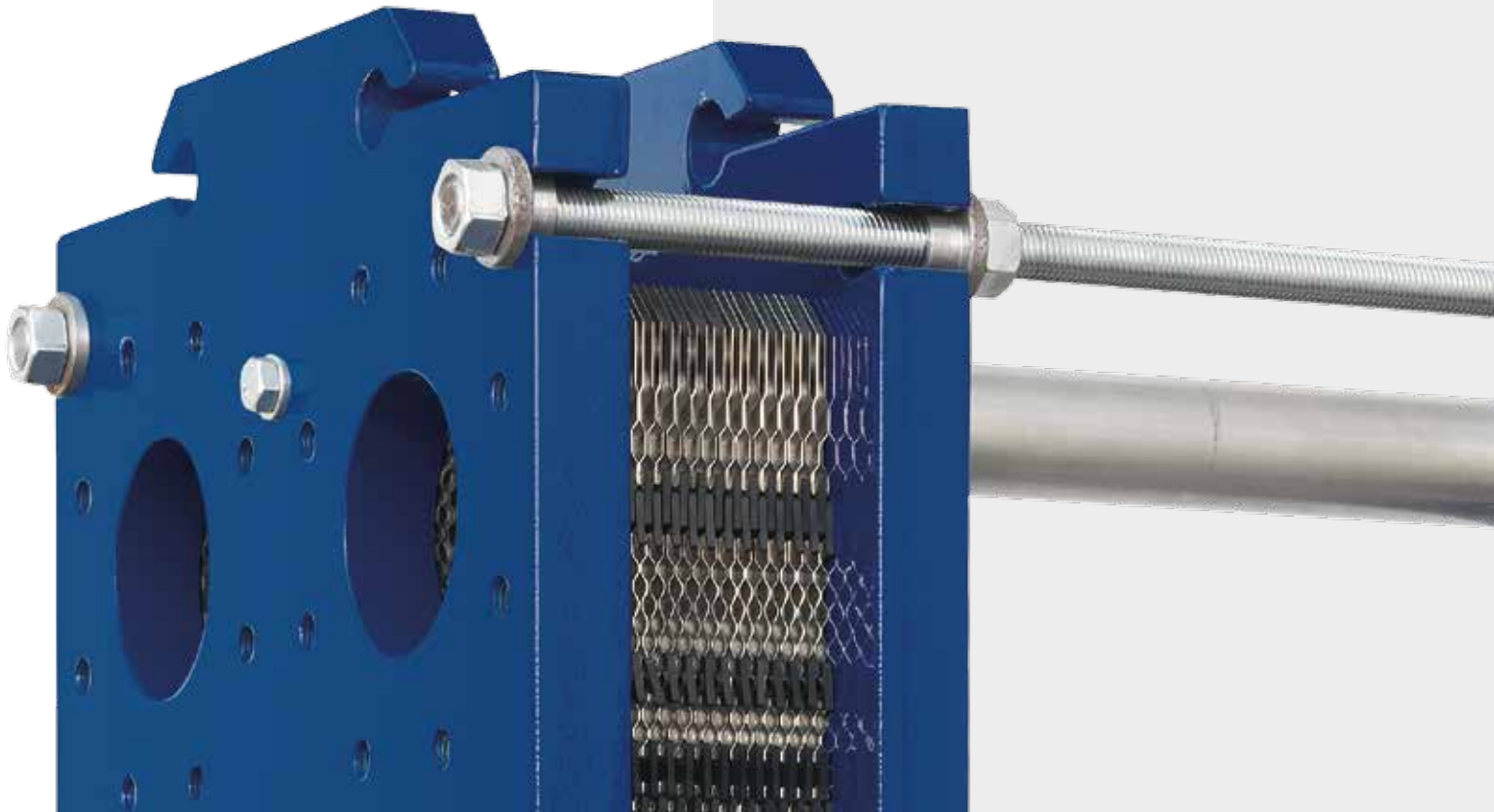




# ADVANCED HEAT EXCHANGERS

PLATE & FRAME



## Scambiatori di calore a piastre ispezionabili

Onda, specialista di diverse tipologie di scambiatori di calore di qualità, propone una gamma di scambiatori di calore ispezionabili. Disponibile in diversi modelli e dimensioni, gli scambiatori di calore ispezionabili Onda offrono soluzioni a quesiti di scambio termico in una varietà innumerevole di applicazioni in tutti i settori civili (HVAC) ed industriali (di processo, navale, chimico, petrolchimico) nonché la cogenerazione ed il teleriscaldamento/raffreddamento.

