

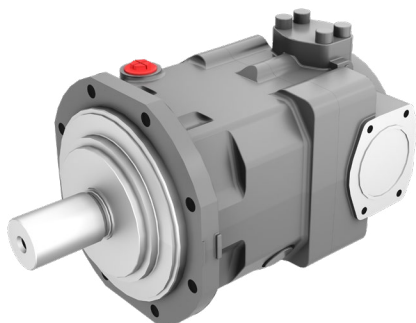
Type F30D

Fixed displacement axial piston pump



Product documentation

2025-10-01



Structural form: single pump

Nominal pressure p_{nom} : 420 bar

Peak pressure p_{max} : 450 bar

Displacement V_{max} : 280-520 cm³/rev

Contents

1	Overview: Fixed displacement axial piston pump type F30D	02
1.1	General	02
2	Available versions, main data	02
2.1	Basic version	02
3.	Dimensions	03
3.1	F30D-280	03
3.2	F30D-520	05

1 Overview: Fixed displacement axial piston pump type F30D

1.1 General

The axial piston fixed displacement pumps of the type F30 of D offer extremely high function safety. Its remarkably low noise levels, the high pressure rating, optimized power-to-weight-ratio make it possible to employ it for most industrial.

The latest knowledge and experience with regard to noise reduction has been used in the development of this pump design. F30D is therefore rather quiet, even when taken to the limit. All components used in the V30D are manufactured from high grade materials and machined with close tolerances. The wide range of modular controllers along with a thru-shaft (option for mounting auxiliary pumps or a second V30D) open up a wide range of application possibilities.

Therefore type F30D features a pump design, which ideally suits the special requirements of modern industrial, marine, offshore, and other industries.

Features and benefits:

- Low-noise emissions
- Full torque available at the second pump in tandem pump applications

Intended applications:

- Coal mining
- Concrete pump
- Extruder
- Industrial plants
- Marine cranes and winches
- Pile driving machine
- Power pack assembly
- Presses
- Tunnel boring machine
- Ship engine



F30D

Fixed displacement
axial piston pump

2 Available versions, main data

2.1 Basic version

Order coding example:

F30D	520	R	D7	G	N	-XXXX
Internal coding						
Shaft seals:				N = NBR (Nitril) V = FKM (Viton)		
Mounting flange:				G=ISO 3019-2 315-8		
Shaft design:				D7= Spline shaft (DIN 5480 W80×3×25×9g); K5= Parallel keyed shaft (DIN 6885 φ80 AS 22×14×125)		
Direction of rotation:				R = clockwise L = counter clockwise		
Nominal size				Table 1: Nominal size		
Basic type						

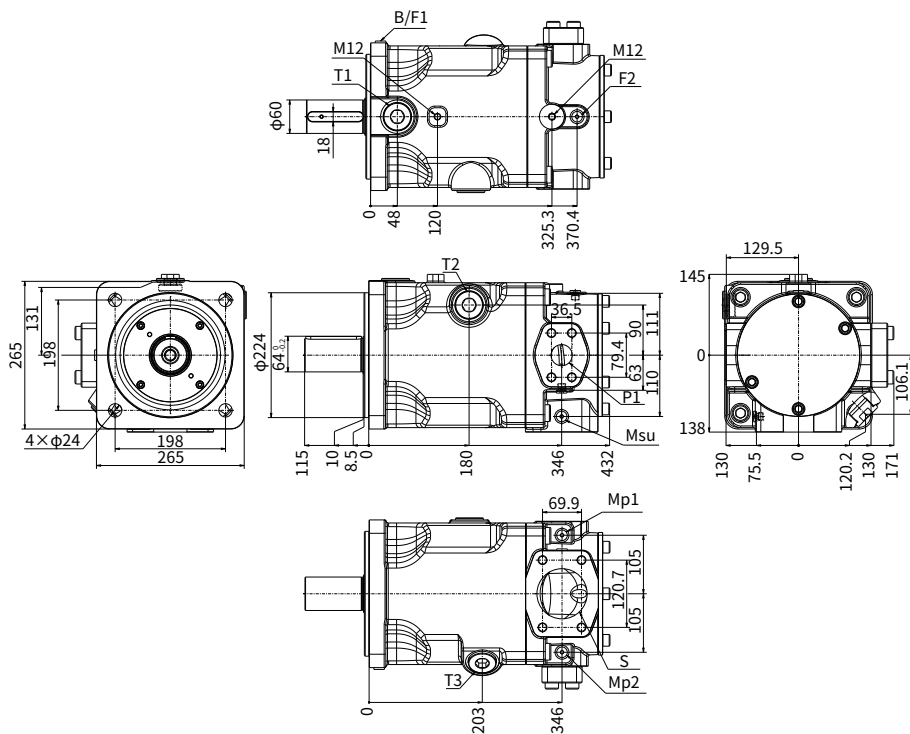
Circuit symbol:



3 Dimensions

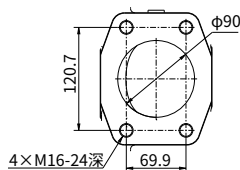
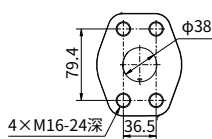
All dimensions in mm, subject to change without notice !

