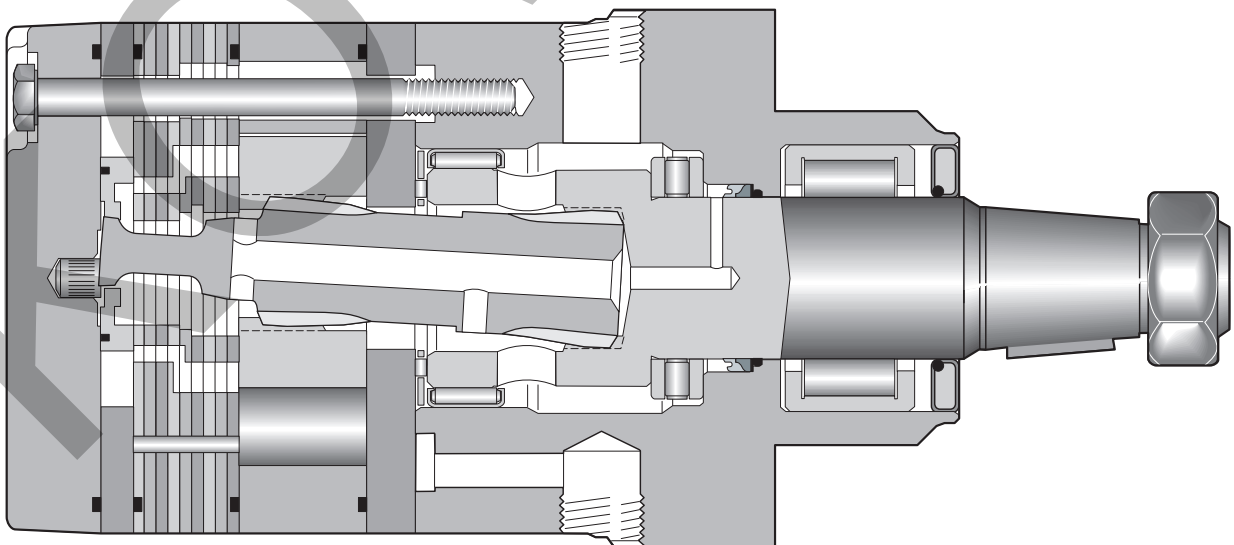


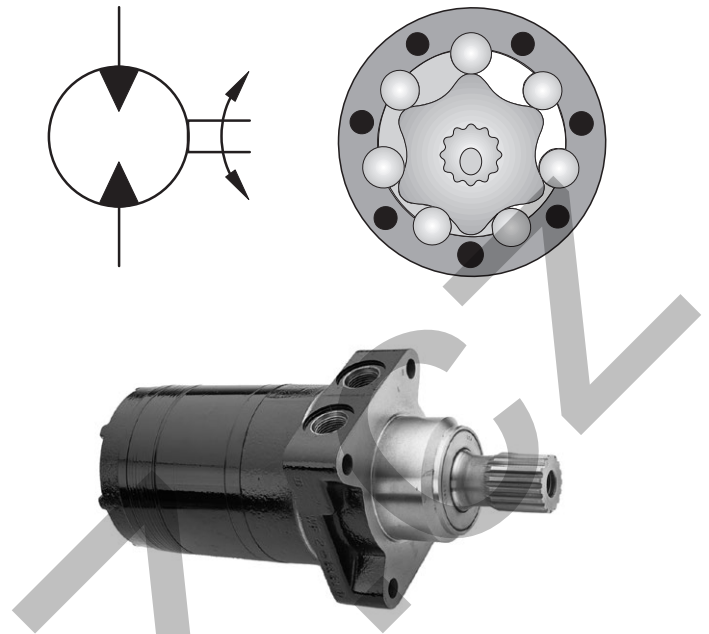
Features / Merkmale / Caractéristique / Carratteristiche

- **Langsamlaufender Gerotor-Motor**
- **Spezielle Orbital-Steuerung**
Geringe interne Leakage
Hoher volumetrischer Wirkungsgrad
- **Rollen im Rotorsatz**
Reduzierte Reibung
Lange Lebensdauer
- **Patentierte Hochdruckwellendichtung**
Keine Leckölleitung
Keine Rückschlagventile
- **Vielzahl von Varianten**
Großer Einsatzbereich
- **Moteur lent système Gerotor**
- **Une distribution orbitale particulière assure**
fuites internes minimales
rendements volumétriques élevés
- **Le rotor à rouleaux**
réduit les frottements
augmente la durée de vie
- **Par l'utilisation de joints d'arbre haute pression brevetés**
pas de conduite de drainage
pas de clapets anti-retour
- **Grâce à de nombreuses variantes**
larges domaines d'application
- **Low Speed Gerotor Motor**
- **Zero leak commutation valve**
For greater, more consistent volumetric efficiency
- **Roller vane rotor set**
Reduces friction and internal leakage
Maintaining efficiency throughout the life of the motor
- **A patented high-pressure shaft seal**
No check valves needed
No extra plumbing
- **Wide choice of displacement range, flange and shaft options**
Greater efficiency in systems design to suit your application
- **Motore orbitale a bassa velocità**
- **Una particolare distribuzione orbitale assicura**
trafilamento ridotto
elevato rendimento volumetrico
- **Con lo statore a rullini**
si riduce l'attrito interno
si mantiene nel tempo l'efficienza del motore
- **Una guarnizione di tenuta ad alta pressione brevettata elimina la necessità**
di una linea di drenaggio esterna
e di valvole di non ritorno
- **Un'ampia gamma di cilindrata, flange ed alberi**
consentono scelte adeguate ad ogni esigenza costruttiva



