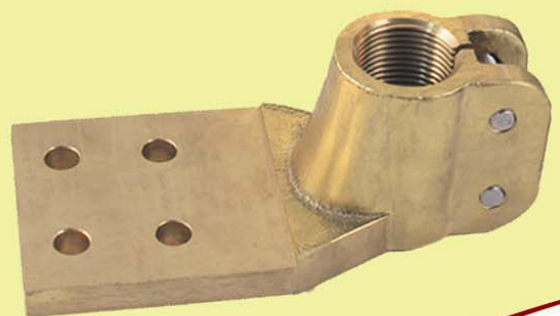
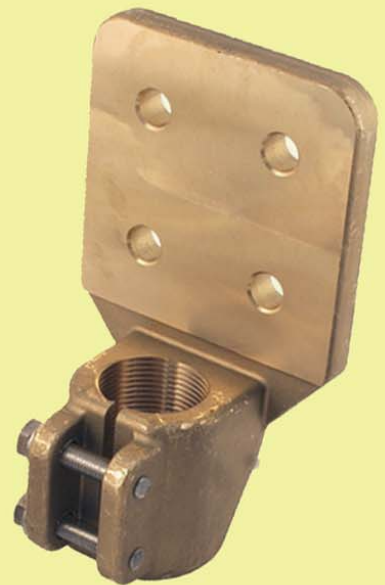
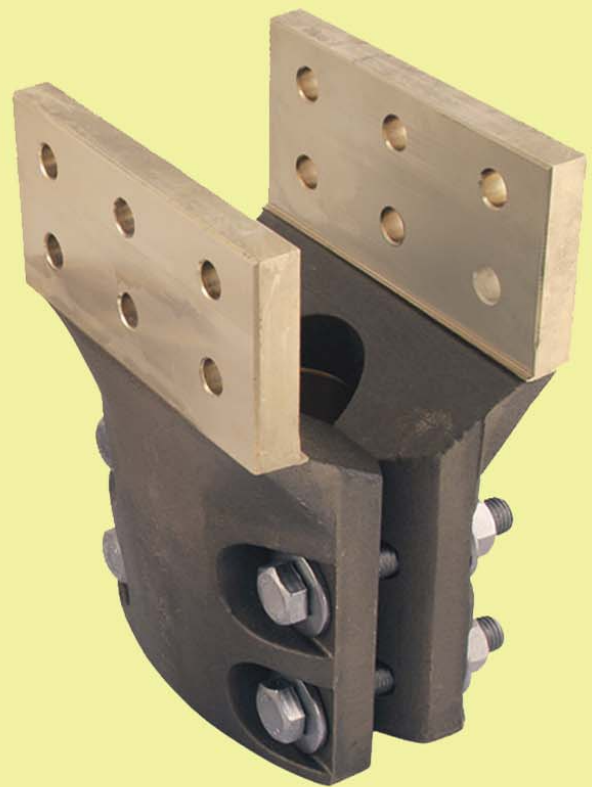


CEDASPE

CEDASPE

TRANSFORMER BUSHINGS



Made in Italy



Italian Transformer Components

FLAG CONNECTORS

CEDASPE manufacturing program include a wide range of connecting flags.

This catalogue shows the most common types (mainly acc to DIN standard and UNEL standard); it is possible to make also special flags according to customer drawing (please contact our technical department).

Material used for our flags is brass hot forged or casted (depending on size); for high current flags (above 8000A) casted bronze 88-9-3 silverplated; on demand other materials can be used (ie copper or aluminium), our technical department will be at your disposal to make the best choice. Unless by special request, all active metallic parts in brass and copper have self colour surfaces. Upon request, particularly for use in highly polluted environment conditions or in tropical climate, flags can be supplied with electrolytic tinplated surfaces with 6-8 micron average coating thickness. Below table shows tightening torque to be applied on the locking bolts of the flags

| Size | Torque |
|------|--------|
| M10 | 25 Nm |
| M12 | 40 Nm |
| M16 | 90 Nm |

