

Part number:

HYDROMA

HYDRAULICKÉ SYSTÉMY

HIDROMA
SISTEMS

UKŁADY HYDRAULICZNE

HYDROMA

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

KAPPA 30 GENERAL DATA PUMPS

KP 30

Pump type	Displacement	Max. pressure			Max. speed	Min. speed
		p ₁	p ₂	p ₃		
	in ³ /rev (cm ³ /rev)	psi (bar)			min ⁻¹	
KP 30•27	1.63 (26,7)	4060 (280)	4350 (300)	4495 (310)	3000	350
KP 30•34	2.11 (34,56)	3770 (260)	4060 (280)	4350 (300)	3000	350
KP 30•38	2.40 (39,27)	3770 (260)	4060 (280)	4350 (300)	3000	350
KP 30•43	2.68 (43,98)	3625 (250)	3915 (270)	4205 (290)	3000	350
KP 30•51	3.16 (51,83)	3335 (230)	3625 (250)	3915 (270)	2500	350
KP 30•56	3.45 (56,54)	3118 (215)	3408 (235)	3698 (255)	2500	350
KP 30•61	3.74 (61,26)	2900 (200)	3190 (220)	3480 (240)	2500	350
KP 30•73	4.50 (73,82)	2610 (180)	2900 (200)	3190 (220)	2500	350

p₁= Max. continuous pressure

p₂= Max. intermittent pressure

p₃= Max. peak pressure

The values in the table refer to unidirectional pumps.

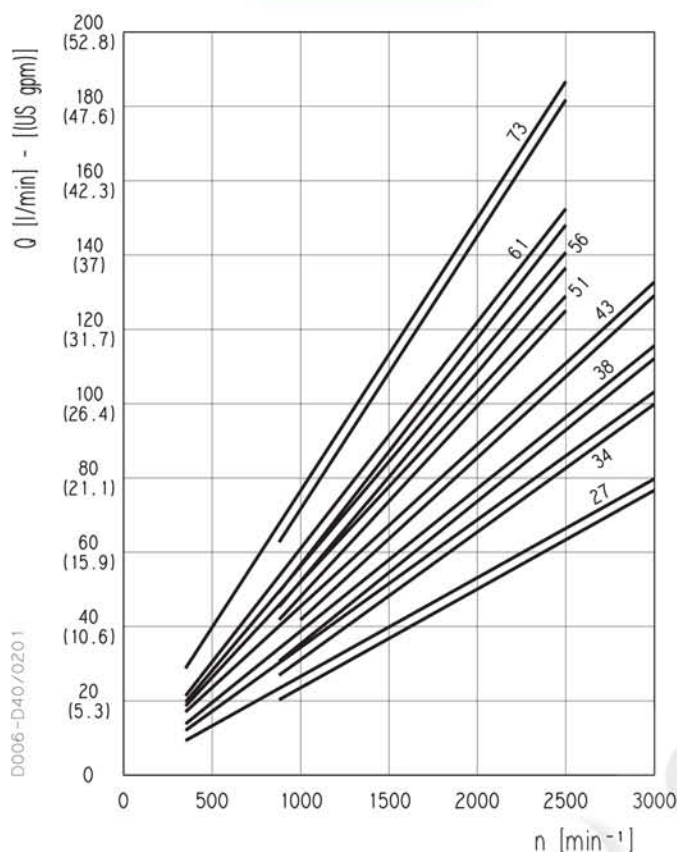
Reversible pump max pressures are 15% lower than those shown in table.

For different working conditions please consult our sales department.

