HYDRANK™

Precision Hydraulic Components

H-VP-70 Series High Performance Low Noise Vane Pumps

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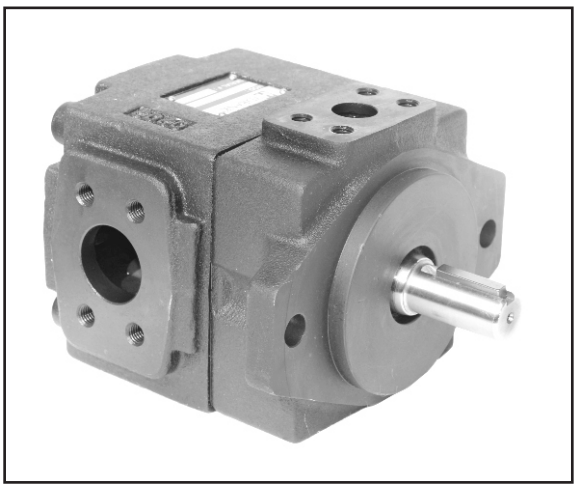
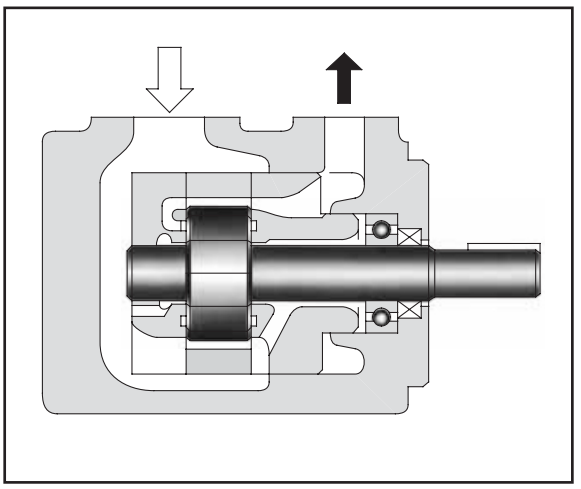
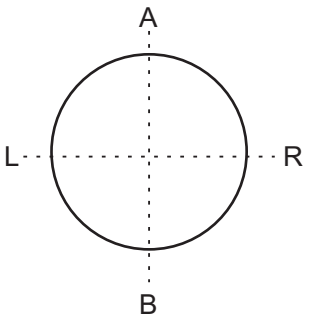
H-VP-70 Series High Performance Low noise vane pumps
SINGLE PUMPS





Direction of Port



Faced with shaft end

ORDERING CODE

H-VP10	-6	A	A	-R	70 / 71	*
Series Number	Nominal Displacement cm^3/rev	Discharge Port Position	Suction Port Position	Shaft Rotation	Design Number	Modifications
H-VP10	**4, 6, 8, 10, 12 14, 17, 19 23, 25, 28, 31**	(Viewed from Shaft End)		**R:** Clockwise (Normal)	**71**	
H-VP20	**23, 26, 33, 36, 41 47, 53, 59, 65, 75**	**A:** Upwards (Normal)	**A:** Upwards (Normal)		**70**	
H-VP30	**52, 60, 66, 76, 94, 116, 125, 136, 153**			**L:** Anticlockwise	**70**	

