

NEW

Motion Control Systems

V3.0, 4-Quadrant PWM
with EtherCAT interface

96 mNm

41 W

MCS 3268 ... BX4 ET

| Values at 22°C and nominal voltage | | MCS 3268G024BX4 .. | |
|---|----------------------------|--------------------|-------------------|
| Power supply for electronic | U_p | 12 ... 50 | V DC |
| Power supply for motor | U_{mot} | 0 ... 50 | V DC |
| Nominal voltage for motor | U_N | 24 | V |
| No-load speed (at U_N) | n_0 | 4 700 | min ⁻¹ |
| Peak torque (S2 operation for max. 1s) | $M_{max.}$ | 190 | mNm |
| Torque constant | k_m | 43,5 | mNm/A |
| PWM switching frequency | f_{PWM} | 100 | kHz |
| Efficiency electronic | η | 95 | % |
| Standby current for electronic (at 24V) | I_{el} | 0,06 | A |
| Shaft bearings | ball bearings, preloaded | | |
| Shaft load max.: | | | |
| – with shaft diameter | 5 | | mm |
| – radial at 3 000 min ⁻¹ (5 mm from mounting flange) | 50 | | N |
| – axial at 3 000 min ⁻¹ (push / pull) | 5 | | N |
| – axial at standstill (push / pull) | 50 | | N |
| Shaft play: | | | |
| – radial | ≤ 0,015 | | mm |
| – axial | = 0 | | mm |
| Operating temperature range | – 40 ... + 85 | | °C |
| Speed range (up to 30V) | 1 ... 6 000 | | min ⁻¹ |
| Housing material | aluminium, stainless steel | | |
| Protection class, with option V ring | IP 54 | | |
| Mass | 394 | | g |

| Rated values for continuous operation | | | |
|---------------------------------------|-------|-------|-------------------|
| Rated torque | M_N | 96 | mNm |
| Rated current (thermal limit) | I_N | 2,3 | A |
| Rated speed | n_N | 3 700 | min ⁻¹ |

Note: Rated values are calculated with nominal voltage and at a 22°C ambient temperature.

| Interface | ... ET |
|--------------------------------------|----------|
| Configuration from MotionManager 6.0 | RS232 |
| Fieldbus | EtherCAT |

| Range of functions | MCS |
|----------------------|---|
| Operating modes | PP, PV, PT, CSP, CSV, CST and homing acc. to IEC 61800-7-201 or IEC 61800-7-301 as well as position-, speed- and torque control via analog setpoint or voltage controller |
| Speed range | see motor diagram |
| Application programs | Max. 8 application programs (BASIC), one of which is an autostart function |
| Additional functions | Touch-probe input, connection of a second incremental encoder, control of a holding brake |
| Indicator | LEDs for displaying the operating state Trace as recorder (scope function) or logger |

Note:

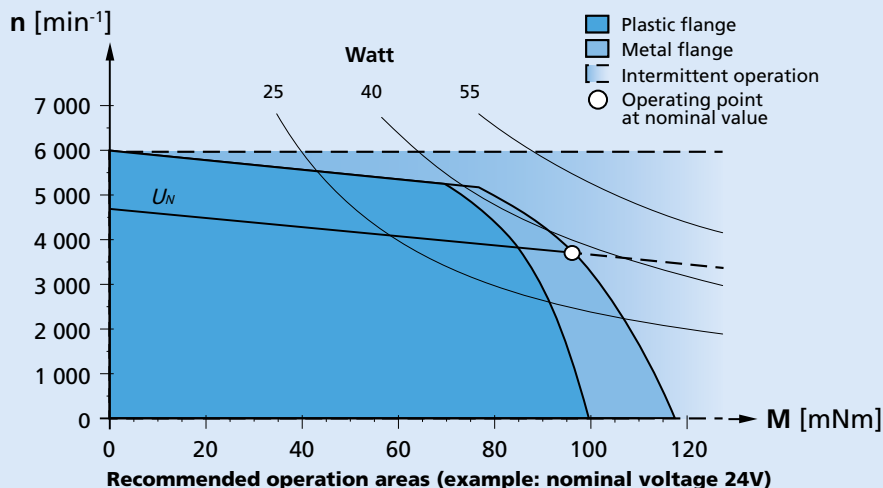
The display shows the range of possible operation points of the drives at a given ambient temperature of 22°C.

