

XPi series

the *intelligent* pump

fixed displacement bent axis design



The compact size envelope of XPi pumps, together with their technology, means they can be installed in environments with little space available, and be used at relatively high rotating speeds.

ADVANTAGES

- ▶ Pump automatically sets to required direction of rotation
- ▶ Mounting and start-up, easier than ever !

CHARACTERISTICS

- 7 pistons
- Innovative plate - barrel synchronisation
- use of materials with high mechanical resistance
- reinforced sealing



■ **10 models :**

- from 12 to 130 cc/rev
- 380 bar continuous working pressure
- 420 bar peak pressure
- max. speed from 1750 to 3150 rpm

PB Xpi series

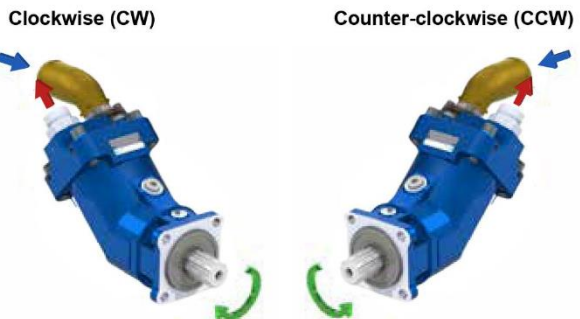


Pump reference	Displac. (cc/rev)	Maximum continuous pressure (bar)	Maximum intermittent peak pressure < 5 seconds (bar)	Max speed ⁽¹⁾ (rpm)	Max. torque absorbed at 380 bar ⁽²⁾ (N.m)	Weight		Overhang torque	
						without inlet fitting (kg)	with inlet fitting 2" (kg)	without inlet fitting (N.m)	with inlet fitting 2" (N.m)
XPi 12 0523820	12	380	420	3150	76	9.2	9.65	8.74	9.17
XPi 18 0523810	18	380	420	2900	114	9.25	9.7	8.79	9.21
XPi 25 0523800	25	380	420	2750	159	9.3	9.75	8.84	9.26
XPi 32 0523790	32	380	420	2700	204	11.1	11.55	11.1	11.55
XPi 41 0523780	41	380	420	2550	261	11.15	11.6	11.15	11.6
XPi 50 0523770	50.3	380	420	2450	318	11.2	11.65	11.76	12.23
XPi 63 0523760	63	380	420	2300	401	11.25	11.7	11.81	12.28
XPi 80 0523640	80.4	380	420	2150	509	14.85	15.3	17.82	18.36
XPi 108 0523750	108.3	380	420	1900	687	14.95	15.4	17.94	18.48
XPi 130 0523730	129.8	380	420	1750	827	15.35	15.8	18.73	19.28

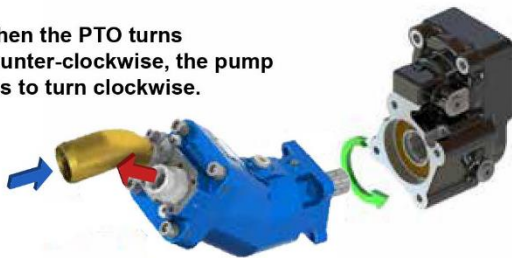
(1) At absolute pressure 1 bar, ISO VG46 fluid at 25°C.
 (2) Maximum torque given with a mechanical efficiency at 95%.

DUAL DIRECTION OF ROTATION:
 this *intelligent* pump can operate in either direction of rotation.

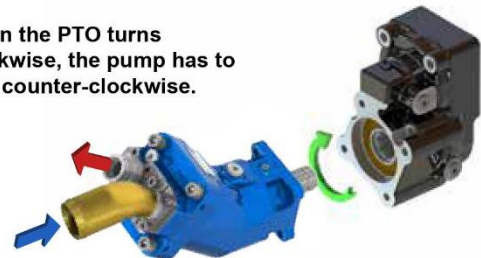
Fit the inlet fitting on required side, depending on the direction of rotation of the PTO, and the pump will set itself accordingly.



