NEW

FAULHABER

Planetary Gearheads

High Torque

0,6 Nm

20 000 min-1

Series 16GPT

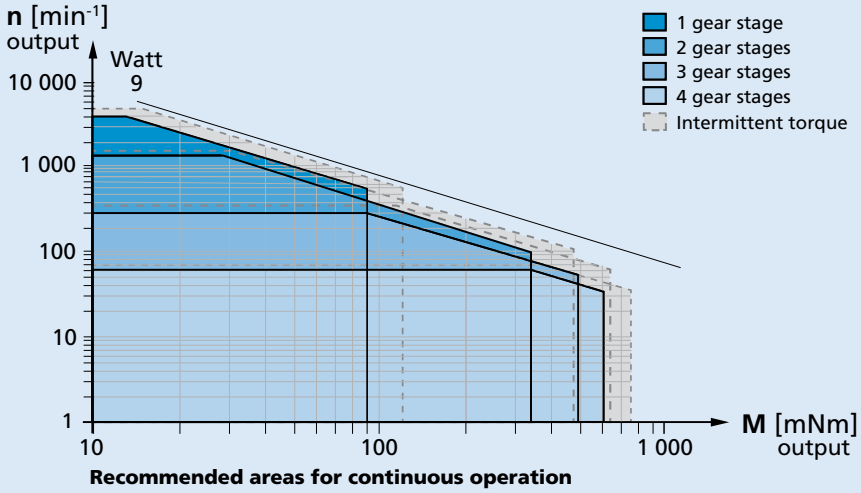
Values at 22°C					
Number of gear stages		1	2	3	4
Reduction ratio [1] (rounded)		**3,3:1** **4,9:1** **5,8:1** **7,1:1**	**11:1** **16:1** **19:1** **23:1** **29:1** **35:1** **41:1** **50:1**	**54:1** **63:1** **78:1** **95:1** **116:1** **136:1** **166:1** **203:1** **248:1**	**313:1** **384:1** **468:1** **573:1** **671:1** **822:1** **1 002:1** **1 228:1** **1 437:1**
Continuous torque, max. [2]	Nm	0,09	0,34	0,48	0,6
Intermittent torque, max.	Nm	0,13	0,45	0,64	0,8
Peak torque	Nm	0,23	0,7	1	1,25
Continuous input speed, max. [3]	min-1	14 000	18 000	20 000	20 000
Intermittent input speed, max. [3]	min-1	17 000	22 000	24 000	24 000
Continuous output power, max.	W	5,8	3,8	3	2,4
Intermittent output power, max.	W	8,2	5,3	4,2	3
Efficiency, max.	%	90	82	74	60
Input inertia with pinion, max.	gmm²	9,75	9,91	9,87	3,7
Torsional stiffness, typical	Nm/°	1,5	1,6	1,7	1,8
Backlash, at no-load, typical	°	1	1,1	1,2	1,3
Shaft load, max.:					
– radial (6,5 mm from mounting face)	N	30	50	70	90
– axial	N	30	30	30	30
Shaft press fit force, max.	N	35	35	35	35
Shaft play:					
– radial (6,5 mm from mounting face)	mm	≤ 0,05	≤ 0,05	≤ 0,05	≤ 0,05
– axial	mm	= 0	= 0	= 0	= 0
Length without motor L2	mm	15,4	20,1	24,7	29,4
Mass without motor and flange	g	17,5	22,5	27,5	33,5
Operating temperature range	°C	-30 … +120			
Direction of rotation, drive to output		=			
Housing material		stainless steel			
Geartrain material		stainless steel			
Bearings on output shaft		ball bearings, preloaded			

[1] The reduction ratios are rounded, the exact values are available on request or at www.faulhaber.com.
[2] Continuous output torque for reduction ratio 50:1 is limited to 0,28 Nm.
[3] Input speed of reduction ratios 11:1 and 54:1 are limited to 14'000 min-1 and 17'000 min-1 respectively in continuous and intermittent operation.

Note: These gearheads are available only with motors mounted.

