

ANELLI ROTANTI

ROTARY RINGS



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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.

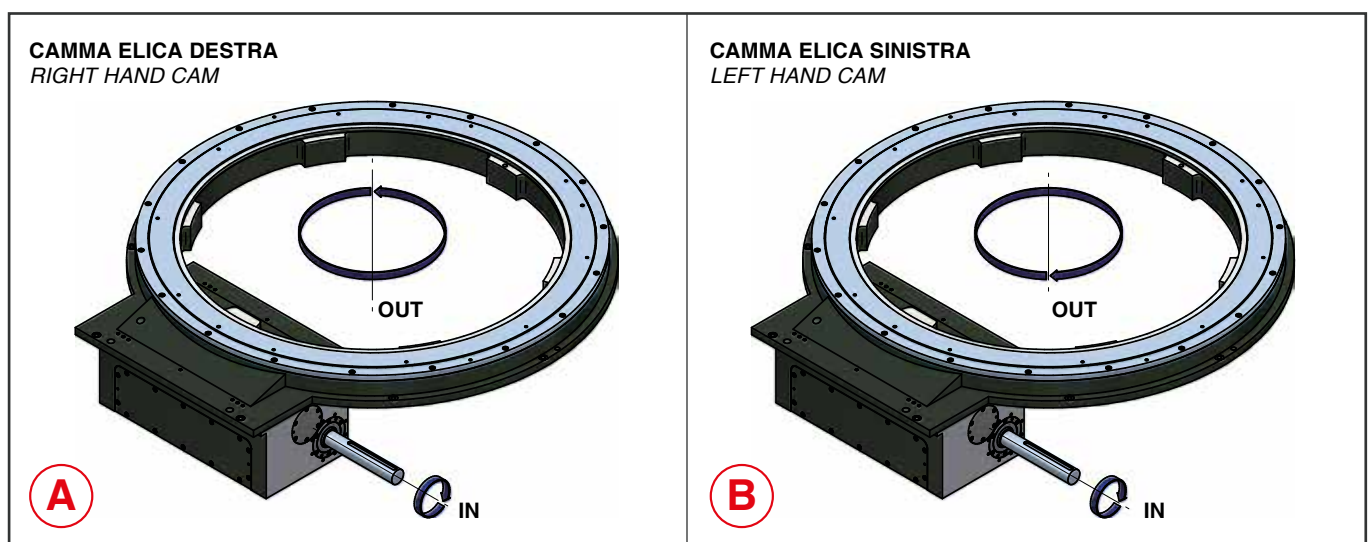
Senso di rotazione

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).*



Posizione di lavoro anello rotante

Index ring operating position

1 STANDARD
STANDARD

2 CAPOVOLTA
SOLO AR250/AR350/AR510
UPSIDE-DOWN
ONLY AR250/AR350/AR510

3 ASSE ORIZZONTALE
ALBERO INFERIORE
SOLO AR250/AR350/AR510
HORIZONTAL AXIS
LOWER INPUT SHAFT
ONLY AR250/AR350/AR510

4 ASSE ORIZZONTALE
ALBERO SUPERIORE
SOLO AR250/AR350/AR510
HORIZONTAL AXIS
UPPER INPUT SHAFT
ONLY AR250/AR350/AR510

5 6 POSIZIONI SPECIALI
SOLO AR250/AR350/AR510
SPECIAL POSITIONS
ONLY AR250/AR350/AR510

Posizione di montaggio unità motrice

Power drive unit assembling position

MONTAGGIO SUL LATO STANDARD ASSEMBLING ON STANDARD SIDE	A	A 90°
	B	D
MONTAGGIO SUL LATO OPPOSTO ASSEMBLING ON OPPOSITE SIDE	E 90°	E 90°
	F	H

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

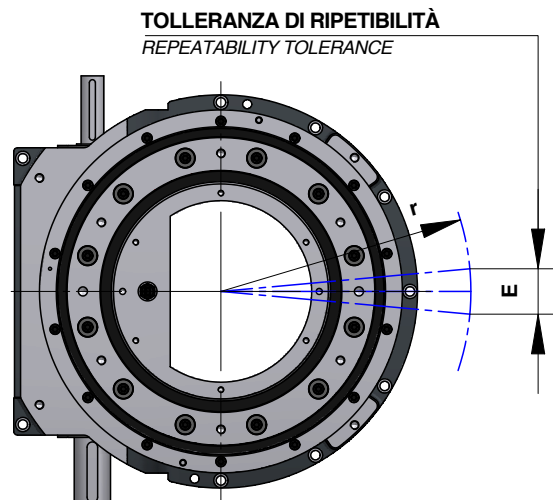
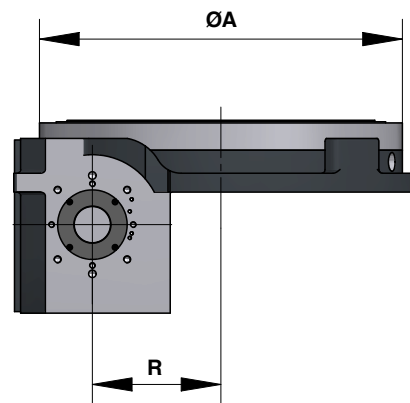
Repeatability tolerance:

- R : 87,5 mm
- EE: ±0,015 mm

Ripetibilità - Repeatability E (+/- mm)	R = 87,5	R = 150	R = 300
Standard	0,015	0,026	0,051

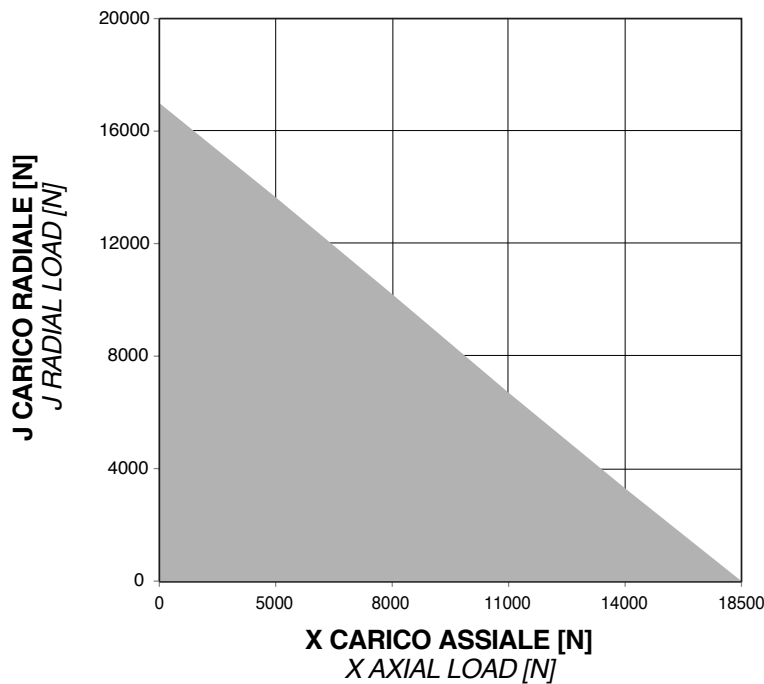
Planarità disco/Disc flatness:

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



Carichi assiali e radiali

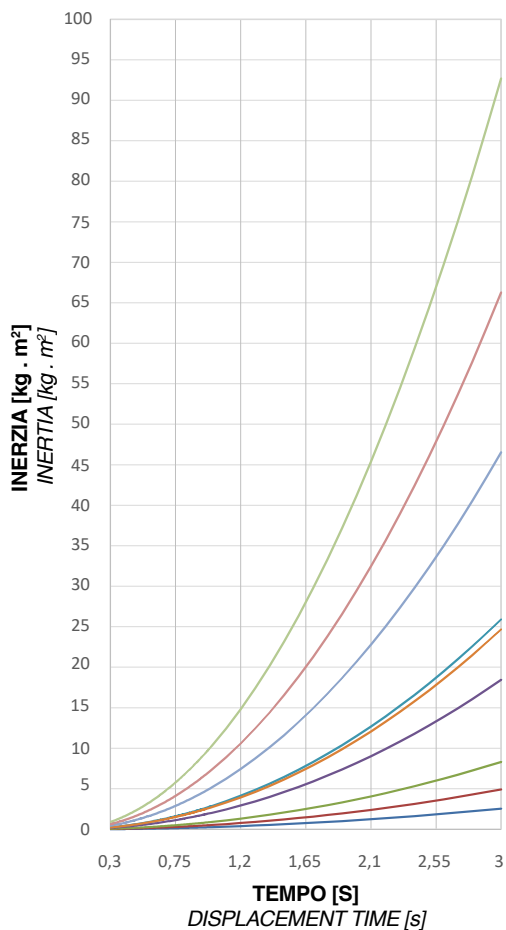
Max axial and radial loads



AR250

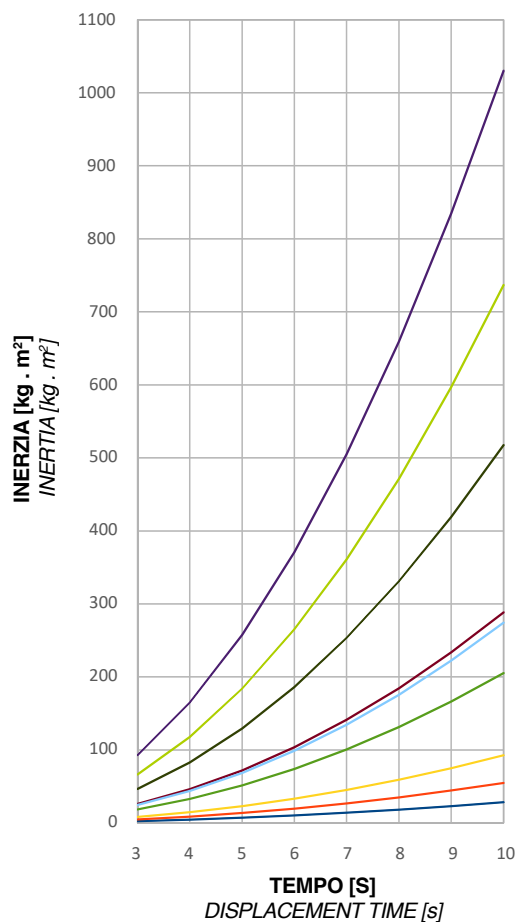
AR250

- 2 STAZIONI 2 STATIONS
- 3 STAZIONI 3 STATIONS
- 4 STAZIONI 4 STATIONS
- 5 STAZIONI 5 STATIONS
- 6 STAZIONI 6 STATIONS
- 8 STAZIONI 8 STATIONS
- 10 STAZIONI 10 STATIONS
- 12 STAZIONI 12 STATIONS
- 16 STAZIONI 16 STATIONS



AR250

- 2 STAZIONI 2 STATIONS
- 3 STAZIONI 3 STATIONS
- 4 STAZIONI 4 STATIONS
- 5 STAZIONI 5 STATIONS
- 6 STAZIONI 6 STATIONS
- 8 STAZIONI 8 STATIONS
- 10 STAZIONI 10 STATIONS
- 12 STAZIONI 12 STATIONS
- 16 STAZIONI 16 STATIONS

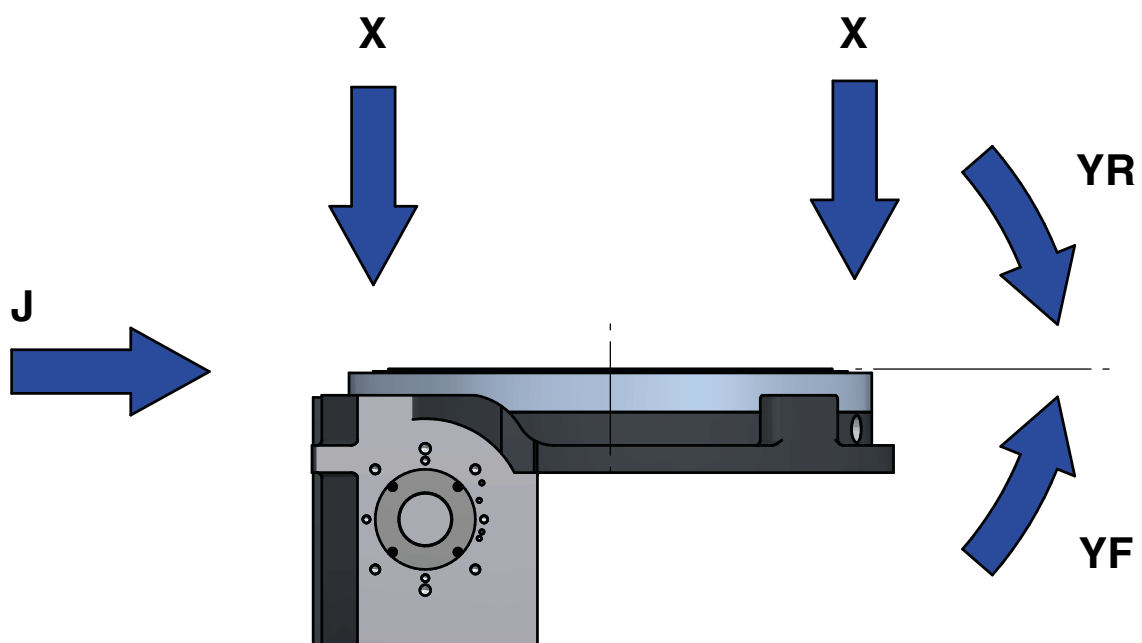


IL GRAFICO È INDICATIVO, PER IDENTIFICARE UN CORRETTO DIMENSIONAMENTO, CONSIGLIAMO DI RICHIEDERE UN CALCOLO DEDICATO AL NOSTRO UFFICIO TECNICO
 THE GRAPH IS INDICATIVE, TO IDENTIFY A CORRECT SIZING, WE RECOMMEND REQUESTING A DEDICATED CALCULATION FROM OUR TECHNICAL DEPARTMENT

