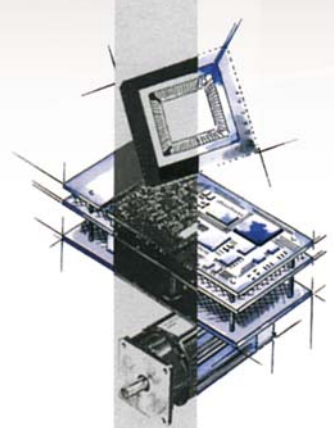


QAMC

**NOVOTRON**

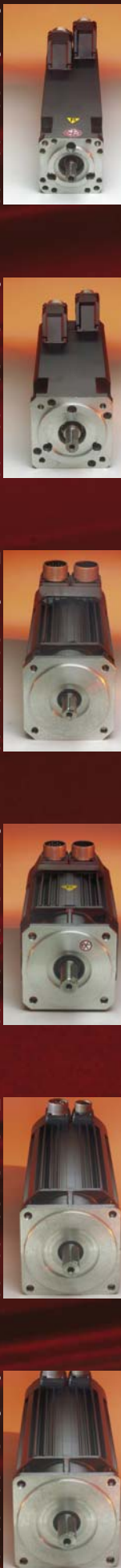
für Dynamik und Bewegung

NHR



# NOVOMOT NHR-SERIE

NHR 55  
NHR 70  
NHR 92  
NHR 115  
NHR 142  
NHR 190



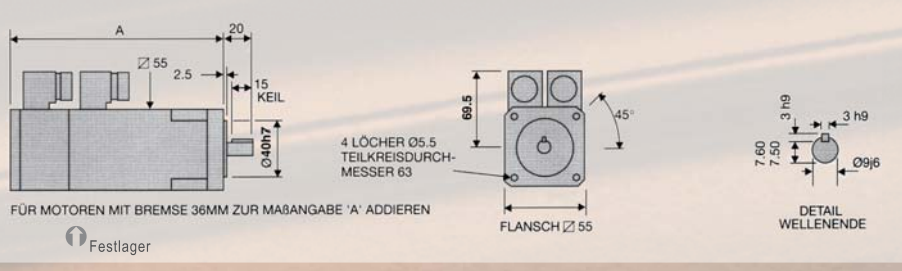
Motor type	Continuous stall torque TENV IC400	Continuous standstill current	Max. torque	Max. peak current	Max. speed	Rotor moment of inertia
Voltage gradient +15% -5%	Nm	A	Nm	A	rpm	kg.cm <sup>2</sup>
NHR55A4-22	0.2	0.78	0.74	4.5	8000	0.14
NHR55A4-32	0.2	0.53	0.74	3.1	8000	0.14
NHR55A4-44	0.2	0.39	0.74	2.3	8000	0.14
NHR55C4-22	0.4	1.6	1.4	8.7	8000	0.19
NHR55C4-32	0.4	1.07	1.4	6.1	8000	0.19
NHR55C4-44	0.4	0.78	1.4	4.4	8000	0.19
NHR55G4-22	0.8	3.1	3	18	8000	0.28
NHR55G4-32	0.8	2.1	3	12.1	8000	0.28
NHR55G4-44	0.8	1.6	3	8.7	8000	0.28
NHR70A4-22	0.6	2.3	2.2	15	8000	0.32
NHR70A4-32	0.6	1.6	2.2	10.2	8000	0.32
NHR70A4-44	0.6	1.17	2.2	7.4	8000	0.32
NHR70C4-32	1.2	3.2	4.5	21	8000	0.47
NHR70C4-44	1.2	2.3	4.5	15	8000	0.47
NHR70C4-64	1.2	1.6	4.5	10.2	8000	0.47
NHR70E4-22	1.8	7	6.6	45	8000	0.62
NHR70E4-32	1.8	4.8	6.6	31	8000	0.62
NHR70E4-44	1.8	3.5	6.6	22	8000	0.62
NHR92C4-32	1.5	4	4.6	22	6000	0.94
NHR92C4-44	1.5	2.9	4.6	16	6000	0.94
NHR92C4-64	1.5	2	4.6	11	6000	0.94
NHR92E4-32	2.2	5.9	6.7	32	6000	1.3
NHR92E4-44	2.2	4.3	6.7	23	6000	1.3
NHR92E4-64	2.2	2.9	6.7	16	6000	1.3
NHR92G4-32	3	8	9.2	43	6000	1.6
NHR92G4-44	3	5.8	9.2	32	6000	1.6
NHR92G4-64	3	4	9.2	22	6000	1.6
NHR92J4-44	3.8	7.4	11.4	39	6000	2
NHR92J4-64	3.8	5.1	11.4	27	6000	2
NHR92J4-88	3.8	3.7	11.4	20	6000	2
NHR115A6-44	3.7	7.2	11	36	6000	2.7
