

NEW

3TPW

Cast Iron Gear Pump



titan

POWER



 **waltvoil**
FLUID POWER E|MOTION

A member of



3TPW

Cast Iron Gear Pump



Walvoil presents the new range of 3TPW Cast Iron Pumps.

These pumps are particularly suitable for all applications where traditional aluminum pumps are used at the limit of their performance; eg. for installation on mobile equipment intended for heavy duty operating cycles, where pressures or mechanical stresses are typically higher.

Its two-piece construction allows an increase in pressures with P1 up to 300 bar pressure on a wide displacement range of 23.9 to 79.8 cm³/rev. The new 3TPW completes the cast iron pump range. Thanks its modular construction and the assembly with 2SPW pumps and with a wide range of integrated valves, this pump is suitable for mobile applications in Agricultural and Construction/Earth Moving sectors (Skid Steer Loaders, Telehandlers e Backhoe Loaders).

- ☐ Long life expectancy
- ☐ High efficiencies
- ☐ High pressure limits
- ☐ Reduced number of components
- ☐ Reduced overall dimension

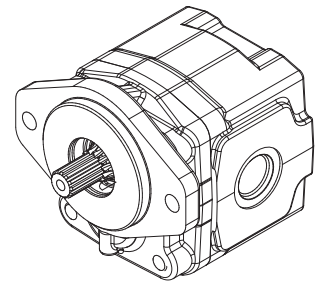
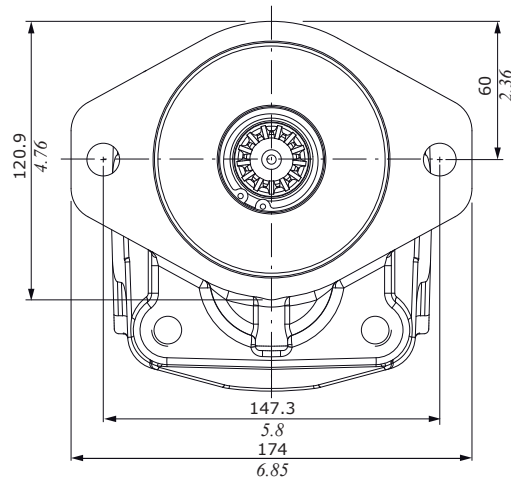
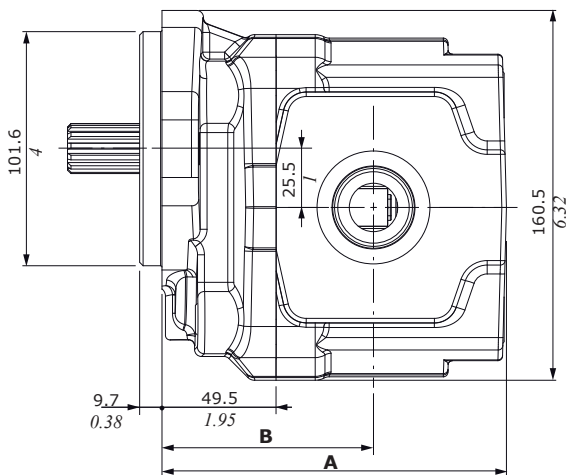
GENERAL WORKING CONDITIONS		
Displacement		from 23.9 to 79.8 cm ³ /rev from 1.46 to 4.87 in ³ /rev
Max continuous pressure	up to	300 bar - 4350 psi
Fluid		hydraulic mineral oil-based
Fluid temperature range	with NBR (buna N) seals	from -20 to +80 °C from -4 to +176 °F
	with FPM (viton) seals	from -15 to +100 °C from -5 to +212 °F
Viscosity	Recommended	from 15 to 92 mm ² /s (cSt)
	Permitted for starting	2000 mm ² /s (cSt)
Max level of contamination	Recommended for operating pressure > 150 bar (2150 psi)	20/18/15 ISO 4406 class 9 (NAS 1638)
	Recommended for operating pressure < 150 bar (2150 psi)	21/18/15 ISO 4406 class 10 (NAS 1638)