ROTARY RINGS

Axial and radial loads

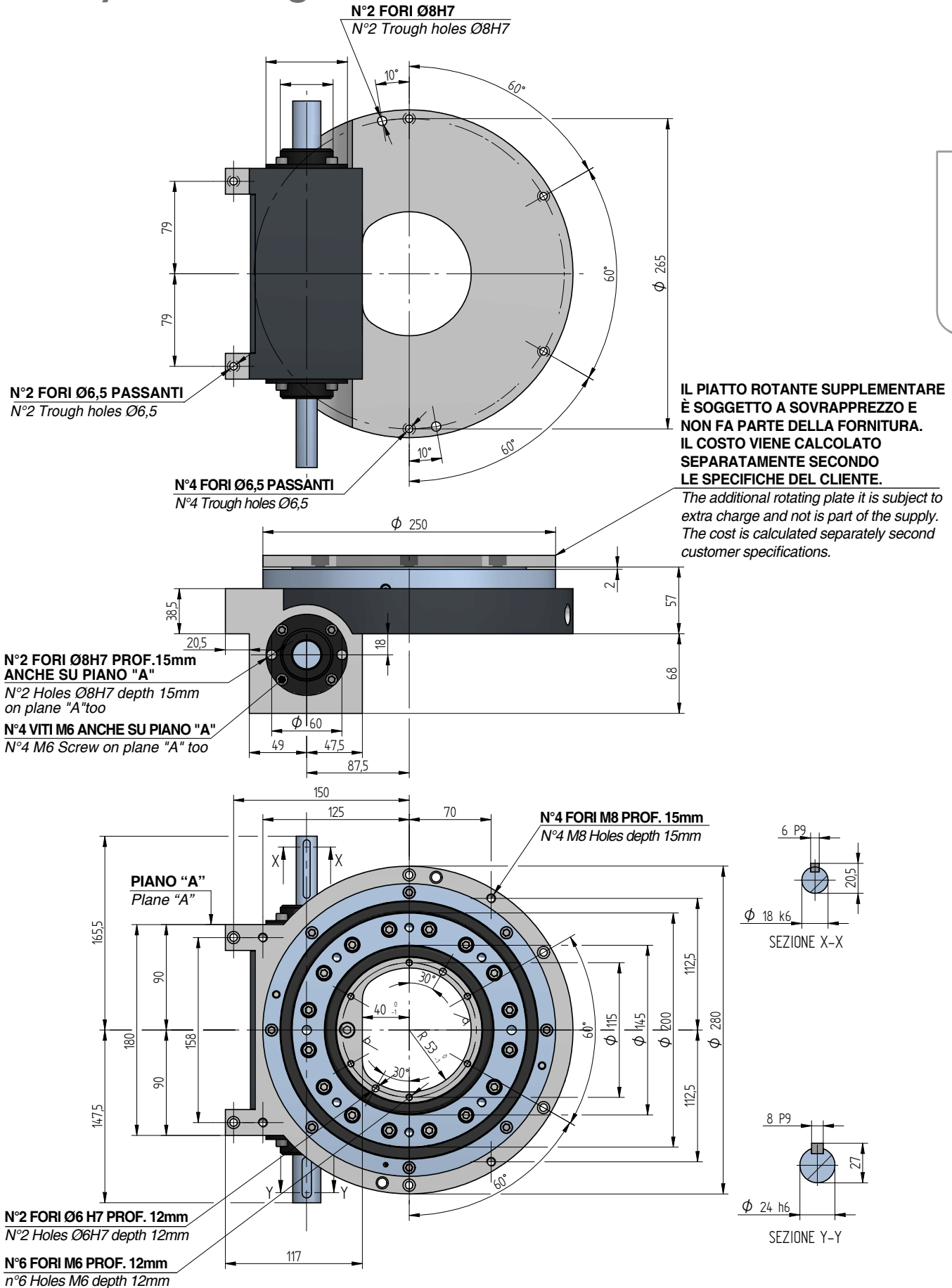
X Carico assiale Axial load	J Carico radiale Radial load	YR Momento ribaltante Overturning torque
N		Nm
18500	17000	580



