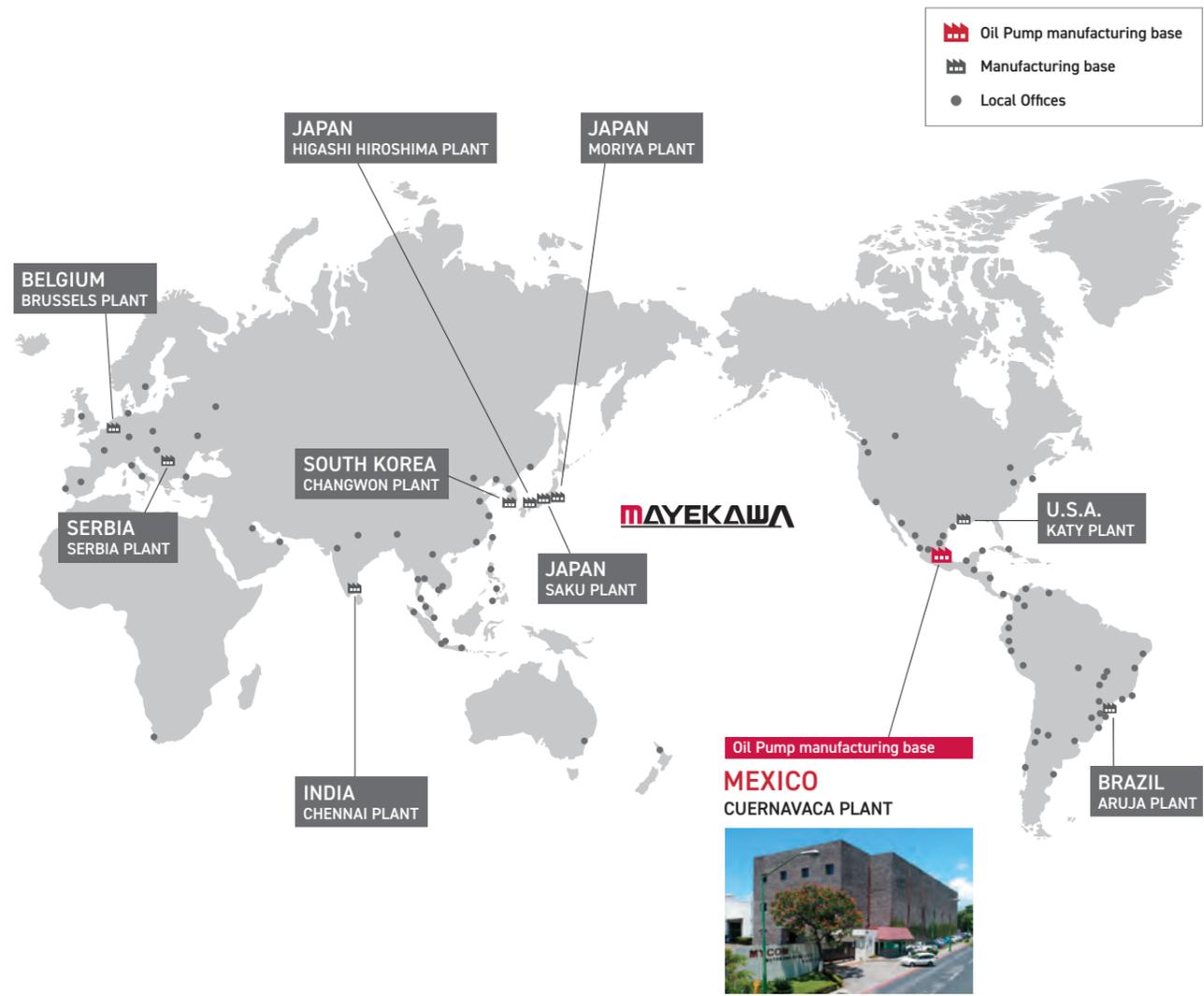


Global network

Headquartered in Tokyo Japan, Mayekawa provides products and services all over the world through an extensive network of local offices and plants.



