

PLANETENMOTOR EPRM-B

ORBITAL MOTOR EPRM-B

ANWENDUNG

- o Förderbänder
- o Metallbearbeitungsmaschinen
- o Fördertechnik für Roboter
- o Landmaschinen
- o Nahrungsmittelindustrie
- o Textilmaschinen
- o u.a.

APPLICATION

- o Conveyors
- o Metal working machines
- o Feeding mechanism of robots and maipulators
- o Agricultural machines
- o Food industries
- o Textile machines
- o etc.

BAUWEISE UND AUSFÜHRUNGEN

- o Modell: Längsschieberventil, Planetensatz
- o Doppelwellenmotor
- o Ovalflansch oder Quadratflansch
- o Anschlüsse: Seitlich, BSPP Gewinde
- o Wellen: Zylindrisch oder verzahnt
- o Sonderausführungen

CONSTRUCTION AND OPTIONS

- o Model: Spool valve, gerotor
- o Dual shaft design
- o Ovalflange or squareflange
- o Ports: Side ports, BSPP threaded
- o Shafts: Straight or splined
- o Other special features

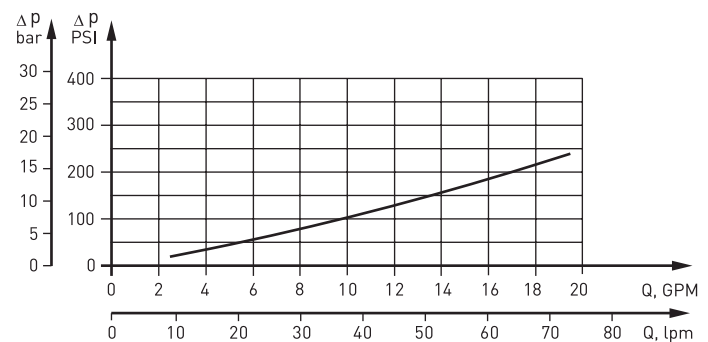
ÜBERSICHT OVERVIEW

Max. Schluckvolumen	Max. Displacement	cm ³ /U	ccm/rev	[in ³ /rev]	397,0 [24.4]
Max. Drehzahl	Max. Speed	U/min	rpm		970
Max. Drehmoment	Max. Torque	daNm		[in/lb]	43,0 [38055]
Max. Leistungsabgabe	Max. Output	kW		[HP]	15,0 [20.1]
Max. Druckgefälle	Max. Pressure drop	bar		[PSI]	200 [2900]
Max. Ölstrom	Max. Oil flow	l/min	lpm	[GPM]	75 [18.5]
Min. Drehzahl	Min. Speed	U/min	rpm		10
Hydrauliköl	Pressure fluid				HLP (DIN 51524) oder or HM (ISO 6743/4)
Öltemperatur	Temperature range	° C		[° F]	-40 ÷ 140 [-40 ÷ 284]
Optimalviskosität	Optimal viscosity range	mm ² /s		[SUS]	20 ÷ 75 [98 ÷ 347]
Filtrierung	Filtration				ISO code 20/16 (min. empfohlene Filtrierung recommended filtration 25 µm)

ÖLSTROM LECKÖLLEITUNG OIL FLOW DRAIN LINE

Druckgefälle Pressure drop bar [PSI]	Viskosität Viscosity mm ² /s [SUS]	Ölstrom Oilflow l/min lpm [GPM]
100 [1450]	20 [98]	2,5 [.660]
	35 [164]	1,8 [.476]
140 [2030]	20 [98]	3,5 [.925]
	35 [164]	2,8 [.740]

