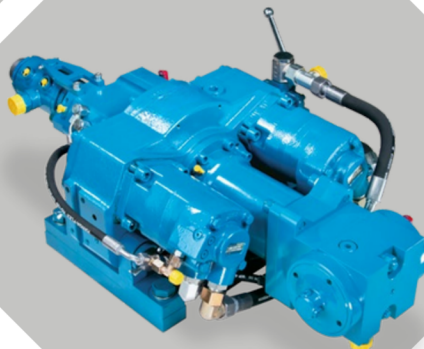
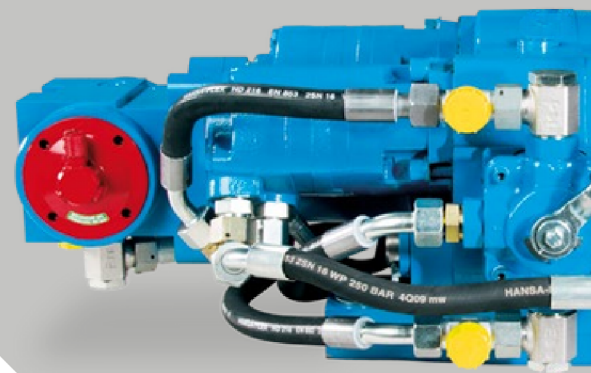
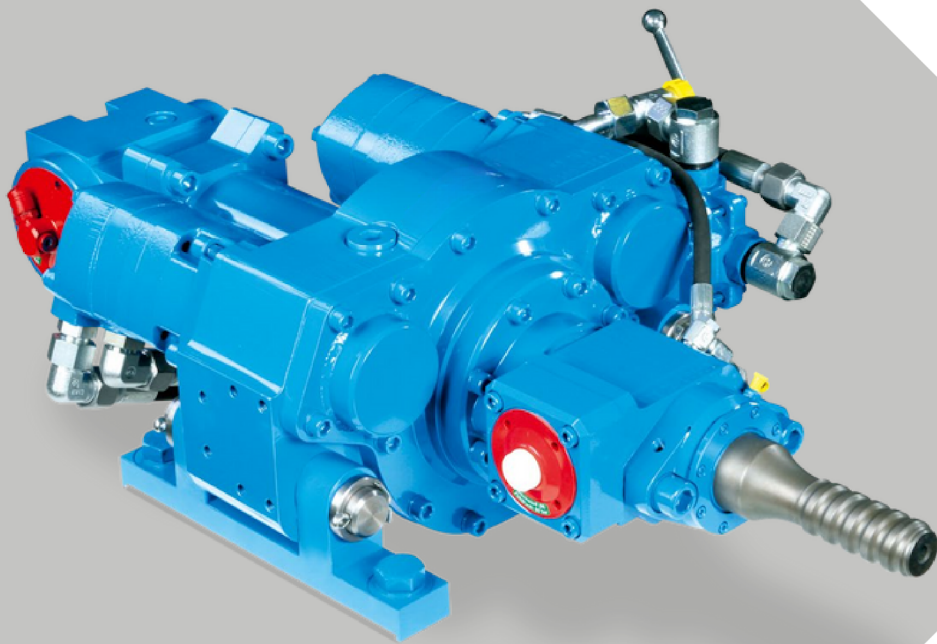


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safety: efficient and sustainable



DRIFTER  
HB20

# DRIFTER HB20

HB20 is a small-size Drifter (top-hammer) especially developed for:

- Micropile drilling up to a casing diameter of 4 inch (ø101,6 mm)
- Threaded hollow bar drilling (self-drilling anchors) up to a bar diameter of 2 inch (ø50 mm)
- Blast hole drilling up to a hole diameter of 3 inch (ø75 mm)

HB20 has a standard built-in hydraulic damping mechanism to avoid blank impacts and to allow percussion during retraction of casings.

HB20 offers 3 different ways to switch between the speed of the rotary drive, either electrically or hydraulically or manually (by hand) and it offers 4 different motors (160 ccm, 205 ccm, 245 ccm, 310 ccm).