MAYEKAWA MFG.CO.,LTD

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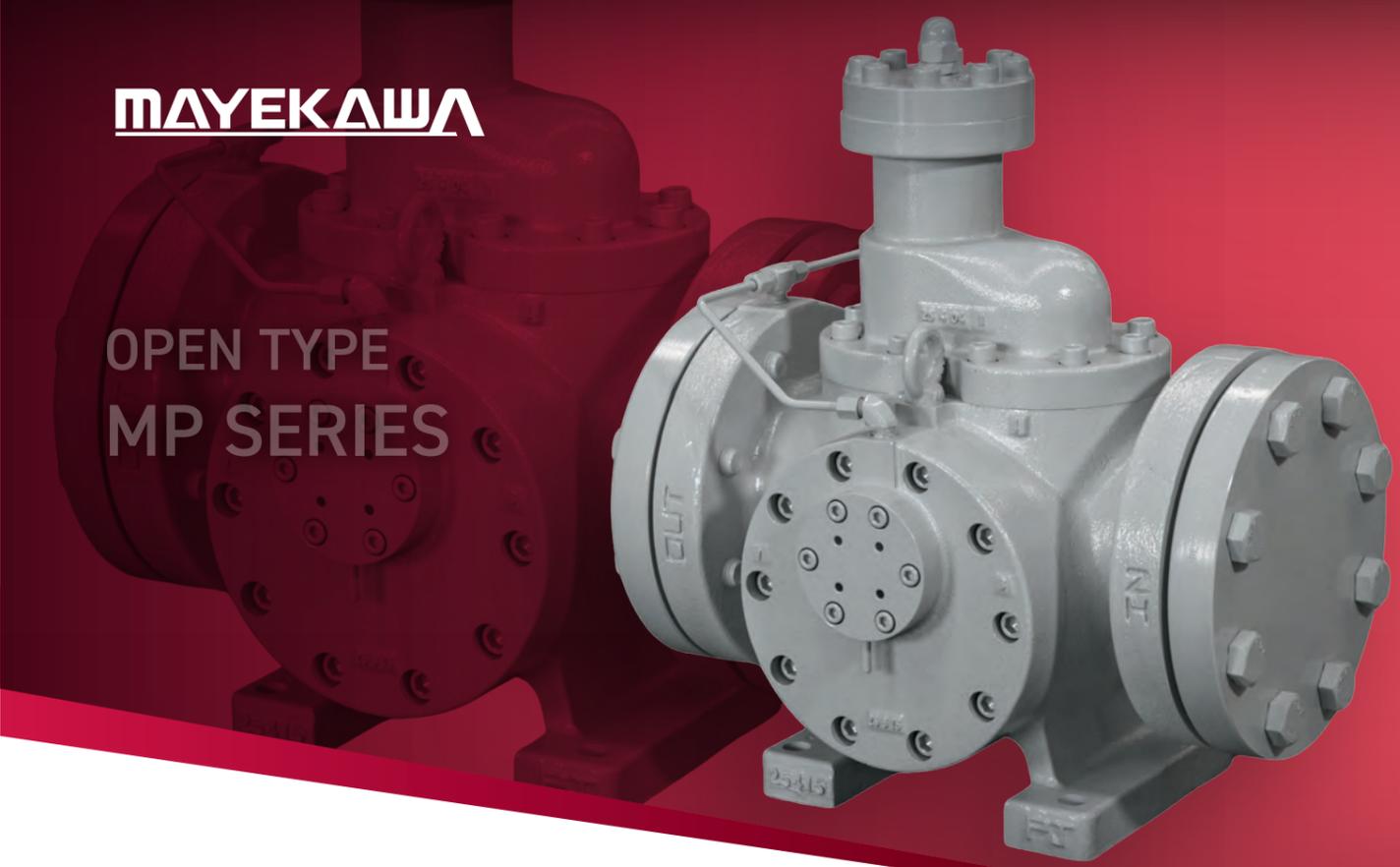
Information in this pamphlet is subject to change without prior notice due to product improvements.
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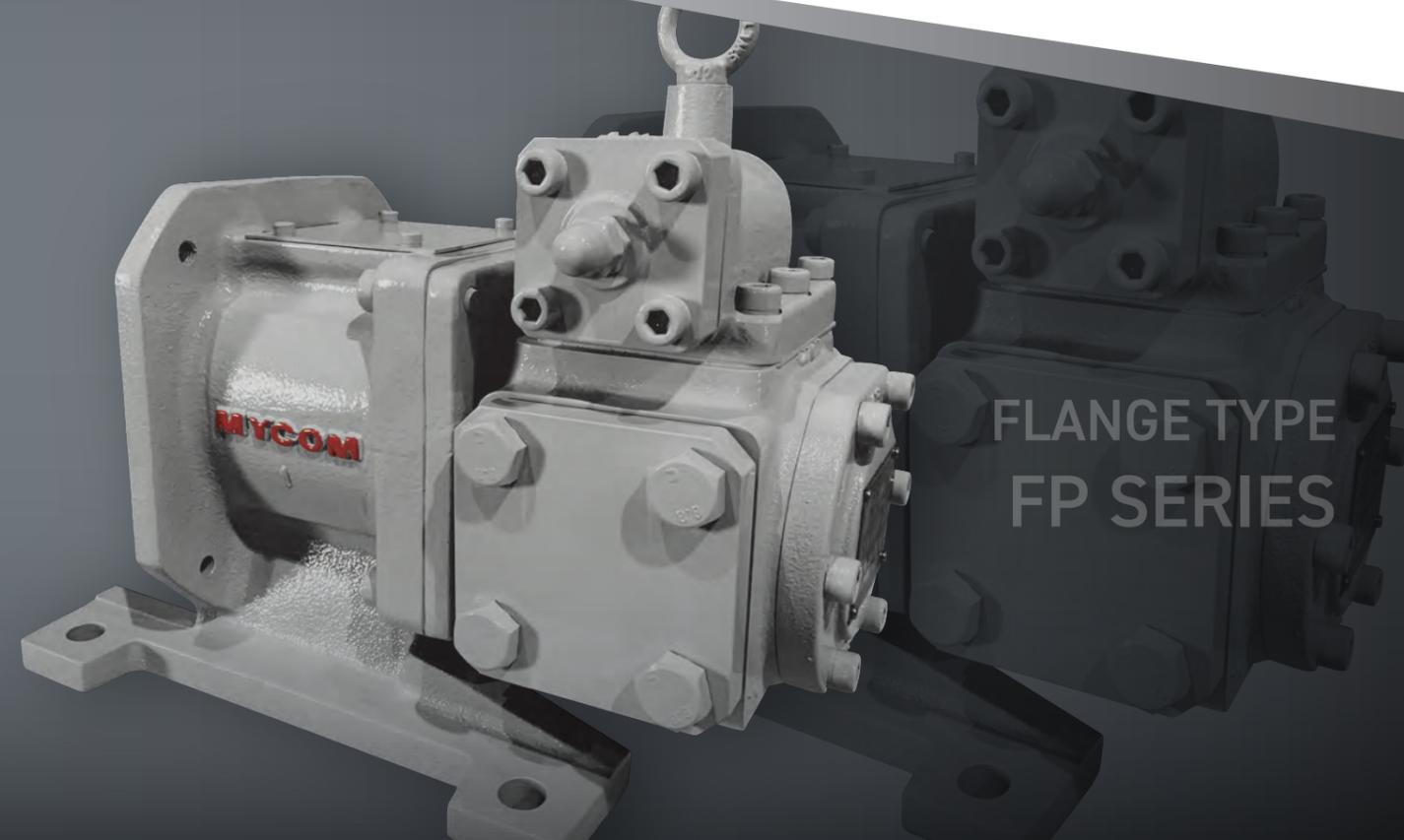
MAYEKAWA

OPEN TYPE
MP SERIES



MYCOM

MYCOM OIL PUMP SERIES



FLANGE TYPE
FP SERIES

OIL PUMP LINE-UP

The MYCOM oil pump is a high performance pump series based on screw compressor manufacturing technology that we have developed over many years.