### Descrizione:

Le piastre sono disponibili con due diversi corrugazioni, sia in H (alta resa) sia in L (bassa resa), permettendo, attraverso la combinazione delle due corrugazioni, la perfetta ottimizzazione delle perdite di carico. Le guarnizioni sono state progettate con il sistema Easyfix al fine di facilitare il fissaggio degli stessi alle piastre garantendo una perfetta tenuta.

### Certificazioni:

ISO 9001 Vision 2000  
P.E.D. (European pressure Directive 97/23 CE)  
ASME (su richiesta)

### Materiali:

Telaio: Acciaio al carbonio verniciato  
Piastrre: AISI 316L / TITANIO / AISI 304L  
Guarnizioni: NBR (100°C max) / EPDM (120°C max) / HNBR  
EPDM H HT  
Connessioni: AISI 316 / PVC

### Optional:

Coibentazioni disponibili su richiesta  
Involucro in lamiera stampata in acciaio inox Aisi 304 o alluminio  
Materiale isolante Armaflex spessore 16mm  
Staffe di fissaggio

## Gasketed Plate heat exchangers

As a specialist of various kinds of heat exchangers, Onda offers a range of gasketed plate heat exchangers.

The gasketed Plate heat exchangers are available in various models and dimensions and always offer the best solution to a great variety of heat exchange applications coming from both the HVAC and the industry such as the powerindustry, marine, chemical, heavy industry etc., as well as cogeneration and district heating-and cooling applications.

### Description:

The plates are available in two different designs, both in H (high efficiency) and L (low efficiency), enabling pressure drop optimization through the combination of both plates. The gaskets have been designed with the Easyfix system in order to enable an easy fastening of the gaskets to the plates and guarantee perfect leak-tightness.

### Certifications:

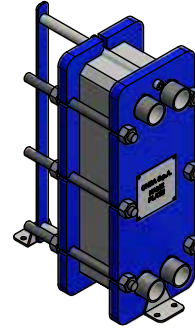
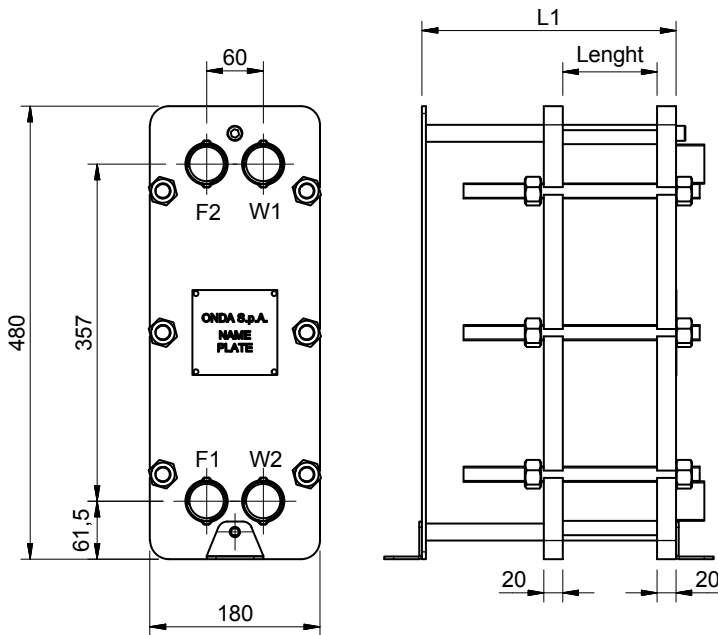
ISO 9001 Vision 2000  
P.E.D. (European pressure Directive 97/23 CE)  
ASME (on request)

### Materials:

Frame: Carbon steel, painted  
Plates: AISI 316L / TITANIUM / AISI 304L  
Gaskets: NBR (100°C max) / EPDM (120°C max) / HNBR  
HPDM H HT  
Tightening bolts: galvanized steel  
Connections: AISI 304 / AISI 316 / PVC / POM-C

### Optional:

Insulations available on request  
Casing in formed Stainless Steel AISI 304 or Aluminium  
Internal insulating material Armaflex thickness 16mm  
Mounting feet



