

HYDRAULIC PISTON PUMP AND MOTOR

**HYDmax**

**Our Strength Hidden  
in Hydraulics**

[hydmax.com.tr](http://hydmax.com.tr)



# Who Are We?

HYDMax Hydraulic with more than 15 years of experience, continues to be a leading force in the hydraulic industry. As a manufacturer of hydraulic axial pumps and hydraulic motors, we set out with a vision to provide our customers with high performance, durable and quality solutions.

In the years since our inception, we are proud to have become a recognised brand in the industry by combining our experience and expertise. As HYDMax Hydraulics, we are committed to maximising customer satisfaction and being at the forefront of hydraulic technology.

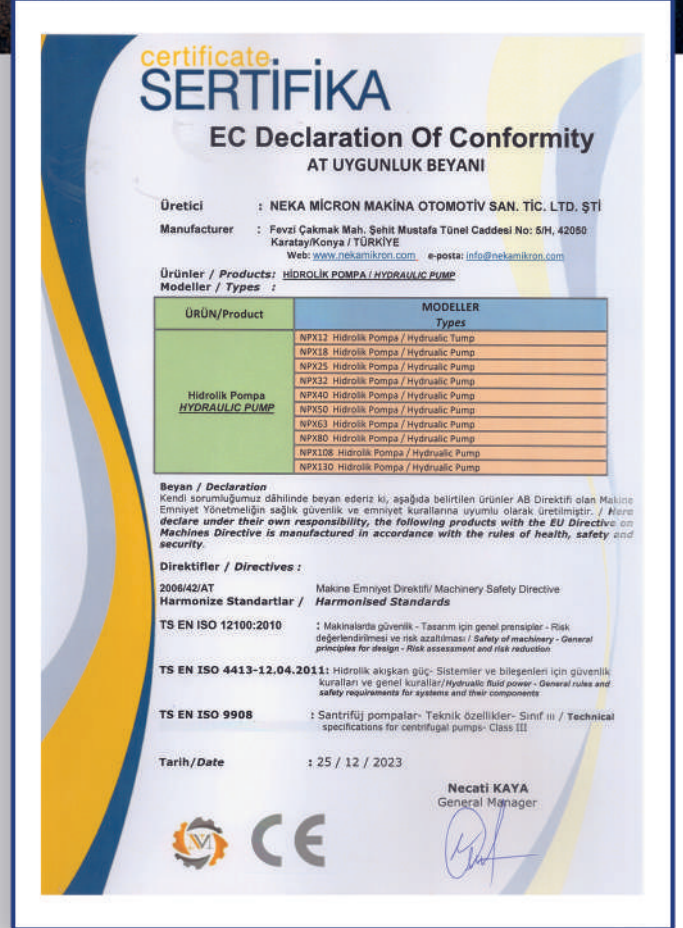
Our product portfolio, including hydraulic axial pumps and hydraulic motors, meets our customers' expectations with performance that exceeds industry standards. We aim to be a reliable business partner in the industry with our quality, innovation and customer-focused approach.

Committed to our values, we prioritise quality in the solutions we provide to our customers. Our professional team, based on the principle of working in accordance with ethical values, ensures that HYDMax Hydraulic is a brand preferred by customers.

With the strength of our past and our commitment to the future, we strive to maintain our leadership in the industry and continue to create value for our customers.



