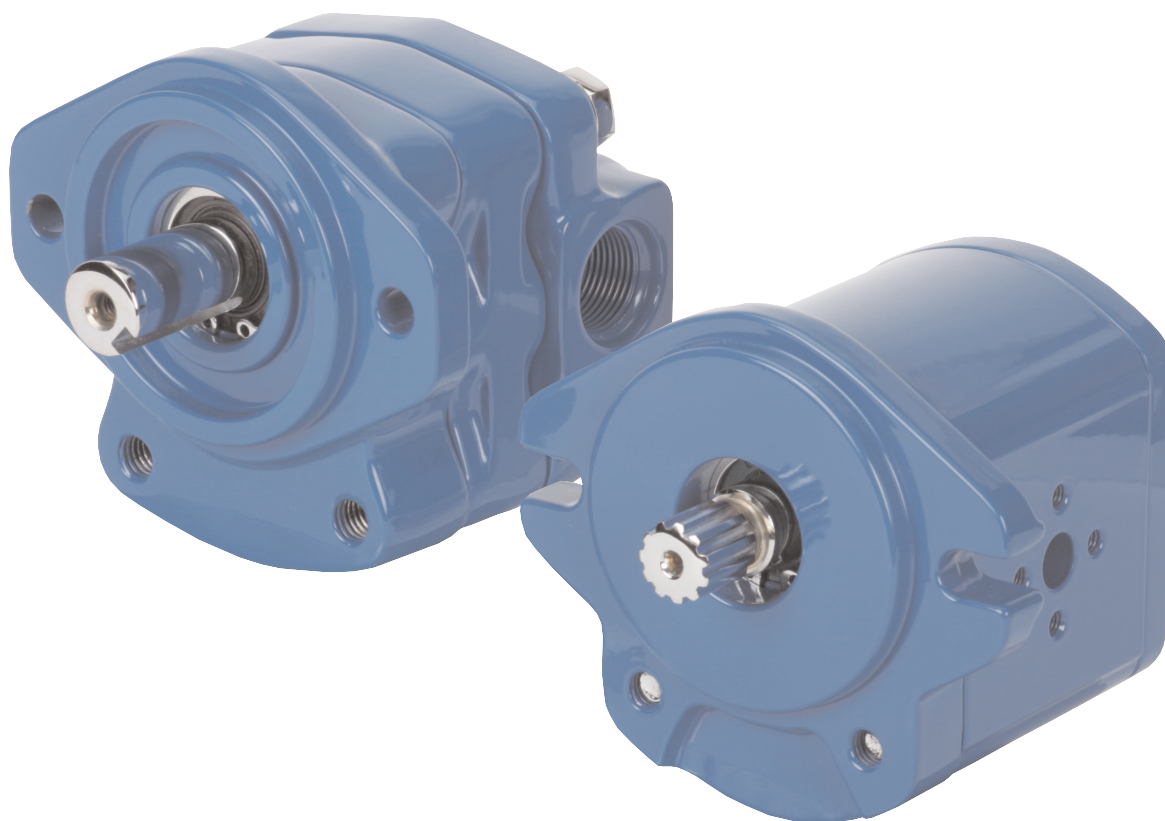


EATON

Global Gear Pumps

A AL Pump/Group 2/AEG Series
A CI Pump/Group 2/AEK Series



A AL Pump/Group 2/ AEG Series

Eaton Gear Products combine state of the art innovation and manufacturing processes. These products are designed to satisfy global customer requirements for higher pressure, quiet operation, long life, and a full range of options and features.

The Group 2 aluminum series is a floating bushing, pressure balanced design with a high strength extruded aluminum body and cast iron end cap and mounting flange.

Features:

- Continuous operating pressures to 4000 psi
- SAE, DIN, & ISO Flange, shaft and porting styles
- 12 tooth low noise and pressure ripple gear design
- High efficiency gear profiles
- Built to ISO 9001 Standards
- 3-year warranty
- Field reversible

Customize your Eaton gear products with these options:

- Single and multiple section pumps
- Isolated sections for applications requiring separate fluids or reservoirs
- Common and separate inlets
- Relief valve and priority control valve options
- Auxiliary mounting features

Applications:

- Turf care
- Agriculture tractors and harvesters
- Lift trucks
- Skidsteer loaders
- Fan drive systems
- Steering circuits
- Salt and sand spreaders
- Auxiliary work circuits
- Industrial

Performance Data

GGP A MOUNT ALUMINUM

Displacement	cm ³ /r in ³ /r	5.3 0.32	6.5 0.40	8.3 0.51	10.3 0.63	12.9 0.79	16.1 0.98	20.0 1.22	24.0 1.46	28.4 1.73	33.4 2.04
Max Continuous Pressure	bar psi	276 4000	276 4000	276 4000	276 4000	276 4000	276 4000	250 3625	235 3400	200 2900	170 2465
Max Intermittent Pressure	bar psi	305 4425	305 4425	305 4425	305 4425	305 4425	305 4425	276 4002	270 3920	220 3190	190 2750
Rated Speed		4000	4000	4000	3600	3300	3000	2800	2600	2300	2100
Min Rated Speed		700	700	700	700	700	700	700	700	700	700
Min Output Flow at Continuous Rated Speed & Pressure	LPM GPM	18.7 4.9	22.9 6.0	29.2 7.7	32.6 8.6	37.5 9.9	44.4 11.7	51.5 13.6	57.4 15.2	60.1 15.9	64.5 17.0
Input Power at Continuous Rated Speed & Pressure	kW HP	11.6 15.6	14.3 19.1	18.2 24.4	20.4 27.3	23.4 31.3	26.5 35.6	27.5 36.8	28.8 38.6	25.6 34.4	23.4 31.4

Note: Performance data was collected using a mineral based oil with a viscosity of 133 SUS at 49°C (120°F)

GENERAL SPECIFICATIONS

Mounting flange	SAE 2 Bolt A	Max. Rotating Torque at 0 Pressure (single section)	5.5 N-m (4.0 ft-lb)
	SAE 2 Bolt B	Max Continuous Inlet Temperature	80°C (180°F)
	European Rectangular	Min. Operating Temperature	-29°C (-20°F)
Max. Continuous Pressure	276 bar (4000 psi)*	Max. Inlet Vacuum at Operating Condition	6.0 In. Hg.
Max. Intermittent Pressure	305 bar (4400 psi)*		
Min. Speed at Constant Pressure	700 RPM		
Operating Viscosity	8 cSt Min. 2000 cSt Max. at start up under load (16-40 cSt optimum)		

* Displacements can vary with respect to pressure and speed capability. See table for individual ratings.

