

Part number:

073-10008

HYDROMA

HYDRAULICKÉ SYSTÉMY

**HIDROMA
SYSTEMS**


UKŁADY HYDRAULICZNE







HYDROMA

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

INTRODUCTION **XV-0M** **XV-1M** **XV-2M** **XV-3M**

XV-0M		
		
References: XM-001	References: XM-012	References: XM-017
Standard Ø22 FLANGE	Ø22 BH FLANGE	Ø22 HY FLANGE

XV-1M		
		
References: XM-101	References: XM-113	References: XM-119
Ø25.4 FLANGE	Ø30 FLANGE	Ø32 BH FLANGE
		
References : XM-140	References: XM-161	References: XM-168
Ø32 HY FLANGE	Standard German Ø32 BH	Ø50.8 SAE AA FLANGE

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

XV-3M	
	
References : XM-301	References : XM-331
FLANGE Ø50,8 - Standard	FLANGE Ø101,6 SAE B

Vivoil Oleodinamica Vivolo s.r.l. presents a new series of gear reversible motors called XV-M. 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 motors are divided into four groups:

XV-0M **XV-1M** **XV-2M** **XV-3M**

INTRODUCTION XV-0M XV-1M XV-2M XV-3M

Summary: Displacements - Torque - Power - Pressures - Speeds

	TYPE	Displacement	Torque	Power	Max Inlet Pressure	Max Drain Pressure	Min Starting Pressure	Min Speed	Max Speed
			1000 rev/min	100 bar					
XV-0M	XV-0M/0.45	0.45 cm ³ /rev	0,61 Nm	0,06 KW	280 bar	1 bar	25 bar	700 rev/min	9000 rev/min
	XV-0M/0.57	0.56 cm ³ /rev	0,76 Nm	0,08 KW	280 bar	1 bar	25 bar	700 rev/min	9000 rev/min
	XV-0M/0.76	0.75 cm ³ /rev	1,01 Nm	0,11 KW	280 bar	1 bar	25 bar	700 rev/min	9000 rev/min
	XV-0M/0.98	0.92 cm ³ /rev	1,24 Nm	0,13 KW	280 bar	1 bar	20 bar	700 rev/min	6000 rev/min
	XV-0M/1.27	1.26 cm ³ /rev	1,70 Nm	0,18 KW	280 bar	1 bar	15 bar	700 rev/min	6000 rev/min
	XV-0M/1.52	1.48 cm ³ /rev	2,00 Nm	0,21 KW	280 bar	1 bar	10 bar	700 rev/min	6000 rev/min
	XV-0M/2.30	2.28 cm ³ /rev	3,08 Nm	0,32 KW	210 bar	1 bar	10 bar	700 rev/min	5000 rev/min
XV-1M	XV-1M/0.9	0.91 cm ³ /rev	1,23 Nm	0,13 KW	280 bar	6 bar	30 bar	700 rev/min	6000 rev/min
	XV-1M/1.2	1.17 cm ³ /rev	1,58 Nm	0,17 KW	290 bar	6 bar	30 bar	700 rev/min	6000 rev/min
	XV-1M/1.7	1.56 cm ³ /rev	2,11 Nm	0,22 KW	290 bar	6 bar	30 bar	700 rev/min	6000 rev/min
	XV-1M/2.2	2.08 cm ³ /rev	2,81 Nm	0,29 KW	290 bar	6 bar	25 bar	700 rev/min	6000 rev/min
	XV-1M/2.6	2.60 cm ³ /rev	3,52 Nm	0,37 KW	300 bar	6 bar	20 bar	700 rev/min	6000 rev/min
	XV-1M/3.2	3.12 cm ³ /rev	4,22 Nm	0,44 KW	300 bar	6 bar	15 bar	700 rev/min	6000 rev/min
	XV-1M/3.8	3.64 cm ³ /rev	4,92 Nm	0,52 KW	300 bar	6 bar	15 bar	700 rev/min	6000 rev/min
	XV-1M/4.3	4.16 cm ³ /rev	5,63 Nm	0,59 KW	300 bar	6 bar	15 bar	700 rev/min	6000 rev/min
	XV-1M/4.9	4.94 cm ³ /rev	6,68 Nm	0,70 KW	300 bar	6 bar	15 bar	700 rev/min	6000 rev/min
	XV-1M/5.9	5.85 cm ³ /rev	7,91 Nm	0,83 KW	300 bar	6 bar	15 bar	700 rev/min	5000 rev/min
