

Type: Type: GM1300	Short Descr.: Kurzbez.: MotorGearbox	Date: Datum: 19/01/2015
------------------------------	------------------------------------------------	-----------------------------------

Affected GM References / Betroffene Motorreferenzen		
Reference Referenz	Designation Bezeichnung	Date Datum
RX131762-00	GM1300	19/01/2015

A	19/01/2015	creation	PC
Rev./ Ausgabe	Date/ Datum	Modification / Modifikation	Name/ Name

Technical Datasheet

Technisches Datenblatt

Type: GM1300 <i>Type:</i>	Short Descr.: MotorGearbox <i>Kurzbez.:</i>	Date: 19/01/2015 <i>Datum:</i>
-------------------------------------	-------------------------------------------------------	------------------------------------------

Nominal data operational mode / <i>Nenndaten Betriebsart:</i> S1 – 100%								
Gear 1:1 (Getriebe 1:1)				Gear 5:1 (Getriebe 5:1)				
Speed <i>Drehzahl</i>	1500	5000	9000		300	1000	1800	rpm <i>U/min</i>
Output, perf. <i>Leistung</i>	40	40	25		38.8 ^(*)	38.8 ^(*)	24.3 ^(*)	kW
Torque <i>Drehmoment</i>	255	76	27		1235 ^(*)	371 ^(*)	129 ^(*)	Nm
Voltage <i>Spannung</i>	275	400	400		275	400	400	V
Current <i>Strom</i>	145	77	48		145	77	48	A
Frequency <i>Frequenz</i>	105	342	608		105	342	608	Hz
Connection <i>Schaltung</i>	Star <i>Stern</i>							

(*) including gearbox efficiency / mit Getriebewirkungsgrad η 97%

Nominal data operational mode / <i>Nenndaten Betriebsart:</i> S6 – 40%								
Gear 1:1 (Getriebe 1:1)				Gear 5:1 (Getriebe 5:1)				
Speed <i>Drehzahl</i>	1500	3500	9000		300	700	1800	rpm <i>U/min</i>
Output, perf. <i>Leistung</i>	60	60	25		58.2 ^(*)	58.2 ^(*)	24.3 ^(*)	kW
Torque <i>Drehmoment</i>	382	164	27		1853 ^(*)	794 ^(*)	129 ^(*)	Nm
Voltage <i>Spannung</i>	290	400	400		290	400	400	V
Current <i>Strom</i>	191	119	48		191	119	48	A
Frequency <i>Frequenz</i>	108	242	608		108	242	608	Hz
Connection <i>Schaltung</i>	Star <i>Stern</i>							

(*) including gearbox efficiency / mit Getriebewirkungsgrad η 97%

Duty cycle <i>Betriebszyklus</i>		
% of time / % Zeit	Output speed / <i>Abtriebsdrehzahl</i> rpm	Axial force / <i>Axiale Kraft</i> N
20	9000	1500
25	4500	1500
30	1500	1500
25	300	1500

Backlash <i>Verdrehspiel</i>	15 arcmin maximum
Noise level <i>Geräuschpegel</i>	83 dB(A) maximum
Mounting position <i>Einbaulage</i>	Vertical and horizontal <i>Vertikal und Horizontal</i>

Inertia <i>Massenträgheit</i>	Motor <i>Motor</i>	ca. - m ² .kg
	Gearbox ratio 1:1 <i>Getriebe – Übersetzung 1:1</i>	- 10 ⁻³ m ² .kg
	Gearbox ratio 5:1 <i>Getriebe – Übersetzung 5:1</i>	- 10 ⁻³ m ² .kg
Mass <i>Mass</i>	Motor+Gearbox <i>Motor+Getriebe</i>	- kg
Thermal protection <i>Wärmeschutz</i>	KTY84-130+Res, PTC Drilling + Res	
Amplifier <i>Regler</i>	-	

Technical Datasheet

Technisches Datenblatt

Type: GM1300 <i>Type:</i>	Short Descr.: MotorGearbox <i>Kurzbez.:</i>	Date: 19/01/2015 <i>Datum:</i>
-------------------------------------	-------------------------------------------------------	------------------------------------------

Electrical data <i>Elektrische Daten</i>	Motor Type <i>Motortyp</i>	Asynchronous <i>Asynchron</i>
	Inductance for each winding <i>Induktivität für jede Wicklung</i>	- mH
	Number of pairs of poles <i>Anzahl Polepaare</i>	-
	Torque constant <i>Drehmomentkonstante</i>	- Nm/A

