

Pumps Piston Series XPi series



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

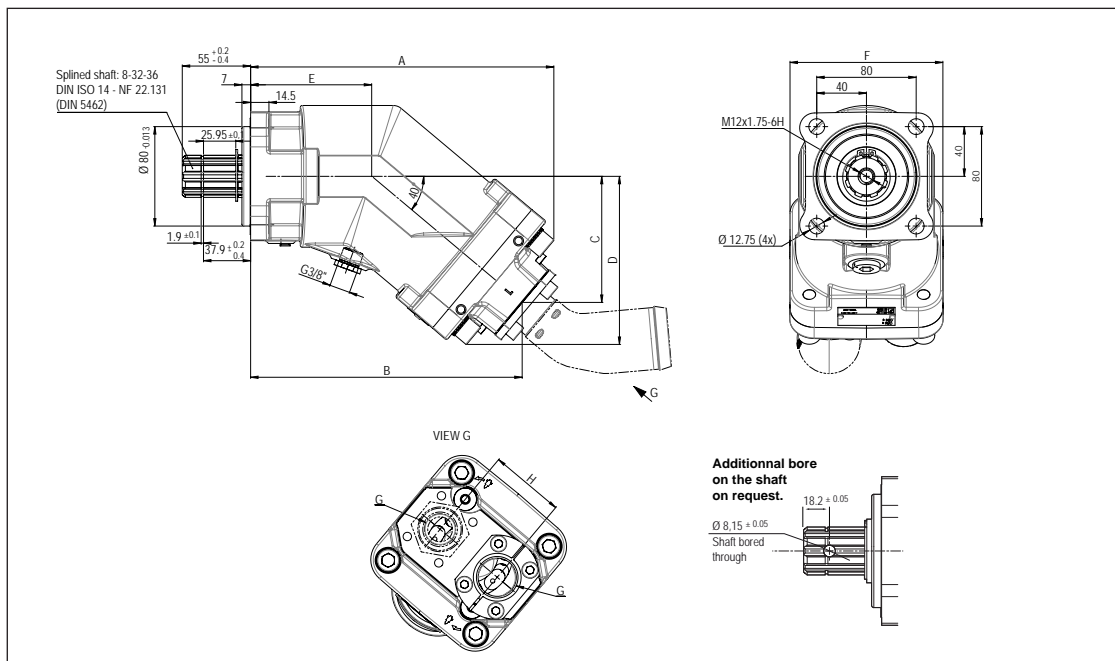


■ 10 models :

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

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%.



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.

Pumps Piston Series XAi



The compact size envelope of XAi 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 !

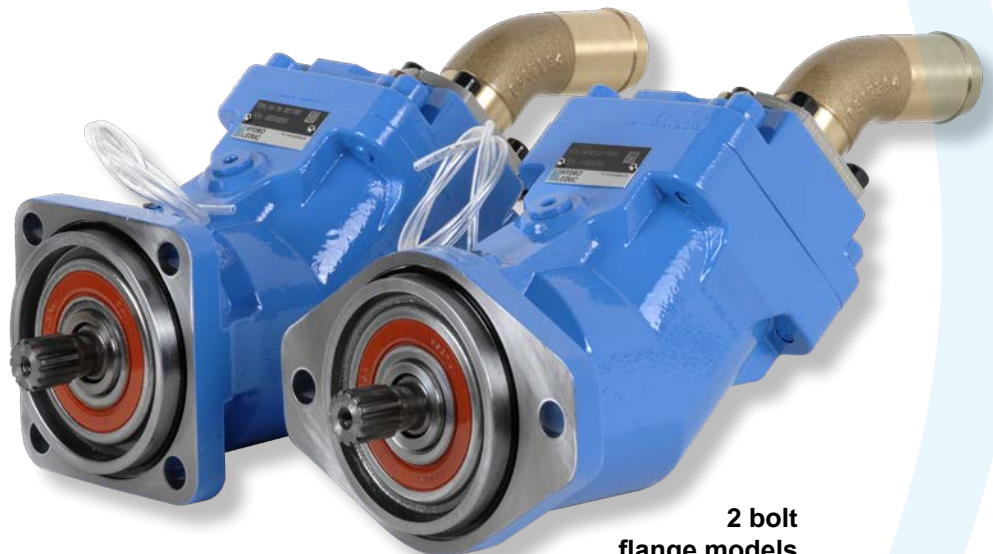
CHARACTERISTICS

- 7 pistons
- original idea for plate - barrel synchronisation
- use of materials with high mechanical resistance
- reinforced sealing

