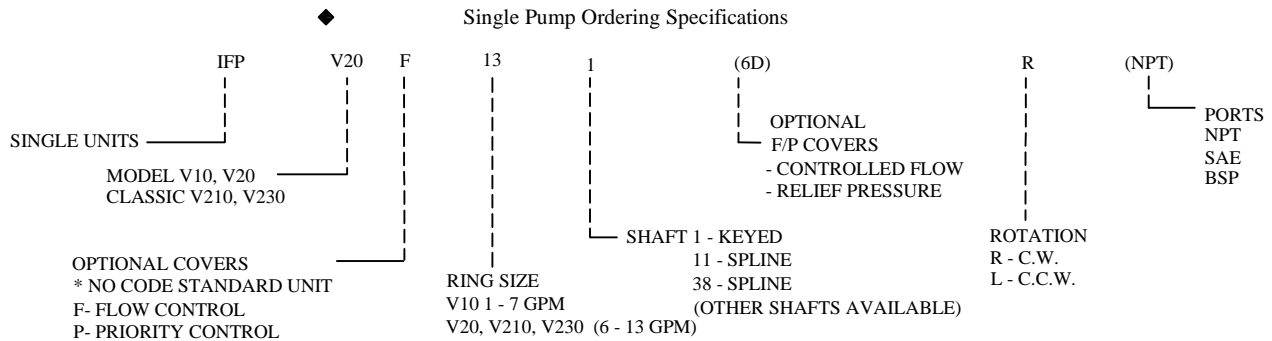
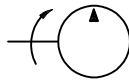


IFP SINGLE VANE PUMPS

V10/V20 - V210/V230



- * High Performance
- * Low Cost
- * Extended Life
- * Versatile
- * Compact
- * Quiet Operation
- * Balanced Cartridge Design



Values based on using anti-wear type petroleum oil 150 SUS at 100°F and 0 PSI inlet pressure.

MODEL SERIES	RING SIZE (DELIVERY USgpm @ 1200 R/MIN & 100 PSI)	DISPL. in ³ /r	MAXIMUM SPEED (RPM)	MAXIMUM PRESSURE (PSI)	TYPICAL DELIVERY (USgpm) @max. speed & pressure	TYPICAL INPUT POWER (HP) @max. speed & pressure	WEIGHT (lbs.)
V10	1	0.20	4800	2500	3.60	07.0	(10 - 15)
	2	0.40	4500	2500	7.30	13.6	
	3	0.60	4000	2500	9.40	17.8	
	4	0.80	3400	2500	10.9	20.4	
	5	1.00	3200	2500	12.8	22.8	
	6	1.19	3000	2500	14.6	26.0	
	7	1.39	2800	2500	16.0	28.0	
V20 V210 V230	6	1.19	3400	2500	16.1	29.0	(16 - 18)
	7	1.39	3000	2500	16.7	29.5	
	8	1.62	2800	2500	17.7	32.5	
	9	1.80	2800	2500	19.8	35.5	
	11	2.22	2500	2500	22.9	37.5	
	12	2.38	2400	2500	23.0	38.5	
	13	2.59	2400	2500	25.9	42.0	

IFP offers a complete line of economical high performance fixed displacement vane pumps providing flows up to 26 US GPM for mobile and industrial applications. Balanced vane design provides quiet operation, high efficiency and long service life for the toughest applications. Units are designed for use with oil or synthetic fire resistant fluid. A large combination of Spline/Keyed Shafts and factory tested cartridges are available for fast, easy conversion and repair. Units are self-priming. However, before starting, fill the pump with system fluid through uppermost port. The housing must be kept full at all times to provide internal lubrication.