Anello rotante

Rotary index ring

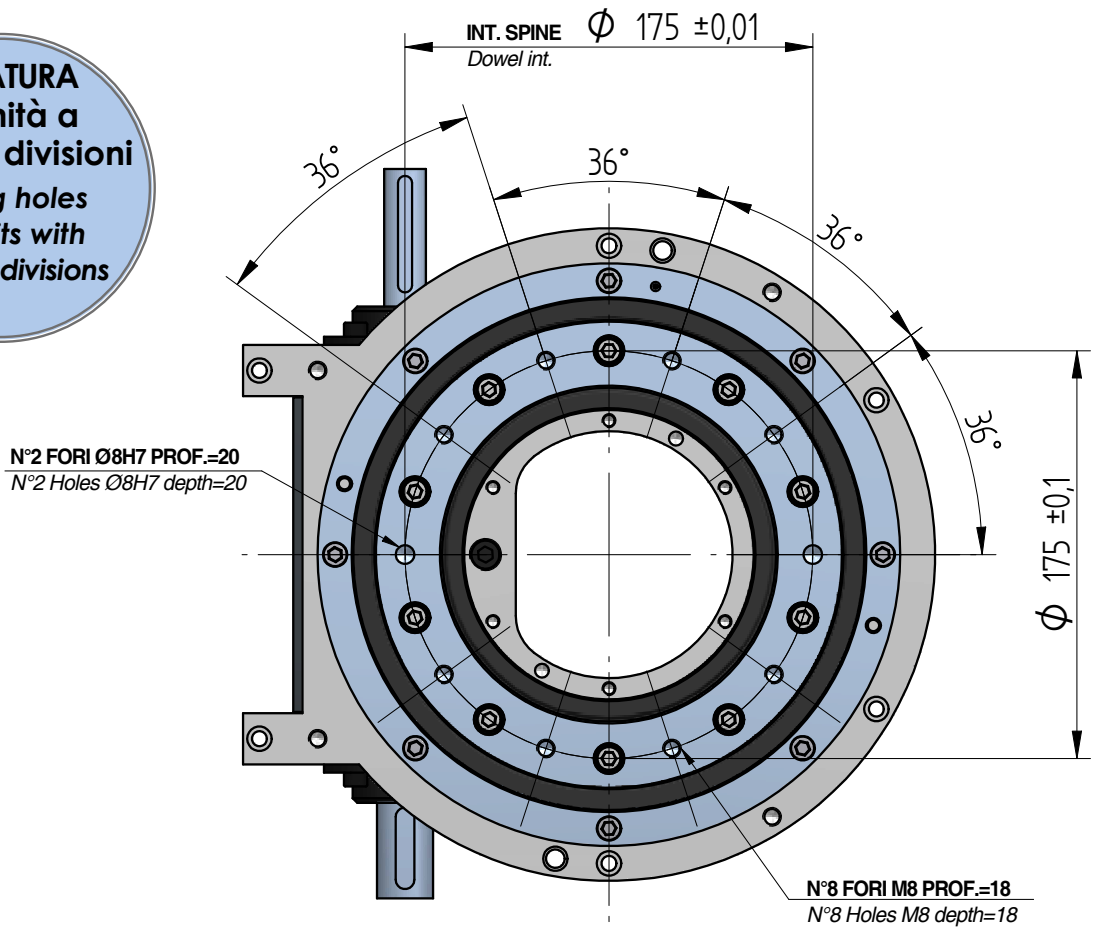
AR250



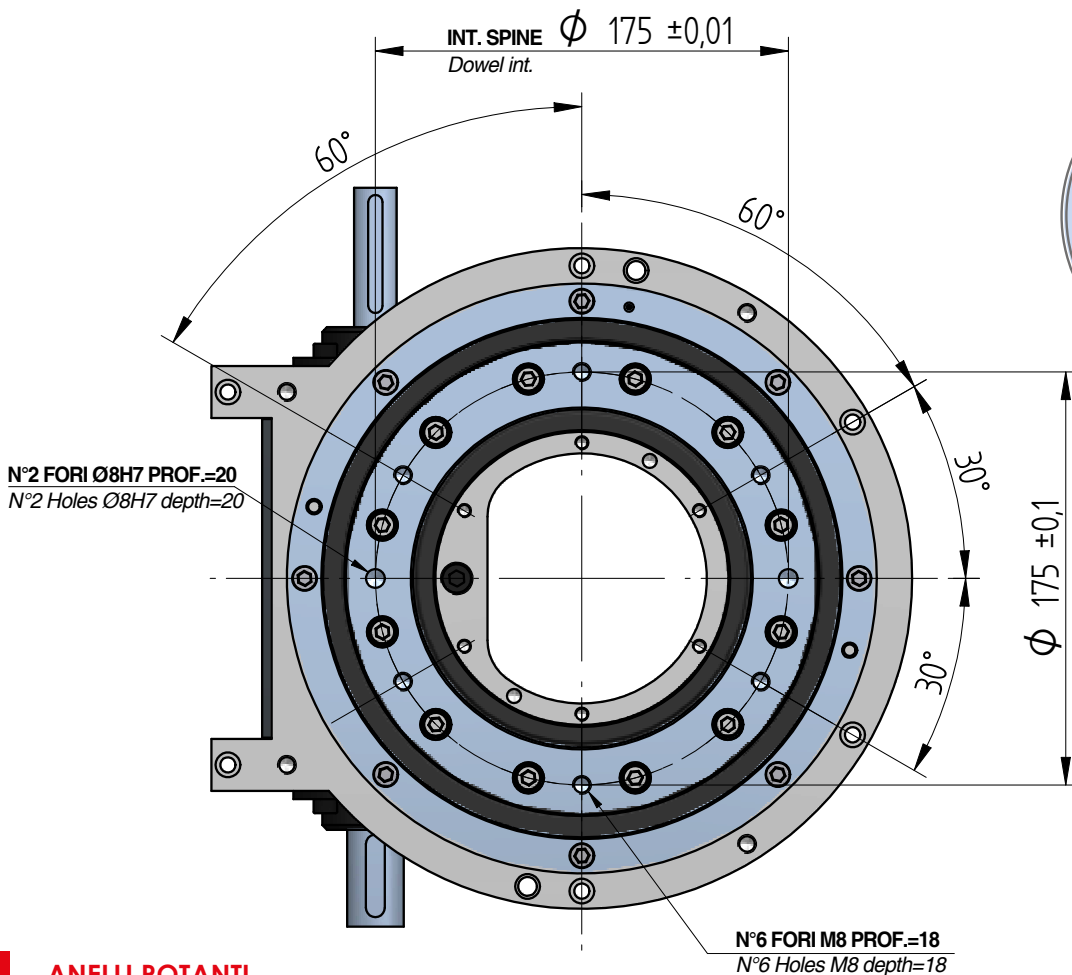
KG 25 kg

Assembling threaded holes on rotating disk

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



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

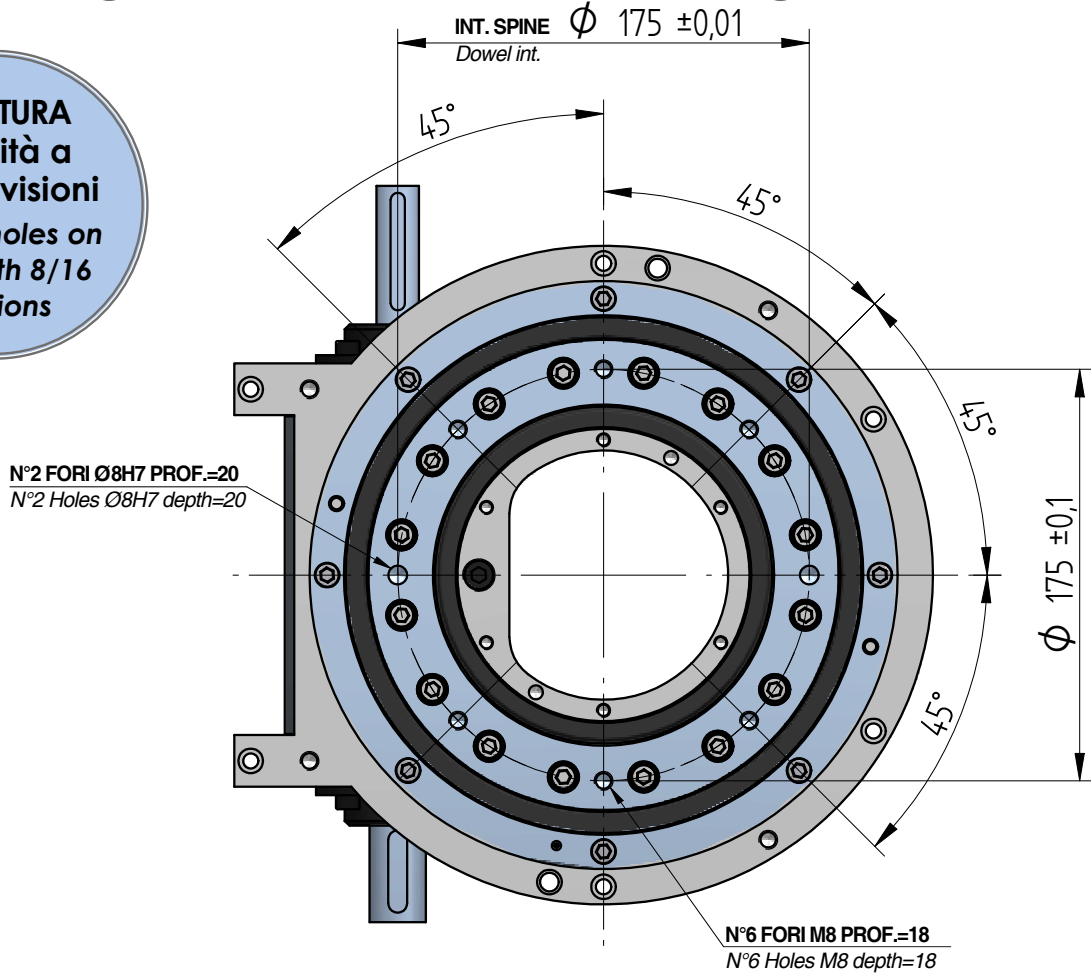


Fori per assemblaggio su disco rotante

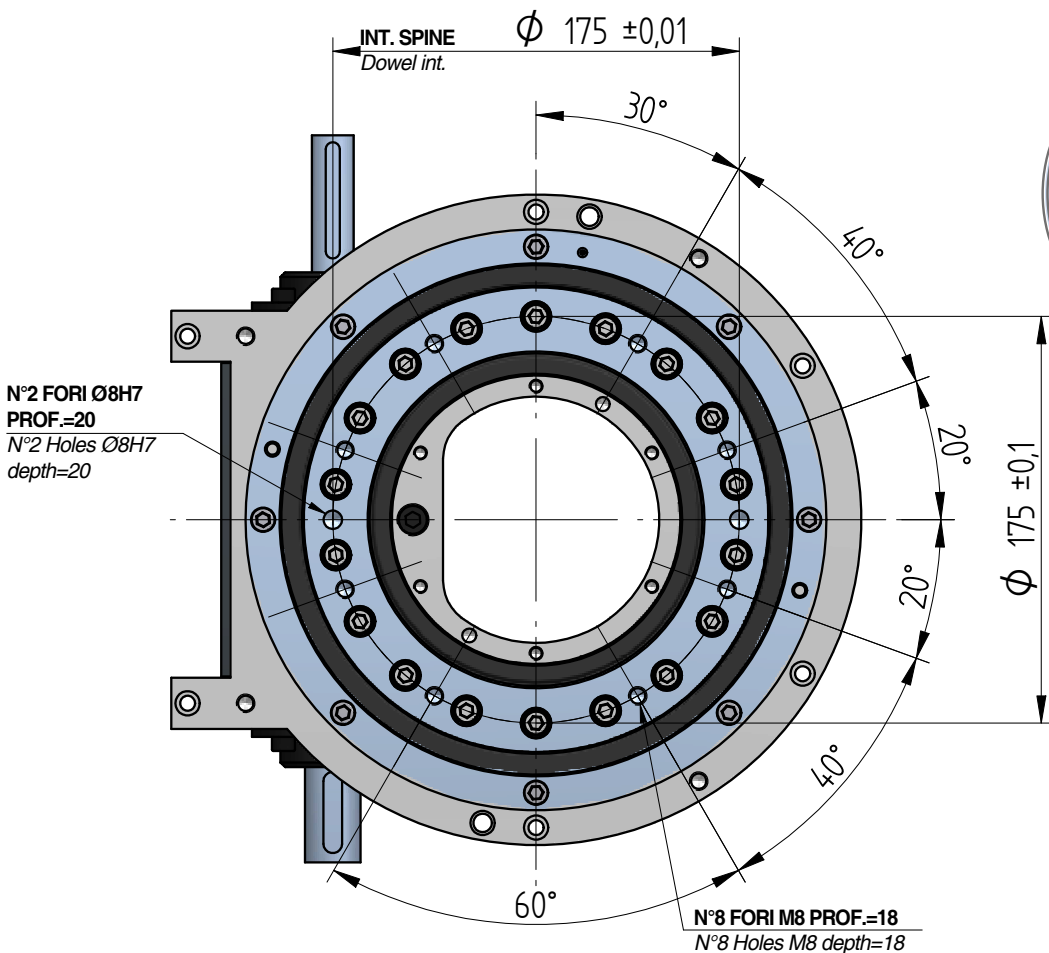
Assembling threaded holes on rotating disk

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 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

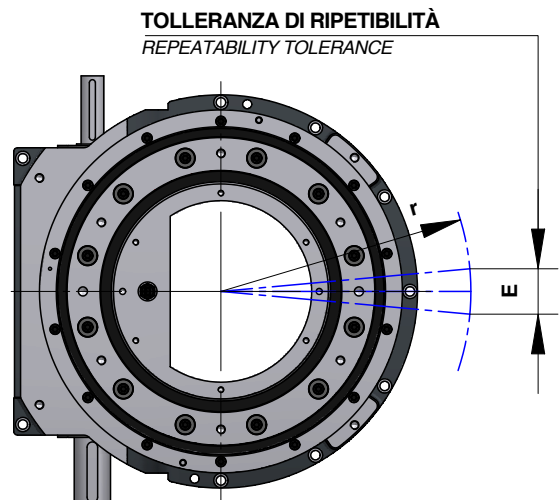
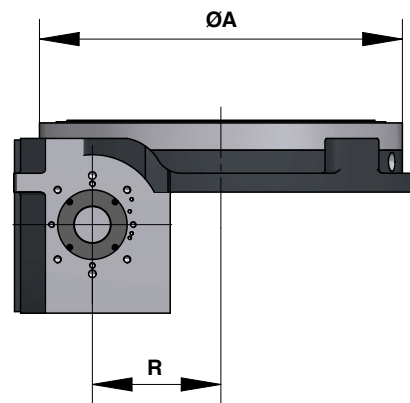
Repeatability tolerance:

- R : 127,5 mm
- EE: ±0,015 mm

Ripetibilità - Repeatability E (+/- mm)	R = 127,5	R = 250	R = 500
Standard	0,015	0,029	0,059

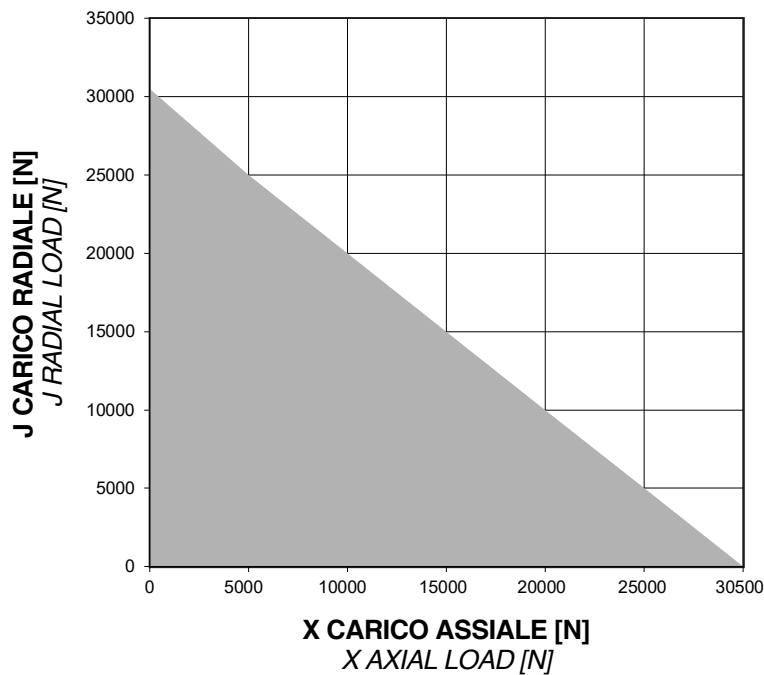
Planarità disco/Disc flatness:

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

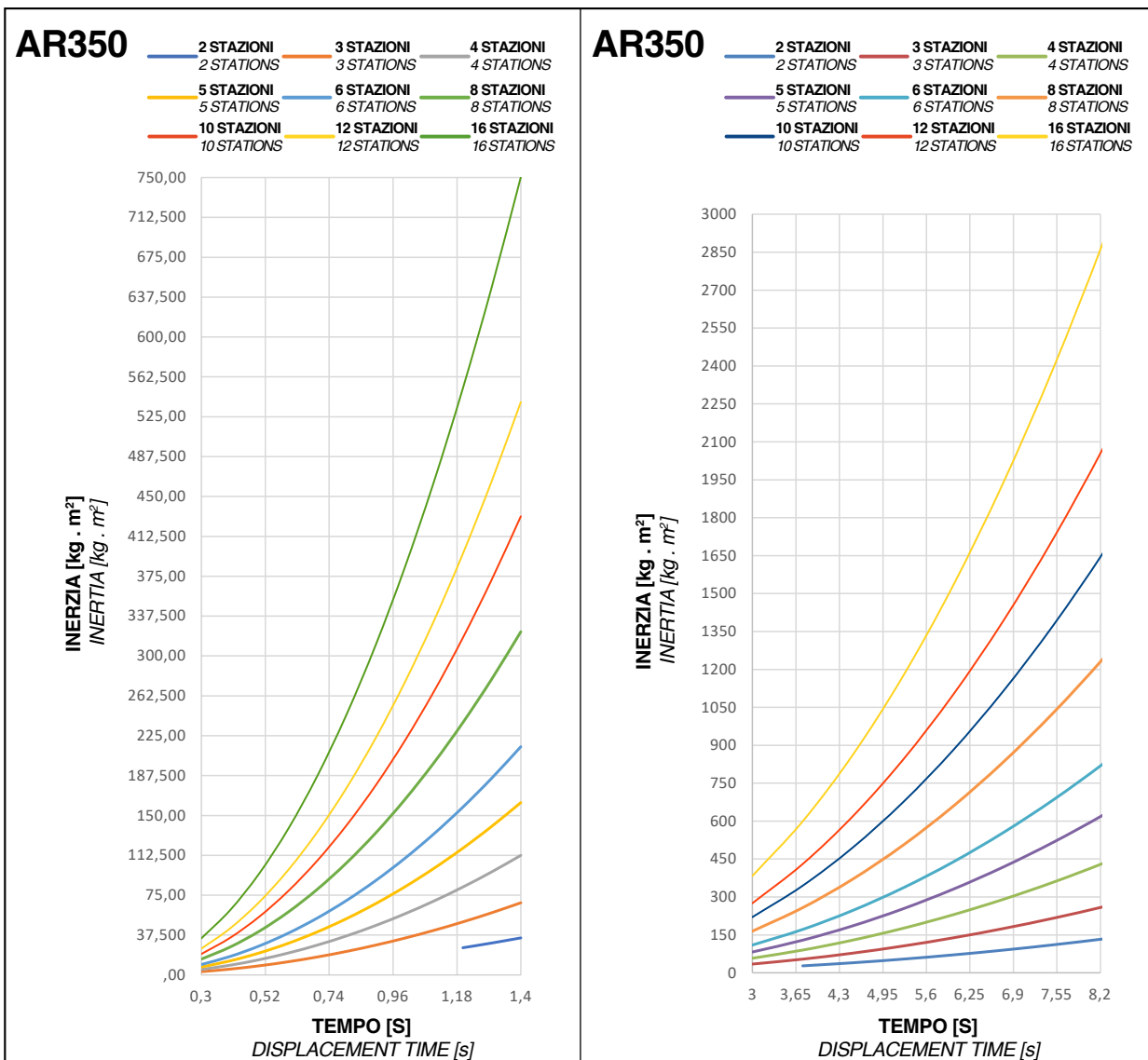


Carichi assiali e radiali

Max axial and radial loads



AR350

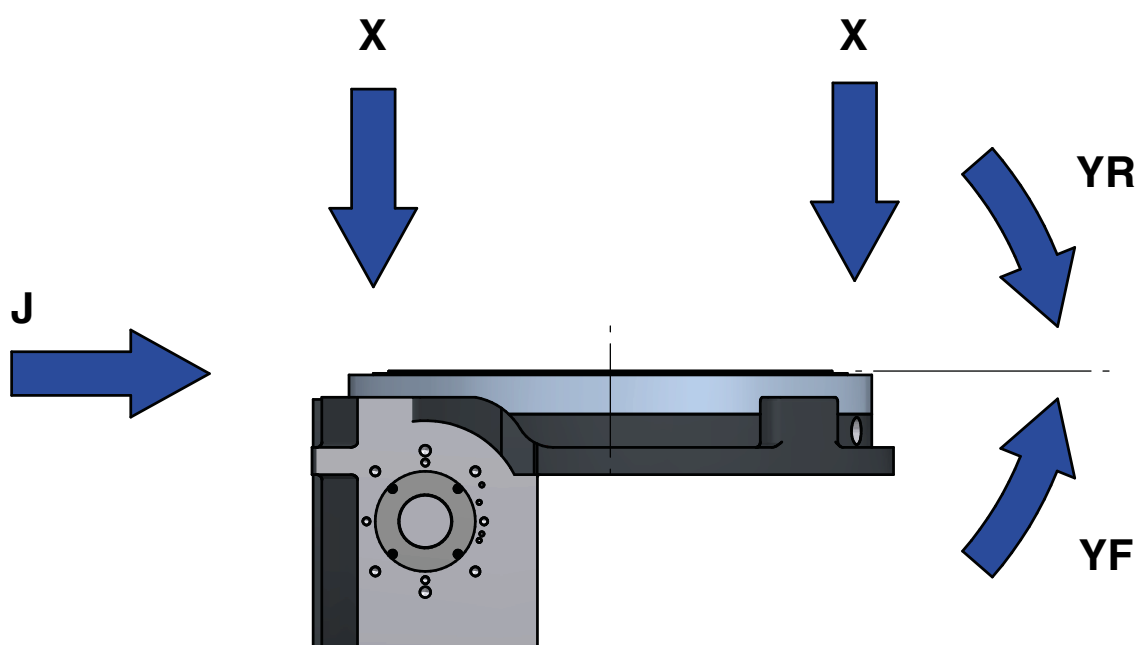


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ROTARY RINGS

Axial and radial loads

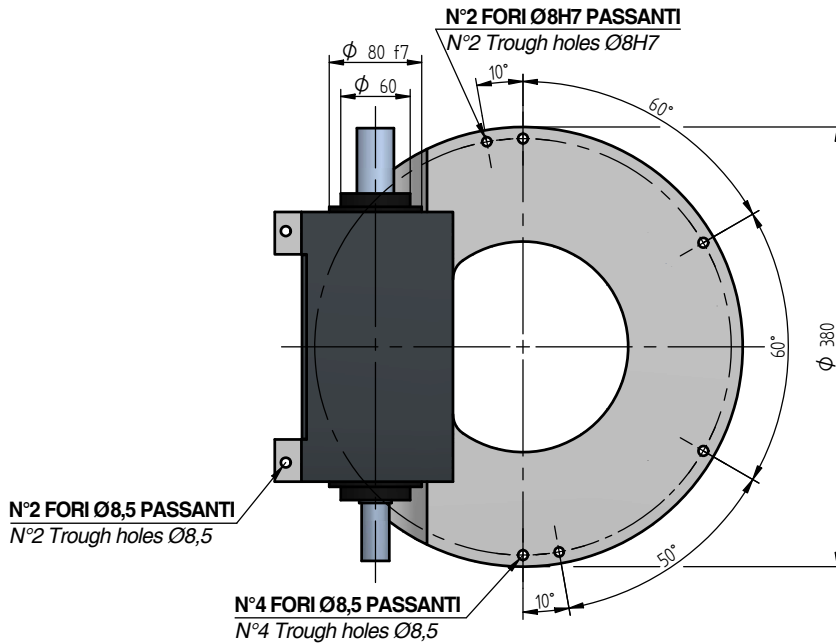
X Carico assiale Axial load	J Carico radiale Radial load	YR Momento ribaltante Overturning torque
N		Nm
30500	30500	1360



