

Übersicht Nebenabtriebe

PTO Program



Automatische Getriebe
Automatic Transmissions

Getriebe- bezeichnung	Nebenab- triebtyp	Abtriebs- stelle	Abtriebs- moment	Drehzahlfaktor		Drehrichtung		Antrieb durch			Betriebsart	
				Speed factor		Output rotation		Driven by			Operation	
Transmission designation	PTO type	Output point	Output torque (Nm)	"f" (1)	"g" (2)	entgegen Motor counter- enginewise	wie Motor enginewise	kupplungs- abhängig clutch dependet	motor- abhängig engine dependet	fahr- abhängig road driven	Dauer- ⁽³⁾ betrieb continuous operation	Kurzzeit- betrieb intermittend operation

ZF-AS TRONIC lite

6 AS 850	NL1 (6)		600	0.42 - 0.53	-	●	-	●	-	-	●	-	
	NL4 (6)		430	0.53 - 0,68	-	-	●	●	-	-	-	●	
	N 36/5		400 - 300	0.87 - 1.46	-	-	●	●	-	-	-	●	
6 AS 700 TO*	NL1 (6)		600	0.57	-	●	-	●	-	-	●	-	
	NL4		430	0.73	-	-	●	●	-	-	-	●	
	NL/6*		400	1.10	-	-	●	●	-	-	-	●	
6 AS 800 TO	NH/1 (6)		800	0.53	-	●	-	●	-	-	●	-	
	NH/4		430	0.67	-	-	●	●	-	-	-	●	
	NH/6*		400	1.01	-	-	●	●	-	-	-	●	
6 AS 1000 TO	NH/1		1000	0.53	-	●	-	●	-	-	●	-	
	NH/4		430	0.67	-	-	●	●	-	-	-	●	
	NL/10	C		270 - 480	1.19 - 2.03	-	-	●	●	-	-	●	-
		D: NL/1		600	0.53	-	●	-	●	-	-	●	-
		D: NL/4		430	0.67	-	-	●	●	-	-	-	●

ZF-AS TRONIC mid

12 AS 1010 TD 12 AS 1220 TD 12 AS 1420 TD	NH/1		800	0.79 / 0.98	-	●	-	●	-	-	●	-	
	NH/4		430	1.01 / 1.25	-	-	●	●	-	-	-	●	
	NM AS/10	C		380 - 590	0.97 - 2.14	-	-	●	●	-	-	●	●
		D: NL/1		600	0.79 / 0.98	-	●	-	●	-	-	●	●
		D: NL/4		430	1.01 / 1.25	-	-	●	●	-	-	-	●
NM AS/PL		-	-	1.85	-	●	-	-	●	●	-		
12 AS 1010 TO 12 AS 1210 TO 12 AS 1420 TO 12 AS 1620 TO	NH/1		800	0.98 / 1.20	-	●	-	●	-	-	●	-	
	NH/4		430	0.88 / 1.08	-	-	●	●	-	-	-	●	
	NM AS/10	C		380 - 590	1.20 / 2.30	-	-	●	●	-	-	●	●
		D: NL/1		600	0.98 / 1.20	-	●	-	●	-	-	●	●
		D: NL/4		430	0.88 / 1.08	-	-	●	●	-	-	-	●
NM AS/PL		-	-	1.85	-	●	-	-	●	●	-		

