

- Reach: 2m to 10m20
- Built-in wear-resistant compression spring:
  - > 3.000.000 movements
- Adjustable movement speed
- Master/slave
- Up to 5 year warranty
- Custom-made and delivered ready for installation

#### **Parts**

# Barrier box

- Dimension: 450 W x 440 D x 1100 H
- Parts: folded and welded steel plate (3mm) with internal reinforcement (up to 12mm), an access door, a removeable cover and a base plate (6mm)
- Removable cover runs diagonally upwards to the center
- · Pivot points are mointed with bearings and tension ring mounts

#### Barrier arm

- Round aluminium tube (Ø 90mm) with a plug at both ends or oval barrier arm (175 x 100mm)
- Red reflective strips (330 x 90 mm) are applied to both sides
- Balanced by a wear-resistant compression spring (> 3.000.000 movements)
- 3 types:
  - Type R = right-hand mounted barrier arm
  - Type L = left-hand mounted barrier arm
  - Type C = centrally mounted barrier arm
- Secured by 4 (R, L) or 3 (C) stainless steel bolts which makes the barrier arm easy to replace

#### Finishing

- Surface treatment: blasted and metallized
- · Finished off with a thermo-hardened polyester coating

#### Opening

- Type S (fast): 4,2 sec (max. barrier arm length = 4000mm)
- Type N (normal): 6,9 sec (max. barrier arm length = 6000mm)
- Type T (slow): 8,2 sec (max. barrier arm length = 10000mm)

#### Safety

Emergency release accessible through the access door at the front of the barrier box. When the door is opened, a circuit breaker prevents the barrier from opening automatically. The barrier can be opened manually using the emergency crank (found on the connecting rod).

# Emergency crank (optional)

When the emergency crank is used, the current is automatically interrupted by a limit switch that is in contact with the motor gearbox. To use the emergency crank, swivel the cover on the right side of the barrier box.

#### Mechanism

#### Drive

Single bearing intermediate shaft (45mm) is driven by a single-phase gear motor using a crankshaft-connecting rod mechanism to the single bearing output shaft (45mm). This mechanism ensures a fluent movement when opening or closing and is locked in both end positions.

#### Durability

Slip action clutch in the gear unit ensures a safe ratio between the torque exerted and the torque required. By combining the favourable power factor (1,2) and this clutch, the gear unit is maintenance-free.

# Control system

Built-in FEIG WU-A-BOR frequency drive microcontroller is suitable for a wide range of applications (such as 3-push button, switch pulse, start with automatic closing, loop start,...) and is supplied with a magnetic motor safe-ty switch. This control system prevents slipping in the slip-action clutch, which makes it maintenance-free.

Microcontroller can be connected to and managed by other home management or domotic systems with additional communication software.

# Operating temperature

The MCS58 has an operating temperature of -5°C to 50°C. With the optional heating mat, the operating temperature increases to -30°C to 50°C.



# Technical information en accessories



1	Door switch	
2	Upper shaft	
3	Control + motor capacitor	FEIG-WU-A-BOR
	Power supply	230 VAC
	Frequency	50 Hz
	Power usage	30 Watt
4	Motor gearbox with interna	l slip clutch
	Pwer supply	230 VAC
	Frequency	50 Hz
	Power usage	370 Watt
	Cosinus Phi	0.94
5	Connecting rod	
6	Terminal strip	
7	Balance spring	Max. 2
8	Limit switches	
9	Bottom shaft	
10	Simplex chain	

Position of the barrier arm







Dimensions barrier box	450 x 440 x 1100mm (WxDxH)
Parts barrier box	Folded and welded steel plate (3mm) with
	internal reinforcement up to 12mm, access door,
	removable lid, base plate (6mm)
Ø boom barrier arm	90mm
Opening speed	*without options
Type F	4,2 sec (max. barrier arm length= 4000mm)
Type N	6,9 sec (max. barrier arm length= 6000mm)
Type S	8,2 sec (max. barrier arm length= 10000mm)
Control	Relay control
Operating temperature	-5°C to 50°C
Options	
Frequency control	
Emergency crank	
Potential-free contact of the limi	it switches in the clamming strip
Maritime coating	
Stainless steel	
Bottom skirt	To 7000mm
(opening speed type S)	
Top and bottom skirt	To 6000mm
opening speed type S)	