Motor Encoder <i>Motor-Impulsgeber</i>	Type <i>Type</i>	GEL 2443
	Fab. <i>Fab.</i>	Lenor & Bauer
	Pulse <i>Imp/Signal</i>	256 sin/cos
	Art <i>Nature</i>	Gear Transmitter <i>Zahnradgeber</i>

Outline Shaft Encoder <i>Abtriebswelle-Impulsgeber</i>	Type <i>Type</i>	GEL 2444K
	Fab. <i>Fab.</i>	Lenor & Bauer
	Pulse <i>Imp/Signal</i>	512 sin/cos
	Art <i>Nature</i>	Gear Transmitter <i>Zahnradgeber</i>

Cooling <i>Kühlung</i>	Medium <i>Medium</i>	Water with additives <i>Wasser mit Additiven</i>
	Max. temperature increase <i>Max. Temperaturerhöhung</i>	3 K
	Flow rate <i>Durchflussrate</i>	33 l/min
	max. temperature on input <i>Eintrittstemp. max</i>	30 °C
	Pressure P_{max} <i>Druck P_{max}</i>	7 bar
	Loss power P_v <i>Abzuführende Verluststg P_v</i>	ca. 7.0 kW

Lubrication <i>Schmierung</i>	Medium <i>Medium</i>	Oil See user manual <i>Öl S. Bedienungsanleitung</i>
	Flow rate input <i>Durchflussrate Einlass</i>	2 l/min
	Flow rate output <i>Durchflussrate Ablass</i>	5 l/min
	max. temperature on input <i>Eintrittstemp. max.</i>	See user manual <i>S. Bedienungsanleitung</i>
	Pressure P_{max} <i>Druck P_{max}</i>	6 Bar
	Loss power P_v <i>Abzuführende Verluststg P_v</i>	ca. 0.65 kW

Technical Datasheet

Technisches Datenblatt

Type: GM1300 <i>Type:</i>	Short Descr.: MotorGearbox <i>Kurzbez.:</i>	Date: 19/01/2015 <i>Datum:</i>
-------------------------------------	-------------------------------------------------------	------------------------------------------

Speed shifting <i>Schaltung</i>	Medium <i>Medium</i>	Hydraulic oil See user manual <i>Hydraulische Öl S. Bedienungsanleitung</i>			
	Pressure supply <i>Versorgungsdruck</i>	50 to/bis 100 Bar			
	Flow rate <i>Durchflussrate</i>	5 to/bis 7 l/min			
	Volume <i>Volumen</i>	22 cm ³			
	Shifting time <i>Schaltungszeit</i>	190 to/bis 265 ms			
	Direct and reduction ratio signal <i>Signalausgang 1:1 & 5:1 Betriebe</i>		4 to/bis 20mA 0 to/bis 250 bar	0 to/bis 10V 0 to/bis 250 bar	
		0 bar	4.00 mA	0 V	
50 bar		7.20 mA	2 V		
	100 bar	10.40 mA	4 V		
Hydraulic circuit <i>Hydraulischer Schmierkreis</i>	Closed and full of oil <i>Geschlossen und von Öl gefüllt</i>				

