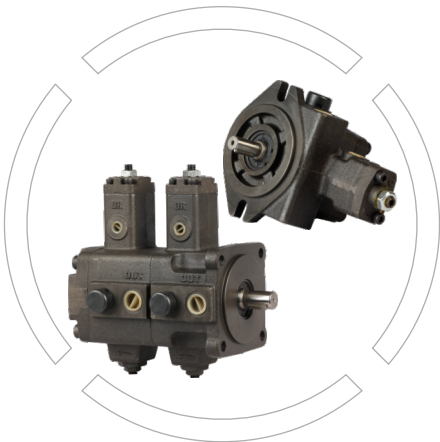


TVCM Series

Direct operated Variable Vane Pump
Single & Double pump
Size: 08 to 50 ltr @1800rpm
Maximum operated pressure 70bar
Displacement volume 4.4cc to 27.7cc

updated 10.2024



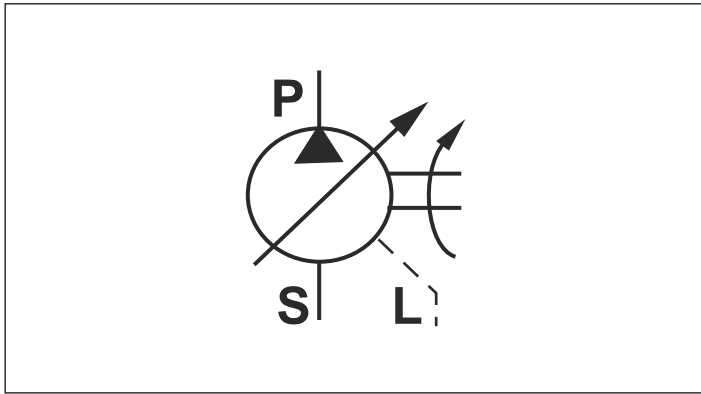
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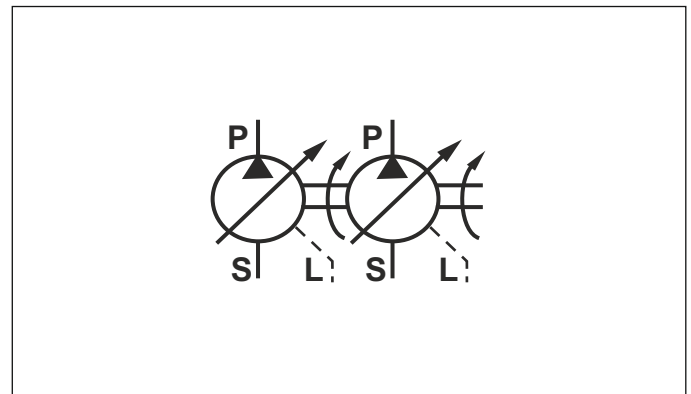
Features

- Great efficiency, operation with minimum pressure loss
 - Power saving
 - Very low noise during operation
 - Compact and simple design, space saving
 - Sturdy structure for high efficiency and long service life
 - Adjustable displacement volumes
 - Highly preferred for CNC and special purpose machines and general applications
-
- Symbols

Single Pump



Double Pump





Ordering code

	TVCM	SF	-	30	D	-	30	D	10	G
Variable Vane Pump										
Single Pump		= SF								
Double Pump		= DF								
First pump output @1800rpm in litre										
4.44cc/rev				= 08						
6.66cc/rev				= 12						
8.33cc/rev				= 15						
11.11cc/rev				= 20						
16.66cc/rev				= 30						
22.22cc/rev				= 40						
27.77cc/rev				= 50						
Max. pressure setting range upto										
20bar				= A						
35bar				= B						
55bar				= C						
70bar				= D						
Single pump								= No code		
Second pump output @1800 rpm in litre										
4.44cc/rev					= 08					
6.66cc/rev					= 12					
8.33cc/rev					= 15					
11.11cc/rev					= 20					
16.66cc/rev					= 30					
22.22cc/rev					= 40					
27.77cc/rev					= 50					
Single pump								= No code		
Max. pressure setting range upto										
20bar					= A					
35bar					= B					
55bar					= C					
70bar					= D					
Shaft code for single pump										
For size 08, 12, 15, 20										
Parallel shaft with key Ø12.7mm									= 10	
Parallel shaft with key Ø15.875mm									= 11	
For Size 30, 40, 50										
Parallel shaft with key Ø19.05mm									= 10	
Parallel shaft with key Ø15.875mm(only for 30 & 40)									= 11	
Shaft code for double pump										
For size 08, 12, 15, 20										
Parallel shaft with key Ø15.875mm									= 10	
For size 30, 40, 50										
Parallel shaft with key Ø19.05mm										
BSP ports										= G

Note: In the TVCM-SF-30-* and TVCM-SF-40-* models, Code 11 features a spigot diameter of Ø82.55 mm and a shaft diameter of Ø15.875 mm.