L1							
N° plate	0-25	26-50	51-75	76-100	101-150	151-200	201-250
GG003 (2,90)	250	330	500	500	NO	NO	NO

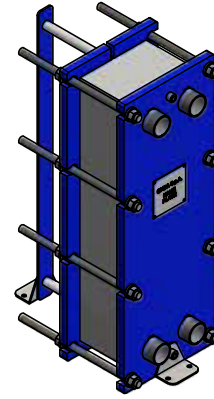
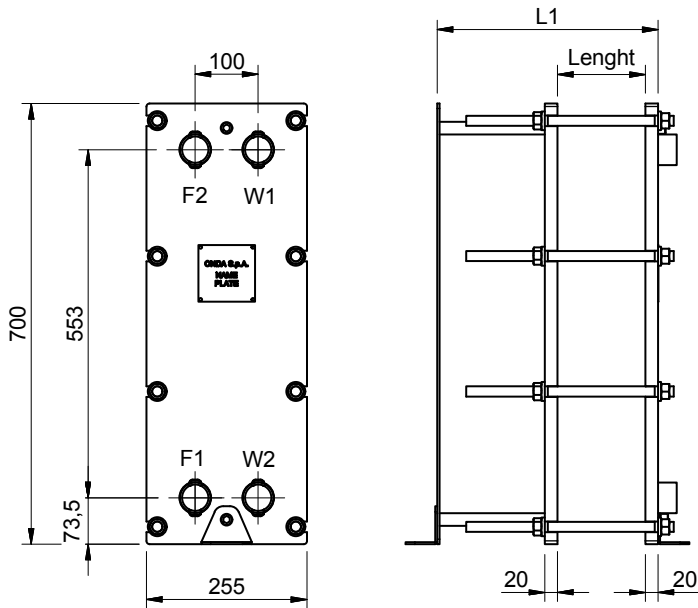
SPECIFICATIONS	GG003 PN10	GG003 PN16
PRESSURE RANGE (bar)	10	16
TEMPERATURE RANGE (°C) NBR	-10°C to +100°C	-10°C to +100°C
TEMPERATURE RANGE (°C) EPDM	-10°C to +120°C	-10°C to +120°C
MAXIMUM CONNECTIONS AVAILABLE (mm)	Ø 34mm	Ø 34mm
MAXIMUM FLOW RATE (m³/h)	18	18
VOLUME / CHANNEL (liters)	0,08	0,08
DIMENSIONS (mm)	180x480	180x480
LENGHT CALCULATION (mm)	N x 2,9	N x 2,9
WEIGHT CALCULATION (kg)	N x 0,2 + 31	N x 0,2 + 31

CONNECTIONS TYPE	
DN32	
1" 1/4 GAS	1" 1/4 NPT

- F1 INLET CIRCUIT 1
- F2 OUTLET CIRCUIT 1
- W1 INLET Secondary Fluid
- W2 OUTLET Secondary Fluid

Plate material      AISI 304L / AISI 316L / TITANIUM  
 Plate thickness     0,5mm  
 Gasket material    NBR / EPDM / VITON / HNBR / EPDM H HT  
 Frame material     P265GH CARBON STEEL  
 Frame colour       RAL 5002 SEMIGLOSS FINISHING  
 Tie rod              N° 6 M16 GALVANIZED CLASS 8.8  
 Pressure             PN 10 - PN16  
 Material connections   AISI 304 / AISI 316 / POM-C

