

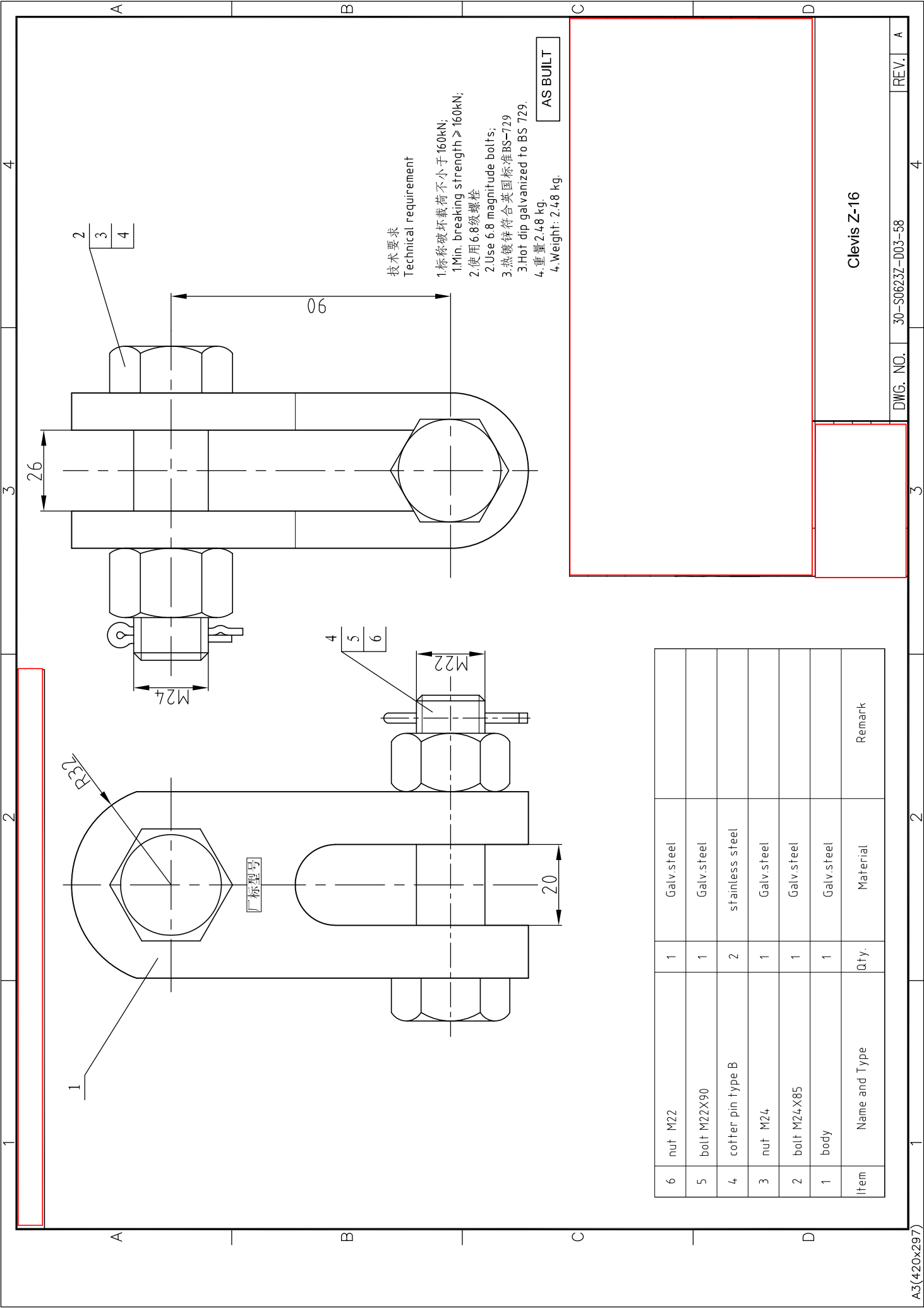
- Notes: 注意:
1. The ball and socket size according to IEC 120/ 16.
 1. 球座及球頭 IEC 120/ 16號。
 2. Hot dip galvanized acc.to BS 729.
 2. 熱鍍鋅鋼 BS 729之規格。
 3. All dimensions are in mm.
 3. 所有尺寸均以毫米。
 4. The total weight is app. 45.37kg.
 4. 總淨重約45.37kg.
 5. The short current capacity is 31.5kA.
 5. 斷路容量31.5kA.
 6. This type set should be installed in the area with creepage of 31mm/kV.
 6. 該型斷路器應安裝在爬距31mm/kV範圍內。

Item 序号	Name 名称	Type 型号	No. 数量	Drawing-no. 图号	Remark 备注
1	Clevis 挂板	Z-16	1	30-S0623Z-D03-58	160 KN
2	Adjust Plate 调整板	DB-12R	1	30-S0623Z-D03-65	120 KN
3	Double straps 平行挂板	P-1214	1	30-S0623Z-D03-66	120 KN
4	Ball Eyes 球头挂环	Q-12P	1	30-S0623Z-D03-51	120 KN
5	Upper arcing horn 上钩压环	ZH-220SX1	1	30-S0623Z-D03-85	----
6	Composite Insulator 合成棒子 F104-220/120SB	Creepage 7595mm	1		120 KN
7	Bottom arcing horn 下钩压环	ZH-220SX2	1	30-S0623Z-D03-86	----
8	Socket Clevis 碗头挂板	W1-12K	1	30-S0623Z-D03-56	120 KN
9	Shackles U型挂环	U-12	1	30-S0623Z-D03-64	120 KN
10	Strain Clamp 耐张线夹	NY-300/50	1	30-S0623Z-D03-79	95% UTS of conductor

AS BUILT

Tension Insulator String (normal)

DWG. NO.	30-S0623Z-D03-02	REV.	D
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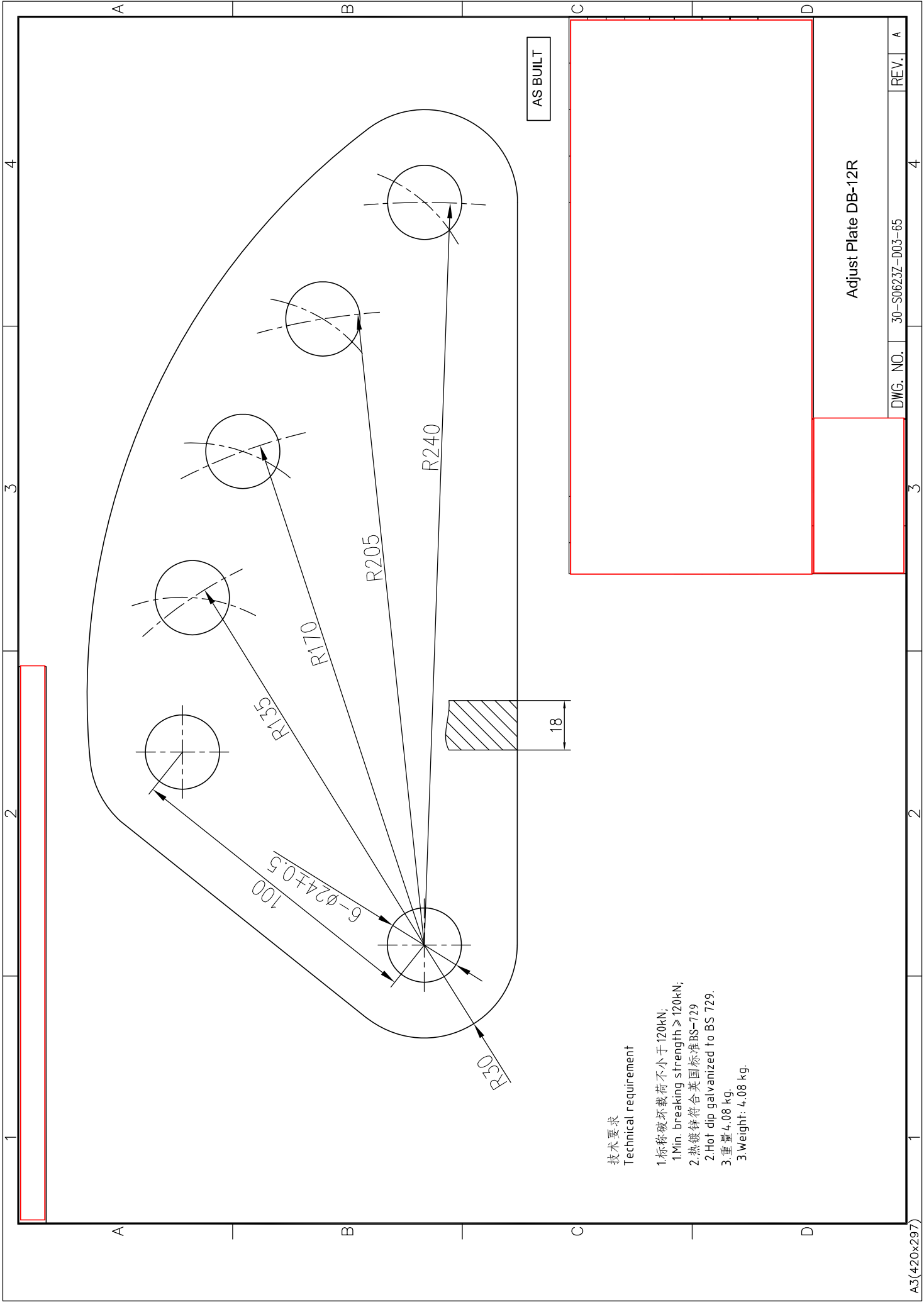


6	nut M22	1	Galv steel		
5	bolt M22X90	1	Galv steel		
4	cotter pin type B	2	stainless steel		
3	nut M24	1	Galv steel		
2	bolt M24X85	1	Galv steel		
1	body	1	Galv steel		
Item	Name and Type	Qty.	Material	Remark	

Clevis Z-16

DWG. NO. 30-S0623Z-D03-58

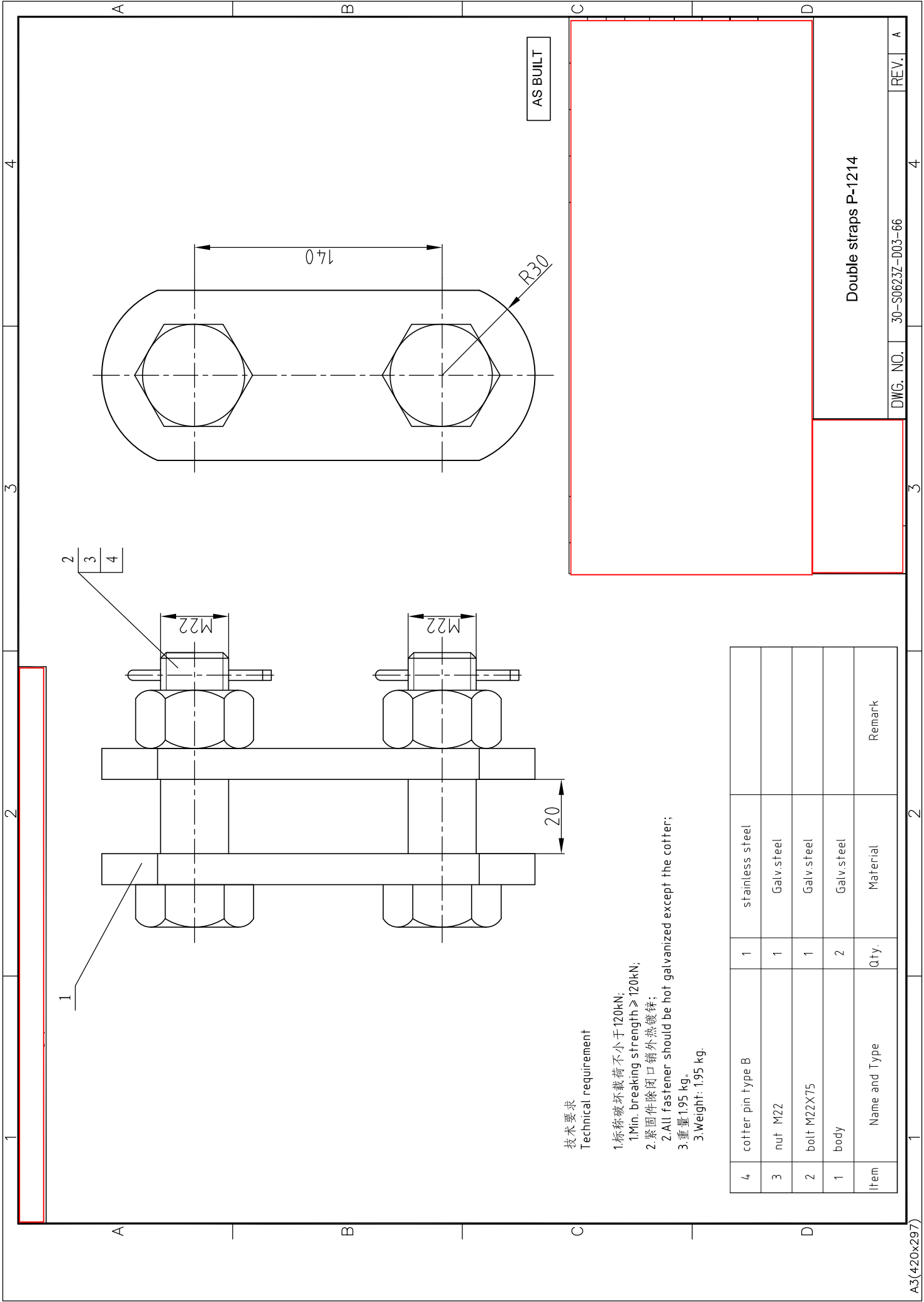
REV. A



技术要求

Technical requirement

1. 标称破坏载荷不小于120kN;
1. Min. breaking strength $\geq 120\text{kN}$;
2. 热镀锌符合英国标准BS-729
2. Hot dip galvanized to BS 729.
3. 重量4.08 kg.
3. Weight: 4.08 kg.



技术要求
Technical requirement

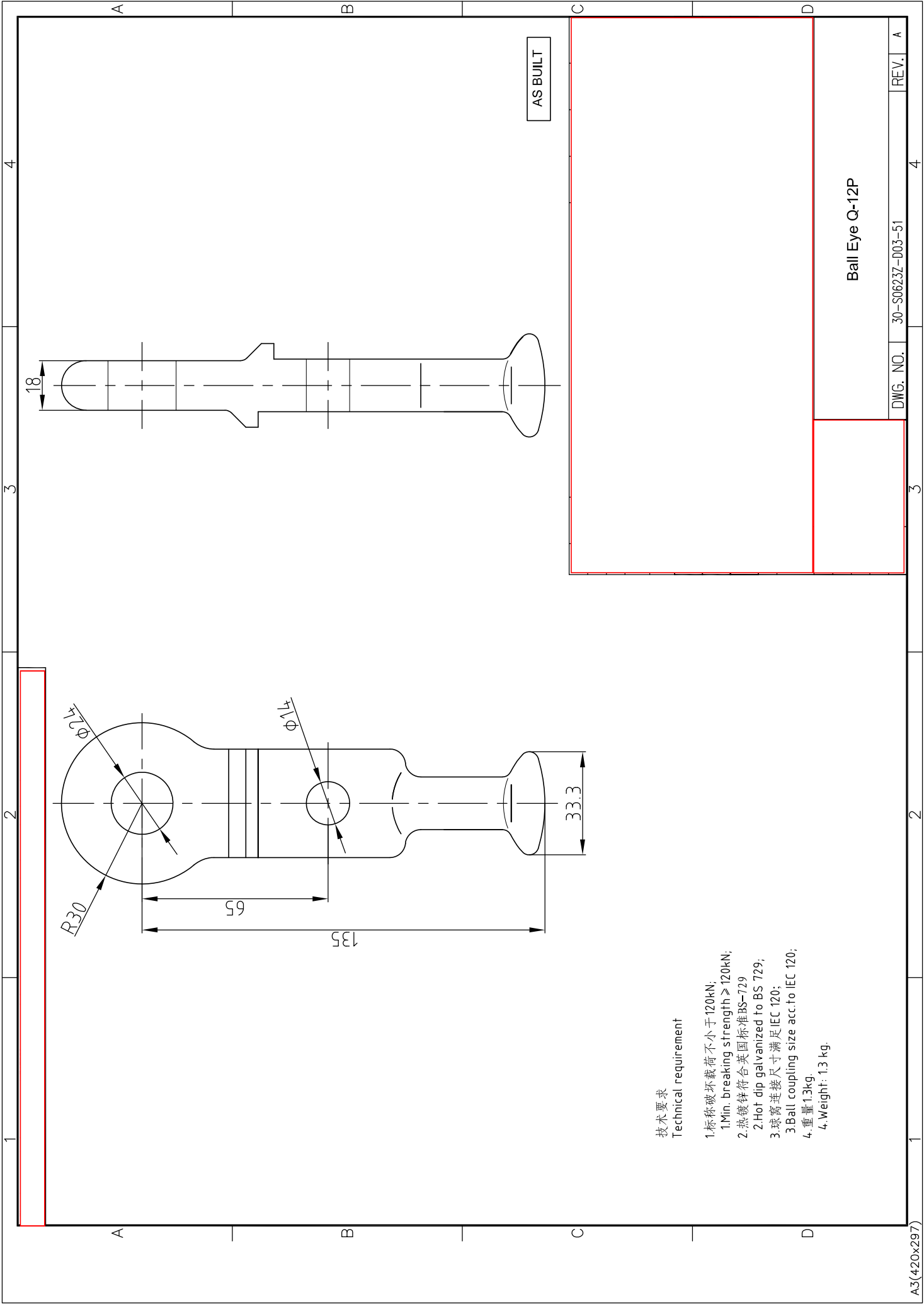
1. 标称破坏载荷不小于 120kN;
1.Min. breaking strength \geq 120kN;
2. 紧固件除闭口销外热镀锌;
2.All fastener should be hot galvanized except the cotter;
3. 重量 1.95 kg.
3.Weight: 1.95 kg.

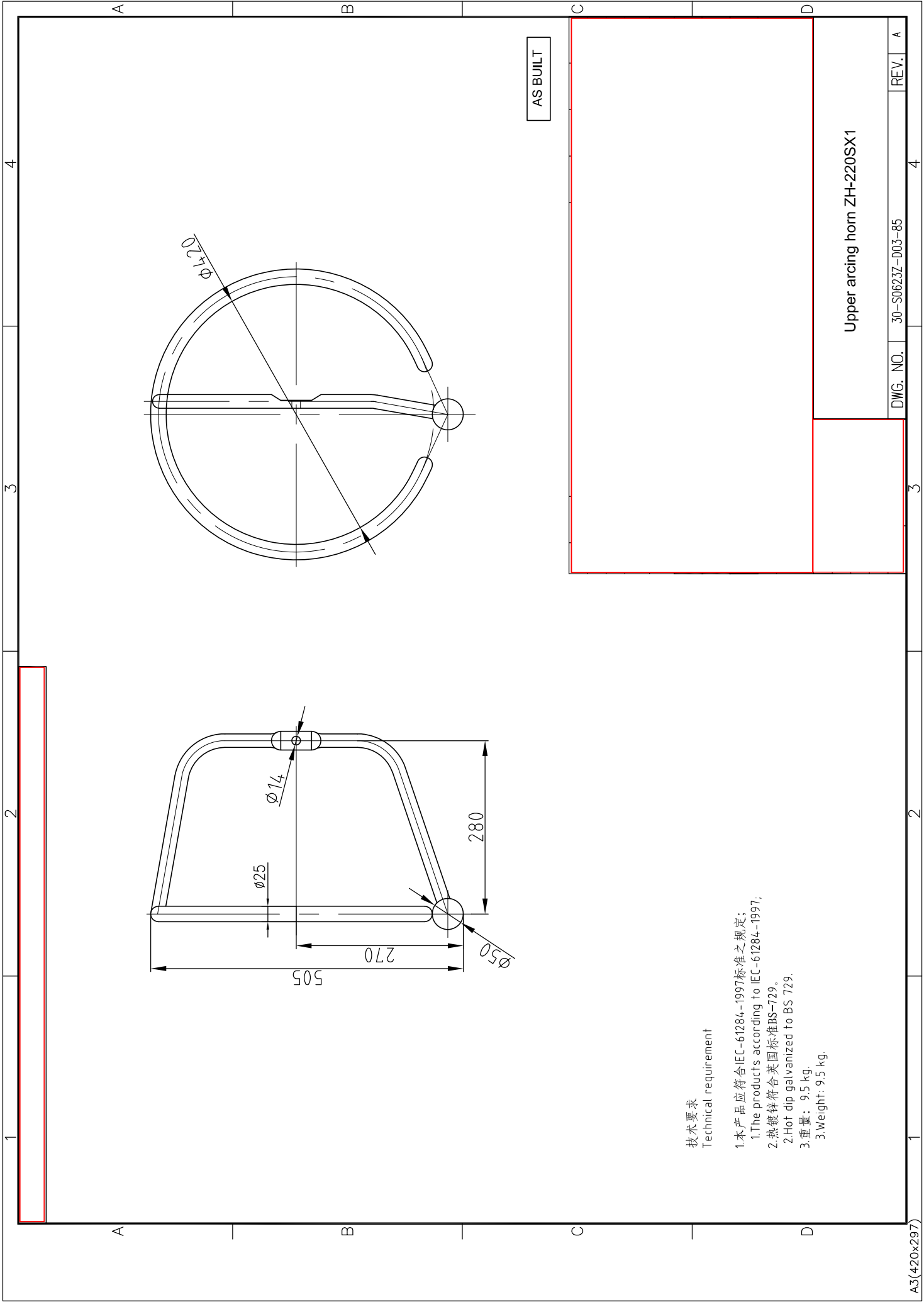
4	cotter pin type B	1	stainless steel	
3	nut M22	1	Galv.steel	
2	bolt M22X75	1	Galv.steel	
1	body	2	Galv.steel	
Item	Name and Type	Qty.	Material	Remark

Double straps P-1214

DWG. NO. 30-S0623Z-D03-66

REV. A



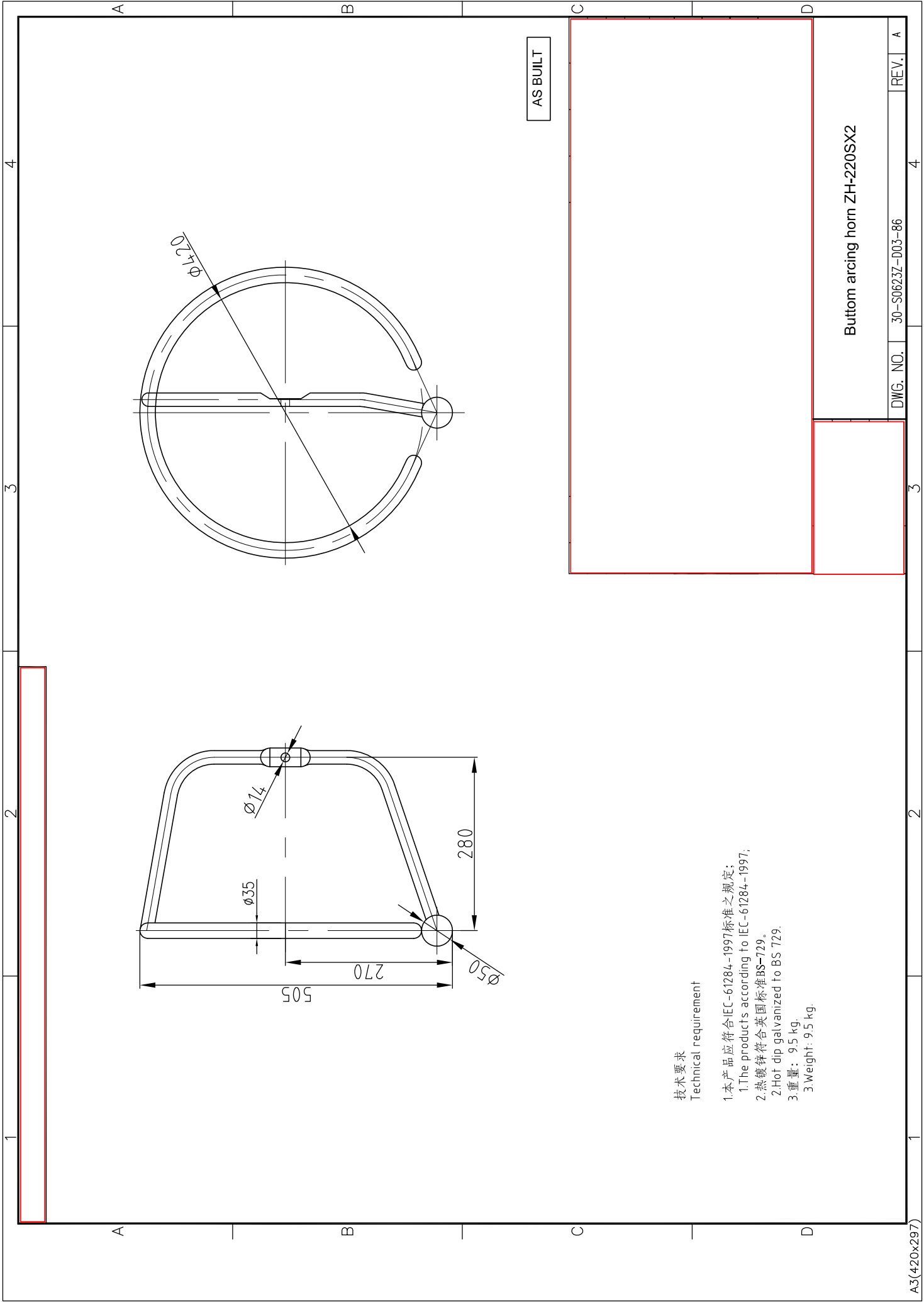


技术要求

Technical requirement

- 1.本产品应符合IEC-61284-1997标准之规定;
1.The products according to IEC-61284-1997;
2.热镀锌符合英国标准BS-729.
2.Hot dip galvanized to BS 729.
3.重量: 9.5 kg.
3.Weight: 9.5 kg.

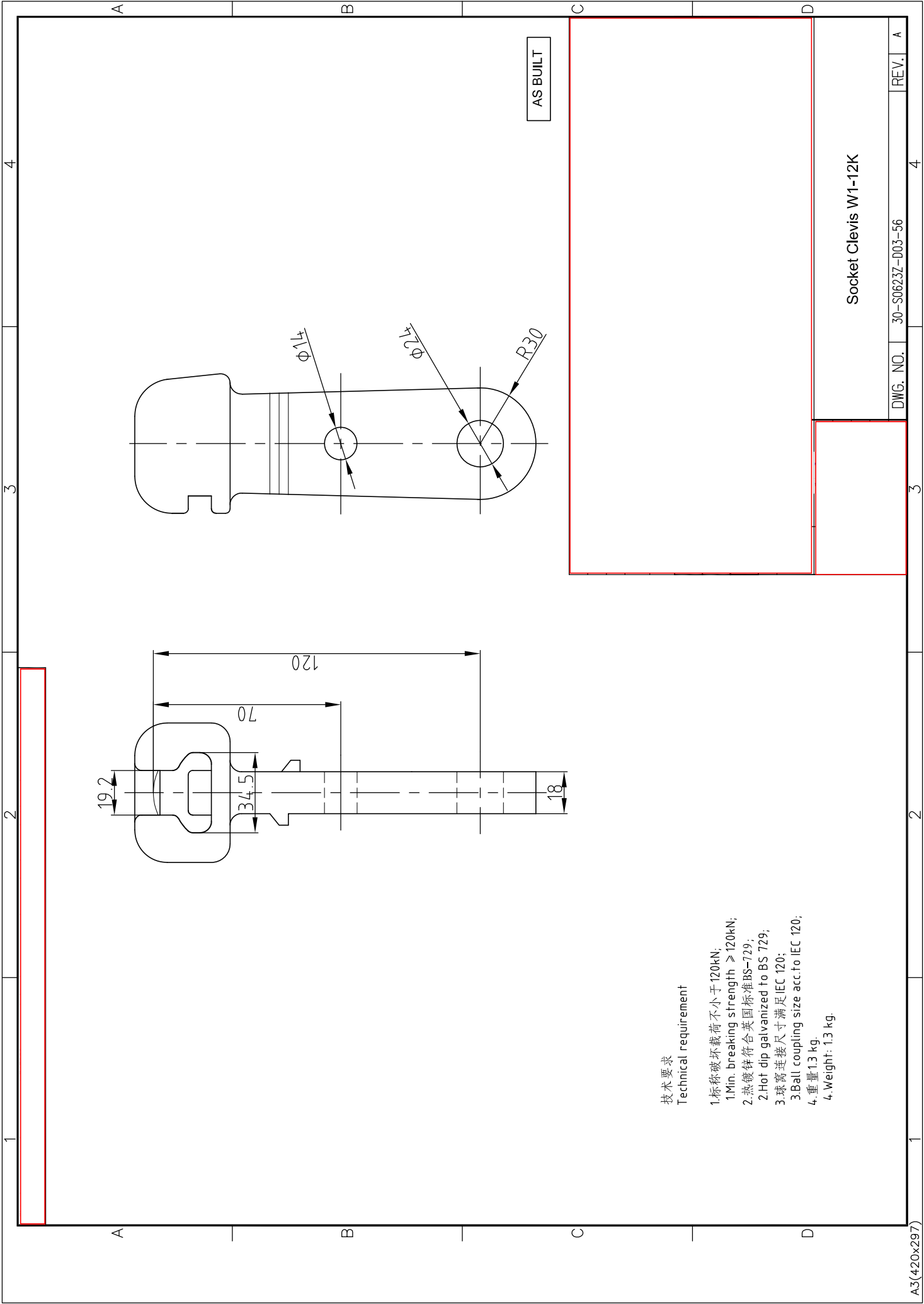
AS BUILT

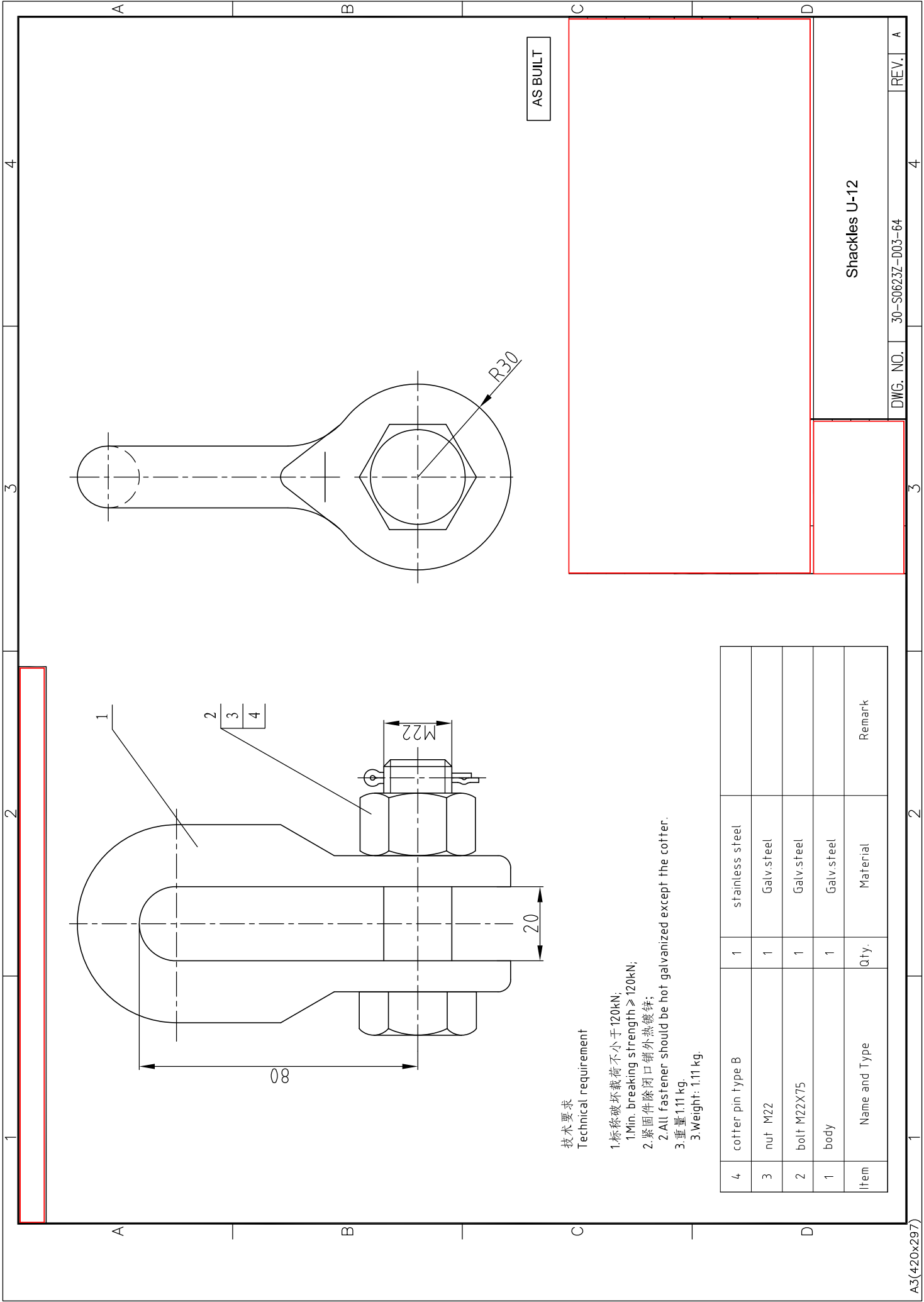


技术要求

Technical requirement

- 1.本产品应符合IEC-61284-1997标准之规定;
1.The products according to IEC-61284-1997;
- 2.热镀锌符合英国标准BS-729.
2.Hot dip galvanized to BS 729.
- 3.重量: 9.5 kg.
3.Weight: 9.5 kg.





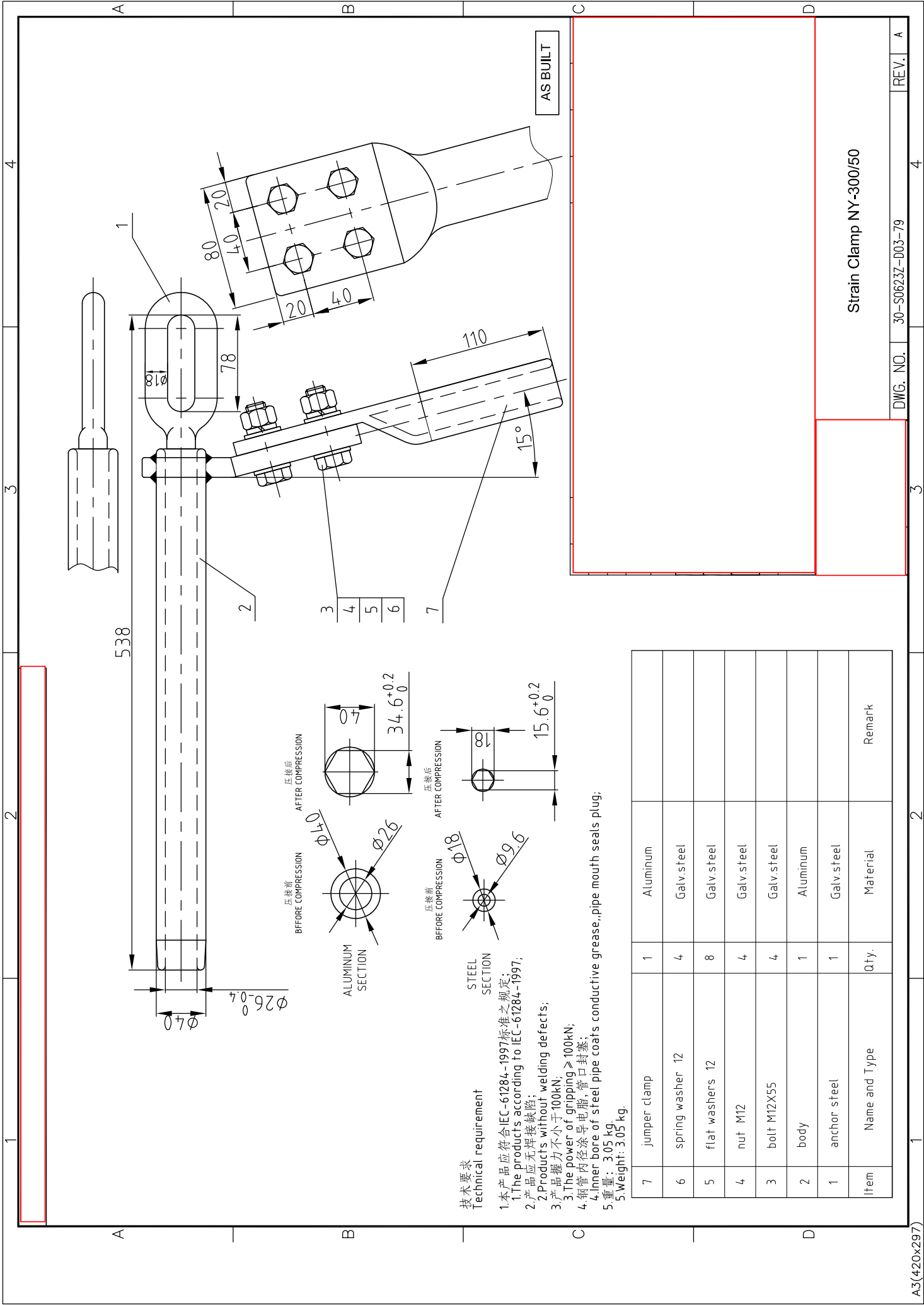
AS BUILT

Shackles U-12

DWG. NO. 30-S0623Z-D03-64

REV. A

4	cotter pin type B	1	stainless steel		
3	nut M22	1	Galv.steel		
2	bolt M22X75	1	Galv.steel		
1	body	1	Galv.steel		
Item	Name and Type	Qty.	Material		Remark



技术要求
Technical requirement

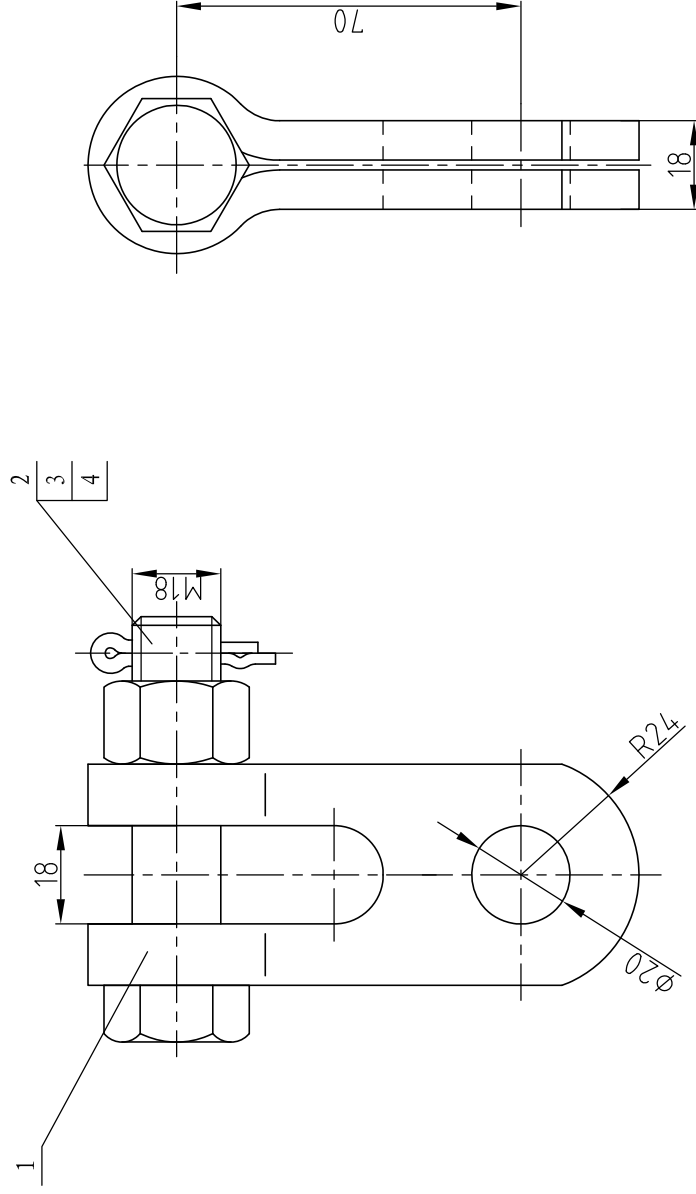
1. 本产品应符合 IEC-61284-1997 标准之规定;
1. The products according to IEC-61284-1997;
2. 产品应无焊接缺陷;
2. Products without welding defects;
3. 产品握力不小于 100kN;
3. The power of gripping $\geq 100\text{kN}$;
4. 钢管内径涂导电脂, 管口封塞;
4. Inner bore of steel pipe coats conductive grease, pipe mouth seals plug;
5. 重量: 3.05 kg;
5. Weight: 3.05 kg

7	jumper clamp	1	Aluminum		
6	spring washer	12	Galv steel		
5	flat washers	12	Galv steel		
4	nut M12	4	Galv steel		
3	bolt M12X55	4	Galv steel		
2	body	1	Aluminum		
1	anchor steel	1	Galv steel		
Item	Name and Type	Qty.	Material	Remark	

Strain Clamp NY-300/50

DWG. NO. 30-S0623Z-D03-79

REV. A



技术要求

Technical requirement

1. 标称破坏荷载不小于100kN;

1.Min. breaking strength $\geq 100\text{kN}$;

2. 紧固件除闭口销外热镀锌。

2. All fastener should be hot galvanized except the cotter.

3.重量: 0.9 kg.