Anello rotante

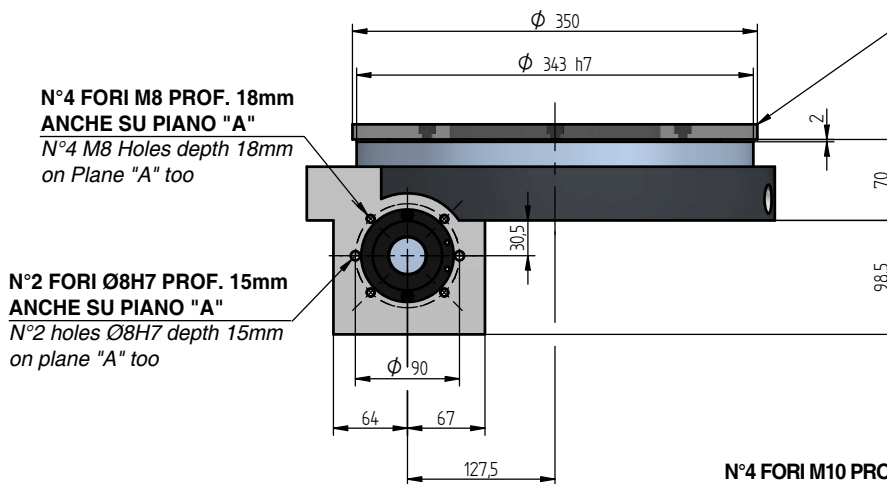
Rotary index ring

AR350



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

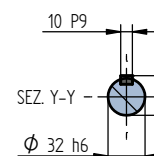
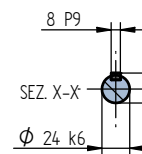
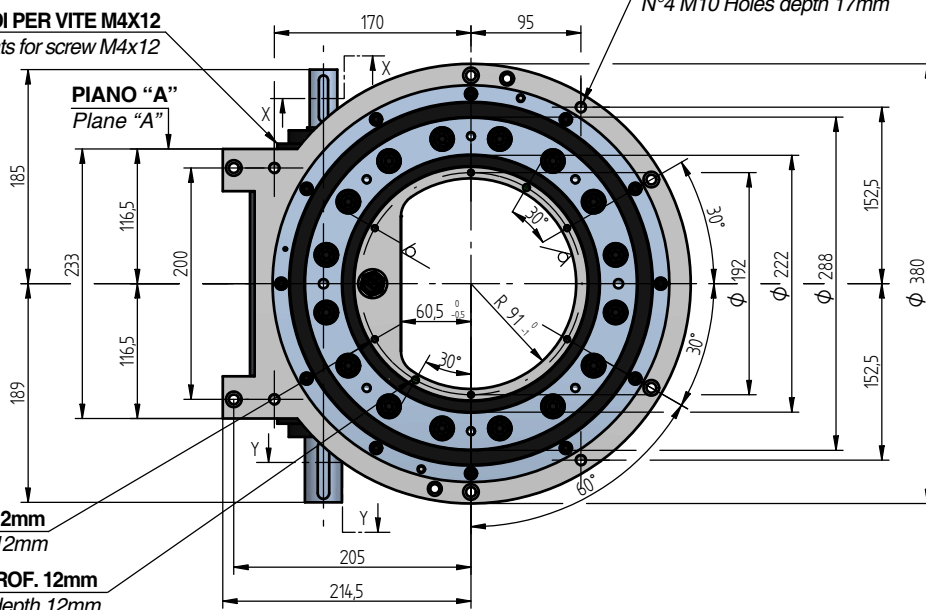
The additional rotating plate it is subject to extra charge and not is part of the supply. The cost is calculated separately second customer specifications.



N°4 SEDI PER VITE M4X12
N°4 Seats for screw M4x12

PIANO "A"
Plane "A"

N°4 FORI M10 PROF. 17mm
N°4 M10 Holes depth 17mm

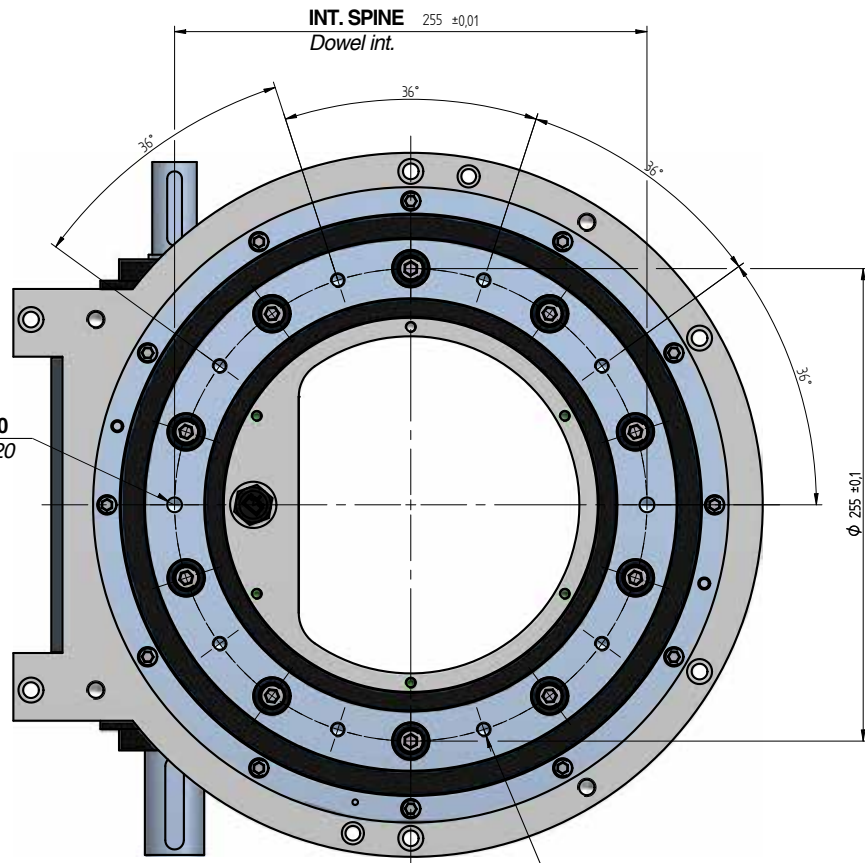


KG 60 kg

Assembling threaded holes on rotating disk

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

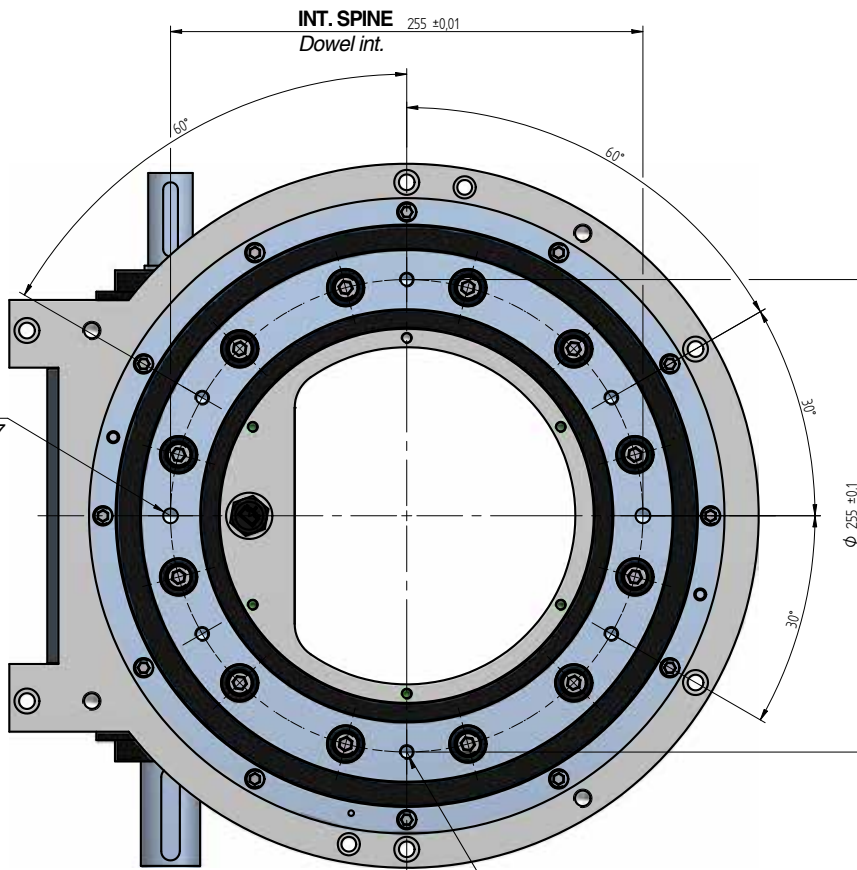
N°2 FORI Ø8H7 PROF.=20
 N°2 Holes Ø8H7 depth=20



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

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

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



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

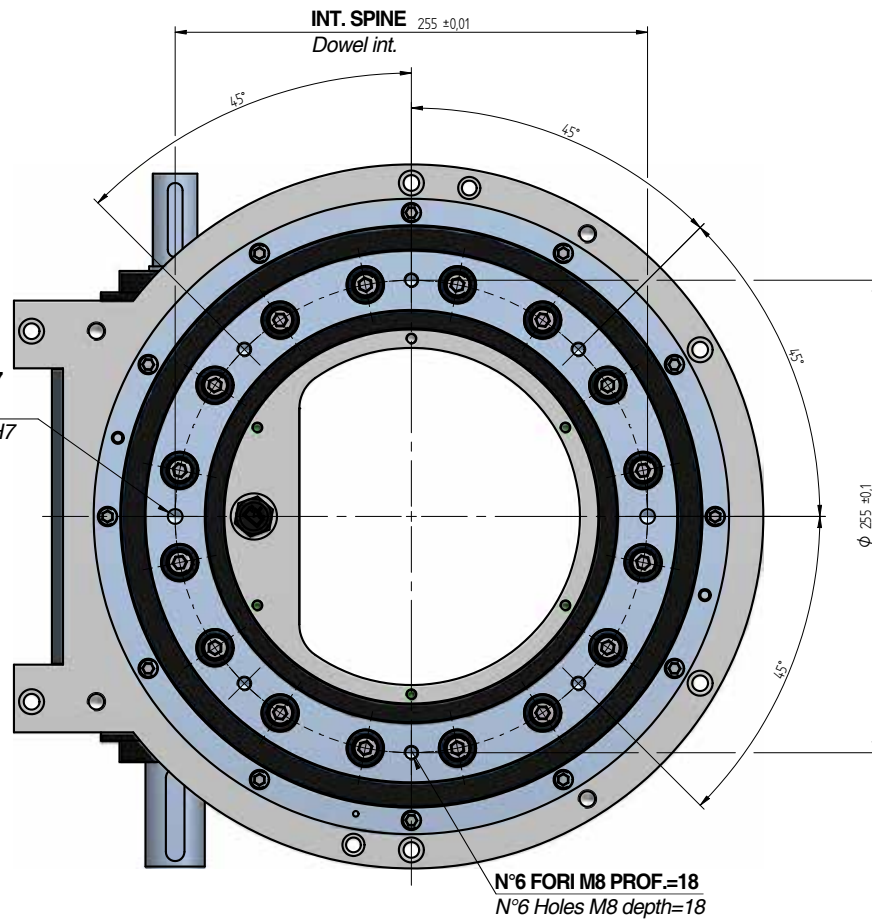
Fori per assemblaggio su disco rotante

Assembling threaded holes on rotating disk

AR350

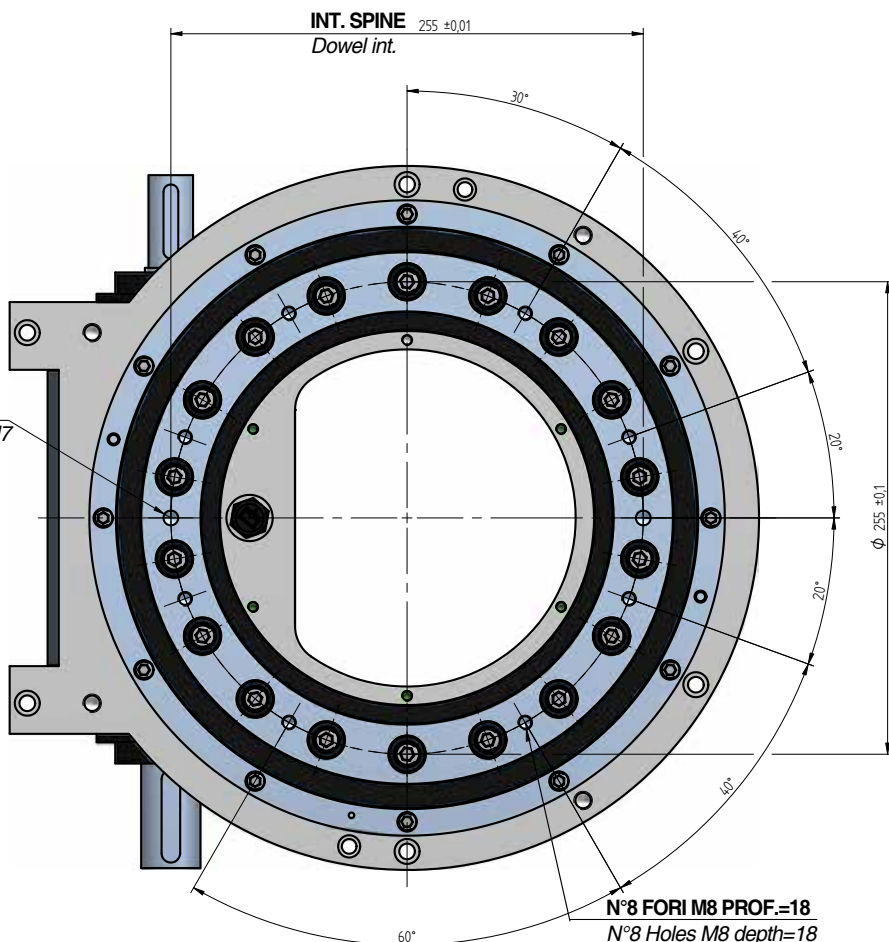
**FORATURA
su unità a
8/16 divisioni
Drilling holes on
units with 8/16
divisions**