# GG005



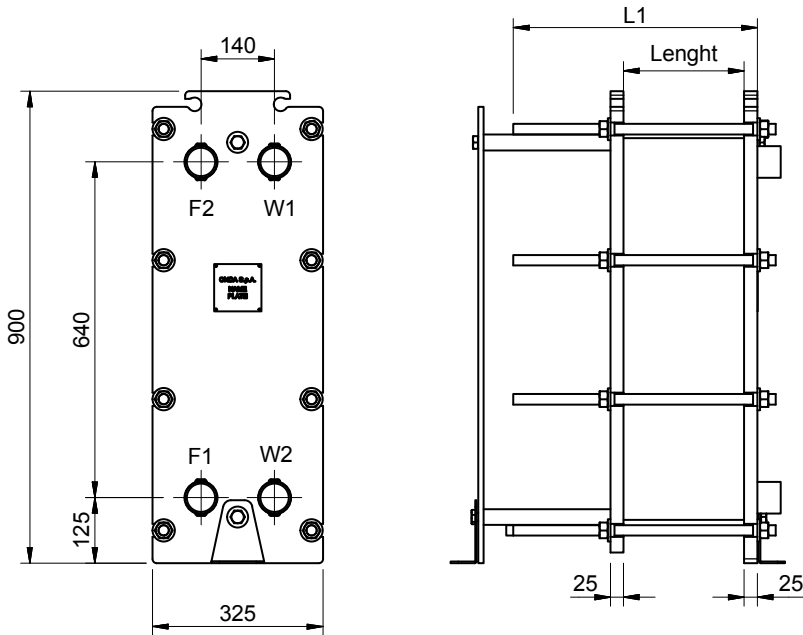
L1							
N° plate	0-25	26-50	51-75	76-100	101-150	151-200	201-250
GG005 (3,4)	250	330	500	500	NO	NO	NO

SPECIFICATIONS	GG005 PN10	GG005 PN16
PRESSURE RANGE (bar)	10	16
TEMPERATURE RANGE (°C) NBR	-10°C to +100°C	-10°C to +100°C
TEMPERATURE RANGE (°C) EPDM	-10°C to +120°C	-10°C to +120°C
MAXIMUM CONNECTIONS AVAILABLE (mm)	Ø 40mm	Ø 40mm
MAXIMUM FLOW RATE (m³/h)	24	24
VOLUME / CHANNEL (liters)	0,24	0,24
DIMENSIONS (mm)	255x700	255x700
LENGHT CALCULATION (mm)	N x 3,4	N x 3,4
WEIGHT CALCULATION (kg)	N x 0,5 + 62	N x 0,5 + 62

CONNECTIONS TYPE	
DN40	
1" 1/2 GAS	1" 1/2 NPT

F1 INLET CIRCUIT 1  
 F2 OUTLET CIRCUIT 1  
 W1 INLET Secondary Fluid  
 W2 OUTLET Secondary Fluid

Plate material AISI 304L / AISI 316L / TITANIUM  
 Spessore plate 0,5mm  
 Gasket material NBR / EPDM / VITON / HNBR / EPDM H HT  
 Frame material P265GH CARBON STEEL  
 Frame colour RAL 5002 SEMIGLOSS FINISHING  
 Tie rod N° 8 M16 GALVANIZED CLASS 8.8  
 Pressure PN 10 - PN16  
 Material connections AISI 304 / AISI 316 / POM-C



L1							
N° plate	0-25	26-50	51-75	76-100	101-150	151-200	201-250
GG006 (3,5)	250	330	500	750	1000	NO	NO

