

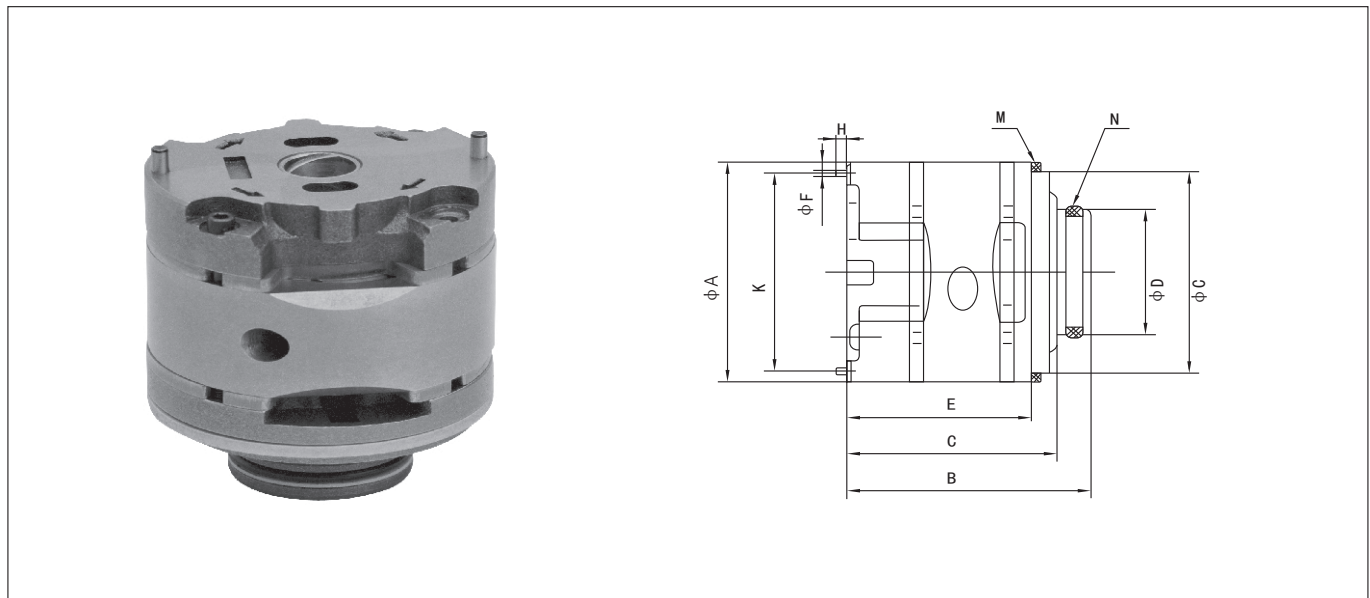
VQ Series Cartridge Kits

Model Code

(F3-)	PC-	20VQ	-5	-R	-10
Prefix	Cartridge kits mark	Series	▲ Code	Rotation	Design
Omit-Using antiwear oil water glycol fluid	PC-Single pump cartridge kits Double pump shaft end pump cartridge kits	20VQ	2,3,4,5,6,7,8,9,10, 11,12,14	(Viewed from shaft end of pump) R-Right hand for clockwise L-Left hand for counter clockwise	10
		25VQ	10,12,14,15,17,19, 21		
F3-Phosphated ester fluid	PCT-Double pump cover end pump cartridge kits	35VQ	21,25,30,32,35,38,45		
		45VQ	42,45,50,57,60,66,75		

▲ Rated capacity(USgpm)at 1200 rpm,0.69 MPa (100 psi).

Installation dimensions

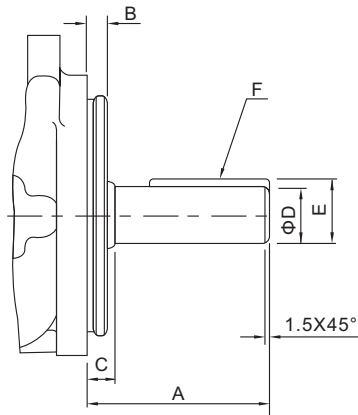


Series	A	B	C	D	E	F	G	H	K	M (Gasket)	N (O-Ring)
20VQ	82.5	81.5	70.1	47	61.5	4.8	76.2	7	73.6	82.76×76.26×3.5	40×3.5
25VQ	96.8	98.8	87	52.2	71.2	4.8	90.5	7	88.19	97×91×3.5	44×3.53
35VQ	114.3	117.7	105	72.2	90.3	6.4	108	7	103.94	114.5×108.5×3.5	63.09×3.53
45VQ	133.35	141.1	129.6	80.2	105.5	6.4	127	11	133.35	133.6×127.6×3.5	71×3.55

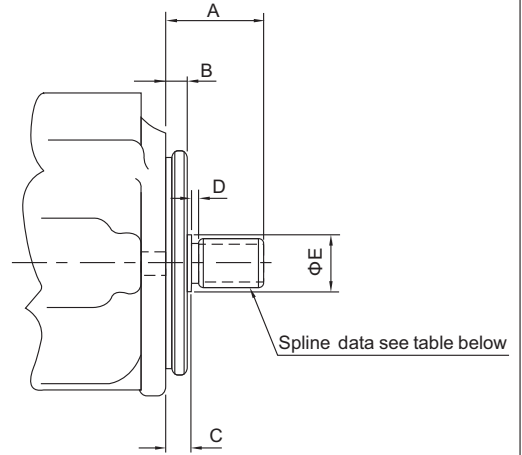
Series	Inner spline dentiform parameter of rotor				
	Pitch	Number of teeth	Pressure angle	Major diameter	Minor diameter
20VQ	48/96	30	45°	16.617	15.56
25VQ	48/96	40	45°	21.9	20.86
35VQ	40/80	37	45°	24.38	23.1
45VQ	12/24	14	30°	32.59	27.60

Optional shafts

● key shaft



● Spline shaft



● key shaft

Model	Shaft	A	B	C	D	E	F
20VQ	1	59	9.53	12.1	22.23/22.20	24.5/24.4	4.76×32
25VQ	1	59	9.53	11.1	22.23/22.20	24.5/24.4	4.76×32
2520VQ	86	78	9.53	11.1	25.37/25.35	28.3/28.1	6.36×50.8
35VQ	1	73.2	9.53	11.1	31.75/31.70	35.36/34.10	7.94×38.1
352*VQ	86	86	9.53	11.1	34.90/34.87	38.6/38.3	7.94×54
45VQ	1	62	12.7	14.22	31.75/31.70	35.36/34.10	7.94×28.5
45**VQ	86	87.4	12.7	14.22	38.07/38.05	42.4/42.1	9.54×50.8

● Spline shaft

Model	Shaft	A	B	C	D	E	Spline data (see table below)
20VQ	151	41.1	9.53	11.1	3.9	27.8	A
25VQ	11	44.5	9.53	11.1	3.9	27.8	A
2520VQ							
35VQ	11	58.7	9.53	11.1	6.35	35.1	C
352*VQ							
45VQ	11	61.9	12.7	14.3	9.7	39.6	C
45**VQ							

● Spline data (involute spline)

Spline data tag	teeth	diameter	large diameter	forming diameter	trail	flat tooth with fit
A	13	16/32	22.17	19.03	18.63	large diameter fit
			22.15		18.35	
C	14	12/24	31.7	27.2	26.99	large diameter fit
			31.67		26.64	