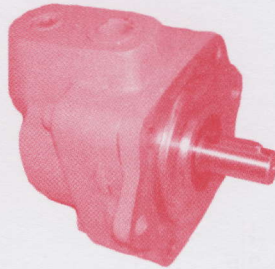
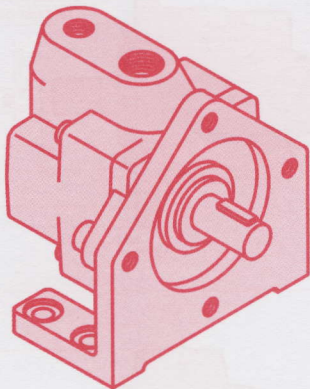




DS SERIES FIXED DISPLACEMENT VANE PUMP MAX. PRESSURE 70 bar



SYMBOL

■ This series pump create large horse power in a small housing compared with low pressure gear pumps, and exhibit the top performance.

■ "DS series" pump are compact and yet powerful compared with gear pumps, and are most suitable for applications in machine tools.

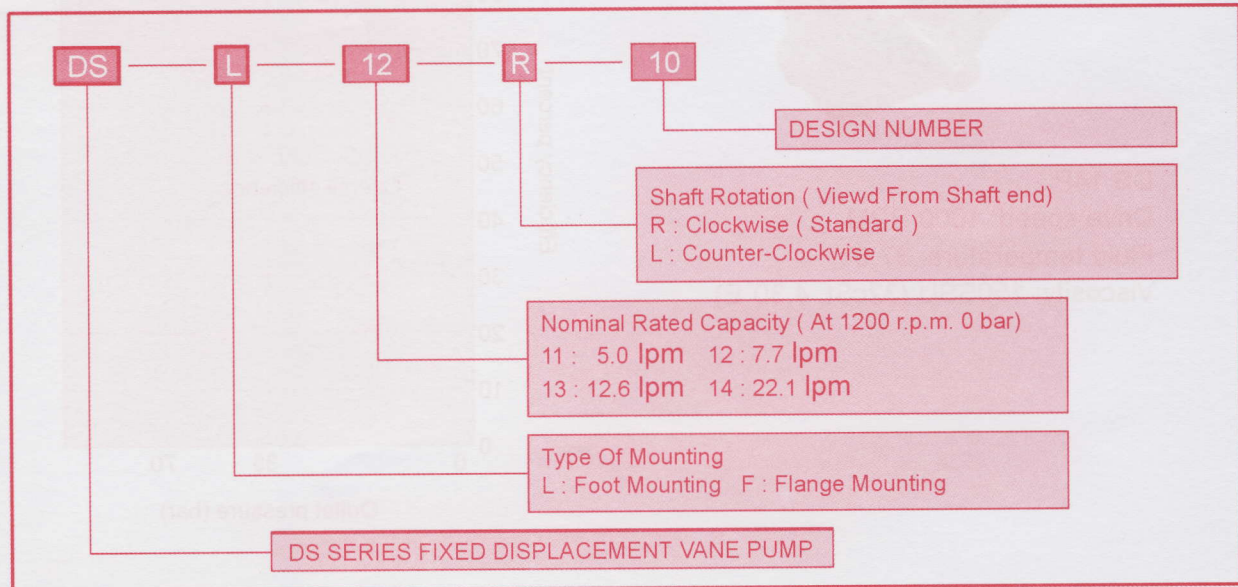
■ The cam-ring is specifically designed to have a special curve so as to reduce noise level lower than that of the conventional vane pumps.

■ The wide path in the suction port ensures low noise operation and anti-cavitation.

