



榆 液  
機 準

# YUCI HYDRAULIC

YUCI SERIES GEAR PUMP (MOTOR)

Where there are hydraulic transmissions  
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**Note: The all details of the products including drawing and efficiency curve, please contact with us.**

## YUCI SERIES GEAR PUMP (MOTOR)

### CB Series Single Gear Pump

#### General Description:

This external gear pump is of positive displacement design, feature reliable, compact and easy to repair. Apply to Construction machinery, Lifting the transport machinery, mining machinery, agricultural machinery etc.

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#### Model Code

CB	-F	10	-1	F	85	-L	-X
Gear pump	Serie s	Geometric displacement	Shaft extension type	Mounting type	Location hole dimensions	Port connection type	Rotation
CB	F <sub>A</sub>	10,18,25,31.5,40	-	F:Rhombic flange	-	L:Threaded connecting F:Flange connecting	None: Right hand X:left hand
	F <sub>C</sub>	10,16,20,25,31.5,40	1. straight key 2. involute spline 3. square key		85: Φ85f8 90: Φ90f8 100: Φ100f8		
	D	20,25,32,36,40,50	1. SAE involute 2. straight key	-	-		
	G <sub>A</sub>	40,50,63,80,100	1. flat key Φ30 2. square splineΦ30 3. involute splineΦ32 4. flat key Φ32 5. involute spline Φ30				
	H <sub>B</sub>	50,60,70,80,90,100	1. type 1 straight key 2. type 2 straight key	F:Rhombic flange	125: Φ125f8 130: Φ130f8		
	L	100,125,140,160,180,200,224	4. straight key 5. involute spline square key	F:Rhombic flange	-		

### Main Technical Data (anti-wear hydraulic fluid, viscosity 24cSt at 50°C)

Model	Displacement (ml/r)	Rated pressure (MPa)	Rated speed (rpm)	Driving power (kW)				Weight (kg)
				6.3MPa	10MPa	14(16)MPa	20MPa	
CB-F <sub>A</sub> 10-FL	11.27	15	1800	2.34	3.71	5.2	-	7.8
CB-F <sub>A</sub> 18-FL	18.32			3.78	-	8.4	-	8.2
CB-F <sub>A</sub> 25-FL	25.36			5.22	8.29	11.6	-	8.6
CB-F <sub>A</sub> 31.5-FL	32.41			6.66	10.57	14.8	-	9.0
CB-F <sub>A</sub> 40-FL	39.45			8.15	12.93	18.1	-	9.4
CB-F <sub>C</sub> 10	10.44	16	2000	2.4	3.81	(6.1)	-	7.25
CB-F <sub>C</sub> 16	16.01			3.66	5.81	(9.3)	-	7.45
CB-F <sub>C</sub> 20	20.19			4.6	7.31	(11.7)	-	7.6
CB-F <sub>C</sub> 25	25.06			5.73	9.1	(14.56)	-	8
CB-F <sub>C</sub> 31.5	32.02			7.32	11.63	(18.6)	-	8.45
CB-F <sub>C</sub> 40	40			9.15	14.53	(23.24)	-	8.85
CB-D20	20.4	20	2000	4.67	7.4	10.37	14.81	
CB-D25	25.5			5.83	9.26	12.96	18.52	
CB-D32	32.7			7.48	11.88	16.63	23.75	4.05
CB-D36	36.8			8.42	13.36	18.7	26.78	4.16
CB-D40	40.8			9.33	14.81	20.74	29.63	4.27
CB-D50	51			11.67	18.52	25.93	37.04	4.55
CBG <sub>A</sub> 40	40.9	20	2000	9.36	14.86	20.8	29.7	
CBG <sub>A</sub> 50	50.1			11.46	18.2	25.47	36.38	
CBG <sub>A</sub> 63	63.46			14.52	23.23	32.26	46.09	
CBG <sub>A</sub> 80	80.16			18.34	29.1	40.75	58.21	
CBG <sub>A</sub> 100	100.2	16		22.92	36.38	(58.21)	-	
CB-H <sub>B</sub> 50	51.76	16	1800	10.65	16.91	(27.06)	-	19.5
CB-H <sub>B</sub> 60	61.71			12.7	20.17	(32.27)	-	20
CB-H <sub>B</sub> 70	71.67			14.75	23.42	(37.47)	-	20.5
CB-H <sub>B</sub> 80	81.62			16.8	26.68	(42.68)	-	21
CB-H <sub>B</sub> 90	91.57			18.85	29.93	(47.88)	-	21.5
CB-H <sub>B</sub> 100	101.53			20.9	33.18	(53.09)	-	22
CB-L100	101.8	16	1500	17.45	27.7	38.8	55.4	44
CB-L125	125.3			21.5	34.12	47.77	68.25	45
CB-L140	141			24.2	38.4	53.76	76.8	46
CB-L160	106.5	14		27.54	43.7	(69.93)	-	48
CB-L180	180.1			30.9	49	(78.49)	-	49
CB-L200	200	12		34.3	54.46	76.25		50
CB-L224	227		38.95	61.82	86.55		51	

### CB-F<sub>A</sub> and CB-F<sub>B</sub> type Single Pump

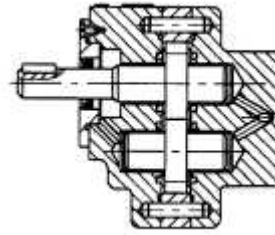
Configuration and installation dimensions (mm)



(CB-F<sub>A</sub>)



(CB-F<sub>C</sub>)



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#### CB-F<sub>A</sub> TYPE

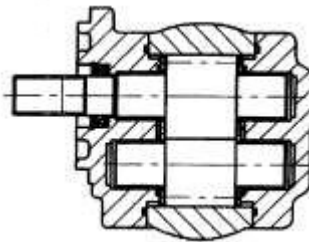
Model		CB-F <sub>A</sub> 10	CB-F <sub>A</sub> 16	CB-F <sub>A</sub> 20	CB-F <sub>A</sub> 25	CB-F <sub>A</sub> 31.5	CB-F <sub>A</sub> 40
Size	A	168	172	175	178	183	189
	B	97	101	104	107	112	118