ZF-AS TRONIC

12 AS 1630 TD	NH/1		1000	0.82	-	●	-	●	-	-	●	-
12 AS 1930 TD	NH/4		430	1.05	-	-	●	●	-	-	-	●
12 AS 2130 TD	N AS/10	1 (4)	360 - 430	1.51 - 2.10	-	-	●	●	-	-	●	-
12 AS 2140 TD		2 (5)	630 - 690	1.00 - 1.29	-	-	●	●	-	-	●	-
12 AS 2330 TD	N AS/PL		-	-	1.85	-	●	-	-	●	●	-
12 AS 2340 TD												
12 AS 2540 TD												
12 AS 1930 TO	NH/1		1000	1.35	-	●	-	●	-	-	●	-
12 AS 2130 TO	NH/4		430	1.31	-	-	●	●	-	-	-	●
12 AS 2330 TO	N AS/10	1 (4)	490 - 600	1.40 - 2.15	-	-	●	●	-	-	●	-
12 AS 2530 TO		2 (5)	710 - 730	1.03 - 1.48	-	-	●	●	-	-	●	-
12 AS 2540 TO	N AS/PL		-	-	1.85	-	●	-	-	●	●	-
12 AS 2740 TO												
12 AS 2940 TO												
12 AS 3140 TO												
16 AS 2230 TD	NH/1		1000	0.76	-	●	-	●	-	-	●	-
	NH/4		430	0.97	-	-	●	●	-	-	-	●
	N AS/10	1 (4)	360 - 430	1.40 - 1.95	-	-	●	●	-	-	●	-
		2 (5)	630 - 690	0.93 - 1.20	-	-	●	●	-	-	●	-
N AS/PL		-	-	1.85	-	●	-	-	●	●	-	
16 AS 2630 TD	NH/1		1000	1.11	-	●	-	●	-	-	●	-
	NH/4		430	1.00	-	-	●	●	-	-	-	●
	N AS/10	1 (4)	430 - 580	1.42 - 2.05	-	-	●	●	-	-	●	-
		2 (5)	680 - 720	1.01 - 1.37	-	-	●	●	-	-	●	-
N AS/PL		-	-	1.85	-	●	-	-	●	●	-	

Automatische Getriebe

Automatic Transmissions

Getriebe- bezeichnung	Nebenab- triebstyp	Abtriebs- stelle	Abtriebs- moment	Drehzahlfaktor		Drehrichtung		Antrieb durch			Betriebsart	
				Speed factor		Output rotation		Driven by			Operation	
Transmission designation	PTO type	Output point	Output torque (Nm)	"f" (1)	"g" (2)	entgegen Motor counter- enginewise	wie Motor enginewise	kupplungs- abhängig clutch dependet	motor- abhängig engine dependet	fahr- abhängig road driven	Dauer- betrieb (3) continuous operation	Kurzzeit- betrieb intermittend operation

ZF-TC TRONIC

12 TC 2740 TO	NH/1		1000	1.35	-	●	-	●	-	-	●	-	
	NH/4		430	1.21	-	-	●	●	-	-	-	●	
	N AS/10	1 (4)	490 - 600	1.40 - 2.15	-	-	●	●	-	-	-	●	-
		2 (5)	710 - 730	1.03 - 1.48	-	-	●	●	-	-	-	●	-
	N AS/PL		-	-	1.85	-	●	-	-	●	●	-	

(1) = Abtriebsdrehzahl = f x Motordrehzahl / Output speed = f x engine speed

(2) = Pumpendrehzahl = g x Abtriebsdrehzahl des Getriebes / Pump speed = g x output speed of gearbox

(3) = Für Dauerbetrieb muss grundsätzlich beim Ersteinbau eine Öltemperaturmessung durchgeführt werden.
Wird die max. zul. Temperatur überschritten muss eine Zusatzkühlung eingebaut werden /
Initial installation for continuous operation invariably requires measurement of the oil temperature.
If the maximally permitted temperature is exceeded, an additional cooling system must be installed.

(4) = schneller Abtrieb / fast output

(5) = langsamer Abtrieb / slow output

(6) = Installation nur möglich bei einem Durchmesser des Getriebeabtriebsflansches bis max. 120 mm /
installation only possible with transmission output flange diameter not exceeding 120 mm

* = künftige Produkte / future products

● = Standard

Getriebe bezeichnung	Nebenab- triebstyp	Abtriebs- moment	Drehzahlfaktor	Drehrichtung		Schaltbar	Nicht Schaltbar
			Speed factor	Output rotation			
Transmission designation	PTO type (1)	Output torque (Nm)	"f" (2)	entgegen Motor counter- enginewise	wie Motor enginewise	Engageable	Not engageable

