

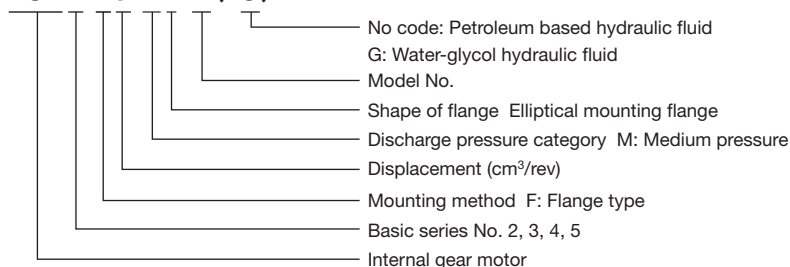
Two gears meshing in the casing are rotated continuously by the fluid flowing into the casing to develop torque on the output shaft.

**Features**

1. Low noise
  2. Contains only a few parts made for easy maintenance.
  3. High-speed operation is possible while developing stable torque over the low to high speed range.
  4. The operating direction is reversible.
- The drain pipe must be returned to the reservoir directly.
  - The pump can be used for R&O type and abrasion-resistant type hydraulic fluid applications.
  - The permissible viscosity of hydraulic fluid to be used is 300 to 15 mm<sup>2</sup>/s. However, it is advisable to use a hydraulic fluid with a viscosity of around 30 mm<sup>2</sup>/s.
  - When water-glycol type hydraulic fluid is used, specify "G" at the end of model designation. In this case, the maximum speed is 1,200 min<sup>-1</sup>. For brand names of water-glycol hydraulic fluid, please consult us.
  - Read the "Cautions on Using Pumps and Motors", A-2 and A-3 pages.
  - The foot is sold as optional single parts. Refer to "About foot", A-64 page.

**Description of the model designation**

**TCM2-F5-M1-B(-G)**



**Specifications**

Model	Capacity (Nominal)	Displacement (cm <sup>3</sup> /rev)	Inlet pressure (MPa)		Output torque (At rated pressure) (N·m)	Rotating speed (min <sup>-1</sup> )	
			Rated	Max.		Max.	Lowest
TCM2-F5-M1-B	5	5.5	17.5	21	14	4,000	200
TCM2-F6.3-M1-B	6.3	6.9			17		
TCM2-F8-M1-B	8	8.8			21		
TCM2-F10-M1-B	10	11.0			27		
TCM3-F12.5-M1-B	12.5	13.7	17.5	21	35	3,000	200
TCM3-F16-M1-B	16	17.3			44		
TCM3-F20-M1-B	20	22.1			55		
TCM3-F25-M1-B	25	27.4			69		
TCM4-F31.5-M1	31.5	35.2	17.5	21	86	3,000	200
TCM4-F40-M1	40	44.9			110	2,800	
TCM4-F50-M1	50	54.6			136	2,500	
TCM5-F63-M1-A	63	62.2	17.5	21	171	1,800	200
TCM5-F80-M1-A	80	79.3			215		
TCM5-F100-M1-A	100	99.1			269		
TCM5-F125-M1-A	125	127.5			339		

