

Part number:

**HYDROMA**

HYDRAULICKÉ SYSTÉMY

**HIDROMA**  
SYSTEMS

UKŁADY HYDRAULICZNE

**HYDROMA**

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

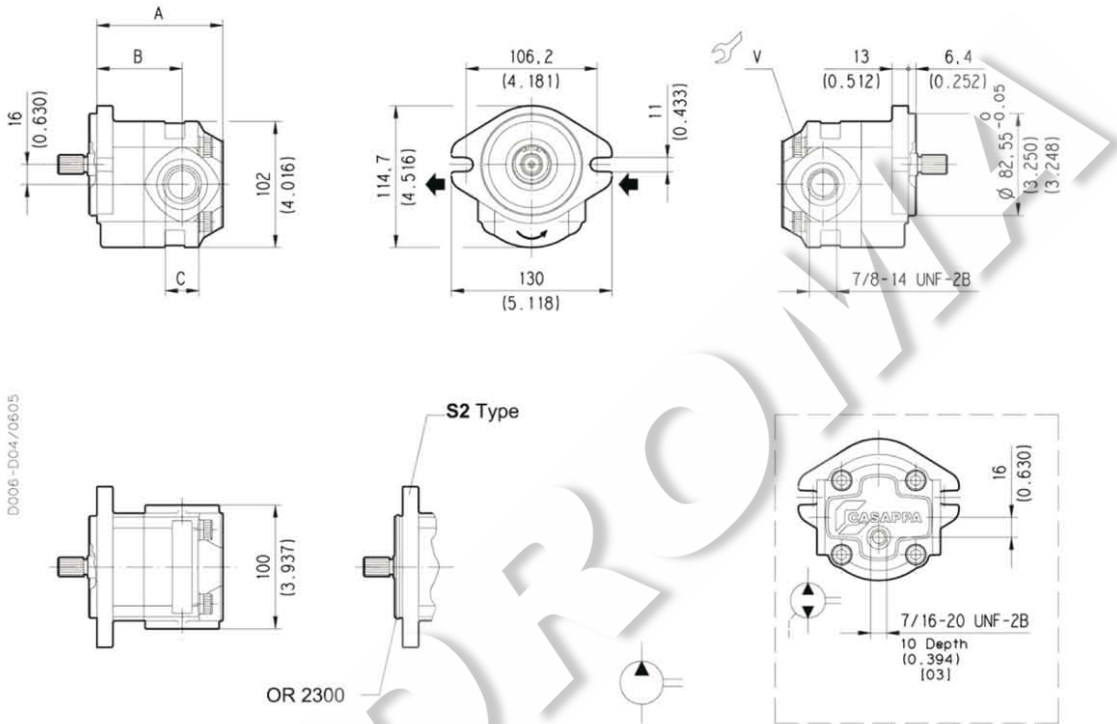
**KAPPA 20**

**HYDRAULIC GEAR PUMPS SAE STANDARD**

**... S1**

SAE STRAIGHT THREAD PORTS J514

American straight thread UNC-UNF 60° conforms to ANSI B 1.1



D006-D04/0605

<b>V Screws tightening torque Nm (lbf in)</b>
70 <sup>+7</sup> (558 + 682)