ZF-ECOMAT

HP 500	D 01 (3)	950	0.97	●	●	●	-
HP 502 C	D 02 (4)	950	0.97	●	●	●	-
HP 590	D 03 (3)	950	0.97	●	●	-	●
HP 592 C	D 04 (4)	950	0.97	●	●	-	●
HP 600	D 05.3 (5)	600	1.43	●	●	-	●
HP 602 C	D 05.4 (5)	400	2.12	●	●	-	●

(1) = Motorabhängig, geeignet für Dauerbetrieb / Engine-dependet, suitable for continuous operation

(2) = Abtriebsdrehzahl = f x Motordrehzahl / Output speed = f x engine speed

(3) = mit Abtriebsflansch / with output flange

(4) = Anschluss für hydraulische Pumpe / Connection for hydraulic pump

(5) = mit Stirntrieb / with spur gear drive

● = Standard

Manuelle Getriebe

Manual Transmissions

Getriebe- bezeichnung	Nebenab- triebstyp	Abtriebs- stelle	Abtriebs- moment	Drehzahlfaktor		Drehrichtung		Antrieb durch			Betriebsart	
				Speed factor		Output rotation		Driven by			Operation	
Transmission designation	PTO type	Output point	Output torque (Nm)	"f" (1)	"g" (2)	entgegen Motor counter- enginewise	wie Motor enginewise	kupplungs- abhängig clutch dependet	motor- abhängig engine dependet	fahr- abhängig road driven	Dauer- ⁽⁸⁾ betrieb continuous operation	Kurzzeit- betrieb intermittend operation

ZF-ECOLITE

6 S 5-42	NS 42/2		270 / 190	0.87 - 1.54	-	●	-	●	-	-	-	●
6 S 850	NL/1 (6)		600	0.42 / 0.53	-	●	-	●	-	-	●	-
	NL/4 (6)		430	0.53 / 0.68	-	-	●	●	-	-	-	●
	N 36/5		400 / 300	0.87 - 1.46	-	-	●	●	-	-	-	●
	N 850/10	C	560 - 290	0.76 - 1.72	-	-	●	●	-	-	-	●
D: NL/1 (7)		600	0.42 / 0.53	-	●	-	●	-	-	-	●	-
6 S 700 TO*	D: NL/4 (7)	430	0.53 / 0.68	-	-	●	●	-	-	-	-	●
	NL/1 (6)		600	0.57	-	●	-	●	-	-	●	-
	NL/4		430	0.73	-	-	●	●	-	-	-	●
6 S 800 TO	NL/6*		400	1.10	-	-	●	●	-	-	-	●
	NH/1 (6)		800	0.53	-	●	-	●	-	-	●	-
	NH/4		430	0.67	-	-	●	●	-	-	-	●
6 S 1000 TO	NH/6*		400	1.01	-	-	●	●	-	-	-	●
	NH/1		1000	0.53	-	●	-	●	-	-	●	-
	NH/4		430	0.67	-	-	●	●	-	-	-	●
6 S 1200 TD	C	270 - 480	1.19 - 2.03	-	-	●	●	-	-	-	●	-
		D: NL/1	600	0.53	-	●	-	●	-	-	●	-
	D: NL/4	430	0.67	-	-	●	●	-	-	-	-	●
	NH/1		800	0.54	-	●	-	●	-	-	●	-
	NH/4		350	0.69	-	-	●	●	-	-	-	●

