



CHARACTERISTICS

				4-displacement motor			
	•			0	0	3	4
		Displacement	cm³/tr	2 857	1 516	934	467
			[cu.in/rev.]	[174.2]	[92.5]	[57.0]	[28.5]
	L2	Th. torque at 100 bar	Nm	4 547	2 413	1 486	743
		Th. torque at 1000 PSI	[lb.ft]	[2 310]	[1 226]	[755]	[378]
		Max.speed	tr/min [RPM]	63	118	192	250
		Displacement	cm³/tr	2 587	1 423	934	467
			[cu.in/rev.]	[157.8]	[86.8]	[57.0]	[28.5]
	H2	Th. torque at 100 bar	Nm	4 117	2 265	1 486	743
		Th. torque at 1000 PSI	[lb.ft]	[2 092]	[1 150]	[755]	[378]
		Max.speed	tr/min [RPM]	69	126	192	250
		Displacement	cm³/tr	2 506	1 253	934	467
			[cu.in/rev.]	[152.8]	[76.4]	[57.0]	[28.5]
	92	Th. torque at 100 bar	Nm	3 988	1 994	1 486	743
		Th. torque at 1000 PSI	[lb.ft]	[2 026]	[1 013]	[755]	[378]
		Max.speed	tr/min [RPM]	72	143	192	250
Callis		Displacement Th. torque at 100 bar Th. torque at 1000 PSI	cm³/tr	2 449	1 224	702	351
			[cu.in/rev.]	[149.4]	[74.7]	[42.8]	[21.4]
	09		Nm	3 898	1 948	1 117	559
			[lb.ft]	[1 980]	[990]	[568]	[284]
		Max.speed	tr/min [RPM]	73	147	250	250
		Displacement	cm³/tr	2 252	1 301	856	428
			[cu.in/rev.]	[137.3]	[79.3]	[52.2]	[26.1]
	Q1	Th. torque at 100 bar	Nm [lb.ft]	3 584	2 071	1 362	681
		Th. torque at 1000 PSI		[1 821]	[1 052]	[692]	[346]
		Max.speed	tr/min [RPM]	80	138	210	250
		Displacement	cm³/tr	1 947	973	856	428
			[cu.in/rev.]	[118.7]	[59.3]	[52.2]	[26.1]
	61	Th. torque at 100 bar	Nm	3 099	1 549	1 362	681
	01	Th. torque at 1000 PSI	[lb.ft]	[1 574]	[787]	[692]	[346]
		Max.speed	tr/min [RPM]	92	185	210	250
		Max.power	kW 🔥	90	60	50	40
			[HP] ^	[121]	[81]	[67]	[54]
			kW R	90	45	50	30
			[HP] ``	[121]	[60]	[67]	[40]
		Max. pressure	bar		45	50	
		•	[15]		[6 5	30]	



Contact your Poclain Hydraulics application engineer to find out how the displacement shift from the third to the second displacement is controlled and to find out transmission capabilities in terms of displacement shift when the vehicle is in motion.

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Hydraulic motors MW24



CODE



Without Options or Adaptations	0
T4 speed sensor (without rotation direction)	2
Predisposition for speed sensor	8
TR speed sensor (digital rotation direction)	S
TD speed sensor (two phase shifted frequencies)	Q



Methodology :

This document is intended for manufacturers of machines that incorporate Poclain Hydraulics products. It describes the technical characteristics of Poclain Hydraulics products and specifies installation conditions that will ensure optimum operation. This document includes important comments concerning safety. They are indicated in the following way:



Safety comment.

This document also includes essential operating instructions for the product and general information. These are indicated in the following way:

	Essential instructions.
Î	General information .
C	Information on the model number.Information on the model code.
$\hat{\Box}$	Weight of component without oil.
Y C	Volume of oil.
V	Units.
))	Tightening torque.
m	Screws.
Â	Information intended for Poclain-Hydraulics personnel.

The views in this document are created using metric standards. The dimensional data is given in mm and in inches (inches are between brackets and italic)



Associated documents

Document type	N°
Generic installation	801478197L

Poclain Hydraulics Patents

Document type	N°
MW motor	FR2796992
MW motor	US6347572
Dyna +™ brake	FR2796886
Dyna +™ brake	US6357558
Dyna +™ brake	FR2797008

205 [8.07]

Ø 425 max. [16.73 dia.]

185 [7.28]

WHEEL MOTOR

Dimensions for standard motor



Brake

Model code

Motor



Load curves









The starting torque is taken to be approximately 85% of the first value for available pressure. For a precise calculation, consult your Poclain Hydraulics application engineer.

