



ANFIELD

Gear Pumps



**2017
Edition**



Model	Description	Page
AP-0	Close-coupled mini gear pump, 0.009 to 0.012 cipr	4
AP-1	Mini gear pump, 0.06 to 0.48 cipr	6
AP-10	SAE AA gear pump, 0.07 to 0.49 cipr	8
AP-20	SAE A gear pump, 0.36 to 1.52 cipr	10
AP-20A	SAE A gear pump, 1.52 to 2.44 cipr	12
AP-29	SAE B gear pump, .61 to 2.75 cipr	14
AP-30	SAE B gear pump, 1.34 to 5.43 cipr	16
AP-HL	Hi-Lo pump, 8-16 GPM	18
AP-HFL	Hi-Lo pump, 22-28 GPM	20
AP-PTO	PTO-driven gear pump	22
AFD Series	Rotary gear flow divider	24
AFD1	Rotary gear flow divider	25
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- Anfield pumps feature a floating bushing design with bodies made of high strength cold extruded aluminum which can withstand pressures of over 4000 psi. AP-10, 20, 20A, 29, and 30 styles come with cast iron end caps and mounting flange. AP-HL are all cast iron construction. SAE flange and porting styles are standard ISO and DIN styles are also available along with a wide range of shaft and port combinations. Please ask an Anfield representative for any requirements that are not found in this catalogue.
- Efficiencies: Volumetric-up to 98%, Mechanical-up to 93%
- Fluid: Anfield gear pumps must be used with hydraulic oil which is non-foaming, anti-oxidizing, non-corrosive and at minimum meets DIN 51524-2.
- Recommended Filtration: The most common reason for gear pump failures is contamination. Oil cleanliness should at minimum meet ISO cleanliness code 18/16/13 per ISO 4406. New oil entering the system must exceed class 10 NAS 1638.
- Inlet and Delivery Lines: Hydraulic lines should not have sharp restrictions or small radius bends. The reservoir should have a capacity about twice as much as the volume delivered by the pump in one minute.

Hydraulic Gear Pump AP-0



DESCRIPTION

- AP-0 is an all aluminum construction, high pressure Mini Hydraulic Gear Pump. The standard mounting flange is as detailed on the installation drawing and porting is any combination of rear, front or side as defined in the ordering example.



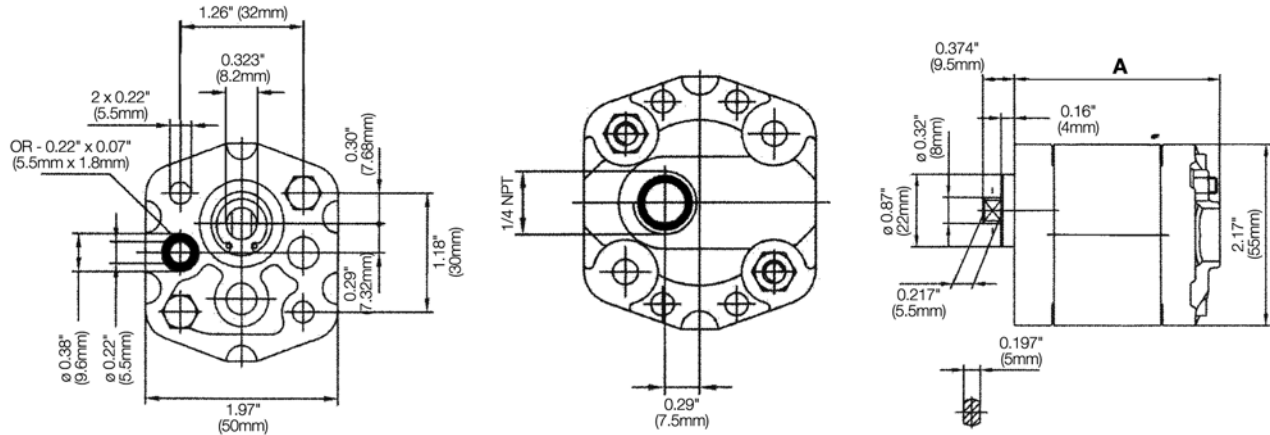
TECHNICAL DATA

- Filtration: 25 micron or better
- Oil Viscosity: 6 to 200 cSt
- Inlet Pressure: 12 to 32 psi absolute
- Temperature: Oil: -25°C to 80°C / -12°F to 175°F
Ambient: -22°C to 55°C / -8°F to 130°F

Model	Displacement		Rated Pressure		Speed RPM		Weight	
	cm ³ /rev	cu.in/rev	PSI	BAR	Min.	Max.	Lbs.	Kg
AP-0-0.16	0.16	0.009	3000	200	800	7000	0.82	0.37
AP-0-0.25	0.25	0.015	3000	200	800	7000	0.84	0.38
AP-0-0.50	0.50	0.030	3000	200	800	7000	0.87	0.39
AP-0-0.75	0.75	0.045	3000	200	800	7000	0.91	0.41
AP-0-1.00	1.00	0.060	3000	200	800	6000	0.92	0.42
AP-0-1.25	1.25	0.080	3000	200	800	5000	1.00	0.45
AP-0-1.50	1.50	0.090	3000	200	800	4000	1.04	0.47
AP-0-1.75	1.75	0.110	3000	200	800	4000	1.08	0.49
AP-0-2.00	2.00	0.120	3000	200	800	3500	1.13	0.51

- Flow rate in gpm - Displacement (cu.in/rev) X speed (rpm)/231
- Volumetric efficiency % >93

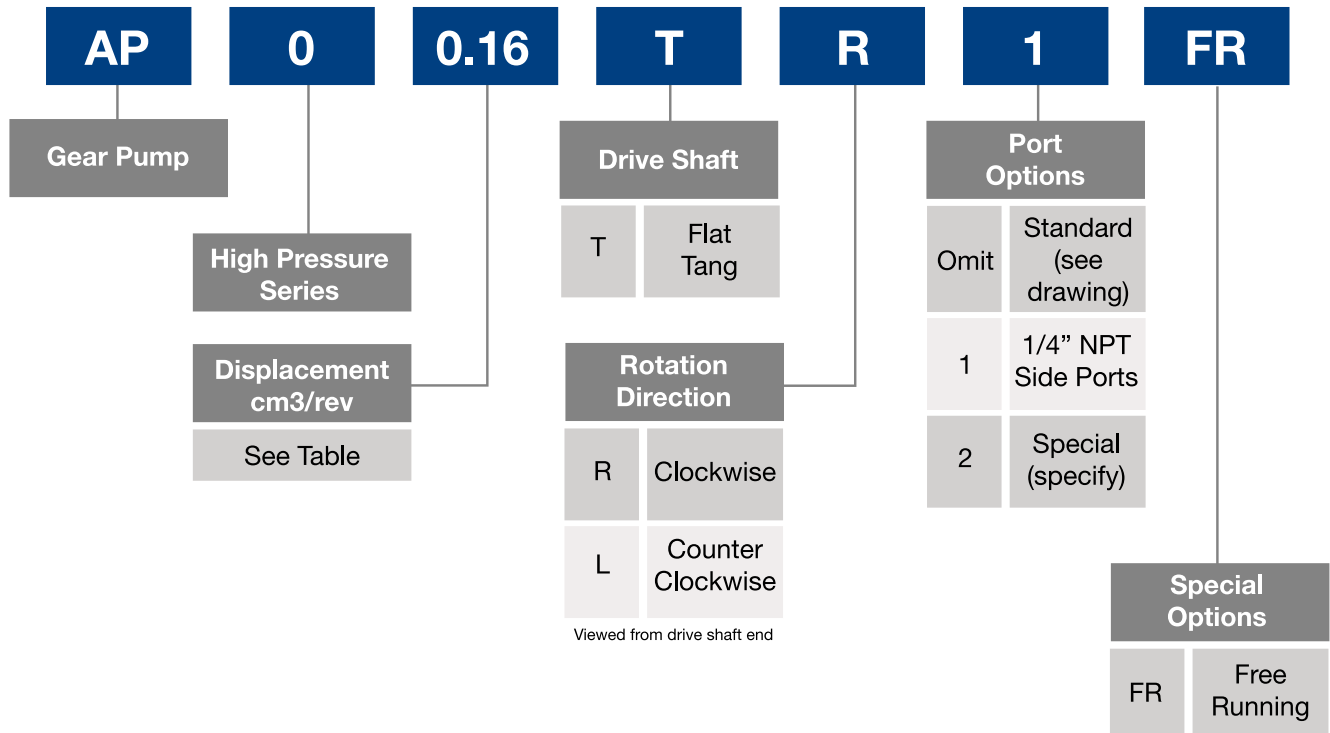
INSTALLATION DATA



Model	A	
	mm	inch
AP-0-0.16	60	2.36
AP-0-0.25	61	2.40
AP-0-0.50	63	2.48
AP-0-0.75	65	2.55
AP-0-1.00	68	2.68

Model	A	
	mm	inch
AP-0-1.25	70	2.75
AP-0-1.50	72	2.83
AP-0-1.75	75	2.95
AP-0-2.00	77	3.03

ORDERING INFORMATION



Hydraulic Gear Pump AP-1



DESCRIPTION

- AP-1 is an all aluminum construction, high pressure Hydraulic Gear Pump. The standard mounting flange is as detailed on the installation drawing and porting is any combination of rear, front or side as defined in the ordering example. The drive shaft options include flat tang or tapered keyed.