Performance / Kenndaten / Puissance / Prestazioni

Drehzahl Speed Vitesse de rotation Velocità di rotazione	max. 710 rev/min
Schluckstrom Oil flow Débit d'huile Portata	max. 115 l/min
Eingangsdruck Supply pressure Pression entrée Pressione in entrata	max. 300 bar
Torque Couple Coppia	max. 1490 Nm
Seitenlast Side load Charges latérales Carico radiale	max. 30.000 N See page 60



Motor series TH	Geom. Schluckvolumen Geometric displacement Cylindrée	Max. Drehzahl Max. speed Vitesse de rotation max Velocità di rotazione max	Max. Schluckstrom Max. oil flow Débit d'huile max Portata max	Max. Druckdifferenz Max. differential pressure Chute de pression max Caduta di pressione max	Max. Eingangsdruck Max. supply pressure Pression max entrée Pressione max in entrata	Max. Drehmoment Max. torque Couple max Coppia max	Max. Leistungabgabe Max. performance Puissance de sortie max Potenza meccanica max	Min. Anlaufmoment Min. starting torque Couple min. démarrage Coppia min. di spunto
	[cm ³ /U] [cm ³ /rev]	cont / int* [U/min] [rev/min]	cont / int* [l/min]	cont / int* [bar]	max [bar]	cont / int* [Nm]	cont / int* [KW]	cont / int* [Nm]
TH 140	141	530/710	75/100	210/280	300	400/545	33	320/436
TH 170	169	440/575	75/100	210/280	300	485/670	33	388/536
TH 195	195	380/510	75/100	210/280	300	560/770	33	448/616
TH 240	238	320/420	75/100	210/280	300	685/945	32	548/756
TH 280	280	270/350	75/100	210/280	300	800/1100	31	675/880
TH 335	337	225/290	75/100	210/280	300	980/1350	30	784/1080
TH 405	405	185/245	75/100	170/240	300	960/1350	27	791/1145
TH 475	477	160/240	75/115	140/210	300	960/1400	28	768/1120
TH 530	529	140/215	75/115	140/170	300	1050/1280	23	874/1091
TH 625	613	120/185	75/115	120/160	300	1040/1360	20	895/1165
TH 785	786	95/145	75/115	100/140	300	1150/1490	17	991/1341
TH 960	959	78/119	75/115	70/100	300	925/1390	12	763/1177

*int. =

Intermittierende Werte maximal: 10% von jeder Betriebsminute.

Intermittent operation rating applies to 10% of every minute.

Fonctionnement interm.: 10% max. de chaque minute d'utilisation.

Servizio intermittente: 10% max di ogni minuto di utilizzazione.

** Druckdifferenz Δp zwischen Ein- und Ausgang

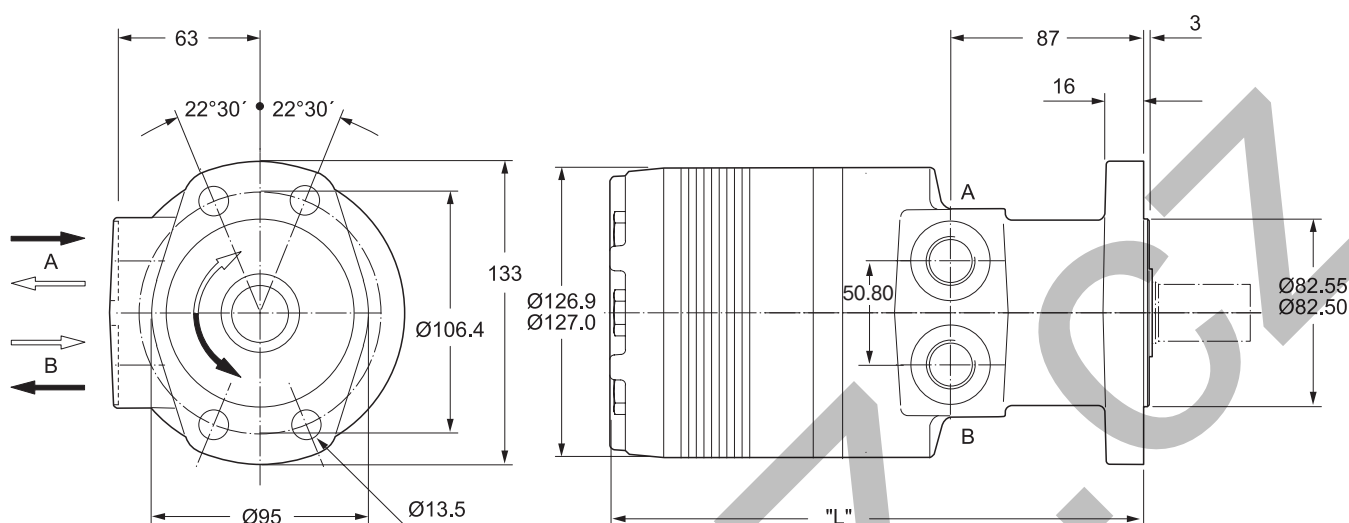
** Pressure difference is Δp between input and output