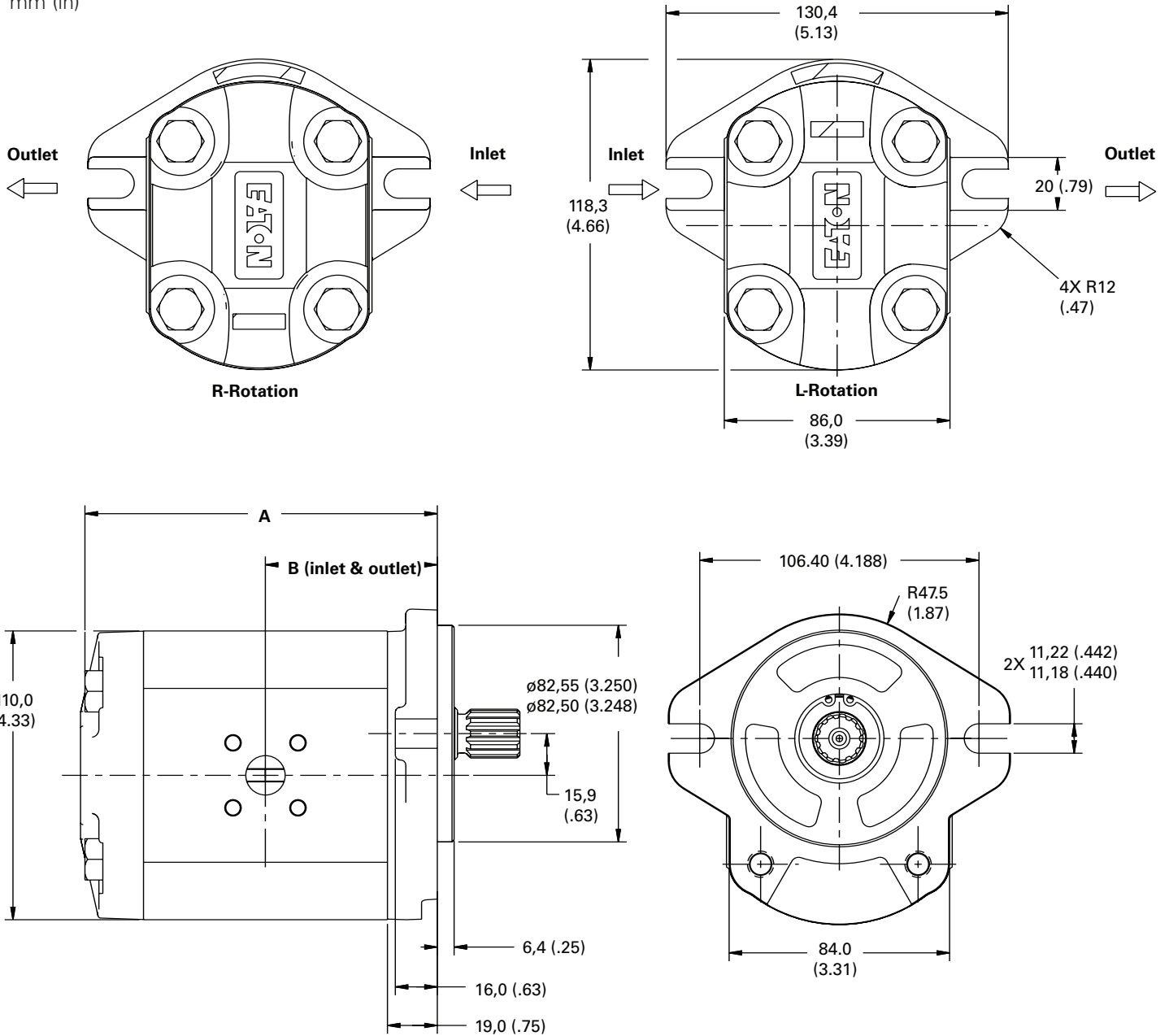
PUMP SPECIFICATION

Displacement cm ³ /r (in ³ /r)	Nominal Flow at 2000 RPM LPM (GPM)	A mm (in)	B mm (in)	Weight Kg (lb.)
5.3 (.32)	10.6 (2.80)	93.6 (3.68)	44.1 (1.74)	3.6 (7.90)
6.5 (.40)	13.0 (3.40)	93.4 (3.68)	45.0 (1.77)	3.6 (7.90)
8.3 (.51)	16.6 (4.40)	98.2 (3.86)	46.4 (1.88)	3.7 (8.20)
10.3 (.63)	20.6 (5.40)	99.2 (3.90)	47.9 (1.89)	3.8 (8.40)
12.9 (.79)	25.8 (6.80)	105.1 (4.14)	49.9 (1.96)	3.9 (8.60)
16.1 (.98)	32.2 (8.50)	108.0 (4.25)	52.3 (2.06)	4.0 (8.80)
20.0 (1.22)	40.0 (10.60)	113.9 (4.49)	55.3 (2.18)	4.3 (9.50)
24.0 (1.46)	48.0 (12.70)	120.0 (4.72)	58.3 (2.30)	4.4 (9.70)
28.4 (1.73)	56.8 (15.00)	128.7 (5.07)	61.7 (2.43)	4.6 (10.10)
33.4 (2.04)	66.8 (17.60)	134.3 (5.29)	65.5 (2.58)	4.9 (10.80)

A AL Pump/Group 2/ AEG Series

A AI Pump

Dimensional Drawing
mm (in)



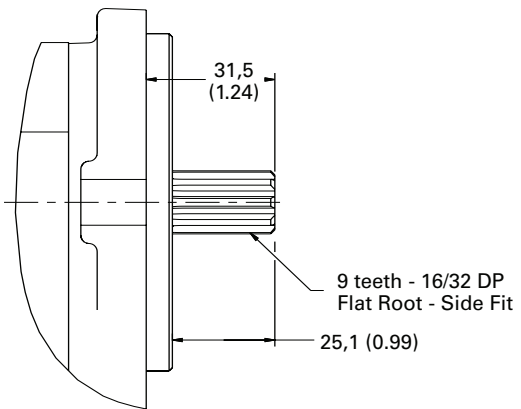
A AL Pump/Group 2/ AEG Series

A AI Shaft

Dimensional Drawing
mm (in)

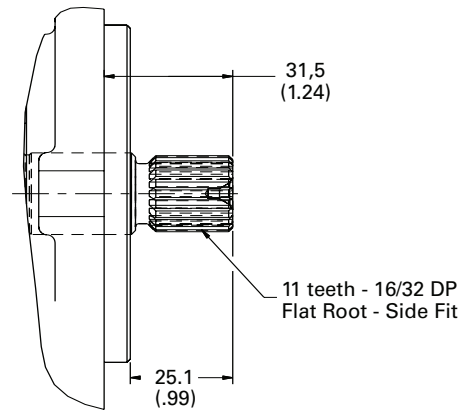
Shaft Type -01

Max. Torque 85Nm (752 lb-in)



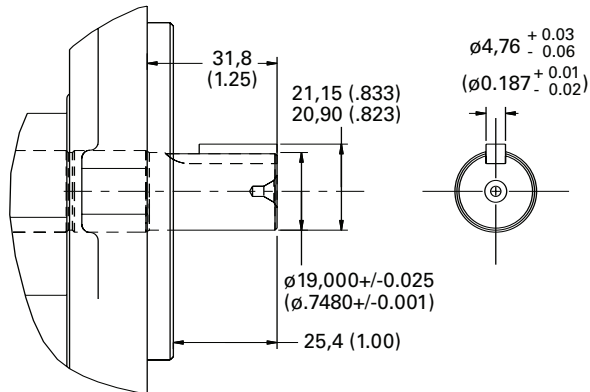
Shaft Type -04

Max. Torque 160Nm (1418 lb-in)



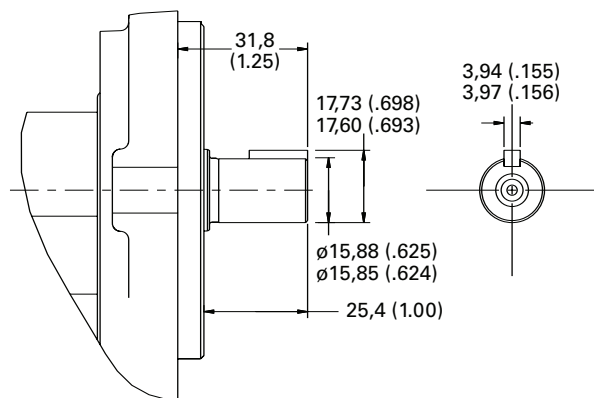
Shaft Type -08

Max. Torque 151Nm (1335 lb-in)



Shaft Type -02

Max. Torque 86Nm (762 lb-in)