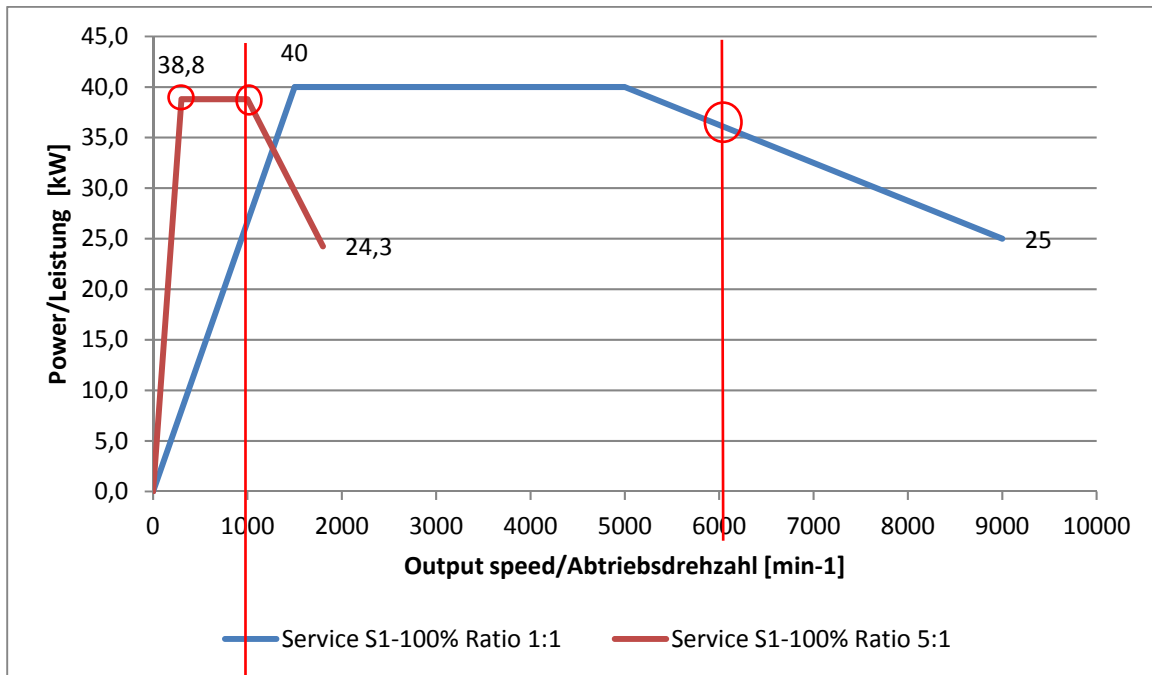
Unclamp Unit <i>Löseeinheit</i>	Type <i>Type</i>	LE 115		
	Fab. <i>Fab.</i>	OTT		
	Medium <i>Medium</i>	Oil <i>Öl</i>		
	Useful Stroke <i>Nutzhub</i>	15 mm		
	Piston area "L" <i>Kolbenfläche "L"</i>	50.6 cm ²		
	Pressure P_{max} "L" <i>Druck P_{max} "L"</i>	120 Bar		
	Piston area "S" <i>Kolbenfläche "S"</i>	42.9 cm ²		
	Pressure P_{min} "S" <i>Druck P_{min} "S"</i>	5 Bar		

Unclamp unit sensor <i>Gerber der Löseeinheit</i>	Type <i>Type</i>	BAW M18ME-UAC48B-BP01,5-GS04		
	Fab. <i>Fab.</i>	BALLUFF		
	Operating Voltage <i>Medium</i>	15 to/bis 30 VDC		

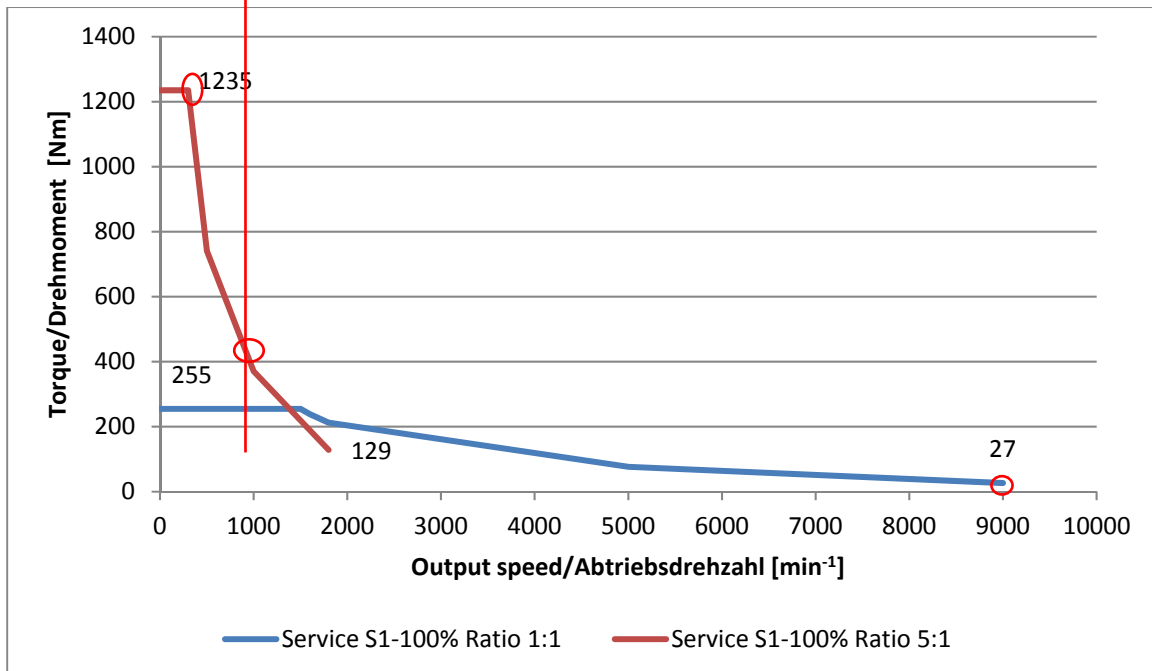
Rotary Union <i>Drehdurchführung</i>	Type <i>Type</i>	1K-GD 95.250.021.3.0		
	Fab. <i>Fab.</i>	OTT		
	Medium <i>Medium</i>	Coolant and Air <i>Kühlschmiermittel und Luft</i>		
	Coolant pressure max. <i>Kühlschmiermitteldruck max.</i>	80 Bar		
	Cleaning air pressure max n= 0 rpm <i>Reinigungsluftdruck max. n= 0 rpm</i>	10 Bar		
	Filter Grade <i>Filterfeinheit</i>	<50 µm		