KAPPA 30 GEAR PUMPS PERFORMANCE CURVES

KP 30

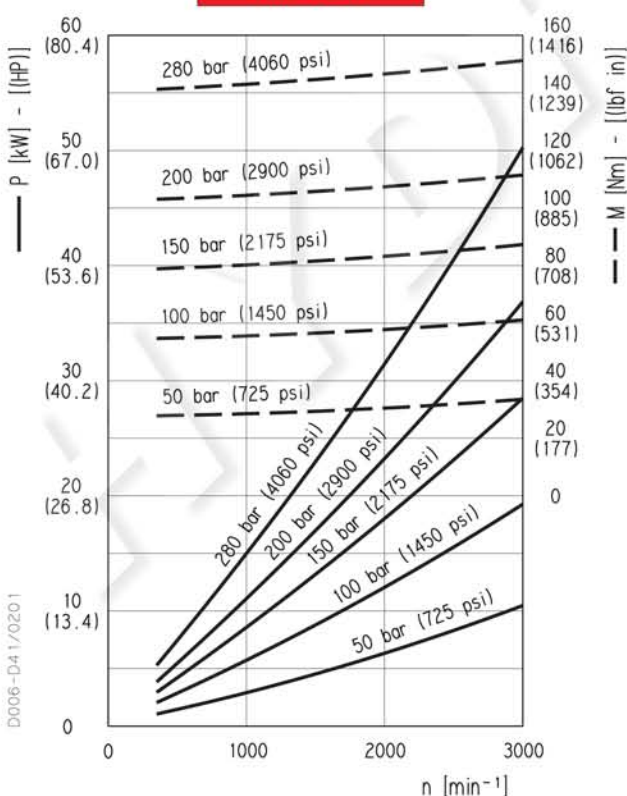
KP 30



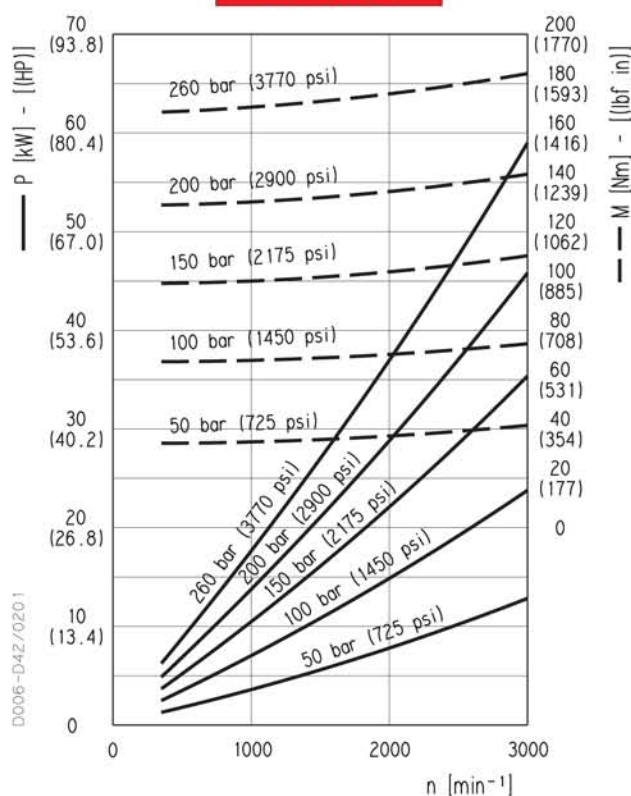
Each curve has been obtained at 122 °F (50 °C), using oil with viscosity 168 SSU (36 cSt) at 104 °F (40 °C) and at these pressures:

KP 30•27	290-4060 psi (20-280 bar)
KP 30•34	290-3770 psi (20-260 bar)
KP 30•38	290-3770 psi (20-260 bar)
KP 30•43	290-3625 psi (20-250 bar)
KP 30•51	290-3335 psi (20-230 bar)
KP 30•56	290-3118 psi (20-215 bar)
KP 30•61	290-2900 psi (20-200 bar)
KP 30•73	290-2610 psi (20-180 bar)

