



### GWSFA-4 Standard Duty Four-way Spider Fitting

*The spider's arms are designed to support a maximum loading and allow flexibility to reduce the stress on glass panel. Suitable for structures such as steel trusses, beams, columns. Can also be fixed on concrete using steel brackets.*

**Specifications:**

	@ARM	Whole Fig	Arm. Deflection
Positive Wind Load	1.25 kN	5 kN	0.00 mm
Negative Wind Load	1.25 kN	5 kN	0.04 mm
Dead Load	1.25 kN	5 kN	0.10 mm

Material: SUS316 (CF8M) with tensile strength: 590Mpa

Element Composition according to ASTM

0.08max	1.50max	1.50max	0.04max	.04max	9~12	18~21	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

Original testing reports available upon owner's request.

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)



### GWSFA-2 Standard Duty Two-way Spider Fitting

*The spider's arms are designed to support a maximum loading and allow flexibility to reduce the stress on glass panels. Suitable for structures such as steel trusses, beams, columns. Can also be fixed on concrete using steel brackets.*

**Specifications:**

	@ARM	Whole Fig	Arm. Deflection
Positive Wind Load	2 kN	4 kN	0.015 mm
Negative Wind Load	2 kN	4 kN	0.03 mm
Dead Load	1.25 kN	2.5 kN	0.10 mm

Material: SUS316 (CF8M) with tensile strength: 590Mpa

Element Composition according to ASTM

0.08max	1.50max	1.50max	0.04max	.04max	9~12	18~21	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

Original testing reports available upon owner's request.

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### GWSFA-3 Standard Duty Three-way Spider Fitting

*The spider's arms are designed to support a maximum loading and allow flexibility to reduce the stress on glass panels. Suitable for structures such as steel trusses, beams, columns. Can also be fixed on concrete using steel brackets.*

**Specifications:**

Material: SUS316 (CF8M) with tensile strength: 590Mpa

Element Composition according to ASTM

0.08max	1.50max	1.50max	0.04max	.04max	9~12	18~21	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)



### GWSFA-2/1 Standard Duty One-way Spider Fitting

Pitch: 141.5mm

*The spider's arms are designed to support a maximum loading and allow flexibility to reduce the stress on glass panels. Suitable for structures such as steel trusses, beams, columns. Can also be fixed on concrete using steel brackets.*

**Specifications:**

Material: SUS316 (CF8M) with tensile strength: 590Mpa

Element Composition according to ASTM

0.08max	1.50max	1.50max	0.04max	.04max	9~12	18~21	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

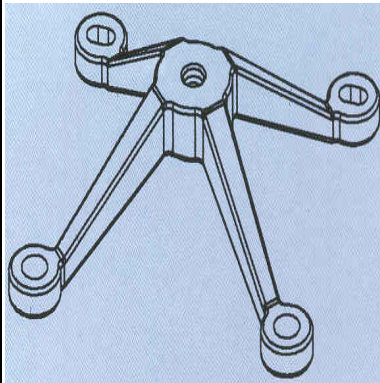
### GWSFA-1 Standard Duty One-way Spider Fitting

Pitch: 100 mm

(Specification is similar to GWSFA-2/1)

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)

## GWSFMA-4 Heavy Duty Four-way Spider Fitting



*Robust arms are designed to support large glass panels and high wind-load. Suitable for structures such as steel trusses, beams, columns. Can also be fixed on concrete using steel brackets.*

### Specifications:

	@ARM	Whole Fig	Arm. Deflection
Positive Wind Load	4.5 kN	18 kN	0.027 mm
Negative Wind Load	4.4 kN	18 kN	0.03 mm
Dead Load	4.0 kN	16 kN	4.51 mm

Material: SUS316 (CF8M) with tensile strength: 590Mpa

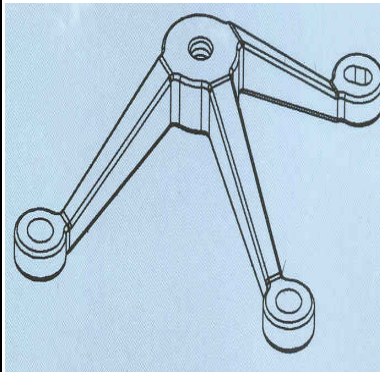
Element Composition according to ASTM

0.08max	1.50max	1.50max	0.04max	.04max	9~12	18~21	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

Original testing reports available upon owner's request.

