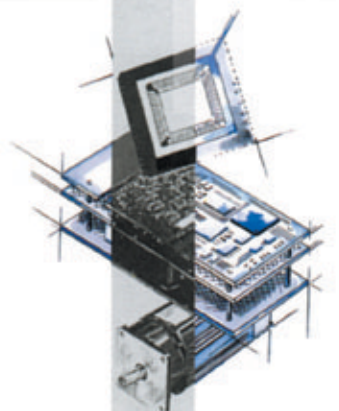




DMO T

NHDM

**NOVOTRON**  
Future in Drives



# NOVOTRON NHDM-SERIE



NHDM58



NHDM82



NHDM105



NHDM142

Motor type Voltage gradient +15% -5%	Continuous stall torque	Continuous standstill current	Max. torque	Max. peak current	Max. speed 300V	Max. speed 560V
	Nm	A	Nm	A	rpm	rpm
NHDM58A6-22S	0,48	1,9	1,22	8,4	10000	-
NHDM58A6-32S	0,48	1,28	1,22	5,8	9400	-
NHDM58A6-44S	0,48	0,93	1,22	4,2	6800	10000
NHDM58C6-22S	0,85	3,3	2,4	17	10000	-
NHDM58C6-32S	0,85	2,3	2,4	11,5	9400	-
NHDM58C6-44S	0,85	1,7	2,4	8,4	6800	10000
NHDM58E6-44S	1,2	2,3	3,7	12,7	6800	-
NHDM58E6-64S	1,2	1,6	3,7	8,7	4700	8800
NHDM58E6-130S	1,2	0,79	3,7	4,3	2300	4300
NHDM58G6-44S	1,5	3	4,9	17	6800	-
NHDM58G6-64S	1,5	2	4,9	11,5	4700	8800
NHDM58G6-130S	1,5	1	4,9	5,7	2300	4300
NHDM82A8-15S	0,84	4,8	2,2	22	8000	-
NHDM82A8-30S	0,84	2,4	2,2	11,2	8000	-
NHDM82A8-47S	0,84	1,5	2,2	7,1	6400	8000
NHDM82C8-22S	1,7	6,6	4,6	32	8000	-
NHDM82C8-28S	1,7	5,2	4,6	25	8000	-
NHDM82C8-63S	1,7	2,3	4,6	11	4800	8000
NHDM82E8-30S	2,3	6,6	6,9	35	8000	-
NHDM82E8-38S	2,3	5,2	6,9	28	7800	-
NHDM82E8-76S	2,3	2,6	6,9	14	3900	7300
NHDM82J8-40S	3,5	7,5	11,6	44	7300	-
NHDM82J8-56S	3,5	5,3	11,6	32	5300	8000
NHDM82J8-116S	3,5	2,6	11,6	15	2800	4800
NHDM105A10-31S	2,4	6,6	5,3	26	6000	-
NHDM105A10-44S	2,4	4,7	5,3	18	6000	-
NHDM105A10-89S	2,4	2,3	5,3	9	3300	6000
NHDM105C10-39S	4,6	10,1	11	43	6000	-
NHDM105C10-54S	4,6	7,3	11	31	5500	-
NHDM105C10-77S	4,6	5,1	11	22	3800	6000
NHDM105E10-51S	6,3	10,6	17	49	5800	-
NHDM105E10-81S	6,3	6,7	17	31	3700	6000
NHDM105E10-104S	6,3	5,2	17	24	2800	5300
NHDM105G10-69S	7,9	9,8	22	49	4300	-
NHDM105G10-90S	7,9	7,5	22	37	3300	6000
NHDM105G10-120S	7,9	5,6	22	28	2500	4600
NHDM142A10-54S	9,1	14	20	56	5600	-
NHDM142A10-75S	9,1	10,4	20	41	4000	6000
NHDM142A10-107S	9,1	7,3	20	28	2800	5200
NHDM142C10-76S	13	15	34	68	3900	6000
NHDM142C10-107S	13	10,4	34	48	2800	5200
NHDM142C10-152S	13	7,3	34	34	2000	3700
NHDM142E10-92S	17	16	51	84	3300	-
NHDM142E10-147S	17	9,9	51	52	2000	3800
NHDM142E10-204S	17	7,1	51	38	1500	2700
NHDM142J10-137S	25	16	85	94	2200	4100
NHDM142J10-214S	25	10	85	60	1400	2600
NHDM142J10-309S	25	6,9	85	42	1000	1800

NHDM = Novotron High Dynamics Motor  
 142 = flange size squared (58...142 mm)  
 C = motor length (A...J)  
 10 = number of poles (6...10)  
 107 = voltage gradient (22...309)  
 S = Sinusförmig EMK