## Percussion Unit for Anchor Drilling

Operating pressure (kp/cm <sup>2</sup> )	170 - 190 bar
Oil flow rate (l/min)	70 - 80 lpm
Impact rate (min <sup>-1</sup> )	(50 Hz) 3,000 bpm
Single impact energy (Joule)	270 Nm

## Shank Adaptors (Striker Bars)

Male thread	R32 left   R38 left   T38 left   T45 left R55(H55) right   R55(H55) left
Female thread	R32 left   R38 left   T38 left Titan 30/11 left   40/16 left   52/26 left

### OPTIONS

- External flushing head for casings and self-drilling hollow bars
- Integrated flushing through extended shank adaptor (striker bar)
- Drifter version without damping mechanism available

## Rotary Drives

### Motor-Version 160 ccm

Pressure at rotary drive		140bar				170bar				200bar				240bar				
Gear				2 <sup>nd</sup>	1 <sup>st</sup>			2 <sup>nd</sup>	1 <sup>st</sup>			2 <sup>nd</sup>	1 <sup>st</sup>			2 <sup>nd</sup>	1 <sup>st</sup>	
Oil flow rate (lpm)	50	Torque (Nm)			1,000	2,100			1,300	2,600			1,500	3,100			1,800	3,600
		Speed (rpm)			109	53			106	51			102	48			96	43
	75	Torque (Nm)			1,000	2,100			1,300	2,600			1,500	3,100			1,800	3,600
		Speed (rpm)			151	81			148	78			144	74			137	70
	95	Torque (Nm)			1,000	2,100			1,300	2,600			1,500	3,100			1,800	3,600
		Speed (rpm)			173	95			169	92			164	88			157	83

1st gear (parallel mode), 2<sup>nd</sup> gear (serial mode)

■ Intermittend mode (max. 10% per minute)

### Motor-Version 205 ccm

Pressure at rotary drive		140bar				170bar				200bar				240bar				
drive Gear				2 <sup>nd</sup>	1 <sup>st</sup>			2 <sup>nd</sup>	1 <sup>st</sup>			2 <sup>nd</sup>	1 <sup>st</sup>			2 <sup>nd</sup>	1 <sup>st</sup>	
Oil flow rate (lpm)	50	Torque (Nm)			1,300	2,600			1,600	3,200			1,900	3,800			2,200	4,300
		Speed (rpm)			76	32			74	31			72	28			68	25
	75	Torque (Nm)			1,300	2,600			1,600	3,200			1,900	3,800			2,200	4,400
		Speed (rpm)			110	53			108	52			104	50			100	48
	95	Torque (Nm)			1,300	2,600			1,600	3,200			1,900	3,800			2,200	4,400
		Speed (rpm)			138	63			136	63			132	61			128	58

1st gear (parallel mode), 2<sup>nd</sup> gear (serial mode)

■ Intermittend mode (max. 10% per minute)

### Motor-Version 245 ccm (standard)

Pressure at rotary drive		100bar				140bar				170bar				200bar				
Gear				2 <sup>nd</sup>	1 <sup>st</sup>			2 <sup>nd</sup>	1 <sup>st</sup>			2 <sup>nd</sup>	1 <sup>st</sup>			2 <sup>nd</sup>	1 <sup>st</sup>	
Oil flow rate (lpm)	50	Torque (Nm)			1,100	2,300			1,500	3,000			1,900	3,800			2,300	4,400
		Speed (rpm)			65	28			63	26			61	23			58	22
	75	Torque (Nm)			1,100	2,300			1,500	3,100			1,900	3,800				4,500
		Speed (rpm)			94	46			91	45			88	43				40
	95	Torque (Nm)			1,100	2,300			1,500	3,000			1,900	3,800				4,500
		Speed (rpm)			118	56			115	54			112	52				49

1st gear (parallel mode), 2<sup>nd</sup> gear (serial mode)

■ Intermittend mode (max. 10% per minute)

### Motor-Version 310 ccm

Pressure at rotary drive		70bar				100bar				140bar				170bar				
Gear				2 <sup>nd</sup>	1 <sup>st</sup>			2 <sup>nd</sup>	1 <sup>st</sup>			2 <sup>nd</sup>	1 <sup>st</sup>			2 <sup>nd</sup>	1 <sup>st</sup>	
Oil flow rate (lpm)	50	Torque (Nm)			900	1,900			1,400	2,900			2,000	3,800			2,400	4,800
		Speed (rpm)			53	22			52	22			51	21			50	20
	75	Torque (Nm)			900	1,900			1,400	2,900			1,900	3,900				4,900
		Speed (rpm)			75	37			74	37			73	36				35
	95	Torque (Nm)			900	1,900			1,400	2,900			1,900	3,900				4,900
		Speed (rpm)			94	45			93	44			92	44				42