With over 48,000 units installed worldwide, the series has earned a strong reputation for reliability.

Low noise and low vibration have been realized with our original gear shapes. Low noise and vibration are achieved through our proprietary gear design, enabling stable long-term operation even under demanding conditions such as high pressure.

LINE UP

MP
SERIES

Open type

P / Standard	M50P	M60P	M80P	M100P	M125P
PJ / Allowable discharge pressure 4.0MPa		M60PJ	M80PJ	M100PJ	M125PJ
PS / Allowable discharge pressure 5.5MPa	M50PS				
	F50P	F60P			

FP
SERIES

Flange type

MODEL DESIGNATION MP SERIES & FP SERIES

M50 P - R H 01

RELIEF VALVE

- 01:with built-in relief valve, standard type $\leq \Delta P$ 0.4MPa
- 02:w/o built-in relief valve, specific type $\leq \Delta P$ 2.0MPa
- 03:Special spring $\leq \Delta P$ 0.6MPa

BEARING TYPE

- S:Standard temp. (80°C max), standard type \rightarrow Aluminum bearing
- H:High temp. (130°C max.), specific type \rightarrow White metal bearing

DIRECTION OF OIL FLOW

- R:Left: suction, Right: discharge, viewed from the inlet shaft side
- L:Right: suction, Left: discharge, viewed from the inlet shaft side

ALLOWABLE DISCHARGE PRESSURE RANGE

- P :2.2MPa (FP SERIES, M60P), 2.5MPa (M50P, M80P, M100P, M125P)
- PJ :4.0MPa (M60PJ,M80PJ,M100PJ,M125PJ)
- PS:5.5MPa (M50PS) \rightarrow Tandem shaft + ANSI Flange 600#

PUMP MODEL

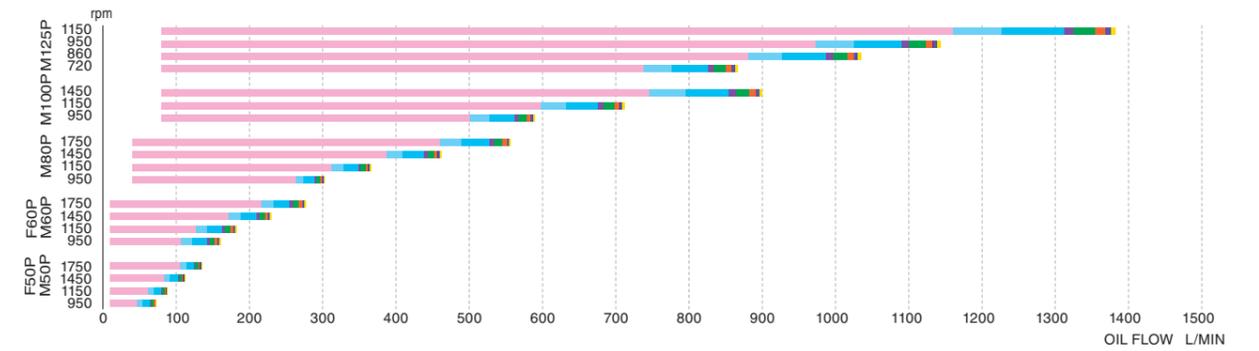
- F50 :Flanged motor, rotor external diameter 50mm
- F60 :Flanged motor, rotor external diameter 60mm
- M50 :Rotor external diameter 50mm
- M60 :Rotor external diameter 60mm
- M80 :Rotor external diameter 80mm
- M100:Rotor external diameter 100mm
- M125:Rotor external diameter 125mm



