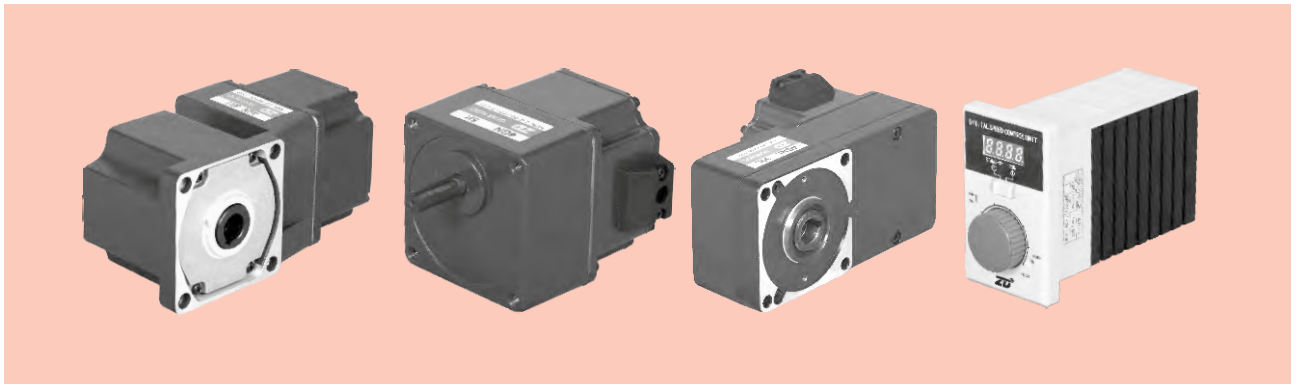


80 SERIEN BÜRSTENLOSER DC GETRIEBEMOTOR

80 SERIES BRUSHLESS DC GEAR MOTOR



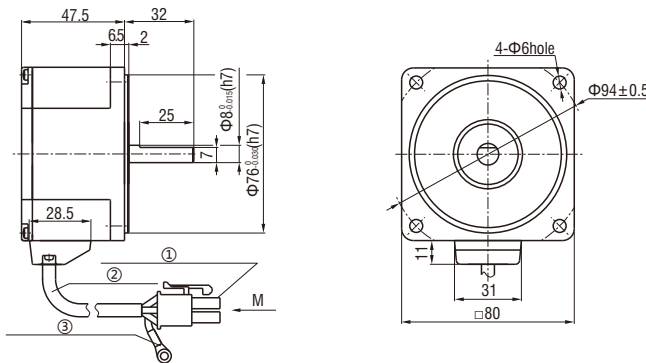
Allgemeine Eigenschaften des Motors / Basic Characteristics Of Motor

● 60W (24VDC / 36VDC / 48VDC für Gleichstromversorgung) / 60W (DC Power Supply When Applied To 24VDC/36VDC/48VDC)

Nennleistung (kontinuierlich) / Rated power (Continuous)		W	60 (40W/60W)		
Nennzahl / Rated speed		r/min	2500		
Nennmoment / Rated torque		N.m	0.230		
Max. Spitzmoment / Instantaneous maximum torque		N.m	0.345		
Rotorträgheitsmoment / Rotor moment of inertia		J: X10 ⁻⁴ kg.m ²	0.082		
Drehzahlregelbereich / Speed control range		RPM	High pressure 200-2500RPM (Low pressure 200-3000RPM)		
Drehzahländerungsrate Speed change rate	On load	Below ±1%: condition 0~rated torque, rated speed, rated voltage, room temperature			
	On voltage	Below ±1%: condition rated voltage ±10%, rated speed, rated load, room temperature			
	On temperature	Below ±1%: Conditions of ambient temperature 0~+40°C rated voltage, rated load and rated speed			
Leistungseingabe Power input	Nennspannung / Rated voltage	V	Single phase 110V	Single phase 220V	24VDC (Optional 36VDC/48VDC)
	Spannungstoleranzbereich / Voltage tolerance range		±10%		
	Frequenzen / Frequency	Hz	50/60		
	Frequenztoleranzbereich / Frequency tolerance range		±5%		
	Nenneingangsstrom / Rated input current	A	1.7	1.0	3.7
	Max. Spitzeneingangsstrom Instantaneous maximum input current	A	3.3	1.9	5.6

