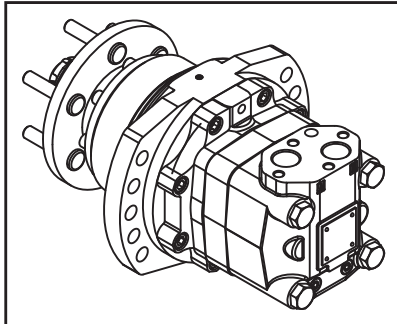
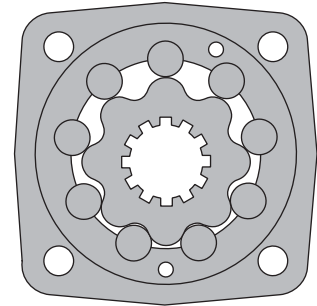


Motor-brakes type MTF/B



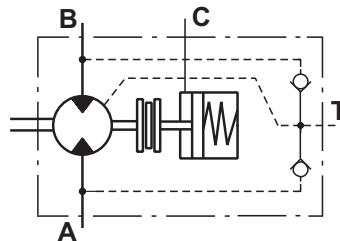
APPLICATION

- » Conveyors
- » Metal working machines
- » Machines for agriculture
- » Road building machines
- » Mining machinery
- » Food industries
- » Special vehicles
- » Plastic and rubber machinery etc.



OPTIONS

- » Model- Disc valve, roll-gerotor
- » Flange mount with wheel mount
- » Side and rear ports
- » Shafts- straight, splined and tapered
- » Metric, SAE and BSPP ports
- » Other special features



EXCELLENCE

- » High torque and pressure drop
- » High inlet pressure
- » High starting torque
- » Improved efficiency at high pressure drop and frequent reversing
- » Smooth operation at low speed
- » High radial and axial bearing capacity

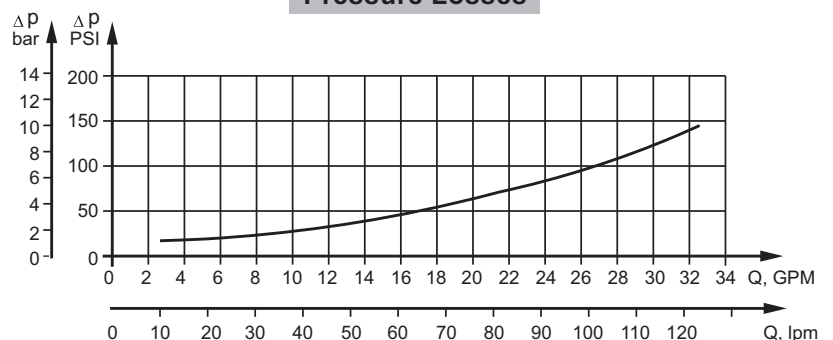
GENERAL

Displacement,	cm ³ /rev [in ³ /rev]	523,6 [31.95]
Max. Speed,	RPM	560
Max. Torque,	daNm [lb-in]	cont.: 122 [10800] int.: 137 [12125]
Max. Output,	kW [HP]	33,5 [44.9]
Max. Pressure Drop,	bar [PSI]	cont.: 210 [3390] int.: 275 [3990]
Max. Oil Flow,	lpm [GPM]	150 [40]
Min. Speed,	RPM	5
Permissible Shaft Loads,	daN [lb]	Pa=1000 [2250]
Pressure fluid		Mineral based- HLP(DIN 51524) or HM(ISO 6743/4)
Temperature range,	°C [°F]	-30÷90 [-22÷194]
Optimal Viscosity range,	mm ² /s [SUS]	20÷75 [98÷347]
Filtration		ISO code 20/16 (Min. recommended fluid filtration of 25 micron)

Oil flow in drain line

Pressure drop bar [PSI]	Viscosity mm ² /s [SUS]	Oil flow in drain line lpm [GPM]
140 [2030]	20 [98]	2,5 [.660]
	35 [164]	1,5 [.396]
210 [3045]	20 [98]	5 [1.321]
	35 [164]	3 [.793]