# Certificates

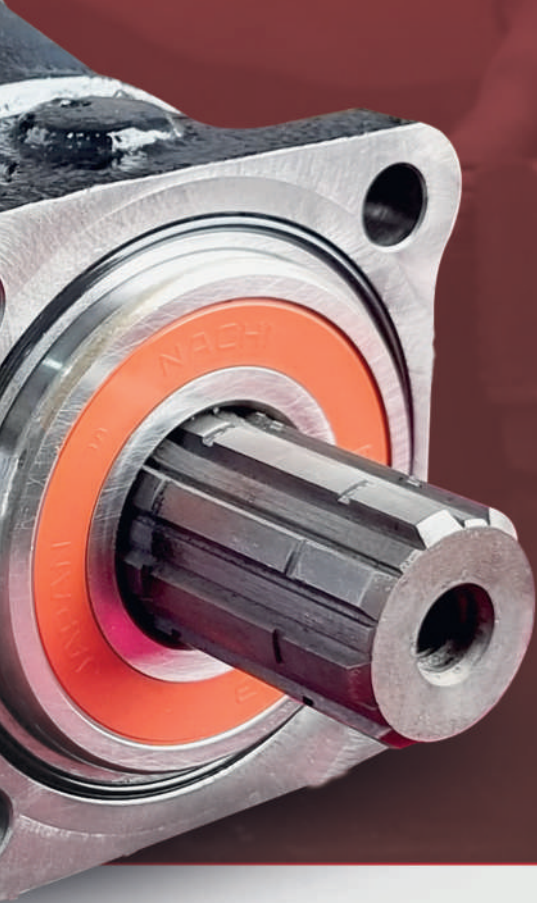


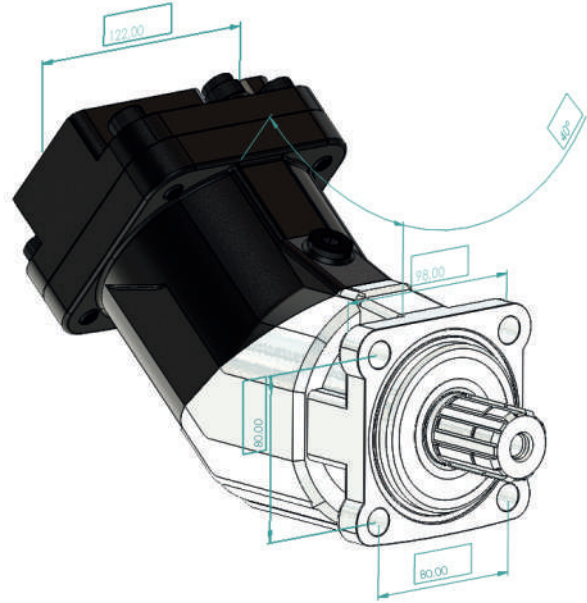
As HYDMax Hidrolik, we will continue to add value to our customers by combining our past experience with our future vision.

# PUMPS



# NPX SERIES





**NPX Series Hydraulic Piston Pump have the following advantages;**

- Compact Design,
- High Power Density,
- High Overall Efficiency,
- High Rotating Speeds,
- High Output Pressure,
- 400 bar Cont. Work. Pressure,
- 450 bar Peak Pressure,
- From 12cc to 130cc,
- Reduced Noise Level,
- Increased Reliability,
- No Drain Line Necessary,
- One Piece Pistons with Piston Rings,
- Special Inlet Fittings & Accesories,
- Simple Change of Direction of Rotation



## Technical Specifications

		12	18	25	32	40	50	63	80	108	130
Displacement	cc	12,00	18,00	25,00	32,00	40,20	50,00	63,00	80,00	108,4	130,0
Theoretical oil flow l/min at pump speed	1000 rpm	12,00	18,00	25,00	32,00	40,20	50,00	63,00	80,00	108,4	130,0
	1500 rpm	18,00	27,00	37,50	48,00	60,30	75,00	94,50	120,0	162,6	195,0

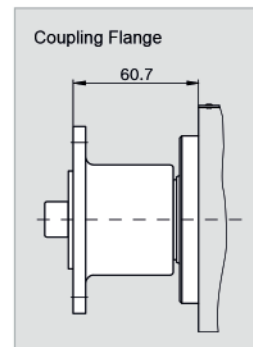
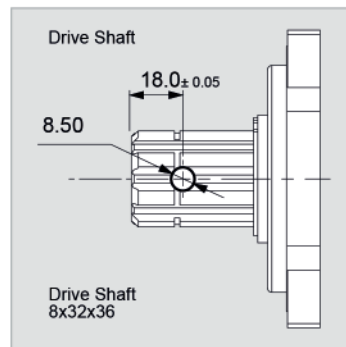
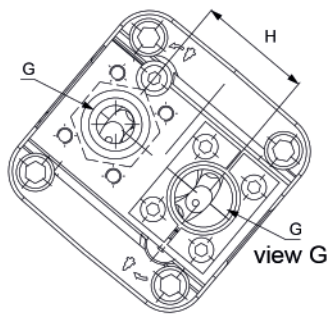
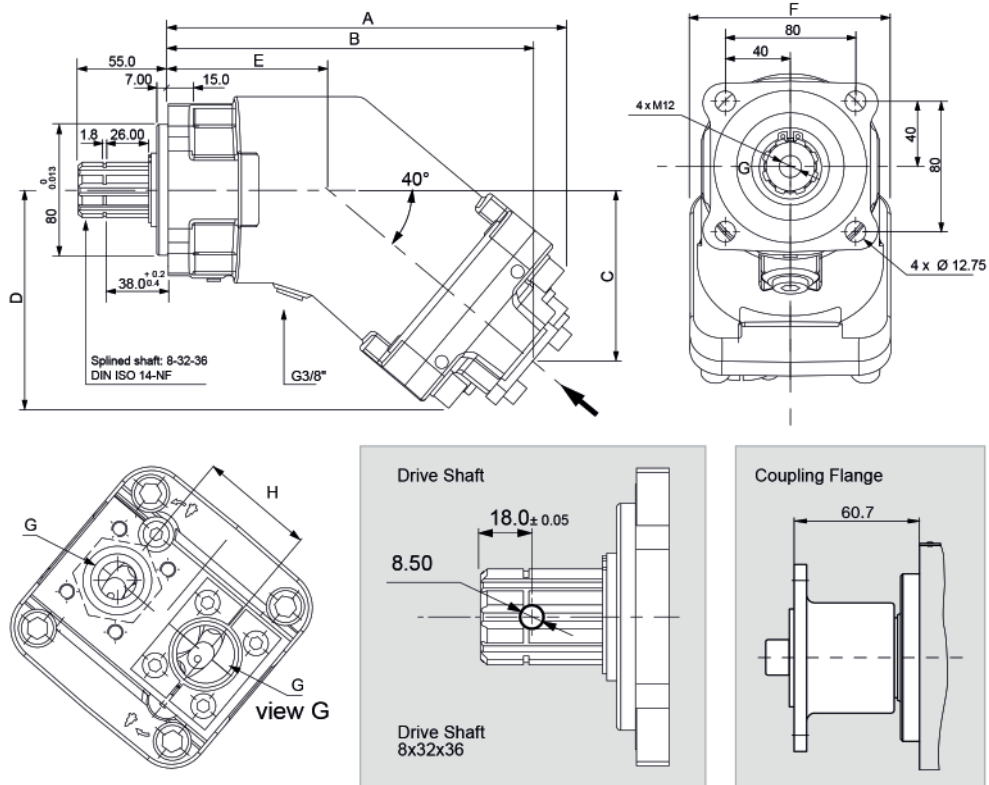
Maximum Pump Speed											
- Continuous	rpm	2300	2300	2300	2250	1900	1900	1900	1700	1700	1600
- Limited	rpm	3100	2900	2700	2700	2500	2500	2300	2100	1900	1750
Max. Continuous Pressure	bar	400	400	400	400	400	400	400	400	400	400
Max. Intermit. Peak Pressure	bar	450	450	450	450	450	450	450	450	450	450
Max. Torque at 350 bar	Nm	71	105	146	190	240	292	360	460	620	746