A AL Pump/Group 2/ AEG Series

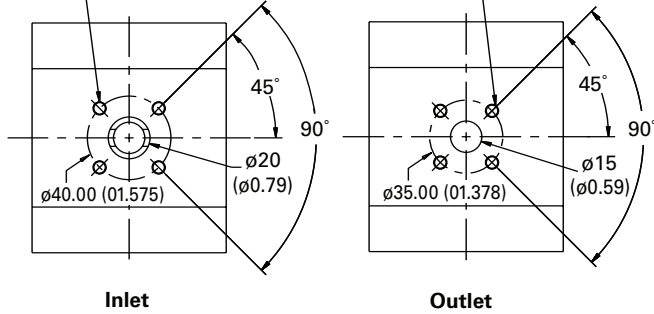
A AI Ports

Dimensional Drawing

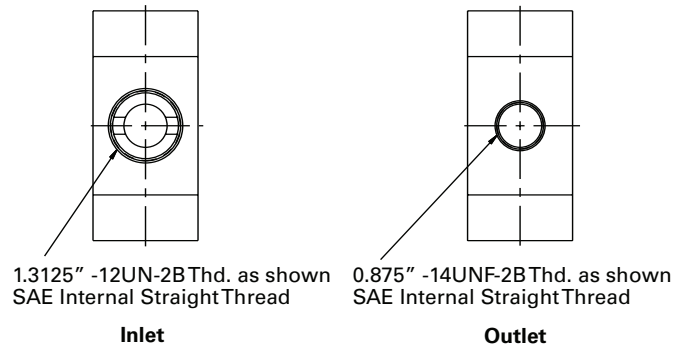
mm (in)

Port Type AM

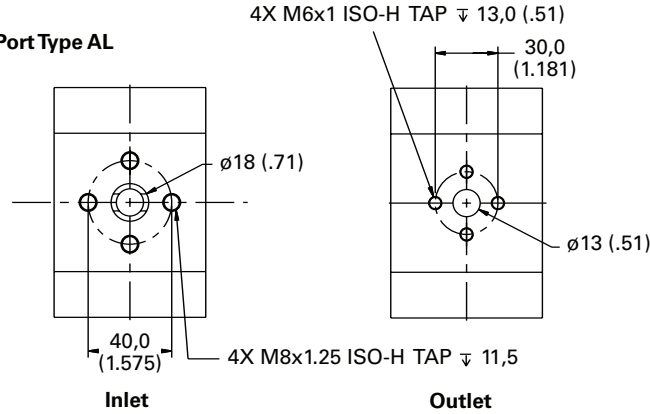
4X M6x1 ISO-H TAP ∇ 13,0 (.51) 4X M6x1 ISO-H TAP ∇ 13,0 (.51)



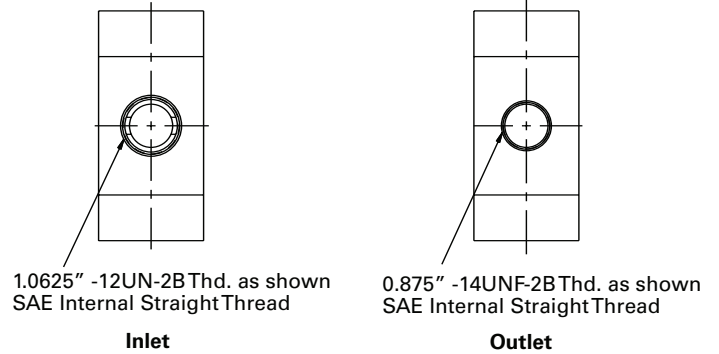
Port Type AC



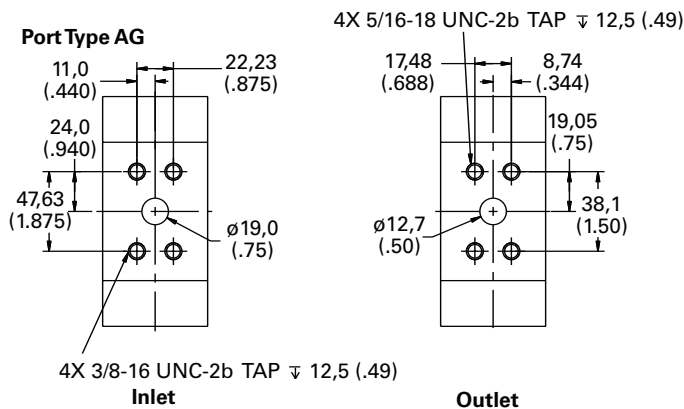
Port Type AL



Port Type AB



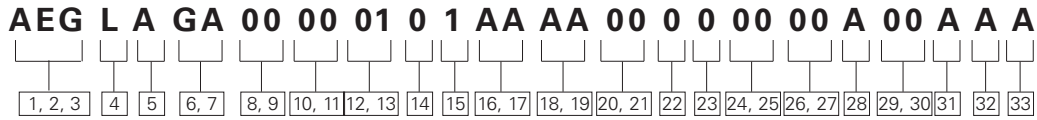
Port Type AG



Model Code

A AL Pump/Group 2/
AEG Series

Items not in **bold** are non standard and may have a longer lead time.



1, 2, 3 **Global Gear Pump**

AEG – A Mount Aluminum

4 **Input Rotation**

L – Left-Hand Rotation CCW
R – Right-Hand Rotation CW

5 **Mounting Features (Front)**

A – SAE J744 82-2
(SAE A) 2 BOLT
B – SAE J744 101-2
(SAE B) 2 BOLT
C – ISO 3019/2
(ISO 82A2HW) 2 BOLT
D – ISO 3019/2
(ISO 100A2HW) 2 BOLT
E – EUROPEAN RECTANGULAR
71.4mm X 96mm
F – EUROPEAN RECTANGULAR
72mm X 100mm
G – INTEGRAL MOUNT,
NO FRONT MOUNTING
INTERFACES WITH
EATON PISTON PUMPS

6, 7 **Displacement (Single)**

GA – 5.3 cm³/r [.32 in³/r]
GB – 6.5 cm³/r [.40 in³/r]
GC – 8.3 cm³/r [.51 in³/r]
GD – 10.3 cm³/r [.63 in³/r]
GE – 12.9 cm³/r [.79 in³/r]
GF – 16.1 cm³/r [.98 in³/r]
GG – 20.0 cm³/r [1.22 in³/r]
GH – 24.0 cm³/r [1.46 in³/r]
GJ – 28.4 cm³/r [1.73 in³/r]
GK – 33.4 cm³/r [2.04 in³/r]

8, 9 **Displacement (Double)**

00 – None
GA – 5.3 cm³/r [.32 in³/r]
GB – 6.5 cm³/r [.40 in³/r]
GC – 8.3 cm³/r [.51 in³/r]
GD – 10.3 cm³/r [.63 in³/r]
GE – 12.9 cm³/r [.79 in³/r]
GF – 16.1 cm³/r [.98 in³/r]
GG – 20.0 cm³/r [1.22 in³/r]
GH – 24.0 cm³/r [1.46 in³/r]
GJ – 28.4 cm³/r [1.73 in³/r]
GK – 33.4 cm³/r [2.04 in³/r]

10, 11 **Displacement (Triple)**

00 – None
GA – 5.3 cm³/r [.32 in³/r]
GB – 6.5 cm³/r [.40 in³/r]
GC – 8.3 cm³/r [.51 in³/r]
GD – 10.3 cm³/r [.63 in³/r]

GE – 12.9 cm³/r [.79 in³/r]
GF – 16.1 cm³/r [.98 in³/r]
GG – 20.0 cm³/r [1.22 in³/r]
GH – 24.0 cm³/r [1.46 in³/r]
GJ – 28.4 cm³/r [1.73 in³/r]
GK – 33.4 cm³/r [2.04 in³/r]