Ratings

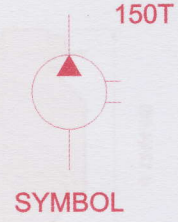
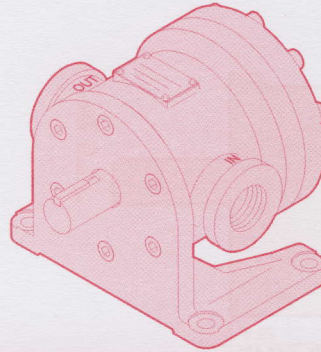
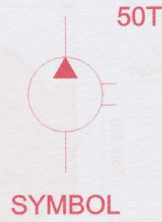
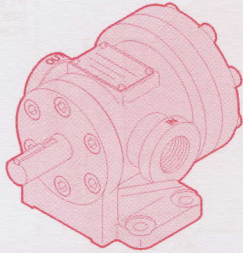
Model	Max Pressure bar	Operating characteristics at 1800r.p.m. with 20cSt Fluid						Speed Range(rpm)		Ports Size(PT)		Weight(kg)	
		Delivery lpm			Input (KW)			Min.	Max.	Outlet	Inlet	Foot Type	Flange Type
		5bar	35bar	70bar	5bar	35bar	70bar						
DS-11	70	5.0	4.5	3.9	0.2	0.55	1.1	600	2000	3/8	1/2	4.5	3.0
DS-12	70	7.7	7.2	6.5	0.3	0.75	1.5	600	2000	3/8	1/2	4.5	3.0
DS-13	70	12.6	11.8	11.0	0.4	1.05	2.1	600	2000	3/8	1/2	4.5	3.0
DS-14	70	22.1	21.6	21.0	0.6	1.65	3.4	600	2000	3/8	1/2	4.5	3.0

ORDERING CODE





50T & 150T Series Fixed Displacement Vane Pump



B

Model	Delivery Flow lpm at no-load pressure				Running Speed(rpm) lpm		Max Pressure bar	Weight (kg)		
	Running Speed (rpm)				Max	Min		Foot Type	Flange type	
	1000	1200	1500	1800						
50T	50T-07	-----	9.0	11.2	13.5	1800	1200	105	10	9.5
	50T-12	12.0	14.4	18.0	21.6	1800	950	105	10	9.5
	50T-14	14.6	17.5	21.7	26.1	1800	950	105	10	9.5
	50T-17	17.0	20.3	25.5	31.5	1800	950	105	10	9.5
	50T-19	19.2	23.0	28.8	34.6	1800	950	105	10	9.5
	50T-21	21.1	25.3	31.7	38.0	1800	950	105	10	9.5
	50T-23	23.0	27.6	34.5	41.4	1800	950	105	10	9.5
	50T-26	26.2	31.4	39.3	47.2	1800	950	105	10	9.5
	50T-30	30.1	36.1	45.2	54.0	1800	950	105	10	9.5
	50T-36	36.2	43.4	54.3	-----	1500	950	70	10	9.5
	50T-40	41.5	49.8	-----	-----	1200	950	70	10	9.5
150T	150T-48	48.3	57.9	72.4	86.9	1800	900	90	24	24.0
	150T-61	61.5	73.8	92.2	110.7	1800	900	90	24	24.0
	150T-75	75.2	90.6	113.2	135.9	1500	900	90	24	24.0
	150T-94	94.2	113.0	141.3	-----	1500	900	70	24	24.0
	150T-116	116.3	139.6	-----	-----	1200	900	70	24	24.0

ORDERING CODE

50T - 36 - F - R L - 20

Design Number 20: 50T Shaft ϕ 19.05
30: 50T Shaft ϕ 22

Discharge Port Position
Viewed From Shaft End
R: On Right Hand L: On Left Hand (normal)

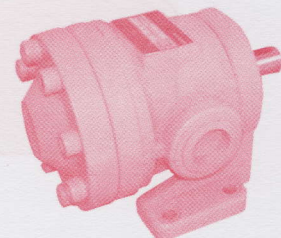
Direction of Rotation
Viewed From Shaft End
R: Clockwise L: Counter-Clockwise

Type of Mounting
L: Foot Mounting F: Flange Mounting

Capacity Mark: (c.c/rev)
50T: 07, 12, 14, 17, 19, 23, 26, 30, 36, 40
150T: 48, 61, 75, 94, 116