Technical data

Model	Delivery at no load L/min		Pressure Adj. range bar	Shaft speed rpm		Max. pressure bar	Weight Kg	Oil temperature	“G” BSP as per ISO 228/1			
	1800rpm	1500rpm		Max	Min				Inlet	Outlet	Drain	
SF/DF-08A	08	6.5	20	1800	800	20	Single pump 5.0	15°C ~ 60°C during operation	1/2” BSP	3/8” BSP	1/4” BSP	
SF/DF-08B			35			35						
SF/DF-08C			55			55						
SF/DF-08D			70			70						
SF/DF-12A	12	8	20			20						
SF/DF-12B			35			35						
SF/DF-12C			55			55						
SF/DF-12D			70			70						
SF/DF-15A	15	10	20			20						
SF/DF-15B			35			35						
SF/DF-15C			55			55						
SF/DF-15D			70			70						
SF/DF-20A	20	16	20			20						
SF/DF-20B			35			35						
SF/DF-20C			55			55						
SF/DF-20D			70			70						
SF/DF-30A	30	25	20			20			Single pump 9.0	3/4” BSP	1/2” BSP	1/4” BSP
SF/DF-30B			35			35						
SF/DF-30C			55			55						
SF/DF-30D			70			70						
SF/DF-40A	40	35	20			20						
SF/DF-40B			35			35						
SF/DF-40C			55			55						
SF/DF-40D			70			70						
SF/DF-50A	50	42	20			20						
SF/DF-50B			35			35						
SF/DF-50C			55			55						
SF/DF-50D			70			70						



