Technische Daten *Technical datas*

Für EPM Motoren mit C, CO, SH, K und SA Wellen (Dichtungsdurchmesser Ø28,56)
For EPM motors with C, CO, SH, K and SA shafts (sealing diameter Ø28.56)

Typ *Type*		EPM 160	EPM 200	EPM 250	EPM 315	EPM 400	EPM 500	EPM 630
Schluckvolumen *Displacement* cm^3/U *ccm/rev* [in^3/rev]		158,4 [9.66]	198,0 [12.10]	247,5 [15.10]	316,8 [19.30]	396,0 [24.16]	495,0 [30.20]	623,6 [38.05]
Max. Drehzahl *Max. Speed* U/min *RPM*	Dauerbetrieb *Continuous working*	378	303	242	190	150	120	95
	Intermittierend* *Intermittent**	472	378	303	236	189	150	120
Max. Drehmoment *Max. Torque* daNm [lb-in]	Dauerbetrieb Continuous working	31,3 [2770]	36,6 [3240]	38,0 [3360]	38,0 [3360]	36,0 [3190]	39,0 [3452]	44,0 [3895]
	Intermittierend* *Intermittent**	37,8 [3345]	45,6 [4035]	58,3 [5160]	56,0 [4960]	59,0 [5240]	57,0 [5045]	64,0 [5665]
	Spitze ** *Peak ***	43,8 [3880]	55,0 [4870]	68,5 [6060]	85,0 [7505]	85,4 [7560]	78,0 [6903]	82,0 [7257]
Max. Leistungsabgabe *Max. Output* kW [HP]	Dauerbetrieb *Continuous working*	10,1 [13.5]	10,0 [13.5]	7,5 [10.0]	5,8 [7.9]	4,6 [6.2]	3,5 [4.7]	3,3 [4.4]
	Intermittierend* *Intermittent**	12,1 [16.2]	12,0 [16.1]	12,0 [16.1]	9,0 [12.1]	7,8 [10.5]	7,2 [9.7]	5,6 [7.5]
Max. Druckgefälle *Max. Pressure drop* bar [PSI]	Dauerbetrieb *Continuous working*	140 [2030]	140 [2030]	110 [1600]	90 [1300]	70 [1015]	60 [870]	55 [800]
	Intermittierend* *Intermittent**	175 [2540]	175 [2540]	175 [2540]	140 [2030]	115 [1665]	90 [1305]	80 [1160]
	Spitze ** *Peak ***	225 [3260]	225 [3260]	225 [3260]	225 [3260]	180 [2610]	130 [1885]	110 [1740]
Max. Ölstrom *Max. Oil flow* l/min *lpm* [GPM]	Dauerbetrieb *Continuous working*	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]	60 [15.9]
	Intermittierend* *Intermittent**	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]	75 [19.8]
Max. Eingangsdruck *Max. Inlet pressure* bar [PSI]	Dauerbetrieb *Continuous working*	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	140 [2030]	140 [2030]
	Intermittierend* *Intermittent**	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	175 [2540]	175 [2540]
	Spitze ** *Peak ***	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]
Max. Rücklaufdruck mit Leckölleitung *Max. Return pressure with drain line* bar [PSI]	Dauerbetrieb *Continuous working*	175 [2540]	175 [2540]	175 [2540]	175 [2540]	175 [2540]	140 [2030]	140 [2030]
	Intermittierend* *Intermittent**	200 [2900]	200 [2900]	200 [2900]	200 [2900]	200 [2900]	175 [2540]	175 [2540]
	Spitze ** *Peak ***	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]	225 [3260]
Max. Anlaufdruck mit unbelasteter Welle *Max. starting pressure with unloaded shaft* bar [PSI]		8 [116]	7 [100]	6 [87]	5 [73]	5 [73]	5 [73]	5 [73]
Min. Anlaufmoment bei max. Druckgefälle *Min. starting torque at max. pressure drop* daNm [lb-in]	Dauerbetrieb *Continuous working*	28,2 [2500]	33,5 [2950]	33,6 [2970]	34,4 [3045]	34,5 [3050]	36,0 [3180]	41,5 [3670]
	Intermittierend* *Intermittent**	35,5 [3140]	42,6 [3770]	54,2 [4795]	61,9 [5480]	60,8 [5390]	54,0 [4780]	62,0 [5480]
Min. Drehzahl *** *Min speed ***** U/min *RPM*		10	10	10	10	10	10	10
Gewicht *Weight* kg [lb]	EPM (F) (N)	6,4 [14.1]	6,6 [14.6]	6,8 [15.0]	7,1 [15.6]	7,6 [16.8]	8,9 [20.0]	9,5 [21.4]
	EPM-W (N)	6,1 [13.5]	6,3 [13.9]	6,5 [14.3]	6,8 [15.0]	7,2 [15.9]	8,6 [19.0]	9,2 [20.3]
Für Hintenanschluss *For rear ports* +0,450 [.992]	EPM-Q (N)	5,8 [12.8]	6,0 [13.2]	6,2 [13.7]	6,5 [14.3]	6,8 [15.0]	8,3 [18.3]	9,0 [19.8]