Weight											
- Without inlet fitting	kg	9,00	9,00	9,50	10,50	10,50	11,00	11,50	15,00	15,50	16,50
- With inlet fitting	kg	9,40	9,40	9,90	10,90	10,90	11,40	11,90	15,40	15,90	17,00

Rotation		cw,ccw	cw,ccw	cw,ccw	cw,ccw	cw,ccw	cw,ccw	cw,ccw	cw,ccw	cw,ccw	cw,ccw
Fluid		Mineral Based Hydraulic Oils									
Inlet & Outlet		3/4"	3/4"	3/4"	1"	1"	1"	1"	1"	1"	1"



## Dimensions



	12	18	25	32	40	50	63	80	108	130
cc	12,00	18,00	25,00	32,00	40,20	50,00	63,00	80,00	108,4	130,0
A	195,0	195,0	195,0	202,0	202,0	215,0	215,0	242,0	242,0	242,0
B	176,0	176,0	176,0	183,0	183,0	196,0	196,0	221,0	223,0	223,0
C	76,0	76,0	76,0	82,0	82,0	94,0	94,0	104,0	105,0	105,0
D	104,0	104,0	104,0	108,0	108,0	118,0	118,0	132,0	132,0	132,0
E	86,0	86,0	86,0	86,0	86,0	86,0	86,0	98,0	98,0	98,0
F	108,0	108,0	108,0	108,0	108,0	108,0	108,0	122,0	122,0	122,0
G	3/4"	3/4"	3/4"	1"	1"	1"	1"	1"	1"	1"
H	54	54	54	54	54	54	54	60	60	60

The NPX Series Hydraulic Piston Pump fitted with a rubber front seal.

### INSTALLATION

NPX Series Hydraulic Piston Pump are direct mounting on the PTO.

Grease the splined shaft before installation. Do not tap the gear wheel/driver into position.

Remove any mounted screws on the pump.

The NPX Series was delivered with protective covers and plastic/threaded plugs.

It should be removed before of install. Please check seals and surfaces.If sealing or other surfaces damaged please contact your responsible Service Partner.

Start up and run the pump at medium speed (800 to 1000 rpm at the PTO) until the oil flowing out of the pump. (There are no more air bubbles.)

### OIL SUPPLY

Oil and supply line should be clean, and the supply line is airtight.

### SUCTION LINE

Connect the suction line, tighten the suction connection bolts in diametric pairs.

Connect the pressure line.

### REPAIR

We offers a comprehensive range of services for the repair of our Hydraulic Piston Pump.

Repairs to the NPX Series Hydraulic Piston Pump may only be performed by authorized, skilled and instructed personnel.

Only use original and pre-installed our NPX Series spare parts from supplied to Manufacturer..

Tested and pre-installed NPX Series Hydraulic Piston Pump successful repair requiring only little time.

### SPARE PARTS

The spare parts list and the NPX Series Hydraulic Piston Pump order specific.

When ordering spare parts, quote the material and complete Ordering code number of the NPX Series Hydraulic Piston Pump as well as the right numbers of the spare parts.

### RISK OF DAMAGE!

Do not touch the drive shaft of the NPX Series Hydraulic Piston Pump

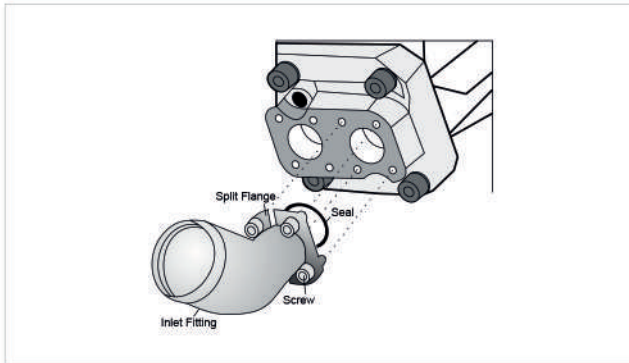
Do not touch sensor, valves and fittings

Do not touch sealing surfaces.