	XV-1M/6.5	6.50 cm ³ /rev	8,79 Nm	0,92 KW	300 bar	6 bar	10 bar	700 rev/min	5000 rev/min
	XV-1M/7.8	7.54 cm ³ /rev	10,20 Nm	1,07 KW	260 bar	6 bar	10 bar	700 rev/min	5000 rev/min
	XV-1M/9.8	9.88 cm ³ /rev	13,37 Nm	1,40 KW	230 bar	6 bar	10 bar	700 rev/min	4000 rev/min
XV-2M	XV-2M/4	4.2 cm ³ /rev	5,68 Nm	0,60 KW	300 bar	6 bar	30 bar	700 rev/min	3500 rev/min
	XV-2M/6	6.0 cm ³ /rev	8,12 Nm	0,85 KW	300 bar	6 bar	25 bar	700 rev/min	3500 rev/min
	XV-2M/9	8.4 cm ³ /rev	11,36 Nm	1,19 KW	300 bar	6 bar	20 bar	700 rev/min	3500 rev/min
	XV-2M/11	10.8 cm ³ /rev	14,61 Nm	1,53 KW	300 bar	6 bar	20 bar	700 rev/min	3500 rev/min
	XV-2M/14	14.4 cm ³ /rev	19,48 Nm	2,04 KW	290 bar	6 bar	15 bar	700 rev/min	3500 rev/min
	XV-2M/17	16.8 cm ³ /rev	22,73 Nm	2,38 KW	270 bar	6 bar	15 bar	700 rev/min	3500 rev/min
	XV-2M/19	19.2 cm ³ /rev	25,97 Nm	2,72 KW	250 bar	6 bar	15 bar	700 rev/min	3000 rev/min
	XV-2M/22	22.8 cm ³ /rev	30,84 Nm	3,23 KW	240 bar	6 bar	15 bar	700 rev/min	3000 rev/min
	XV-2M/26	26.2 cm ³ /rev	35,44 Nm	3,71 KW	210 bar	6 bar	15 bar	700 rev/min	3000 rev/min
	XV-2M/30	30.0 cm ³ /rev	40,58 Nm	4,25 KW	200 bar	6 bar	15 bar	700 rev/min	2500 rev/min
	XV-2M/34	34.2 cm ³ /rev	46,27 Nm	4,85 KW	190 bar	6 bar	15 bar	700 rev/min	2500 rev/min
XV-3M	XV-3M/40	39.6 cm ³ /rev	53,57 Nm	5,61 KW	180 bar	6 bar	15 bar	700 rev/min	2000 rev/min
	XV-3M/15	14.89 cm ³ /rev	20,14 Nm	2,11 KW	320 bar	6 bar	20 bar	700 rev/min	3000 rev/min
	XV-3M/18	17.37 cm ³ /rev	23,50 Nm	2,46 KW	320 bar	6 bar	20 bar	700 rev/min	3000 rev/min
	XV-3M/21	21.10 cm ³ /rev	28,54 Nm	2,99 KW	300 bar	6 bar	15 bar	700 rev/min	3000 rev/min
	XV-3M/27	26.97 cm ³ /rev	36,49 Nm	3,82 KW	270 bar	6 bar	10 bar	700 rev/min	3000 rev/min
	XV-3M/32	32.27 cm ³ /rev	43,66 Nm	4,57 KW	270 bar	6 bar	10 bar	700 rev/min	3000 rev/min
	XV-3M/38	38.47 cm ³ /rev	52,04 Nm	5,45 KW	270 bar	6 bar	10 bar	700 rev/min	2800 rev/min
	XV-3M/43	43.44 cm ³ /rev	58,77 Nm	6,15 KW	250 bar	6 bar	10 bar	700 rev/min	2800 rev/min
	XV-3M/47	47.16 cm ³ /rev	63,80 Nm	6,68 KW	250 bar	6 bar	10 bar	700 rev/min	2800 rev/min
	XV-3M/51	50.88 cm ³ /rev	68,83 Nm	7,21 KW	250 bar	6 bar	10 bar	700 rev/min	2800 rev/min
	XV-3M/54	54.60 cm ³ /rev	73,86 Nm	7,74 KW	250 bar	6 bar	10 bar	700 rev/min	2300 rev/min
	XV-3M/61	60.81 cm ³ /rev	82,26 Nm	8,61 KW	220 bar	6 bar	10 bar	700 rev/min	2300 rev/min
	XV-3M/64	64.53 cm ³ /rev	87,30 Nm	9,14 KW	220 bar	6 bar	10 bar	700 rev/min	2300 rev/min
	XV-3M/70	70.74 cm ³ /rev	95,70 Nm	10,02 KW	210 bar	6 bar	10 bar	700 rev/min	2300 rev/min
	XV-3M/74	74.46 cm ³ /rev	100,73 Nm	10,55 KW	190 bar	6 bar	10 bar	700 rev/min	2300 rev/min
	XV-3M/90	86.87 cm ³ /rev	117,52 Nm	12,31 KW	160 bar	6 bar	10 bar	700 rev/min	2300 rev/min