IFP V10 SINGLE VANE PUMP INSTALLATION DIMENSION

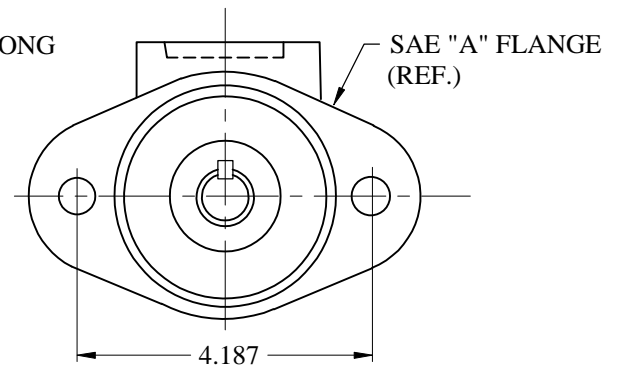
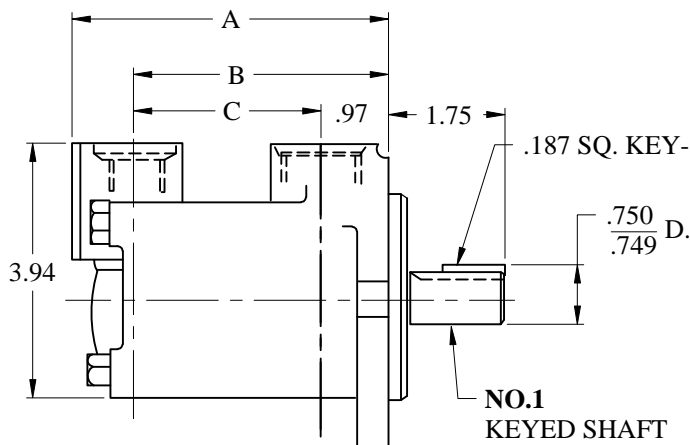
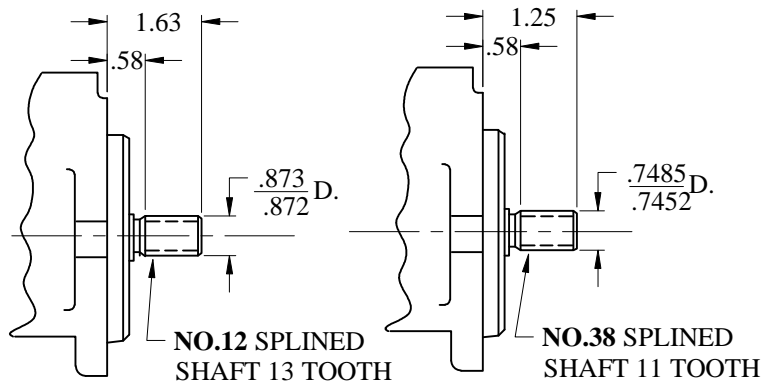
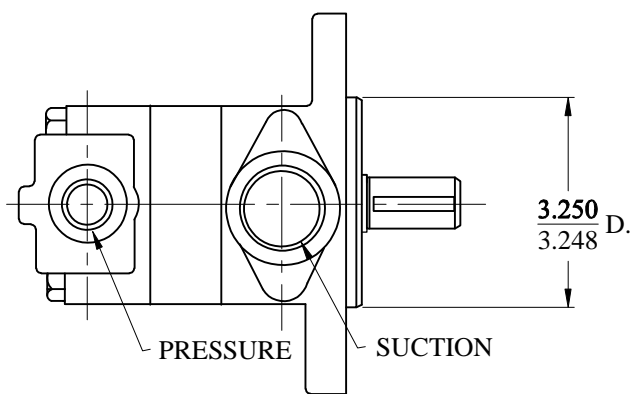
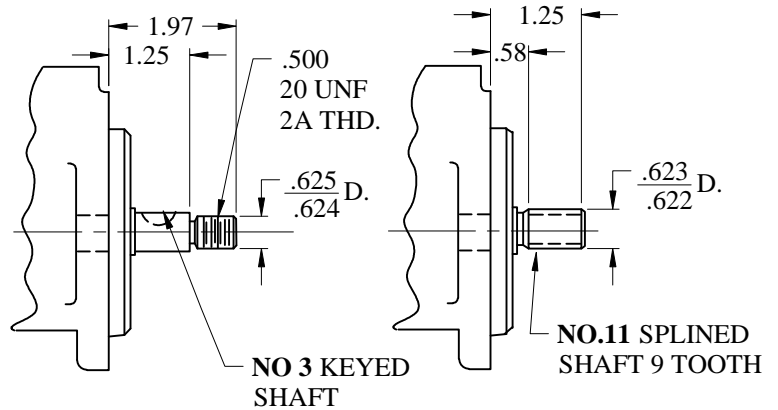


DIMENSION (inches)

DELIVERY @ 1200 RPM & 100 PSI	DIMENSION		
	A	B	C
1 GPM	4.55	3.62	2.65
2 GPM	4.55	3.62	2.65
3 GPM	4.55	3.62	2.65
4 GPM	4.80	3.87	2.90
5 GPM	4.85	3.87	2.90
6 GPM	5.00	4.07	3.10
7 GPM	5.00	4.07	3.10

Weight 10 - 15 lbs
 Pressure: 1/2" NPT
 Suction: 1" NPT
 Optional BSPT/SAE Ports available.