Technical data

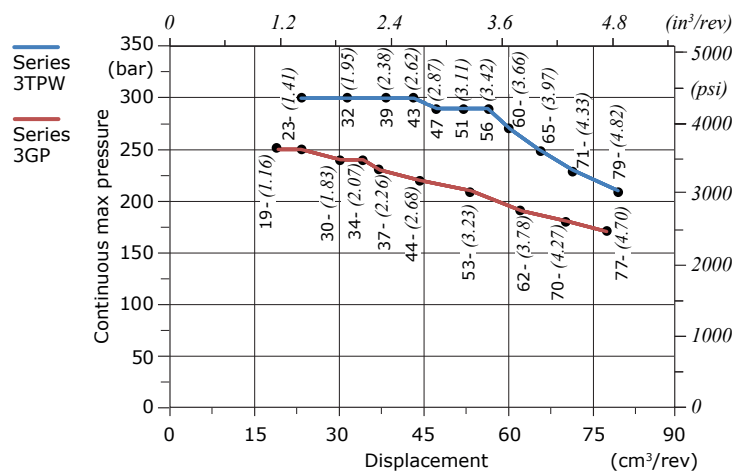
GROUP 3TPW	Displacement		Max continuous pressure		Max intermittent pressure		Max peak pressure		Max rotation speed
	cm ³ /rev	in ³ /rev	bar	psi	bar	psi	bar	psi	
3TPW 230	23.9	1.46	300	4,350	320	4,640	330	4,785	3000
3TPW 320	32.2	1.96	300	4,350	320	4,640	330	4,785	3000
3TPW 390	39.7	2.42	300	4,350	320	4,640	330	4,785	3000
3TPW 430	43.8	2.67	300	4,350	320	4,640	330	4,785	3000
3TPW 470	47.9	2.92	290	4,205	310	4,495	320	4,640	3000
3TPW 520	52.0	3.18	290	4,205	310	4,495	320	4,640	2800
3TPW 560	56.8	3.47	290	4,205	310	4,495	320	4,640	2500
3TPW 600	60.9	3.72	270	3,915	290	4,205	300	4,350	2500
3TPW 650	65-0	3.97	250	3,625	270	3,915	280	4,060	2500
3TPW 710	71.6	4.37	230	3,335	250	3,625	260	3,770	2500
3TPW 790	79.8	4.87	210	3,045	230	3,335	240	3,480	2500

NEW

Dimensions



Series 3GP - 3TPW comparison
Continuous max. pressure vs. displacement

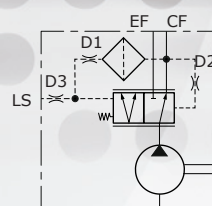
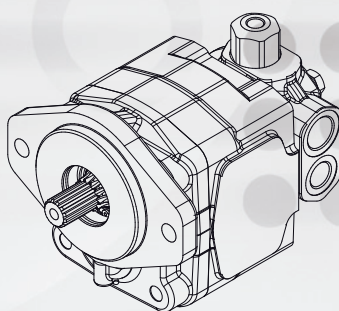
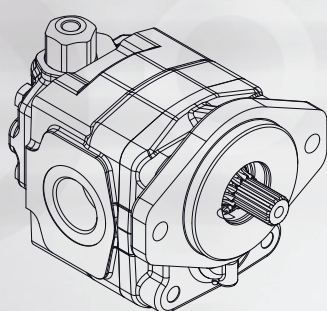


