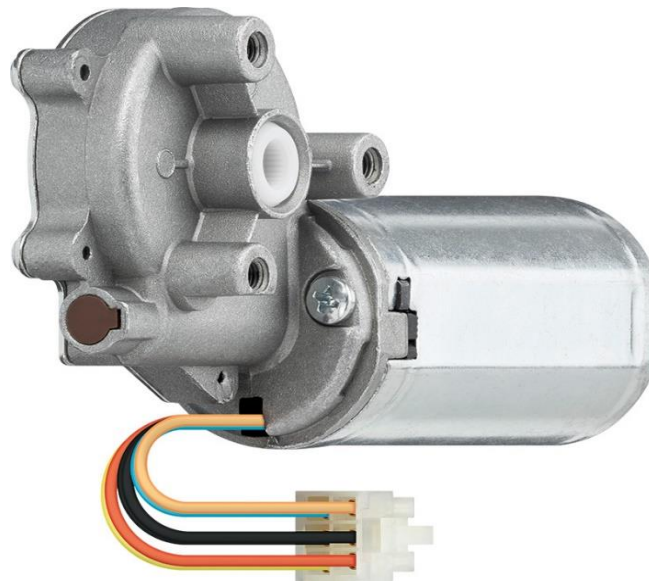


## DC motors



- DC motor with worm gear
- spindle or shaft assembly by serration
- 2 channel Hall sensor for positioning
- motor connection by Molex plug

# DC motor with worm gear



## part number

MOT - DC - 42 - J - H - D

specifics (nominal speed[1/min])	
B	60
J	100
D	125
L	135
F	230
N	350
H	400
P	500

optionen	
H	Hall

motor connection	
J	plastic plug

outer diameter	
42	42 mm

motor typ	
DC	DC-motor

product group	
MOT	motor

# DC motor with worm gear

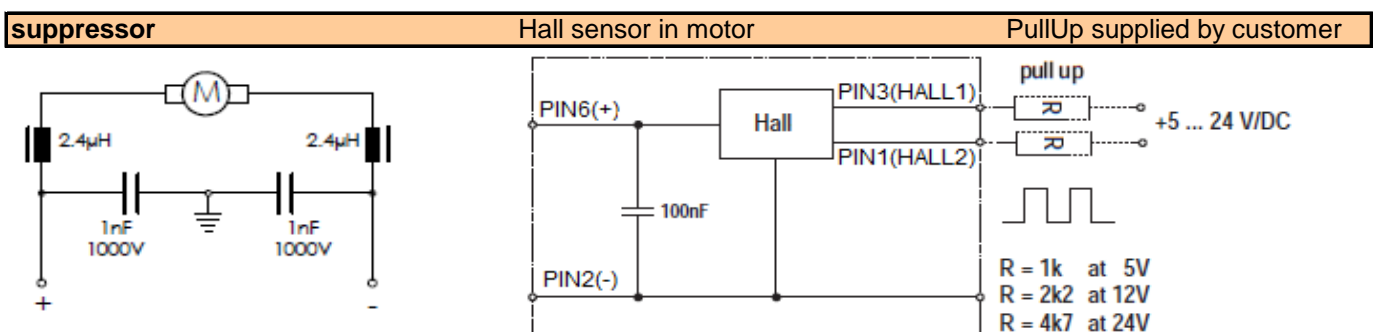
technical data									
motor		MOT-DC-42-J-H-B	MOT-DC-42-J-H-D	MOT-DC-42-J-H-F	MOT-DC-42-J-H-H	MOT-DC-42-J-H-J	MOT-DC-42-J-H-L	MOT-DC-42-J-H-N	MOT-DC-42-J-H-P
nominal voltage	[VDC]	24	24	24	24	24	24	24	24
nominal torque	[Nm]	2,00	1,75	1,25	0,75	3,00	2,50	1,6	1,4
nominal speed	[1/min]	50	100	200	350	80,0	110	280	400
nominal current	[A]	1,5	2,8	1,9	1,9	4,0	4,0	5,0	4,0
no-load speed	[1/min]	60	125	230	400	100,0	135,0	350,0	500,0
no-load current	[A]	0,45	1,35	0,45	0,70	1,3	1,6	1,3	2,5
starting torque	[Nm]	10,0	8,0	7,5	5,0	18	13	7	9
starting current	[A]	5,0	10,0	9,0	10,0	16	16	18	36
max. shaft load axial	[N]	0	0	0	0	0	0	0	0
max. shaft load radial	[N]	0	0	0	0	0	0	0	0
gear ratio		62:1	62:1	59:3	56:4	62:1	62:1	59:3	59:3