NOTE : suggested value +/-10%

In following pages are shown the most common types

Page 4.2: Flags EP - FP DIN 43675 from 1000 to 3150 A

Flags 1000-2000-3150 UNEL 38137-67

Flags 2000-3150A NEMA

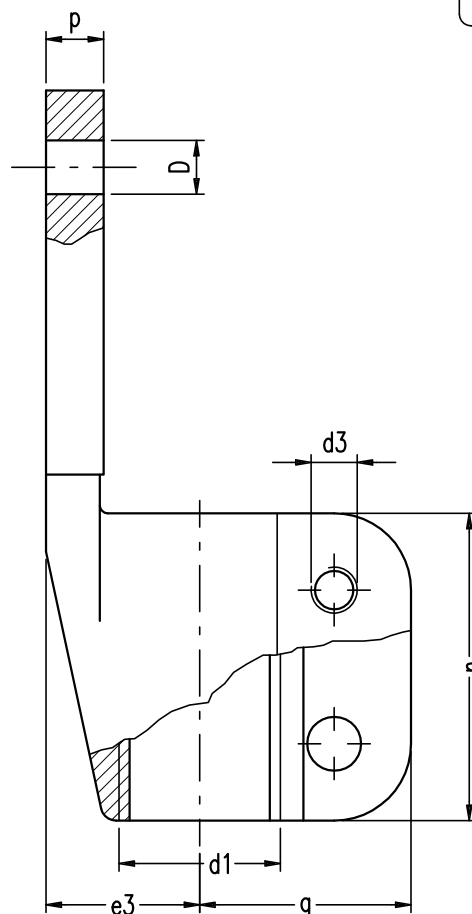
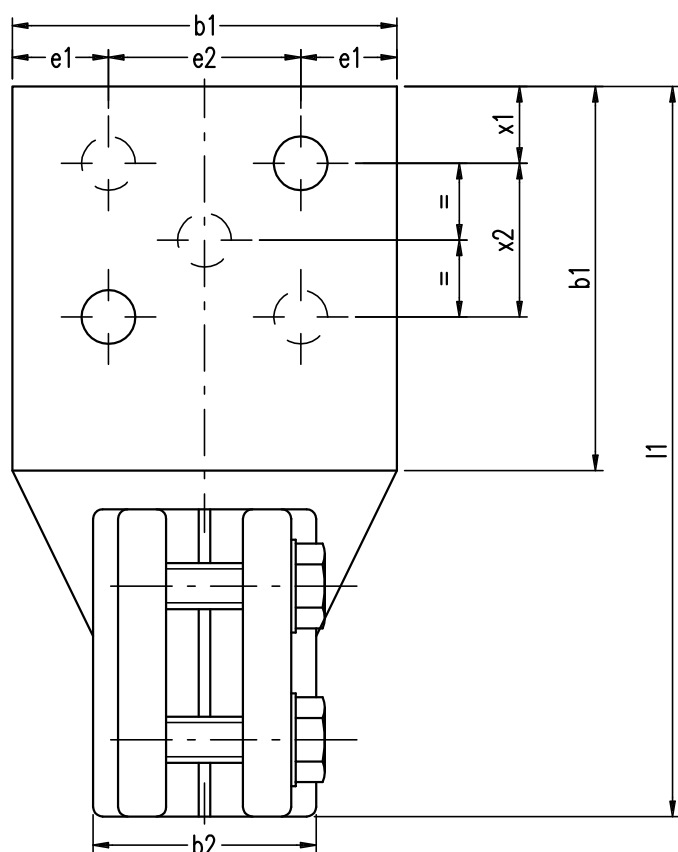
Flags FP 4500-6300 A Special

