Mooring line holding capacity

Mooring line holding capacity on the seabed

The holding capacity (P) in [t] of the part of the mooring line that is laying on the seabed, can be estimated with the following equation:

$P = f \times l \times w$

with

f : friction coefficient between the mooring line and the seabed
l : the length of the mooring line laying on the seabed in [m]
w : the unit weight of the mooring line in water in [t/m]

If no detailed information on the friction coefficient is available, the following values can be used:

mooring line type	friction coefficient	
	starting	sliding
chain	1.0	0.7
wire rope	0.6	0.25

The values for the friction coefficient given under starting can be used to calculate the holding capacity of the mooring line, while the values given under sliding can be used to calculate the forces during deployment of the mooring line.