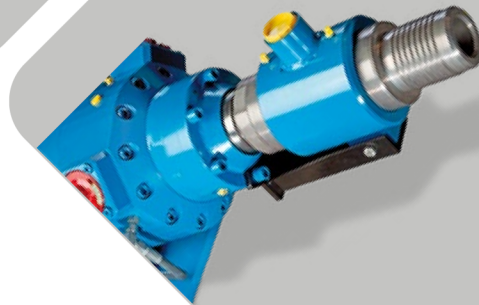
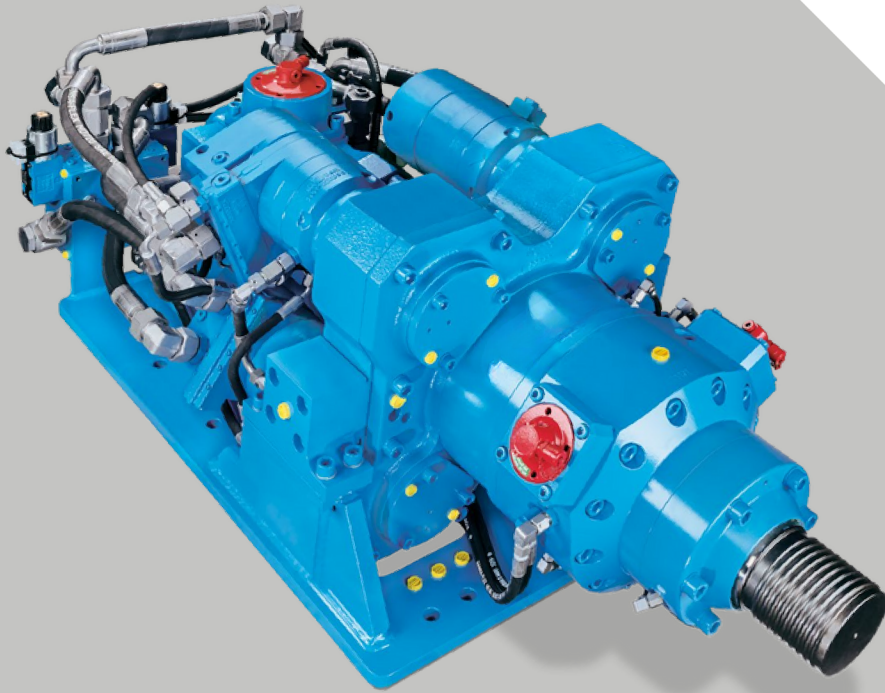


terra  
infrastructure

safety: efficient and sustainable



DRIFTER  
HB60

# DRIFTER HB60

HB60 is a large-size Drifter (top-hammer) especially developed for:

- Micropile drilling up to a casing diameter of 8 inches (ø203,2 mm)
- Overburden drilling up to an outside casing diameter of 7 inches (ø177,8 mm)
- Threaded hollow bar drilling (self-drilling anchors) up to a bar diameter of 5 inches (ø130 mm)
- Auger drilling (CFA) up to an auger diameter of 36 inches (ø900 mm)

HB60 has a standard built-in hydraulic damping mechanism to avoid blank impacts and to allow percussion during retraction of casings and augers.

HB60 achieves optimum drilling performance in different types of soil by adjusting the impact frequency and the impact energy; three different impact frequencies and impact energies are available.

HB60 offers two different ways to switch between the percussion mechanism and the speed of the rotary drive, either electrically or hydraulically.

HB60 offers three different high-speed and high-pressure motors (480 ccm, 677 ccm, 940 ccm).

## Percussion Unit for Anchor Drilling

Operating pressure (kp/cm <sup>2</sup> )	180 - 200 bar
Oil flow rate (l/min)	80 - 90 lpm
Impact rate (min <sup>-1</sup> ) (20   32   40 Hz)	1,200   1,900   2,400 bpm
Single impact energy (Joule)	840   540   420 Nm

## Shank Adaptors (Striker Bars)

Male thread	C112 left   C112 right
Male thread	R112 (H112) left   R112 (H112) right

## OPTIONS

- External flushing heads for casings and self-drilling hollow bars
- Built-in RPM sensor with external box for speed indication
- Central lubrication system
- Custom made hammer plate