Type: GM1300 <i>Type:</i>	Short Descr.: MotorGearbox <i>Kurzbez.:</i>	Date: 19/01/2015 <i>Datum:</i>
-------------------------------------	-------------------------------------------------------	------------------------------------------

Power/ Leistung : S1-100%

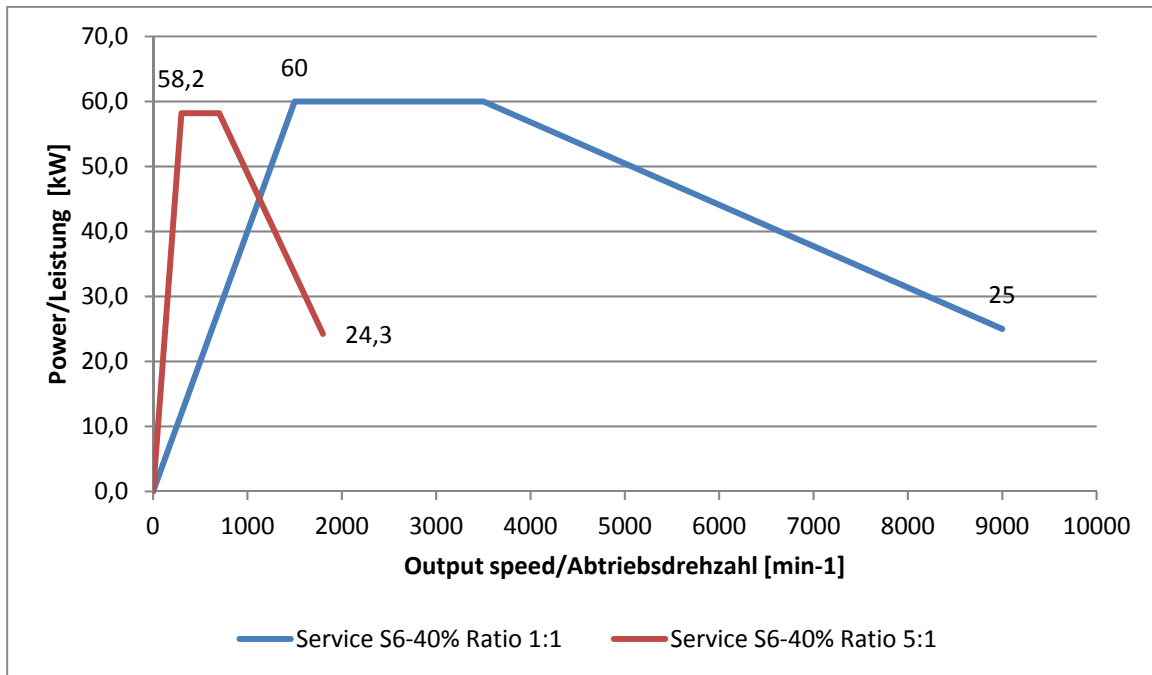


Torque/ Drehmoment : S1-100%



Type: GM1300 <i>Type:</i>	Short Descr.: MotorGearbox <i>Kurzbez.:</i>	Date: 19/01/2015 <i>Datum:</i>
-------------------------------------	-------------------------------------------------------	------------------------------------------

Power/ Leistung : S6-40%



Torque/ Drehmoment : S6-40%