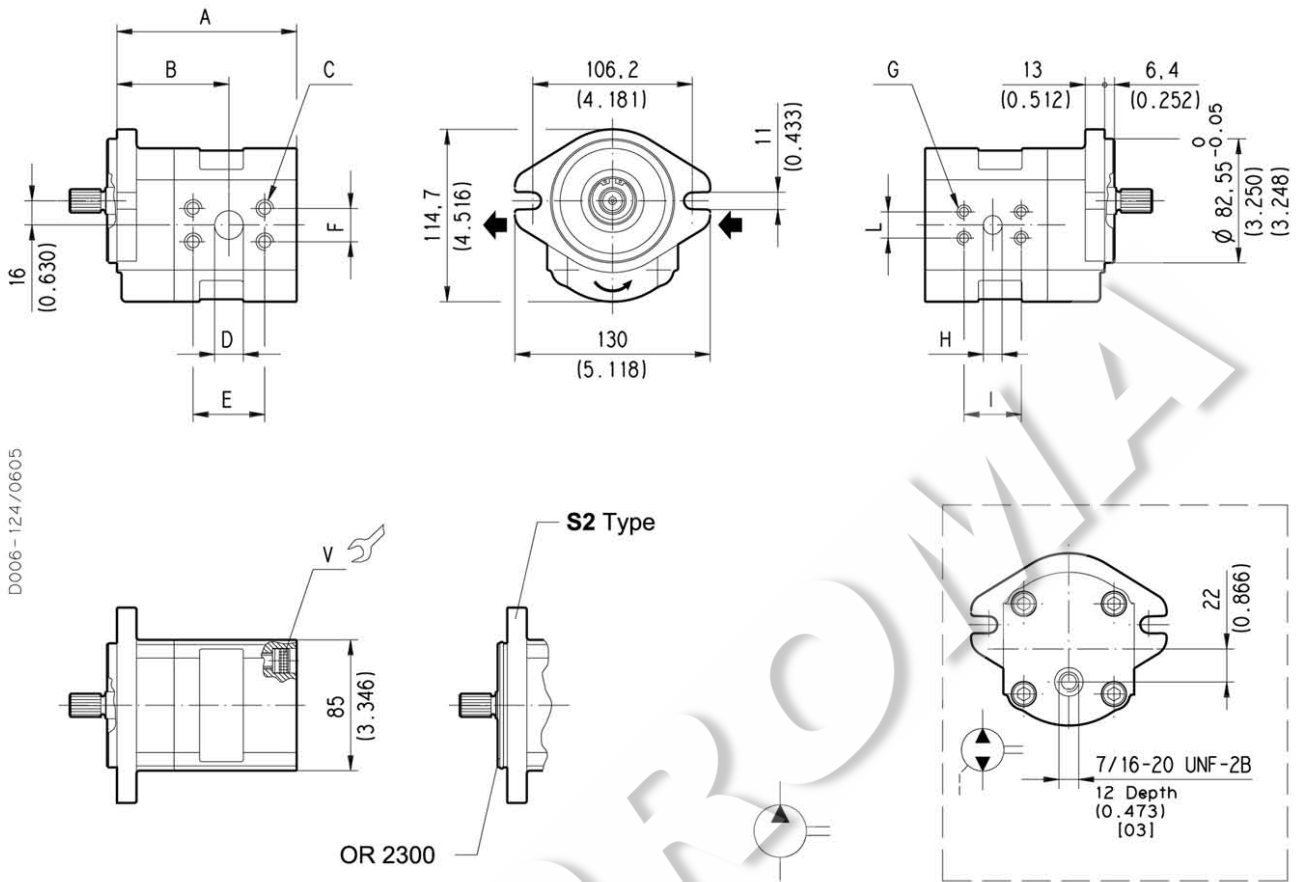
**Side ports version (L) - To order see page 22**

02/06.2005

Pump type	A	B	C	Ports code	
	mm (in)	mm (in)	mm (in)	IN	OUT
<b>KP 20•4</b>	89,5 (3.524)	62 (2.441)	7/8-14 UNF-2B	<b>OC</b>	
<b>KP 20•6,3</b>	92 (3.622)	64,5 (2.539)			
<b>KP 20•8</b>	94,5 (3.720)	67 (2.638)			
<b>KP 20•11,2</b>	98 (3.858)	70,5 (2.776)			
<b>KP 20•14</b>	102 (4.016)	69 (2.717)	1-1/16-12 UN-2B	<b>OD</b>	<b>OC</b>
<b>KP 20•16</b>	107,5 (4.232)	74,5 (2.933)			
<b>KP 20•20</b>	114 (4.488)	81 (3.189)			
<b>KP 20•25</b>	122 (4.803)	74 (2.913)			
<b>KP 20•31,5</b>	132 (5.197)	84 (3.307)			

SAE FLANGED PORTS J518 - Standard pressure series 3000 PSI

Metric thread ISO 60° conforms to ISO/R 262



D006-124/0605

V Screws tightening torque Nm (lbf in)
70 ±7 (558 ÷ 682)