Pressure Losses



SPECIFICATION DATA

Type		MTF/B 160	MTF/B 200	MTF/B 250	MTF/B 315	MTF/B 400	MTF/B 500
Displacement, cm³/rev [in³/rev]		159,7 [9.74]	200 [12.2]	251,8 [15.37]	326,3 [19.9]	410,9 [19.9]	523,6 [31.95]
Max. Speed, [RPM]	Cont.	470	375	496	382	305	238
	Int.*	560	450	601	461	365	289
Max. Torque, daNm [lb-in]	Cont.	49 [4340]	61 [5400]	73 [6460]	95 [8410]	108 [9560]	122 [10800]
	Int.*	60 [5310]	72 [6370]	88 [7788]	114 [10090]	126 [11150]	137 [12125]
Max. Output, kW [HP]	Cont.	16,5 [22.1]	16,5 [22.1]	33,5 [44.9]	33,5 [45]	30 [40]	26,5 [36]
	Int.*	23 [30.8]	22 [29.52]	40 [53.6]	40 [53.6]	35 [46.9]	30 [40]
Max. Pressure Drop, bar [PSI]	Cont.	210 [3390]	210 [3390]	200 [2900]	200 [2900]	180 [2610]	160 [2320]
	Int.*	275 [3990]	275 [3990]	240 [3480]	240 [3480]	210 [3390]	180 [2610]
	Peak**	295 [4280]	295 [4280]	280 [4050]	280 [4050]	240 [3480]	210 [3050]
Max. Inlet Pressure, bar [PSI]	Cont.	230 [3340]	230 [3340]	230 [3340]	230 [3340]	210 [3050]	210 [3050]
	Int.*	295 [4280]	295 [4280]	295 [4280]	295 [4280]	250 [3600]	250 [3600]
Max. Oil Flow, lpm [GPM]	Cont.	125 [33]	125 [33]	125 [33]	125 [33]	125 [33]	125 [33]
	Int.*	150 [40]	150 [40]	150 [40]	150 [40]	150 [40]	150 [40]
Max. Return Pressure with Drain Line, bar [PSI]	Cont.	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]	140 [2030]
	Int.*	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]
	Peak**	210 [3050]	210 [3050]	210 [3050]	210 [3050]	210 [3050]	210 [3050]
Max. Starting Pressure with Unloaded Shaft, bar [PSI]		8 [115]	8 [115]	8 [115]	8 [115]	10 [150]	10 [150]
Min. Starting Torque, daNm [lb-in]	at max. pressure drop cont.	47 [4160]	47 [4160]	56 [4960]	71 [6280]	84 [7430]	95 [8410]
	at max. pressure drop int.*	56 [4960]	56 [4960]	70 [6200]	85 [7520]	97 [8585]	106 [9380]
Min. Speed***, RPM		10	6	6	6	6	5
Static Torque of Brake, daNm [lb-in]	MTF/B	143 [12656]					
	MTF/B-01	110 [9735]					
Min. Brake Release Pressure****, bar [PSI]	MTF/B	16 [232]					
	MTF/B-01	23 [333]					
Max. Opening Pressure, bar [PSI]	MTF/B	30 [435]					
	MTF/B-01	35 [507]					
Max. Pressure in Drain Line, bar [PSI]		P _{atm.}					

* Intermittent operation: the permissible values may occur for max. 10% of every minute.

