



# Artisan Scientific

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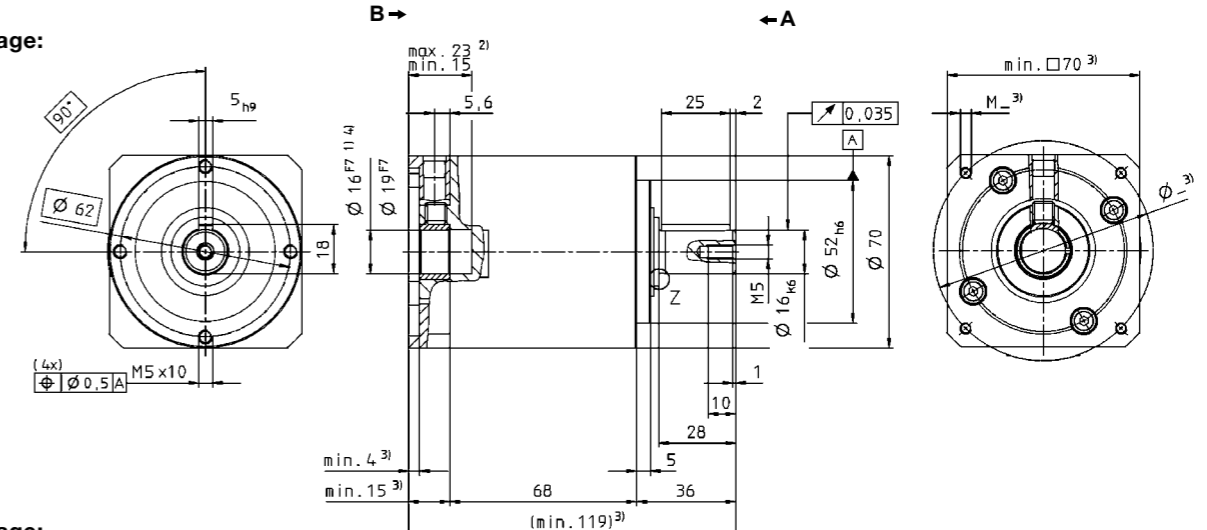
Ratio	i	1-stage							2-stage								
		3	4	5	7	10	9	12	16	20	25	30	40	50	70	100	
Max. acceleration torque <small>(max. 1000 cycles per hour)</small>	$T_{2B}$	Nm	55	42	40	40	37	55	55	55	42	40	55	40	40	37	
		in.lb	490	370	350	350	330	490	490	490	370	350	490	350	350	330	
Nominal output torque <small>(with <math>n_{1N}</math>)</small>	$T_{2N}$	Nm	29	22	21	21	19	29	29	29	22	21	29	21	21	19	
		in.lb	260	190	190	190	170	260	260	260	190	190	260	190	190	170	
Emergency stop torque <small>(permitted 1000 times during the service life of the gearhead)</small>	$T_{2Not}$	Nm	65	75	75	75	75	75	75	75	75	75	75	75	75	75	
		in.lb	580	660	660	660	660	660	660	660	660	660	660	660	660	660	
Nominal input speed <small>(with <math>T_{2N}</math> and 20°C ambient temperature)<sup>3)</sup></small>	$n_{1N}$	rpm	3700	3700	3700	3700	3700	3700	3700	3700	3700	3700	3700	3700	3700		
Max. input speed	$n_{1Max}$	rpm	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000		
Mean no load running torque <small>(with <math>n_1 = 3000</math> rpm and 20°C gearhead temperature)</small>	$T_{012}$	Nm	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
		in.lb	2.7	2.2	1.8	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.9	
Max. torsional backlash	$i_t$	arcmin	≤ 8							≤ 10							
Torsional rigidity	$C_{21}$	Nm/arcmin	4	4	3.3	3.3	2.8	4.0	4.0	4.0	4.0	4.0	4.0	3.3	3.3	3.3	2.8
		in.lb/arcmin	35	35	29	29	25	35	35	35	35	35	35	29	29	29	25
Max. axial force <sup>b)</sup>	$F_{2AMax}$	N	1550							1550							
		lb <sub>f</sub>	349							349							
Max. radial force <sup>b)</sup>	$F_{2RMax}$	N	1450							1450							
		lb <sub>f</sub>	326							326							
Efficiency at full load	$\eta$	%	97							95							
Service life <small>(For calculation, see the Chapter "Information")</small>	$L_h$	h	> 20000							> 20000							
Weight incl. standard adapter plate	m	kg	2.0							2.4							
		lb <sub>m</sub>	4.4							5.3							
Operating noise <small>(with <math>n_1 = 3000</math> rpm no load)</small>	$L_{PA}$	dB(A)	≤ 64														
Max. permitted housing temperature		°C	+90														
		F	194														
Ambient temperature		°C	-15 to +40														
		F	5 to 104														
Lubrication			Lubricated for life														
Paint			Blue RAL 5002														
Direction of rotation			Motor and gearhead same direction														
Protection class			IP 64														
Moment of inertia <small>(relates to the drive)</small>	D 16	$J_1$	kgcm <sup>2</sup>	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
			10 <sup>3</sup> in.lb.s <sup>2</sup>	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Clamping hub diameter (mm)	E 19	$J_1$	kgcm <sup>2</sup>	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
			10 <sup>3</sup> in.lb.s <sup>2</sup>	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4