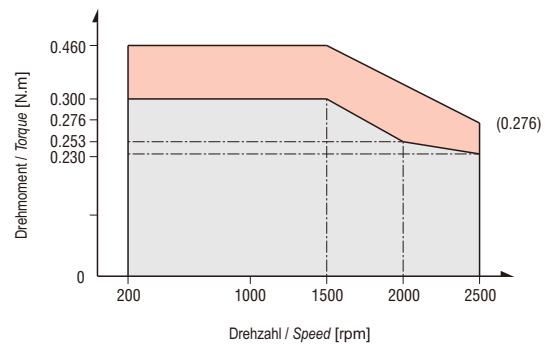
Nur Motor mit runden Wellen / Circular Shaft Type Optical Motor

● Z4BLD60-□ A-25S □ — Spannung / Voltage 24/36/48/110/220

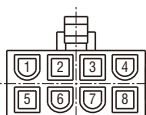


① Connector: 5557-8R/10R (MOLEX) ② The sheath length of lead line 300mm ③ Round terminal: SRA-21T-4 (Low ground)

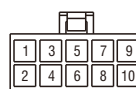
● Z5BLD120-220A-25S Diagramm / Diagram (ZD Standard Steuerung / ZD Standard Drive)



● Niederspannungs-Motorverdrahtungsbuche entsprechende Signalbeschreibung ● Hochspannungs-Motorverdrahtungsbuche entsprechende Signalbeschreibung
Low Voltage Wire Plughole Corresponding Signal Explanation High Voltage Wire Plughole Corresponding Signal Explanation



plughole	1	2	3	4
signal	U	W	Hv	Hu
plughole	5	6	7	8
signal	V	GND	Hw	Vcc

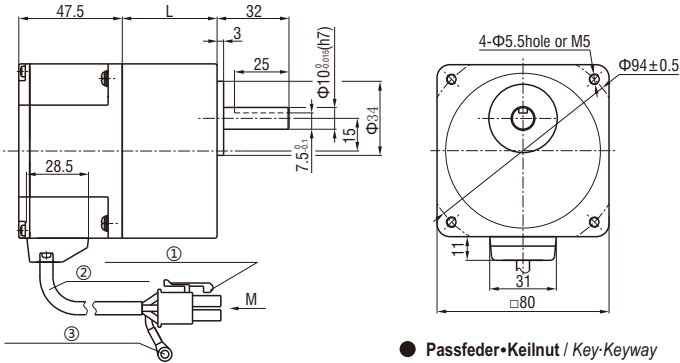


Cable Description									
1	2	3	4	5	6	7	8	9	10
Blue thick	Yellow thin	Yellow thick	Green thin	Green thick	Blue thin		Metal net	Red thin	Black thin
W	Hu	U	Hv	V	Hw			Vcc+5V	GND

60W

● Parallelwellengetriebe / Parallel Shaft Speed Reducer

Z4BLD60-□GN-25S/4GN□K □ —Spannung / Voltage 24/36/48/110/220
 □Untersetzungsverhältnisse / Velocity Ratio Value

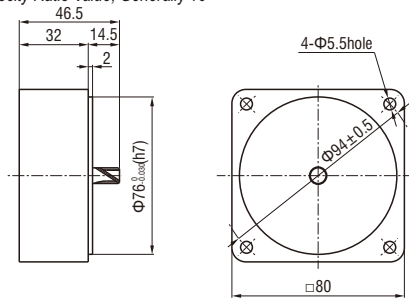


● Passfeder•Keilnut / Key-Keyway



● Dezimalgetriebe / Decimal Gearhead

4GN□XK
 □Untersetzungsverhältnisse allgemein 10
 Velocity Ratio Value, Generally 10



