

ANELLI ROTANTI

ROTARY RINGS



ANELLI ROTANTI

ROTARY RINGS

L'Anello Rotante è un dispositivo che trasforma il moto rotatorio continuo in entrata, in moto rotatorio intermittente in uscita.

Evoluzione delle tavole rotanti, ha come sostanziale differenza che la parte in rotazione non è il disco, ma la corona. Si contraddistingue per un'ampia apertura centrale, ideale per il montaggio di apparecchiature ausiliarie all'interno, un'esecuzione compatta ed un elevato grado di precisione.

L'anello ARI è stato progettato per movimentare parti impegnative per massa ed inerzia, per ciascun modello è possibile la soluzione con sosta indicizzata oppure a rotazione continua programmabile. Cuscinetti sovradimensionati, camma cilindrica e struttura progettata generosamente, garantiscono altissima efficienza in tutte le condizioni d'impiego ed un funzionamento silenzioso. Esecuzione con camma meccanica per ottimizzare precisione e ripetibilità.

The Rotating Ring is a device that transforms the continuous input rotary motion into an intermittent output motion. This is an evolution of a rotary index table, but it has the substantial difference in that the rotating part is not on the disc but on the crown. It is characterized by a large center hole which is ideal for the mounting of auxiliary equipment in the center of the ring. It has a compact design and a high degree of precision. The AR Series is designed to handle demanding part requirements when considering mass and inertia. Each model can be the possible solution for programmable stopping or continuous rotation.

The heavy duty cam followers, cylindrical cam and structural design guarantee high efficiency in all applications. It also provides a quiet operation. It is run with a mechanical cam to optimize accuracy and repeatability.

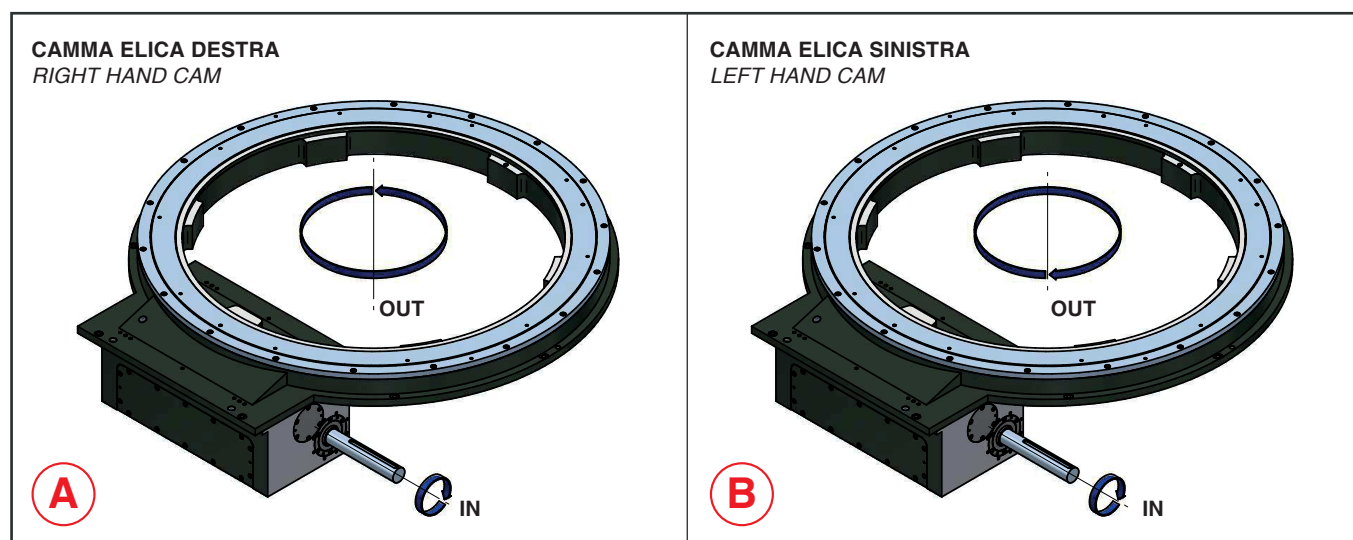
Senso di rotazione

Rotation direction

L'anello rotante in esecuzione standard è fornita con camma ad elica **destra**. La rotazione **oraria** dell'albero in entrata genera una rotazione intermittente **antioraria** in uscita (vedi figura "A" sotto). Per avere la direzione contraria è sufficiente invertire il moto all'ingresso. Con camma ad elica **sinistra** e rotazione **oraria** in ingresso si ha l'uscita in senso **orario** (vedi figura "B" sotto).

Standard rotary rings is supplied with **right hand cam**. Clockwise rotation at inlet is transformed into **counter-clockwise** intermittent rotation at outlet (see picture below "A").

With **left hand cam** and **clockwise** rotation at inlet we have intermittent **clockwise** at outlet (see picture "B" below).



Index ring operating position



Power drive unit assembling position

ROTARY RINGS

Rotary index ring

Stazioni Stations	Angoli di camma Cam angles									
	90	120	150	180	210	240	270	300	330	345
2										
4										
6										
8										
12										
16										
18										
24										

ANGOLI DI CAMMA REALIZZABILI
FEASIBLE CAM TRANSFER ANGLES

Tolleranza Anelli Rotanti

Tolerances of indexing rings

Tolleranza di ripetibilità

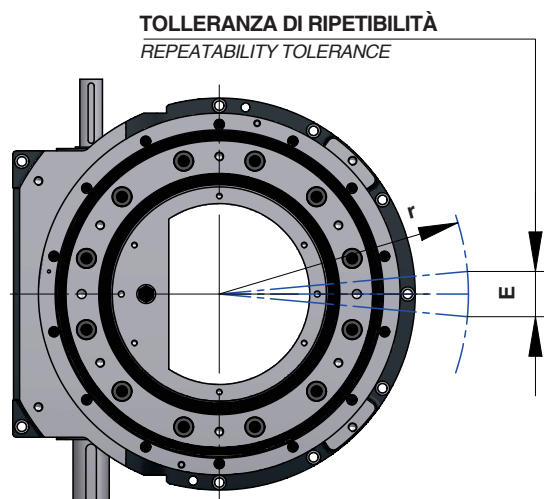
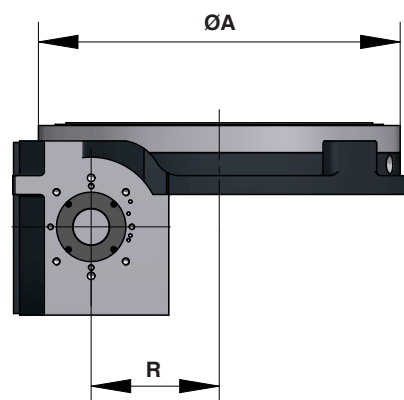
Repeatability tolerance:

- R : 87,5 mm
- EE: ±0,015 mm

Planarità disco/Disc flatness:

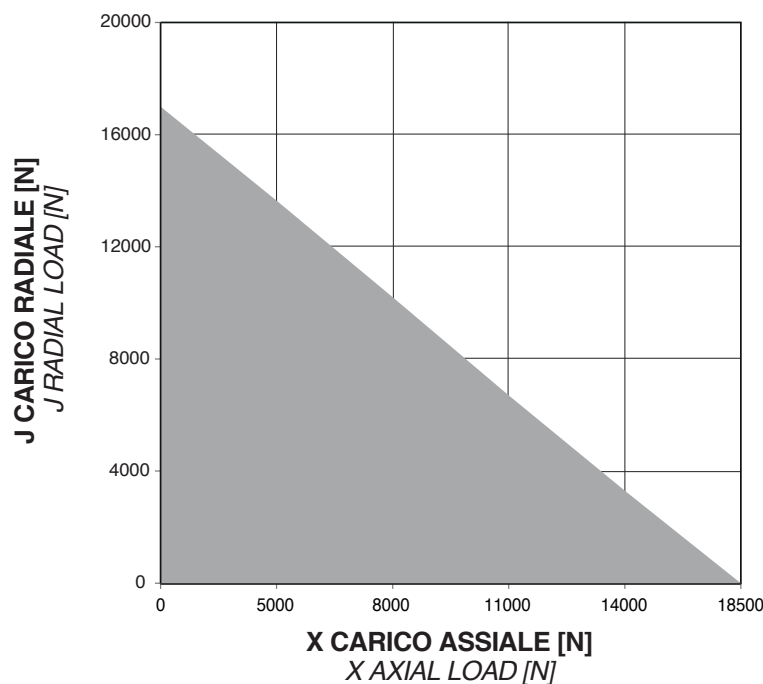
- A: 250 mm
- Total: 0,02 mm

$$E = \frac{r}{R} \times EE = \pm [\text{mm}]$$

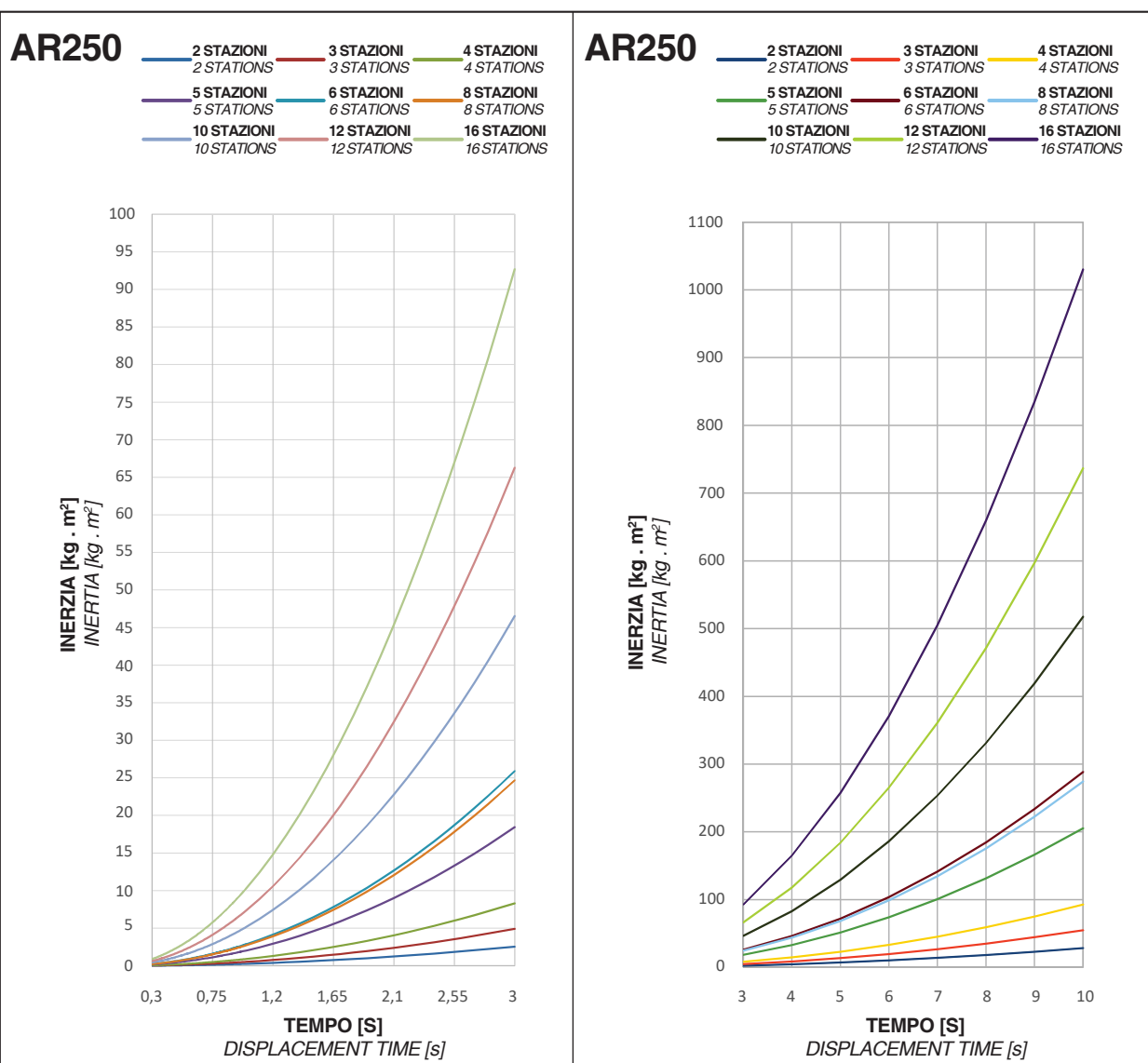


Carichi assiali e radiali

Max axial and radial loads



AR250

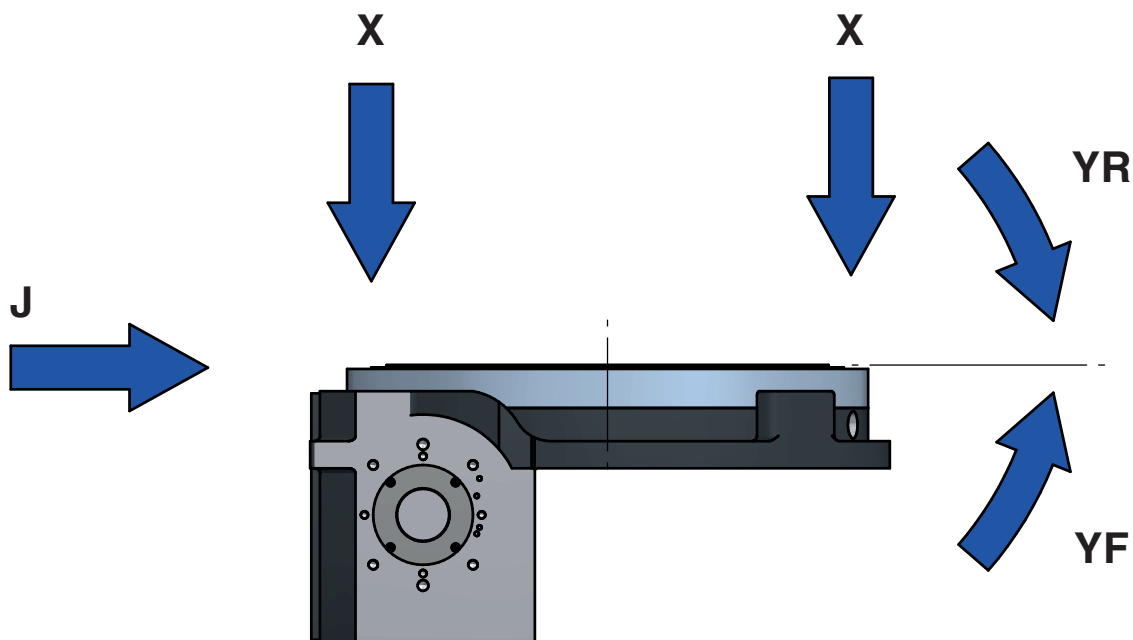


IL GRAFICO È INDICATIVO, PER IDENTIFICARE UN CORRETTO DIMENSIONAMENTO, CONSIGLIAMO DI RICHIEDERE UN CALCOLO DEDICATO AL NOSTRO UFFICIO TECNICO
THE GRAPH IS INDICATIVE, TO IDENTIFY A CORRECT SIZING, WE RECOMMEND REQUESTING A DEDICATED CALCULATION FROM OUR TECHNICAL DEPARTMENT