■ 10 models:

- from 18 to 63 cc/rev (1.1 to 3.84 cu.in/rev)
- 380 bar (5511 psi) continuous working pressure
- 420 bar (6092 psi) peak pressure
- maximum speed from 2300 to 2900 rpm

4 bolt
flange models



2 bolt
flange models

► 2 bolt flange - SAE J744

Pump reference	Displac. Cu.in/rev (cc/rev)	Maximum continuous pressure psi (bar)	Maximum peak pressure < 5 seconds psi (bar)	Max speed ⁽¹⁾ rpm	Max. torque absorbed at 5511 psi (380 bar) ⁽²⁾ lbf ft (N.m)	Weight		Overhang torque	
						without inlet fitting lbs (kg)	with inlet fitting 2" lbs (kg)	without inlet fitting lbf ft (N.m)	with inlet fitting 2" lbf ft (N.m)
XAi 18 0524085	1.1 (18)	5511 (380)	6092 (420)	2900	84 (114)	22.15 (10.5)	23.14 (10.5)	7.04 (9.54)	7.35 (9.97)
XAi 25 0524095	1.52 (25)	5511 (380)	6092 (420)	2750	117 (159)	22.38 (10.15)	23.36 (10.6)	7.11 (9.64)	7.43 (10.07)
XAi 32 0524105	1.95 (32)	5511 (380)	6092 (420)	2700	150 (204)	26.34 (11.95)	27.67 (12.4)	8.81 (11.95)	9.15 (12.4)
XAi 41 0524115	2.5 (41)	5511 (380)	6092 (420)	2550	192 (261)	26.45 (12)	27.45 (12.45)	8.85 (12)	9.18 (12.45)

(1) At absolute pressure 14.50 psi (1 bar), ISO VG46 fluid at 77°F (25°C).

(2) Maximum torque given with a mechanical efficiency at 95%.

► 4 bolt flange - SAE J744

Pump reference	Displac. Cu.in/rev (cc/rev)	Maximum continuous pressure psi (bar)	Maximum peak pressure < 5 seconds psi (bar)	Max speed ⁽¹⁾ rpm	Max. torque absorbed at 5511 psi (380 bar) ⁽²⁾ lbf ft (N.m)	Weight		Overhang torque	
						without inlet fitting lbs (kg)	with inlet fitting 2" lbs (kg)	without inlet fitting lbf ft (N.m)	with inlet fitting 2" lbf ft (N.m)
XAi 18 0524080	1.1 (18)	5511 (380)	6092 (420)	2900	84 (114)	22.59 (10.25)	23.59 (10.7)	7.18 (9.73)	7.49 (10.16)
XAi 25 0524090	1.52 (25)	5511 (380)	6092 (420)	2750	117 (159)	22.71 (10.3)	23.70 (10.75)	7.19 (9.75)	7.53 (10.21)
XAi 32 0524100	1.95 (32)	5511 (380)	6092 (420)	2700	150 (204)	26.68 (12.1)	27.67 (12.55)	8.92 (12.1)	9.26 (12.55)
XAi 41 0524110	2.5 (41)	5511 (380)	6092 (420)	2550	192 (261)	26.78 (12.15)	27.78 (12.6)	8.96 (12.15)	9.29 (12.6)
XAi 50 0524360 XAi 50 0524365	3.07 (50.3)	5511 (380)	6092 (420)	2450	234 (318)	26.89 (12.2)	27.89 (12.65)	9.45 (12.81)	9.80 (13.28)
XAi 63 0524125	3.84 (63)	5511 (380)	6092 (420)	2300	295 (401)	27.01 (12.25)	28 (12.7)	9.49 (12.86)	9.83 (13.33)

(1) At absolute pressure 14.50 psi (1 bar), ISO VG46 fluid at 77°F (25°C).