Getriebe Modell Gearhead Model	Untersetzung Gear Ratio	L(mm) L Dimension
4GN□K	3~18	32&43.5
	20~200	43.5

①Connector: 5557-8R/10R (MOLEX) ②The sheath length of lead line 300mm ③Round terminal: SRA-21T-4 (Low ground)

● Im Getriebemodell (□) ist der Wert des Untersetzungsverhältnisses
 Enter the gear ratio in the box (□) within the model name

● Z4BLD40-□GN-25S/ 4GN□K Zulässiger Moment (Einheit: N.m) / Z4BLD40-□GN-25S/4GN□K Machine Allowable Torque (Unit: N.m)

Modell Model	Untersetzung Reduction Ratio Motor Drehzahl Motor Speed	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	50	60	75	90	100	120	150	180	200
		Z4BLD40-□GN	200~1500RPM	0.48	0.58	0.80	0.97	1.21	1.45	1.61	2.01	2.41	2.90	2.90	3.63	4.35	5.22	7.25	7.87	8.00	8.00	8.00	8.00	8.00
	2000RPM	0.47	0.56	0.78	0.93	1.16	1.40	1.55	1.94	2.33	2.79	3.10	3.48	4.17	5.00	6.95	7.56	8.00	8.00	8.00	8.00	8.00	8.00	8.00
	2500RPM	0.37	0.45	0.62	0.74	0.93	1.11	1.24	1.55	1.86	2.23	2.47	2.79	3.35	4.02	5.58	6.05	7.56	8.00	8.00	8.00	8.00	8.00	8.00

● Z4BLD60-□GN-25S/ 4GN□K Zulässiger Moment (Einheit: N.m) / Z4BLD60-□GN-25S/4GN□K Machine Allowable Torque (Unit: N.m)

Modell Model	Untersetzung Reduction Ratio Motor Drehzahl Motor Speed	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	50	60	75	90	100	120	150	180	200
		Z4BLD60-□GN	200~1500RPM	0.72	0.87	1.21	1.45	1.81	2.17	2.41	3.02	3.62	4.34	4.35	5.44	6.53	7.83	8.00	8.00	8.00	8.00	8.00	8.00	8.00
	2000RPM	0.70	0.84	1.16	1.39	1.74	2.09	2.32	2.90	3.48	4.18	4.64	5.23	6.27	7.52	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
	2500RPM	0.56	0.67	0.93	1.11	1.39	1.67	1.86	2.32	2.78	3.34	3.71	4.18	5.02	6.02	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00

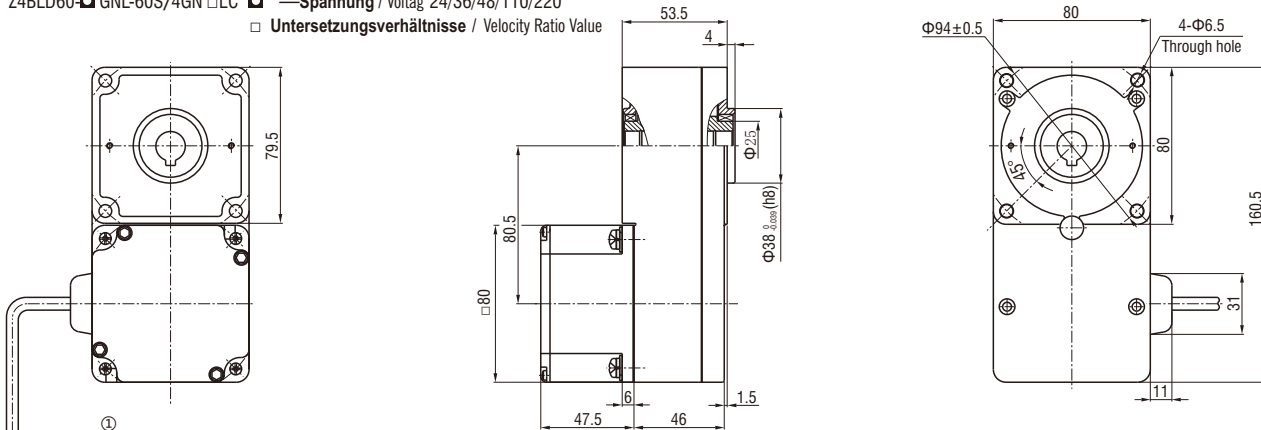
Hinweis / Note:

Der (graue) Teil der Tabelle zeigt an, dass die Drehrichtung der des Motors entspricht.
 The (gray) in the table indicates that the rotation direction is consistent with the motor.