KP 30•27



KP 30•34

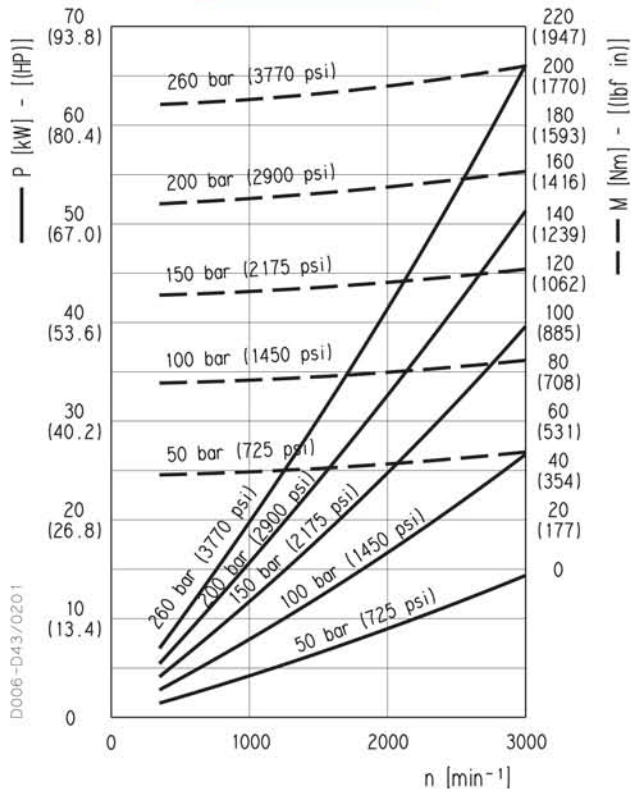


01/03.2002

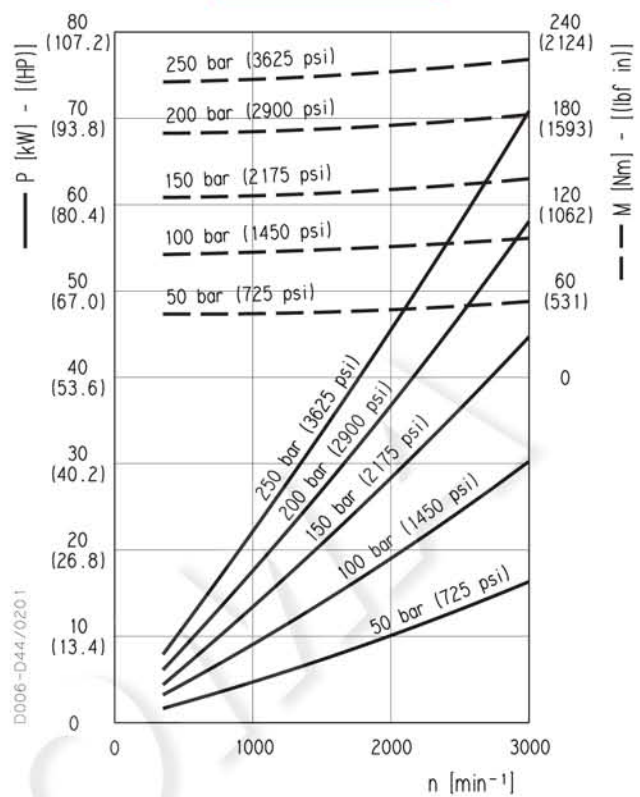
KAPPA 30 GEAR PUMPS PERFORMANCE CURVES

KP 30

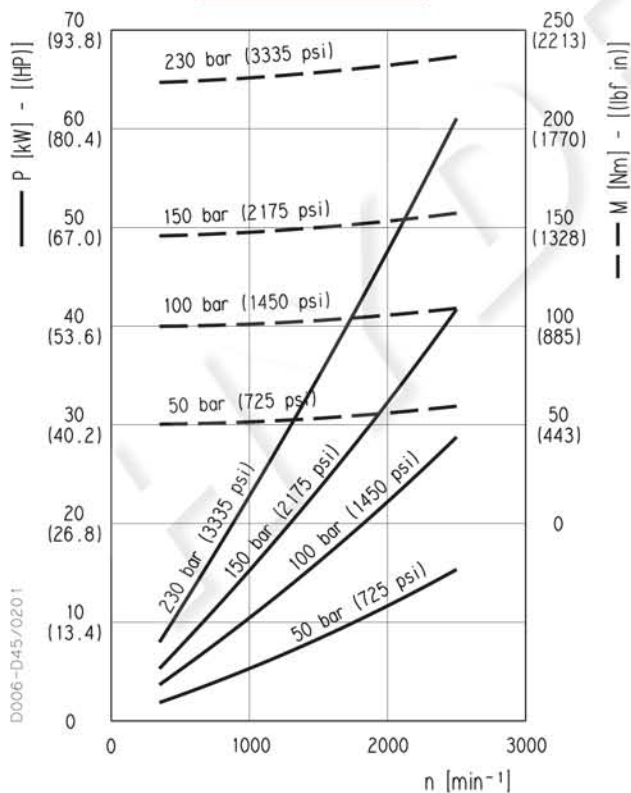
KP 30•38



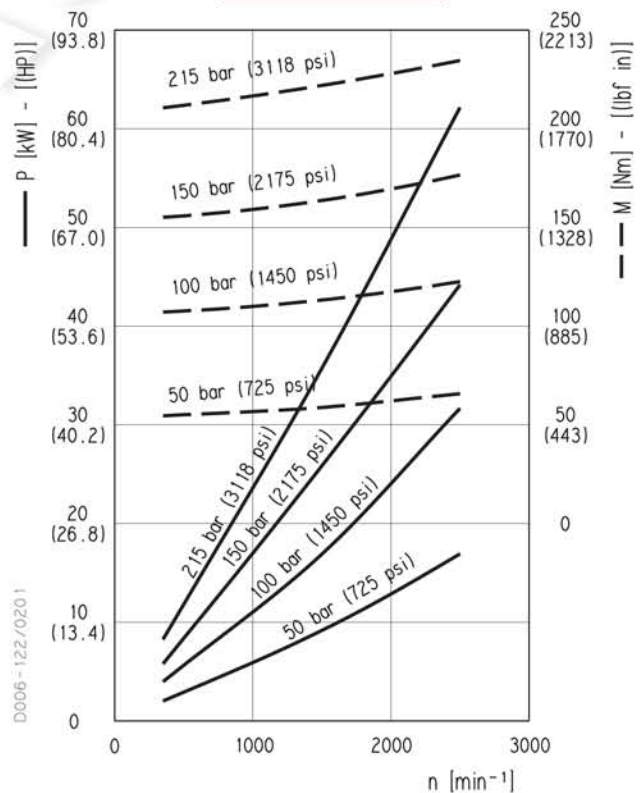
KP 30•43



KP 30•51



KP 30•56

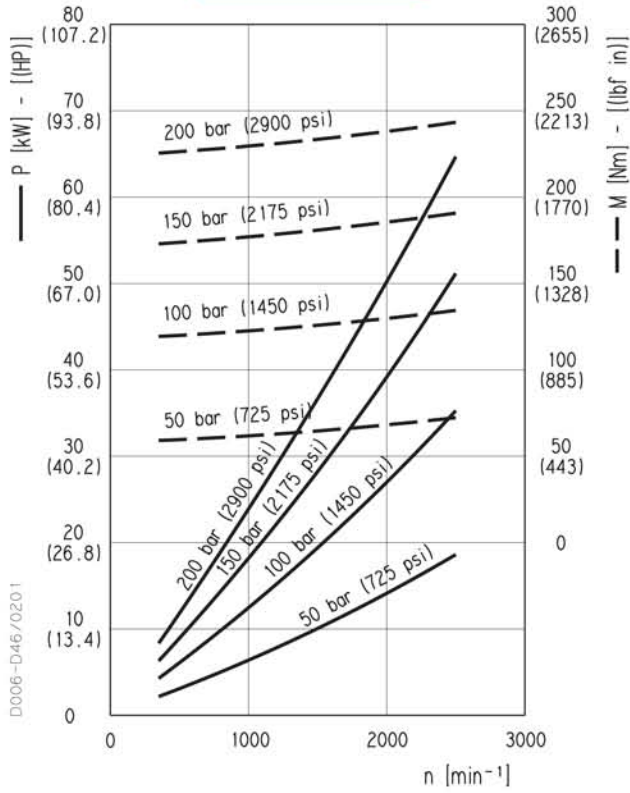


01/03.2002

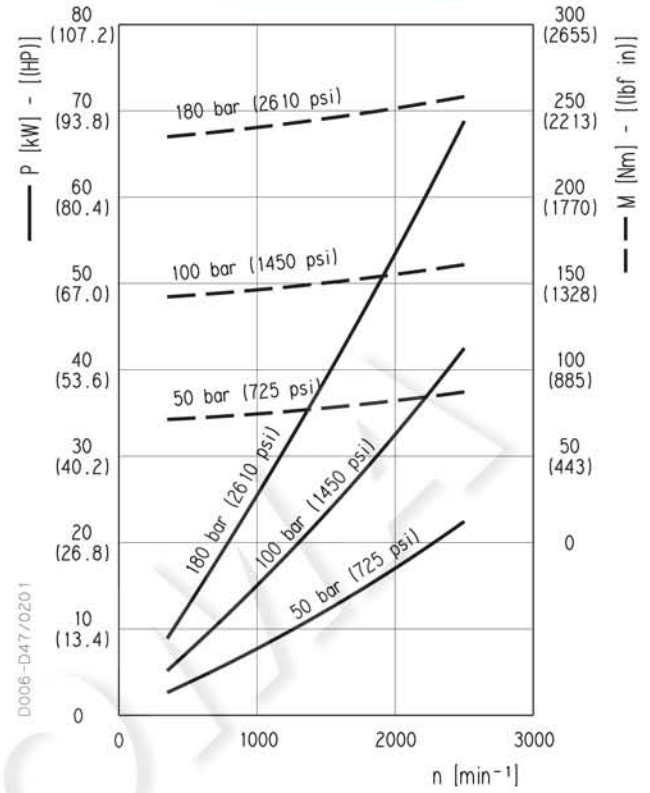
KAPPA 30 GEAR PUMPS PERFORMANCE CURVES