Weight												
- Without inlet fitting	kg	9,00	9,00	9,50	10,50	10,50	11,00	11,50	15,00	15,50	16,50	
- With inlet fitting	kg	9,40	9,40	9,90	10,90	10,90	11,40	11,90	15,40	15,90	17,00	

Address all questions regarding spare parts to your responsible Our Service Partner or the technical service department of the manufacture's plant / factory for the NPX Series Hydraulic Piston Pump

## Changing the Direction of Rotation

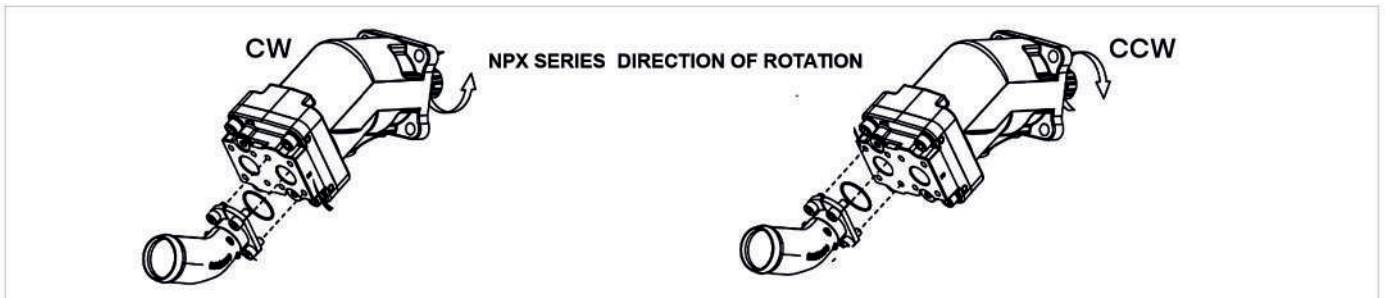


### FLUID

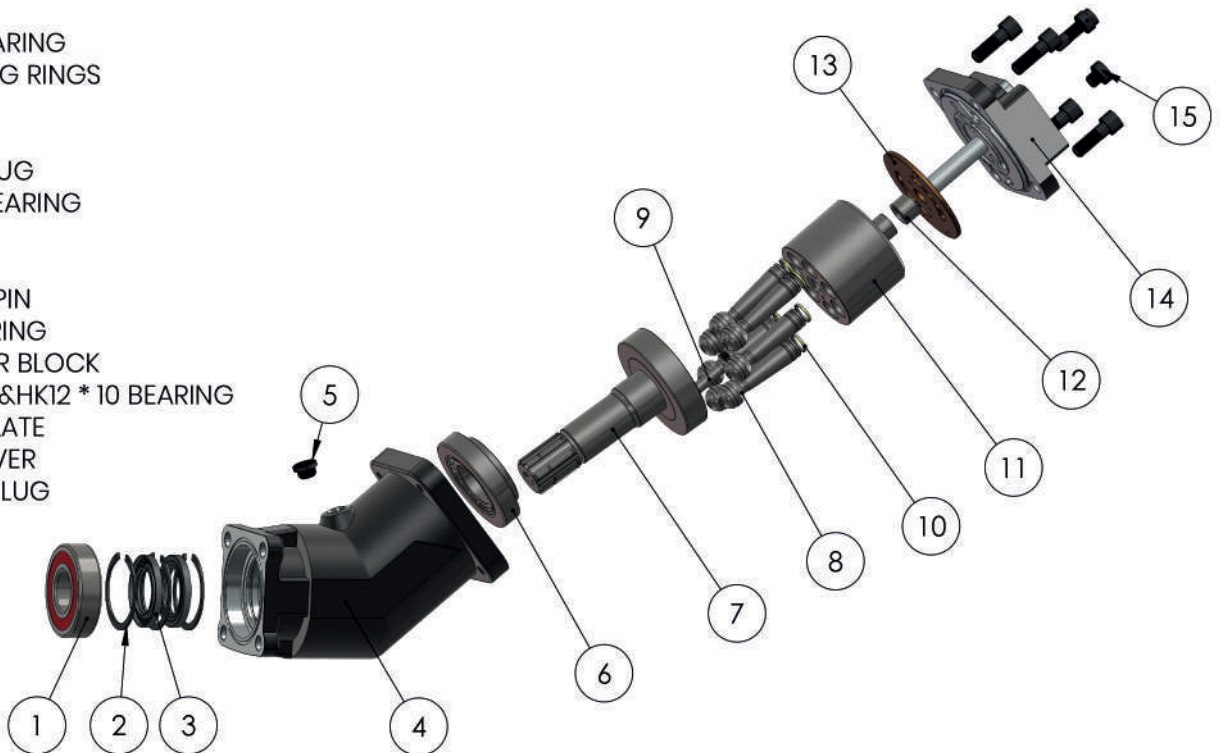
Please check the following recommendations:  
Mineral oil