#### CB-F<sub>C</sub> TYPE

Model		CB-F <sub>C</sub> 10	CB-F <sub>C</sub> 16	CB-F <sub>C</sub> 20	CB-F <sub>C</sub> 25	CB-F <sub>C</sub> 31.5	CB-F <sub>C</sub> 40
Size	A	168	172	175	178	183	189
	B	97	101	104	107	112	118

### CBD type Single Pump

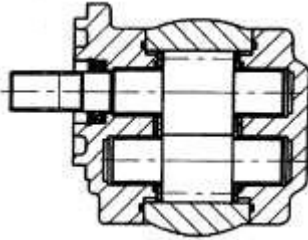
Configuration and installation dimensions (mm)



Model	Port at pump side											Cover port		
	A	B	Inlet					Outlet					A	B
			D	E	F	G	H	D	E	F	G	H		
CBD-20			32	30.2	58.7	M10	22	25	26.2	52.4	M10	22	106.5	110
CBD-25													111.5	115
CBD-32	112	59.0											118.5	112
CBD-36	126	61.0											122.5	126
CBD-40	130	63.0											126.5	140
CBD-50	140	68.0											136.5	140

### CBG<sub>A</sub> type Single Pump

Configuration and installation dimensions (mm)

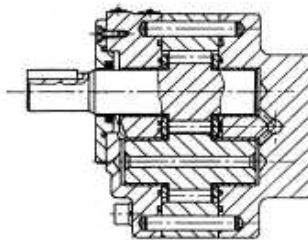


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Size Model	Inlet			Outlet			B	A
	D	K×J	U	E	M×N	V		
CBG <sub>A</sub> -40	Φ20	22×48	M10-7Hdepth 14	Φ18	22×48	M8-7Hdepth 14	95.25	213.5
CBG <sub>A</sub> -40	Φ25	26×52	M10-7Hdepth 20	Φ20	22×48	M8-7Hdepth 14	98	219
CBG <sub>A</sub> -40	Φ32	30×60	M10-7Hdepth 20	Φ25	26×52	M8-7Hdepth 20	102	227
CBG <sub>A</sub> -40	Φ40	36×70	M12-7Hdepth 22	Φ32	30×60	M10-7Hdepth 20	107	237
CBG <sub>A</sub> -40	Φ40	36×70	M12-7Hdepth 22	Φ32	30×60	M10-7Hdepth 20	113	249

### CB-H<sub>B</sub> type Single Pump

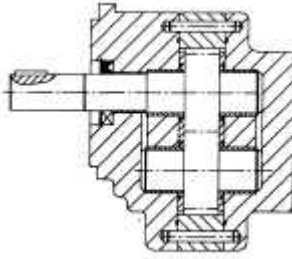
Configuration and installation dimensions (mm)



Model	CB-H <sub>B</sub> 50	CB-H <sub>B</sub> 60	CB-H <sub>B</sub> 70	CB-H <sub>B</sub> 80	CB-H <sub>B</sub> 90	CB-H <sub>B</sub> 100	
Size	A	233	238	243	248	253	262
	B	129	134	139	144	149	154

**CB-L type Single Pump**

Configuration and installation dimensions (mm)



Model	CB-L100	CB-L125	CB-L140	CB-L160	CB-L180	CB-L200	CB-L225	
Size	A	300	306	310	315	320	326	332
	B	42	48	52	57	62	68	74

## CBH<sub>2</sub>-F Series Gear Pump for forklift

### General Description:

The CBH<sub>2</sub>-F Series gear pumps is a kind of is an ideal environmental protection product. Beside the character of gear pumps, they are lower noise, smaller and easy to assemble. The CBH<sub>2</sub>-F pumps widely used for environmental products.

### Model Code

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CBH <sub>2</sub>	-F	23	-A	L	P	L
Products code	Pressure grade	Nominal displacement(ml/r)	Mounting	Joining port	Shaft end	Rotation
CBH <sub>2</sub>	F:20MPa	23,25,28.2,30,32,36	A:Oval	L:Screw	P:Plain key Φ:SAE spline H: Rectangle spline X: Involute spline	L:left(counterclockwise) R:right (clockwise is omitted)

## CBH<sub>2</sub>-F Series Gear Pump for forklift

### Configuration and Specification:



### Main Technical Data

Model	Nominal displacement (ml/r)	Pressure (MPa)		Speed (r/min)			Volumetric efficiency (≥%)	L	Weight (kg)
		Rated	Max	Min	Rated	Max			
CBH <sub>2</sub> -F23-AL**	23	20	25	600	2500	3000	92	115.5	4.1
CBH <sub>2</sub> -F25-AL**	25							118.5	4.3
CBH <sub>2</sub> -F28.2-AL**	28.2							122.5	4.6
CBH <sub>2</sub> -F30-AL**	30							124.5	4.8
CBH <sub>2</sub> -F32-AL**	32							126.5	5.0
CBH <sub>2</sub> -F36-AL**	36							131.5	5.4



## CBN-F5 Series Gear Pump for forklift

### General Description:

The CBN-F5 Series gear pumps is a kind of is an ideal environmental protection product. The CBN-F5 pumps widely used for environmental products including dump truck, loading machine, excavator, Crane, road roller etc.

### Model Code

CBN-	F	5	**	-B	F	*	*
Product code	Pressure grade	Gear modulus	Nominal displacement (ml/r)	Mounting	Joining port	Shaft end	Rotation
CBN	F:20MPa	5	20,25,32,40,50,63,80	B:Square	F:Flange	P:Plain key H:Rectangle spline	L:left(counterclockwise) R:right(clockwise is omitted)

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### CBN-F5 Series Gear Pump for dump truck

#### Configuration and Specification:



### Main Technical Data

Model	Nominal displacement (ml/r)	Pressure (ml/r)		Speed (r/min)			Volumetric efficiency (≥%)	L <sub>1</sub>	L	A	d	D		Weight (kg)
		Rated	Max	Min	Rated	Max						Inlet	Outlet	
CBN-F520-BE**	20	20	25	600	2500	3000	92	67.5	132	48	65	25	20	5.1
CBN-F525-BE**	25													
CBN-F532-BE**	32													
CBN-F540-BE**	40													
CBN-F555-BE**	50			500	2500	3000	93	67.5	141	51	76	30	26	6.3
CBN-F563-BE**	63													
CBN-F580-BE**	80													
												36	30	7.4

## 2CB Series Double Gear Pump

### General Description:

The double gear pump consists of two single pumps, each having its own outlet port and sharing one common inlet port and one input shaft. This compact power source is capable of serving two separate hydraulic circuits and supplying greater volume through the combined delivery of both pumps. The whole unit is simple in structure, variable in combination, reliable in performance and easy to repair.

