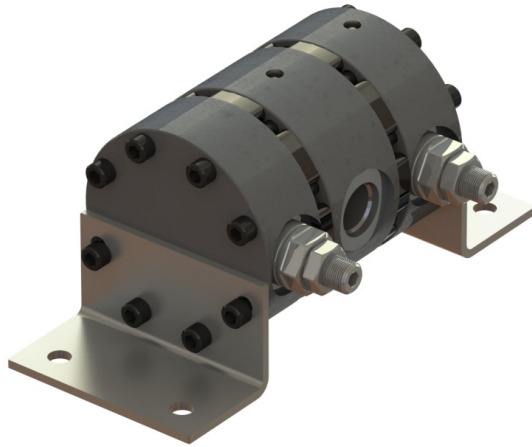


## AFT100 FLOW DIVIDER



### Unit Description:

The AFT100 Flow Divider consists of two fixed clearance external gear sections. Gear type flow dividers offer 50:50 flow division less susceptible to contamination than a spool type flow divider. Displacements range from 1.2 cc to 4.0 cc per section.

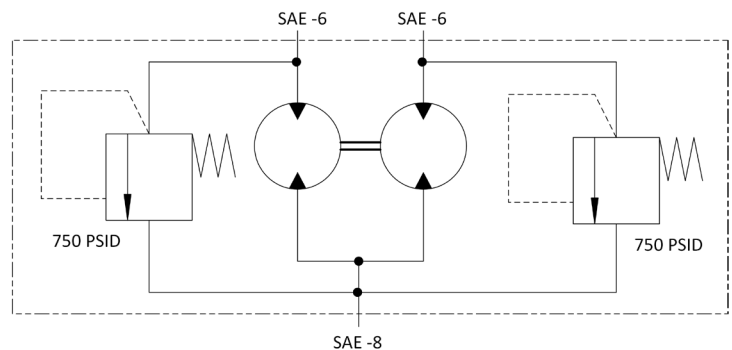
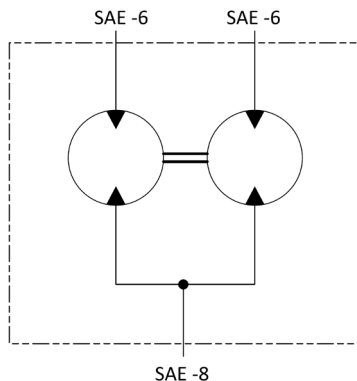
The design is based on Bucher Hydraulics Modular Pump proven in M-Series Power Units and shares many common components: gears, cylinder plates, idler shafts, and bushings. This design has been and continues to be trusted in the industry and offers long product life. Long product life is also ensured by the durable hard coated aluminum inlet and outlet sections and powdered metal steel housings. The AFT100 Flow Divider is offered with or without differential relief valves which relieve pressure internally for cylinder synchronization (factory preset to 750 PSI). Contains two (2) #6 SAE Outlet Ports and one (1) #8 Inlet Port.

### Features:

- Two (2) Fixed Displacement External Gear Sections
- One (1) 3/4-16 UNF-2B, #8 SAE O-Ring Inlet Port
- Two (2) 9/16-18 UNF-2B, #6 SAE O-Ring Outlet Ports
- Hard Coat Anodized Aluminum Body Sections
- Black Oxide Coated Powdered Metal Steel Gear Housings
- Two (2) Adjustable Cartridge Relief Valves (Optional)
- External Drive Shaft Access Port
- Two (2) Mounting Brackets

### Application Examples:

- Dual cylinder synchronization
- Tailgate lifts
- Aerial work platforms
- Car Haulers
- Lifting platforms