(2) Maximum torque given with a mechanical efficiency at 95%.

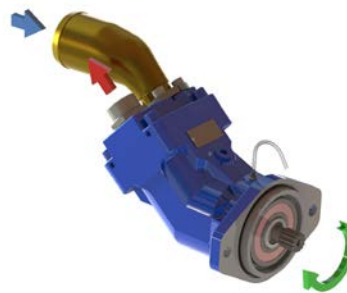
XAi - SAE series

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

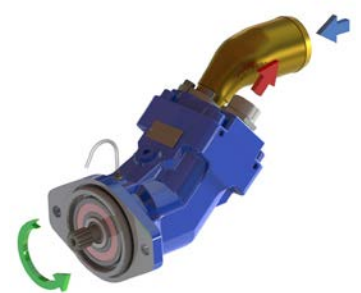
Fit the inlet fitting on required side, depending on the direction of rotation of the PTO, and the pump will set itself accordingly.



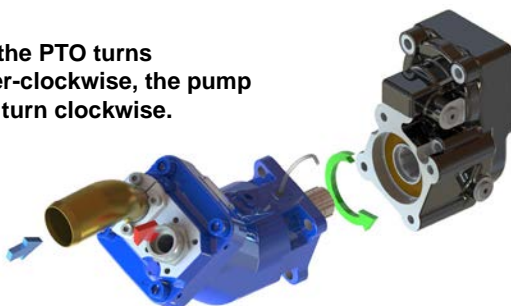
Clockwise (CW)



Counter-clockwise (CCW)