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### Model Code

2CB	-F	25	10	F	-L	-X
Gear pump	Series	Geometric displacement of shaft end pump	Geometric displacement of cover end pump	Mounting type	Port connection type	Rotation
2CB	F <sub>A</sub>	10,18,25,31.5	10,18	F:rhombic flange	L:Threaded connecting F:Flange connecting	None: Right hand X:left hand
	F <sub>C</sub>	10,16,20,25,31.5	10,16,20			

### Main Technical Data

Model	Displacement (ml/r)	Rated pressure (MPa)	Rated speed (rpm)	Driving power (kW)			Weight (kg)
				6.3MPa	10MPa	14(16)MPa	
2CB-F <sub>A</sub> 10/10-FL	11.27/11.27	14	1800	2.13/2.13	3.38/3.38	4.73/4.73	12.7
2CB-F <sub>A</sub> 18/10-FL	18.32/11.27			3.47/2.13	5.5/3.38	7.7/4.73	13.1
2CB-F <sub>A</sub> 25/10-FL	25.36/11.27			4.82/2.13	7.64/3.38	10.7/4.73	23.5
2CB-F <sub>A</sub> 31.5/10-FL	32.41/11.27			6.12/2.13	9.71/3.38	13.6/4.73	13.9
2CB-F <sub>A</sub> 18/18-FL	18.32/18.32			3.47/3.47	5.5/5.5	7.7/7.7	13.5
2CB-F <sub>A</sub> 25/18-FL	25.36/18.32			6.12/3.47	9.71/5.5	10.7/7.7	13.9
2CB-F <sub>C</sub> 10/10-FL	10.44/10.44	16	2500	3/3	4.74/4.74	(7.58/7.58)	
2CB-F <sub>C</sub> 16/10-FL	16.01/10.44			4.58/3	4.27/7.74	(11.63/7.58)	
2CB-F <sub>C</sub> 20/10-FL	20.19/10.44		2000	4.62/39	7.33/3.8	(11.73/6)	
2CB-F <sub>C</sub> 25/10-FL	25.06/10.44			5.73/2.39	9.1/3.8	(14.56/6)	
2CB-F <sub>C</sub> 31.5/10-FL	32.02/10.44			7.32/2.39	11.63/3.8	(18.6/6)	
2CB-F <sub>C</sub> 16/16-FL	16.01/16.01		2500	4.58/4.58	7.27/7.27	(11.63/11.63)	
2CB-F <sub>C</sub> 20/16-FL	20.19/16.01		2000	4.62/3.66	7.33/5.81	(11.73/9.3)	
2CB-F <sub>C</sub> 25/16-FL	25.06/16.01			5.73/3.66	9.1/5.81	(14.56/9.3)	
2CB-F <sub>C</sub> 20/20-FL	20.19/20.19			4.62/4.62	7.33/7.33	(11.73/11.73)	
2CB-F <sub>C</sub> 25/20-FL	25.06/20.19			5.73/4.62	9.1/7.33	(14.56/11.73)	

## 2CB-F type Double Pump

Configuration and installation dimensions (mm)



Model	A	B	Model	A	B	Model	A	B
2CB-F <sub>A</sub> 10/10	210	87	2CB-F <sub>C</sub> 10/10	207	91	2CB-F <sub>C</sub> 16/16	215	95
2CB-F <sub>A</sub> 18/10	215	92	2CB-F <sub>C</sub> 16/10	211	95	2CB-F <sub>C</sub> 20/16	218	98
2CB-F <sub>A</sub> 25/10	220	97	2CB-F <sub>C</sub> 20/10	214	98	2CB-F <sub>C</sub> 25/16	222	102
2CB-F <sub>A</sub> 32/10	225	102	2CB-F <sub>C</sub> 25/10	218	102	2CB-F <sub>C</sub> 20/20	221	98
2CB-F <sub>A</sub> 18/18	220	92	2CB-F <sub>C</sub> 31.5/10	223	107	2CB-F <sub>C</sub> 25/20	225	102
2CB-F <sub>A</sub> 25/18	225	97						

## QZCB-H<sub>B</sub> Gear Pump for Dump Truck

### General Description:

This pump is three-section design, compact in construction, higher pressure and longer service life. Shaft construction provides maximum strength and allows the use of larger sliding bearing (SF type) for greater load carrying capacity and longer service life.

Wear plates are axially pressures loaded and balanced to minimize running clearance and leakage across gear and faces, thus increasing operating efficiency.

Front and rear covers are fitted together with center section by two positioning pins and eight screws, so as to easy for disassembling, repairing and replacing.

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### Model Code

QZCB	-63	-1	J	85	L	-X	27	P	-G	-1	C
Combined gear pump	Geometric displacement ml/r	Form of extension	Mounting type	Installing hole dimensions	Port connecting	Rotation	Outlet port size	Outlet Seal type	Inlet port joint	Control air cylinder	Safety valve set (MPa)
QZCB-H <sub>B</sub>	63,80,100	1.flange connecting 2.straight key 3.square spline key 4.involute spline	J:foot bracket S:square key with four holes	125: Φ125f8 130: Φ130f8	L:threaded F:flange	None: Right hand X:left hand	M30× 1.5	Plane seal	M36× 1.5 spherical seal	1.single are cylinder 2.double air cylinder	Safety valve set C:17.5 D:21 G:25

### Main Technical Data

Model	Displacement (ml/r)	Rated pressure (MPa)	Rated speed (rpm)	Driving power(kW)			Weigh (kg)
				6.3 MPa	10 MPa	14MPa	
QZCB-H <sub>B</sub> 63	60.32	16	1800	12.4	19.7	31.53	34.2
QZCB-H <sub>B</sub> 80	79.78			16.4	26	41.72	35.7
QZCB-H <sub>B</sub> 100	99.23			20.43	32.4 3	51.89	37.2

## QZCH-H<sub>B</sub> Gear Pump for Dump Truck

Configuration and installation dimensions (mm)



(for double air cylinder control)



(for single air cylinder control)

