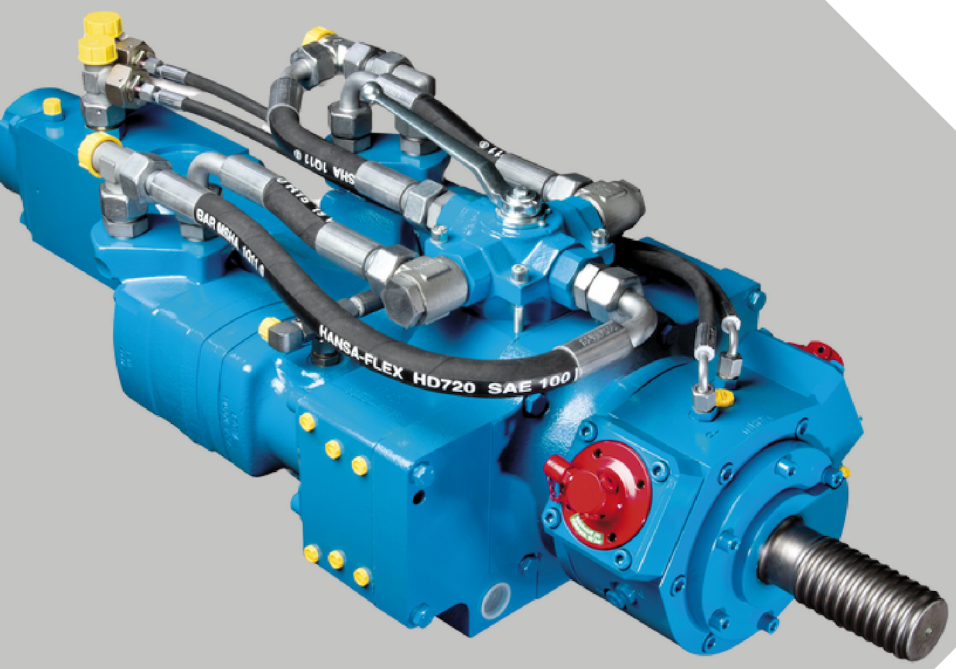
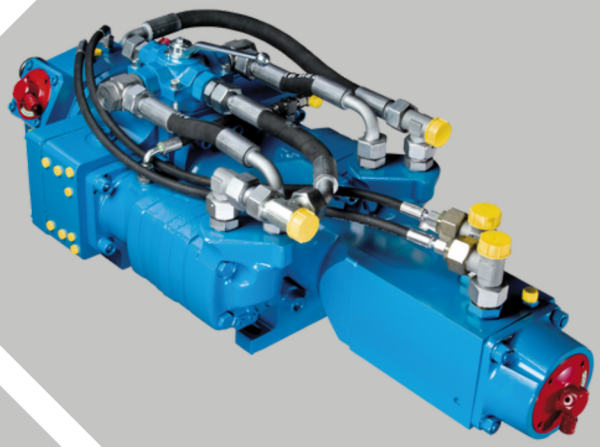
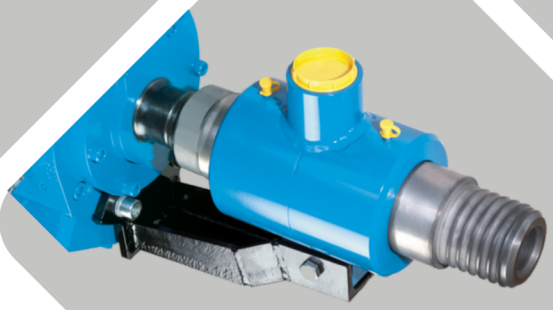
terra
infrastructure

safety: efficient and sustainable







DRIFTER
HB40

DRIFTER HB40

HB40 is a mid-size Drifter (top-hammer) especially developed for:

- Micropile drilling up to a casing diameter of 5 inch (ø133 mm)
- Overburden drilling up to an outside casing diameter of 5 inch (ø133 mm)
- Threaded hollow bar drilling (self-drilling anchors) up to a bar diameter of 3 inch (ø75 mm)
- Auger drilling (CFA) up to an auger diameter of 24 inch (ø600 mm)

HB40 has a standard built-in rubber damping mechanism to avoid blank impacts and to allow percussion during retraction of casings and augers; optional with hydraulic damping mechanism.

HB40 achieves an optimal drilling performance in different types of soil by adjusting the impact frequency and the impact energy, therefore 2 different impact frequencies and impact energies are available.