* 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 mm^2/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.*
- *Intermittent speed and pressure should not occur simultaneously.*
- *Recommended minimum oil viscosity 13 mm^2/s [70 SUS] at 50° C [122° F]*
- *Recommended maximum 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 EPM® *Ordercode EPM®*

EPM	1	2	3	4	5	6	7	8	9	10

Pos. 1	Montageflansch *Mounting flange*
frei ***omit***	Ovalflansch, zwei Befestigungslöcher *Oval mount, two holes*
F	Ovalflansch, vier Befestigungslöcher *Oval mount, four holes*
Q	Quadratflansch, vier Gewindebohrungen *Square mount, four bolts*
W	Radflansch *Wheel mount*

Pos. 2	Lagerung *Bearing*
frei ***omit***	Ohne Lager *Without bearing*
N*	Mit Radialnadellager *With needle bearings*

Pos. 3	Anschlusstyp *Port type*
frei ***omit***	Seitenanschluss *Side ports*
E	Hintenanschluss *Rear ports*

Pos. 4	Schluckvolumen *Displacement*
25*	25,0 cm^3/U *ccm/rev* [1.52 in^3/rev]
32*	32,0 cm^3/U *ccm/rev* [1.95 in^3/rev]
40*	40,0 cm^3/U *ccm/rev* [2.44 in^3/rev]
50	49,5 cm^3/U *ccm/rev* [3.02 in^3/rev]
80	79,2 cm^3/U *ccm/rev* [4.83 in^3/rev]
100	99,0 cm^3/U *ccm/rev* [6.04 in^3/rev]
125	123,8 cm^3/U *ccm/rev* [7.55 in^3/rev]
160	158,4 cm^3/U *ccm/rev* [9.66 in^3/rev]
200	198,0 cm^3/U *ccm/rev* [12.10 in^3/rev]
250	247,5 cm^3/U *ccm/rev* [15.10 in^3/rev]
315	316,8 cm^3/U *ccm/rev* [19.30 in^3/rev]
400	396,0 cm^3/U *ccm/rev* [24.16 in^3/rev]
500	495,0 cm^3/U *ccm/rev* [30.20 in^3/rev]
630	623,6 cm^3/U *ccm/rev* [38.05 in^3/rev]

