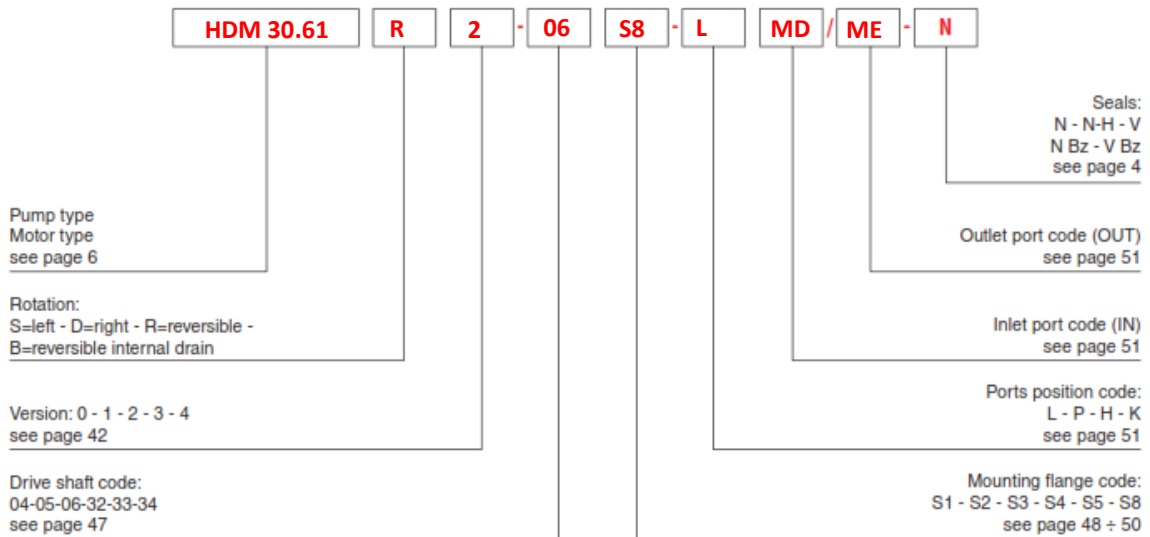


HOW TO ORDER SINGLE UNITS

Before ordering consult shaft, flange and version table compatibility at pages 48 ÷ 50.