V10 series Optional Shafts



Foot Bracket available
 Part # - IFB - A (see page J 1.1)

FLOW CONTROL/PRIORITY COVERS AVAILABLE.
 (SEE Page A2.5)

IFP V20/V210/V230 SINGLE VANE PUMP INSTALLATION DIMENSION

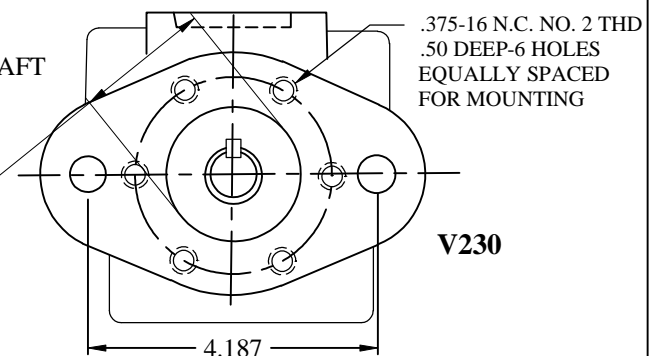
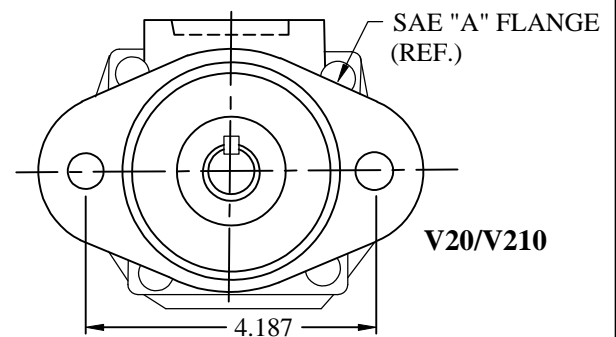
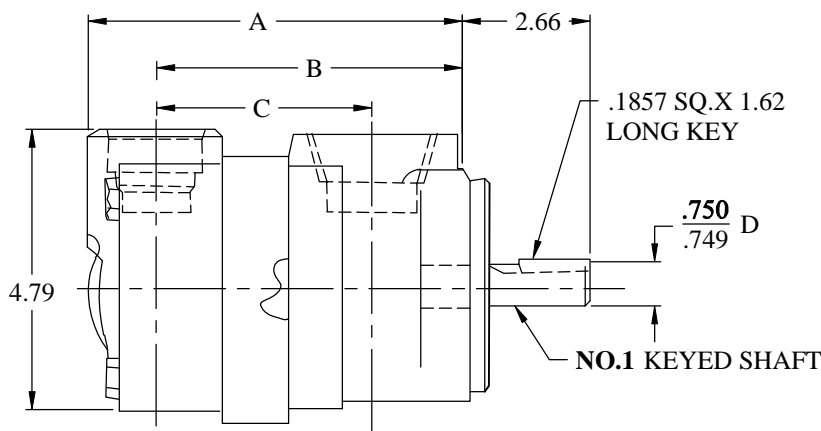
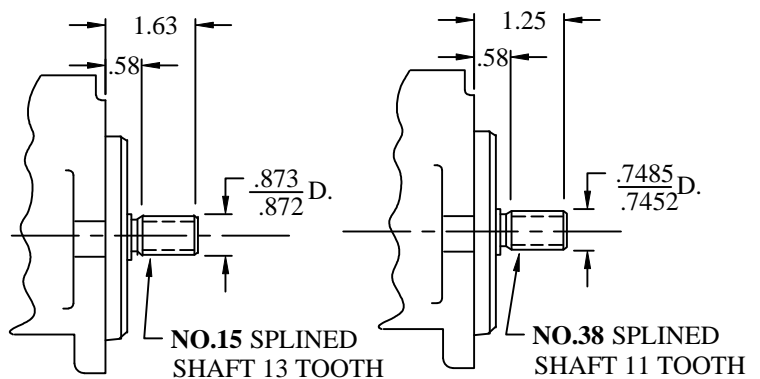
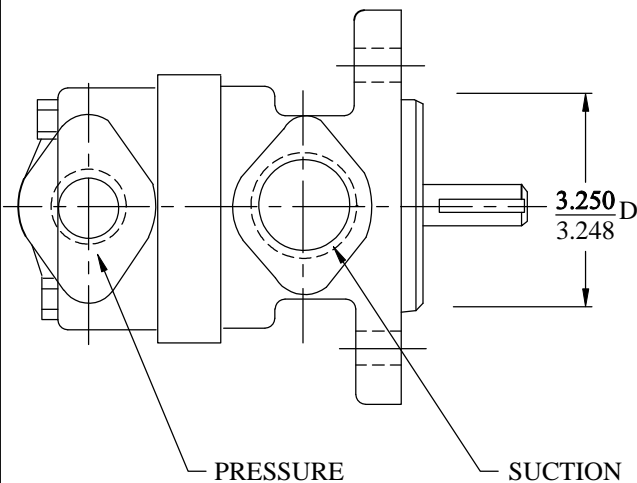
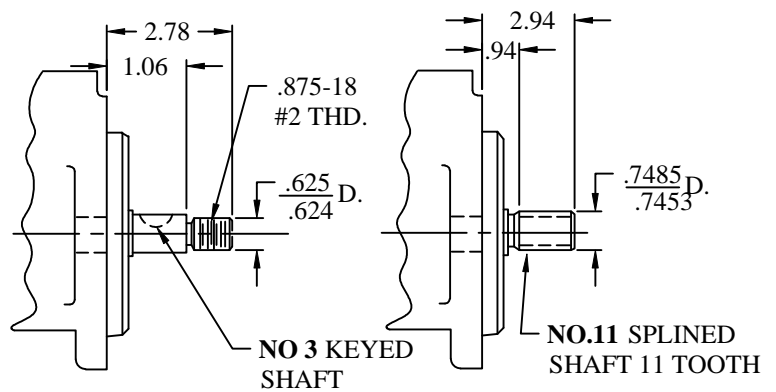