** La différence de pression est Δp entre l'entrée et la sortie

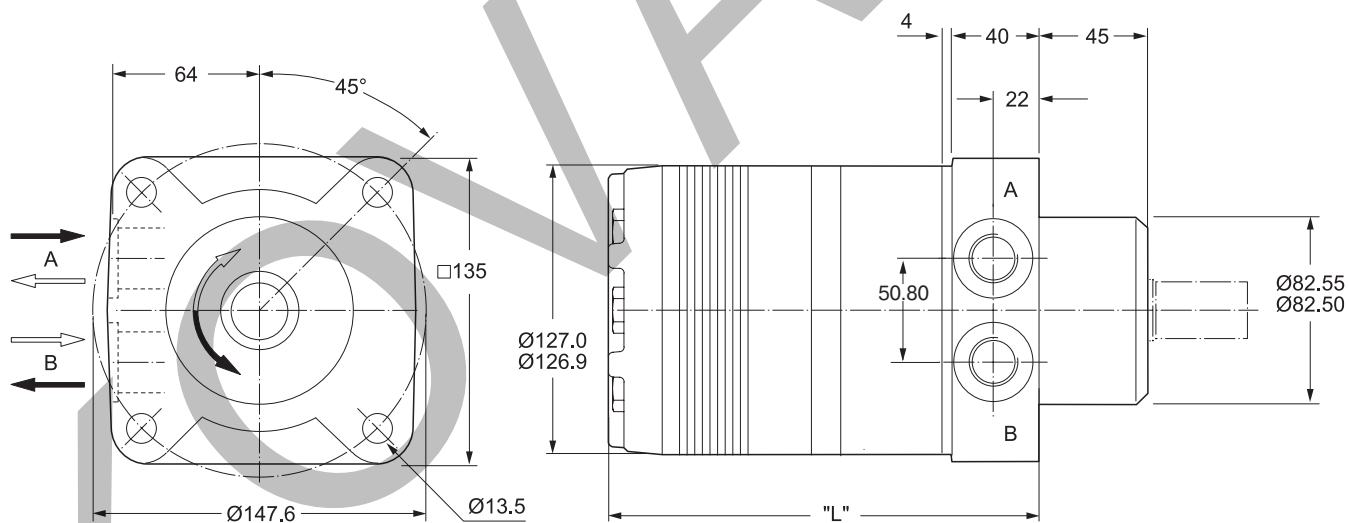
** La differenza di pressione corrisponde al Δp tra ingresso e uscita

Housing / Gehäuse / Carter / Corpo

Code M

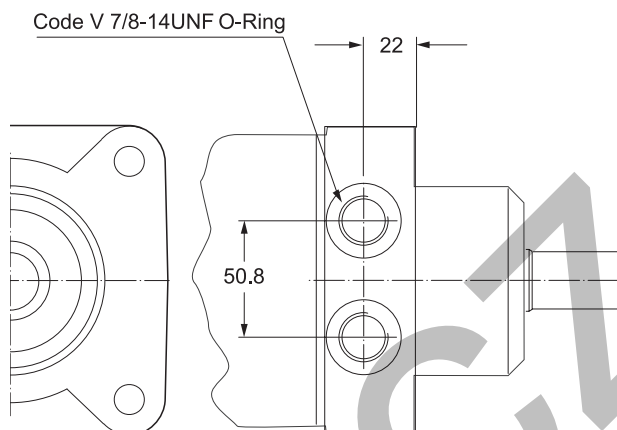
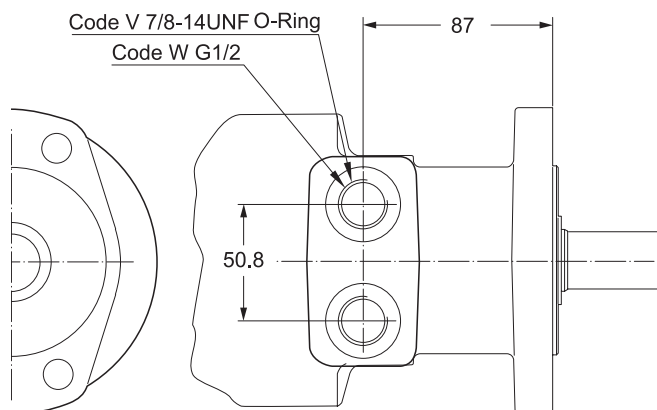


Code U



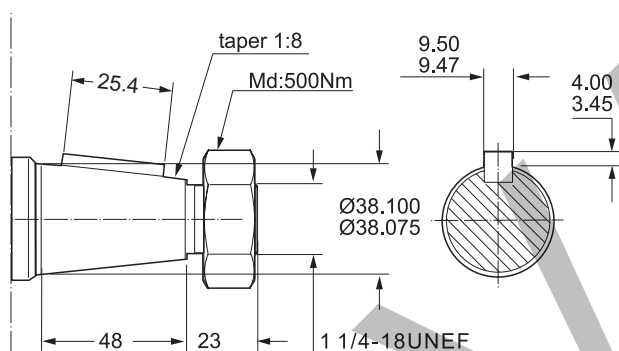
		Series TH											
		140	170	195	240	280	335	405	475	530	625	785	960
Gewicht / Weight Poids / Peso [kg]		17.0	17.2	17.4	17.8	18.2	18.6	19.2	19.8	20.6	21.3	22.9	24.5
Code M	"L" [mm]	216	219	222	227	232	238	245	254	260	270	289	308
Code U	"L" [mm]	173	177	180	184	189	196	203	212	218	227	246	265