Connections
T: Threaded Connections F: Flanged Connections

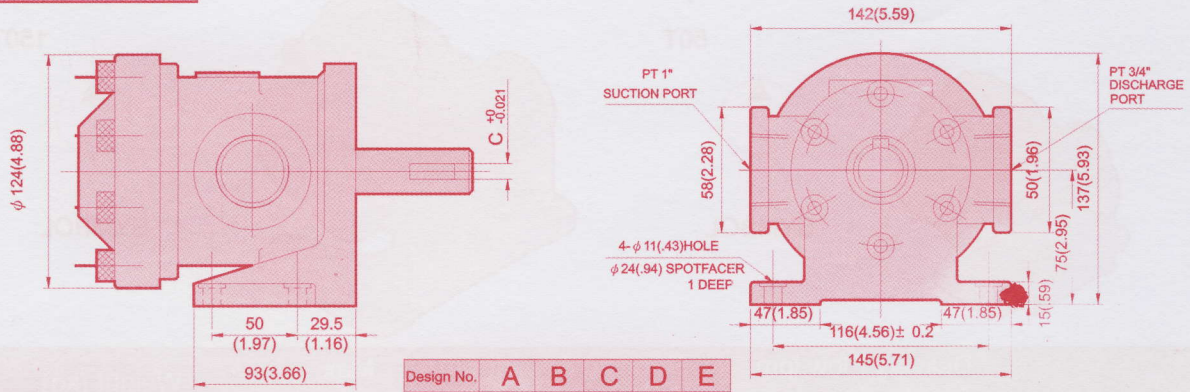
Series Number
50T: Fixed Displacement Vane Pump
150T: Fixed Displacement Vane Pump



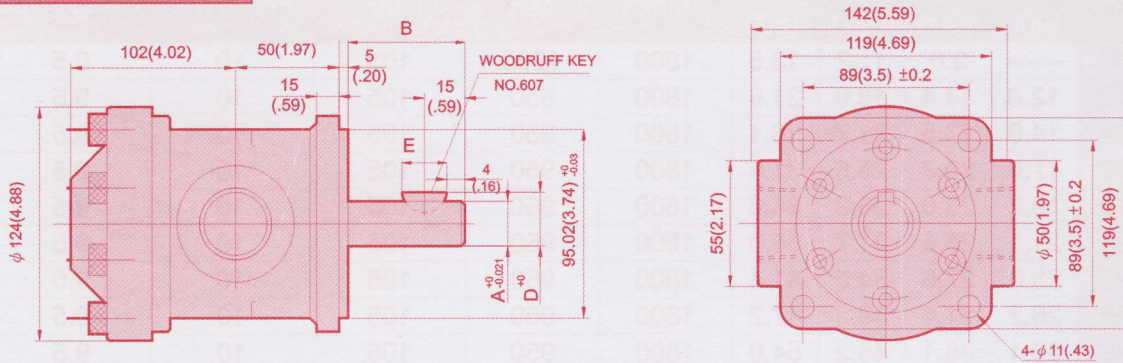
DIMENSIONS

MILLIMETERS(INCHES)