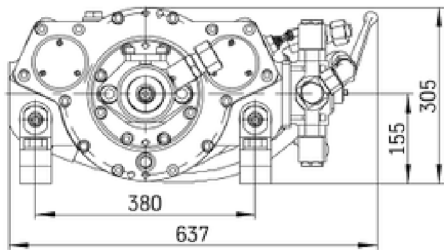
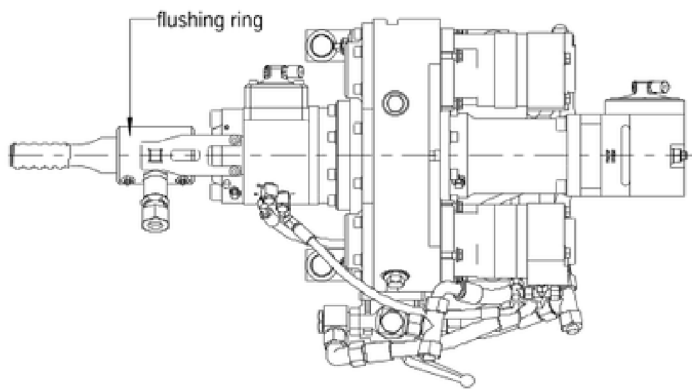
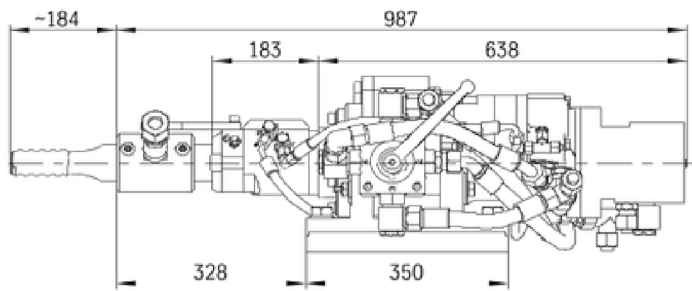
1st gear (parallel mode), 2<sup>nd</sup> gear (serial mode)

■ Intermittend mode (max. 10% per minute)

## Dimensions

### for Anchor-Drilling

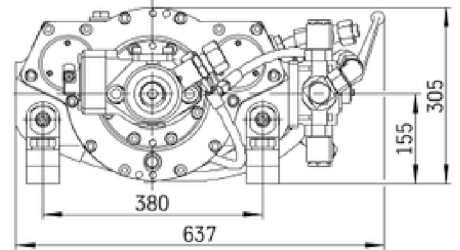
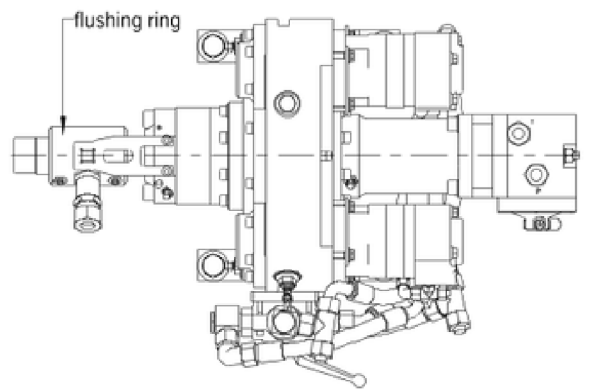
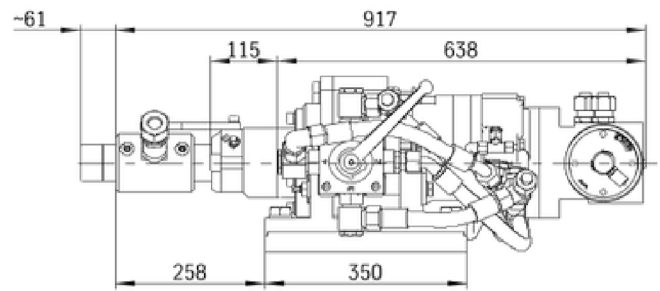
with hydraulic damping mechanism and external flushing ring fitted to extended shank adaptor (swivel)