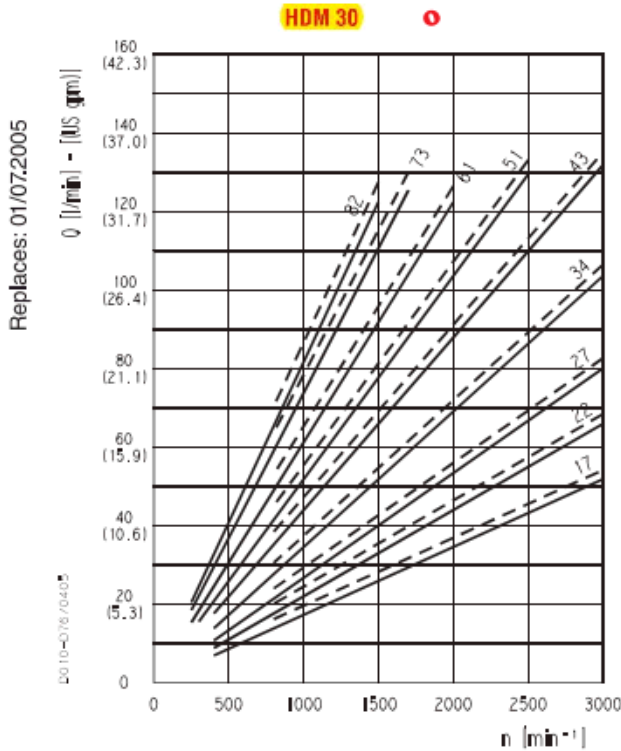
Auszug Seite 6

GENERAL DATA PUMPS AND MOTORS

Pump type HDP Motor type HDM	Displacement in ³ /rev (cm ³ /rev)	Max. pressure			Max. speed min ⁻¹	Min. speed
		P ₁	P ₂	P ₃		
		psi (bar)				
HD. 30•17	1,05 (17,28)	4060 (280)	4350 (300)	4640 (320)	3000	400
HD. 30•22	1,34 (21,99)	4060 (280)	4350 (300)	4640 (320)	3000	400
HD. 30•24	1,47 (24,03)	4060 (280)	4350 (300)	4640 (320)	3000	400
HD. 30•27	1,63 (26,70)	4060 (280)	4350 (300)	4640 (320)	3000	400
HD. 30•34	2,11 (34,56)	3915 (270)	4205 (290)	4495 (310)	3000	400
HD. 30•38	2,40 (39,27)	3915 (270)	4205 (290)	4495 (310)	3000	400
HD. 30•43	2,68 (43,98)	3770 (260)	4060 (280)	4350 (300)	3000	400
HD. 30•51	3,16 (51,83)	3335 (230)	3770 (260)	4060 (280)	2500	300
HD. 30•56	3,45 (56,55)	3118 (215)	3553 (245)	3843 (265)	2500	300
HD. 30•61	3,74 (61,26)	2900 (200)	3335 (230)	3625 (250)	2000	250
HD. 30•73	4,50 (73,82)	2755 (190)	3045 (210)	3335 (230)	1700	250
HD. 30•82	4,98 (81,68)	2465 (170)	2755 (190)	3045 (210)	1500	250

HDM 30

MAGNUM 30 GEAR MOTORS PERFORMANCE CURVES

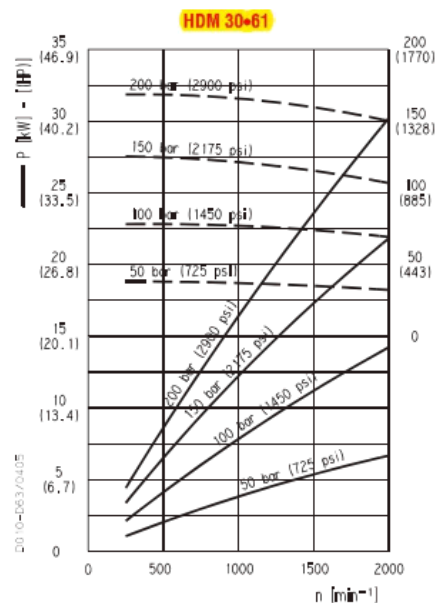
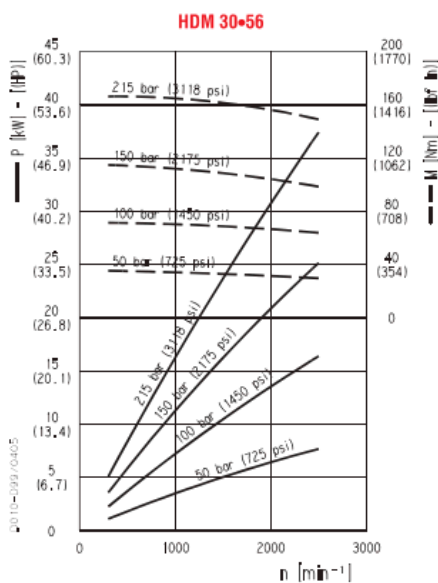


Each curve has been obtained at 122 °F (50°C), using oil with viscosity 168 SSU (36 cSt) at 104 °F (40°C) and at these pressures:

HDP 30•17	—	290 psi (20 bar)
	- -	4060 psi (280 bar)
HDP 30•22	—	290 psi (20 bar)
	- -	4060 psi (280 bar)
HDP 30•27	—	290 psi (20 bar)
	- -	4060 psi (280 bar)
HDP 30•34	—	290 psi (20 bar)
	- -	3915 psi (270 bar)
HDP 30•43	—	290 psi (20 bar)
	- -	3770 psi (260 bar)
HDP 30•51	—	290 psi (20 bar)
	- -	3335 psi (230 bar)
HDP 30•61	—	290 psi (20 bar)
	- -	2900 psi (200 bar)
HDP 30•73	—	290 psi (20 bar)
	- -	2755 psi (190 bar)
HDP 30•82	—	290 psi (20 bar)
	- -	2465 psi (170 bar)

