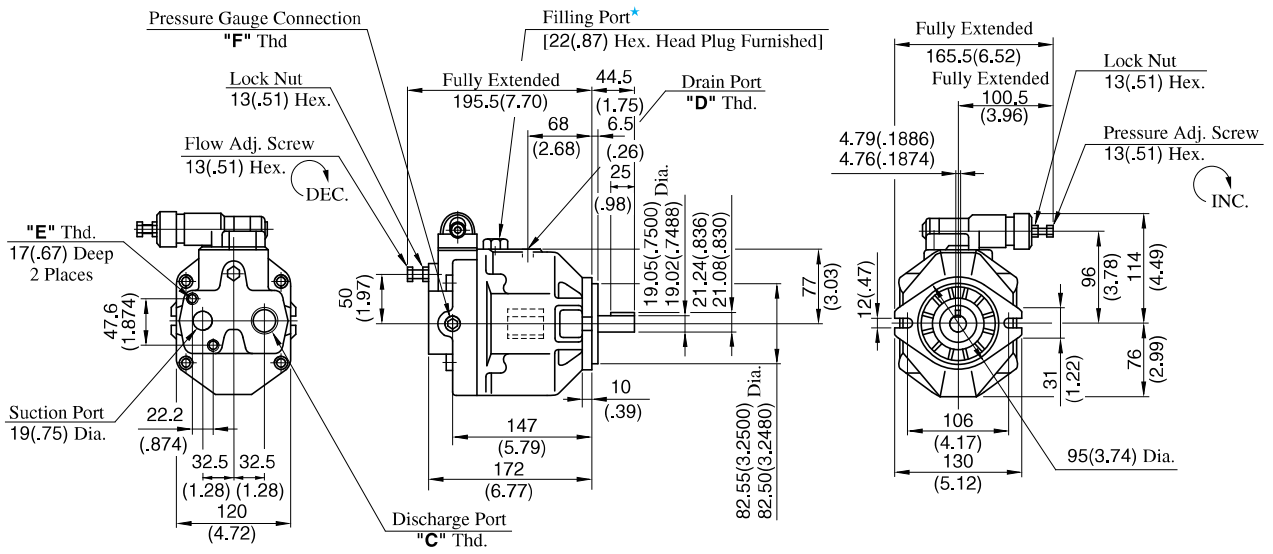


AR16-FR01\*-20/2080/20950  
AR22-FR01\*-20/2080/20950

**Axial Port Type**



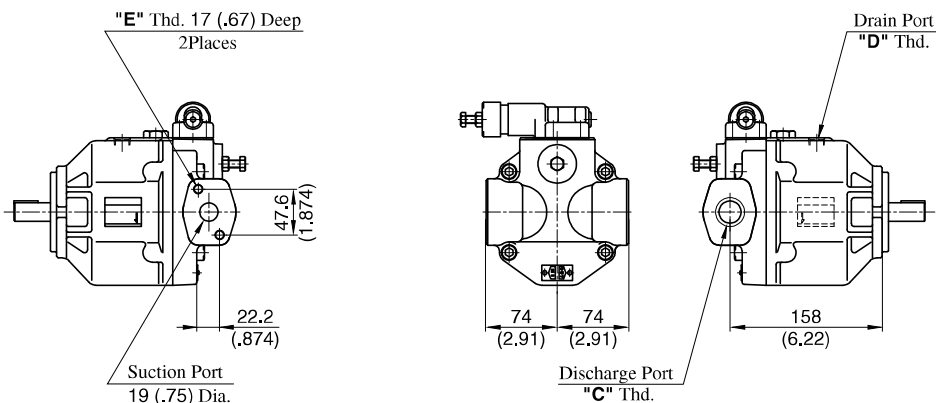
\* Install the pump so that the "Filling port" is at the top.

Model Numbers	"C" Thd.	"D" Thd.	"E" Thd.	"F" Thd.
AR16/AR22-FR01*-20	Rc 3/4	Rc 3/8	M10	Rc 1/4
AR16/AR22-FR01*-2080	3/4 BSP.F	3/8 BSP.F		1/4 BSP.Tr
AR16/AR22-FR01*-20950	SAE #12	SAE #8	3/8-16 UNC	SAE #4

DIMENSIONS IN MILLIMETRES (INCHES)