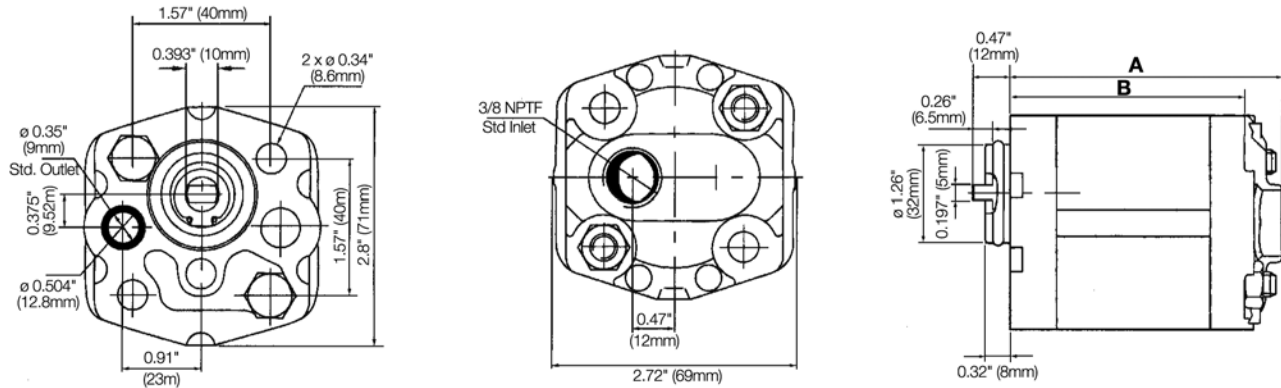
TECHNICAL DATA

- Filtration: 25 micron or better
- Oil Viscosity: 6 to 200 cSt
- Inlet Pressure: 12 to 32 psi absolute
- Temperature: Oil: -25°C to 80°C / -12°F to 175°F
Ambient: -22°C to 55°C / -8°F to 130°F

Model	Displacement		Rated Pressure		Speed RPM		Weight	
	cm ³ /rev	cu.in/rev	PSI	BAR	Min.	Max.	Lbs.	Kg
AP-1-1.1	1.1	0.06	3650	250	600	6000	1.69	0.77
AP-1-1.3	1.3	0.07	3650	250	600	6000	1.73	0.79
AP-1-1.6	1.6	0.09	3650	250	600	6000	1.76	0.80
AP-1-1.8	1.8	0.10	3650	250	600	6000	1.78	0.81
AP-1-2.1	2.1	0.12	3650	250	600	6000	1.80	0.82
AP-1-2.7	2.7	0.16	3650	250	600	6000	1.87	0.85
AP-1-3.2	3.2	0.19	3650	250	600	5000	1.91	0.87
AP-1-3.7	3.7	0.22	3650	250	600	4500	1.98	0.90
AP-1-4.2	4.2	0.25	3650	250	600	4000	2.02	0.92
AP-1-4.8	4.8	0.29	2900	200	600	3500	2.09	0.95
AP-1-5.8	5.8	0.35	2900	200	600	2900	2.20	1.00
AP-1-8.0	8.0	0.48	2900	200	600	2100	2.42	1.10

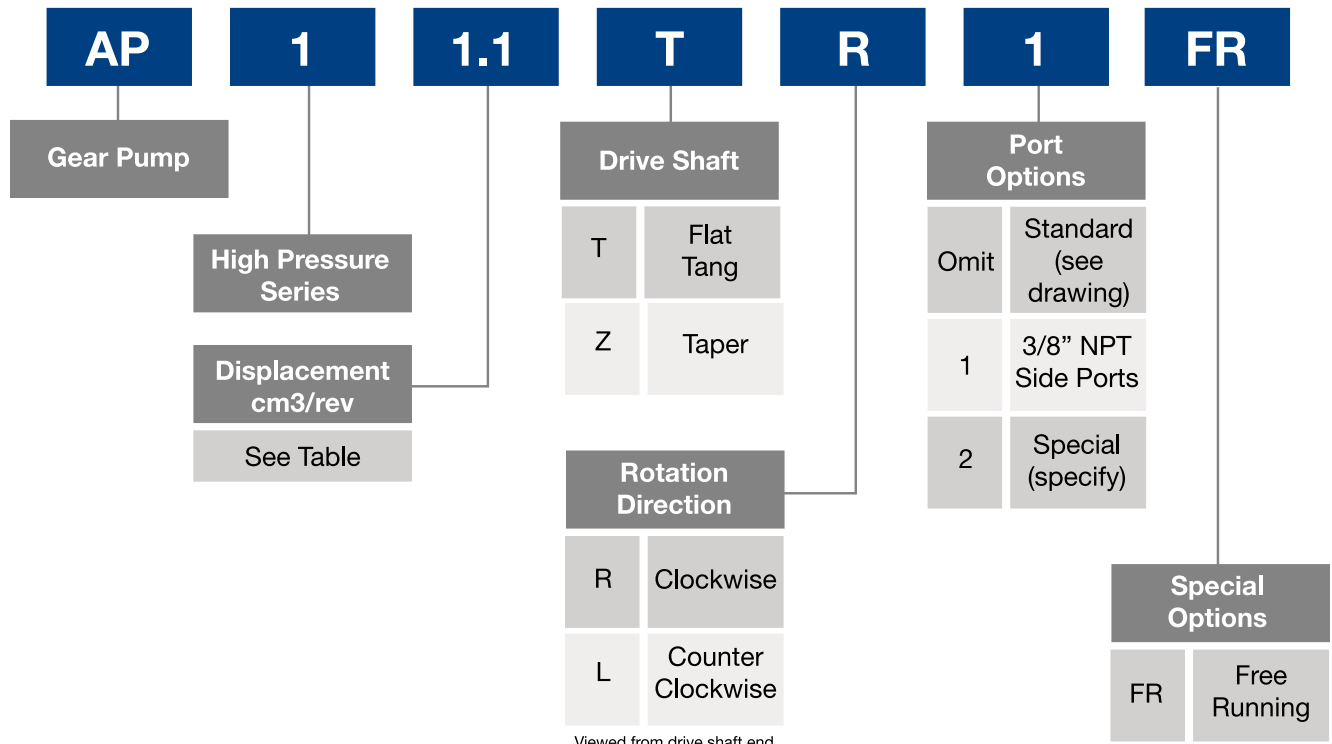
- Flow rate in gpm - Displacement (cu.in/rev) X speed (rpm)/231
- Volumetric efficiency % >93

INSTALLATION DATA



Model	A		B		Model	A		B	
	mm	inch	mm	inch		mm	inch	mm	inch
AP-1-1.1	74	2.91	62	2.44	AP-1-3.2	82	3.23	70	2.76
AP-1-1.3	75	2.95	63	2.48	AP-1-3.7	84	3.31	72	2.83
AP-1-1.6	76	2.99	64	2.52	AP-1-4.2	86	3.39	74	2.91
AP-1-1.8	77	3.03	65	2.56	AP-1-4.8	88	3.46	76	2.99
AP-1-2.1	78	3.07	66	2.60	AP-1-5.8	92	3.62	80	3.15
AP-1-2.7	80	3.15	68	2.68	AP-1-8.0	100	3.94	88	3.46

ORDERING INFORMATION



Hydraulic Gear Pump AP-10



DESCRIPTION

- AP-10 is a high pressure gear pump with cast iron end caps and an aluminum housing.
- Standard mounting flange is **SAE AA-2 bolt**.
- Standard ports are **SAE-8 inlet** and **SAE-6 outlet**.
- Standard drive shaft is **1/2" straight shaft with 1/8" key**.
- All aluminum construction is available.



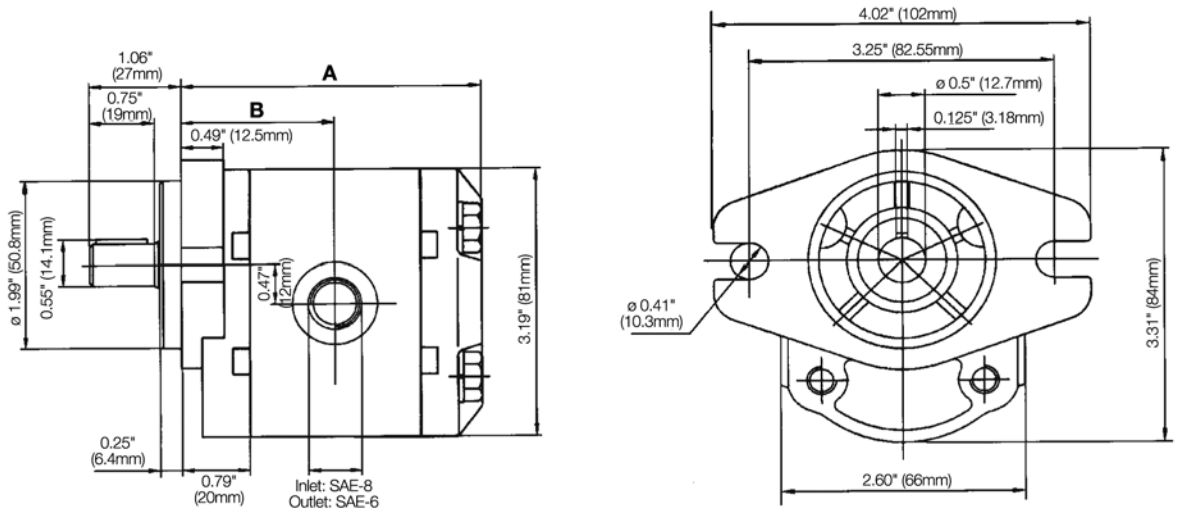
TECHNICAL DATA

- Filtration: 25 micron or better
- Oil Viscosity: 6 to 200 cSt
- Inlet Pressure: 12 to 32 psi absolute
- Temperature: Oil: -25°C to 80°C / -12°F to 175°F
Ambient: -22°C to 55°C / -8°F to 130°F
- Port Sizes: Inlet: SAE-8 (3/4"-16 UNF)
Outlet: SAE-6 (9/16"-18 UNF)