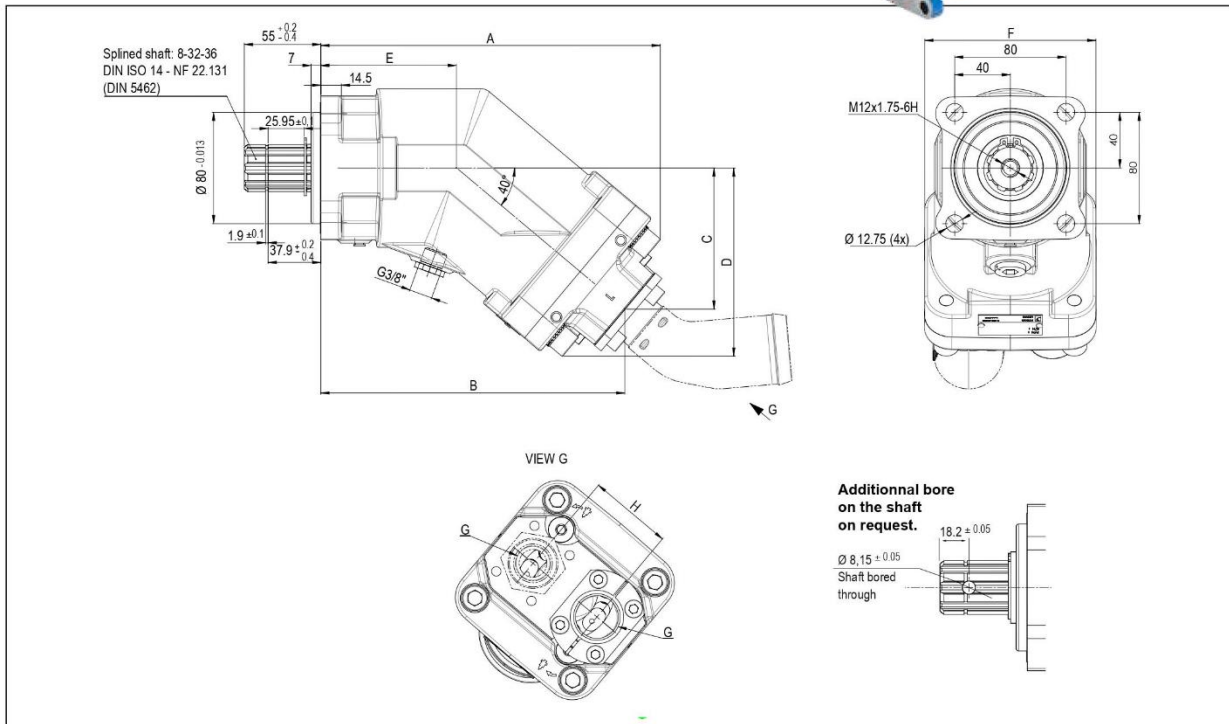
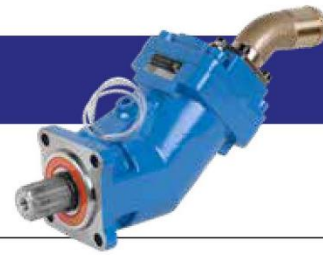
When the PTO turns counter-clockwise, the pump has to turn clockwise.



When the PTO turns clockwise, the pump has to turn counter-clockwise.