DIMENSION (inches)

DELIVERY @ 1200 RPM & 100 PSI	DIMENSION		
	A	B	C
6	4.93	4.02	2.80
7	5.18	4.27	3.05
8	5.18	4.27	3.05
9	5.18	4.27	3.05
11	5.38	4.47	3.25
12	5.52	4.61	3.39
13	5.52	4.61	3.39

Weight 16 - 18 lbs
 Pressure: 3/4" NPT
 Suction: (V20) 1-1/4" NPT, (V210) 1" NPT
 Optional BSPT/SAE Ports available.

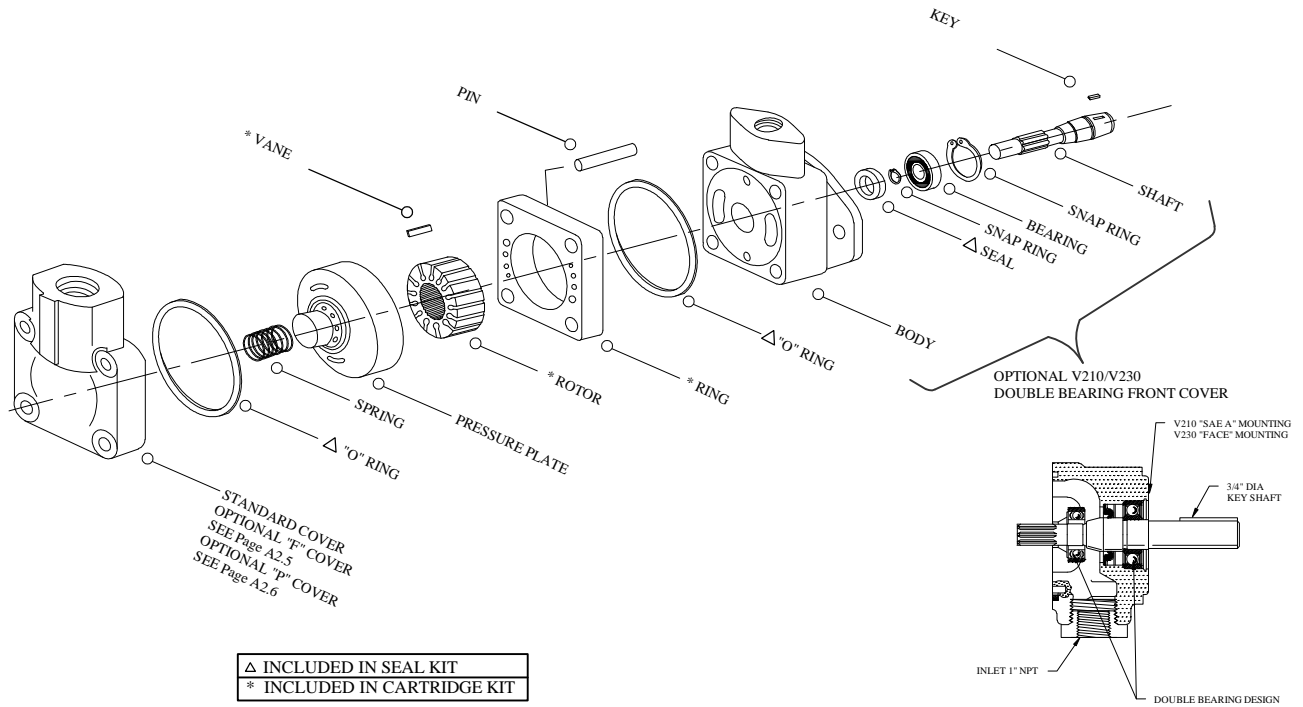
V20 series Optional Shafts



Foot Bracket available
 Part # - IFB - A (see page J 1.1)

**FLOW CONTROL/PRIORITY COVERS AVAILABLE.
 (SEE Page A2.5)**

IFP V10/V20/V210/V230 VANE PUMP SERVICE PARTS INFORMATION



△ INCLUDED IN SEAL KIT
* INCLUDED IN CARTRIDGE KIT

PUMP SE	C. KIT	ROTOR	VANES	RING	SEAL	SEAL KIT	BEARING	PR. PL.	SPRING	BODY	COVER	SHAFT NO.
V10...1	923471N	317681N	923499N	317674N	263585N	923548N	148423N	374343N	345262N	352699N	372863N	SHAFT 1 NO.374338N
...2	923470N			317675N	VITON	VITON						SHAFT 3 NO.374340N
...3	923496N			317676N	388205N	919772N						SHAFT 4 NO.378959N
...4	923469N	351247N	923500N	317677N								SHAFT 6 NO.382250N
...5	923468N			317678N								SHAFT 11 NO.374339N
...6	923497N	357268N	923501N	355641N								SHAFT 12 NO. 375480N
...7	923498N			331813N								SHAFT 38 NO. 387481N
V20...5	924076N	358328N	923485N	388284N	229235N	922733N	098574N	359287N	28422N	V20	313657N	V20
(V210)...6	923480N			328150N	VITON	VITON				280689N		SHAFT 1 NO.280372N
(V230)...7	923481N	358330N	923493N	328152N	279499N	919805N				V210		SHAFT 3 NO.280504N
...8	923483N			331791N						280210N		SHAFT 6 NO.297330N
...9	923484N			331789N						V230		SHAFT 11 NO.280515N
...10	923620N	358332N	923478N	374309N						280230N		SHAFT 15 NO.294922N
...11	923482N			328156N								SHAFT 38 NO.328096N
...12	923486N	358334N	923479N	331806N								V210/V230
...13	923487N			331807N								SHAFT 1 NO.280210N

- All cartridge assemblies are factory tested prior to shipping -

Rear Cover Bolt Torque

V10	40 FT./LBS
V20	80 FT./LBS

Changing Cartridge Rotation

Assemble the ring using the locating pins for alignment making sure the arrow on the perimeter point's in the proper direction of rotation. Install the rotor on shaft and insert vanes in the rotor slots. Be certain the radius edges of the vanes are towards the cam ring.