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### Technical Date

Model	Outlet pressure (MPa)			Rotation speed (r/min)		Theoretical displacement (ml/r)	Volumetric efficiency at P=16MPa n=1800rpm t=50±5°C 30"hydraulic oil	Driving power (kW) P=16MPa N=1800rpm	Weight (kg)
	Rated	Max	Limited pressure	Rated	Max.				
QZCB-H <sub>B</sub> 63	16	20	21	1800	2400	60.32	0.91	32.4	34.2
QZCB-H <sub>B</sub> 80						79.78	0.92	40.9	35.7
QZCB-H <sub>B</sub> 199						99.23	0.93	51.2	37.2

Model	Size				
	A	B	C	D	M
QZCB-H <sub>B</sub> 63	39	20	69.5	346	M8-6H
QZCB-H <sub>B</sub> 80	49	25	72	356	M10-6H
QZCB-H <sub>B</sub> 199	59	30	74.5	366	M10-6H

## CB-F<sub>E</sub> Gear Pump

### General Description:

CB-F<sub>E</sub> series gear pump consists of three sections, front and rear pump covers, and central section fitted together with two positioning pins and four screws, "sweeping" chamber of gear tip as radial seal and pressure side plate as axial seal thus providing optimum axial clearance so as to ensure higher volumetric efficiency of gear pump. Slide bearing reeled up with SF composite material can bear higher load and has longer service life.

For this series pump adopts both high strength cast iron body and light strength aluminum alloy body, the pump with the former body can operate at rated pressure of 16 MPa, and the pump with the latter body at 29 MPa.

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### CB-F<sub>E</sub> Series Single Gear pump

#### Model Code

CB-F <sub>E</sub>	50	E	-F1	L1	-1	B	-27	P	17
Series code	Nominal displacement (ml/r)	Rated pres.(MPa)	Mounting flange	Connecting type for inlet and outlet	Shaft extension	Rotation	L4 Connecting size for check valve and input		
							Connecting thread for check valve	Sealing type for check valve	Hose inside dia. for inlet
CB-F <sub>E</sub> Gear pump	10	E:16 F:20	F1:130 rhombic flange with two holes F2:140 rhombic flange with two holes F3:146 rhombic flange with two holes F4:110*86 Square flange with four holes	L1:	1.Φ20 straight key 2.Φ25 straight key 3.square spline key 4.GB/T involute spling 5.SAE involute spline	R:CW L:CCW	22:M22×1.5  27:M27×1.5  30:M30×1.5	P:O ring Z:Tapered seal	17: Φ17 19: Φ19  25:Φ25  30:Φ30
	16			Inlet and outlet with thread at side					
	20								
	25								
	31.5								
	40								
	50								
63		L4:	Inlet and outlet with checkvalve connection						

## Main Technical Data

Model	Pressure (MPa)		Speed(r/min)			Theoretic displacement (ml/r)	Driving power at rated pres. and speed (kW)	Weight (kg)
	Rated	Max. (instantaneous)	Min.	Rated	Max.			
CB-F <sub>E</sub> 10E	16	20	500	2000	2500	10.44	6.0	7.0
CB-F <sub>E</sub> 16E						16.06	9.0	7.6
CB-F <sub>E</sub> 20E						20.19	11.5	8.0
CB-F <sub>E</sub> 25E						25.06	14.5	8.5
CB-F <sub>E</sub> 31.5E						32.02	18.5	9.0
CB-F <sub>E</sub> 40E						40.38	23.5	10.5
CB-F <sub>E</sub> 50E						48.75	28.0	11.25
CB-F <sub>E</sub> 63E				1500	2000	65.63	28.0	12.0
CB-F <sub>E</sub> 10F	20	25	500	2000	2500	10.44	7.5	6.2
CB-F <sub>E</sub> 16F						16.06	11.5	6.7
CB-F <sub>E</sub> 20F						20.19	14.5	7.0
CB-F <sub>E</sub> 25F						25.06	18.0	7.5
CB-F <sub>E</sub> 31.5F						32.02	23.5	8.0
CB-F <sub>E</sub> 40F						40.38	29.5	8.7
CB-F <sub>E</sub> 50F						48.75	35.0	9.5

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### Configuration and installation dimensions (mm)



#### ***CB-F<sub>E</sub>\*E/F-F1L1-\*R/L Gear pump***

CB-F <sub>E</sub> Series	CB-F <sub>E</sub> 10	CB-F <sub>E</sub> 16	CB-F <sub>E</sub> 20	CB-F <sub>E</sub> 25	CB-F <sub>E</sub> 31.5	CB-F <sub>E</sub> 40	CB-F <sub>E</sub> 50
Size	89	93	96	100	105	111	117

#### ***CB-F<sub>E</sub>\*E/F-F2L2-\*R/L Gear pump***

CB-F <sub>E</sub> Series	CB-F <sub>E</sub> 10	CB-F <sub>E</sub> 16	CB-F <sub>E</sub> 20	CB-F <sub>E</sub> 25	CB-F <sub>E</sub> 31.5	CB-F <sub>E</sub> 40	CB-F <sub>E</sub> 50
Size	89	93	96	100	105	111	117

**CB-F<sub>E</sub>\*E/F-F3L2-\*R/L Gear pump**

CB-F <sub>E</sub> Series	CB-F <sub>E</sub> 10	CB-F <sub>E</sub> 16	CB-F <sub>E</sub> 20	CB-F <sub>E</sub> 25	CB-F <sub>E</sub> 31.5	CB-F <sub>E</sub> 40	CB-F <sub>E</sub> 50
Size	89	93	96	100	105	111	117

**CB-F<sub>E</sub>\*E/F-F4L3-\*R/L Gear pump**

CB-F <sub>E</sub> Series	CB-F <sub>E</sub> 10	CB-F <sub>E</sub> 16	CB-F <sub>E</sub> 20	CB-F <sub>E</sub> 25	CB-F <sub>E</sub> 31.5	CB-F <sub>E</sub> 40	CB-F <sub>E</sub> 50	CB-F <sub>E</sub> 63
Size	104	108	111	115	120	126	132	142

**CB-F<sub>E</sub>\*E/F-F4L4-\*R/L Gear pump**

CB-F <sub>E</sub> Series	CB-F <sub>E</sub> 10	CB-F <sub>E</sub> 16	CB-F <sub>E</sub> 20	CB-F <sub>E</sub> 25	CB-F <sub>E</sub> 31.5	CB-F <sub>E</sub> 40	CB-F <sub>E</sub> 50	CB-F <sub>E</sub> 63
Size	104	108	111	115	120	126	132	142