Side ports version (L) - To order see page 22

Pump type	A	B	C	D	E	F	G	H	I	L	Ports code	
	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	IN	OUT
<b>KP 20-4</b>	101,5 (3.996)	62 (2.441)	M8 Depth 12 (0.472)	12,5 (0.492)	38,1 (1.500)	17,5 (0.689)	M8 Depth 12 (0.472)	12,5 (0.492)	38,1 (1.500)	17,5 (0.689)	<b>MA</b>	<b>MA</b>
<b>KP 20-6,3</b>	104 (4.094)	64,5 (2.539)										
<b>KP 20-8</b>	106,5 (4.193)	67 (2.638)										
<b>KP 20-11,2</b>	111 (4.370)	70,5 (2.776)	M10 Depth 12 (0.472)	19 (0.748)	47,6 (1.874)	22,2 (0.874)	M10 Depth 12 (0.472)	19 (0.748)	47,6 (1.874)	22,2 (0.874)		
<b>KP 20-14</b>	116 (4.567)	69 (2.717)										
<b>KP 20-16</b>	119,5 (4.705)	74,5 (2.933)										
<b>KP 20-20</b>	126 (4.961)	81 (3.189)	M10 Depth 12 (0.472)	25,4 (1.000)	52,4 (2.063)	26,2 (1.031)	M10 Depth 12 (0.472)	19 (0.748)	47,6 (1.874)	22,2 (0.874)	<b>MC</b>	<b>MB</b>
<b>KP 20-25</b>	134 (5.276)	74 (2.913)										
<b>KP 20-31,5</b>	144 (5.669)	84 (3.307)										

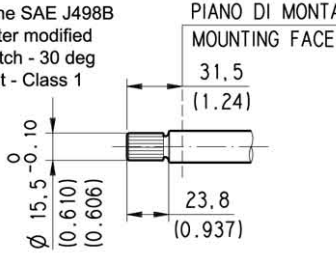
02/06.2005



SAE "A" SPLINE

03

Ext. Involute Spline SAE J498B  
with major diameter modified  
9 teeth - 16/32 Pitch - 30 deg  
Flat Root - Side fit - Class 1

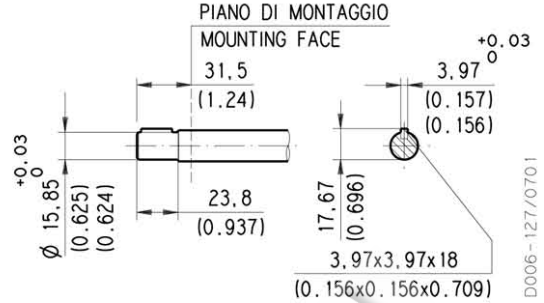


D006-126/0601

MAX 885 lbf in (100 Nm)

SAE "A" STRAIGHT

31



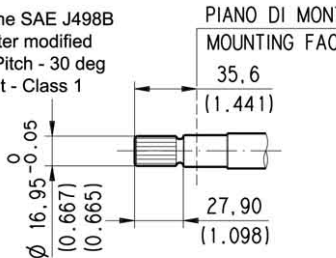
D006-127/0701

MAX 620 lbf in (70 Nm)

SAE SPLINE

01

Ext. Involute Spline SAE J498B  
with major diameter modified  
10 teeth - 16/32 Pitch - 30 deg  
Flat Root - Side fit - Class 1

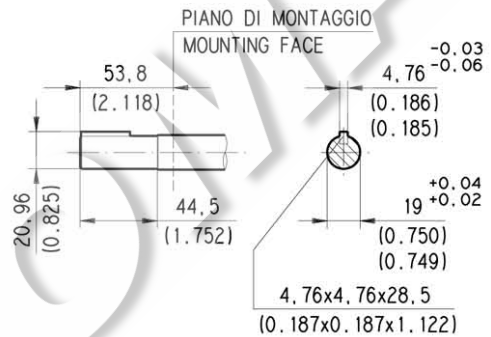


D006-159/0701

MAX 1151 lbf in (130 Nm)

STRAIGHT

49



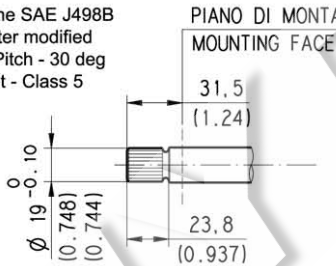
D006-161/0701

MAX 1239 lbf in (140 Nm)

SAE SPLINE

07

Ext. Involute Spline SAE J498B  
with major diameter modified  
11 teeth - 16/32 Pitch - 30 deg  
Flat Root - Side fit - Class 5

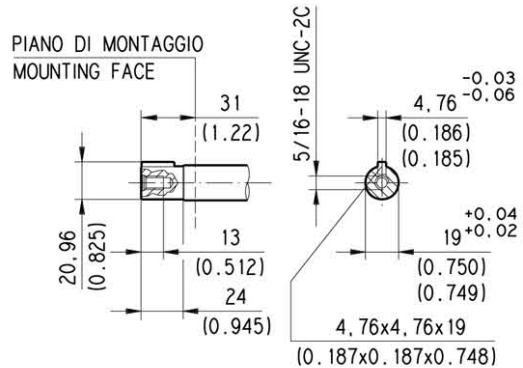


D006-160/0701

MAX 1505 lbf in (170 Nm)