INTRODUCTION **XV-0M** **XV-1M** **XV-2M** **XV-3M**

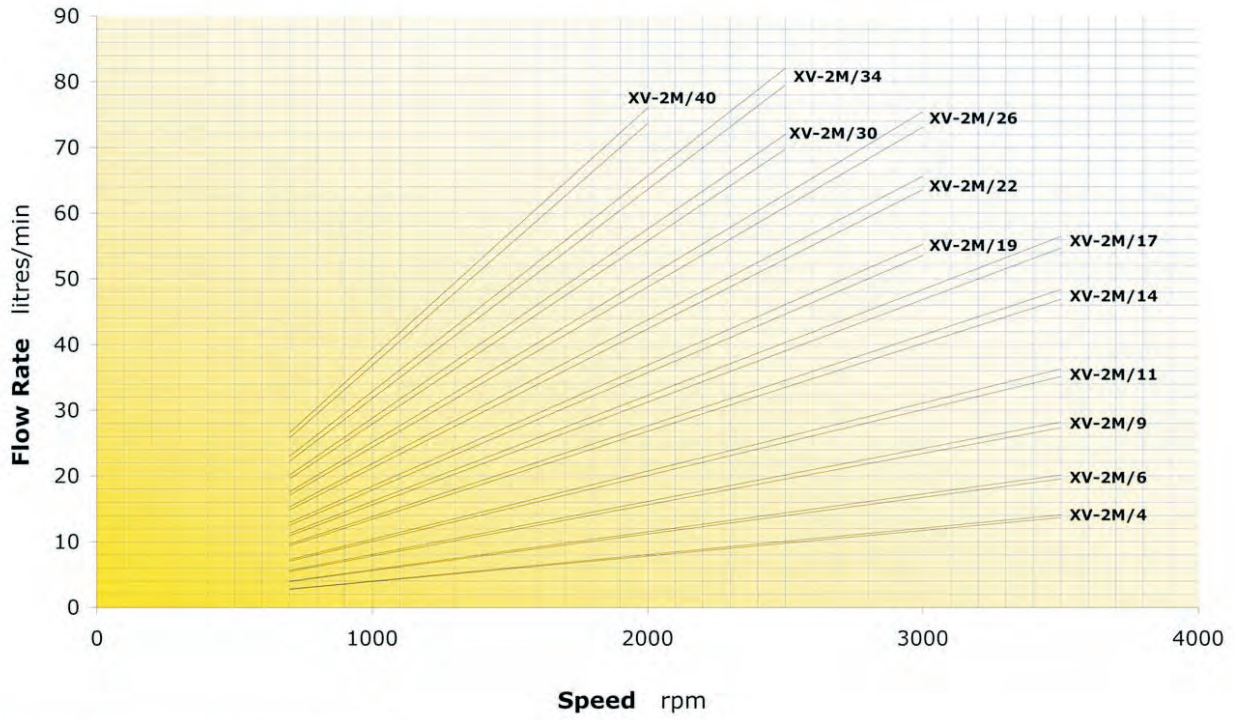
TYPE	cm3/rev	rpm							
		700	1000	1500	2000	2500	3000	3500	
XV 2M/4	4,2	2,800	4,000	6,000	8,000	10,000	12,000	14,000	Flow rate l/min
XV 2M/6	6	4,200	6,000	9,000	12,000	15,000	18,000	21,000	
XV 2M/9	8,4	6,300	9,000	13,500	18,000	22,500	27,000	31,500	
XV 2M/11	10,8	7,700	11,000	16,500	22,000	27,500	33,000	38,500	
XV 2M/14	14,4	9,800	14,000	21,000	28,000	35,000	42,000	29,000	
XV 2M/17	16,8	11,900	17,000	25,500	34,000	42,500	51,000	59,500	
XV 2M/19	19,2	13,300	19,000	28,500	38,000	47,500	57,000		
XV 2M/22	22,8	15,400	22,000	33,000	44,000	55,000	66,000		
XV 2M/26	26,2	18,200	26,000	39,000	52,000	65,000	78,000		
XV 2M/30	30	21,000	30,000	45,000	60,000	75,000			
XV 2M/34	34,2	23,800	34,000	51,000	68,000	85,000			
XV 2M/40	39,6	28,000	40,000	60,000	80,000				