**2CB-F<sub>E</sub> Series Double Gear pump**
**Model Code**

2CB-F <sub>E</sub>	50	/16	E	-F <sub>1</sub>	L1	-1	R
Series	Nominal displacement of front pump (ml/r)	Nominal displacement of rear pump (ml/r)	Rated pres. (MPa)	Mounting flange	Connecting type for inlet and outlet	Shaft extension type	Rotation
2CB-F <sub>E</sub> Double gear pump	10	10	E:16 F:20	F1:130 rhombic flange with two holes	L11: inlet and outlet with thread at one side of body L12: inlet and outlet with thread at separate body	1.straight key 2.Φ25 flat key 3.Square spline key 4.CB/T involute spline	R: CW L: CCW
	16	16					
	20	20					
	25	25					
	31.5	31.5					
	40	-					
	50	-					
Note: sum of front and rear pump displacement is not more than 65ml/r.							





Model	Pressure (MPa)		Speed (r/min)			Theoretic displacement		Driving power at rated pres. and speed	Weight (kg)
	Rate	Max. (instantaneous)	Min	Rated	Max	Front pump	Rear pump		
2CB-F <sub>E</sub> 50/16F	20	25	500	2000	2500	48.75	16.01	46.5	15.2
2CB-F <sub>E</sub> 50/10F						48.75	10.44	43.0	14.8
2CB-F <sub>E</sub> 40/25F						40.38	25.06	47.0	15.1
2CB-FE40/20F						40.38	20.19	43.0	14.8
2CB-FE40/16F						40.38	16.01	40.0	14.4
2CB-FE40/10F						40.38	10.44	36.0	14.3
2CB-F <sub>E</sub> 31.5/31.5F						32.02	32.02	46.0	15.0
2CB-F <sub>E</sub> 31.5/25F						32.02	25.06	41.0	14.8
2CB-F <sub>E</sub> 31.5/20F						32.02	20.19	37.5	14.4
2CB-FE31.5/16F						32.02	16.01	34.5	14.1
2CB-FE31.5/10F						32.02	10.44	30.5	13.7
2CB-FE25/25F						25.06	25.06	36.0	14.3
2CB-F <sub>E</sub> 25/20F						25.06	20.19	32.5	13.9
2CB-F <sub>E</sub> 25/16F						25.06	16.01	29.5	13.6
2CB-F <sub>E</sub> 25/10F						25.06	10.44	25.0	13.0
2CB-FE20/20F						20.19	20.19	29.0	13.5
2CB-FE20/16F						20.19	16.01	26.1	13.1
2CB-FE20/10F						20.19	10.44	22.0	12.7
2CB-F <sub>E</sub> 16/16F						16.01	16.01	20.5	13.0
2CB-F <sub>E</sub> 16/10F						16.01	10.44	19.0	12.3
2CB-F <sub>E</sub> 10/10F	10.44	10.44	15.0	11.9					
2CB-F <sub>E</sub> 50/16E	16	20	500	2000	2500	48.75	16.01	37.5	18.5
2CB-F <sub>E</sub> 50/10E						48.75	10.44	34.0	18.0
2CB-F <sub>E</sub> 40/25E						40.38	25.06	38.0	18.5
2CB-FE40/20E						40.38	20.19	35.0	18.0
2CB-FE40/16E						40.38	16.01	27.0	17.5
2CB-FE40/10E						40.38	10.44	29.0	16.6
2CB-F <sub>E</sub> 31.5/31.5F						32.02	32.02	37.0	18.0
2CB-F <sub>E</sub> 31.5/25F						32.02	25.06	33.0	17.6
2CB-F <sub>E</sub> 31.5/20F						32.02	20.19	30.0	16.8
2CB-FE31.5/16F						32.02	16.01	27.5	16.4
2CB-FE31.5/10F						32.02	10.44	24.5	15.9
2CB-FE25/25F						25.06	25.06	29.0	16.7
2CB-F <sub>E</sub> 25/20F						25.06	20.19	36.0	16.2
2CB-F <sub>E</sub> 25/16F						25.06	16.01	23.5	15.8
2CB-F <sub>E</sub> 25/10F						25.06	10.44	20.0	15.1
2CB-FE20/20F						20.19	20.19	23.5	15.7
2CB-FE20/16F						20.19	16.01	20.5	15.2
2CB-FE20/10F						20.19	10.44	17.5	14.6
2CB-F <sub>E</sub> 16/16F						16.01	16.01	18.5	14.8
2CB-F <sub>E</sub> 16/10F						16.01	10.44	15.5	14.1
2CB-F <sub>E</sub> 10/10F	10.44	10.44	11.5	13.5					