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)

## GWSFMA-3 Heavy Duty Three-way Spider Fitting



*Robust arms are designed to support large glass panels and high wind-load. Suitable for structures such as steel trusses, beams, columns. Can also be fixed on concrete using steel brackets.*

### Specifications:

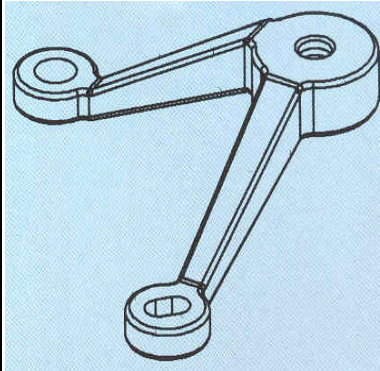
Material: SUS316 (CF8M) with tensile strength: 590Mpa

Element Composition according to ASTM

0.08max	1.50max	1.50max	0.04max	.04max	9~12	18~21	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)

## GWSFMA-4/2/90 Heavy Duty Two-way 90° Spider Fitting



*Robust arms are designed to support large glass panels and high wind-load. Suitable for structures such as steel trusses, beams, columns. Can also be fixed on concrete using steel brackets.*

### Specifications:

Material: SUS316 (CF8M) with tensile strength: 590Mpa

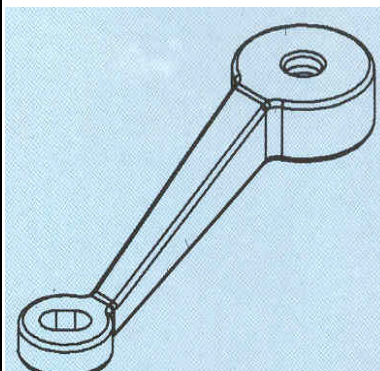
Element Composition according to ASTM

0.08max	1.50max	1.50max	0.04max	.04max	9~12	18~21	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)

## GWSFMA-2/1 Heavy Duty One-way Spider Fitting

Pitch: 141.5 mm



*Robust arms are designed to support large glass panels and high wind-load. Suitable for structures such as steel trusses, beams, columns. Can also be fixed on concrete using steel brackets.*

### Specifications:

Material: SUS316 (CF8M) with tensile strength: 590Mpa

Element Composition according to ASTM

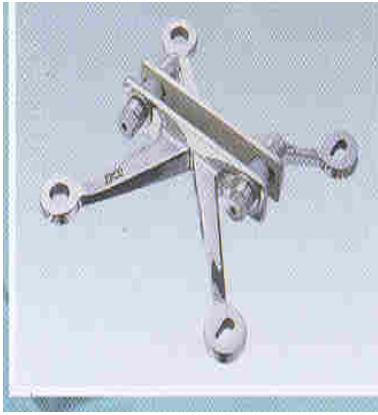
0.08max	1.50max	1.50max	0.04max	.04max	9~12	18~21	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

## GWSFMA-1 Heavy Duty One-way Spider Fitting

Pitch: 100 mm

(Specification is similar to GWSFMA-2/1)

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)



### **GW PFA-4 Heavy Duty Four- way Fin Spider Fitting**

*Suitable for structures using glass or metal fin supports. Can be fixed also to any structure by using steel cleats. Spider arms are designed to take large glass panels and high wind-load.*

**Specifications:**

	<u>@ARM</u>	<u>Whole Fig</u>	<u>Arm. Deflection</u>
Positive Wind Load	3.75 kN	15 kN	0.031 mm
Negative Wind Load	3.75 kN	15 kN	0.62 mm
Dead Load	3.25 kN	13 kN	0.41 mm

Material: SUS316 (CF8M) with tensile strength: 590Mpa

Element Composition according to ASTM

0.08max	1.50max	1.50max	0.04max	.04max	9~12	18~21	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

Original testing reports available upon owner's request.