DRUCKVERLUST PRESSURE LOSSES



TECHNISCHE DATEN

TECHNICAL DATA

Typ Type		EPRM-B 50	EPRM-B 80	EPRM-B 100	EPRM-B 125	EPRM-B 160	EPRM-B 200	EPRM-K 250	EPRM-K 315	EPRM-K 400
Schluckvolumen Displacement	cm ³ /U ccm/rev [in ³ /rev]	51,5 [3.14]	80,3 [4.90]	99,8 [6.09]	125,5 [7.67]	159,6 [9.74]	199,8 [12.19]	250,1 [15.26]	315,7 [19.26]	397,0 [24.40]
Max. Drehzahl Max. Speed U/min RPM	Dauerbetrieb Continuous	775	750	600	475	375	300	240	190	150
	Int. * Int. *	970	940	750	600	470	375	300	240	185
Max. Drehmoment Max. Torque daNm [lb-in]	Dauerbetrieb Continuous	10,0 [850]	19,5 [1725]	24,0 [2125]	30,0 [2655]	30,0 [2655]	30,0 [2655]	30,0 [2655]	30,0 [2655]	30,0 [2655]
	Int. * Int. *	13,0 [1150]	22,0 [1947]	28,0 [2480]	34,0 [3010]	39,0 [3540]	39,0 [3540]	38,0 [3360]	42,0 [3720]	43,0 [3805]
Max. Drehmoment (Welle A) Max. Torque (A shaft) daNm [lb-in]	Dauerbetrieb Continuous	8,0 [710]	11,5 [1000]	12,0 [1060]	20,0 [1170]	20,0 [1170]	20,0 [1170]	20,0 [1170]	20,0 [1170]	20,0 [1170]
	Int. * Int. *	9,5 [840]	13,0 [1150]	14,0 [1240]	23,0 [2035]	23,0 [2035]	23,0 [2035]	23,0 [2035]	23,0 [2035]	23,0 [2035]
Max. Drehmoment (Welle B) Max. Torque (B shaft) daNm [lb-in]	Dauerbetrieb Continuous	4,0 [335]	11,5 [1000]	12,0 [1060]	20,0 [1170]	20,0 [1170]	20,0 [1170]	20,0 [1170]	20,0 [1170]	20,0 [1170]
	Int. * Int. *	5,0 [440]	13,0 [1150]	14,0 [1240]	23,0 [2035]	23,0 [2035]	23,0 [2035]	23,0 [2035]	23,0 [2035]	23,0 [2035]
Max. Leistungsabgabe Max. Output kW [HP]	Dauerbetrieb Continuous	7,0 [9.5]	12,5 [17.0]	13,0 [11.5]	12,5 [17.4]	10,0 [13.5]	8,0 [10.7]	6,0 [8.0]	5,0 [6.7]	4,0 [5.4]
	Int. * Int. *	8,5 [11.9]	15,0 [20.1]	15,0 [20.1]	14,5 [19.7]	12,5 [17.0]	10,0 [13.4]	8,0 [10.7]	6,5 [8.7]	6,0 [8.0]
Max. Druckgefälle Max. Pressure drop bar [PSI]	Dauerbetrieb Continuous	140 [2030]	175 [2540]	175 [2540]	175 [2540]	130 [1885]	110 [1600]	80 [1160]	70 [1020]	55 [800]
	Int. * Int. *	175 [2540]	200 [2900]	200 [2900]	200 [2900]	175 [2540]	140 [2030]	110 [1600]	100 [1450]	80 [1160]
Max. Ölstrom Max. Oil flow l/min lpm [GPM]	Dauerbetrieb Continuous	40 [10.5]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]
	Int. * Int. *	50 [13.2]	75 [18.5]	75 [18.5]	75 [18.5]	75 [18.5]	75 [18.5]	75 [18.5]	75 [18.5]	75 [18.5]
Max. Rücklaufdruck mit Leckölleitung oder max. Druck in der Leckölleitung Max. Return pressure with drain line or max. pressure in drain line bar [PSI]	Dauerb. Cont. 0 - 100 U/min RPM	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]
	Dauerb. Cont. 100 - 200 U/min RPM	50 [730]	50 [730]	50 [730]	50 [730]	50 [730]	50 [730]	50 [730]	50 [730]	50 [730]
	Dauerb. Cont. 200 - 500 U/min RPM	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]	20 [290]
	Int.* Int.* 0 - max. U/min RPM	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	75 [1090]	15 [220]