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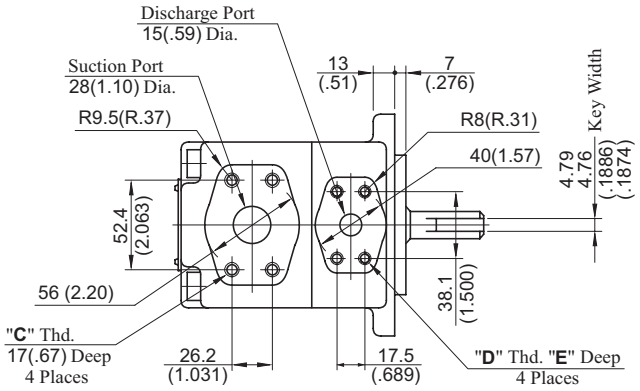
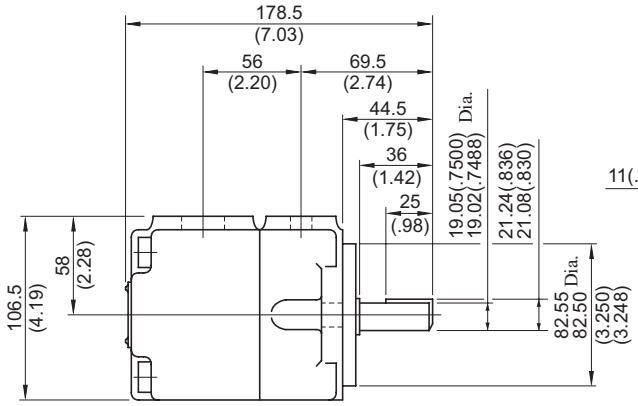
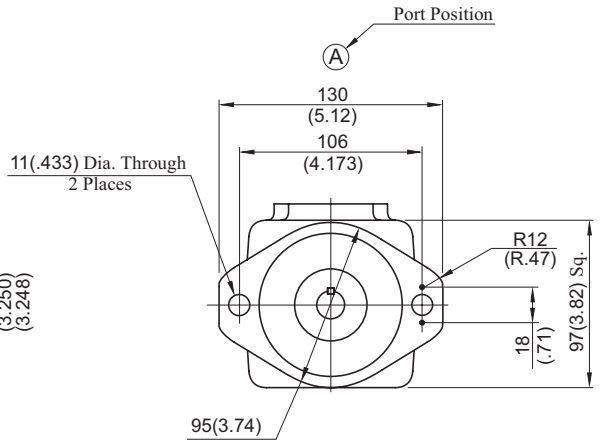
H-VP10 (Flange Mount)







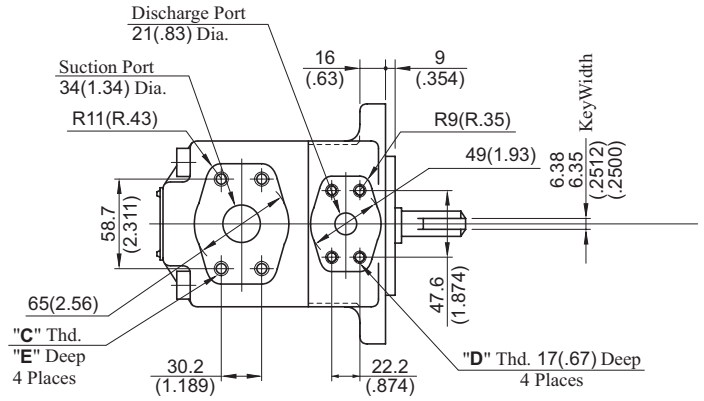
Model Numbers	"**C**" Thd.	"**D**" Thd.	**E** mm (Inches)
H-VP10 (Flange Mount)	M-10	M-8	14 (.55)

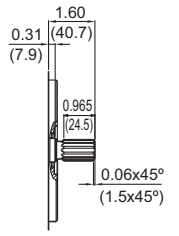
Model Numbers	Approx. Weight (kg)
H-VP10	8.0

Specifications

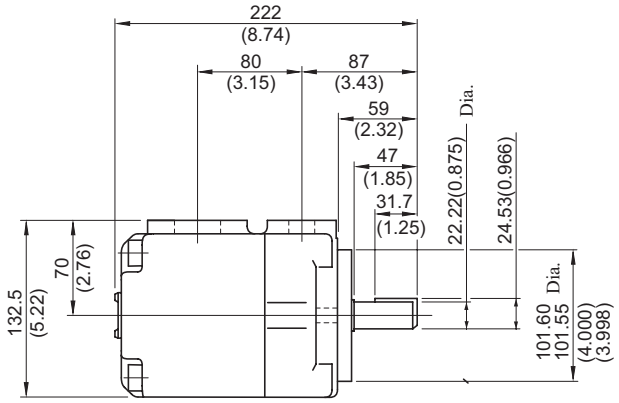
Model Numbers	Nominal Displacement cm^3/rev	Max. Operating Pressure MPa (PSI)						Shaft Speed Range r/min	
		Petroleum Base Oils		Water Containing Fluids			Synthetic Fluids		
		Anti-Wear Type	R & O Type	Anti-Wear Type Water Glycols	Water Glycols	Water in Oil Emulsions	Phosphate Esters	Max.	Min.
4	4.3	21 (3050)	16 (2320)	16 (2320)	7 (1020)	7 (1020)	16 (2320)	1800 (1200)	750
6	5.8								
8	8.0								
10	9.4	21 (3050)							
12	12.2								
14	13.7								
17	16.6								
19	18.6								
23	22.7								
25	25.3								
28	29.6	16 (2320)							
31	31.0								

