

# A8PL

DUAL FLOW - Bent Axis Piston Pump

Twin Flow or Double Flow Piston Pump Special Design



**A8PL Pumps have the following advantages ;**

- Compact Design,
- Economical Conception,
- High Power Density,
- High Overall Efficiency,
- High Rotating Speeds,
- High Output Pressure,
- 350 bar Cont. Work. Pressure,
- 400 bar Peak Pressure,
- From 5cc to 130cc,
- Reduced Noise Level,
- Increased Reliability,
- No Drain Line Necessary,
- Smaller Installation Dimensions,
- One Piece Pistons with Piston Rings,
- Special Inlet Fittings & Accessories,
- Simple Change of Direction of Rotation

# Twin Flow Bent Axis Piston Pumps

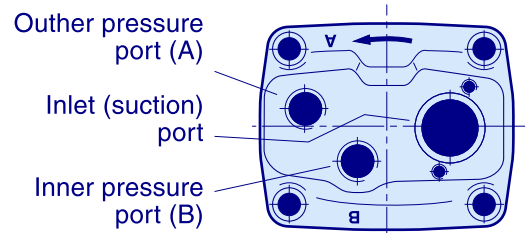
## (fixed displacement)

### Specifications

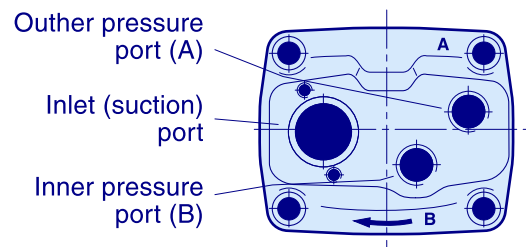
Frame size	53/53	70/35
<b>Displacement</b> [cm <sup>3</sup> /rev]		
Port A	54	69
Port B	52	36
<b>Max operating pressure</b> [bar]	350	350
<b>Max shaft speed</b> [rpm]		
(unloaded pump; low pressure)	2550	2550
<b>Max selfpriming speed</b> [rpm]		
Ports A <sup>1)2)</sup> and B <sup>1)2)</sup> pressurized	1800	1800
Port A <sup>2)</sup> unloaded, pressure in port B	2100	2100
<b>Input power</b> [kW]		
Max intermittent <sup>3)</sup>	110	110
Max continuous	88	88
<b>Weight</b> [kg]	19	19

- 1) Valid with 2 1/2" inlet (suction) line; with 2" inlet line: max 1400 rpm.
- 2) Measured at 1.0 bar abs. inlet pressure.  
**Please note:** A lower inlet pressure affects pump performance.
- 3) Max 6 seconds in any one minute.

### 'Left hand' and 'right hand' end caps



*End cap for right hand rotating pump*



*End cap for left hand rotating pump*

### Flow vs. shaft speed (theoretical)

Pump speed [rpm]	800	1000	1200	1400	1600	1800	1900	2000	2100
<b>53/53 flow</b> [l/min]									
Port A	43	54	65	76	86	97	-	-	-
Port B	42	52	62	73	83	94	99	104	109
Total (ports A + B)	85	106	127	149	169	191	-	-	-
<b>70/35 flow</b> [l/min]									
Port A	55	69	83	97	110	124	-	-	-
Port B	29	36	43	50	58	65	68	72	76
Total (ports A + B)	84	105	126	147	168	189	-	-	-