- * Intermittierend: Betrieb max. 10% pro Minute
- ** Spitze: max. 1% pro Minute
- *** Für Drehzahlen kleiner der min. Drehzahl sprechen Sie uns bitte an.
- Intermittierende Druckgefälle und Ölströme dürfen nicht gleichzeitig erreicht werden.
- Minimale Viskosität 13 mm²/s [70 SUS] bei 50 °C [122 °F]
- Maximale Öltemperatur während des Betriebs 82 °C [180 °F]
- Die Lebensdauer der Motoren kann erhöht werden, wenn die Antriebswelle 10-15 Minuten vor voller Belastung frei läuft.

- * Intermittent: Working max. 10% per minute
- ** Peak: max. 1% per minute
- *** For speeds lower than given, please consult us.
- Int. speed and pressure should not occur simultaneously.
- Recommended min. oil viscosity 13 mm²/s [70 SUS] at 50 °C [122 °F]
- Recommended max. system operating temperature is 82 °C [180 °F]
- To assure optimum motor life fill with fluid prior to loading and run at moderate load and speed for 10-15 minutes.

BESTELLCODE ORDER CODE

EPRM-B	1	2	3	4	5	6
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1.	Schluckvolumen Displacement
50	51,5 cm ³ /U ccm/rev. [3.14 in ³ /rev]
80	80,3 cm ³ /U ccm/rev. [4.90 in ³ /rev]
100	99,8 cm ³ /U ccm/rev. [6.09 in ³ /rev]
125	125,7 cm ³ /U ccm/rev. [7.67 in ³ /rev]
160	159,6 cm ³ /U ccm/rev. [9.74 in ³ /rev]
200	199,8 cm ³ /U ccm/rev. [12.19 in ³ /rev]
250	250,1 cm ³ /U ccm/rev. [15.26 in ³ /rev]
315	315,7 cm ³ /U ccm/rev. [19.26 in ³ /rev]
400	397,0 cm ³ /U ccm/rev. [24.40 in ³ /rev]

3.	Abtriebswelle A (Zul. Momentabgabe darf nicht überschritten werden) Shaft A (Permissible output torque should not be exceeded)
C	Zylindrisch Ø25, Passfeder 8x7x32 DIN6885 Straight Ø25, parallel key 8x7x32 DIN6885
SH	Verzahnt Ø25,32 BS2059 (SAE 6 B) Splined Ø25,32, BS2059 (SAE 6 B)

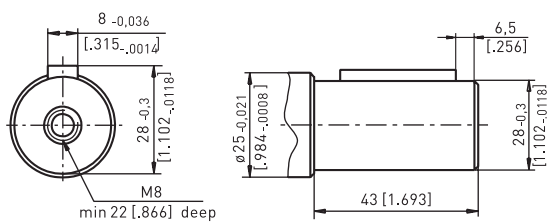
4.	Abtriebswelle B (Zul. Momentabgabe darf nicht überschritten werden) Shaft B (Permissible output torque should not be exceeded)
C	Zylindrisch Ø25, Passfeder 8x7x32 DIN6885 Straight Ø25, parallel key 8x7x32 DIN6885
SH	Verzahnt Ø25,32 BS2059 (SAE 6 B) Splined Ø25,32, BS2059 (SAE 6 B)

5.	Sonderausführungen Special features
R	Drehrichtung umgedreht Reverse rotation
P	Lackiert (Farbe auf Anfrage) Paint (colour on request)
PC	Korrosionsschutzfarbe (Farbe auf Anfrage) Corrosion protected paint (colour on request)
PS	Speziallackierung (Anschlussflächen blank / Farbe auf Anfrage) Paint (non painted feeding surfaces / colour on request)
PCS	Korrosionsschutzfarbe Spezial (Anschlussflächen blank / Farbe auf Anfrage) Corrosion prot. paint special (non painted feeding surfaces / colour on request)

