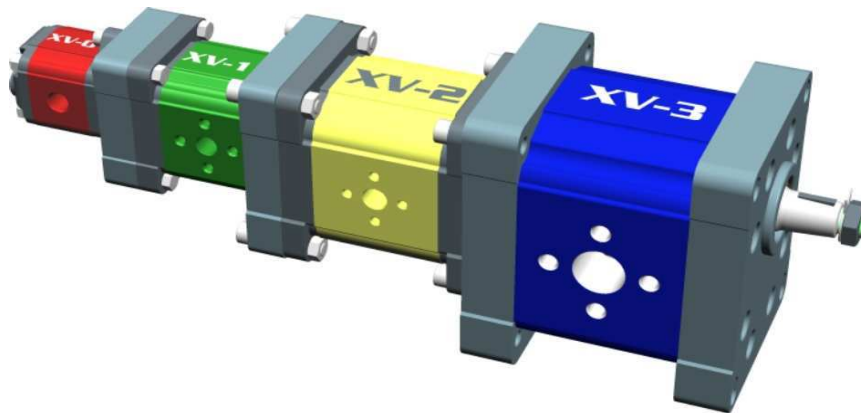


VIVOIL



ENGLISH

Unidirectional Pumps



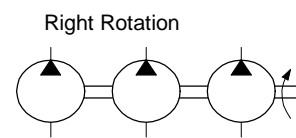
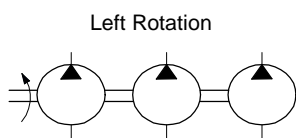
XV-0P	Unidirectional Pump	Left Rotation	Right Rotation
XV-1P			
XV-2P			
XV-3P			

XV-0U	Unidirectional Motor	Left Rotation	Right Rotation
XV-1U			
XV-2U			
XV-3U			

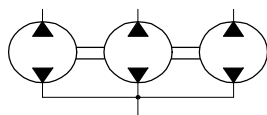
XV-0R	Reversible Pump	External drainage	Internal drainage
XV-1R			
XV-2R			
XV-3R			

XV-0M	Reversible Motor	External drainage	Internal drainage
XV-1M			
XV-2M			
XV-3M			

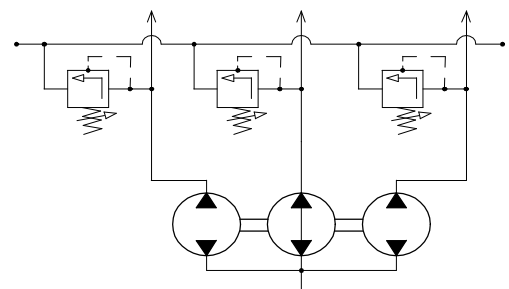
XV-0T	XV-1T	XV-2T	XV-3T	Primary element of multiple pump	
XV-0I	XV-1I	XV-2I	XV-3I		Intermediate element of multiple pump
XV-0F	XV-1F	XV-2F	XV-3F		Final element of multiple pump



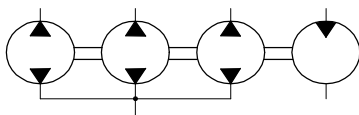
KV-DF	Flow divider
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KV-DFV	Flow divided with valves
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KV-DF+M	Flow divider with motor
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The descriptions and dimensions stated herein are not binding. Vivoil Oleodinamica Vivolo s.r.l reserves the right to make changes as it deems necessary, at any time and without notice.

