

## Series MIG Nova+

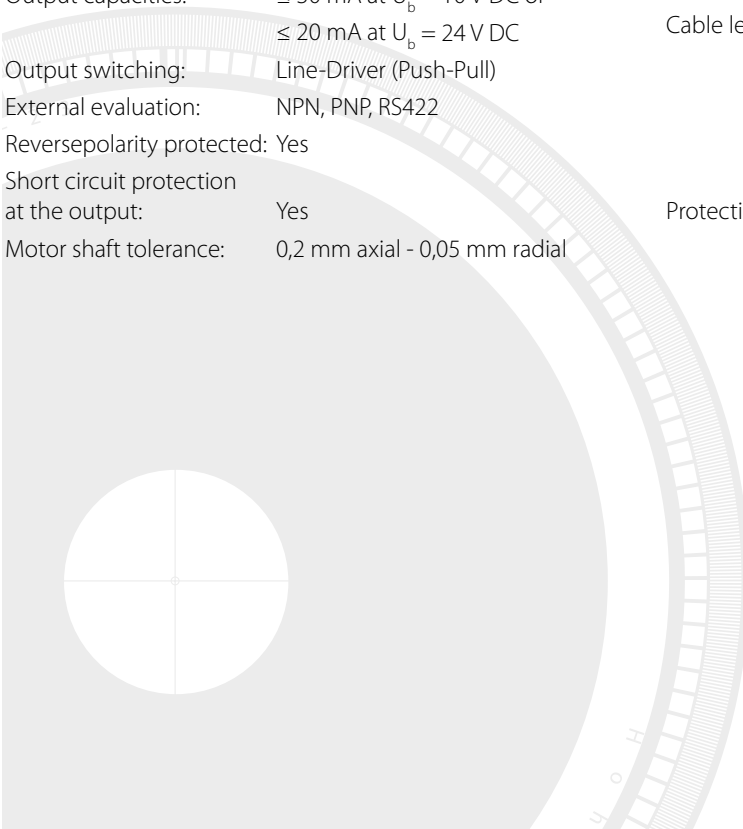
- ▶ Compact design; 7 - 15 mm thick
- ▶ Standard flanges sizes from 80 to 450 mm
- ▶ Compatible with any IEC standard motor, size 56 to 225
- ▶ Space-saving and protective assembly between motor and gearbox; protection class IP67
- ▶ Also applicable to existing drives
- ▶ Epoxy resin sealed encoder electronics
- ▶ Unbreakable vulcanized magnet ring
- ▶ 1 - 2048 impulses (A 90°B) per revolution
- ▶ Contactless signal measurement
- ▶ Output signal A 90° B and inverted
- ▶ Up to 6000 rpm.
- ▶ Line driver output, 10 - 24 VDC and TTL 5 VDC
- ▶ Flange material in aluminum and available in stainless steel
- ▶ Special construction and material on request
- ▶ Standard with 2 m, screened cable.  
Different lengths and plug connection on request.

### Electrical specifications

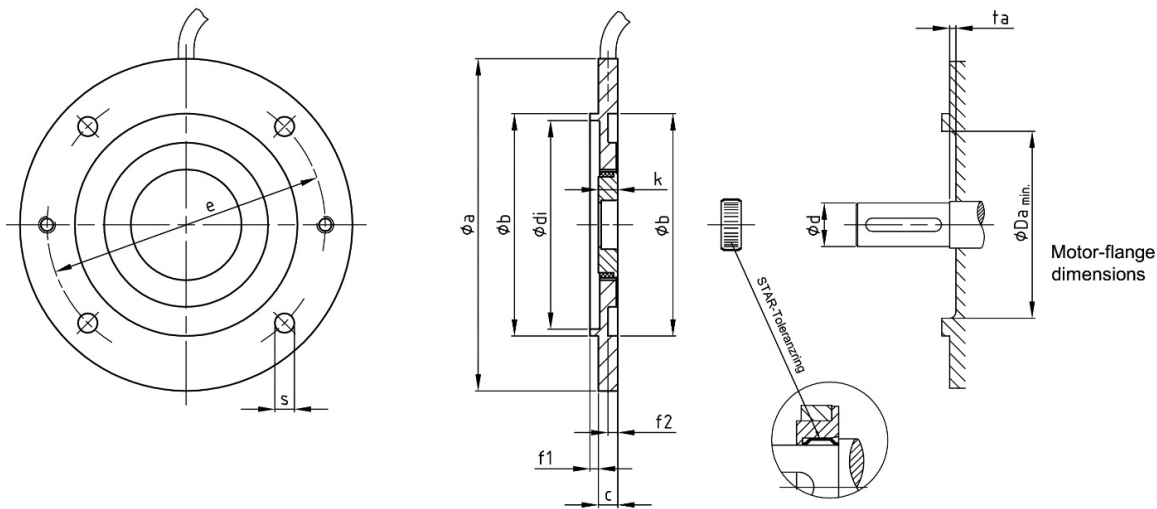
Connecting voltage $U_b$ :	5 to 24 VDC
Max. impulse frequency:	$\leq 100$ kHz
Output signals:	Square wave-impulses, A 90° B and A 90° B inverted
Impulses:	1 ... 512, 1.024, 2.048
Signal level:	$U_{high} \geq U_b - 0,7V$ at $I_{last} \leq 10$ mA $U_{low} \leq -0,7V$ at $I_{last} \leq 10$ mA
Output capacities:	$\leq 30$ mA at $U_b = 10V$ DC or $\leq 20$ mA at $U_b = 24V$ DC
Output switching:	Line-Driver (Push-Pull)
External evaluation:	NPN, PNP, RS422
Reversepolarity protected:	Yes
Short circuit protection at the output:	Yes
Motor shaft tolerance:	0,2 mm axial - 0,05 mm radial