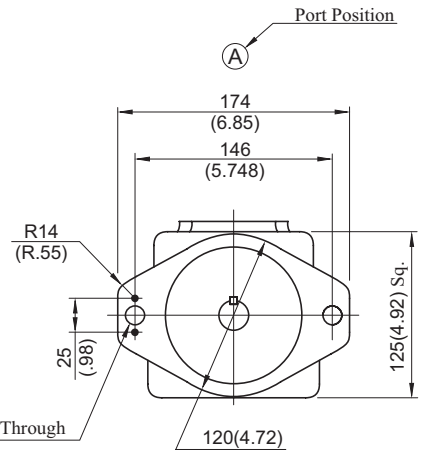
H-VP20 (Flange Mount)





Shaft code F-11
SAE B splined shaft
Class 1-J498b
16/32 dp. 13 teeth
30° pressure angle
flat root side fit





Model Numbers	"C" Thd.	"D" Thd.	E mm (Inches)
H-VP20 (Flange Mount)	M-10	M-10	19 (.75)

Model Numbers	Approx. Weight (kg)
H-VP20	16.0

Specifications

Model Numbers	Nominal Displacement cm^3/rev	Max. Operating Pressure MPa (PSI)					
		Petroleum Base Oils		Water Containing Fluids			Synthetic Fluids
		Anti-Wear Type	R & O Type	Anti-Wear Type Water Glycols	Water Glycols	Water in Oil Emulsions	Phosphate Esters
23	22.7	21 (3050)	14 (2030)	16 (2320)	7 (1020)	7 (1020)	14 (2030)
26	25.3						
33	32.3						
36	35.6						
41	39.8						
47	49.8						
53	51.5						
59	55.8						
65	63.7						
75	75.1	16 (2320)					

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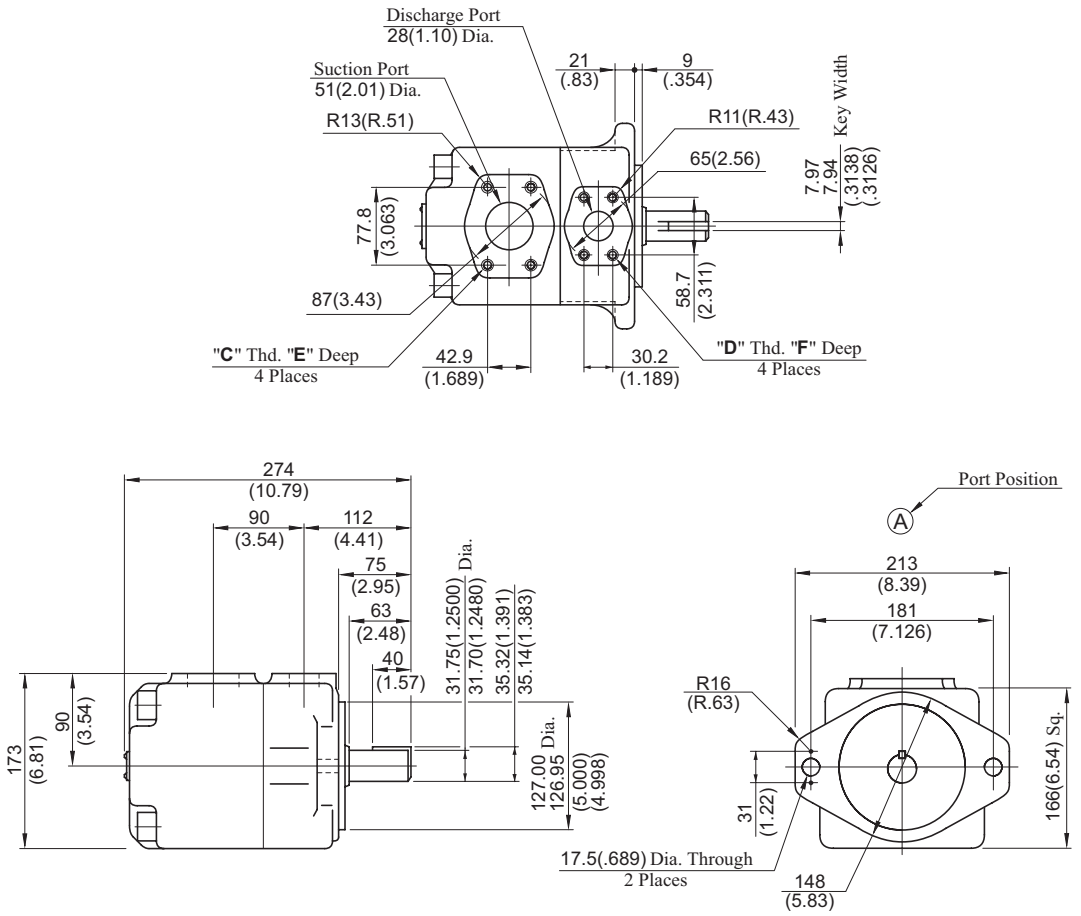
H-VP30 (Flange Mount)