**Configuration and installation dimensions (mm)**

**CB-F<sub>E</sub>\*E/F-F1L11-\*R/L Double Gear pump**

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Model	A	B	Weight(kg)	Model	A	B	Weight(kg)
2CB-F <sub>E</sub> 50/16F	114	200.5	18.5	2CB-F <sub>E</sub> 50/16E	114	200.5	15.2
2CB-F <sub>E</sub> 50/10F	114	196.5	18.0	2CB-F <sub>E</sub> 50/10E	114	196.5	14.8
2CB-F <sub>E</sub> 40/25F	108	201	18.5	2CB-F <sub>E</sub> 40/25E	108	201	15.1
2CB-FE40/20F	108	197.5	18.0	2CB-FE40/20E	108	197.5	14.8
2CB-FE40/16F	108	194.5	17.5	2CB-FE40/16E	108	194.5	14.4
2CB-FE40/10F	108	190.5	16.6	2CB-FE40/10E	108	190.5	14.3
2CB-F <sub>E</sub> 31.5/31.5F	102	200	18.0	2CB-F <sub>E</sub> 31.5/31.5E	102	200	15.0
2CB-F <sub>E</sub> 31.5/25F	102	195	17.6	2CB-F <sub>E</sub> 31.5/25E	102	195	14.8
2CB-F <sub>E</sub> 31.5/20F	102	191.5	16.8	2CB-F <sub>E</sub> 31.5/20E	102	191.5	14.4
2CB-FE31.5/16F	102	188.5	16.4	2CB-FE31.5/16E	102	188.5	14.1
2CB-FE31.5/10F	102	184.5	15.9	2CB-FE31.5/10E	102	184.5	13.7
2CB-FE25/25F	97	190	16.7	2CB-FE25/25E	97	190	14.3
2CB-F <sub>E</sub> 25/20F	97	186.5	16.2	2CB-F <sub>E</sub> 25/20E	97	186.5	13.9
2CB-F <sub>E</sub> 25/16F	97	183.5	15.8	2CB-F <sub>E</sub> 25/16E	97	183.5	13.6
2CB-F <sub>E</sub> 25/10F	97	179.5	15.1	2CB-F <sub>E</sub> 25/10E	97	179.5	13.0
2CB-FE20/20F	93.5	183	15.7	2CB-FE20/20E	93.5	183	13.5
2CB-FE20/16F	93.5	180	15.2	2CB-FE20/16E	93.5	180	13.1
2CB-FE20/10F	93.5	176	14.6	2CB-FE20/10E	93.5	176	12.7
2CB-F <sub>E</sub> 16/16F	90.5	177	14.8	2CB-F <sub>E</sub> 16/16E	90.5	177	13.0
2CB-F <sub>E</sub> 16/10F	90.5	173	14.1	2CB-F <sub>E</sub> 16/10E	90.5	173	12.3
2CB-F <sub>E</sub> 10/10F	86.5	169	13.5	2CB-F <sub>E</sub> 10/10E	86.5	169	11.9

**CB-F<sub>E</sub>\*E/F-F1L12-\*R/L Double Gear pump**

Model	A	B	Weight(kg)	Model	A	B	Weight(kg)
2CB-F <sub>E</sub> 50/16F	114	188.5	18.5	2CB-F <sub>E</sub> 50/16E	114	18.5	15.2
2CB-F <sub>E</sub> 50/10F	114	184.5	18.0	2CB-F <sub>E</sub> 50/10E	114	18.0	14.8
2CB-F <sub>E</sub> 40/25F	108	189	18.5	2CB-F <sub>E</sub> 40/25E	108	18.5	15.1
2CB-FE40/20F	108	185.5	18.0	2CB-FE40/20E	108	18.0	14.8
2CB-FE40/16F	108	182.5	17.5	2CB-FE40/16E	108	17.5	14.4
2CB-FE40/10F	108	178.5	16.6	2CB-FE40/10E	108	16.6	14.3
2CB-F <sub>E</sub> 31.5/31.5F	102	188	18.0	2CB-F <sub>E</sub> 31.5/31.5F	102	18.0	15.0
2CB-F <sub>E</sub> 31.5/25F	102	183	17.6	2CB-F <sub>E</sub> 31.5/25F	102	17.6	14.8
2CB-F <sub>E</sub> 31.5/20F	102	179.5	16.8	2CB-F <sub>E</sub> 31.5/20F	102	16.8	14.4
2CB-FE31.5/16F	102	176.5	16.4	2CB-FE31.5/16F	102	16.4	14.1
2CB-FE31.5/10F	102	172.5	15.9	2CB-FE31.5/10F	102	15.9	13.7
2CB-FE25/25F	97	178	16.7	2CB-FE25/25F	97	16.7	14.3
2CB-F <sub>E</sub> 25/20F	97	174.5	16.2	2CB-F <sub>E</sub> 25/20F	97	16.2	13.9
2CB-F <sub>E</sub> 25/16F	97	171.5	15.8	2CB-F <sub>E</sub> 25/16F	97	15.8	13.6
2CB-F <sub>E</sub> 25/10F	97	167.5	15.1	2CB-F <sub>E</sub> 25/10F	97	15.1	13.0
2CB-FE20/20F	93.5	171	15.7	2CB-FE20/20F	93.5	15.7	13.5
2CB-FE20/16F	93.5	168	15.2	2CB-FE20/16F	93.5	15.2	13.1
2CB-FE20/10F	93.5	164	14.6	2CB-FE20/10F	93.5	14.6	12.7
2CB-F <sub>E</sub> 16/16F	90.5	165	14.8	2CB-F <sub>E</sub> 16/16F	90.5	14.8	13.0
2CB-F <sub>E</sub> 16/10F	90.5	161	14.1	2CB-F <sub>E</sub> 16/10F	90.5	14.1	12.3
2CB-F <sub>E</sub> 10/10F	86.5	157	13.5	2CB-F <sub>E</sub> 10/10F	86.5	13.5	11.9

## CB-J Series High Performance Gear Pump

### General Description:

This kind of gear pumps has higher volumetric efficiency, with longer working life and lower noise. The CB-J series pumps widely used for environmental products including loading machine, excavator, Crane, road roller etc. Beside the single pump, the single pump can be composed to double pumps, triple pump. As well produce as per the special requirement about the Mounting dimensions and connecting dimension.

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### CB-J1 type High Performance Gear pump

#### Model Code

CB-J1	040	-F1	-1	R
Series code	Nominal displacement (ml/r)	Mounting flange	Shaft extension type	Rotation
CB-J1	16	F1: $\phi$ 100 rhombic flange with two holes F2: $\phi$ 101.6 rhombic flange with two holes	1: $\phi$ 22 straight key 2:square spline key 3:GB/T involute spling 4:SAE involute spline	R: CW L: CCW
	20			
	25			
	32			
	40			
	45			
	50			

#### Main Technical Data

Model	Nominal displacement (ml/r)	Pressure(MPa)		Speed(ml/r)			Driving power (kW)	volumetric efficiency %	overall efficiency %	Weight (kg)
		Rated	Max.	Min	Rated	Max				
CB-J1016	16	25	31.5	500	2300	2500	16.8	≥92	≥83	
CB-J1020	20									
CB-J1025	25									
CB-J1032	32	20	25				26.8			
CB-J1040	40						33.5			
CB-J1045	45						30.1			
CB-J1050	50	16	20				33.5			

**Configuration and installation dimensions (mm)**

**Single pump**

Model	A	B	inlet				outlet			
			H1	L1	D1	C1	H2	L2	D2	C2
CB-J1016	200.0	74.75	48	22	Ø20	M12	48	22	Ø16	M8
CB-J1020	203.0	75.25							Ø18	
CB-J1025	206.5	78	52	26	Ø25	M12	52	26	Ø20	M10
CB-J1032	216.5	80.75							Ø28	
CB-J1040	217.5	83.50	60	30	Ø32	M12	52	26	Ø20	M10
CB-J1045	221.5	85.50							Ø25	
CB-J1050	225.0	87.25								