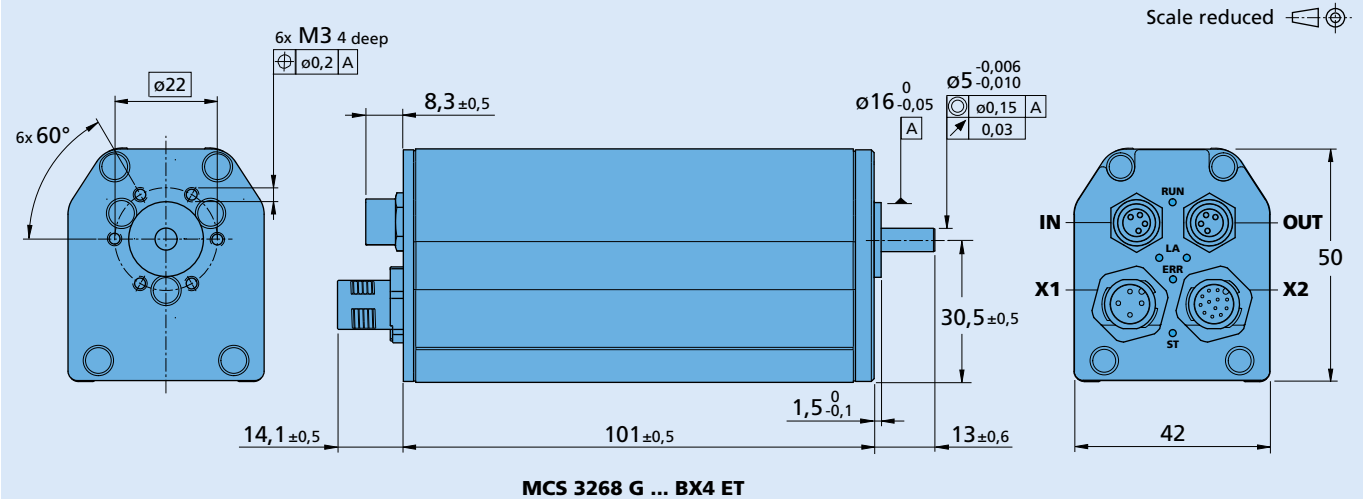
The diagram indicates the recommended speed in relation to the available torque at the output shaft.

It includes the assembly on a plastic- as well as on a metal flange (assembly method: IM B 5).

The nominal voltage linear slope describes the maximal achievable operating points at nominal voltage.

Any points of operation above this linear slope will require a supply voltage $U_{mot} > U_N$.



Dimensional drawing

Option, cable and connection information

 Example product designation: **MCS3268G024BX4ET-5453**

| Option | Type | Description | Connection | | | |
|--------|------------|--------------------------------------|---|-----------------------------------|--|---|
| 5452 | Shaft seal | For use with oil emulsive substances | Name | Function | Inputs-outputs | Description |
| 5453 | Shaft seal | Splash water protected (IP54) | X1 | Motor and electronic power supply | | |
| | | | X2 | Inputs-outputs | DigIn1, DigIn2, DigIn3 DigOut1, DigOut2 AnIn1, AnIn2 U _{out} / GND | TTL or. PLC level max. 0,7A continuous current ± 10V against AGND 5V |
| | | | IN | Fieldbus | | EtherCAT IN |
| | | | OUT | Fieldbus | | EtherCAT OUT |
| | | | Note: For details on the connection assignment, see device manual for the MCS. | | | |

Product Combination

| Precision Gearheads / Lead Screws | Encoder | Drive Electronics | Cables / Accessories |
|---|---------|-------------------|--|
| 32A 32/3 32/3S 38A BS32-2.0 | | Integrated | To view our large range of accessory parts, please refer to the "Accessories" chapter. |