12, 13 **Input Shaft**

01 – SAE A - 9 TOOTH
16/32 SPLINE
02 – SAE A/15.9mm
STRAIGHT KEYED SHAFT
03 – SAE A - TAPERED SHAFT
04 – 11 TOOTH 16/32 SPLINE
05 – 10 TOOTH 16/32
SAE 16.4 SPLINE
06 – 14 TOOTH
DIN 5480 SPLINE
07 – 9 TOOTH
DIN 5482 SPLINE
08 – 19mm STRAIGHT
KEYED SHAFT
10 – EUROPEAN
TAPERED SHAFT
(17mm X 1:5 TAPER)
11 – TANG SHAFT
8mm X 6.6mm
(for Euro coupling)

14 **Auxiliary Mounting Features**

0 – No Rear mounting

15 **Port Location**

1 – SUCTION SIDE,
PRESSURE SIDE
2 – SUCTION REAR,
PRESSURE REAR
3 – SUCTION SIDE,
PRESSURE REAR
4 – SUCTION REAR,
PRESSURE SIDE
5 – COMMON SUCTION SIDE,
FRONT OF A DOUBLE
6 – COMMON SUCTION SIDE,
REAR OF A DOUBLE
7 – COMMON SUCTION SIDE,
FRONT OF A TRIPLE
8 – COMMON SUCTION SIDE,
CENTER OF A TRIPLE
9 – COMMON SUCTION SIDE,
REAR OF A TRIPLE
A – Suction side, pressure side
for valve of a single
B – Suction rear, pressure side
for valve of a single

C – Suction side, pressure side
with valve suction side,
pressure side of a double
D – Suction side, pressure side
with valve suction rear, pres-
sure rear of a double
E – Suction side, pressure side
1&2 with valve suction side,
pressure side of a triple
F – Suction side, pressure side
1&2 with valve suction rear,
pressure rear of a triple
G – Common suction front
side, pressure side 1&2
with valve suction side,
pressure side of a triple
H – Common suction front
side, pressure side 1&2
with valve suction rear,
pressure rear of a triple
J – Common suction center
side, pressure side 1&2
with valve suction side,
pressure side of a triple
K – Common suction center
side, pressure side 1&2
with valve suction rear,
pressure rear of a triple

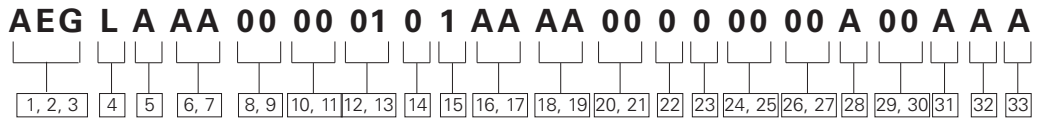
16, 17 **Suction and Pressure (Single - Front)**

AA – .875-14 UNF-2B SAE
O-RING PORT (SAE #10);
.750-16 UNF-2B SAE O-
RING PORT (SAE #8)
AB – 1.0625-12 UN-2B SAE
O-RING PORT (SAE #12);
.875-14 UNF-2B SAE O-
RING PORT (SAE #10)
AC – 1.3125-12 UN-2B SAE
O-RING PORT (SAE #16);
.875-14 UNF-2B SAE O-
RING PORT (SAE #10)
(for valve options also)
AD – M22 X 1.5 METRIC
O-RING PORT; M18 X 1.5
METRIC O-RING PORT
AE – M27 X 2.0 METRIC
O-RING PORT; M22 X 1.5
METRIC O-RING PORT
AF – M33 X 2.0 METRIC O-
RING PORT; M27 X 2.0
METRIC O-RING PORT
AG – SAE J518 C SPLIT
FLANGE 19.0 [.75] DIA;
SAE J518 C SPLIT
FLANGE 12.7 [.50] DIA

AH – SAE J518 C SPLIT
FLANGE 25.4 [1.00] DIA;
SAE J518 C SPLIT
FLANGE 19.0 [.750] DIA
AJ – Metric SAE J518 C SPLIT
FLANGE 19.0 [.75] DIA;
SAE J518 C SPLIT
FLANGE 12.7 [.50] DIA
AK – Metric SAE J518 C SPLIT
FLANGE 25.4 [1.00] DIA;
SAE J518 C SPLIT
FLANGE 19.0 [.750] DIA
AL – European 4 bolt flange
18.0 [0.708] dia.;
European 4 bolt flange
13.0 [0.512] dia.
AM – German 4 bolt flange
20.0 [0.787] dia.;
German 4 bolt flange
15.0 [0.590] dia.
AN – G-3/4 o-ring JIS o-ring
port; G-1/2 o-ring JIS o-
ring port
AP – G-1 o-ring JIS o-ring port;
G-3/4 o-ring JIS o-ring port
AR – 1.3125-12 UN-2B SAE o-
ring port (SAE #16); .750-
16 UNF-2B SAE o-ring
port (SAE #8) primary
pressure port (for valve
options only)
AS – SAE J518 C SPLIT
FLANGE 12.7 [.50] DIA;
SAE J518 C SPLIT
FLANGE 12.7 [.50] DIA

18, 19 **Suction and Pressure (Rear Double-Center Triple)**

00 – None
AA – .875-14 UNF-2B SAE
O-RING PORT (SAE #10);
.750-16 UNF-2B SAE O-
RING PORT (SAE #8)
AB – 1.0625-12 UN-2B SAE
O-RING PORT (SAE #12);
.875-14 UNF-2B SAE O-
RING PORT (SAE #10)
AC – 1.3125-12 UN-2B SAE
O-RING PORT (SAE #16);
.875-14 UNF-2B SAE O-
RING PORT (SAE #10) (for
valve options also)
AD – M22 X 1.5 METRIC
O-RING PORT; M18 X 1.5
METRIC O-RING PORT



- AE – M27 X 2.0 METRIC O-RING PORT; M22 X 1.5 METRIC O-RING PORT
- AF – M33 X 2.0 METRIC O-RING PORT; M27 X 2.0 METRIC O-RING PORT
- AG** – SAE J518 C SPLIT FLANGE 19.0 [.75] DIA; SAE J518 C SPLIT FLANGE 12.7 [.50] DIA
- AH – SAE J518 C SPLIT FLANGE 25.4 [1.00] DIA; SAE J518 C SPLIT FLANGE 19.0 [.750] DIA
- AJ – Metric SAE J518 C SPLIT FLANGE 19.0 [.75] DIA; SAE J518 C SPLIT FLANGE 12.7 [.50] DIA
- AK – Metric SAE J518 C SPLIT FLANGE 25.4 [1.00] DIA; SAE J518 C SPLIT FLANGE 19.0 [.750] DIA
- AL** – European 4 bolt flange 18.0 [0.708] dia.; European 4 bolt flange 13.0 [0.512] dia.
- AM** – German 4 bolt flange 20.0 [0.787] dia.; German 4 bolt flange 15.0 [0.590] dia.
- AN – G-3/4 o-ring JIS o-ring port; G-1/2 o-ring JIS o-ring port
- AP – G-1 o-ring JIS o-ring port; G-3/4 o-ring JIS o-ring port
- AR – 1.3125-12 UN-2B SAE o-ring port (SAE #16); .750-16 UNF-2B SAE o-ring port (SAE #8) primary pressure port (for valve options only)
- AS – SAE J518 C SPLIT FLANGE 12.7 [.50] DIA; SAE J518 C SPLIT FLANGE 12.7 [.50] DIA

20, 21 Suction and Pressure (Rear Triple)

- 00** – None
- AA – .875-14 UNF-2B SAE O-RING PORT (SAE #10); .750-16 UNF-2B SAE O-RING PORT (SAE #8)
- AB** – 1.0625-12 UN-2B SAE O-RING PORT (SAE #12); .875-14 UNF-2B SAE O-

