core::scalar

```
template <class T, class Allocator = allocator<T> > class scalar;
```

Member types

member type	definition	notes
value_type	The first template parameter (T)	
allocator_type	The second template parameter (Allocator)	defaults to: allocator<T>
reference	value_type&	
const_reference	const value_type&	
pointer	value_type*	
const_pointer	const value_type*	
size_type	an unsigned integral type that can represent any non-negative value of difference_type	usually the same as size_t
difference_type	a signed integral type	usually the same as ptrdiff_t

Member functions

(constructor)	Construct scalar (public member function)
(destructor)	Scalar destructor (public member function)
operator=	Assign content (public member function)

Capacity:

empty	Test whether container is empty (public member function)
size	Return size (public member function)
max_size	Return maximum size (public member function)

Element access:

operator[]	Access element (public member function)
at	Access element (public member function)
data	Access data (public member function)

Modifiers:

assign	Assign a new scalar (public member function)
create	Create a scalar copying the data (public member function)
fill	Fill scalar with specified value (public member function)
linear_fill	Fill scalar with linear gradient values (public member function)
generate	Generate values for scalar with function (public member function)
remap	Map source data to a scalar (public member function)
swap	Swap content (public member function)
clear	Clear content (public member function)

Operations:

operator+=	Add a value or scalar (public member function)
operator-=	Subtract a value or scalar (public member function)
operator*=	Multiply a value or scalar (public member function)
operator/=	Divided by a value or scalar (public member function)
operator&=	And a value or scalar (public member function)
operator^=	Xor a value or scalar (public member function)
operator|=	Or a value or scalar (public member function)

Observers:

get_allocator	Get allocator (public member function)

Non-member function overloads:

operator+	Scalar addition (public member function)

operator-	Scalar subtraction (public member function)
operator*	Scalar multiplication (public member function)
operator/	Scalar division (public member function)
operator&	Scalar and (public member function)
operator^	Scalar xor (public member function)
operator|	Scalar or (public member function)
operator<	Scalar less than (public member function)
operator>	Scalar greater than (public member function)
operator<=	Scalar less than or equal to (public member function)
operator>=	Scalar greater than or equal to (public member function)
operator==	Scalar equal to (public member function)
operator!=	Scalar not equal to (public member function)