ZF-ECOMID

9 S 75	NH/1		600	0.62 / 0.85	-	●	-	●	-	-	●	-	
	NH/4		430	0.79 / 1.08	-	-	●	●	-	-	-	●	
	N 75/10	C	480 - 320	0.75 - 1.66	-	-	●	●	-	-	-	●	-
		D: NL/1	600	0.62 / 0.85	-	●	-	●	-	-	-	●	-
9 S 1110 TD	D: NL/4	430	0.79 / 1.08	-	-	●	●	-	-	-	-	●	
	NH/1		800	0.72	-	●	-	●	-	-	●	-	
	NH/4		430	0.92	-	-	●	●	-	-	-	●	
	N 109/10	C	410 - 630	0.88 - 1.42	-	-	●	●	-	-	-	●	-
		D: NL/1	600	0.72	-	●	-	●	-	-	-	●	-
	D: NL/4	430	0.92	-	-	●	●	-	-	-	-	●	
9 S 1110 TO 9 S 1310 TO	N 109 PL		-	-	1.85	-	●	-	-	●	●	-	
	NH/1		800	0.97	-	●	-	●	-	-	●	-	
	NH/4		430	1.24	-	-	●	●	-	-	-	●	
	N 109/10	C	410 - 630	1.19 - 1.90	-	-	●	●	-	-	-	●	-
		D: NL/1	600	0.97	-	●	-	●	-	-	-	●	-
	D: NL/4	430	1.24	-	-	●	●	-	-	-	-	●	
	N 109 PL		-	-	1.85	-	●	-	-	●	●	-	

ZF-TRANSMATIC

16 S 2720 TO (+ WSK 440)	NH/1		1000	0.91 / 1.09	-	●	-	●	-	-	●	-
	NH/4		430	1.17 / 1.40	-	-	●	●	-	-	-	●
	N 221/10	C	870 - 470	1.13 - 2.40	-	-	●	●	-	-	●	-
	N221/10 IT ⁽³⁾	D: NL/1	600	0.91 / 1.09	-	●	-	●	-	-	●	-
	N221/10 PL ⁽⁴⁾	D: NL/4	430	1.17 / 1.40	-	-	●	●	-	-	-	●
	N 221 PL		-	-	1.85	-	●	-	-	●	●	-

Manuelle Getriebe

Manual Transmissions

Getriebe- bezeichnung	Nebenab- triebtyp	Abtriebs- stelle	Abtriebs- moment	Drehzahlfaktor		Drehrichtung		Antrieb durch			Betriebsart	
				Speed factor		Output rotation		Driven by			Operation	
Transmission designation	PTO type	Output point	Output torque (Nm)	"f" ⁽¹⁾	"g" ⁽²⁾	entgegen Motor counter- enginewise	wie Motor enginewise	kupplungs- abhängig clutch dependet	motor- abhängig engine dependet	fahr- abhängig road driven	Dauer- ⁽⁸⁾ betrieb continuous operation	Kurzzeit- betrieb intermittend operation