STRAIGHT

50



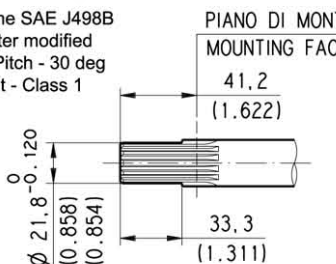
D006-162/0701

MAX 885 lbf in (100 Nm)

SAE "B" SPLINE

04

Ext. Involute Spline SAE J498B  
with major diameter modified  
13 teeth - 16/32 Pitch - 30 deg  
Flat Root - Side fit - Class 1

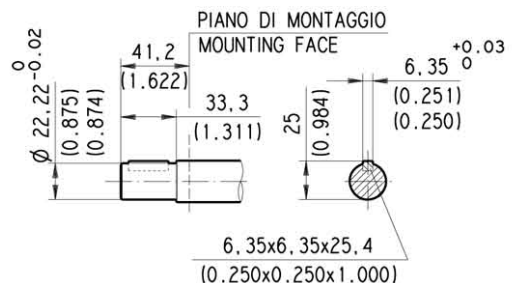


D006-D75/0601

MAX 2478 lbf in (280 Nm)

SAE "B" STRAIGHT

32



D006-D77/0601

MAX 1770 lbf in (200 Nm)

Replaces: 01/03.2002

03/03.2006

## HOW TO ORDER SINGLE PUMPS

1	2	3	4	5	6	7	8
Pump type	Rotation	Version	Drive shaft	Mounting flange	Ports position	Ports IN/OUT	Seals
KP30•17	S	0	03	S1	L	OC/OC	N

1 Pump Type		CODE
in <sup>3</sup> /rev	(cm <sup>3</sup> /rev)	
0.30	4,95	KP 20•4
0.40	6,61	KP 20•6,3
0.50	8,26	KP 20•8
0.69	11,23	KP 20•11,2
0.89	14,53	KP 20•14
1.03	16,85	KP 20•16
1.29	21,14	KP 20•20
1.61	26,42	KP 20•25
2.01	33,03	KP 20•31,5

2 Rotation	CODE
Left	S
Right	D
Reversible	R
Reversible with internal drain	B

3 Version	CODE
Without outboard bearing	0

4 Drive shaft	CODE
SAE "A" spline (9 teeth)	03
SAE spline (10 teeth)	01
SAE spline (11 teeth)	07
SAE "B" spline (13 teeth)	04
SAE "A" straight	31
Straight	49
Straight	50
SAE "B" straight	32

5 Mounting flange	CODE
SAE "A" 2 holes	S1
SAE "A" 2 holes (with o-ring seal)	S2
SAE "B" 2 holes (a)	S5

CODE	Ports position	6
L	Side	
P	Rear	

CODE	Ports IN/OUT		7
SAE STRAIGHT THREAD PORTS (ODT)			
	Side	Rear	Pump type
OC/OC	OC/OC		KP 20•4
OC/OC	OC/OC		KP 20•6,3
OC/OC	OC/OC		KP 20•8
OC/OC	OC/OC		KP 20•11,2
OD/OC	OD/OD		KP 20•14
OD/OC	OD/OD		KP 20•16
OD/OC	OD/OD		KP 20•20
OD/OC	OD/OD		KP 20•25
OD/OC	OD/OD		KP 20•31,5

METRIC SAE SPLIT PORTS SAE J518 C		
MA/MA		KP 20•4
MA/MA		KP 20•6,3
MA/MA		KP 20•8
MA/MA		KP 20•11,2
MB/MA		KP 20•14
MB/MA		KP 20•16
MB/MA		KP 20•20
MC/MB		KP 20•25
MC/MB		KP 20•31,5

CODE	Seals (b)	8
N	Buna N (standard) - no code	
N-H	Buna with high back pressure shaft seals	
V	Viton	
N Bz	Buna N and Bronze thrust plates	
V Bz	Viton and Bronze thrust plates	

- (a) Available only with 04 and 32 shaft  
 (b) Choose the seals according to the temperature shown on page 1

### ORDER EXAMPLE

Standard pump KP 20•4 S0 - 03 S1 - L OC/OC - N

Special version pump KP 20•4 S0 - 04 S5 - L MA/MA - V Bz