37mm<sup>2</sup>/s

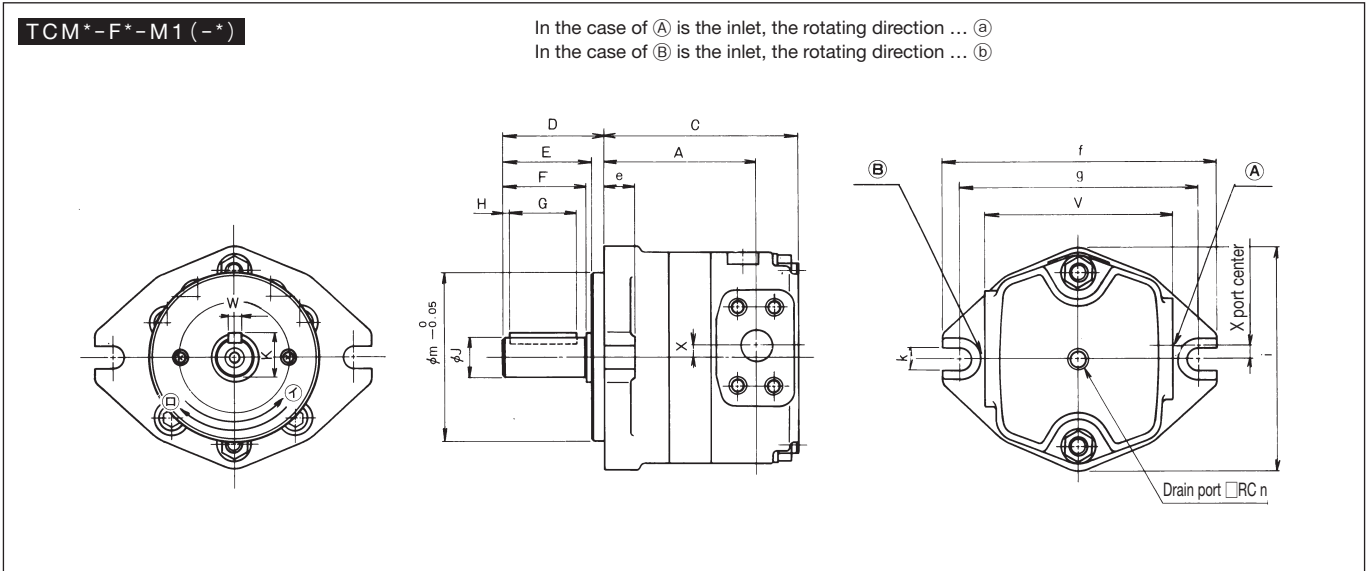
**Pipe flange** Specify by selecting from this table.

Name	For TCM2	For TCM3	For TCM4	For TCM5
For screw	FTCP-04PT	FTCP-06PT	FTCP-08PT	FTCP-12PT
For welding	FTCP-04WE	FTCP-06WE	FTCP-08WE	FTCP-12WE

(Note)

1. This flange comes with mounting bolts and O-ring.
2. For dimensions, see A-31 page.
3. Inlet and outlet pipe flanges are the same size.

■ Outside dimensions



■ Dimension table

Model	TCM2				TCM3				TCM4			TCM5			
Capacity (cm <sup>3</sup> /rev)	5	6.3	8	10	12.5	16	20	25	31.5	40	50	63	80	100	125
A	64	66.5	70	74	81	84.5	89	94	109	114.5	120	123	129	136	146
C	85	87.5	91	95	106	109.5	114	119	146	151.5	157	162	168	175	185

Model	TCM2	TCM3	TCM4	TCM5
D	46	61.5	86	94
E	38.5	53.5	76	82
F	(41)	51.5	73	80
G	30	40	61	61
H	0	0	5	8
J	19.05 <sup>0</sup> <sub>-0.021</sub>	24 <sup>+0.009</sup> <sub>-0.004</sub>	32 <sup>+0.011</sup> <sub>-0.005</sub>	38 <sup>+0.011</sup> <sub>-0.005</sub>
K	21.25	27	35	41

Model	TCM2	TCM3	TCM4	TCM5
W	4.76 <sup>+0.024</sup> <sub>+0.012</sub>	8 <sup>0</sup> <sub>-0.036</sub>	10 <sup>0</sup> <sub>-0.036</sub>	10 <sup>0</sup> <sub>-0.036</sub>
X	10	8	8	0
e	14.5	18.5	20	34
f	125	168	205	268
g	106	146	181	229
i	106	136	186	233
k	11	14	18	22
m	82.55	101.6	126.95	152.35
n	1/4	1/4	3/8	1/2

■ Mass table

Model	Mass (kg)
TCM2-F5-M1-B	2.4
TCM2-F6.3-M1-B	2.5
TCM2-F8-M1-B	2.6
TCM2-F10-M1-B	2.8
TCM3-F12.5-M1-B	4.9
TCM3-F16-M1-B	5.2
TCM3-F20-M1-B	5.5
TCM3-F25-M1-B	5.9
TCM4-F31.5-M1	12.3
TCM4-F40-M1	13.1
TCM4-F50-M1	13.9
TCM5-F63-M1-A	22.2
TCM5-F80-M1-A	23.9
TCM5-F100-M1-A	25.6
TCM5-F125-M1-A	27.8