Model	GPM @ 1800 rpm	Displacement		Rated Pressure		Speed RPM		Weight	
		cm3/rev	cu.in/rev	PSI	BAR	Min.	Max.	Lbs.	Kg
AP-10-1.3	0.55	1.3	0.07	3625	250	500	5000	4.0	1.81
AP-10-1.6	0.76	1.6	0.097	3625	250	500	5000	4.3	1.95
AP-10-2.0	0.94	2.0	0.12	3625	250	500	5000	4.2	1.90
AP-10-2.7	1.25	2.7	0.16	3625	250	500	5000	4.5	2.04
AP-10-3.4	1.56	3.4	0.20	3625	250	500	5000	4.5	2.04
AP-10-4.1	1.95	4.1	0.25	3625	250	500	4000	4.8	2.17
AP-10-5.1	2.73	5.1	0.31	3625	250	500	4000	5.0	2.27
AP-10-6.1	2.88	6.1	0.37	3625	250	500	4000	5.0	2.27
AP-10-8.0	3.82	8.0	0.49	3625	250	500	4000	5.2	2.36

- Flow rate in gpm - Displacement (cu.in/rev) X speed (rpm)/231
- Volumetric efficiency % >93

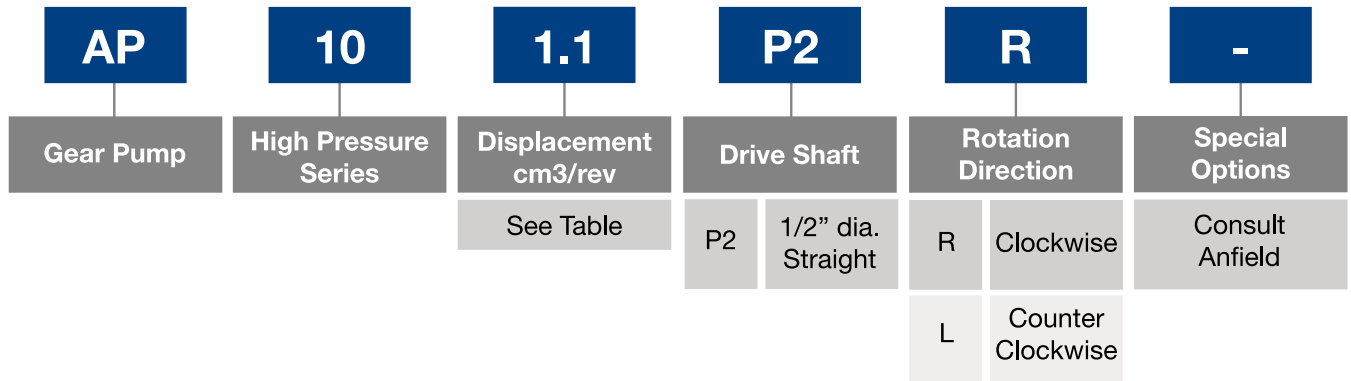
INSTALLATION DATA



Model	A		B	
	mm	inch	mm	inch
AP-10-1.3	82	3.23	42	1.65
AP-10-1.6	83	3.27	43	1.69
AP-10-2.0	84	3.31	43	1.69
AP-10-2.7	86	3.39	44	1.73
AP-10-3.4	88	3.46	45	1.77

Model	A		B	
	mm	inch	mm	inch
AP-10-4.1	90	3.54	46	1.81
AP-10-5.1	93	3.66	47.5	1.87
AP-10-6.1	96	3.78	49	1.93
AP-10-8.0	107	4.28	58	2.29

ORDERING INFORMATION



Viewed from drive shaft end

Hydraulic Gear Pump AP-20



DESCRIPTION

- AP-20 is a high pressure hydraulic gear pump with cast iron end caps and an aluminum housing.
- Standard mounting flange is **SAE A-2 bolt, 3.25" pilot**.
- Standard ports are **SAE-12 inlet** and **SAE-10 outlet**.
- Optional rear ports available.
- Standard drive shaft is **5/8" straight shaft with 5/32" key**.
- Optional shafts include an SAE 9 tooth spline and a 3/4" straight shaft with a 3/16" key.



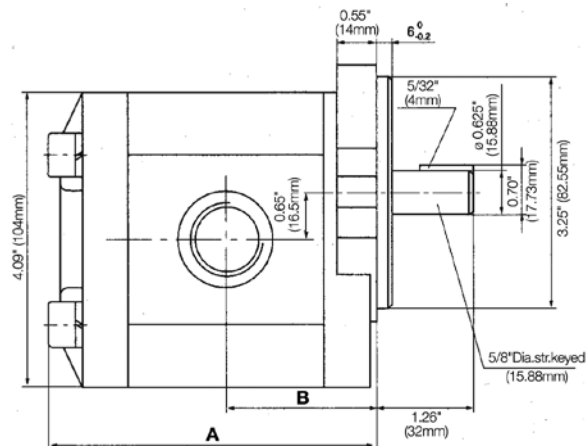
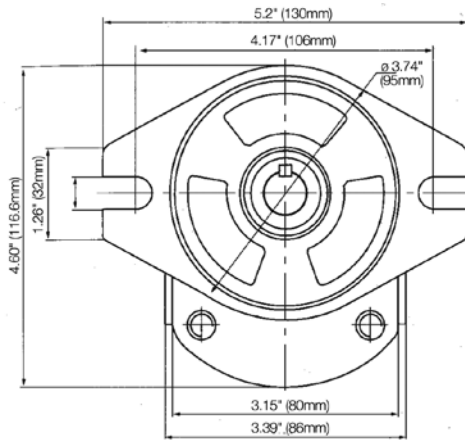
TECHNICAL DATA

- Filtration: 25 micron or better
- Oil Viscosity: 6 to 200 cSt
- Inlet Pressure: 12 to 32 psi absolute
- Temperature: Oil: -25°C to 80°C / -12°F to 175°F
Ambient: -22°C to 55°C / -8°F to 130°F
- Port Sizes: Inlet: SAE-12 (1-1/16"-12 UNF)
Outlet: SAE-10 (7/8"-14 UNF)

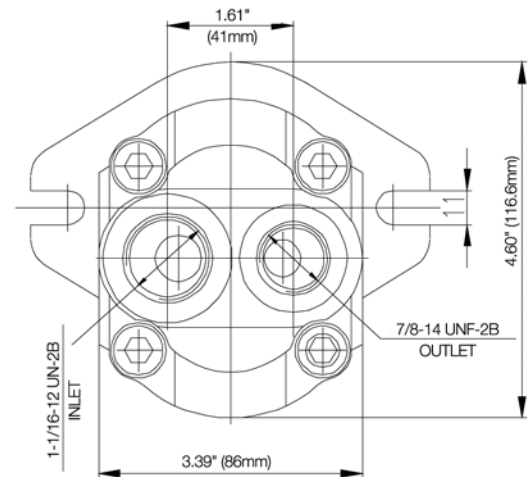
Model	GPM @ 1800 rpm	Displacement		Rated Pressure		Speed RPM		Weight	
		cm3/rev	cu.in/rev	PSI	BAR	Min.	Max.	Lbs.	Kg
AP-20-4.5	2.14	4.5	0.275	3650	250	500	3600	7.8	3.54
AP-20-6.0	2.80	6.0	0.36	3650	250	500	3600	8.35	3.80
AP-20-7.0	3.35	7.0	0.43	3650	250	500	3600	8.28	3.75
AP-20-8.0	3.74	8.0	0.48	3650	250	500	3600	8.61	3.90
AP-20-10	4.75	10	0.61	3650	250	500	3600	8.72	3.95
AP-20-11	5.22	11	0.67	3650	250	500	3600	8.83	4.00
AP-20-12	5.69	12	0.73	3650	250	500	3600	8.91	4.04
AP-20-14	6.62	14	0.85	3650	250	500	3600	9.00	4.08
AP-20-16	7.56	16	0.97	2900	200	500	3000	9.27	4.20
AP-20-20	9.51	20	1.22	2900	200	500	3000	9.73	4.41
AP-20-22	10.44	22	1.34	2900	200	500	3000	9.90	4.49
AP-20-25	11.84	25	1.52	2900	200	500	3000	10.19	4.62

- Flow rate in gpm - Displacement (cu.in/rev) X speed (rpm)/231
- Volumetric efficiency % >93