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### **GW PFA-2 Heavy Duty Two-way Fin Spider Fitting**

*Suitable for structures using glass or metal fin supports. Spider arms are designed to take large glass panels and high wind-load.*

**Specifications:**

	<u>@ARM</u>	<u>Whole Fig</u>	<u>Arm. Deflection</u>
Positive Wind Load	4 kN	8 kN	0.084 mm
Negative Wind Load	4 kN	8 kN	0.17 mm
Dead Load	2.5 kN	5 kN	0.31 mm

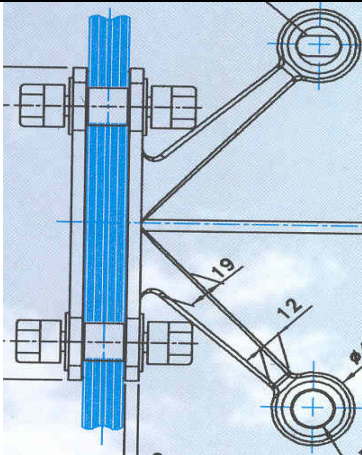
Material: SUS316 (CF8M) with tensile strength: 590Mpa

Element Composition according to ASTM

0.08max	1.50max	1.50max	0.04max	.04max	9~12	18~21	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

Original testing reports available upon owner's request.

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)



### **GW PFA-4/2/90° Heavy Duty Two-way Connection for 90°**

*Suitable for structures with glass or metal fin supports. Can be fixed also to any structure by using steel cleats.*

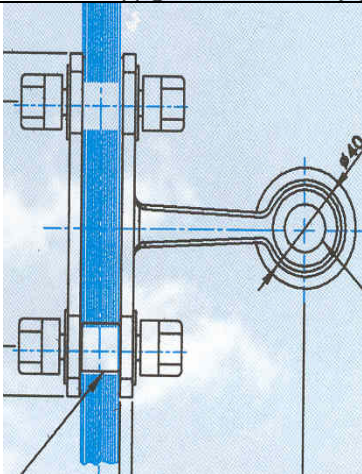
**Specifications:**

Material: SUS316 (CF8M) with tensile strength: 590Mpa

Element Composition according to ASTM

0.08max	1.50max	1.50max	0.04max	.04max	9~12	18~21	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)



### **GW PFA-2/1 Heavy Duty One-way Connection for 90°**

*Suitable for structures with glass or metal fin supports. Can be fixed also to any structure by using steel cleats.*

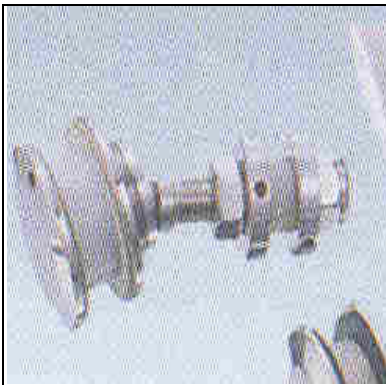
**Specifications:**

Material: SUS316 (CF8M) with tensile strength: 590Mpa

Element Composition according to ASTM

0.08max	1.50max	1.50max	0.04max	.04max	9~12	18~21	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

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### 2.31-M12 Flat Head Articulated Bolt

*Designed for Double Glazed Units with High Wind-load Requirements. For Fixing the Inner Glass Panel Pane of DGU. Also can be used for Single Glazed Units*

#### Specifications:

Swivel Range: 40 Degree, allow the differential movements.

Bolt Dia.M12x Length 65 Flange: 50 mm

Body length: 32 mm designed for 12~15 mm glass.

Glass Hole: 36mm. diameter for single glass

36mm ~ 42mm diameter for laminated glass

Material: SUS316

Max. Negative Wind Load: Max. 45 kN

Dead Load: (L30mm)  $\theta 20$  Deformation Strength: 11 kN

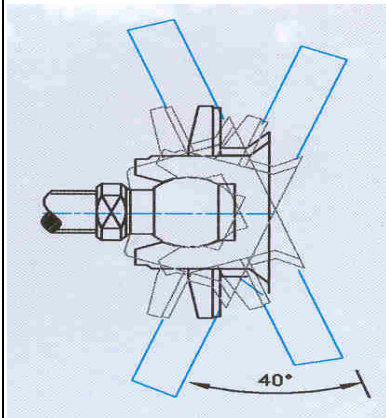
Dead Load: (L52.5mm)  $\theta 20$  Deformation Strength: 4.5 kN

Material: Rod or Bar SUS 316

Element Composition according to AISI

0.08max	1.00max	2.00max	0.04max	.03max	10~14	16~18	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)



### 2.3-M1228-XX Countersunk Head Articulated Bolt

*Designed for Single Glazed Unit – Monolithic or Laminated*

#### Specifications:

Swivel Range: 40 Degree, allow the differential movements.