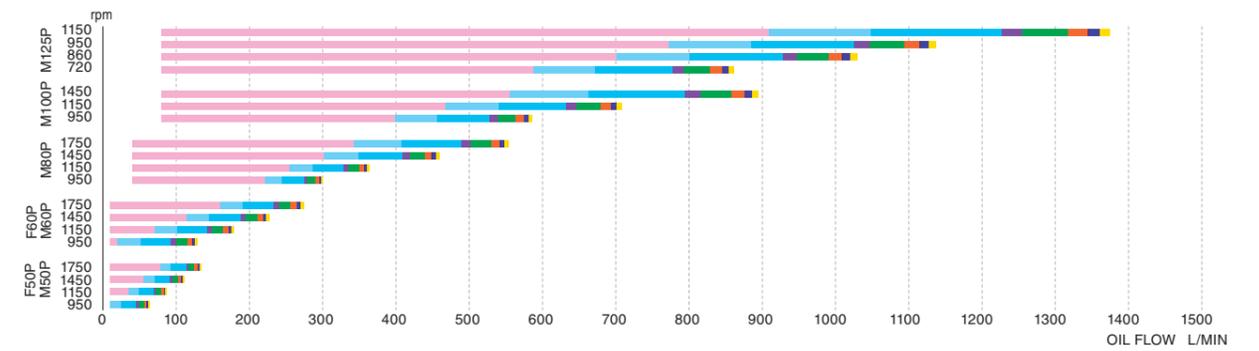
PERFORMANCE CURVE

VISCOSITY(cSt) 3 5 15 20 50 100 200 500

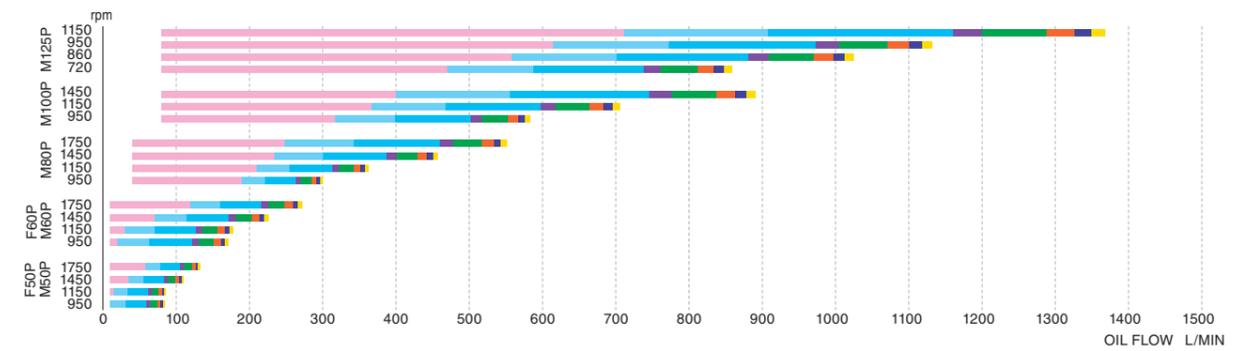
ΔP 0.1MPa



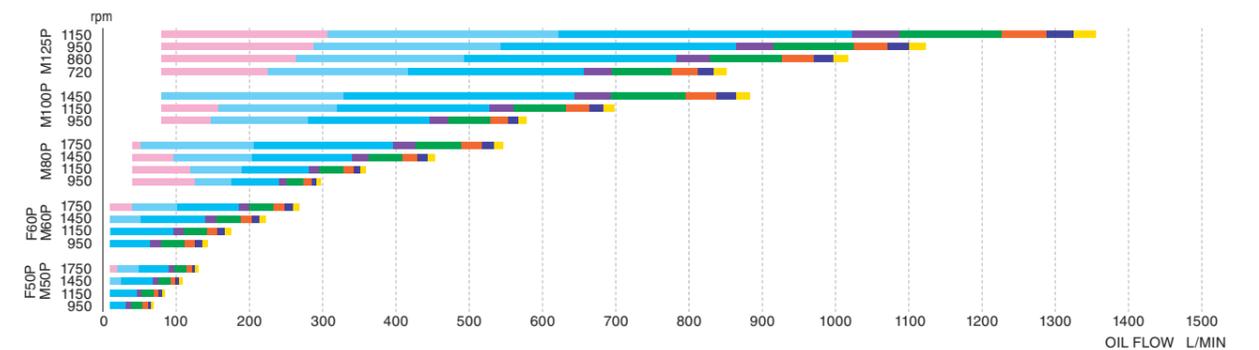
ΔP 0.3MPa



ΔP 0.5MPa



ΔP 1.0MPa



Open Type