Pos. 5	Abtriebswelle ** *Shaft *****
C	Zylindrisch Ø25, Passfeder A8x7x32 DIN 6885 *Cylindrical Ø25, parallel key A8x7x32 DIN 6885*
VC	Zylindrisch Ø25, Passfeder A8x7x32 DIN 6885 mit korrosionsbeständiger Buchse *Cylindrical Ø25, parallel key A8x7x32 DIN 6885* *with corrosion resitant bushing*
CO	Zylindrisch Ø1", Passfeder 1/4" x 1/4" x 1 1/4" BS46 *Cylindrical Ø1", parallel key 1/4" x 1/4" x 1 1/4" BS46*
VCO	Zylindrisch Ø1", Passfeder 1/4" x 1/4" x 1 1/4" BS46 mit korrosionsbeständiger Buchse *Cylindrical Ø1", parallel key 1/4" x 1/4" x 1 1/4" BS46* *with corrosion resitant bushing*
SH	Verzahnt Ø25,32, BS2059 (SAE 6 B) *Splined Ø25.32, BS2059 (SAE 6 B)*
VSH	Verzahnt Ø25,32, BS2059 (SAE 6 B) mit korrosionsbeständiger Buchse *Splined Ø25.32, BS2059 (SAE 6 B)* *with corrosion resitant bushing*
K	Konisch 1:10 Ø28,56, Passfeder B5x5x14 DIN 6885 *Tapered 1:10 Ø28.56, parallel key B5x5x14 DIN 6885*
SA	Verzahnt Ø24,5, B 25x22 DIN 5482 *Splined Ø24.5, B 25x22 DIN 5482*
VSA	Verzahnt Ø24,5, B 25x22 DIN 5482 mit korrosionsbeständiger Buchse *Splined Ø24.5, B 25x22 DIN 5482* *with corrosion resitant bushing*
CB	Zilindrisch Ø32, Passfeder A10x8x45 DIN 6885 *Cylindrical Ø32, parallel key A10x8x45 DIN 6885*
KB	Konisch 1:10 Ø35, Passfeder B6x6x20 DIN 6885 *Tapered 1:10 Ø35, parallel key B6x6x20 DIN 6885*
SB	Verzahnt A 25x22 DIN 5482 *Splined A 25x22 DIN 5482*
OB	Konisch 1:8 Ø1 1/4", Passfeder 5/16" x 5/16" x 1 1/4" BS46 *Tapered 1:8 Ø1 1/4", parallel key 5/16" x 5/16" x 1 1/4" BS46*
HB	Verzahnt Ø1 1/4" 14T ANSI B92.1 - 1976 *Splined Ø1 1/4" 14T ANSI B92.1 -1976*

Pos. 6	Wellendichtung *Shaft seal*
frei ***omit***	Für niedrigen Druck oder "…B" Wellen *For low pressure or "…B" shafts*
D	Für hohen Druck For high pressure
U	Für Höchstdruck (ohne Rückschlagventile) *For highest pressure (without check valves)*

Pos. 7	Leckölanschluss *Drain port*
frei ***omit***	Mit Leckölanschluss *With drain port*
1	Ohne Leckölanschluss *Wihout drain port*

Pos. 8	Anschlüsse *Ports*
frei ***omit***	BSPP (ISO 228)
M	Metrisch *metric* (ISO 262)

Pos. 9	Sonderausführungen *Special features*
RS	Drehzahlsensor *Speed sensor*
LL	Geringeres Lecköl *Low Leakage*
LSV	Ventil für geringe Drehzahlen (nur für EPM-W) *Low speed valve (only for EPM-W)*
FR	Leichtlaufausführung (nicht für EPM-N) *Free running (not for EPM-N)*
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)*

Pos. 10	Design Serie *Design series*
frei ***omit***	Betriebsspezifisch *Factory specified*

* Nur mit Hochdruckdichtung (Pos. 6 Option D oder U) erhältlich
Only with high pressure seal (pos. 6 option D or U) available

** Zulässige Momentabgabe darf nicht überschritten werden
Permissible output torque should not be exceeded

Die folgenden Kombinationen sind nicht erhältlich:

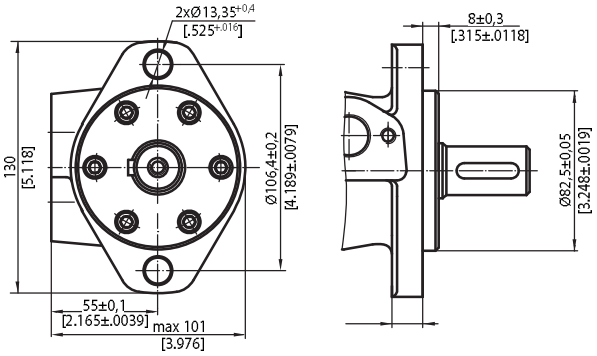
- **Q**-Flansch mit **... B**-Wellen
- **W**-Flansch mit **... B**-Wellen oder Hintenanschluss
- Option **N** mit **... B**-Wellen (nur mit Hochdruckdichtung erhältlich)
- **... B**-Wellen mit **D** oder **U** Wellendichtungen

The following combinations are not available:

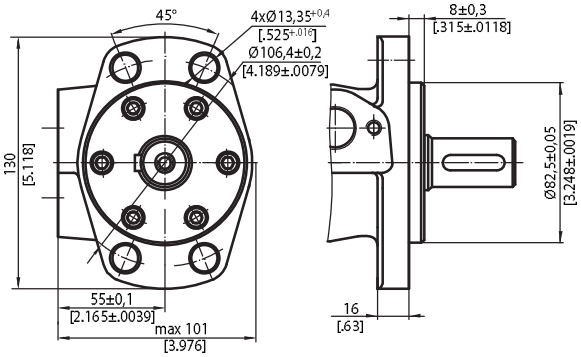
- ***Q**-Flange with ... **B**-shafts*
- ***W**-Flange with ... **B**-shafts or rear port*
- *Option **N** with ... **B**-shafts (only with high pressure seal available)*
- *... **B**-shafts with **D** or U shaftseals*

Pos. 1 Montageflansch *Mounting flange*

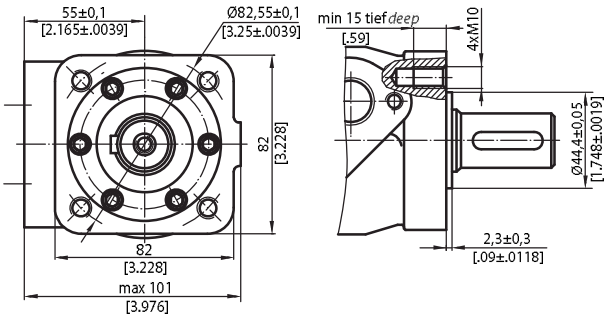
Standard: Ovalflansch, zwei Befestigungslöcher
Standard: Oval mount, two holes



Option F: Ovalflansch, vier Befestigungslöcher
Option F: Oval mount, four holes

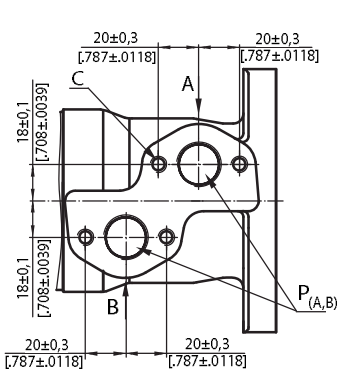


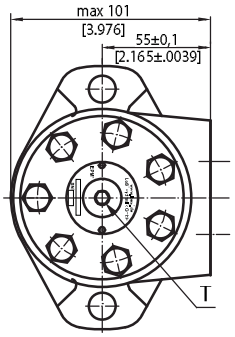
Option Q: Quadratflansch, vier Gewindebohrungen
Option Q: Square mount, four bolts