Bolt Dia. 12x length 65 Locking Flange: 60 mm,

Body length: 28 mm designed for 12~15 mm glass

32 mm for 17~19) mm glass

Glass Hole: (Request for information)

For laminated glass, min. outer layer: 8mm thick. Tempered

Water-proofed for external use

Material: SUS316

Max. Negative Wind Load: 45 kN

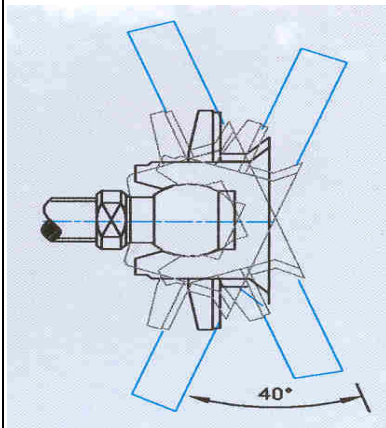
Dead Load: (L30mm)  $\theta 20$  Deformation Strength: 11 kN

Dead Load: (L52.5mm)  $\theta 20$  Deformation Strength: 4.5 kN

Material: Rod or Bar SUS 316

Element Composition according to AISI

0.08max	1.00max	2.00max	0.04max	.03max	10~14	16~18	2~3
C	Si	Mn	P	S	Ni	Cr	Mo



### 2.3-M1445-XX Countersunk Head Articulated Bolt

*Designed for Single Glazed Unit – Monolithic or Laminated*

#### Specifications:

Bolt Dia. 14 x 65

Glass thickness:19~35 mm

Body Length: 45 mm

Swivel Range: 26 degree

Glass Hole: (Request for information)

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)

### 2.3-M1445IGU-XX - Countersunk Head Articulated Bolt

*Designed for Double Glazed Units- Fixing on Both Glass*



Swivel Range: 26 Degree, allow the differential movements.  
 M14 bolt reinforcing for Dead loading.  
 Bolt Dia. 14x length 65 Flange: 60 mm,  
 Body length: 45 mm designed for IGU unit,  
 Glass Hole Diameter: (Request for information)  
 For Laminated Glass, Min. outer glass: 8mm thick. Tempered  
 Cavity Spacer: 12 mm  
 Water-proof for external use  
 Material: Rod or Bar SUS 316

Element Composition according to AISI

0.08max	1.00max	2.00max	0.04max	.03max	10~14	16~18	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

### 2.3-M1460IGU-XX Countersunk Head Articulated Bolt

*Designed for Double Glazed Units- Fixing on Both Glass*

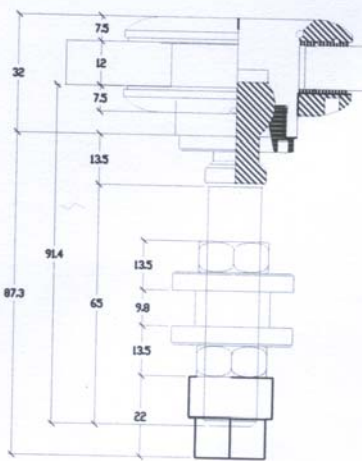
Specifications:

Bolt dia: M14 x Body length: 60 mm  
 Cavity Spacer: 16 mm

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)

### 2.3D-M1432-XX Flat Head Articulated Bolt

*Designed for Single & Double Glazed Units (fixing on one pane)*



Specifications:

Swivel Range: 26 Degree, allow the differential movements.  
 With outside Disc, M14 bolt reinforcing for Dead loading.  
 Bolt Dia. 14x length 65 Locking Flange: 60 mm,  
 Body length: 32 mm designed for 12mm glass  
 Glass Hole Diameter: 36mm  
 Material: Rod or Bar SUS 316

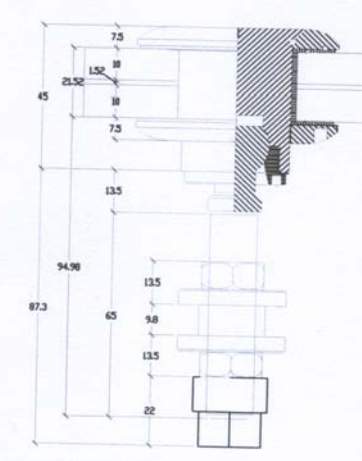
Element Composition according to AISI

0.08max	1.00max	2.00max	0.04max	.03max	10~14	16~18	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)