## Rotary Drives

Motor-Version 2x HP480 ccm + 2x HP677 ccm																		
Pressure at rotary drive		170 bar				200 bar				240 bar				280 bar				
Gear		4 <sup>th</sup>		2 <sup>nd</sup>	1 <sup>st</sup>	4 <sup>th</sup>		2 <sup>nd</sup>	1 <sup>st</sup>	4 <sup>th</sup>		2 <sup>nd</sup>	1 <sup>st</sup>	4 <sup>th</sup>		2 <sup>nd</sup>	1 <sup>st</sup>	
Oil flow rate (lpm)	150	Torque (Nm)	6,100	9,200	12,200	18,400	7,400	11,100	14,800	22,200	8,600	13,000	17,300	25,900	10,100	15,100	20,200	30,300
		Speed (rpm)	60	40	30	18	60	40	30	18	60	40	30	18	60	40	30	18
	240	Torque (Nm)	6,100	9,200	12,200	18,400	7,400	11,100	14,800	22,200	8,600	13,000	17,300	25,900	10,100	15,100	20,200	30,300
		Speed (rpm)	96	64	48	28	96	64	48	28	96	64	48	28	96	64	48	28
	340	Torque (Nm)	6,100	9,200	12,200	18,400	7,400	11,100	14,800	22,200	8,600	13,000	17,300	25,900	10,100	15,100	20,200	30,300
		Speed (rpm)	136	91	68	40	136	91	68	40	136	91	68	40	136	91	68	40

1st gear (parallel mode), 2nd gear (parallel + 2-speed mode), 3rd gear (serial mode), 4th gear (serial + 2-speed mode)

Motor-Version 4x HP677 ccm (standard)																		
Pressure at rotary drive		170 bar				200 bar				240 bar				280 bar				
Gear		4 <sup>th</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	4 <sup>th</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	4 <sup>th</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	4 <sup>th</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	
Oil flow rate (lpm)	150	Torque (Nm)	7,200	10,700	14,300	21,500	8,600	13,000	17,300	25,900	10,100	15,200	20,200	30,400	11,800	17,700	23,600	35,400
		Speed (rpm)	51	34	26	15	51	34	26	15	51	34	26	15	51	34	26	15
	240	Torque (Nm)	7,200	10,700	14,300	21,500	8,600	13,000	17,300	25,900	10,100	15,200	20,200	30,400	11,800	17,700	23,600	35,400
		Speed (rpm)	82	55	41	24	82	55	41	24	82	55	41	24	82	55	41	24
	340	Torque (Nm)	7,200	10,700	14,400	21,500	8,600	13,000	17,300	25,900	10,100	15,200	20,200	30,400	11,800	17,700	23,600	35,400
		Speed (rpm)	116	77	58	34	116	77	58	34	116	77	58	34	116	77	58	34

1st gear (parallel mode), 2nd gear (parallel + 2-speed mode), 3rd gear (serial mode), 4th gear (serial + 2-speed mode)

Motor-Version 2x HP677 ccm + 2x HP940 ccm																		
Pressure at rotary drive		170 bar				200 bar				240 bar								
Gear		4 <sup>th</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	4 <sup>th</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	4 <sup>th</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>	1 <sup>st</sup>					
Oil flow rate (lpm)	150	Torque (Nm)	8,600	12,800	17,100	25,700	10,300	15,500	20,600	31,000	12,100	18,100	24,200	36,200				
		Speed (rpm)	43	29	21	13	43	29	21	13	43	29	21	13				
	240	Torque (Nm)	8,600	12,800	17,100	25,700	10,300	15,500	20,600	31,000	12,100	18,100	24,200	36,200				
		Speed (rpm)	69	46	34	20	69	46	34	20	69	46	34	20				
	340	Torque (Nm)	8,600	12,800	17,100	25,700	10,300	15,500	20,600	31,000	12,100	18,100	24,200	36,200				
		Speed (rpm)	97	65	49	29	97	65	49	29	97	65	49	29				