ROTARY RINGS

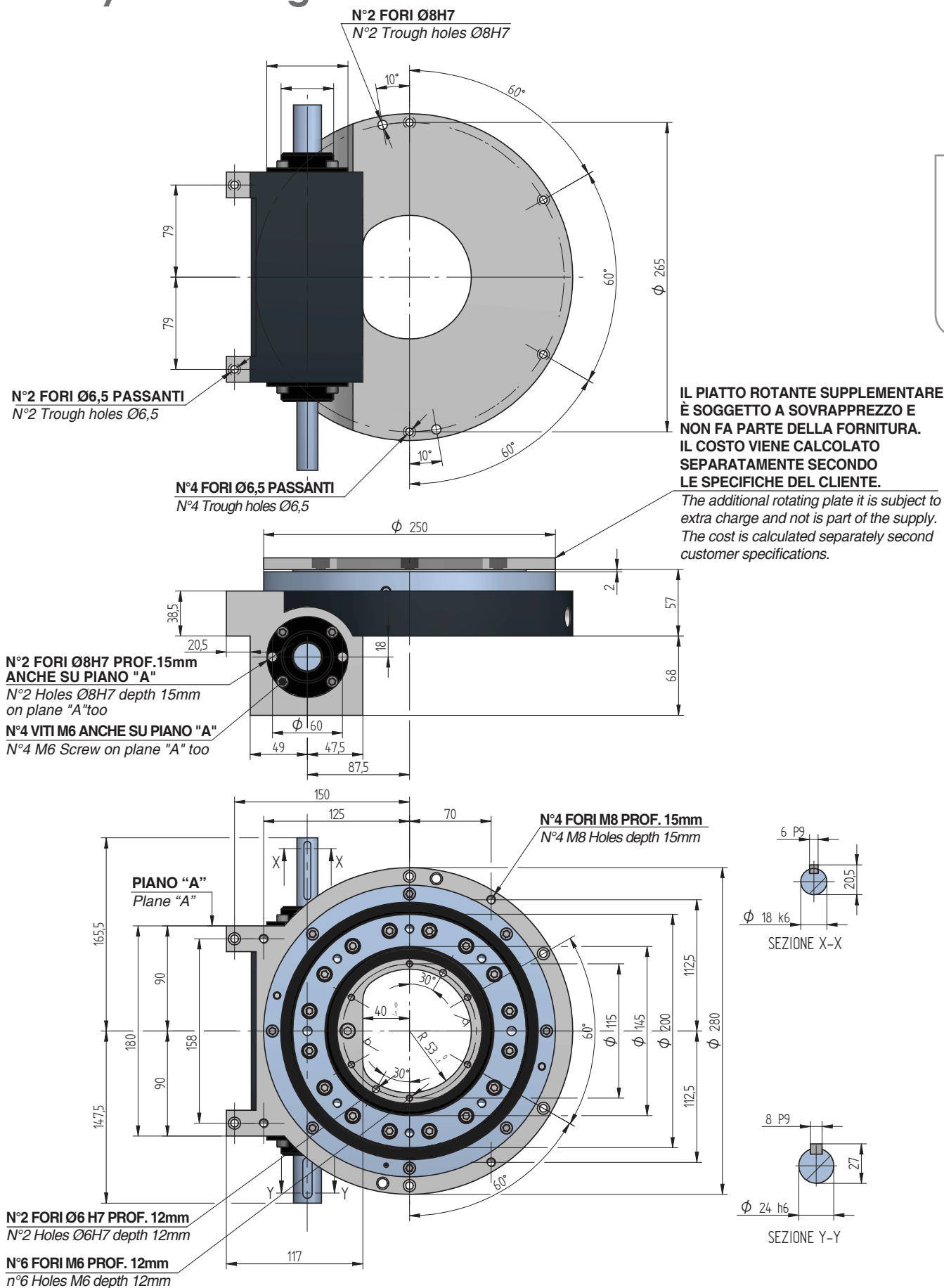
Axial and radial loads

X Carico assiale Axial load	J Carico radiale Radial load	YR Momento ribaltante Overturning torque
N		Nm
18500	17000	580



Anello rotante

Rotary index ring



AR 250

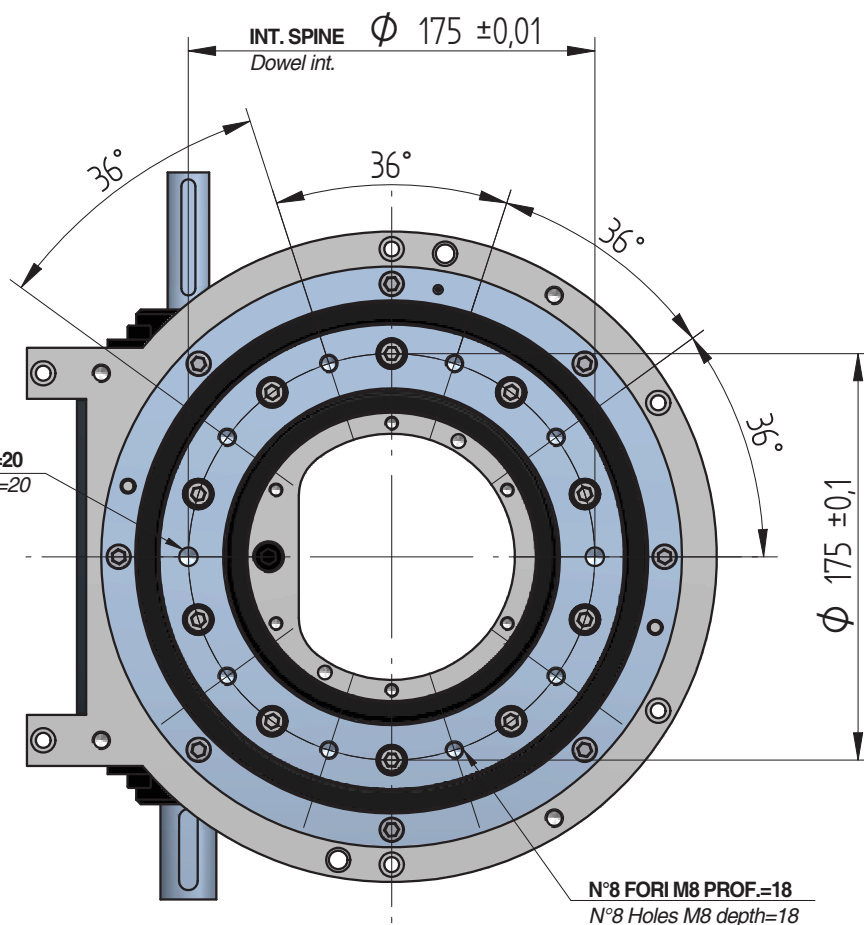


ROTARY RINGS

Assembling threaded holes on rotating disk

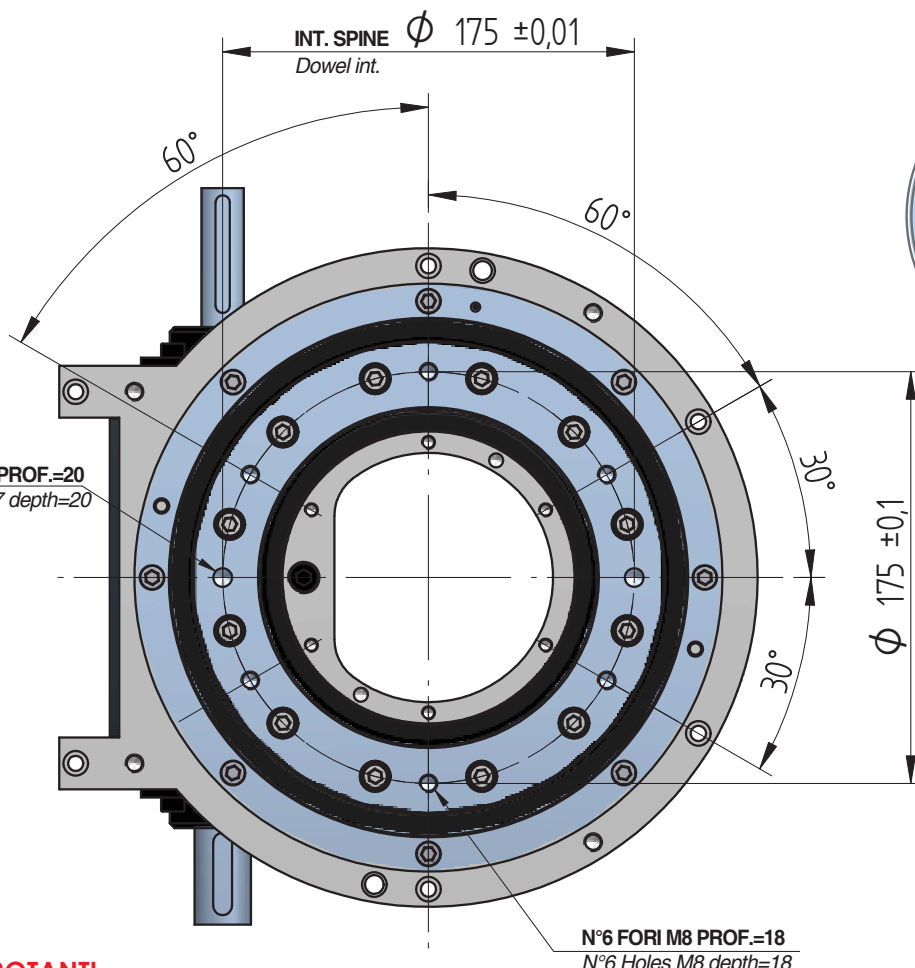
**FORATURA
su unità a
2/10/20 divisioni**
Drilling holes
on units with
2/10/20 divisions

N°2 FORI Ø8H7 PROF.=20
N°2 Holes Ø8H7 depth=20



N°8 FORI M8 PROF.=18
N°8 Holes M8 depth=18

N°2 FORI Ø8H7 PROF.=20
N°2 Holes Ø8H7 depth=20



N°6 FORI M8 PROF.=18
N°6 Holes M8 depth=18

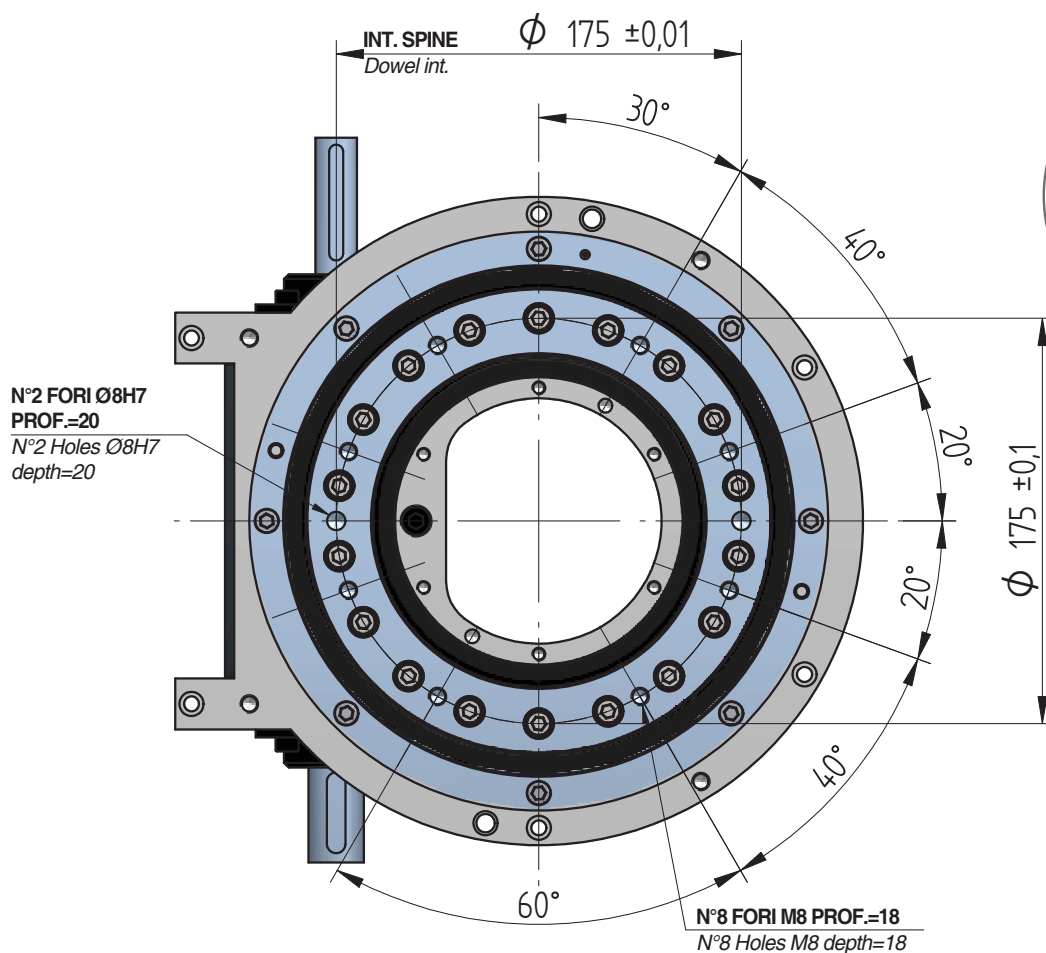
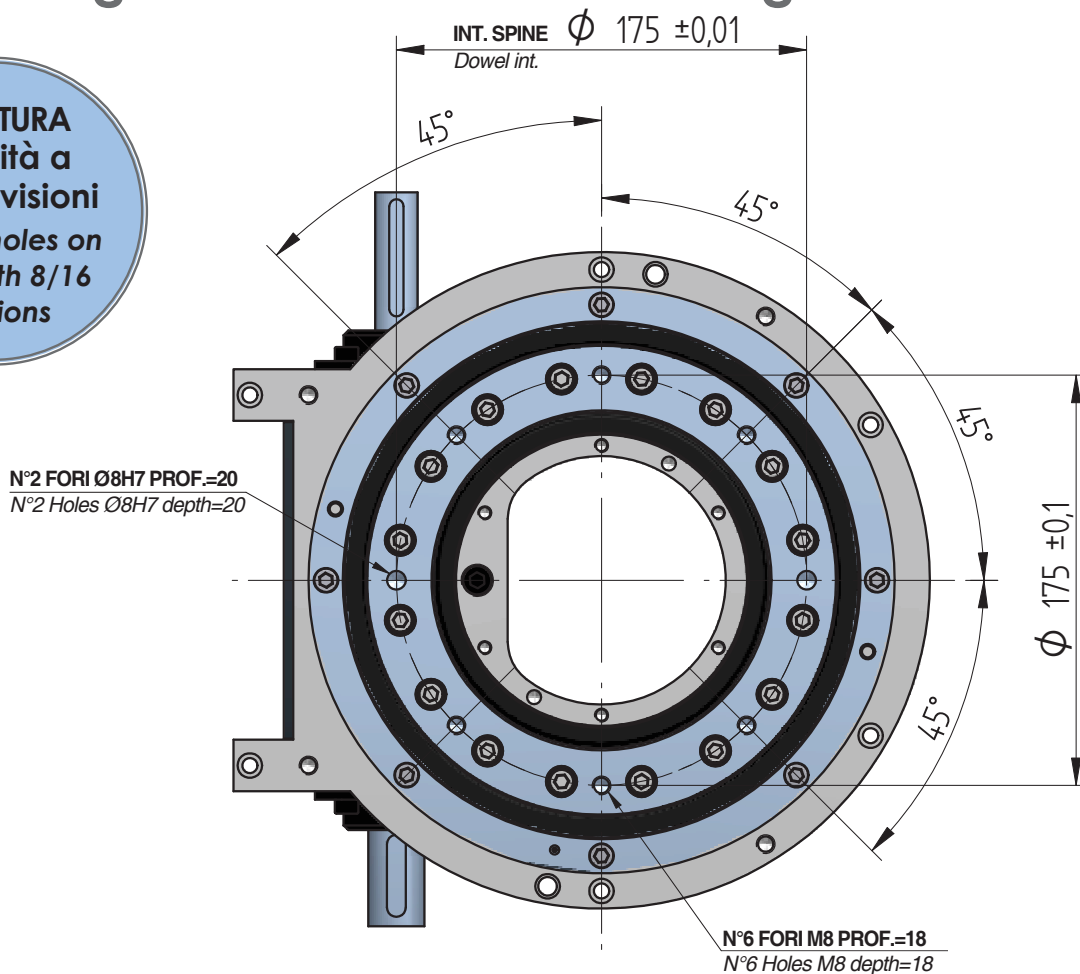
**FORATURA
su unità a
4/6/12/24 divisioni**
Drilling holes on
units with 4/6/12/24
divisions