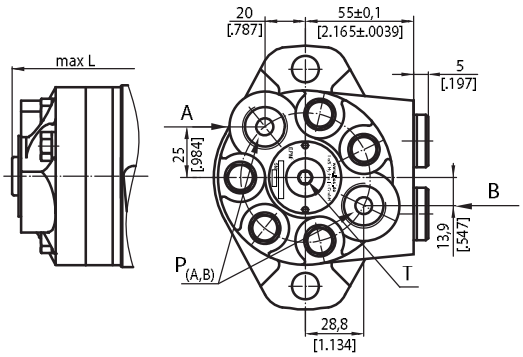
Pos. 3 Anschlusstyp *Port type*

Standard: Seitenanschluss
Standard: Side ports





Option E: Hintenanschluss
Option E: Rear ports

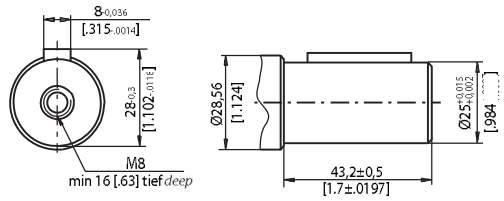


C: 4xM8 - 13mm [.51 in] tief *deep*
P (A,B): 2xG1/2 oder *or* 2xM22x1,5 - 15mm [.59 in] tief *deep*
T: G1/4 oder *or* M14x1,5 - 12 mm [.47 in] tief *deep*

mm [in]

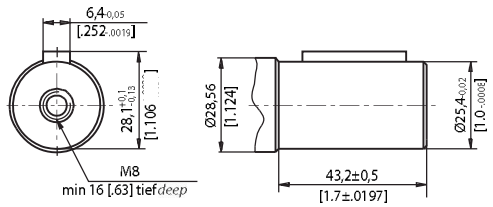
Pos. 5 Abtriebswelle *Shaft*

Option C: Zylindrisch Ø25 mm
Option C: Cylindrical Ø25 mm



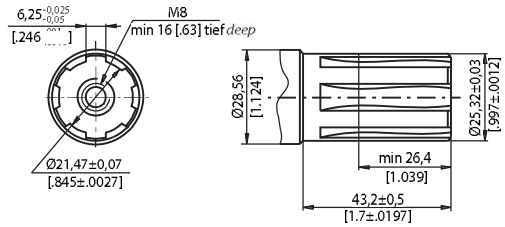
Max. Drehmomentabgabe 34 daNm [3010 lb-in]
Max. Torque 34 daNm [3010 lb-in]

Option CO: Zylindrisch Ø1“
Option CO: Cylindrical Ø1“



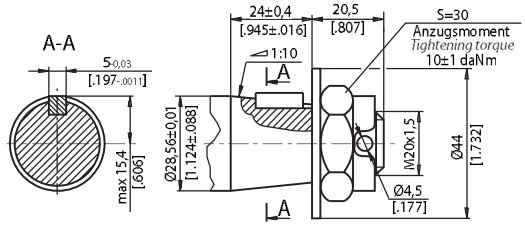
Max. Drehmomentabgabe 34 daNm [3010 lb-in]
Max. Torque 34 daNm [3010 lb-in]

Option SH: Verzahnt BS 2059
Option SH: Splined BS 2059



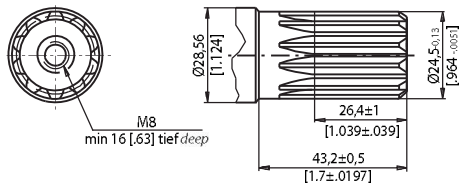
Max. Drehmomentabgabe 40 daNm [3540 lb-in]
Max. Torque 40 daNm [3540 lb-in]

Option K: Konisch 1:10
Option K: Tapered 1:10



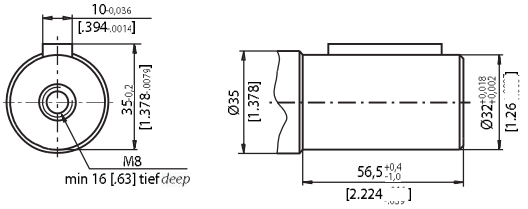
Max. Drehmomentabgabe 40 daNm [3540 lb-in]
Max. Torque 40 daNm [3540 lb-in]