KP 30

KP 30•61



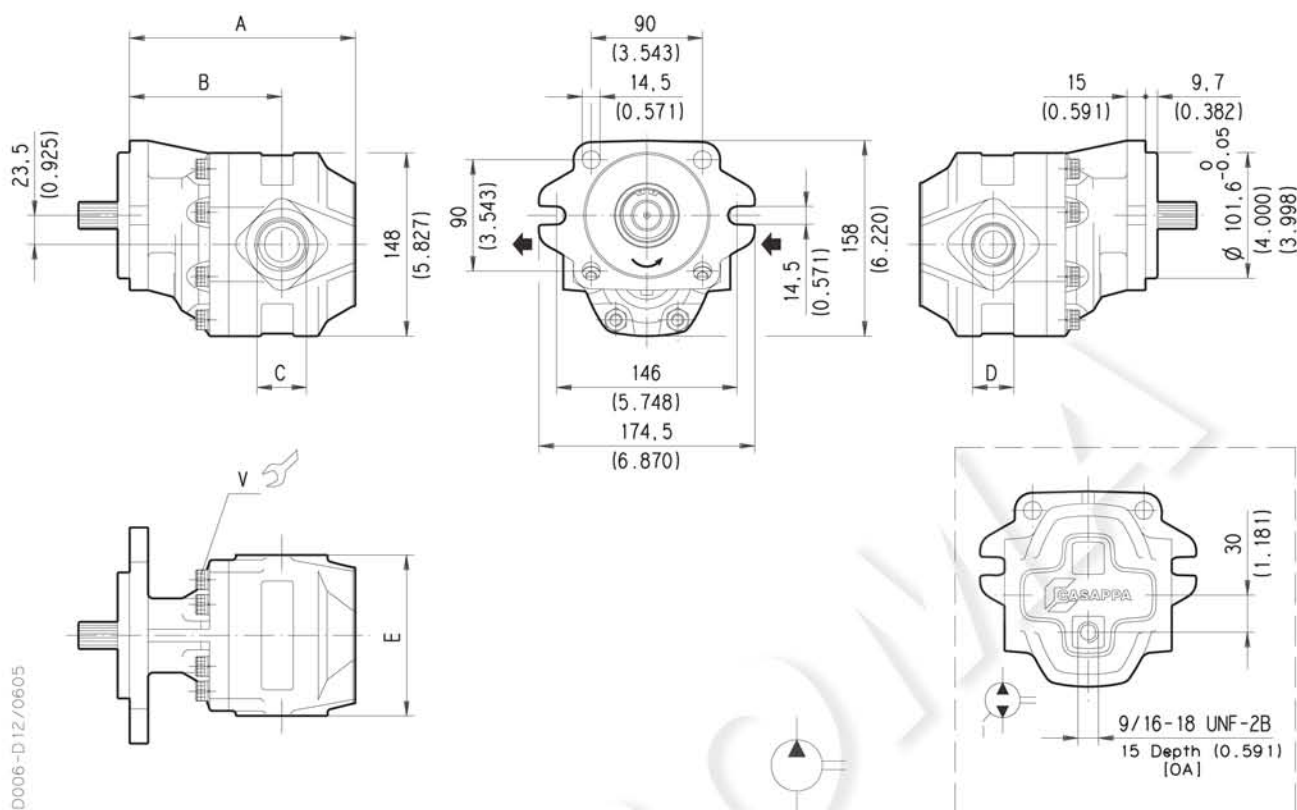
KP 30•73



01/03.2002

SAE STRAIGHT THREAD PORTS J514

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

**V Screws tightening torque Nm (lbf in)**

70 ±7 (558 ÷ 682)

To order see page 33 - 34

Pump type	A	B	C	D	E	Ports code	
	mm (in)	mm (in)			mm (in)	IN	OUT
KP 30•27	164 (6.457)	115 (4.528)	1-5/16-12 UN-2B	1-1/16-12 UN-2B	130 (5.118)	OF	OD
KP 30•34	169 (6.654)	120 (4.724)					
