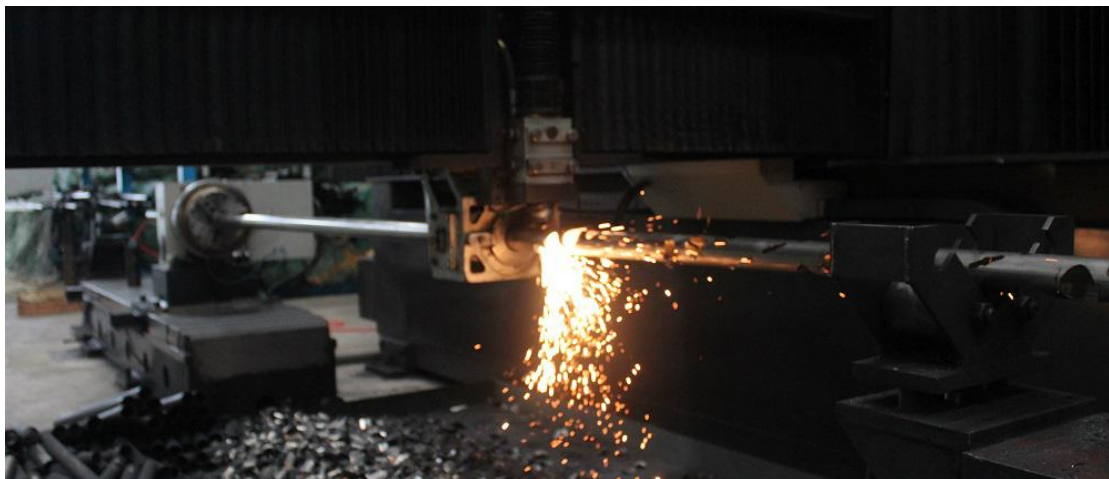
Vigor main perforation guns are for

- Tubing Conveyed Perforating (TCP)
- Wireline Conveyed Perforating (WCP)
- Customized Solution Available.



## Features:

- High strength alloy steel.
- High size precision.
- High temperature and pressure resistant.
- Unique internal structure design to provide superior perforating capabilities.
- Configurations: Scalloped and Slick, WCP & TCP.
- Compatible with industry standard charge styles and subs.
- Different options of length, phasing degree and shot density available.



## 3-1/8" Perforating Gun

### Technical Parameter

Item	Description
Total Length	20in, 1.5ft, 2ft, 2.5ft, 3ft, 4ft up to 21ft
Shot Density	4spf, 6spf
Phasing Deg	60°, 90°, 120°, 180°
Gun Body O.D.	3.125 in
Nominal Thickness	0.313 in
Pressure Rating	22000 psi

### Additional Information

Gun Body Material: Hot-Rolled or Cold-drawing, Seamless Steel Tube

Gun Body Configuration: Threaded & Scalloped

Charge Tube Type: Round Steel Tube

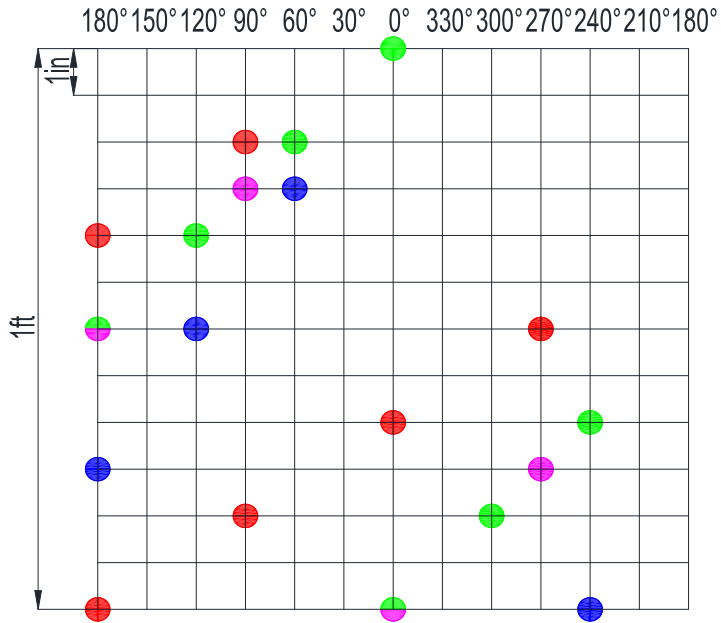
Type of Tandem Connection: Booster to Booster