Front Ports / Anschlüsse / Orifices / Connessioni

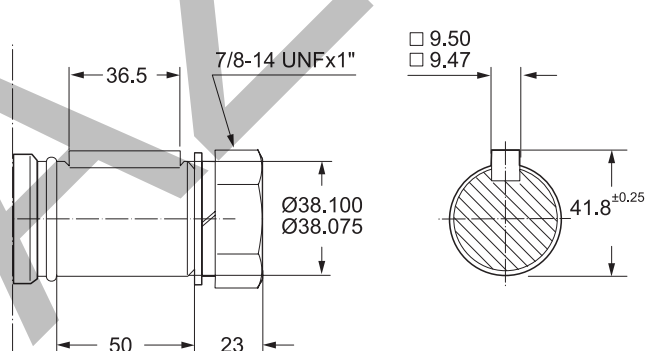


Coupling shaft / Abtriebswelle / Arbre / Alberi

Code 31

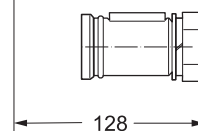
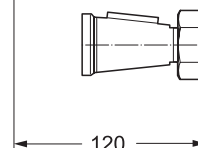
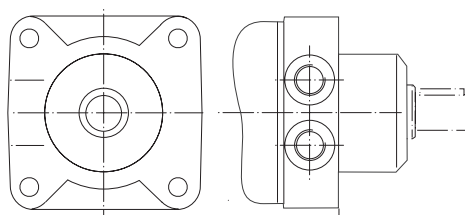
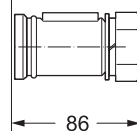
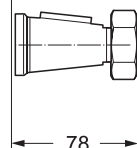