Fori per assemblaggio su disco rotante

Assembling threaded holes on rotating disk

AR250

**FORATURA
su unità a
8/16 divisioni**
Drilling holes on
units with 8/16
divisions



**FORATURA
su unità a
18 divisioni**
Drilling holes on
units with 18
divisions

ROTARY RINGS

Rotary index ring

Stazioni Stations	Angoli di camma Cam angles									
	90	120	150	180	210	240	270	300	330	345
2										
4										
6										
8										
12										
16										
18										
24										

ANGOLI DI CAMMA REALIZZABILI
FEASIBLE CAM TRANSFER ANGLES

Tolleranza Anelli Rotanti

Tolerances of indexing rings

Tolleranza di ripetibilità

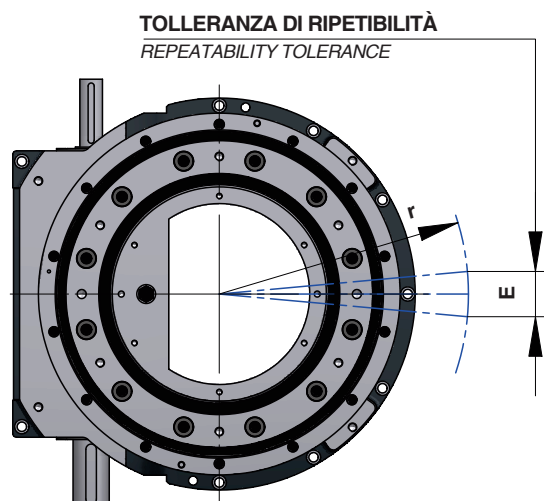
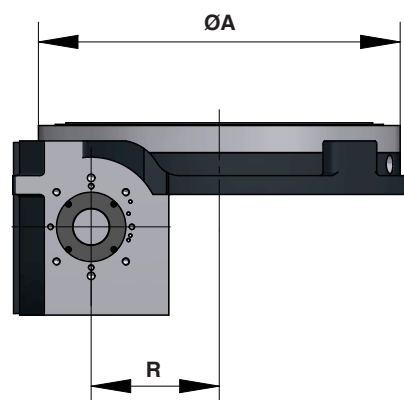
Repeatability tolerance:

- R : 127,5 mm
- EE: ±0,015 mm

Planarità disco/Disc flatness:

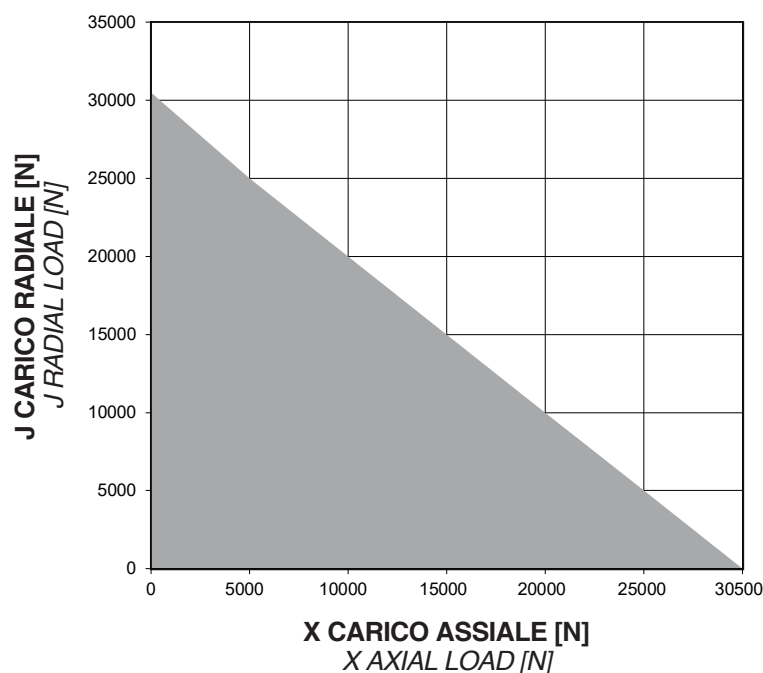
- A: 350 mm
- Total: 0,03 mm

$$E = \frac{r}{R} \times EE = \pm [\text{mm}]$$

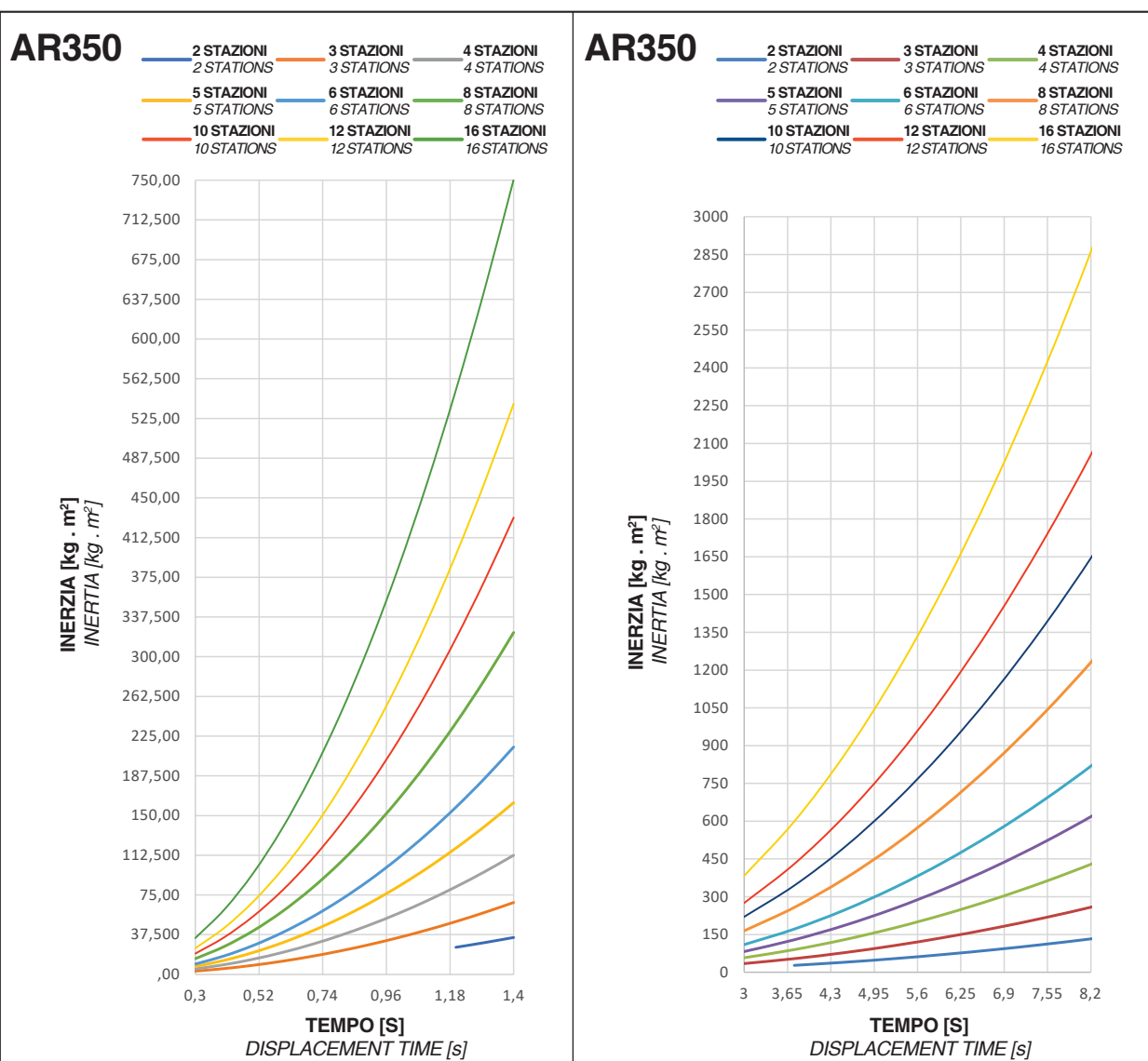


Carichi assiali e radiali

Max axial and radial loads



AR350

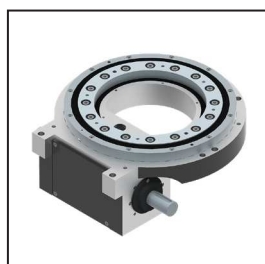
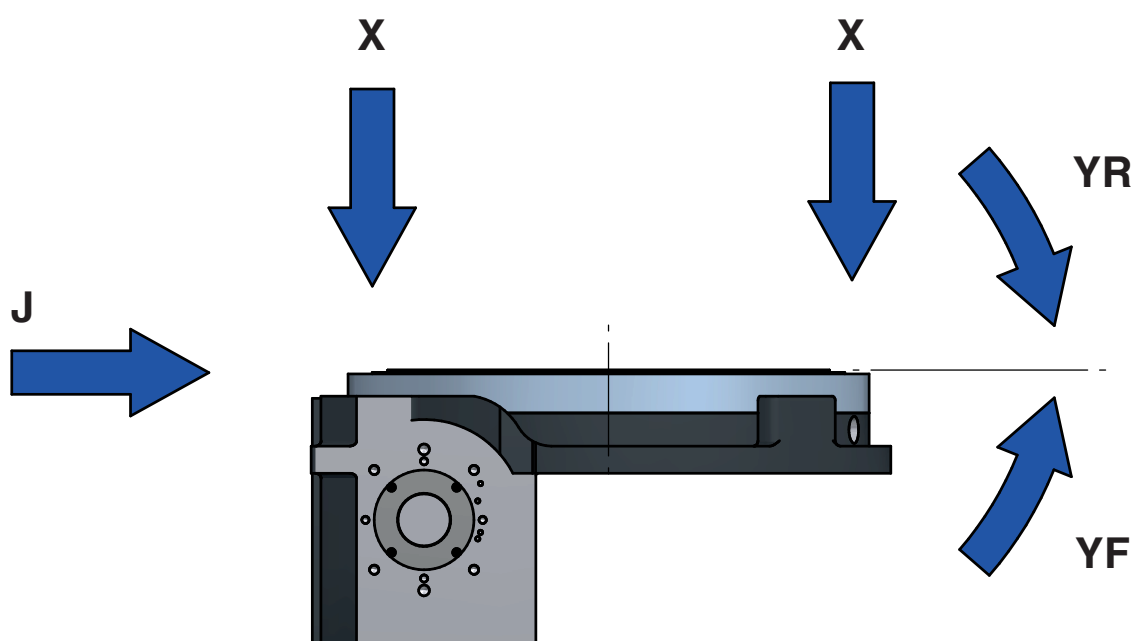


IL GRAFICO È INDICATIVO, PER IDENTIFICARE UN CORRETTO DIMENSIONAMENTO, CONSIGLIAMO DI RICHIEDERE UN CALCOLO DEDICATO AL NOSTRO UFFICIO TECNICO
THE GRAPH IS INDICATIVE, TO IDENTIFY A CORRECT SIZING, WE RECOMMEND REQUESTING A DEDICATED CALCULATION FROM OUR TECHNICAL DEPARTMENT

ROTARY RINGS

Axial and radial loads

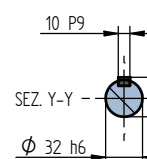
X Carico assiale Axial load	J Carico radiale Radial load	YR Momento ribaltante Overturning torque
N		Nm
30500	30500	1360



Rotary index ring



The additional rotating plate it is subject to extra charge and not is part of the supply. The cost is calculated separately second customer specifications.



Assembling threaded holes on rotating disk

FORATURA
su unità a
8/16 divisioni
*Drilling holes on
units with 8/16
divisions*

INT. SPINE 255 ±0,01
Dowel int.

45°

45°

17

45°

45°

Ø 255 ±0,1

N°6 FORI M8 PROF.=18
N°6 Holes M8 depth=18

**FORATURA
su unità a
18 divisioni**
*Drilling holes on
units with 18
divisions*

INT. SPINE 255 ±0.01
Dowel int.

30°

40°

20°

20°

60°

Φ 255 ±0.1

N°8 FORI M8 PROF.=18
N°8 Holes M8 depth=18

N°8 FORI M8 PROF.=18
N°8 Holes M8 depth=18

Rotary index ring

Stazioni Stations	Angoli di camma Cam angles									
	90	120	150	180	210	240	270	300	330	345
2										
4										
6										
8										
12										
16										
24										
32										

ANGOLI DI CAMMA REALIZZABILI
FEASIBLE CAM TRANSFER ANGLES

Tolleranza Anelli Rotanti

Tolerances of indexing rings

Tolleranza di ripetibilità

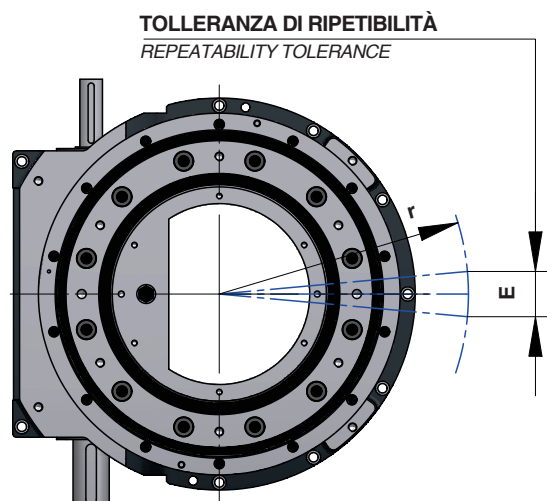
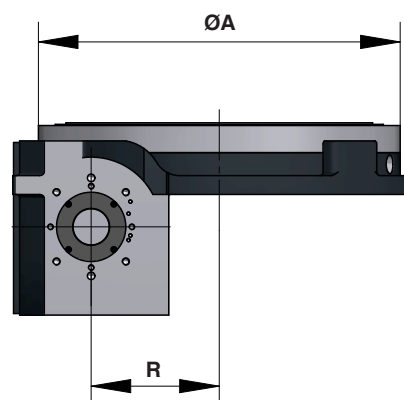
Repeatability tolerance:

- R : 182,5 mm
- EE: ±0,015 mm

Planarità disco/Disc flatness:

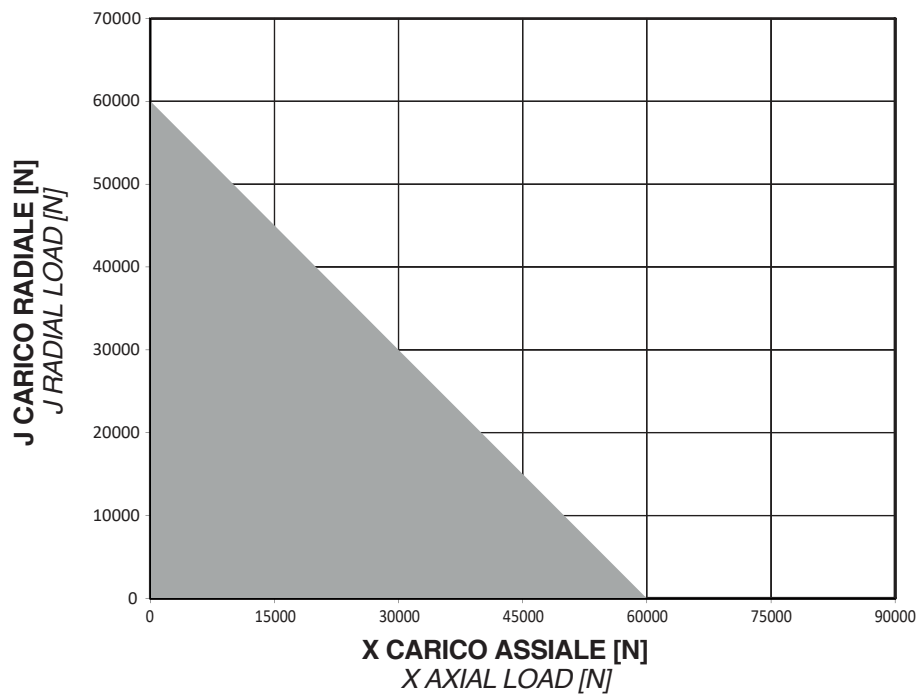
- A: 510 mm
- Total: 0,03 mm

$$E = \frac{r}{R} \times EE = \pm [\text{mm}]$$

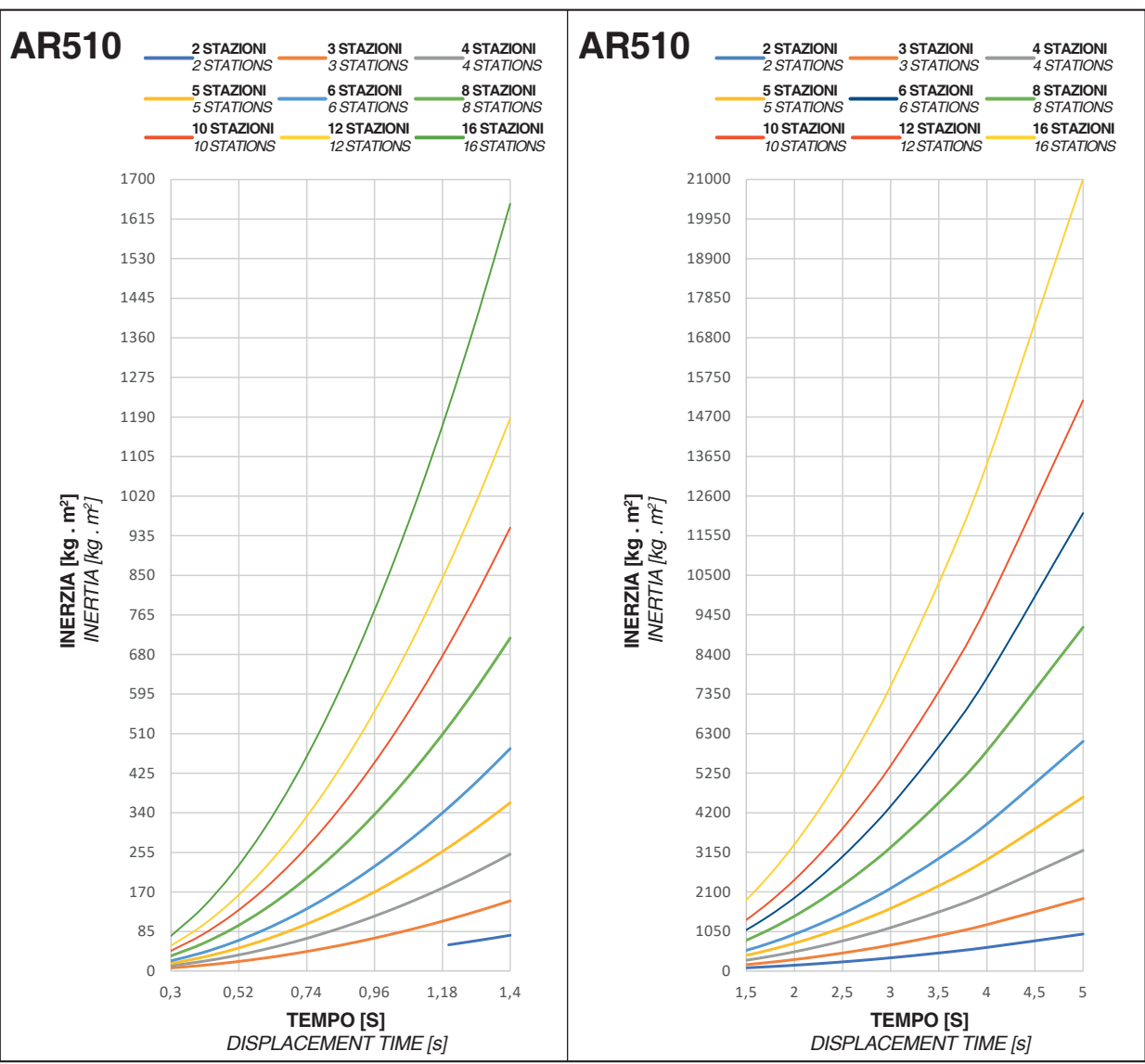


Carichi assiali e radiali

Max axial and radial loads



AR510

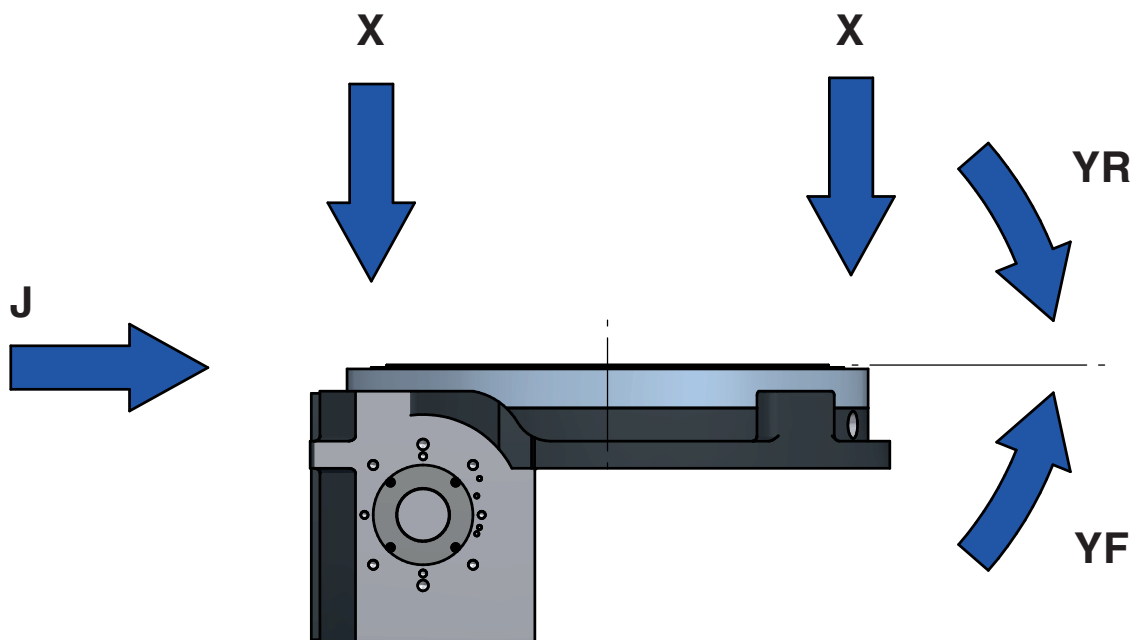


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ROTARY RINGS

Axial and radial loads

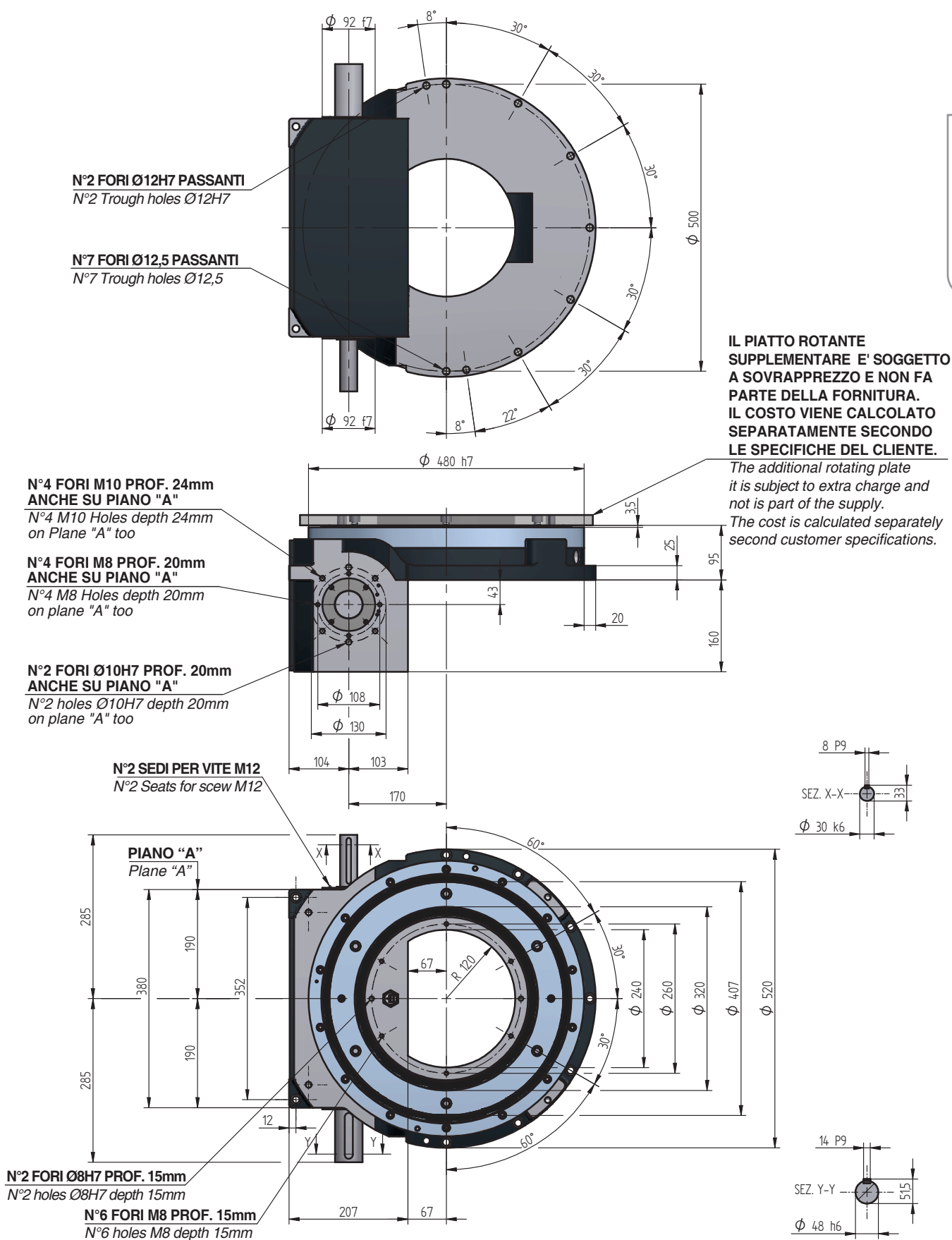
X Carico assiale Axial load	J Carico radiale Radial load	YR Momento ribaltante Overturning torque
N		Nm
60000	60000	2500



Anello rotante

Rotary index ring

AR510



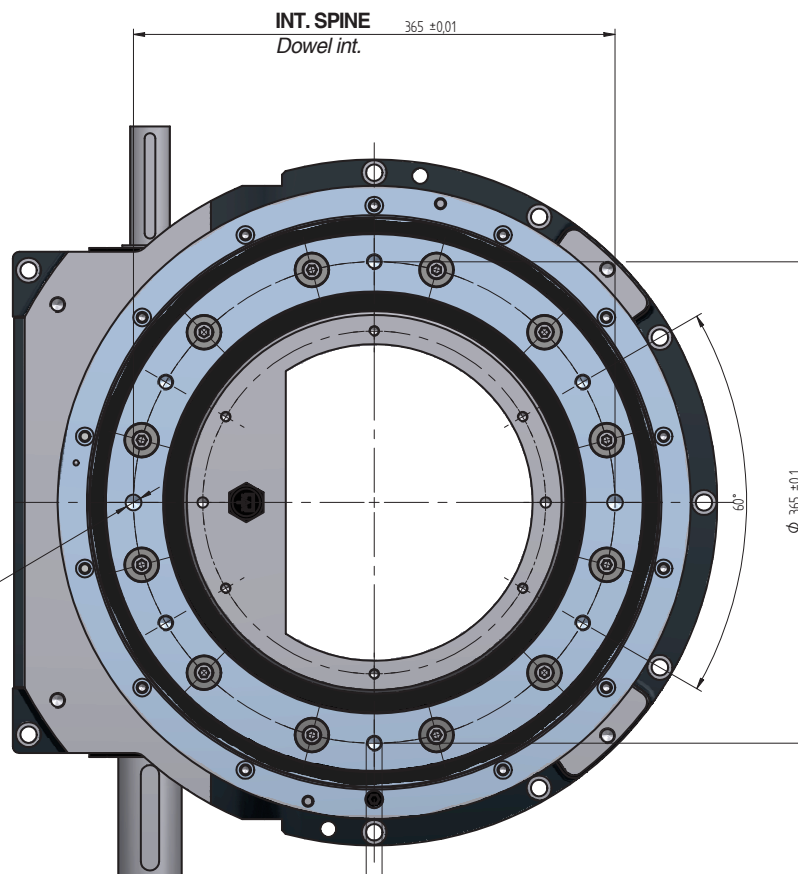
180 kg

ROTARY RINGS

Assembling threaded holes on rotating disk

**FORATURA
su unità a
2/4/6/12/24
divisioni**
*Drilling holes on units
with 2/4/6/12/24
divisions*

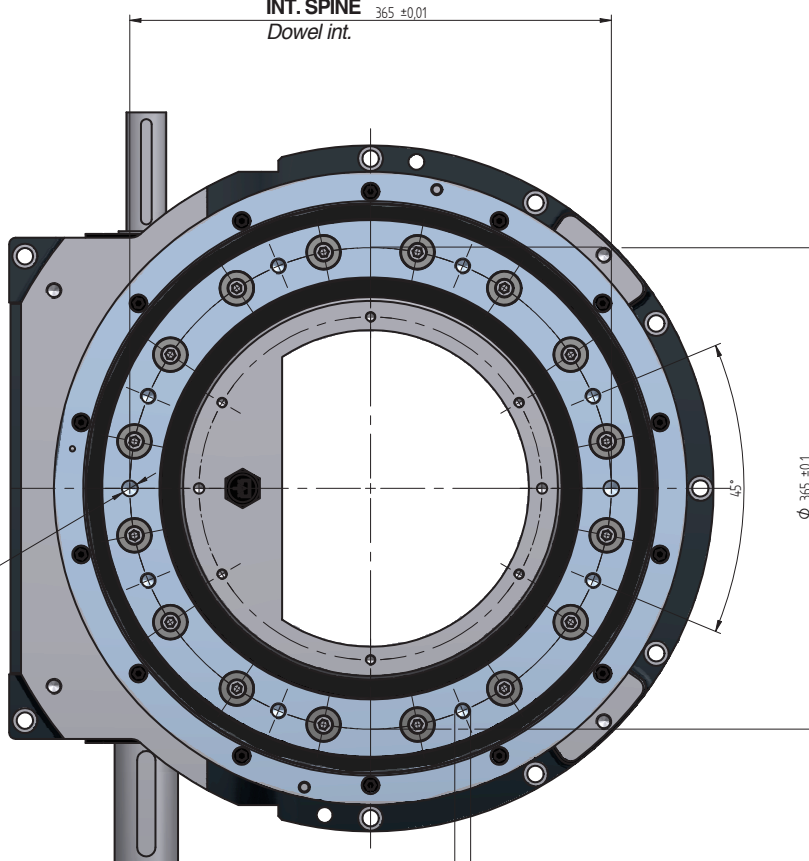
N°2 FORI Ø12H7 PROF.=20
N°2 Holes Ø12H7 depth=20



N°6 FORI M12 PROF.=20
N°6 Holes M12 depth=20

INT. SPINE 365 ±0.01
Dowel int.