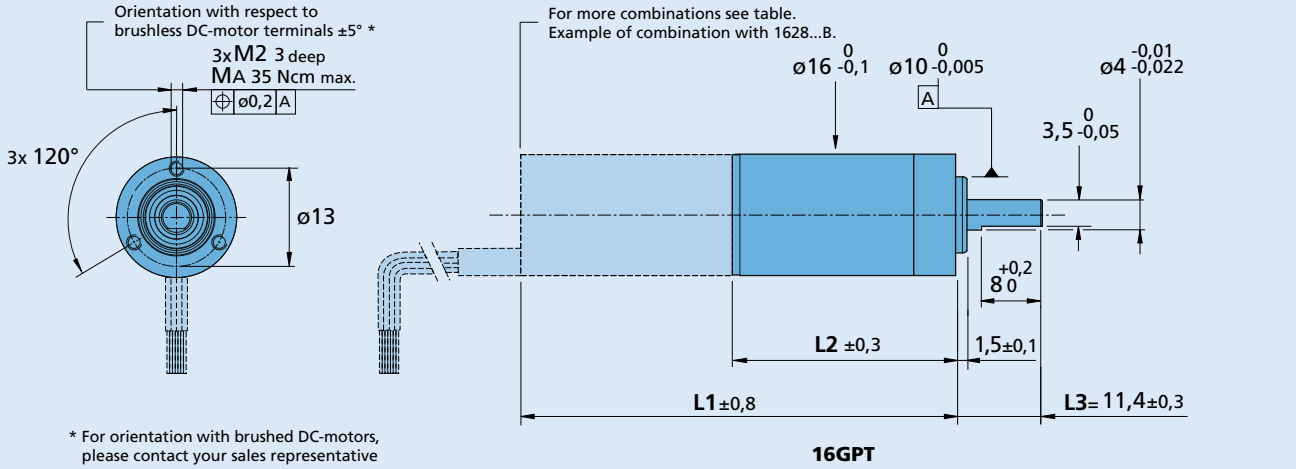
Note:
The display shows the range of possible operation points of the drives at a given ambient temperature of 22°C.

The diagram indicates the recommended output speed in relation to the available torque at the output shaft.



Recommended areas for continuous operation

Dimensional drawing



* For orientation with brushed DC-motors, please contact your sales representative

16GPT

Options

Example product designation: **16GPT 95:1 KS6KL1**

Option	Type	Description
KS1	Output shaft	Round plain shaft, **L3**= 11,4 mm
KS2	Output shaft	Longer round plain shaft, **L3**= 20 mm
KS3	Output shaft	Shaft with double flat shape of 8 mm length on opposite sides, **L3**= 11,4 mm
KS6	Output shaft	Shaft with 3,5 mm flat shape and 2 mm cross bore at 3 mm of shaft end, **L3**= 11,4 mm
KL1	Ambient conditions	Low temperature range of -55°C ... +100°C
KL2	Ambient conditions	Vacuum down to 10^{-5} Pa @ 22°C
KL3	Ambient conditions	Temperature range of -55°C ... +150°C and vacuum down to 10^{-9} Pa @ 60°C
KC1	Cable orientation	Motor cable/wires or terminals oriented at 15° CCW vs gearhead front threads
KC2	Cable orientation	Motor cable/wires or terminals oriented at 30° CCW vs gearhead front threads
KC3	Cable orientation	Motor cable/wires or terminals oriented at 45° CCW vs gearhead front threads
KC4	Cable orientation	Motor cable/wires or terminals oriented at 60° CCW vs gearhead front threads
KC5	Cable orientation	Motor cable/wires or terminals oriented at 75° CCW vs gearhead front threads
KC6	Cable orientation	Motor cable/wires or terminals oriented at 90° CCW vs gearhead front threads
KC7	Cable orientation	Motor cable/wires or terminals oriented at 105° CCW vs gearhead front threads

Note: Specified values may differ from the standard values depending on the option. Please consult your sales representative for further information.

Product combination

Number of gear stages		1	2	3	4
L2 [mm] = length without motor		15,4	20,1	24,7	29,4
L1 [mm] = length with motor	1627X...GXR	41,1	45,8	50,4	55,1
	1627X...SXR	41,1	45,8	50,4	55,1
	1724X...SR	41,0	45,7	50,3	55,0
	1727X...CXR	44,2	48,9	53,5	58,2
	1741X...CXR	58,2	62,9	67,5	72,2
	1628X...B	46,1	50,8	55,4	60,1
	1645X...BHS	64,0	68,7	73,3	78,0
	1660X...BHS	79,0	83,7	88,3	93,0
	1660X...BHT	79,0	83,7	88,3	93,0
	AM1524...59	34,5	39,2	43,8	48,5