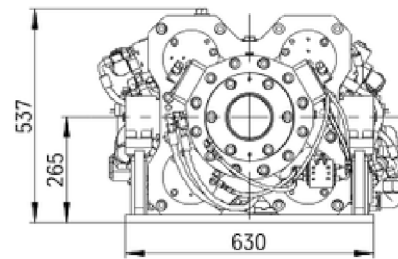
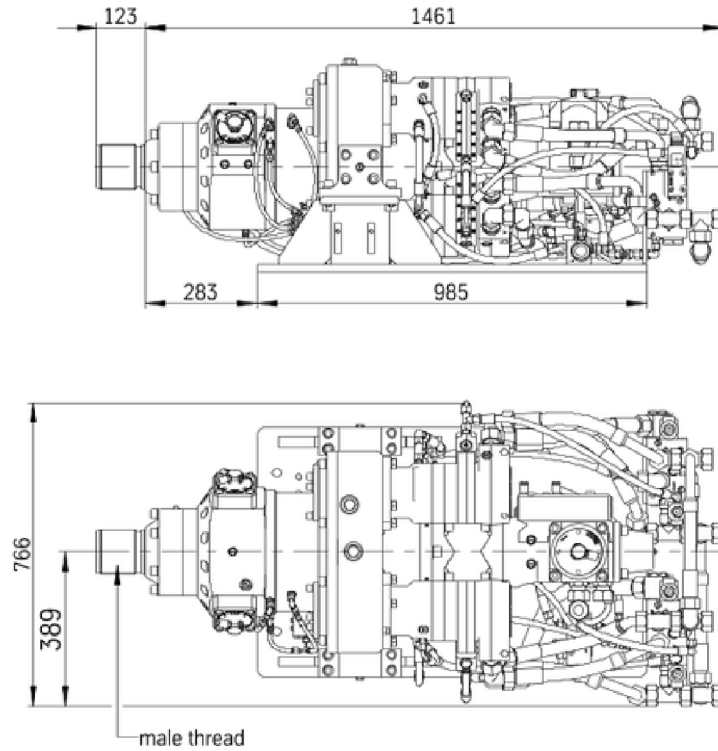
1st gear (parallel mode), 2nd gear (parallel + 2-speed mode), 3rd gear (serial mode), 4th gear (serial + 2-speed mode)   Intermittent mode (max. 10% per minute) between 200 bar and 240 bar

Motor-Version 4x HP940 ccm																		
Pressure at rotary drive		170 bar				200 bar				240 bar								
Gear		4 <sup>th</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	4 <sup>th</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>	1 <sup>st</sup>	4 <sup>th</sup>	3 <sup>rd</sup>	2 <sup>nd</sup>	1 <sup>st</sup>					
Oil flow rate (lpm)	150	Torque (Nm)	10,000	14,900	19,900	29,900	11,100	16,700	22,200	33,400	14,000	21,100	28,100	42,100				
		Speed (rpm)	37	25	18	11	37	25	18	11	37	25	18	11				
	240	Torque (Nm)	10,000	14,900	19,900	29,900	11,000	16,700	22,200	33,400	14,000	21,100	28,100	42,100				
		Speed (rpm)	59	39	30	17	59	39	30	17	59	39	30	27				
	340	Torque (Nm)	10,000	14,900	19,900	29,900	11,100	16,700	22,200	33,400	14,000	21,100	28,100	42,100				
		Speed (rpm)	84	56	42	25	84	56	42	25	84	56	42	25				

1st gear (parallel mode), 2nd gear (parallel + 2-speed mode), 3rd gear (serial mode), 4th gear (serial + 2-speed mode)   Intermittent mode (max. 10% per minute) between 200 bar and 240 bar