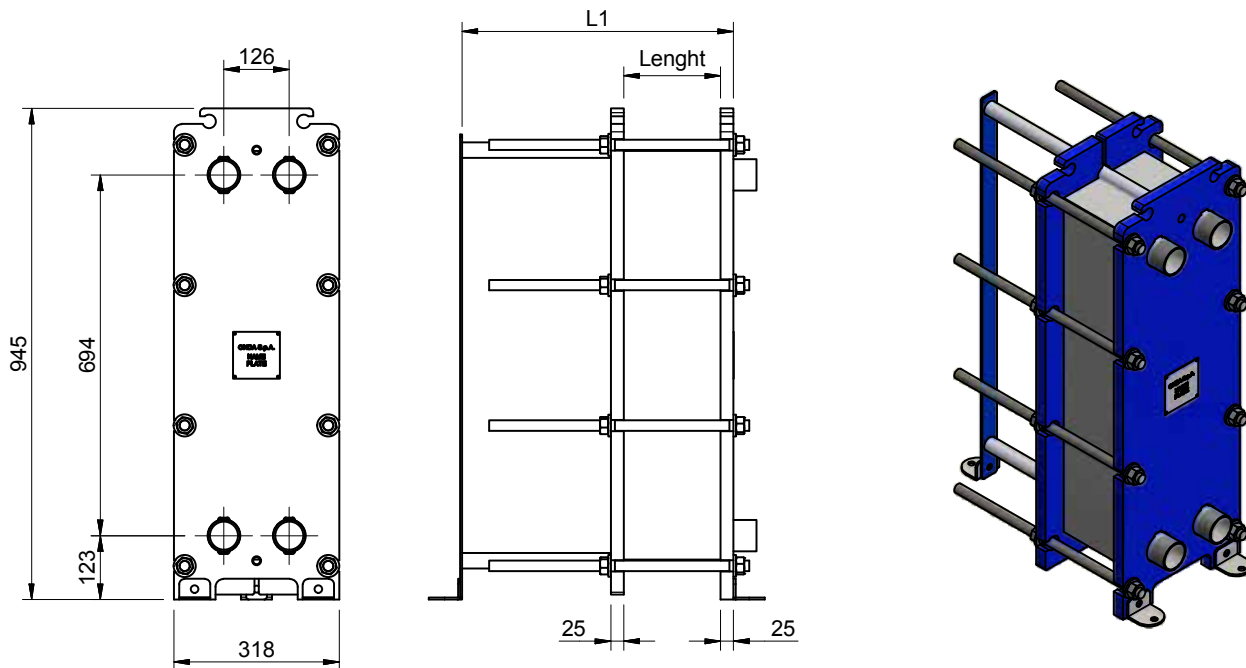
SPECIFICATIONS	GG006 PN10	GG006 PN16
PRESSURE RANGE (bar)	10	16
TEMPERATURE RANGE (°C) NBR	-10°C to +100°C	-10°C to +100°C
TEMPERATURE RANGE (°C) EPDM	-10°C to +120°C	-10°C to +120°C
MAXIMUM CONNECTIONS AVAILABLE (mm)	Ø 58mm	Ø 58mm
MAXIMUM FLOW RATE (m³/h)	52	52
VOLUME / CHANNEL (liters)	0,42	0,42
DIMENSIONS (mm)	325x900	325x900
LENGHT CALCULATION (mm)	N x 3,5	N x 3,5
WEIGHT CALCULATION (kg)	N x 0,7 + 125	N x 0,7 + 125

CONNECTIONS TYPE	
DN50	
2" GAS	2" NPT

**F1** INLET CIRCUIT 1  
**F2** OUTLET CIRCUIT 1  
**W1** INLET Secondary Fluid  
**W2** OUTLET Secondary Fluid

Plate material      AISI 304L / AISI 316L / TITANIUM  
 Plate thickness      0,5mm  
 Gasket material      NBR / EPDM / VITON / HNBR / EPDM H HT  
 Frame material      P265GH CARBON STEEL  
 Frame colour      RAL 5002 SEMIGLOSS FINISHING  
 Tie rod      N° 8 M20 GALVANIZED CLASS 8.8  
 Pressure      PN 10 - PN16  
 Material connections      AISI 304 / AISI 316 / POM-C

# GG007



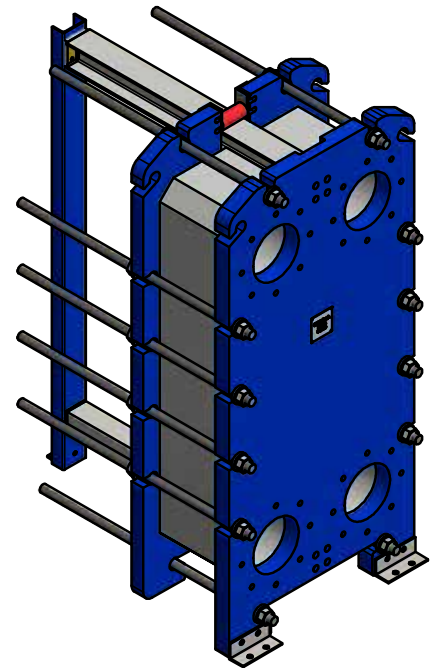
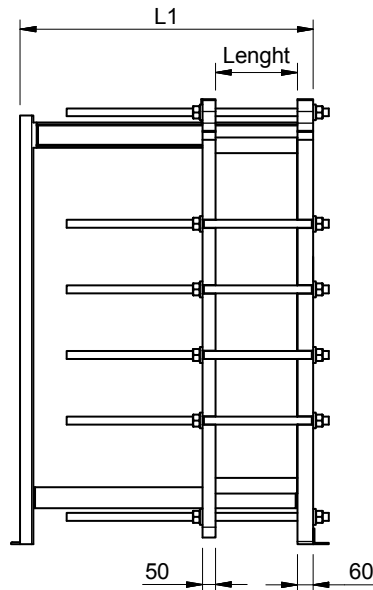
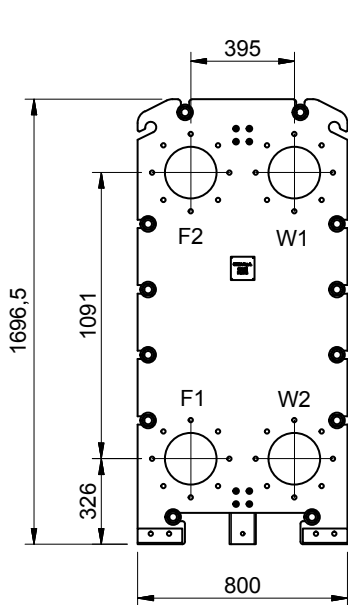
L1							
N° plate	0-25	26-50	51-75	76-100	101-150	151-200	201-250
GG007 (3,0)	250	330	500	750	750	NO	NO