Model Numbers	"C" Thd.	"D" Thd.	E & F mm (Inches)	
H-VP30 (Flange Mount)	M-12	M-10	19 (.75)	19 (.75)

Model Numbers	Approx. Weight (kg)
H-VP30	32.0

Specifications

Model Numbers	Nominal Displacement cm^3/rev	Max. Operating Pressure MPa (PSI)					
		Petroleum Base Oils		Water Containing Fluids			Synthetic Fluids
		Anti-Wear Type	R & O Type	Anti-Wear Type Water Glycols	Water Glycols	Water in Oil Emulsions	Phosphate Esters
52	51.5	21 (3050)	14 (2030)	16 (2320)	7 (1020)	7 (1020)	14 (2030)
60	63.7						
66	66.6						
76	75.5						
94	89.5						
116	118	16 (2320)					
125	122.2						
136	136						
153	153						

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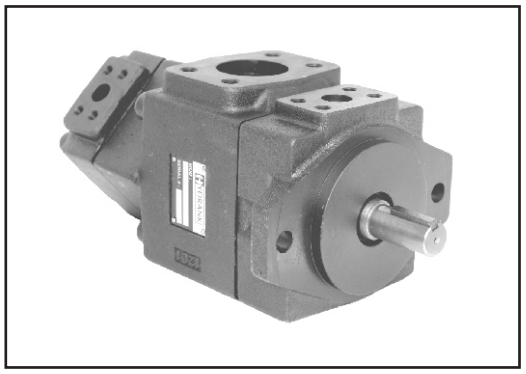
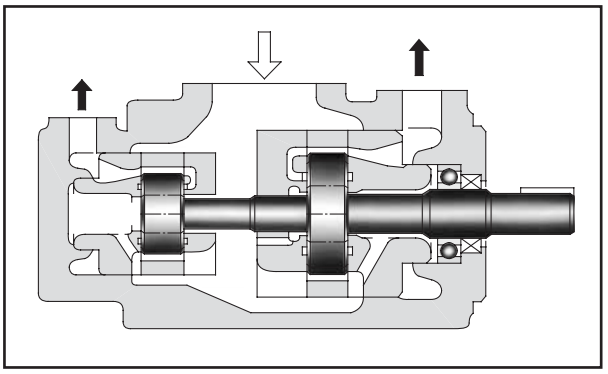
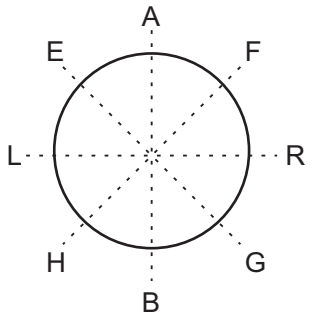
H-VP-70 Series High Performance Low noise vane pumps

DOUBLE PUMPS





Direction of Port



Faced with shaft end

ORDERING CODE

H-VP1020	-6	-65	A	A	A	-R	-70	*
Series Number	Small Volume Pump Nominal Displacement cm^3/rev	Large Volume Pump Nominal Displacement cm^3/rev	Small Volume Pump Discharge Port Position	Large Volume Pump Discharge Port Position	Suction Port Position	Direction of Rotation	Design Number	Modifications
H-VP1020	**4, 6, 8 10, 12 14, 17 19, 23 25, 28, 31**	**23, 26, 33 36, 41, 47 53, 59 65, 75**	(Viewed from Shaft End) **E:** Left 45° Upwards (Normal)			**R:** Clockwise (Normal)	**70**	
H-VP1030	**4, 6, 8 10, 12 14, 17 19, 23 25, 28, 31**	**52, 60, 66 76, 94 116, 125 136, 153**	**A:** Upwards (Normal)	**A:** Upwards (Normal)	**A:** Upwards (Normal)		**70**	
H-VP2030	**23, 26, 33 36, 41, 47 53, 59 65**	**52, 60, 66 76, 94 116, 125 136, 153**	**E:** Left 45 Upwards (Normal)			**L:** Anti Clockwise	**70**	