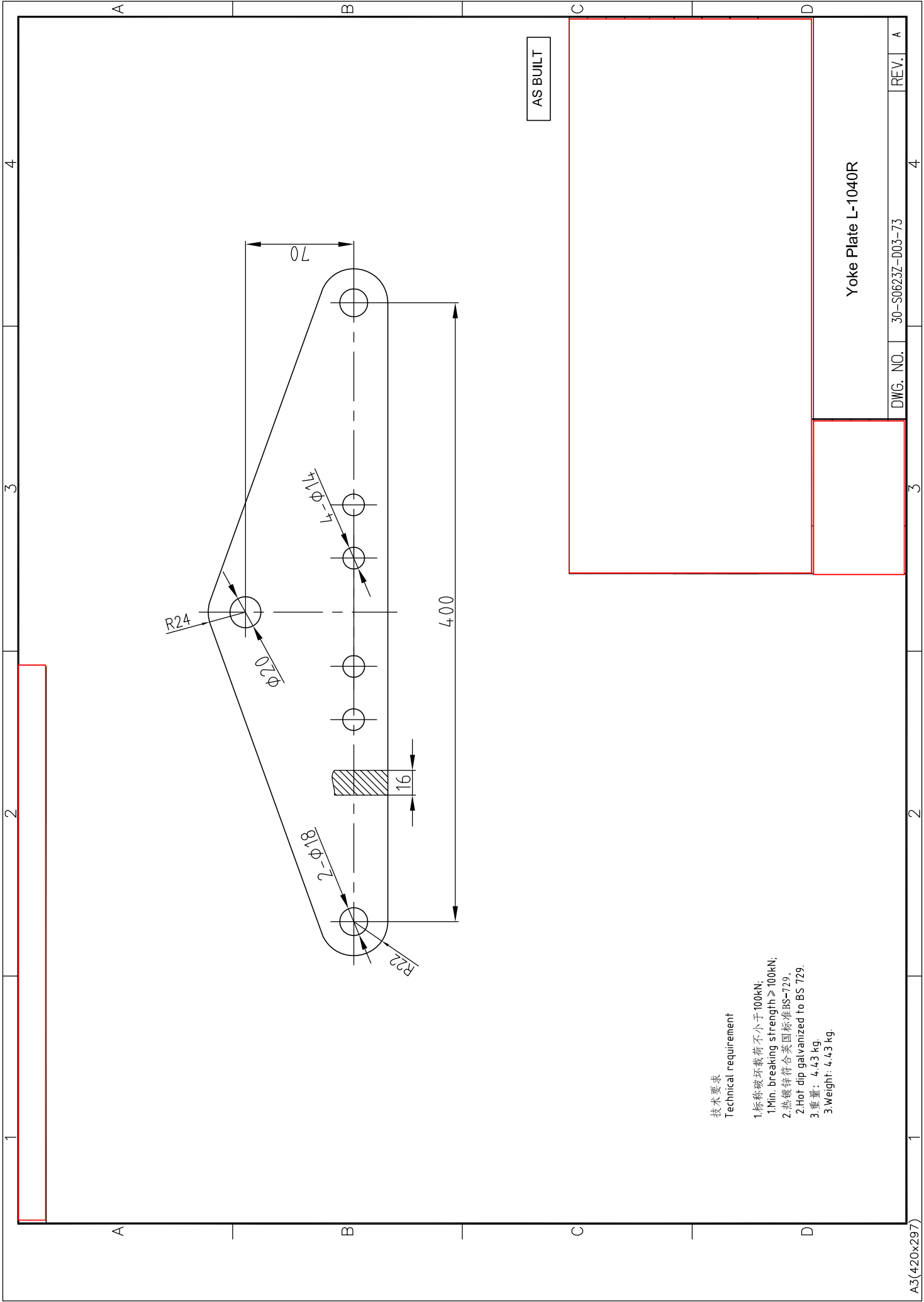
3. Weight: 0.9 kg.

4	cotter pin type A	1	stainless steel	
3	nut M18	1	Galv.steel	
2	bolt M18X75	1	Galv.steel	
1	body	1	Galv.steel	
Item	Name and Type	Qty.	Material	Remark

Clevis ZS-10

DWG. NO.	30-S0623Z-D03-46
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REV.	A
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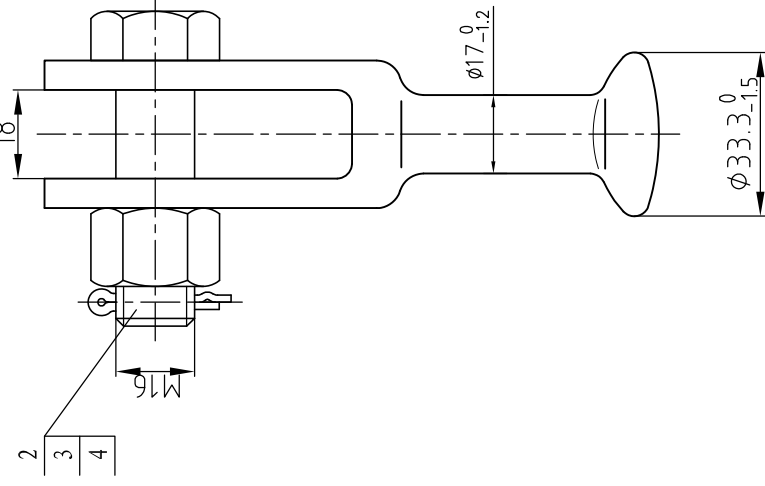
技术要求

Technical requirement

1. 标称破坏载荷不小于100kN;
1 Min. breaking strength > 100kN;
2. 热镀锌符合英国标准BS-729。
2 Hot dip galvanized to BS 729.
3. 重量: 4.43 kg.
3 Weight: 4.43 kg.

DWG. NO.	30-S0623Z-003-73	REV.	A
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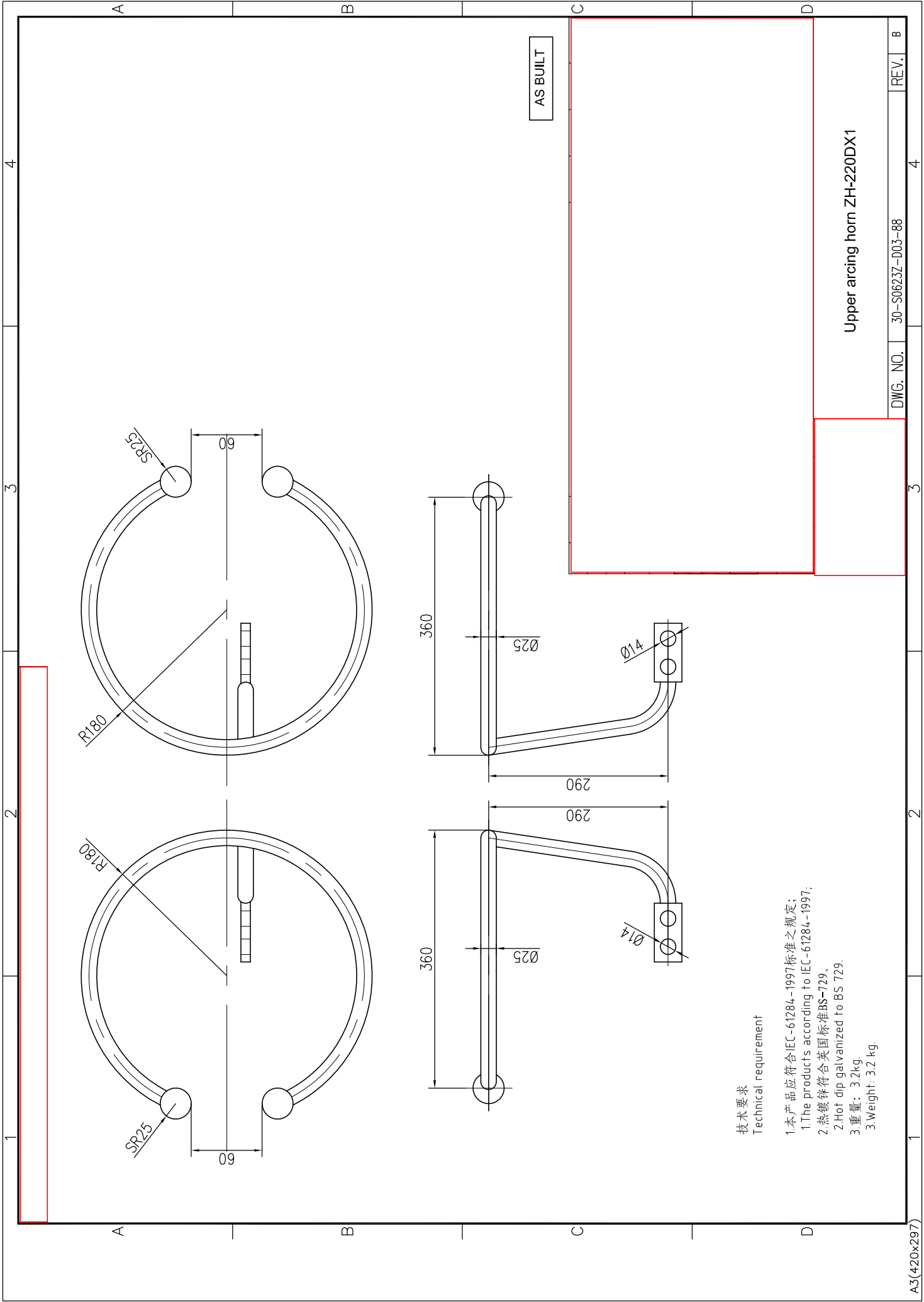
Yoke Plate L-1040R



- 1.标称破环载荷不小于70kN;
- 1.Min. breaking strength $\geq 70\text{kN}$;
- 2.热镀锌符合英国标准BS-729;
- 2.Hot dip galvanized to BS 729;
- 3.球窝连接尺寸满足IEC 120;
- 3.Ball coupling size acc.to IEC 120;
- 4.重量0.9 kg.
- 4.Weight: 0.9 kg.

Ball Eye (type U) Q-7U

4	cotter pin type A	1	stainless steel	
3	nut M16	1	Galv steel	
2	bolt M16X50	1	Galv steel	
1	body	1	Galv steel	
Item	Name and Type	Qty.	Material	Remark



技术要求

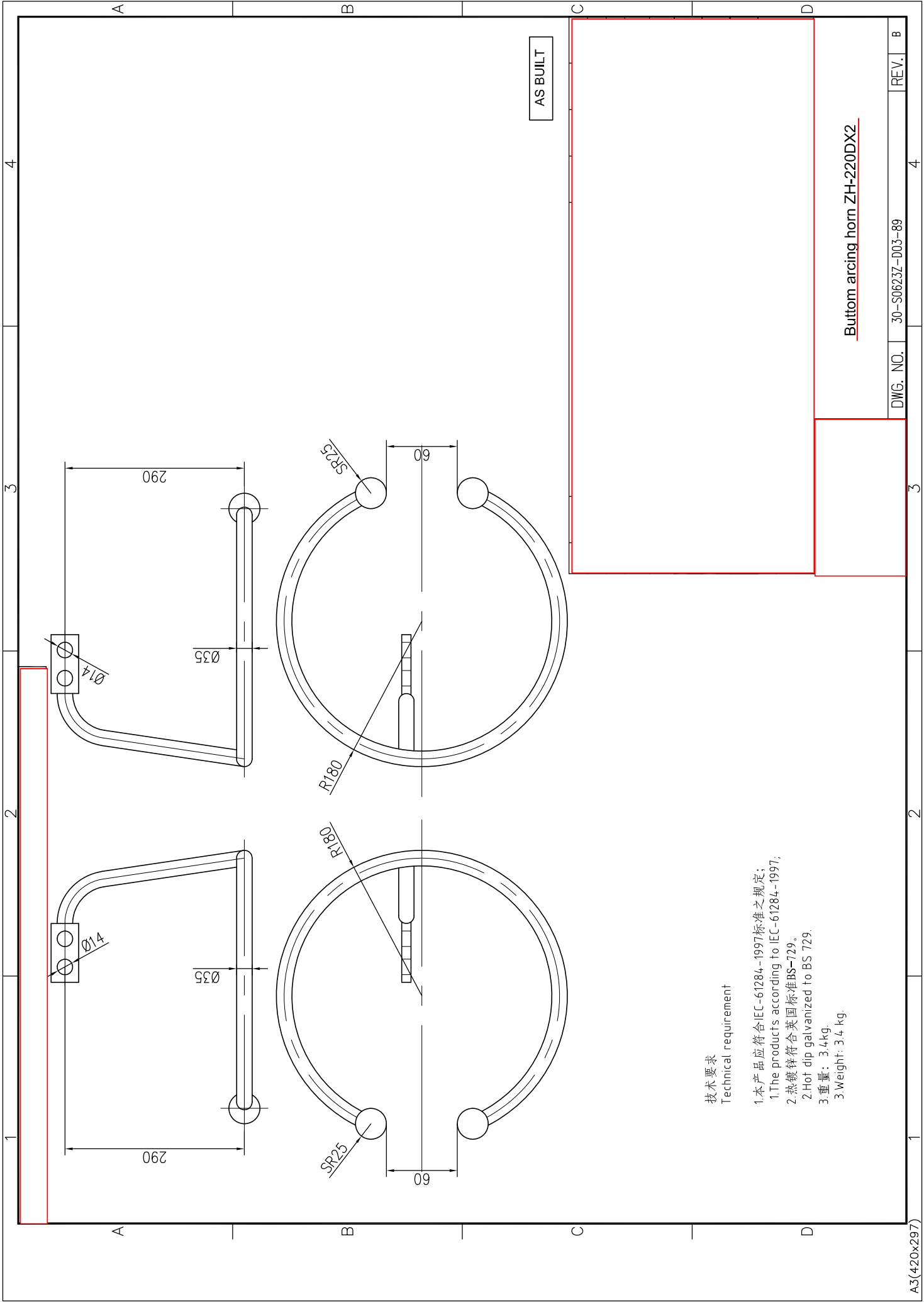
Technical requirement

- 1.本产品应符合IEC-61284-1997标准之规定；
- 1.The products according to IEC-61284-1997;
- 2.热镀锌符合英国标准BS-729。
- 2.Hot dip galvanized to BS 729.
- 3.重量：3.2kg。
- 3.Weight: 3.2 kg.

AS BUILT

Upper arcing horn ZH-220DX1

DWG. NO.	30-S0623Z-D03-88	REV.	B
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技术要求

Technical requirement

1. 本产品应符合 IEC-61284-1997 标准之规定；
1. The products according to IEC-61284-1997;
2. 热镀锌符合英国标准 BS-729。
2. Hot dip galvanized to BS 729.
3. 重量：3.4kg。
3. Weight: 3.4 kg.

AS BUILT

Bottom arcing horn ZH-220DX2

DWG. NO.	30-S0623Z-003-89	REV.	B
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1

2

3

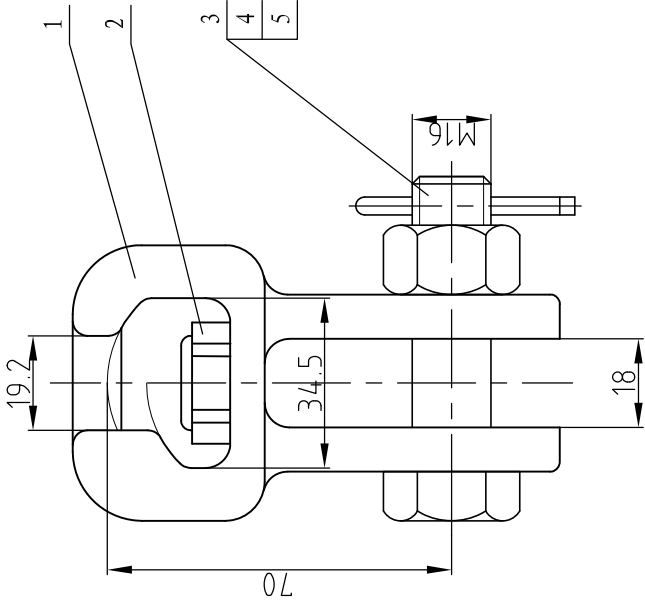
4

A

B

C

D



技术要求

Technical requirement

- 1. 标称破坏载荷不小于 70kN;
- 1.Min. breaking strength $\geq 70\text{kN}$;
- 2. 热镀锌符合英国标准 BS-729
- 2.Hot dip galvanized to BS 729;
- 3. 球窝连接尺寸满足 IEC 120;
- 3.Ball coupling size acc.to IEC 120;
- 4. 重量 1.0 kg.
- 4. Weight: 1.0 kg.

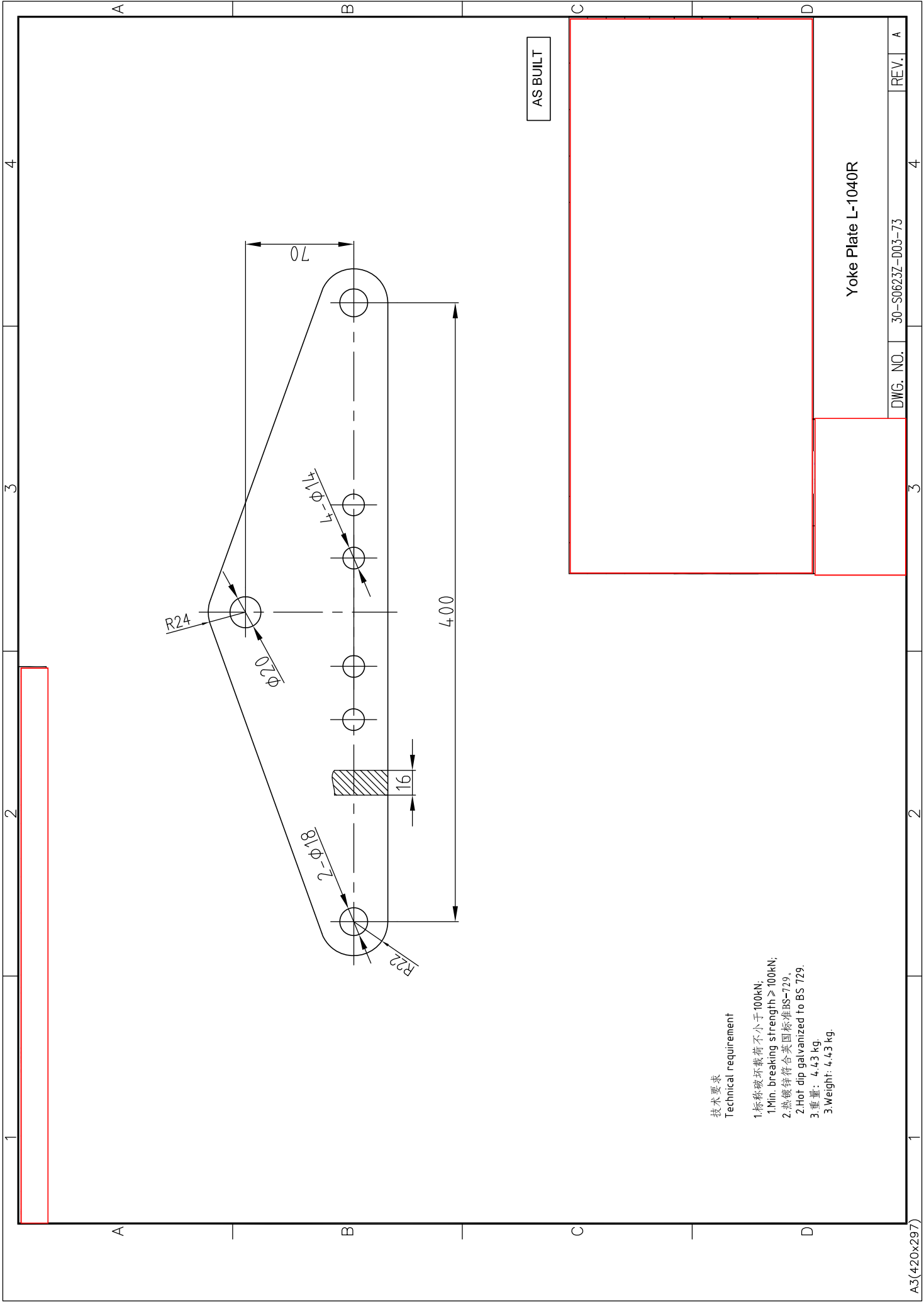
AS BUILT

5	cotter pin type A	1	stainless steel	
4	nut M16	1	Galv steel	
3	bolt M16X60	1	Galv steel	
2	locking pin	1	stainless steel	
1	socket clevis	1	Galv steel	
Item	Name and Type	Qty.	Material	Remark

Socket Clevis WS-7

DWG. NO. 30-S0623Z-D03-54

REV. A



技术要求
Technical requirement
1. 标称破坏载荷不小于100kN;
1 Min. breaking strength > 100kN;
2. 热镀锌符合英国标准BS-729。
2 Hot dip galvanized to BS 729.
3. 重量: 4.43 kg.
3 Weight: 4.43 kg.

AS BUILT

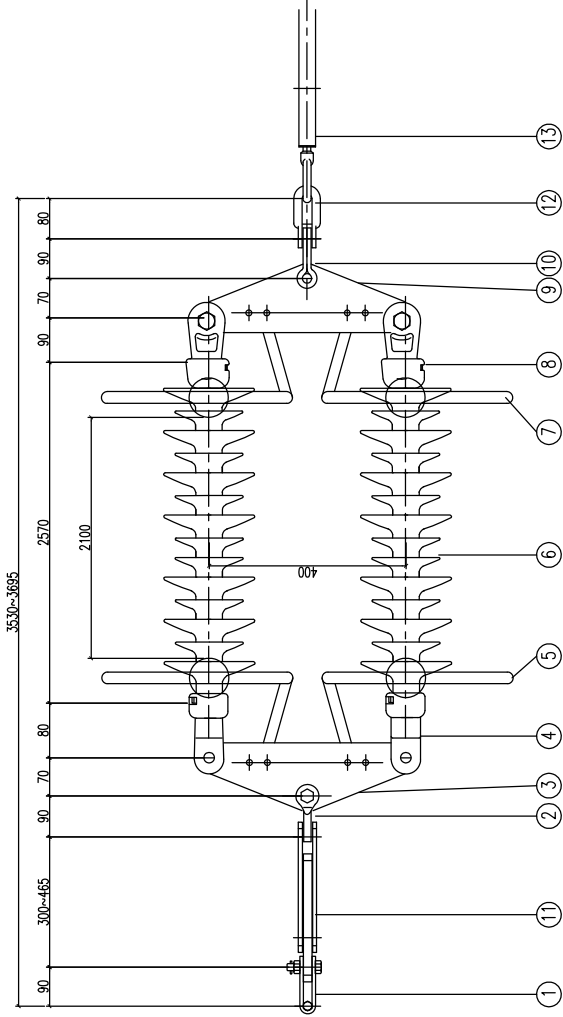
Yoke Plate L-1040R

DWG. NO.	REV.	A
30-S0623Z-003-73		

1

2

3



AS BUILT

Notes:

- 1.The ball and socket size according to IEC 120/ 16.
- 1.球和球座 IEC 120/ 16
- 2.Hot dip galvanized acc.to BS 729.
- 2.热镀锌 BS 729标准
- 3.All dimensions are in mm.
- 3.所有尺寸均为毫米
- 4.The total weight is app. 67.14kg.
- 4.总重量为67.14kg.
- 5.The short current capacity is 31.5kA.
- 5.额定短路电流31.5kA.
- 6.This type set should be installed in the area with creepage of 31mm/kV.
- 6.此种绝缘子应安装在爬电比距31mm/kV的区域

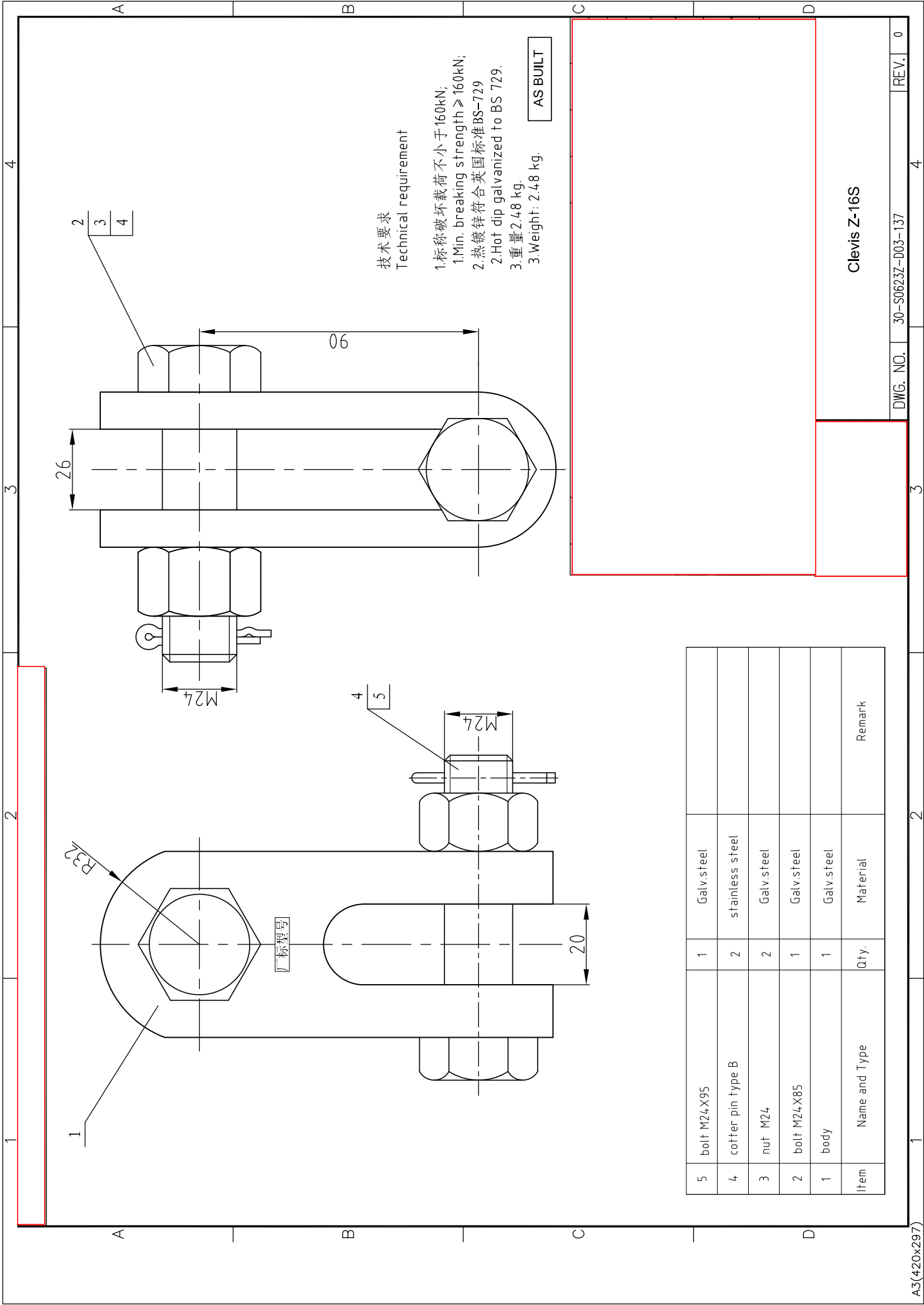
C

D

Double Tension Insulator String (normal)

DWG. NO. 30-S0623Z-D03-24

REV. c



技术要求
Technical requirement

- 1.标称破坏载荷不小于160kN;
1.Min. breaking strength ≥ 160kN;
- 2.热镀锌符合英国标准BS-729
2.Hot dip galvanized to BS 729.
- 3.重量2.48 kg.
3.Weight: 2.48 kg.

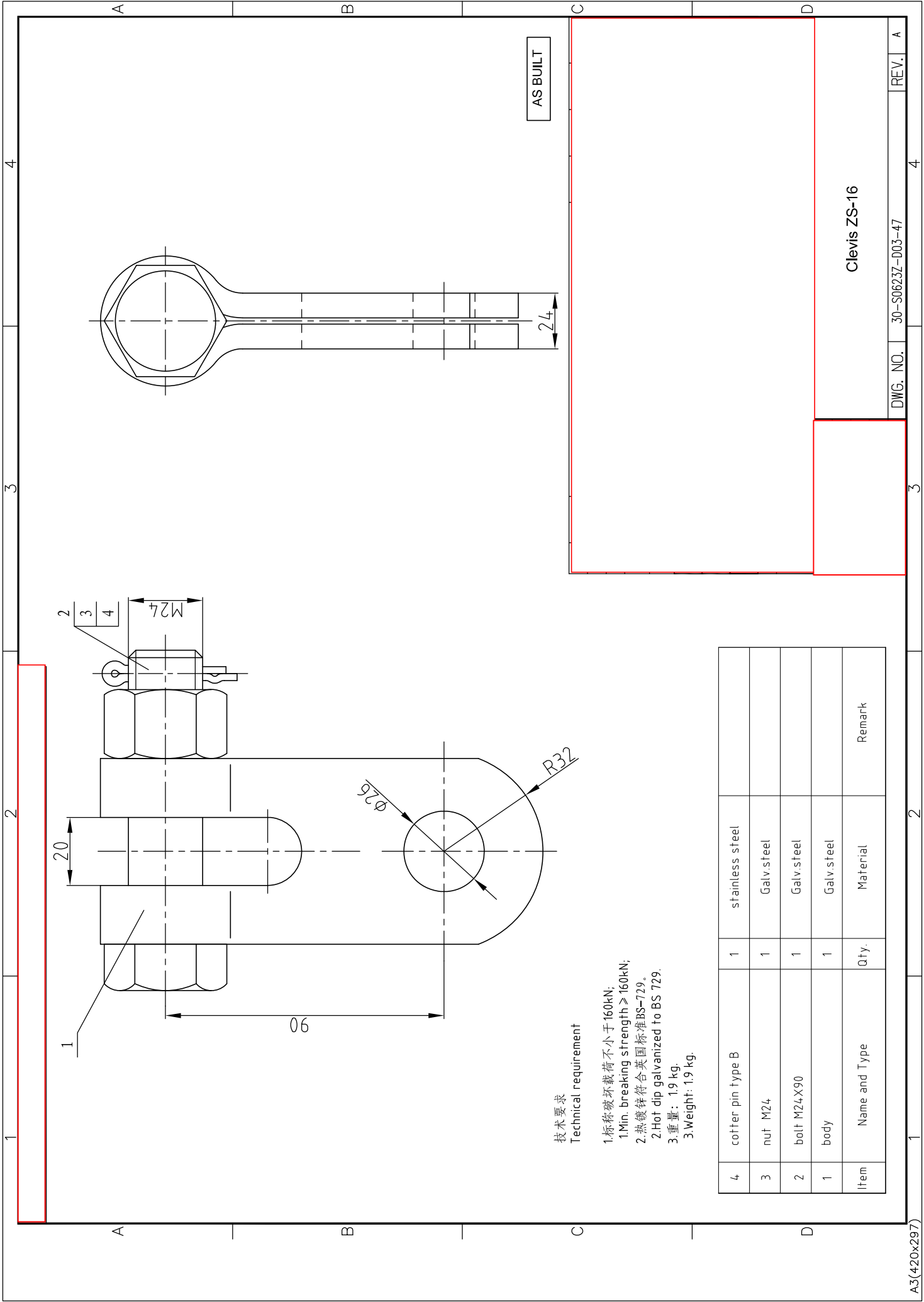
AS BUILT

5	bolt M24X95	1	Galv.steel		
4	coffer pin type B	2	stainless steel		
3	nut M24	2	Galv.steel		
2	bolt M24X85	1	Galv.steel		
1	body	1	Galv.steel		
Item	Name and Type	Qty.	Material	Remark	

Clevis Z-16S

DWG. NO. 30-S0623Z-D03-137

REV. 0



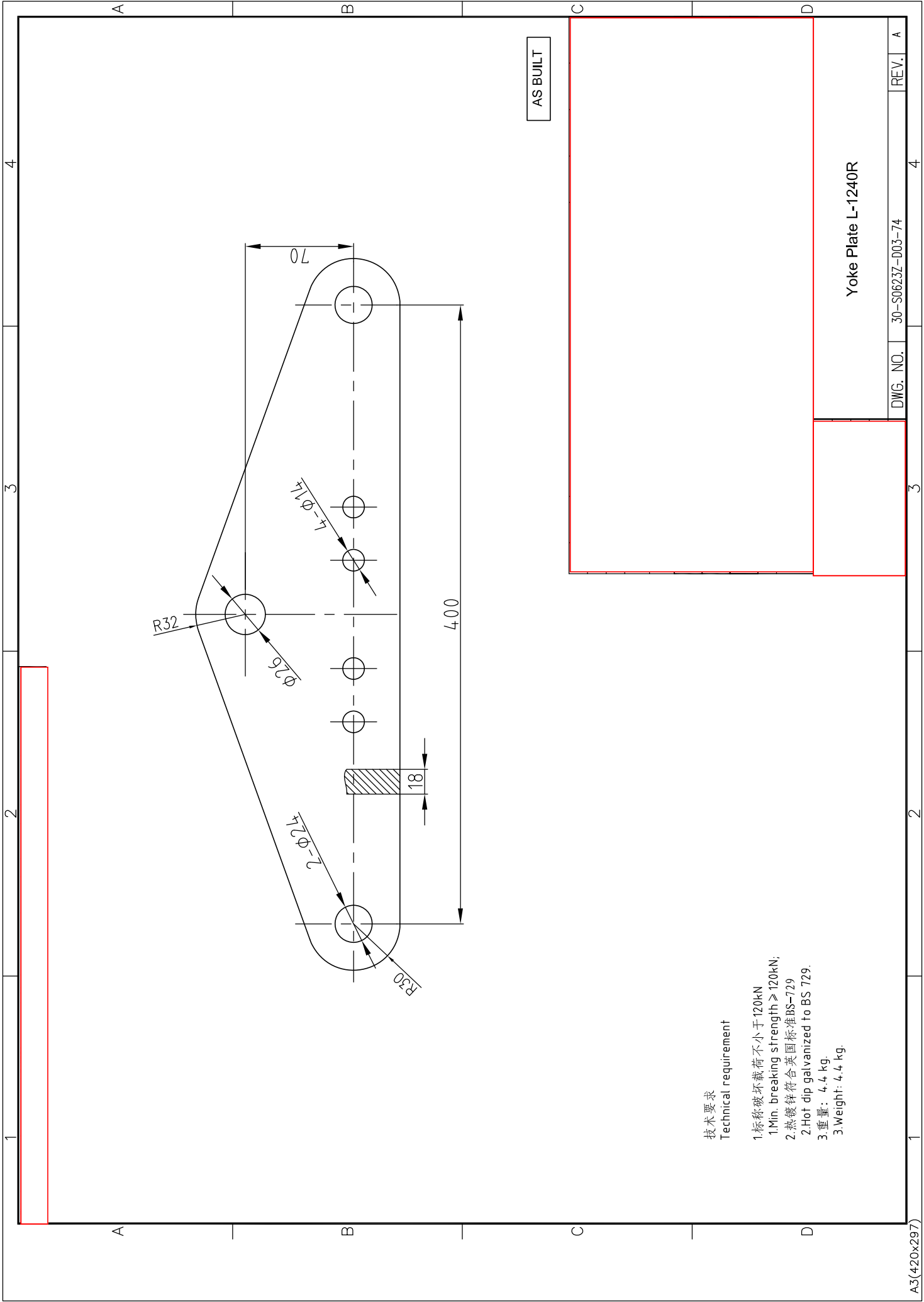
技术要求
Technical requirement

1.标称破坏载荷不小于160kN;
1.Min. breaking strength ≥ 160kN;
2.热镀锌符合英国标准BS-729.
2.Hot dip galvanized to BS 729.
3.重量: 1.9 kg.
3.Weight: 1.9 kg.