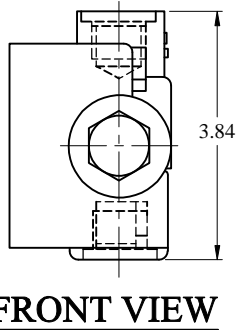
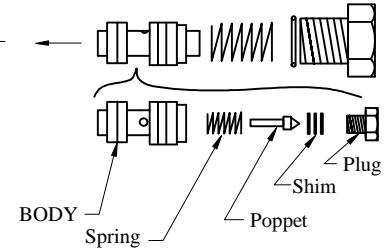
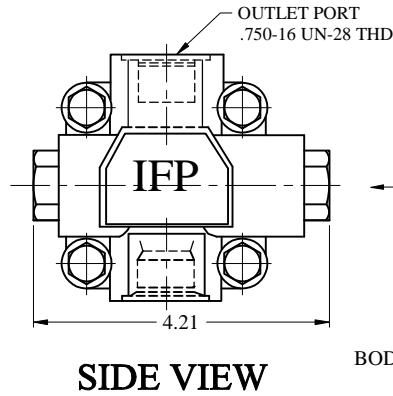
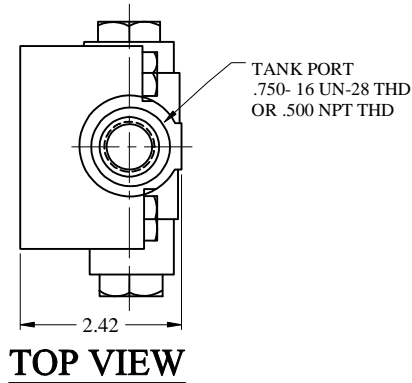
FLOW CONTROL/PRIORITY COVER AVAILABLE

IFP FLOW CONTROL/RELIEF COVER V10/V20F



V10F

PART NUMBER
IFP 379543N



FLOW RATE ORIFICE		RELIEF VALVE NUMBER / PRESSURE SETTING					
2	-2 USgpm	A-	250psi	229613N	H-	2000psi	232799N
3	-3 USgpm	B-	500psi	233018N	J-	2250psi	233019N
4	-4 USgpm	C-	750psi	232794N	K-	2500psi	233020N
5	-5 USgpm	D-	1000psi	232795N	BODY		700283N
6	-6 USgpm	E-	1250psi	232796N	SPRING		700285N
7	-7 USgpm	F-	1500psi	232797N	POPPET		700284N
8	-8 USgpm	G-	1750psi	232798N	SHIM		700890N

FLOW CONTROL RELIEF VALVE

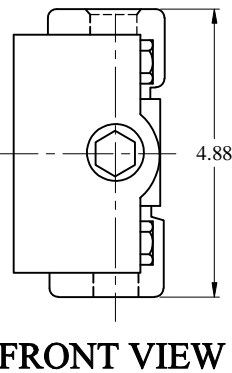
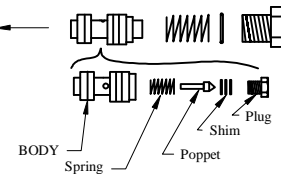
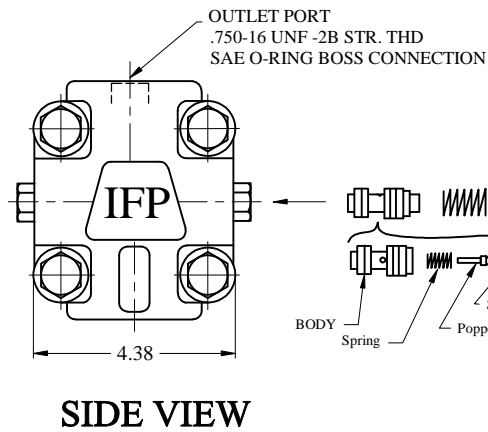
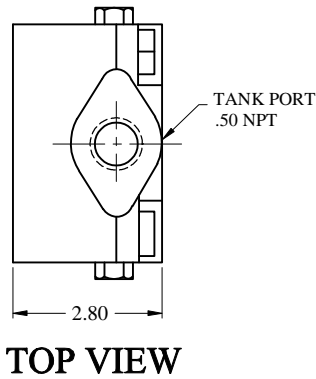
When installing control relief valve, install relief assembly in cover bore, install spring seating on hex head end of relief assembly, compress spring and install cover plug.

*** WARNING ***

Failure to follow these steps could cause serious malfunction and pressures to rise to dangerous levels.