- RING PORT (SAE #10)
- AC** – 1.3125-12 UN-2B SAE O-RING PORT (SAE #16); .875-14 UNF-2B SAE O-RING PORT (SAE #10) (for valve options also)
- AD – M22 X 1.5 METRIC O-RING PORT; M18 X 1.5 METRIC O-RING PORT
- AE – M27 X 2.0 METRIC O-RING PORT; M22 X 1.5 METRIC O-RING PORT
- AF – M33 X 2.0 METRIC O-RING PORT; M27 X 2.0 METRIC O-RING PORT
- AG** – SAE J518 C SPLIT FLANGE 19.0 [.75] DIA; SAE J518 C SPLIT FLANGE 12.7 [.50] DIA
- AH – SAE J518 C SPLIT FLANGE 25.4 [1.00] DIA; SAE J518 C SPLIT FLANGE 19.0 [.750] DIA
- AJ – Metric SAE J518 C SPLIT FLANGE 19.0 [.75] DIA; SAE J518 C SPLIT FLANGE 12.7 [.50] DIA
- AK – Metric SAE J518 C SPLIT FLANGE 25.4 [1.00] DIA; SAE J518 C SPLIT FLANGE 19.0 [.750] DIA
- AL** – European 4 bolt flange 18.0 [0.708] dia.; European 4 bolt flange 13.0 [0.512] dia.
- AM** – German 4 bolt flange 20.0 [0.787] dia.; German 4 bolt flange 15.0 [0.590] dia.
- AN – G-3/4 o-ring JIS o-ring port; G-1/2 o-ring JIS o-ring port
- AP – G-1 o-ring JIS o-ring port; G-3/4 o-ring JIS o-ring port
- AR – 1.3125-12 UN-2B SAE o-ring port (SAE #16); .750-16 UNF-2B SAE o-ring port (SAE #8) primary pressure port (for valve options only)
- AS – SAE J518 C SPLIT FLANGE 12.7 [.50] DIA; SAE J518 C SPLIT FLANGE 12.7 [.50] DIA

22 Valve Style

- 0** – NO RELIEF VALVE
- A – RELIEF VALVE with .875-14 UNF-2B SAE o-ring (SAE #10) tank port
- B – PRIORITY FLOW with .750-16 UNF-2B SAE o-ring (SAE #8) tank port
- C – PRIORITY FLOW WITH RELIEF VALVE with .750-16 UNF-2B SAE o-ring (SAE #8) tank port
- D – LOAD SENSE PRIORITY FLOW with .5625-18 UNF-2B (SAE #6) SAE o-ring load sending port
- E – LOAD SENSE PRIORITY FLOW WITH RELIEF VALVE with .5625-18 UNF-2B (SAE #6) SAE o-ring load sending port

23 Secondary Pressure Port (Flow Divider)

- 0** – NO SECONDARY PRESSURE PORT
- A – .750-16 UNF-2B SAE O-RING PORT (SAE #8)
- B – .875-14 UNF-2B SAE O-RING PORT (SAE #10)
- C – M18 X 1.5 METRIC O-RING PORT
- D – M22 X 1.5 METRIC O-RING PORT

24, 25 Priority Flow Divider Setting

- 00** – NO FLOW SETTING
- 01 – 3.8 L/min [1.00 gal/min]
- 02 – 7.6 L/min [2.00 gal/min]
- 03 – 11.4 L/min [3.00 gal/min]
- 04 – 15.1 L/min [4.00 gal/min]
- 05 – 18.9 L/min [5.00 gal/min]
- 06 – 22.7 L/min [6.00 gal/min]
- 07 – 26.5 L/min [7.00 gal/min]
- 08 – 30.3 L/min [8.00 gal/min]
- 09 – 34.1 L/min [9.00 gal/min]
- 10 – LOAD SENSING - DYNAMIC SIGNAL - BIAS PRESSURE 7.6 bar [110 lbf/in²]
- 11 – LOAD SENSING - STATIC SIGNAL - BIAS PRESSURE 5.4 bar [78 lbf/in²]
- 12 – LOAD SENSING - STATIC SIGNAL - BIAS PRESSURE 10.3 bar [150 lbf/in²]

26, 27 Relief Valve Setting

- 00** – NO FLOW SETTING
- 01 – 34.5 bar [500 lbf/in²]
- 02 – 51.7 bar [750 lbf/in²]
- 03 – 68.9 bar [1000 lbf/in²]
- 04 – 86.2 bar [1250 lbf/in²]
- 05 – 103.4 bar [1500 lbf/in²]
- 06 – 120.1 bar [1750 lbf/in²]
- 07 – 137.9 bar [2000 lbf/in²]
- 08 – 155.1 bar [2250 lbf/in²]
- 09 – 172.4 bar [2500 lbf/in²]
- 10 – 189.6 bar [2750 lbf/in²]
- 11 – 206.8 bar [3000 lbf/in²]

28 Seal Type

- A** – BUNA-N SEAL
- B** – VITON SHAFT SEAL
- C** – VITON SEALS

29, 30 Special Features

- 00** – No Special Features
- 01 – Double shaft seal for front flange
- 02 – Sealing between sections

31 Paint

- 0 – NO PAINT
- A** – PRIMER PER SPEC 209-13A
- B – Black per spec 209-13B

32 Identification

- A** – EATON NUMBER AND NAMEPLATE

33 Design Code

- A** – A

A CI Pump/Group 2/ AEK Series

The Group 2 cast iron pump series is a fixed bushing, pressure balanced design with a high strength cast iron body and cast iron end cap and mounting flange.

Customize your Eaton gear products with these options:

- Single and multiple section pumps
- Isolated sections for applications requiring separate fluids or reservoirs
- Common and separate inlets
- Relief valve and priority control valve options
- Auxiliary mounting features

Applications:

- Turf care
- Agriculture tractors and harvesters
- Lift trucks
- Skidsteer loaders
- Fan drive systems
- Steering circuits
- Salt and sand spreaders
- Auxiliary work circuits
- Industrial

Performance Data

GGP A MOUNT CAST IRON

		8.0	10.0	12.7	16.0	19.0	22.2	25.4	28.6	31.8	36.0
Displacement	cm ³ /r	8.0	10.0	12.7	16.0	19.0	22.2	25.4	28.6	31.8	36.0
	in ³ /r	0.49	0.61	0.77	0.98	1.16	1.35	1.55	1.75	1.94	2.20
Max Continuous Pressure	bar	280	280	280	280	280	250	250	250	250	210
	psi	4060	4060	4060	4060	4060	3625	3625	3625	3625	3045
Max Intermittent Pressure	bar	310	310	310	310	310	280	280	280	280	240
	psi	4495	4495	4495	4495	4495	4060	4060	4060	4060	3480
Max Rated Speed		3600	3600	3600	3300	3300	3000	3000	3000	3000	3000
Min Rated Speed		700	600	500	400	400	400	400	400	400	400
Min Output Flow at Continuous Rated Speed & Pressure	LPM	25.3	31.7	40.2	46.5	55.2	61.3	70.1	78.9	87.8	99.4
	GPM	6.7	8.4	10.6	12.3	14.6	16.2	18.5	20.9	23.2	26.3
Input Power at Continuous Rated Speed & Pressure	kW	15.8	19.8	25.1	29.0	34.4	32.7	37.4	42.1	46.8	44.5
	HP	21.2	26.5	33.7	38.9	46.2	43.8	50.1	56.4	62.7	59.6

Note: Performance data was collected using a mineral based oil with a viscosity of 133 SUS at 49°C (120°F)

SPECIFICATIONS

Mounting Flange	SAE 2 Bolt A SAE 2 Bolt B European Rectangular	Max. Rotating Torque at 0 Pressure (single section)	5.0 N-m (3.7 ft-lb)
Max. Continuous Pressure	280 bar (4060 psi)*	Max. Continuous Inlet Temperature	80°C (180°F)
Max. Intermittent Pressure	310 bar (4495 psi)*	Min. Operating Temperature	-29°C (-20°F)
Min. Speed at Constant Pressure	500 RPM	Max. Inlet Vacuum at Operating Condition	6.0 In. Hg
Operating Viscosity	8 cSt Min. 2000cSt max. at startup under load (16-40cSt optimum)		

* Displacements can vary with respect to pressure and speed capability. See table for individual ratings.