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



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

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



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

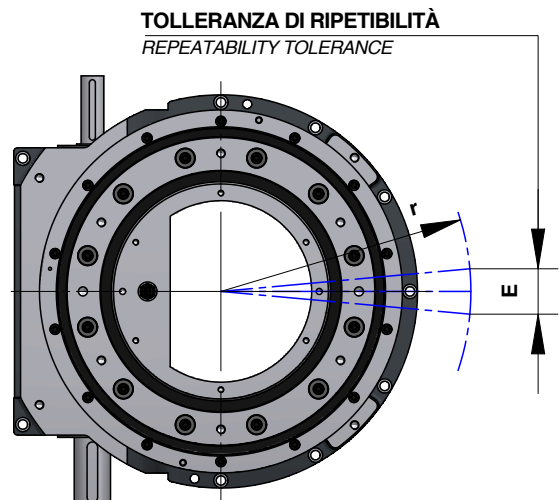
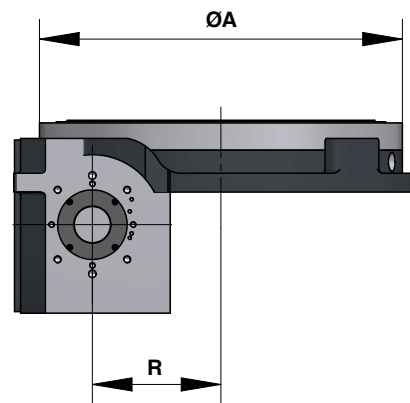
Repeatability tolerance:

- R : 182,5 mm
- EE: ±0,015 mm

Ripetibilità - Repeatability E (+/- mm)	R = 182,5	R = 350	R = 700
Standard	0,015	0,029	0,058

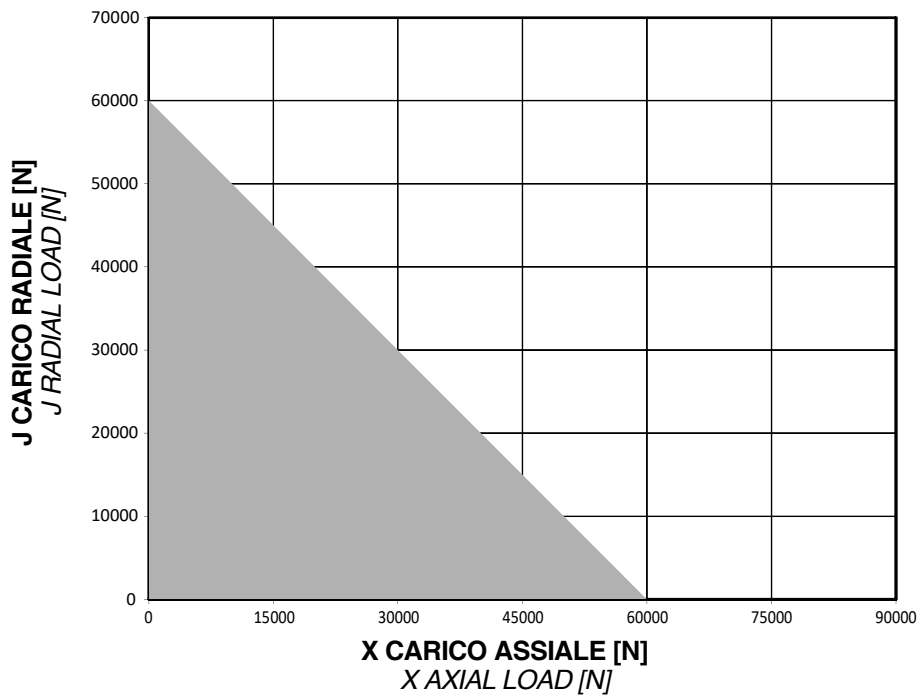
Planarità disco/Disc flatness:

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

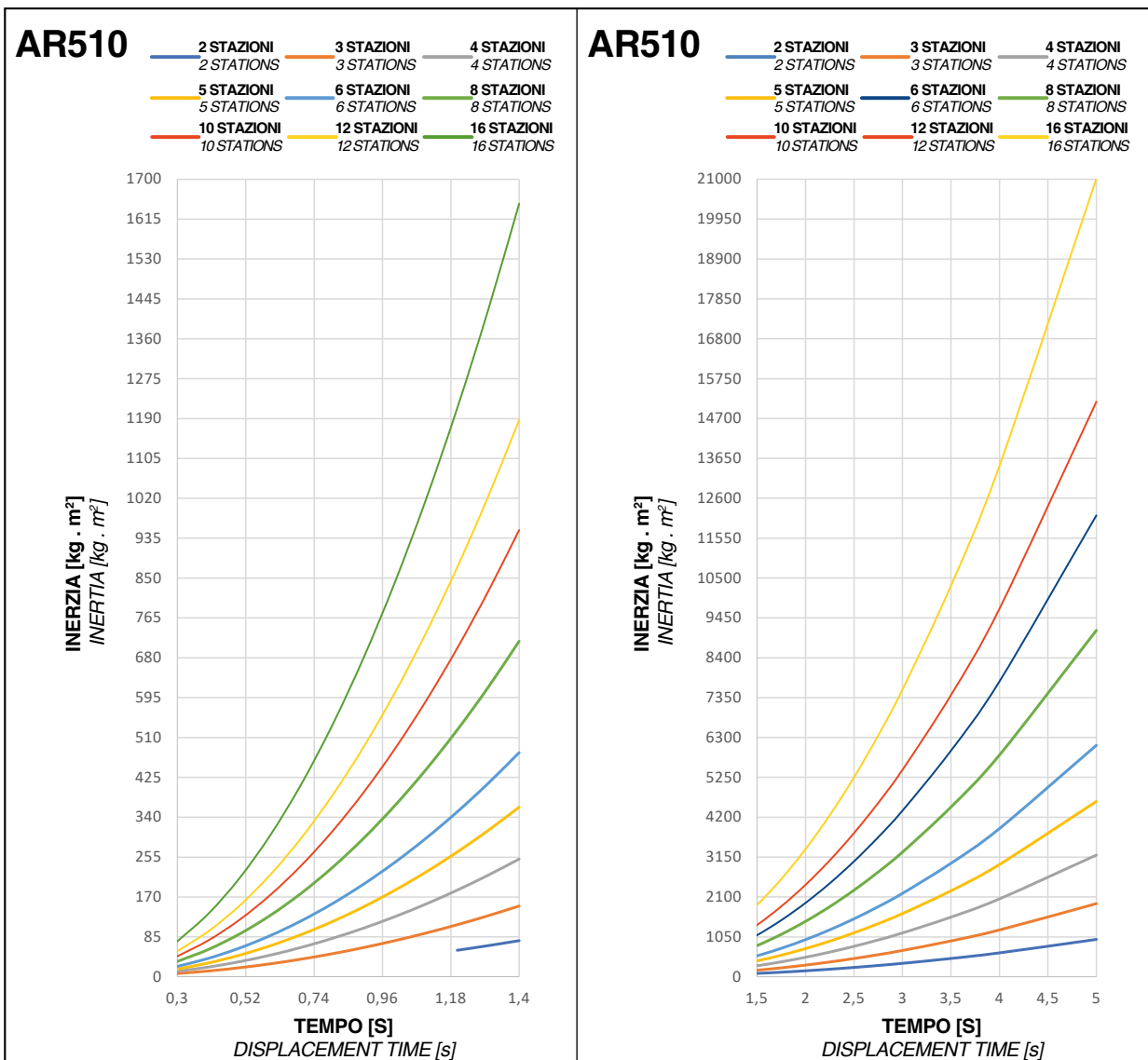


Carichi assiali e radiali

Max axial and radial loads



AR510

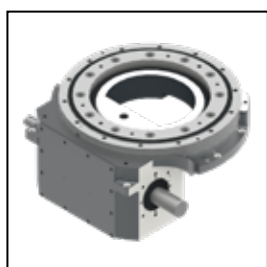
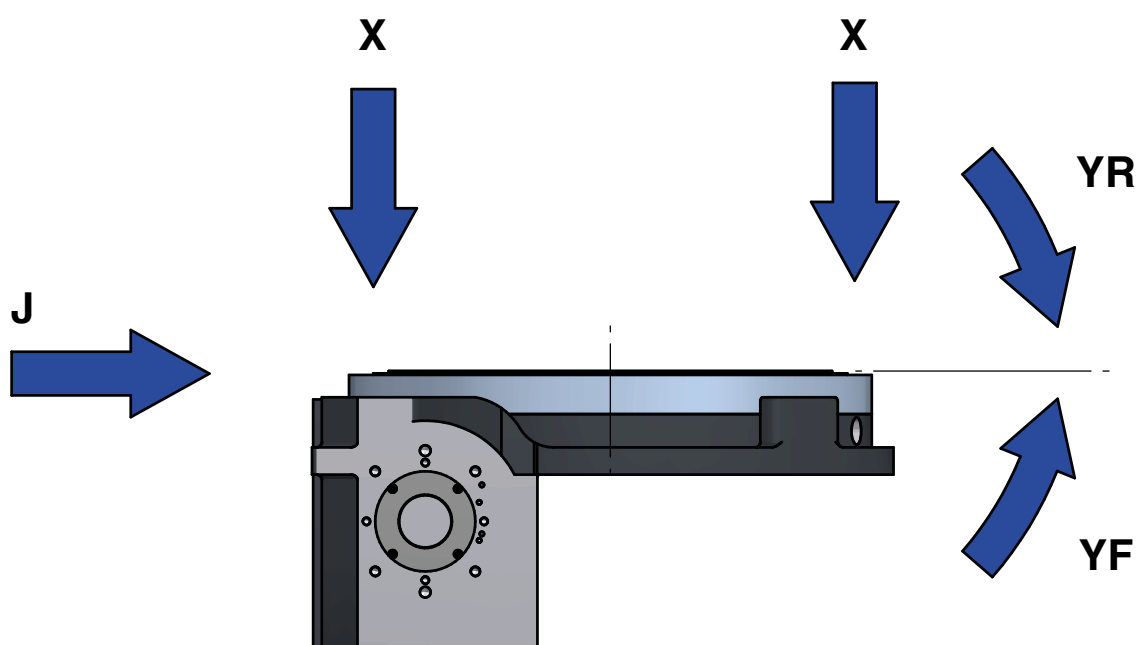


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ROTARY RINGS

Axial and radial loads

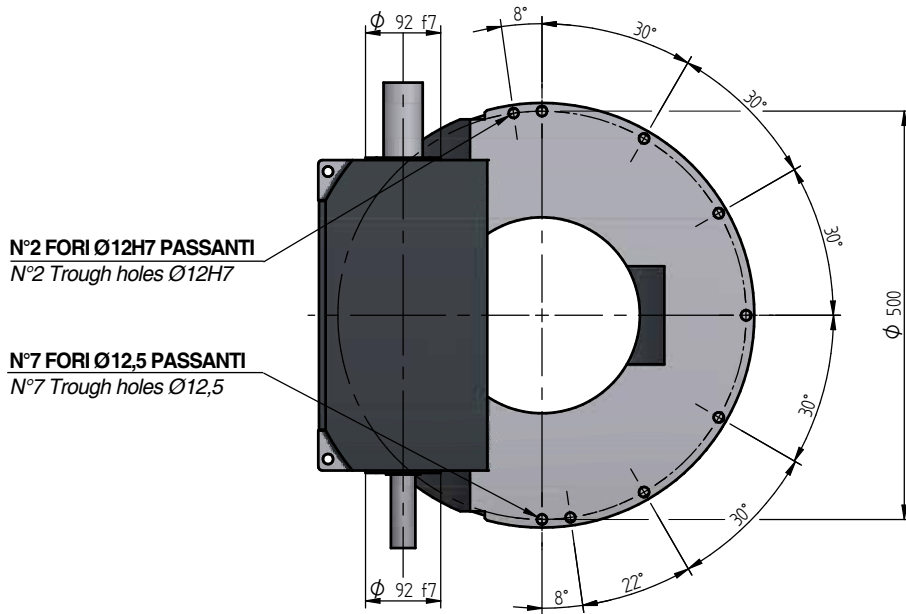
X Carico assiale Axial load	J Carico radiale Radial load	YR Momento ribaltante Overturning torque
N		Nm
60000	60000	2500



Anello rotante

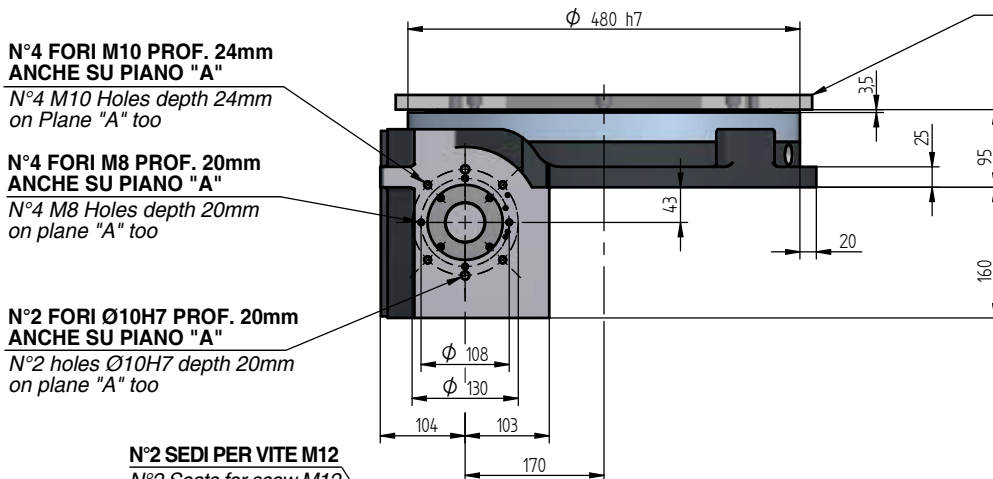
Rotary index ring

AR510



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.