4	cotter pin type B	1	stainless steel	
3	nut M24	1	Galv.steel	
2	bolt M24X90	1	Galv.steel	
1	body	1	Galv.steel	
Item	Name and Type	Qty.	Material	Remark

DWG. NO. 30-S0623Z-D03-47

REV. A



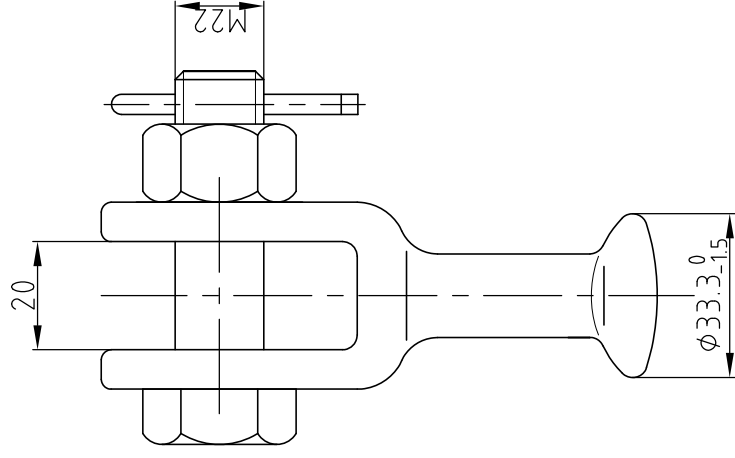
技术要求
Technical requirement

1. 标称破坏载荷不小于 120kN;
1. Min. breaking strength $\geq 120\text{kN}$;
2. 热镀锌符合英国标准 BS-729
2. Hot dip galvanized to BS 729.
3. 重量: 4.4 kg.
3. Weight: 4.4 kg.

DWG. NO.	30-S0623Z-003-74	REV.	A
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Yoke Plate L-1240R

AS BUILT

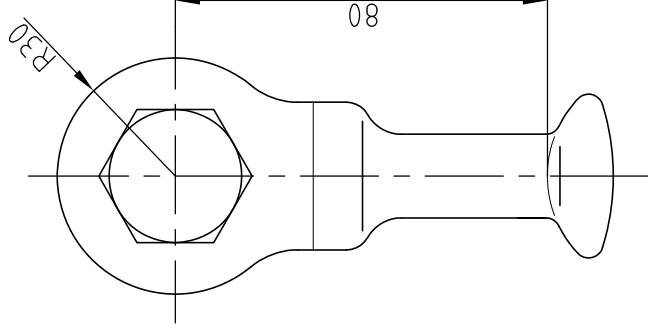


技术要求

Technical requirement

1. 双点划线处为重要部位, 应清除冲剪飞边毛刺;

1. The important part marked with double dots line, get rid of the sharps and deburrings;
2. 标称破坏载荷不小于 120kN;
- 2Min. breaking strength >120kN;
3. 热镀锌符合英国标准BS-729
- 3Hot dip galvanized to BS 729;
4. 球窝连接尺寸满足IEC 120;
- 4.Ball coupling size acc.to IEC 120;
5. 重量12 kg.
- 5.Weight: 12 kg.



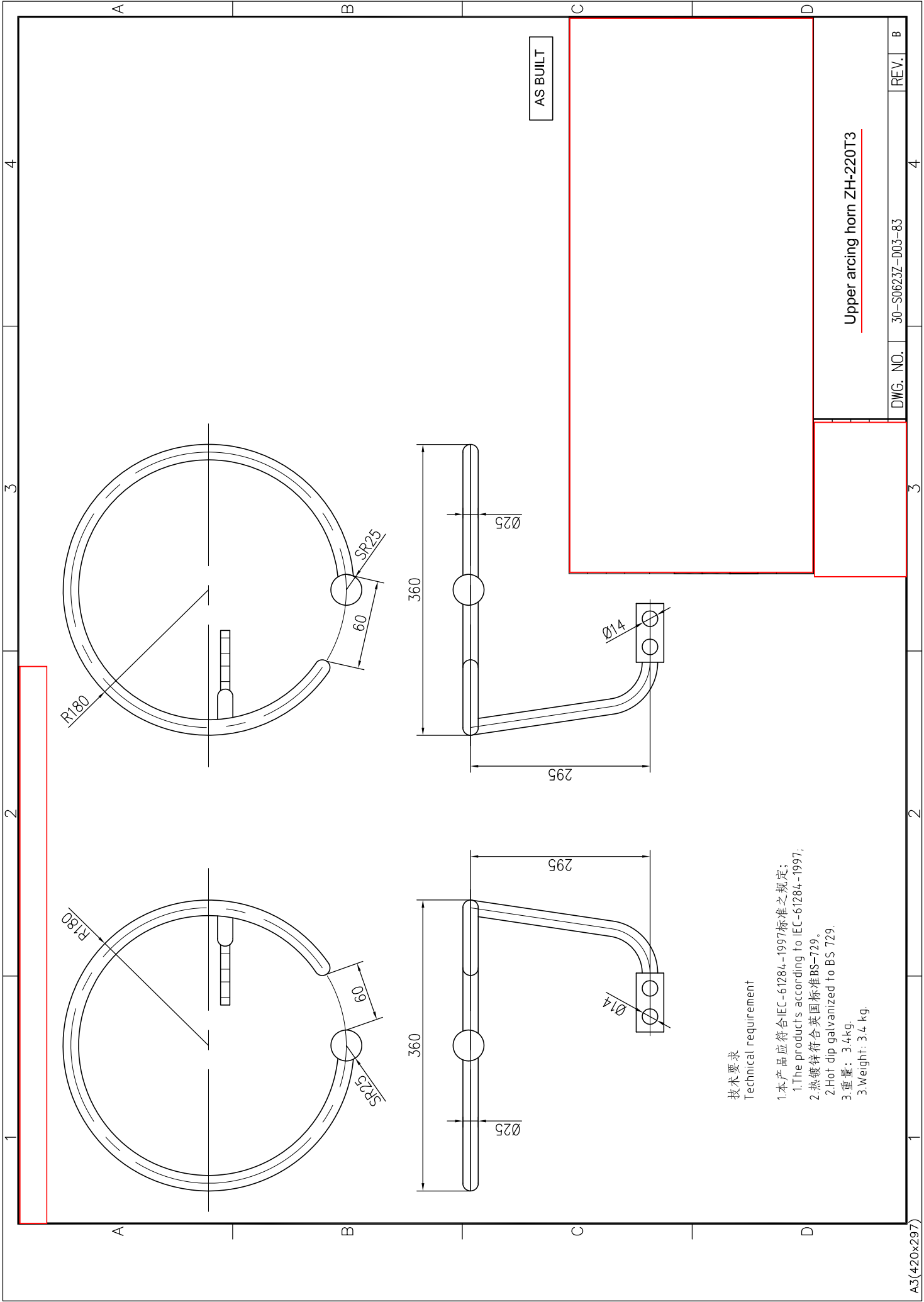
AS BUILT

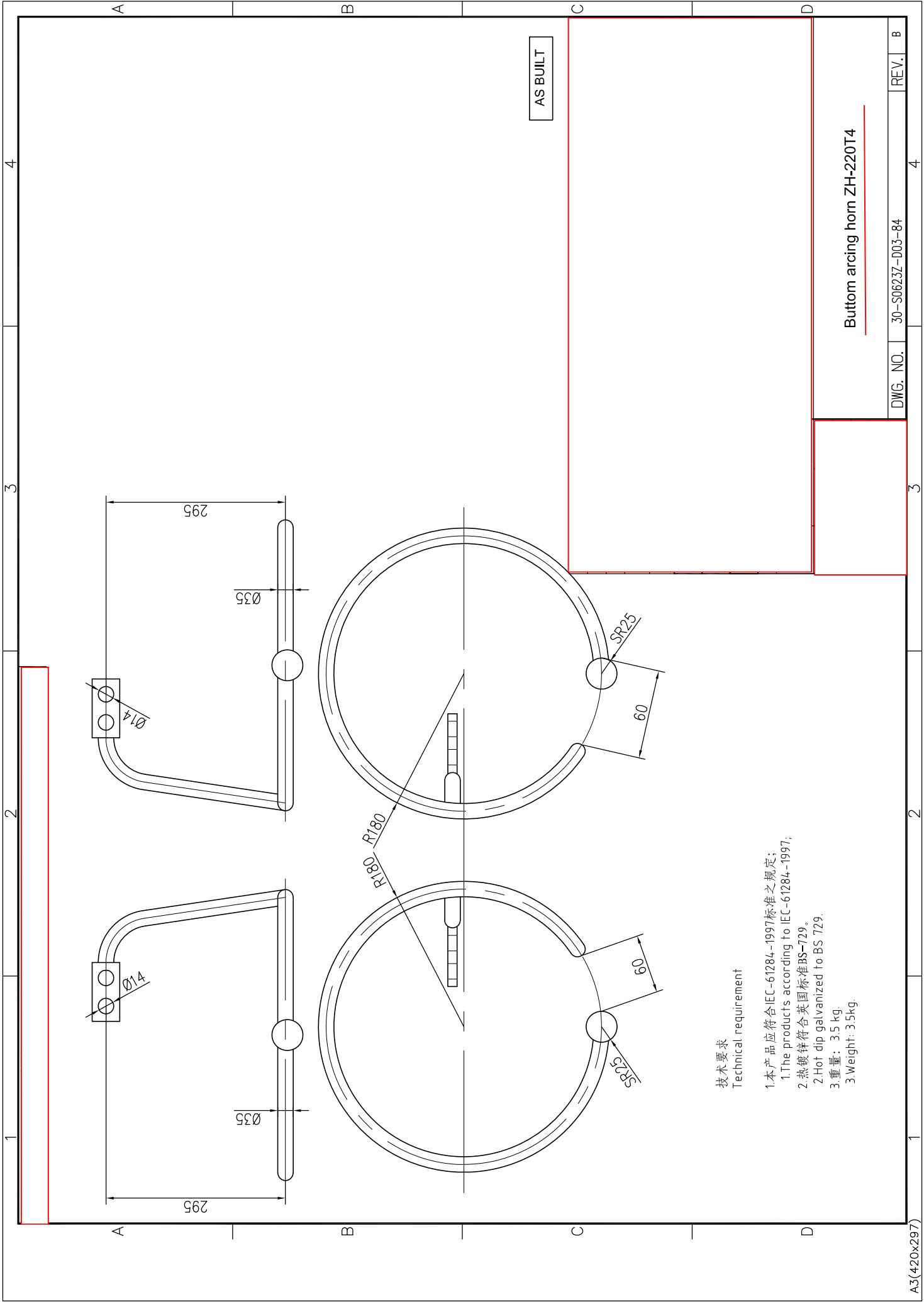
4	cotter pin type B	1	stainless steel	
3	nut M22	1	Galv.steel	
2	bolt M22X75	1	Galv.steel	
1	body	1	Galv.steel	
Item	Name and Type	Qty.	Material	Remark

Ball Eye (type U) Q-12U

DWG. NO.	30-S0623Z-D03-52
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REV.	A
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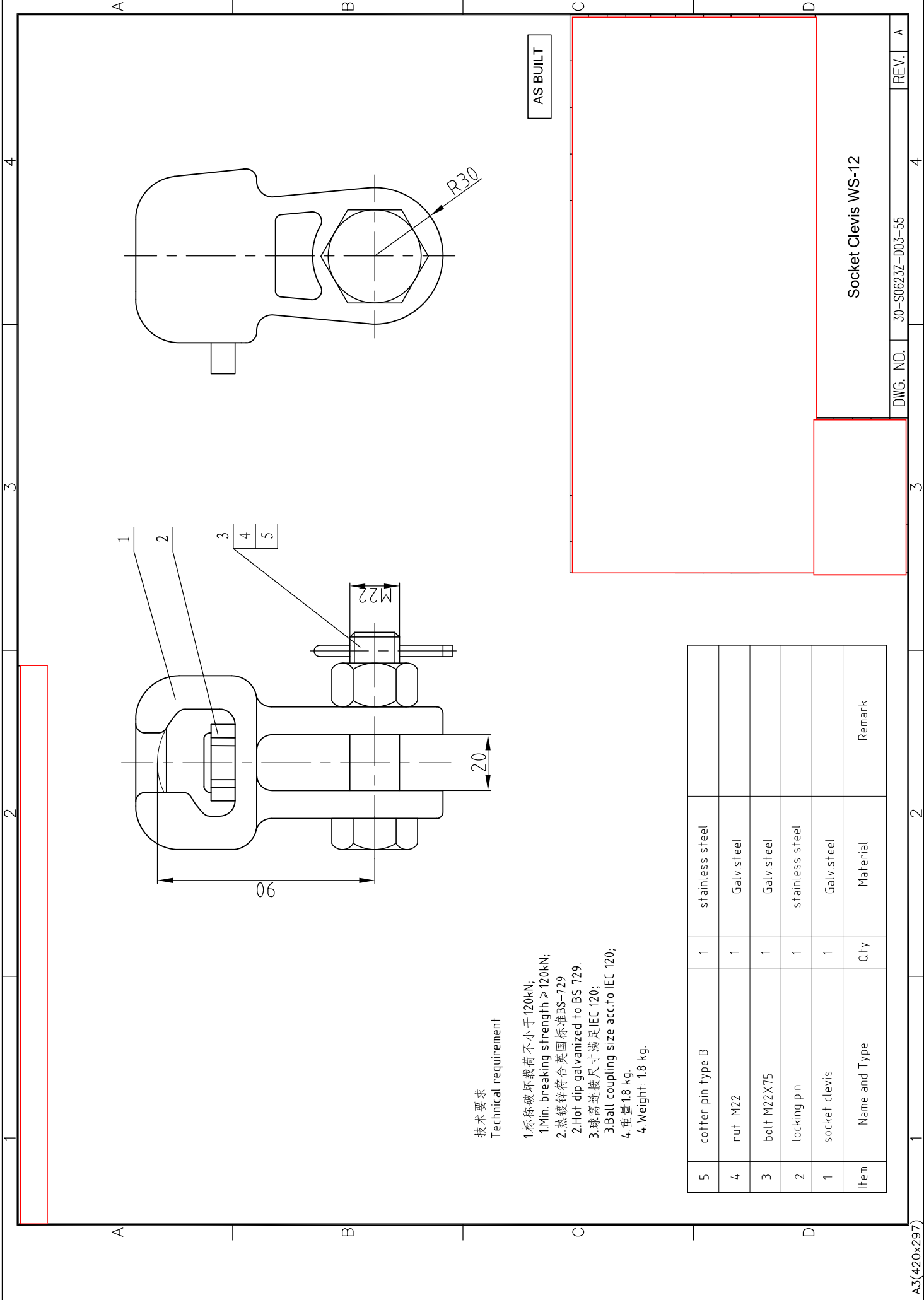


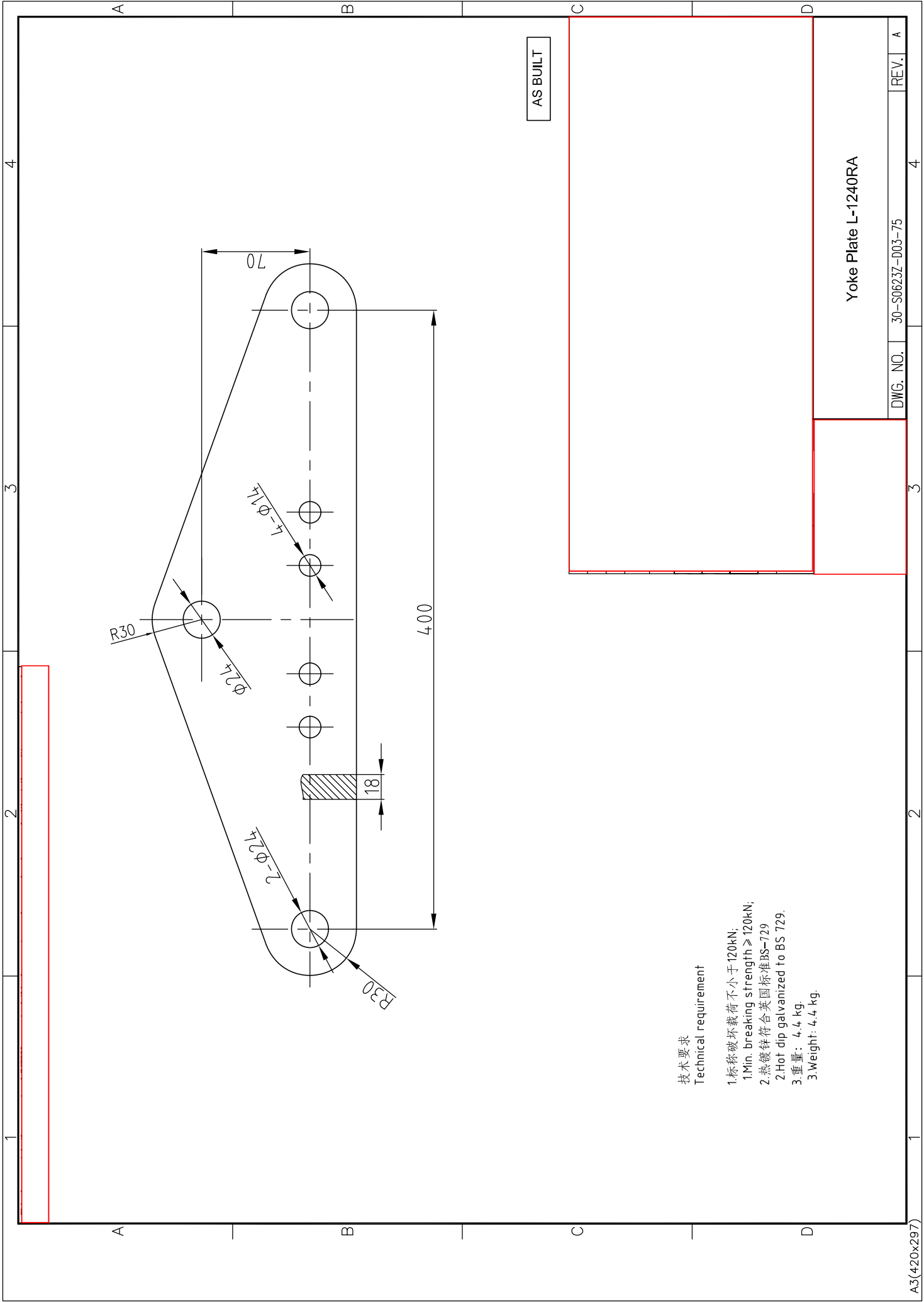


技术要求
Technical requirement

- 1.本产品应符合IEC-61284-1997标准之规定;
1.The products according to IEC-61284-1997;
2.热镀锌符合英国标准BS-729。
2.Hot dip galvanized to BS 729.
3.重量: 3.5 kg.
3.Weight: 3.5kg.

DWG. NO.	30-S0623Z-D03-84	REV.	B
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技术要求

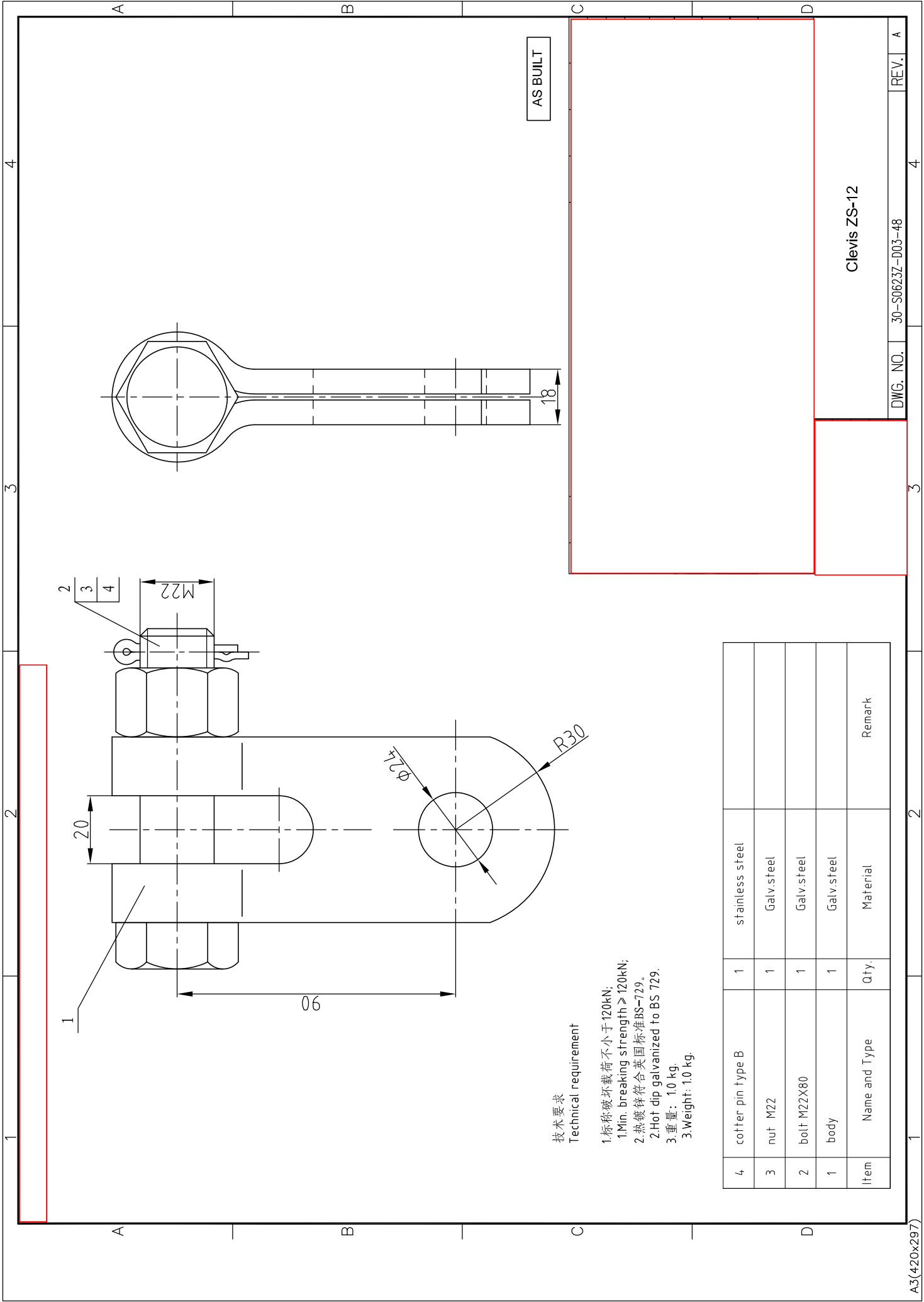
Technical requirement

1. 标称破坏载荷不小于120kN;
1.Min. breaking strength $\geq 120\text{kN}$;
2. 热镀锌符合英国标准BS-729
2.Hot dip galvanized to BS 729.
3. 重量: 4.4 kg.
3.Weight: 4.4 kg.

AS BUILT

Yoke Plate L-1240RA

DWG. NO.	30-S0623Z-003-75	REV.	A
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AS BUILT

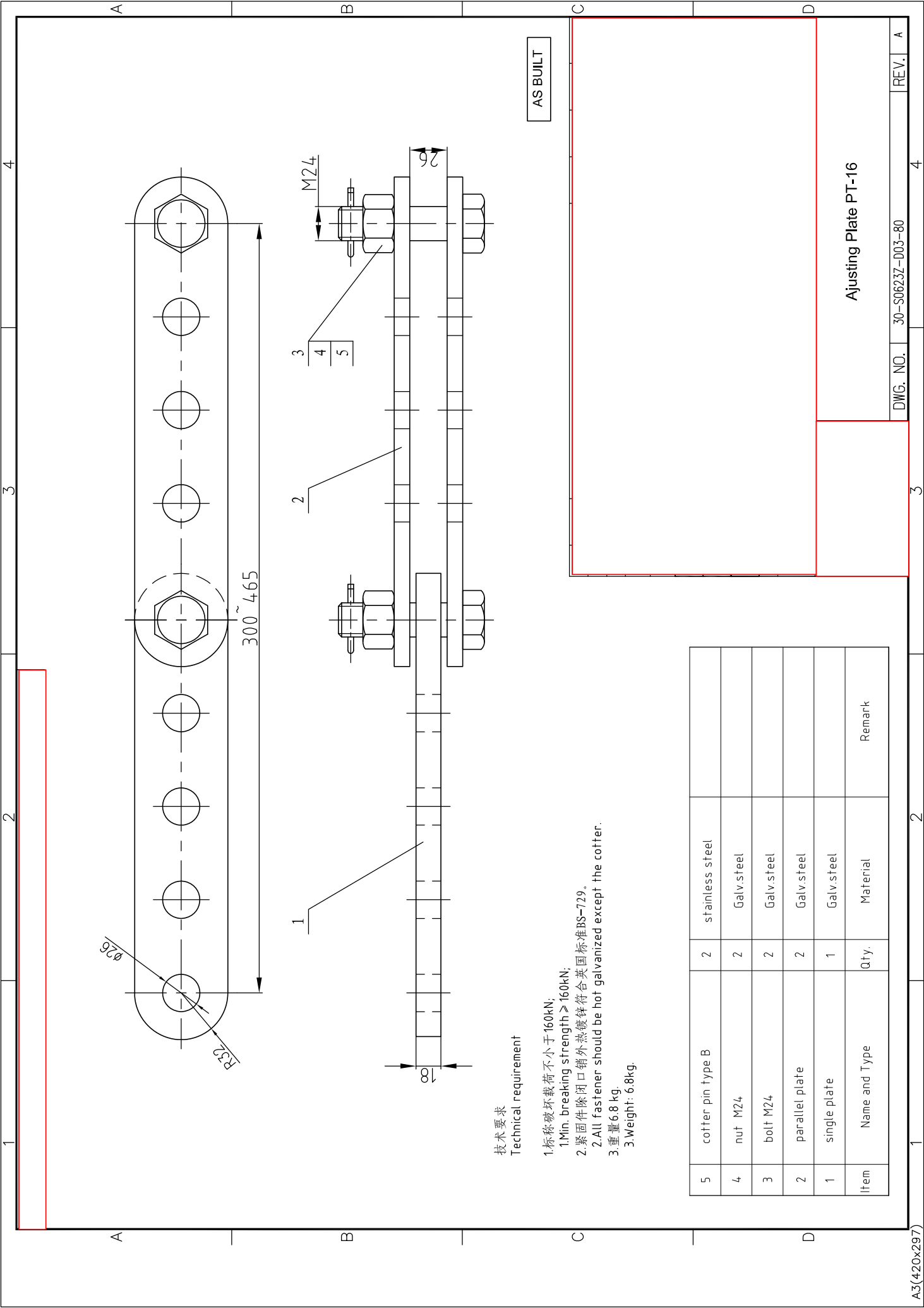
Clevis ZS-12

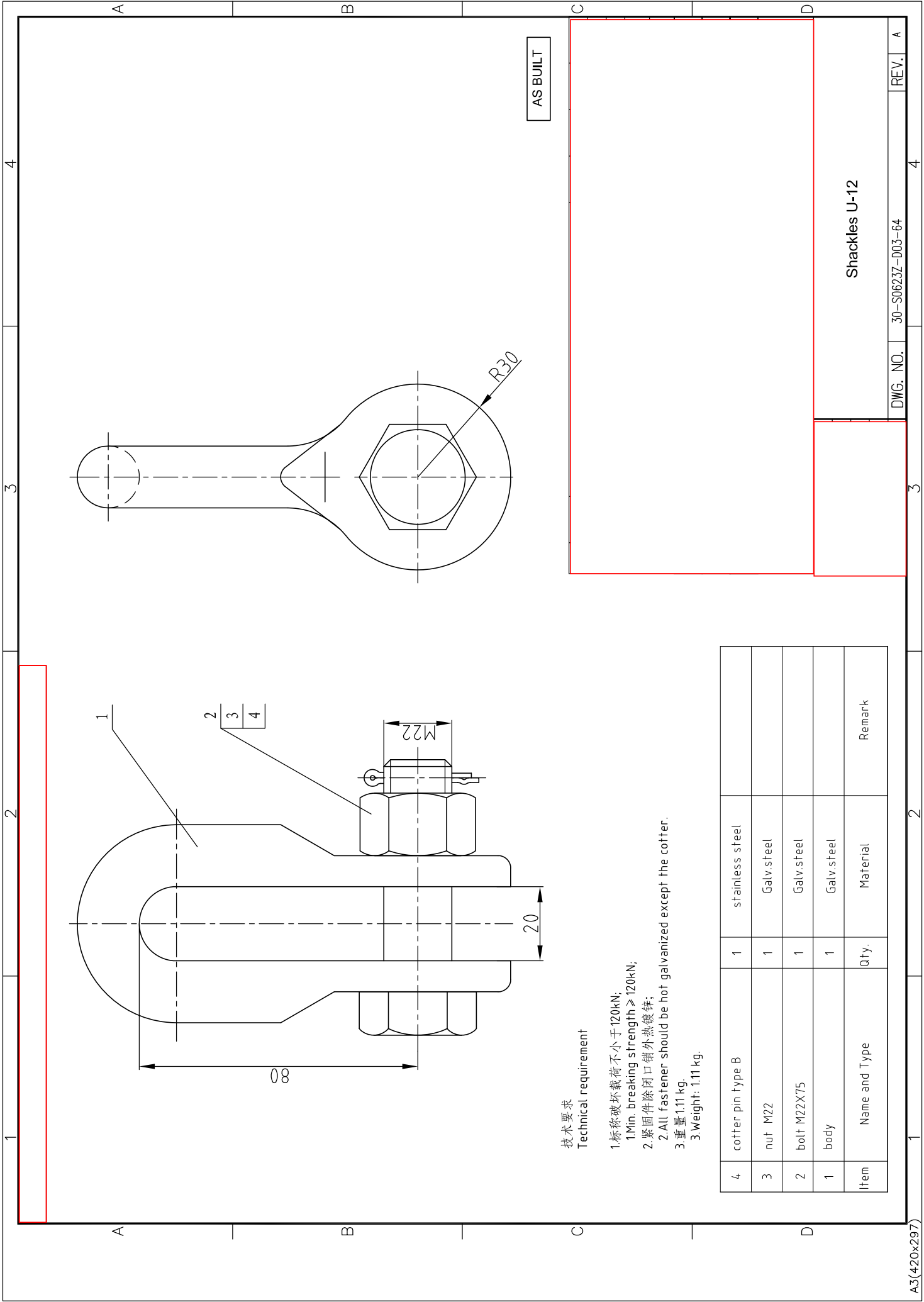
DWG. NO. 30-S0623Z-D03-48

REV. A

4	cotter pin type B	1	stainless steel		
3	nut M22	1	Galv steel		
2	bolt M22X80	1	Galv steel		
1	body	1	Galv steel		
Item	Name and Type	Qty.	Material	Remark	

技术要求
Technical requirement
1.标称破坏载荷不小于120kN;
1.Min. breaking strength ≥ 120kN;
2.热镀锌符合英国标准BS-729。
2.Hot dip galvanized to BS 729.
3.重量: 1.0 kg.
3.Weight: 1.0 kg.



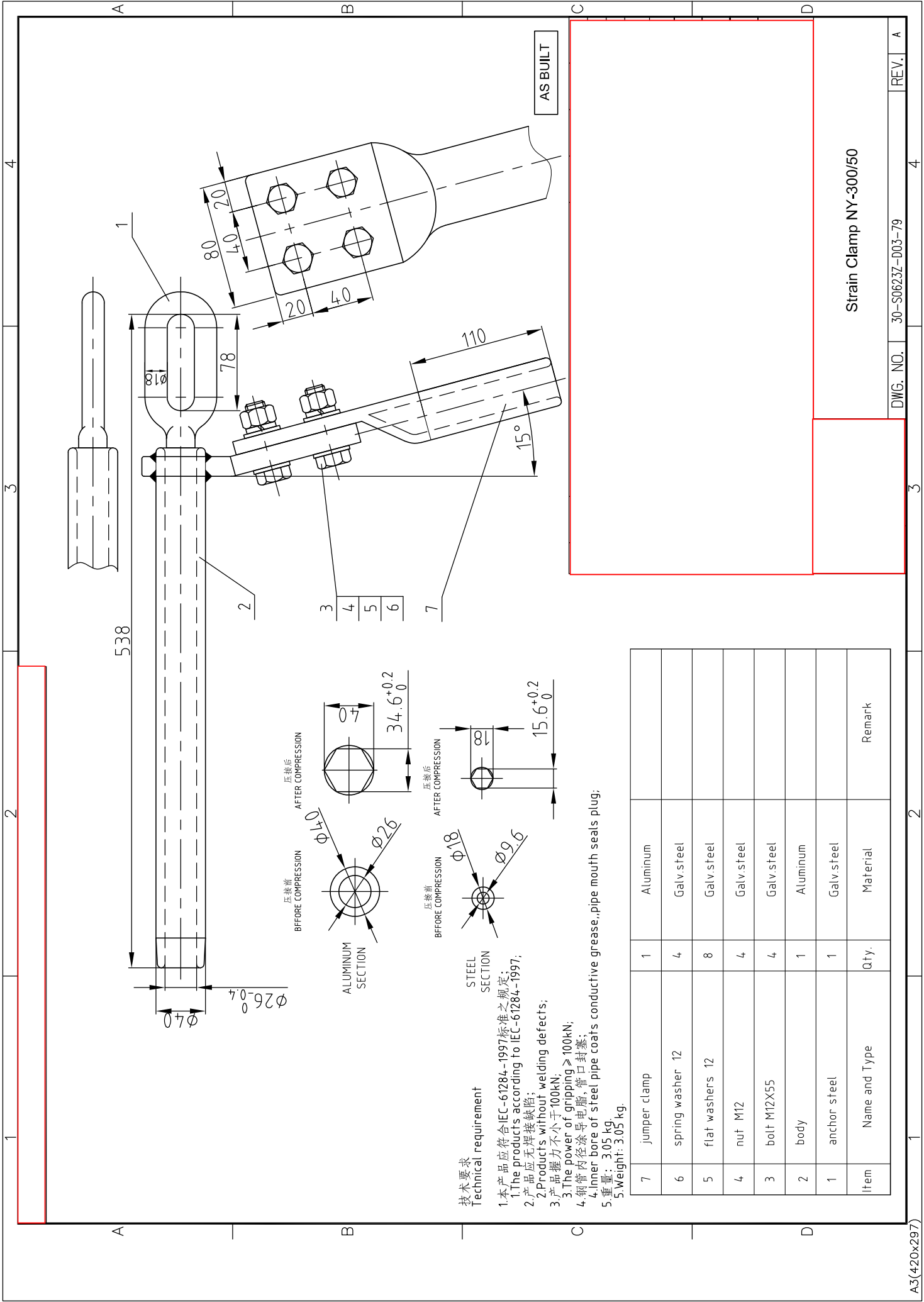


技术要求
Technical requirement

1.标称破坏载荷不小于120kN;
1.Min. breaking strength $\geq 120\text{kN}$;
2.紧固件除闭口销外热镀锌;
2.All fastener should be hot galvanized except the cotter.
3.重量1.11 kg.
3.Weight: 1.11 kg.