MP SERIES

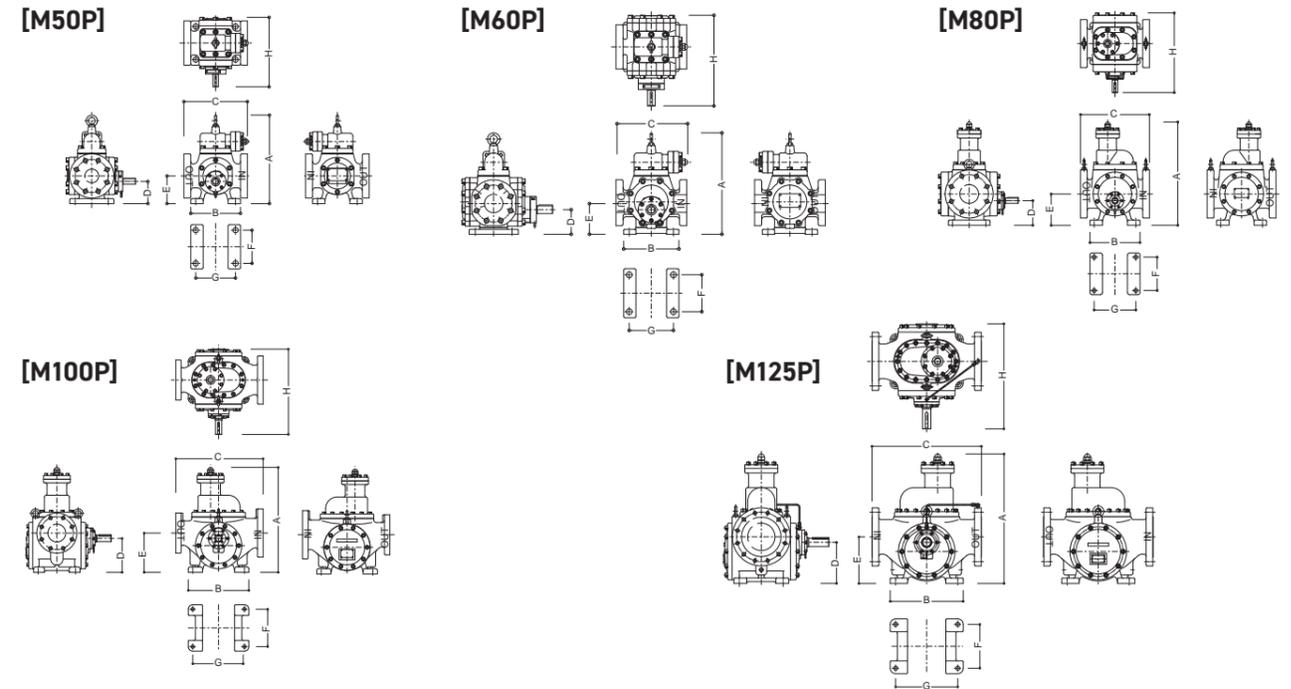
SPECIAL FEATURE

Oil pumps in the MP series are of the open type, incorporating screw-rotor design for the gear-mesh mechanism. They are well suited for lubrication systems in screw compressors.