3.1 F30D-280



Pressure Port X

Suction Port Y

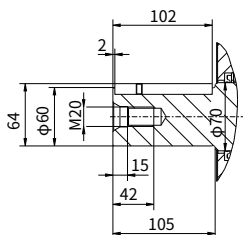


3.1 F30D-280

Shaft versions

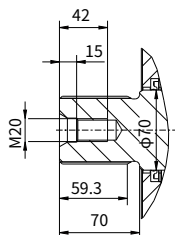
Spline shaft Coding D2

(DIN 5480 W60×2×28×9g)



Parallel keyed shaft Coding K4

(DIN 6885 φ60 AS 18×11×100)



Port description

port	description	Standard	Size	Notice
S	Input port	SAE J518 code 61 DIN 13	4 in M16; 24 deep	Flange cover plate protection
P1	Output port	SAE J518 code 61 DIN 13	1 1/2 in M16; 24 deep	Flange cover plate protection
P2	Output port	SAE J518 code 61 DIN 13	1 1/2 in M16; 24 deep	Flange cover plate protection
Mp1, Mp2	P1 and P2 outlet pressure gauges	DIN 3852-Type X	M14x1,5; 12 deep	Screw plug protection during delivery
Msu	Oil suction pressure tap	DIN 3852-Type X	M14x1,5; 12 deep	Screw plug protection during delivery
T1;T2;T3	Drain port	DIN 3852-Type X	M42x2; 21 deep	When in use, it is necessary to connect the upper oil drain port (protected by a plastic screw plug)
F1; F2	Bearing flushing hole	DIN 3852-Type X	M14x1,5; 12 deep	Refer to the instructions for flushing the oil circuit (delivered with screw plug protection)
B	exhaust port	DIN 3852-Type X	M14x1,5; 12 deep	When installed horizontally or vertically with the drive shaft facing upwards, it can be used for exhaust (delivered with screw plug protection)

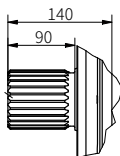
	Displacement (cm ³ /rev.)	Rated pressure (bar)	Minimum oil suction pressure (bar)	Shell pressure (bar)	Self suction speed (rpm)	Minimum speed (rpm)	Temperature range (°C)	Weight (kg)
F30D - 280	280	420	0.85	2 instantaneous 3	1800	500	-25~100	131

3.2 F30D-520

Shaft versions

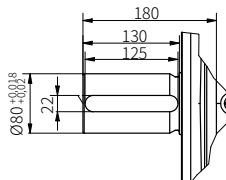
Spline shaft Coding D7

(DIN 5480 W80×3×25×9g)



Parallel keyed shaft Coding K5

(DIN 6885 ϕ 80 AS 22×14×125)



Port description

port	description	Standard	Size	Notice
S	Input port	SAE J518 code 61 DIN 13	5 in M16; 30 deep	Flange cover plate protection
P1	Output port	SAE J518 code 61 DIN 13	2 in M20; 35 deep	Flange cover plate protection
P2	Output port	SAE J518 code 61 DIN 13	2 in M20; 35 deep	Flange cover plate protection
Mp1, Mp2	P1 and P2 outlet pressure gauges	DIN 3852-Type X	M14x1,5; 12 deep	Screw plug protection during delivery
Msu	Oil suction pressure tap	DIN 3852-Type X	M14x1,5; 12 deep	Screw plug protection during delivery
T1	Drain port	DIN 3852-Type X	M48x2; 22 deep	When in use, it is necessary to connect the upper oil drain port (protected by a plastic screw plug)
T2	Drain port	DIN 3852-Type X	M48x2; 22 deep	When in use, it is necessary to connect the upper oil drain port (protected by a plastic screw plug)
F1; F2	Bearing flushing hole	DIN 3852-Type X	M14x1,5; 12deep	Refer to the instructions for flushing the oil circuit (delivered with screw plug protection)
B	exhaust port	DIN 3852-Type X	M14x1,5; 12deep	When installed horizontally or vertically with the drive shaft facing upwards, it can be used for exhaust (delivered with screw plug protection)

	Displacement (cm ³ /rev.)	Rated pressure (bar)	Minimum oil suction pressure (bar)	Shell pressure (bar)	Self suction speed (rpm)	Minimum speed (rpm)	Temperature range (°C)	Weight (kg)
F30D - 520	520	420	0.85	1 instantaneous 2	1500	500	-25~100	252

© by InLine Hydraulik GmbH.

The forwarding and reproduction of this document, as well as the use and communication of its contents, are forbidden unless expressly permitted.

Any breach or infringement will result in liability for damages.

All rights reserved concerning patent or utility model registrations.