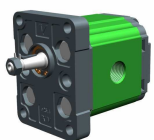
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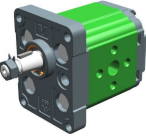


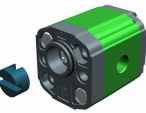
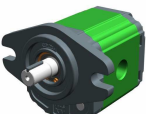
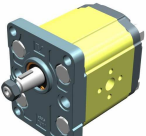
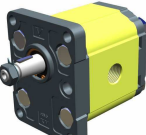
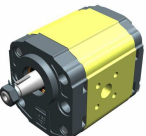
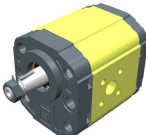
XV-0P

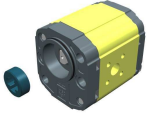
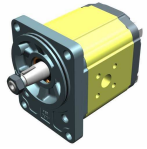
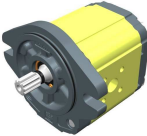
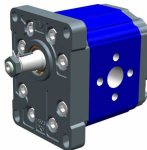
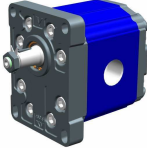
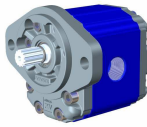
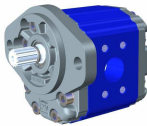
XP001
STANDARD PUMP
ø22 FLANGE - PARALLEL SHAFT
30

XP012
BH TYPE PUMP
ø22 BODY-SHAPED FLANGE - MILLED SHANK
32

XP017
HY TYPE PUMP
ø22 BODY-SHAPED FLANGE - MILLED SHANK
34
XV-1P

XP101
STANDARD EUROPEAN PUMP
ø25.4 FLANGE - TAPER SHAFT
36

XP105
STANDARD EUROPEAN PUMP
ø25.4 FLANGE - TAPER SHAFT
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<hr/>			
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	XP213	"HY" TYPE PUMP ø50 BODY-SHAPED FLANGE - TAPER SHAFT	56
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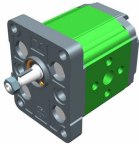
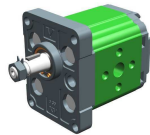



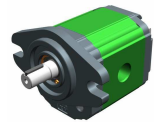


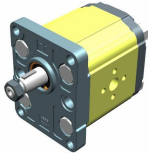
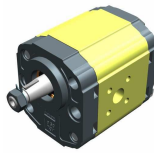
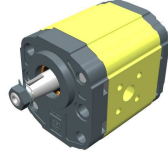
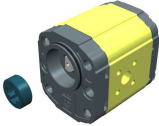
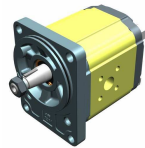
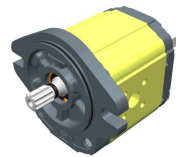
UNIDIRECTIONAL PUMPS

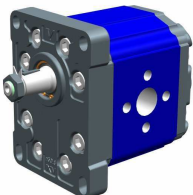

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References: XP-001 Standard Ø22 FLANGE	References: XP-012 Ø22 BH FLANGE	References: XP-017 Ø22 HY FLANGE

XV-1P		
		
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References : XP-140 Ø32 HY FLANGE	References: XP-161 Standard German Ø32 BH	References: XP-168 Ø50.8 SAE AA FLANGE

XV-2P		
		
References : XP-201 Ø36.5 FLANGE	References : XP-210 Ø50 BH FLANGE	References: XP-213 Ø50 HY FLANGE
		
References: XP-216 Standard German Ø52 BH FLANGE	References : XP-217 Standard German Ø80 FLANGE	References : XP-219 Ø82.5 SAE A FLANGE

XV-3P	
	
References : XP-301 BASE Ø50,8 - Standard	References : XP-331 BASE Ø101,6 SAE B

Vivoil Oleodinamica Vivoil s.r.l. presents a new series of gear pumps called **XV-P**. The quality of the product has been improved on by exploiting new and innovative solutions, both technical and constructive, for which the company has been **awarded 3 patents**.

The pumps are divided into four groups:

The main features of the XV-0P are the following:

Displacements from 0.16 cm³ / revolution to 2.28 cm³/revolution.

Maximum pressures up to **280 bar**.

Versions w/ flanges: Ø22 – Standard;
Ø22 BH – Sagomata;
Ø22 HY – Sagomata.

Rotation speeds up to **9000 rpm**.

Configurations with inlet and outlet in the body, flange and cover.