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**Double pump**

Code	A	B	L	Inlet	Outlet for front pump			Outlet for rear pump						
				D	H1×L1	D1	C1	H2×L2	D2	C2				
CB-J1016/1016	73.75	183.25	259.00	Ø35	48×22		M8	48×22	Ø16	M8				
CB-J1020/1020	75.25	187.75	265.00						Ø18					
CB-J1025/1025	77.00	193.00	272.00						52×26		M10	52×26	Ø20	M10
CB-J1032/1032	79.75	201.25	283.00										Ø25	
CB-J1040/1040	82.50	209.50	294.00		Ø20	M10	52×26	Ø25		M10				
CB-J1045/1045	84.43	215.28	301.70					Ø20						
CB-J1050/1050	86.25	220.75	309.00		52×26	M10	52×26	Ø25		M8				
CB-J1050/1045		218.93	305.35					Ø18						
CB-J1050/1040		217.00	301.50					Ø16		M8				
CB-J1050/1032		214.25	296.00										Ø20	
CB-J1050/1025		211.50	290.50					Ø18		M8				
CB-J1050/1020		209.75	287.00										Ø16	
CB-J1050/1016		208.25	254.00					Ø18		M8				
CB-J1045/1040		84.43	213.35										292.35	52×26
CB-J1045/1032	210.60		286.85		Ø18									
CB-J1045/1025	207.85		283.35		Ø16	M8								
CB-J1045/1020	206.10		283.35				Ø18							
CB-J1045/1016	204.60		280.35		Ø16	M8								
CB-J1040/1032	82.5		206.75				283.50	48×22	M8	48×22	Ø18			
CB-J1040/1025		204.00	283.00		Ø20									
CB-J1040/1020		202.25	279.50	Ø18	M8									
CB-J1040/1016		200.75	276.50			Ø16								
CB-J1032/1025	79.75	198.50	277.50	48×22	M8	48×22	Ø18							
CB-J1032/1020		196.75	274.50				Ø16							
CB-J1032/1016		195.25	271.00				Ø18							
CB-J1025/1020	77.00	191.25	268.50	48×22	M8	48×22	Ø18							
CB-J1025/1016		189.75	265.50				Ø16							
CB-J1020/1016	75.25	188.00	263.75											

**CB-J2 type Performance Gear pump**
**Model Code**

CB-J2	050	-F1	-1	R
Series code	Nominal displacement (ml/r)	Mounting flange	Shaft extension type	Rotation
CB-J2	32	F1: $\phi$ 125 square flange with four holes F2: $\phi$ 127 square flange with four holes	1: $\phi$ 30 straight key 2:square spline key 3:GB/T involute spling 5:SAE involute spline	R: CW L: CCW
	40			
	50			
	63			
	80			
	100			
	125			

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**Main Technical Data**

Model	Nominal displacement (ml/r)	Pressure(MPa)		Speed(ml/r)			Driving power (kW)	volumetric efficiency %	overall efficiency %	Weight (kg)
		Rated	Max.	Min	Rated	Max				
CB-J2032	32	25	31.5	500	2300	2500	33.4	≥92	≥83	25.0
CB-J2040	40						41.8			25.5
CB-J2050	50						52.2			26.1
CB-J2063	63	20	25				52.6			27.5
CB-J2080	80						66.8			28.8
CB-J2100	100						66.8			29.2
CB-J2125	125	16	16				65.3			31.0

**Configuration and installation dimensions (mm)**


**Single pump**

Model	A	B	inlet				outlet			
			H1	L1	D1	C1	H2	L2	D2	C2
CB-J2032	186	104.5	48	22	∅20	M10	48	22		M8
CB-J2040	189.5	106.5			∅19					
CB-J2050	194.0	108.5	52	26	∅25					
CB-J2063	200.0	111.5	60	30	∅32	M12	52	26	∅25	
CB-J2080	208.0	115.5	70	36	∅38				60	30
CB-J2100	217.0	120.0			∅40					
CB-J2125										

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**Double pump**

Code	A	B	L	Inlet	Outlet for front pump			Outlet for rear pump			
				D	H1×L1	D1	C1	H2×L2	D2	C2	
CB-J2032/2032	104.4	220.2	301.6	∅40	48×22	∅18	M8	48×22	∅18	M8	
CB-J2040/2040	106.25	225.75	309.0			∅20					
CB-J2050/2050	108.5	232.2	318.0			∅25					
CB-J2063/2063	111.2	241.5	330.0	∅44	60×30	∅32	M12	52×26	∅25	M10	
CB-J2080/2080	115.5	253.5	346.0						60×30		∅35
CB-J2100/2100	120.0	267.0	364.0								52×26
CB-J2125/2125	125.5	283.5	386.0					48×22	∅20	M8	
CB-J2125/2100		278.0	375.0						60×30		∅18
CB-J2125/2080		273.5	366.0					52×26		∅25	M10
CB-J2125/2063		269.5	358.0						48×22	∅20	
CB-J2125/2050		266.5	352.0					60×30		∅32	M10
CB-J2125/2040		264.25	347.5						52×26	∅25	
CB-J2125/2032	262.4	343.8	48×22					∅18		M8	
CB-J2100/2080	120.0	262.5						355.0	60×30		∅32
CB-J2100/2063		258.5	347.0					52×26		∅25	
CB-J2100/2050		255.5	341.0	48×22	∅20	M8					
CB-J2100/2040		253.25	336.5		60×30		∅32	M10			
CB-J2100/2032		251.4	322.8	52×26		∅25					
CB-J2080/2063		249.5	338.0		48×22	∅18	M8				
CB-J2080/2050	115.5	246.5	332.0	60×30		∅20		M10			
CB-J2080/2040		244.25	327.5		52×26	∅18					
CB-J2080/2032		242.4	323.8	48×22		∅20					
CB-J2063/2050	115.5	238.5	324.0		52×26	∅25	M8				
CB-J2063/2040		236.25	319.5	48×22		∅18					
CB-J2063/2032		234.4	315.5		60×30	∅32		M10			
CB-J2050/2040	108.5	230.25	313.5	52×26		∅25	M8				
CB-J2050/2032		228.45	309.8		48×22	∅25					
CB-J2040/2032		106.5	223.9	305.3		∅40					