INSTALLATION DATA

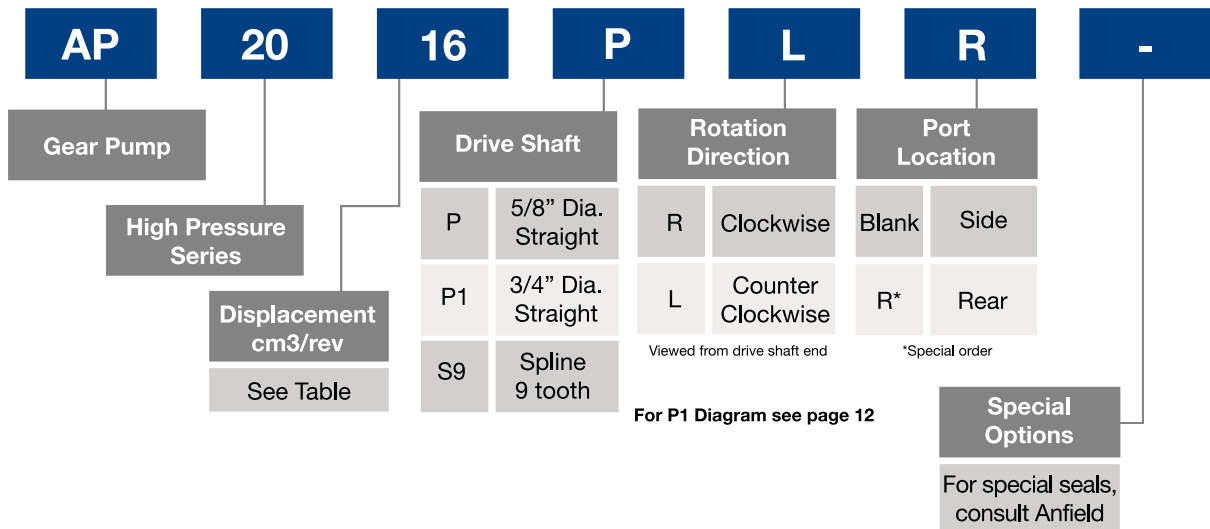


Model	A		B	
	mm	inch	mm	inch
AP-20-4.5	96	3.78	44	1.73
AP-20-6.0	98	3.87	45	1.77
AP-20-7.0	99.5	3.91	45.75	1.80
AP-20-8.0	102	4.02	47	1.85
AP-20-10	104	4.12	48	1.89
AP-20-11	106	4.17	49	1.93
AP-20-12	108	4.25	50	1.97
AP-20-14	110	4.35	51	2.0
AP-20-16	114	4.50	53	2.09
AP-20-20	120	4.75	56	2.20
AP-20-22	123	4.92	57.5	2.26
AP-20-25	128	5.05	60	2.36



* Special order
For P1 diagram see page 13

ORDERING INFORMATION



Hydraulic Gear Pump AP-20A



DESCRIPTION

- AP-20A is high pressure gear pump with cast iron end caps and an aluminum housing.
- Standard mounting flange is **SAE A-2 bolt, 3.25" pilot**.
- Standard ports are **SAE-16 inlet** and **SAE-12 outlet**.
- Standard drive shaft is **5/8" straight shaft with 5/32 key**.
- Available options include 3/4" straight shaft with 3/16" key and SAE 9 tooth spline.



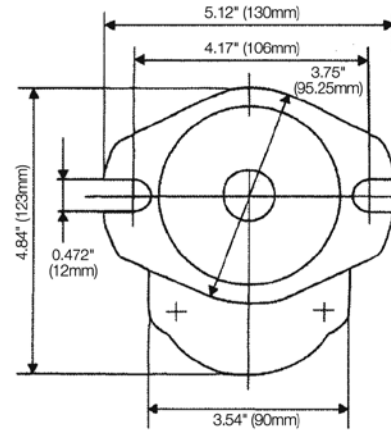
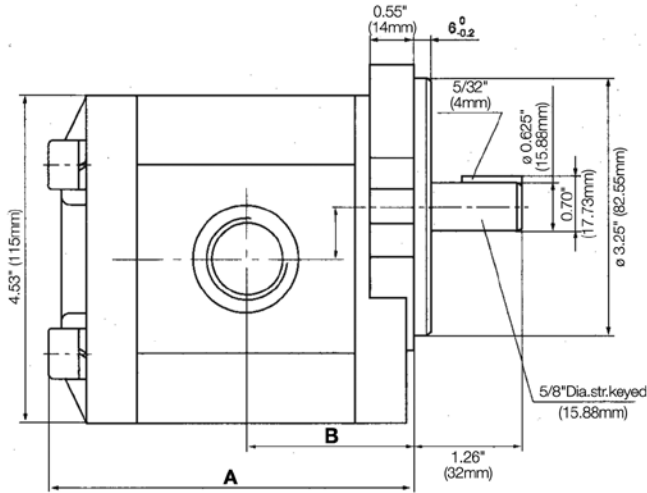
TECHNICAL DATA

- Filtration: 25 micron or better
- Oil Viscosity: 6 to 200 cSt
- Inlet Pressure: 12 to 32 psi absolute
- Temperature: Oil: -25°C to 80°C / -12°F to 175°F
Ambient: -22°C to 55°C / -8°F to 130°F

Model	GPM @ 1800 rpm	Displacement		Rated Pressure		Speed RPM		Weight	
		cm3/rev	cu.in/rev	PSI	BAR	Min.	Max.	Lbs.	Kg
AP-20A-25	11.84	25	1.52	3650	250	500	3000	11.36	5.15
AP-20A-27	12.55	27	1.61	3650	250	500	3000	11.58	5.25
AP-20A-30	14.26	30	1.83	3650	250	500	3000	11.8	5.35
AP-20A-32	15.19	32	1.95	3650	250	500	3000	12.02	5.45
AP-20A-40	19.01	40	2.44	3650	250	500	3000	12.46	5.65

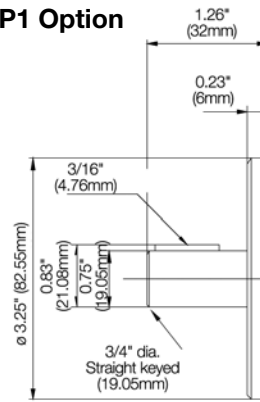
- Flow rate in gpm - Displacement (cu.in/rev) X speed (rpm)/231
- Volumetric efficiency % >93

INSTALLATION DATA

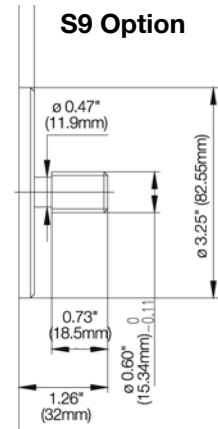


Model	A		B	
	mm	inch	mm	inch
AP-20A-25	130	5.12	62	2.44
AP-20A-27	132	5.20	63	2.48
AP-20A-30	137	5.39	65	2.56
AP-20A-32	139	5.47	66	2.60
AP-20A-40	148	5.83	70	2.76

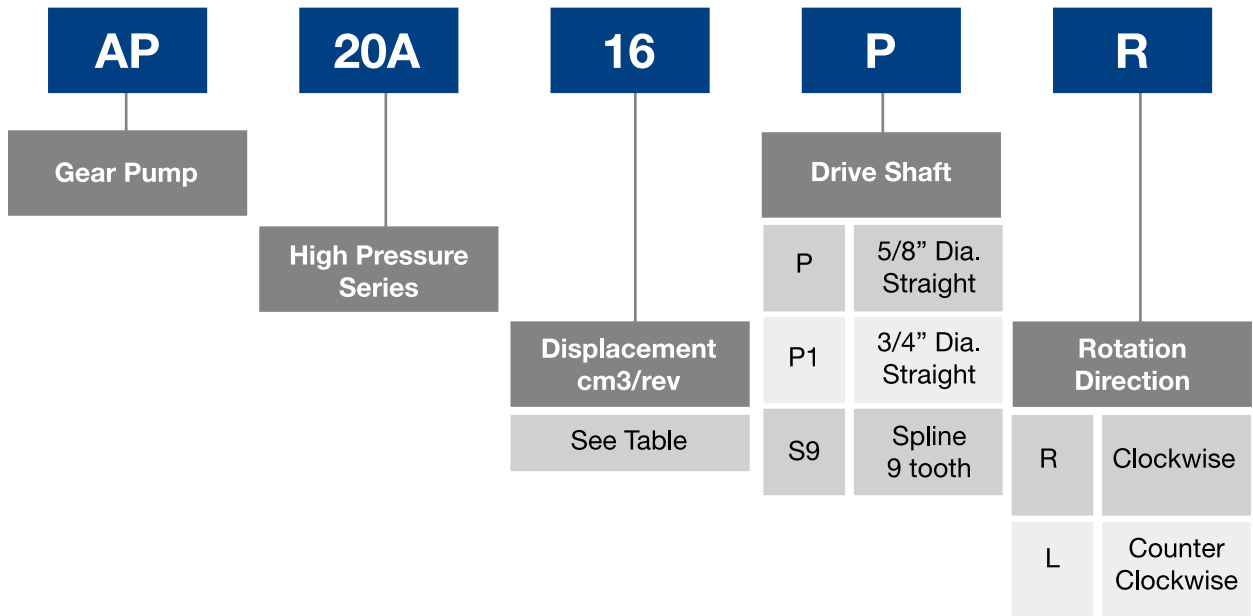
P1 Option



S9 Option



ORDERING INFORMATION



Viewed from drive shaft end

Hydraulic Gear Pump AP-29



DESCRIPTION

- AP-29 is high pressure gear pump with cast iron end caps and an aluminum housing.
- Standard mounting flange is **SAE B-2 bolt, 4" pilot**.
- Standard ports are **SAE-12 inlet** and **SAE-10 outlet**.
- Drive shaft options include 13 tooth spline or 7/8" straight shaft with 1/4" key.