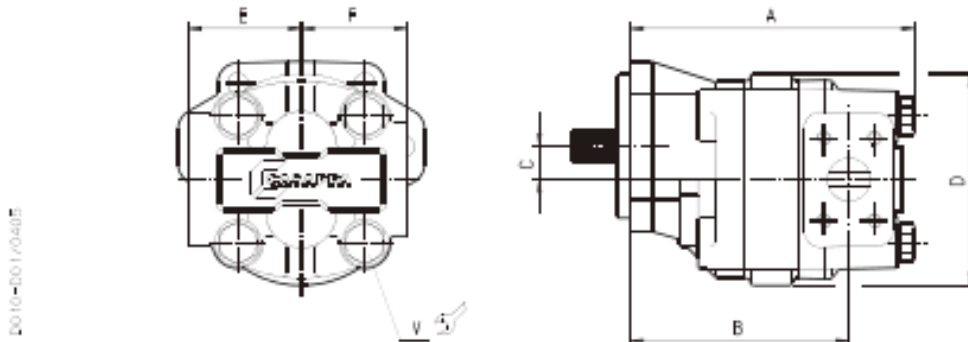
HDM 30

MAGNUM 30 GEAR MOTORS PERFORMANCE CURVES



SINGLE UNITS SIDE PORTS

L



D010-001/03485

Tightening torque Nm (lbf in)
V
280 ±2% (2230 ± 2726)

DRIVE SHAFTS:
see page 47

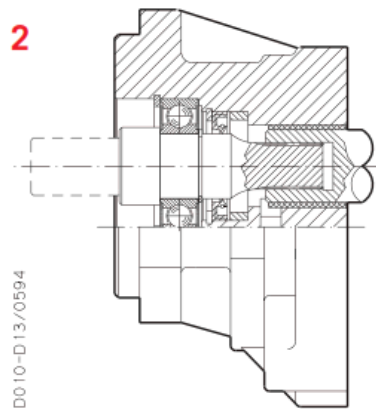
MOUNTING FLANGE:
see page 48 ÷ 50

PORTS:
see page 51

The drawing shows a single unit with left rotation.

Pump type	A	B	C	D	E (IN)	F (OUT)
Motor type	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)	mm (inch)
HD. 30•17	184,5 (7,2638)	138 (5,4331)				
HD. 30•22	187,5 (7,3819)	141 (5,5512)				
HD. 30•24	188,8 (7,4331)	142,3 (5,6024)				
HD. 30•27	190,5 (7,5000)	144 (5,6693)				
HD. 30•34	195,5 (7,6969)	149 (5,8661)				
HD. 30•38	198,5 (7,8150)	152 (5,9843)	23,45	150	80	75
HD. 30•43	201,5 (7,9331)	155 (6,1024)	(0,9232)	(5,9055)	(3,1496)	(2,9528)
HD. 30•51	206,5 (8,1299)	160 (6,2992)				
HD. 30•56	209,5 (8,2480)	163 (6,4173)				
HD. 30•61	212,5 (8,3661)	166 (6,5354)				
HD. 30•73	220,5 (8,6811)	174 (6,8504)				
HD. 30•82	225,5 (8,8780)	179 (7,0472)				
HD. 35•40	224,5 (8,8386)	172 (6,7717)				
HD. 35•50	229,5 (9,0354)	177 (6,9685)				
HD. 35•63	235,5 (9,2717)	183 (7,2047)				
HD. 35•71	239,5 (9,4291)	187 (7,3622)				
HD. 35•80	243,5 (9,5866)	191 (7,5197)	27,35	172	90	85
HD. 35•90	248,5 (9,7835)	196 (7,7165)	(1,0768)	(6,7717)	(3,5433)	(3,3465)
HD. 35•100	252,5 (9,9409)	200 (7,8740)				
HD. 35•112	258,5 (10,1772)	206 (8,1102)				
HD. 35•125	264,5 (10,4134)	212 (8,3465)				