SPECIFICATIONS	GG007 PN10	GG007 PN16
PRESSURE RANGE (bar)	10	16
TEMPERATURE RANGE (°C) NBR	-10°C to +100°C	-10°C to +100°C
TEMPERATURE RANGE (°C) EPDM	-10°C to +120°C	-10°C to +120°C
MAXIMUM CONNECTIONS AVAILABLE (mm)	Ø 58mm	Ø 58mm
MAXIMUM FLOW RATE (m³/h)	52	52
VOLUME / CHANNEL (liters)	0,42	0,42
DIMENSIONS (mm)	318x945	318x945
LENGHT CALCULATION (mm)	N x 3	N x 3
WEIGHT CALCULATION (kg)	N x 0,75 + 132	N x 0,75 + 132

CONNECTIONS TYPE	
DN50	
2" GAS	2" NPT

F1 INLET CIRCUIT 1  
 F2 OUTLET CIRCUIT 1  
 W1 INLET Secondary Fluid  
 W2 OUTLET Secondary Fluid

Plate material AISI 304L / AISI 316L / TITANIUM  
 Plate thickness 0,5mm  
 Gasket material NBR / EPDM / VITON / HNBR / EPDM H HT  
 Frame material P265GH CARBON STEEL  
 Frame colour RAL 5002 SEMIGLOSS FINISHING  
 Tie rod N° 8 M20 GALVANIZED CLASS 8.8  
 Pressure PN 10 - PN16  
 Material connections AISI 304 / AISI 316 / POM-C



### L1

N° plate	0-25	26-50	51-75	76-100	101-150	151-200	201-250	250-300	301-350	351-400	401-450
GT022 (3,1)	1000	1000	1000	1000	1000	1500	1500	1500	2000	3000	3000

SPECIFICATIONS	GT021 PN10	GT021 PN16
PRESSURE RANGE (bar)	10	16
TEMPERATURE RANGE (°C) NBR	-10°C to +100°C	-10°C to +100°C
TEMPERATURE RANGE (°C) EPDM	-10°C to +120°C	-10°C to +120°C
MAXIMUM CONNECTIONS AVAILABLE (mm)	Ø 200mm	Ø 200mm
MAXIMUM FLOW RATE (m³/h)	600	600
VOLUME / CHANNEL (liters)	1,68	1,68
DIMENSIONS (mm)	800x1696	800x1696
LENGHT CALCULATION (mm)	N x 3,15	N x 3,15
WEIGHT CALCULATION (kg)	N x 3,15 + 1120	N x 3,15 + 1120

CONNECTIONS TYPE
DN200
8"

- F1 INLET CIRCUIT 1
- F2 OUTLET CIRCUIT 1
- W1 INLET Secondary Fluid
- W2 OUTLET Secondary Fluid

Plate material	AISI 304L / AISI 316L / TITANIUM
Plate thickness	0,5mm
Gasket material	NBR / EPDM / VITON / HNBR / EPDM H HT
Frame material	P265GH CARBON STEEL
Frame colour	RAL 5002 SEMIGLOSS FINISHING
Tie rod	N° 12 M30 GALVANIZED CLASS 8.8
Pressure	PN 10 - PN16
Connections	FLANGES