Code 32



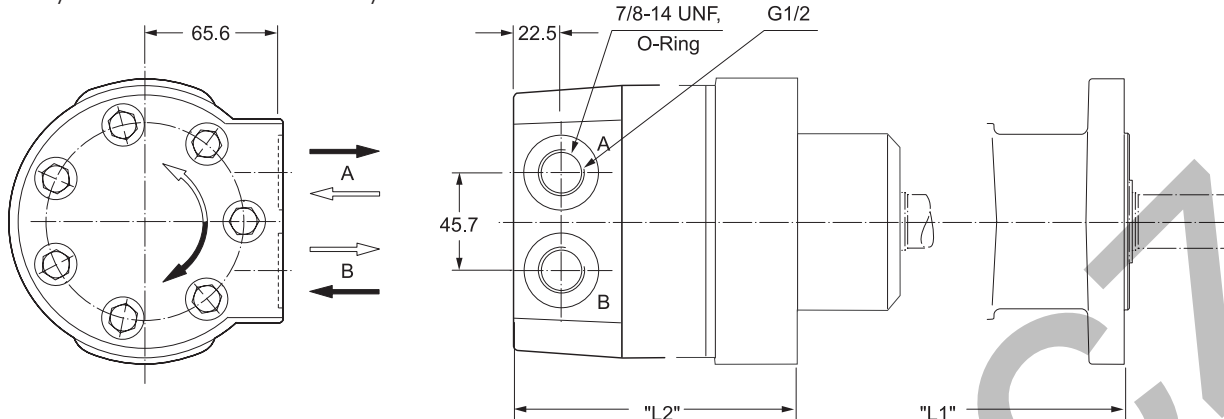
Code 31

Code 32

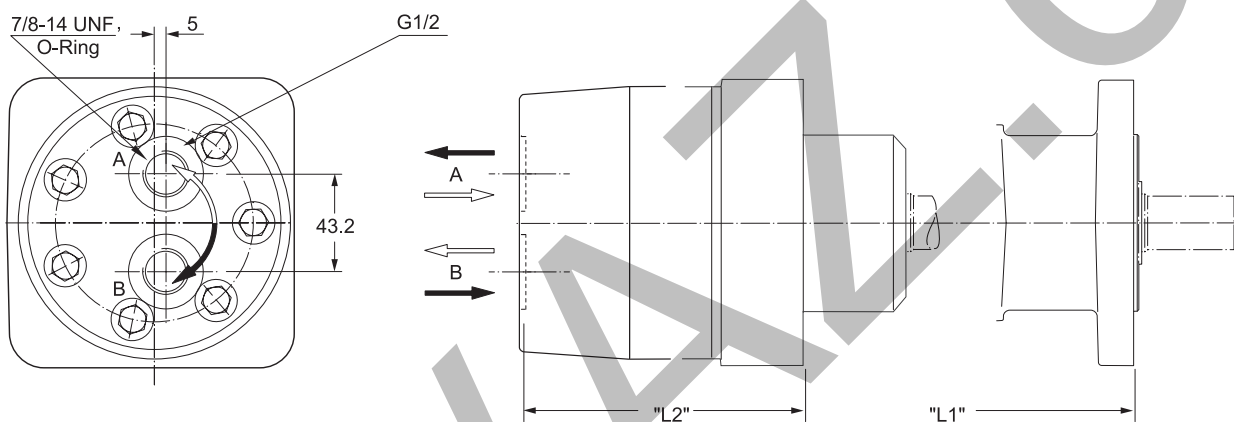


Rear Ports / Anschlüsse hinten / orifices arrière/ Connessioni posteriori

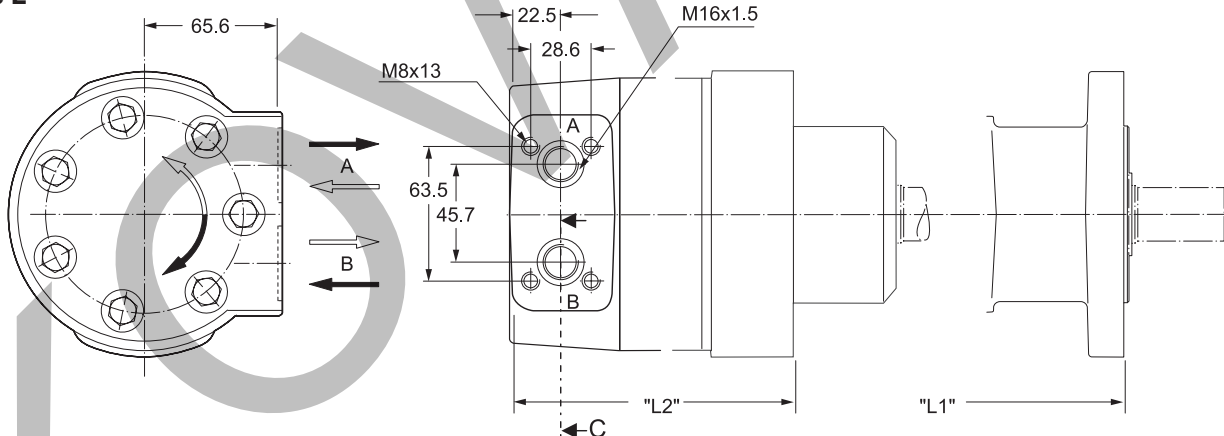
Code B 7/8-14UNF **Code X** G 1/2



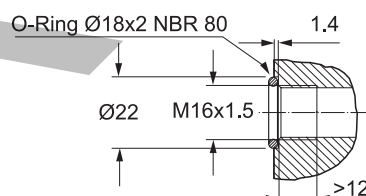
Code A 7/8-14UNF **Code Y** G 1/2



Code L



Section C



Zum Motor mit Universalanschluss werden 2 O-Ringe geliefert.

Motor with manifold mount is supplied with 2 O-rings.

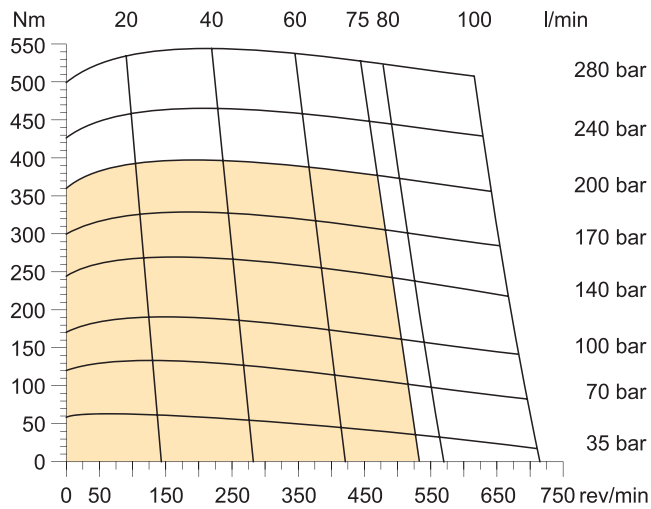
Deux joints toriques sont livrés avec les moteurs au plan de raccordement universel.

Il blocchetto connessioni è corredato da 2 OR.

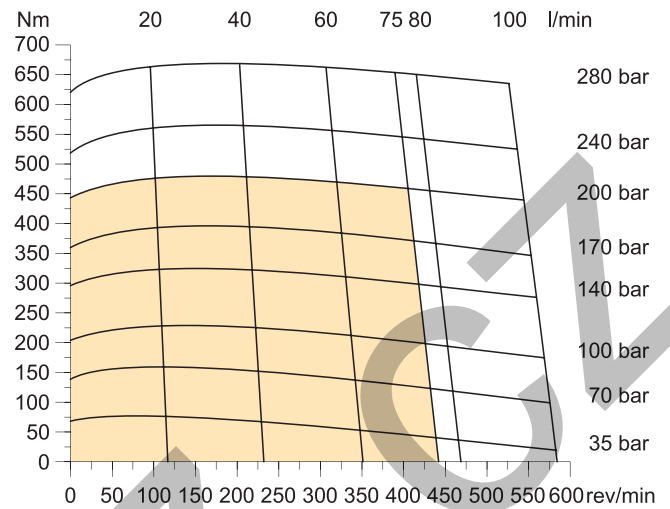
		Series TH											
		140	170	195	240	280	335	405	475	530	625	785	960
Gewicht / Weight Poids / Peso [kg]		18.6	18.8	19.0	19.4	19.8	20.2	20.8	21.4	22.2	22.9	24.5	26.1
Code	„L1“ [mm]	241	244	247	252	257	263	270	279	285	295	314	333
B X L A Y	„L“ [mm]	198	202	205	209	214	221	228	237	243	252	271	290