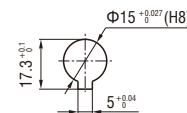
Das Drehmoment bei verschiedenen Drehzahl und Übersetzung wird vom ZD-Standardtreiber gemessen.
 The torque under different speed and speed ratio is obtained under the ZD standard.)

● L-Typ Getriebe / L Type Speed Reducer

Z4BLD60-□GNL-60S/4GN□LC □ —Spannung / Voltag 24/36/48/110/220
 □ Untersetzungsverhältnisse / Velocity Ratio Value



● Ausgangswelle Bohrungsstruktur
 The Output Shaft Hole Structure



①Lead wire length 300mm ②Connector: 5557-8R/10R (MOLEX)
 ③Round terminal: SRA-21T-4 (Low ground)

● **Z4BLD40-□GNL-25S/4GN□LC Zulässiger Moment (Einheit: N.m) / Z4BLD40- □GNL-25S/4GN□LC Machine Allowable Torque (Unit: N.m)**

Motor Drehzahl Motor Speed	Untersetzung Reduction Ratio	5	10	15	20	30	50	100	200
200~1500RPM		0.73	1.45	2.18	2.90	4.35	7.25	14.5	29.0
2000RPM		0.61	1.23	1.84	2.45	3.68	6.13	12.3	24.5
2500RPM		0.56	1.12	1.67	2.23	3.35	5.58	11.2	22.3

● **Z4BLD60-□GNL-25S/4GN□LC Zulässiger Moment (Einheit: N.m) / Z4BLD60- □GNL-25S/4GN□LC Machine Allowable Torque (Unit: N.m)**

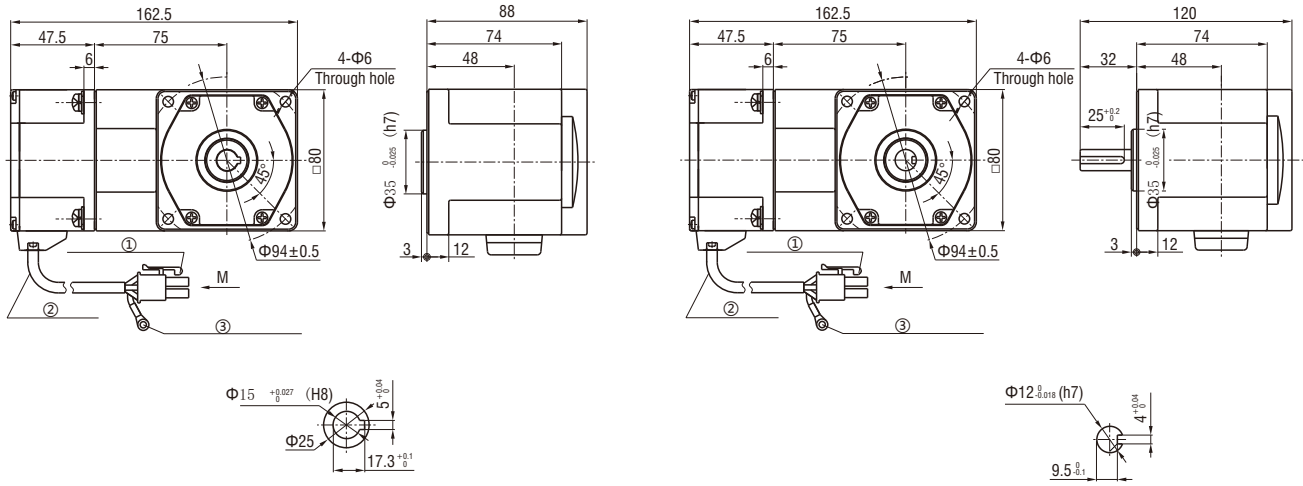
Motor Drehzahl Motor Speed	Untersetzung Reduction Ratio	5	10	15	20	30	50	100	200
200~1500RPM		1.21	2.41	3.62	4.83	6.53	10.9	21.8	39.3
2000RPM		1.02	2.04	3.06	4.08	5.52	9.20	18.4	33.3
2500RPM		0.83	1.67	2.51	3.35	5.02	8.37	16.7	30.3