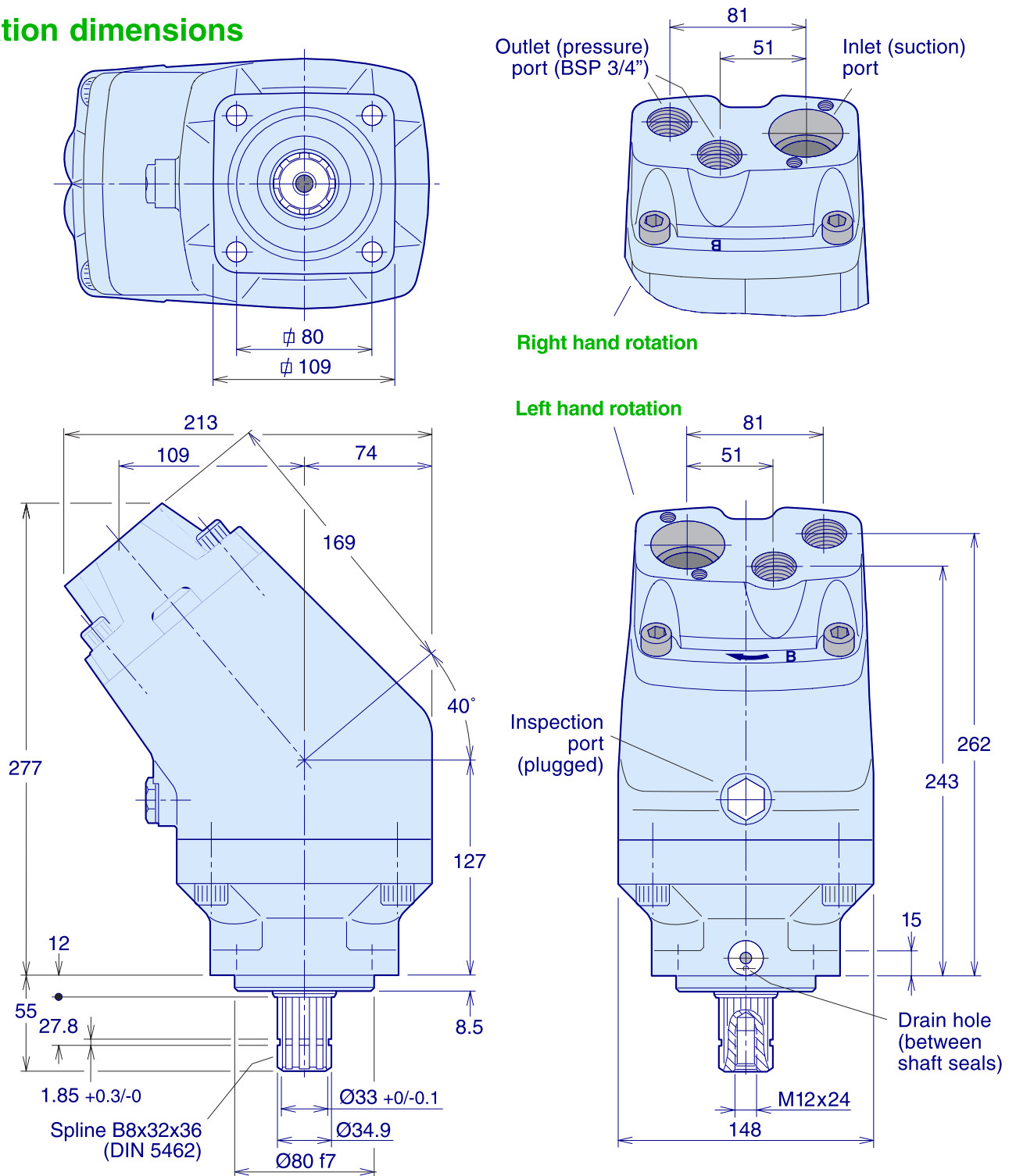
### Shaft torque vs. pressure (theoretical)

Pressure [bar]	150	200	250	300	350
<b>53/53 torque</b> [Nm]					
Port A	126	168	210	252	294
Port B	124	165	206	248	289
Total (ports A and B)	250	333	416	500	583
<b>70/35 torque</b> [Nm]					
Port A	164	219	274	329	383
Port B	86	114	143	171	200
Total (ports A and B)	250	333	417	500	583

# Twin Flow Bent Axis Piston Pumps

(fixed displacement)

## Installation dimensions



## Ordering code

53/53 - L	53/53 - R	Rotation
70/35 - L	70/35 - R	L : Left
76/76 - L	76/76 - R	R : Right
64/32 - L	64/32 - R	
46/46 - L	46/46 - R	
56/26 - L	56/26 - R	CW : Right
35/35 - L	35/35 - R	CCW : Left
40/40 - L	40/40 - R	
40/20 - L	40/20 - R	
28/28 - L	28/28 - R	
20/20 - L	20/20 - R	W : Bi-Direct.