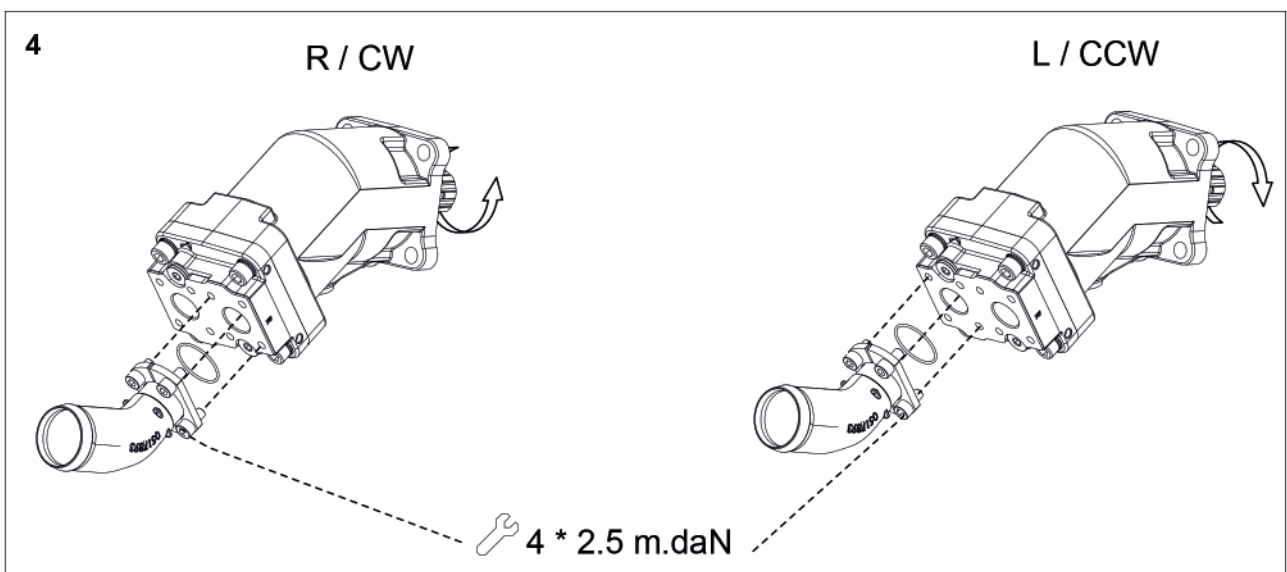
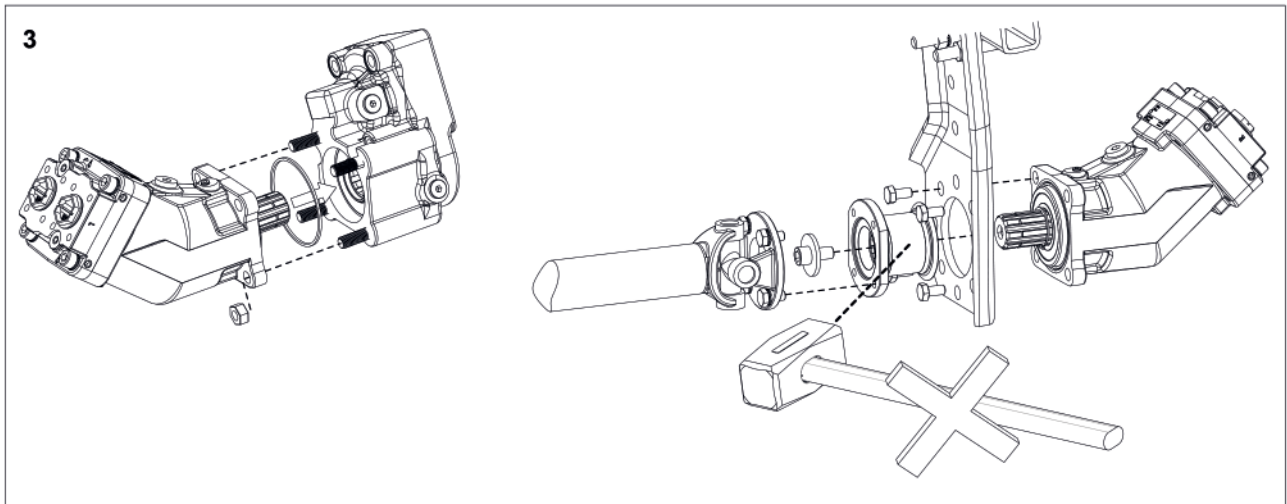
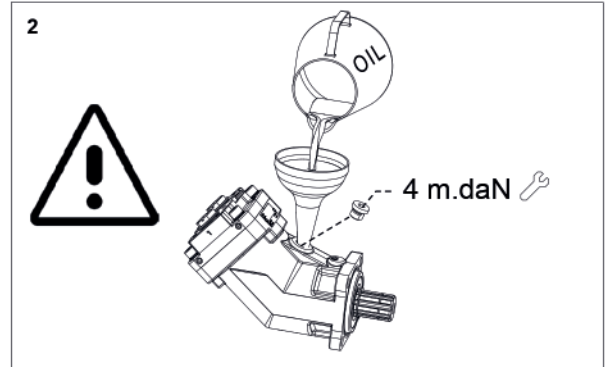
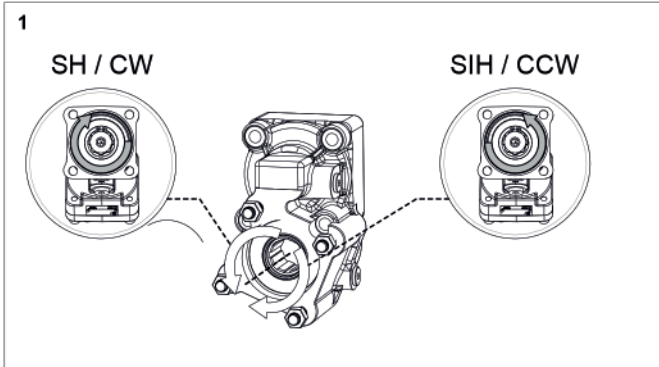
<b>Viscosity</b>	20 to 40 cSt
<b>Min. viscosity</b>	5 cSt
<b>Viscosity for correct operation</b>	10 to 400 cSt
<b>Recommended filtration</b>	10µ absolute class 9 NAS 1638 class 6 SAE class 18/15 ISO
<b>Max temp.</b>	100 oC