V20F

PART NUMBER
IFP 316090N



FLOW RATE ORIFICE		RELIEF VALVE NUMBER / PRESSURE SETTING					
2	-2 USgpm	A-	250psi	229613N	H-	2000psi	232799N
3	-3 USgpm	B-	500psi	233018N	J-	2250psi	233019N
4	-4 USgpm	C-	750psi	232794N	K-	2500psi	233020N
5	-5 USgpm	D-	1000psi	232795N	BODY		700283N
6	-6 USgpm	E-	1250psi	232796N	SPRING		700285N
7	-7 USgpm	F-	1500psi	232797N	POPPET		700284N
8	-8 USgpm	G-	1750psi	232798N	SHIM		700890N

FLOW CONTROL RELIEF VALVE

When installing control relief valve, install relief assembly in cover bore, install spring seating on hex head end of relief assembly, compress spring and install cover plug.

*** WARNING ***

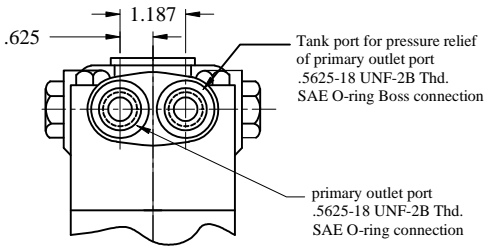
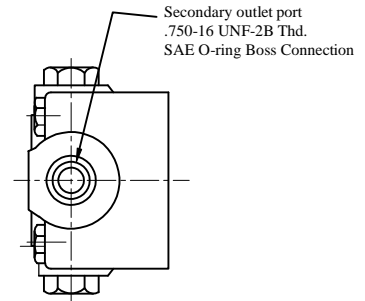
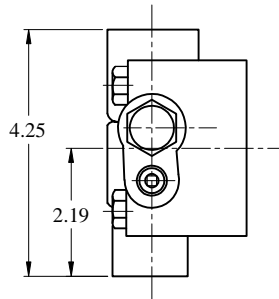
Failure to follow these steps could cause serious malfunction and pressures to rise to dangerous levels.

IFP PRIORITY COVER V10P/V20P



V10P

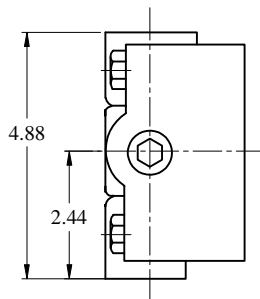
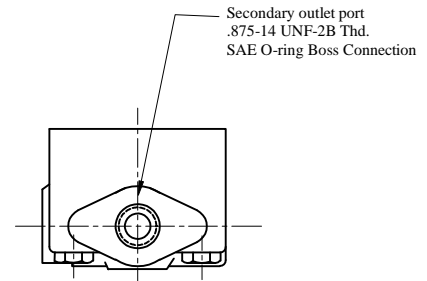
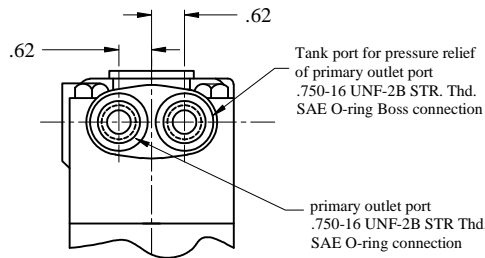
PART NUMBER
IFP 388262N



FLOW RATE ORIFICE		RELIEF VALVE SETTING	
2	-2 USgpm	A-	250psi
3	-3 USgpm	B-	500psi
4	-4 USgpm	C-	750psi
5	-5 USgpm	D-	1000psi
6	-6 USgpm	E-	1250psi
7	-7 USgpm	F-	1500psi
		G-	1750psi
		H-	2000psi
		J-	2250psi
		K-	2500psi

V20P

PART NUMBER
IFP 308121N



FLOW RATE ORIFICE		RELIEF VALVE SETTING	
2	-2 USgpm	A-	250psi
3	-3 USgpm	B-	500psi
4	-4 USgpm	C-	750psi
5	-5 USgpm	D-	1000psi
6	-6 USgpm	E-	1250psi
7	-7 USgpm	F-	1500psi
8	-8 USgpm	G-	1750psi
		H-	2000psi
		J-	2250psi
		K-	2500psi