KP 30•38	172 (6.772)	123 (4.843)	1-5/8-12 UN-2B	1-5/16-12 UN-2B		OG	OF
KP 30•43	175 (6.890)	126 (4.961)					
KP 30•51	180 (7.087)	123 (4.843)					
KP 30•56*	182 (7.165)	127 (5.000)	1-7/8-12 UN-2B	1-5/8-12 UN-2B	135 (5.433)	OH	OG
KP 30•61	186 (7.323)	130 (5.118)					
KP 30•73	194 (7.638)	138 (5.433)					

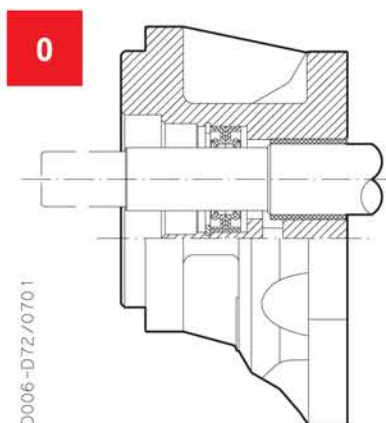
* Available only with 04 and 32 shaft for 0 and 1 version.

02/06.2005

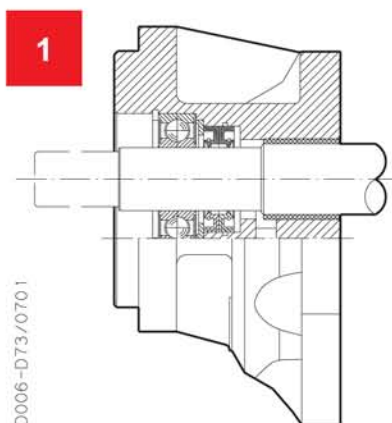
KAPPA 30 SAE VERSION

SAE

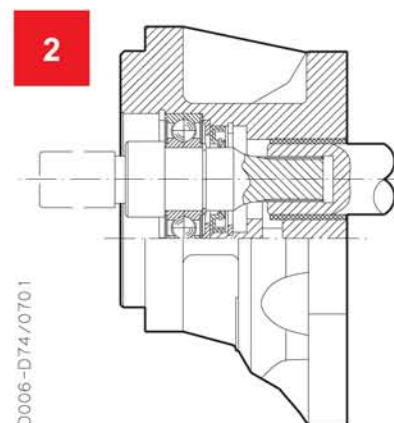
Replaces: 01/03.2002



Version for applications without radial and axial load on the drive shaft.



Version for applications with low radial load and without axial load on the drive shaft.



Special version with independent shaft for applications with low radial load and without axial load on the drive shaft.