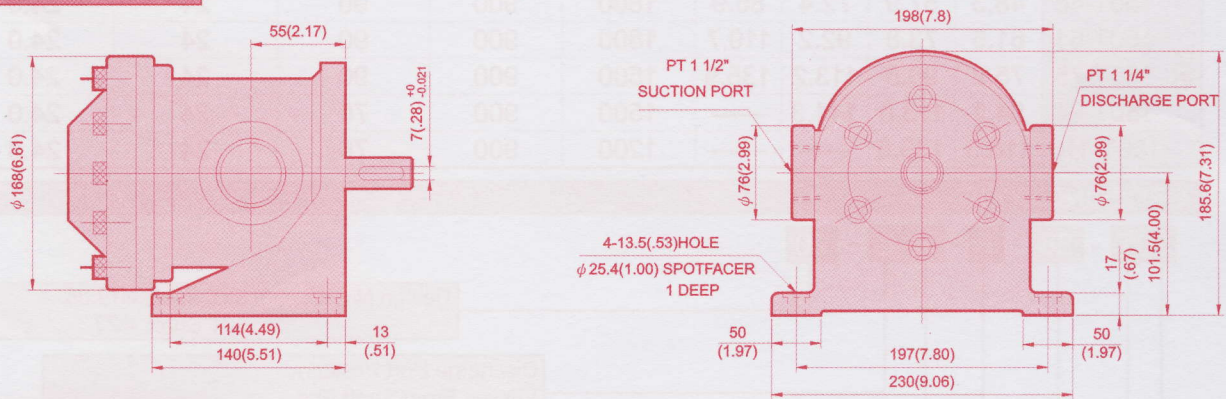
50T Foot Mounting



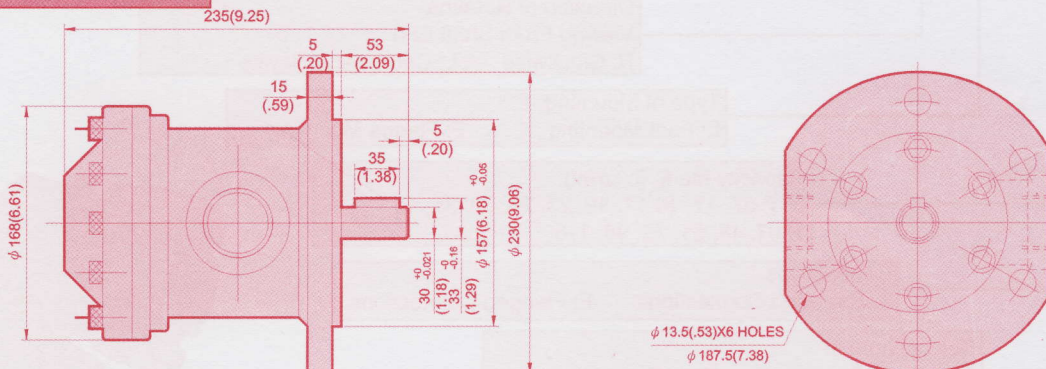
50T Flange Mounting



150T Foot Mounting



150T Flange Mounting



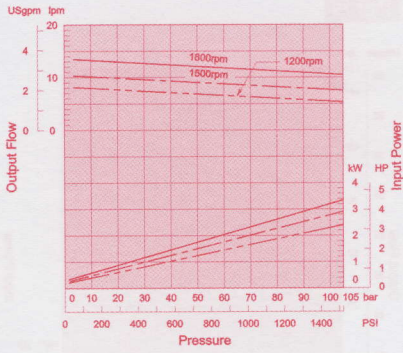


B

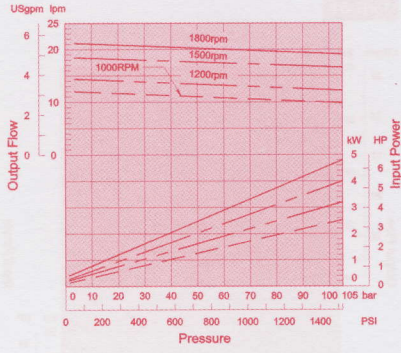
50T TYPICAL PERFORMANCE CHARACTERISTICS

■ PRESSURE-FLOW; INPUT POWER
 ■ CONDITIONS:
 Hydraulic Fluid: ISO VG46
 Temperature: 40°C (104°C)