4	cotter pin type B	1	stainless steel	
3	nut M22	1	Galv.steel	
2	bolt M22X75	1	Galv.steel	
1	body	1	Galv.steel	
Item	Name and Type	Qty.	Material	Remark

Shackles U-12



技术要求
Technical requirement

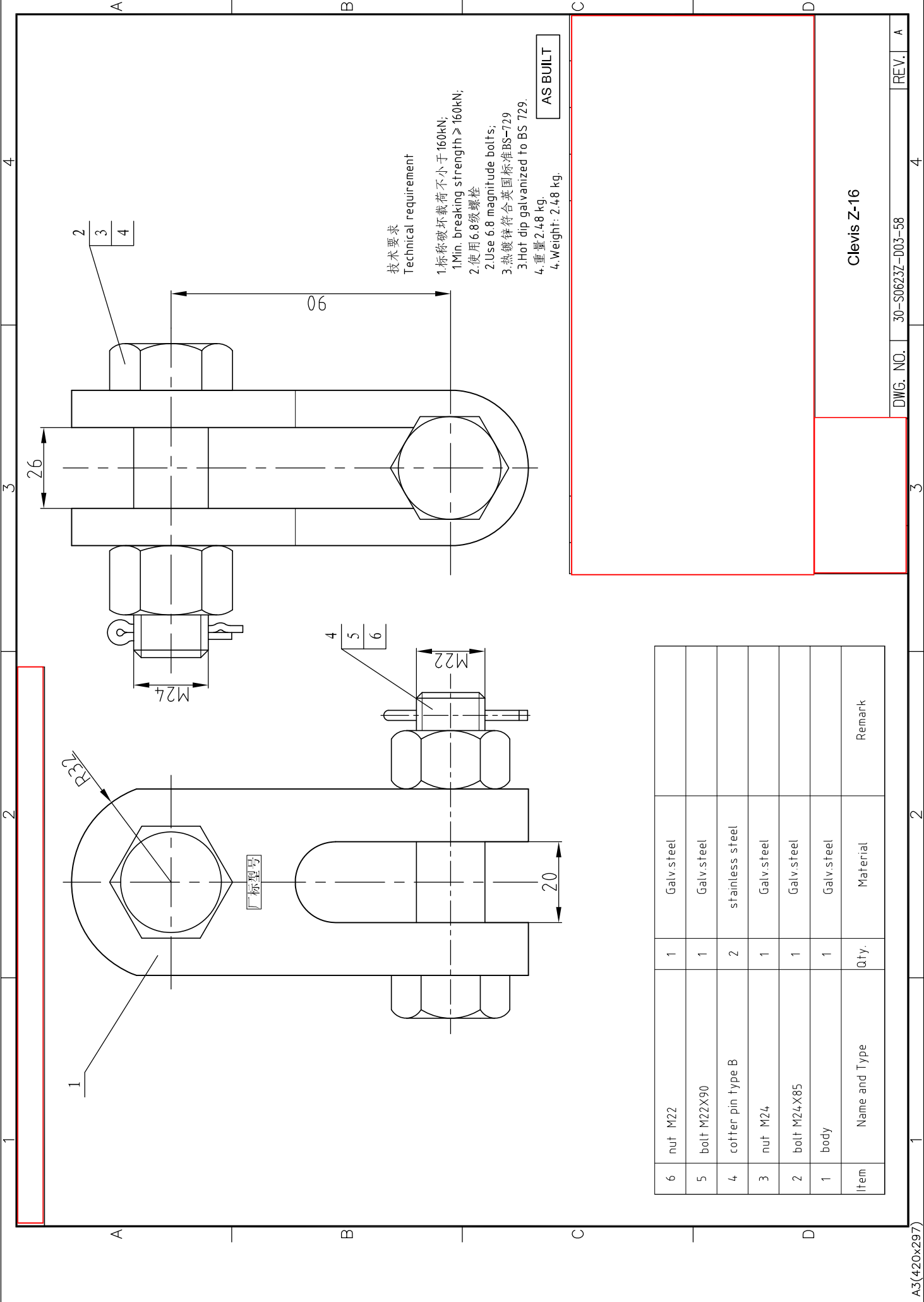
1. 本产品应符合 IEC-61284-1997 标准之规定;
1. The products according to IEC-61284-1997;
2. 产品应无焊接缺陷;
2. Products without welding defects;
3. 产品握力不小于 100kN;
3. The power of gripping $\geq 100\text{kN}$;
4. 钢管内径涂导电脂, 管口封塞;
4. Inner bore of steel pipe coats conductive grease, pipe mouth seals plug;
5. 重量: 3.05 kg;
5. Weight: 3.05 kg;
6. 重量: 3.05 kg;

7	jumper clamp	1	Aluminum		
6	spring washer	12	Galv steel		
5	flat washers	12	Galv steel		
4	nut M12	4	Galv steel		
3	bolt M12X55	4	Galv steel		
2	body	1	Aluminum		
1	anchor steel	1	Galv steel		
Item	Name and Type	Qty.	Material	Remark	

Strain Clamp NY-300/50

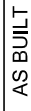
DWG. NO. 30-S0623Z-D03-79

REV. A



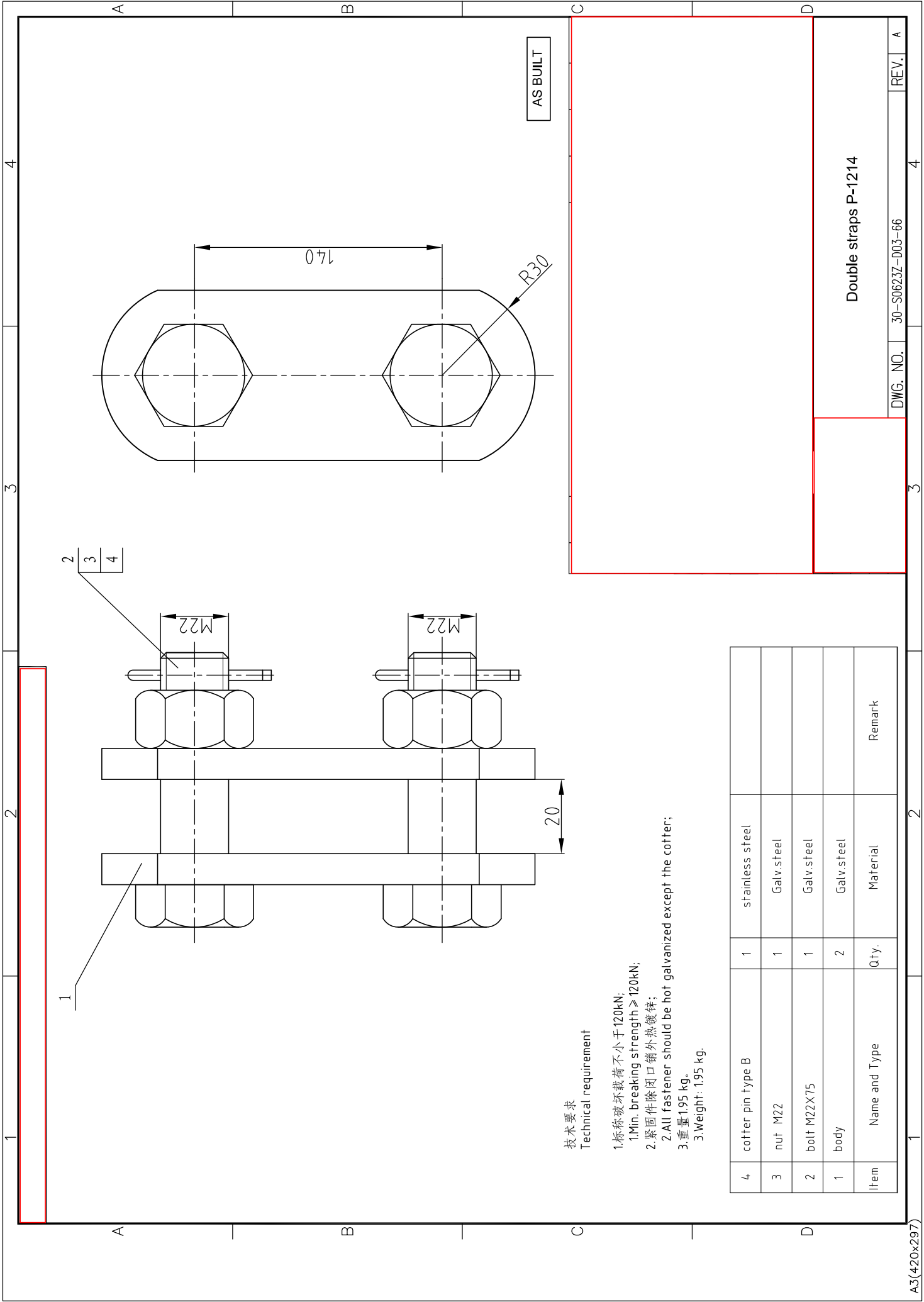
DWG. NO. 30-S0623Z-D03-58

REV. A



1. 标称破坏荷载不小于 120kN;
1Min. breaking strength $\geq 120\text{kN}$;
2. 热镀锌符合英国标准 BS-729
- 2.Hot dip galvanized to BS 729;
3. 重量 4.08 kg.
- 3.Weight: 4.08 kg.

DWG. NO.	30-S0623Z-D03-65
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技术要求
Technical requirement

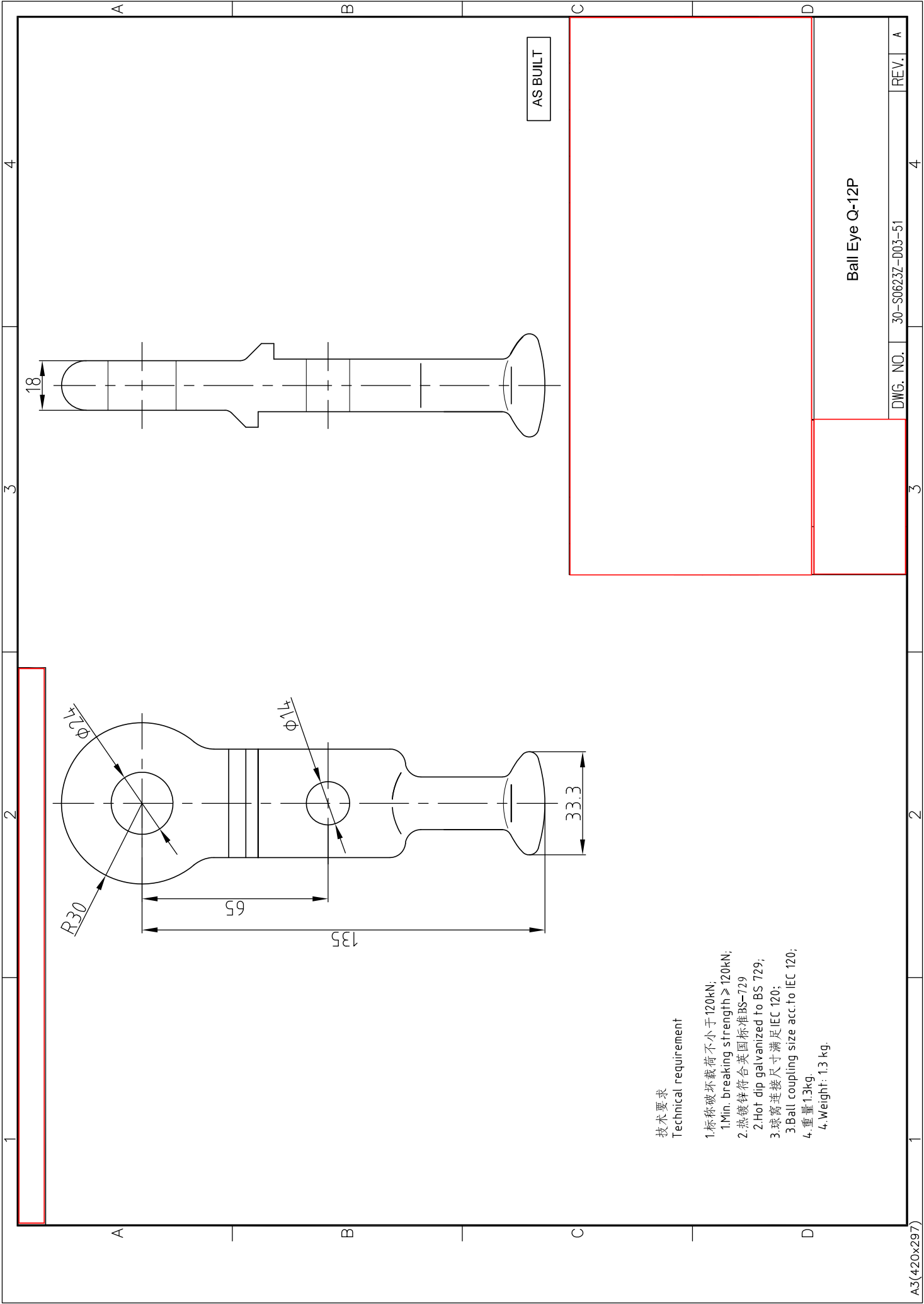
1. 标称破坏载荷不小于 120kN;
1.Min. breaking strength $\geq 120\text{kN}$;
2. 紧固件除闭口销外热镀锌;
2.All fastener should be hot galvanized except the cotter;
3. 重量 1.95 kg.
3.Weight: 1.95 kg.

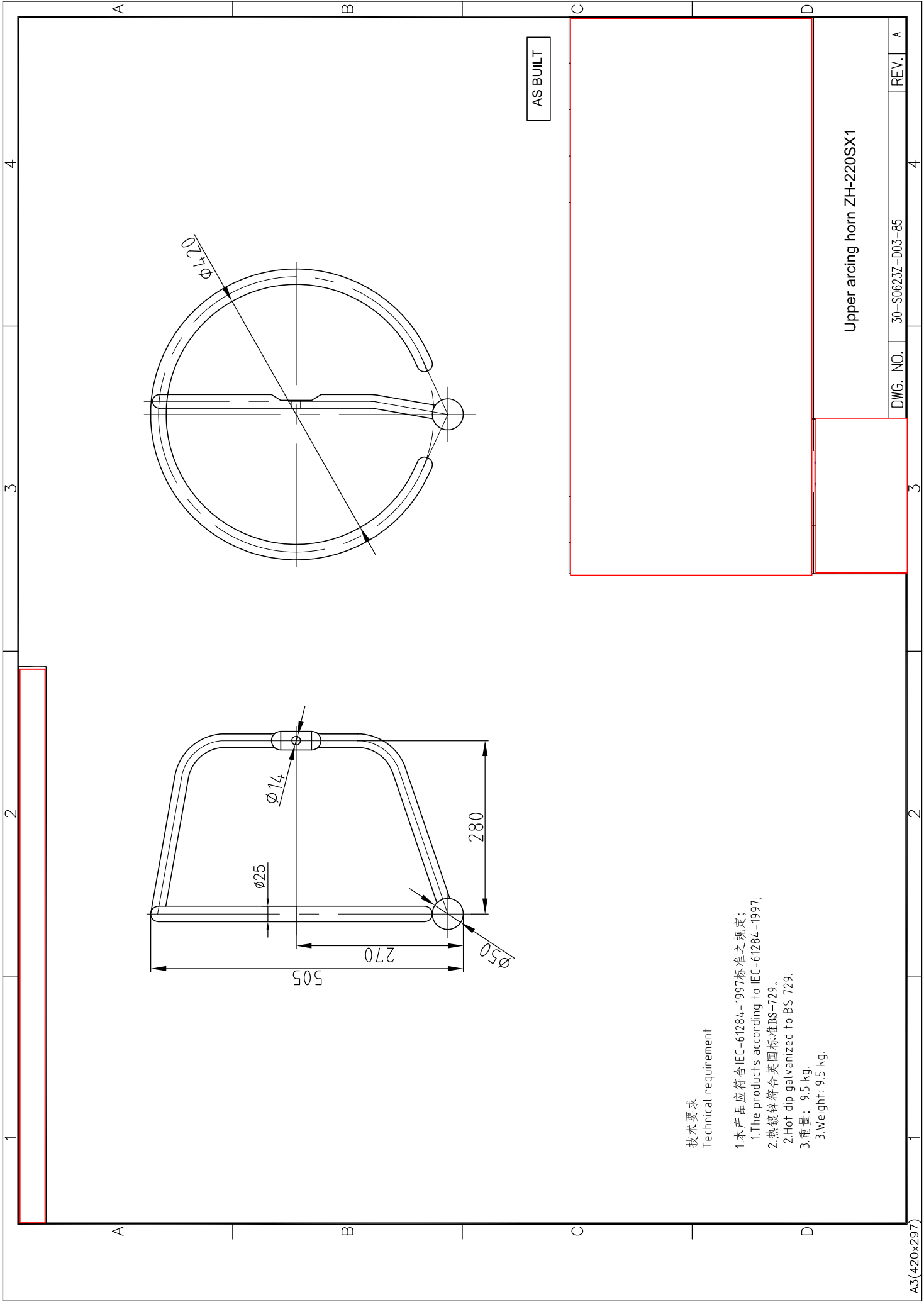
4	cotter pin type B	1	stainless steel	
3	nut M22	1	Galv.steel	
2	bolt M22X75	1	Galv.steel	
1	body	2	Galv.steel	
Item	Name and Type	Qty.	Material	Remark

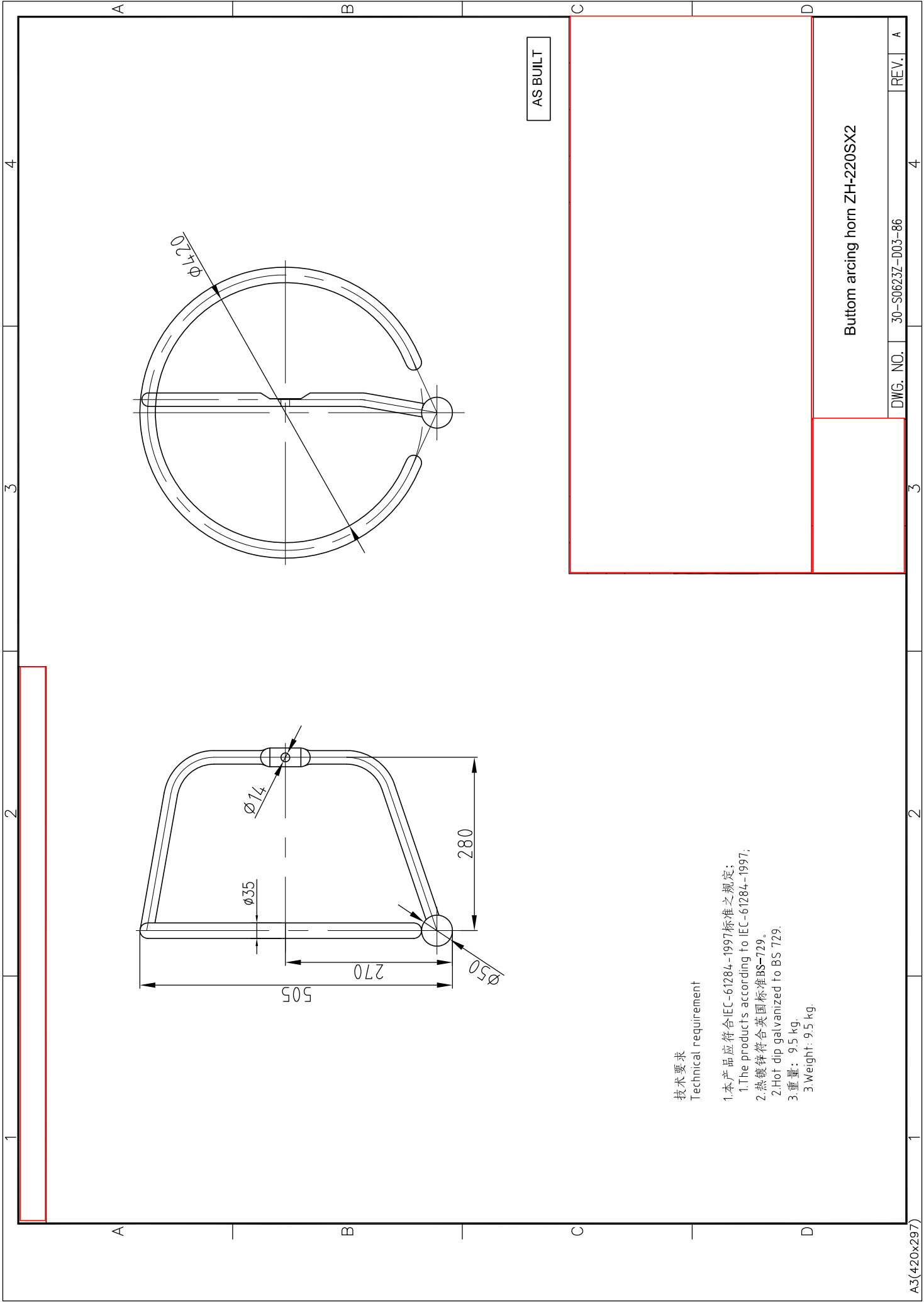
Double straps P-1214

DWG. NO. 30-S0623Z-D03-66

REV. A



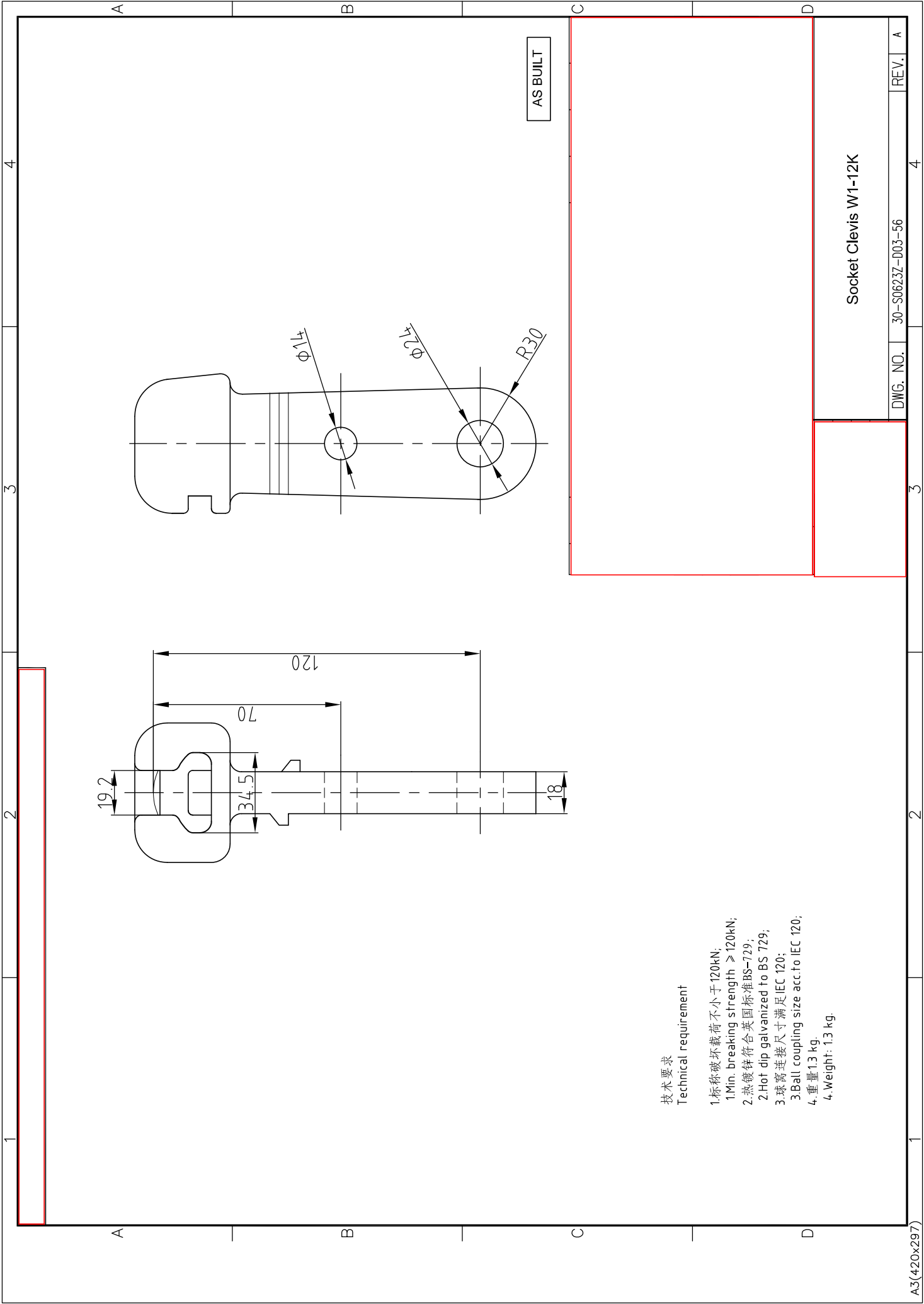




技术要求

Technical requirement

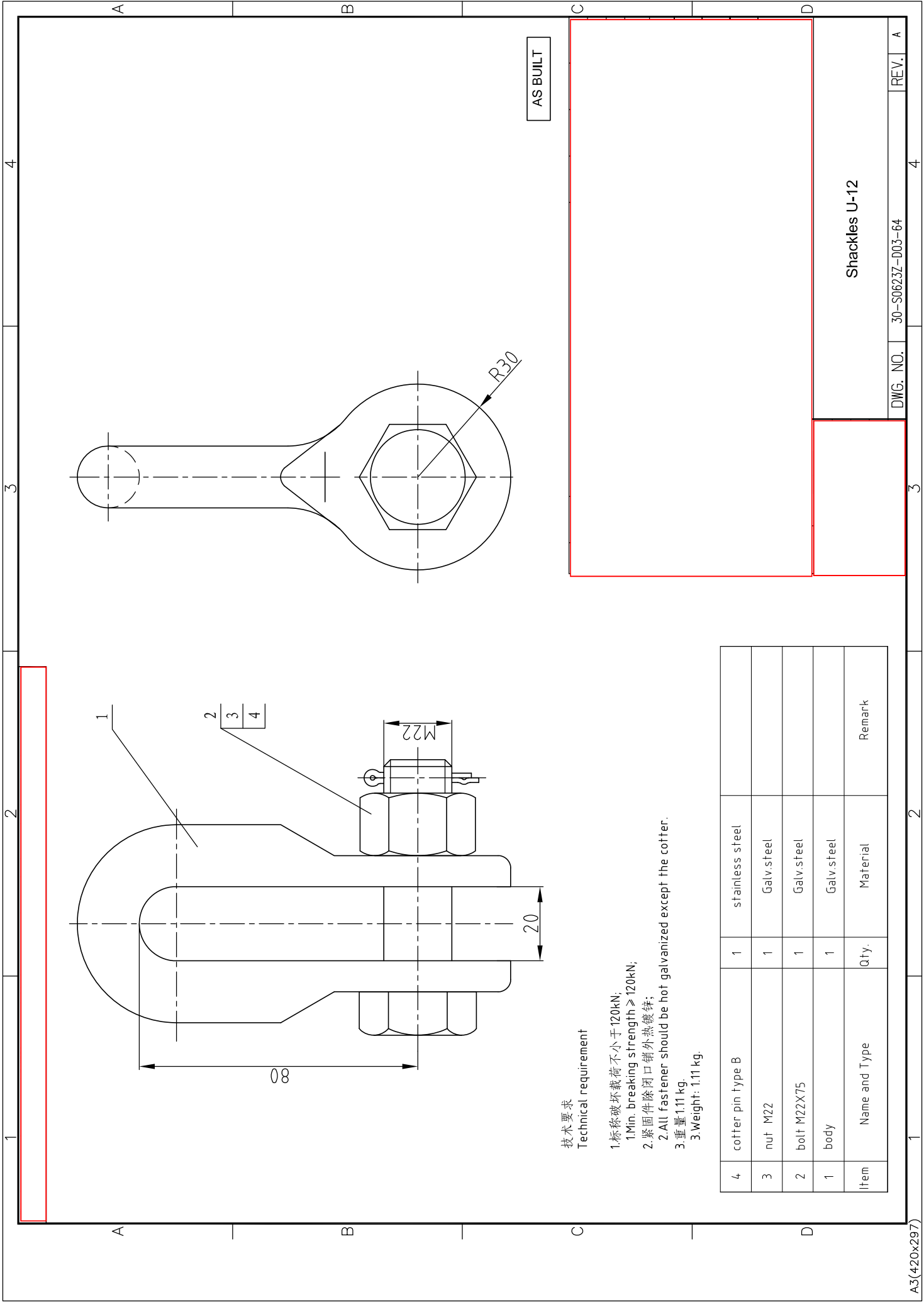
- 1.本产品应符合IEC-61284-1997标准之规定;
1.The products according to IEC-61284-1997;
- 2.热镀锌符合英国标准BS-729.
2.Hot dip galvanized to BS 729.
- 3.重量: 9.5 kg.
3.Weight: 9.5 kg.



技术要求

Technical requirement

1. 标称破坏载荷不小于120kN;
1 Min. breaking strength $\geq 120\text{kN}$;
2. 热镀锌符合英国标准BS-729;
2. Hot dip galvanized to BS 729;
3. 球窝连接尺寸满足IEC 120;
3 Ball coupling size acc.to IEC 120;
4. 重量1.3 kg.
4. Weight: 1.3 kg.



技术要求
Technical requirement

- 1.标称破坏载荷不小于120kN;
1.Min. breaking strength $\geq 120\text{kN}$;
- 2.紧固件除闭口销外热镀锌;
2.All fastener should be hot galvanized except the cotter.
- 3.重量1.11 kg.
3.Weight: 1.11 kg.

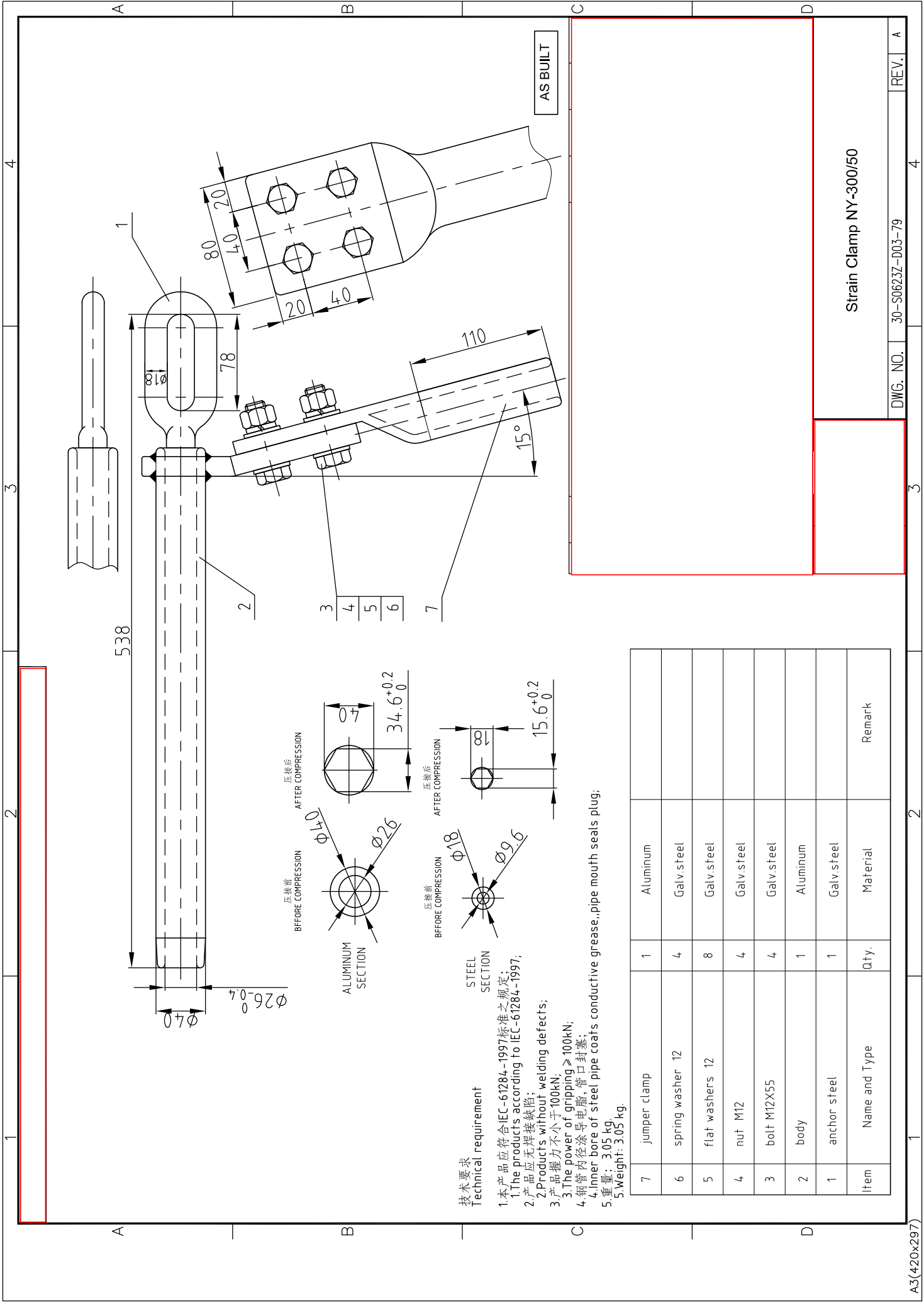
4	cotter pin type B	1	stainless steel	
3	nut M22	1	Galv.steel	
2	bolt M22X75	1	Galv.steel	
1	body	1	Galv.steel	
Item	Name and Type	Qty.	Material	Remark

AS BUILT

Shackles U-12

DWG. NO. 30-S0623Z-D03-64

REV. A



技术要求
Technical requirement

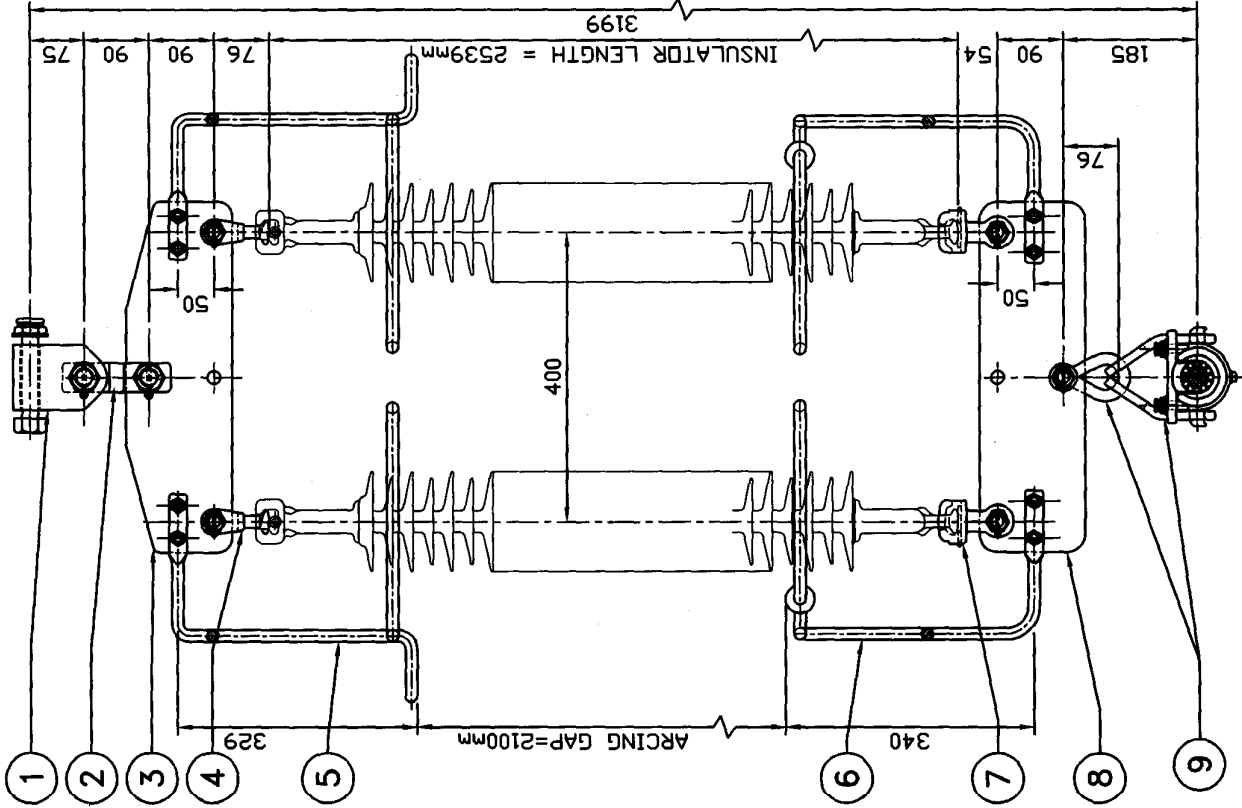
- 1. 本产品应符合 IEC-61284-1997 标准之规定;
- 1. The products according to IEC-61284-1997;
- 2. 产品应无焊接缺陷;
- 2. Products without welding defects;
- 3. 产品握力不小于 100kN;
- 3. The power of gripping $\geq 100\text{kN}$;
- 4. 钢管内径涂导电脂, 管口封塞;
- 4. Inner bore of steel pipe coats conductive grease, pipe mouth seals plug;
- 5. 重量: 3.05 kg;
- 5. Weight: 3.05 kg;

7	jumper clamp	1	Aluminum		
6	spring washer	12	Galv steel		
5	flat washers	12	Galv steel		
4	nut M12	4	Galv steel		
3	bolt M12X55	4	Galv steel		
2	body	1	Aluminum		
1	anchor steel	1	Galv steel		
Item	Name and Type	Qty.	Material	Remark	

Strain Clamp NY-300/50

B I L L O F M A T E R I A L S

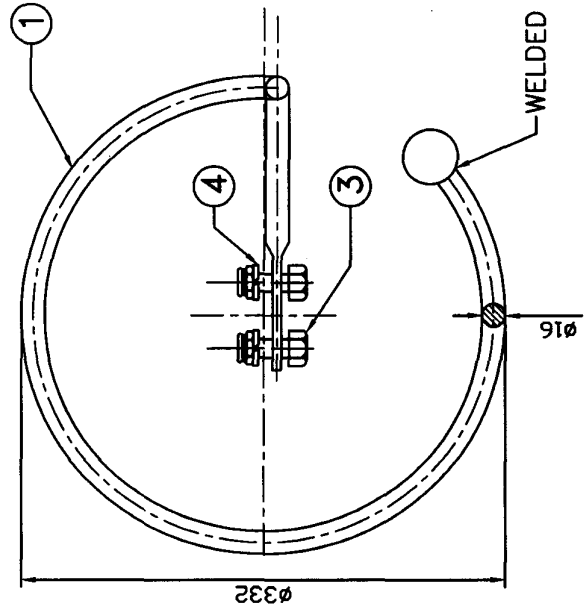
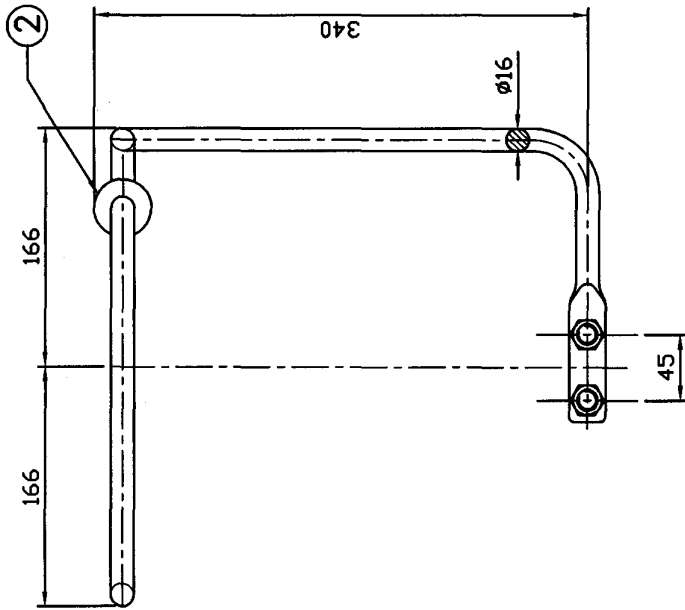
ITEM NO.	ITEM DESCRIPTION.	CAT. NO.	MATERIAL	SURFACE TREATMENT.	U.T.S. (KN)	REQD. QTY.
1.	TOWER HINGE	ATEL-38/1	MILD STEEL	H.D.G.	140	1
2.	EXT. STRAP	AEL-335	MILD STEEL	H.D.G.	140	1
3.	YOKE PLATE(T.S.)	ATP-213	MILD STEEL	H.D.G.	140	1
4.	BALL CLEVIS	ABC-1	FORGED STEEL	H.D.G.	70	2
5.	ARCING RING(T.S.)	AAH/FR-15A	MILD STEEL	H.D.G.	-	2
6.	ARCING RING(L.S.)	AAH/FRB-4C	MILD STEEL	H.D.G.	-	2
7.	SOCKET CLEVIS	ASC-1	FORGED STEEL	H.D.G.	70	2
8.	YOKE PLATE(L.S.)	ATP-200C	MILD STEEL	H.D.G.	140	1
9.	SUSPENSION CLAMP ASSY. WITH P.A. ROD	A-32-ASSY.	FORGED STEEL & AL. ALLOY	-	70	1 SET



* TECHNICAL DATA *

1. U.T.S. OF HARDWARE FITTINGS : 2x70 KN.
2. BALL & SOCKET DESIGNATION : 16 mm.
3. SLIP STRENGTH OF SUS. CLAMP = 15% OF AS PER IEC:120.
4. U.T.S. OF RELEVANT CONDUCTOR.
5. H/WARE FITTINGS CONFORMS TO B.S.: 3288, PART-I.
6. ALL FERROUS PARTS (EXCEPT SPRING WASHER) SHALL BE HOT DIP GALVANISED CONFORMING TO B.S: 729. SPRING WASHER : SPRING STEEL, ELECTRO-GALVANISED.
7. SECURITY CLIP & SPLIT PIN : STAINLESS STEEL.
8. ALL DIMENSIONS ARE IN mm.
9. SHORT CIRCUIT : 31.5 KA PER 1 SEC.
9. GENERAL TOLERANCE : $\pm 3\%$.