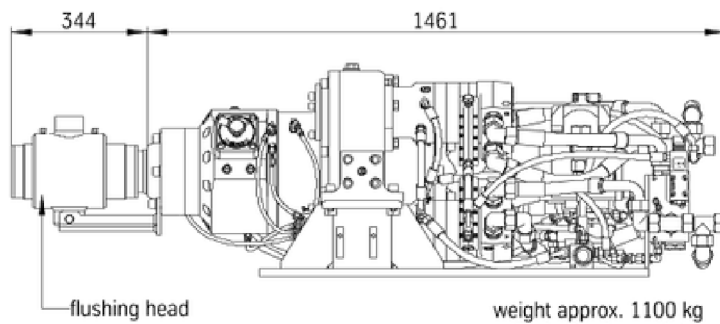
## Dimensions

with hydraulic damping mechanism



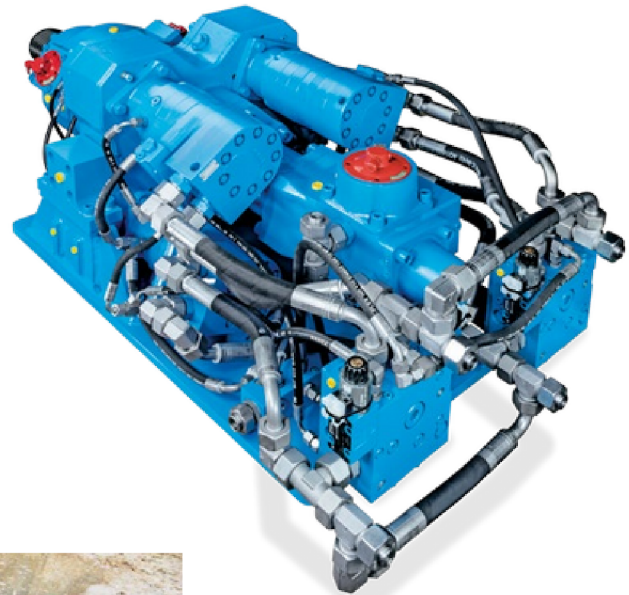
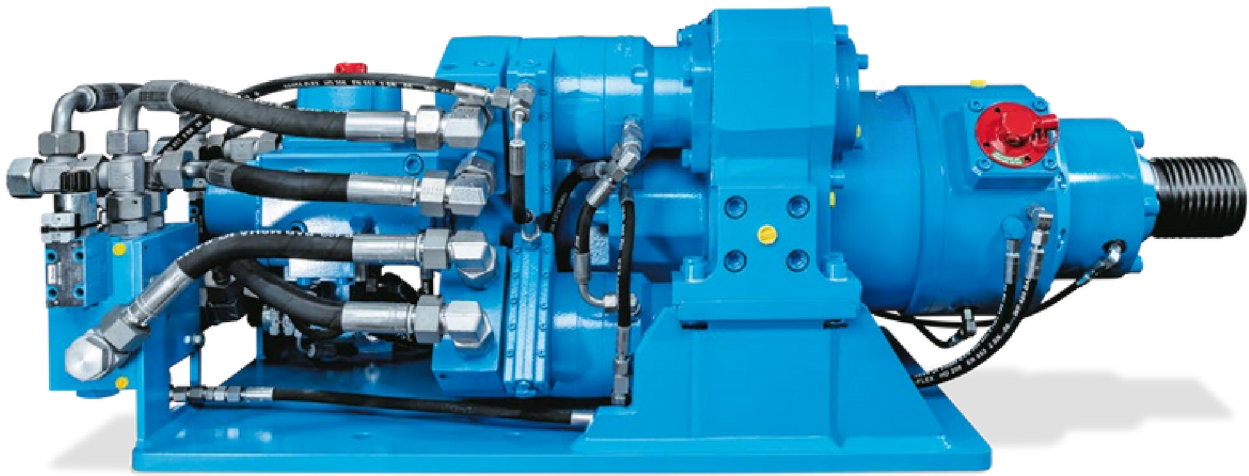
weight approx. 1050 kg  
(including base plate)

with hydraulic damping mechanism and external flushing head



weight approx. 1100 kg  
(including base plate)





HB60 drilling 177.8 mm casings 23 m deep

Flushing head swivel with male thread

terra infrastructure GmbH, Alte Liederbacher Straße 6, 36304 Alsfeld, Germany  
P: +49 6631 781-0  
sales.drilling@terra-infrastructure.com | www.terra-infrastructure.com

#### **Australia**

terra infrastructure Pty Ltd, 11 Woodford Pl, Thornton NSW 2322, Australia  
P: +61 2 8448-3555  
info.anz@terra-infrastructure.com  
www.terra-infrastructure.com.au

#### **New Zealand, Pacific Islands**

terra infrastructure Pty Ltd, 180 Fred Taylor Drive, Whenuapai Auckland 0814, New Zealand  
P: +64 9 416-8891  
info.anz@terra-infrastructure.com  
www.terra-infrastructure.co.nz

#### **Baltic States**

terra infrastructure UAB, Liepų g. 83, 93269 Klaipėda, Lithuania  
P: +370 46 355-401  
www.terra-infrastructure.com/lt

#### **Russian Federation**

OOO terra infrastructure, Bolshevikov Str. 54 B, Office 211, 193315 St. Petersburg, Russia  
P: +7 812 337-6510  
www.terra-infrastructure.com/ru



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