HB45 offers 3 different ways to switch between the percussion mechanism and the speed of the rotary drive, either electrically or hydraulically or manually (by hand) and it offers 2 different high-speed and high-pressure motors (480 ccm and 677 ccm) and two single-speed motors (670 ccm and 677 ccm).

Percussion Unit for Anchor Drilling

Operating pressure (kp/cm²)	170 - 190 bar
Oil flow rate (l/min)	70 - 85 lpm
Impact rate1 (min⁻¹)	(30 | 42 Hz) 1,800 | 2,500 bpm
Single impact energy (Joule)	400 | 340 Nm

Shank Adaptors (Striker Bars)

Male thread (standard)	C64 left | C64 right
Male thread	R55(H55) left | R55(H55) right

OPTIONS

- External flushing head for casings and self-drilling hollow bars
- Built-in RPM sensor with external box for speed indication
- Drifter with hydraulic or rubber damping mechanism
- Central lubrication system

Rotary Drives

Motor-Version 670 ccm (single-speed)

Pressure at rotary drive		140 bar				170 bar				200 bar							
Gear			2nd		1st		2nd		1st		2nd		1st				
Oil flow rate (lpm)	90 Torque (Nm)		3,200		6,400		4,000		8 ,100		4,800		9,700				
	90 Speed (rpm)		55		26		53		25		52		24				
	120 Torque (Nm)		3,100		6,400		4,000		8,000				9,600				
	120 Speed (rpm)		74		35		73		34				33				
	170 Torque (Nm)		3,100		6,400		3,900		8,000				9,600				
	170 Speed (rpm)		104		52		104		51				48				

1st gear (parallel mode), 2 gear (serial mode)

Intermittend mode (max. 10% per minute)

Motor-Version HP677 ccm (single-speed)

Pressure at rotary drive		170 bar				200 bar				240 bar				280 bar			
Gear			2nd		1st		2nd		1st		2nd		1st		2nd		1st
Oil flow rate (lpm)	90 Torque (Nm)		3,800		8 ,100		4,500		9,600		5,500		11,600		6,500		13,600
	90 Speed (rpm)		57		29		57		29		57		29		57		29
	120 Torque (Nm)		3,600		7,900		4,300		9,400		5,300		11,400		6,300		13,400
	120 Speed (rpm)		76		38		76		38		76		38		76		38
	170 Torque (Nm)		3,000		7,600		3,800		9,100		4,800		11,100		5,800		13,100
	170 Speed (rpm)		108		54		108		54		108		54		108		54

1st gear (parallel mode), 2nd gear (serial mode)

Motor-Version HP480 ccm (two-speed)

Pressure at rotary drive		170 bar				200 bar				240 bar				280 bar			
Gear		4th	3rd	2nd	1st	4th	3rd	2nd	1st	4th	3rd	2nd	1st	4th	3rd	2nd	1st
Oil flow rate (lpm)	90 Torque (Nm)	1,700	2,700	3,800	5,800	2,000	3,200	4,500	6,800	2,500	3,900	5,400	8,300	3,000	4,600	6,400	9,700
	90 Speed (rpm)	121	80	60	40	121	80	60	40	121	80	60	40	121	80	60	40
	120 Torque (Nm)	1,300	2,500	3,700	5,600	1,600	3,100	4,400	6,700	2,100	3,800	5,300	8 ,10 0	2,600	4,500	6,300	9,500
	120 Speed (rpm)	161	107	80	54	161	107	80	54	161	107	80	54	161	107	80	54
	170 Torque (Nm)	1,100	2,200	3,400	5,400	1,500	2,700	4,200	6,400	1,900	3,400	5,100	7,900	2,400	4,100	6 ,100	9,300
	170 Speed (rpm)	228	152	114	76	228	152	114	76	228	152	114	76	228	152	114	76

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

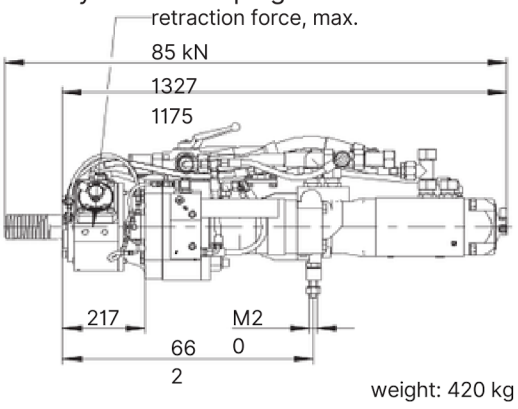
Motor-Version HP677 ccm (two-speed)