### NOTE:

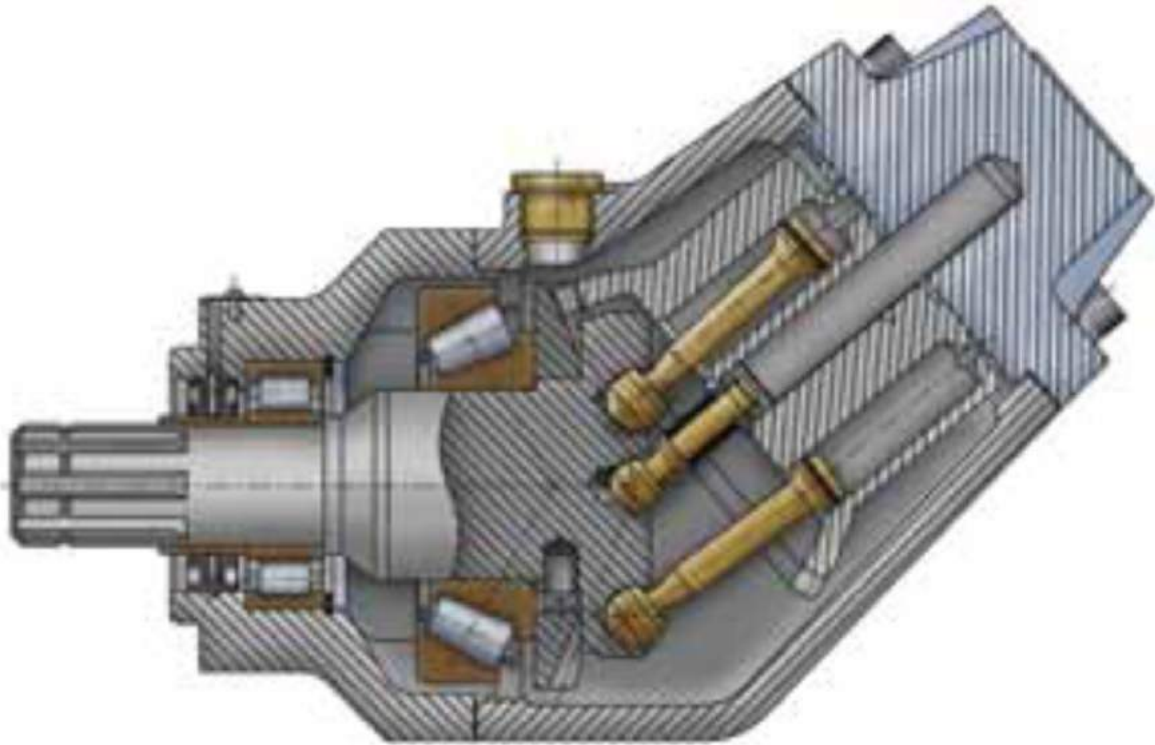
- Before start-up, tighten the inspection port plug to 70–100 Nm.
- To change the direction of rotation, **the end cap must be replaced.**

**NOTE:** The pump **does not** include a suction fitting; it must be ordered separately. See chapter 9.

# **Twin Flow Bent Axis Piston Pumps**

(fixed displacement)

---



## **Benefits/Features**

- **Two separate outlet flows with a single inlet**
- **Operating pressures to 6000 PSI (413.7 BAR) intermittent**
- **Higher overall efficiency**
- **Increased reliability**
- **Low noise level**
- **Compact package that only weighs 42 lbs (19.1 kg).**

# Twin Flow Bent Axis Piston Pumps

(fixed displacement)

---



Fixed Displacement Piston Pumps are widely used on truck applications with operating pressure up to 5000 PSI (350 BAR). These twin flow pumps provide two independent output flows with a single inlet in a compact package. These lightweight, efficient pumps were designed specifically for truck applications including cargo cranes, hook loaders, forest cranes and concrete mixer.

