8LVA2

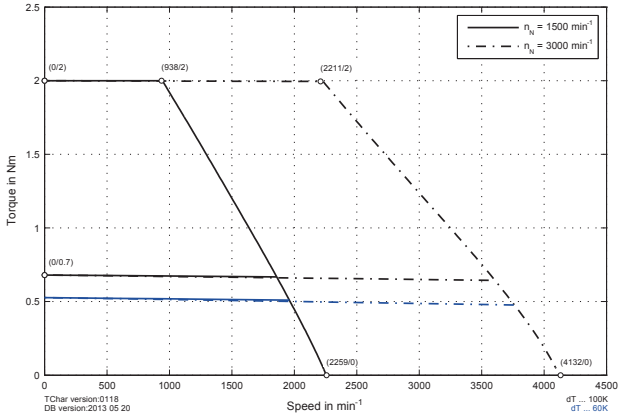
Technical data

	8LVA22.ee015ffgg-0	8LVA22.ee030ffgg-0	8LVA23.ee015ffgg-0	8LVA23.ee030ffgg-0
Motor				
Nominal speed n_N [rpm]	1500	3000	1500	3000
Number of pole pairs	4			
Nominal torque M_n [Nm]	0.67	0.65	1.33	1.3
Nominal power P_N [W]	105	204	209	408
Nominal current I_N [A]	1.61	2.9	3.2	5.8
Stall torque M_0 [Nm]	0.7	0.7	1.4	1.4
Stall current I_0 [A]	1.6	3	3.2	6
Maximum torque M_{max} [Nm]	2	2	4	4
Maximum current I_{max} [A]	5.6	10.3	11.2	20.7
Maximum speed n_{max} [rpm]	6600			
Torque constant K_T [Nm/A]	0.42	0.23	0.42	0.23
Voltage constant K_E [V/1000 rpm]	25.1	13.6	25.1	13.6
Stator resistance R_{2ph} [Ω]	6.02	2	2.6	0.83
Stator inductance L_{2ph} [mH]	12.2	4.1	6.3	2
Electrical time constant t_{el} [ms]	2.03	2.05	2.42	2.41
Thermal time constant t_{therm} [min]	35	35	38	38
Moment of inertia J [kgcm^2]	0.14	0.14	0.26	0.26
Weight without brake m [kg]	1.05	1.05	1.45	1.45
Holding brakes				
Holding torque of the brake M_{Br} [Nm]	2.2			
Weight of brake [kg]	0.16			
Moment of inertia for the brake J_{Br} [kgcm^2]	0.12			
Recommendations				
ACOPOS servo drive 8Vxxxx.00-x1	1022	1045	1045	1090
ACOPOSmulti inverter module 8BVI…	0014	0028	0028	0055
Cross section for B&R motor cables [mm^2]	1.5			
Connector type	Y-Tec			

Note regarding servo drive: The recommended servo drive / inverter module is designed for 1.1x the stall current. If more than double the amount is needed during the acceleration phase, the next larger servo drive should be selected. This recommendation is only a guideline; detailed inspection of the corresponding speed/torque characteristic curve can result in deviations of the servo drive size (larger or smaller).

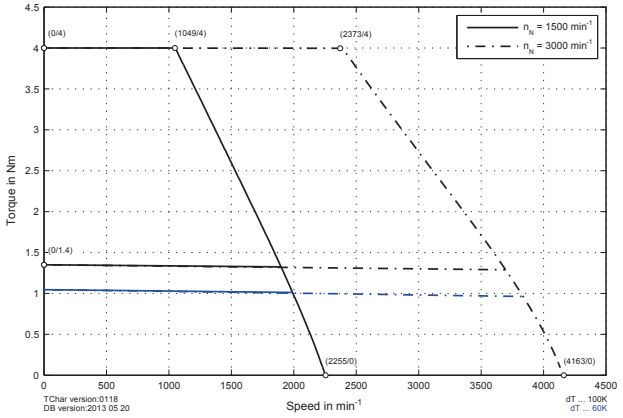
Speed - torque characteristic curve at 80V DC bus voltage

