

Motion Control Systems

V2.5, 4-Quadrant PWM
with RS232 or CANopen interface

67 mNm

32 W

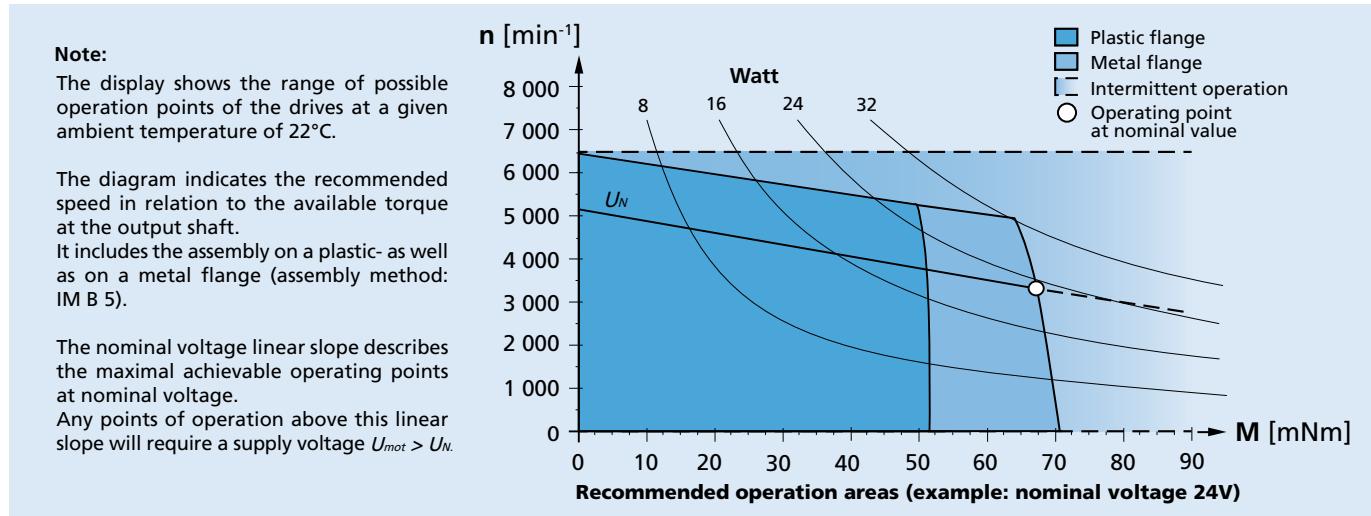
3242 ... BX4 Cx

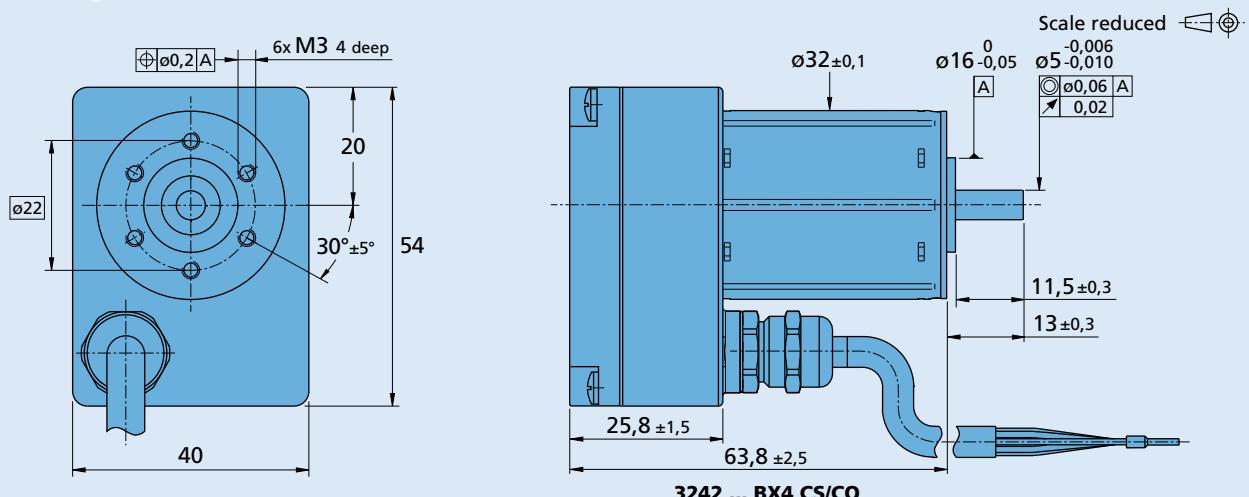
Values at 22°C and nominal voltage	3242 G	024BX4 Cx
Power supply electronic	U_B/U_{EL}	12 ... 30
Power supply motor ¹⁾	$-/U_B$	0 ... 30
Nominal voltage for motor	U_N	24
No-load speed (at U_N)	n_0	5 100
Peak torque (S2 operation for max. 5s)	$M_{max.}$	134
Torque constant	k_M	42,1
PWM switching frequency	f_{PWM}	78
Efficiency electronic	η	95
Standby current for electronic (at $U_B=24V$)	I_{el}	0,055
Speed range (up to 30V)		1 ... 6 500
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	$\leq 0,015$	mm
- axial	= 0	mm
Operating temperature range	-40 ... +100	°C
Housing material	motor: stainless steel; controller housing: zinc, black anodized	
Mass	370	g

¹⁾ Only available for option 2993 (separate power supply)

Rated values for continuous operation			
Rated torque	M_N	67	mNm
Rated current (thermal limit)	I_N	1,65	A
Rated speed	n_N	3 300	min ⁻¹

Interface / range of functions	... CS	... CO
Configuration from Motion Manager 5.0	RS232	CANopen
Fieldbus	RS232	CANopen
Operating modes (CS)	Position/speed/torque control via interface or analogue set value specification. Operation as servo amplifier in voltage controller mode.	
Operating modes (CO)	Profile Position Mode (PP), Profile Velocity Mode (PV), Homing Mode.	
Speed range	see motor diagram	
Application programs, (CS)	Command sequences from movement and control commands can be placed directly into the controller as user programs.	
Additional functions	Enables stand-alone operation without a connected communication interface. Overload protection for electronics and motor, self-protection from overheating, over-voltage protection in generator mode.	



Dimensional drawing

Option, cable and connection information

Example product designation: **3242G024BX4CS-2993**

Option	Type	Description	Connection	
			Wires	Function
2993	Supply	Separate voltage supply for motor and electronics	blue	GND
			pink	U_s
			brown	Analog input
			white	Fault output
			grey	Analog GND
			yellow	RS232 RXD / CAN_L
			green	RS232 TXD / CAN_H
			red	Connection No. 3
			Standard cable PVC-cable, 8-conductors AWG 24, length 1 meter	
			Caution: Connect motor supply terminals to the correct polarity. Electronics are protected against polarity reversal by an internal fuse. In case of damage, this internal fuse can only be replaced at the factory.	
			Note: For details on the connection assignment, see device manual MCS.	

Product combination

Precision Gearheads / Lead Screws	Encoders	Drive Electronics	Cables / Accessories
32A 32ALN 32GPT 32/3 32/3R 38A 38/1 38/1 S 38/2 38/2 S 42GPT		Integrated	To view our large range of accessory parts, please refer to the "Accessories" chapter.