Page 4.3: Flags ER - FR DIN 43675 from 1000 to 4500 A

Page 4.4: Flags 250 & 630 A – different styles

Page 4.5: Ansi clamp, with eye bolt and special flags

Page 4.7: Flags TP - GPL DIN 43675 from 6300 to 12500 A



Z : N° fori

Mat. ottone (CuZn40Pb2) UNI 5705-65

Z : N° of holes

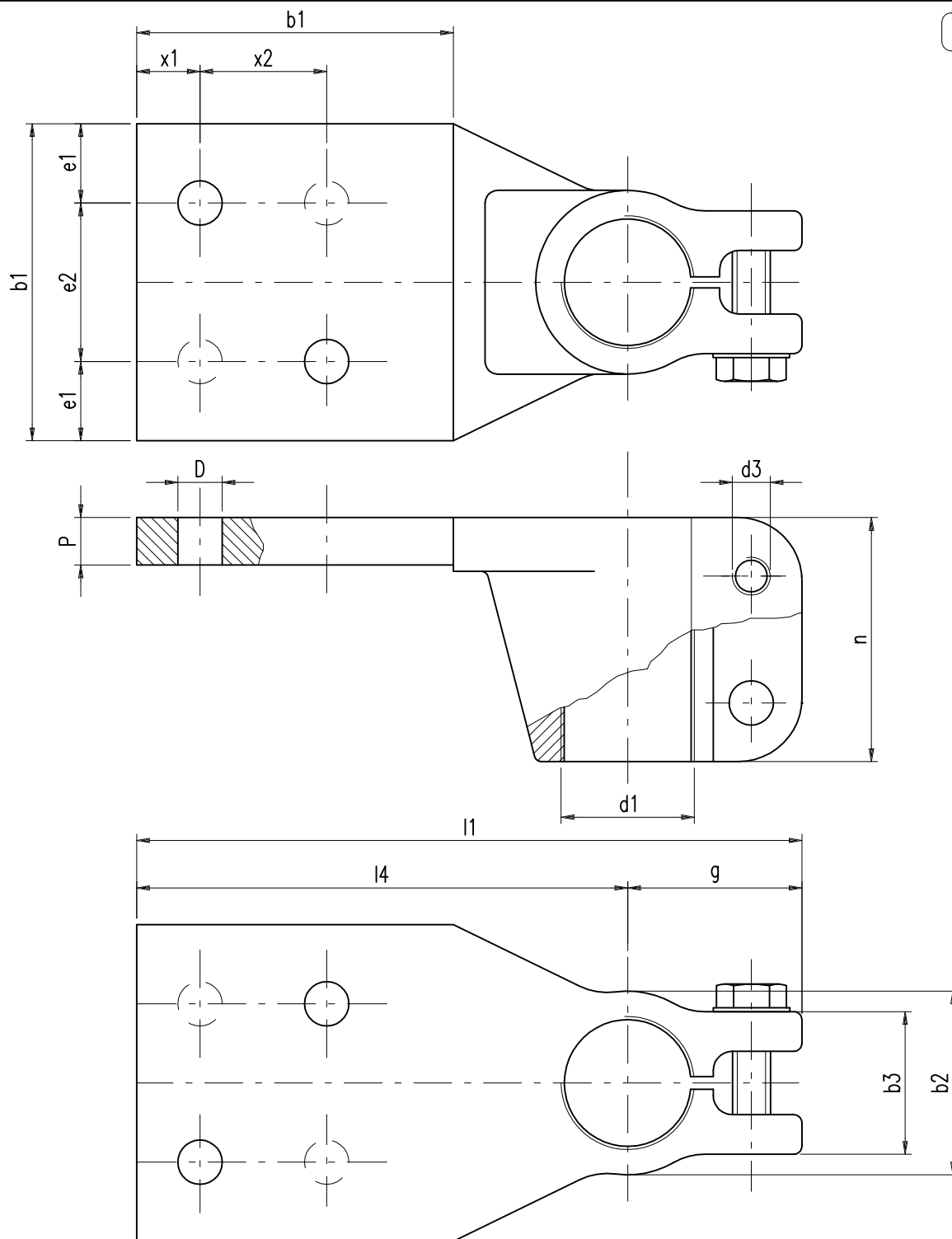
Mat. brass (CuZn40Pb2) UNI 5705-65

LA FIGURA MOSTRA BANDERUOLA FP 2000 IN SCALA 1:2
THE FIGURE SHOWS FLAG FP 2000 (1:2 SCALE)