**CB-J3 type Performance Gear pump**
**Model Code**

CB-J3	160	-F1	-1	R
Series code	Nominal displacement (ml/r)	Mounting flange	Shaft extension type	Rotation
CB-J3	100	F1: $\phi$ 125 square flange with four holes F2: $\phi$ 127 SAE square flange	1: $\phi$ 30 straight key 2: $\phi$ 40 square spline key 3:GB/T involute spling 4:SAE involute spline 5: $\phi$ 30 involute spline	R: CW L: CCW
	125			
	140			
	160			
	180			
	200			
	220			

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**Main Technical Data**

Model	Nominal displacement (ml/r)	Pressure(MPa)		Speed(ml/r)			Driving power (kW)	volumetric efficiency %	overall efficiency %	Weight (kg)
		Rated	Max.	Min	Rated	Max				
CB-J3100	100	25	31.5	500	2300	2500	105	≥92	≥83	
CB-J3125	125						130			
CB-J3140	140	20	25				117			
CB-J3160	160						134			
CB-J3180	180						121			
CB-J3200	200	14	17.5				117			
CB-J3220	220	12.5	14.5				115			

Configuration and installation dimensions (mm)



Model	A	B	inlet				outlet			
			H1	L1	D1	C1	H2	L2	D2	C2
CB-J3100	276	110	70	36	$\phi$ 35	M12	60	30	$\phi$ 30	M10
CB-J3125	284	114			$\phi$ 38				$\phi$ 32	
CB-J3140	289	116.5			$\phi$ 44				$\phi$ 35	
CB-J3160	295.5	119.75	78	43	$\phi$ 48		70	36	$\phi$ 38	M12
CB-J3180	302	123			$\phi$ 50				$\phi$ 40	
CB-J3200	308.5	126.25			$\phi$ 60				$\phi$ 44	
CB-J3220	315	129.5	89	51						



## CM-F<sub>M</sub> Series Gear Motor

### General Description:

Gear motor is one kind of actuators, which can convert oil pressure into mechanical energy. Shaft rotation can reverse depending on the direction of flow through the motor port. Output torque of the shaft is subject to variation with the operating pressure and speed of the shaft with the flow. The gear motor with feature such as compact design, lower torque and high speed can be used for engineering, agricultural and forest machineries.

### CM-F<sub>M</sub> type Pump Motor

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### Model Code

CM	-F <sub>M</sub>	40	-F	L
Gear motor	Series	Geometric displacement (ml/r)	Mounting and connecting type	Port connecting type
CM	F <sub>M</sub>	10,18,25,31.5,40	F:rhombic flange	L:threaded connecting

### Main Technical Data

Model	Displacement (ml/r)	Rated pressure (MPa)	Rated speed (rpm)		Driving power (kW)			Weight (kg)
			Min	Max	6.3MPa	10MPa	14(16)MPa	
CM-F <sub>M</sub> 10-FL	11.27	14	120	2400	9.4	15	20.9	8.4
CM-F <sub>M</sub> 18-FL	18.32				15.3	24.3	34	8.6
CM-F <sub>M</sub> 25-FL	25.36				21.2	33.6	47	8.8
CM-F <sub>M</sub> 31.5-FL	32.41				27	42.9	60	9.0
CM-F <sub>M</sub> 40-FL	39.45				32.9	52.1	73.1	9.2

### Configuration and installation dimensions (mm)



Model		CM-F <sub>M</sub> 10-FL	CM-F <sub>M</sub> 18-FL	CM-F <sub>M</sub> 25-FL	CM-F <sub>M</sub> 31.5-FL	CM-F <sub>M</sub> 40-FL
Size	A	161.5	166.5	175.5	176.5	181.5
	B	91.5	96.5	101.5	106.5	111.5

## CM-F<sub>E</sub> Gear Motor

### General Description:

CM-F<sub>E</sub> series gear motor has basically the same structure as that of CB-F<sub>E</sub> series gear pump. Its special design in radial gear tip sealing, axial sealing and pressure floating side-plate provide higher volumetric efficiency and mechanical efficiency as well as lower startup torque. Sliding bearing reeled up with composite material has smaller friction coefficient, higher load carrying capacity and longer service life.

### Model Code

CM-F <sub>E</sub>	50	E	-F1	L1	-1
Series code	Nominal displacement(ml/r)	Rated pressure(MPa)	Mounting flange	Connecting type for inlet and outlet	Shaft extension type
CM-F <sub>E</sub> Gear motor	10	E;16	F1:130 rhombic flange with two holes	L1:inlet and outlet with side thread	1: Φ20 flat key 2: Φ25 flat key
	16				
	20				
	25				
	31.5				
	40				
	50				

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### Main Technical Data

	Pressure(MPa)		Speed (r/min)		Theoretic displacement (ml/r)	Torque (N·m)				Weight (kg)
	Rated	Max. (instantaneous)	Min.	Max.		6.3MPa	10MPa	14MPa	16MPa	
CM-F <sub>E</sub> 10E	16	20	120	2500	10.44	8.5	13.5	19.0	22.0	6.2
CM-F <sub>E</sub> 16E					16.06	13.5	21.0	29.5	33.5	6.7
CM-F <sub>E</sub> 20E					20.19	16.5	26.5	37.5	42.5	7.0
CM-F <sub>E</sub> 25E					25.06	20.5	33.0	46.5	53.0	7.5
CM-F <sub>E</sub> 31.5E					32.02	26.5	42.5	59.5	76.5	8.0
CM-F <sub>E</sub> 40E					40.38	33.5	53.5	75.0	85.5	8.7
CM-F <sub>E</sub> 50E	14	17.5			48.75	40.5	64.5	90.0	-	9.5

### CM-F<sub>E</sub> type Gear Motor

Configuration and installation dimensions (mm)



### CM-F<sub>E</sub>\*E/F-F1L1-\* Gear motor

CM-F <sub>E</sub> Series	CM-F <sub>E</sub> 10	CM-F <sub>E</sub> 16	CM-F <sub>E</sub> 20	CM-F <sub>E</sub> 25	CM-F <sub>E</sub> 31.5	CM-F <sub>E</sub> 40	CM-F <sub>E</sub> 50
Size A	89	93	96	100	105	111	117