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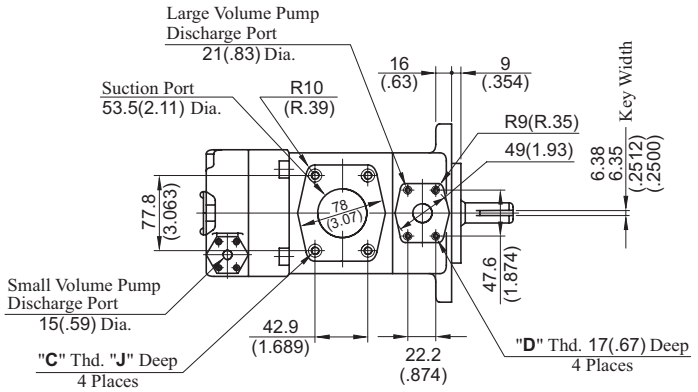
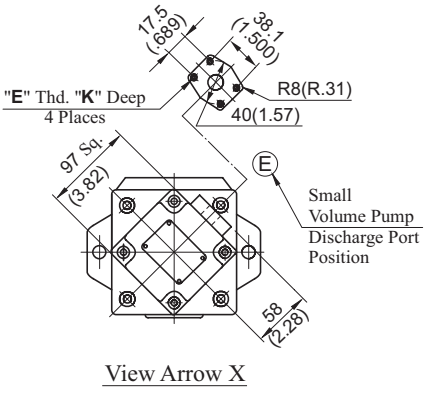
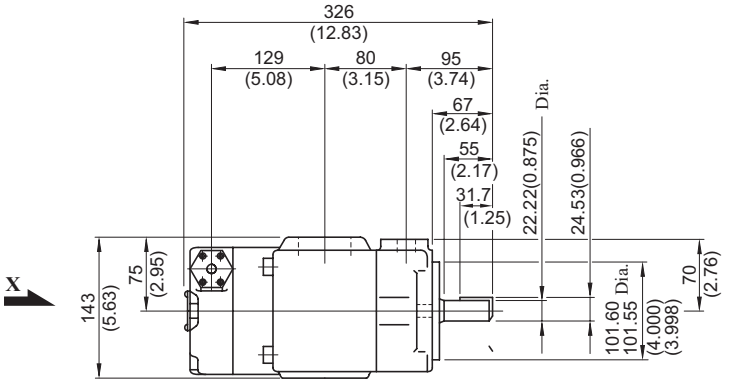
Precision Hydraulic Components

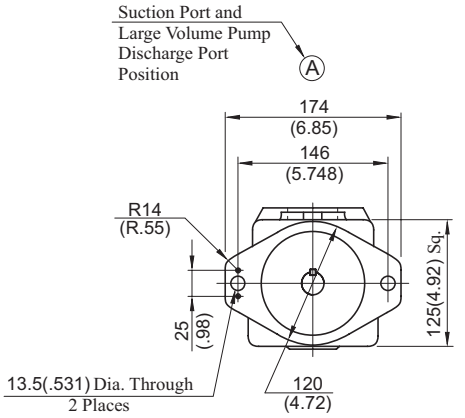
H-VP1020 (Flange Mount)





View Arrow X





Model Numbers	"C" Thd.	"D" Thd.	"E" Thd.	Dimensions mm (Inches)	
				J	K
H-VP1020 (Flange Mount)	M-12	M-10	M-8	19 (.75)	14 (.55)

Model Numbers	Approx. Weight (kg)
H-VP1020	30.0

Specifications

Model Numbers	Nominal Displacement cm^3/rev	Max. Operating Pressure MPa (PSI)					
		Petroleum Base Oils		Water Containing Fluids			Synthetic Fluids
		Anti-Wear Type	R & O Type	Anti-Wear Type Water Glycols	Water Glycols	Water in Oil Emulsions	Phosphate Esters
4	4.3	21 (3050)	16 (2320)	16 (2320)	7 (1020)	7 (1020)	16 (2320)
6	5.8						
8	8.0						
10	9.4						
12	12.2						
14	13.7						
17	16.6						
19	18.6						
23	22.7						
25	25.3						
28	29.6	16 (2320)					
31	31.0						
23	22.7	21 (3050)	14 (2030)	16 (2320)	7 (1020)	7 (1020)	14 (2030)
26	25.3						
33	32.3						
36	35.6						
41	39.8						
47	49.8						
53	51.5						
59	55.8						
65	63.7						
75	75.1	16 (2320)					