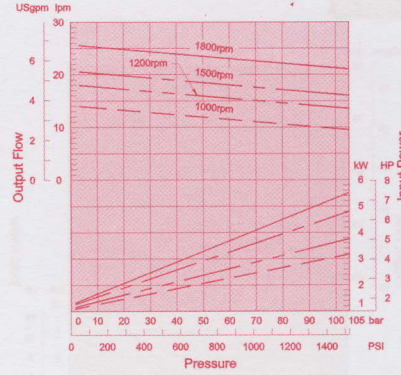
50T-7



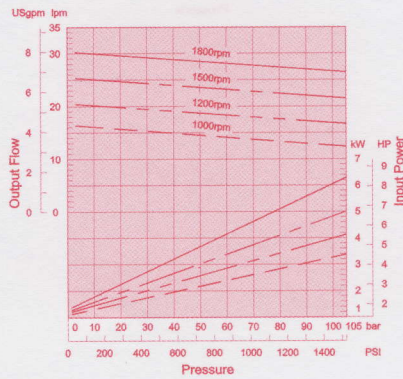
50T-12



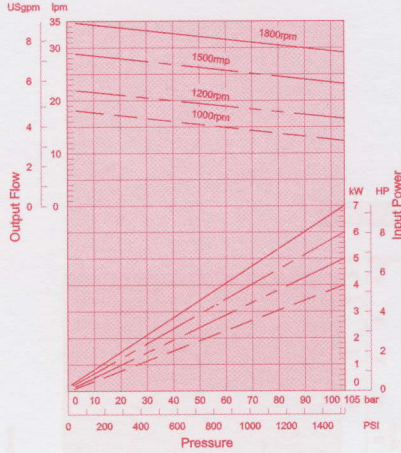
50T-14



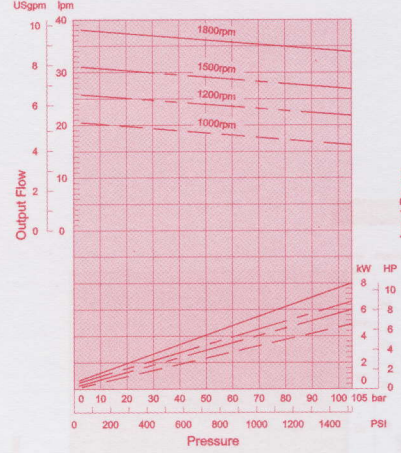
50T-17



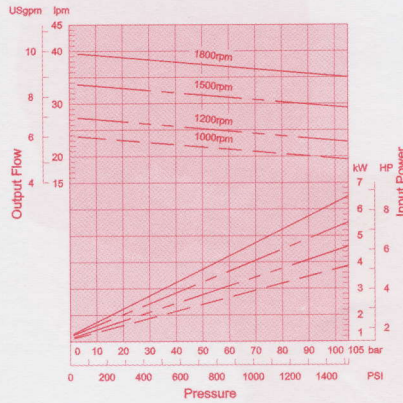
50T-19



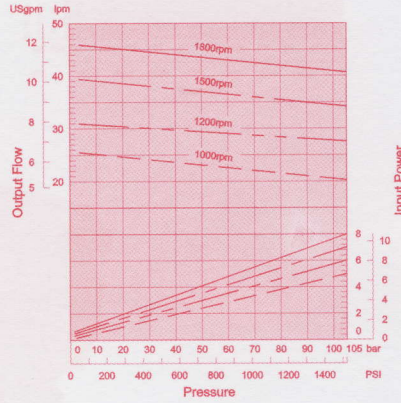
50T-21



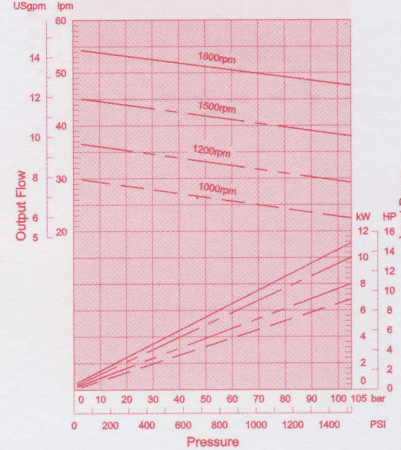
50T-23



50T-26



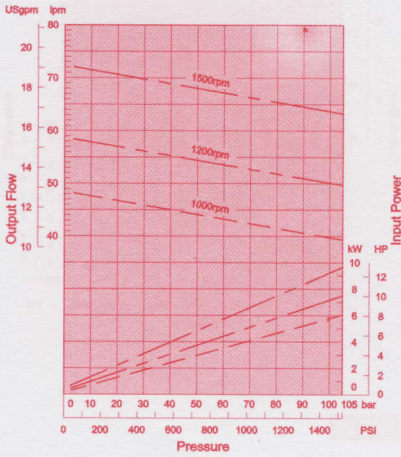
50T-30



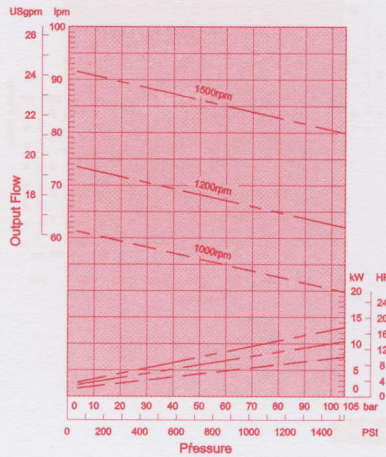
150T TYPICAL PERFORMANCE CHARACTERISTICS

- PRESSURE-FLOW:INPUT POWER
- CONDITIONS:
Hydraulic Fluid:ISO VG46
Temperature:40°C(104°F)