- 1) 6307 BEARING
- 2) RETAINING RINGS
- 3) SEALS
- 4) BODY
- 5) BODY PLUG
- 6) SHAFT BEARING
- 7) SHAFT
- 8) PISTON
- 9) CENTER PIN
- 10) PISTON RING
- 11) CYLINDER BLOCK
- 12) HK16 \* 16&HK12 \* 10 BEARING
- 13) VALVE PLATE
- 14) END COVER
- 15) COVER PLUG



### Installation Procedure



### Installation Procedure

**5**

Mini : -0.2 bar  
Maxi : 2 bar

**6**

min. 26	Q Max*
1½" (39.1 mm)	60 l/min
2" (50 mm)	120 l/min
2½" (63.5 mm)	150 l/min

\* Qmax. recommandé/Qmax. recommended / Qmax. Empfohlen

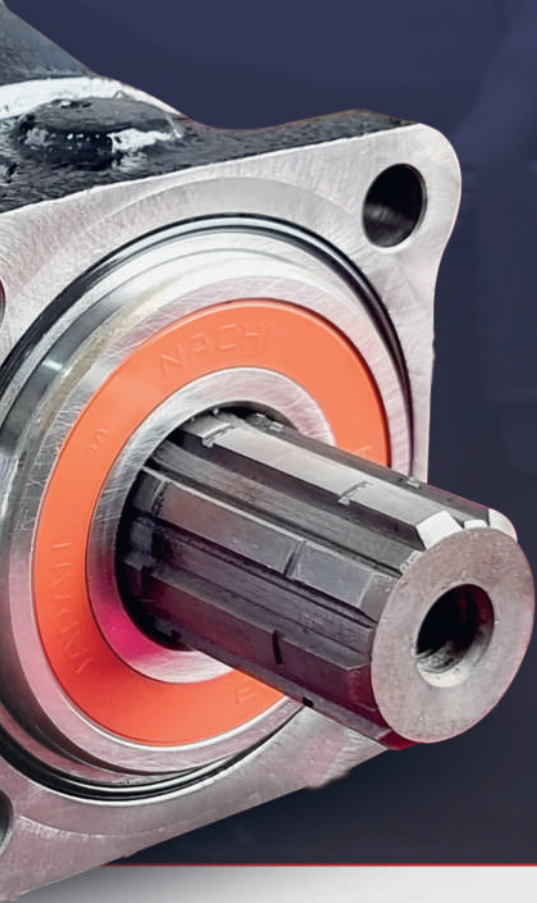
**7**

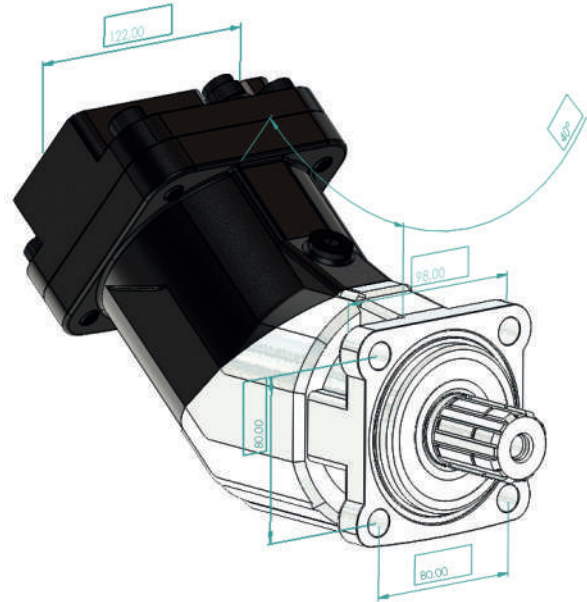
20/18/15

# MOTORS



# NMX SERIES





**NMX Series Hydraulic Piston Motor have the following advantages;**

- Compact Design,
- High Power Density,
- High Efficiency,
- High Rotating Speeds,
- From 12cc to 130cc,
- High Pressure,
- Good Starting Characteristics,
- Optimized Weight and Size,