Diagrams / Diagramme / Diagrammes / Diagrammi

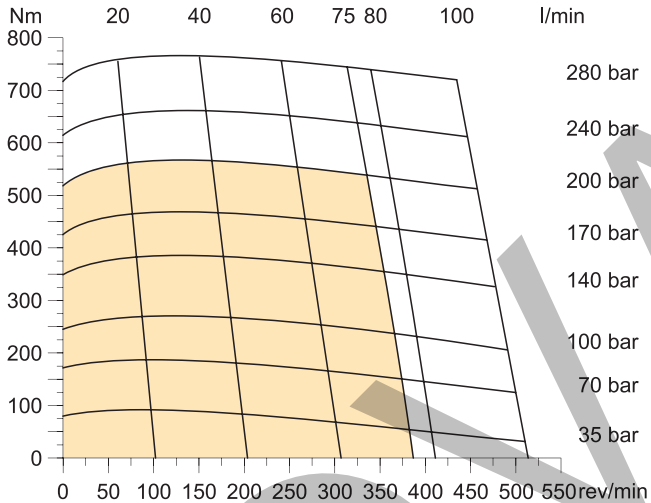
TH 140



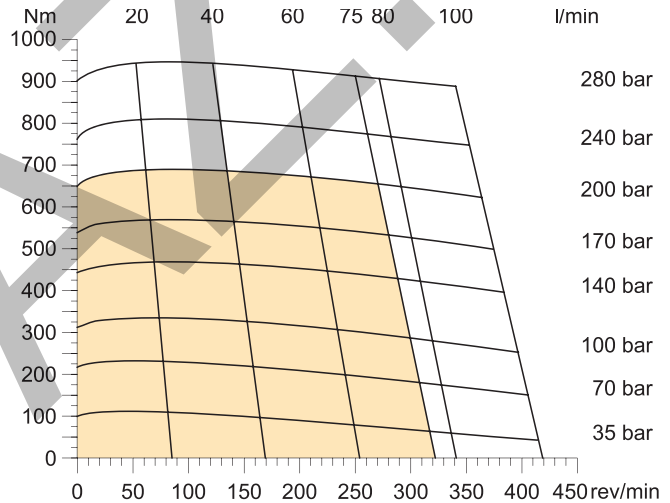
TH 170



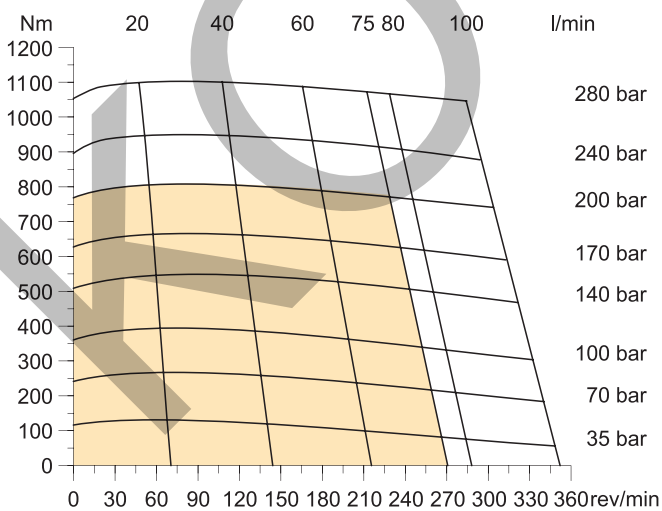
TH 195



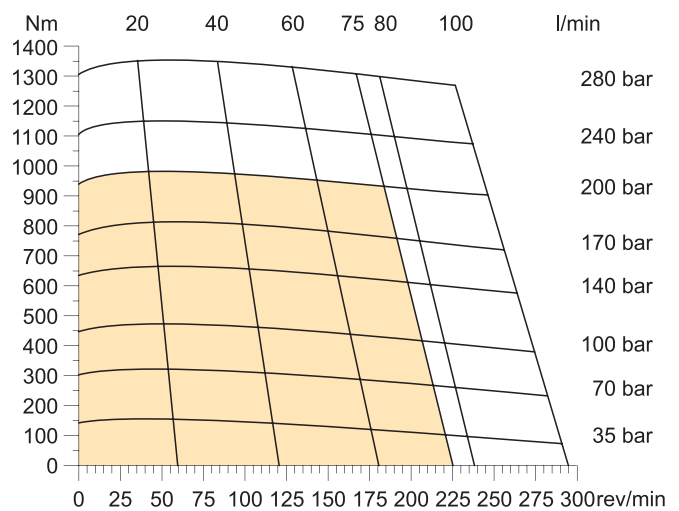
TH 240



TH 280



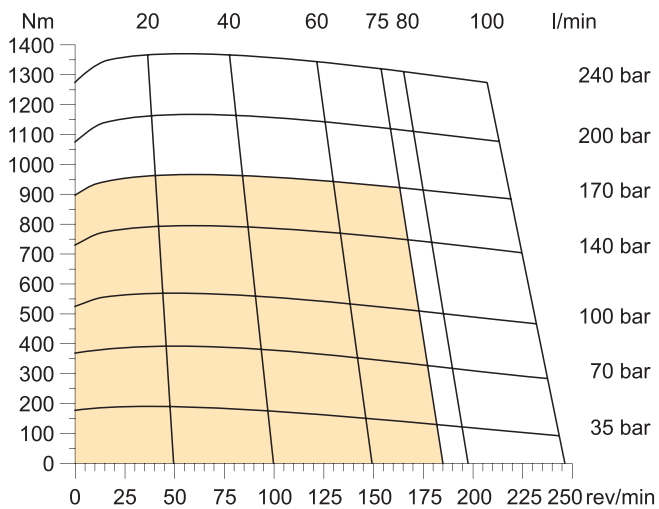
TH 335



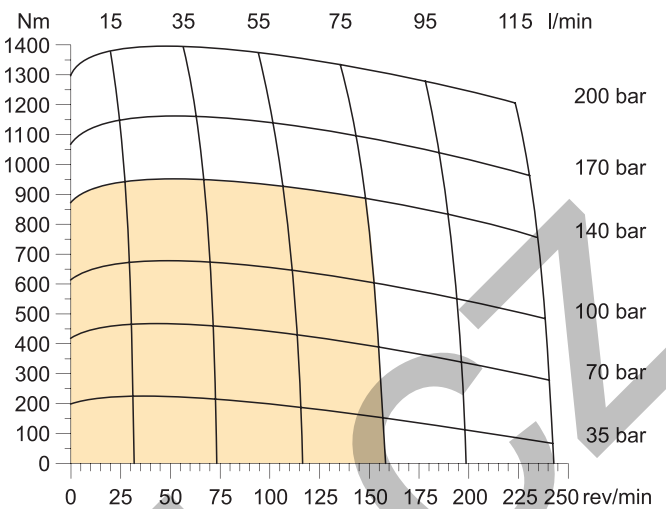
Cont. Int. int. =

Intermittierende Werte maximal: 10% von jeder Betriebsminute.
Intermittent operation rating applies to 10% of every minute.
Fonctionnement interm.: 10% max. de chaque minute d'utilisation.
Servizio intermittente: 10% max di ogni minuto di utilizzazione.