NHR115A6-64	3.7	4.9	11	24	6000	2.7
NHR115A6-88	3.7	3.6	11	18	6000	2.7
NHR115A6-130	3.7	2.4	11	12.1	5400	2.7
NHR115B6-44	5.2	10.1	16	53	6000	3.9
NHR115B6-64	5.2	6.9	16	36	6000	3.9
NHR115B6-88	5.2	5.1	16	26	6000	3.9
NHR115B6-130	5.2	3.4	16	18	5400	3.9
NHR115C6-44	6.8	13.2	22	70	6000	5.1
NHR115C6-64	6.8	9.1	22	48	6000	5.1
NHR115C6-88	6.8	6.6	22	35	6000	5.1
NHR115C6-130	6.8	4.5	22	24	5400	5.1
NHR115E6-44	9.8	19	33	106	6000	7.5
NHR115E6-64	9.8	13.1	33	73	6000	7.5
NHR115E6-88	9.8	9.5	33	53	6000	7.5
NHR115E6-130	9.8	6.4	33	36	5400	7.5
NHR142C6-44	11.3	22	30	105	6000	11.5
NHR142C6-64	11.3	15	30	72	6000	11.5
NHR142C6-88	11.3	11	30	52	6000	11.5
NHR142C6-130	11.3	7.4	30	35	5400	11.5
NHR142E6-64	16	21	45	109	6000	17
NHR142E6-88	16	16	45	78	6000	17
NHR142E6-130	16	10.5	45	53	5400	17
NHR142E6-180	16	7.6	45	38	3900	17
NHR142G6-88	21	20	60	102	6000	22
NHR142G6-130	21	13.8	60	70	5400	22
NHR142G6-180	21	10	60	50	3900	22
NHR142J6-130	25	16	76	89	5400	27
NHR142J6-180	25	11.9	76	64	3900	27
NHR142J6-240	25	8.2	76	44	2700	27
NHR190C8-88	32	31	87	150	4000	55
NHR190C8-130	32	21	87	100	4000	55
NHR190C8-180	32	15	87	73	3900	55
NHR190C8-260	32	10.5	87	51	2700	55
NHR190E8-88	45	44	129	220	4000	78
NHR190E8-130	45	21	129	108	3900	78
NHR190E8-260	45	15	129	75	2700	78
NHR190G8-130	56	37	170	200	4000	100
NHR190G8-260	56	18	170	100	2700	100
NHR190G8-360	56	13.3	170	73	1900	100
NHR190J8-180	67	32	210	180	3900	130
NHR190J8-260	67	22	210	125	2700	130
NHR190J8-360	67	16	210	91	1900	130

○ Vorzugsmotor ● Standardmotor

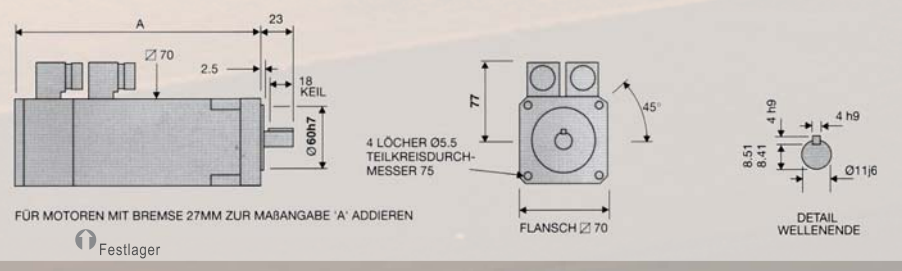
Torque  
Constant  
( $3 \times K_{trms}$ )