AR16-FR01\*S-20/2080/20950  
AR22-FR01\*S-20/2080/20950

**Side Port Type**



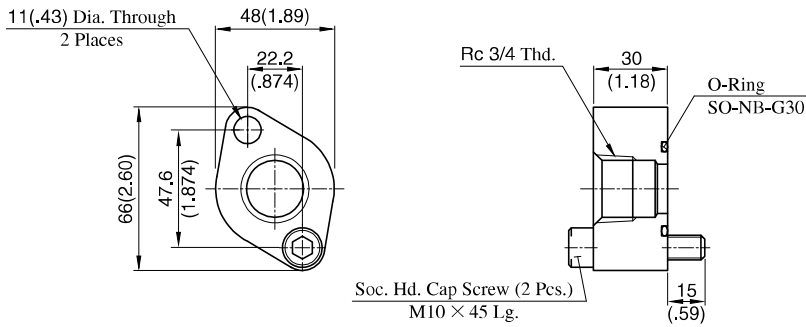
Model Numbers	"C" Thd.	"D" Thd.	"E" Thd.
AR16/AR22-FR01*S-20	Rc 3/4	Rc 3/8	M10
AR16/AR22-FR01*S-2080	3/4 BSP.F	3/8 BSP.F	
AR16/AR22-FR01*S-20950	SAE #12	SAE #8	3/8-16 UNC

• For other dimensions, refer to "Axial Port Type".

**Pipe Flange Kit for Suction Port**

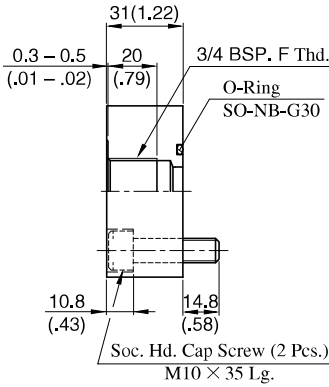
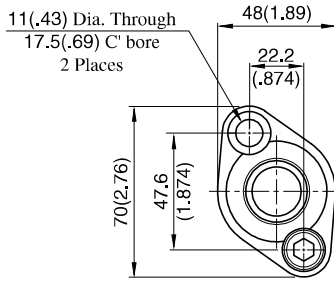
- Threaded Connection

**Japanese Std. "JIS": F5-06-A-1021**



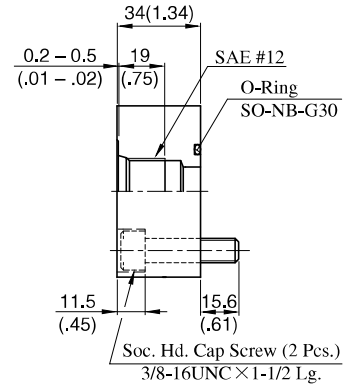
Approx. Mass ..... 0.5 kg (1.1 lbs.)

**European Design Std.: F5-06-A-10801**



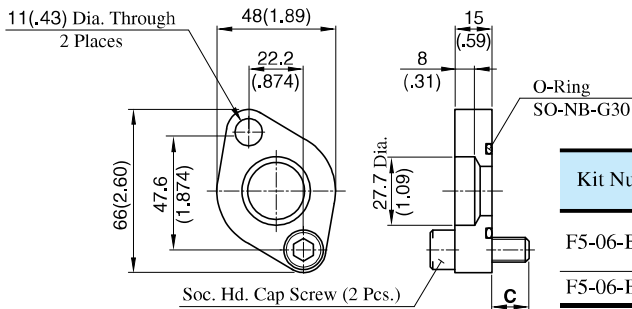
Approx. Mass ..... 0.5 kg (1.1 lbs.)

**N. American Design Std.: F5-06-A-10950**



- Socket Welding

**F5-06-B-1021/10901**

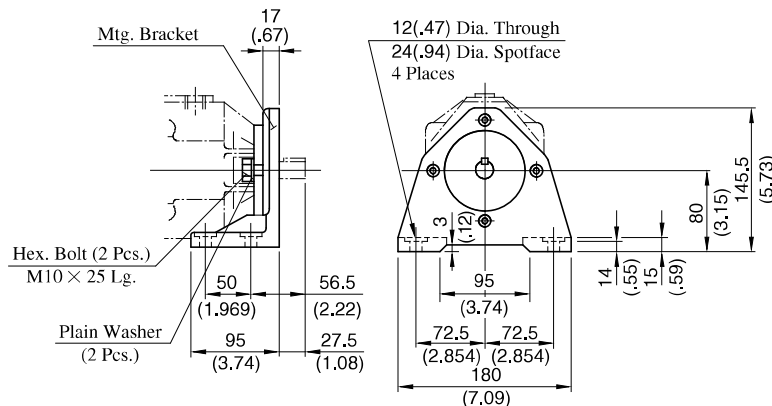


Approx. Mass ..... 0.3 kg (.66 lbs.)