- Wide flow-capacity range with high efficiency performance
- High efficiency performance
- Operable across a wide speed range from 720 to 1750 rpm
- Low noise and low vibration
- Equipped with an integral pressure-regulating valve enabling a simplified lubrication system (Relief valve capacity up to 50% of total flow)
- Applicable to a wide range of operating pressures
 - P type : 2.2MPa(M60P), 2.5MPa(M50P/M80P/M100P/M125P)
 - PJ type : 4.0MPa (M60PJ/M80PJ/M100PJ/M125PJ)
 - PS type : 5.5MPa (M50PS)
- Reverse rotation and reverse flow direction available upon request
- High-temperature operation up to 130°C
- JIS 20K flange available (M50P/M60P/M80P/M100P)
- ANSI 300# flange available (M50P/M80P/M100P/M125P, M60PJ/M80PJ/M100PJ/M125PJ)
- ANSI 600# flange available (M50PS)
- Compatible with various gases (refrigerants)
 - NH₃, HFCs, HFOs / HFO blend, CO₂, Propane, Propylene, Natural gas, City gas, Helium

Outer dimensions



Model	A	B	C	D	E	F	G	H
M50P	320	180	230	80	100	120	144	251
M60P	330	180	230	80	100	120	144	295
M80P	495	240	330	118	150	160	200	382
M100P	588	340	490	190	220	210	283	478
M125P	709	400	600	225	255	240	340	575

* Please consult us for further details.

Specifications

Application	Standard					High pressure				
	M50P	M60P	M80P	M100P	M125P	M60PJ	M80PJ	M100PJ	M125PJ	M50PS
Maximum Speed (rpm)	1750	1750	1750	1450	1150	1750	1750	1450	1150	1750
Minimum Speed (rpm)	950	950	720	720	720	950	950	720	720	950
Flow Direction *1	L.H.D R.H.D	L.H.D R.H.D	L.H.D R.H.D	L.H.D R.H.D	L.H.D R.H.D	L.H.D R.H.D	L.H.D R.H.D	L.H.D R.H.D	L.H.D R.H.D	L.H.D R.H.D
Rotation *2	CW CCW	CW CCW	CW CCW	CCW CW	CCW CW	CCW CW	CCW CW	CCW CW	CCW CW	CCW CW
Max. Capacity @50cSt, ΔP=0.3MPa [L/min]	119	244	505	819	1268	244	505	819	1268	119
Design Pressure [MPaG]	2.6	2.6	2.6	2.6	2.6	4.0	4.0	4.0	4.0	5.5
Max. Outlet Pressure [MPaG]	2.5	2.2	2.5	2.5	2.5	4.0	4.0	4.0	4.0	5.5
Min. Inlet Pressure [MPaG]	-0.03									
Differential Pressure [MPa]	With Relief Valve					ΔPmax.=0.4MPa / ΔPmax.=0.6MPa *3				
	Without Relief Valve					ΔPmax.=2.0MPa				
Temperature Range [°C]	Aluminum Bearing: 20~80°C					White Metal Bearing : 20~130°C *4				
Viscosity of Fluid [cSt]	3~500cSt									
Flange type	JIS20K* ANSI#300	JIS20K	JIS20K* ANSI#300	JIS20K* ANSI#300	ANSI#300	ANSI#300	ANSI#300	ANSI#300	ANSI#300	ANSI#600

*1 L.H.D: Left Hand Discharge From Drive End R.H.D: Right Hand Discharge From Drive End *2 CW: Clockwise CCW: Counterclockwise
 *3 Special spring *4 Temperature Range [°C] 120°C ≤ FKM(VITON) O-ring

Flange type

FP SERIES

SPECIAL FEATURE

Oil pumps in the FP series are of the flanged type and can be directly mounted to C-flange motors. They are suitable for lubrication systems in screw compressors.