ITEM : DOUBLE SUSPENSION H/WARE FITTINGS FOR SINGLE AC/SR CANARY CONDUCTOR (220 KV)

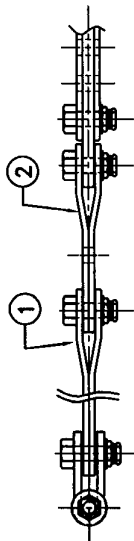
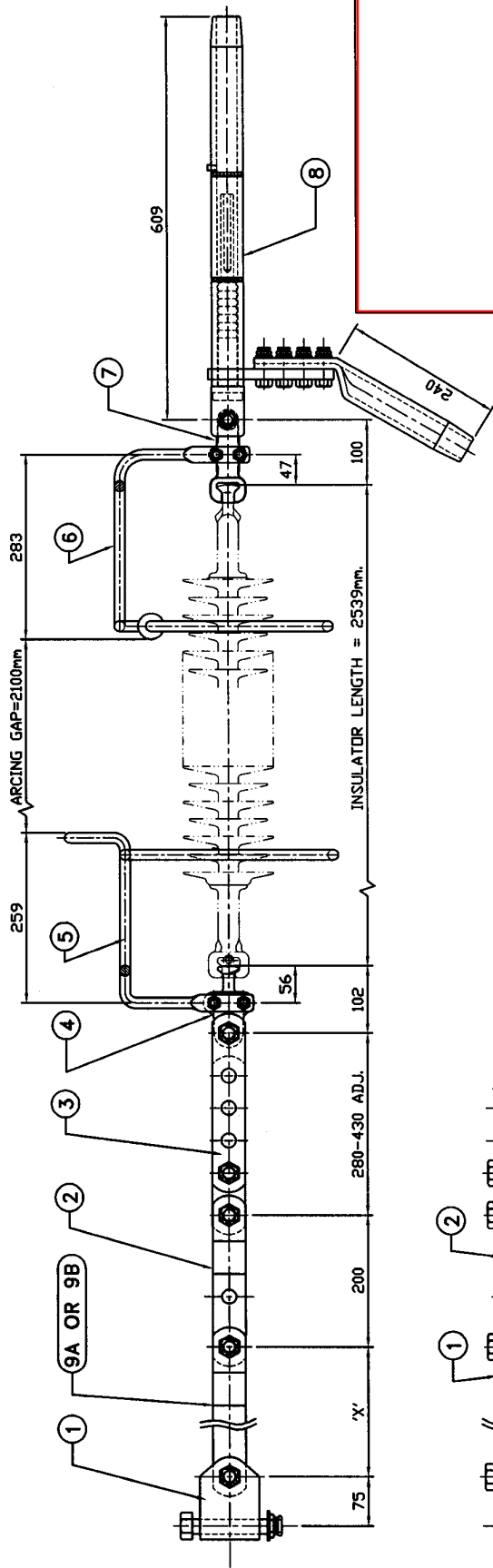


* TECHNICAL DATA *

1. SHORT CIRCUIT CAPACITY : 31.5 KA PER 1 SEC.
2. GENERAL TOLERANCE : $\pm 3\%$ UNLESS OTHERWISE SPECIFIED.

* BILL OF MATERIALS *				
ITEM NO.	ITEM DESCRIPTION.	MATERIAL.	SURFACE TREATMENT.	REQD.NO.
1.	ARCING RING	MILD STEEL	H.D.G.	1.
2.	BALL ($\phi 40$)	MILD STEEL	H.D.G.	1.
3.	M12X40 BOLT & NUT.	MILD STEEL	H.D.G.	2 SETS.
4.	SPRING WASHER.	SP. STEEL.	E.G.	2.

ITEM : ARCING RING (L.S.) FOR DOUBLE SUSPENSION
H/WARE FITTINGS SUITABLE FOR SINGLE
ACSR CANARY CONDUCTOR. (220 KV)

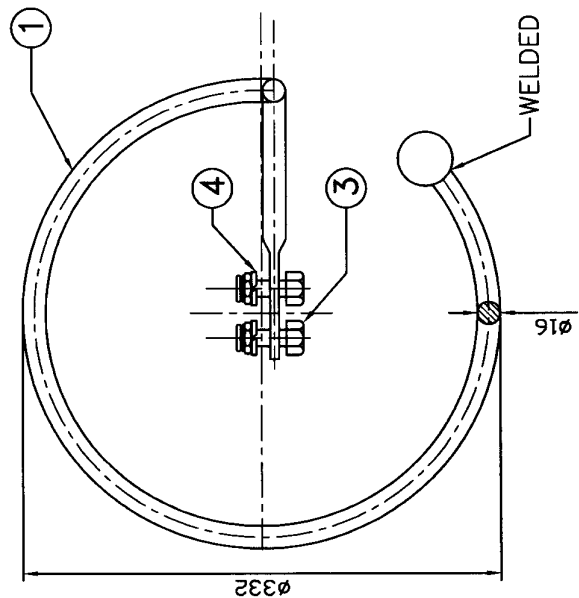
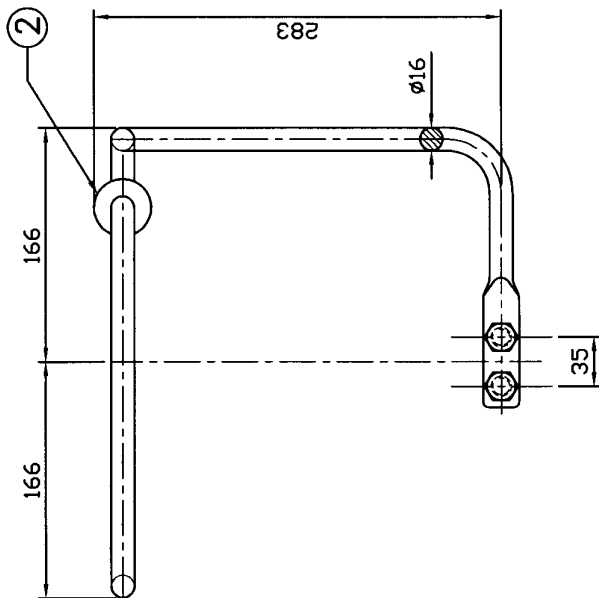


* TECHNICAL DATA *

1. U.T.S. OF HARDWARE FITTINGS : 120 KN.
2. U.T.S. OF TENSION CLAMP : 95% OF U.T.S. OF ACSR CANARY.
3. BALL & SOCKET DESIGNATION : 16 mm. AS PER IEC:120.
4. H/WARE FITTINGS CONFORMS TO B.S.: 3288, PART-I.
5. ALL FERROUS PARTS (EXCEPT SPRING WASHER) SHALL BE HOT DIP GALVANISED CONFORMING TO B.S: 729.
6. SPRING WASHER : SPRING STEEL, ELECTRO-GALVANISED.
7. SPLIT PIN & SECURITY CLIP : STAINLESS STEEL
8. SHORT CIRCUIT CAPACITY : 31.5 KA PER 1 SEC.
9. GENERAL TOLERANCE : $\pm 3\%$.

ITEM : SINGLE TENSION H/WARE FITTINGS FOR
SINGLE ACSR CANARY CONDUCTOR (220 KV)

B I L L O F M A T E R I A L S						
ITEM NO.	ITEM DESCRIPTION.	CAT. NO.	MATERIAL.	SURFACE TREATMENT.	U.T.S. (KN)	REQD. QTY.
1.	TOWER HINGE	ATEL-3	MILD STEEL	H.D.G.	120	1
2.	EXT. STRAP	AEL-336	MILD STEEL	H.D.G.	120	1
3.	SAG ADJ. PLATE	ASA-78	MILD STEEL	H.D.G.	120	1
4.	H.H. BALL EYE	ABL-6	FORGED STEEL	H.D.G.	120	1
5.	ARCING RING(T.S)	AAH/FR-15	MILD STEEL	H.D.G.	-	1
6.	ARCING RING(L.S)	AAH/FRB-4D	MILD STEEL	H.D.G.	-	1
7.	H.H. SOCKET EYE	ASE-100C	FORGED STEEL	H.D.G.	120	1
8.	DEAD END CLAMP	ADE/C-065	EXTRUDED AL. (99.5% PURITY & FORGED STEEL	- H.D.G	95% OF U.T.S. OF ACSR CANARY.	1
9A	ADDITIONAL LINK	AEL-351	MILD STEEL	H.D.G.	120	1
9B	ADDITIONAL LINK	AEL-352	MILD STEEL	H.D.G.	120	1



* TECHNICAL DATA *

1. SHORT CIRCUIT CAPACITY : 31.5 KA PER 1 SEC.
2. GENERAL TOLERANCE : $\pm 3\%$ UNLESS OTHERWISE SPECIFIED.

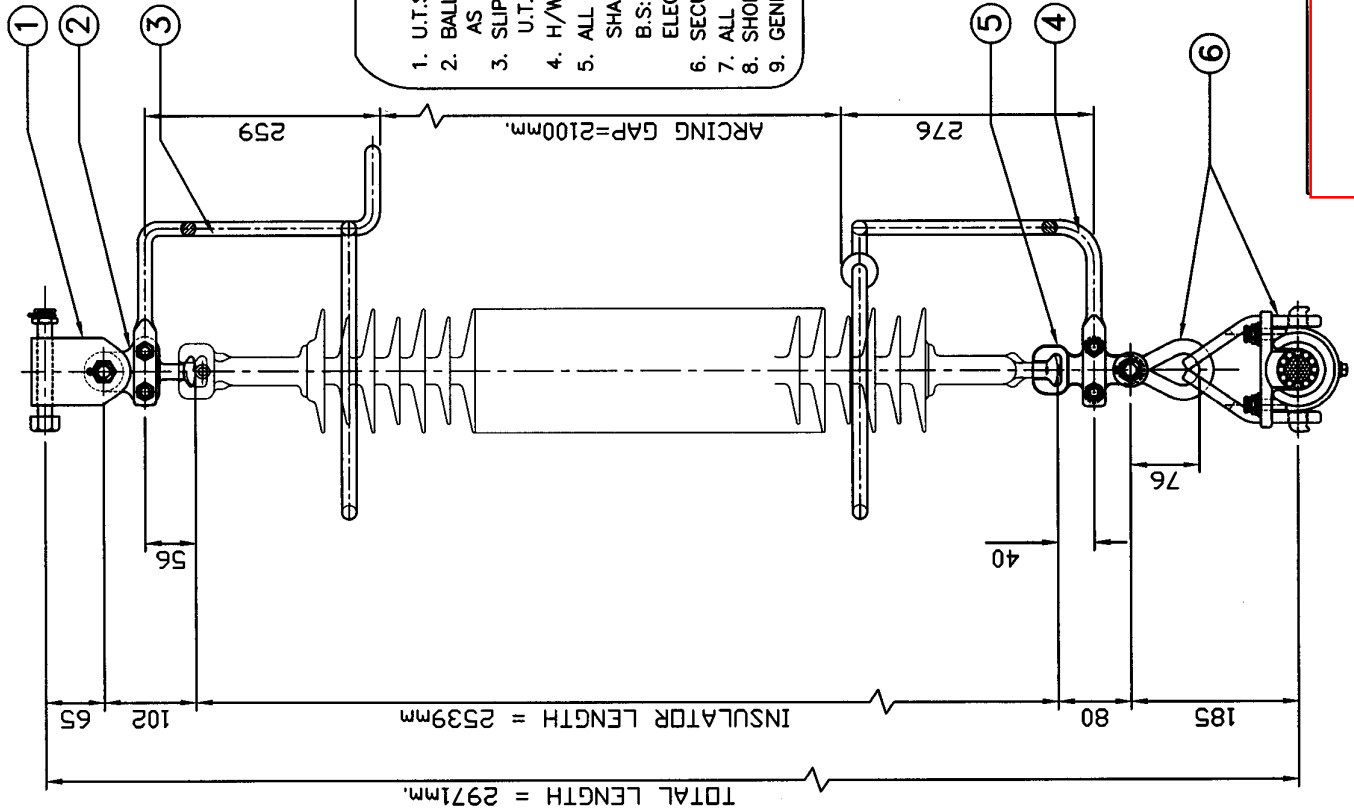
* B I L L O F M A T E R I A L S *				
ITEM NO.	ITEM DESCRIPTION.	MATERIAL.	SURFACE TREATMENT.	REQD.NO.
1.	ARCING RING	MILD STEEL	H.D.G.	1.
2.	BALL ($\phi 40$)	MILD STEEL	H.D.G.	1.
3.	M12X40 BOLT & NUT.	MILD STEEL	H.D.G.	2 SETS.
4.	SPRING WASHER.	SP. STEEL.	E.G.	2.

ITEM : ARCING RING (L.S.) FOR SINGLE TENSION
H/WARE FITTINGS SUITABLE FOR SINGLE
ACSR CANARY CONDUCTOR. (220 KV)

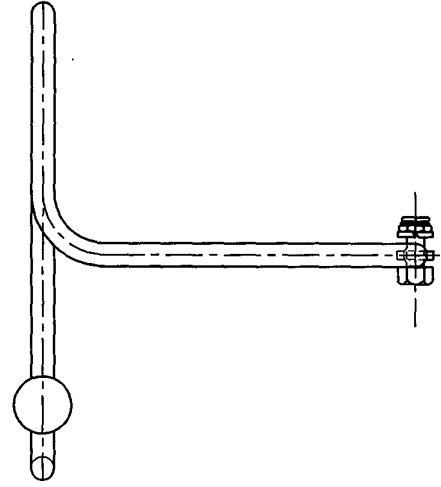
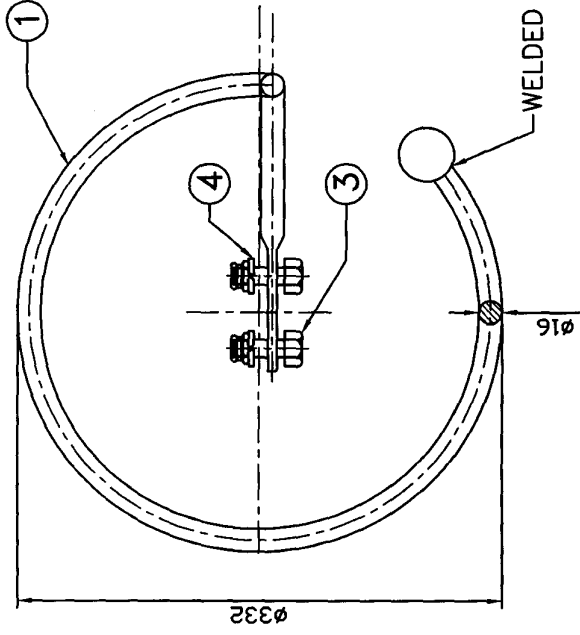
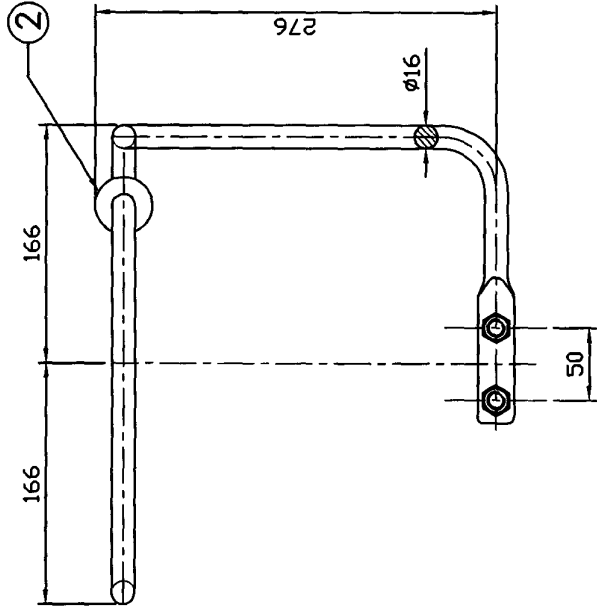
B I L L O F M A T E R I A L S					
ITEM NO.	ITEM DESCRIPTION.	CAT. NO.	MATERIAL.	SURFACE TREATMENT. (KN)	REQD. QTY.
1.	TOWER HINGE	ATEL-04B	MILD STEEL	H.D.G.	70 1
2.	H.H. BALL LINK	ABL-6	FORGED STEEL	H.D.G.	70 1
3.	ARCING RING(T.S)	AAH/FR-15	MILD STEEL	H.D.G.	- 1
4.	ARCING RING(L.S)	AAH/FRB-4B	MILD STEEL	H.D.G.	- 1
5.	H.H. SOCKET EYE	ASE-78A	FORGED STEEL	H.D.G.	70 1
6.	SUSPENSION CLAMP ASSY. WITH P.A. ROD	A-32-ASSY	FORGED STEEL & AL. ALLOY	H.D.G.	70 1 SET

* TECHNICAL DATA *

1. U.T.S. OF HARDWARE FITTINGS : 70 KN.
2. BALL & SOCKET DESIGNATION : 16 mm.
AS PER IEC:120.
3. SLIP STRENGTH OF SUS. CLAMP = 15% OF
U.T.S. OF RELEVANT CONDUCTOR.
4. H/WARE FITTINGS CONFORMS TO B.S.: 3288, PART-I.
5. ALL FERROUS PARTS (EXCEPT SPRING WASHER)
SHALL BE HOT DIP GALVANISED CONFORMING TO
B.S: 729. SPRING WASHER : SPRING STEEL,
ELECTRO-GALVANISED.
6. SECURITY CLIP & SPLIT PIN : STAINLESS STEEL.
7. ALL DIMENSIONS ARE IN mm.
8. SHORT CIRCUIT : 31.5 KA PER 1 SEC.
9. GENERAL TOLERANCE : $\pm 3\%$.



ITEM :
SINGLE SUSPENSION H/WARE FITTINGS
FOR SINGLE ACSR CANARY CONDUCTOR (220 KV)



*** TECHNICAL DATA ***

1. SHORT CIRCUIT CAPACITY : 31.5 KA PER 1 SEC.
2. GENERAL TOLERANCE : $\pm 3\%$ UNLESS OTHERWISE SPECIFIED.

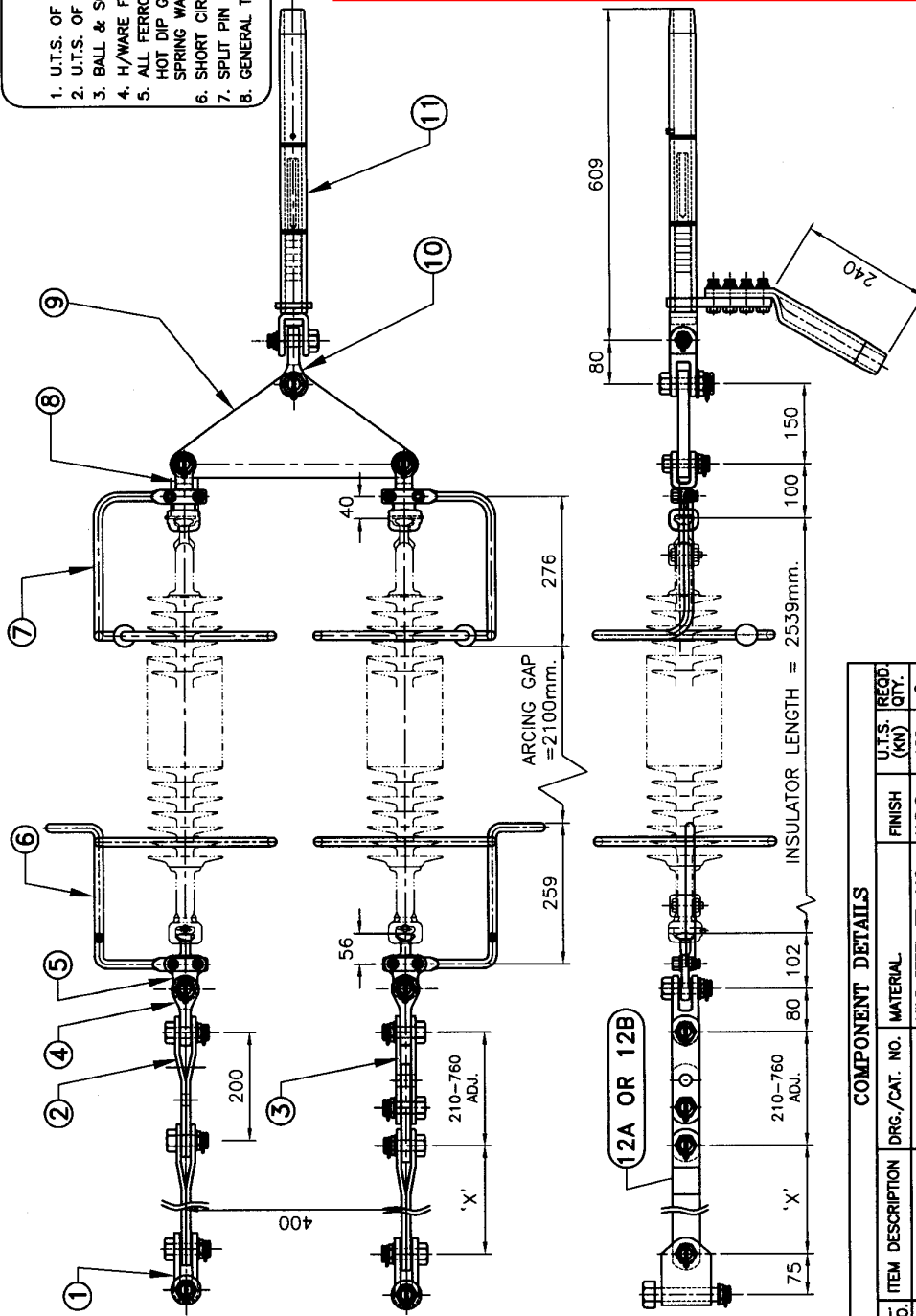
* BILL OF MATERIALS *				
ITEM NO.	ITEM DESCRIPTION.	MATERIAL.	SURFACE TREATMENT.	REQD.NO.
1.	ARCING RING	MILD STEEL	H.D.G.	1.
2.	BALL ($\phi 40$)	MILD STEEL	H.D.G.	1.
3.	M12X40 BOLT & NUT.	MILD STEEL	H.D.G.	2 SETS.
4.	SPRING WASHER.	SP. STEEL.	E.G.	2.

ITEM : ARCING RING (L.S.) FOR SINGLE SUSPENSION
H/WARE FITTINGS SUITABLE FOR SINGLE
ACSR CANARY CONDUCTOR. (220 KV)

* TECHNICAL DATA *

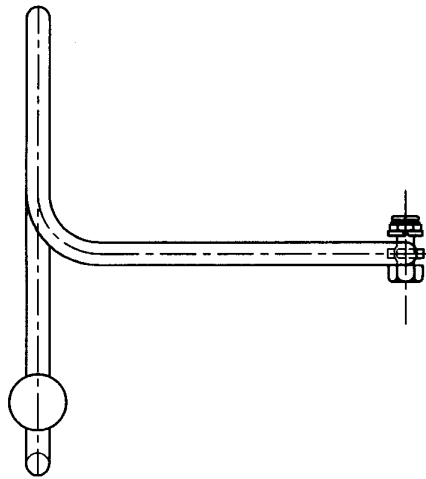
1. U.T.S. OF HARDWARE FITTINGS: 2x120 KN. (WITHOUT TENSION CLAMP)
2. U.T.S. OF TENSION CLAMP : 95 % UTS OF ACSR CANARY.
3. BALL & SOCKET DESIGNATION : 16 mm. AS PER IEC:120.
4. H/WARE FITTINGS CONFORMS TO B.S.: 3288, PART-I.
5. ALL FERROUS PARTS (EXCEPT SPRING WASHER) SHALL BE HOT DIP GALVANISED CONFORMING TO B.S: 729.
6. SPRING WASHER : SPRING STEEL, ELECTRO-GALVANISED.
7. SHORT CIRCUIT : 31.5 KA PER 1 SEC.
8. SPLIT PIN & SECURITY CLIP : STAINLESS STEEL.
9. GENERAL TOLERANCE : $\pm 3\%$.

ITEM : DOUBLE TENSION HARDWARE FITTINGS
SUITABLE FOR SINGLE ACSR CANARY
CONDUCTOR (220 KV)



COMPONENT DETAILS

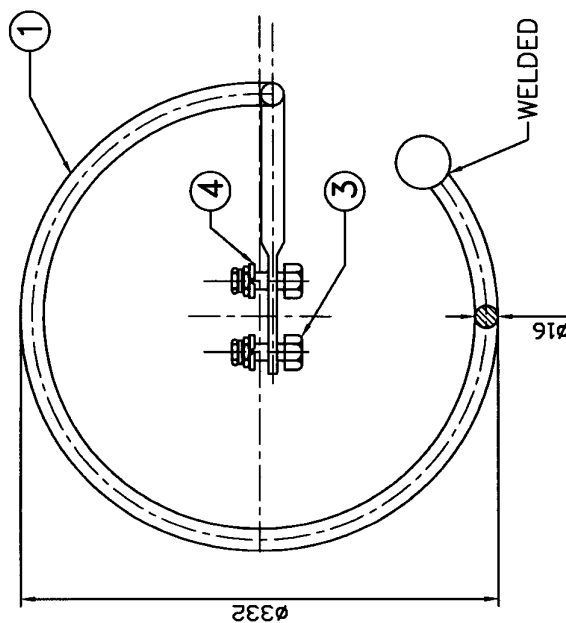
SL. NO.	ITEM DESCRIPTION	DRG./CAT. NO.	MATERIAL	FINISH	U.T.S. (KN)	RECD. QTY.
1	TOWER HINGE	ATEL-3	MILD STEEL FE-410	H.D.G.	120	2
2	FIXED EXT. STRAP	AEL-336A	MILD STEEL FE-410	H.D.G.	120	1
3	ADJ. EXT. STRAP	ASA-79A	MILD STEEL FE-410	H.D.G.	120	1
4	CLEVIS EYE	ACE-76T(222)	FORGED STEEL (CL-N)	H.D.G.	120	2
5	H.H. BALL EYE	ABL-6	FORGED STEEL (CL-N)	H.D.G.	120	2
6	ARCING RING(T.S)	AAH/FR-15	MILD STEEL FE-410	H.D.G.	-	2
7	ARCING RING(L.S)	AAH/FR-48	MILD STEEL FE-410	H.D.G.	-	2
8	H.H. SOCKET CLEVIS	ASC-9H/1	FORGED STEEL (CL-N)	H.D.G.	120	2
9	YOKE PLATE	ATP-10C7	MILD STEEL FE-410	H.D.G.	240	1
10	CLEVIS EYE	ACE-76T(224)	FORGED STEEL (CL-N)	H.D.G.	160	1
11	DEAD END CLAMP	ADE/C-065	EXTRUDED AL. (99.5% PURITY) & FORGED STEEL	-	95% OF U.T.S. OF ACSR CANARY	1
12A	ADDITIONAL LINK	AEL-351	MILD STEEL	H.D.G.	120	2
12B	ADDITIONAL LINK	AEL-352	MILD STEEL	H.D.G.	120	2



* B I L L O F M A T E R I A L S *				
ITEM NO.	ITEM DESCRIPTION.	MATERIAL.	SURFACE TREATMENT.	REQD.NO.
1	ARCING RING	MILD STEEL	H.D.G.	1.
2.	BALL (φ40)	MILD STEEL	H.D.G.	1.
3.	M12X40 BOLT & NUT.	MILD STEEL	H.D.G.	2 SETS.
4.	SPRING WASHER.	SP. STEEL.	E.G.	2.

**** TECHNICAL DATA ****

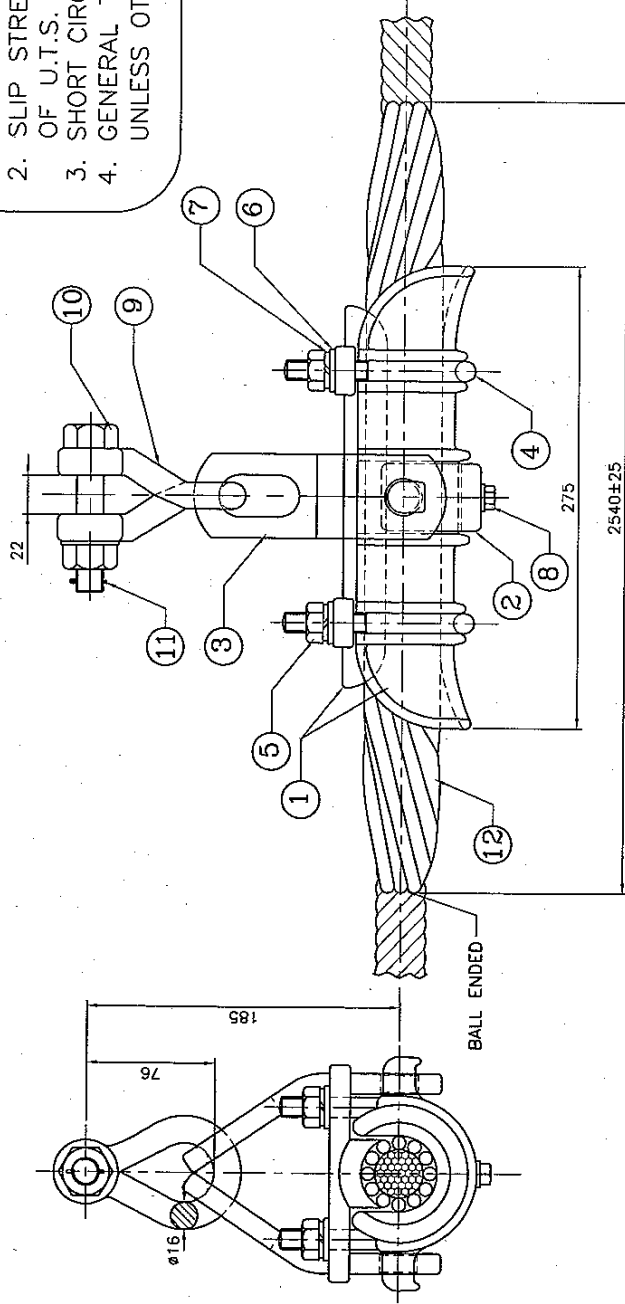
1. SHORT CIRCUIT CAPACITY :
31.5 KA PER 1 SEC.
2. GENERAL TOLERANCE : $\pm 3\%$
UNLESS OTHERWISE SPECIFIED.



ITEM : ARCTING RING (L.S.) FOR DOUBLE TENSION H/WARE FITTINGS SUITABLE FOR SINGLE ACSR CANARY CONDUCTOR. (220 KV)

*** TECHNICAL DATA ***

1. MIN. BREAKING STRENGTH OF CLAMP : 70 KN.
2. SLIP STRENGTH OF SUS. CLAMP = 15% OF U.T.S. OF RELEVANT CONDUCTOR.
3. SHORT CIRCUIT CAPACITY : 31.5 KA PER 1 SEC.
4. GENERAL TOLERANCE $\pm 3\%$ UNLESS OTHERWISE SPECIFIED.



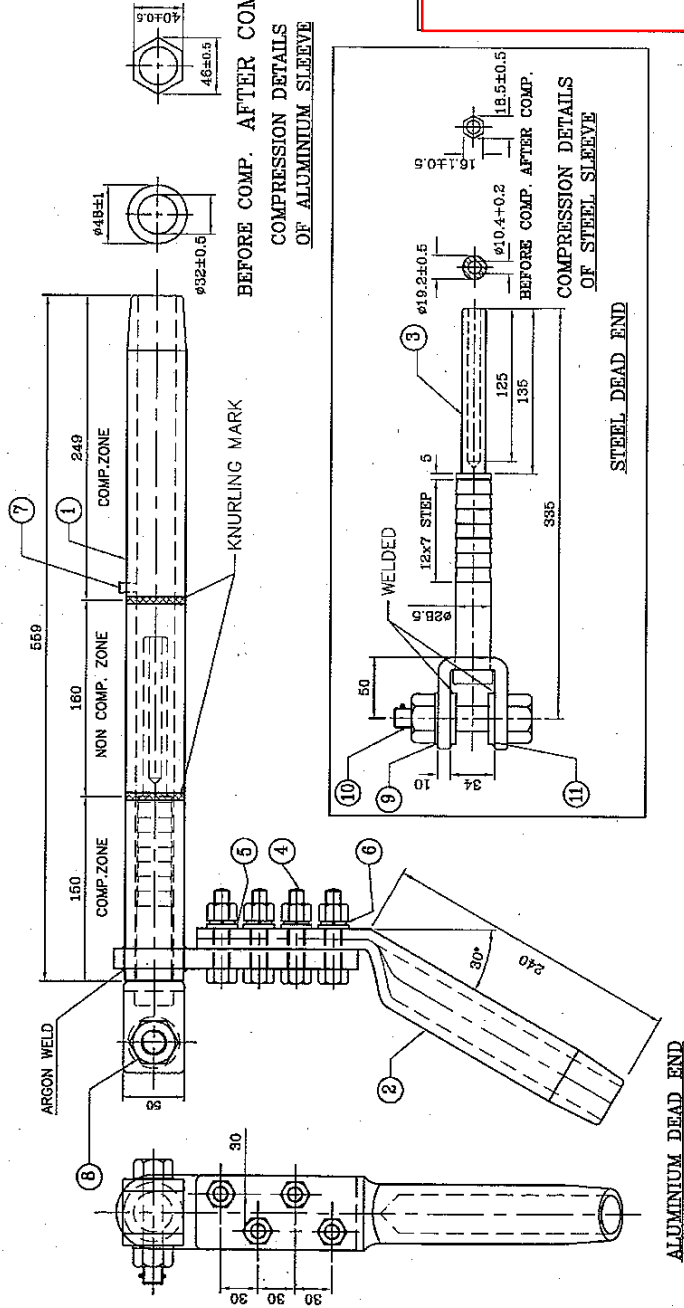
BILL OF MATERIALS				
ITEM NO.	ITEM	MATERIAL	QTY/SET	CAT. NO.
1.	CLAMP & KEEPER	AL. ALLOY	1 SET	
2.	SADDLE	M.S., H.D.G.	1.	
3.	SIDE STRAP	M.S., H.D.G.	2.	
4.	U-BOLT (M-12)	M.S., H.D.G.	2.	
5.	M-12 NUT	M.S., H.D.G.	4.	A-32
6.	PLAIN WASHER	M.S., H.D.G.	4.	
7.	SPRING WASHER	SP. STEEL, E.G.	4.	
8.	M10 BOLT	M.S., H.D.G.	1.	
9.	TWISTED SHACKLE	F.S., H.D.G.	1.	
10.	M-16x90 BOLT, NUT & FLAT WASHER.	M.S., H.D.G.	1 SET	ATS-1
11.	SPLIT PIN	STAINLESS STEEL	1	
12.	P. A. ROD ($\phi 7.87$)	AL. ALLOY 6061	13	APR-018

ITEM : SUSPENSION CLAMP ASSY. WITH P.A. ROD
FOR ACSR CANARY CONDUCTOR. (220 KV)

182AKPS10021B

**** TECHNICAL DATA ****

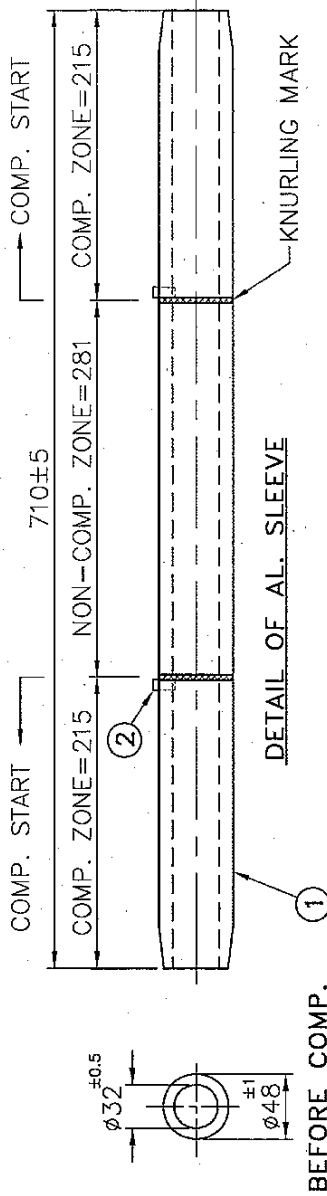
1. SLIP/MECH. STRENGTH(MIN):
95% U.T.S. OF CONDUCTOR
2. COMPRESSION DIE NOS. DA-11(AL) & DS-10
(STEEL) COMPRESSION PRESSURE: 100 TON.
3. SHORT CIRCUIT CAPACITY : 31.5 KA PER 1 SEC.
4. GENERAL TOLERANCE : $\pm 3\%$
UNLESS OTHERWISE SPECIFIED.



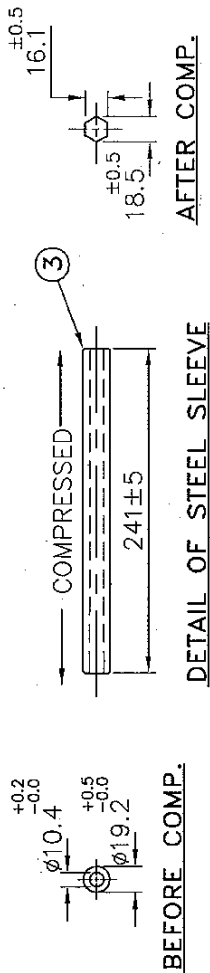
BILL OF MATERIALS

BILL OF MATERIALS				
ITEM NO.	COMPONENT.	MATERIAL.	SURFACE TREATMENT.	REQD. QTY.
1.	DEAD END BODY.	EXTRUDED	—	1
2.	JUMPER.	AL. ALLOY	—	1
3.	STEEL DEAD END.	FORGED STEEL	H.D.G.	1
4.	M12X60 BOLT, NUT	MILD STEEL.	H.D.G.	4 SETS.
5.	PLAIN WASHER FOR M12 BOLT	MILD STEEL	H.D.G.	4
6.	SPRING WASHER FOR M12 BOLT	SPRING STEEL.	E.G.	4
7.	FILLER PLUG.	PURE AL. ROD	—	1
8.	M16X80 BOLT & NUT	MILD STEEL (GR. 8.8/8.0)	H.D.G.	1 SET.
9.	PLAIN WASHER FOR M16 BOLT	MILD STEEL.	H.D.G.	1
10.	SPLIT PIN	STAINLESS STEEL	—	1
11.	5mm THK. WASHER	MILD STEEL.	—	2

ITEM : TENSION CLAMP FOR
ACSR CANARY CONDUCTOR. (220 KV)



BEFORE COMP.