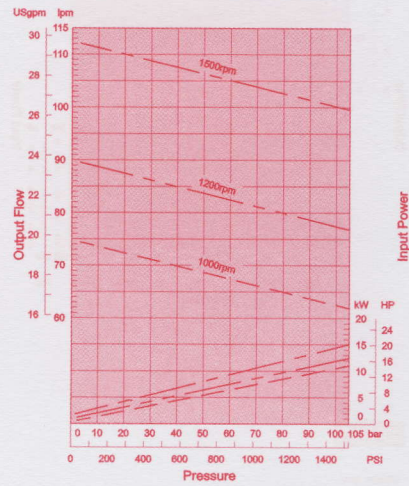
150T-48



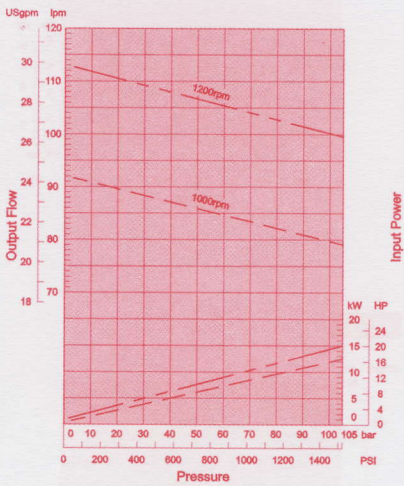
150T-61



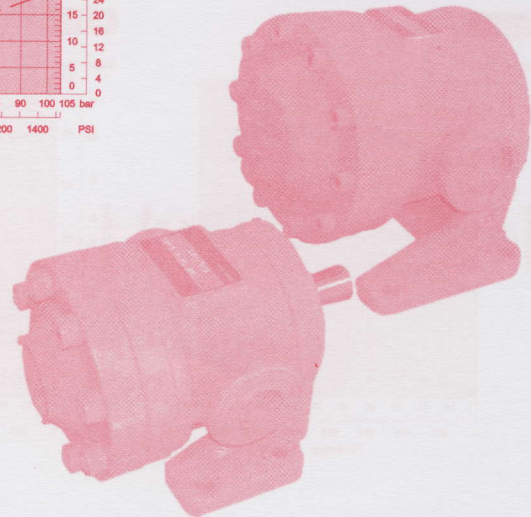
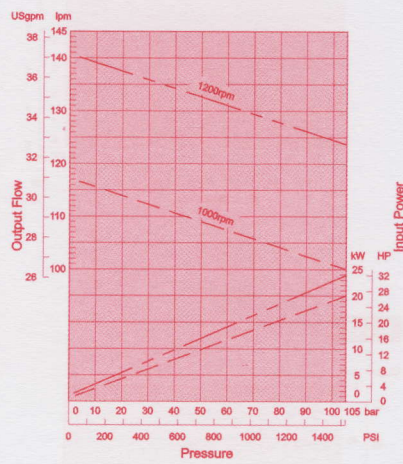
150T-75



150T-94



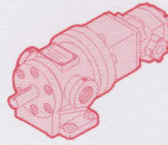
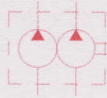
150T-116



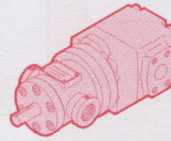


B

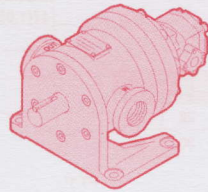
Hi-Lo Pumps Series
Fixed Displacement Vane Pump + Gear Pump



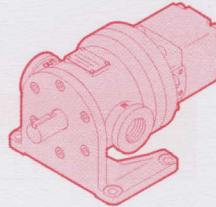
50T+PA(KYB)



50T+HQ15



150T+PA(PB)



150T+HQ15 (GS2)

Ordering Code Hi-Lo Pumps Series

50T	12	L	R	L	PA	-30
SERIES NO.	Vane Pump Displacement Mark (Shaft End)	Type of Mounting	Shaft Rotation	Discharge Port Position	High-Pressure Gear Pump (Cover End) (c.c/rev)	Design
50T-Fixed Displacement Vane Pump	50T-7, 12, 14, 17, 19, 21, 23, 26, 30, 36, 40	L- Foot mounting. F- Flange mounting.	Viewed from Shaft End R: Clockwise L: Counter Clockwise	Viewed from Shaft End R: On Right Hand L: On Left Hand	Model Capacity PA1 1.07 PA2 2.02 PA3 3.01 PA4 4.01 PA5 6.05 HGP ... PB ... HQ15 ... TSP ...	20: 50T Shaft ϕ 19.05 30: 50T Shaft ϕ 22
150T-Fixed Displacement Vane Pump	150T-48, 61, 75, 94, 116					
T: Pipe Mounting F: Flange Mounting						