**N°2 FORI Ø12H7
PROF.=20**
*N°2 Holes Ø12H7
depth=20*



N°8 FORI M12 PROF.=20
N°8 Holes M12 depth=20

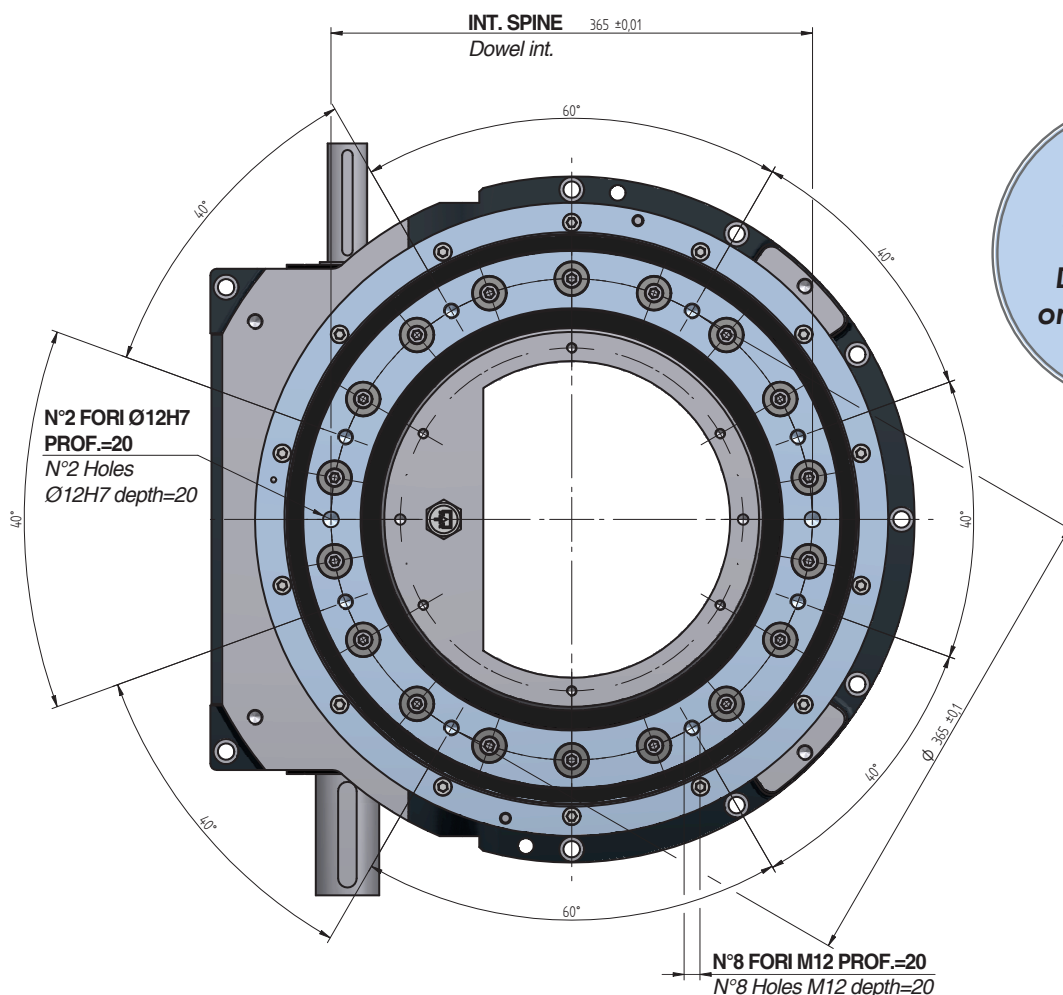
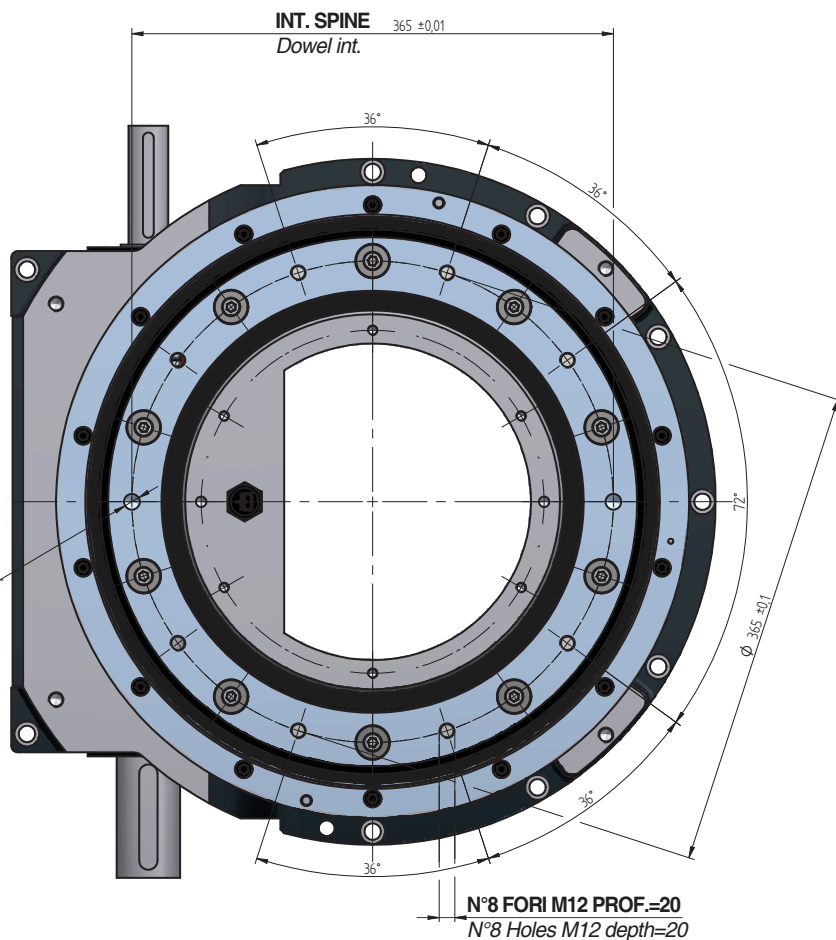
**FORATURA
su unità a
8/16/32 divisioni**
*Drilling holes on
units with 8/16/32
divisions*

Fori per assemblaggio su disco rotante

Assembling threaded holes on rotating disk

**FORATURA
su unità a
10/20/30 divisioni**
Drilling holes on
units with 10/20/30
divisions

**N°2 FORI Ø12H7
PROF.=20**
N°2 Holes Ø12H7
depth=20

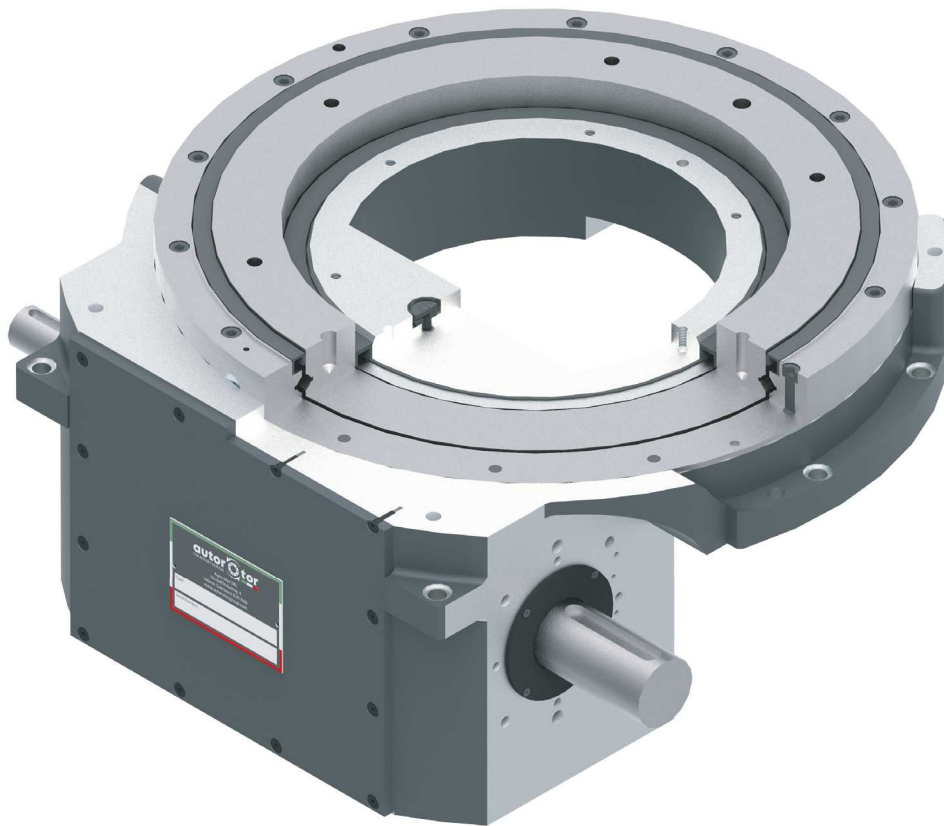


**FORATURA
su unità a
18 divisioni**
Drilling holes
on units with 18
divisions

AR510

ROTARY RINGS

Rotary ring 3D



Anello rotante

Rotary index ring

Stazioni Stations	Angoli di camma Cam angles									
	90	120	150	180	210	240	270	300	330	345
2										
4										
6										
8										
12										
16										
24										

ANGOLI DI CAMMA REALIZZABILI
FEASIBLE CAM TRANSFER ANGLES

AR1600

Tolleranza Anelli Rotanti

Tolerances of indexing rings

Tolleranza di ripetibilità

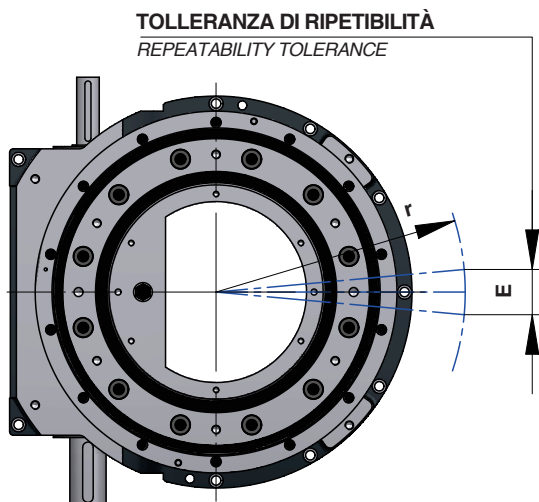
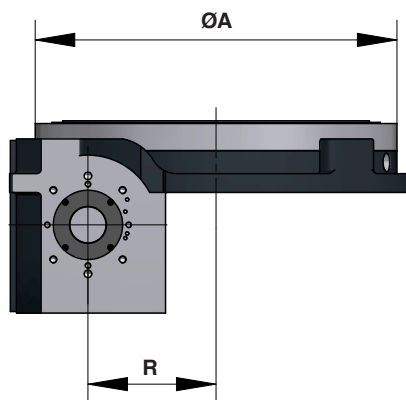
Repeatability tolerance:

- R : 700 mm
- EE: ±0,04 mm

Planarità disco/Disc flatness:

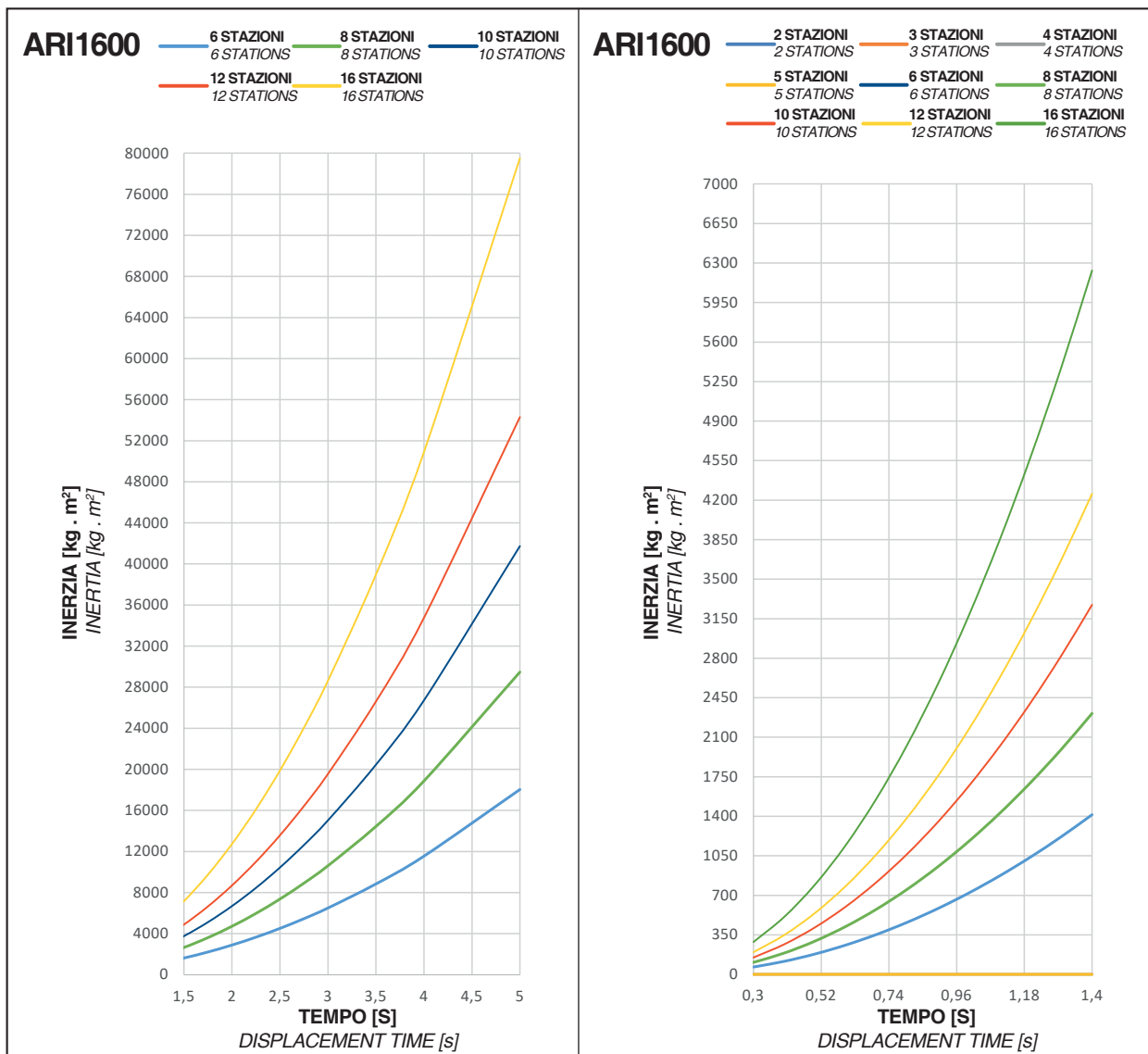
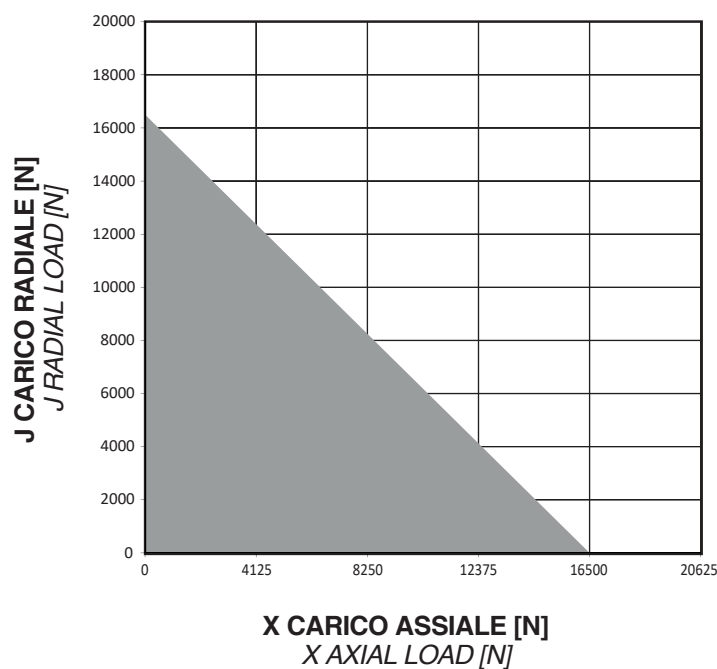
- A: 1600 mm
- Total: 0,07 mm