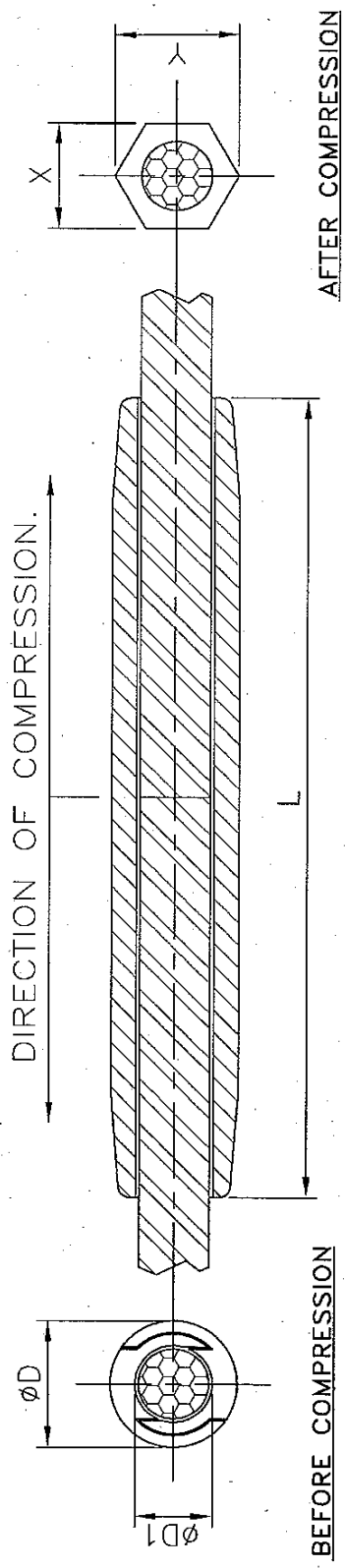
AFTER COMP.

BILL OF MATERIALS			
ITEM NO	ITEM	MATERIAL	QTY/SET
1.	AL. SLEEVE	EXTRUD. AL (E.C.GRADE) (99.5% PURITY)	1
2.	FILLER PLUG	ALUMINIUM	2
3.	STEEL SLEEVE	MILD STEEL, H.D.G. FE-410, IS: 2062.	1

*** TECHNICAL DATA ***

- JOINT CONFORMS TO B.S.: 3288, (PART-I).
- SLIP STRENGTH : 95% OF U.T.S.
OF RELEVANT CONDUCTOR.
- COMPRESSION DIE NOS. DA-11(AL) & DS-10
(STEEL) COMPRESSION PRSSURE: 100 TON.
- GENERAL TOLERANCE : ±3%
UNLESS OTHERWISE SPECIFIED.

ITEM : MIDSPAN COMPRESSION JOINT FOR ACSR CANARY
CONDUCTOR (220 KV)



BEFORE COMPRESSION AFTER COMPRESSION

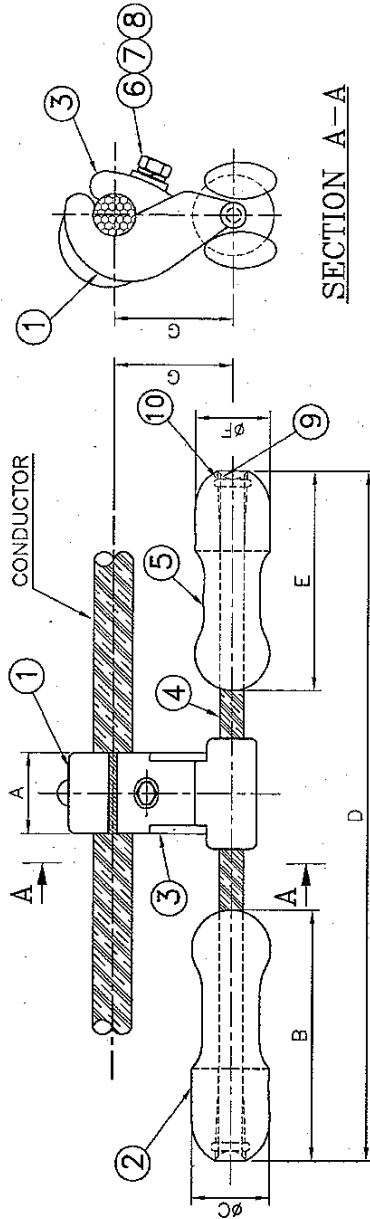
CONDUCTOR C O D E N A M E	C A T. N O.	COND. DIA.	DIMENSIONS(mm.)				APP. WT. (KG)	D I E N O.
			LENGTH (L)	OUTSIDE D I A (ϕD)	INSIDE D I A ($\phi D1$)	ACROSS FLAT (X)	ACROSS CORNER (Y)	
CANARY	ARS-06	$\phi 29.52$	279	48	31	40	46	0.65
								DA-11

- * TECHNICAL DATA ***
1. ITEM CONFORMS TO B.S: 3288, (PART-I).
 2. SLIP STRENGTH : 95% OF U.T.S. OF ACSR CANARY.
 3. MATERIAL : EXTRUDED ALUMINIUM, E.C. GRADE.
 4. GENERAL TOLERANCE : $\pm 5\%$.

ITEM : REPAIR SLEEVE FOR ACSR CANARY
CONDUCTOR (220 KV)

TECHNICAL DATA

1. ITEM CONFORMS TO B.S.: 3288, (PART-I).
2. MASS PULL OFF VALUE : 500 KG.
3. SLIP STRENGTH OF CLAMP :
BEFORE FATIGUE TEST-2.5 KN.(MIN.),
AFTER FATIGUE TEST-2.0 KN.
4. U.T.S. OF MESSENGER CABLE : 135 KG/SQ.MM.(Min).
5. MESSENGER CABLE : 19 STRAND.
6. LAY RATIO OF MESSENGER CABLE : 9-11.
7. GENERAL TOLERANCE : $\pm 5\%$.
8. TIGHTENING TORQUE : 6.5 KG-M.
9. WEIGHT IS INDICATIVE ONLY, NOT MANDATORY.
10. RESONANCE FREQUENCIES
1st 10 \pm 1 2nd 14 \pm 1 3rd 28 \pm 2 4th 35 \pm 2



SECTION A-A

CONDUCTOR NAME	CAT. NO.	D	A	B	C	D	E	F	G	APPROX. WT.(KG)
ACSR CANARY	AVD-4R-3	29.52	60	185	57	510	163	55	87	4.65

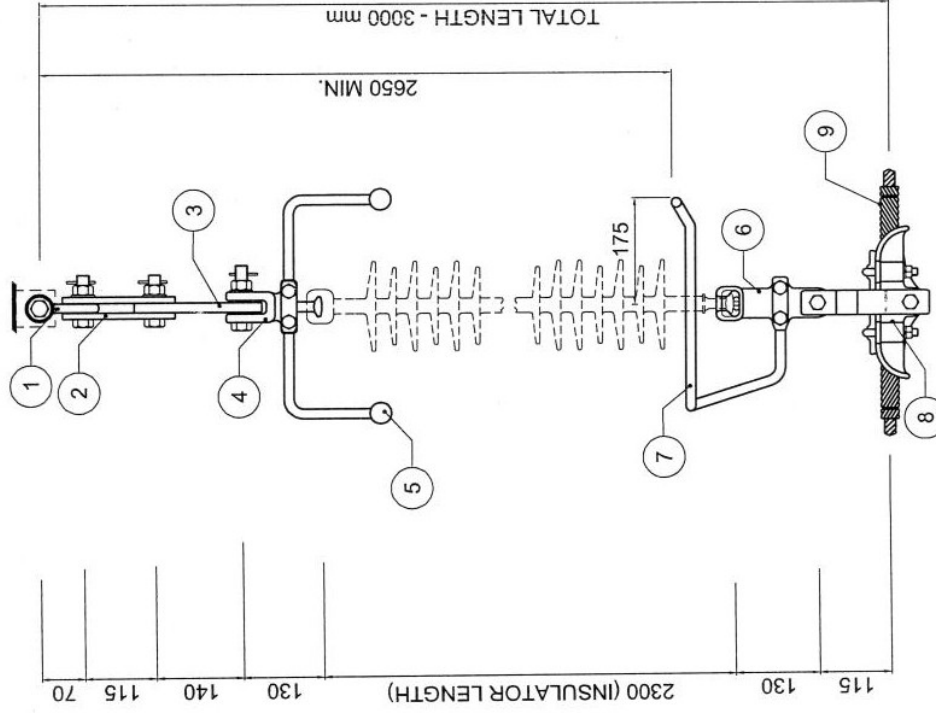
B I L L O F M A T E R I A L S

ITEM NO.	DESCRIPTION	MATERIAL	QTY./SET
1	HOOK HALF CLAMP	AL. ALLOY	1
2	DAMPER MASS (BIG)	C.I., H.D.G.	1
3	COVER HALF CLAMP	AL. ALLOY	1
4	MESSENGER CABLE	HIGH T.S., H.D.G.	19 STRAND
5	DAMPER MASS (SMALL)	C.I., H.D.G.	1
6	M16 FLAT WASHER	M.S., H.D.G.	1
7	M16 SPRING WASHER	SP. STEEL, E.G.	1
8	BOLT (M16)	M.S., H.D.G.	1
9	SEALING PLUG	AL. ALLOY	2
10	TAPER SLEEVES	AL. ALLOY	2

ITEM : VIBRATION DAMPER FOR ACSR CANARY CONDUCTOR (220 KV)

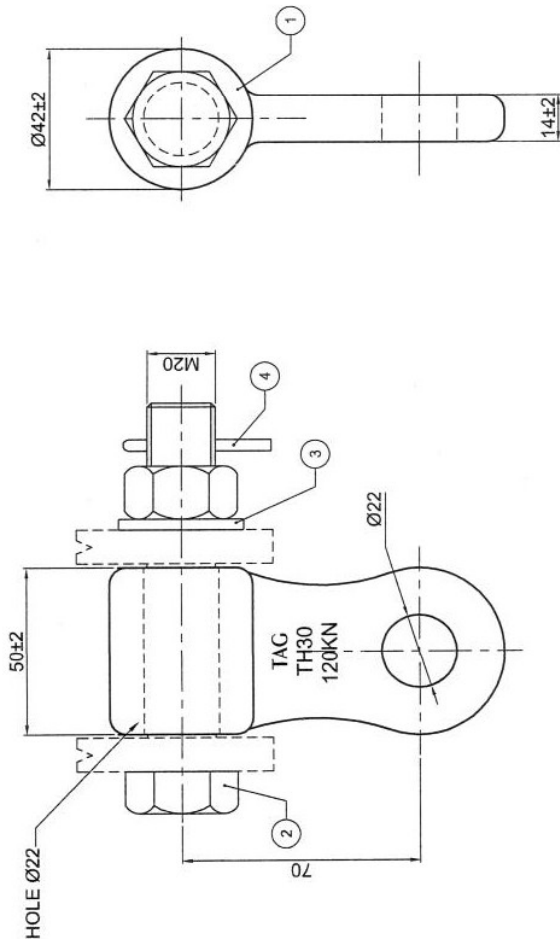
TECHNICAL DATA

1. ASSEMBLY MINIMUM ULTIMATE TENSILE STRENGTH - 120 kN.
2. BALL & SOCKET DESIGNATION - 16 MM AS PER IEC-120.
3. BALL & SOCKET LOCKING BY R-CLIP AS PER IEC-372. MADE OF STAINLESS STEEL.
4. FERROUS PARTS-HOT DIP GALVANIZED AS PER ISO 1461.
5. GENERAL TOLERANCE NOT TO EXCEED $\pm 3\%$.
6. WEIGHT OF THE STRING - 18.0 kg (APPROX).
7. INSULATOR NOT IN TAG'S SCOPE OF SUPPLY..
8. ALL DIMENSIONS ARE IN mm.



TECHNICAL DATA

- 1. HOT DIP GALVANIZED AS PER ISO 1461.
- 2. BREAKING STRENGTH - 120 KN.
- 3. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
- 4. ALL DIMENSIONS ARE IN MM.



FRONT VIEW

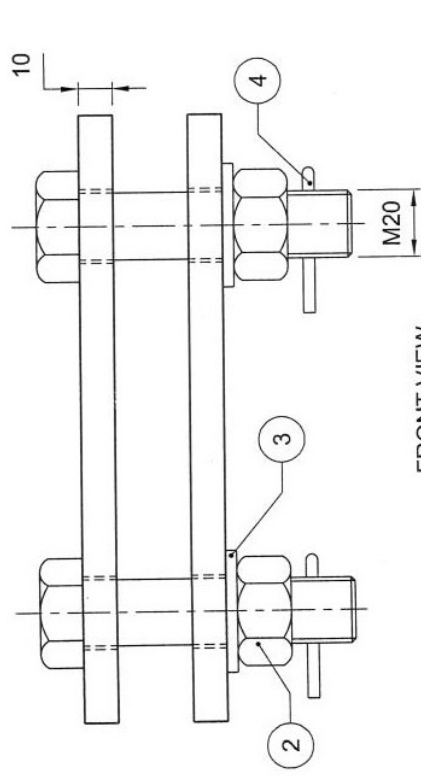
LEFT VIEW

S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)
4	SPLIT PIN (SP/001)	STAINLESS STEEL (AISI - 304)	-	
3	FLAT WASHER (M20)	MILD STEEL	H.D.G.	
2	BOLT & NUT (M20 X 120)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	
1	MAIN BODY	FORGED STEEL	H.D.G.	

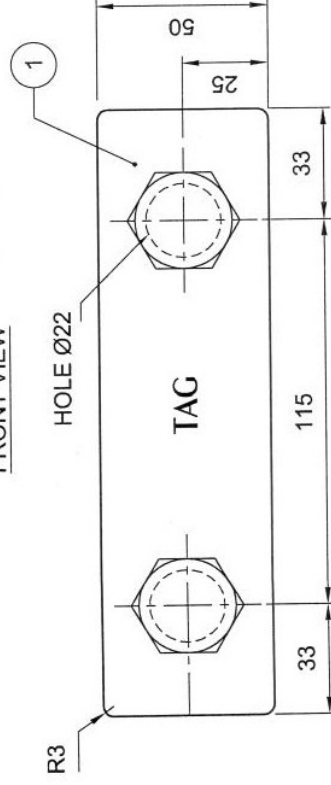
TITLE	TOWER HINGE (SWIVEL)
DWG. NO: TH/3000/EI	REV. 0

TECHNICAL DATA

1. HOT DIP GALVANIZED AS PER ISO 1461.
2. BREAKING STRENGTH - 120 KN.
3. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
4. ALL DIMENSIONS ARE IN MM.



FRONT VIEW



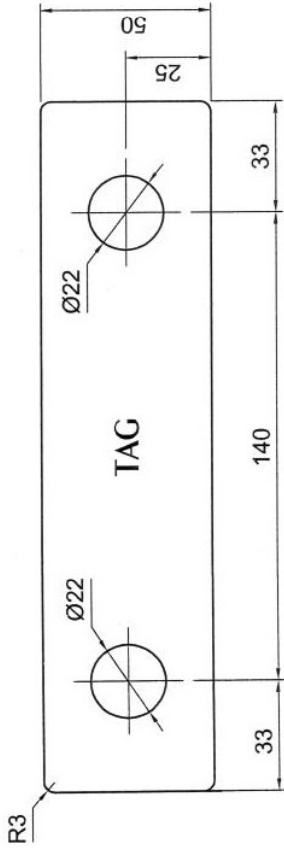
TOP VIEW

S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)
4	SPLIT PIN (SP/001)	STAINLESS STEEL (AISI - 304)	-	2
3	FLAT WASHER (M20)	MILD STEEL	H.D.G.	2
2	BOLT & NUT (M20 X 75)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	2
1	50 / 10 FLAT	MILD STEEL	H.D.G.	2

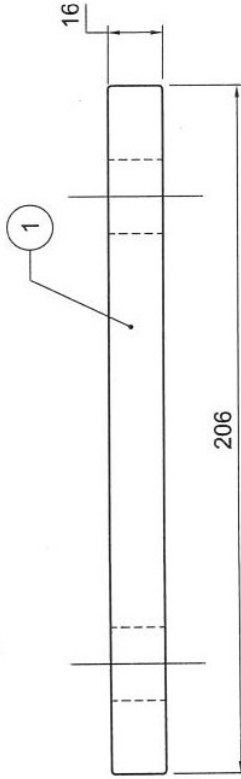
TITLE	CLEVIS CLEVIS
DWG. NO: CC/4103/EI	REV. 0

TECHNICAL DATA

1. HOT DIP GALVANIZED AS PER ISO 1461.
2. BREAKING STRENGTH - 120 KN.
3. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
4. ALL DIMENSIONS ARE IN MM..



FRONT VIEW

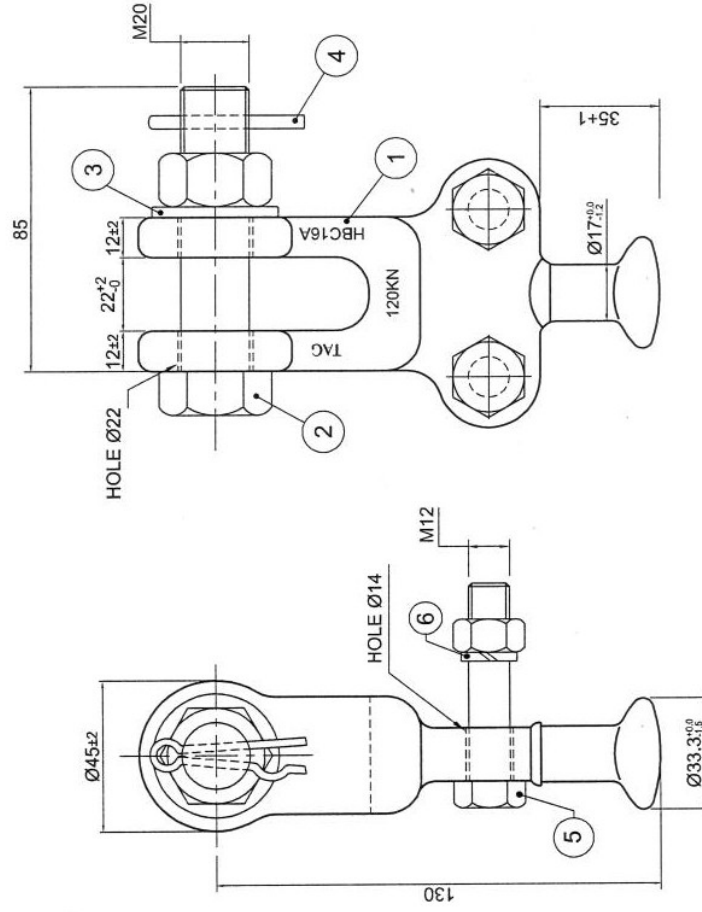


TOP VIEW

				<div> <div>TITLE</div> <div>EXTENSION PLATE</div> </div>	
1	EXTENSION PLATE	MILD STEEL	H.D.G.	1	
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)	DWG. NO: EP/4004/EI REV. 0

TECHNICAL DATA

1. HOT DIP GALVANIZED AS PER ISO 1461.
2. BALL DESIGNATION 16 mm AS PER IEC-120.
3. BREAKING STRENGTH - 120 KN.
4. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
5. ALL DIMENSIONS ARE IN MM.



FRONT VIEW

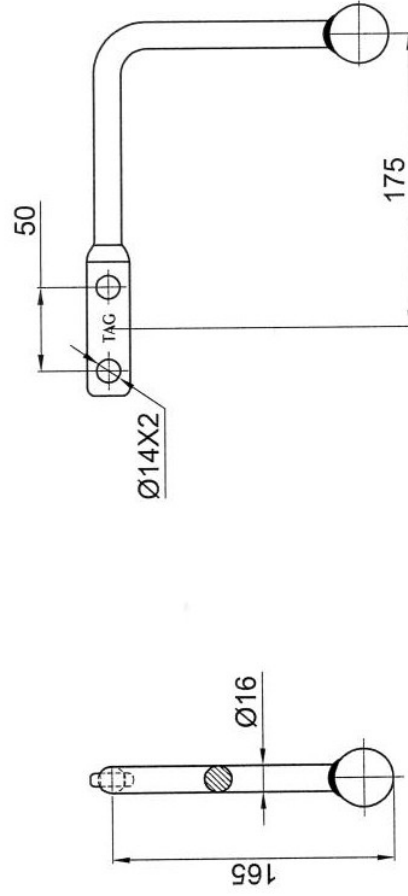
LEFT VIEW

6	SPRING WASHER (M12)	SPRING STEEL	-	2
5	BOLT & NUT (M12 X 50)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	2
4	SPLIT PIN (SP/001)	STAINLESS STEEL (AISI - 304)	-	1
3	FLAT WASHER (M20)	MILD STEEL	H.D.G.	1
2	BOLT & NUT (M20 X 85)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	1
1	BALL CLEVIS	FORGED STEEL	H.D.G.	1
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)

TITLE		H.H.BALL CLEVIS	
DWG. NO: HBC/1600/EI		REV. 0	

TECHNICAL DATA

1. HOT DIP GALVANIZED AS PER ISO 1461.
2. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
3. WELDING BY ELECTRIC ARC WELDING.
4. ALL DIMENSIONS ARE IN mm..



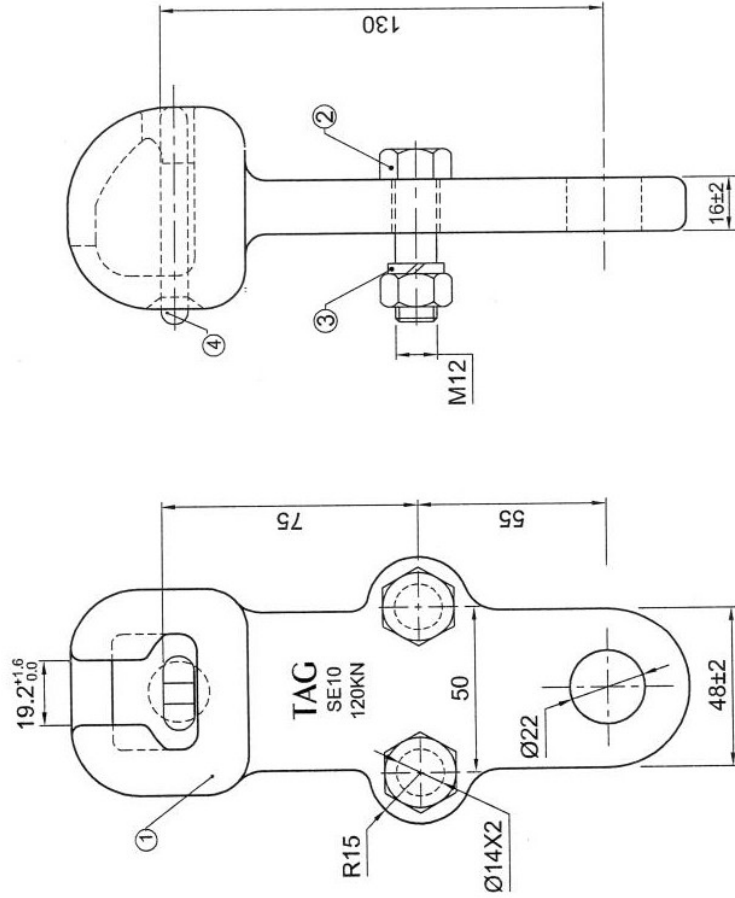
FRONT VIEW

LEFT VIEW

1		MAIN BODY (ROD)	MILD STEEL	H.D.G.	1	TITLE		BALL ARCING HORN
S.NO.	DESCRIPTION		MATERIAL	SURFACE TREATMENT	QTY.(NOS)	DWG. NO: BAH/4007/EI		REV.0

TECHNICAL DATA

1. HOT DIP GALVANIZED AS PER ISO 1461.
2. SOCKET DESIGNATION 16 B mm AS PER IEC-120.
3. BREAKING STRENGTH - 120 KN.
4. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.

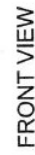


LEFT VIEW

FRONT VIEW

4	R - CLIP (RC-004)	STAINLESS STEEL (AISI - 304)	-	1
3	SPRING WASHER (M12)	SPRING STEEL	E.G.	2
2	BOLT & NUT (M12 X 45)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	2
1	MAIN BODY	FORGED STEEL	H.D.G.	1
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)

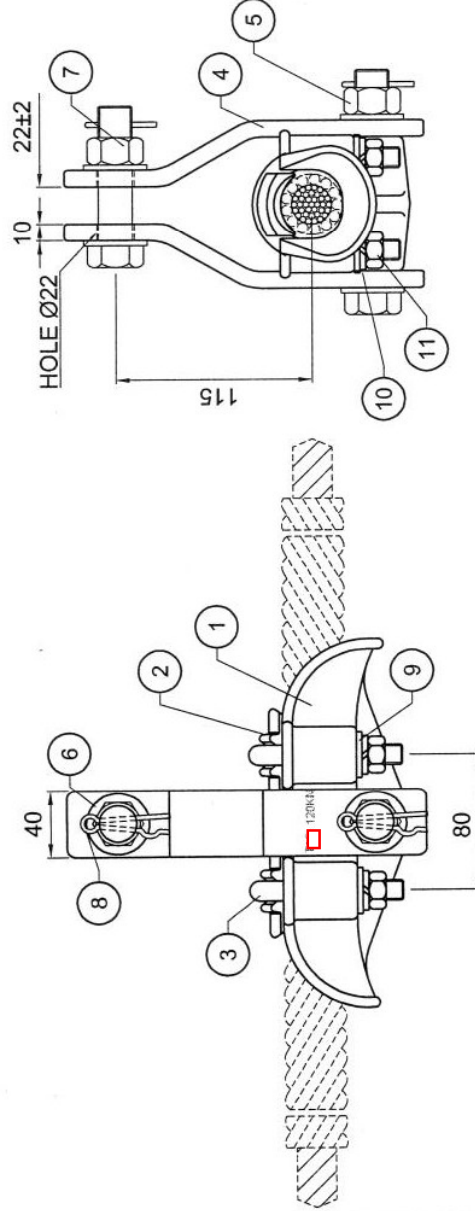
TITLE	REV. 0
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DWG. NO: SE/3000/EI	



	TITLE	RING TYPE ARCING HORN
DWG. NO: RTAH/4000/EI		REV. 0

TECHNICAL DATA

1. CLAMP SUITABLE FOR ACSR STARLING CONDUCTOR.
2. BREAKING STRENGTH - 120 KN.
3. FERROUS PARTS HOT DIP GALVANIZED AS PER ISO 1461.
4. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
5. ALL DIMENSIONS ARE IN MM.



S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)
11	NUT (M12)	MILD STEEL (P.C.5.0)	H.D.G.	4
10	SPRING WASHER (M12)	SPRING STEEL	H.D.G.	4
9	FLAT WASHER (M12)	MILD STEEL	H.D.G.	4
8	SPLIT PIN (SP/001)	STAINLESS STEEL (AISI - 304)	-	2
7	BOLT & NUT (M20 X 85)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	1
6	FLAT WASHER (M20)	MILD STEEL	H.D.G.	4
5	BOLT & NUT (M20 X 140)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	1
4	STRAP	MILD STEEL	-	2
3	U - BOLT	STAINLESS STEEL	-	2
2	KEEPER PICE	AL.ALLOY (A-6)	-	1
1	CLAMP BODY	AL.ALLOY (A-6)	-	1

TITLE

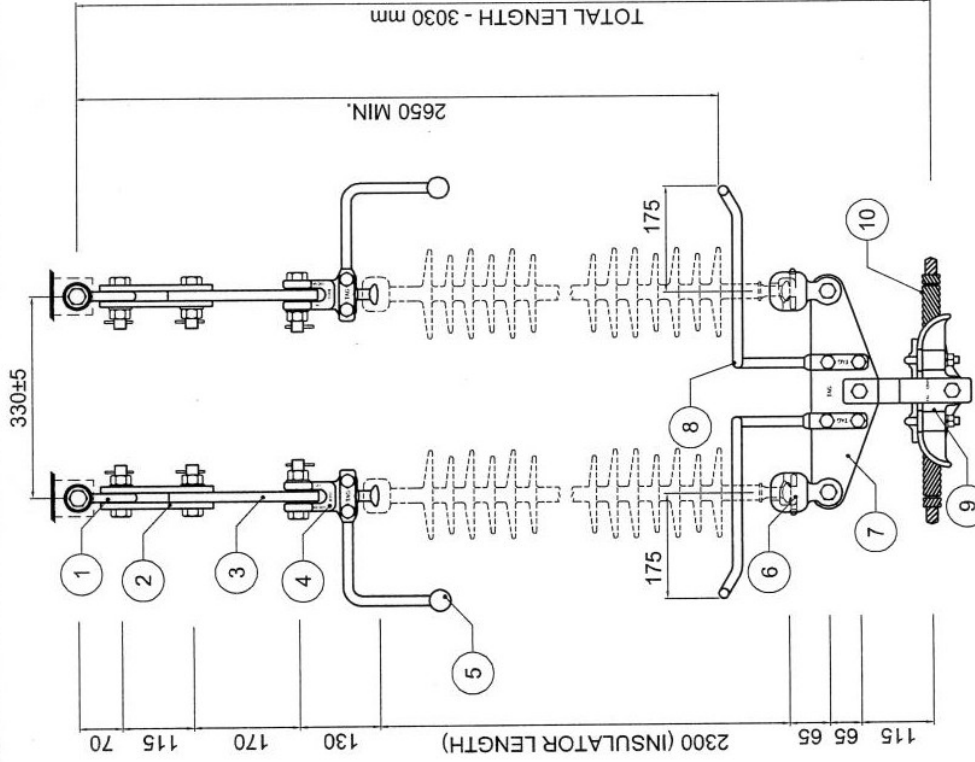
SUSPENSION CLAMP SUITABLE FOR
ACSR STARLING CONDUCTOR

DWG. NO: SCS/4000/EI

REV.0

TECHNICAL DATA

1. ASSEMBLY MINIMUM ULTIMATE TENSILE STRENGTH - 120 kN.
2. BALL & SOCKET DESIGNATION - 16 MM AS PER IEC-120.
3. BALL & SOCKET LOCKING BY R-CLIP AS PER IEC-372. MADE OF STAINLESS STEEL.
4. FERROUS PARTS-HOT DIP GALVANIZED AS PER ISO 1461.
5. GENERAL TOLERANCE NOT TO EXCEED $\pm 3\%$.
6. WEIGHT OF THE STRING - 31.0 kg (APPROX).



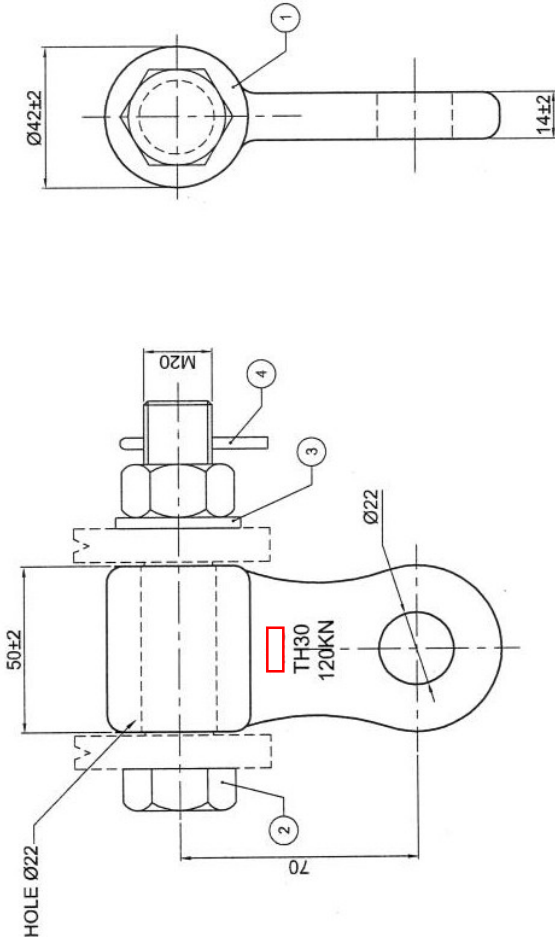
S.NO.	DESCRIPTION	MATERIAL	COMP.	QTY. (NOS.)	SURFACE TREATMENT	UTS (KN.)
10	P.A. RODS	AL. ALLOY (6061,ASTM:B 308)	PAR/STL/EI	1 SET	-	-
9	SUSPENSION CLAMP	AL. ALLOY (A-6,BS:1490) / MILD STEEL (BS:4360)	SCS/4000/EI	1	- /H.D.G.	120
8	RING TYPE ARCING HORN	MILD STEEL (BS:4360)	RTAH/4004/EI	2	H.D.G.	-
7	TRIANGULAT YOKE PLATE	MILD STEEL (BS:4360)	TYP/1200/EI	1	H.D.G.	120
6	SOCKET CLEVIS	FORGED STEEL (EN8D,BS:970)	SC/3001/EI	2	H.D.G.	120
5	BALL ARCING HORN	MILD STEEL (BS:4360)	BAH/4007/EI	2	H.D.G.	-
4	H.H. BALL CLEVIS	FORGED STEEL (EN8D,BS:970)	HBC/1600,1/EI	2	H.D.G.	120
3	EXTENSION PLATE	MILD STEEL (BS:4360)	EPI/4003/EI	2	H.D.G.	120
2	CLEVIS CLEVIS	MILD STEEL (BS:4360)	CC/4103/EI	2	H.D.G.	120
1	TOWER HINGE (SWIVEL)	FORGED STEEL (EN8D,BS:970)	TH/3000/EI	2	H.D.G.	120
			COMP.	QTY. (NOS.)	SURFACE TREATMENT	UTS (KN.)
S.NO.	DESCRIPTION	MATERIAL	DRG.NO.			

DWG. NO: TAG/E/DSI/S2/005/EI

REV. 01

TECHNICAL DATA

- 1. HOT DIP GALVANIZED AS PER ISO 1461.
- 2. BREAKING STRENGTH - 120 KN.
- 3. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
- 4. ALL DIMENSIONS ARE IN MM.



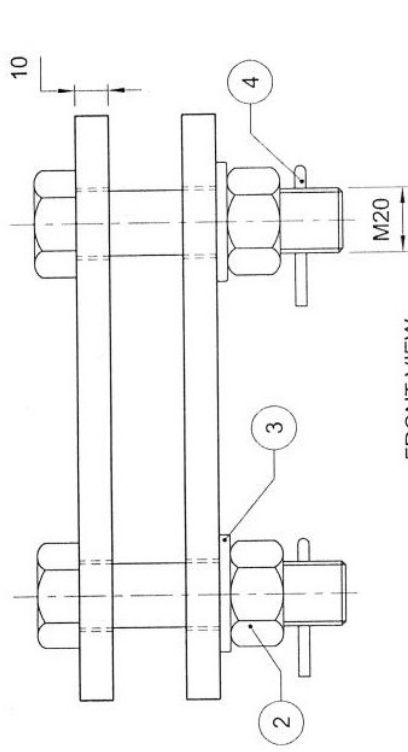
FRONT VIEW

LEFT VIEW

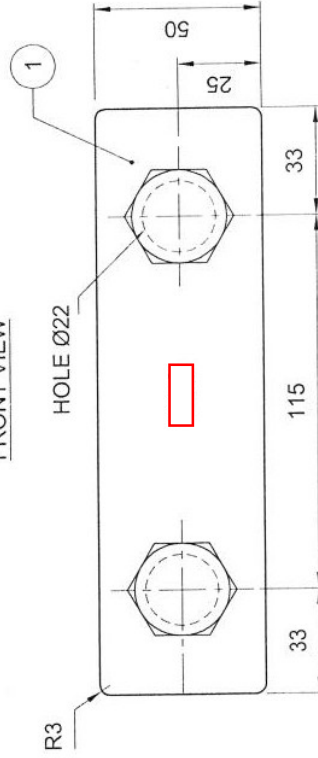
TITLE		TOWER HINGE (SWIVEL)	
DWG. NO:TH/3000/EI		REV.0	
S.NO.	DESCRIPTION	MATERIAL	QTY.(NOS)
4	SPLIT PIN (SP/001)	STAINLESS STEEL (AISI - 304)	1
3	FLAT WASHER (M20)	MILD STEEL	1
2	BOLT & NUT (M20 X 120)	MILD STEEL (P.C.5.6 / 5.0)	1
1	MAIN BODY	FORGED STEEL	1
		SURFACE TREATMENT	
		H.D.G.	
		H.D.G.	
		H.D.G.	

TECHNICAL DATA

1. HOT DIP GALVANIZED AS PER ISO 1461.
2. BREAKING STRENGTH - 120 KN.
3. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
4. ALL DIMENSIONS ARE IN MM.



