NEW

FAULHABER

Planetary Gearheads

High Torque

8 Nm

11 000 min^{-1}

Series 32GPT

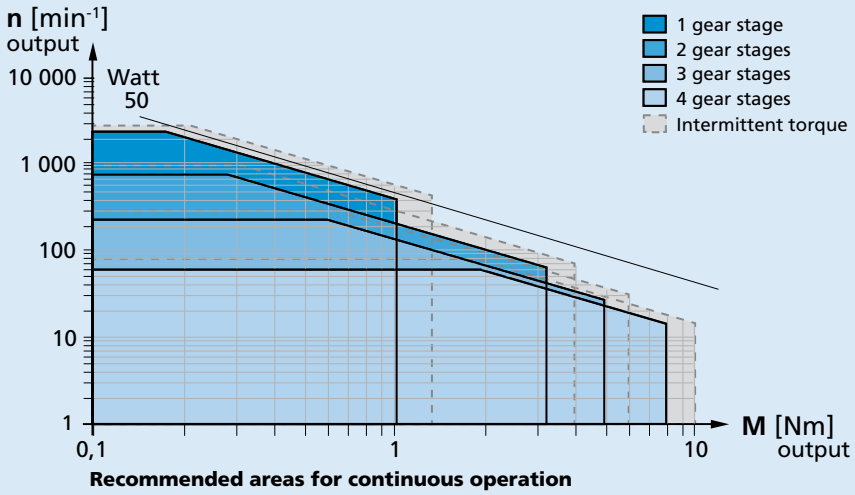
Values at 22°C								
Number of gear stages		1	1	2	2	3	4	4
Reduction ratio (rounded)[1]		3:1	3,6:1 4,5:1 6,6:1	9:1 11:1	14:1 16:1 20:1 24:1 30:1 44:1	41:1 49:1 59:1 72:1 89:1 108:1 131:1 158:1 196:1	178:1 215:1 267:1 323:1 401:1 474:1 588:1 862:1	711:1 1042:1 1294:1
Continuous torque, max.	Nm	1,0	1,0	3,0	3,0	5,0	8,0	6,0
Intermittent torque, max.	Nm	1,3	1,3	4,0	4,0	7,0	10	7,2
Peak torque	Nm	2	2	6,5	6,5	10	13	10
Continuous input speed, max.	min^{-1}	6 500	8 000	6 500	10 000	11 000	11 000	11 000
Intermittent input speed, max.	min^{-1}	7 500	9 500	7 500	12 500	14 000	14 000	14 000
Continuous output power, max.	W	40	40	21	21	14	12	12
Intermittent output power, max.	W	55	55	30	30	20	15	15
Efficiency, max.	%	93	93	89	89	80	65	65
Input inertia with pinion, max.	gmm^2	410	274	434	195	196	83	75
Torsional stiffness, typical	Nm/°	12	12	16	16	16	16	16
Backlash, at no-load, typical	°	0,6	0,6	0,6	0,6	0,6	0,6	0,6
Shaft load, max:								
– radial (10 mm from mounting face)	N	140	140	180	180	220	300	300
– axial	N	120	120	150	150	180	250	250
Shaf press fit force, max	N	250	250	250	250	250	250	250
Shaft play:								
– radial (10 mm from mounting face)	mm	≤ 0,07	≤ 0,07	≤ 0,07	≤ 0,07	≤ 0,07	≤ 0,07	≤ 0,07
– axial	mm	= 0	= 0	= 0	= 0	= 0	= 0	= 0
Length withtout motor (L2)	mm	23,4	23,4	31,8	31,8	40,2	48,6	48,6
Mass without motor and flange	g	180	180	240	240	310	360	360
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.

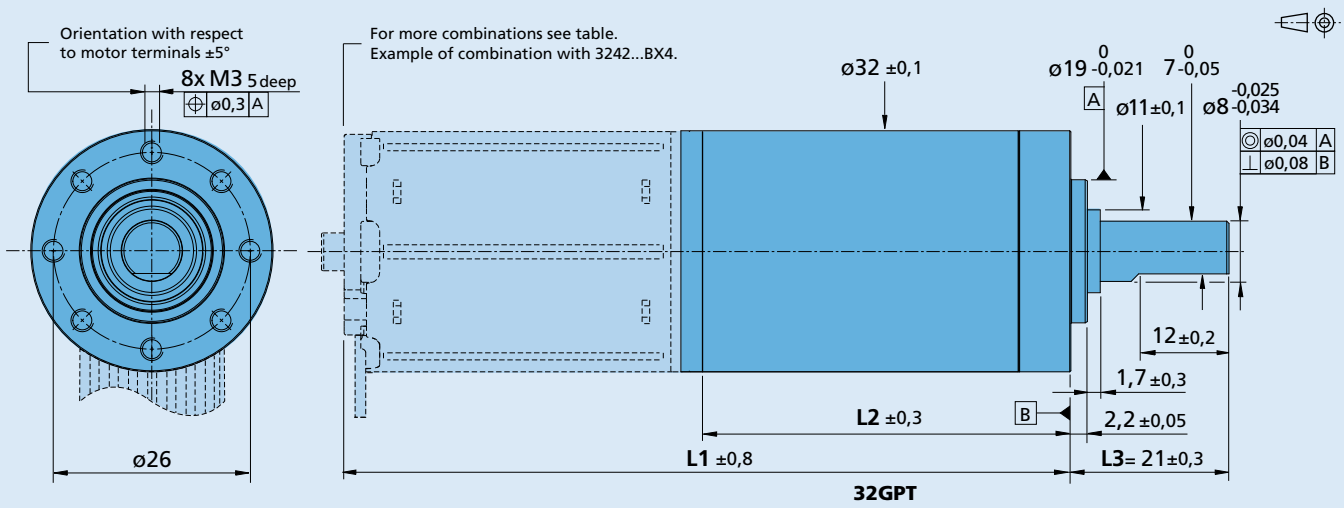
The diagram indicates the recommended output speed in relation to the available torque at the output shaft.



Recommended areas for continuous operation

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

Dimensional drawing



Option information

Example product designation: **32GPT 24:1 KS3KL2**

Option	Type	Description
KS1	Output shaft	Round plain shaft, **L3**= 21 mm
KS2	Output shaft	Longer round plain shaft, **L3**= 31 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
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 12 mm single flat shape and M4 axial threaded hole, **L3**= 21 mm
KS8	Output shaft	Shaft with fork shape of 3 mm width opening, **L3**= 21 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

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		23,4	31,8	40,2	48,6
L1 [mm] = length with motor	2642X...CXR/CR	68,3	76,7	85,1	93,5
	2657X...CXR/CR	83,3	91,7	100,1	108,5
	2668X...CR	94,3	102,7	111,1	119,5
	3242X...CR	68,3	76,7	85,1	93,5
	3257X...CR	83,3	91,7	100,1	108,5
	3272X...CR	98,3	106,7	115,1	123,5
	2250X...BX4	78,1	86,5	94,9	103,3
	3242X...BX4	70,5	78,9	87,3	95,7
	3268X...BX4	96,5	104,9	113,3	121,7
	2264X...BP4	90,3	98,7	107,1	115,5
	3274X...BP4	104,4	112,8	121,2	129,6
	3056X...B	82,3	90,7	99,1	107,5
	3564X...B	90,3	98,7	107,1	115,5
	3216X...BXT H	43,1	51,5	59,9	68,3
	3216X...BXT R	42,3	50,7	59,1	67,5