## NMX Series Hydraulic Piston Motor

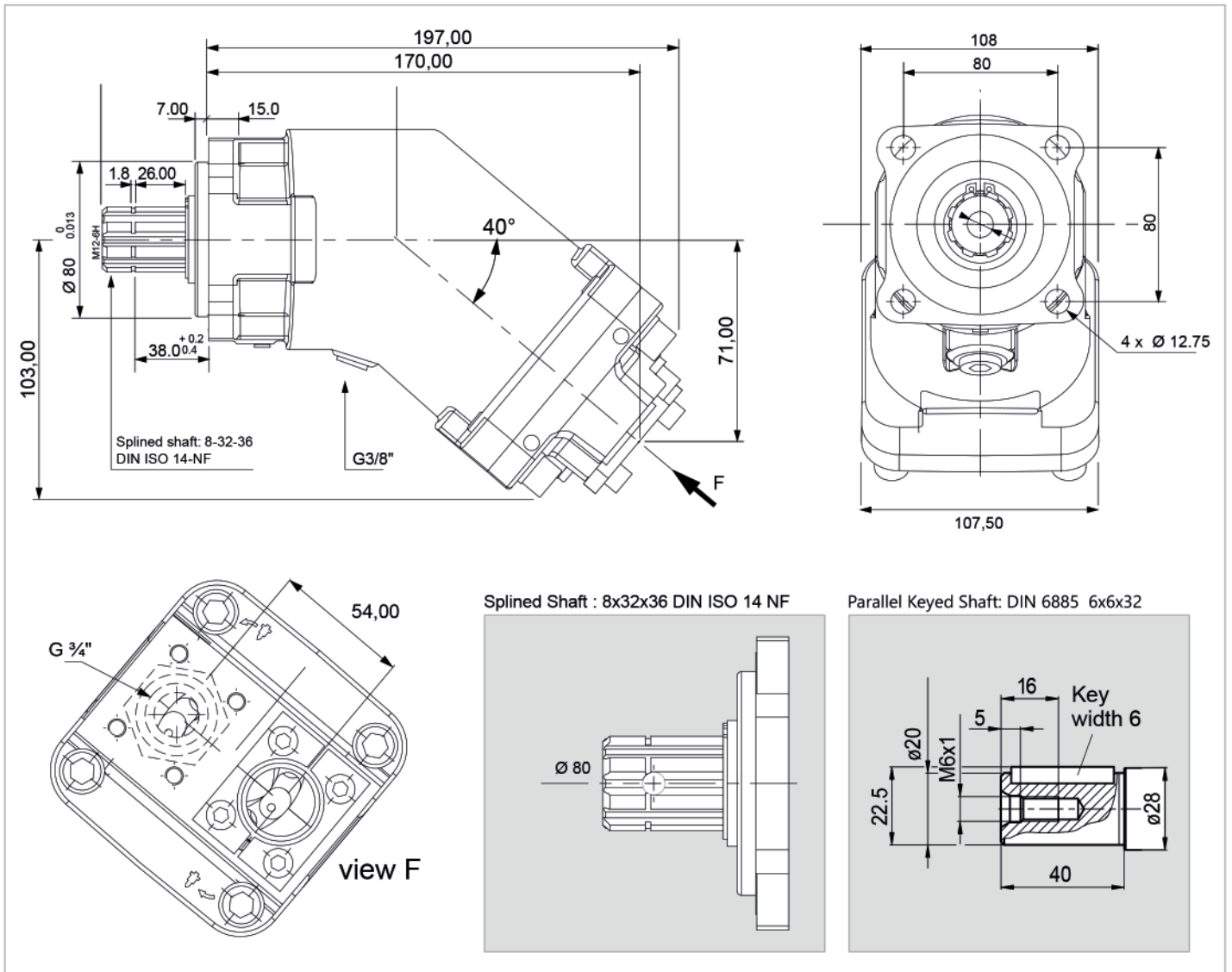
		12	18	25	32	40	50	63	80	108	130
Displacement	cc	12,00	18,00	25,00	32,00	40,20	50,00	63,00	80,00	108,4	130,0
Theoretical oil flow l/min at motors speed	1000 rpm	12,00	18,00	25,00	32,00	40,20	50,00	63,00	80,00	108,4	130,0
	1500 rpm	18,00	27,00	37,50	48,00	60,30	75,00	94,50	120,0	162,6	195,0

Maximum Speed											
- Continuous	rpm	8000	8000	6250	6250	5600	5000	5000	4400	4000	3400
- Limited	rpm	8800	8800	6800	6800	6300	5500	5500	4900	4400	4400
Max. Continuous Pressure	bar	400	400	400	400	400	400	400	400	400	400
Max. Peak Pressure	bar	450	450	450	450	450	450	450	450	450	450
Torque bar	m.N/bar	0.18	0.28	0.40	0.51	0.65	0.80	1.00	1.28	1.69	2.10
Torque at 350 bar	m.N	66	98	140	174	228	280	350	440	600	710