TYPE	cm3/rev	rpm							
		700	1000	1500	2000	2300	2500	3000	
XV 3M/15	14,89	9,90	14,15	21,22	28,29	32,54	35,37	42,44	Flow rate l/min
XV 3M/18	17,37	11,55	16,51	24,76	33,01	37,96	41,26	49,52	
XV 3M/21	21,10	14,03	20,04	30,06	40,08	46,10	50,11	60,13	
XV 3M/27	26,97	17,94	25,62	38,43	51,24	58,93	64,05	76,86	
XV 3M/32	32,27	21,46	30,65	45,98	61,31	70,50	76,63	91,96	
XV 3M/38	38,47	25,58	36,55	54,82	73,09	84,06	91,37		
XV 3M/43	43,44	28,88	41,26	61,89	82,53	94,91	103,16		
XV 3M/47	47,16	31,36	44,80	67,20	89,60	103,04	112,00		
XV 3M/51	50,88	33,84	48,34	72,51	96,67	111,17			
XV 3M/54	54,60	36,31	51,87	77,81	103,75	119,31			
XV 3M/61	60,81	40,44	57,77	86,65	115,54	132,87			
XV 3M/64	64,53	42,91	61,31	91,96	122,61	141,00			
XV 3M/70	70,74	47,04	67,20	100,80	134,40	154,56			
XV 3M/74	74,46	49,52	70,74	106,11	141,47	162,70			
XV 3M/90	86,87	57,77	82,53	123,79	165,05	189,81			