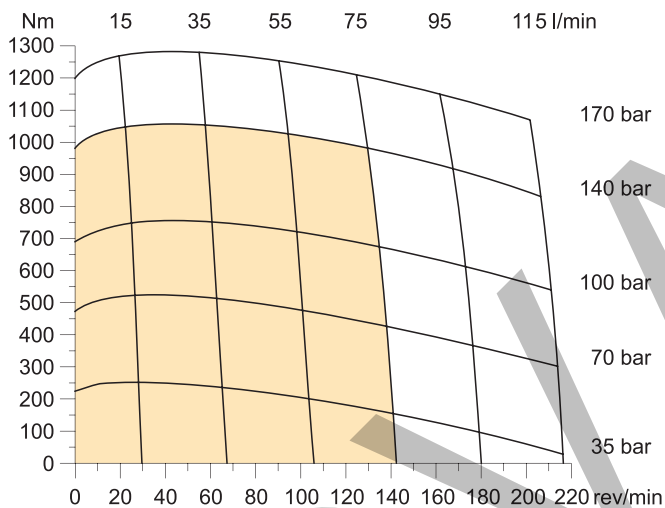
TH 405



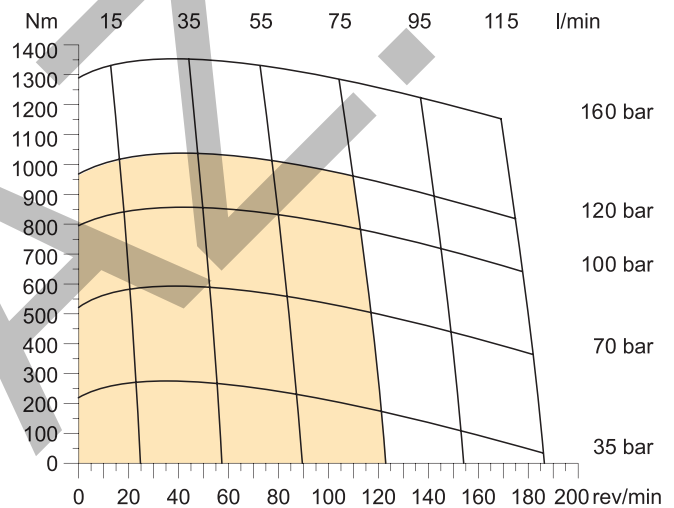
TH 475



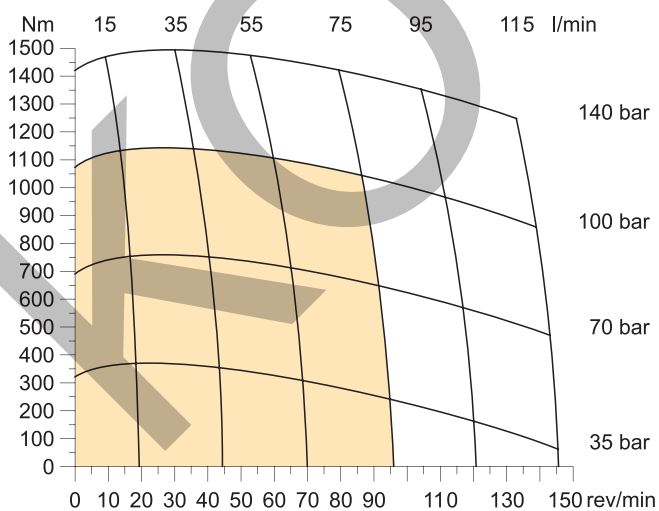
TH 530



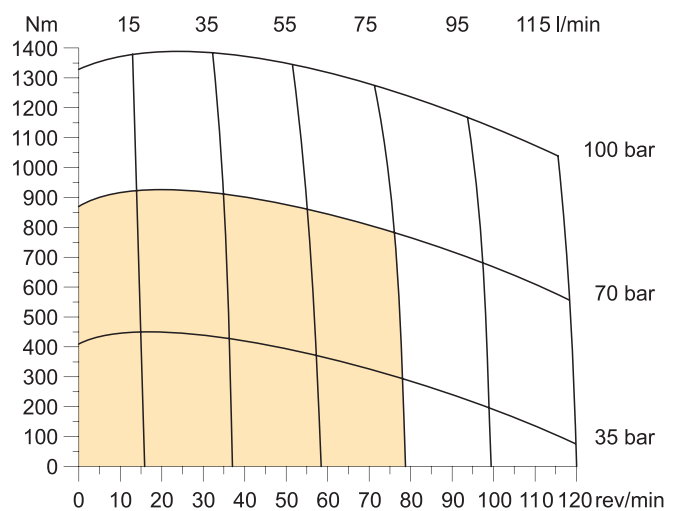
TH 625



TH 785



TH 960

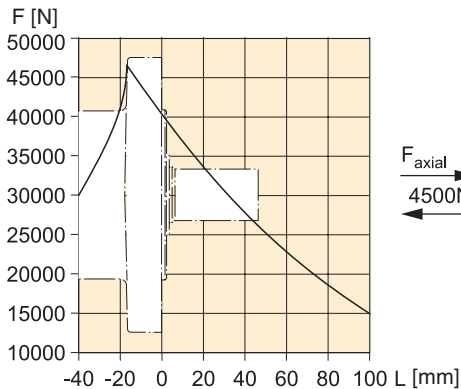


Cont. Int. int. =

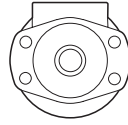
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Intermittent operation rating applies to 10% of every minute.
Fonctionnement interm.: 10% max. de chaque minute d'utilisation.
Servizio intermittente: 10% max di ogni minuto di utilizzazione.