H-VP1030 (Flange Mount)

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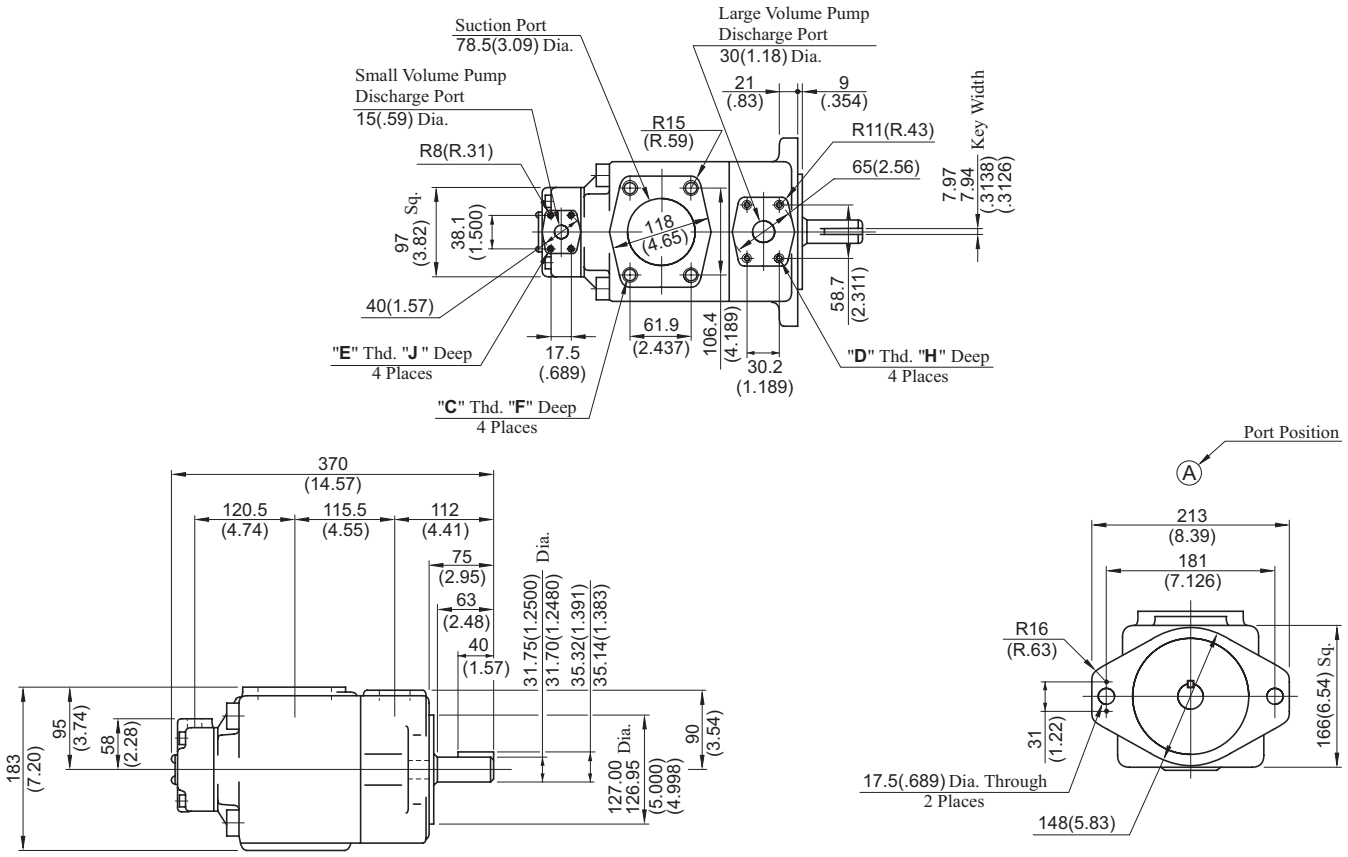

Model Numbers	"C" Thd.	"D" Thd.	"E" Thd.	Dimensions mm (Inches)		
				F	H	J
H-VP1030 (Flange Mount)	M16	M10	M8	19 (.75)	19 (.75)	14 (.55)