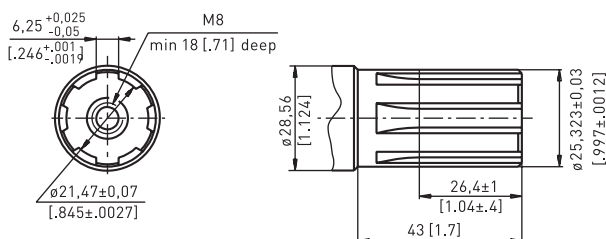
6.	Design Serie Design series
frei omit	Betriebsspezifisch Factory specified

3. + 4. ABTRIEBSWELLE 3. + 4. SHAFT

Option C: Zylindrisch Ø25 mm
Option C: Straight Ø 25 mm



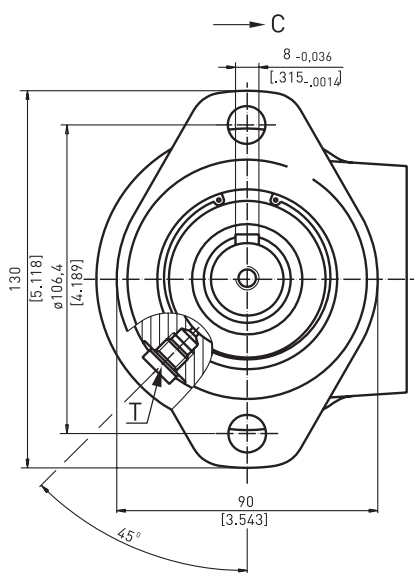
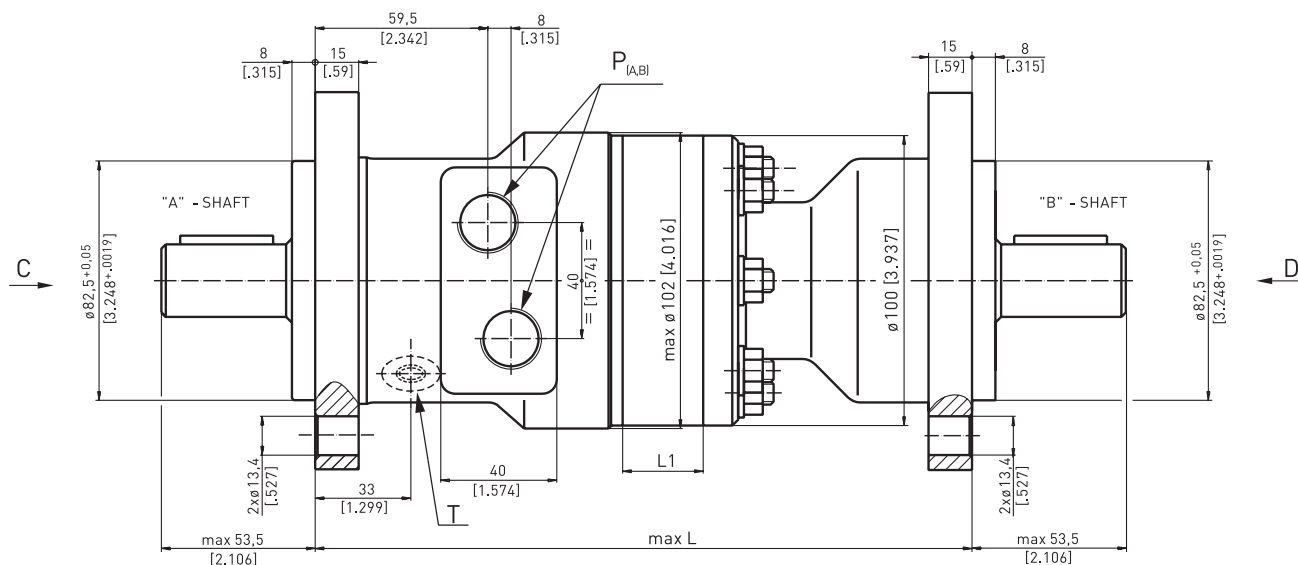
Option SH: Verzahnt SAE 6 B
Option SH: Splined SAE 6 B