Hall sensor									
operating voltage	[VDC]	5-24V +/-25%							
current per channel max.	[A]	0,1							
impulse / turn (motor shaft)		5							
impulse / turn (drive shaft)		310	310	98	70	310	310	98	98
zero impulse / index		no							

weight		
motor weight	[kg]	0,7

operating data		
ambient temperature	[°C]	-10 ... +50
max temperature rise	[°C]	70
humidity (not condensing)	[%]	85
protection class		IP20
operation mode		S2 (short-time duty)

plug connection			
Molex serie Mini-Fit			Mini-Fit, 4.2mm, 6pol., 2row, stra.
signal	PIN	color	wire typ
Hall chanal 2	1	yellow	0,128mm <sup>2</sup> (26 AWG)
Hall minus	2	black	0,128mm <sup>2</sup> (26 AWG)
Hall chanal 1	3	blue	0,128mm <sup>2</sup> (26 AWG)
motor +	4	red	0,128mm <sup>2</sup> (26 AWG)
motor -	5	black	0,128mm <sup>2</sup> (26 AWG)
Hall plus (5-24VDC)	6	orange	0,128mm <sup>2</sup> (26 AWG)

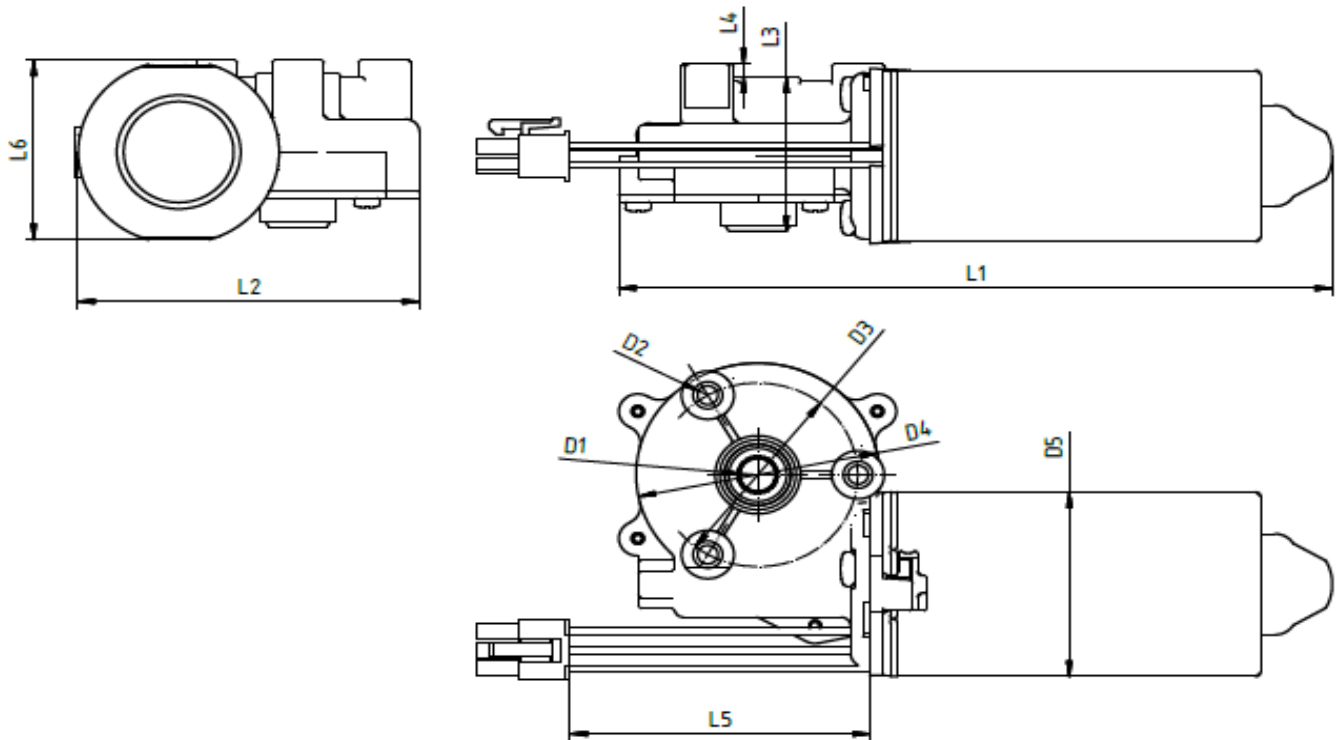


torque-, current- & roation speed datas are valid at cold motor. The tolerance of these values is 10%.