Net weight  
Kg

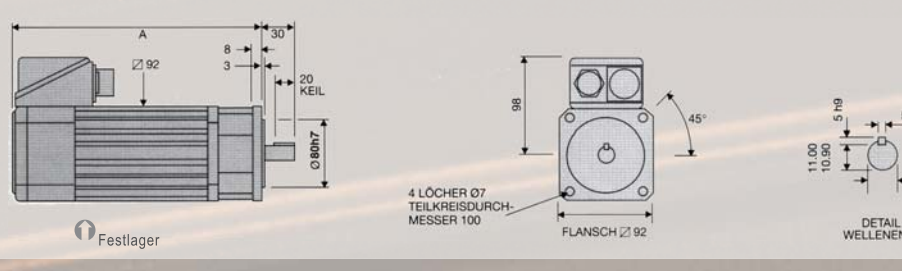
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0.375 1.2  
0.51 1.2  
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0.375 1.4  
0.51 1.4  
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0.375 1.9  
0.51 1.9  
0.258 2.0  
0.375 2.0  
0.51 2.0  
0.375 2.6  
0.51 2.6  
0.75 2.6  
0.258 3.2  
0.375 3.2  
0.58 3.2  
0.375 4.3  
0.51 4.3  
0.75 4.3  
0.375 5.1  
0.51 5.1  
0.75 5.1  
0.375 5.8  
0.51 5.8  
0.75 5.8  
0.51 6.6  
0.75 6.6  
0.258 6.6  
0.375 6.6  
0.51 6.6  
0.75 6.6  
0.258 6.6  
0.51 6.6  
0.75 6.6  
0.258 6.6  
0.51 6.6  
0.75 6.6  
0.258 7.8  
0.375 7.8  
0.51 7.8  
0.51 9  
0.75 9  
0.258 9  
0.375 9  
0.51 9  
0.51 11.4  
0.75 11.4  
0.258 11.4  
0.375 11.4  
0.51 11.4  
0.51 14  
0.75 14  
0.258 14  
0.375 14  
0.51 14  
0.75 18  
0.258 18  
0.375 18  
0.51 18  
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0.258 21  
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0.375 21  
0.51 21  
0.75 25  
0.258 25  
0.375 25  
0.51 25  
0.75 25  
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0.75 28.5  
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0.51 43  
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0.258 50  
0.375 50  
0.51 50  
0.75 50



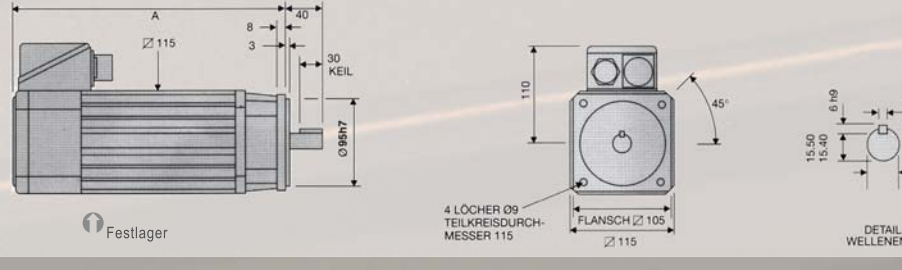
	Dimension „A“ in mm	
Motor type	without brake	with brake
NHR55A	122	158
NHR55C	140	176
NHR55G	176	212



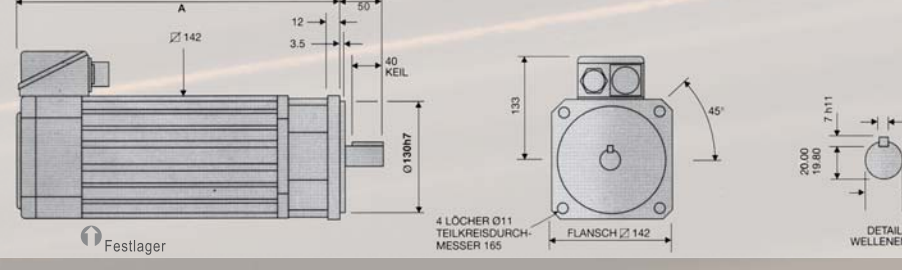
	Dimension „A“ in mm	
Motor type	without brake	with brake
NHR70A	131	167
NHR70C	158	194
NHR70E	185	221