Model Numbers	Approx. Weight (kg)
H-VP1030	45.7

Specifications

Model Numbers	Nominal Displacement cm^3/rev	Max. Operating Pressure MPa (PSI)					
		Petroleum Base Oils		Water Containing Fluids			Synthetic Fluids
		Anti-Wear Type	R & O Type	Anti-Wear Type Water Glycols	Water Glycols	Water in Oil Emulsions	Phosphate Esters
4	4.3	21 (3050)	16 (2320)	16 (2320)	7 (1020)	7 (1020)	16 (2320)
6	5.8						
8	8.0						
10	9.4						
12	12.2						
14	13.7						
17	16.6						
19	18.6						
23	22.7						
25	25.3						
28	29.6	16 (2320)					
31	31.0						
52	51.5	21 (3050)	14 (2030)	16 (2320)	7 (1020)	7 (1020)	14 (2030)
60	63.7						
66	66.6						
76	75.5						
94	89.5						
116	118	16 (2320)					
125	122.2						
136	136						
153	153						

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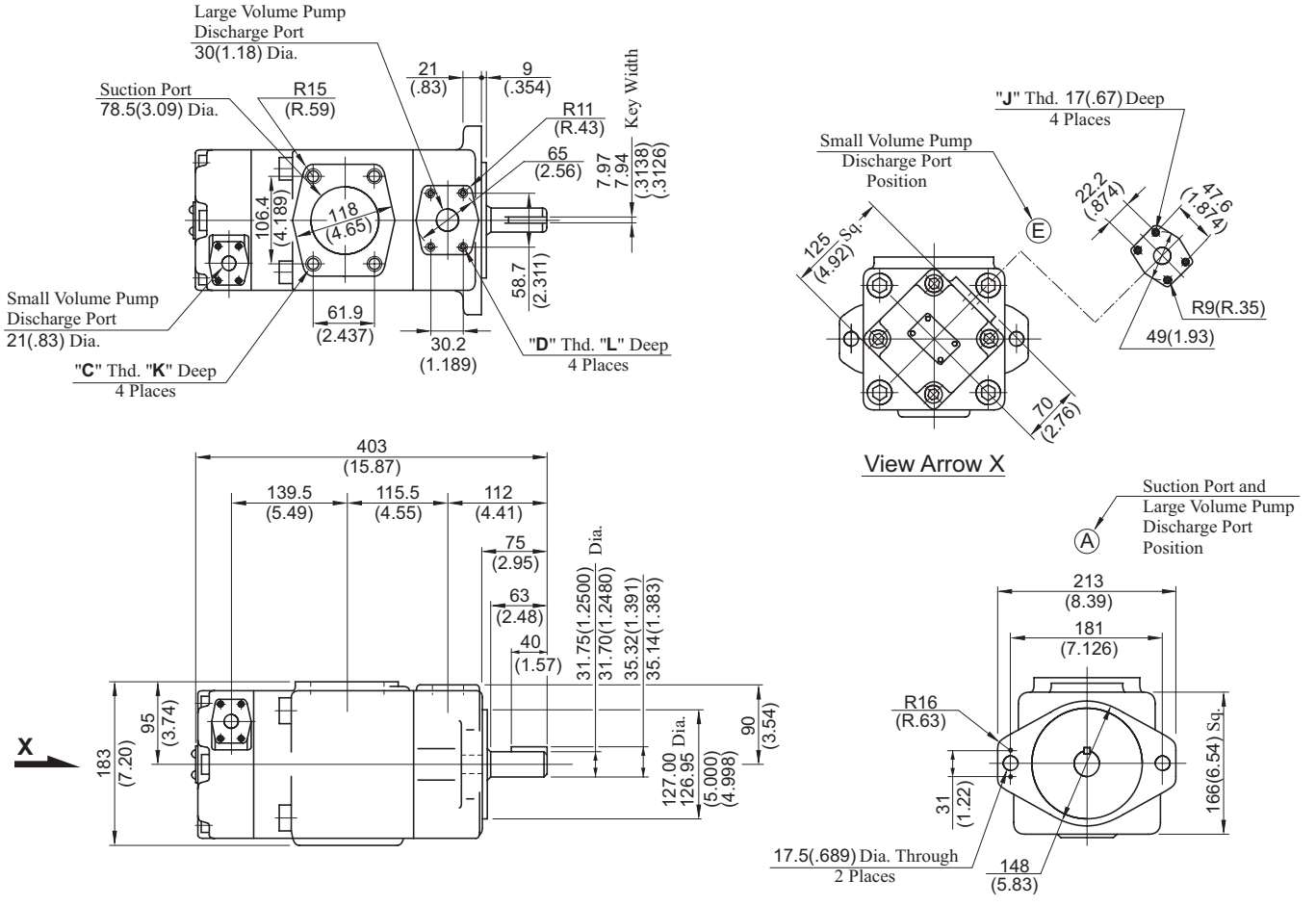
H-VP2030 (Flange Mount)