## Pump Performance Data

Model Series	Max. Displacement in <sup>3</sup> /rev (cc/rev)	Outlet Pressure PSI (BAR)	Drive Speed RPM	Flow** @ 1800 RPM		Max. Input Power HP (KW)
				Port A GPM (LPM)	Port B GPM (LPM)	
42/42	2.62/2.50 (43/41)	5000 (350)	1800	204 (77.2)	19.5 (73.8)	118 (88.0)
55/28	3.36/1.71 (55/28)	5000 (350)	1800	261 (98.6)	13.3 (50.3)	118 (88.0)
53/53	3.30/3.17 (54/52)	5000 (350)	1800	255 (96.5)	24.8 (93.9)	147 (109.8)
70/35	4.21/2.20 (69/36)	5000 (350)	1800	327 (123.8)	17.2 (65.1)	147 (109.8)
70/70	4.15/4.15 (68/68)	4350 (300)	1650	323 (122.3)	32.3 (122.3)	150 (111.9)

### Markets

### Applications

Forestry	Knuckle Boom Loader, Cranes, Mowers / Cutters
Construction	Off-Highway Trucks, Fan Drives
Mining	Dump Trucks
Material Handling	Truck Mounted Cranes, Lift Trucks
Recycling	Vaccum Truck Systems, Refuse Trucks - ASL, Rear Loaders
Military	

# Twin Flow Bent Axis Piston Pumps (fixed displacement)

## Piston Pumps Model Ordering Code

Frame Size
42/42
55/28
53/53
70/35
70/70

Code	Rotation
L	Left Hand (CCW)
R	Right Hand (CW)

**NOTES:**

1. Pressure port on 25, 41, 51 and 61 sizes is 3/4". Pressure port on 81 and 101 sizes is 1".
2. Suction fitting must be ordered separately.
3. Use seven digit number when placing order.

Ordering Code	Ordering No.
42/42-R	9378 4042
42/42-L	9378 4043
55/28-R	9378 4128
55/28-L	9378 4129
53/53-R	9378 1453
53/53-L	9378 1454
70/35-R	9378 1470
70/35-L	9378 1471
70/70-R	9378 4070
70/70-L	9378 4071

### Suction Fittings

A suction fitting consists of a straight, 45°, 90° or 135° suction fitting, 2 clamps, 2 cap screws and an O-ring.

#### Straight Suction Fittings

Ordering no.	A in. (mm)	B in. (mm)	C dia. in. (mm)
	0 (0)	3.35" (85)	1.5" (38)
	0.67" (17)	5.35" (136)	2.0" (50)
	0.98" (25)	5.71" (145)	2.5" (63)
	0.67" (17)	5.35" (136)	1.77" (45)
	0.67" (17)	5.35" (136)	1.77" (48)

#### 45° Suction Fittings

Ordering no.	A in. (mm)	B in. (mm)	C dia. in. (mm)
	2.36" (60)	4.09" (104)	1.25" (32)
	2.36" (60)	4.09" (104)	1.5" (38)
	2.64" (67)	4.33" (110)	2" (50)
	2.95" (75)	4.61" (117)	2.5" (63)
	2.64" (67)	4.33" (110)	1.57" (40)
	2.64" (67)	4.33" (110)	1.77" (45)
	2.64" (67)	4.33" (110)	1.89" (48)