Available shafts: Cylindrical with Woodruff key;
Milled shank;
Tapered 1:8 Woodruff key.

The main features of the XV-1P are the following:

Displacements from 0.91 cm³ / revolution to 9.88 cm³/ revolution.

Maximum pressures up to **300 bar**.

Versions w/ flanges: Ø25.4 – Standard European;
Ø30 – Standard;
Ø32 BH – Body-Shaped;
Ø32 HY – Body-Shaped;
Ø32 BH – Standard German – Body-Shaped;
Ø50.8 – SAE AA

Rotation speeds up to **6000 rpm**

Configurations with inlet and outlet in the body, flange and cover.

Available shafts: Tapered 1:8 Woodruff key;
Parallel with key;
Milled shank;
Splined.

The main features of the XV-2P are the following:

Displacements from 4.2 cm³ / revolution a 39.6 cm³/ revolution.

Maximum pressures up to **300 bar**.

Versions w/ flanges: Ø36,5 – Standard Europea;
Ø50 BH – Body-Shaped;
Ø50 HY – Body-Shaped;
Ø52 BH - Standard German – Body-Shaped;
Ø80 – Standard German;
Ø82,5 – SAE A.

Rotation speeds up to **3500 rpm**

Configurations with inlet and outlet in the body, flange and cover.

Available shafts: Tapered 1:8 Woodruff key;
Parallel with key;
Milled shank;
Splined.

The main features of the XV-3P are the following:

Displacements from 14.89 cm³ / revolution to 86.87cm³/ revolution.

Maximum pressures up to **320 bar**.

Versions w/ flanges: Ø50,8 – Standard European;

Rotation speeds up to **3000 rpm**.

Available shafts: Tapered 1:8 Woodruff key;
Parallel with key;
Splined.