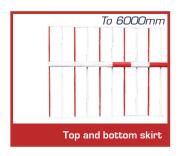
## Accessories - barrier arm

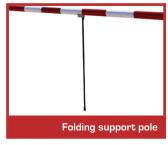




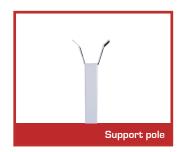








Accessories - general



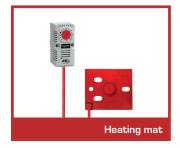










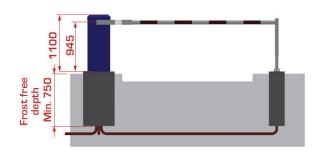




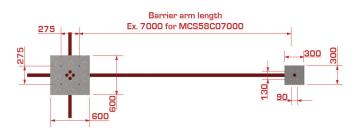


# **Technical drawings**

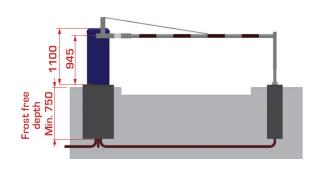
## MCS58 - central mounted barrier arm

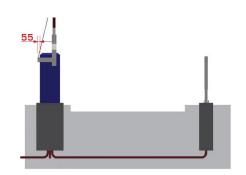




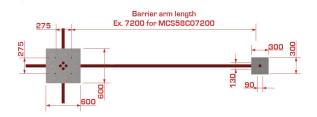


## MCS58 - with tension cables on top





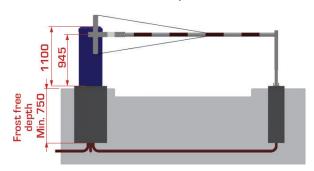


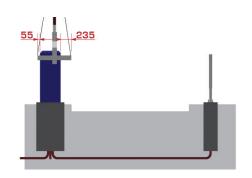




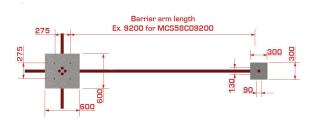


MCS58 - with tension cables on top and below

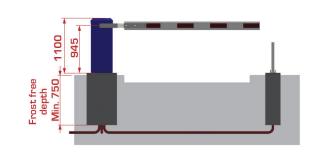




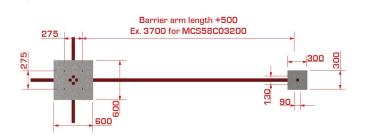




MCS58 - oval arm (175 x 100mm)

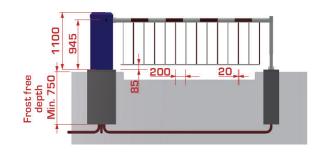




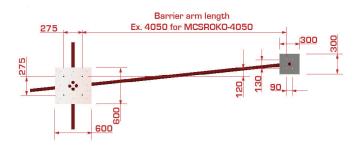




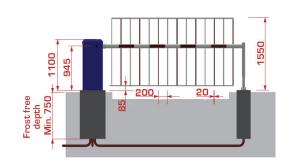
# MCS58 - with bottom skirt



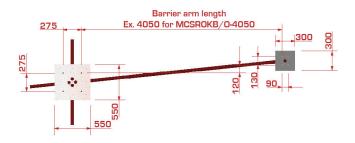




# MCS58 - with top and bottom skirt





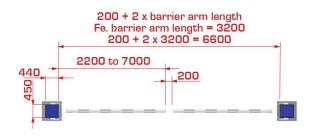


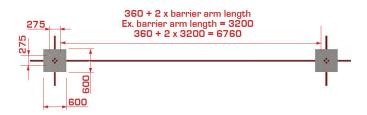




# MCS58 - Master/slave









# MCS58 - Springs

		2200	2250	2450	2650	2850	3050	3200	3250	3450	3650
MCS58 central Ø90  MCS58 bottom skirt  MCS58 top and bottom skirt		VEER 19x38 MCS58 type 2						VEER 25x51 MCS58 type 3			
			VEER 25x51	VEER 25x51	VEER 38x63	VEER 38x63	VEER 38x63 MCS58 type 4 VEER 38x63 MCS58 type 4		VEER 38x63 MCS58 type 4 VEER 2x38x63 MCS58 type 6	VEER 38x63 MCS58 type 4 VEER 2x38x63 MCS58 type 6	VEER 2x38x63 MCS58 type 6 VEER 2x38x63 MCS58 type 6
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5850	6050	6200	6250	6450	6650	6750	6850	7050	7200	8200	9200
		VEER 2x38x63 MCS58 type 6							VEER 2x38x63 MCS58 type 6 VEER 25x51 MCS58 type 3"	VEER 2x38x63 MCS58 type 6 VEER 38x63 MCS58 type 4"	VEER 2x38x63 MCS58 type 6 VEER 2x38x63 MCS58 type 6"
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type 6"	type 7"					type 7"			type 7"		

VEER
2x38x63
MCS58
type 6
VEER
2x38x63
R MCS58





- Barrier resistant to freezing weather, strong winds and other extreme weather conditions
- Without slip clutch
- No tension cables required
- More powerful motor with duplex chain
- Mechanically loadable weight: 10kg at end of barrier arm in closed position\*
- Reinforced barrier arm holder
- Opening speed: 10 sec.