01/072005



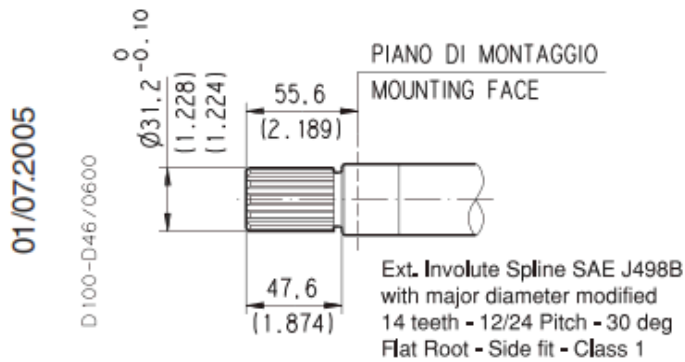
Special version with independent shaft for applications with low radial load and without axial load on the drive shaft.

Max. torque version 2:
 HD. 30: 170 Nm (1505 lbf in)
 HD. 35: 350 Nm (3098 lbf in)

SAE "C" SPLINE

06

Mounting face refer to flange code **S8**



HD. 30 MAX 170 Nm (1505 lbf in) ◆

HD. 35 MAX 900 Nm (7966 lbf in) ◆

- ◆ For "2", "3" and "4" version whichever end shaft, the max torque applicable is:
 HD. 30 MAX 170 Nm (1505 lbf in) - HD. 35 MAX 350 Nm (3098 lbf in)

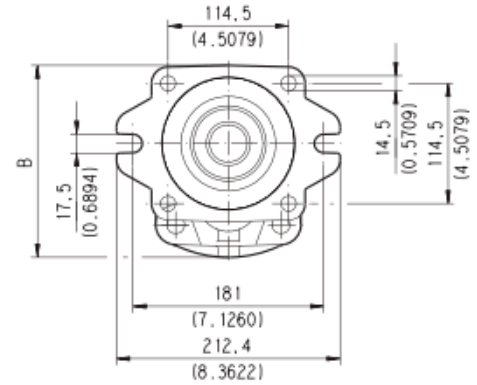
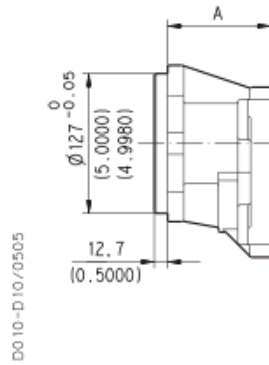
MOUNTING FLANGES AND TABLE OF COMPATIBILITY

Replaces: 01/07.2005

SAE "C" 2-4 HOLES

S8

Conforms to SAE J744



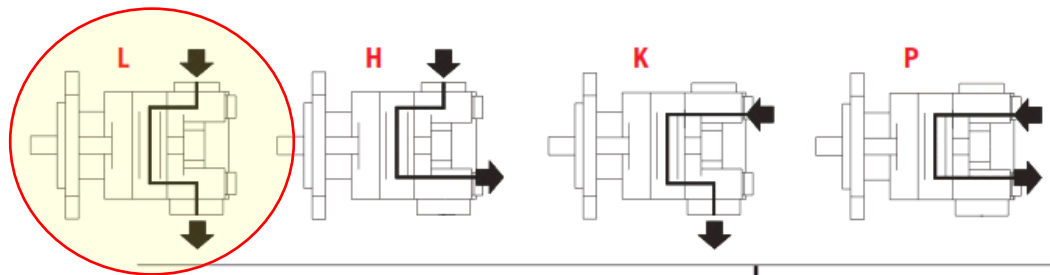
GROUP	A	B
	mm (inch)	mm (inch)
HD. 30	80 (3.1496)	167,9 (6.6102)
HD. 35	90 (3.5433)	182,8 (7.1969)

GROUP	VERSIONS See page 42	DRIVE SHAFTS See page 47					
		04	32	05	33	06	34
HD. 30	0	X	X	X	X		
	1	X	X	X			
	2	X	X	X	X	X	X
	3	X	X	X		X	X
	4	X	X		X	X	X
HD. 35	0					X	X
	1					X	X
	2	X	X	X	X	X	X
	3					X	X
	4	X				X	X