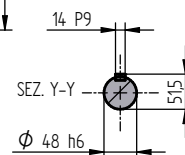
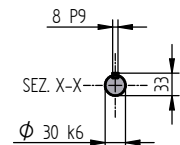
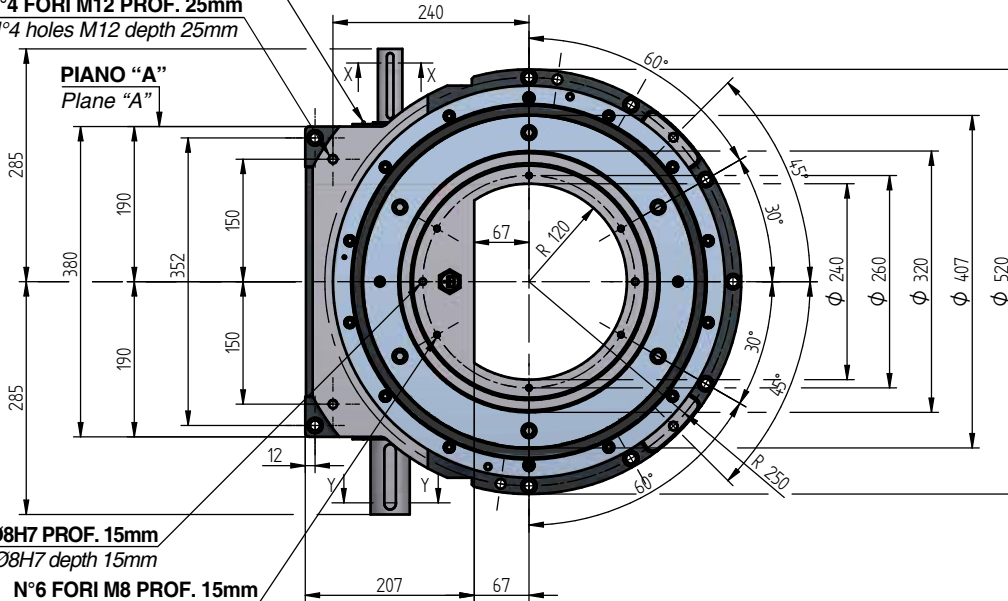


N°2 SEDI PER VITE M12
N°2 Seats for sciew M12

N°4 FORI M12 PROF. 25mm
N°4 holes M12 depth 25mm

PIANO "A"
Plane "A"

285
380
190
352
150
150
190
285



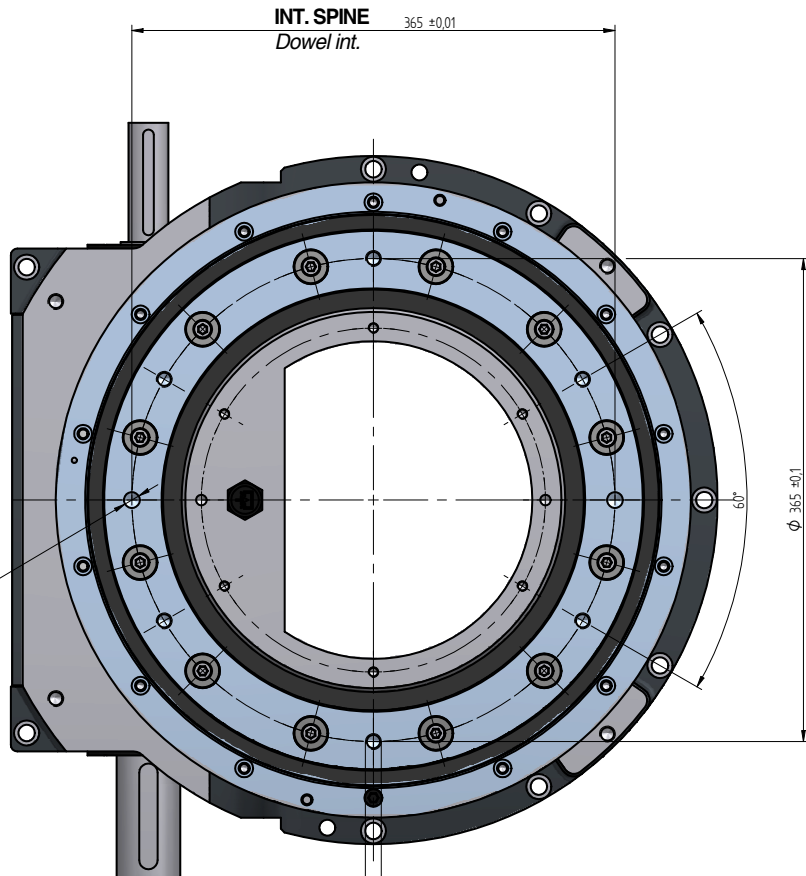
KG 180 kg

ROTARY RINGS

Assembling threaded holes on rotating disk

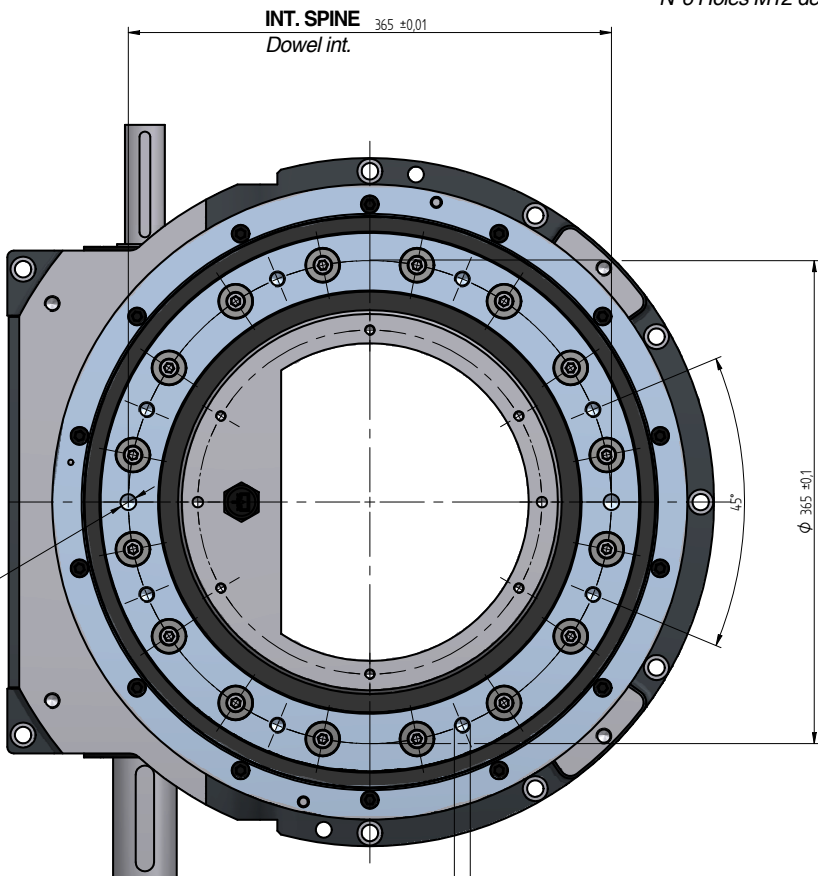
**FORATURA
su unità a
2/4/6/12/24
divisioni**
*Drilling holes on units
with 2/4/6/12/24
divisions*

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

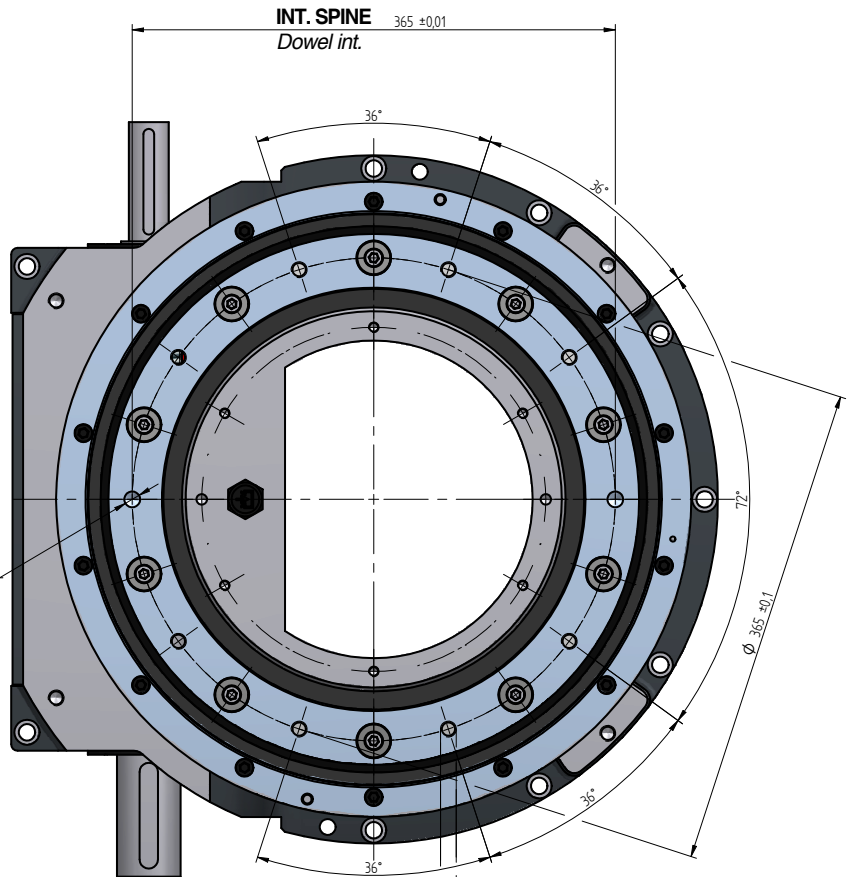
**FORATURA
su unità a
8/16/32 divisioni**
*Drilling holes on
units with 8/16/32
divisions*

Fori per assemblaggio su disco rotante

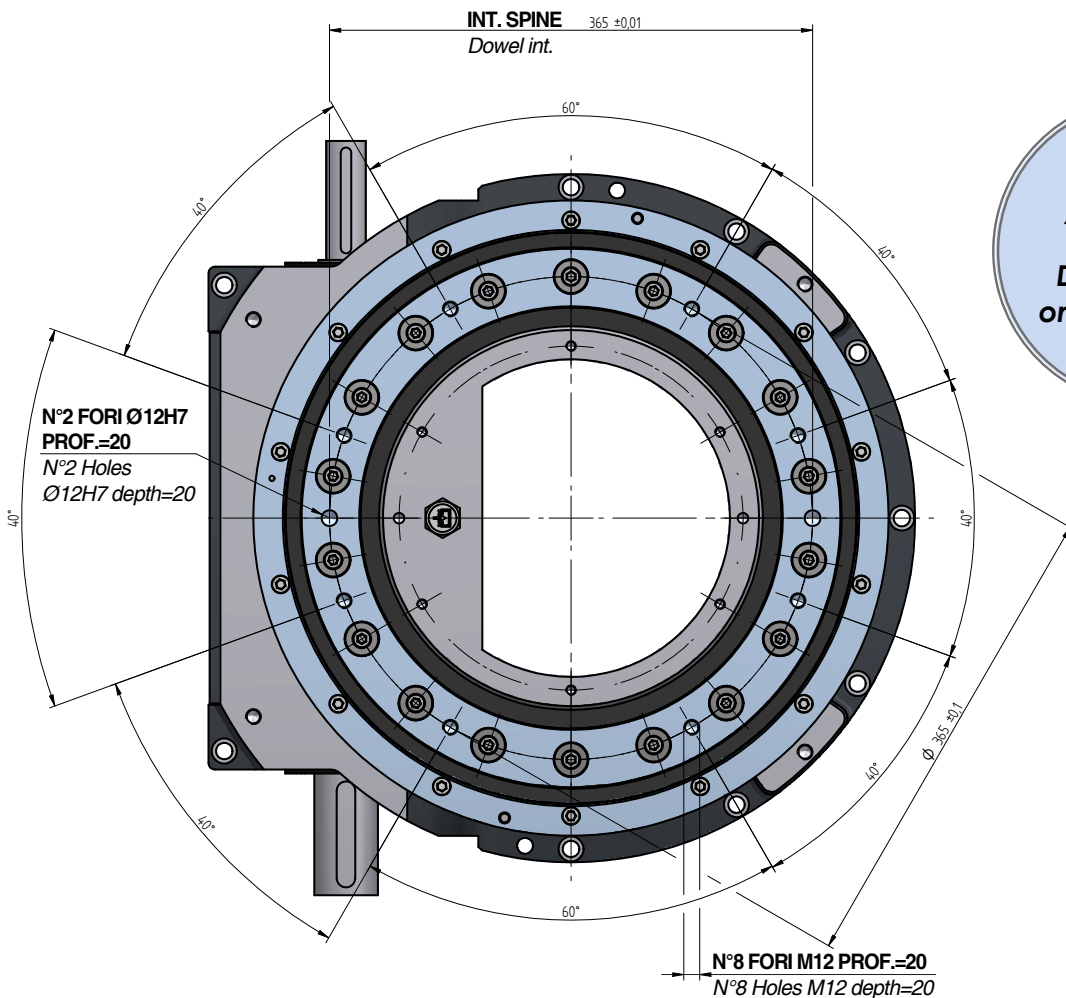
Assembling threaded holes on rotating disk