Option SA: Verzahnt B 25x22 DIN 5482
Option SA: Splined B 25x22 DIN 5482



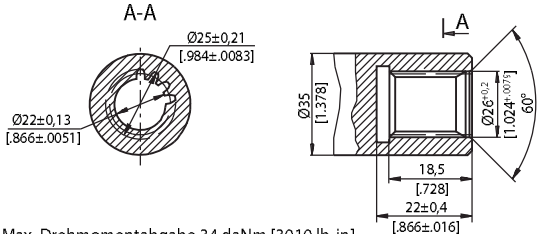
Max. Drehmomentabgabe 40 daNm [3540 lb-in]
Max. Torque 40 daNm [3540 lb-in]

Option CB: Zylindrisch Ø32 mm
Option CB: Cylindrical Ø32 mm



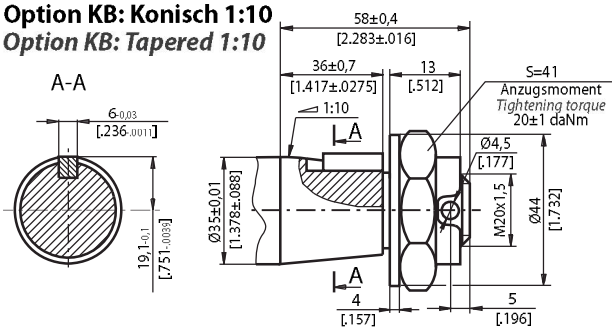
Max. Drehmomentabgabe 77 daNm [6815 lb-in]
Max. Torque 77 daNm [6815 lb-in]

Option SB: Verzahnt A 25x22 DIN 5482
Option SB: Splined A 25x22 DIN 5482



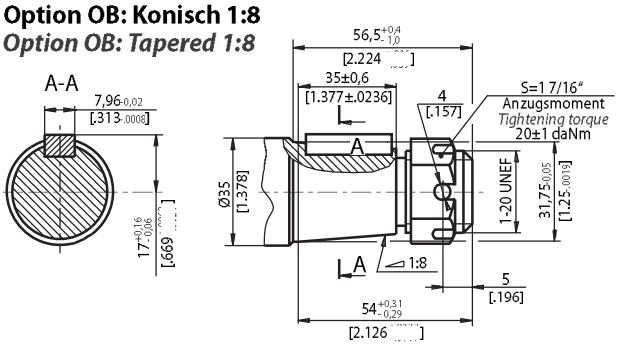
Max. Drehmomentabgabe 34 daNm [3010 lb-in]
Max. Torque 34 daNm [3010 lb-in]

Option KB: Konisch 1:10
Option KB: Tapered 1:10



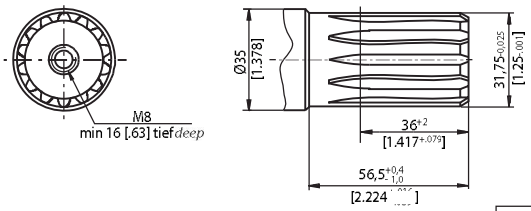
Max. Drehmomentabgabe 77 daNm [6815 lb-in]
Max. Torque 77 daNm [6815 lb-in]

Option OB: Konisch 1:8
Option OB: Tapered 1:8



Max. Drehmomentabgabe 77 daNm [6815 lb-in]
Max. Torque 77 daNm [6815 lb-in]

Option HB: Verzahnt ANSI B92.1-1976
Option HB: Splined ANSI B92.1-1976



Max. Drehmomentabgabe 77 daNm [6815 lb-in]
Max. Torque 77 daNm [6815 lb-in]

mm [in]