| Tipo Type | Corrente Current A | b1 mm | b2 mm | b3 mm | d1 | d3 | e1 mm | e2 mm | e3 mm | g mm | l1 mm | n mm | p mm | x1 mm | x2 mm | Z | D ø | NOTA Note | Codice Code |
|-------------------|--------------------------|----------|----------|----------|------------------|-----|----------|----------|----------|---------|----------|---------|---------|----------|----------|---|--------|-----------------------|----------------|
| EP 1000 | 1000 | 60 | 45 | 36 | M30X2 | M10 | 17 | 26 | 28 | 40 | 130 | 60 | 10 | 17 | 26 | 2 | 14 | Acc. to DIN 43675 | BA1000DVIO |
| FP 2000 | 2000 | 100 | 58 | 45 | M42X3 | M12 | 25 | 50 | 40 | 55 | 190 | 80 | 15 | 20 | 40 | 4 | 14 | Acc. to DIN 43675 | BA2000DVIO |
| FP 3150 | 3150 | 120 | 68 | 58 | M48X3 | M12 | 30 | 60 | 45 | 55 | 210 | 80 | 15 | 20 | 40 | 4 | 14 | Acc. to DIN 43675 | BA3150DVIO |
| FP 4500 | 4500 | 150 | 80 | 58 | M55X3 | M12 | 40 | 70 | 55 | 60 | 246 | 90 | 20 | 40 | 70 | 4 | 18 | Special | BA4500UVIO |
| FP 6300 | 6300 | 200 | 105 | 62 | ø71 | M12 | 40 | 120 | 65 | 70 | 310 | 100 | 20 | 40 | 120 | 5 | 18 | Special | BA6300UVF0 |
| FP M30 NEMA | 2000 | 100 | 58 | 45 | M30X2 | M12 | 27.7 | 44.5 | 40 | 55 | 190 | 80 | 15 | 27.7 | 44.5 | 4 | 14 | Special NEMA pads | FA2000DVF3 |
| FP M42 NEMA | 2000 | 100 | 58 | 45 | M42X3 | M12 | 27.7 | 44.5 | 40 | 55 | 190 | 80 | 15 | 27.7 | 44.5 | 4 | 14 | Special NEMA pads | BA2000DVI2 |
| FP 1"1/2 UNF NEMA | 2000 | 100 | 58 | 45 | 1"1/2 UNF(12tpi) | M12 | 27.7 | 44.5 | 40 | 55 | 190 | 80 | 15 | 27.7 | 44.5 | 4 | 14 | Special NEMA pads | BA2000DVI4 |
| FP M48 NEMA | 3150 | 120 | 68 | 58 | M48X3 | M12 | 37.7 | 44.5 | 45 | 55 | 210 | 80 | 15 | 37.7 | 44.5 | 4 | 14 | Special NEMA pads | FA3150DVF2 |
| UNEL 1000 A | 1000 | 60 | 44 | 44 | M30X2 | M12 | 14 | 32 | 30 | 40 | 130 | 60 | 12 | 14 | 32 | 4 | 14 | Acc. to UNEL 38167-67 | FA1000UVF0 |
| UNEL 2000 A | 2000 | 100 | 58 | 58 | M42X3 | M12 | 25 | 50 | 45 | 55 | 195 | 80 | 20 | 25 | 50 | 4 | 18 | Acc. to UNEL 38167-67 | FA2000UVF0 |
| UNEL 3150 A | 3150 | 120 | 68 | 58 | M48X3 | M12 | 30 | 60 | 50 | 55 | 210 | 80 | 20 | 30 | 60 | 4 | 18 | Acc. to UNEL 38167-67 | FA3150UVF0 |

CEDASPE

BANDERUOLE VERTICALI
Vertical Flags



Z : N° fori

Mat. ottone (CuZn40Pb2) UNI 5705-65

Z : N° of holes

Mat. brass (CuZn40Pb2) UNI 5705-65

| Tipo Type | Corrente Current A | b1 mm | b2 mm | b3 mm | d1 | d3 | e1 mm | e2 mm | g mm | l1 mm | l4 mm | n mm | P mm | x1 mm | x2 mm | Z | D φ | NOTA Note |
|--------------|--------------------------|----------|----------|----------|-------|-----|----------|----------|---------|----------|----------|---------|---------|----------|----------|---|--------|-------------------|
| ER 1000 | 1000 | 60 | 45 | 36 | M30X2 | M10 | 17 | 26 | 40 | 135 | 95 | 60 | 10 | 17 | 26 | 2 | 14 | Acc. to DIN 43675 |
| FR 2000 | 2000 | 100 | 58 | 45 | M42X3 | M12 | 25 | 50 | 55 | 210 | 155 | 80 | 15 | 20 | 40 | 4 | 14 | Acc. to DIN 43675 |
| FR 3150 | 3150 | 120 | 68 | 58 | M48X3 | M12 | 30 | 60 | 55 | 230 | 175 | 80 | 15 | 20 | 40 | 4 | 14 | Acc. to DIN 43675 |
| FR 4500 | 4500 | 150 | 80 | 80 | M55X3 | M12 | 40 | 70 | 60 | 267 | 205 | 90 | 20 | 40 | 70 | 4 | 18 | Special |