Pressure at rotary drive		170 bar				200 bar				240 bar				280 bar			
Gear		4th	3rd	2nd	1st	4th	3rd	2nd	1st	4th	3rd	2nd	1st	4th	3rd	2nd	1st
Oil flow rate (lpm)	90 Torque (Nm)	2,400	3,800	5,300	8 ,10	2,900	4,500	6,300	9,600	3,500	5,500	7,700	11,600	4,200	6,500	9,000	13,600
	90 Speed (rpm)	86	57	43	0 29	86	57	43	29	86	57	43	29	86	57	43	29
	120 Torque (Nm)	1,800	3,600	5,200	7,900	2,300	4,300	6,200	9,400	3,000	5,300	7,500	11,400	3,600	6,300	8,900	13,400
	120 Speed (rpm)	114	76	57	38	114	76	57	38	114	76	57	38	114	76	57	38
	170 Torque (Nm)	1,600	3,000	4,900	7,600	2,100	3,800	5,900	9,100	2,700	4,800	7,200	11,100	3,400	5,800	8,500	13,100
	170 Speed (rpm)	162	108	81	54	162	108	81	54	162	108	81	54	162	108	81	54

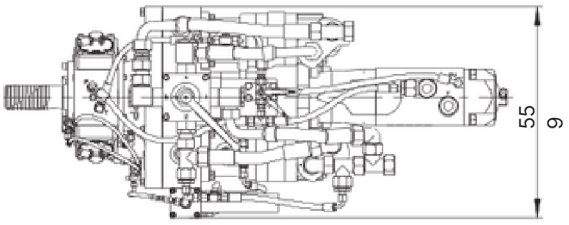
1st gear (parallel mode), 2nd gear (parallel + 2-speed mode), 3rd gear (serial mode), 4th gear (serial + 2-speed mode)