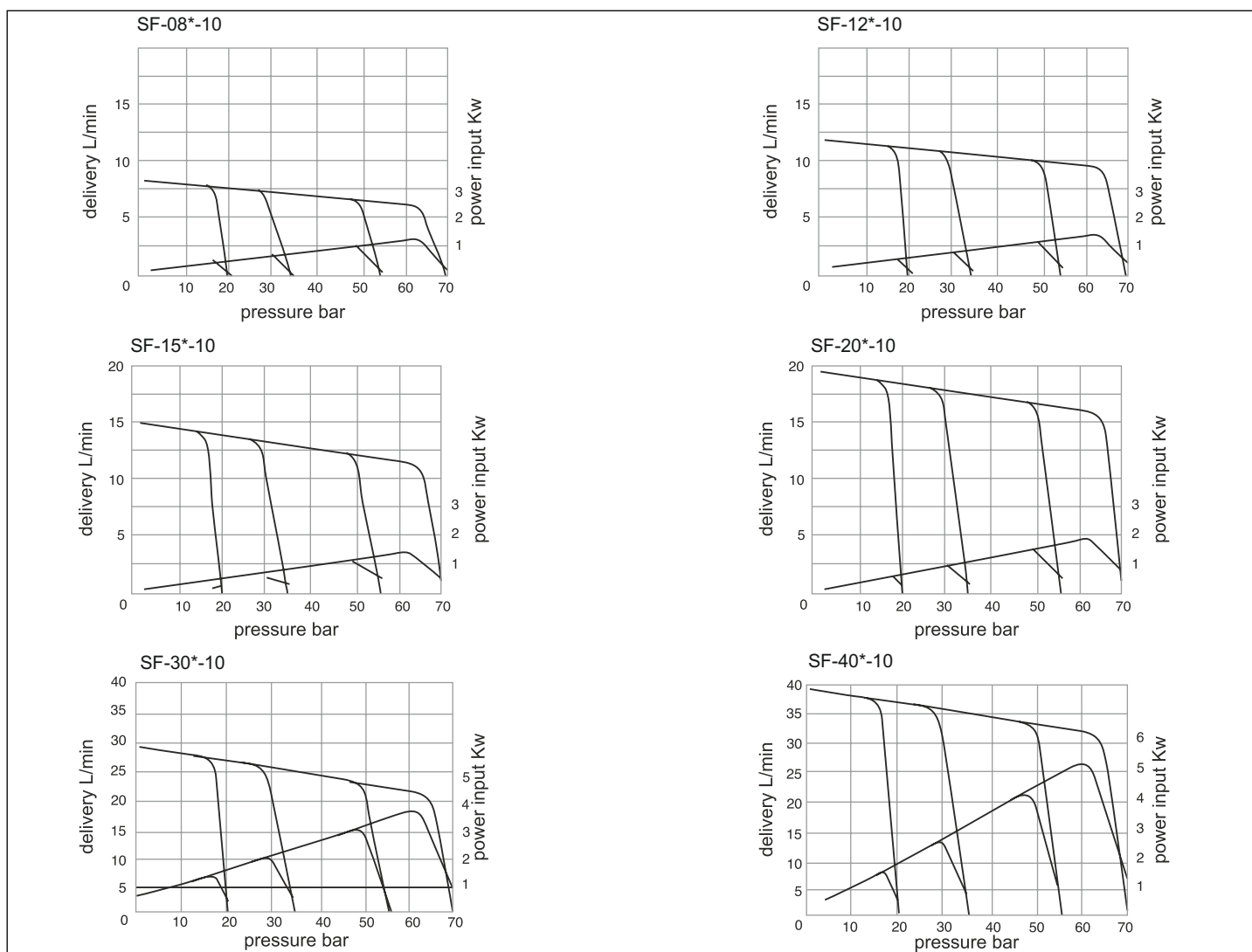
Technical data

Important info: All pumps are available in BSP ports	
Shaft rotation	Clockwise rotation viewd from the shaft end is standard
Temperature range (°C)	-10 to +60, permissible viscosity range
Viscosity range	60 to 160 at operating temperature
Degree of contamination	recommend a filter with a minimum rating @20 micron
Inlet pressure, absolute	±0.03 bar
Mounting type	flange connection at any position
Shaft loading	radial only, to be coupled to electric motor only $\pm 1^\circ$ angular deflection, alignment between shafts to 0.05mm
Pressure fluid	HLP - mineral oil to DIN 51 524 part 2
	viscosity 30~50 (cst) (Vg32) @ 40°C

Performance curves

Notes:

- Pressure increases by adjusting screw is turned clockwise and reduce anti-clockwise.
- **Caution**, pump always to be started for the first time in **NO-LOAD** condition, repeat starting and stopping several times to bleed air, keep at **NO-LOAD** condition for minimum 10-15 minutes.
- **Drain connection** must be piped directly to tank and back pressure not to exceed 0.3bar



Notes:

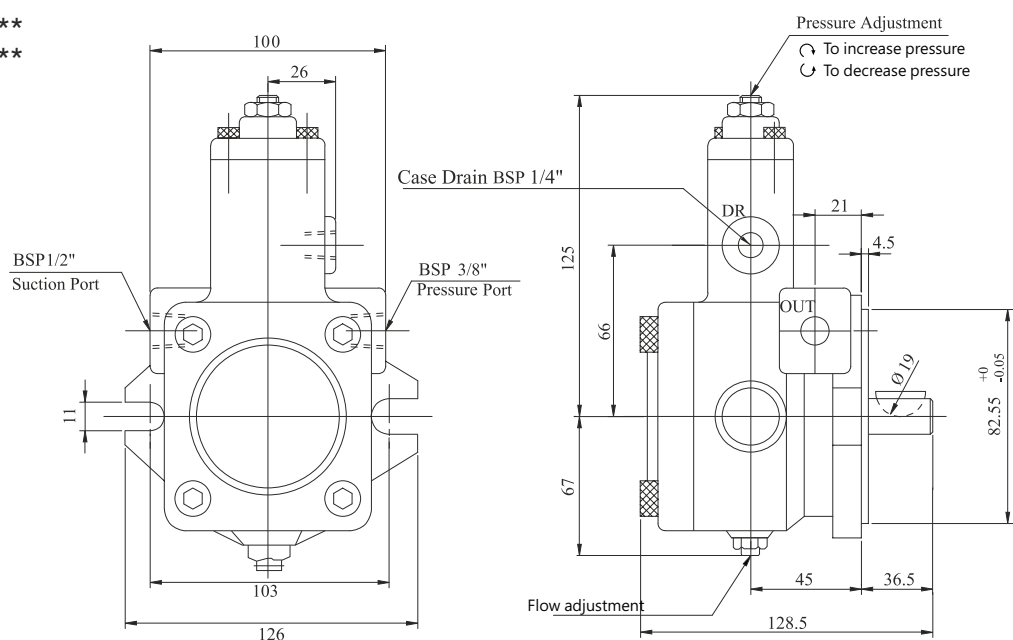
- The pressure curve for TVCM-SF-50* will be updated soon.