X Available combination

2012

PORTS TYPE



PORTS TYPE	SIDE PORTS								REAR PORTS			
	Split SSM		Spit SSS		Gas BSPP		SAE ODT		Gas BSPP		SAE ODT	
Pump type	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
Motor type	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN
HD. 30•17	MC	MB	SC	SB	GF	GE	OF	OD	GE	GE	OD	OD
HD. 30•22	MC	MB	SC	SB	GF	GE	OF	OD	GE	GE	OD	OD
HD. 30•27	MC	MB	SC	SB	GF	GE	OF	OD	GE	GE	OD	OD
HD. 30•34	MC	MB	SC	SB	GF	GE	OF	OD	GE	GE	OD	OD
HD. 30•38	MC	MB	SC	SB	GF	GE	OF	OD	GE	GE		
HD. 30•43	MD	MC	SD	SC	GG	GF	OG	OF	GF (●)	GE		
HD. 30•51	MD	MC	SD	SC	GG	GF	OG	OF	GF (●)	GE		
HD. 30•56	MD	MC	SD	SC	GG	GF	OG	OF	GF (●)	GE		
HD. 30•61	ME	MD	SE	SD	GG	GF	OG	OF	GF (●)	GE		
HD. 30•73	ME	MD	SE	SD	GG	GF	OG	OF	GF (●)	GE		



Tightening torque for low pressure side port



Tightening torque for high pressure side port [values obtained at 5075 psi (350 bar)]

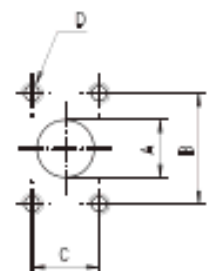
For reversible rotation, please consult only the tightening torque for high pressure side port

SAE FLANGED PORTS J518 - Standard pressure series 3000 PSI SSM

Metric thread ISO 60° conforms to ISO/R 262

CODE	A	B	C	D		
	mm (in)	mm (in)	mm (in)	Thread Depth mm (in)	Nm (lbf in)	Nm (lbf in)
MB	19 (0,7480)	47,6 (1,8740)	22,2 (0,8740)	M 10 22 (0,8661)	20 ⁺¹ (177 + 186)	35 ^{+2,5} (310 + 332)
MC	24,5 (0,9646)	52,4 (2,0630)	26,2 (1,0315)	M 10 22 (0,8661)	20 ⁺¹ (177 + 186)	35 ^{+2,5} (310 + 332)
MD	30,5 (1,2008)	58,7 (2,3110)	30,2 (1,1890)	M 10 22 (0,8661)	20 ⁺¹ (177 + 186)	35 ^{+2,5} (310 + 332)
ME	39,3 (1,5472)	69,8 (2,7480)	35,7 (1,4055)	M 12 27 (1,0630)	30 ^{+2,5} (266 + 288)	65 ⁺⁵ (575 + 620)
MF	51 (2,0079)	77,8 (3,0630)	42,9 (1,6890)	M 12 27 (1,0630)	30 ^{+2,5} (266 + 288)	—

010 10-3 15/04/05



Auszug Seite 4

Viscosity range	Up to 3410 SSU [750 mm ² /s (cSt)] permitted
Filtering requirement	See table (2)

Tab. 1

Type	Fluid composition	Max pressure psi - (bar)	Max speed min ⁻¹	Temperature °F - (°C)			Seals (◆)
				Min	Max continuous	Max peak	
ISO/DIN	Mineral oil based hydraulic fluid to ISO/DIN	See page 6	See page 6	-13 (-25)	176 (80)	212 (100)	N
				-13 (-25)	230 (110)	257 (125)	N - H V
HFA	Oil emulsion in water 5 ÷ 15% of oil	725 (50)	1500	36 (2)	131 (55)		N
HFB	Water emulsion in oil 40% of water	1740 (120)	1500	36 (2)	140 (60)		N
HFC	Water - glycol	1450 (100)	1500	-4 (-20)	140 (60)		N Bz
HFD	Phosphate ester	2175 (150)	1500	14 (-10)	176 (80)		V Bz

(◆) **N= Buna N (standard)** - **N-H=** Buna N and high back pressure shaft seals - **V=** Viton
N Bz= Buna N and Bronze thrust plates - **V Bz=** Viton and Bronze thrust plates