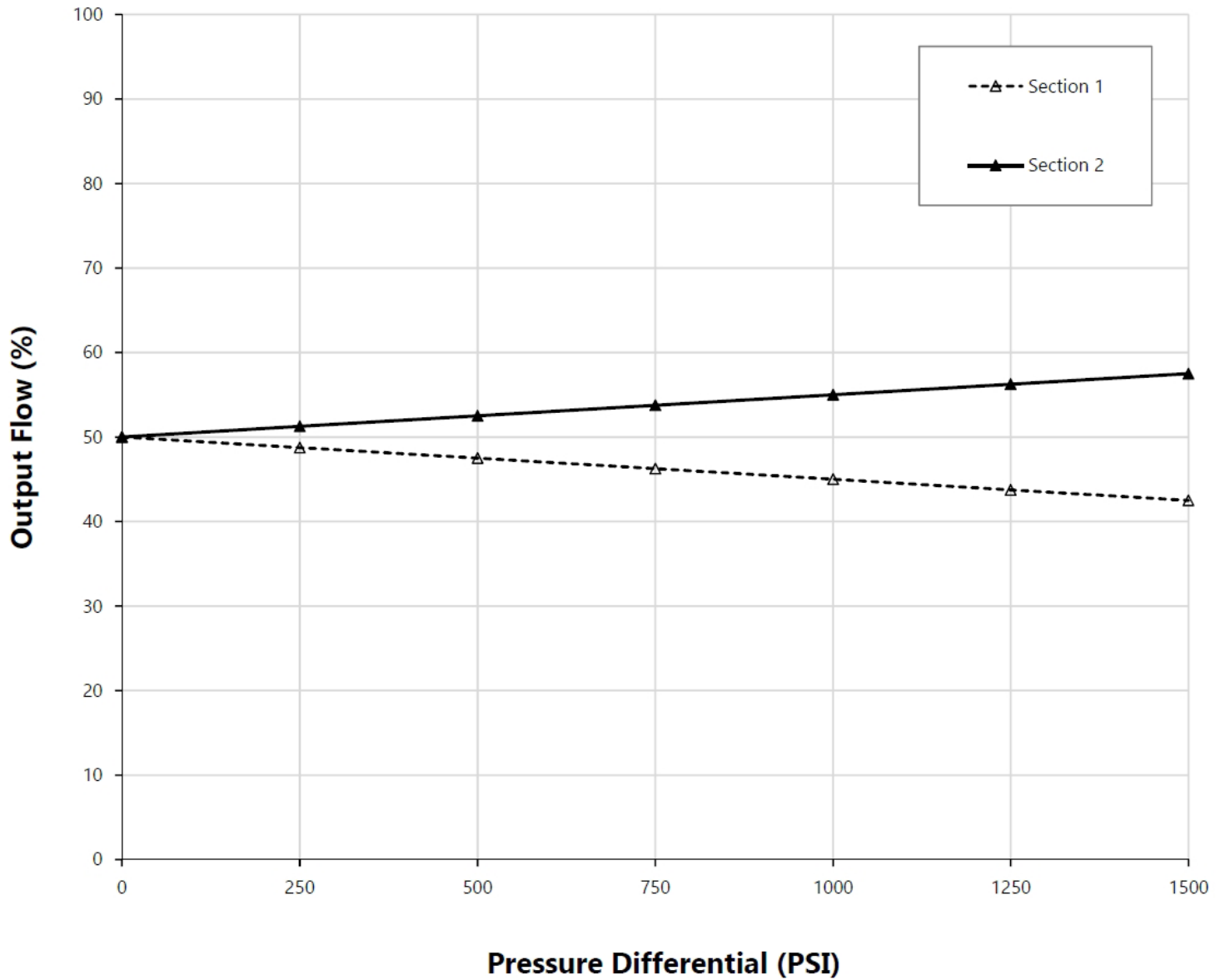
**Performance:**

Standard Models	Order Code	Section Size CC/Rev	Input Flow Range	SAE O-Ring Port Sizes	
				Inlet Port	Outlet Port
AFT100-150/150	500209024047150	1.2cc/1.2cc	0.6 – 2.5 gpm (2.3 – 9.5 lpm)	SAE-8 (3/4-16)	SAE-6 (9/16-18)
AFT100-150/150 with Relief	500209026323150				
AFT100-250/250	500209024047250	2.0cc/2.0cc	1.0 - 4.2 gpm (3.8 – 15.9 lpm)		
AFT100-250/250 with Relief	500209026323250				
AFT100-330/330	500209024047330	2.6cc/2.6cc	1.5 – 5.5 gpm (5.7 – 20.8 lpm)		
AFT100-330/330 with Relief	500209026323330				
AFT100-510/510	500209024047510	4.0cc/4.0cc	2.2 – 8.5 gpm (8.3 – 32.2 lpm)		
AFT100-510/510 with Relief	500209026323510				