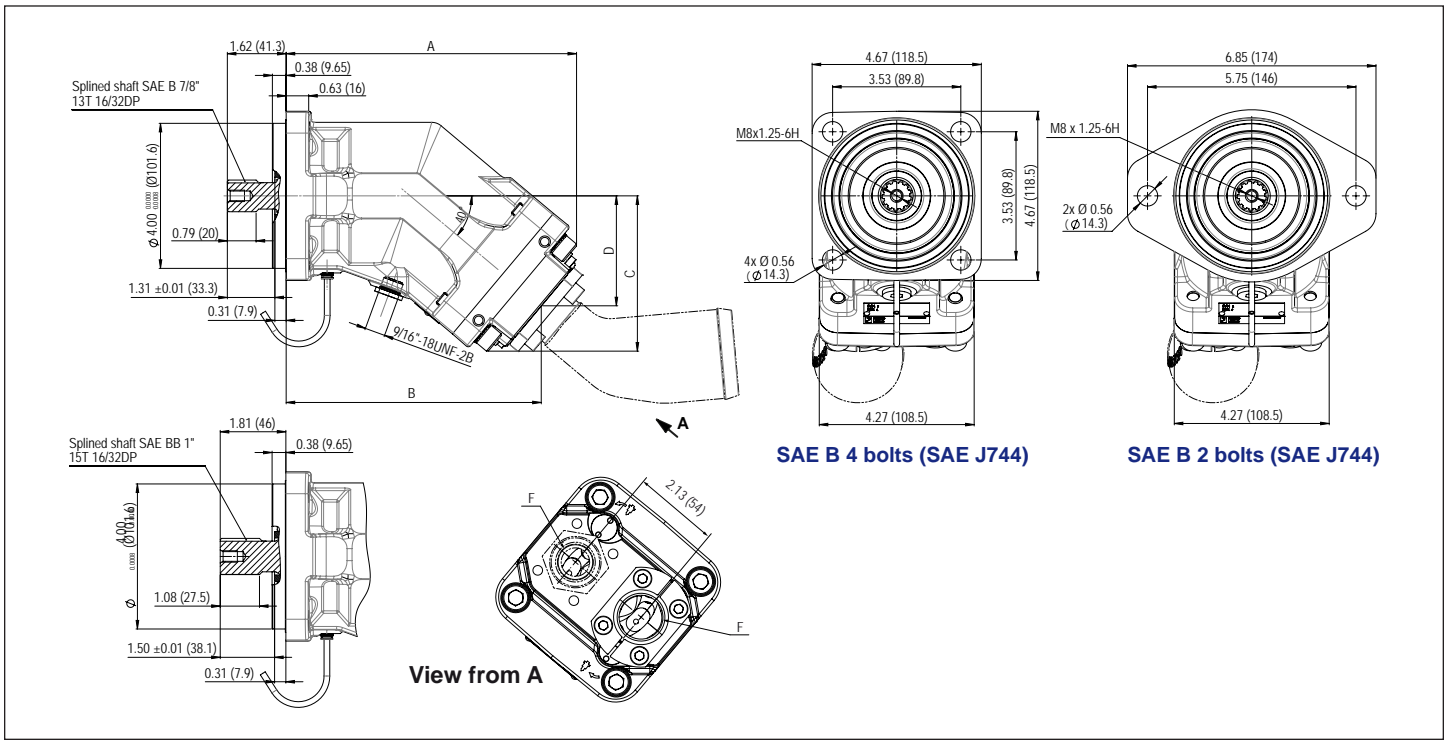


When the PTO turns counter-clockwise, the pump has to turn clockwise.



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





► SAE B - 2 bolt mounting configurations (SAE J744)

Pump type	A	B	C	D	F	Shaft
XAi 18 0524085	7.76 (197.2)	6.79 (172.5)	4.08 (103.7)	2.87 (73)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
XAi 25 0524095	7.76 (197.2)	6.79 (172.5)	4.08 (103.7)	2.87 (73)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
XAi 32 0524105	8 (203.2)	7.03 (178.5)	4.28 (108.7)	3.03 (77)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
XAi 41 0524115	8 (203.2)	7.03 (178.5)	4.28 (108.7)	3.03 (77)	1 1/16"-12 UNF-2B	SAE B 7/8" 13T-16/32DP

► SAE B - 4 bolt mounting configurations (SAE J744)

Pump type	A	B	C	D	F	Shaft
XAi 18 0524080	7.76 (197.2)	6.79 (172.5)	4.08 (103.7)	2.87 (73)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
XAi 25 0524090	7.76 (197.2)	6.79 (172.5)	4.08 (103.7)	2.87 (73)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
XAi 32 0524100	8 (203.2)	7.02 (178.5)	4.28 (108.7)	3.03 (77)	3/4"-16 UNF-2B	SAE B 7/8" 13T-16/32DP
XAi 41 0524110	8 (203.2)	7.02 (178.5)	4.28 (108.7)	3.03 (77)	1 1/16"-12 UNF-2B	SAE B 7/8" 13T-16/32DP
XAi 50 0524360	8.45 (214.7)	7.48 (190)	4.65 (118.2)	3.4 (86.5)	1 1/16"-12 UNF-2B	SAE B 7/8" 13T-16/32DP
XAi 50 0524365	8.45 (214.7)	7.48 (190)	4.65 (118.2)	3.4 (86.5)	1 1/16"-12 UNF-2B	SAE BB 1" 15T-16/32DP
XAi 63 0524125	8.45 (214.7)	7.48 (190)	4.65 (118.2)	3.4 (86.5)	1 1/16"-12 UNF-2B	SAE BB 1" 15T-16/32DP

Dimensions in inches (mm).