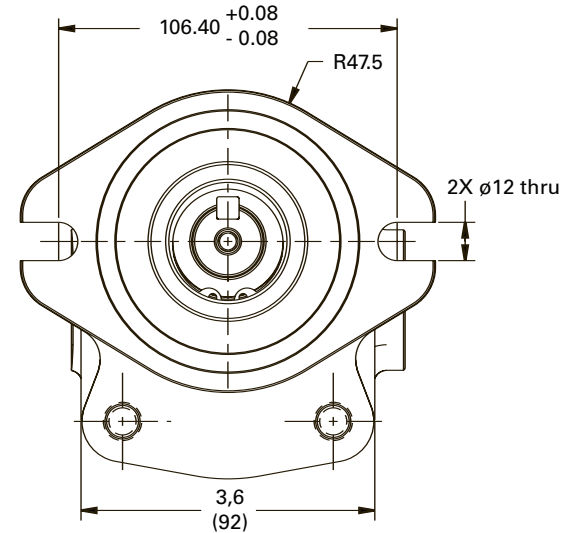
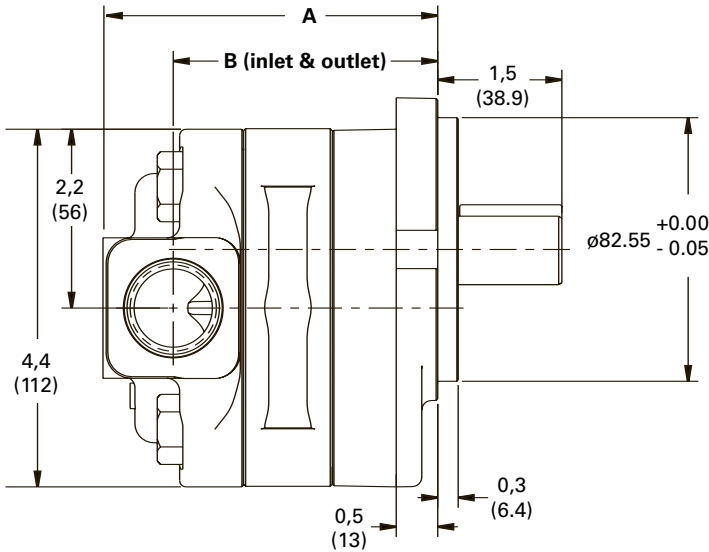
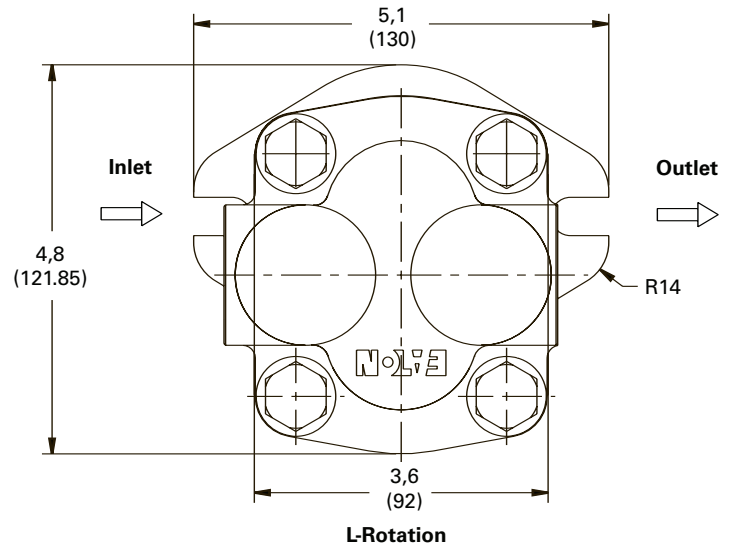
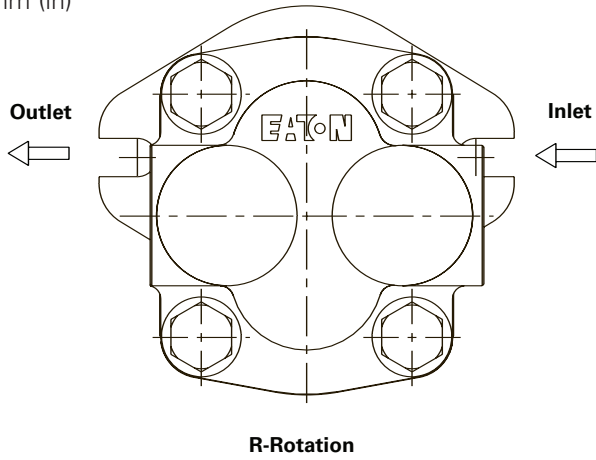
PUMP SPECIFICATION

Displacement	Nom Flow at 2000 RPM		A		B		Weight		
	LPM	(GPM)	mm	(in)	mm	(in)	Kg	(lb.)	
8.0	0.49	16.0	4.2	76.6	3.02	71.6	2.82	5.5	11.99
10.0	0.61	20.0	5.3	78.7	3.10	73.7	2.90	5.5	12.18
12.7	0.78	25.4	6.7	81.4	3.21	76.4	3.01	5.7	12.53
16.0	0.98	32.0	8.5	84.8	3.34	79.8	3.14	5.9	12.96
19.0	1.16	38.0	10.1	87.8	3.46	82.8	3.26	6.0	13.30
22.2	1.35	44.4	11.7	91.1	3.59	86.1	3.39	6.3	13.75
25.4	1.55	50.8	13.4	94.4	3.71	89.4	3.52	6.4	14.04
28.6	1.75	57.2	15.1	97.6	3.84	92.6	3.65	6.6	14.49
31.8	1.94	63.6	16.8	100.9	3.97	95.9	3.77	6.7	14.77
36.0	2.20	72.0	19.0	105.1	4.14	100.1	3.94	6.9	15.26

A CI Pump/Group 2/ AEK Series

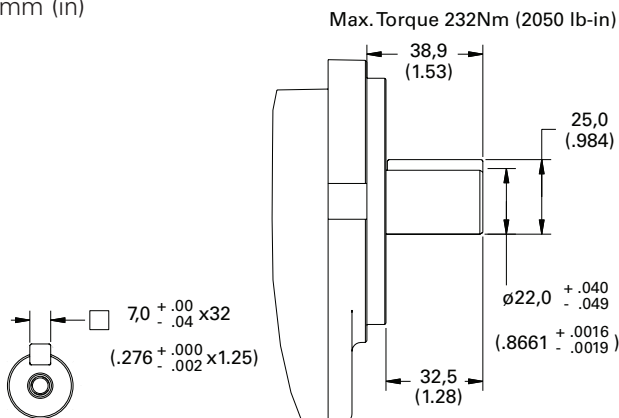
A CI Pump

Dimensional Drawing
mm (in)



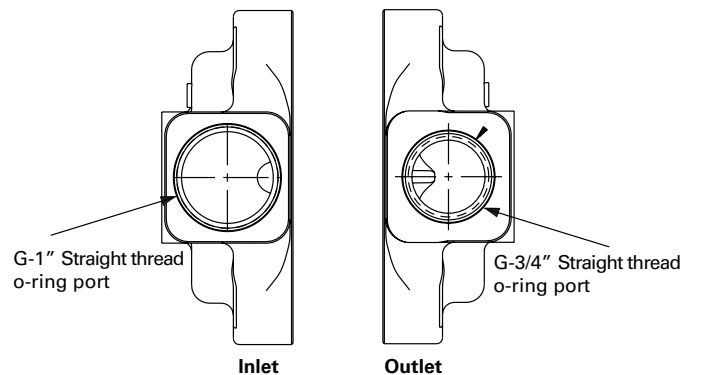
A CI Shaft

Dimensional Drawing
mm (in)



A CI Port

Dimensional Drawing
mm (in)

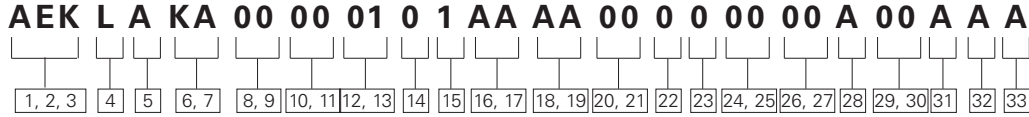


Model Code

A CI Pump/Group 2/

AEK Series

Items not in **bold** are non standard and may have a longer lead time.