F50P

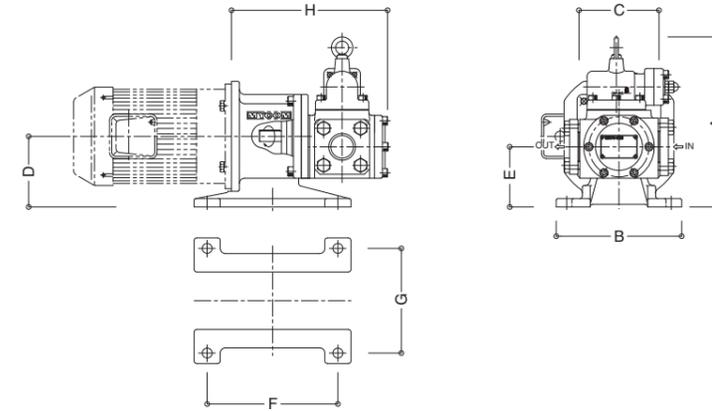


F60P

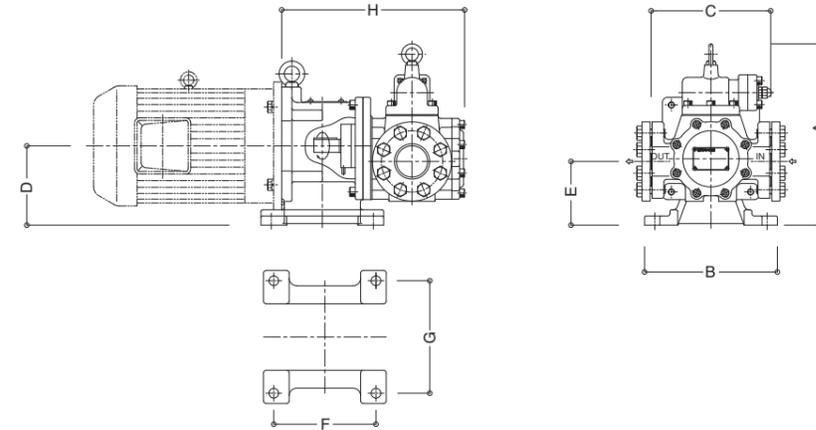
- Models F50P and F60P available
- High efficiency performance
- Operable across a wide speed range from 950 to 1750 rpm
- Industry-proven durability with a no-thrust-load screw gear design
- Low noise and low vibration
- Equipped with an integral pressure-regulating valve for a simplified lubrication system (Relief valve capacity up to 50% of total flow)
- Applicable to various pressure ranges (2.2 MPa)
- Reverse rotation and reverse flow direction available upon request
- Suitable for high-temperature operation up to 130°C
- JIS 20K flange type
- Compatible with various gases (refrigerants)
Applicable fluids: NH₃, HFCs, HFOs / HFO blends, CO₂, Propane, Propylene, Natural gas, City gas, Helium

Outer dimensions

[F50P]



[F60P]



Model	A	B	C	D	E	F	G	H
F50P	325	240	153	135	115	250	200	299
F60P	355	260	234	155	125	200	220	358

* Please consult us for further details.

Specifications

Model	F50P		F60P	
	Maximum Speed (rpm)	1750		1750
Minimum Speed (rpm)	950		950	
Flow Direction *1	L.H.D	R.H.D	L.H.D	R.H.D
Rotation *2	CCW	CW	CCW	CW
Max. Capacity @50cSt, ΔP=0.3MPa [L/min]	119		244	
Design Pressure [MPaG]	2.6			
Max. Outlet Pressure [MPaG]	2.2			
Min. Inlet Pressure [MPaG]	-0.03			
Differential Pressure [MPa]	With Relief Valve		ΔPmax.=0.4MPa	
	Without Relief Valve		ΔPmax.=2.0MPa	
Temperature Range [°C]	Aluminum Bearing: 20~80°C		White Metal Bearing : 20~130°C	
Viscosity of Fluid [cSt]	3~500cSt			
Flange type	JIS20K			

*1 L.H.D: Left Hand Discharge From Drive End R.H.D: Right Hand Discharge From Drive End
*2 CW: Clockwise CCW: Counter Clockwise