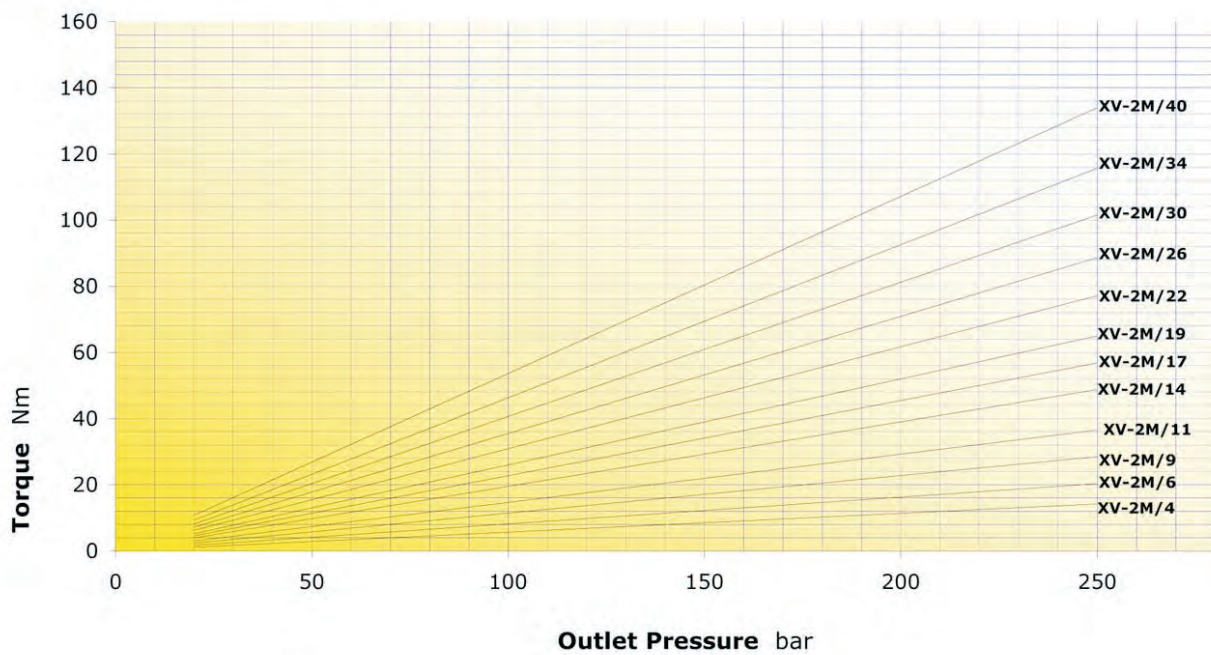
CHARACTERISTIC CURVES

XV-2M

XV-2M CHARACTERISTIC FLOW RATE CURVES



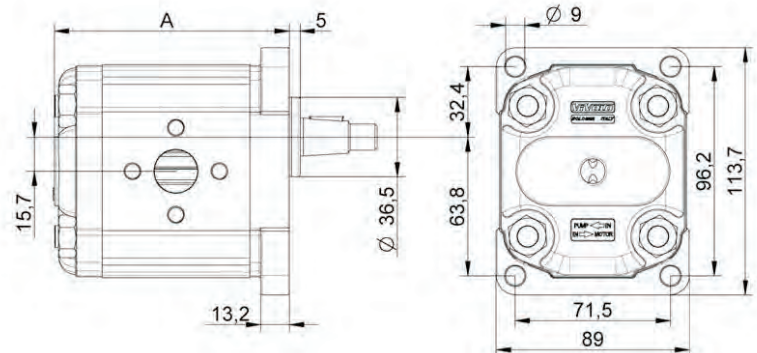
XV-2M MOTOR TORQUE


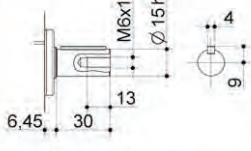
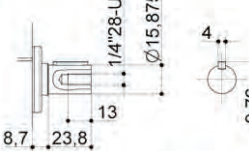
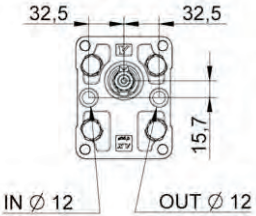
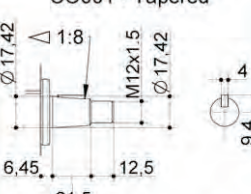
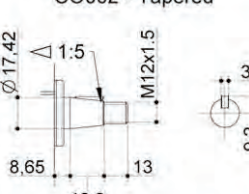
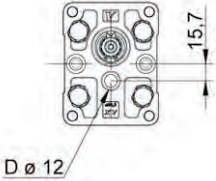
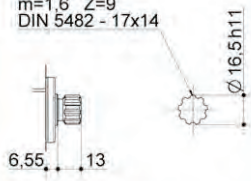
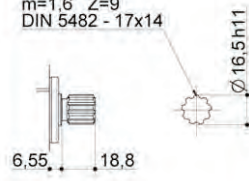
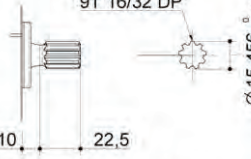
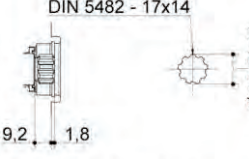


These two pages provide an overview of all the possible variations for customising a pump with a $\varnothing 36.5$ flange.

By filling in the missing data you can obtain the complete code of the product to be customised.

X	2	M					
Series	X	series XV					
Group	2	group 2					
Category	M	reversible motor					
Displacement							
Flange							
Shaft							
Body	IN						
	OUT						
Cover							



$\varnothing 36.5$ FLANGE		Shaft	
	Code		Code
	01	CI001 - Parallel 	A
		T.2 = 44.1 [Nm]	
		CI002 - Parallel 	B
		T.2 = 67.5 [Nm]	
	04	CO001 - Tapered 	E
		T.2 = 233.2 [Nm]	
		CO002 - Tapered 	F
		T.2 = 233.2 [Nm]	
	05	SCF02 - Splined m=1.6 Z=9 DIN 5482 - 17x14 	G
		T.2 = 86.1 [Nm]	
		SCF03 - Splined m=1.6 Z=9 DIN 5482 - 17x14 	H
		T.2 = 86.1 [Nm]	
		SCF04 - Splined SAE J 498 9T 16/32 DP 	I
		T.2 = 67.1 [Nm]	
		SCF01 - Splined m=1.6 Z=9 DIN 5482 - 17x14 	L
		T.2 = 86.2 [Nm]	