### Mechanical specifications

Max. speed:	6.000 min <sup>-1</sup> (1.024 impulses) 3.000 min <sup>-1</sup> (2.048 impulses)
Temperature range:	-30° C to +80° C
Flange/hub material:	Aluminium, stainless steel (additional price) / Magnet vulcanized
Connection cable:	PUR-sheath 6 x 0,14 screened (A+B, A+B inv.) Standard 2 m or on request
Cable length:	Depending on the impulses and RPM max. 100 m at 5 V DC max. 20 m at 24 V DC max. 50 m at 24 V DC and impulse frequency max. 50 kHz
Protection type:	Standard IP55, depending on the sealant used between motor and machine flange IP67. Pleas take note in the operating manual.



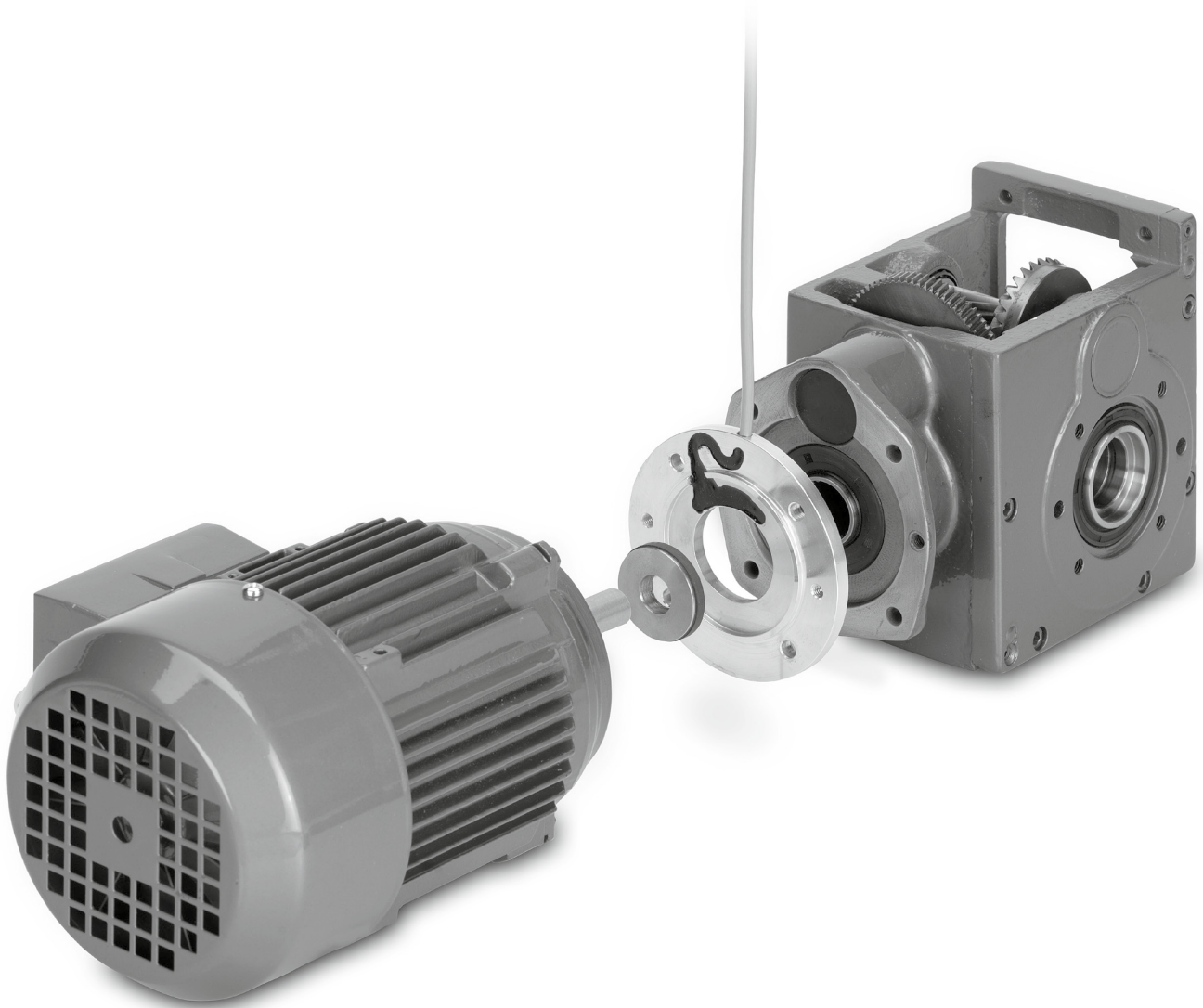
## Mechanical Dimensions



MIG Nova+ Dimensions									Standard motor sizes (BG) according to IEC									
Øa	Øb	c	Ødi	Øe	f1	f2	k	s	BG	Fl.	Ød x l	ta	ØDa					
80	50	7	44	65	2,5	3	7	5,8	56	FT 65	Ø 9 x 20	2	43					
90	60	7	54	75	2,5	3	7	5,8	63	FT 75	Ø 11 x 23	2	43					
105	70	7	64	85	2,5	3	7	7	56	FT 85	Ø 9 x 20	2	60					
									71	FT 85	Ø 14 x 30	2	60					
120	80	7	74	100	3	3,5	7	7	56	FT 100	Ø 9 x 20	2	60					
									63	FT 100	Ø 11 x 23	2	60					
									80	FT 100	Ø 19 x 40	2	60					
140	95	7	85	115	3,5	4	7	9	63	FT 115	Ø 11 x 23	2	60					
									71	FT 115	Ø 14 x 30	2	60					
160	110	9	85	115	3,5	4	9	9	90	FT 115	Ø 24 x 50	3	60					
									71	FT 130	Ø 14 x 30	2	60					
														80	FT 130	Ø 19 x 40	2	60
														90	FT 130	Ø 24 x 50	3	60
														100	FT 130	Ø 28 x 60	3	105
112	FT 130	Ø 28 x 60	3	105														
200	130	9	120	165	3,5	4	9	11	80	FT 165	Ø 19 x 40	2	60					
									90	FT 165	Ø 24 x 50	3	60					
									100	FT 165	Ø 28 x 60	3	60					
									112	FT 165	Ø 28 x 60	3	105					