DIMENSIONS

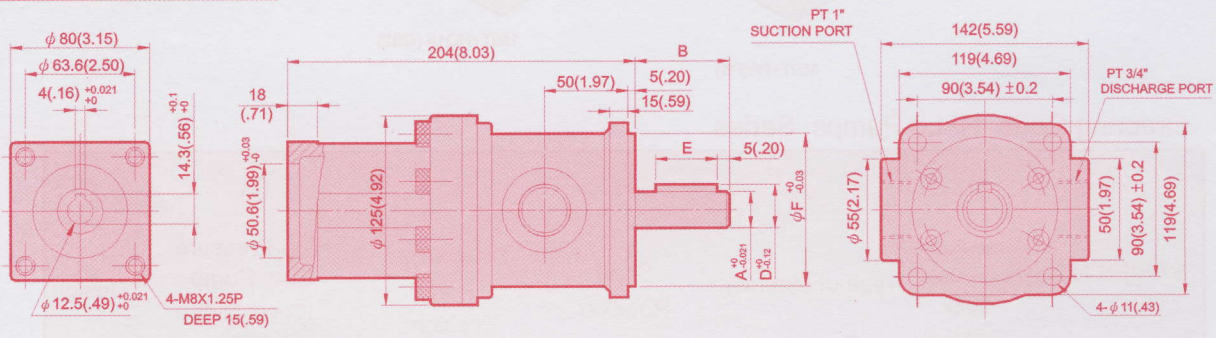
MILLIMETERS(INCHES)