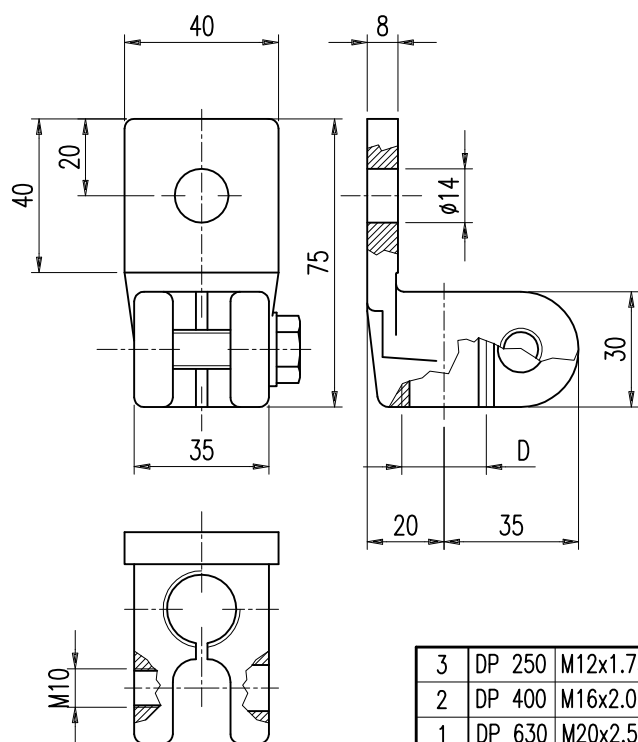
LA FIGURA MOSTRA BANDERUOLA FR 2000 IN SCALA 1:2

THE FIGURE SHOWS FLAG FR 2000 (1:2 SCALE)