Weight											
- Without accessories	kg	9,00	10,00	10,00	11,00	11,00	11,00	12,00	15,00	16,00	16,50
- With accessories	kg	9,50	10,50	10,50	11,50	11,50	11,50	12,50	15,50	16,50	17,00

Motor Temperature											
- Minimum	°C	-25	-25	-25	-25	-25	-25	-25	-25	-25	-25
- Maximum	°C	110	110	110	110	110	110	110	110	110	110

### NMX Series Hydraulic Piston Motor



### Installation Procedure

**POSITION**

NMX Motors can be operate any position.

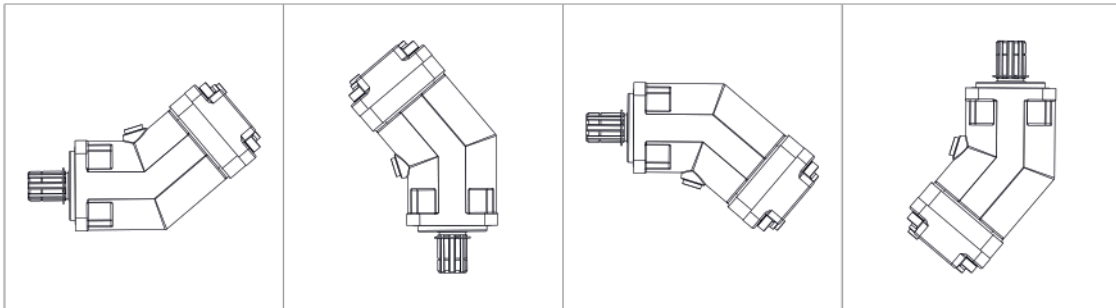
**DIRECTION OF ROTATION**

NMX Motors can be operate in both directions of rotation.

Before of Installation operation, the motor must be filled with hydraulic fluid and air bled.

**INSTALLATION POSITION**

See following examples.

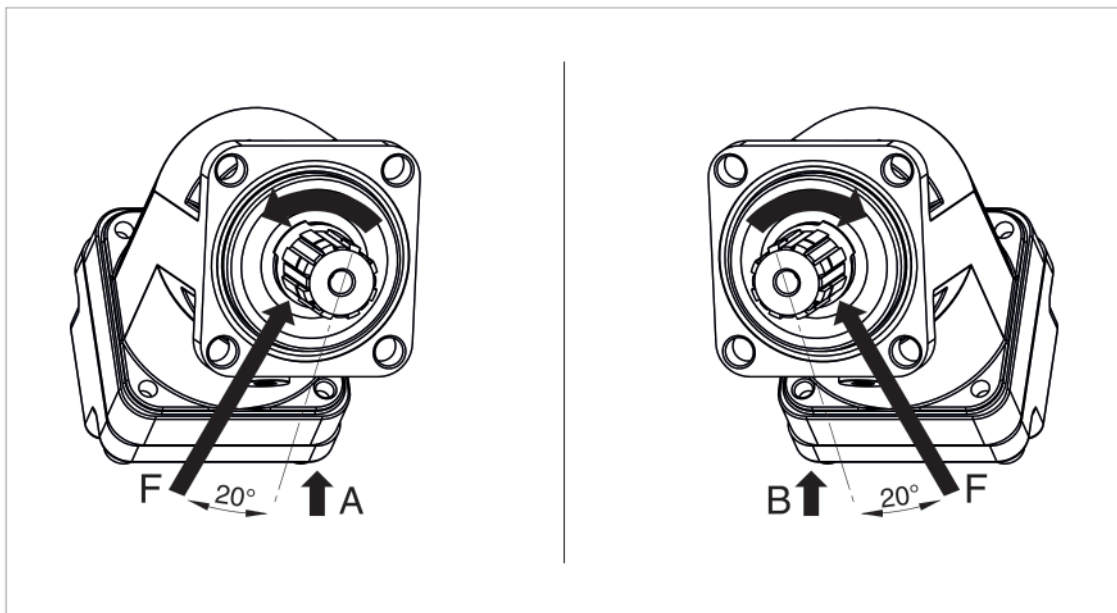


**HYDRAULIC FLUID**

Recommended ;

Generally : between 15 and 200 cSt.

Maximum : between 5 and 1600 cSt.

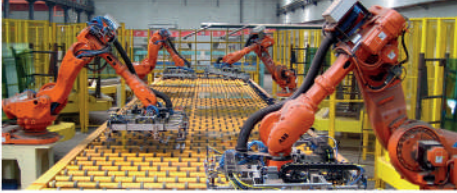


**FOR USE;**

Available via e-mail on request or each motor is supplied via Starting datasheet.

For detailed information about NMX Bent Axis Motors, please contact with Technical Department !!!

# Areas of Use





+90 534 695 27 81

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