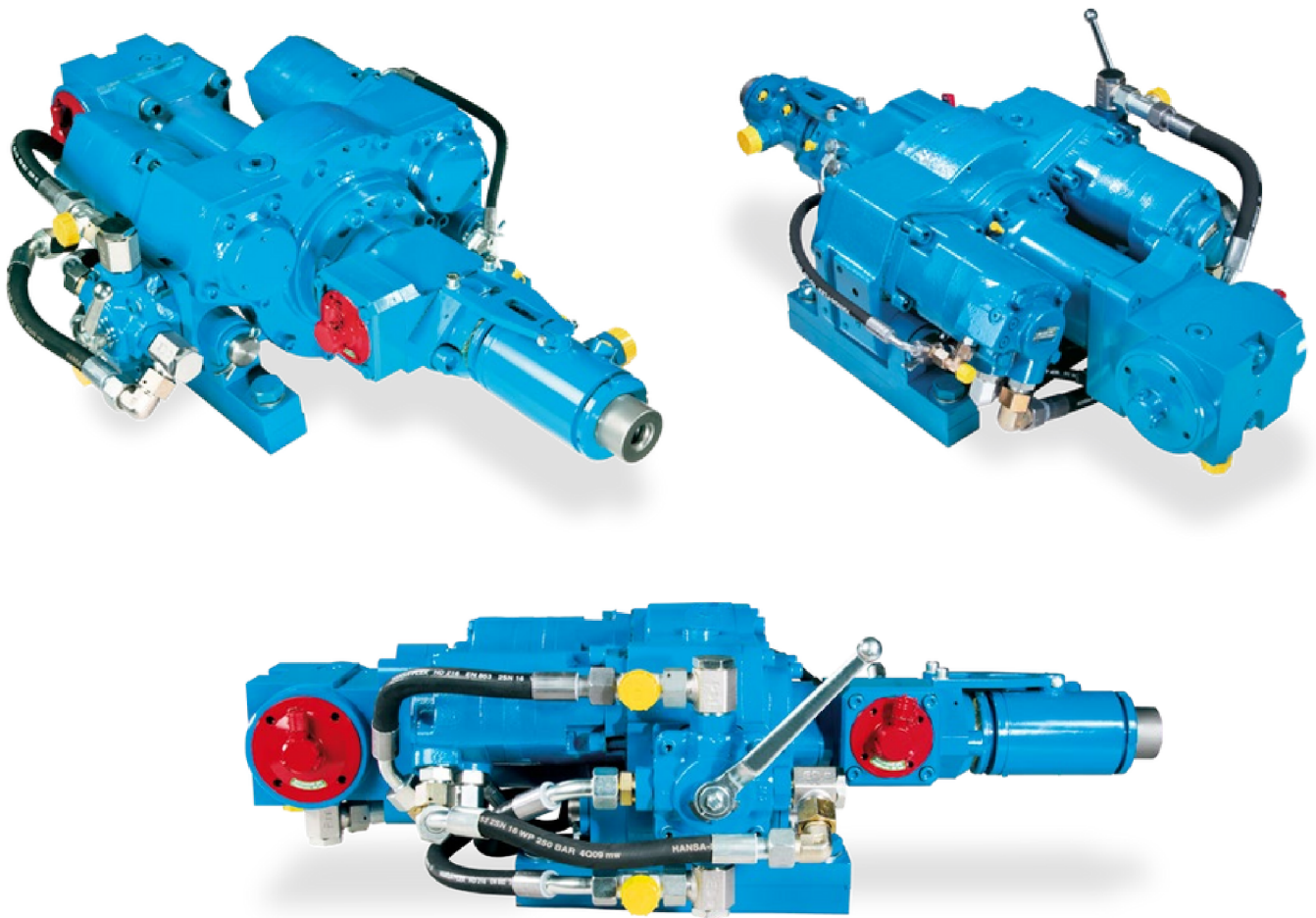
weight approx. 230 kg  
retraction force max. 36 kN

### for Rock-Drilling

without hydraulic damping mechanism, but with external flushing ring fitted to extended shank adaptor (swivel)



weight approx. 215 kg  
retraction force max. 36 kN



HB20 drilling Ø52 mm (2 inch) threaded hollow bars

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