CEDASPE

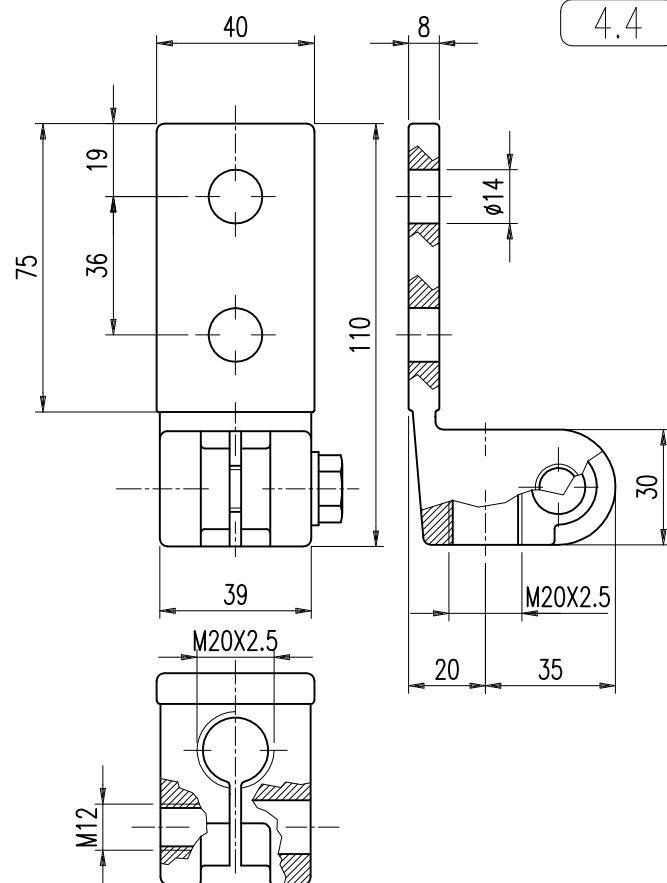
BANDERUOLE ORIZZONTALI ER-FR

Horizontal Flags ER-FR

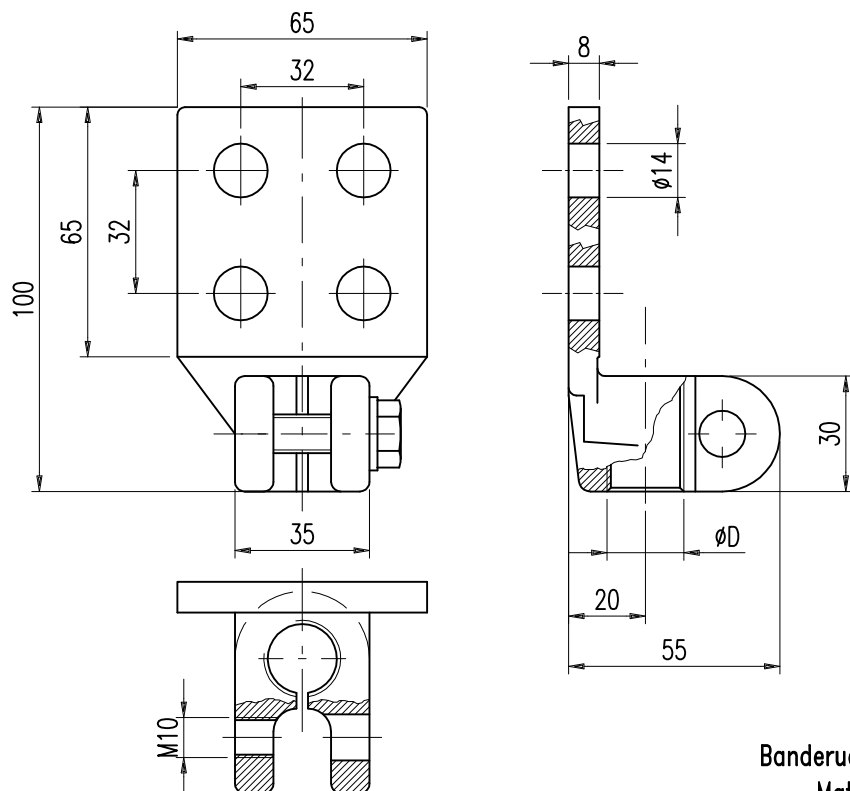


| 3 | DP 250 | M12x1.75 |
|------|--------|----------|
| 2 | DP 400 | M16x2.0 |
| 1 | DP 630 | M20x2.5 |
| Pos. | TIPO | D |

Bandaruola/Brass flag DIN 43675 "DP"
 Mat. ottone (CuZn40Pb2) UNI 5705-65
 brass (CuZn40Pb2) UNI 5705-65



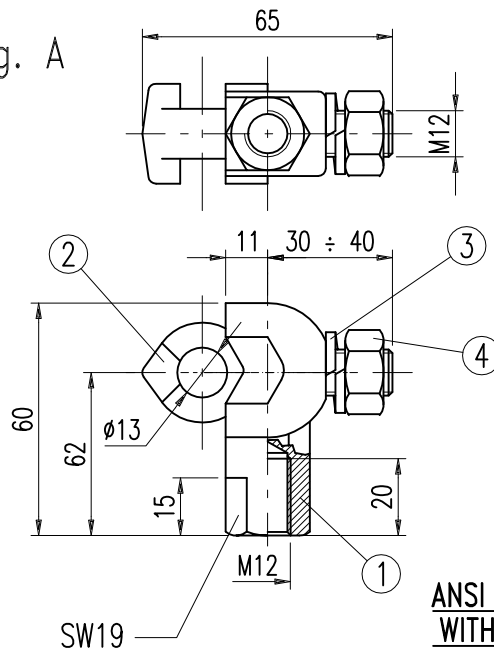
Bandaruola/Brass flag DIN 43675 (modified) "AP-EL"
 Mat. ottone (CuZn40Pb2) UNI 5705-65
 brass (CuZn40Pb2) UNI 5705-65



| 2 | DP/LK 250 | M12 |
|------|-----------|-----|
| 1 | DP/LK 630 | M20 |
| Pos. | TIPO | D |

Bandaruola/Brass flag DIN 43675 (modified) "DP-LK"
 Mat. ottone (CuZn40Pb2) UNI 5705-65
 brass (CuZn40Pb2) UNI 5705-65

Fig. A



SW19

**ANSI CLAMP M12
WITH EYE BOLT**

| POS | DESCRIPTION | MATERIAL |
|-----|----------------|----------|
| 1 | ANSI CLAMP M12 | BRASS |
| 2 | EYE BOLT M12 | BRASS |
| 3 | SPRING WASHER | S/STEEL |
| 4 | NUT M12 | BRASS |