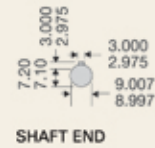
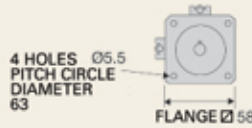
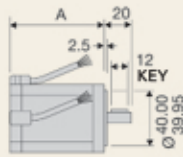


Rotor polar moment of inertia  
kgcm<sup>2</sup>

Net weight  
kg

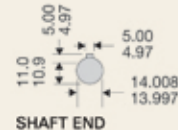
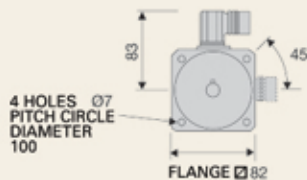
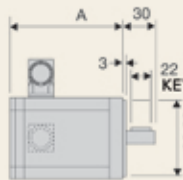
0,074	0,85
0,074	0,85
0,074	0,85
0,12	1,2
0,12	1,2
0,12	1,2
0,17	1,5
0,17	1,5
1,17	1,5
0,22	1,8
0,22	1,8
0,22	1,8
0,35	1,7
0,35	1,7
0,35	1,7
0,61	2,3
0,61	2,3
0,61	2,3
0,88	2,9
0,88	2,9
0,88	2,9
1,4	4
1,4	4
1,4	4
1,4	3
1,4	3
1,4	3
2,3	4,3
2,3	4,3
2,3	4,3
3,2	5,5
3,2	5,5
3,2	5,5
4,1	6,7
4,1	6,7
4,1	6,7
6,6	6,2
6,6	6,2
6,6	6,2
10,7	8,3
10,7	8,3
10,7	8,3
16	10,8
16	10,8
16	10,8
26	15,9
26	15,9
26	15,9

## NHDM58



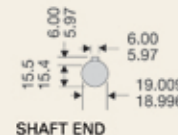
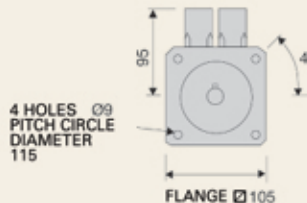
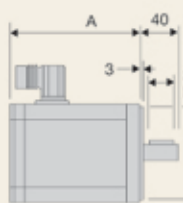
Frame	Dimension A	
	without brake	with brake
NHDM58A	84	119
NHDM58C	102	137
NHDM58E	119	154
NHDM58G	137	172

## NHDM82



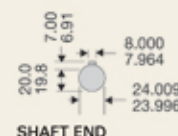
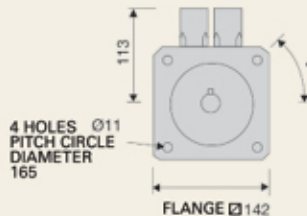
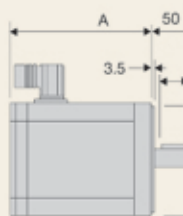
Frame	Dimension A	
	without brake	with brake
NHDM82A	82	122
NHDM82C	100	140
NHDM82E	118	158
NHDM82J	154	194

## NHDM105



Frame	Dimension A	
	without brake	with brake
NHDM105A	94	139
NHDM105C	120	165
NHDM105E	146	191
NHDM105G	172	217

## NHDM142



Frame	Dimension A	
	without brake	with brake
NHDM142A	112	172
NHDM142C	132	192
NHDM142E	157	217
NHDM142J	207	267

## Highly compact and dynamic,

that's what the brushless NOVOMOT servo motors of the NHDM series are. High-quality neodymium-iron-boron magnets and windings placed in the segmented stator provide very high stalled torques and acceleration torques.

NHDM motor are available in four sizes and with a torque ranging from 0,48 to 25 Nm. They are first choice if small, low-inertia motors with high torque density are used: in robotics and automation as well as for textile, printing and packaging machines.

Depending on the specific requirements, all conventional sensor systems can be used, such as, for example, resolvers, incremental sensors, absolute sensors or absolute sensors with EnDat interface. At option, the motor can be equipped with a stopping brake.