Hinweis / Note: Die Tabelle zeigt an, dass die entgegengesetzte Richtung der des Motors entspricht.
 All gearbox output turn direction in form are opposite as motor turn direction.
 (Das Drehmoment bei verschiedenen Drehzahl und Übersetzung wird vom ZD-Standardtreiber gemessen.)
 The torque under different speed and speed ratio is obtained under the ZD standard.)

● **90°Spiralkegelrad Getriebemotor / Arc Cone Right Angle Speed Reducer Motor**

Z4BLD60-□GN-25S/4GN□RC □ —Spannung / Voltage 24/36/48/110/220
 □ Unteretzungsverhältnisse / Velocity Ratio Value

Z4BLD60-□GN-25S/4GN□RT □ —Spannung / Voltage 24/36/48/110/220
 □ Unteretzungsverhältnisse / Velocity Ratio Value



① Connector: 5557-8R/10R (MOLEX) ② The sheath length of lead line 300mm ③ Round terminal: SRA-21T-4 (Low ground)

● **Z4BLD40-□GN-25S/4GN□RC/RT Zulässiger Moment (Einheit: N.m) / Z4BLD40-□GN-25S/4GN□RC/RT Machine Allowable Torque (Unit: N.m)**

Modell Model	Untersetzung Reduction Ratio	Motor Drehzahl Motor Speed	7.5	9	10	12.5	15	18	20	25	30	36	50	60	75	90	100	120	150	180
			Z4BLD40-□GN	200~1500RPM	1.21	1.45	1.61	2.01	2.41	2.90	2.90	3.63	4.35	5.22	7.25	7.87	8.00	8.00	8.00	8.00
	2000RPM	1.02	1.23	1.36	1.70	2.04	2.52	2.80	3.50	4.20	5.04	7.00	7.56	8.00	8.00	8.00	8.00	8.00	8.00	8.00
	2500RPM	0.83	1.00	1.12	1.39	1.67	2.01	2.23	2.79	3.35	4.02	5.58	6.05	7.56	8.00	8.00	8.00	8.00	8.00	8.00

● **Z4BLD60-□GN-25S/4GN□RC/RT Zulässiger Moment (Einheit: N.m) / Z4BLD60-□GN-25S/4GN□RC/RT Machine Allowable Torque (Unit: N.m)**

Modell Model	Untersetzung Reduction Ratio	Motor Drehzahl Motor Speed	7.5	9	10	12.5	15	18	20	25	30	36	50	60	75	90	100	120	150	180
			Z4BLD60-□GN	200~1500RPM	1.81	2.17	2.41	3.02	3.62	4.34	4.35	5.44	6.53	7.83	8.00	8.00	8.00	8.00	8.00	8.00
	2000RPM	1.57	1.88	2.09	2.61	3.14	3.76	4.18	5.23	6.27	7.52	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
	2500RPM	1.25	1.51	1.67	2.09	2.51	3.01	3.35	4.18	5.02	6.02	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00

Hinweis / Note:
 Der (graue) □ Teil der Tabelle zeigt an, dass die Drehrichtung der des Motors entspricht.
 The (gray) □ in the table indicates that the rotation direction is consistent with the motor.
 Das Drehmoment bei verschiedenen Drehzahl und Übersetzung wird vom ZD-Standardtreiber gemessen.
 The torque under different speed and speed ratio is obtained under the ZD standard.)