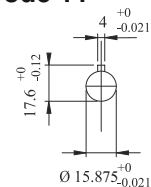
Unit dimensions of SF-08/12/15/20

(dimensions in mm)

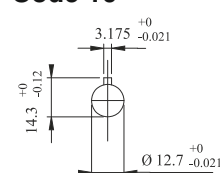
SF-08*-**
SF-12*-**
SF-15*-**
SF-20*-**



Shaft options Code 11



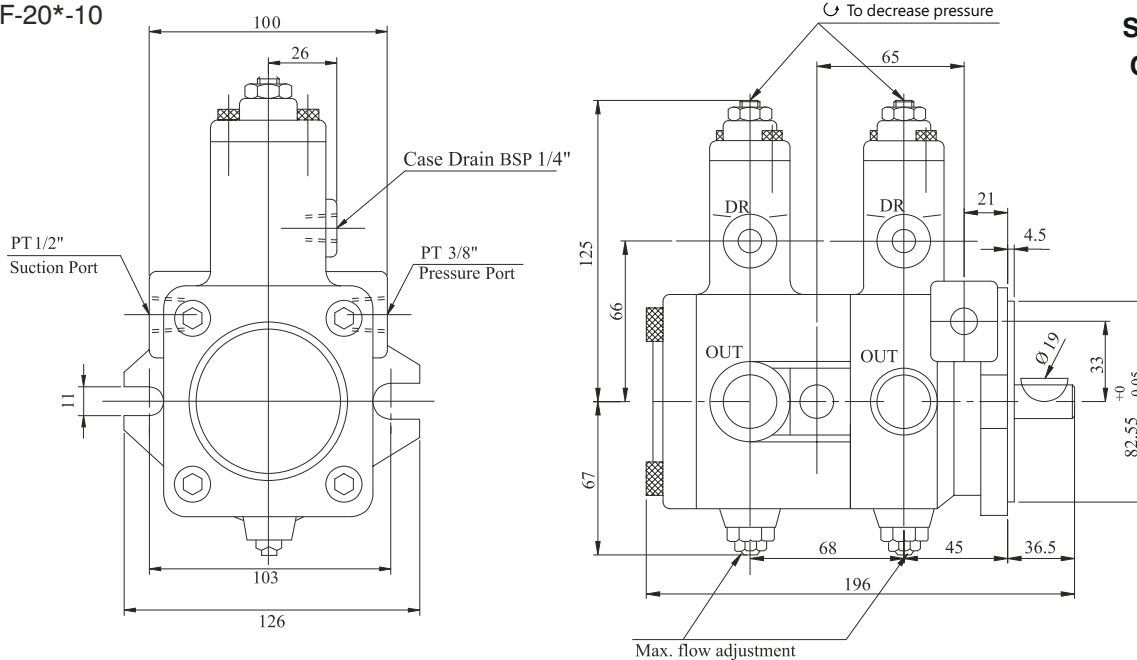
Code 10



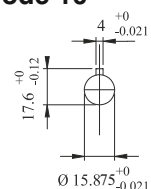
Unit dimensions of DF-08/12/15/20

(dimensions in mm)