O-ring Material: Nitrile-90 Durometer or Viton-95 Durometer

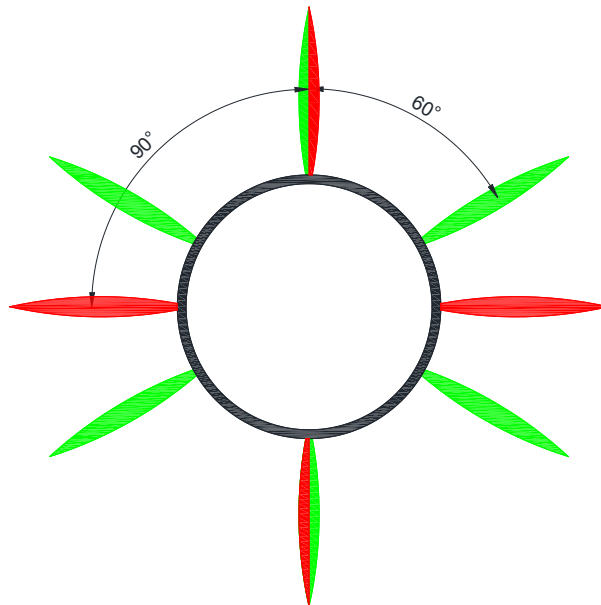
O-ring Size: O-Ring AS-230

Shaped Charges: On Request

## Shot Pattern



- 3-1/8in 6SPF 60°
- 3-1/8in 6SPF 90°
- 3-1/8in 4SPF 90°
- 3-1/8in 4SPF 60°



## 3-3/8" Perforating Gun

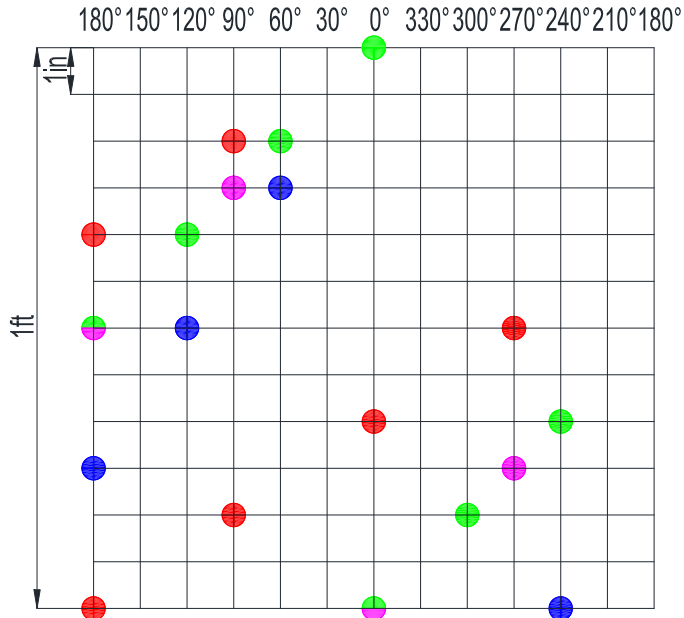
### Technical Parameter

Item	Description
Total Length	20in, 1.5ft, 2ft, 2.5ft, 3ft, 4ft
Shot Density	4spf, 6spf
Phasing Deg	60°, 90°, 120°, 180°
Gun Body O.D.	3.375 in
Nominal Thickness	0.375 in
Pressure Rating	22000 psi

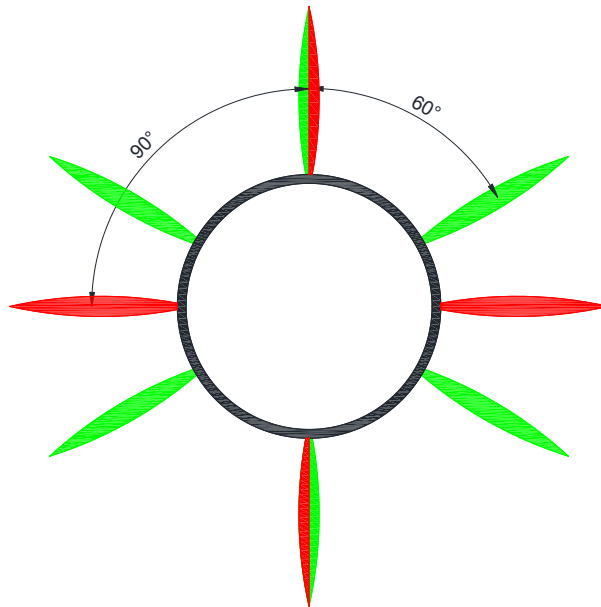
### Additional Information

- Gun Body Material: Hot-Rolled or Cold-drawing, Seamless Steel Tube
- Gun Body Configuration: Threaded & Scalloped
- Charge Tube Type: Round Steel Tube
- Type of Tandem Connection: Booster to Booster
- O-ring Material: Nitrile-90 Durometer or Viton-95 Durometer
- O-ring Size: O-Ring AS-231
- Shaped Charges: On Request

## Shot Pattern



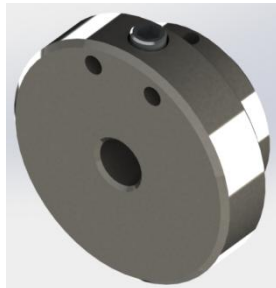
- 3-3/8in 6SPF 60°
- 3-3/8in 6SPF 90°
- 3-3/8in 4SPF 90°
- 3-3/8in 4SPF 60°