<sup>3)</sup> For higher ambient temperatures, please reduce input speed  
<sup>b)</sup> Refers to center of the output shaft, if  $n_2 = 100$  rpm

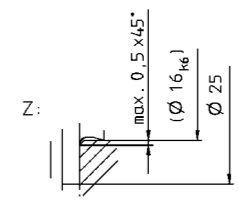
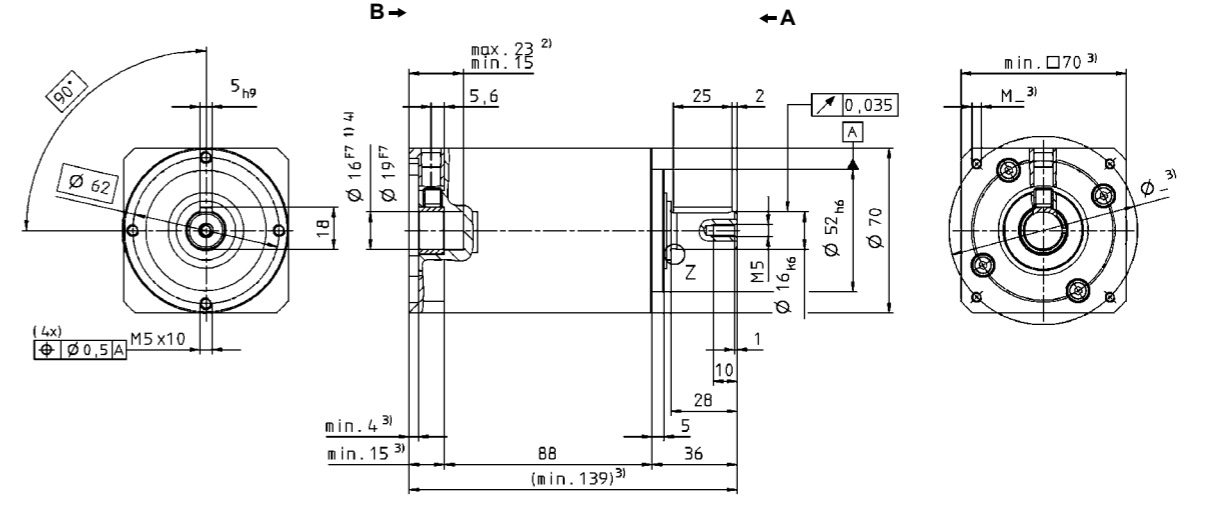
View A

View B

LP+ 1-stage:



LP+ 2-stage:



- Non-tolerated dimensions ±1mm
- 1) Check motor shaft fit.
  - 2) Min./Max. permissible motor shaft length. Longer motor shafts are adaptable, please contact us.
  - 3) The dimensions depend on the motor.
  - 4) Smaller motor shaft diameter is compensated by a bushing. Motor shaft diameters up to 19mm available – please contact WITTENSTEIN alpha

