NEW

FAULHABER

Planetary Gearheads

High Torque

1,8 Nm

15 000 min^{-1}

Series 22GPT

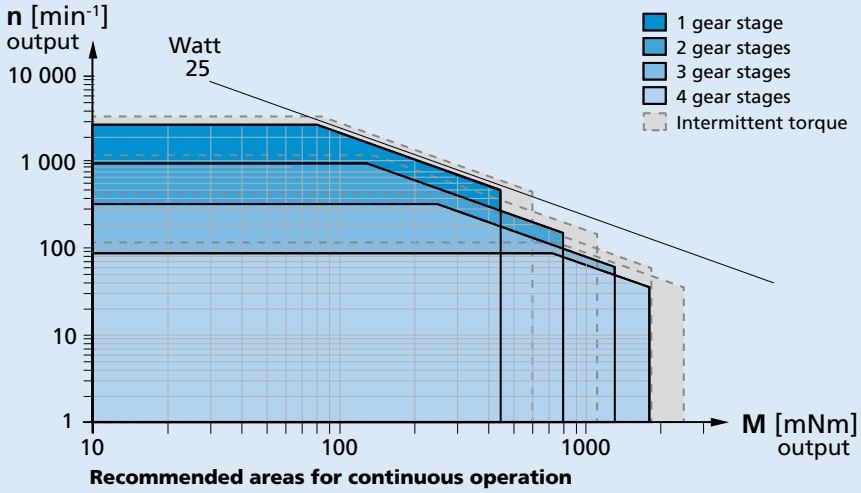
Values at 22°C							
Number of gear stages		1	2	2	3	4	4
Reduction ratio (rounded)[1]		3:1 3,6:1 4,5:1 6,6:1	9:1	11:1 14:1 16:1 20:1 24:1 30:1 44:1	41:1 49:1 59:1 72:1 89:1 108:1 131:1 158:1 196:1	178:1 215:1 267:1 323:1 401:1 474:1 588:1 862:1	711:1 1042:1 1294:1
Continuous torque, max.	Nm	0,45	0,8	0,8	1,3	1,8	1,4
Intermittent torque, max.	Nm	0,6	1,1	1,1	1,8	2,5	2,0
Peak torque	Nm	1	2,5	2,5	3,5	4,5	4,0
Continuous input speed, max.	min^{-1}	9 000	10 000	12 000	15 000	15 000	15 000
Intermittent input speed, max.	min^{-1}	11 000	12 000	15 000	20 000	20 000	20 000
Continuous output power, max.	W	21	12	12	8	7	7
Intermittent output power, max.	W	30	18	18	12	10	10
Efficiency, max.	%	92	84	82	78	65	65
Input inertia with pinion, max.	gmm^2	75	78	50	34	14	13
Torsional stiffness, typical	Nm/°	6	11	11	11	11	11
Backlash, at no-load, typical	°	0,8	0,8	0,8	0,8	0,8	0,8
Shaft load, max:							
– radial (10 mm from mounting face)	N	65	90	90	120	150	150
– axial	N	60	85	85	110	140	140
Shaf press fit force, max	N	150	150	150	150	150	150
Shaft play:							
– radial (10 mm from mounting face)	mm	≤ 0,05	≤ 0,05	≤ 0,05	≤ 0,05	≤ 0,05	≤ 0,05
– axial	mm	= 0	= 0	= 0	= 0	= 0	= 0
Length withtout motor (L2)	mm	18,1	24,5	24,5	30,8	37,2	37,2
Mass without motor and flange	g	51	66	66	82	97	97
Operating temperature	°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.