Summary: Displacements - Pressures - Speeds

	Type	Displacement	Max. Pressure	Min speed	Max speed
XV-0P	XV-0P/0.17	0.16 cm ³ /rev	260 bar	700 rpm	9000 rpm
	XV-0P/0.25	0.24 cm ³ /rev	260 bar	700 rpm	9000 rpm
	XV-0P/0.45	0.45 cm ³ /rev	280 bar	700 rpm	9000 rpm
	XV-0P/0.57	0.56 cm ³ /rev	280 bar	700 rpm	9000 rpm
	XV-0P/0.76	0.75 cm ³ /rev	280 bar	700 rpm	9000 rpm
	XV-0P/0.98	0.92 cm ³ /rev	280 bar	700 rpm	6000 rpm
	XV-0P/1.27	1.26 cm ³ /rev	280 bar	700 rpm	6000 rpm
	XV-0P/1.52	1.48 cm ³ /rev	280 bar	700 rpm	6000 rpm
	XV-0P/2.30	2.28 cm ³ /rev	210 bar	700 rpm	5000 rpm
XV-1P	XV-1P/0.9	0.91 cm ³ /rev	280 bar	700 rpm	6000 rpm
	XV-1P/1.2	1.17 cm ³ /rev	290 bar	700 rpm	6000 rpm
	XV-1P/1.7	1.56 cm ³ /rev	290 bar	700 rpm	6000 rpm
	XV-1P/2.2	2.08 cm ³ /rev	290 bar	700 rpm	6000 rpm
	XV-1P/2.6	2.60 cm ³ /rev	300 bar	700 rpm	6000 rpm
	XV-1P/3.2	3.12 cm ³ /rev	300 bar	700 rpm	6000 rpm
	XV-1P/3.8	3.64 cm ³ /rev	300 bar	700 rpm	6000 rpm
	XV-1P/4.3	4.16 cm ³ /rev	300 bar	700 rpm	6000 rpm
	XV-1P/4.9	4.94 cm ³ /rev	300 bar	700 rpm	6000 rpm
	XV-1P/5.9	5.85 cm ³ /rev	300 bar	700 rpm	5000 rpm
	XV-1P/6.5	6.50 cm ³ /rev	300 bar	700 rpm	5000 rpm
XV-2P	XV-1P/7.8	7.54 cm ³ /rev	260 bar	700 rpm	5000 rpm
	XV-1P/9.8	9.88 cm ³ /rev	230 bar	700 rpm	4000 rpm
	XV-2P/4	4.2 cm ³ /rev	300 bar	700 rpm	3500 rpm
	XV-2P/6	6.0 cm ³ /rev	300 bar	700 rpm	3500 rpm
	XV-2P/9	8.4 cm ³ /rev	300 bar	700 rpm	3500 rpm
	XV-2P/11	10.8 cm ³ /rev	300 bar	700 rpm	3500 rpm
	XV-2P/14	14.4 cm ³ /rev	290 bar	700 rpm	3500 rpm
	XV-2P/17	16.8 cm ³ /rev	270 bar	700 rpm	3500 rpm
	XV-2P/19	19.2 cm ³ /rev	250 bar	700 rpm	3000 rpm
	XV-2P/22	22.8 cm ³ /rev	240 bar	700 rpm	3000 rpm
	XV-2P/26	26.2 cm ³ /rev	210 bar	700 rpm	3000 rpm
XV-3P	XV-2P/30	30.0 cm ³ /rev	200 bar	700 rpm	2500 rpm
	XV-2P/34	34.2 cm ³ /rev	190 bar	700 rpm	2500 rpm
	XV-2P/40	39.6 cm ³ /rev	180 bar	700 rpm	2000 rpm
	XV-3P/15	14.89 cm ³ /rev	320 bar	700 rpm	3000 rpm
	XV-3P/18	17.37 cm ³ /rev	320 bar	700 rpm	3000 rpm
	XV-3P/21	21.10 cm ³ /rev	300 bar	700 rpm	3000 rpm
	XV-3P/27	26.97 cm ³ /rev	270 bar	700 rpm	3000 rpm
	XV-3P/32	32.27 cm ³ /rev	270 bar	700 rpm	3000 rpm
	XV-3P/38	38.47 cm ³ /rev	270 bar	700 rpm	2800 rpm
	XV-3P/43	43.44 cm ³ /rev	250 bar	700 rpm	2800 rpm
	XV-3P/47	47.16 cm ³ /rev	250 bar	700 rpm	2800 rpm
	XV-3P/51	50.88 cm ³ /rev	250 bar	700 rpm	2800 rpm
	XV-3P/54	54.60 cm ³ /rev	250 bar	700 rpm	2300 rpm
	XV-3P/61	60.81 cm ³ /rev	220 bar	700 rpm	2300 rpm
XV-3P/64	64.53 cm ³ /rev	220 bar	700 rpm	2300 rpm	
XV-3P/70	70.74 cm ³ /rev	210 bar	700 rpm	2300 rpm	
XV-3P/74	74.46 cm ³ /rev	190 bar	700 rpm	2300 rpm	
XV-3P/90	86.87 cm ³ /rev	160 bar	700 rpm	2300 rpm	

General technical data

Type of fluid to be used	Mineral-based hydraulic oil HLP HV (D IN 51524)
Minimum operating viscosity	10 mm ² /s
Maximum operating viscosity	100 mm ² /s
Maximum admissible viscosity at start-up	1500 mm ² /s
Recommended viscosity	20 mm ² /s - 100 mm ² /s
Ambient temperature	-20 °C - 60°C
Fluid operating temperature	-15°C - 80°C
Recommended fluid operating temperature	30°C - 50° C
For temperatures above 120°C	Request FKM seals (V iton)
Max. inlet fluid suction pressure (IN)	0.02-0.08 bars
Max. inlet fluid pressure (IN)	0.3 - 0.5 bars (for higher pressures consult the manufacturer)
Inlet fluid filtering (IN)	30 - 60 Microns
Outlet fluid filtering (OUT)	10 - 25 Microns
Max. inlet fluid speed (IN)	0.5 - 1.5 m/s
Max. outlet fluid speed (OUT)	3.0 - 5.5m/s
Use of water-glycol (HF-C)	max n. of revolutions 1100 rpm; max pressure 170 bars