$$E = \frac{r}{R} \times EE = \pm [\text{mm}]$$



ROTARY RINGS

Max axial and radial loads



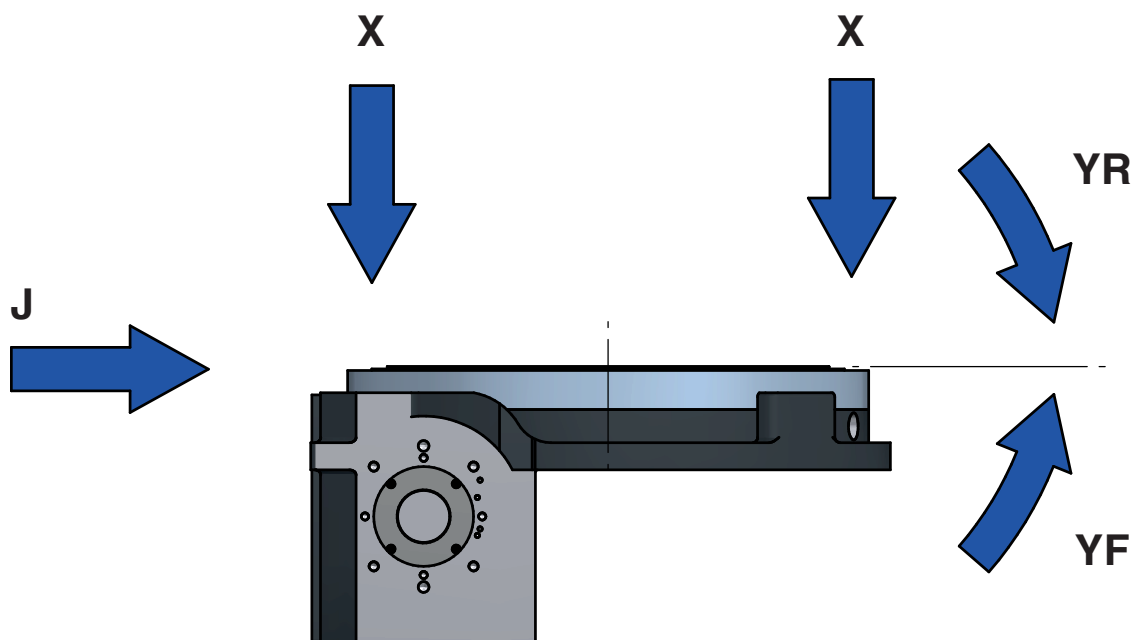
ANELLI ROTANTI IL GRAFICO È INDICATIVO, PER IDENTIFICARE UN CORRETTO DIMENSIONAMENTO, CONSIGLIAMO DI RICHIEDERE UN CALCOLO DEDICATO AL NOSTRO UFFICIO TECNICO
THE GRAPH IS INDICATIVE, TO IDENTIFY A CORRECT SIZING, WE RECOMMEND REQUESTING A DEDICATED CALCULATION FROM OUR TECHNICAL DEPARTMENT

Carichi assiali e radiali

Axial and radial loads

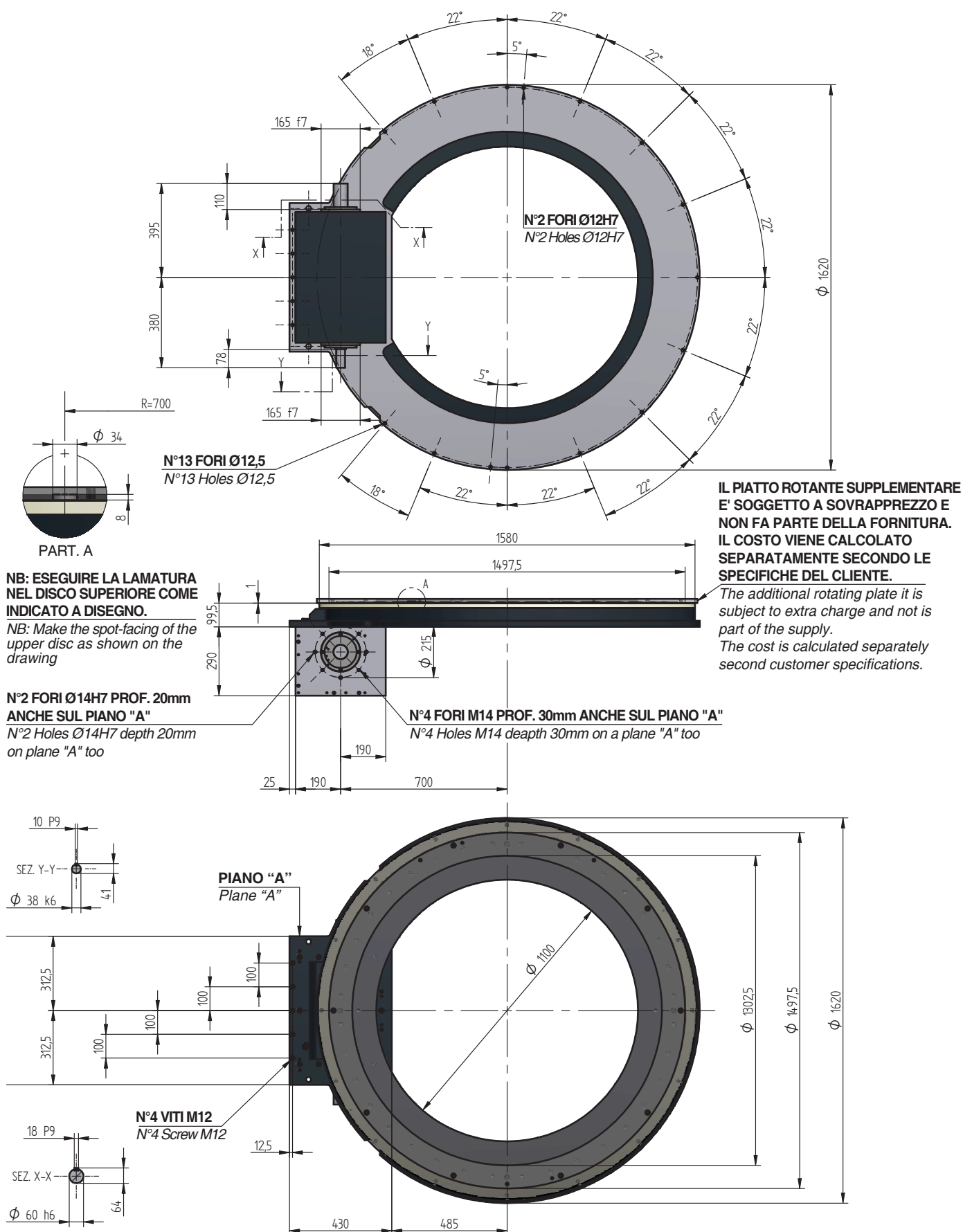
X Carico assiale Axial load	J Carico radiale Radial load	YR Momento ribaltante Overturning torque
N		Nm
16500	16500	2200

AR1600



ROTARY RINGS

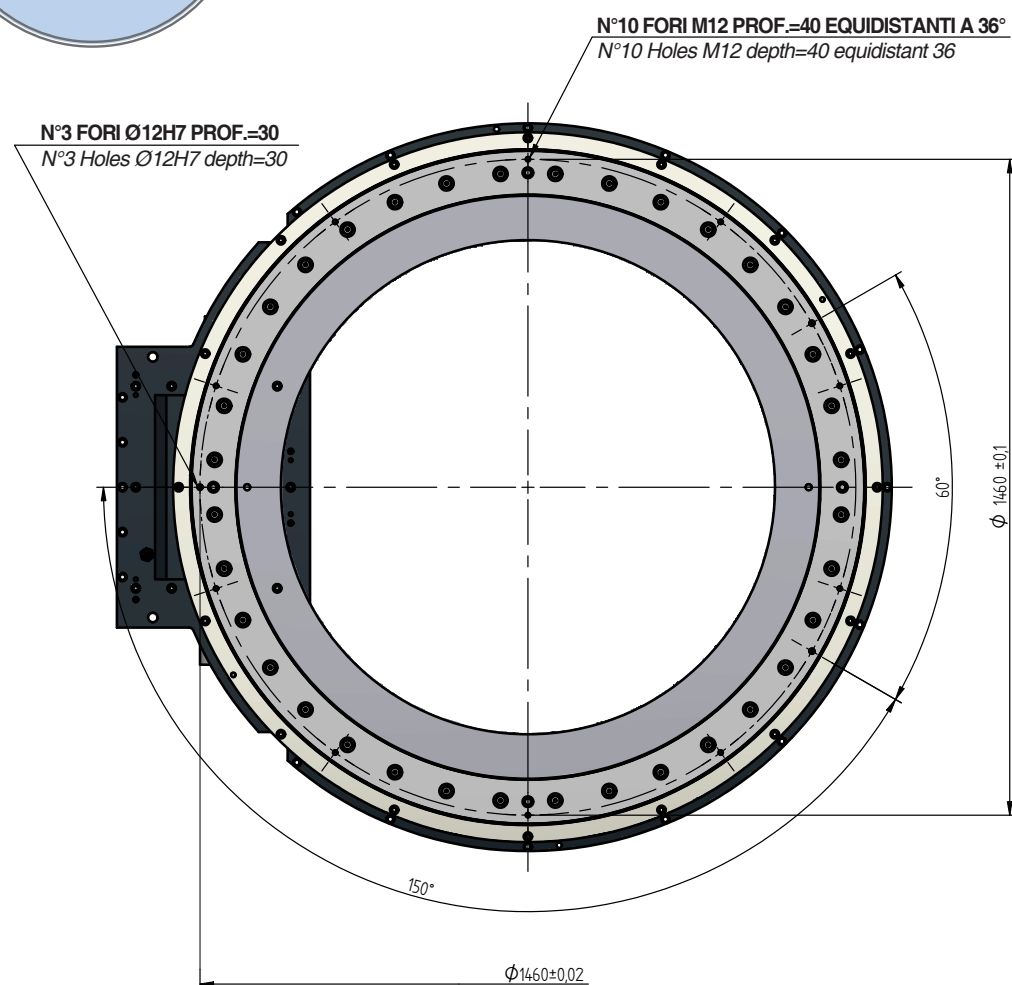
Rotary index ring



Fori per assemblaggio su disco rotante

Assembling threaded holes on rotating disk

FORATURA
su unità
Drilling holes
on units



AR1600

Rotary index ring

Stazioni Stations	Angoli di camma Cam angles									
	90	120	150	180	210	240	270	300	330	345
2										
4										
6										
8										
12										
16										
24										

ANGOLI DI CAMMA REALIZZABILI
FEASIBLE CAM TRANSFER ANGLES

Tolleranza Anelli Rotanti

Tolerances of indexing rings

Tolleranza di ripetibilità

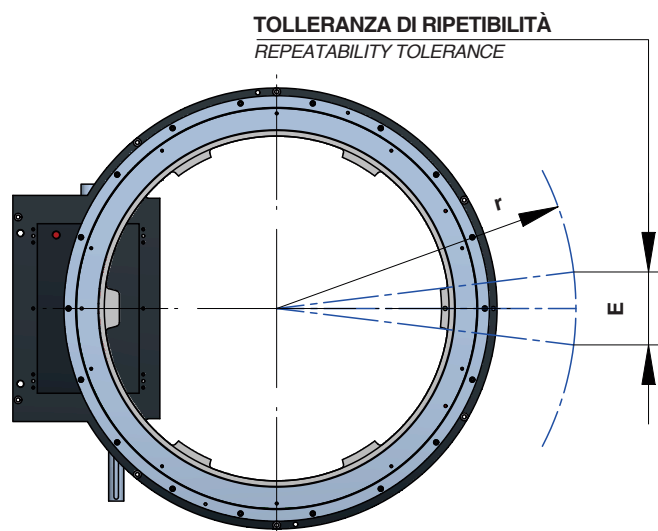
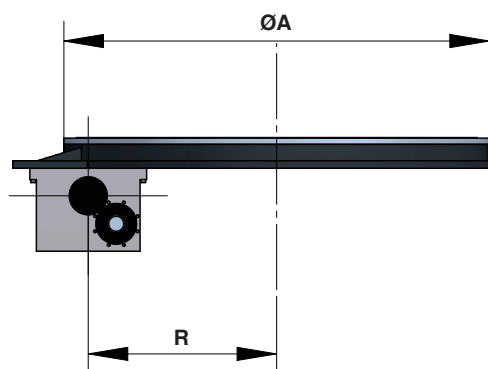
Repeatability tolerance:

- R : 310 mm
- EE: ±0,02 mm

Planarità disco/Disc flatness:

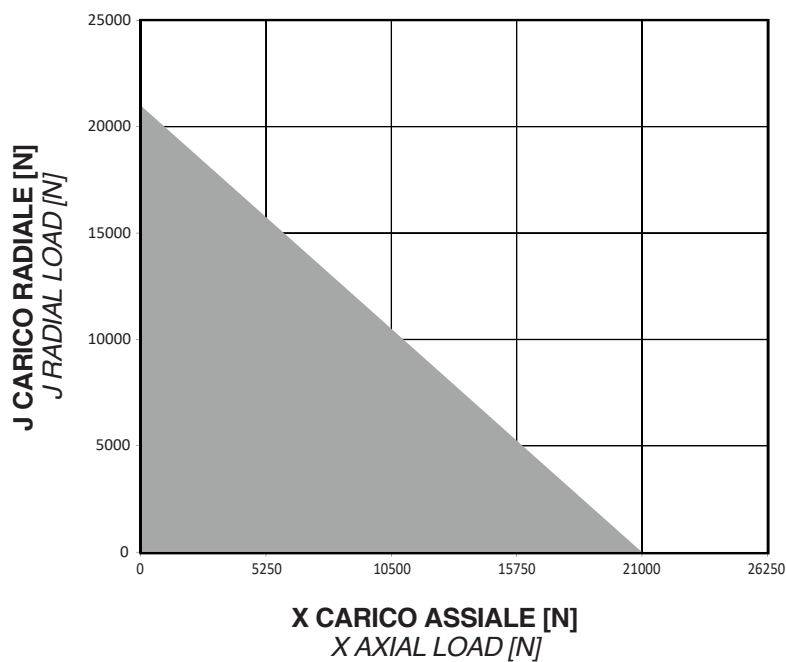
- A: 800 mm
- Total: 0,03 mm

$$E = \frac{r}{R} \times EE = \pm [\text{mm}]$$

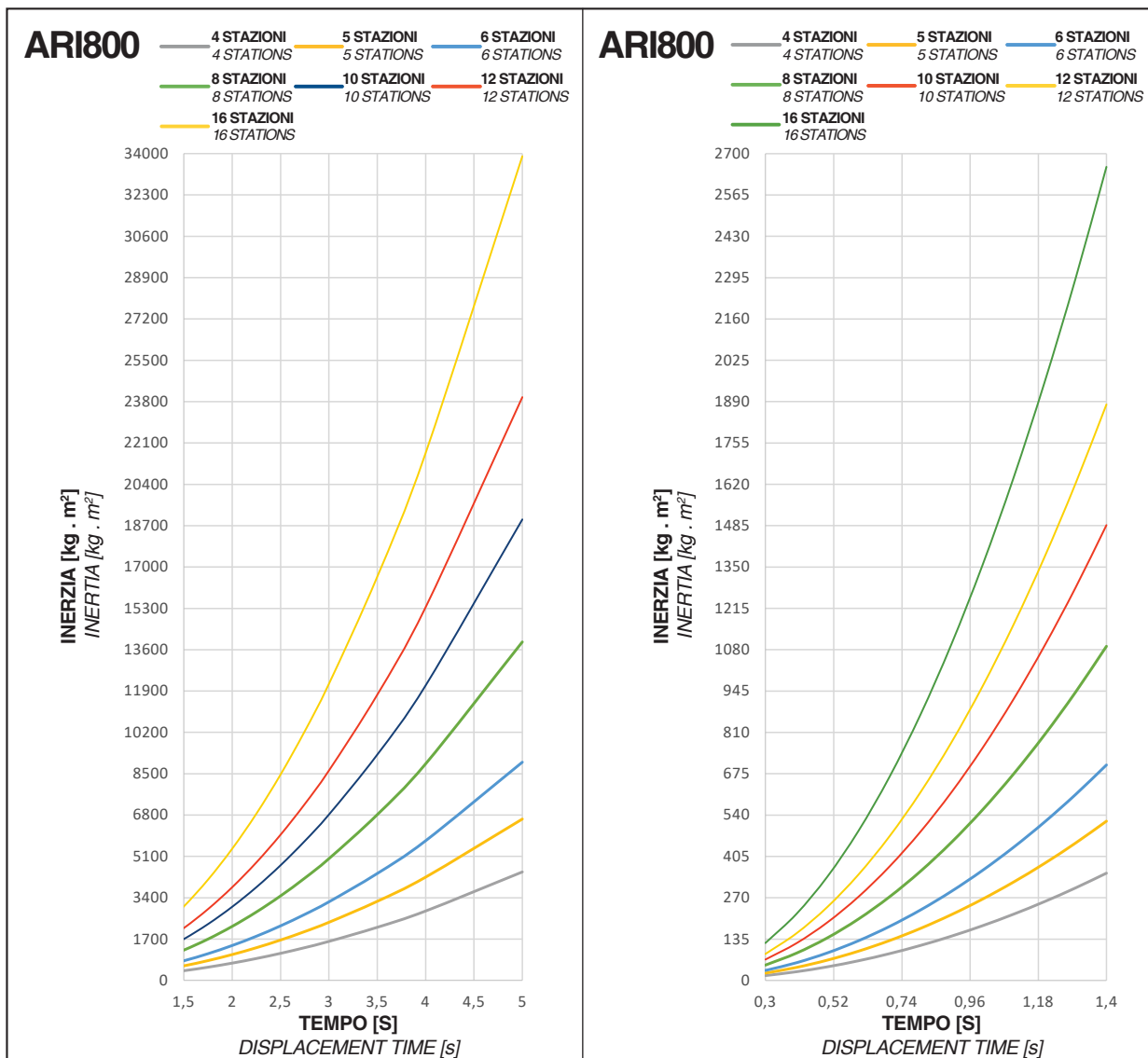


Carichi assiali e radiali

Max axial and radial loads



ARI800

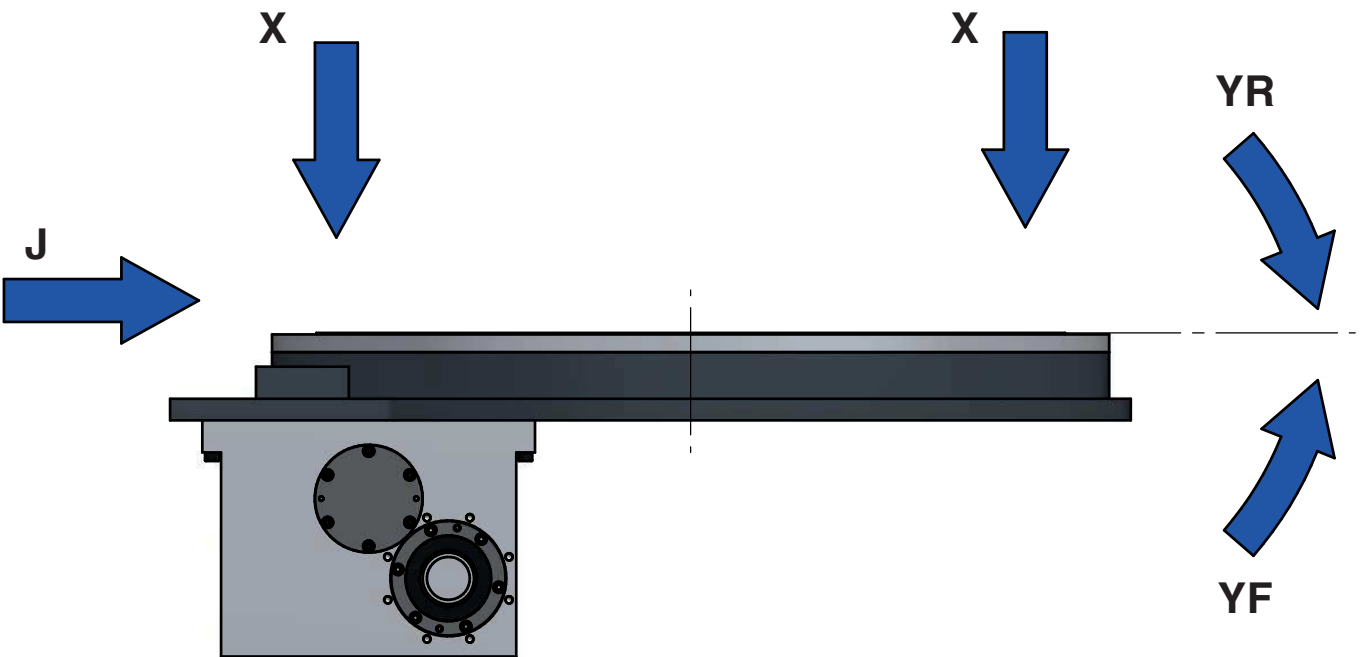


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ROTARY RINGS

Axial and radial loads

X Carico assiale Axial load	J Carico radiale Radial load	YR Momento ribaltante Overturning torque
N		Nm
21000	21000	2500

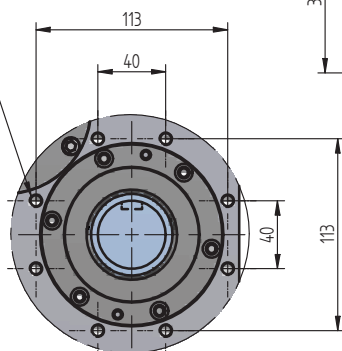


Anello rotante

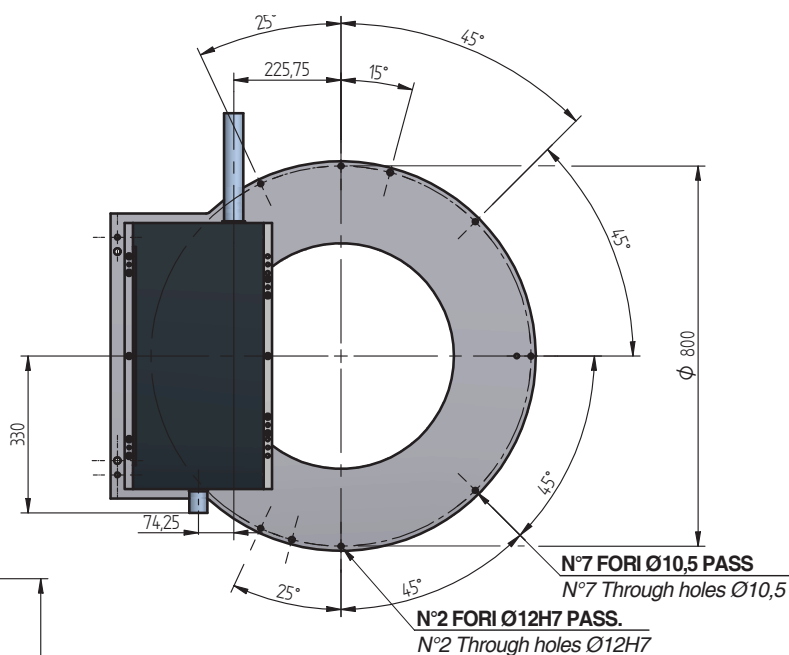
Rotary index ring

ARI800

N°8 FORI M8 PROF. 20mm
N°8 Holes M8 depth 20mm

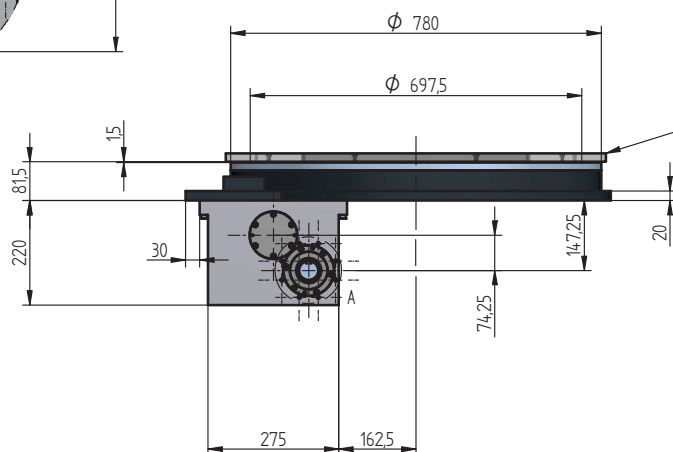


PART. A

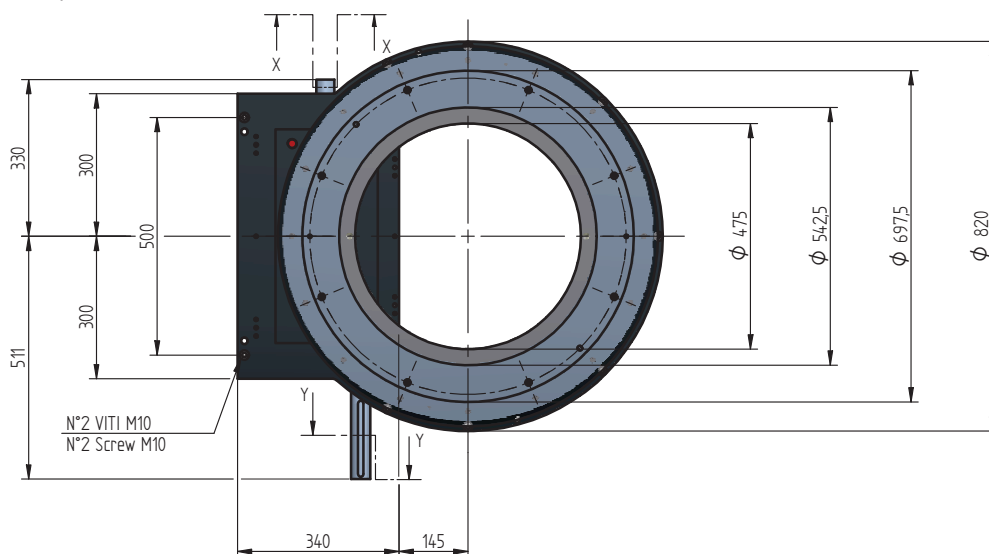
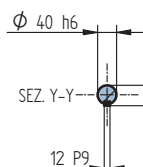
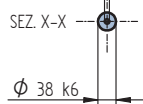


IL PIATTO ROTANTE
SUPPLEMENTARE E' SOGGETTO
A SOVRAPPREZZO E NON FA
PARTE DELLA FORNITURA.
IL COSTO VIENE CALCOLATO
SEPARATAMENTE SECONDO
LE SPECIFICHE DEL CLIENTE.

The additional rotating plate it is
subject to extra charge and not is
part of the supply.
The cost is calculated separately
second customer specifications.

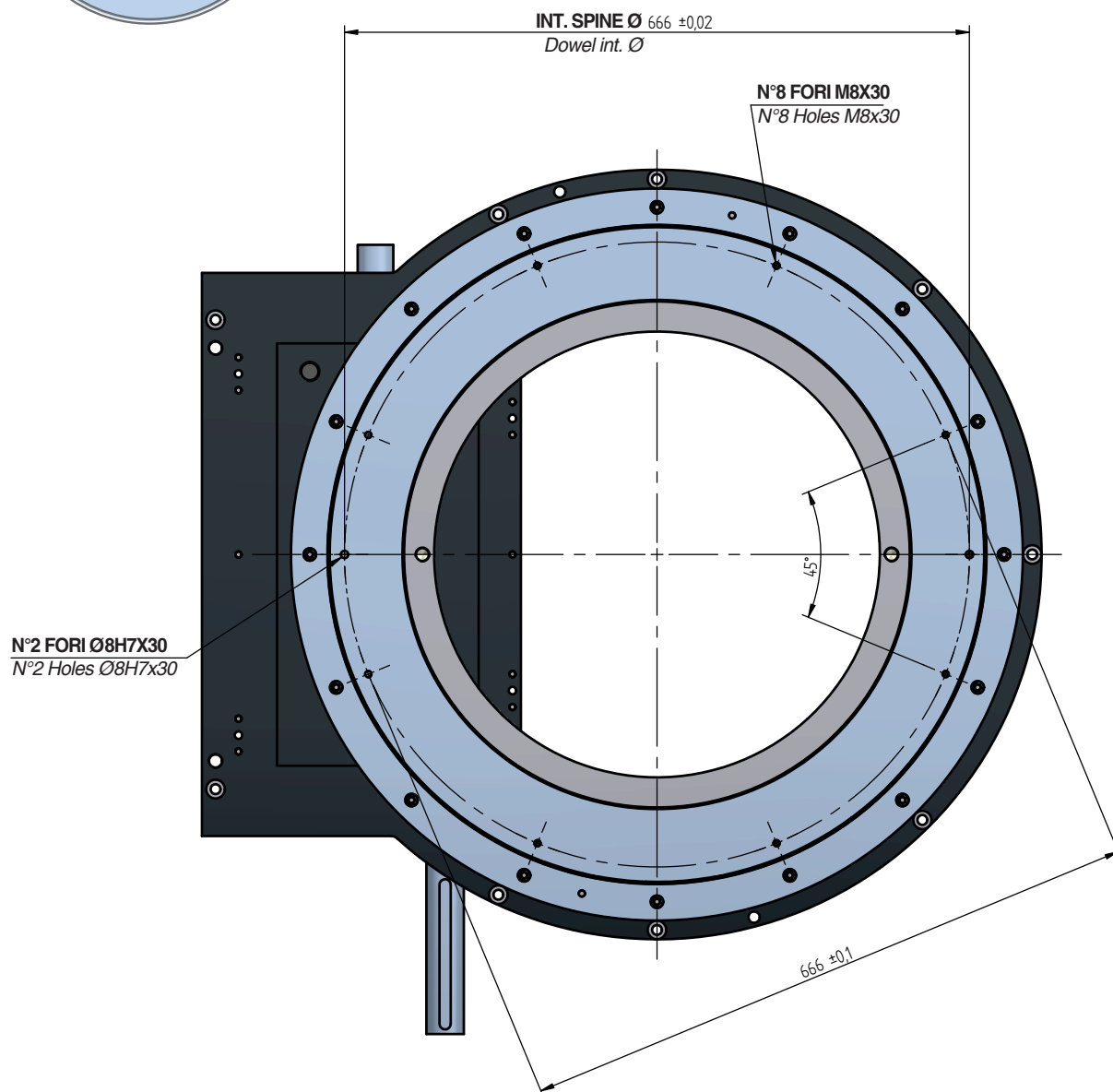


FORO Ø10H7 PROF. 18mm
Hole Ø10H7 depth 18mm



Assembling threaded holes on rotating disk

**FORATURA
su unità**
*Drilling holes
on units*



Anello rotante

Rotary index ring

Stazioni Stations	Angoli di camma Cam angles									
	90	120	150	180	210	240	270	300	330	345
2										
4										
6										
8										
12										
16										
24										