### 2.3D-M1445-XX Flat Head Articulated Bolt

*Designed for Laminated Glass*



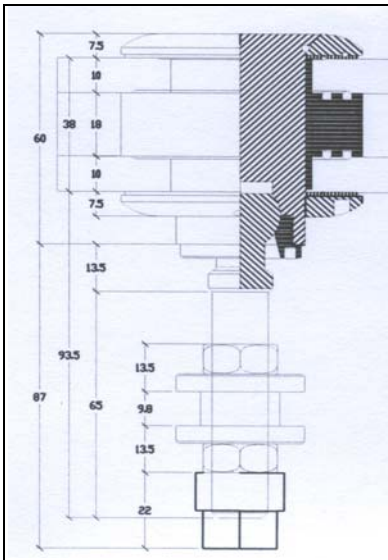
Specifications:

Swivel Range: 26 Degree, allow the differential movements.  
 With outside Disc, M14 bolt reinforcing for Dead loading.  
 Bolt Dia. 14x length 65 Locking Flange: 60 mm,  
 Body length: 45 mm designed for 15mm~26 glass  
 Glass Hole Diameter: 36mm ~ 42mm  
 Suitable for external use  
 Material: Rod or Bar SUS 316

Element Composition according to AISI

0.08max	1.00max	2.00max	0.04max	.03max	10~14	16~18	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)



### 2.3D-M1432-XX Flat Head Articulated Bolt

*For IGU designed for very high-humidity resistance*

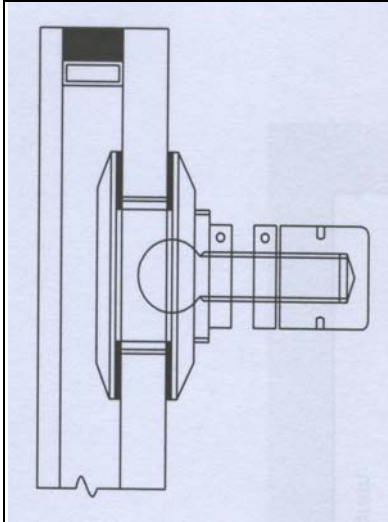
#### Specifications:

Swivel Range: 26 Degree, allow the differential movements.  
 With outside Disc, M14 bolt reinforcing for Dead loading.  
 Bolt Dia. 14x length 65 Locking Flange: 60 mm,  
 Body length: 60 mm designed for IGU units  
 Glass Hole Diameter: 36mm. for glass pane on bearing  
 40mm ~ 42mm on non-bearing glass pane  
 Airspace : 12mm to 18mm; With O-rings seals  
 Material: Rod or Bar SUS 316

Element Composition according to AISI

0.08max	1.00max	2.00max	0.04max	.03max	10~14	16~18	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)



### 2.5-M12 Flat Head Articulated Bolt

*Designed for IGU with thickened inner pane.*

#### Specifications:

Swivel Range: 20 Degree, allow the differential movements.  
 Bolt Dia. M12x Length 50, Flange: 60 mm  
 Body length: 30 mm designed for 12~15 mm internal panel.  
 Glass Hole Diameter: 36mm  
 Material: SUS316  
 Material: Rod or Bar SUS 316

Element Composition according to AISI

0.08max	1.00max	2.00max	0.04max	.03max	10~14	16~18	2~3
C	Si	Mn	P	S	Ni	Cr	Mo

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)



### 2.1 Countersunk Bolt

*Standard Counter-sunk Bolt Assembly for Single Glass – Monolithic or Laminated. Can be used for vertical and sloped glazing, glass balustrades and glass enclosures. Applicable for internal and external applications.*

Material Specifications: SUS316

Code No.	Bolt length	Glass thick
2.1-M1010	M10x45	10mm
2.1-M1012	M10x45	12mm
2.1-M1215	M12x55	15mm
2.1-M1417	M14x60	17~ 21mm

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)



### 2.11 Flat Head Bolt

*Standard Counter-sunk Bolt Assembly for Single Glass – Monolithic or Laminated. Can be used for vertical and sloped glazing, glass balustrades and glass enclosures. Applicable for internal and external applications.*

Material Specifications: SUS316

Code No.	Bolt length	Glass thick
2.11-M1010	M10x50	10mm
2.11-M1012	M12x55	12mm
2.11-M1215	M12x60	15mm
2.11-M1417	M14x65	17~ 21mm

For price send email to: [façade-design@epco-uk.com](mailto:façade-design@epco-uk.com)