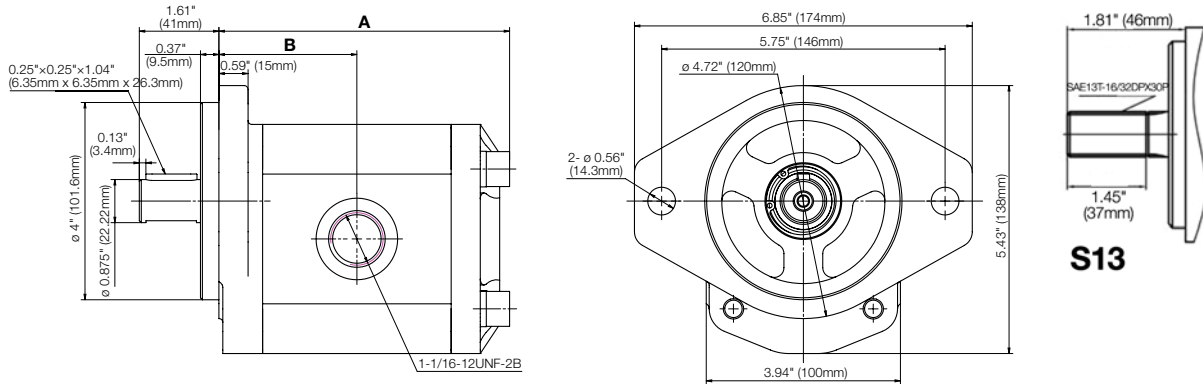
TECHNICAL DATA

- Filtration: 25 micron or better
- Oil Viscosity: 6 to 200 cSt
- Inlet Pressure: 12 to 32 psi absolute
- Temperature: Oil: -25°C to 80°C / -12°F to 175°F
Ambient: -22°C to 55°C / -8°F to 130°F

Model	GPM @ 1800 rpm	Displacement		Rated Pressure		Speed RPM		Weight	
		cm3/rev	cu.in/rev	PSI	BAR	Min.	Max.	Lbs.	Kg
AP-29-10	4.75	10	0.61	3650	250	700	4000	13.8	6.27
AP-29-12	5.69	12	0.73	3650	250	700	3500	14.2	6.45
AP-29-14	6.62	14	0.85	3650	250	600	3500	14.6	6.63
AP-29-16	7.56	16	0.98	3650	250	600	3500	15	6.81
AP-29-19	9.04	19	1.16	3650	250	500	3000	15.4	7.0
AP-29-22	10.44	22	1.34	3650	250	500	3000	15.8	7.18
AP-29-25	11.84	25	1.53	3650	250	500	3000	16.2	7.36
AP-29-28	13.32	28	1.71	3650	250	500	3000	16.6	7.54
AP-29-30	14.26	30	1.83	3350	230	500	3000	16.8	7.63
AP-29-32	15.19	32	1.95	3350	230	400	3000	17	7.72
AP-29-36	17.14	36	2.20	2900	200	400	2750	17.4	7.90
AP-29-40	19.01	40	2.44	2900	200	400	2750	18	8.18
AP-29-43	20.42	43	2.62	2475	170	400	2500	18.5	8.4
AP-29-45	21.38	45	2.75	2475	170	400	2500	19	8.63

- Flow rate in gpm - Displacement (cu.in/rev) X speed (rpm)/231
- Volumetric efficiency % >93

INSTALLATION DATA



Model	A		B		Model	A		B	
	mm	inch	mm	inch		mm	inch	mm	inch
AP-29-10	111.5	4.39	51.8	2.04	AP-29-28	131	5.16	61.5	2.42
AP-29-12	113.5	4.47	52.8	2.09	AP-29-30	133	5.27	62.5	2.46
AP-29-14	116	4.57	54	2.13	AP-29-32	135	5.31	63.5	2.50
AP-29-16	118	4.65	56	2.20	AP-29-36	139	5.47	65.5	2.58
AP-29-19	121	4.76	56.5	2.22	AP-29-40	143.5	5.65	67.8	2.67
AP-29-22	124.5	4.90	58.3	2.30	AP-29-43	147.5	5.81	69.8	2.75
AP-29-25	127.5	5.02	59.8	2.35	AP-29-45	150	5.91	71	2.80

ORDERING INFORMATION

AP	29	16	P4	R
Gear Pump	High Pressure Series	Displacement cm ³ /rev	Drive Shaft	Rotation Direction
		See Table	P4	R
			7/8" Dia. Straight	Clockwise
			S13	L
			Spline 13 tooth	Counter Clockwise

Viewed from drive shaft end

Hydraulic Gear Pump AP-30



DESCRIPTION

- AP-30 is high pressure gear pump with cast iron end caps and an aluminum housing.
- Standard mounting flange is **SAE B-2 bolt**.
- Standard ports are **SAE-16 inlet** and **SAE-12 outlet 22-43 cc** and **SAE-20 inlet** and **SAE-16 outlet 51-89 cc**.
- Drive shaft options include **7/8" 13 tooth spline** and **7/8" straight shaft with 1/4" key**.



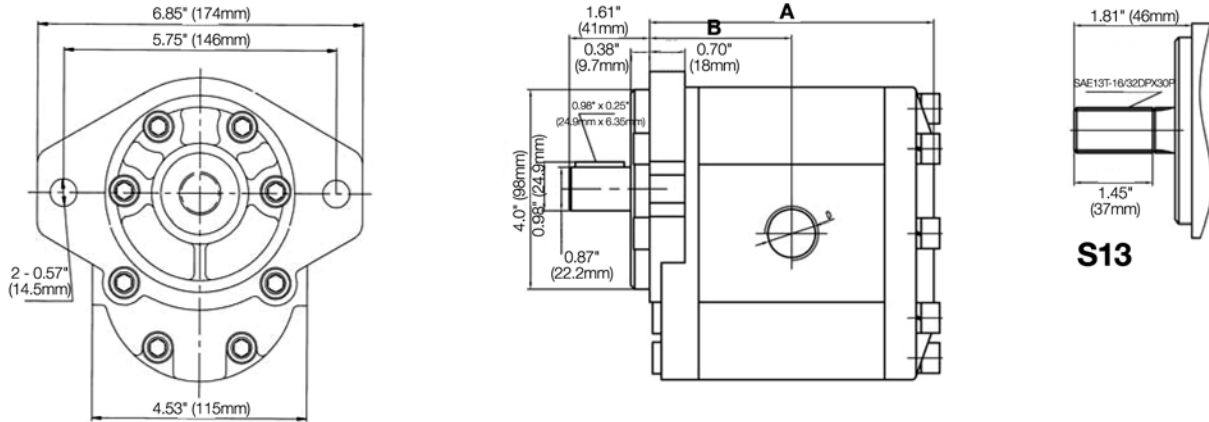
TECHNICAL DATA

- Filtration: 25 micron or better
- Oil Viscosity: 6 to 200 cSt
- Inlet Pressure: 12 to 32 psi absolute
- Temperature: Oil: -25°C to 80°C / -12°F to 175°F
Ambient: -22°C to 55°C / -8°F to 130°F

Model	GPM @ 1800 rpm	Displacement		Rated Pressure		Speed RPM		Weight	
		cm3/rev	cu.in/rev	PSI	BAR	Min.	Max.	Lbs.	Kg
AP-30-22	10.44	22	1.34	3650	250	400	3000	19.1	8.68
AP-30-26	12.38	26	1.59	3650	250	400	3000	19.35	8.8
AP-30-34	16.42	34	2.07	3650	250	400	3000	20.05	9.11
AP-30-39	18.55	39	2.38	3650	250	400	3000	20.22	9.19
AP-30-43	20.42	43	2.62	3650	250	400	2800	20.65	9.39
AP-30-51	24.23	51	3.11	3650	250	400	2400	21.60	9.82
AP-30-60	28.52	60	3.66	2900	200	400	2800	22.35	10.16
AP-30-70	33.27	70	4.27	2900	200	400	2500	22.79	10.36
AP-30-78	37.09	78	4.76	2900	200	400	2300	23.47	10.67
AP-30-89	42.31	89	5.43	2600	200	400	2000	24.18	11

- Flow rate in gpm - Displacement (cu.in/rev) X speed (rpm)/231
- Volumetric efficiency % >93

INSTALLATION DATA



Model	A		B		SAE Ports	
	mm	inch	mm	inch	in	out
AP-30-22	131	5.16	66	2.60	-16	-12
AP-30-26	134	5.27	67	2.63	-16	-12
AP-30-34	139	5.47	69	2.71	-16	-12
AP-30-39	143	5.62	71	2.79	-16	-12
AP-30-43	147	5.78	73	2.87	-16	-12
AP-30-51	152	5.98	76	2.99	-20	-16
AP-30-60	158	6.22	79	3.11	-20	-16
AP-30-70	166	6.53	82	3.22	-20	-16
AP-30-78	171	6.73	85	3.34	-20	-16
AP-30-89	176	6.93	88	3.46	-20	-16

ORDERING INFORMATION

AP	30	34	P4	R	-
Gear Pump	High Pressure Series	Displacement cm3/rev	Drive Shaft	Rotation Direction	Special Options
		See Table	P4 7/8" dia. Straight	R Clockwise	Consult Anfield
			S13 13 tooth Spline	L Counter Clockwise	

Viewed from drive shaft end

DESCRIPTION

- AP-HL is a HI/LO cast iron Hydraulic Gear Pump with a max pressure of 900 psi for the low pressure pump and 3000 psi for the high pressure pump. The change from LO to HI pressure is automatic with the LO side pressure pre set from 400 psi to 900 psi. The HI/LO section of the pump and the end plates are cast iron. Applications for the HI/LO pump are log splitters, presses etc. where rapid movement of the cylinder at low pressure is required prior to automatically switching to the high pressure mode to meet load requirements.