50T+PA Foot Mounting

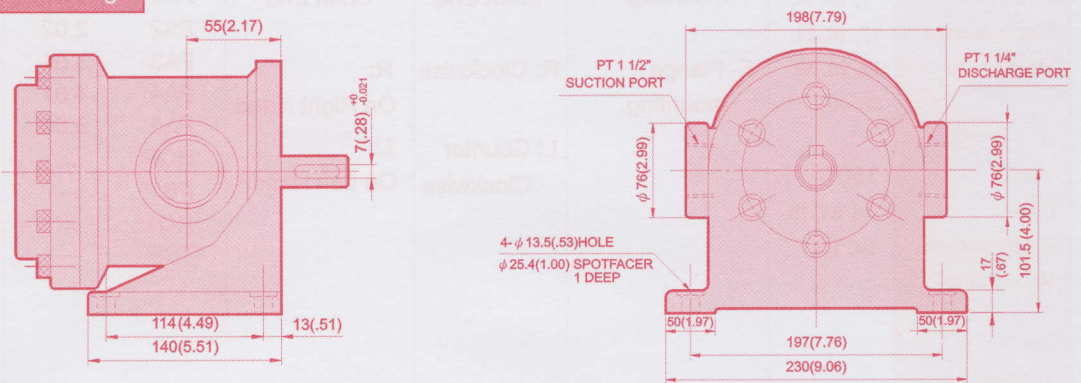


Design No.	A	B	C	D	E	F
20	φ 19.05	36	4.76	21.3	22	95
30	φ 22	46	5	24	30	96

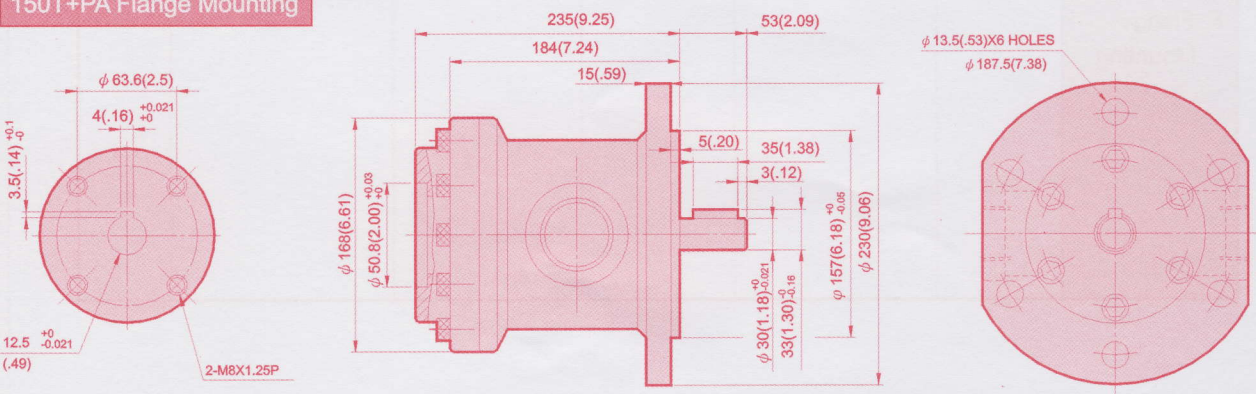
50T+PA Flange Mounting



150T+PA Foot Mounting



150T+PA Flange Mounting



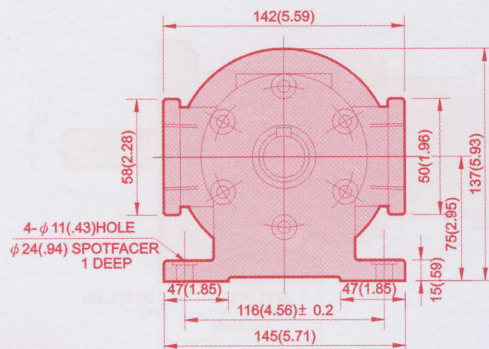
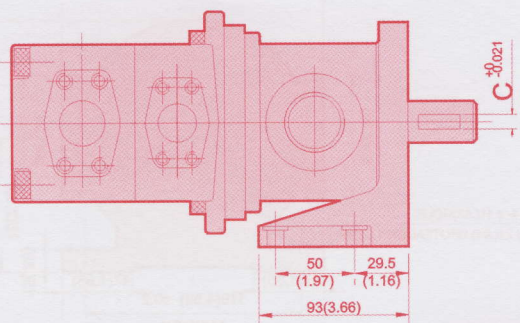


DIMENSIONS

MILLIMETERS(INCHES)

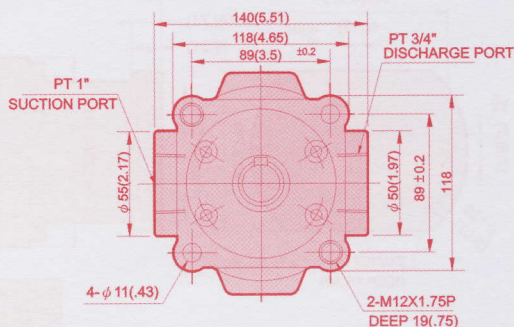
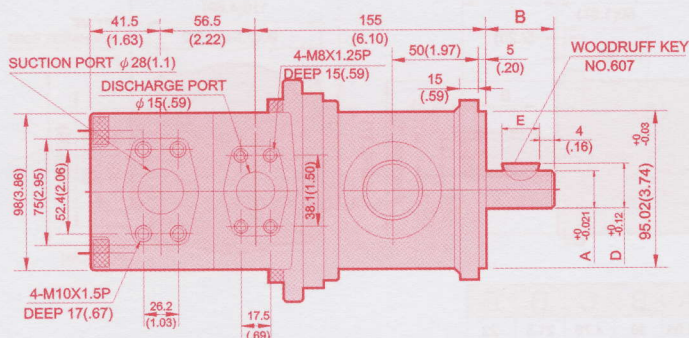
B

50T+HQ15 Foot Mounting

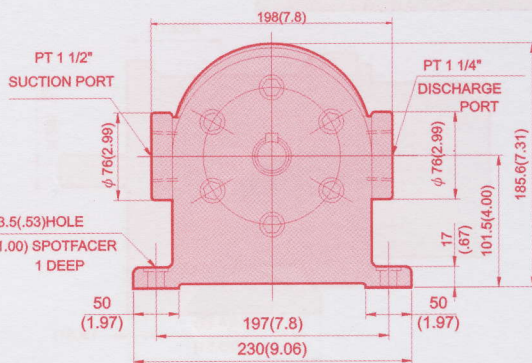
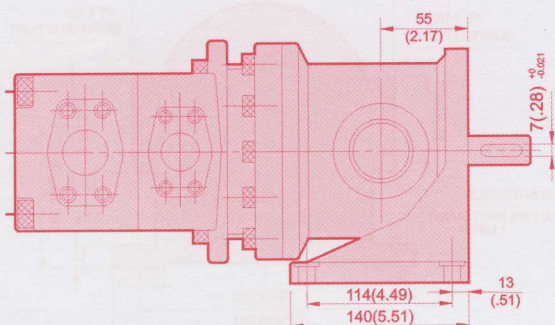


Design No.	A	B	C	D	E
20	φ 19.05	36	4.76	21.3	22
30	φ 22	46	5	24	30

50T+HQ15 Flange Mounting



150T+HQ15 Foot Mounting



150T+HQ15 Flange Mounting