Kit Numbers	C mm (In.)	Soc. Hd. Cap Screw	Remarks
F5-06-B-1021	15 (.59)	M10 x 45Lg.	Japanese Std. "JIS" European Design Std.
F5-06-B-10901	16.75 (.66)	3/8-16 UNC x 1-1/4 Lg.	N. American Design Std.

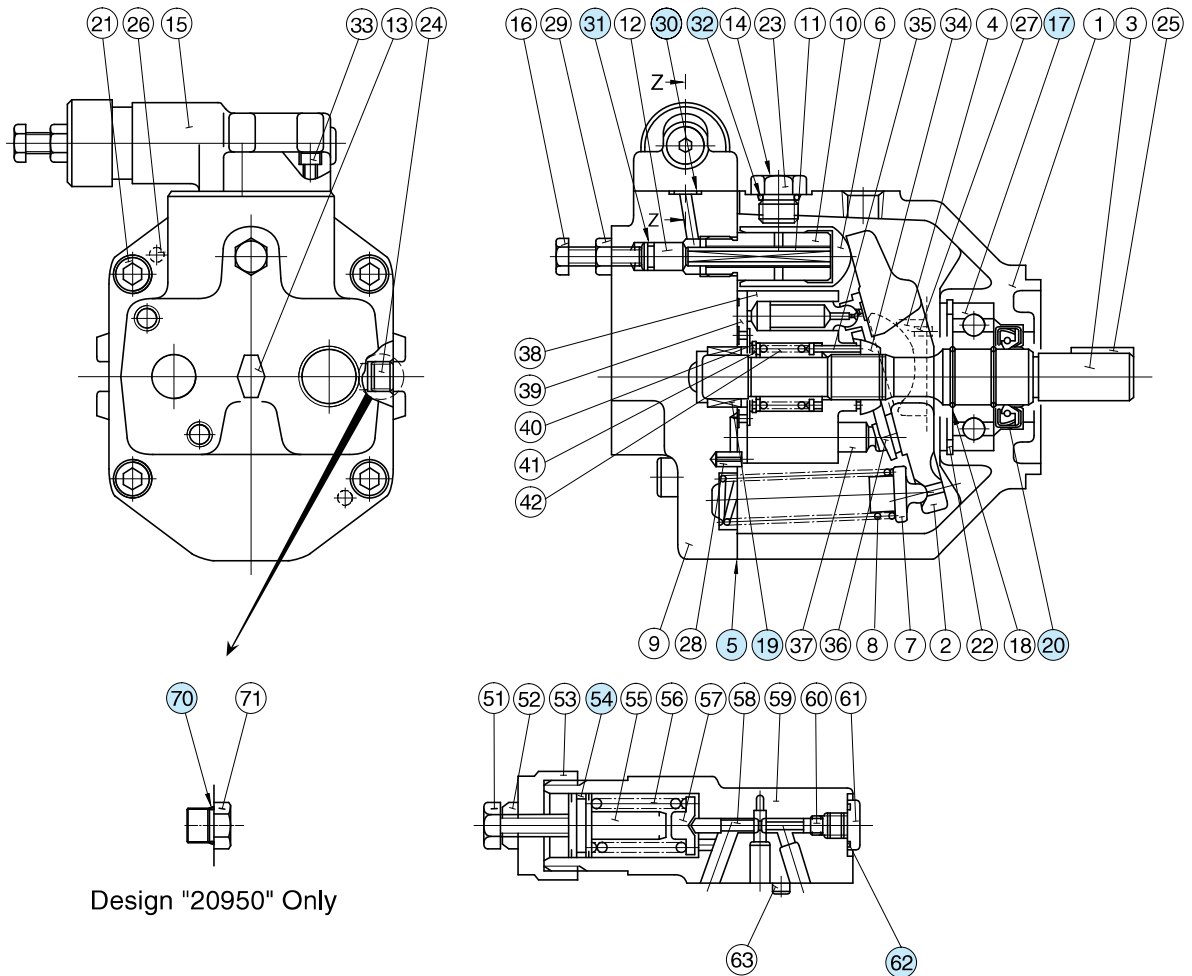
**DIMENSIONS IN MILLIMETRES (INCHES)**

**Mtg. Bracket Kit: LP-1A-10**



■ Spare Parts List

AR16-FR01\*-20/2080/20950  
AR22-FR01\*-20/2080/20950



Section Z-Z

● List of Seals & Bearings

Item	Name of Parts	Part Numbers		Qty.
		AR16-FR01	AR22-FR01	
5*	Gasket	1302-PK312891-5		1
17	Bearing	6305		1
19	Bearing	HMK 1715 V2	Z30-1303-PK410300-8	1
20*	Oil Seal	TCN 254511		1
30*	O-Ring	SO-NB-P9		3
31*	O-Ring	SO-NA-P8		1
32*	O-Ring	SO-NB-P14		1
54*	O-Ring	SO-NA-A018		1
62*	O-Ring	SO-NB-P10		1
70	O-Ring	SO-NB-A905		1

★ When ordering seals, please specify the seal kit number from the table below.