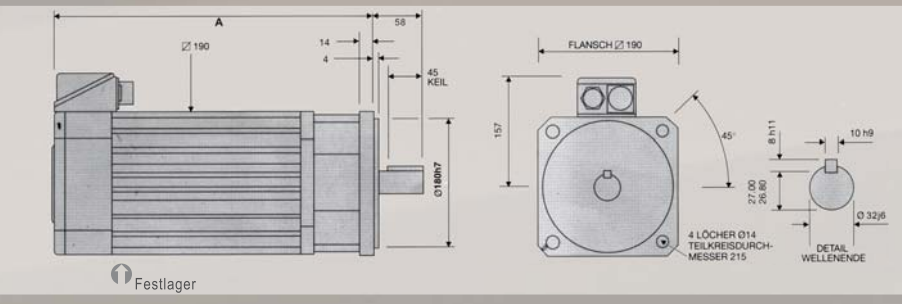
Motor type	Dimension „A“ in mm
NHR92C	230
NHR92E	250
NHR92G	270
NHR92J	290



Motor type	Dimension „A“ in mm
NHR115A	235
NHR115B	255
NHR115C	275
NHR115E	315



Motortyp	Maß „A“ in mm
NHR142C	295
NHR142E	335
NHR142G	375
NHR142J	415



Motortyp	Maß „A“ in mm
NHR190C	375
NHR190E	415
NHR190G	455
NHR190J	495

## The NHR series

comprises brushless servo motors, with Neodymium-Iron-Boron magnets and very low rotor moments of inertia, that are characterized by an excellent price/performance ratio and can be used for practically all applications, such as machine tools, handling devices, packaging machines, textile machines, and for all automation purposes.

## Type definition

Example: NHR55A4-22

NHR = NOVOTRON  
High Response motor,  
55 = flange size  
squared in mm,  
A = length A for  
shortest version  
of motor,  
4 = number of poles,  
-22 = voltage gradient  
in Volt per 1000 rpm,  
S = sinusoidal EMF,  
feedback with resolver.

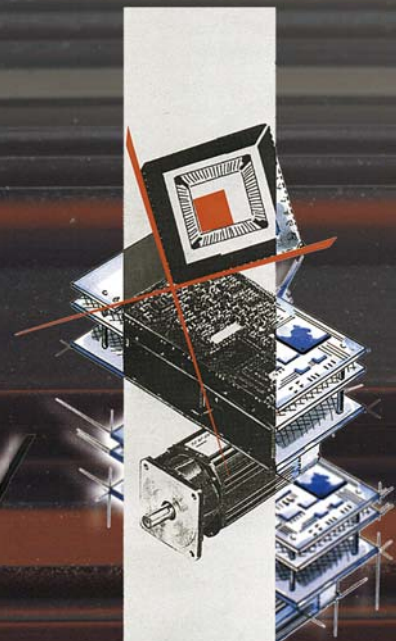
Enclosure size	Voltage gradients available												
	8	11	16	22	32	44	64	88	130	180	260	360	520
NHR55	A												
	C												
	G												
NHR70	A												
	C												
	E												
NHR92	C												
	E												
	G												
	J												
NHR115	A												
	B												
	C												
	E												
NHR142	C					o							
	E						o						
	G							o					
	J												
NHR190	C							o	o	o	o	o	o
	E							+	o	o	o	o	o
	G								+	o	o	o	o
	J									+	o	o	o

o Lieferbar mit 1,5 Leistungsstecker oder mit Klemmkasten + nur mit Klemmkasten Lieferbar

## Characteristics

- inertia values including feedback
- all torque values are valid for a winding temperature rise of 110°C
- TENV ("totally enclosed non-ventilated")
- for all data a tolerance of  $\pm 10\%$  applies, except for torque constant and voltage gradient for which applies a tolerance of +15% and -5%.