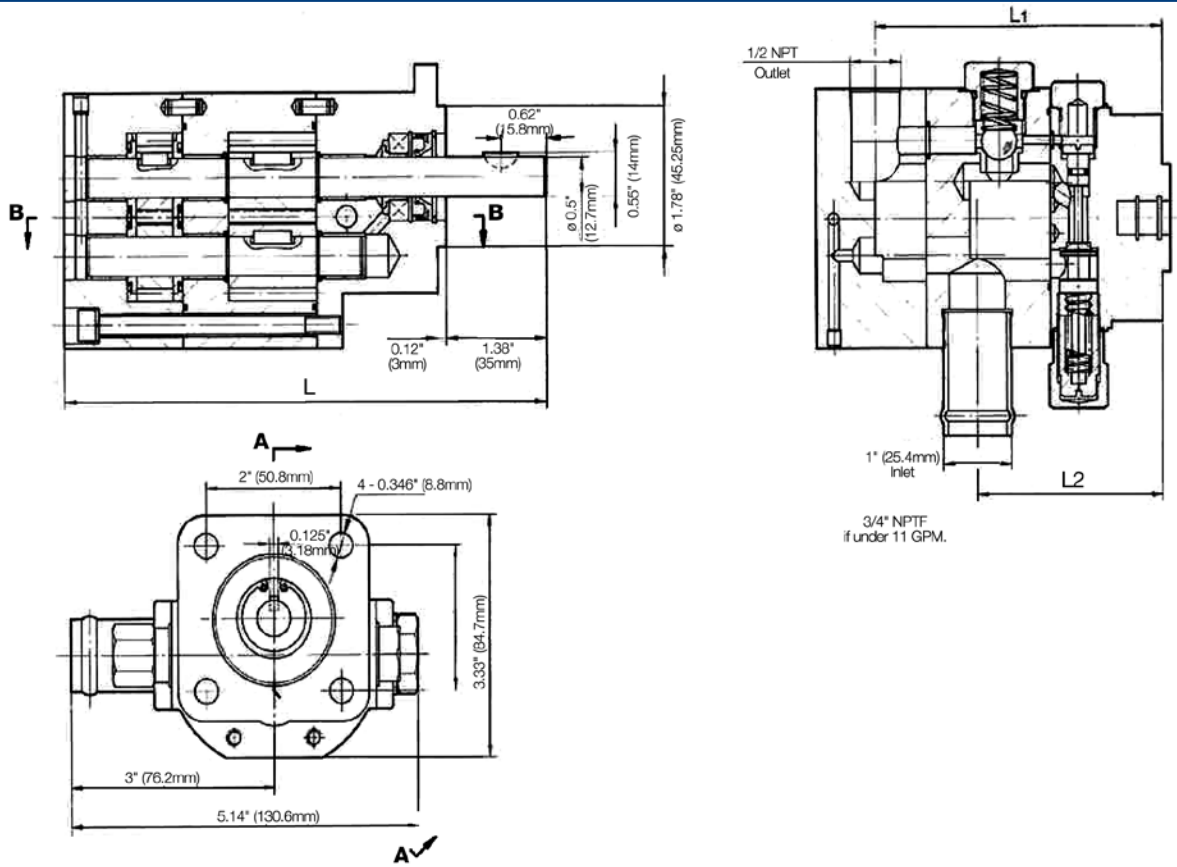
TECHNICAL DATA

- Filtration: 25 micron or better
- Oil Viscosity: 6 to 200 cSt
- Inlet Pressure: 12 to 32 psi absolute
- Temperature: Oil: -25°C to 80°C / -12°F to 175°F
Ambient: -22°C to 55°C / -8°F to 130°F
- Port Sizes: Inlet: 3/4" NPTF (8-10 GPM)
1" pipe (11-16 GPM)
Outlet: 1/2" NPT
Different port options available upon request
- Shaft: 1/2 straight shaft with #404 woodruff key (8-10GPM)

Model	Input HP	Flow GPM	Pressure PSI		Displacement cu.in/rev		Speed RPM
		3600r/min	LO	HI	LO	HI	Max.
AP-HL-8.0	5	8	400/900	3000	0.385	0.13	3600
AP-HL-11	6	11	400/900	3000	0.537	0.220	3600
AP-HL-13	7	13	400/900	3000	0.665	0.220	3600
AP-HL-16	8	16	400/900	3000	0.793	0.265	3600

- More displacements available upon request.

INSTALLATION DATA

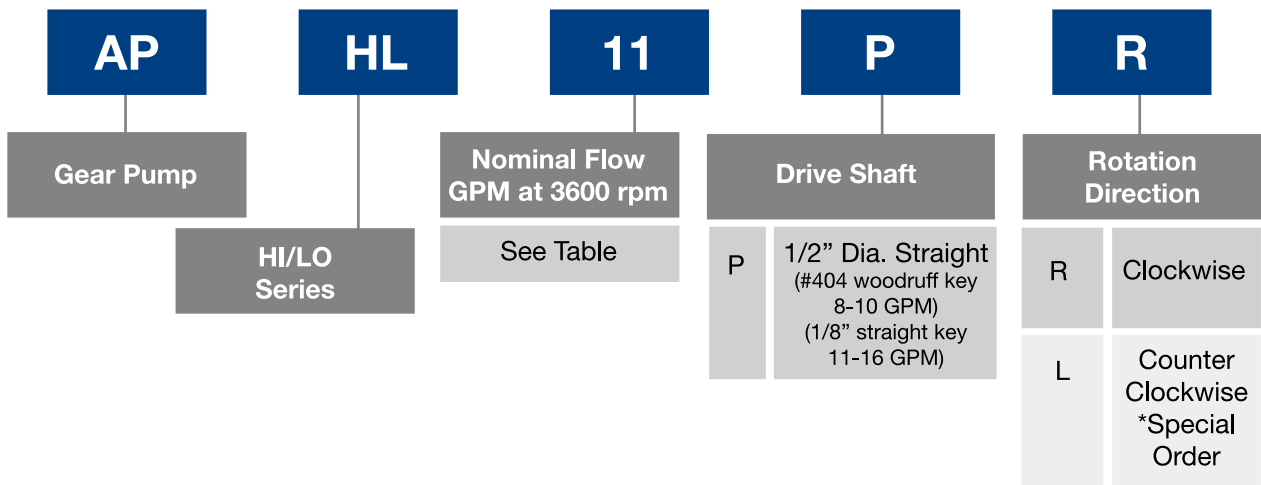


Model	L		L1		L2	
	mm	inch	mm	inch	mm	inch
HL-8	154	6.07	9.5	3.74	6	2.41
HL-11	168	6.61	11	4.24	7	2.74

Model	L		L1		L2	
	mm	inch	mm	inch	mm	inch
HL-13	175	6.90	12	4.53	8	3.04
HL-16	180	7.09	12	4.53	8	3.04

ORDERING INFORMATION

■ See next page for 22 and 28 GPM.



■ Please contact Anfield for more options.

Viewed from drive shaft end

DESCRIPTION

- The AP-HFL series is a Hi/Lo gear pump that offer the same functionality as the AP-HL series but with flows up to 28 gpm at 3600 psi. It has a max pressure of 900 psi on the low pressure pump and 3000 psi for the high pressure pump. The standard mounting flange is a SAE-A 2 bolt.

