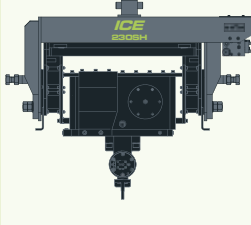
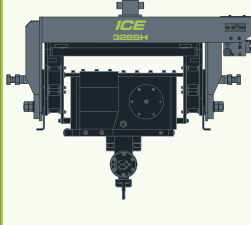
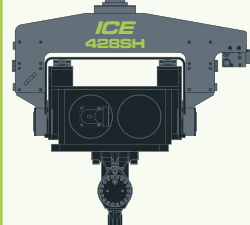


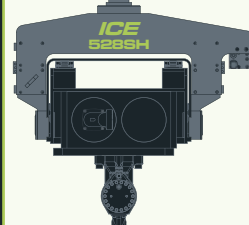
VIBRATORY HAMMERS EXCAVATOR MOUNTED WITH SWIVEL HEAD

Eccentric moment	kgm
Max. frequency	rpm
Max. centrifugal force	kN
Max. line pull capacity	kN
Max. hydr. power	kW/HP
Max. oil flow	L/min
Dynamic weight (**)	kg
Total weight (**)	kg
Max. amplitude (**)	mm
L x W x H (**)	mm
Recommended clamp	

230SH	
	
Eccentric moment	2.2
Max. frequency	3000
Max. centrifugal force	220
Max. line pull capacity	100
Max. hydr. power	53/72
Max. oil flow	90
Dynamic weight (**)	720
Total weight (**)	1270
Max. amplitude (**)	6.1
L x W x H (**)	1838 x 642 x 1405
Recommended clamp	40TU

328SH	
	
Eccentric moment	3.2
Max. frequency	2800
Max. centrifugal force	275
Max. line pull capacity	100
Max. hydr. power	65/88
Max. oil flow	110
Dynamic weight (**)	740
Total weight (**)	1280
Max. amplitude (**)	8.6
L x W x H (**)	1838 x 642 x 1405
Recommended clamp	40TU

428SH	
	
Eccentric moment	4.0
Max. frequency	2800
Max. centrifugal force	345
Max. line pull capacity	120
Max. hydr. power	98/133
Max. oil flow	170
Dynamic weight (**)	900
Total weight (**)	1460
Max. amplitude (**)	8.9
L x W x H (**)	1600 x 848 x 1604
Recommended clamp	60TU

528SH	
	
Eccentric moment	5.6
Max. frequency	2800
Max. centrifugal force	481
Max. line pull capacity	120
Max. hydr. power	98/133
Max. oil flow	170
Dynamic weight (**)	900
Total weight (**)	1460
Max. amplitude (**)	12.4
L x W x H (**)	1600 x 848 x 1604
Recommended clamp	60TU

A quick indication of which hammer can be used on which excavator, can be realized by using the following rules of the thumb.

1 Flow excavator

The flow of the excavator has to be at least 1.4 times the required flow of the vibratory hammer.

2 Power excavator

The required power of the excavator has to be at least 1.5 times the power of the vibratory hammer

Amplitude during vibration of hammer and sheetpile:

$$\text{Amplitude} = \frac{2000 \times \text{Eccentric moment}}{\text{Dynamic weight incl. clamp} + \text{weight sheetpile}}$$

Example:

ICE 416L vibratory hammer + sheetpile (2000 kg)

$$\text{Amplitude} = \frac{2000 \times 23}{2840 + 2000} = 9.5 \text{ mm}$$

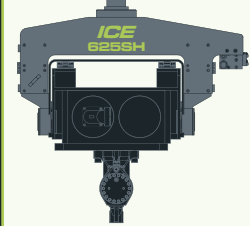
Centrifugal force in case of a different frequency

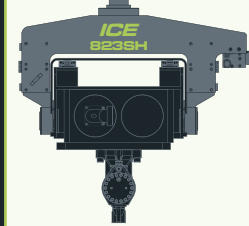
$$\text{Centrifugal force} = 0.011 \times (\text{frequency})^2 \times \text{Eccentric moment}$$

Example:

ICE 416L vibratory hammer working with a frequency of 1400 rpm (in stead of 1600 rpm)

$$\text{Centrifugal force} = 0.011 \times 1400^2 \times 23 = 495880 \text{ N} = 496 \text{ KN}$$

625SH	
	
Eccentric moment	6.0
Max. frequency	2500
Max. centrifugal force	410
Max. line pull capacity	120
Max. hydr. power	117/159
Max. oil flow	200
Dynamic weight (**)	930
Total weight (**)	1480
Max. amplitude (**)	12.9
L x W x H (**)	1600 x 848 x 1604
Recommended clamp	60TU

823SH	
	
Eccentric moment	8.0
Max. frequency	2300
Max. centrifugal force	465
Max. line pull capacity	120
Max. hydr. power	108/147
Max. oil flow	185
Dynamic weight (**)	940
Total weight (**)	1490
Max. amplitude (**)	17.0
L x W x H (**)	1600 x 848 x 1604
Recommended clamp	60TU

