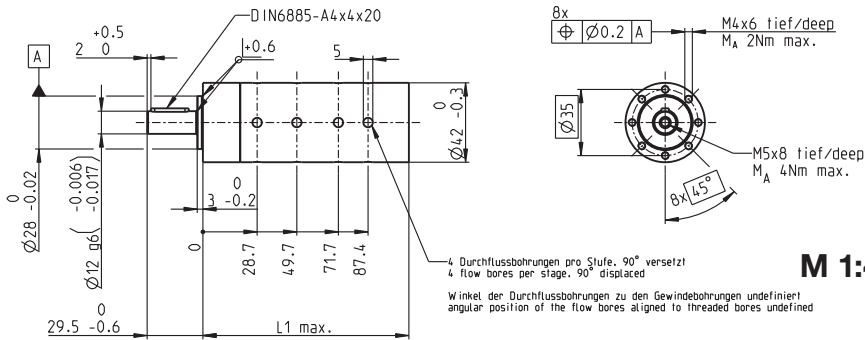


Planetary Gearhead GP 42 HD $\varnothing 42$ mm, 10–50 Nm

NEW

Heavy Duty – for application in oil



Technical Data

Planetary Gearhead	straight teeth
Output shaft	stainless steel
Bearing at output	ball bearing
Radial play, 12 mm from flange	max. 0.05 mm
Axial play	max. 0.2 mm
Max. axial load (dynamic)	250 N
Max. force for press fits	450 N
Direction of rotation, drive to output	=
Max. continuous input speed	< 8000 rpm
Recommended temperature range	-55...+200°C
Extended range as option	-55...+260°C
Number of stages	1 2 3 4
Max. radial load, 12 mm from flange	250 N 480 N 720 N 720 N

	Stock program	Standard program	Special program (on request)	Part Numbers						
Gearhead Data (provisional)				454742	454744	454745	476936	454280	476945	476949
1 Reduction				3.5:1	12:1	43:1	81:1	150:1	285:1	441:1
2 Absolute reduction				$7/2$	$49/4$	$343/8$	$2197/27$	$2401/16$	$15379/54$	$441/1$
10 Mass inertia	gcm ²			17.5	29	35.5	23.9	41.3	33.1	30.6
3 Max. motor shaft diameter	mm			10	10	10	8	10	8	10
Part Numbers				476927	476928	476933	476937	476942	476946	476950
1 Reduction				4.3:1	15:1	53:1	91:1	186:1	319:1	488:1
2 Absolute reduction				$13/3$	$91/6$	$637/12$	$91/1$	$4459/24$	$637/2$	$4394/9$
10 Mass inertia	gcm ²			11.1	23.3	31.8	25.4	37.6	34.2	26.3
3 Max. motor shaft diameter	mm			8	8	10	8	10	10	8
Part Numbers					476929	476934	476938	476943	476947	476951
1 Reduction					19:1	66:1	113:1	230:1	353:1	546:1
2 Absolute reduction					$169/9$	$1183/18$	$338/3$	$8281/36$	$28561/81$	$546/1$
10 Mass inertia	gcm ²				19.1	28.1	21.2	36.6	28.9	28.1
3 Max. motor shaft diameter	mm				8	8	8	10	8	8
Part Numbers						454746		476944	476948	476952
1 Reduction						74:1		257:1	394:1	676:1
2 Absolute reduction						$147/2$		$1029/4$	$1183/3$	$676/1$
10 Mass inertia	gcm ²					28.2		37.6	30.4	23.9
3 Max. motor shaft diameter	mm					10		10	8	8
4 Number of stages				1	2	3	3	4	4	4
5 Max. continuous torque	Nm			10	20	40	40	50	50	50
6 Max. intermittent torque at gear output	Nm			15	30	60	60	75	75	75
15 Max. overload torque ¹⁾	Nm			20	40	80	80	100	100	100
7 Max. efficiency	%			95	87	78	78	65	65	65
8 Weight	g			430	600	710	710	780	780	780
9 Average backlash no load	°			0.6	0.8	0.8	1.0	1.0	1.0	1.0
11 Gearhead length L1	mm			57.7	79.9	102.2	102.2	116.9	116.9	116.9
13 Max. transmittable power (continuous)	W			2000	880	300	300	62	62	62
14 Max. transmittable power (intermittent)	W			3000	1320	450	450	93	93	93

¹⁾ Reduced lift time expectancy



maxon Modular System										
+ Motor	Page	+ Sensor/Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor/brake) + assembly parts						
EC 32 HD oil, A	277			221.3	243.5	265.8	265.8	280.5	280.5	280.5
EC 32 HD oil, B	277			241.3	263.5	285.8	285.8	300.5	300.5	300.5

Application	Important Notice
General	This gearhead has been designed for applications in oil and is only equipped with minimum lubrication. Therefore it is not permitted to use it under normal air conditions.
- extreme temperature applications	
- vibration tested according to MIL-STD810F/Jan2000 Fig. 514.5C-10	
- operation in oil and high pressure	
Oil & Gas Industry	
- oil, gas and geothermal wells	