Wheel rim mountings

	A (1)	В	С		L
7 2 1 1 2 3 4 P	Ø 220.8 [8.69 dia.]	Ø 275 [10.83 dia.]	Ø 360 [14.17 dia.]	8 x M20x1.5	55 [2.17]
7 5 1 1 2 3 4 P	Ø 220.8 [8.69 dia.]	Ø 335.0 [13.19 dia.]	Ø 360.0 [14.17 dia.]	10 x M22x1.5	55 [2.17]

(1)+ 0 [+ 0] - 0.2 [- 0.008]





Studs

		с	С	р				(*)
	B	min.	max.	D		Class	(1)	(2)
Studs	M20x1.5	3.5 [0.14]	29 [1.14]	25 [0.98]		12.9	600 <i>[442.5]</i>	770 [567.9]
(*) The tightening torques are given for the indicated loads.								

(1) Wheel rim : Suggested tightening torque for wheel rim mountings (Re steel disc > 240 N/mm² [>34 800 PSI]).
(2) Standard : Suggested tightening torque in other cases (Re steel flange 360 > N/mm² [>52 215 PSI])

Hydraulic motors MW24

Chassis mountings



(*) The tightening torques are given for the indicated loads.



For other chassis mounting possibilities, please consult your Poclain Hydraulics engineer.

Hydraulic connections



V	Old standards	Standards	Power supply	Case drain 1	Return Power supply R	1 st or 3 rd displacement control Y1-Y3	Control of parking break X	Control of service break XD
	ISO 6162	ISO DP6162	DN 19 PN400		DN 19 PN400			
1	DIN 3852	ISO 9974-1		M22 x 1.5		M16 x 1.5	M16 x 1.5	M14 x 1.5
	ISO 6162	ISO DP6162	DN 19 PN400		DN 19 PN400			
7	SAEJ514	ISO 11926-1		7/8" 14 UNF		3/4" 16 UNF	3/4" 16 UNF	9/16" 18 UNF



To find the connections' tightening torques, see the brochure "Installation guide" N° 801478197L.



You are strongly advised to use the fluids specified in

brochure "Installation guide" N° 801478197L.



Do not put either a check valve or a poppet valve on the pilot line.

Model code

Motor

Brake

Options

BRAKES

DYNA+[™] Brake



Brake operation

This mutli-disk brake operates in two distinct ways:

Either by an absence of pressure (static braking): The spring applies a force to the static piston that is transmitted to the dynamic piston, which clamps the fixed and free disks, preventing the shaft from turning. Braking torque decreases linearly as a function of unlocking pressure.

• Or by braking pressure (dynamic braking). The braking command creates a pressure on the dynamic braking piston, which clamps the fixed and free disks, preventing the shaft from turning. Braking torque increases linearly as a function of the unlocking pressure.

C	7	7	3	1

Hydraulically controlled dynamic braking	6
Max. permissible brake torque	16 600 Nm [12 240 lb.ft]
Pressure to obtain max. permissible brake torque	120 bar <i>[1 740 PSI]</i>
Volume required for braking	22 cm³ [1.34 cu.in]
Mini. irrigation flow rate for dynamic braking	4 L/min [1.06 GPM]
Hydraulically controlled parking brake	
Parking brake torque (new brakes)	9 580 Nm [7 070 lb.ft]
Parking brake torque (after 500 dynamic braking)	7 660 Nm [5 650 lb.ft]
Parking brake torque mini. requiring renovation	6 830 Nm [5 040 lb.ft]
Max. release brake pressure	30 bar <i>[435 PSI</i>]
Volume for brake release	86 cm³ [5.25 cu.in]
Inlet conditions for brake release in towing (Flow rate of 2 L/min)	14 bar <i>[203 PSI]</i>
Emergency dynamical braking torque at 0 bar to the case	8 000 Nm [5 900 lb.ft]
Max. energy dissipation	882 kJ

Indicative values coming from fly-wheel test bench. Braking performance must be performed on machine by the manufacturer.



Brake release pressure vented.



Do not use both dynamic and parking brake simultaneously.



The use of certain oils, can not offer the characteristics ones above. Consult your Poclain Hydraulics sales engineer.

OPTIONS



Model code

Motor

Brake

Thirteen subsidiaries and a worldwide network ^h of more than 150 distributors and partners ...

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A01875N
A01882V
A01883W
A01884X

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More information on