1, 2, 3 Global Gear Pump

AEK – A Mount Cast Iron

4 Input Rotation

L – Left-Hand Rotation CCW
R – Right-Hand Rotation CW

5 Mounting Features (Front)

A – SAE J744 82-2 (SAE A) 2 BOLT
B – SAE J744 101-2 (SAE B) 2 BOLT
C – ISO 3019/2 (ISO 82A2HW) 2 BOLT
D – ISO 3019/2 (ISO 100A2HW) 2 BOLT
E – EUROPEAN RECTANGULAR 71.4mm X 96mm
F – EUROPEAN RECTANGULAR 72mm X 100mm
G – INTEGRAL MOUNT, NO FRONT MOUNTING

6, 7 Displacement (Single)

KA – 8.0 cm³/r [0.49 in³/r]
KB – 10.0 cm³/r [0.61 in³/r]
KC – 12.7 cm³/r [0.78 in³/r]
KD – 16.0 cm³/r [0.98 in³/r]
KE – 19.0 cm³/r [1.16 in³/r]
KF – 22.2 cm³/r [1.35 in³/r]
KG – 25.4 cm³/r [1.55 in³/r]
KH – 28.6 cm³/r [1.75 in³/r]
KJ – 31.8 cm³/r [1.94 in³/r]
KK – 36.0 cm³/r [2.20 in³/r]

8, 9 Displacement (Double)

00 – NONE
KA – 8.0 cm³/r [0.49 in³/r]
KB – 10.0 cm³/r [0.61 in³/r]
KC – 12.7 cm³/r [0.78 in³/r]
KD – 16.0 cm³/r [0.98 in³/r]
KE – 19.0 cm³/r [1.16 in³/r]
KF – 22.2 cm³/r [1.35 in³/r]
KG – 25.4 cm³/r [1.55 in³/r]
KH – 28.6 cm³/r [1.75 in³/r]
KJ – 31.8 cm³/r [1.94 in³/r]
KK – 36.0 cm³/r [2.20 in³/r]

10, 11 Displacement (Triple)

00 – NONE
KA – 8.0 cm³/r [0.49 in³/r]
KB – 10.0 cm³/r [0.61 in³/r]
KC – 12.7 cm³/r [0.78 in³/r]
KD – 16.0 cm³/r [0.98 in³/r]
KE – 19.0 cm³/r [1.16 in³/r]
KF – 22.2 cm³/r [1.35 in³/r]
KG – 25.4 cm³/r [1.55 in³/r]
KH – 28.6 cm³/r [1.75 in³/r]
KJ – 31.8 cm³/r [1.94 in³/r]
KK – 36.0 cm³/r [2.20 in³/r]

12, 13 Input Shaft

01 – SAE A - 9 TOOTH 16/32 SPLINE
02 – SAE A - STRAIGHT KEYED SHAFT (15.9 dia)
03 – SAE A - TAPERED SHAFT
04 – 11 TOOTH 16/32 SPLINE
05 – 10 TOOTH 16/32 SAE 16.4 SPLINE
06 – 14 TOOTH DIN 5480 SPLINE
07 – 9 TOOTH DIN 5482 SPLINE
08 – 19mm STRAIGHT KEYED SHAFT
10 – EUROPEAN TAPERED SHAFT (17mm X 1:5 TAPER)
11 – TANG SHAFT 8mm X 6.6mm (for Euro coupling)
12 – 22mm STRAIGHT KEYED SHAFT
13 – 20mm STRAIGHT KEYED SHAFT
14 – 18mm STRAIGHT KEYED SHAFT

14 Auxilliary Mounting Features

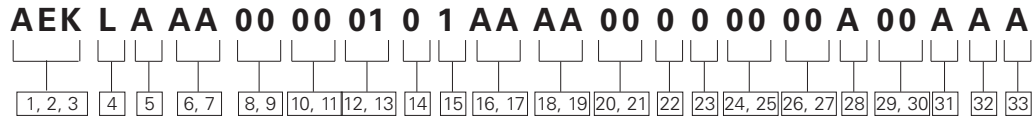
0 – No Rear mounting

15 Port Location

1 – SUCTION SIDE, PRESSURE SIDE
2 – SUCTION REAR, PRESSURE REAR
3 – SUCTION SIDE, PRESSURE REAR
4 – SUCTION REAR, PRESSURE SIDE
5 – COMMON SUCTION SIDE, FRONT OF A DOUBLE
6 – COMMON SUCTION SIDE, REAR OF DOUBLE
7 – COMMON SUCTION SIDE, FRONT OF A TRIPLE
8 – COMMON SUCTION SIDE, CENTER OF A TRIPLE
9 – COMMON SUCTION SIDE, REAR OF A TRIPLE
A – Suction side, pressure side for valve of a single
B – Suction rear, pressure side for valve of a single
C – Suction side, pressure side with valve suction side, pressure side of a double
D – Suction side, pressure side with valve suction rear, pressure rear of a double
E – Suction side, pressure side 1&2 with valve suction side, pressure side of a triple
F – Suction side, pressure side 1&2 with valve suction rear, pressure rear of a triple
G – Common suction front side, pressure side 1&2 with valve suction side, pressure side of a triple
H – Common suction front side, pressure side 1&2 with valve suction rear, pressure rear of a triple
J – Common suction center side, pressure side 1&2 with valve suction side, pressure side of a triple
K – Common suction center side, pressure side 1&2 with valve suction rear, pressure rear of a triple

16, 17 Suction and Pressure (Single - Front)

AA – .875-14 UNF-2B SAE O-RING PORT; .750-16 UNF-2B SAE O-RING PORT
AB – 1.0625-12 UN-2B SAE O-RING PORT; .875-14 UNF-2B SAE O-RING PORT
AC – 1.3125-12 UN-2B SAE O-RING PORT; .875-14 UNF-2B SAE O-RING PORT
AD – M22 X 1.5 METRIC O-RING PORT; M18 X 1.5 METRIC O-RING PORT
AE – M27 X 2.0 METRIC O-RING PORT; M22 X 1.5 METRIC O-RING PORT
AF – M33 X 2.0 METRIC O-RING PORT; M27 X 2.0 METRIC O-RING PORT
AG – SAE J518 C SPLIT FLANGE 19.0 [.75] DIA; SAE J518 C SPLIT FLANGE 12.7 [.50] DIA
AH – SAE J518 C SPLIT FLANGE 25.4 [1.00] DIA; SAE J518 C SPLIT FLANGE 19.0 [.750] DIA
AJ – METRIC SAE J518 C SPLIT FLANGE 19.0 [.75] DIA; SAE J518 C SPLIT FLANGE 12.7 [.50] DIA
AK – METRIC SAE J518 C SPLIT FLANGE 25.4 [1.00] DIA; SAE J518 C SPLIT FLANGE 19.0 [.750] DIA
AL – EUROPEAN 4 BOLT FLANGE 18.0 [0.708] DIA; EUROPEAN 4 BOLT FLANGE 13.0 [0.512] DIA
AM – GERMAN 4 BOLT FLANGE 20.0 [0.787] DIA; GERMAN 4 BOLT FLANGE 15.0 [0.590] DIA
AN – G 3/4" straight thread o-ring port; G 1/2" straight thread o-ring port (JIS)
AP – G 1" straight thread o-ring port; G 3/4" straight thread o-ring port (JIS)
AR – 1.3125-12 UN-2B SAE o-ring port (SAE #16); .750-16 UNF-2B SAE o-ring port (SAE #8) primary pressure port (for valve options only)