● List of Seal Kits

Pump Model Numbers	Seal Kit Number
AR16-FR01*-20/2080/20950	KS-AR16-01-20
AR22-FR01*-20/2080/20950	

## Interchangeability in Installation between "A" Series and "AR" Series

### Specifications

Model		A16-*-R-01-*-K-32*	AR16-FR01*-20*	A22-*-R-01-*-K-32*	AR22-FR01*-20*
Description		A16-*-R-01-*-K-32*	AR16-FR01*-20*	A22-*-R-01-*-K-32*	AR22-FR01*-20*
Geometric Displacement		15.8 cm <sup>3</sup> /rev (.964 cu.in./rev)		22.2 cm <sup>3</sup> /rev (1.355 cu.in./rev)	
Operating Pres.	Rated	16 MPa (2320 PSI)		16 MPa (2320 PSI)	
	Intermittent	21 MPa (3050 PSI)	16 MPa (2320 PSI)	16 MPa (2320 PSI)	
Shaft Speed Range		600 -1800 r/min		600 -1800 r/min	
Approx. Mass (Flange Mtg.)		16.5 kg (36.4 lbs.)	9.8 kg (21.6 lbs.)	16.5 kg (36.4 lbs.)	9.8 kg (21.6 lbs.)

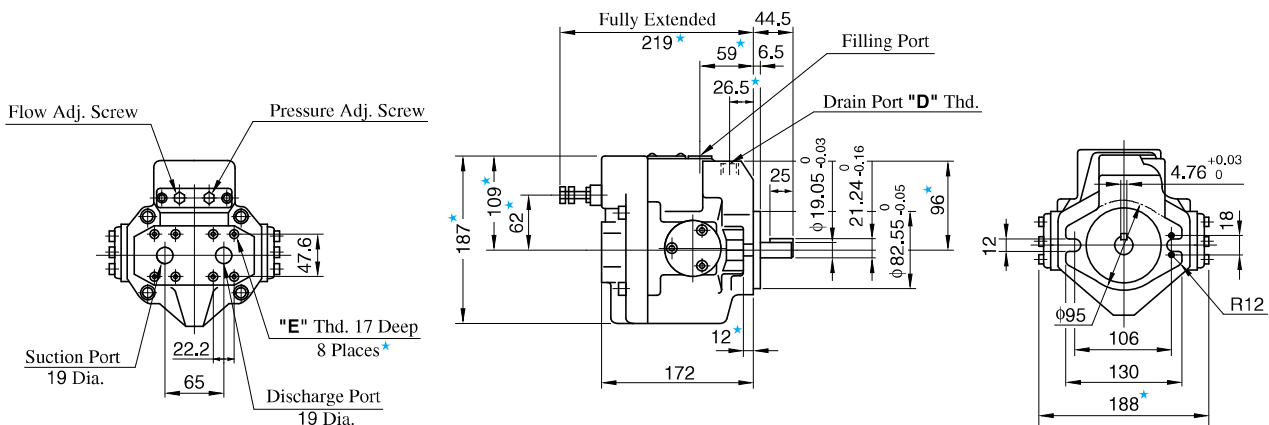
### Interchangeability in Installation

Model Numbers		Interchangeability in Installation			
"A" Series	"AR" Series	Mtg. Flange & Shaft End	Piping		
			Suction Port	Discharge Port	Drain Port
A16-*-R-01-*-K-32*	AR16-FR01*-20*	Yes	Yes	No	No
A22-*-R-01-*-K-32*	AR22-FR01*-20*				

Comparison of dimensions between "A" series and "AR" series are shown below.

#### A16/A22-F-R-01-\*-K

Note: Dimensions with star mark \* are identical to each other.



Model Numbers	"C" Thd.	"D" Thd.	"E" Thd.	"F" Thd.
A16/A22-F-R-01-*-K-32	—	Rc 3/8	M10	—
A16/A22-F-R-01-*-K-3280	—	3/8 BSP.F		—
A16/A22-F-R-01-*-K-32950	—	SAE #8		3/8-16 UNC
AR16/22-FR01*-20	Rc 3/4	Rc 3/8	M10	Rc 1/4
AR16/22-FR01*-2080	3/4 BSP.F	3/8 BSP.F		1/4 BSP.Tr
AR16/22-FR01*-20950	SAE #12	SAE #8	3/8-16 UNC	SAE #4

#### AR16/AR22-FR01