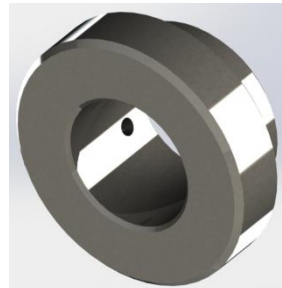
## End Plate

- ✚ China Vigor perforating gun system is designed to run on tubing conveyed and wireline perforating operations.
- ✚ China Vigor perforating gun can provide 4 different configurations of end plates to meet with different kinds of perforating projects.
- ✚ China Vigor perforating gun end plate can ensure that no interference occurs in the internal wall of the gun body. The screw in the top plate can prevent charge tube twisting and ensure that the charge tube can not move in the gun.

### CONFIGURATION VD-01



TOP PLATE

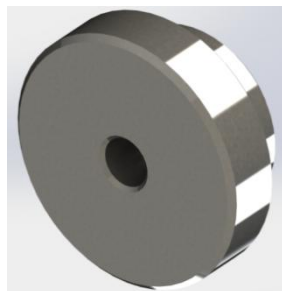


BOTTOM PLATE

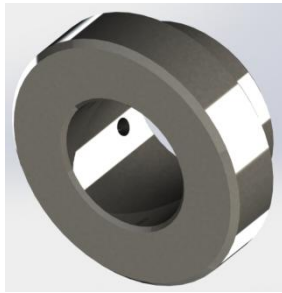
### CONFIGURATION VD-02



TOP PLATE



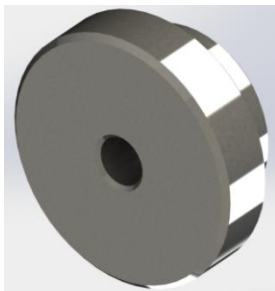
BOTTOM PLATE

**CONFIGURATION VD-03**


TOP PLATE



BOTTOM PLATE

**CONFIGURATION VD-04**


TOP PLATE



BOTTOM PLATE

**Selection Chart**

Gun Size	Type	Keyway Hole Size	Opposite Hole Size
3 1/8"	VD-01	φ12mm	φ32mm
	VD-02	φ32mm	φ12mm
	VD-03	φ32mm	φ32mm
	VD-04	φ12mm	φ12mm
3 3/8"	VD-01	φ12mm	φ35mm
	VD-02	φ35mm	φ12mm
	VD-03	φ35mm	φ35mm
	VD-04	φ12mm	φ12mm

## Other Product Specifications

We China Vigor also supply Longer Perforating Guns and used all over the world by different clients, our complete types are as the below appendix shows, you can contact us for more information.



## Appendix

No.	Vigor Serial No.	Gun Body O.D.	Hole Density	Phasing Deg	Conveyed Mode
1	V 1916	1-9/16"	4SPF 6SPF	0°, 60°, 90°, 120°, 180° 0°, 60°, 180°	WCP or TCP
2	V 2000	2"	4SPF 6SPF	0°, 60°, 90°, 120°, 180° 0°, 60°, 180°	WCP or TCP
3	V 212	2-1/2"	4SPF 6SPF	0°, 60°, 90°, 180° 0°, 60°	WCP or TCP
4	V 234	2-3/4"	4SPF 6SPF	60°, 90° 60°	WCP or TCP
5	V 278	2-7/8"	4SPF 6SPF	60°, 90° 60°	WCP or TCP
6	V 318	3-1/8"	4SPF 5SPF 6SPF 8SPF 12SPF	0°, 60°, 90°, 180° 0°, 180° 0°, 60°, 90°, 120° 135/45° 140/20°	WCP or TCP



No.	Vigor Serial No.	Gun Body O.D.	Hole Density	Phasing Deg	Conveyed Mode
7	V 338	3-3/8"	4SPF	0°, 60°, 90°, 180°	WCP or TCP
			5SPF	0°, 180°	
			6SPF	0°, 60°, 90°, 180°	
			8SPF	135/45°	
			12SPF	140/20°	
8	V 4000	4"	4SPF	90°	WCP or TCP
			6SPF	60°	
			8SPF	135/45°	
9	V 412	4-1/2"	4SPF	90°	WCP or TCP
			5SPF	60°	
			6SPF	60°	
			8SPF	135/45°	
			12SPF	135/45°	
			16SPF	140/20°	



No.	Vigor Serial No.	Gun Body O.D.	Hole Density	Phasing Deg	Conveyed Mode
10	V 458	4-5/8"	4SPF	90°	WCP or TCP
			5SPF	60°	
			6SPF	60°	
			8SPF	135/45°	
			12SPF	135/45°	
			16SPF	140/20°	
11	V 518	5-1/8"	12SPF	135/45°	WCP or TCP
			16SPF	135/45°	
12	V 7000	7"	12SPF	135/45°	WCP or TCP