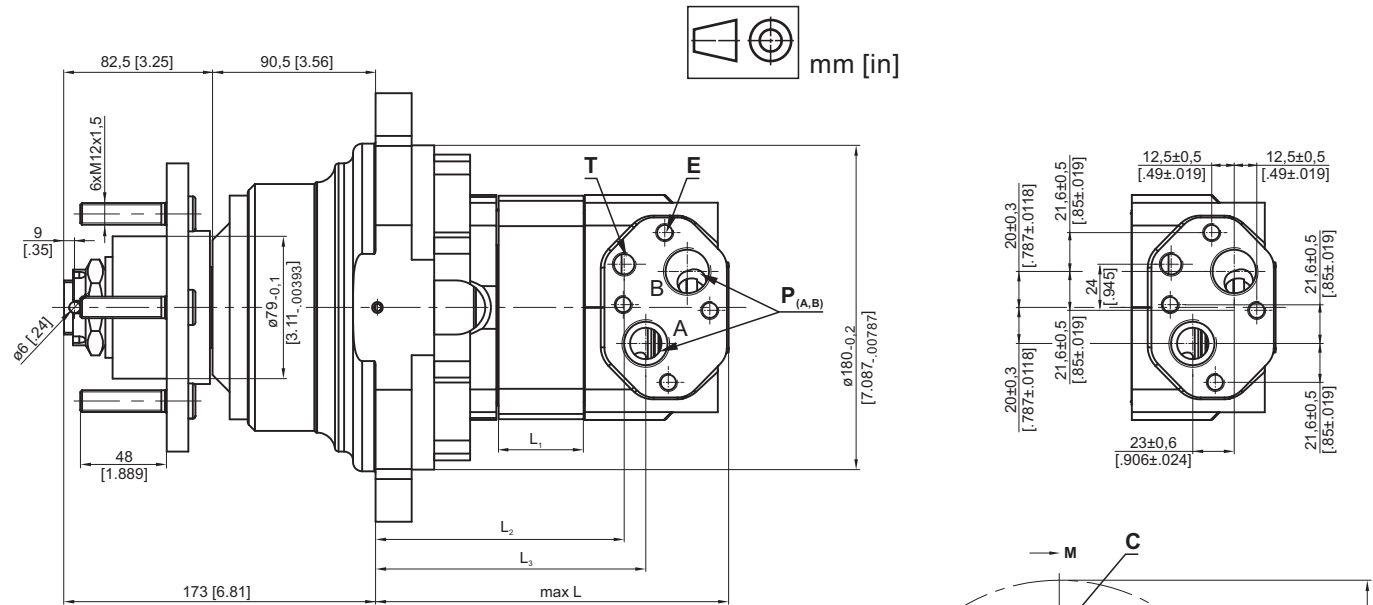
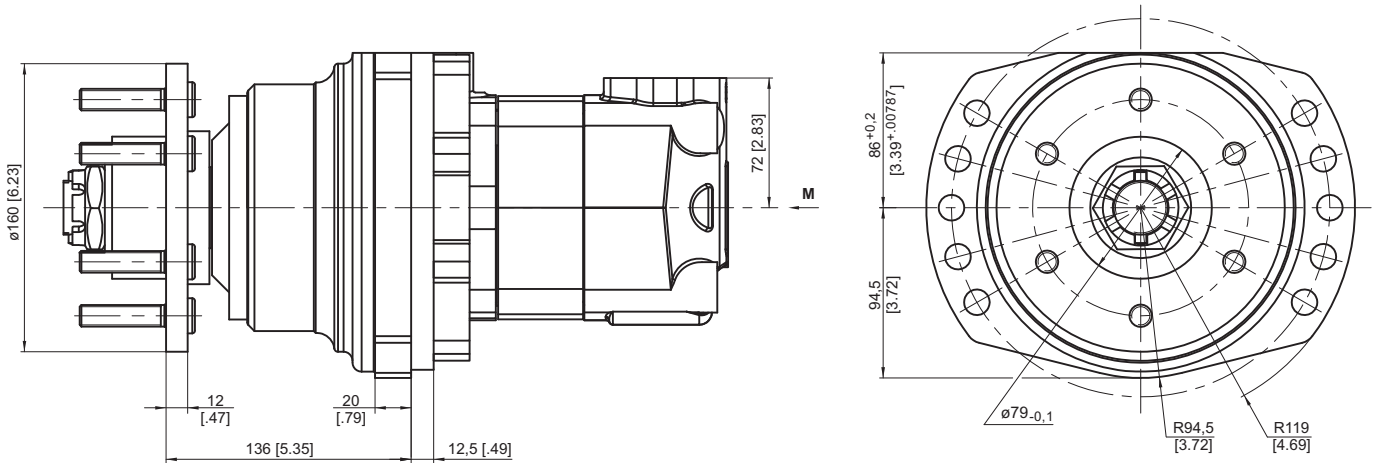
** Peak load: the permissible values may occur for max. 1% of every minute.