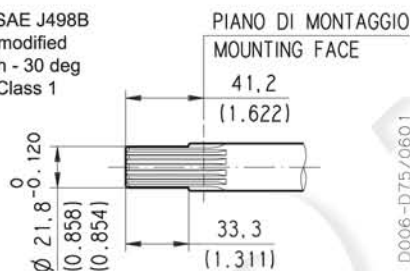
KAPPA 30 END DRIVE SHAFTS

SAE

SAE "B" SPLINE

04

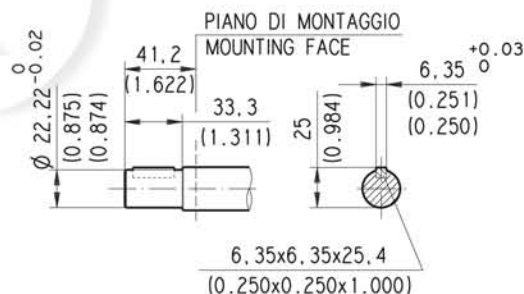
Ext. Involute Spline SAE J498B
with major diameter modified
13 teeth - 16/32 Pitch - 30 deg
Flat Root - Side fit - Class 1



MAX 2921 lbf in (330 Nm) ◆

SAE "B" STRAIGHT

32

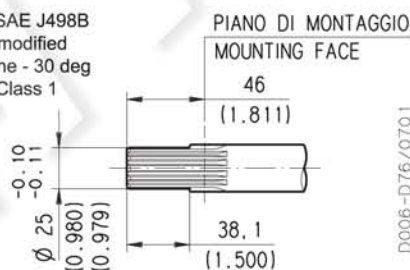


MAX 1770 lbf in (200 Nm) ◆

SAE "BB" SPLINE

05

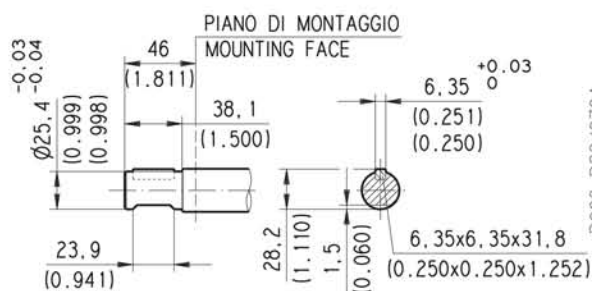
Ext. Involute Spline SAE J498B
with major diameter modified
15 teeth - 16/32 Spline - 30 deg
Flat Root - Side fit - Class 1



MAX 4426 lbf in (500 Nm) ◆

SAE "BB" STRAIGHT

33



MAX 2478 lbf in (280 Nm) ◆

◆ For "2" version whichever end shaft, the max. torque applicable is M= 1505 lbf in (170 Nm)

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•27	S	0	–	04	S3	–	L	OF/OD	–	N

1	Pump Type	CODE
in³/rev	(cm³/rev)	
1.63	26,7	KP 30•27
2.11	34,56	KP 30•34
2.40	39,27	KP 30•38
2.68	43,98	KP 30•43
3.16	51,83	KP 30•51
3.45	56,54	KP 30•56
3.74	61,26	KP 30•61
4.50	73,82	KP 30•73

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

3	Version	CODE
	Without outboard bearing	0
	With outboard bearing	1
	With outboard bearing and indep. shaft	2

4	Drive shaft	CODE
	SAE "B" spline (13 teeth)	04
	SAE "B" straight	32
	SAE "BB" spline (15 teeth)	05
	SAE "BB" straight	33

5	Mounting flange	CODE
SAE "B" 2-4 holes		S3
SAE "B" 2 holes		S5

CODE	Ports position	6
L	Side	
P	Rear	

CODE	Ports IN/OUT	7
SAE STRAIGHT THREAD PORTS (ODT)		
Side	Pump type	
OF/OD	KP 30•27	
OF/OD	KP 30•34	
OG/OF	KP 30•38	
OG/OF	KP 30•43	
OG/OF	KP 30•51	
OH/OG	KP 30•56	
OH/OG	KP 30•61	
OH/OG	KP 30•73	

CODE	Seals (a)	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) Choose the seals according to the temperature shown on page 1

ORDER EXAMPLE

Standard pump **KP 30•27 S0 - 04 S3 - L OF/OD - N**

Special version pump **KP 30•27 S2 - 32 S3 - L OF/OD - V Bz**