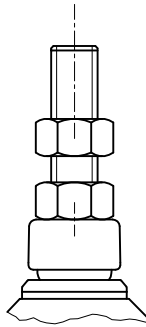
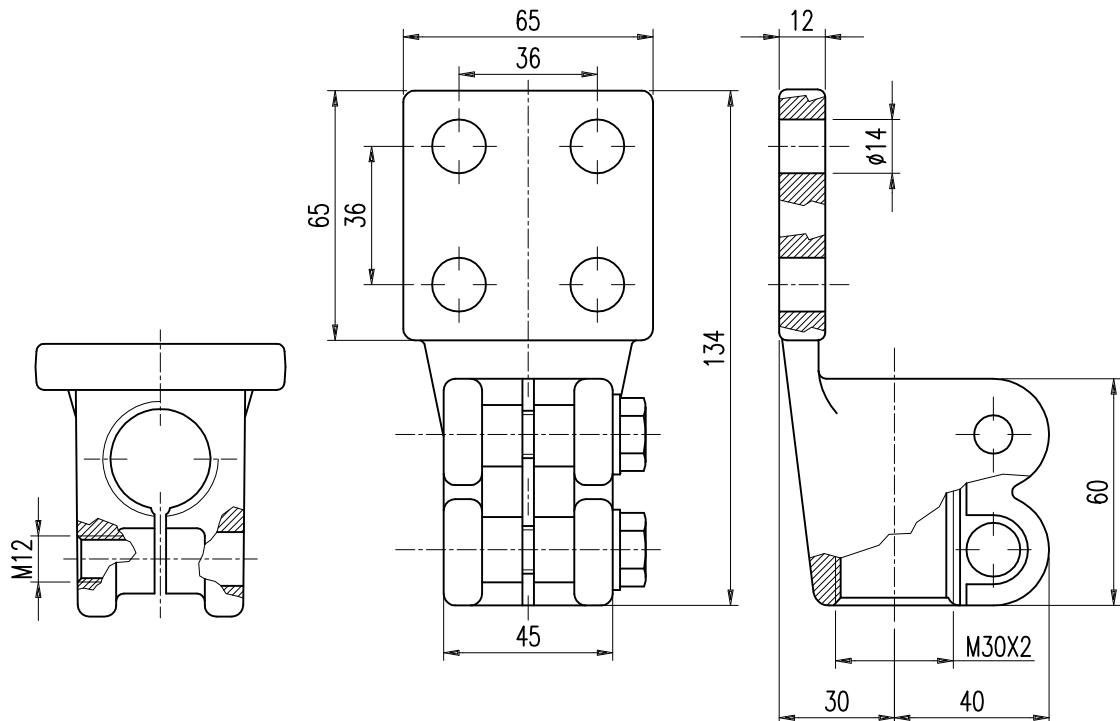
Schema
montaggioAssembly
scheme

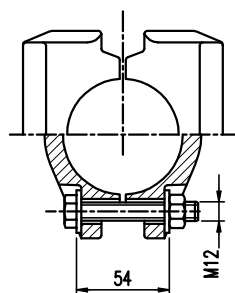
Fig. C



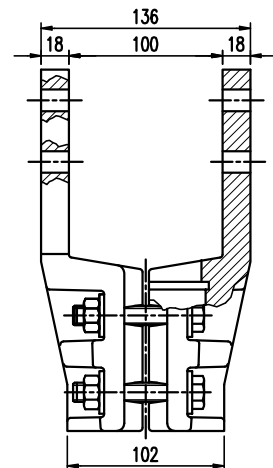
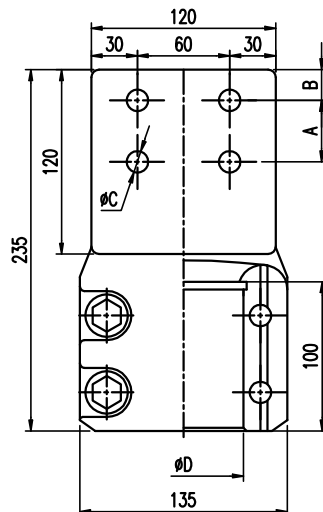
Banderuola/Brass flag DIN 43675 "BP-EL"
 Mat. ottone (CuZn40Pb2) UNI 5705-65
 brass (CuZn40Pb2) UNI 5705-65