									132	FT 165	Ø 38 x 80	3	105					
250	180	12	170	215	4	5	12	13,5	100	FT 215	Ø 28 x 60	3	60					
									112	FT 215	Ø 28 x 60	3	60					
									132	FT 215	Ø 38 x 80	3	105					
300	230	12	218	265	4	5	12	13,5	132	FT 265	Ø 38 x 80	3	105					
350	250	12	238	300	5	6	12	17	160	FT 300	Ø 42 x 110	3	105					
									180	FT 300	Ø 48 x 110	3	105					
400	300	15	290	350	5	6	15	17,5	200	FT 350	Ø 55 x 110	3	105					
450	350	15	340	400	5	6	15	17,5	225	FF 400	Ø 55 x 110	3	105					
											Ø 60 x 140							

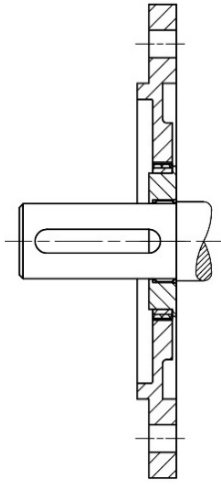
## Series MIG Nova+

The very compact **MIG Nova+** encoder flange is available with pulses from 1 to 2048 per revolution and has a revolutionary vulcanized magnet ring. The flange has standard dimensions and therefore fits on every IEC motor. With a minimum thickness of 7 mm, your drive is only a fraction longer and the epoxy resin sealed encoder electronics is completely protected from external influences. Extremely suitable for the „wet applications“ such as the food, dairy and fish processing industry.



### IEC flange design

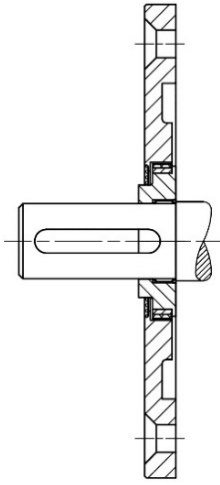
e.g. Flange motor



Motor B5 and B 14

### Cover design\*

e.g. conventional motor

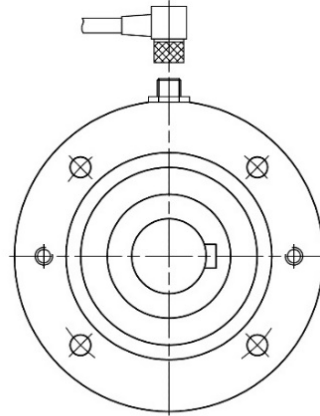


Motor B3/B5 and B3/B4

\*Cover width by flange width „C“ on page 35  
7 mm = 9,3 mm / 9 mm = 11 mm / 12 mm = 15 mm

### Design with plug-in connection 4 pin plug

not for TTL design



View of motor shaft  
(cable connection left)

### Terminals

Terminal	Ub	0V	A	B	A'	B'
Cable	brown	white	yellow	green	pink	gray

Attention: Please isolate not required connection lacings and protect them from short-circuits!