Life Time / Lebensdauer / Durée de vie / Durata

Code M

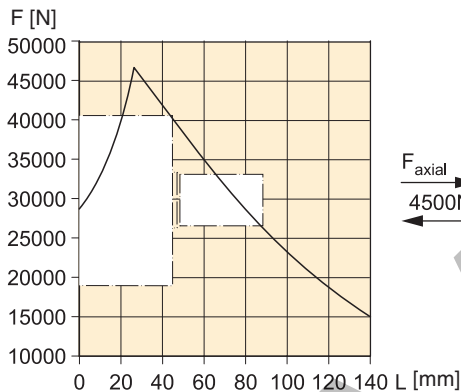


F_{Radial} [N]

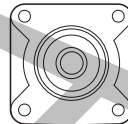


$$L_h = \frac{\left(\frac{1500000}{F_R \cdot \left(1.20 + \frac{L}{95\text{mm}} \right)} \right)^{3.3}}{n}$$

Code U



F_{Radial} [N]



$$L_h = \frac{\left(\frac{1500000}{F_R \cdot \left(0.76 + \frac{L}{95\text{mm}} \right)} \right)^{3.3}}{n}$$

Die Lebensdauer der Radiallager (L_h in Stunden) lässt sich nach folgender Formel berechnen. Die Größe F_R ist durch die mechanische Festigkeit der Abtriebswelle begrenzt (siehe Diagramm). Das Maß "L" ist das Längenmaß vom Gehäuseflansch bis zum Angriffspunkt der Radialkraft F_R .

Life time (L_h in hours) of the radial bearings can be calculated with the following formula. The value F_R is limited by the mechanical strength of the shaft (see diagram). The measurement "L" is the length from the housing flange up to the point of impact of the radial force F_R .

La durée de vie des roulements radiaux (L_h en heures) peut être calculée par les formules suivantes. La grandeur F_R est limitée par les résistances mécaniques de l'arbre de sortie (voir diagramme). La cote "L" est la longueur entre la bride du carter jusqu'au point d'appui de l'effort radial F_R .

La durata dei cuscinetti (L_h in ore) può essere calcolata con la seguente formula. Il valore F_R è limitato dalla resistenza meccanica dell'albero (vedi diagramma). La quota "L" è la distanza tra la flangia del corpo ed il punto di applicazione della forza radiale F_R .

Vorstehende Formeln gelten für eine B10-Lebensdauer.

The preceding formulas are valid for a B10 duration of life.

Les formules précédentes sont valables pour une durée de vie B10.

Le formule precedenti sono valide per una durata della vita B10.

L_h = [h]
 L = [mm]
 n = [rev/min]

TH							A	A	A	B																																																				
Serie Series Série Serie	Schluckvolumen Displacement Cylindrée Cilindrata	Gehäuse Housing Carter Corpo motore	Anschluss Ports Plan de raccordement Conessioni	Welle Shaft Arbre Albero	Drehrichtung Direction of rotation Direction de rotation Direzione di rotazione	Option																																																								
	<table border="1"> <thead> <tr> <th>Code</th> <th>cm³/rev</th> </tr> </thead> <tbody> <tr><td>0140</td><td>140</td></tr> <tr><td>0170</td><td>169</td></tr> <tr><td>0195</td><td>195</td></tr> <tr><td>0240</td><td>237</td></tr> <tr><td>0280</td><td>280</td></tr> <tr><td>0335</td><td>337</td></tr> <tr><td>0405</td><td>405</td></tr> <tr><td>0475</td><td>476</td></tr> <tr><td>0530</td><td>529</td></tr> <tr><td>0625</td><td>624</td></tr> <tr><td>0785</td><td>786</td></tr> <tr><td>0960</td><td>958</td></tr> </tbody> </table>	Code	cm ³ /rev	0140	140	0170	169	0195	195	0240	237	0280	280	0335	337	0405	405	0475	476	0530	529	0625	624	0785	786	0960	958		<table border="1"> <thead> <tr> <th>Code</th> <th>Front port</th> </tr> </thead> <tbody> <tr><td>S</td><td>7/8-14 UNF O-Ring</td></tr> <tr><td>W¹⁾</td><td>G 1/2</td></tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Code</th> <th>Rear port</th> </tr> </thead> <tbody> <tr><td>Y</td><td>G 1/2 Axial</td></tr> <tr><td>A</td><td>7/8-14 UNF Axial</td></tr> <tr><td>X</td><td>G 1/2 Radial</td></tr> <tr><td>B</td><td>7/8-14 UNF Radial</td></tr> <tr><td>L</td><td>Universal Radial M8x13</td></tr> </tbody> </table>	Code	Front port	S	7/8-14 UNF O-Ring	W ¹⁾	G 1/2	Code	Rear port	Y	G 1/2 Axial	A	7/8-14 UNF Axial	X	G 1/2 Radial	B	7/8-14 UNF Radial	L	Universal Radial M8x13			<p>For further options different to standard 'AAAB' see page 67.</p> <table border="1"> <thead> <tr> <th>Code</th> <th>Front port</th> </tr> </thead> <tbody> <tr> <td>0</td> <td> Standard </td> </tr> <tr> <td>1</td> <td> </td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Code</th> <th>Rear port</th> </tr> </thead> <tbody> <tr> <td>0</td> <td> Standard </td> </tr> <tr> <td>1</td> <td> </td> </tr> </tbody> </table>	Code	Front port	0	 Standard	1	 	Code	Rear port	0	 Standard	1	
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¹⁾ Nicht verfügbar für Gehäuse "U"
Not possible for housing "U"
Pas disponible pour carter "U"
Non Disponibile con il corpo codice "U"