# DC motor with worm gear

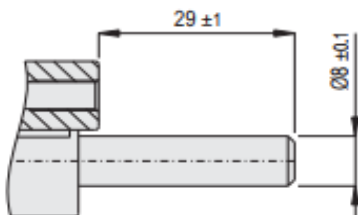


## technical data dimension



typ	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	D5 [mm]	L1 [mm] ±1	L2 [mm] ±2	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm] ±1
MOT-DC-42-J-H-... (valid for all motors)	7x8 DIN5481	M5	42 (3x120°)	51	42	150	72	35	3	75	41

motor shaft		
part number	description	parts per motor
NOR-22300	plug-in motor shaft (DIN 5481 7x8)	1
NOR-22301	plug-in motor shaft (DIN 5481 7x8) (D-Cut)	1
NOR-20507	lock ring	2



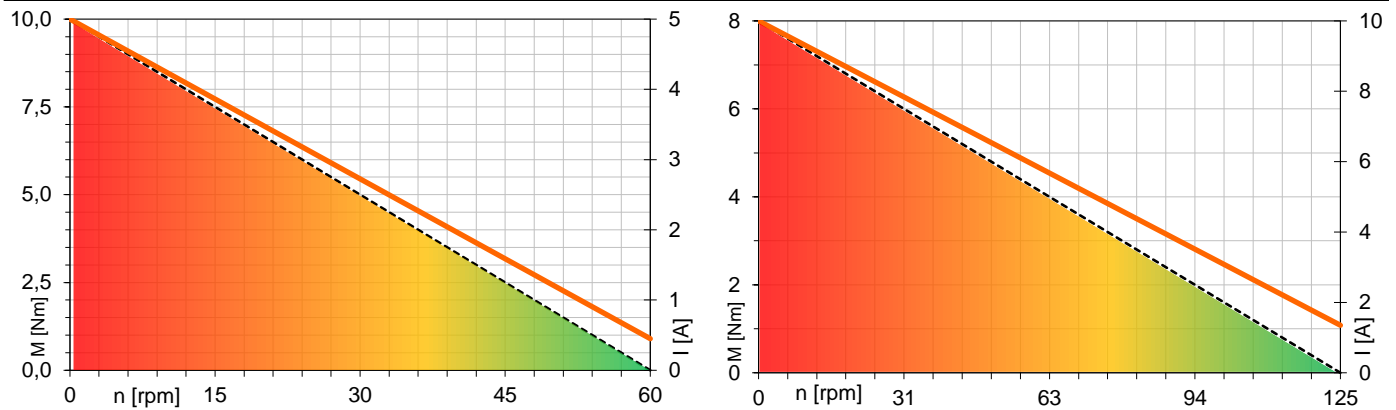
## cables

cable Ø: 7,5 mm / bending radius moved < 10 m travel distance: min. 7,5 x d				
part number	outer jacket	type	cable length [m]	connector
DLE904121463-3 (MAT904101539-3 old) (unshielded)	PVC	CF130	3	straight
DLE904121463-5 (MAT904101539-5 old) (unshielded)	PVC	CF130	5	straight
DLE904121463-10 (MAT904101539-10 old) (unshielded)	PVC	CF130	10	straight
cable Ø: 9,5 mm / bending radius moved < 10 m travel distance: min. 10 x d				
part number	outer jacket	type	cable length [m]	connector
DLE904121462-3 (MAT904106262-3 old) (shielded)	PVC	CF211	3	straight
DLE904121462-5 (MAT904106262-5 old) (shielded)	PVC	CF211	5	straight
DLE904121462-10 (MAT904106262-10 old) (shielded)	PVC	CF211	10	straight