*** For speeds lower than given, consult factory or your regional manager.

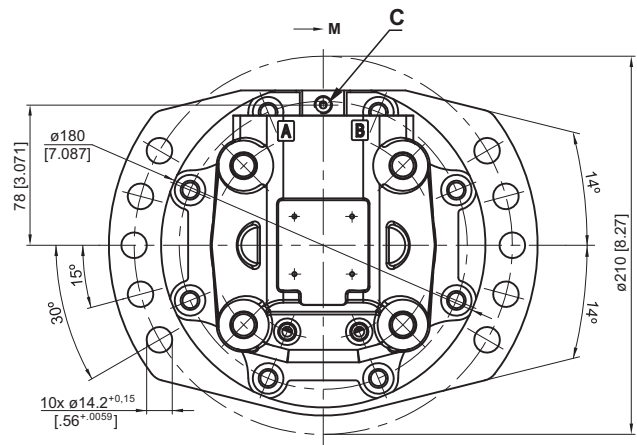
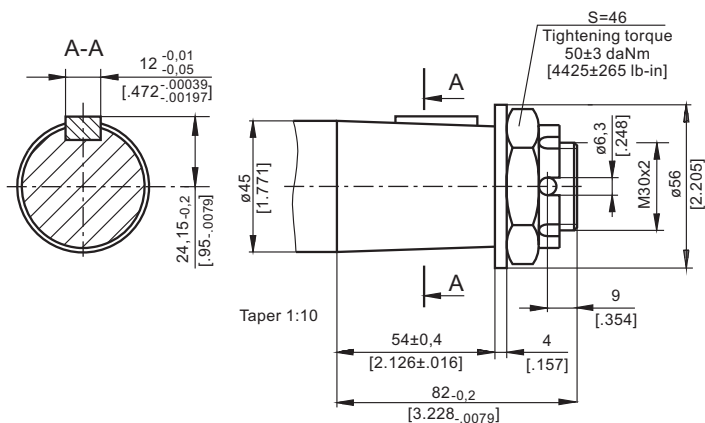
**** Motor-brakes must always have a drain line. The brake release pressure is the difference between the pressure in the brake release line and the pressure in the drain line.

1. Intermittent speed and intermittent pressure must not occur simultaneously.
2. Recommended filtration is per ISO cleanliness code 20/16. A nominal filtration of 25 micron or better.
3. Recommend using a premium quality, anti-wear type mineral based hydraulic oil, HLP(DIN51524) or HM(ISO6743/4). If using synthetic fluids consult the factory for alternative seal materials.
4. Recommended minimum oil viscosity 70 SUS [13 cmi/s] at 122°F [50°C].
5. Recommended maximum system operating temperature is 180°F [82°C].
6. To assure optimum motor life fill with fluid prior to loading and run at moderate load and speed for 10-15 minutes.

DIMENSIONS AND MOUNTING DATA - MTF/B



K -tapered 1:10, Parallel key B12x8x28 DIN 6885
Max. Torque 210,7 daNm [18650 lb-in]



- P_(A,B)** : 2xG3/4 - 17 mm [.669 in] depth
- T** : G1/4 - 12 mm [.472 in] depth
- C** : G1/8 - release port
- E** : 4xM10

Warning: Drain line should always be used.