FRONT VIEW



TOP VIEW

TITLE

CLEVIS CLEVIS

S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)
4	SPLIT PIN (SP/001)	STAINLESS STEEL (AISI - 304)	-	2
3	FLAT WASHER (M20)	MILD STEEL	H.D.G.	2
2	BOLT & NUT (M20 X 75)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	2
1	50 / 10 FLAT	MILD STEEL	H.D.G.	2

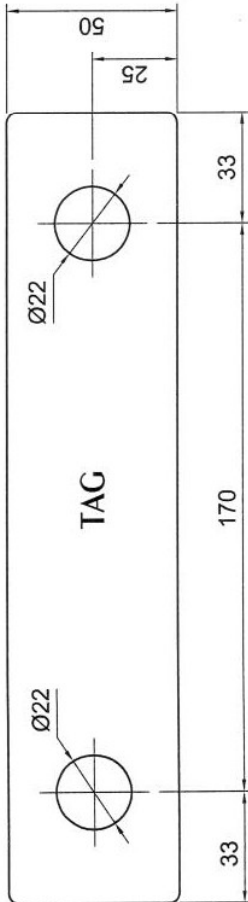
DWG. NO: CC/4103/EI

REV. 0

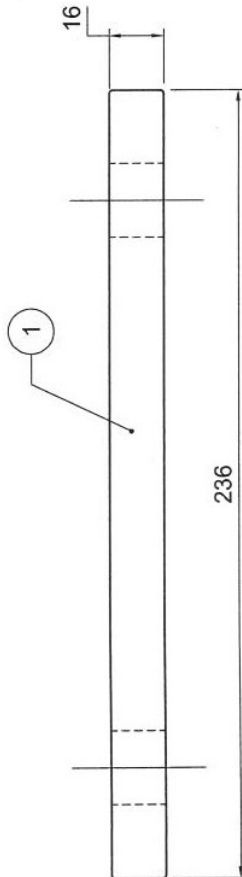
TECHNICAL DATA

- 1. HOT DIP GALVANIZED AS PER ISO 1461.
- 2. BREAKING STRENGTH - 120 KN.
- 3. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
- 4. ALL DIMENSIONS ARE IN MM.

Consultant



FRONT VIEW



TOP VIEW

TITLE

EXTENSION PLATE

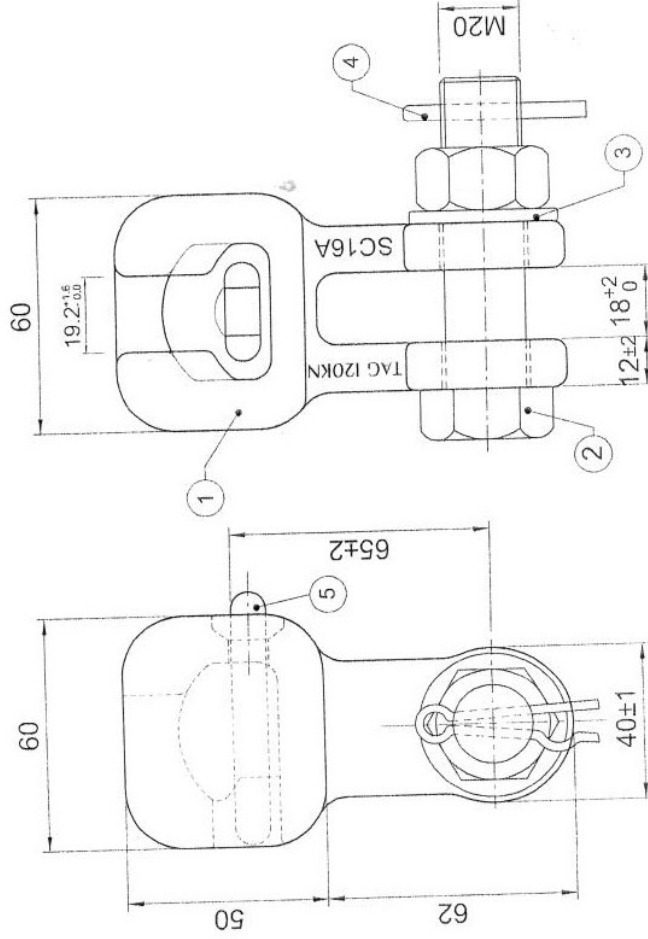
DWG. NO:EP/4003/EI

REV.0

1	EXTENSION PLATE	MILD STEEL	H.D.G.	1
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)

TECHNICAL DATA

1. HOT DIP GALVANIZED AS PER ISO 1461.
2. SOCKET DESIGNATION 16 B MM AS PER IEC-120.
3. BREAKING STRENGTH - 120 KN.
4. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.



TITLE

SOCKET CLEVIS

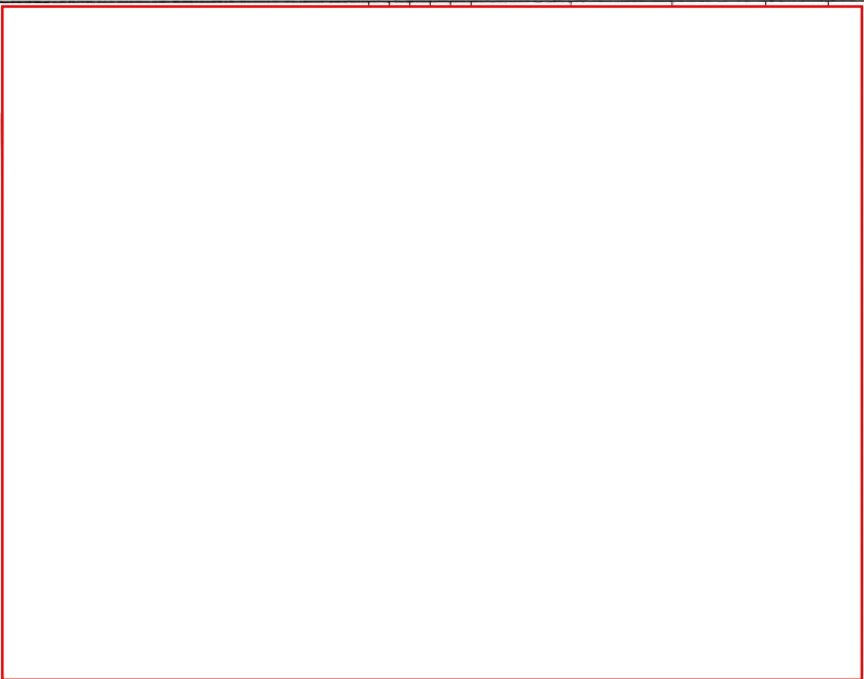
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)
5	R - CLIP (RC/004)	STAINLESS STEEL (AISI - 304)	-	1
4	SPLIT PIN (SP/001)	STAINLESS STEEL (AISI - 304)	-	1
3	FLAT WASHER (M20)	MILD STEEL	H.D.G.	1
2	BOLT & NUT (M20X 85)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	1
1	MAIN BODY	FORGED STEEL	H.D.G.	1

REV.0

DWG. NO:SC/3001/EI

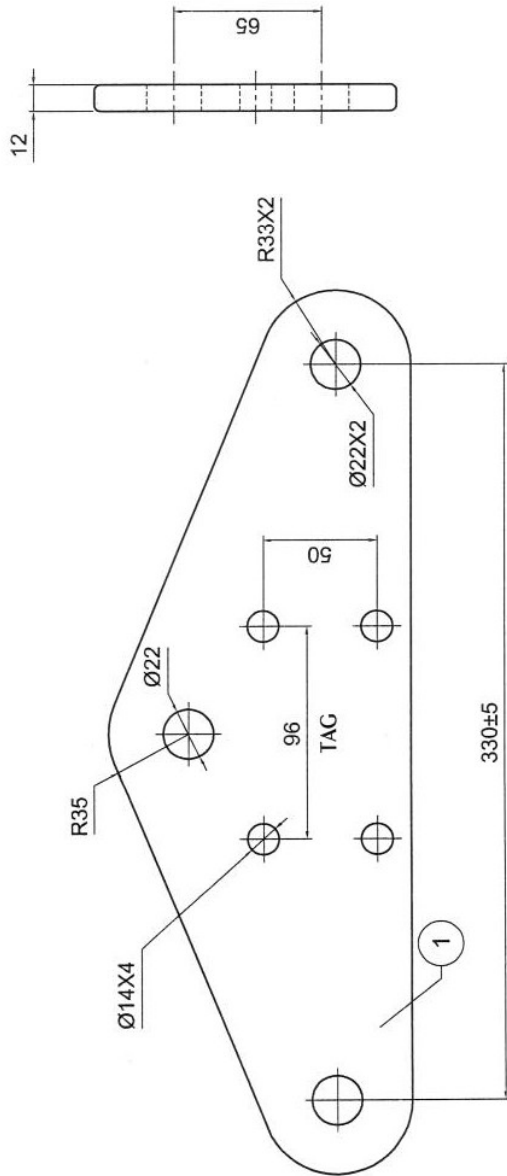
TECHNICAL DATA

- 1. HOT DIP GALVANIZED AS PER ISO 1461.
- 2. BREAKING STRENGTH - 120 KN.
- 3. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.



TITLE	TRIANGULAR YOKE PLATE
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DWG. NO: TYP/1200/EI	REV. 0
----------------------	--------



LEFT VIEW

FRONT VIEW

1	TRIANGULAR YOKE PLATE	MILD STEEL	H.D.G.	1
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)

TECHNICAL DATA

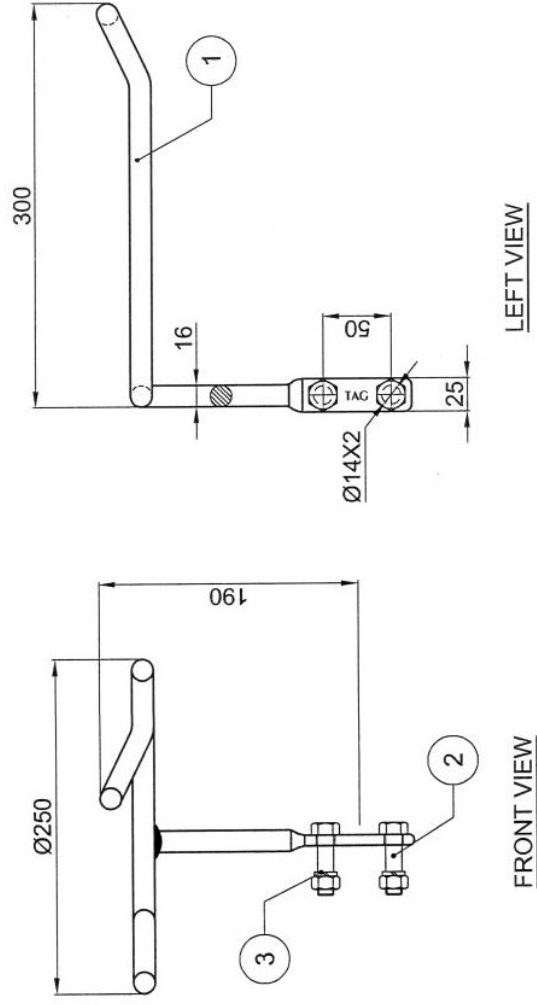
1. HOT DIP GALVANIZED AS PER ISO 1461.
2. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
3. WELDING BY ELECTRIC ARC WELDING.

TITLE

RING TYPE ARCING HORN

DWG. NO:RTAH/4004/EI

REV. 0



3	SPRING WASHER (M12)	SPRING STEEL	E.G.	2
2	BOLT & NUT (M12 X 45)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	2
1	MAIN BODY (ROD)	MILD STEEL	H.D.G.	1
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)

TECHNICAL DATA

- 1. HOT DIP GALVANIZED AS PER ISO 1461.
- 2. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
- 3. WELDING BY ELECTRIC ARC WELDING.

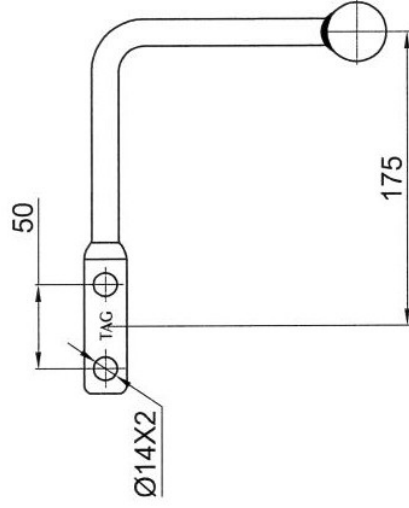


TITLE

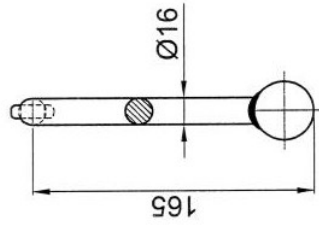
BALL ARCING HORN

DWG. NO:BAH/4007/EI

REV. 0



LEFT VIEW

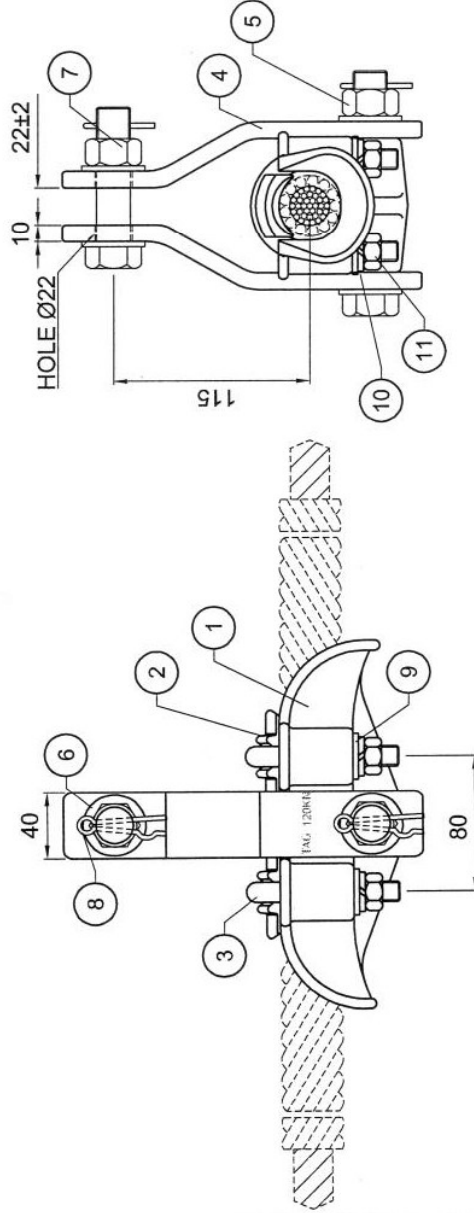


FRONT VIEW

1	MAIN BODY (ROD)	MILD STEEL	H.D.G.	1
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)

TECHNICAL DATA

1. CLAMP SUITABLE FOR ACSR STARLING CONDUCTOR.
2. BREAKING STRENGTH - 120 KN.
3. FERROUS PARTS HOT DIP GALVANIZED AS PER ISO 1461.
4. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.



S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)
11	NUT (M12)	MILD STEEL (P.C.5.0)	H.D.G.	4
10	SPRING WASHER (M12)	SPRING STEEL	H.D.G.	4
9	FLAT WASHER (M12)	MILD STEEL	H.D.G.	4
8	SPLIT PIN (SP/001)	STAINLESS STEEL (AISI - 304)	-	2
7	BOLT & NUT (M20 X 85)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	1
6	FLAT WASHER (M20)	MILD STEEL	H.D.G.	4
5	BOLT & NUT (M20 X 140)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	1
4	STRAP	MILD STEEL	-	2
3	U - BOLT	STAINLESS STEEL	-	2
2	KEEPER PICE	AL-ALLOY (A-6)	-	1
1	CLAMP BODY	AL-ALLOY (A-6)	-	1

TITLE

SUSPENSION CLAMP SUITABLE FOR
ACSR STARLING CONDUCTOR

DWG. NO:SCS/4000/EI

REV. 0

TECHNICAL DATA

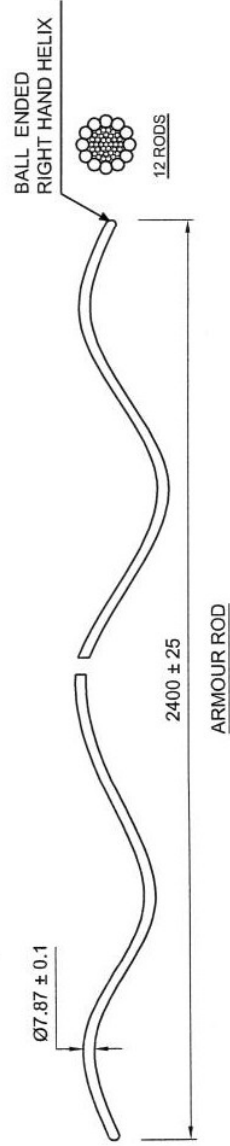
1. ARMOUR RODS SUITABLE FOR ACSR STARLING CONDUCTOR.
2. TOLERANCE ON LENGTH OF LONGEST & SHORTEST OF THE ARMOUR RODS 13 MM (MAX).
3. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
4. ALL DIMENSIONS ARE IN MM.

TITL

PREFORMED ARMOUR ROD

DWG. NO: PAR/STL/EI

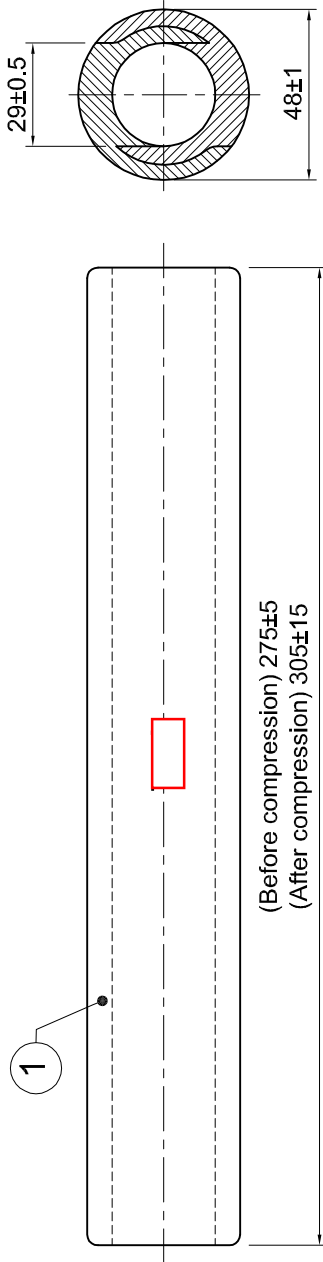
REV. 0



1	ARMOUR RODS	ALALLOY	-	12
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)

TECHNICAL DATA :-

1. REPAIR SLEEVE SUITABLE FOR "ACSR STARLING" CONDUCTOR.
2. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
3. TOTAL WEIGHT - 0.83 KG (APPROX).
4. ALL DIMENSIONS ARE IN mm.
5. COMPRESSION PRESSURE : 100 TONS.



FRONT VIEW

LEFT VIEW

COMP.	ALUMINIUM
BEFORE	
AFTER	

TITLE
REPAIR SLEEVE FOR
ACSR STARLING CONDUCTOR

UTS.kN

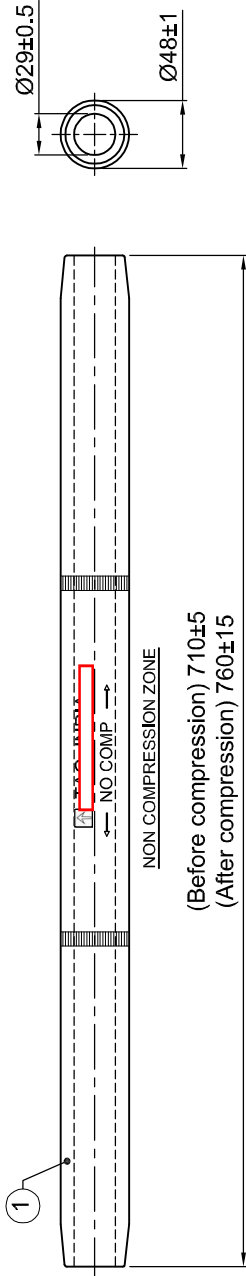
QTY.NOS.

DWG. NO: TAG/E/RS/018/EI

REV.0

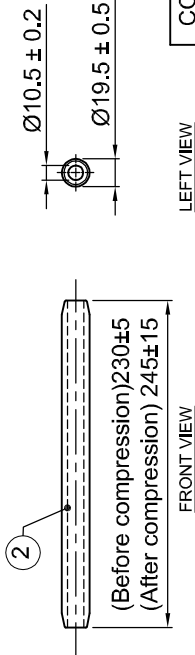
TECHNICAL DATA :-

1. MID SPAN JOINT SUITABLE FOR ACSR " STARLING " CONDUCTOR.
2. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
3. FERROUS PARTS HOT DIP GALVANIZED AS PER ISO 1461.
4. TOTAL WEIGHT - 2.6 kg (APPROX).
5. ALL DIMENSIONS ARE IN MM.
6. SLIPPING STRENGTH SHOULD NOT BE LESS THAN 95 % OF UTS OF CONDUCTOR.
7. COMPRESSION PRESSURE : 100 TONS.



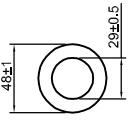
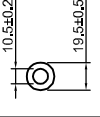
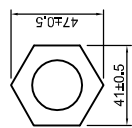
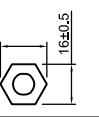
FRONT VIEW

LEFT VIEW



FRONT VIEW

LEFT VIEW

COMP.	ALUMINIUM	STEEL
BEFORE	 48±1 29±0.5	 10.5±0.2 19.5±0.5
AFTER	 41±0.5 47±0.5	 18.5±0.5 16±0.5

S.NO.	DESCRIPTION	MATERIAL	QTY.NOS.	UTS.KN
2	STEEL BODY	MILD STEEL	1	-
1	MAIN BODY	ALUMINIUM	1	-

TITLE
MID SPAN COMPRESSION JOINT
ACSR STARLING CONDUCTOR

DWG. NO: TAG/E/MSJ/021/EI

REV. 0

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TECHNICAL DATA

1. HOT DIP GALVANIZED AS PER ISO 1461.
2. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
3. WELDING BY ELECTRIC ARC WELDING.

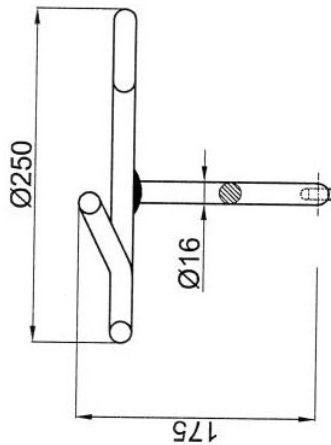


TITLE

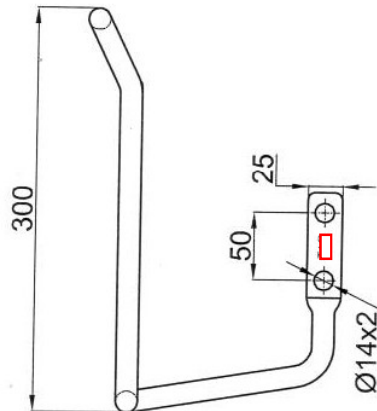
RING TYPE ARCING HORN

DWG. NO: RTAH/4000/EI

REV. 0



FRONT VIEW

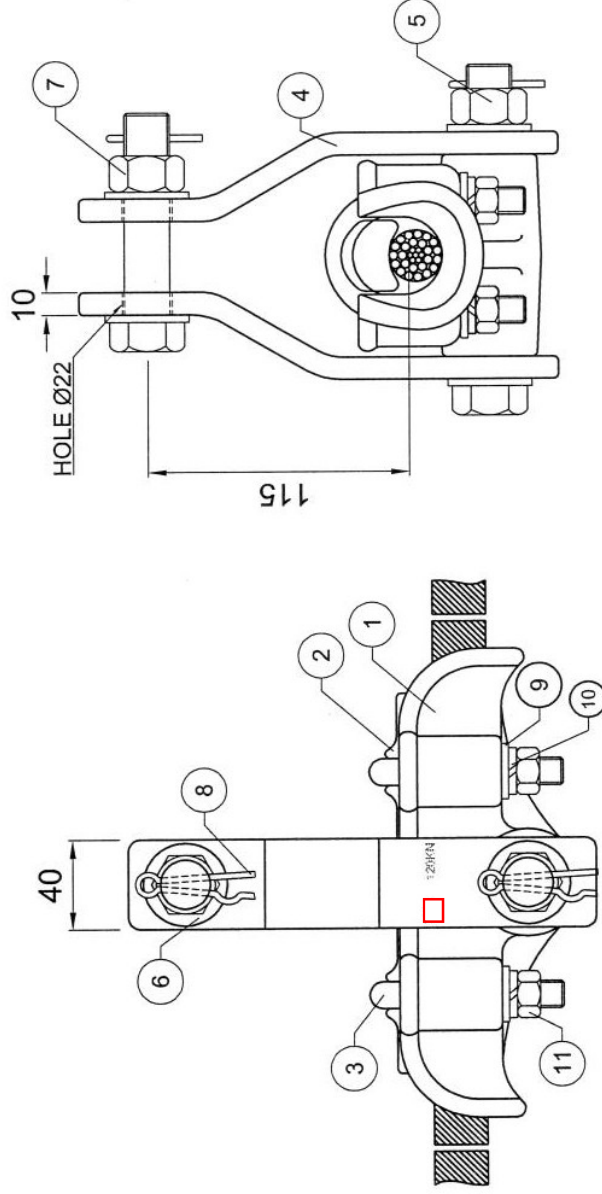


LEFT VIEW

S.NO.	DESCRIPTION	MATERIAL	H.D.G. SURFACE TREATMENT	QTY.(NOS)
1	MAIN BODY (ROD)	MILD STEEL		1

TECHNICAL DATA

1. CLAMP SUITABLE FOR ACSR STARLING CONDUCTOR.
2. BREAKING STRENGTH - 120 KN.
3. FERROUS PARTS HOT DIP GALVANIZED AS PER ISO 1461.
4. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
5. ALL DIMENSIONS ARE IN MM.



S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)
11	NUT (M12)	MILD STEEL (P.C. 5.0)	H.D.G.	4
10	SPRING WASHER (M12)	SPRING STEEL	H.D.G.	4
9	FLAT WASHER (M12)	MILD STEEL	H.D.G.	4
8	SPLIT PIN (SP/001)	STAINLESS STEEL (AISI - 304)	-	2
7	BOLT & NUT (M20 X 85)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	1
6	FLAT WASHER (M20)	MILD STEEL	H.D.G.	4
5	BOLT & NUT (M20 X 130)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	1
4	STRAP	MILD STEEL	-	2
3	U - BOLT (UB-008)	STAINLESS STEEL	-	2
2	KEEPER PICE	AL-ALLOY (A-6)	-	1
1	CLAMP BODY	AL-ALLOY (A-6)	-	1

TITLE

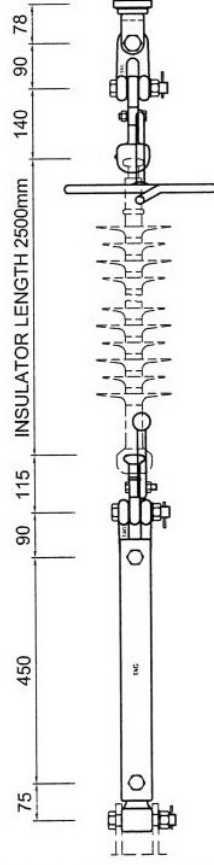
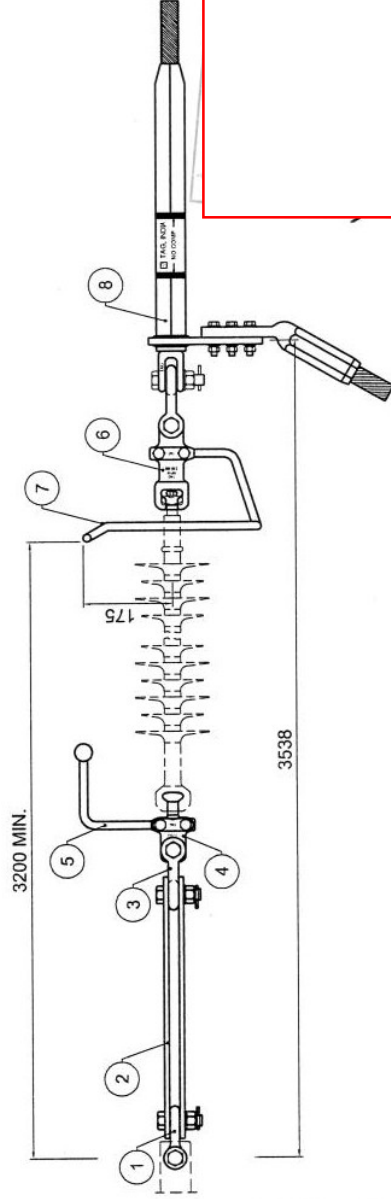
SUSPENSION CLAMP SUITABLE FOR
ACSR STARLING CONDUCTOR

DWG. NO.:SCS/4002/EI

REV.0

TECHNICAL DATA

1. ASSEMBLY MINIMUM ULTIMATE TENSILE STRENGTH - 210 kN.
2. BALL & SOCKET DESIGNATION - 20 MM AS PER IEC-120.
3. BALL & SOCKET LOCKING BY R-CLIP AS PER IEC-372. MADE OF STAINLESS STEEL.
4. FERROUS PARTS-HOT DIP GALVANIZED AS PER ISO 1461.
5. GENERAL TOLERANCE NOT TO EXCEED $\pm 3\%$.
6. WEIGHT OF THE STRING - 21.0 kg (APPROX).



S.NO.	DESCRIPTION	MATERIAL	COMP. DRG.NO.	QTY. (NOS.)	SURFACE TREATEMENT	UTS (KN.)
8	DEAD END ASSEMBLY	AL. ALLOY(LM-0, BS:1490) / MILD STEEL(EN8D, BS:970)	DEA/3500/EI	1	- / H.D.G.	-
7	RING TYPE ARCING HORN	MILD STEEL (BS:4360)	RTAH/4000/EI	1	H.D.G.	-
6	SOCKET EYE	FORGED STEEL (EN19, BS:970)	SE/4300/EI	1	H.D.G.	210
5	BALL ARCING HORN	MILD STEEL (BS:4360)	BAH/4007/EI	1	H.D.G.	-
4	BALL EYE	FORGED STEEL (EN19, BS:970)	BE/4300/EI	1	H.D.G.	210
3	CLEVIS EYE	FORGED STEEL (EN8D, BS:970)	CE/4003/EI	2	H.D.G.	210
2	CLEVIS HINGE	MILD STEEL (BS:4360)	CC/4105/EI	1	H.D.G.	210
1	TOWER HINGE (SWIVEL)	FORGED STEEL (EN8D, BS:970)	TH/4002/EI	1	H.D.G.	210
				QTY. (NOS.)	SURFACE TREATEMENT	UTS (KN.)

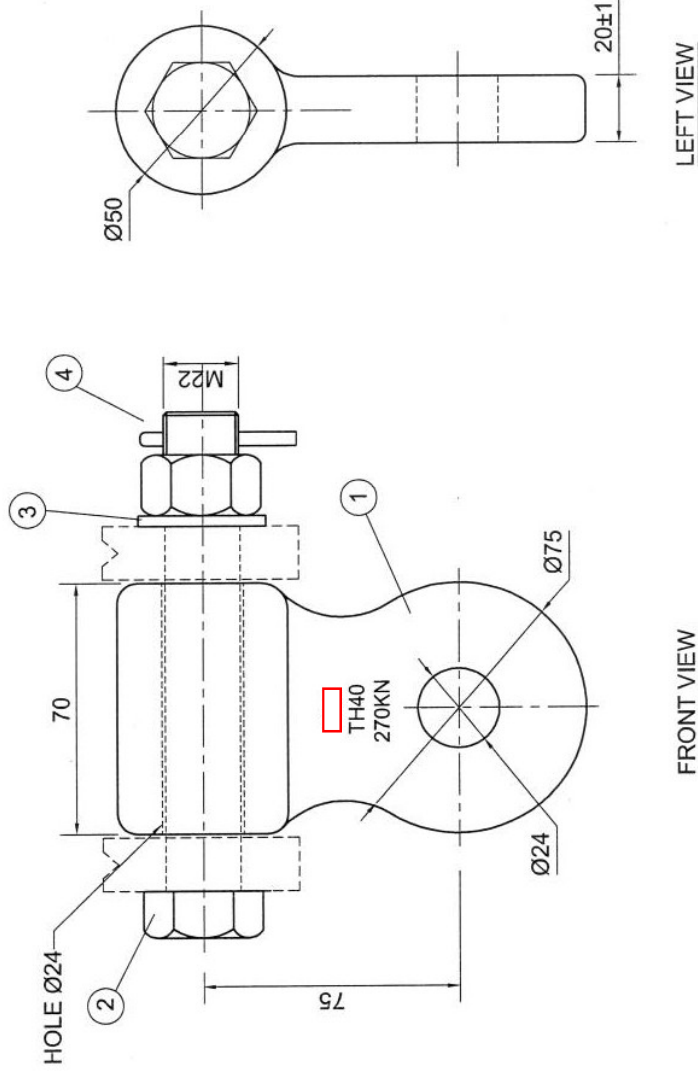
TITLE
220 KV SINGLE TENSION STRING FOR
SINGLE ACSR STARLING CONDUCTOR

DWG. NO: TAG/E/ST/S2/007/EI

REV. 03

TECHNICAL DATA

- 1. FERROUS PARTS-HOT DIP GALVANIZED AS PER ISO 1461.
- 2. BREAKING STRENGTH - 210 KN.
- 3. GENERAL TOLERANCE NOT TO EXCEED $\pm 3\%$.
- 4. ALL DIMENSIONS ARE IN mm.



TITLE

TOWER HINGE (SWIVEL)

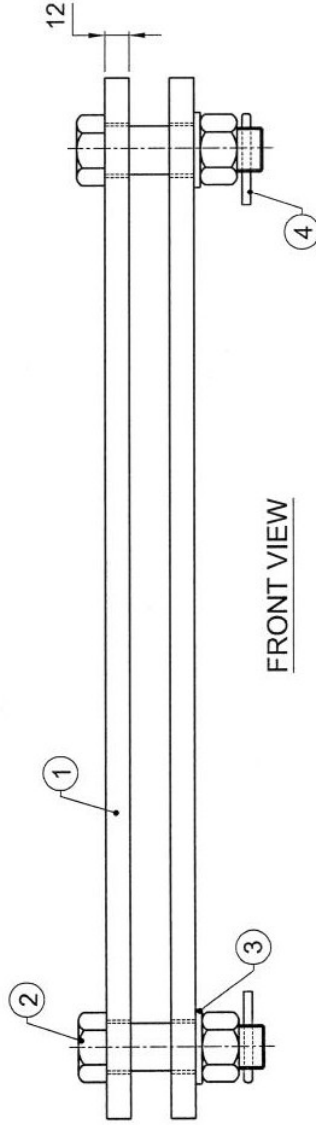
DWG. NO: TH/4002/EI

REV. 0

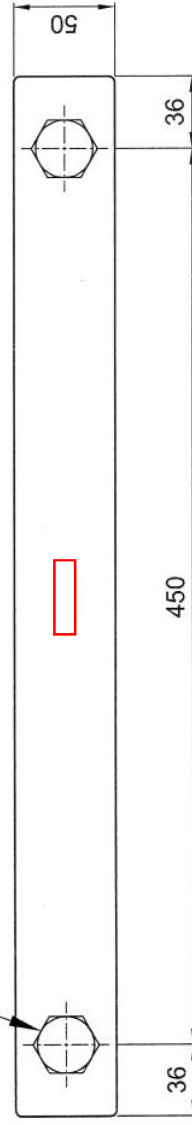
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY. (NOS.)
4	SPLIT PIN (SP0002)	STAINLESS STEEL (AISI - 304)	-	1
3	FLAT WASHER (M22)	MILD STEEL	H.D.G.	1
2	BOLT & NUT (M22 X 140)	MILD STEEL (P.C.8.8/8.0)	H.D.G.	1
1	TOWER HINGE	FORGE STEEL	H.D.G.	1

TECHNICAL DATA

1. HOT DIP GALVANIZED AS PER ISO 1461
2. BREAKING STRENGTH - 210 KN.
3. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.



HOLE Ø24 X 2

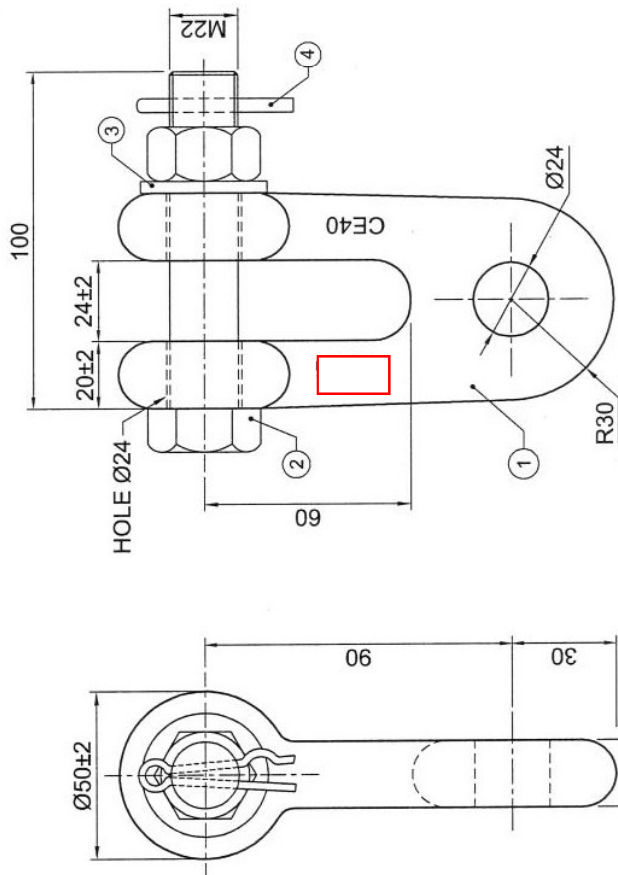


TOP VIEW

4	SPLIT PIN (SP/001)	STAINLESS STEEL (AISI - 304)	-	2
3	FLAT WASHER (M22)	MILD STEEL	H.D.G.	2
2	BOLT & NUT (M22 X 85)	MILD STEEL(P.C.8.8 / 8.0)	H.D.G.	2
1	50x10 FLAT	MILD STEEL	H.D.G.	2
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)

TECHNICAL DATA

- 1. HOT DIP GALVANIZED AS PER ISO 1461.
- 2. BREAKING STRENGTH - 210 KN.
- 3. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
- 4. ALL DIMENSIONS ARE IN MM.