**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



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



**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
18 divisioni**
Drilling holes
on units with 18
divisions

ROTARY RINGS

AR510

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

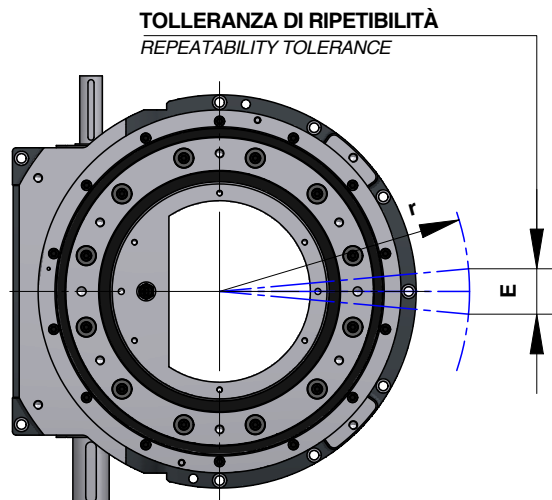
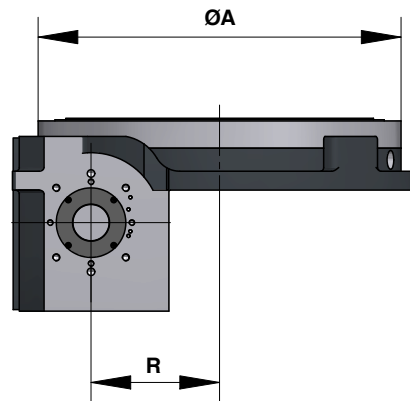
Repeatability tolerance:

- R : 700 mm
- EE: ±0,04 mm

Ripetibilità - Repeatability E (+/- mm)	R = 700	R = 1000	R = 1200
Standard	0,040	0,057	0,069

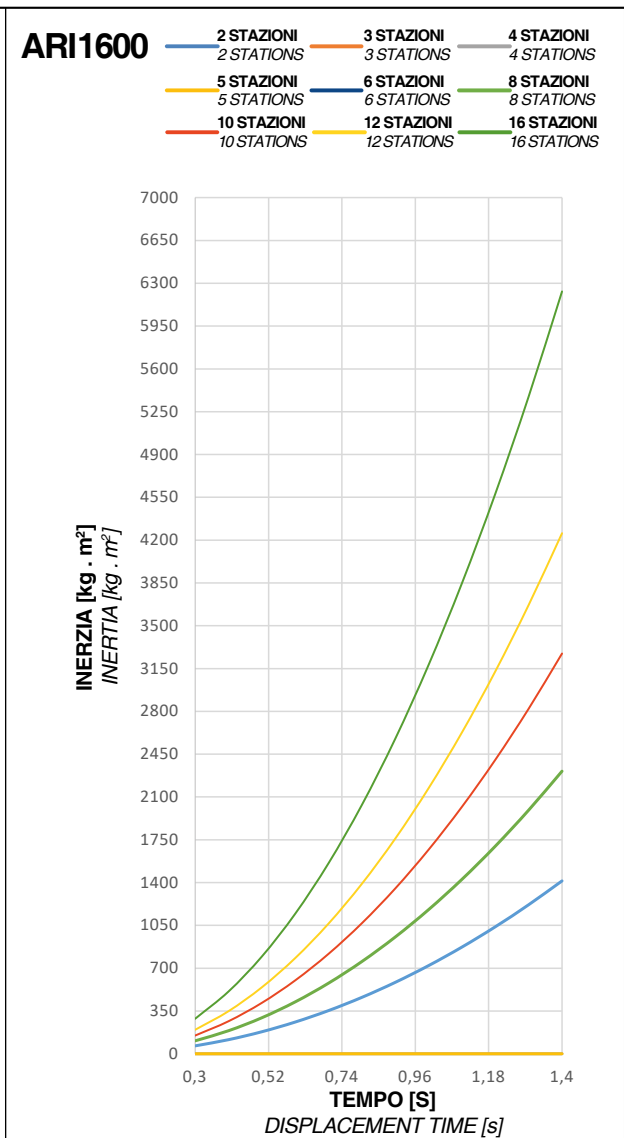
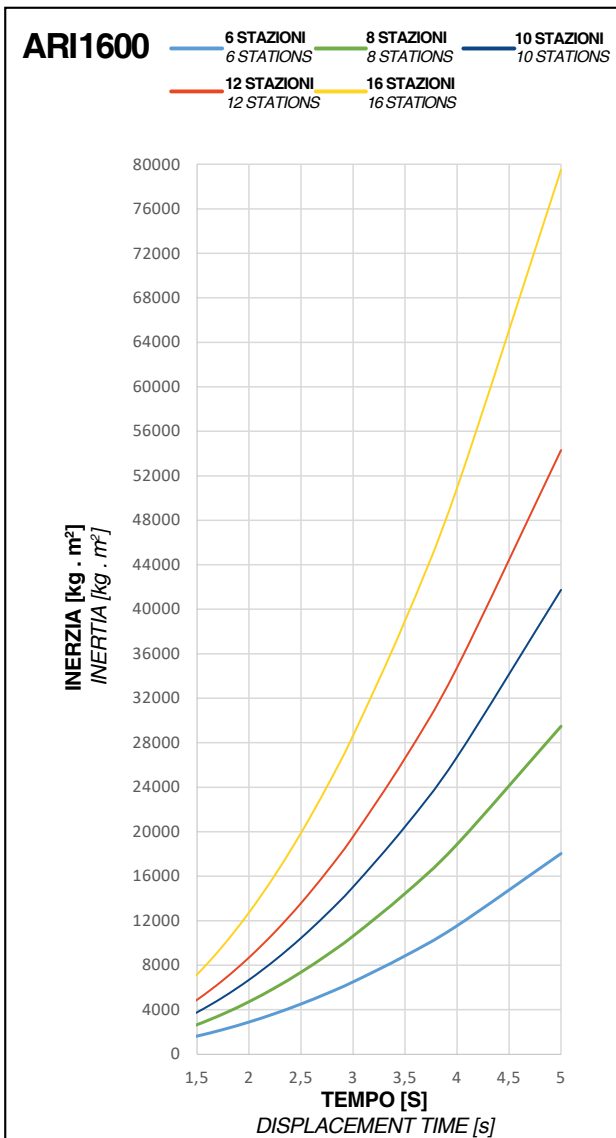
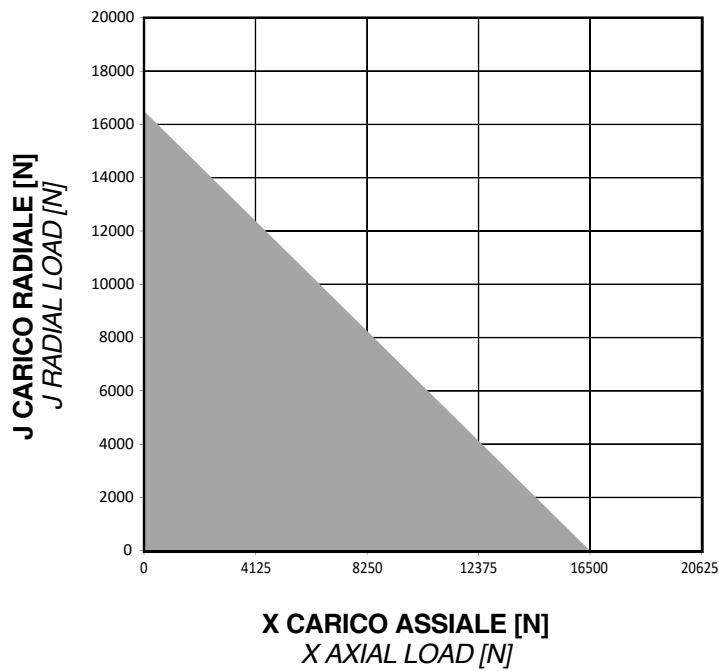
Planarità disco/Disc flatness:

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



ROTARY RINGS

Max axial and radial loads



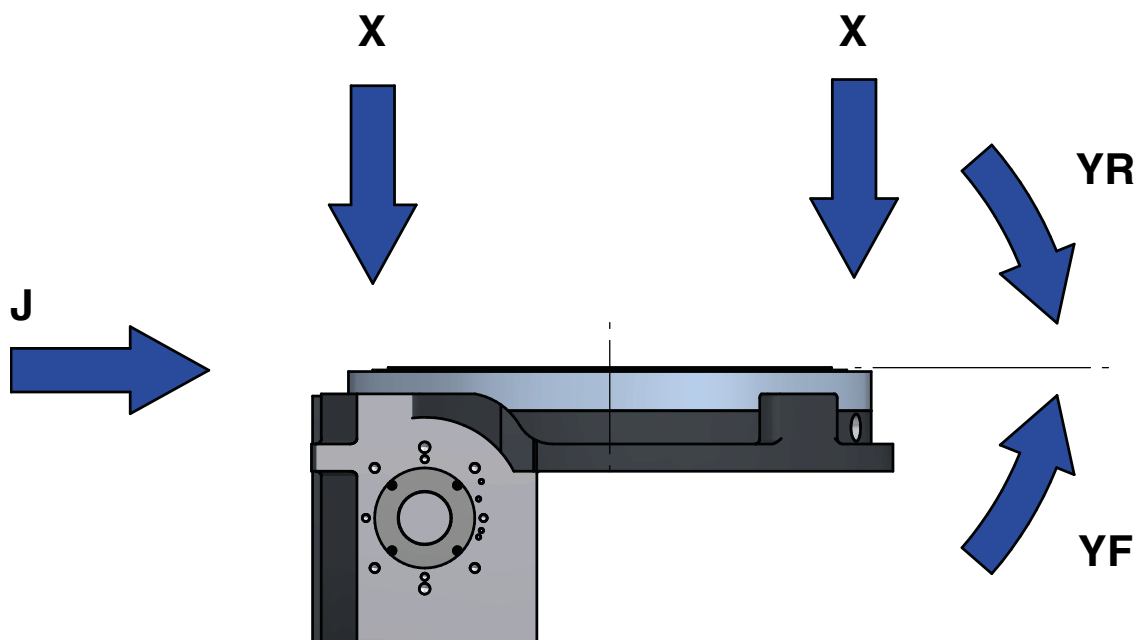
ANELLI ROTANTI IL GRAFICO È INDICATIVO, PER IDENTIFICARE UN CORRETTO DIMENSIONAMENTO, CONSIGLIAMO DI RICHIEDERE UN CALCOLO DEDICATO AL NOSTRO UFFICIO TECNICO
 THE GRAPH IS INDICATIVE, TO IDENTIFY A CORRECT SIZING, WE RECOMMEND REQUESTING A DEDICATED CALCULATION FROM OUR TECHNICAL DEPARTMENT