Zulässige Drehmomentabgabe
Permissible output torque

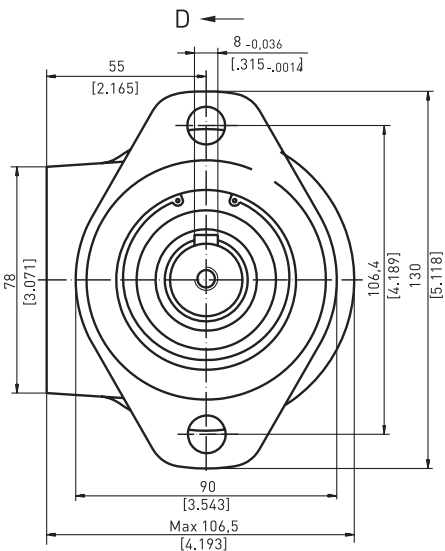
Zulässige Drehmomentabgabe je nach Wellentyp Permissible output torque based on shaft type daNm [lb-in]	
C	SH
34 [3010]	40 [3540]

EINBAUMAß DIMENSION

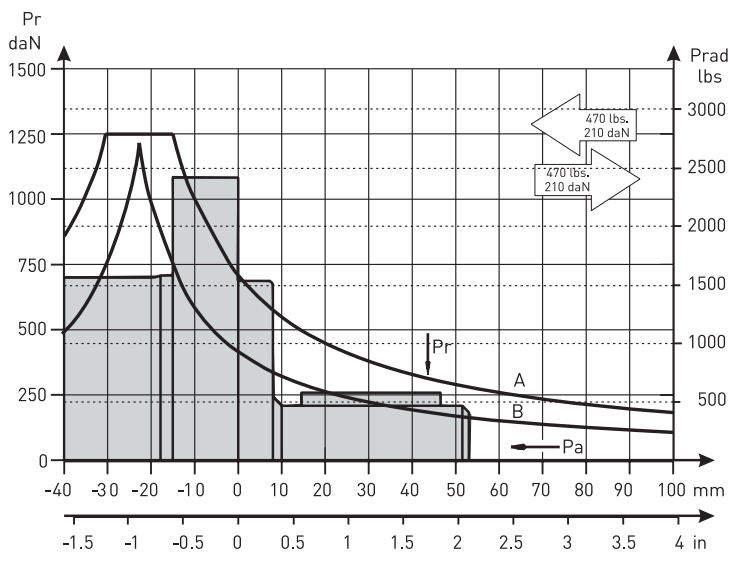


P (A,B): 2xG1/2 - 18mm [.71 in] tief deep
 T: G1/8 - 9 mm [.35 in] tief deep

Typ	Type	L, mm [in]	L ₁ , mm [in]
EPRM-B 50		208,0 [8.19]	9,0 [.35]
EPRM-B 80		213,0 [8.9]	14,0 [.55]
EPRM-B 100		216,0 [8.50]	17,4 [.69]
EPRM-B 125		220,5 [8.68]	21,8 [.86]
EPRM-B 160		226,5 [8.92]	27,8 [1.09]
EPRM-B 200		233,5 [9.19]	34,8 [1.37]
EPRM-B 250		242,5 [9.55]	43,5 [1.71]
EPRM-B 315		253,5 [9.98]	54,8 [2.16]
EPRM-B 400		268,0 [10.55]	69,4 [2.73]



WEITERE TECHNISCHE INFORMATIONEN FURTHER TECHNICAL INFORMATION



Zulässige Wellenbelastung:
 Die Kurven gelten für eine B10-Lebensdauer der Lager von 1600 Stunden bei 200 U/min.
 Kurve A zeigt die maximale statische Belastung die durch die Lager abfangen können.
 Kurve B zeigt die obere Grenze der radialen Belastung ohne Axiallast von 200 daN.

Permissible shaft loads:
 The curves apply to a B10 bearing life of 1600 hours @ 200 rpm
 Curve A gives the maximum static load affordable by the bearings.
 Curve B gives the radial load top limit without axial load of 200 daN.