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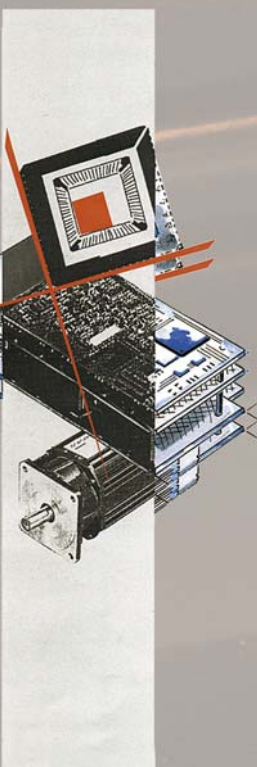
## The NHR series

The motors of the NHR series are characterized by an extremely long lifespan of 20,000 hours at least. They cover a torque range from 0,2 Nm to 67 Nm.

All NOVOTRON motors have as a standard

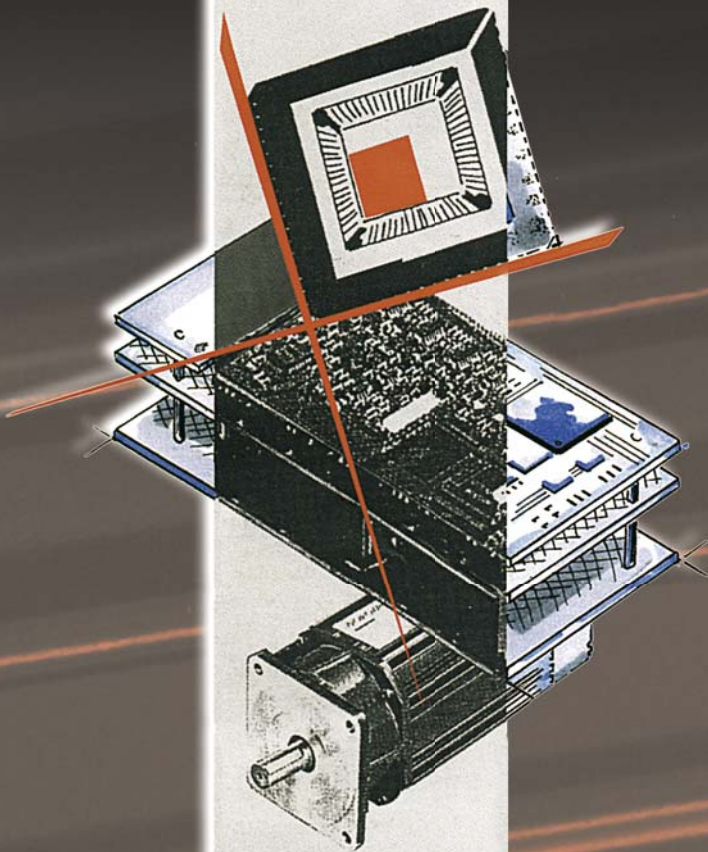
- protection class IP65 and IP64 at motor shaft with oil seal
- Pt motor shaft with key and groove
- thermo switch in motor winding
- isolation class F
- sinusoidal or trapezoidal EMF
- feedback with resolver
- shaft and flange sizes according to industry standards
- motor and sensor connection over plugs.

Up to six different sizes and nine different voltage gradients for each motor give you the chance to find among 170 motors the one most suitable to your requirements.

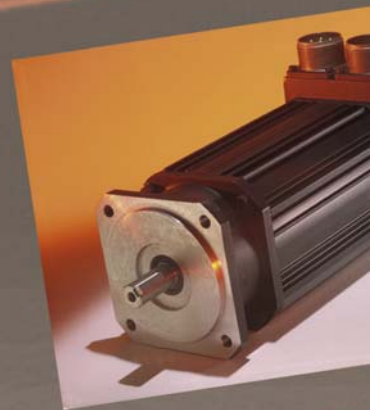


A number of additional features, such as holding brake, encoder, encoder adapter, and various special versions can be provided on demand.





THE MAKER OF  
NOVODRIVE  
NOVOMERIK  
NOVOBUS  
NOVOCHIP  
NOVOMOT



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