Displacement		
TYPE	CODE	A
		mm
XV-2M/04	41	87,2
XV-2M/06	43	90,2
XV-2M/09	45	94,2
XV-2M/11	47	98,2
XV-2M/14	49	104,2
XV-2M/17	51	108,2
XV-2M/19	53	112,2
XV-2M/22	55	118,2
XV-2M/26	57	122,2
XV-2M/30	59	130,2
XV-2M/34	61	137,2
XV-2M/40	63	146,2

Standard bodies				
Displacement	Standard threads			
cm3/rev				
04	O - O	R - R	B - B	Z - Z
06	O - O	R - R	B - B	Z - Z
09	O - O	R - R	B - B	Z - Z
11	O - O	R - R	B - B	Z - Z
14	P - P	R - R	C - C	Z - Z
17	P - P	R - R	C - C	Z - Z
19	P - P	R - R	C - C	Z - Z
22	P - P	R - R	C - C	Z - Z
26	Q - P	S - S	D - D	Z - Z
30	Q - P	S - S	D - D	Z - Z
34	Q - P	S - S	D - D	Z - Z
40	Q - P	S - S	D - D	Z - Z

Table showing standard flange and thread combinations available in stock

Body (threads/flanges)							
	A		B		C		D
	E		F		G		H
	I		L		M		N
	O		P		Q		R
	S		T		U		V
Closed Body	Z						

Cover		Code
		E
External drainage		
		F
Internal drainage		
		K
IN + OUT + external drainage		
		L
IN + OUT + internal drainage		
		P
Flange drainage		

reversible motor - series XV

XV-2M

STANDARD EUROPEAN MOTOR
 ø36.5 FLANGE - TAPER SHAFT

X 2 M 51 01 E P P E

Series	X	series XV
Group	2	group 2
Category	M	reversible motor
Displacement	51	17
Flange	01	Ø36.5 STANDARD EUROPEAN reversible rotation
Shaft	E	CO001 - Tapered 1:8 - ø17.4 - M12x1.5 - key thk.4
Body	IN	inlet - Ø40 Ø20 M8
	OUT	outlet - Ø40 Ø20 M8
Cover	E	with external drainage