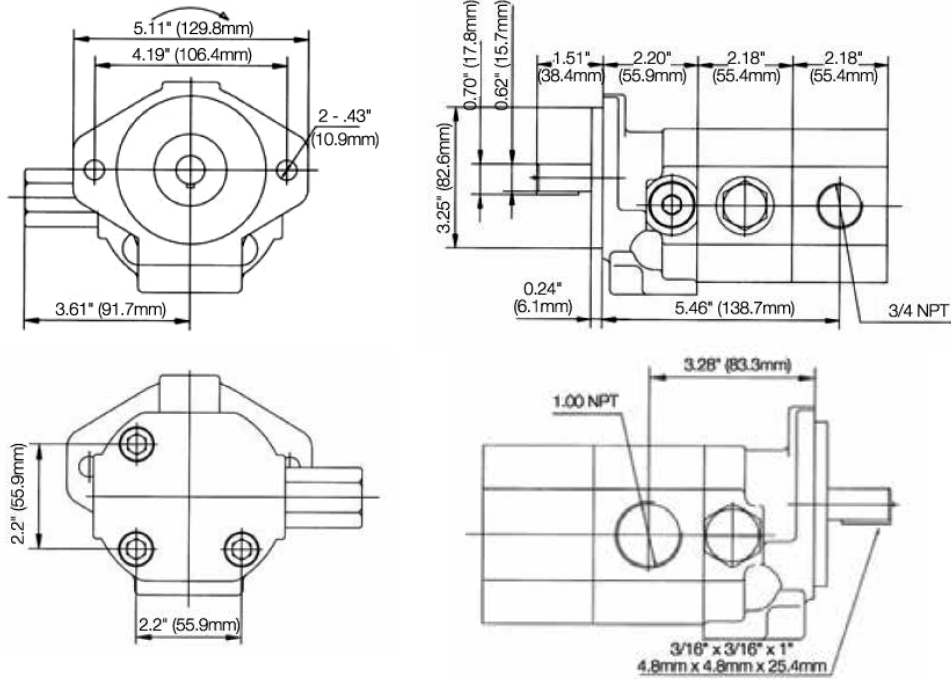


TECHNICAL DATA

- Filtration: 25 micron or better
- Oil Viscosity: 6 to 200 cSt
- Inlet Pressure: 12 to 32 psi absolute
- Temperature: Oil: -25°C to 80°C / -12°F to 175°F
Ambient: -22°C to 55°C / -8°F to 130°F
- Port Sizes: Inlet: 1" NPT
Outlet: 3/4" NPT
- Shaft: 5/8" dia.
1-1/2" length

Model	Input HP	Flow GPM	Pressure PSI		Displacement cu.in/rev		Speed RPM
		3600r/min	LO	HI	LO	HI	Max.
AP-HFL-22	12	22	400/900	3000	0.93	0.465	3600
AP-HFL-28	16	28	400/900	3000	1.395	0.465	3600

INSTALLATION DATA



- Weight: **AP-HFL-22:** 20 pounds
AP-HFL-28: 21 pounds

ORDERING INFORMATION

AP	HFL	28	P	R
Gear Pump	HI/LO Series	Nominal Flow GPM at 3600 rpm	Drive Shaft	Rotation Direction Viewed from drive shaft end
		See Table	P 5/8" Dia. Straight	R Clockwise L* Counter Clockwise *Special Order

AP-PTO Gear Pump



DESCRIPTION

- AP-PTO is a PTO-driven gear pump constructed with cast iron and plates and is available with aluminum or cast iron gear section.
- Standard ports are **SAE-16 (1 5/16-12)** inlet and **SAE-12 (1 1/16-12)** outlet.

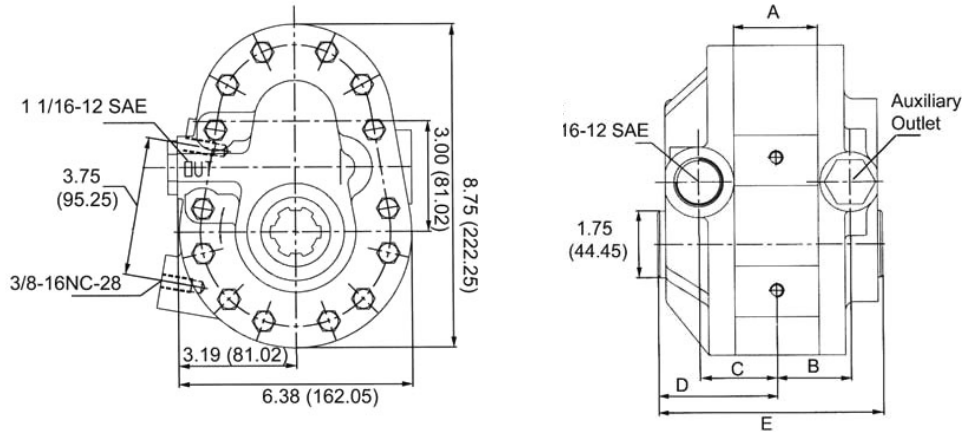


TECHNICAL DATA

- Displacement Size: 4 sizes from 3.41 to 9.76 cu. in/rev (56 to 160 ml/rev)
- Standard Drive: 1 3/8 diameter 6 tooth female spline
- Filtration: 10 micron or better
- Oil Viscosity: 6 to 200 cSt
- Inlet Pressure: 12 to 32 psi absolute
- Temperature: Oil: -25°C to 80°C / -12°F to 175°F
Ambient: -22°C to 55°C / -8°F to 130°F

Model	Displacement		Pressure		Speed RPM	Weight	
	cm3/rev	cu.in/rev	PSI	Bar	Rated	Lbs.	Kg
AP-PTO-9	160	9.76	2500	172.5	540	40	18
AP-PTO-7	125	7.62	2500	172.5	540	38	17
AP-PTO-5	90	5.50	2500	172.5	540	36	16
AP-PTO-5-21	90	5.50	2500	172.5	1000	36	16
AP-PTO-3	56	3.41	2500	172.5	540	33	15
AP-PTO-3-21	56	3.41	2500	172.5	1000	33	15

INSTALLATION DATA



Model	A		B		C		D		E	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
AP-PTO-9	60.3	2.37	53.1	2.09	55.6	2.19	85.1	3.35	161.3	6.35
AP-PTO-7	50.9	2.00	48.5	1.91	50.8	2.00	80.3	3.16	151.6	5.97
AP-PTO-5	41.25	1.62	43.7	1.72	46.0	1.81	75.4	2.97	142.2	5.60
AP-PTO-3	32.1	1.26	39.1	1.54	41.4	1.63	70.6	2.78	132.8	5.23

PERFORMANCE DATA

Model	RPM	500 PSI		1000 PSI		1500 PSI		2000 PSI	
		Input HP	GPM Output	Input HP	GPM Output	Input HP	GPM Output	Input HP	GPM Output
AP-PTO-9	540	8.40	21.10	16.10	20.70	23.80	20.70	32.10	20.70
AP-PTO-7	540	7.10	16.80	13.60	16.61	20.40	16.50	27.40	16.61
AP-PTO-5	540	4.90	11.77	9.30	11.50	13.80	11.19	18.10	11.00
AP-PTO-5-21	1000	9.30	22.58	17.40	22.20	25.90	21.81	34.30	21.62
AP-PTO-3	540	2.90	7.18	5.90	6.80	8.80	6.80	11.90	6.80
AP-PTO-3-21	1000	5.50	13.61	11.00	13.04	16.50	13.22	22.60	13.22

ORDERING INFORMATION

AP-PTO		A		9		6		S	
Series		Center Section		Displacement		Drive Required		Port Location	
PTO	PTO Driven	A	Aluminum	9	9.76 cu.in/rev	6	6 tooth spline	S	Side Port
		B	Cast Iron*	7	7.72 cu.in/rev	21	21 tooth spline*		
				5	5.50 cu.in/rev				
				3	3.41 cu.in/rev				

* Special order

DESCRIPTION

■ Anfield Hydraulic Gear dividers work from a single pump source to:

- 1) Synchronize operation of multiple cylinders or fluid motors.
- 2) Intensify pressure when pressure higher than pump capacity is required.
- 3) Proportionally divide pump flow out among several circuits.