XPi - Dimensions

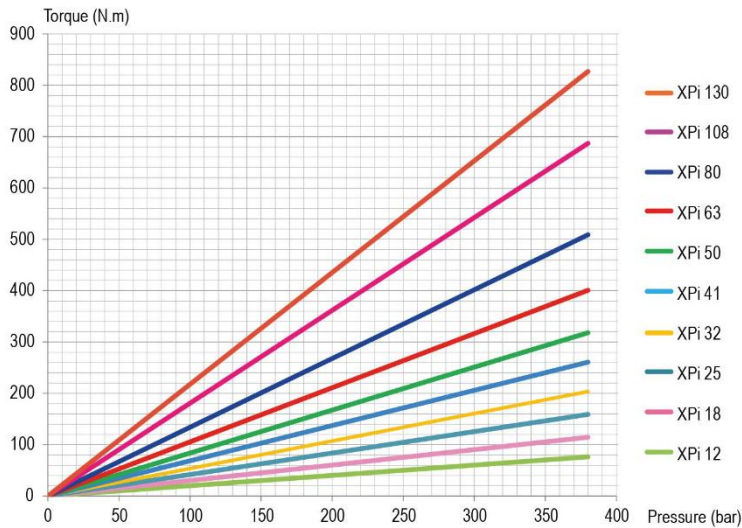


Pump reference	A	B	C	D	E	F	G	H
XPi 12 0523820	196.7	177.8	77.1	103.9	85.7	108	G 3/4"	54
XPi 18 0523810	196.7	177.8	77.1	103.9	85.7	108	G 3/4"	54
XPi 25 0523800	196.7	177.8	77.1	103.9	85.7	108	G 3/4"	54
XPi 32 0523790	202.8	184	82.3	109.1	85.7	108	G 3/4"	54
XPi 41 0523780	202.8	184	82.3	109.1	85.7	108	G 3/4"	54
XPi 50 0523770	214.4	195.6	92	118.9	85.7	108	G 3/4"	54
XPi 63 0523760	214.4	195.6	92	118.9	85.7	108	G 3/4"	54
XPi 80 0523640	241.7	220.9	103.5	133.3	97.4	123	G 1"	60
XPi 108 0523750	241.7	222.5	104.8	133.3	97.4	123	G 1"	60
XPi 130 0523730	244	224.8	106.7	135.2	97.4	123	G 1"	60

Dimensions in mm.

Performance - XPi

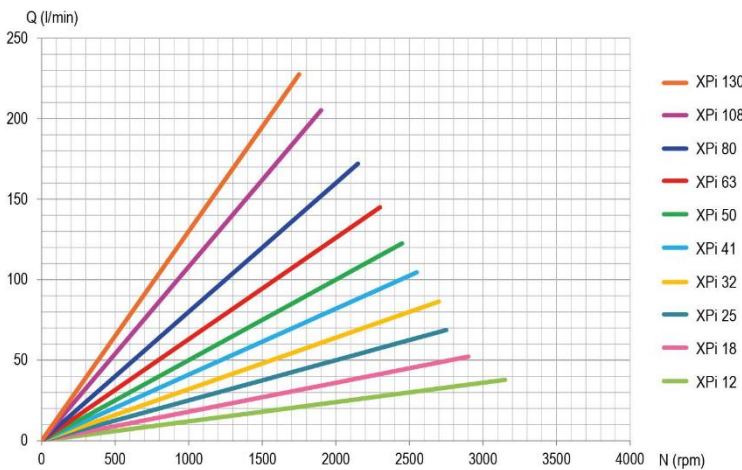
Torque absorbed as a function of pump output pressure (with a mechanical efficiency considered at 95%)



$$C = \frac{\text{Cyl} \times \Delta P}{62.8 \times \eta_{\text{meca}}}$$

- With:
- C = Torque in N.m
 - Cyl = Displacement in cc/rev
 - ΔP = Differential pressure in bar
 - η_{meca} = Mechanical efficiency

Flow as a function of rotating speed



$$Q = \frac{\text{Cyl} \times N \times \eta_{\text{vol}}}{1000}$$

- With:
- Q = Flow in l/min
 - N = Speed in rpm
 - η_{vol} = Volumetric efficiency
 - Cyl = Displacement in cc/rev

These graphs are the results of testwork done in HYDRO LEDUC R&D laboratory, on a specific test bench with a mineral hydraulic fluid ISO VG46 at 25°C (~100 cSt) - disregarding the volumetric efficiency.

Volumetric efficiency