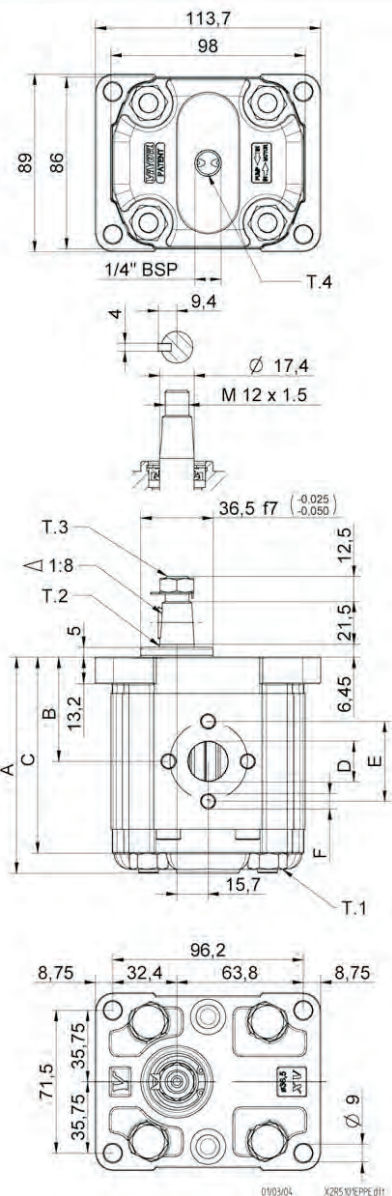


Reference **XM201**

Technical data table						
TYPE	Displacement cm3/rev	Max. Pressure		CODE		
		P1 bar	P3 bar	External drainage		Internal drainage
XV-2M/04	4,20	260	300	X 2 M 41 01	E O O E	X 2 M 41 01 E O O F
XV-2M/06	6,00	260	300	X 2 M 43 01	E O O E	X 2 M 43 01 E O O F
XV-2M/09	8,40	260	300	X 2 M 45 01	E O O E	X 2 M 45 01 E O O F
XV-2M/11	10,80	260	300	X 2 M 47 01	E O O E	X 2 M 47 01 E O O F
XV-2M/14	14,40	250	290	X 2 M 49 01	E P P E	X 2 M 49 01 E P P F
XV-2M/17	16,80	230	270	X 2 M 51 01	E P P E	X 2 M 51 01 E P P F
XV-2M/19	19,20	210	250	X 2 M 53 01	E P P E	X 2 M 53 01 E P P F
XV-2M/22	22,80	200	240	X 2 M 55 01	E P P E	X 2 M 55 01 E P P F
XV-2M/26	26,20	170	210	X 2 M 57 01	E Q P E	X 2 M 57 01 E Q P F
XV-2M/30	30,00	160	200	X 2 M 59 01	E Q P E	X 2 M 59 01 E Q P F
XV-2M/34	34,20	150	190	X 2 M 61 01	E Q P E	X 2 M 61 01 E Q P F
XV-2M/40	39,60	140	180	X 2 M 63 01	E Q P E	X 2 M 63 01 E Q P F

P1) Max. working pressure - P3) Max. peak pressure
 For heavy-duty applications, it is recommended to check the admissible torque of the shaft

Dimensions table										
TYPE	Weight kg	A mm	B mm	C mm	IN			OUT		
					D	E	F	D	E	F
XV-2M/04	2,200	87,2	41,7	77,2	ø13,5	30	M6x1	ø13,5	30	M6x1
XV-2M/06	2,300	90,2	43,2	80,2	ø13,5	30	M6x1	ø13,5	30	M6x1
XV-2M/09	2,400	94,2	45,2	84,2	ø13,5	30	M6x1	ø13,5	30	M6x1
XV-2M/11	2,500	98,2	47,2	88,2	ø13,5	30	M6x1	ø13,5	30	M6x1
XV-2M/14	2,700	104,2	50,2	94,2	ø20	40	M8X1,25	ø20	40	M8X1,25
XV-2M/17	2,800	108,2	52,2	98,2	ø20	40	M8X1,25	ø20	40	M8X1,25
XV-2M/19	2,900	112,2	54,2	102,2	ø20	40	M8X1,25	ø20	40	M8X1,25
XV-2M/22	3,050	118,2	57,2	108,2	ø20	40	M8X1,25	ø20	40	M8X1,25
XV-2M/26	3,150	122,2	59,2	112,2	ø23,5	40	M8X1,25	ø20	40	M8X1,25
XV-2M/30	3,400	130,2	63,2	120,2	ø23,5	40	M8X1,25	ø20	40	M8X1,25
XV-2M/34	3,600	137,2	66,7	127,2	ø23,5	40	M8X1,25	ø20	40	M8X1,25
XV-2M/40	3,800	146,2	71,2	136,2	ø23,5	40	M8X1,25	ø20	40	M8X1,25