### **NHDM motors are designed according to proven standards:**

- sinusoidal EMF
- insulation class F
- IP65 protection, at the shaft IP64 protection with shaft sealing ring
- temperature sensor in the motor winding
- motor shaft with closed key slot
- shaft and flange sizes according to industrial standards
- housing varnished matt black
- motor and sensor connection over plugs

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Recommended servo converter type	Recommended servo converter type
----------------------------------	----------------------------------

ND31-3202	ND32-5605
ND31-3202	ND32-5605
ND31-3202	ND32-5605
ND31-3204	ND32-5605
ND31-3204	ND32-5605
ND31-3202	ND32-5605
ND31-3204	ND32-5605
ND31-3202	ND32-5605
ND31-3202	ND32-5605
ND31-3204	ND32-5605
ND31-3204	ND32-5605
ND31-3202	ND32-5605
ND31-3207	ND32-5610
ND31-3207	ND32-5610
ND31-3204	ND32-5605
ND31-3207	ND32-5610
ND31-3207	ND32-5610
ND31-3204	ND32-5605
ND31-3212	ND32-5610
ND31-3207	ND32-5610
ND31-3204	ND32-5605
ND31-3207	ND32-5610
ND31-3207	ND32-5605
ND31-3204	ND32-5605
ND31-3212	ND32-5620
ND31-3212	ND32-5610
ND31-3207	ND32-5610
ND31-3212	ND32-5620
ND31-3207	ND32-5610
ND31-3207	ND32-5610
ND31-3212	ND32-5610
ND31-3212	ND32-5610
ND31-3207	ND32-5610
	ND32-5620
ND31-3212	ND32-5620
ND31-3212	ND32-5610
	ND32-5620
ND31-3212	ND32-5620
ND31-3212	ND32-5610
	ND32-5620
ND31-3212	ND32-5610
ND31-3212	ND32-5610
	ND32-5620
ND31-3212	ND32-5610
ND31-3207	ND32-5610

## The NHDM motor series by NOVOTRON

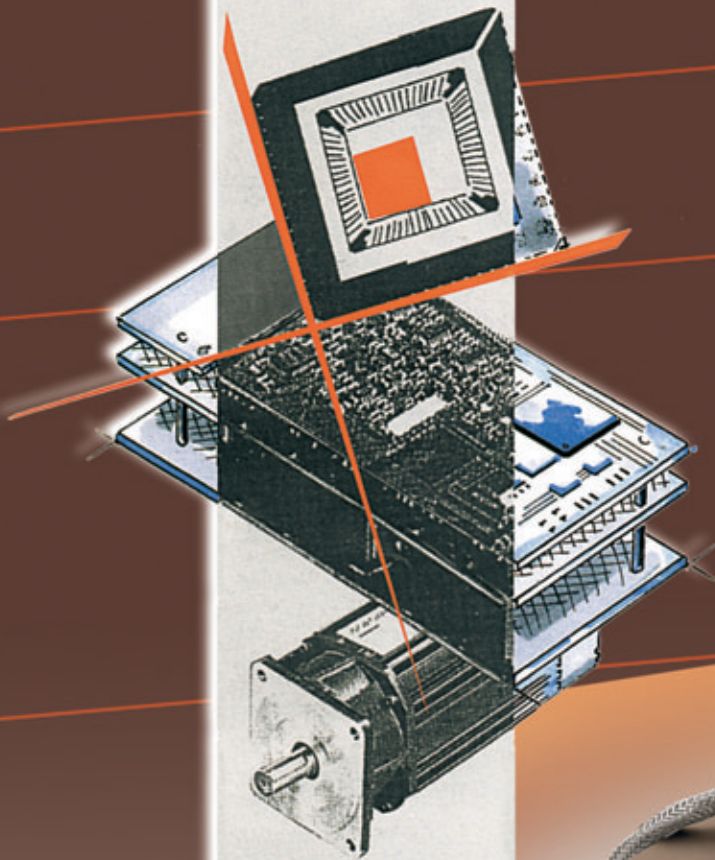
comprises motors that are perfect for applications requiring high acceleration and fast deceleration – and for which spatial requirements are a critical factor. As good things come in small packages, NOVOTRON's smallest motor of the series, NHDM58A6, has a size of only 58 x 58 x 84 mm.

And the growing need for space-saving solutions is also met by NOVOTRON's servo converters. Since we presented our NOVODRIVE ND21 servo converter at the 1992 Hannover fair, which at the time was the smallest 5-kW servo converter ever, we have devoted ourselves to designing compact yet powerful devices.

Our latest servo converters, NOVODRIVE ND31 and ND32, rank among the smallest and lightest devices available on the market. In terms of functionality they leave nothing to be desired, meeting every aspect one can expect of a high-end digital servo converter – and they offer even more! Using NOVOTRON's ND30-SPS PLC add-on, the converters can be extended to work as full-blown drive controls, allowing you to take advantage of controlling functionality directly over the drive, without need for an external PLC.

**Just tell us your automation requirements and listen to how we would approach them!**  
**We look forward to getting to know you.**





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