Pumps Piston Series W

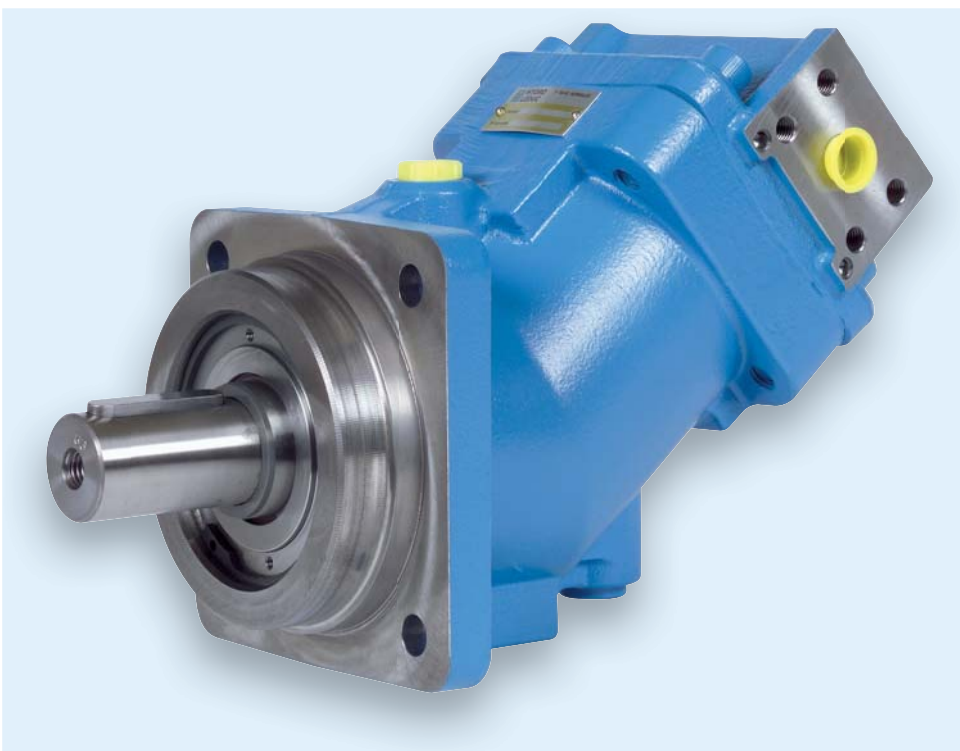


The new W series bent axis piston pumps from LEDUC are of the most modern design, and exist in displacements from 12 to 125cc. These W pumps were developed to satisfy the needs of both the industrial hydraulics market : hydraulic power packs, units for machine tools etc.; and of the mobile market : construction equipment, drilling machines, mobile cranes etc.

The following properties allow such a wide range of applications:

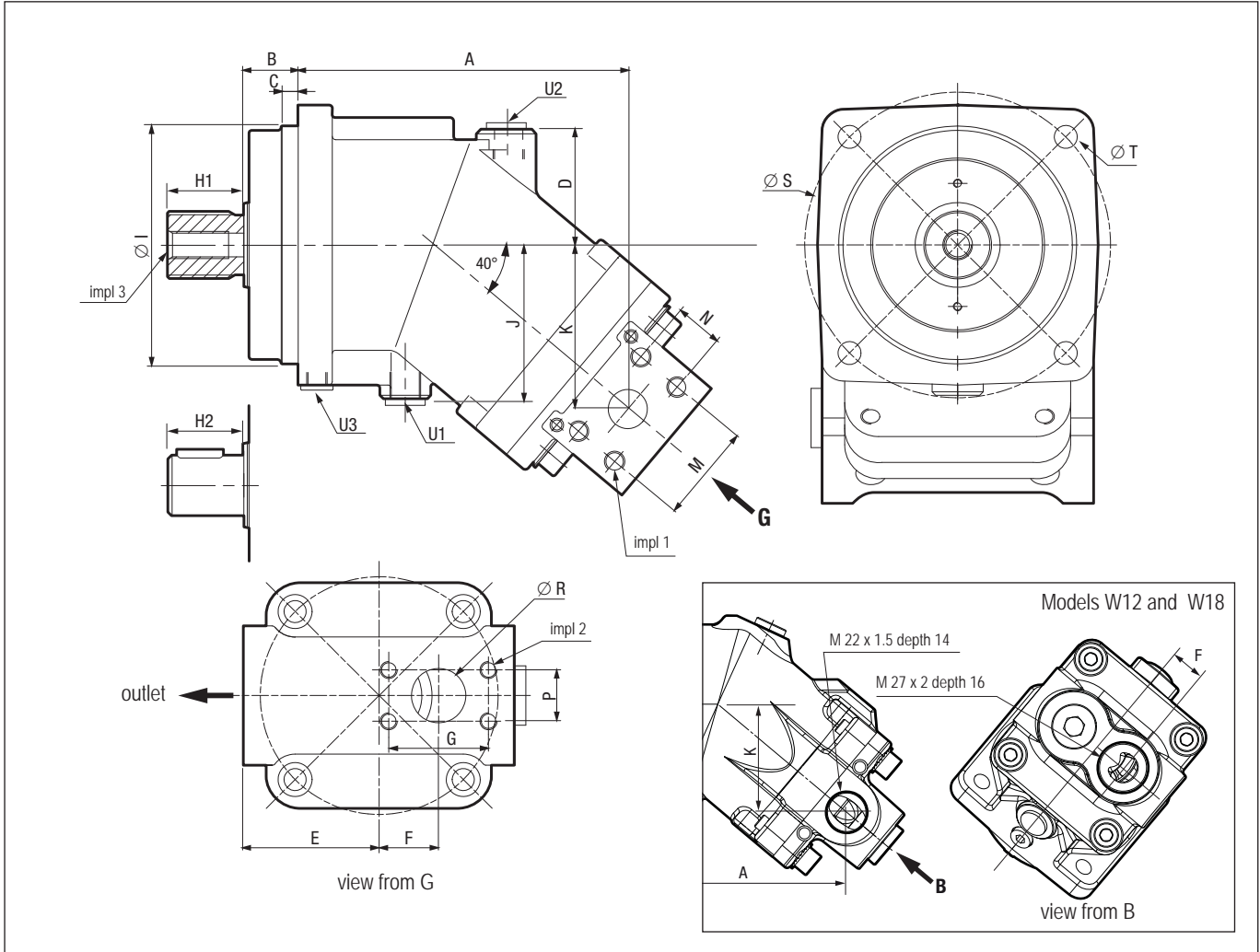
- the W pumps are self-priming and self-suction, which allows installation above the tank, for example, and makes start-up easier;
- capability of conveying fluids of various different types, and with a wide range of viscosities;
- drive speeds are from 150 rpm to over 3,000 rpm (for W12 and W18 models), thus allowing a wide control of flow as a function of pump rotating speed;
- capability of operating at continuous output pressures up to 400 bar (450 bar peak), whilst maintaining high global efficiency and low noise levels;
- W pumps are to standard interfaces : shaft, flange and ports are to Euro-pean (ISO) standards, or North American (SAE) on request.