A) ANSI CLAMP M12 WITH EYE BOLT

C) BANDERUOLA / Flag "BP-EL 1000A

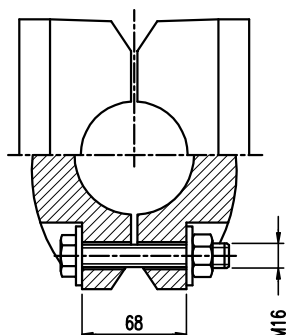


Banderuola/Flag type
TP 78/120 (6300A)
Mat. ottone brass

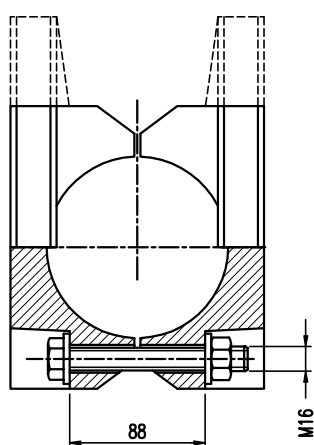
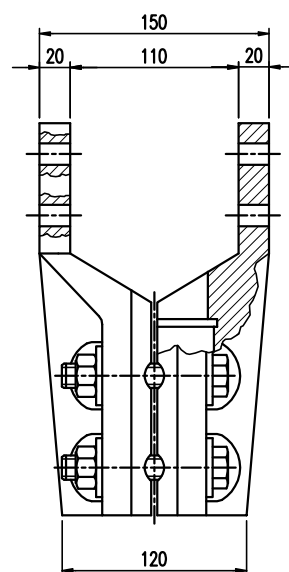
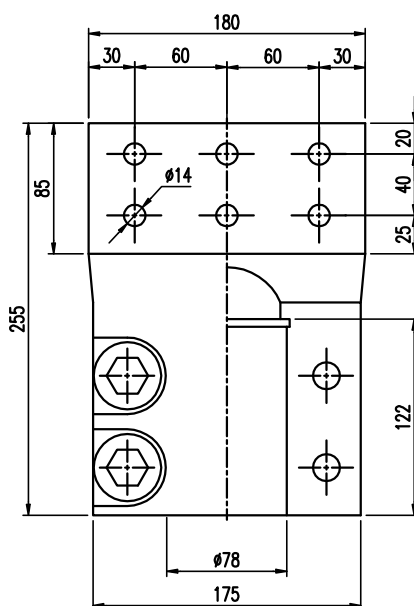


4.7

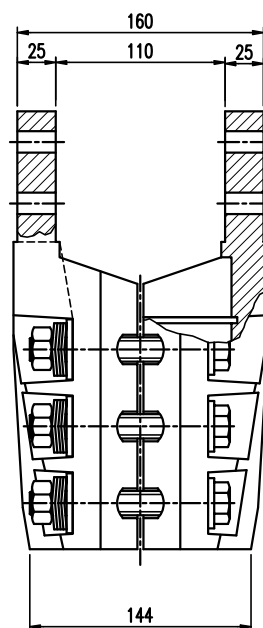
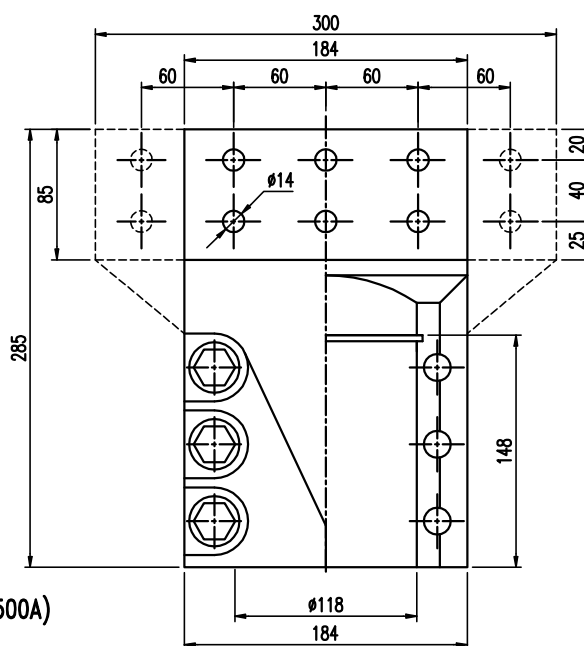
| Pos. | A | B | ØC | ØD | NOTE |
|------|----|----|----|----|-----------------------------------|
| 1 | 40 | 20 | 14 | 78 | TP78/120 (SILVERPLATED) DIN 43675 |
| 2 | 60 | 30 | 18 | 74 | TP78/120 BUSHING 20/6300 OIL SIDE |
| 3 | 60 | 30 | 18 | 71 | TP78/120 BUSHING 20/6300 AIR SIDE |



Banderuola/Flag type
TP 78/180 (8000A)
Mat. bronzo alluminio argentato
alu-bronze 88-9-3 silver plated



Banderuola/Flag type
GPL 118-180 e GPL 118-300 (12500A)
Mat. bronzo alluminio argentato
alu-bronze 88-9-3 silver plated



BANDERUOLE A DOPPIO GUSCIO
PER 6300-8000-12500A DIN 43675
Double flags
For 6300-8000-12500A DIN 43675

CEDASPE