#### **Parts**

# Barrier box

- Dimension: 450 W x 440 D x 1100 H
- Parts: folded and welded steel plate (3mm) with internal reinforcement (up to 12mm), an access door, a removeable cover and a base plate (6mm)
- Removable cover runs diagonally upwards to the center
- Pivot points are mointed with bearings and tension ring mounts

#### Barrier arm

- Round aluminium tube [120  $\emptyset$ ] with a plug at both ends up to 7500 mm
- Round aluminum tube (variable  $\emptyset$ ) with a cover cap at both ends from 7600mm to 8500mm
- Red reflective strips (330 x 90 mm) are applied to both sides
- Balanced by a wear-resistant compression spring (> 3.000.000 movements)
- 1 type:
  - Type C = centrally mounted barrier arm
- Secured by 9 stainless steel bolts which makes the barrier arm easy to replace for extra stability

#### Finishing

- Surface treatment: blasted and metallized
- · Finished off with a thermo-hardened polyester coating

#### Opening

• Type N (normal): 10 sec (min. 8,5 - max. 12 sec)

# Safety

Emergency release accessible via access door in front of column. When the door is opened, the safety interrupter prevents that the barrier moves automatically.

## Emergency crank (optional)

When the emergency crank is used, the current is automatically interrupted by a limit switch that is in contact with the motor gearbox. To use the emergency crank, swivel the cover on the right side of the barrier box.

#### Mechanism

#### Drive

Single bearing intermediate shaft (45mm) is driven by a singlephase gear motor using a crankshaft-connecting rod mechanism to the single bearing output shaft (35mm). This mechanism ensures a fluent movement when opening or closing and is locked in both end positions.

#### Durability

Slip action clutch in the gear unit ensures a safe ratio between the torque exerted and the torque required. By combining the favourable power factor (1,2) and this clutch, the gear unit is maintenance-free.

#### Control system

The built-in microcontroller is suitable for various applications (such as 3-push button, change pulse, start with automatic reclosing, loop start, ...) and is provided with a magnetic motor protection switch. This control prevents prolonged slipping and ensures a long service life of the motor. The microcontroller can be connected to other building management or home automation systems with associated software.

#### Operating temperature

The MCS58 Heavy duty has an operating temperature of -5°C to 50°C. **Optional:** The thermometer of the heating mat is set to maintain a temperature of >0°C. As a result the temperature of the engine and oil always above freezing. The operating temperature is -30°C to 50°C.

#### Operation without slip clutch

The MCS-Heavy duty range was designed without a slipping clutch to maintain a constant opening and closing speed under high bending stress in open or closed position (e.g. during heavy snowfall, buildup of frost on the barrier arm, strong winds, gusts or sudden change of wind direction).

The MCS-Heavy duty range can be equipped with a slip clutch if desired.



# Technical information and accessories



1	Reinforced boom barrier holder	
2	Door switch	
3	Upper shaft	
4	Control + motor capacitor	FEIG-WU-A-BOR
	Power supply	3F 230 VAC/400VAC
	Frequency	50 Hz
	Power usage	30 Watt
5	Motor gearbox without slip clutch	
	Power supply	230 VAC
	Frequency	50 Hz
	Power usage	550 Watt
	Cosinus Phi	0.94
6	Connecting rod	
7	Terminal strip	
8	Balance spring	Max. 2
9	Heating mat	Optional
10	Limit switches	<u> </u>
11	Bottom shaft	
12	Duplex chain	

Position of the barrier arm



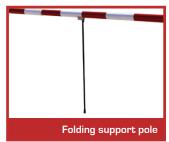
Dimensions barrier box	450 x 440 x 1100mm (WxDxH)			
Parts barrier box	Folded and welded steel plate (3mm) with internal			
	reinforcement (12mm), access door, removable lid, base			
	plate (6mm)			
Ø boom barrier arm				
Up to 7500 mm	Ø 120			
From 7600 mm to 8500 mm	Variable			
Opening speed	10 sec (min. 8,5 sec - max. 12 sec)			
Control	Relay control			
Operating temperature	-5°C to 50°C			
Options				
Frequency control				
Potential-free contact of the limit switches in the clamming strip				
Maritime coating				
Stainless steel				



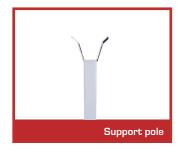


## Accessories - barrier arm





Accessories - general













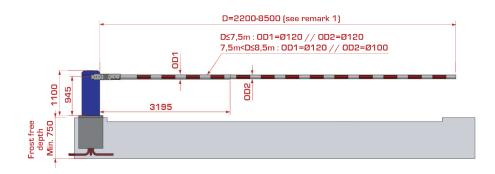




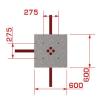


# **Technical drawings**

## MCS58 - Heavy duty







Dimensions boom barrier arm					
OD1	OD2	Remarks			
Ø 120x5	-	Note 1			
Ø 120x5	-				
Ø 120x10	Ø 100x3				
	<b>OD1</b> Ø 120x5 Ø 120x5	OD1     OD2       Ø 120x5     -       Ø 120x5     -			

# Notes:

<sup>1.</sup> When choosing a barrier arm with a mechanical loadable weight of 10kg at the end of the barrier arm, dimension "D" is limited to 6000mm.

<sup>2.</sup> The maximum deflection of the barrier arm is 1%.



Your safe partner in access

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