Motor mounting according to operating manual

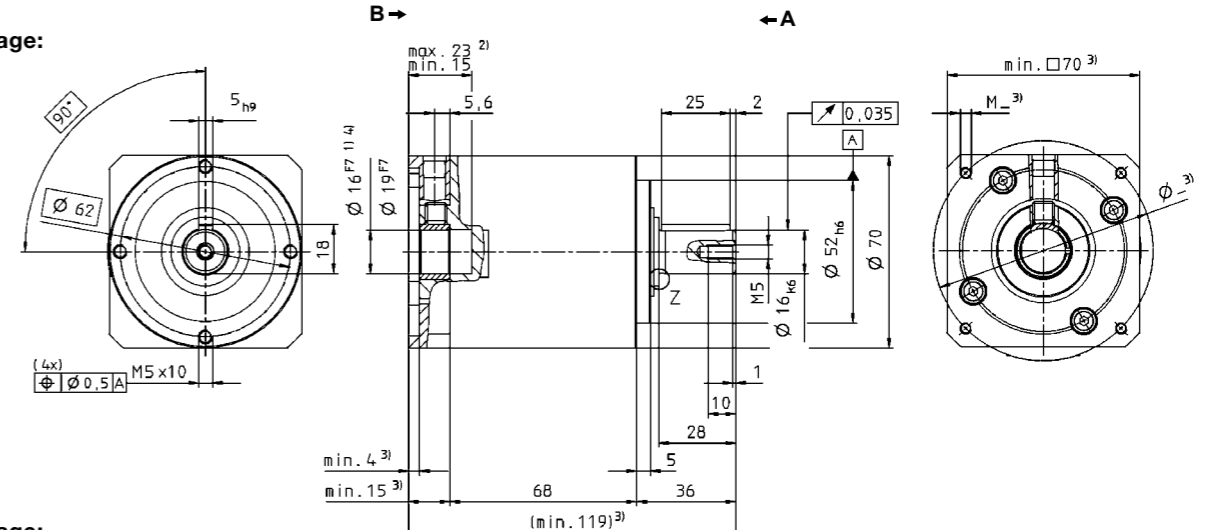
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Ratio	<i>i</i>	3	4	5	7	10	9	12	16	20	25	30	40	50	70	100	
Max. acceleration torque <small>(max. 1000 cycles per hour)</small>	$T_{2B}$	Nm	55	42	40	40	37	55	55	55	42	40	55	40	40	40	37
		in.lb	490	370	350	350	330	490	490	490	370	350	490	350	350	350	330
Nominal output torque <small>(with <math>n_{1N}</math>)</small>	$T_{2N}$	Nm	29	22	21	21	19	29	29	29	22	21	29	21	21	19	
		in.lb	260	190	190	190	170	260	260	260	190	190	260	190	190	190	170
Emergency stop torque <small>(permitted 1000 times during the service life of the gearhead)</small>	$T_{2Not}$	Nm	65	75	75	75	75	75	75	75	75	75	75	75	75	75	
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Nominal input speed <small>(with <math>T_{2N}</math> and 20°C ambient temperature)<sup>3)</sup></small>	$n_{1N}$	rpm	3700	3700	3700	3700	3700	3700	3700	3700	3700	3700	3700	3700	3700	3700	
Max. input speed	$n_{1Max}$	rpm	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	
Mean no load running torque <small>(with <math>n_1=3000</math> rpm and 20°C gearhead temperature)</small>	$T_{012}$	Nm	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
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Max. axial force <sup>b)</sup>	$F_{2AMax}$	N	1550							1550							
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			10 <sup>3</sup> in.lb.s <sup>2</sup>	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Clamping hub diameter (mm)	E 19	$J_1$	kgcm <sup>2</sup>	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
			10 <sup>3</sup> in.lb.s <sup>2</sup>	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4

<sup>3)</sup> For higher ambient temperatures, please reduce input speed  
<sup>b)</sup> Refers to center of the output shaft, if  $n_2 = 100$  rpm

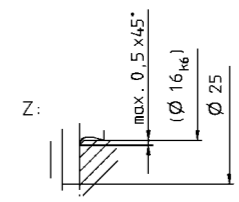
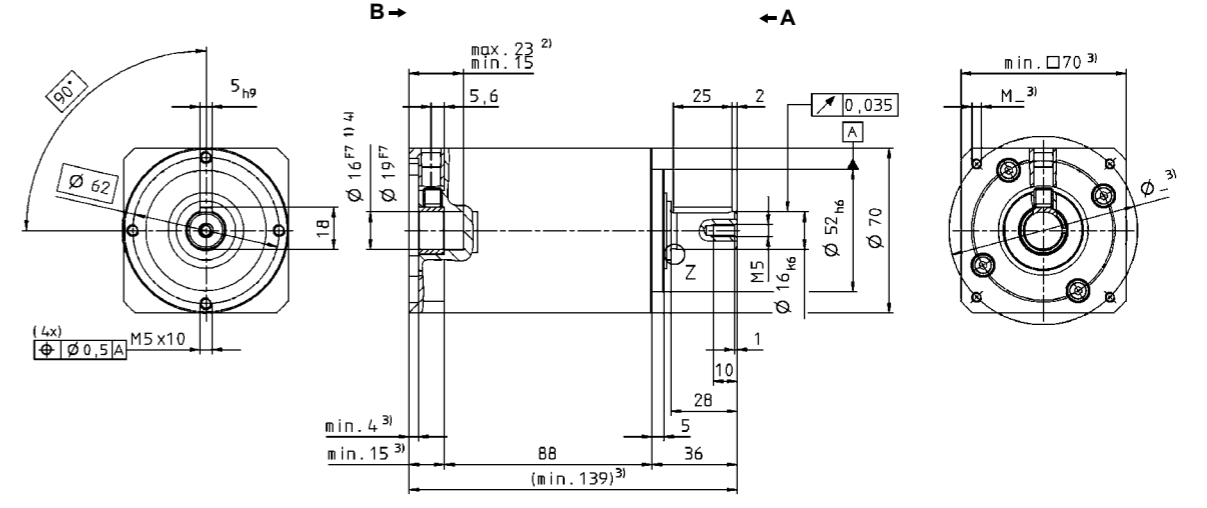
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