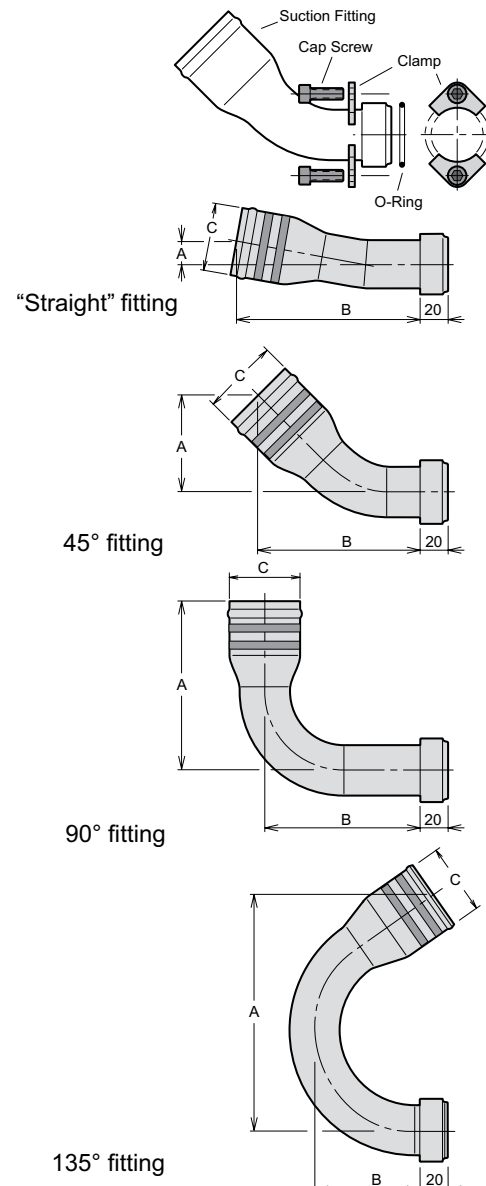
- 1) Suitable for frame size F1-25.
- 2) Suitable for pump sizes F1-41,-51,-61,-81 and -110.

#### 90° Suction Fittings

Ordering no.	A in. (mm)	B in. (mm)	C dia. in. (mm)
	4.96" (126)	3.27" (83)	1.5" (38)
	5.31" (135)	3.27" (83)	2" (50)
	5.31" (135)	3.27" (83)	1.77"(45)
	5.31" (135)	3.27" (83)	1.89" (48)
	5.79" (147)	4.06" (103)	2.5" (63)

#### 135° Suction Fitting

Ordering no.	A in. (mm)	B in. (mm)	C dia. in. (mm)
	6.54" (166)	2.87" (73)	2" (50)



# Complete Product Range

## Piston Pumps

## Piston Motors

# DIN

DIN 5462 / ISO 14  
8x32x35  
8x32x36  
DIN 6885



**A8PD**



**A9MD**

# ISO

ISO 3019-2 (4 BOLTS)  
DIN 5480 -W25,30,35,40,45  
DIN 6885 -Ø20,25,30,35,40,45



**A8PO**



**A9MO**

# SAE

SAE B2 C4 - SAE D  
SAE J498b  
SAE J 744



**A8PS**



**A9MS**

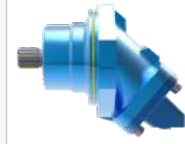
# M2

Fixed Plug-in

DIN 5480 / ISO 3019-2  
W30 - W35 - W40  
M21 - M22 - M23



**A8PL - Dual Flow**



**A9MF - Semi integrated**

# A4

DIN ISO 14  
8x32x36



**A4PP Single Flow**



**A4PL Dual Flow**

# A6

P2 Connection M8x125  
Woodruff key 3x6,5 NF E  
27-653 NF R 124-04  
(2 BOLTS)



**A6HP - High Pressure**



**A7GP - Gear Pump  
A7GM - Gear Motor**

# Contact



Gold Hydraulics, Ltd.

2019® Catalogue

All pictures and banners are patented by owner.

[www.goldhydraulics.com](http://www.goldhydraulics.com)

For more details and other catalogs,  
please send email to our team.

Hydraulic Bent Axis Piston Pumps  
Bent Axis Motors  
Dual Flow Piston Pumps and Gear Pumps...

Sales Team

[info@goldhydraulics.com](mailto:info@goldhydraulics.com)

Order

[order@goldhydraulics.com](mailto:order@goldhydraulics.com)

Management

[mail@goldhydraulics.com](mailto:mail@goldhydraulics.com)



[www.goldhydraulics.com](http://www.goldhydraulics.com)