FRONT VIEW

RIGHT VIEW

TITLE

CLEVIS EYE

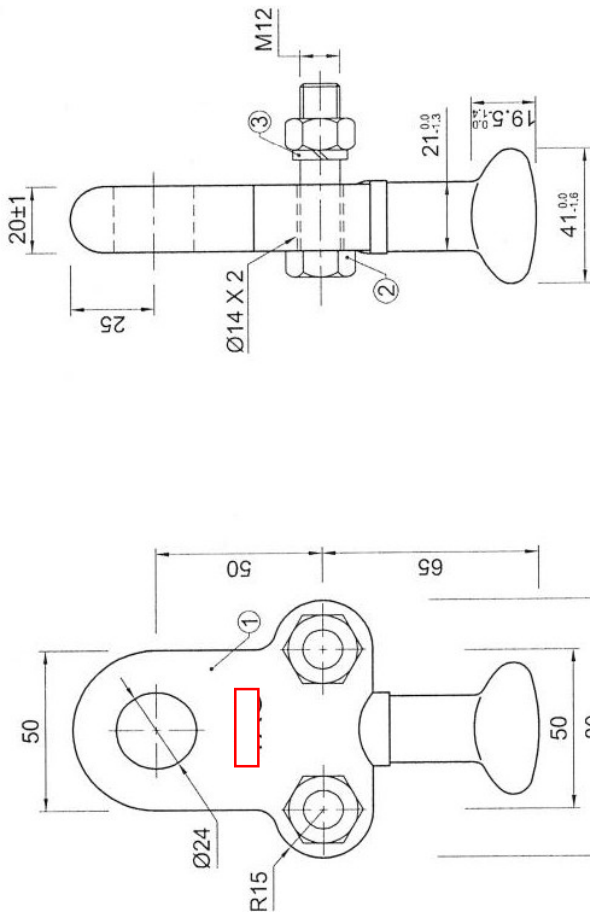
DWG. NO:CE/4003/EI

REV. 0

S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)
4	SPLIT PIN (SP/001)	STAINLESS STEEL (AISI - 304)	-	1
3	FLAT WASHER (M22)	MILD STEEL	H.D.G.	1
2	BOLT & NUT (M22 X 100)	MILD STEEL (P.C.8.8 / 8.0)	H.D.G.	1
1	MAIN BODY	FORGE STEEL	H.D.G.	1

TECHNICAL DATA

- 1. HOT DIP GALVANIZED AS PER ISO 1461.
- 2. BALL DESIGNATION 20 MM AS PER IEC:120.
- 3. BREAKING STRENGTH - 210 KN.
- 4. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.



FRONT VIEW

LEFT VIEW

TITLE

BALL EYE

3	SPRING WASHER (M12)	SPRING STEEL	E.G.	2
2	BOLT & NUT (M12 x 45)	MILD STEEL (P.C.5.8 / 5.0)	H.D.G.	2
1	BALL EYE	FORGED STEEL (EN19 / EN19)	H.D.G.	1
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)

REV. 0

DWG. NO:BE/4300/EI

TECHNICAL DATA

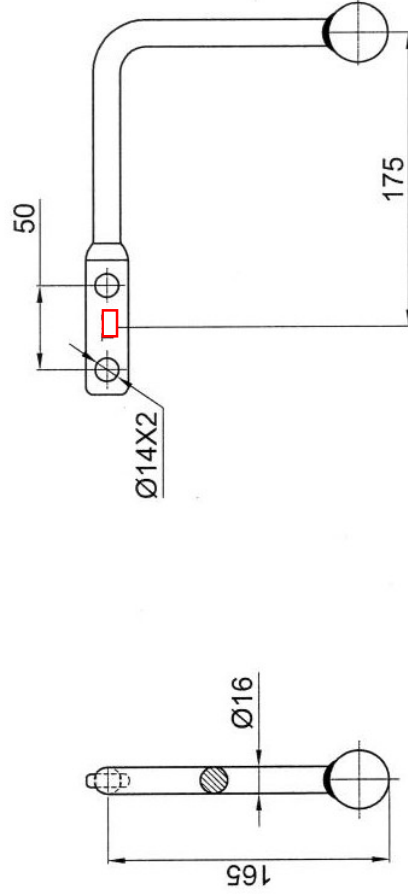
1. HOT DIP GALVANIZED AS PER ISO 1461.
2. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
3. WELDING BY ELECTRIC ARC WELDING.
4. ALL DIMENSIONS ARE IN mm..

TITLE

BALL ARCING HORN

DWG. NO:BAH/4007/EI

REV. 0



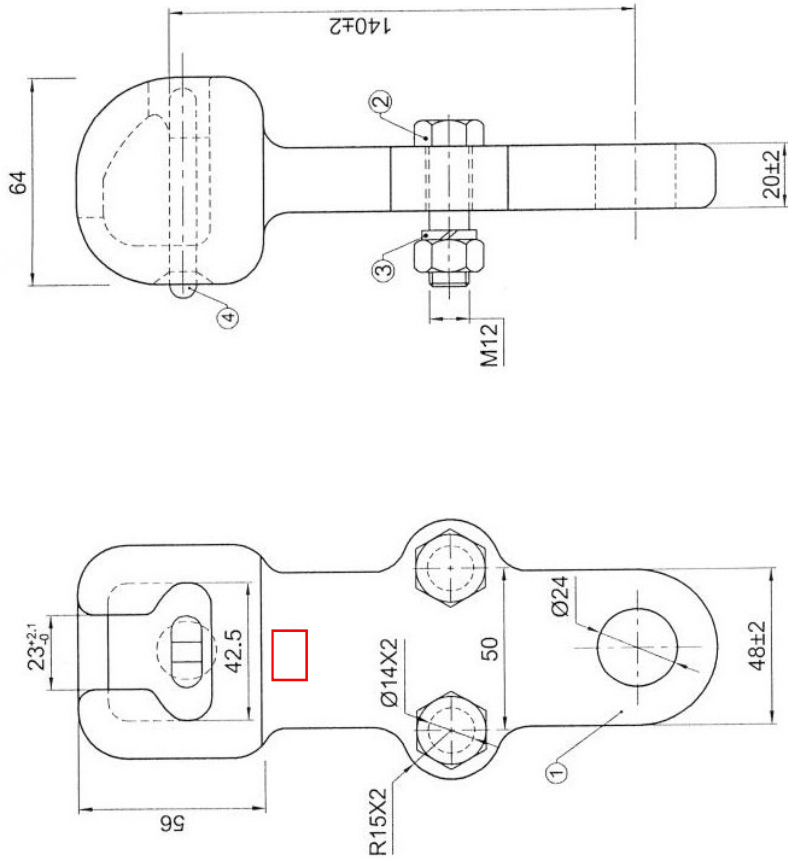
FRONT VIEW

LEFT VIEW

1	MAIN BODY (ROD)	MILD STEEL	H.D.G.	1
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)

TECHNICAL DATA

- 1. HOT DIP GALVANIZED AS PER ISO 1461.
- 2. BALL DESIGNATION 20 MM AS PER IEC:120.
- 3. BREAKING STRENGTH - 210 KN.
- 4. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.



FRONT VIEW

LEFT VIEW

S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)
4	R - CLIP (RC/001)	STAINLESS STEEL (AISI - 304)	-	1
3	SPRING WASHER (M12)	SPRING STEEL	E.G.	2
2	BOLT & NUT (M12x45)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	2
1	MAIN BODY	FORGED STEEL (EN19 / EN19)	H.D.G.	1

TITLE

SOCKET EYE

DWG. NO:SE/4300/EI

REV.0

TECHNICAL DATA

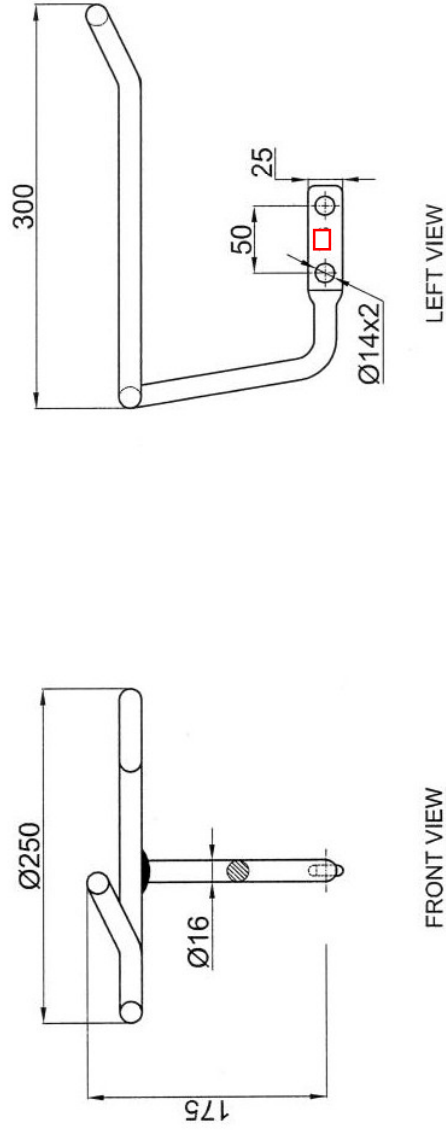
1. HOT DIP GALVANIZED AS PER ISO 1461.
2. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
3. WELDING BY ELECTRIC ARC WELDING.

TITLE

RING TYPE ARCING HORN

DWG. NO:RTAH/4000/EI

REV. 0

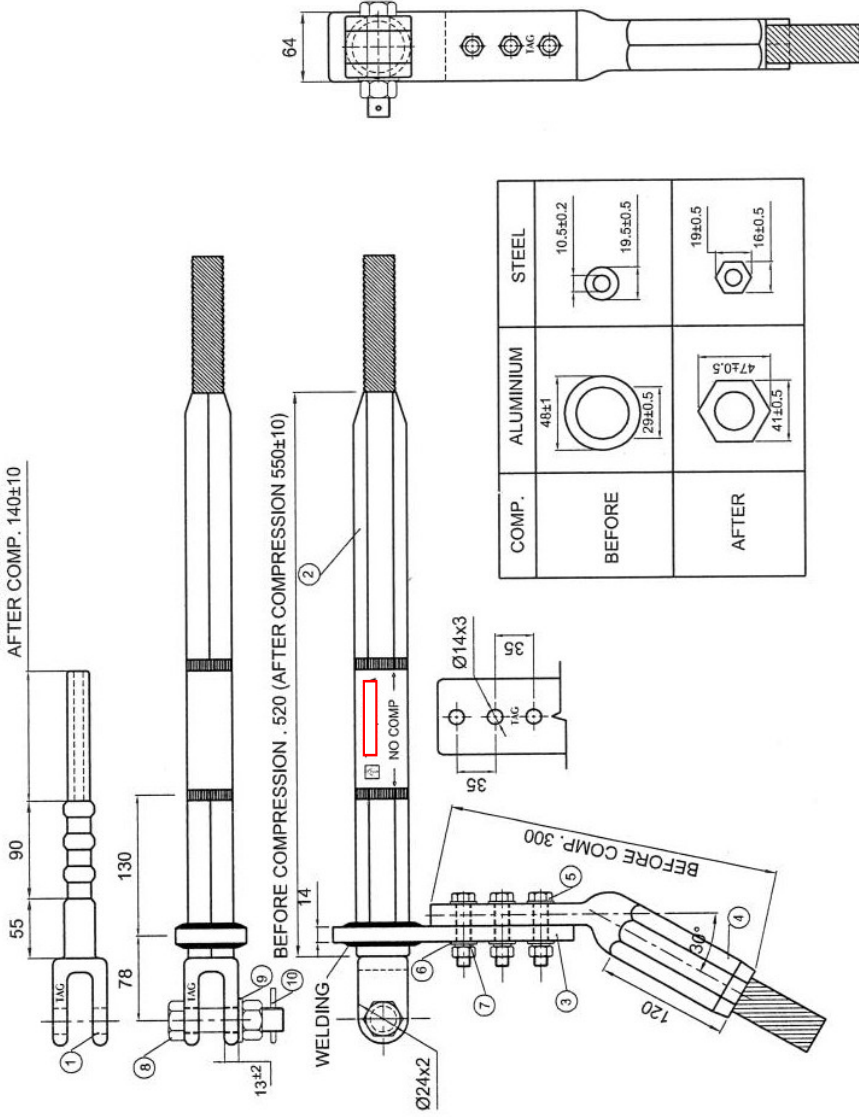


1	MAIN BODY (ROD)	MILD STEEL	H.D.G.	1
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)

TECHNICAL DATA

- 1. COMPRESSION DEAD END SUITABLE FOR ACSR STARLING CONDUCTOR.
- 2. SLIPPING STRENGTH =95% OF ACSR STARLING UTS.
- 3. ALL FERROUS PARTS HOT DIP GALVANIZED AS PER ISO 1461.
- 4. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
- 5. ALL DIMENSIONS ARE IN MM.

BEFORE COMP. 120
AFTER COMP. 140 \pm 10



S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)
10	SPLIT PIN (SP/001)	STAINLESS STEEL (AISI - 304)	-	1
9	FLAT WASHER (M22)	MILD STEEL	H.D.G.	1
8	BOLT & NUT (M22 X 85)	MILD STEEL (P.C.8.8 / 8.0)	H.D.G.	1
7	SPRING WASHER (M12)	SPRING STEEL	E.G.	2
6	FLAT WASHER (M12)	MILD STEEL	H.D.G.	4
5	BOLT & NUT (M12 X 55)	MILD STEEL(P.C.5.6 / 5.0)	H.D.G.	2
4	TERMINAL PAD	ALUMINIUM	-	1
3	JUMPER TERMINAL	ALUMINIUM	-	1
2	MAIN COMP.BODY	FORGED STEEL	H.D.G.	1
1	STEEL CLEVIS	FORGED STEEL	H.D.G.	1

TITLE

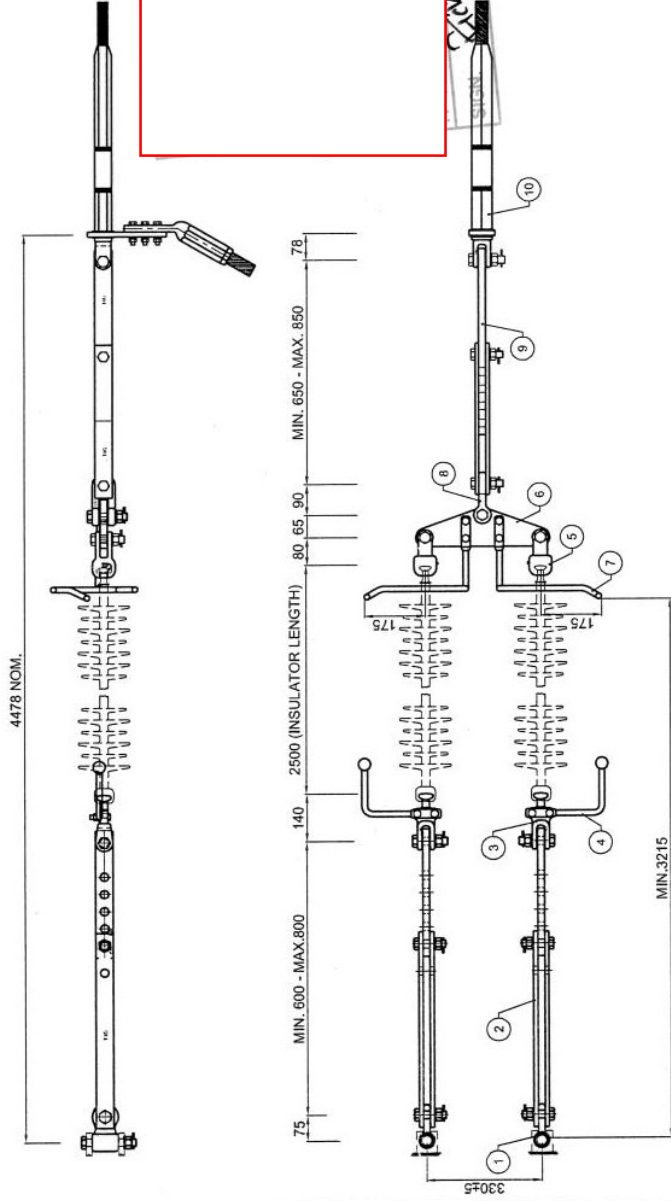
DEAD END ASSEMBLY

DWG. NO:DEA/3500/EI

REV. 0

TECHNICAL DATA

1. ASSEMBLY MINIMUM ULTIMATE TENSILE STRENGTH - 210 kN.
2. BALL & SOCKET DESIGNATION - 20 MM AS PER IEC-120.
3. BALL & SOCKET LOCKING BY R-CLIP AS PER IEC-372. MADE OF STAINLESS STEEL.
4. FERROUS PARTS-HOT-DIP GALVANIZED AS PER ISO 1461.



S.NO.	DESCRIPTION	MATERIAL	COMP. DRG.NO.	QTY. (NOS.)	SURFACE TREATMENT	UTS (KN.)
10	DEAD END ASSEMBLY	AL. ALLOY(LM-0,BS:490) / MILD STEEL(EN8D,BS:970)	DEA/3500/EI	1	- / H.D.G.	-
9	ADJUSTMENT EXTENSION PLATE (LINE SIDE)	MILD STEEL (BS:4360)	AEP/4200/EI	1	H.D.G.	210
8	CLEVIS EYE	FORGED STEEL (EN8D , BS:970)	CE/4003/EI	1	H.D.G.	210
7	RING TYPE ARCING HORN	MILD STEEL (BS:4360)	RTAH/4004/EI	2	H.D.G.	-
6	TRIANGULAR YOKE PLATE	MILD STEEL (BS:4360)	TYP/4128/EI	2	H.D.G.	210
5	SOCKET CLEVIS	FORGED STEEL (EN19 , BS:970)	SC/4300/EI	2	H.D.G.	210
4	BALL ARCING HORN	MILD STEEL (BS:4360)	BAH/4007/EI	2	H.D.G.	-
3	H.H.BALL CLEVIS	FORGED STEEL (EN19 , BS:970)	HBC/4300/EI	2	H.D.G.	210
2	ADJUSTMENT EXTENSION PLATE (TOWER SIDE)	MILD STEEL (BS:4360)	AEP/4201/EI	2	H.D.G.	210
1	TOWER HINGE (SWIVEL)	FORGED STEEL (EN8D , BS:970)	TH/4002/EI	2	H.D.G.	210

TITLE 220 kV DOUBLE TENSION STRING FOR SINGLE ACSR STARLING CONDUCTOR

DWG. NO: TAG/E/DT/S2/004/EI

REV. 04

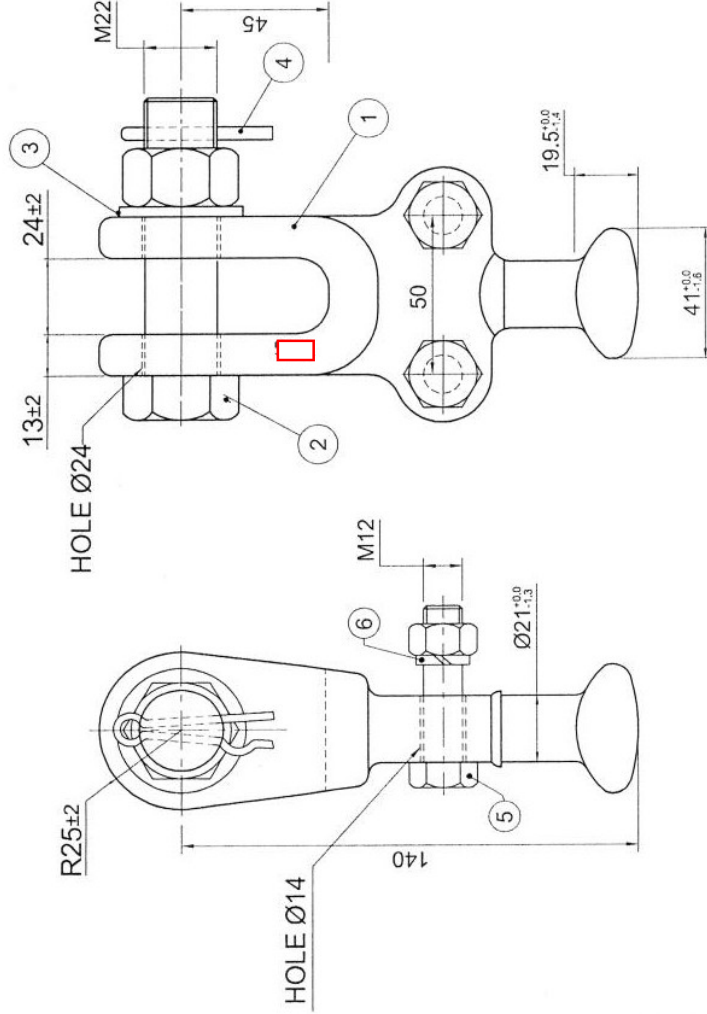
3. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.



5	SPLIT PIN (SP/001)	STAINLESS STEEL (AISI - 304)	-	2
4	FLAT WASHER (M22)	MILD STEEL	H.D.G.	2
3	BOLT & NUT (M22 X 85)	MILD STEEL (P.C.8.8 / 8.0)	H.D.G.	2
2	PLATE	MILD STEEL	H.D.G.	1
1	50 / 12 FLAT	MILD STEEL	H.D.G.	2
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)

TECHNICAL DATA

1. HOT DIP GALVANIZED AS PER ASTM - A 153.
2. BALL DESIGNATION 20 MM AS PER IEC-120.
3. BREAKING STRENGTH - 210 KN.
4. ALL DIMENSIONS ARE IN mm.



FRONT VIEW

LEFT VIEW

S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)
6	SPRING WASHER (M12)	SPRING STEEL	-	2
5	BOLT & NUT (M12)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	2
4	SPLIT PIN (SP/001)	STAINLESS STEEL	-	1
3	FLAT WASHER (M22)	MILD STEEL	H.D.G.	1
2	BOLT & NUT (M22)	MILD STEEL (P.C.8.8 / 8.0)	H.D.G.	1
1	BALL CLEVIS	FORGED STEEL (EN19 / EN 19)	H.D.G.	1

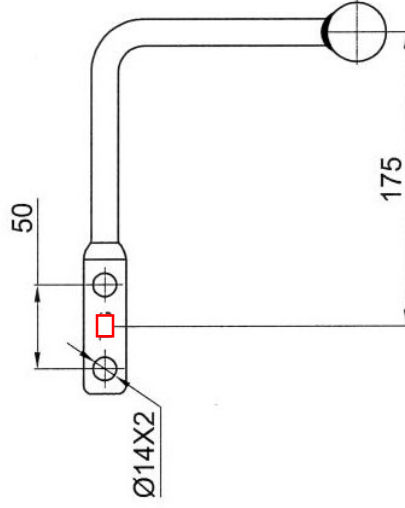
TITLE

H.H.BALL CLEVIS

DWG. NO: HBC/4300/EI

TECHNICAL DATA

- 1. HOT DIP GALVANIZED AS PER ISO 1461.
- 2. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
- 3. WELDING BY ELECTRIC ARC WELDING.
- 4. ALL DIMENSIONS ARE IN mm.



FRONT VIEW

LEFT VIEW

TITLE

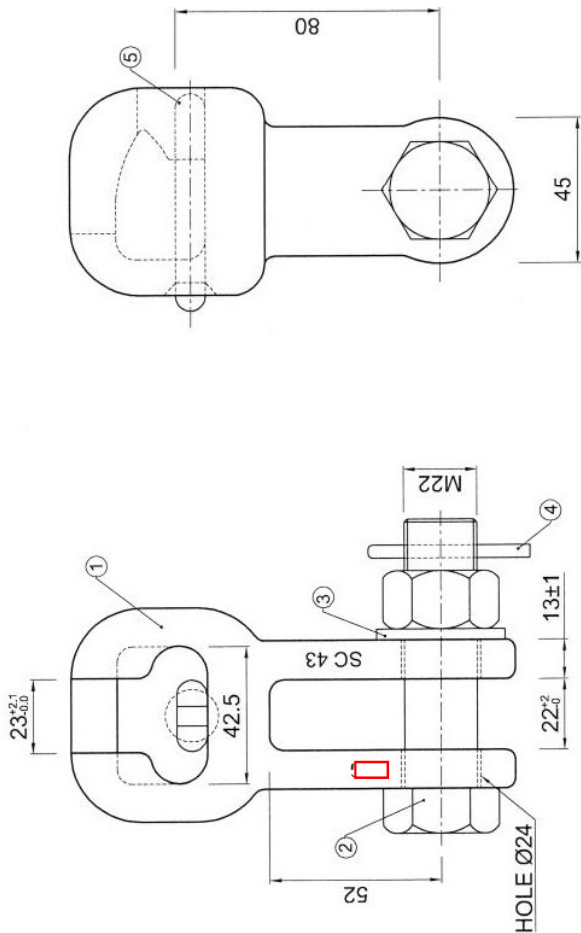
BALL ARCING HORN

1	MAIN BODY (ROD)	MILD STEEL	H.D.G.	1
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)
				REV.0

DWG. NO: BAH/4007/EI

TECHNICAL DATA

- 1. HOT DIP GALVANIZED AS PER ISO 1461.
- 2. SOCKET DESIGNATION 20 MM AS PER IEC: 120.
- 3. BREAKING STRENGTH - 210 KN.
- 4. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.



FRONT VIEW

LEFT VIEW

S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)
5	R - CLIP (RC/001)	STAINLESS STEEL (AISI - 304)	-	1
4	SPLIT PIN (SP/001)	STAINLESS STEEL (AISI - 304)	-	1
3	FLAT WASHER (M22)	MILD STEEL (IS: 2016)	H.D.G.	1
2	BOLT & NUT (M22 X 85)	MILD STEEL (P.C.8.8 / 8.0)	H.D.G.	1
1	SOCKET CLEVIS	FORGED STEEL (EN19) / EN19	H.D.G.	1

TITLE

SOCKET CLEVIS

DWG. NO:SC/4300/EI

REV. 0

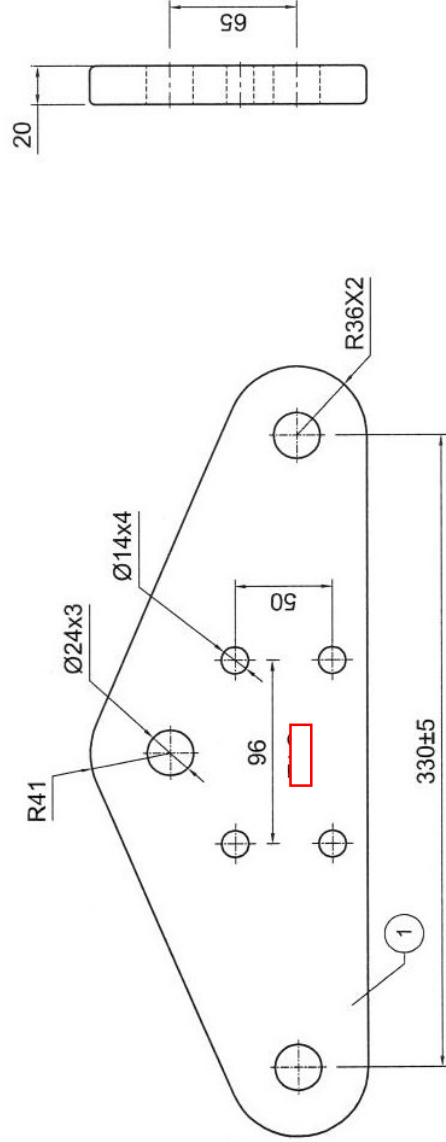
TECHNICAL DATA

- 1. HOT DIP GALVANIZED AS PER ISO 1461.
- 2. BREAKING STRENGTH - 210 KN.
- 3. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
- 4. ALL DIMENSIONS ARE IN mm..



TITLE	TRIANGULAR YOKE PLATE
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DWG. NO: TYP/4128/EI	REV. 0
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FRONT VIEW

LEFT VIEW

1	TRIANGULAR YOKE PLATE	MILD STEEL	H.D.G.	1
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)

TECHNICAL DATA

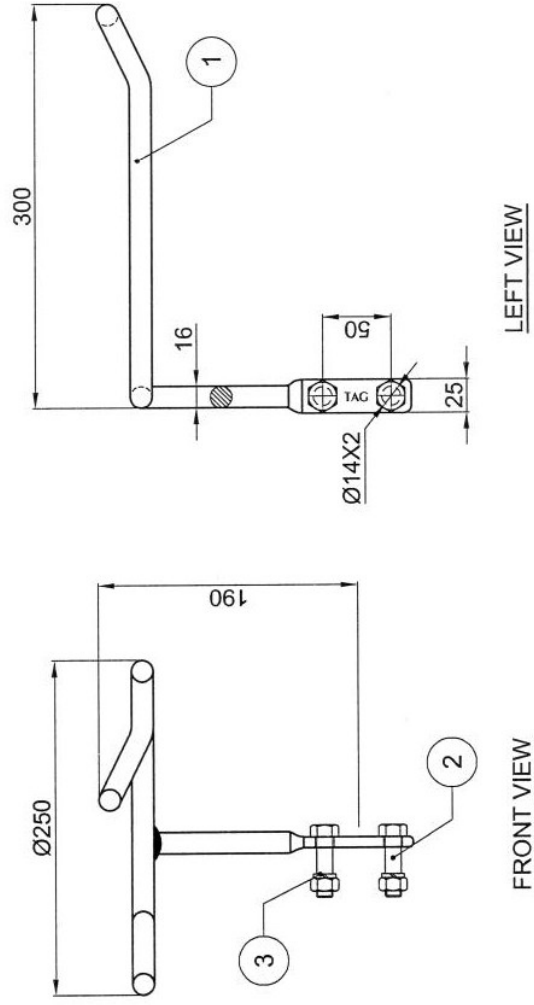
1. HOT DIP GALVANIZED AS PER ISO 1461.
2. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
3. WELDING BY ELECTRIC ARC WELDING.

TITLE

RING TYPE ARCING HORN

DWG. NO:RTAH/4004/EI

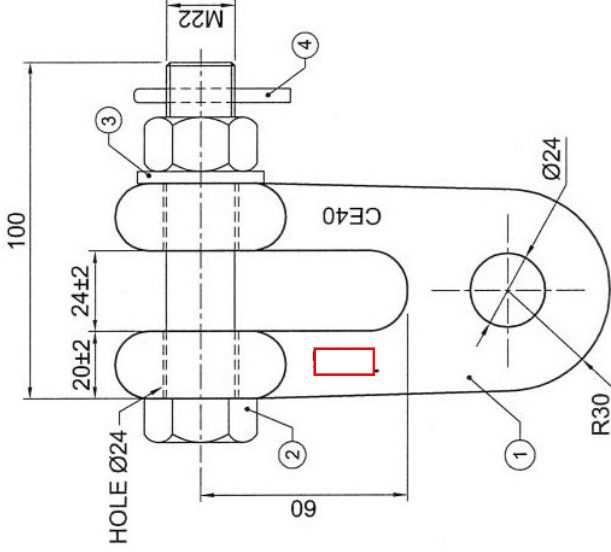
REV. 0



3	SPRING WASHER (M12)	SPRING STEEL	E.G.	2
2	BOLT & NUT (M12 X 45)	MILD STEEL (P.C.5.6 / 5.0)	H.D.G.	2
1	MAIN BODY (ROD)	MILD STEEL	H.D.G.	1
S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)

TECHNICAL DATA

1. HOT DIP GALVANIZED AS PER ISO 1461.
2. BREAKING STRENGTH - 210 KN.
3. GENERAL TOLERANCE UNLESS OTHERWISE SPECIFIED IS $\pm 3\%$.
4. ALL DIMENSIONS ARE IN MM.



FRONT VIEW

RIGHT VIEW

S.NO.	DESCRIPTION	MATERIAL	SURFACE TREATMENT	QTY.(NOS)
4	SPLIT PIN (SP/001)	SPRING STEEL	-	1
3	FLAT WASHER (M22)	MILD STEEL	H.D.G.	1
2	BOLT & NUT (M22 X 100)	MILD STEEL (P.C.8.8 / 8.0)	H.D.G.	1
1	MAIN BODY	FORGE STEEL	H.D.G.	1

TITLE

CLEVIS EYE

DWG. NO:CE/4003/EI

REV. 0

z

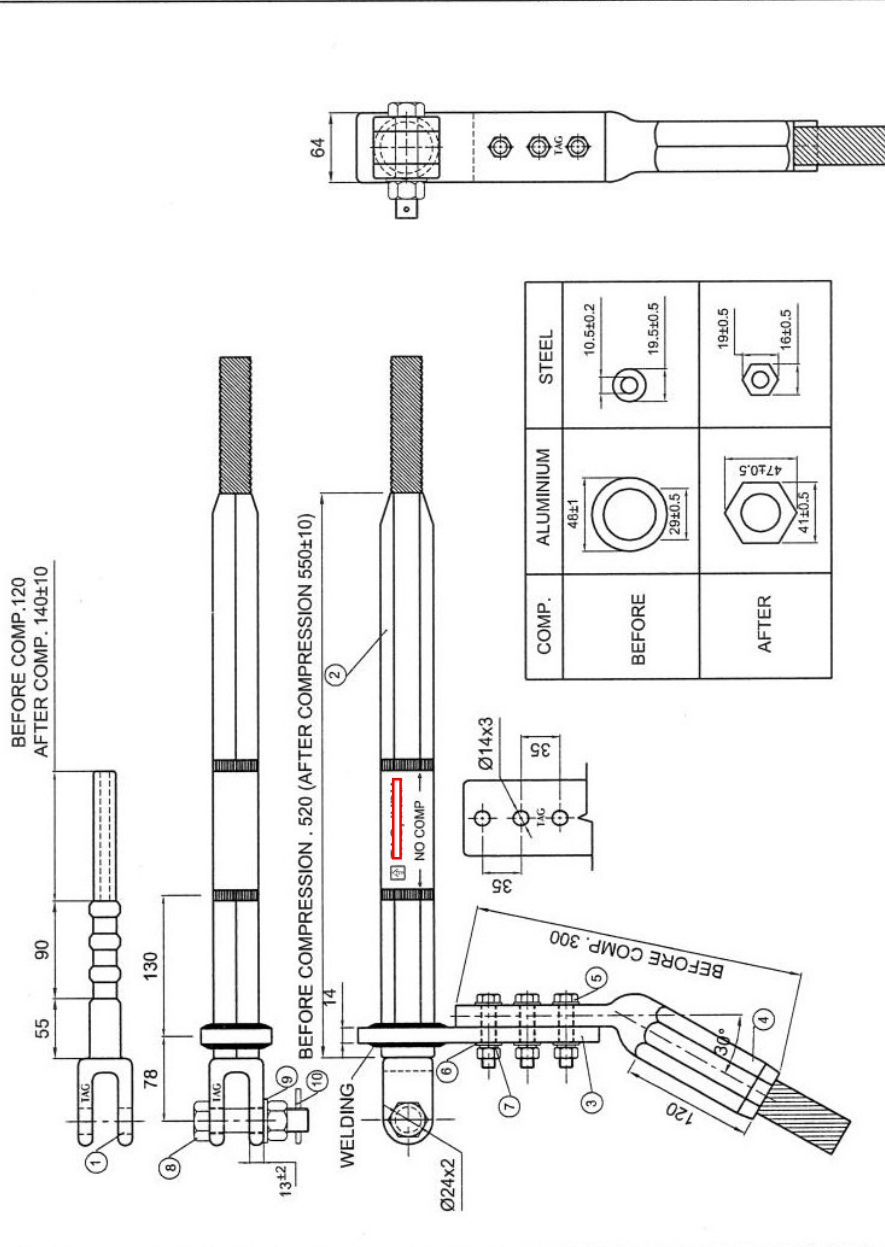
- 



DWG. NO: AEP/4200/EI	REV. 0
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BEFORE COMP. 120

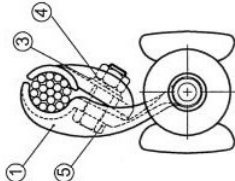
-
- Diagram illustrating the rear suspension assembly after compression. The diagram shows a cross-section of the suspension components, including the shock absorber, coil spring, and rear axle. Key dimensions are indicated: 90, 55, 130, and 78. Callouts 1 and 8 point to specific components.



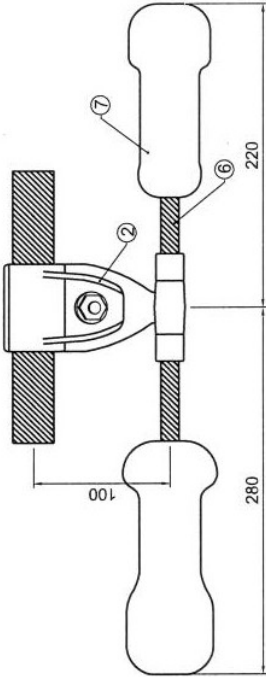
DWG. NO:DEA/3500/EI		REV. 0
TITLE	DEAD END ASSEMBLY	

TECHNICAL DATA

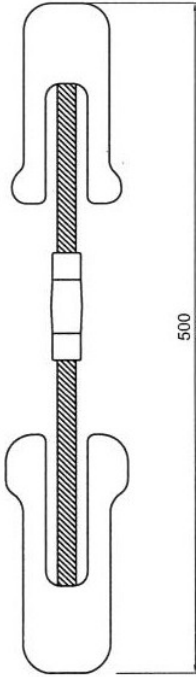
- 1. 4R-STOCK BRIDGE DAMPER SUITABLE FOR ACSR STARLING CONDUCTOR.
- 2. DAMPER WEIGHT MADE OF CAST IRON (HOT DIP GALVANIZED) AND ATTACHED TO MESSENGER CABLE WITH ALUMINIUM SLEEVE IN TAPERED HOLE COMPRESSED FIT.
- 3. FERROUS PARTS HOT DIP GALVANIZED AS PER ISO 1461.
- 4. GENERAL TOLERANCE NOT TO EXCEED $\pm 3\%$.
- 5. BOLT TIGHTENING TORQUE 6 kgm.
- 6. UTS OF MESSENGER CABLE 135 kg /sq.mm.(MIN)
- 7. MASS PULL OFF - 500 kg (MIN).
- 8. TOTAL WEIGHT - 4.3 kg (APPROX)
- 9. ALL DIMENSIONS ARE IN mm.



LEFT VIEW



FRONT VIEW



TOP VIEW

S.NO.	DESCRIPTION	MATERIAL	QTY.NOS.	UTS.kN.
7	DAMPER WEIGHT	CAST IRON	1 SET	
6	MESSENGER CABLE	HIGH STRENGTH STEEL	1	
5	BOLT (M14x45)	M.S.(P.C.5.6/5.0)	1	
4	SPRING WASHER (M14)	SPRING STEEL	1	
3	FLAT WASHER (M14)	MILD STEEL	1	
2	KEEPER PIECE	AL.ALLOY.	1	
1	CLAMP BODY	AL.ALLOY.	1	

TITLE

4R - STOCK BRIDGE VIBRATION DAMPER
FOR ACSR STARLING CONDUCTOR

DWG. NO: TAG/E/VD/004/EI

REV. 0