Flow rate tables

TYPE	cm ³ /rev	Flow rate /min	rpm															Flow rate /min	
			700	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	7000	8000	9000		
XV 0P/0.17	0,16	Flow rate /min	0,106	0,152	0,228	0,304	0,380	0,456	0,532	0,608	0,684	0,760	0,836	0,912	1,064	1,216	1,368	Flow rate /min	
XV 0P/0.25	0,24		0,160	0,228	0,342	0,456	0,570	0,684	0,798	0,912	1,026	1,140	1,254	1,368	1,596	1,824	2,052		
XV 0P/0.45	0,45		0,299	0,428	0,641	0,855	1,069	1,283	1,496	1,710	1,924	2,138	2,351	2,565	2,993	3,420	3,848		
XV 0P/0.57	0,56		0,372	0,532	0,798	1,064	1,330	1,596	1,862	2,128	2,394	2,660	2,926	3,192	3,724	4,256	4,788		
XV 0P/0.76	0,75		0,499	0,713	1,069	1,425	1,781	2,138	2,494	2,850	3,206	3,563	3,919	4,275	4,988	5,700	6,413		
XV 0P/0.98	0,92		0,612	0,874	1,311	1,748	2,185	2,622	3,059	3,496	3,933	4,370	4,807	5,244					
XV 0P/1.27	1,26		0,838	1,197	1,796	2,394	2,993	3,591	4,190	4,788	5,387	5,985	6,584	7,182					
XV 0P/1.52	1,48		0,984	1,406	2,109	2,812	3,515	4,218	4,921	5,624	6,327	7,030	7,733	8,436					
XV 0P/2.30	2,28		1,516	2,166	3,249	4,332	5,415	6,498	7,581	8,664	9,747	10,830							

TYPE	cm ³ /rev	Flow rate /min	rpm												Flow rate /min
			700	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	
XV 1P/0.9	0,91	Flow rate /min	0,630	0,900	1,350	1,800	2,250	2,700	3,150	3,600	4,050	4,500	4,950	5,400	Flow rate /min
XV 1P/1.2	1,17		0,840	1,200	1,800	2,400	3,000	3,600	4,200	4,800	5,400	6,000	6,600	7,200	
XV 1P/1.7	1,56		1,190	1,700	2,550	3,400	4,250	5,100	5,950	6,800	7,650	8,500	9,350	10,200	
XV 1P/2.2	2,08		1,540	2,200	3,300	4,400	5,500	6,600	7,700	8,800	9,900	11,000	12,100	13,200	
XV 1P/2.6	2,6		1,820	2,600	3,900	5,200	6,500	7,800	9,100	10,400	11,700	13,000	14,300	15,600	
XV 1P/3.2	3,12		2,240	3,200	4,800	6,400	8,000	9,600	11,200	12,800	14,400	16,000	17,600	19,200	
XV 1P/3.8	3,64		2,660	3,800	5,700	7,600	9,500	11,400	13,300	15,200	17,100	19,000	20,900	22,800	
XV 1P/4.3	4,16		3,010	4,300	6,450	8,600	10,750	12,900	15,050	17,200	19,350	21,500	23,650	25,800	
XV 1P/4.9	4,94		3,430	4,900	7,350	9,800	12,250	14,700	17,150	19,600	22,050	24,500	26,950	29,400	
XV 1P/5.9	5,85		4,130	5,900	8,850	11,800	14,750	17,700	20,650	23,600	26,550	29,500			
XV 1P/6.5	6,5		4,550	6,500	9,750	13,000	16,250	19,500	22,750	26,000	29,250	32,500			
XV 1P/7.8	7,54		5,460	7,800	11,700	15,600	19,500	23,400	27,300	31,200	35,100	39,000			
XV 1P/9.8	9,88		6,860	9,800	14,700	19,600	24,500	29,400	34,300	39,200					