ZF-ECOSPLIT

16 S 1620 TD 16 S 1920 TD 16 S 2220 TD 16 S 2320 TD	NH/1		1000	0.77 / 0.91	-	-	-	●	-	-	●	-
	NH/4		430	0.98 / 1.17	-	-	●	●	-	-	-	●
	N 221/10	C	870 - 470	0.95 - 2.00	-	-	●	●	-	-	●	-
	N221/10 IT ⁽³⁾	D: NL/1	600	0.77 / 0.91	-	-	●	●	-	-	●	-
	N221/10 PL ⁽⁴⁾	D: NL/4	430	0.98 / 1.17	-	-	●	●	-	-	-	●
	N 221 PL		-	-	-	1.85	-	●	-	-	●	-
16 S 1820 TO 16 S 2220 TO 16 S 2520 TO 16 S 2720 TO ⁽⁵⁾	NMV 221		2000 / 1300	0.98 / 1.55	-	-	●	-	●	-	●	-
	NH/1		1000	0.91 / 1.09	-	-	●	●	-	-	●	-
	NH/4		430	1.17 / 1.40	-	-	●	●	-	-	-	●
	N 221/10	C	870 - 470	1.13 - 2.40	-	-	●	●	-	-	●	-
	N221/10 IT ⁽³⁾	D: NL/1	600	0.91 / 1.09	-	-	●	●	-	-	●	-
	N221/10 P ⁽⁴⁾	D: NL/4	430	1.17 / 1.40	-	-	●	●	-	-	-	●
12 S 2130 TD 12 S 2330 TD 12 S 2833 TD	N 221 PL		-	-	-	1.85	-	●	-	-	●	-
	NMV 221 ⁽⁷⁾		2000 / 1300	0.98 / 1.55	-	-	●	-	●	-	●	-
	NH/1		1000	0.81 / 1.03	-	-	●	●	-	-	●	-
	NH/4		430	0.73 / 0.93	-	-	●	●	-	-	-	●
	N 221/10 IT ⁽⁹⁾	C	870 - 470	1.00 - 2.26	-	-	●	●	-	-	●	-
	N221/10 IT ⁽⁹⁾	D: NL/1	600	0.81 / 1.03	-	-	●	●	-	-	●	-
16 S 1630 TD 16 S 1930 TD 16 S 2230 TD 16 S 2330 TD	N221/10 IT ⁽⁹⁾	D: NL/4	430	0.73 / 0.93	-	-	●	●	-	-	-	●
	NH/PL		-	-	-	1.85	-	●	-	-	●	-
	NH/1		1000	0.77 / 0.91	-	-	●	●	-	-	●	-
	NH/4		430	0.98 / 1.17	-	-	●	●	-	-	-	●
	N 221/10 IT ⁽⁹⁾	C	870 - 470	0.95 - 2.00	-	-	●	●	-	-	●	-
	N221/10 IT ⁽⁹⁾	D: NL/1	600	0.77 / 0.91	-	-	●	●	-	-	●	-
16 S 1830 TO 16 S 2230 TO 16 S 2530 TO 16 S 2730 TO ⁽⁵⁾	N221/10 IT ⁽⁹⁾	D: NL/4	430	0.98 / 1.17	-	-	●	●	-	-	-	●
	NH/PL		-	-	-	1.85	-	●	-	-	●	-
	NH/1		1000	0.91 / 1.09	-	-	●	●	-	-	●	-
	NH/4		430	1.17 / 1.40	-	-	●	●	-	-	-	●
	N 221/10 IT ⁽⁹⁾	C	870 - 470	1.13 - 2.40	-	-	●	●	-	-	●	-
	N221/10 IT ⁽⁹⁾	D: NL/1	600	0.91 / 1.09	-	-	●	●	-	-	●	-
N221/10 IT ⁽⁹⁾	D: NL/4	430	1.17 / 1.40	-	-	●	●	-	-	-	●	
NH/PL		-	-	-	1.85	-	●	-	-	●	-	

- (1) = Abtriebsdrehzahl = f x Motordrehzahl / Output speed = f x engine speed
- (2) = Pumpendrehzahl = g x Abtriebsdrehzahl des Getriebes / Pump speed = g x output speed of gearbox
- (3) = Version mit Intarder / Version with Intarder
- (4) = N 221/10 mit integriertem Lenkpumpenantrieb / N221/10 with integrated steering pump drive
- (5) = für 16 S 2720 TO und 16 S 2730 TO wird statt N 221/10.. ein N 251/10.. benötigt / for 16 S 2720 TO and 16 S 2730 TO a N 251/10.. is required instead of N 221/10..
- (6) = Installation nur möglich bei einem Durchmesser des Getriebeabtriebsflansches bis max. 120 mm / installation only possible with transmission output flange diameter not exceeding 120 mm
- (7) = nicht für 16 S 2720 TO / not for 16 S 2720 TO
- (8) = Für Dauerbetrieb muss grundsätzlich beim Ersteinbau eine Öltemperaturmessung druchgeführt werden. Wird die max. zul. Temperatur überschritten muss eine Zusatzkühlung eingebaut werden / Initial installation for continuous operation invariably requires measurement of the oil temperature. If the maximally permitted temperature is exceeded, an additional cooling system must be installed.
- (9) = gleiche PTO-Bezeichnung für Sologetriebe und Getriebe mit Intarder / same PTO designation for solo transmission and transmission with Intarder.

● = Standard



Antriebs- und Fahrwerktechnik

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