ACOPOSmicro



8LVA22.eennnffgg-0

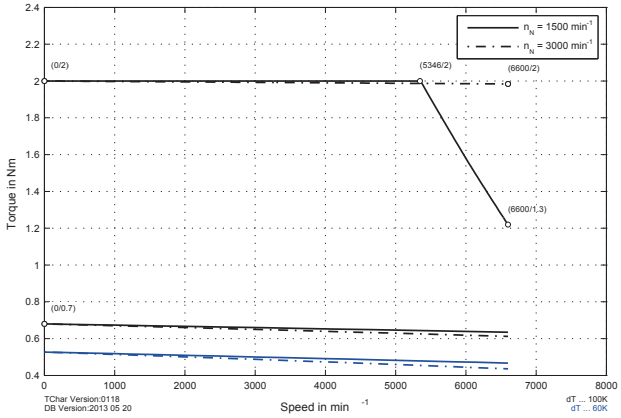
ACOPOSmicro



8LVA23.eennnffgg-0

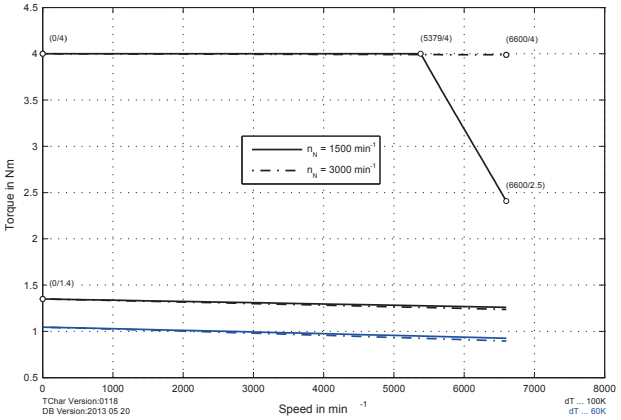
Speed-torque characteristics for DC bus voltage of 325 VDC

ACOPOS (single-phase)



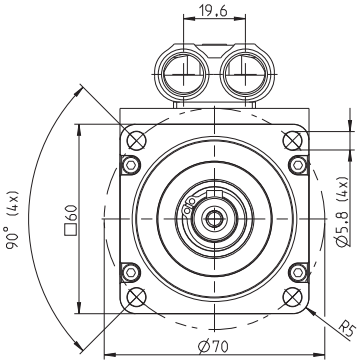
8LVA22.eennnffgg-0

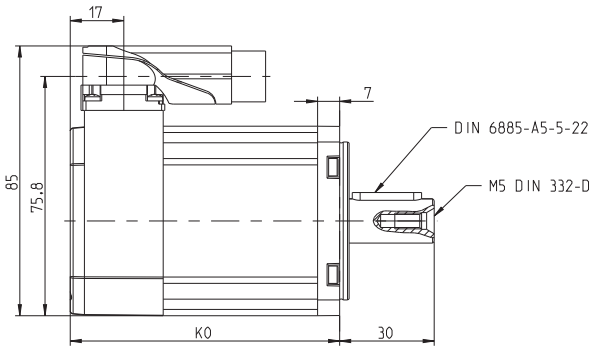
ACOPOS (single-phase)



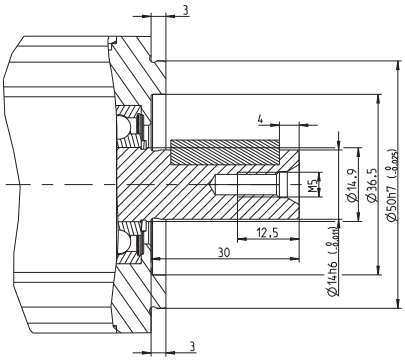
8LVA23.eennnffgg-0

8LVA2





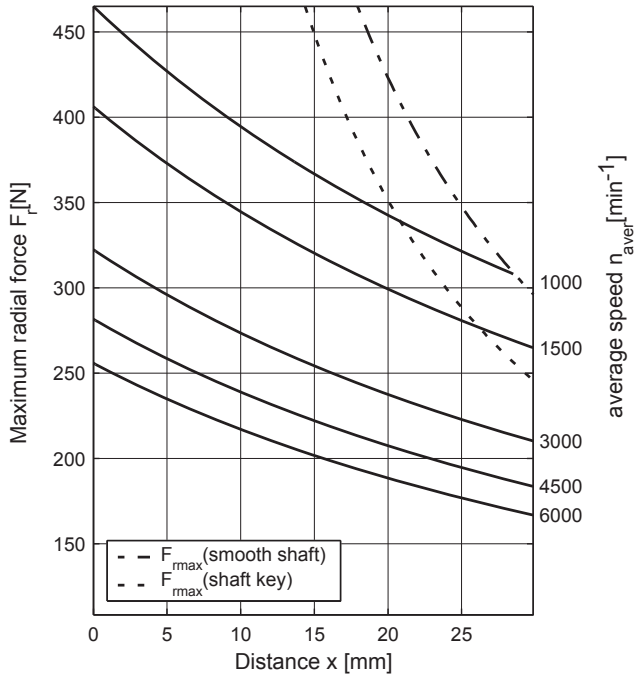
A flange detail
Standard bearing



EnDat feedback / Resolver feedback			Extension of K_0 depending on the motor option [mm]	
Model number	**K_0**	**M**	**Holding brake**	**Oil seal**
8LVA22.eennnffgg-0	85.5	17	33.5	7
8LVA23.eennnffgg-0	106	17	33.5	7

Maximum shaft load

The values in the diagram below are based on a mechanical lifespan of the bearings of 20,000 operating hours.



maximum allowed axial force: F_{amax} = 42 N