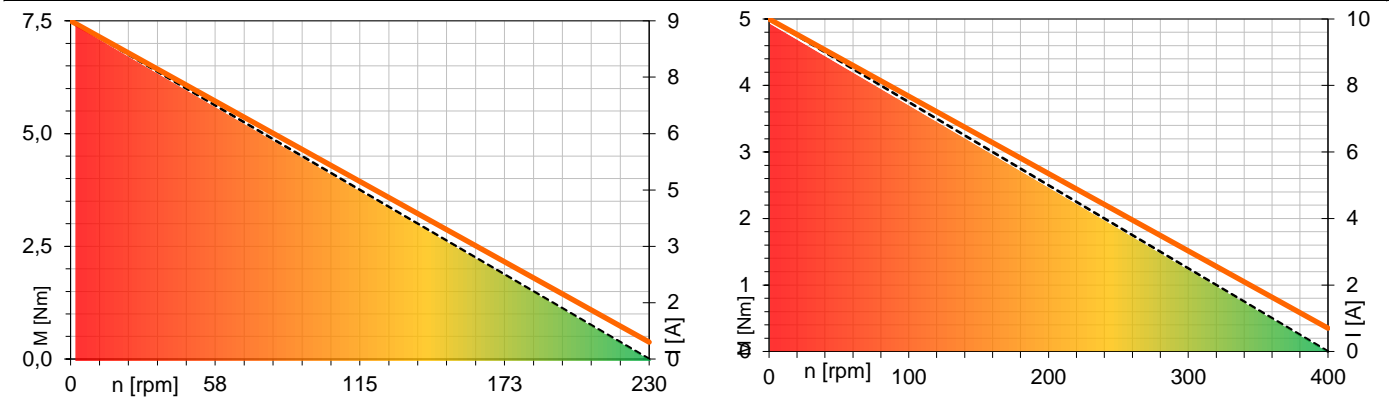
# DC motor with worm gear



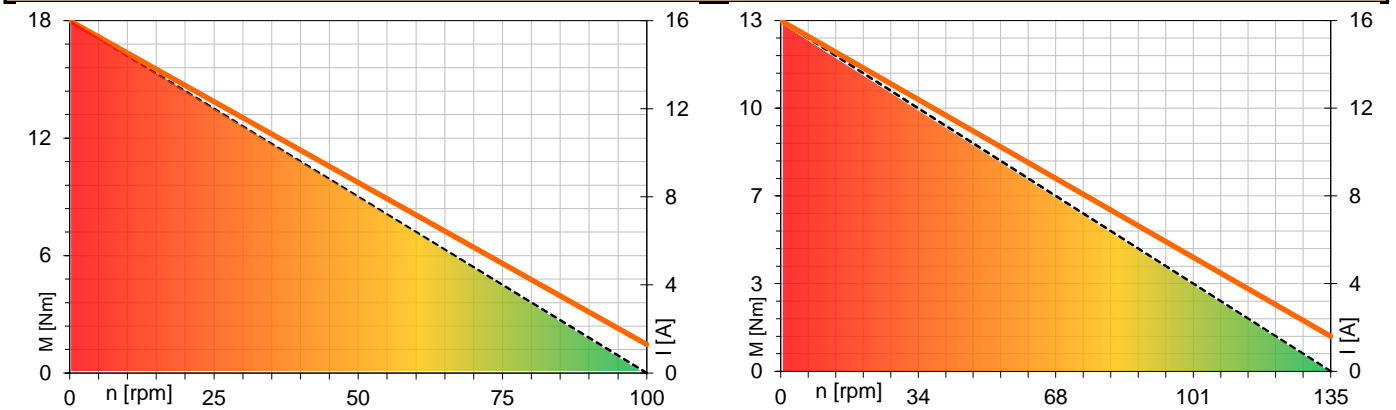
**characteristic (24VDC)**  
 MOT-DC-42-J-H-B MOT-DC-42-J-H-D



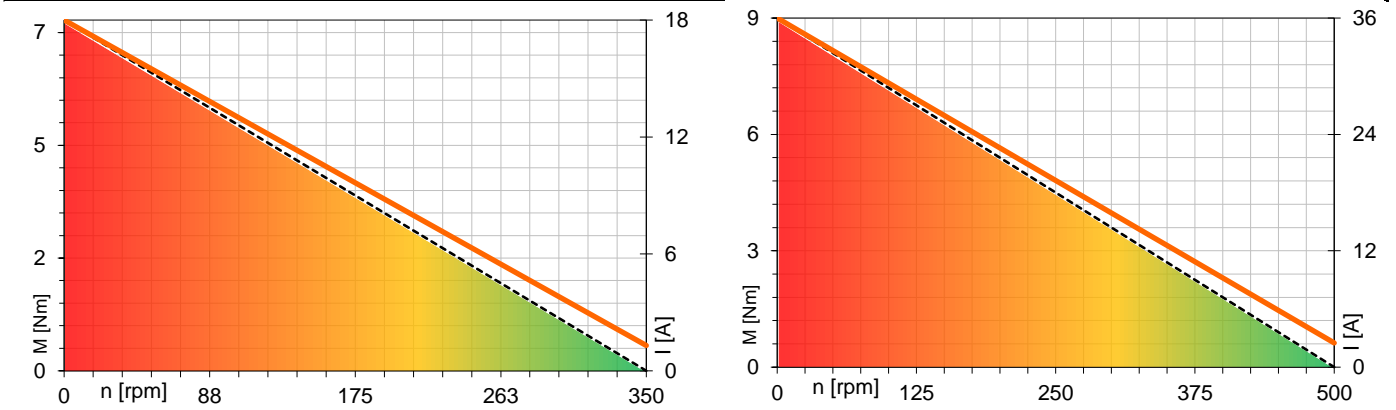
MOT-DC-42-J-H-F MOT-DC-42-J-H-H



MOT-DC-42-J-H-J MOT-DC-42-J-H-L



MOT-DC-42-J-H-N MOT-DC-42-J-H-P



- - - - torque      ——— motor current      (red > overload / yellow > intermittent duty / green > nominal rating (S2))