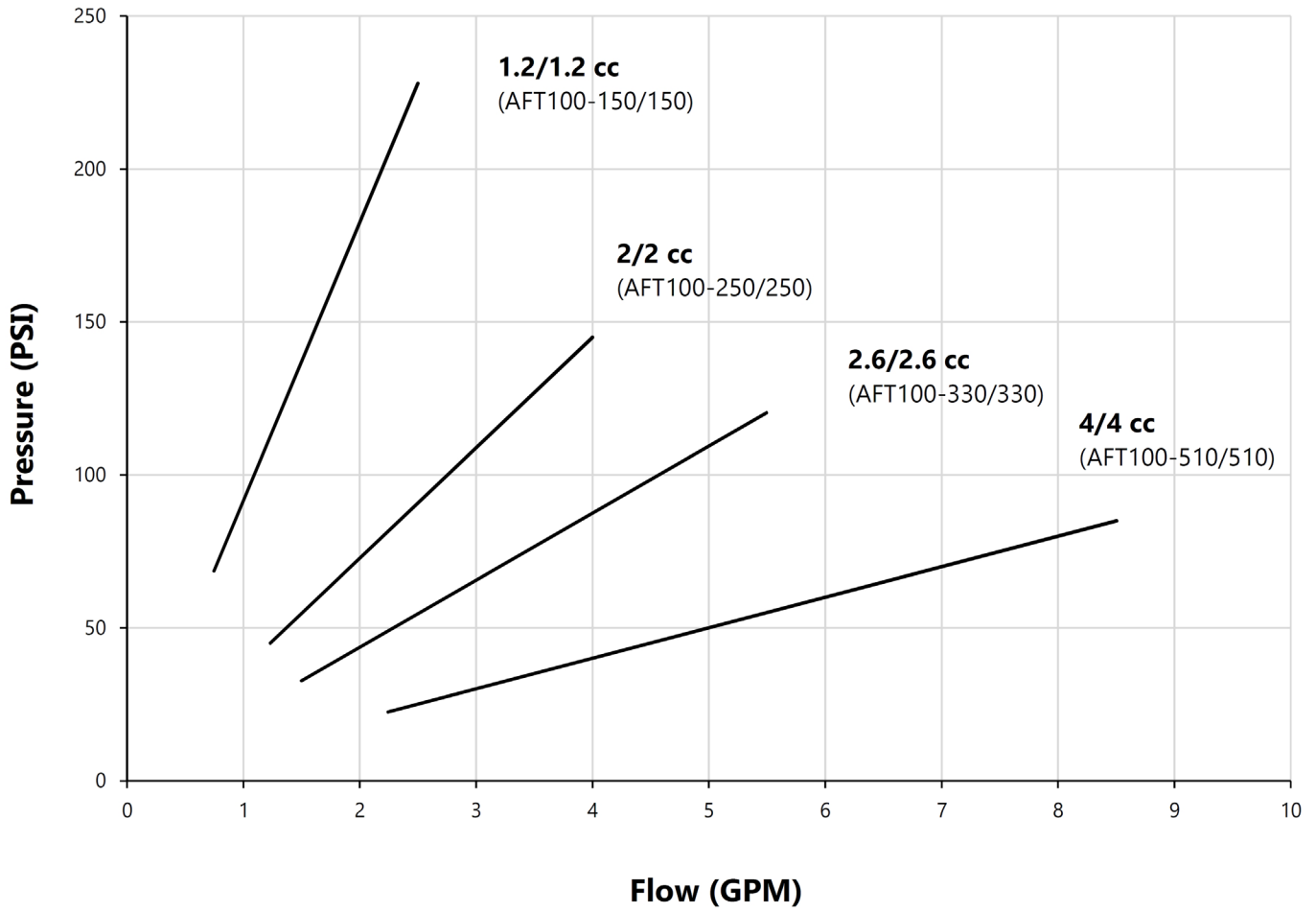
Maximum Pressure	3000 PSI (207 bar) Continuous 4000 PSI (276 bar) Intermittent
Maximum Pressure Difference Between Outlet Ports	1000 PSI (69 bar) Continuous 1500 PSI (103 bar) Intermittent
Optimal RPM Range	1500 - 3500 RPM
Relief Valve Setting	750 PSI (52 bar) Differential
Flow Division Accuracy	± 5% with outlet pressure difference <1000 PSI
Oil Temperature Range	20°F to +200°F (-29°C to +93°C)
Operating Viscosity Range	60 - 1200 SSU (10 - 250 cSt)
Recommended Hydraulic Fluids	HLP mineral oil or ATF
Maximum Admissible Contamination Level	ISO 4406 20/18/15
Seal Material	NBR
Port Specifications	SAE J1926
Mounting Orientation	Unrestricted