Note:

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

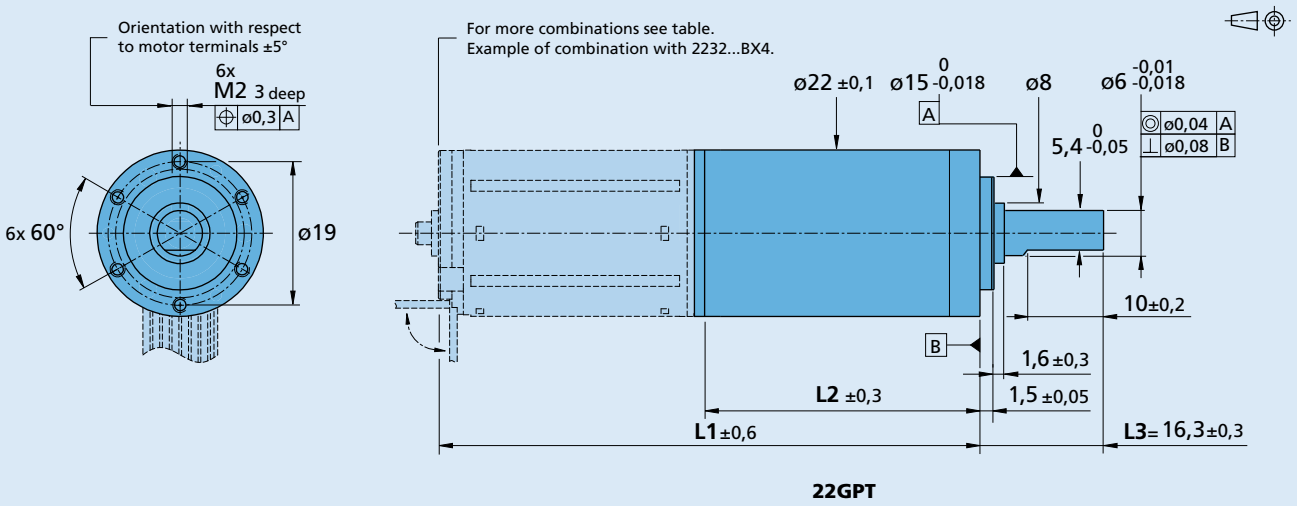
The diagram indicates the recommended output speed in relation to the available torque at the output shaft.



Recommended areas for continuous operation

For notes on technical data and lifetime performance refer to "Technical Information".

Dimensional drawing



22GPT

Option information

Example product designation: **22GPT 89:1 KS6KL1**

Option	Type	Description
KS1	Output shaft	Round plain shaft, **L3**= 16,3 mm
KS2	Output shaft	Longer round plain shaft, **L3**= 27 mm
KS3	Output shaft	Shaft with double flat shape of 12 mm length on opposite sides, **L3**= 21 mm
KS4	Output shaft	Shaft with key DIN 6885-A with dimensions 2x2x12 mm, **L3**= 21 mm
KS5	Output shaft	Shaft with 12 mm single flat shape, **L3**= 21 mm
KS6	Output shaft	Shaft with 12 mm single flat shape and 2 mm cross bore at 6 mm of shaft end, **L3**= 21 mm
KS7	Output shaft	Shaft with 10 mm single flat shape and M2.5 axial threaded hole, **L3**= 16,3 mm
KS8	Output shaft	Shaft with fork shape of 2 mm width opening, **L3**= 16,3 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

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 Stages		1	2	3	4
L2 [mm] = length without motor		18,1	24,5	30,8	37,2
L1 [mm] = length with motor	2224U…SR	45,1	51,4	57,8	64,1
	2232U…SR	53,1	59,4	65,8	72,1
	2237U…CXR	57,9	64,2	70,6	76,9
	2342X…CR	61,8	68,2	74,5	80,9
	2642X…CXR/CR	65,2	71,6	77,9	84,3
	2657X...CXR/CR	80,2	86,6	92,9	99,3
	2668X...CR	91,2	97,6	103,9	110,3
	2232X…BX4	53,6	60,0	66,3	72,7
	2250X…BX4	71,6	78,0	84,3	90,7
	2264X…BP4	87,2	93,6	99,9	106,3
	2214X...BXT H	34,6	41,0	47,3	53,7
	2214X ...BXT R	33,8	40,2	46,5	52,9
	2036U…B	56,9	63,2	69,6	75,9
	2057X…B	76,8	83,2	89,5	95,9
	2444X…B	63,8	70,2	76,5	82,9
	AM2224-10	48,6	54,9	61,3	67,6