Model Numbers	"C" Thd.	"D" Thd.	"E" Thd.	Dimensions mm (Inches)	
				K	L
H-VP2030 (Flange Mount)	M16	M10	M10	19 (.75)	19 (.75)

Model Numbers	Approx. Weight (kg)
H-VP2030	51.1

Specifications

Model Numbers	Nominal Displacement cm^3/rev	Max. Operating Pressure MPa (PSI)					
		Petroleum Base Oils		Water Containing Fluids			Synthetic Fluids
		Anti-Wear Type	R & O Type	Anti-Wear Type Water Glycols	Water Glycols	Water in Oil Emulsions	Phosphate Esters
23	22.7	21 (3050)	14 (2030)	16 (2320)	7 (1020)	7 (1020)	14 (2030)
26	25.3						
33	32.3						
36	35.6						
41	39.8						
47	49.8						
53	51.5						
59	55.8						
65	63.7						
52	51.5	21 (3050)	14 (2030)	16 (2320)	7 (1020)	7 (1020)	14 (2030)
60	63.7						
66	66.6						
76	75.5						
94	89.5						
116	118	16 (2320)					
125	122.2						
136	136						
153	153						

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IMPORTANT NOTES ON USING VANE PUMPS

Installation :

- The Base / Platform / Frame for pump-prime mover should be solid & should minimize vibrations.
- Flexible type couplings should be used to couple shaft of pump with prime mover.
- Alignment with 0.05mm tolerance should be maintained. This will avoid shaft breakage & good bearing life.
- The inner diameter of suction pipe line should not be smaller than inlet port of pump.
- Preferably always use flexible hoses with minimum bends.
- All pipes should be leak free to avoid any air from entering in system as well as leakage of oil from system.

Operating Fluids :

- Hydraulic oil plays the most important role in over all life of any vane pump.
- Always use general industrial anti wear fluids.
- Use proper viscocity oils, depending upon one's geographical conditions.
- Use pumps with special seals for special fluids applications.
- Try to maintain oil temperature in the range of 10°C to 55°C.

Pump Start-Up :

- Check rotation of pump prior to starting it.
- Check whether Inlet / Outlet ports are properly connected or not.
- Always start any vane pump on no load condition, Run pump for 5 minutes in idle condition.
- Bleed air from system by loosing the delivery pipe of the pump.

General Maintenance :

- Always ensure that oil tank is properly sealed.
- Check all mounting bolts & fittings periodically and tighten them if required.
- Get oil analysis done regularly & check the oil properties. Replace oil when necessary.
- Suction line filters to be cleaned regularly.
- Maintain proper cooling of hydraulic oil. Ensure that oil temperature does not go beyond 55°C.

HYDRANK PRODUCT RANGE

Hydraulic Valves

Directional Control Valves
- NG-6, 10, 16, 22, 32

System Stack Valves (Modular Valves)
- Check Valve / Pilot Check Valve
- Flow Control Valve / Pressure Control Valve

Proportional Valves
- Pressure Control
- Flow And Pressure Control

Pressure Control Valves
- Direct / Pilot Operated

Variable Vane Pump
- VP1 (8,12,15,20)
- VP1 (30,40)

H-V & H-VQ Series Vane Pump (Vickers® Design)

Complete Pumps
- Single
- Double

V Design for Industrial Applications
VQ Design for Mobile Applications

Cartridge Kits
Seal Kits
Shaft

H-SQP Series Low Noise Fixed Displacement Vane Pump (Tokimec® Design)

Complete Pumps
- Single
- Double
- Triple

Cartridge Kits
Seal Kits
Shaft

H-VP Series High Performance Low Noise Vane Pump

Complete Pumps
- Single
- Double

Cartridge Kits
Seal Kits
Shaft

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