DF-08*-10
DF-12*-10
DF-15*-10
DF-20*-10



Shaft dimension Code 10





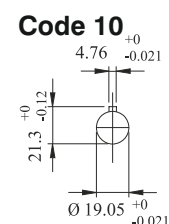
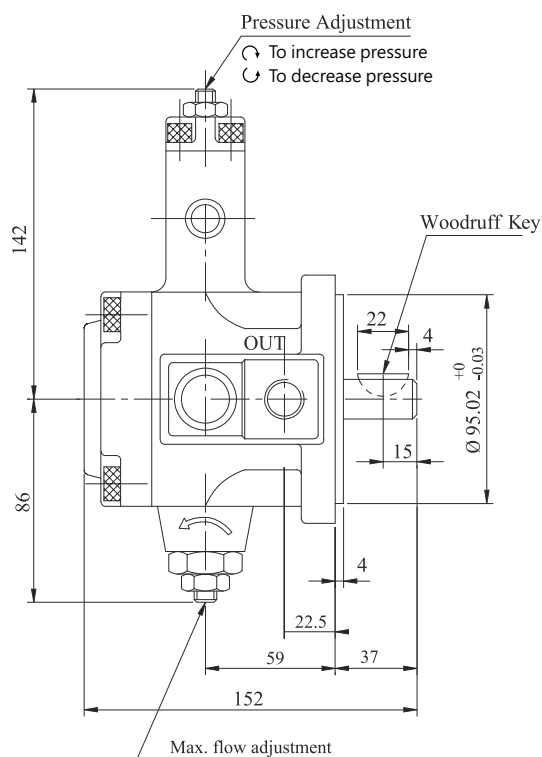
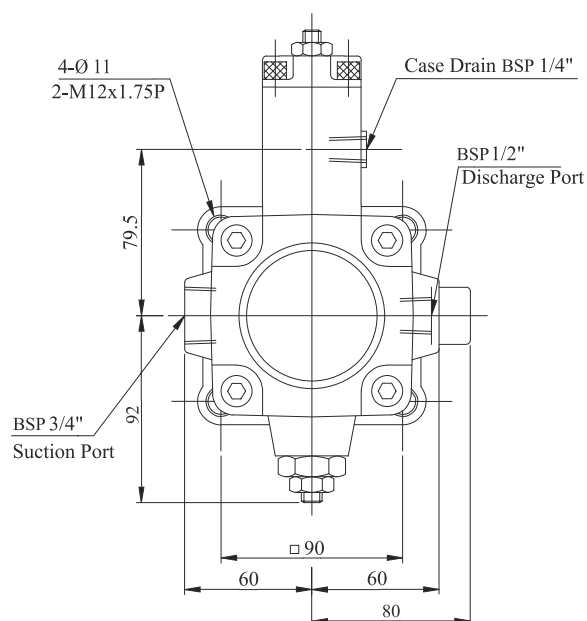
Unit dimensions of SF-30/40/50 (Code10)

(dimensions in mm)

SF-30*-**

SF-40*-**

SF-50*-**

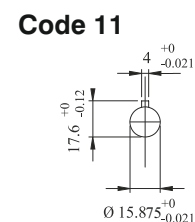
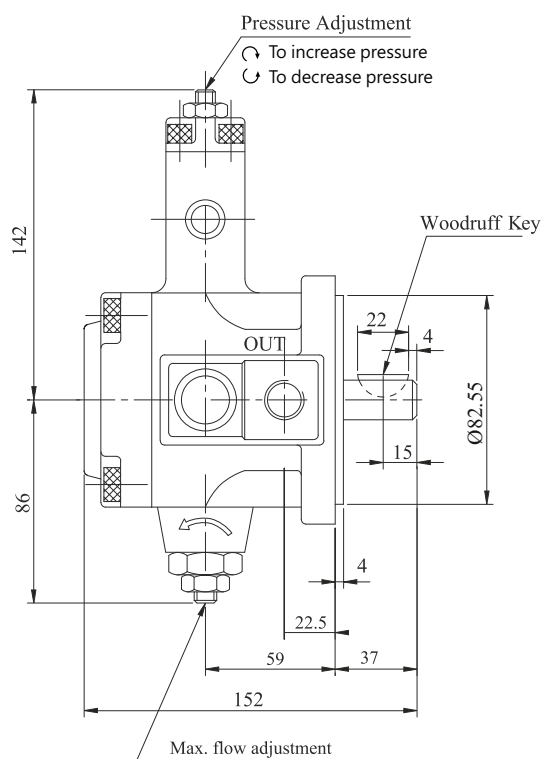
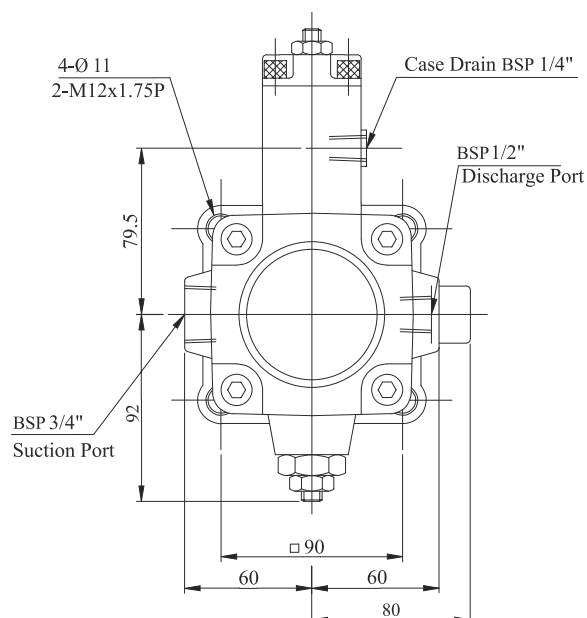