## Characteristic Curves:

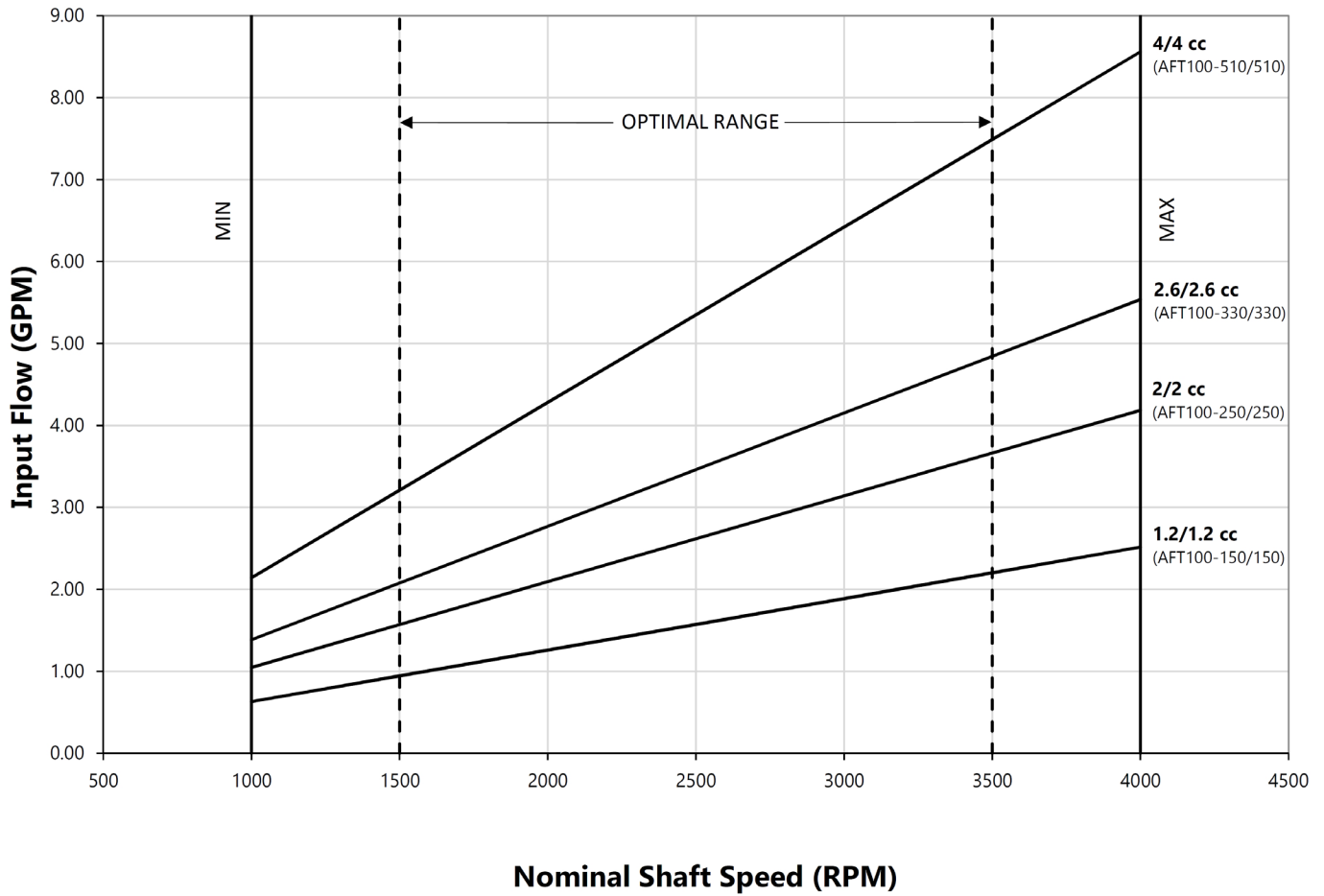
### Output Flow Division Accuracy vs. Outlet Pressure Differential at 50% Rated Flow:



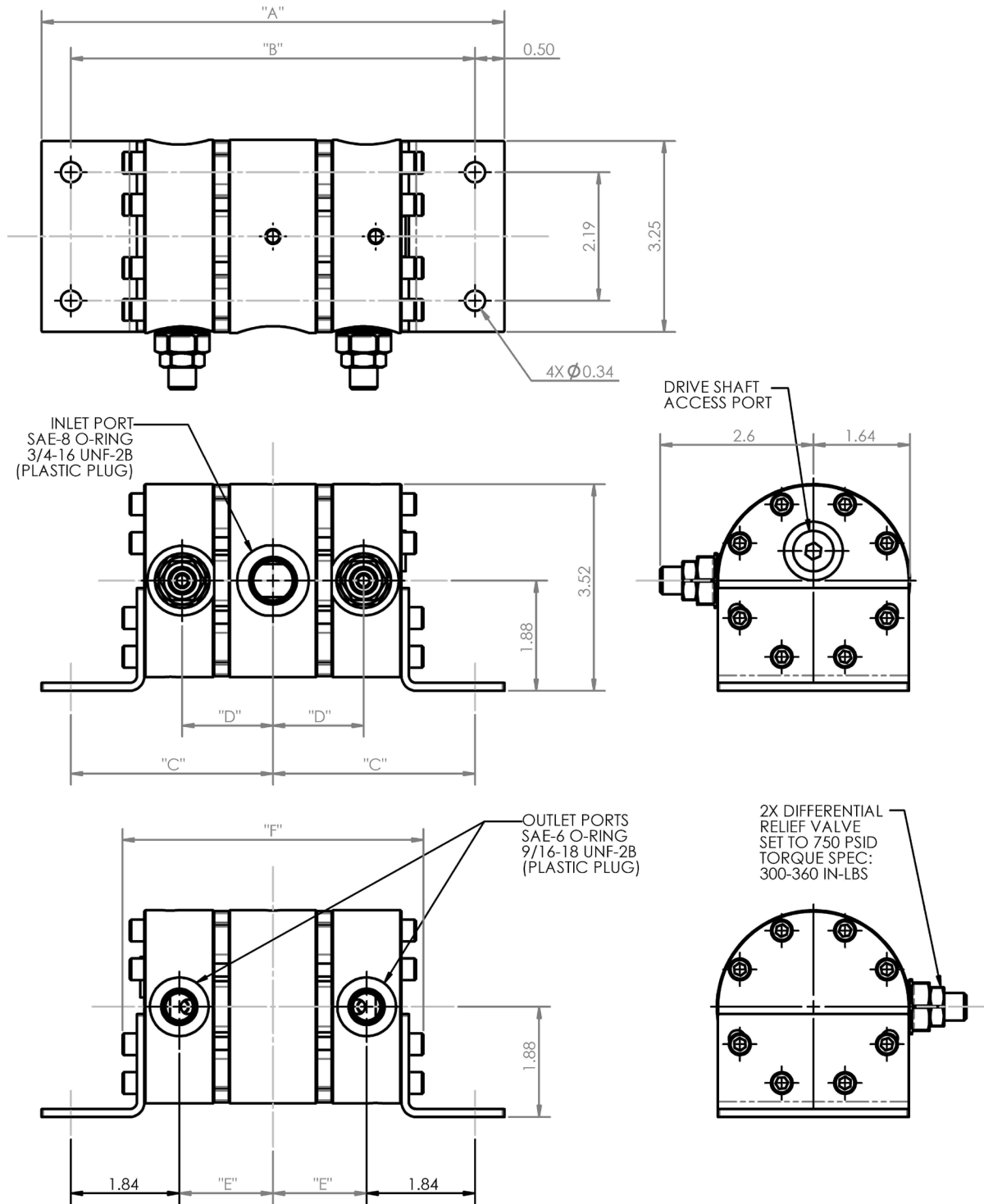
## Inlet Pressure vs. Flow:



## Input Flow vs. Shaft Speed Range:

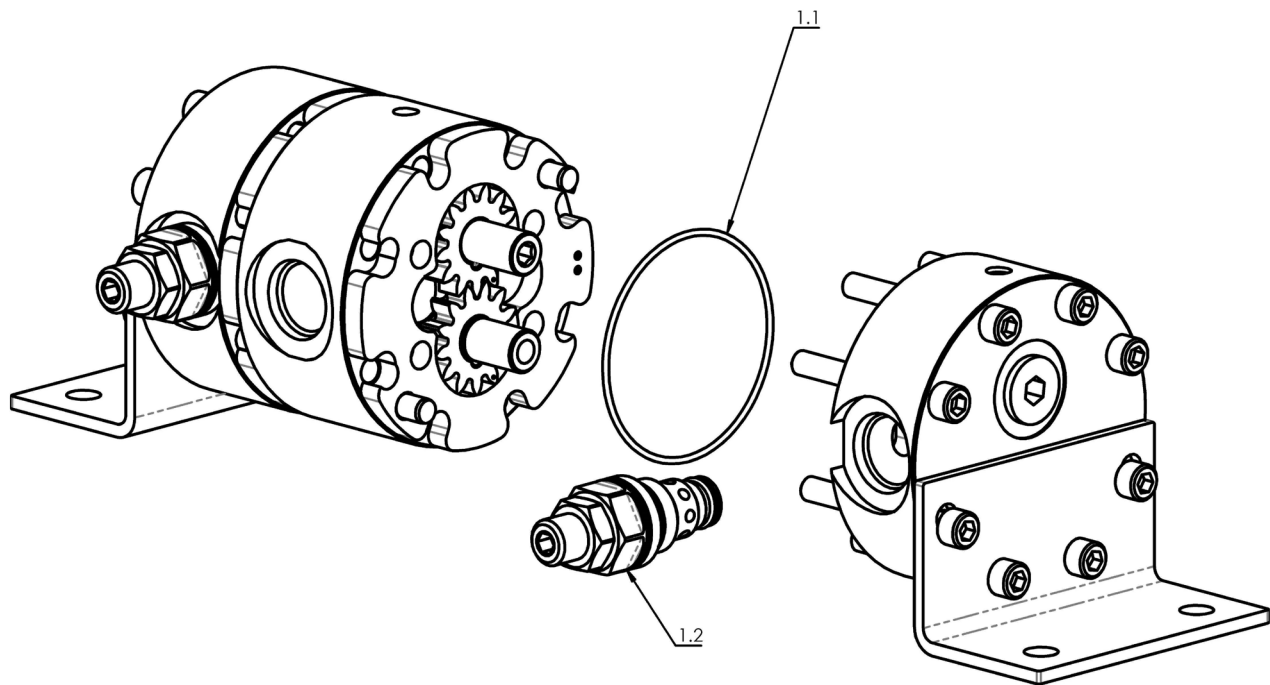


**Dimensions:**



Model No.	Section Size CC/Rev	"A" Inches	"B" Inches	"C" Inches	"D" Inches	"E" Inches	"F" Inches
500209026323150	1.2cc/1.2cc	7.68	6.68	3.34	1.44	1.49	4.92
500209026323250	2.0cc/2.0cc	7.88	6.88	3.44	1.54	1.59	5.12
500209026323330	2.6cc/2.6cc	8.04	7.04	3.52	1.62	1.67	5.28
500209026323510	4.0cc/4.0cc	8.40	7.40	3.70	1.80	1.85	5.64

**Exploded View:**



**Parts List:**

No.	Description	Part No.
1.*	FLOW DIVIDER, AFT100, WITH RV	500209026323***
1.1	O-RING, 2.25 X 2.38 X 0.06-036	500205300116
1.2	VALVE, RELIEF, YF08-40-10	808201222

\* KIT CONTAINS ALL SUBCOMPONENTS LISTED BELOW EACH PART NUMBER

\*\*\* Part No. Suffix: 150, 250, 330, or 510