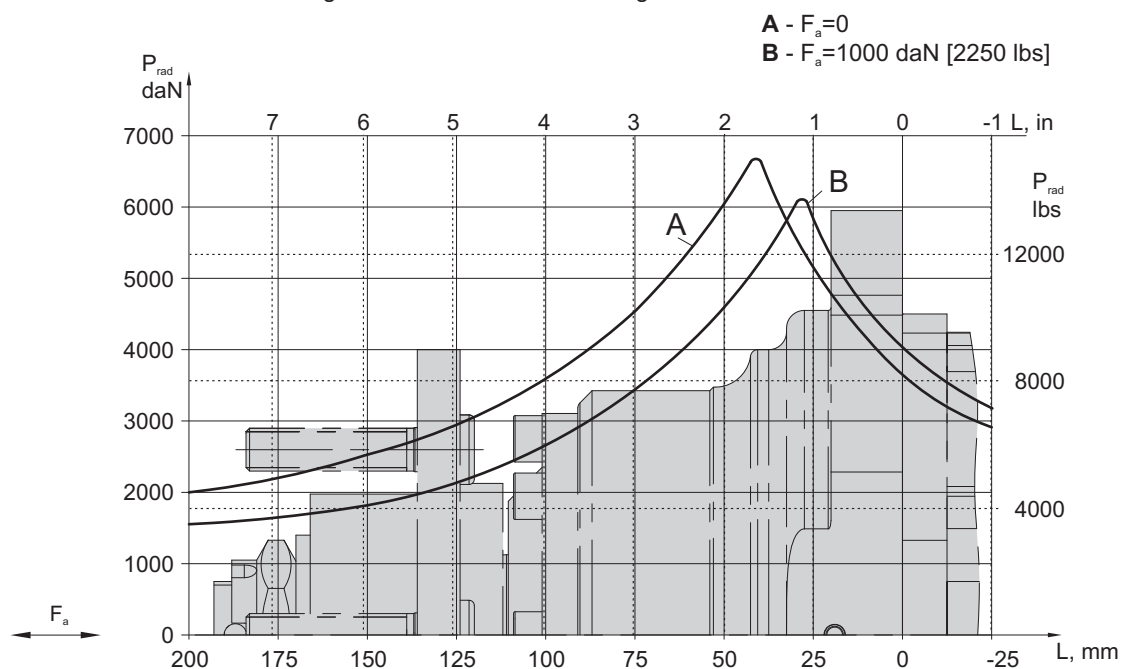
Type	L, mm [in]	L ₃ , mm [in]	L ₂ , mm [in]	L ₁ , mm [in]
MTF/B... 160	168 [6.614]	119 [4.685]	107 [4.213]	16,5 [.649]
MTF/B... 200	173 [6.811]	124 [4.882]	112 [4.409]	21,5 [.846]
MTF/B... 250	179,5 [7.067]	130,3 [5.130]	118,3 [4.665]	27,8 [1.094]
MTF/B... 315	188,5 [7.421]	139,5 [5.492]	127,5 [5.019]	37,0 [1.457]
MTF/B... 400	200 [7.874]	150 [5.906]	138 [5.433]	47,5 [1.870]
MTF/B... 500	213 [8.386]	164 [6.457]	152 [5.984]	61,5 [2.421]

Standard Rotation
Viewed from Shaft End
Port **A** Pressurized - **CW**
Port **B** Pressurized - **CCW**

Reverse Rotation
Viewed from Shaft End
Port **A** Pressurized - **CCW**
Port **B** Pressurized - **CW**

PERMISSIBLE SHAFT LOADS

The load diagram is valid for a B10 bearing life of 2000 hours at 100 RPM



Type	Static Torque daNm [lb-in]	Opening Pressure bar [PSI]
MTF/B...HD	143 [12656]	22-24 [319-348]
MTF/B...HD-01	110 [9735]	16-17 [232-246]

ORDER CODE

1	2	3	4	5	6	7	8
MTF/B						HD	

Pos.1 - Displacement code

160	- 159,7 cm ³ /rev [9.74 in ³ /rev]
200	- 200,0 cm ³ /rev [12.20 in ³ /rev]
250	- 201,4 cm ³ /rev [12.29 in ³ /rev]
315	- 314,9 cm ³ /rev [19.20 in ³ /rev]
400	- 410,9 cm ³ /rev [19.90 in ³ /rev]
500	- 523,6 cm ³ /rev [31.95 in ³ /rev]

Pos.2 - Shaft Extensions*

K	- $\varnothing 45$ [1.771] Tapered 1:10, Parallel key B12x8x28, DIN 6885
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Pos.3 - Special Features

omit	- none
LL	- Low Leakage
LSV	- Low Speed Valve
FR	- Free Running

Pos.4 - Rotation

omit	- Standard Rotation
R	- Reverse Rotation

Pos.5 - Version

omit	- 143/23
01	- 110/16

Pos.6 - Option [Paint]**

omit	- no Paint
P	- Painted
PC	- Corrosion Protected Paint

Pos.7 - Special Features

HD	- Reinforced motor-brake HD ***
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Pos.8 - Design Series

omit	- Factory specified
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Notes: * The permissible output torque for shafts must be not exceeded!

** Color at customer's request.

*** Drain line should always be used.

The motor-brakes are mangano-phosphatized as standard.