W pumps are the latest addition to the vast experience and production at HYDRO LEDUC of hydraulic pumps, motors and accumulators, all offering high performance and long service life.



 **HYDRO
LEDUC**

Dimensions W series pumps



Pump model	A	B	C	D	E	F	G	I	J	K	M	N	P	R	S	T	U1	U2	U3
W12	123	20	6	39	44	17	-	80	51.5	58	-	-	-	-	100	9.0	M12x1.5	M12x1.5	M8x1
W18	123	20	6	39	44	17	-	80	51.5	58	-	-	-	-	100	9.0	M12x1.5	M12x1.5	M8x1
W25	144	25	8	56	60	22	47.6	100	69.0	66	40.5	18.2	22.2	19	125	11.0	M16x1.5	M16x1.5	M10x1
W32	150	25	8	56	60	22	47.6	100	69.0	71	40.5	18.2	22.2	19	125	11.0	M16x1.5	M16x1.5	M10x1
W41	150	25	8	56	60	22	47.6	100	69.0	71	40.5	18.2	22.2	19	125	11.0	M16x1.5	M16x1.5	M10x1
W45	168	32	10	59	68	30	52.5	125	84.0	85	50.8	23.8	26.2	25	160	13.5	M18x1.5	M18x1.5	M12x1.5
W50	168	32	10	59	68	30	52.4	125	84.0	85	50.8	23.8	26.2	25	160	13.5	M18x1.5	M18x1.5	M12x1.5
W63	168	32	10	59	68	30	52.4	125	84.0	85	50.8	23.8	26.2	25	160	13.5	M18x1.5	M18x1.5	M12x1.5
W80	194	32	10	68	80	35	58.7	140	90.5	97	57.2	27.8	30.2	32	180	13.5	M18x1.5	M18x1.5	M12x1.5
W90	194	32	10	68	80	35	58.7	140	90.5	97	57.2	27.8	30.2	32	180	13.5	M18x1.5	M18x1.5	M12x1.5
W108	194	32	10	68	80	35	58.7	140	90.5	97	57.2	27.8	30.2	32	180	13.5	M18x1.5	M18x1.5	M12x1.5
W125	207.6	40	10	60	89	35	69.9	160	107.5	100.8	66.7	31.8	35.7	38	200	17.5	M18x1.5	M18x1.5	M14x1.5