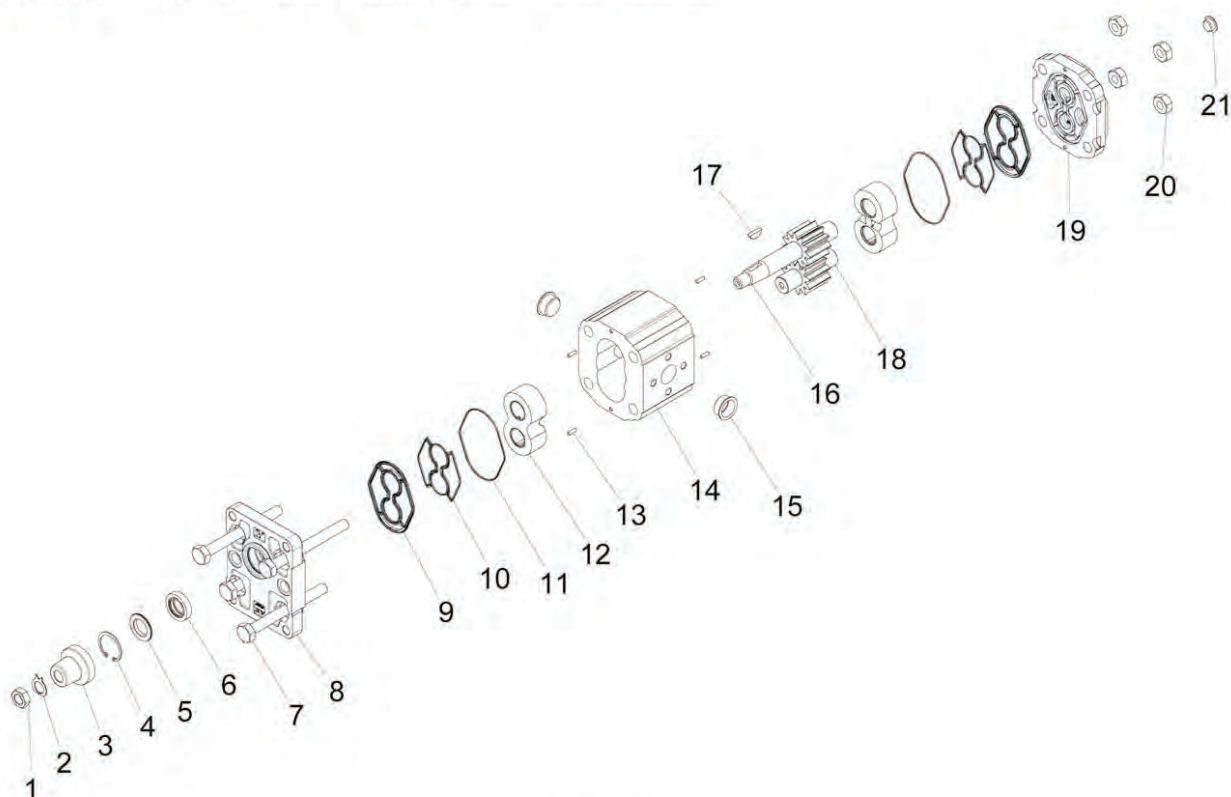


T.1 = 54+58.9 [Nm] - screw tightening torque M10
 T.2 = 233.2 [Nm] - admissible shaft torque (N.B. When choosing a shaft, always check the admissible torque).
 T.3 = 40 [Nm] - torque wrench setting 19
 T.4 = 0.3±0.5 bar - max. drainage pressure

Reference	XM201
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Example of ordering code:

X2M5101EPPE XV2M/17 - Ø36.5 /R - CO001 - Ø40 M8 - Ø40 M8 - Dren. est.



Basic list				
Pos.	Item description	Item	Size	Quantity
1	NUT M12x1,5 H=7 CH.17	200.0157.A	0	1
2	TAB WASHER ø12,5xø19 - CO001-CO002 XV2	200.0150.A	0	1
3	KEY PROTECTION XV2	590.0010.A	0	1
4	ø29 INTERNAL SNAP RING DIN 472	560.0020.A	0	1
5	BACK UP WASHER OIL SEAL XV2M	200.0126.A	0	1
6	OIL SEAL 17.46 x 28.58 x 6.4 SCV	690.0105.A	0	1
7	WHITE GALVANISED SCREW TE M10x100 UNI 5737 8.8	531.0010.A	L100	4
8	XV2 ø36,5 FLANGE	200.0238.A	0	1
9	INJECTION-MOLDED SEAL XV2 (NBR 70÷75 SH)	200.0190.C	0	2
10	XV2 BACK-UP ELEMENT FOR BALANCING	200.0191.A	0	2
11	EXTERNAL BACK-UP ELEMENT XV2	200.0194.A	0	2
12	KV2P BUSH H=20	200.0012.A	0	2
13	PIN ø3x9,8	570.0005.A	0	4
14	STANDARD CROSS FLANGED BODY - cc=17	200.0049.A	H68	1
15	PLASTIC PLUG ø21	580.0001.A	D21	2
16	CO001 - TAPERED 1÷8 DRIVING GEAR	200.0009.A	CC17	1
17	WOODRUFF KEY ø16x4 H=6,5	200.0141.A	0	1
18	COND2 - PERFORATED DRIVEN GEAR	200.0010.A	CC17	1
19	NEUTRAL XV2 COVER W/DRAINAGE 1/4" BSP	200.0008.X	F2ZZA	1
20	WHITE GALVANISED NUT M10 H=10 UNI 5587	540.0005.A	0	4
21	PLASTIC PLUG ø12	580.0001.A	D12	1