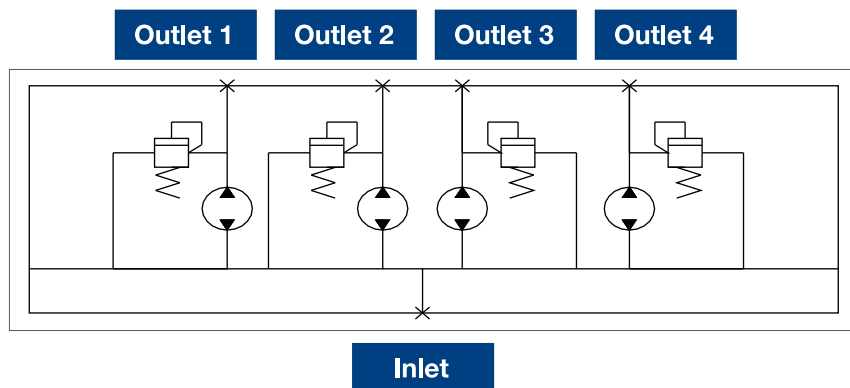


■ AFD1 Series displacement: 1.60 cm³ to 8.42 cm³ per section

■ AFD2 Series displacement: 6 cm³ to 31 cm³ per section

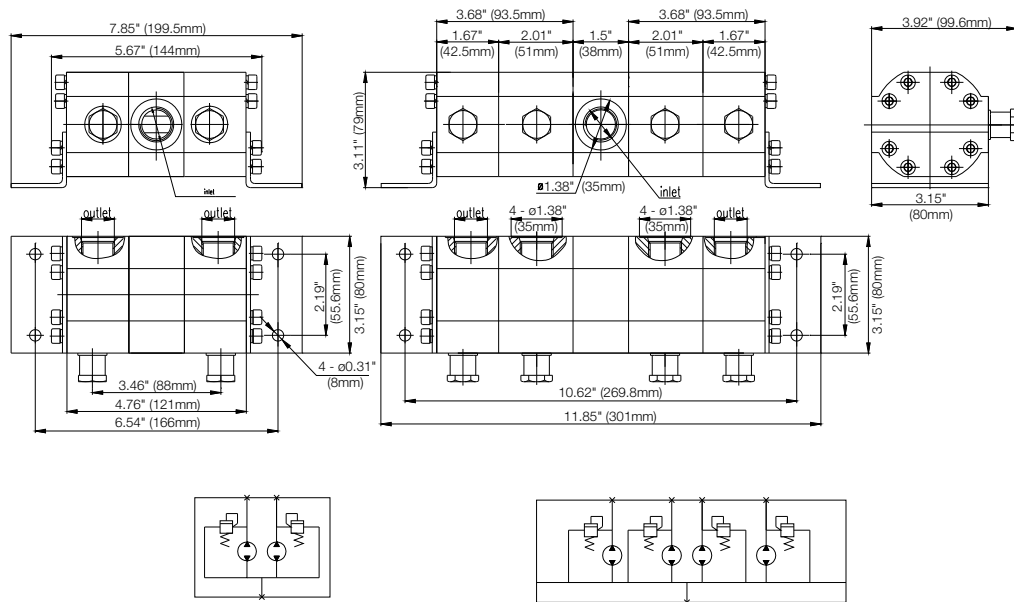
TECHNICAL DATA

- Housing: Aluminum
- Filtration: 25 micron or better
- Fluid: Hydraulic Fluid HLP mineral Oil DIN 51524 Part2
- Flow Accuracy: +/- 1.5%-2%
- Pressure Drop: 230-275 PSI (16-19 BAR)



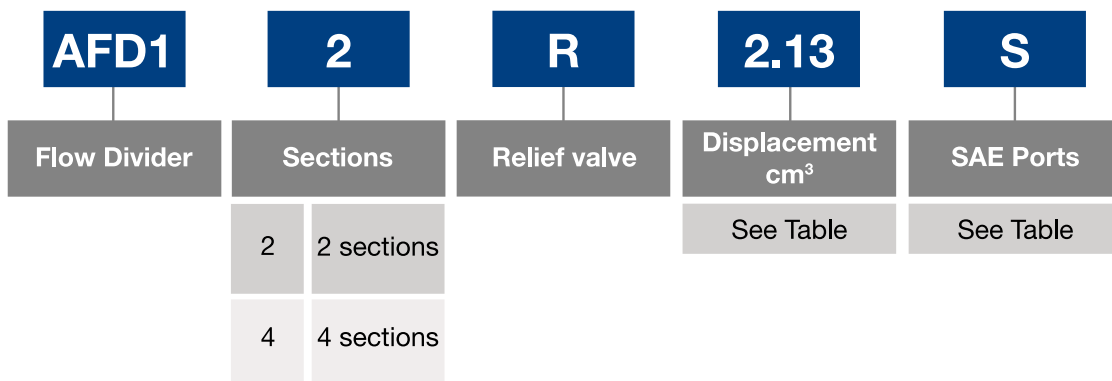
See next pages for dimensions and ordering information for AFD1.

DIMENSIONS



Displacement per section		SAE Port		Min. Flow/sec		Max. Flow/sec		Cont. Diff. Between Pressure Inlet/Outlet		Maximum Outlet Pressure any section	
cm ³ /rev	cu.in/rev	Inlet	Outlet	LPM	GPM	LPM	GPM	PSI	BAR	PSI	BAR
1.60	0.097	SAE8	SAE6	3.0	0.8	6.4	1.7	1800	124	3500	240
2.13	0.129	SAE8	SAE6	4.5	1.2	9.5	2.5	1800	124	3500	240
3.18	0.194	SAE8	SAE6	6.4	1.7	13.2	4.5	1800	124	3500	240
4.24	0.258	SAE10	SAE10	9.5	2.5	18.9	5.0	1800	124	3500	240
5.29	0.323	SAE10	SAE10	11.4	3.0	22.7	6.0	1800	124	3500	240
6.36	0.388	SAE10	SAE10	13.2	3.5	26.5	7.0	1600	110	3500	240
7.42	0.483	SAE10	SAE10	15.1	4.0	30.3	8.0	1300	90	3500	240
8.42	0.517	SAE10	SAE10	17.0	4.5	34.1	9.0	1200	83	3500	240

ORDERING INFORMATION

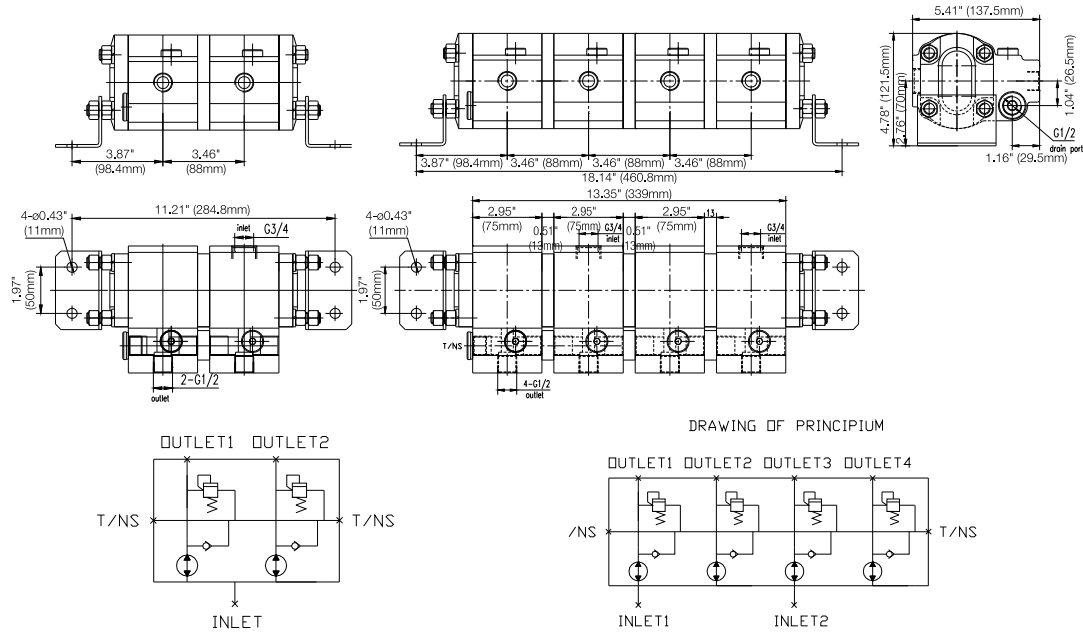


AFD2 Series Rotary Gear Flow Dividers

Displacement up to 31 cm³ per section

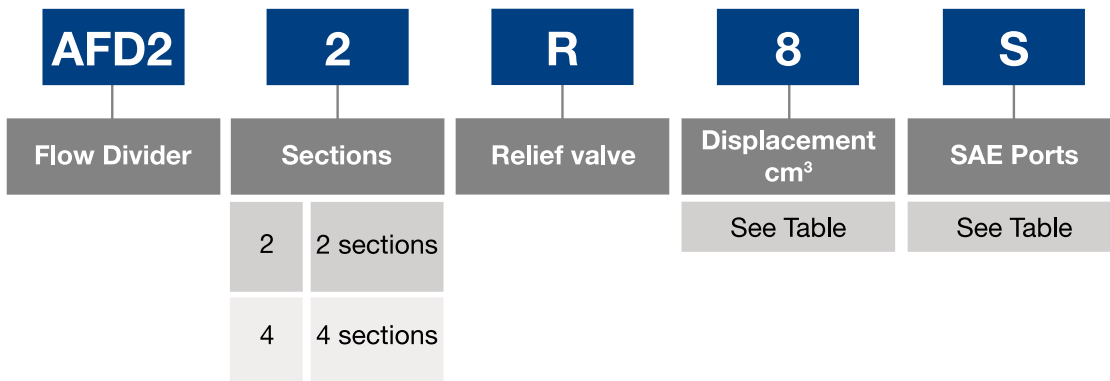


DIMENSIONS



Displacement per section		SAE Port			Min. Flow/sec		Max. Flow/sec		Cont. Diff. Between Pressure Inlet/Outlet		Maximum Outlet Pressure any section	
cm ³ /rev	cu.in/rev	Inlet	Outlet	Drain	LPM	GPM	LPM	GPM	PSI	BAR	PSI	BAR
6	0.366	SAE10	SAE8	SAE6	3.0-16	0.8-4.2	18	4.8	3142	220	3571	250
8	0.488	SAE10	SAE8	SAE6	4.0-19	1.1-5.0	22	5.8	3142	220	3571	250
11	0.671	SAE10	SAE8	SAE6	5.5-25	1.5-6.6	27	7.1	3142	220	3571	250
14	0.854	SAE10	SAE8	SAE6	7.0-32	1.8-8.4	34	9.0	2857	200	3142	220
17	1.037	SAE12	SAE8	SAE6	8.5-34	2.2-9.0	37	9.8	2857	200	3142	220
25	1.525	SAE12	SAE8	SAE6	12-48	3.1-	53	14	2857	200	3142	220
31	1.891	SAE12	SAE8	SAE6	14-60	3.7-	70	18.5	2286	160	2571	180

ORDERING INFORMATION



Strength in Products, Strength in Service

- Pressure Switches
- Temperature Switches
- Transducers
- Gear Pumps
- Flow Dividers
- Hydraulic Motors
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- Test Points
- Gauges
- Monoblock Valves
- Sectional Valves



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