Unit dimensions of SF-30/40 (Code 11)

(dimensions in mm)

SF-30*-**

SF-40*-**



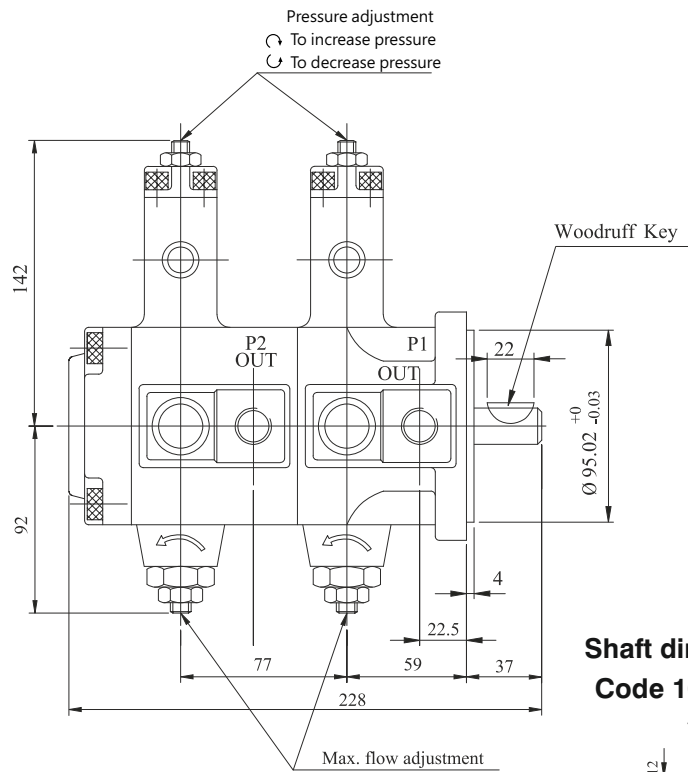
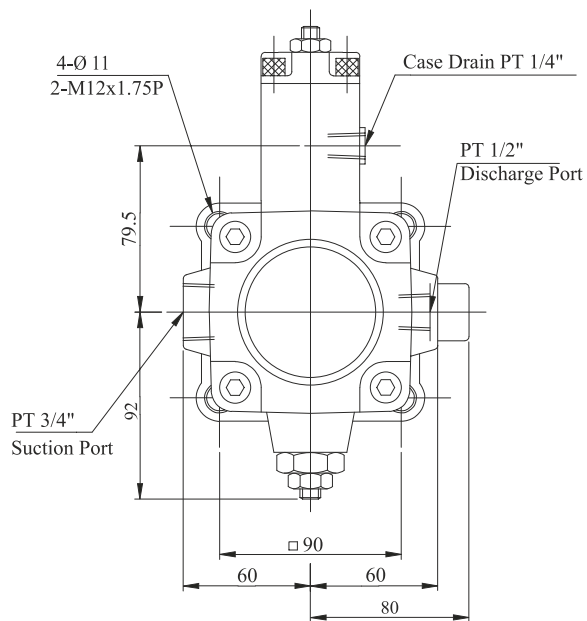
Note: In the TVCM-SF-30-* and TVCM-SF-40-* models, Code 11 features a spigot diameter of Ø82.55 mm and a shaft diameter of Ø15.875 mm.



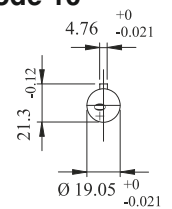
Unit dimensions of DF-30/40/50

(dimensions in mm)

DF-30*-10
DF-40*-10



Shaft dimensions Code 10

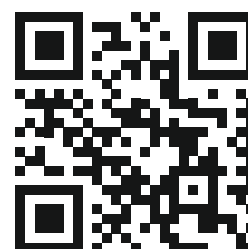


The specified data is for product description purposes only and may not be deemed to be guaranteed unless expressly confirmed in the contract.



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