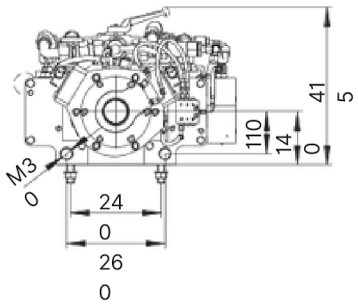
Dimensions

with hydraulic damping mechanism

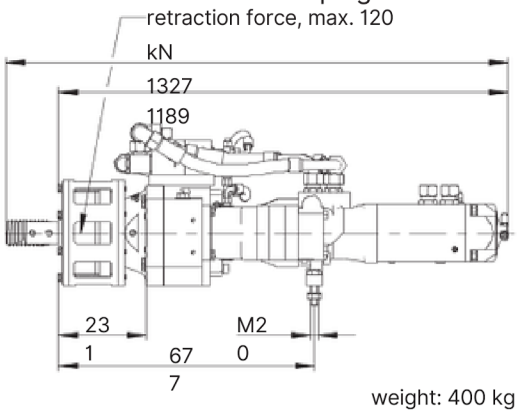


weight: 420 kg

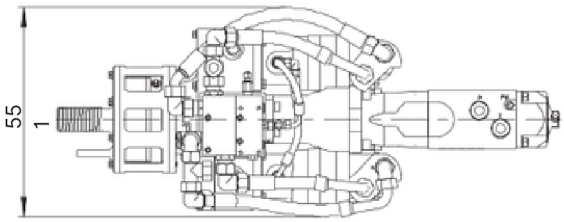


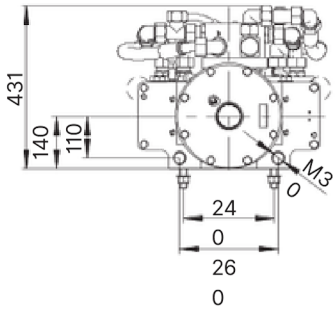


with rubber damping mechanism

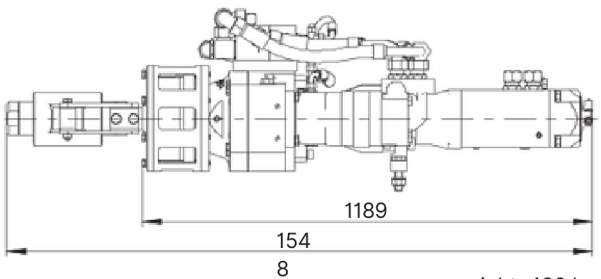


weight: 400 kg

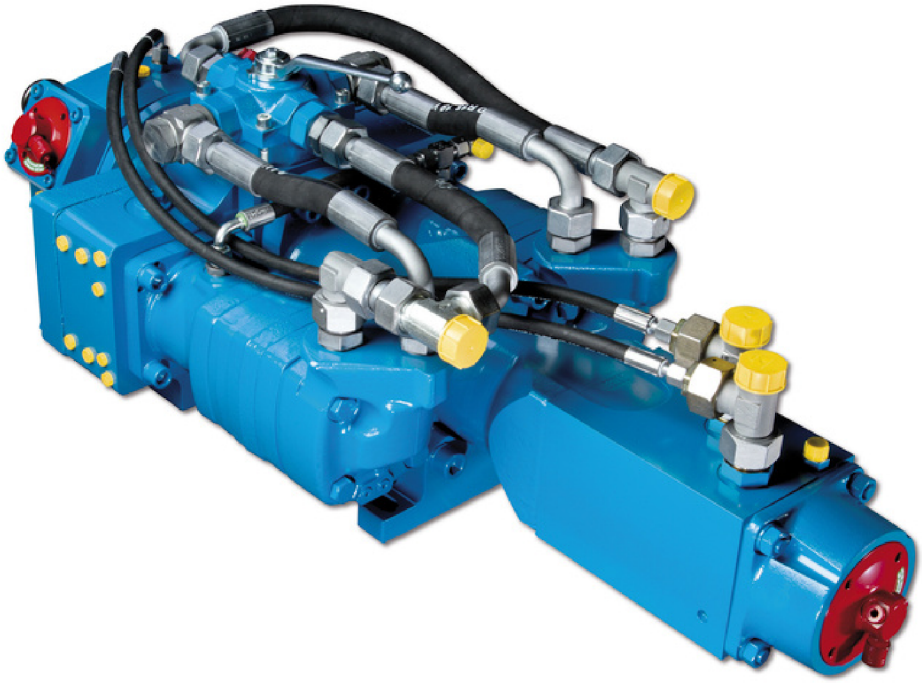


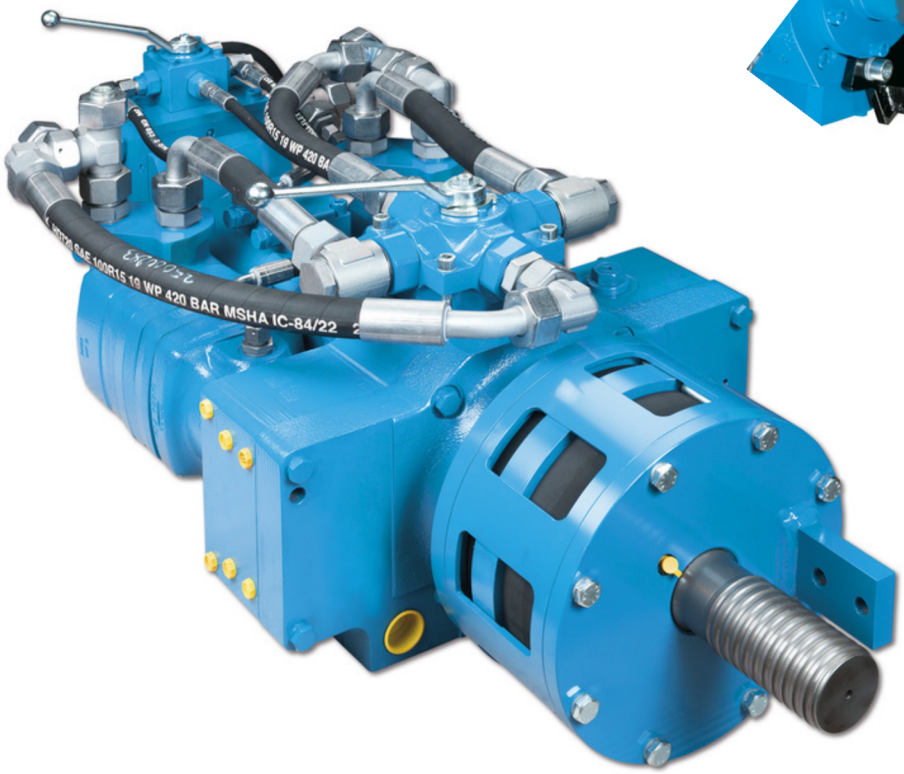


with rubber damping mechanism & external flushing head



weight: 420 kg




SAE 100R15 10 WP 420 BAR MSHA IC-84/22

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