ANGOLI DI CAMMA REALIZZABILI
FEASIBLE CAM TRANSFER ANGLES

ARI 1200

Tolleranza Anelli Rotanti

Tolerances of indexing rings

Tolleranza di ripetibilità

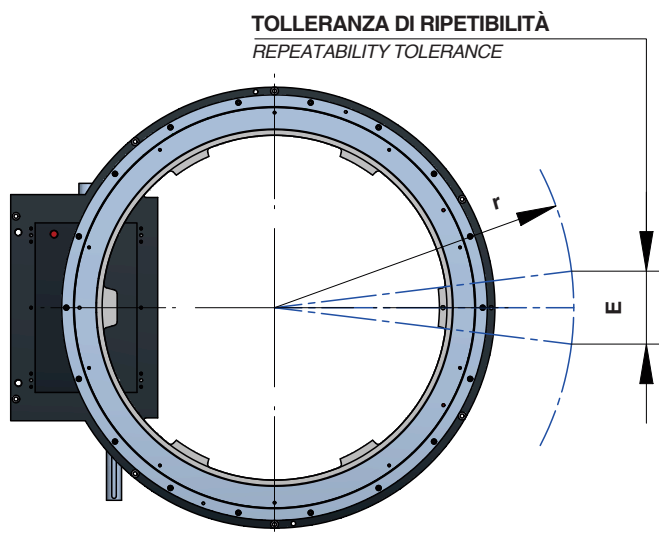
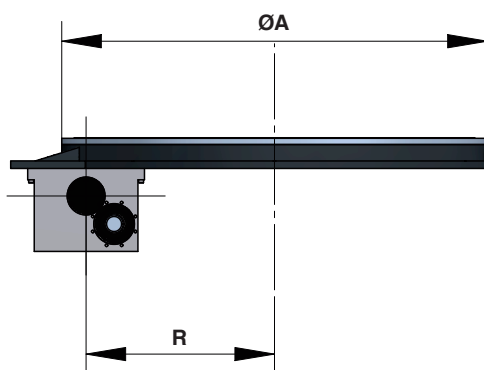
Repeatability tolerance:

- R : 500 mm
- EE: ±0,03 mm

Planarità disco/Disc flatness:

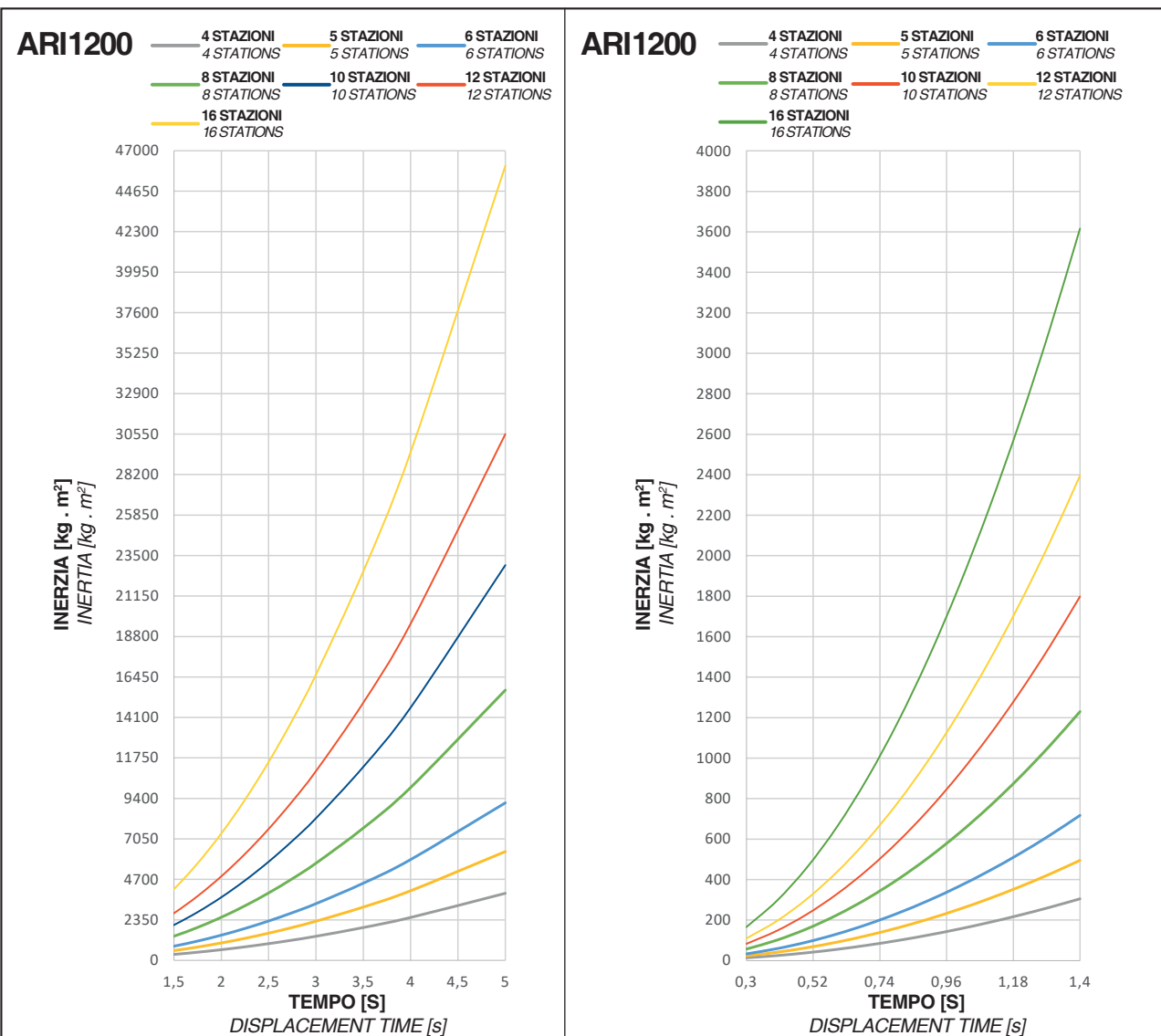
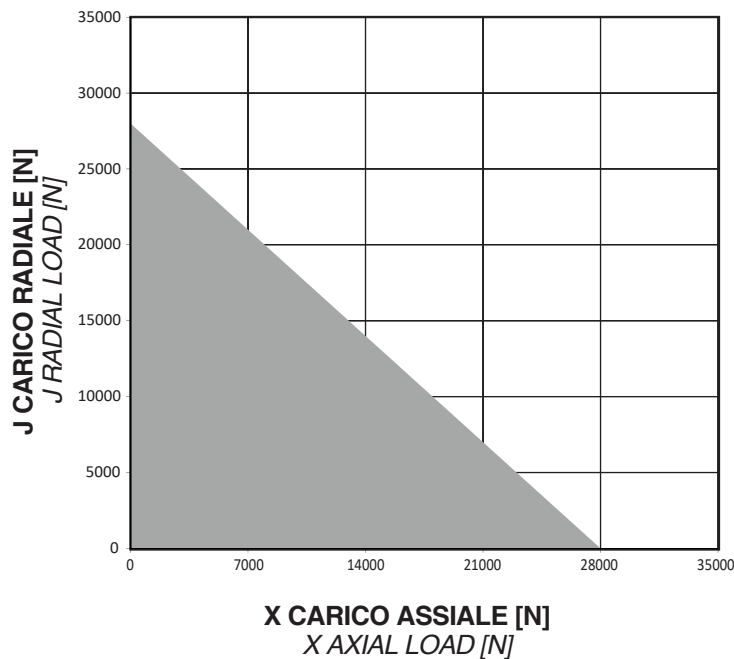
- A: 1200 mm
- Total: 0,05 mm

$$E = \frac{r}{R} \times EE = \pm [\text{mm}]$$



ROTARY RINGS

Max axial and radial loads



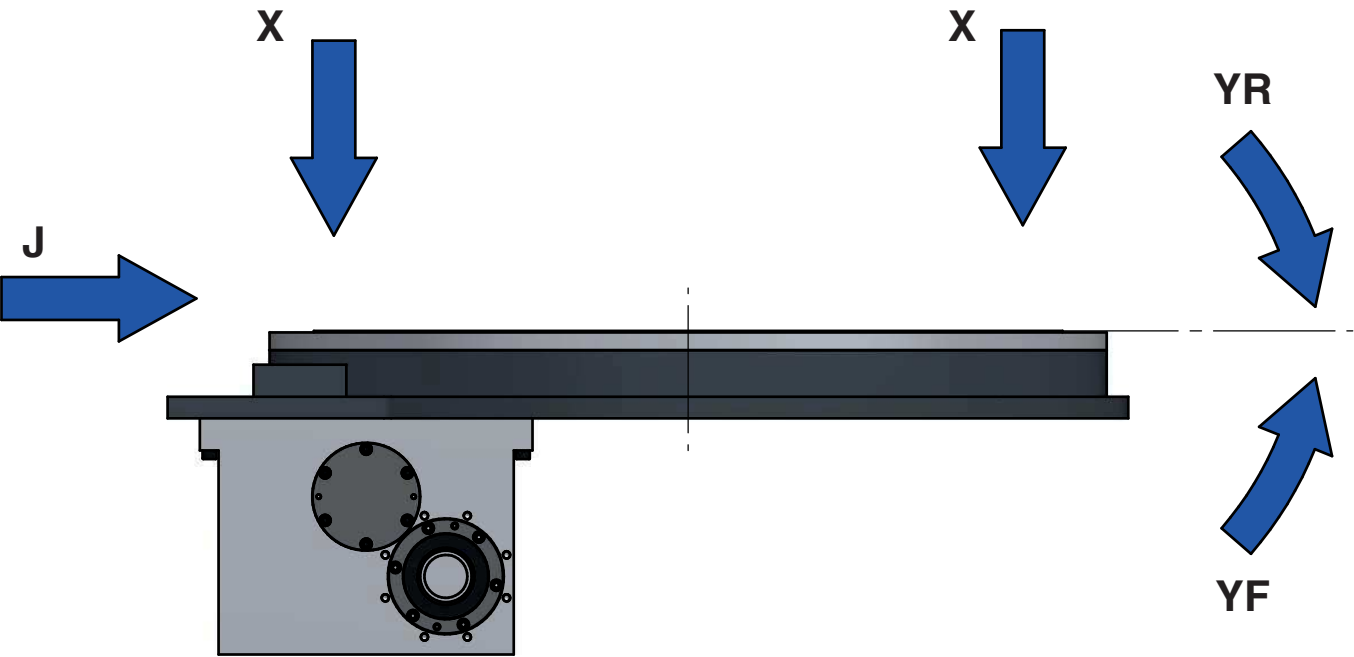
ANELLI ROTANTI IL GRAFICO È INDICATIVO, PER IDENTIFICARE UN CORRETTO DIMENSIONAMENTO, CONSIGLIAMO DI RICHIEDERE UN CALCOLO DEDICATO AL NOSTRO UFFICIO TECNICO
THE GRAPH IS INDICATIVE, TO IDENTIFY A CORRECT SIZING, WE RECOMMEND REQUESTING A DEDICATED CALCULATION FROM OUR TECHNICAL DEPARTMENT

Carichi assiali e radiali

Axial and radial loads

X Carico assiale Axial load	J Carico radiale Radial load	YR Momento ribaltante Overturning torque
N		Nm
28000	28000	3000

ARI 1200

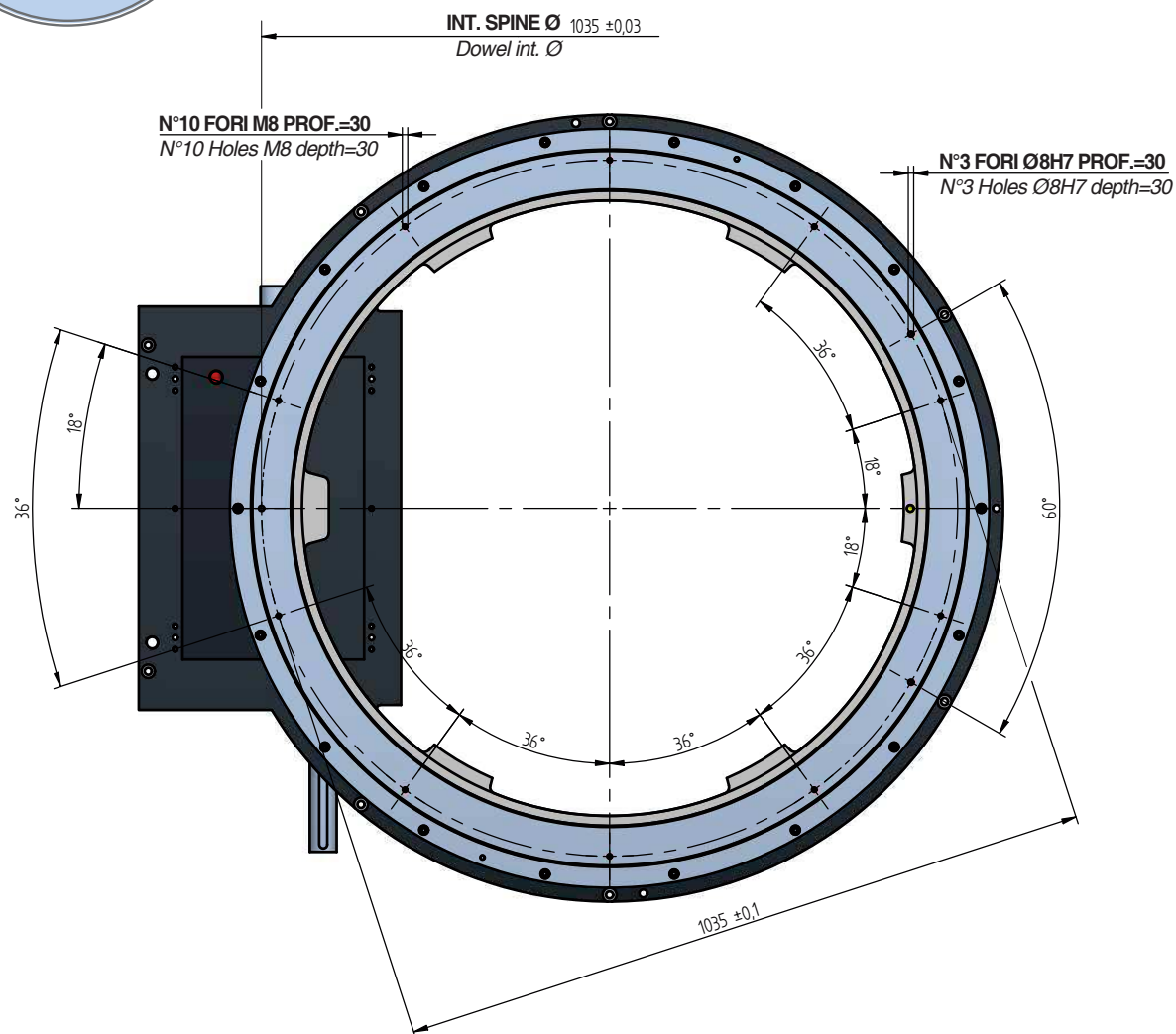


ROTARY RINGS

Fori per assemblaggio su disco rotante

Assembling threaded holes on rotating disk

FORATURA
su unità
Drilling holes
on units



ARI 1200