Pump model	splined shaft	H1	cylindrical keyed shaft	H2	outlet 6000 PSI	inlet 3000 PSI	Impl 1	Impl 2	Impl 3
W12	W25x1.25x30x18x9g	28	Ø25 (8 x 7 x 32)	40	M22x1.5	M27x2	-	-	M8
W18	W25x1.25x30x18x9g	28	Ø25 (8 x 7 x 32)	40	M22x1.5	M27x2	-	-	M8
W25	W25x1.25x30x18x9g	43	Ø25 (8 x 7 x 40)	50	SAE ½"	SAE ¾"	M8x1.25 prof 15	M10x1.5 prof 17	M8
W32	W30x2x30x14x9g	35	Ø30 (8 x 7 x 40)	50	SAE ½"	SAE ¾"	M8x1.25 prof 15	M10x1.5 prof 17	M10
W41	W30x2x30x14x9g	35	Ø30 (8 x 7 x 40)	50	SAE ½"	SAE ¾"	M8x1.25 prof 15	M10x1.5 prof 17	M10
W45	W30x2x30x14x9g	35	Ø30 (8 x 7 x 50)	60	SAE ¾"	SAE 1"	M10x1.5 prof 17	M10x1.5 prof 17	M12
W50	W35x2x30x16x9g	40	Ø35 (10 x 8 x 50)	60	SAE ¾"	SAE 1"	M10x1.5 prof 17	M10x1.5 prof 17	M12
W63	W35x2x30x16x9g	40	Ø35 (10 x 8 x 50)	60	SAE ¾"	SAE 1"	M10x1.5 prof 17	M10x1.5 prof 17	M12
W80	W40x2x30x18x9g	50	Ø40 (12 x 8 x 56)	70	SAE 1"	SAE 1¼"	M12x1.75 prof 20	M10x1.5 prof 17	M16
W90	W40x2x30x18x9g	50	Ø40 (12 x 8 x 56)	70	SAE 1"	SAE 1¼"	M12x1.75 prof 20	M10x1.5 prof 17	M16
W108	W40x2x30x18x9g	50	Ø40 (12 x 8 x 56)	70	SAE 1"	SAE 1¼"	M12x1.75 prof 20	M10x1.5 prof 17	M16
W125	W45x2x30x21x9g	50	Ø45 (14 x 9 x 63)	80	SAE 1"	SAE 1½"	M12x1.75 prof 20	M12x1.75 prof 20	M16

■ Bent axis piston pumps for mobile and industrial applications

Working pressure : 450 bar.
12 models from 12 to 125 cc/rev.
Splined or keyed shaft.

Minimum size envelope - High rotating speeds - High output pressure

Pump model	max continuous speed (rpm)	max pressure continuous/peak (bar)	torque at 350 bar (m.N)	max flow (l/min)	pumps mini/max temperature * (°C)	weight (kg)
W12	3150	400 / 450	67	37.80	-25 / 110	5.5
W18	3150	400 / 450	98	56.70	-25 / 110	5.5
W25	2500	400 / 450	140	62.50	-25 / 110	11.5
W32	2500	400 / 450	175	80.00	-25 / 110	11.5
W41	2250	400 / 450	227	92.25	-25 / 110	11.5
W45	2300	400 / 450	252	103.50	-25 / 110	18
W50	2300	400 / 450	280	115.00	-25 / 110	18
W63	2250	400 / 450	350	145.00	-25 / 110	18
W80	2300	400 / 450	445	184.00	-25 / 110	23
W90	2100	400 / 450	497	189.00	-25 / 110	23
W108	1900	400 / 450	595	205.00	-25 / 110	23
W125	1950	400 / 450	695	244.00	-25 / 110	30

* Available with special low temperature seals. For -40°C, please, contact us.

SAMER services

- Design of systems with pumps and motors in closed and open circuits
- Sale of pumps and motors in closed and open circuits
- Installation and testing of pumps and motors in closed and open circuits
- Repair of pumps and motors in closed circuit and open circuit

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