18, 19 Suction and Pressure (Rear Double-Center Triple)

- 00** – None
- AA – .875-14 UNF-2B SAE O-RING PORT; .750-16 UNF-2B SAE O-RING PORT
- AB – 1.0625-12 UN-2B SAE O-RING PORT; .875-14 UNF-2B SAE O-RING PORT
- AC – 1.3125-12 UN-2B SAE O-RING PORT; .875-14 UNF-2B SAE O-RING PORT
- AD – M22 X 1.5 METRIC O-RING PORT; M18 X 1.5 METRIC O-RING PORT
- AE – M27 X 2.0 METRIC O-RING PORT; M22 X 1.5 METRIC O-RING PORT
- AF – M33 X 2.0 METRIC O-RING PORT; M27 X 2.0 METRIC O-RING PORT
- AG – SAE J518 C SPLIT FLANGE 19.0 [.75] DIA; SAE J518 C SPLIT FLANGE 12.7 [.50] DIA
- AH – SAE J518 C SPLIT FLANGE 25.4 [1.00] DIA; SAE J518 C SPLIT FLANGE 19.0 [.750] DIA
- AJ – METRIC SAE J518 C SPLIT FLANGE 19.0 [.75] DIA; SAE J518 C SPLIT FLANGE 12.7 [.50] DIA
- AK – METRIC SAE J518 C SPLIT FLANGE 25.4 [1.00] DIA; SAE J518 C SPLIT FLANGE 19.0 [.750] DIA
- AL – EUROPEAN 4 BOLT FLANGE 18.0 [0.708] DIA; EUROPEAN 4 BOLT FLANGE 13.0 [0.512] DIA
- AM – GERMAN 4 BOLT FLANGE 20.0 [0.787] DIA; GERMAN 4 BOLT FLANGE 15.0 [0.590] DIA
- AN – G 3/4" straight thread o-ring port; G 1/2" straight thread o-ring port (JIS)
- AP – G 1" straight thread o-ring port; G 3/4" straight thread o-ring port (JIS)
- AR – 1.3125-12 UN-2B SAE o-ring port (SAE #16); .750-16 UNF-2B SAE o-ring port (SAE #8) primary pressure port (for valve options only)

20, 21 Suction and Pressure (Rear Triple)

- 00** – None
- AA – .875-14 UNF-2B SAE O-RING PORT; .750-16 UNF-2B SAE O-RING PORT
- AB – 1.0625-12 UN-2B SAE O-RING PORT; .875-14 UNF-2B SAE O-RING PORT
- AC – 1.3125-12 UN-2B SAE O-RING PORT; .875-14 UNF-2B SAE O-RING PORT
- AD – M22 X 1.5 METRIC O-RING PORT; M18 X 1.5 METRIC O-RING PORT
- AE – M27 X 2.0 METRIC O-RING PORT; M22 X 1.5 METRIC O-RING PORT
- AF – M33 X 2.0 METRIC O-RING PORT; M27 X 2.0 METRIC O-RING PORT
- AG – SAE J518 C SPLIT FLANGE 19.0 [.75] DIA; SAE J518 C SPLIT FLANGE 12.7 [.50] DIA
- AH – SAE J518 C SPLIT FLANGE 25.4 [1.00] DIA; SAE J518 C SPLIT FLANGE 19.0 [.750] DIA
- AJ – METRIC SAE J518 C SPLIT FLANGE 19.0 [.75] DIA; SAE J518 C SPLIT FLANGE 12.7 [.50] DIA
- AK – METRIC SAE J518 C SPLIT FLANGE 25.4 [1.00] DIA; SAE J518 C SPLIT FLANGE 19.0 [.750] DIA
- AL – EUROPEAN 4 BOLT FLANGE 18.0 [0.708] DIA; EUROPEAN 4 BOLT FLANGE 13.0 [0.512] DIA
- AM – GERMAN 4 BOLT FLANGE 20.0 [0.787] DIA; GERMAN 4 BOLT FLANGE 15.0 [0.590] DIA
- AN – G 3/4" straight thread o-ring port; G 1/2" straight thread o-ring port (JIS)
- AP – G 1" straight thread o-ring port; G 3/4" straight thread o-ring port (JIS)

- AR – 1.3125-12 UN-2B SAE o-ring port (SAE #16); .750-16 UNF-2B SAE o-ring port (SAE #8) primary pressure port (for valve options only)

22 Valve Style

- 0** – NO RELIEF VALVE
- A – RELIEF VALVE
- B – PRIORITY FLOW
- C – PRIORITY FLOW WITH RELIEF VALVE
- D – LOAD SENSE PRIORITY FLOW
- E – LOAD SENSE PRIORITY FLOW WITH RELIEF VALVE

23 Secondary Pressure Port (Flow Divider)

- 0** – NO SECONDARY PRESSURE PORT
- A – .750-16 UNF-2B SAE O-RING PORT
- B – .875-14 UNF-2B SAE O-RING PORT
- C – M18 X 1.5 METRIC O-RING PORT
- D – M22 X 1.5 METRIC O-RING PORT

24, 25 Priority Flow Divider Setting

- 00** – NO FLOW SETTING SETTING
- 01 – 3.8 L/min [1.00 gal/min]
- 02 – 7.6 L/min [2.00 gal/min]
- 03 – 11.4 L/min [3.00 gal/min]
- 04 – 15.1 L/min [4.00 gal/min]
- 05 – 18.9 L/min [5.00 gal/min]
- 06 – 22.7 L/min [6.00 gal/min]
- 07 – 26.5 L/min [7.00 gal/min]
- 08 – 30.3 L/min [8.00 gal/min]
- 09 – 34.1 L/min [9.00 gal/min]
- 10 – LOAD SENSING - DYNAMIC SIGNAL - BIAS PRESSURE 7.6 bar [110 lbf/in²]
- 11 – LOAD SENSING - STATIC SIGNAL - BIAS PRESSURE 5.4 bar [78 lbf/in²]
- 12 – LOAD SENSING - STATIC SIGNAL - BIAS PRESSURE 10.3 bar [150 lbf/in²]

26, 27 Relief Valve Setting

- 00** – NO FLOW SETTING
- 01 – 34.5 bar [500 lbf/in²]
- 02 – 51.7 bar [750 lbf/in²]
- 03 – 68.9 bar [1000 lbf/in²]
- 04 – 86.2 bar [1250 lbf/in²]
- 05 – 103.4 bar [1500 lbf/in²]
- 06 – 120.1 bar [1750 lbf/in²]
- 07 – 137.9 bar [2000 lbf/in²]
- 08 – 155.1 bar [2250 lbf/in²]
- 09 – 172.4 bar [2500 lbf/in²]
- 10 – 189.6 bar [2750 lbf/in²]
- 11 – 206.8 bar [3000 lbf/in²]

28 Seal Type

- A – BUNA-N SEAL
- B – VITON SHAFT SEAL
- C – VITON SEALS

29, 30 Special Features

- 00** – No Special Features
- 01 – Double shaft seal for front flange
- 02 – Sealing between sections

31 Paint

- 0** – NO PAINT
- A – PRIMER PER SPEC 209-13A
- B – Black per spec 209-13B

32 Identification

- A – EATON NUMBER AND NAMEPLATE

33 Design Code

- A – A

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