GROUP 3TPW	Ports Threading											
	BSP		UN-UNF		EUROPEAN				SPLIT			
	IN	OUT	IN	OUT	Ø IN		Ø OUT		Ø IN		Ø OUT	
					mm	in	mm	in	mm	in	mm	in
3TPW 230	G1	G3/4	SAE16	SAE12	27	1.06	19	0.75	25	0.98	19	0.75
3TPW 320	G1 1/4	G1	SAE20	SAE16	27	1.06	19	0.75	32	1.25	19	0.75
3TPW 390	G1 1/4	G1	SAE20	SAE16	27	1.06	19	0.75	32	1.25	19	0.75
3TPW 430	G1 1/4	G1	SAE20	SAE16	27	1.06	19	0.75	32	1.25	25	0.98
3TPW 470	G1 1/4	G1	SAE20	SAE16	27	1.06	19	0.75	39.3	1.55	25	0.98
3TPW 520	G1 1/4	G1	SAE20	SAE16	27	1.06	19	0.75	39.3	1.55	25	0.98
3TPW 560	G1 1/4	G1	SAE20	SAE16	27	1.06	19	0.75	39.3	1.55	32	1.25
3TPW 600	G1 1/4	G1	SAE20	SAE16	27	1.06	19	0.75	39.3	1.55	32	1.25
3TPW 650	G1 1/4	G1	SAE20	SAE16	33	1.30	19	0.75	39.3	1.55	32	1.25
3TPW 710	G1 1/4	G1	SAE20	SAE16	33	1.30	27	1.06	39.3	1.55	32	1.25
3TPW 790	G1 1/4	G1	SAE20	SAE16	33	1.30	27	1.06	39.3	1.55	32	1.25

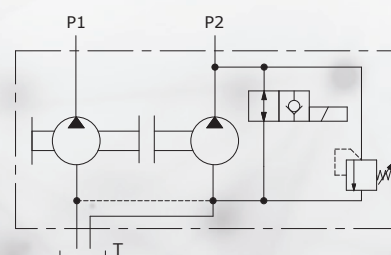
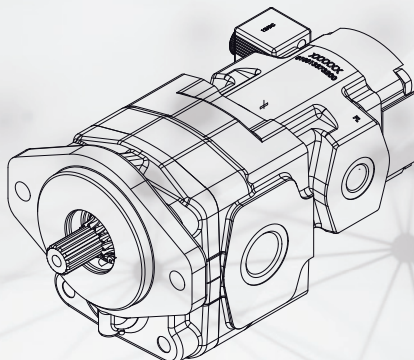
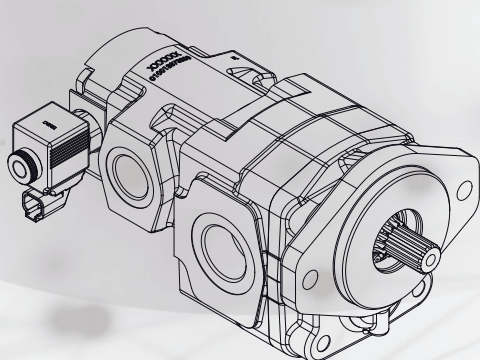
GROUP 3TPW	A		B	
	mm	in	mm	in
3TPW 230	125.5	4.94	76.5	3.01
3TPW 320	131.5	5.18	81.5	3.21
3TPW 390	137	5.39	85.5	3.37
3TPW 430	140	5.51	88	3.46
3TPW 470	143	5.63	90.5	3.56
3TPW 520	146	5.75	90.5	3.56
3TPW 560	149.5	5.88	92	3.62
3TPW 600	152.5	6	93	3.66
3TPW 650	155.5	6.12	95	3.74
3TPW 710	160.5	6.32	95.5	3.76
3TPW 790	166.5	6.55	101.5	4

Configurations

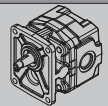
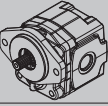
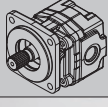
Configuration with priority valve built in the back cover of the pump



Tandem configuration



Combinations available with cast iron flanges

GROUP 3TPW		Shaft type					
		S13 SAEB 13T splined	S13N SAEB 13T splined	S15 SAEB-B 15T splined	S15L SAEB-B 15T splined	S14L SAEC 14T splined	10 Tapered 1:8
EUR							◇
SAEB		◇	◇	◇			
SAEC					◇	◇	

◇ = STANDARD COMBINATION

walvoil
FLUID POWER EMOTION

walvoil

hydro control

Galtech
HYDRAULICS

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