Carichi assiali e radiali

Axial and radial loads

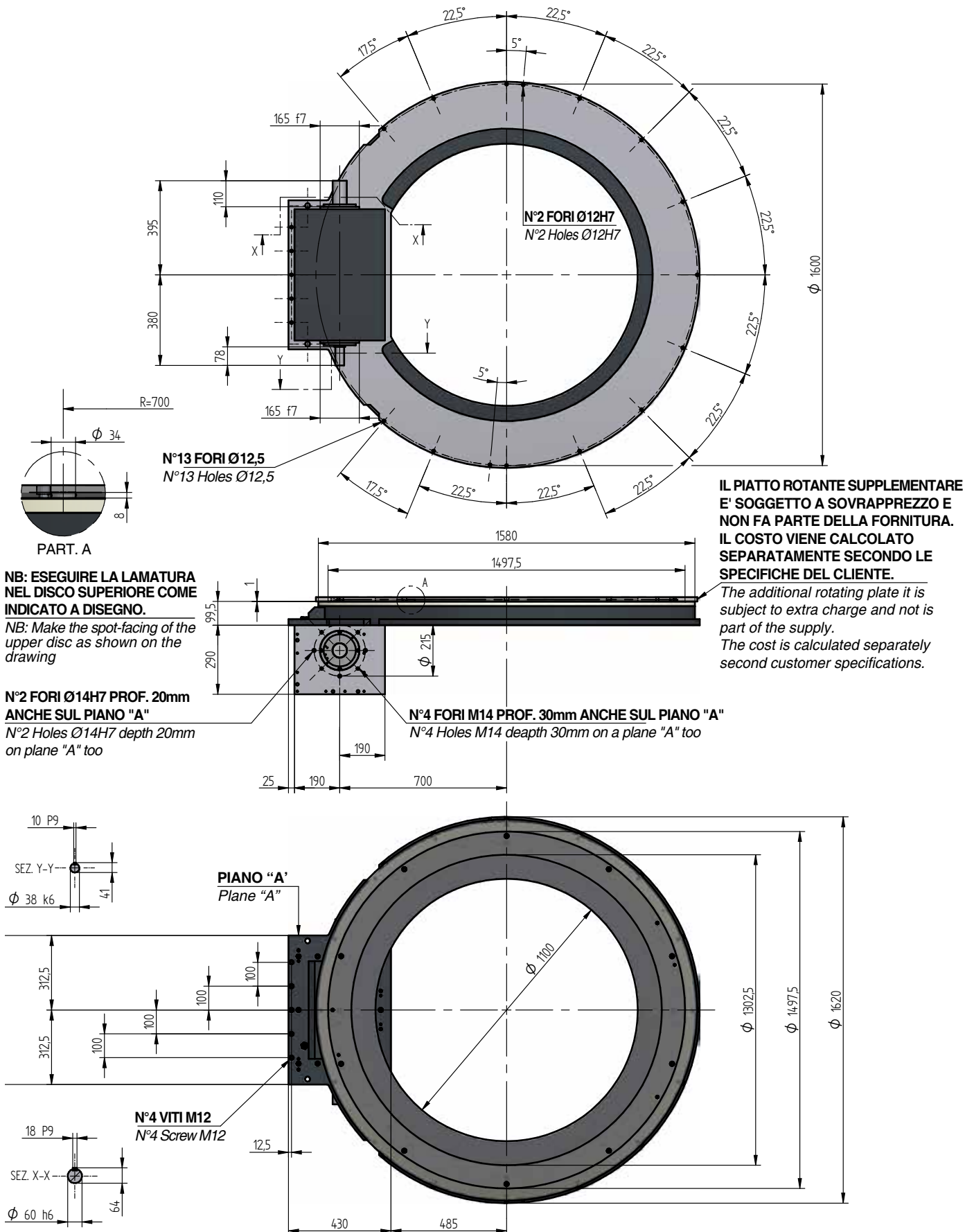
X Carico assiale Axial load	J Carico radialeo Radial load	YR Momento ribaltante Overturning torque
N		Nm
16500	16500	2200

AR1600



ROTARY RINGS

Rotary index ring



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.

NB: ESEGUIRE LA LAMATURA NEL DISCO SUPERIORE COME INDICATO A DISEGNO.

NB: Make the spot-facing of the upper disc as shown on the drawing

N°2 FORI $\phi 14H7$ PROF. 20mm ANCHE SUL PIANO "A"
N°2 Holes $\phi 14H7$ depth 20mm on plane "A" too

N°4 FORI M14 PROF. 30mm ANCHE SUL PIANO "A"
N°4 Holes M14 depth 30mm on a plane "A" too

PIANO "A"
Plane "A"

N°4 VITI M12
N°4 Screw M12

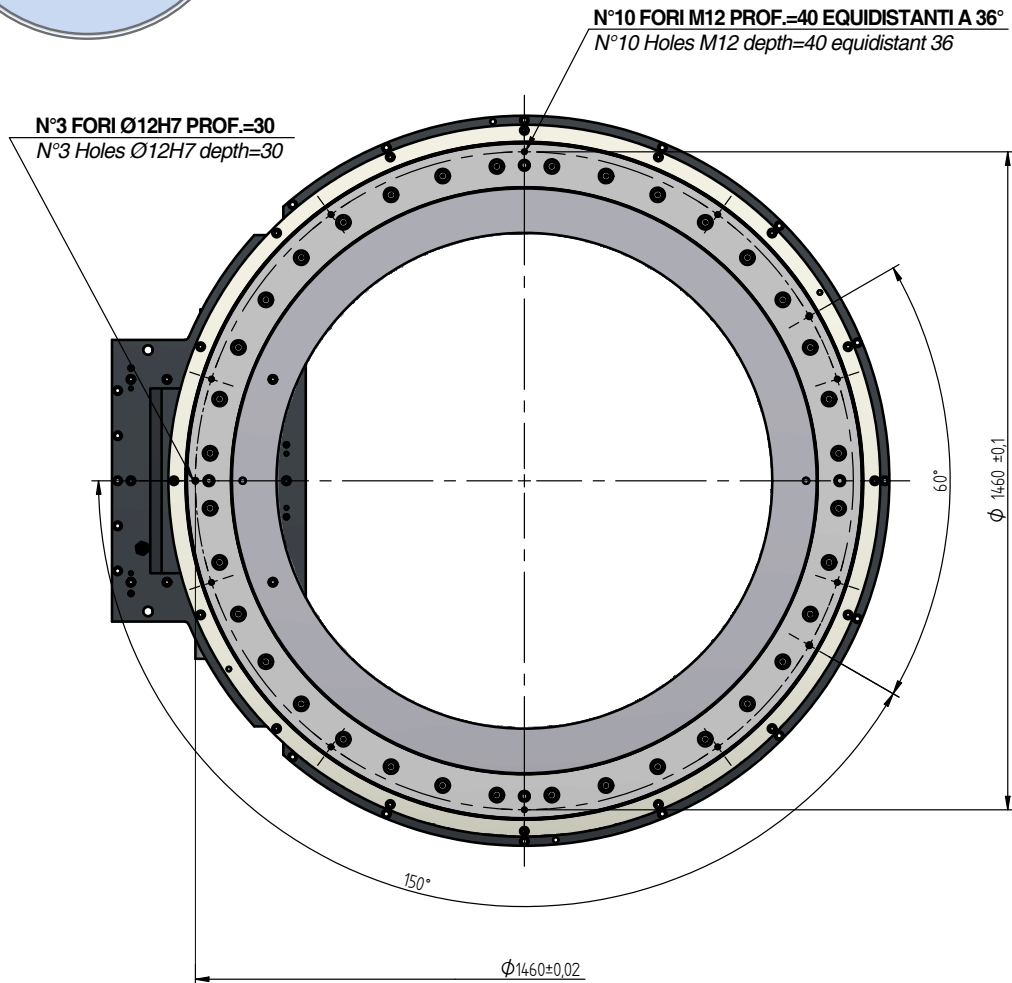
1100 kg



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

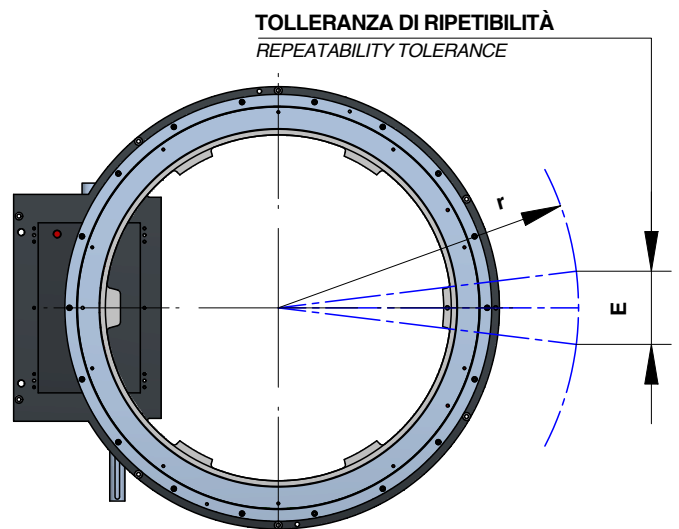
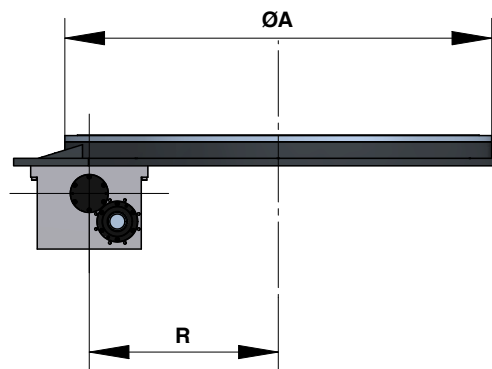
Repeatability tolerance:

- R : 310 mm
- EE: ±0,02 mm

Ripetibilità - Repeatability E (+/- mm)	R = 310	R = 600	R = 1000
Standard	0,020	0,039	0,065

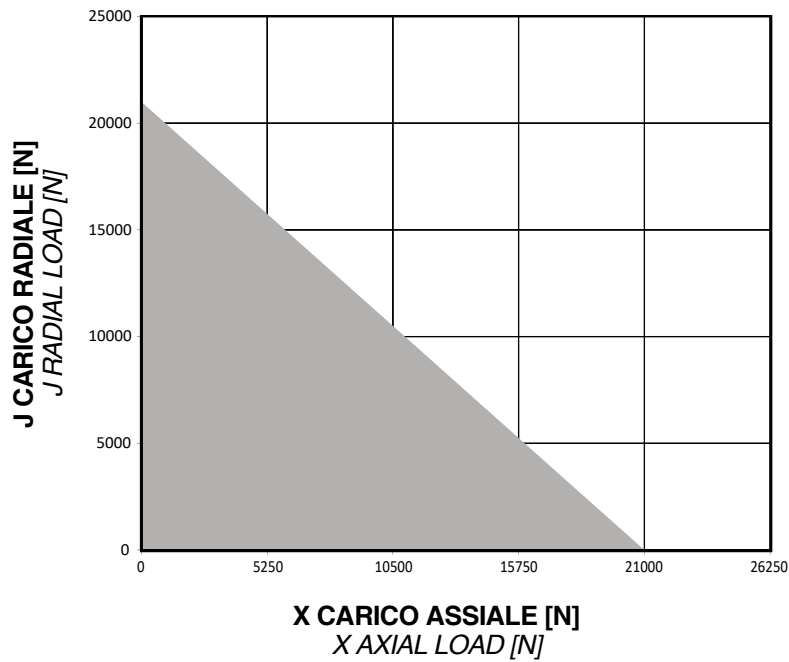
Planarità disco/Disc flatness:

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

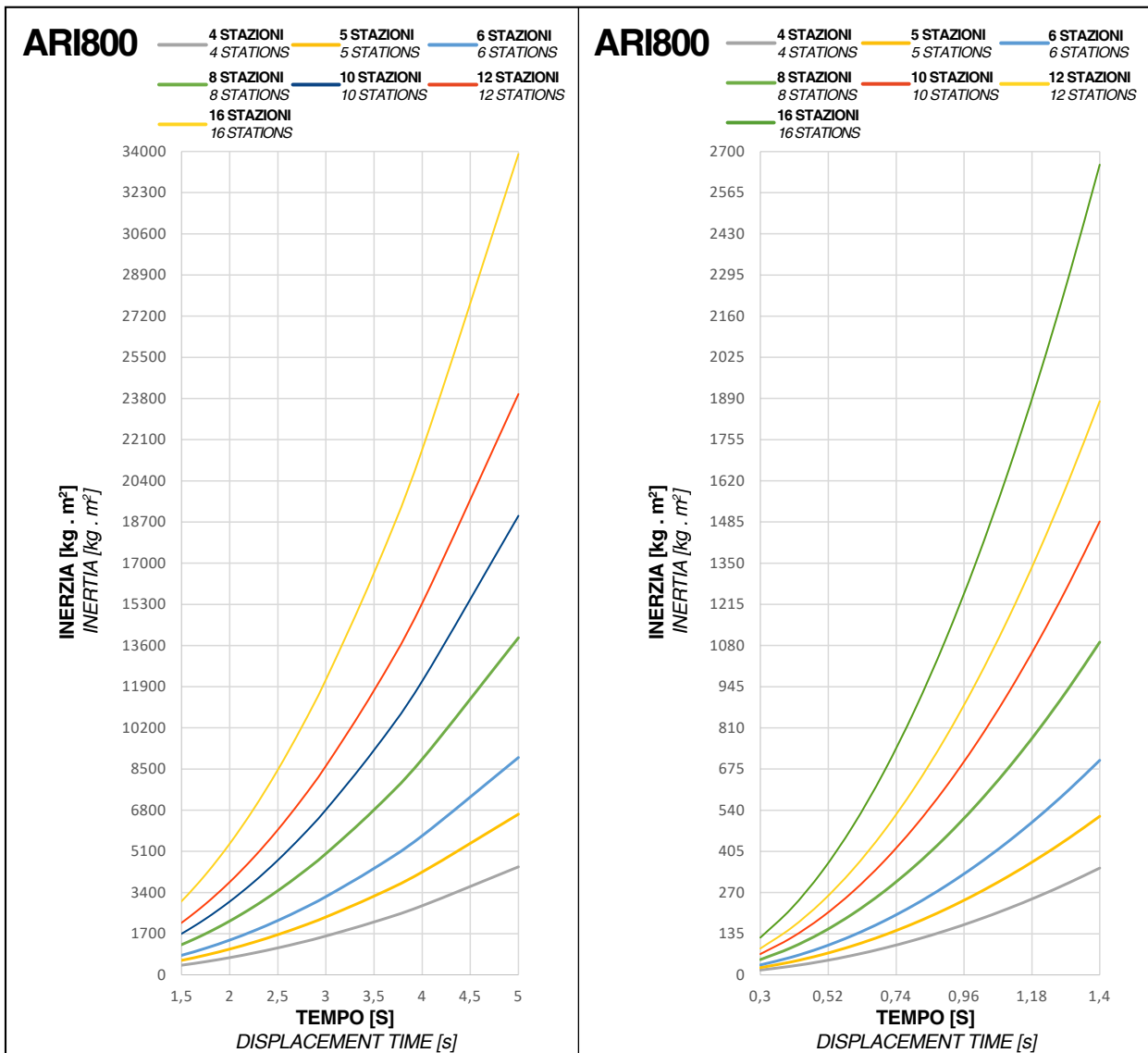


Carichi assiali e radiali

Max axial and radial loads



ARI800

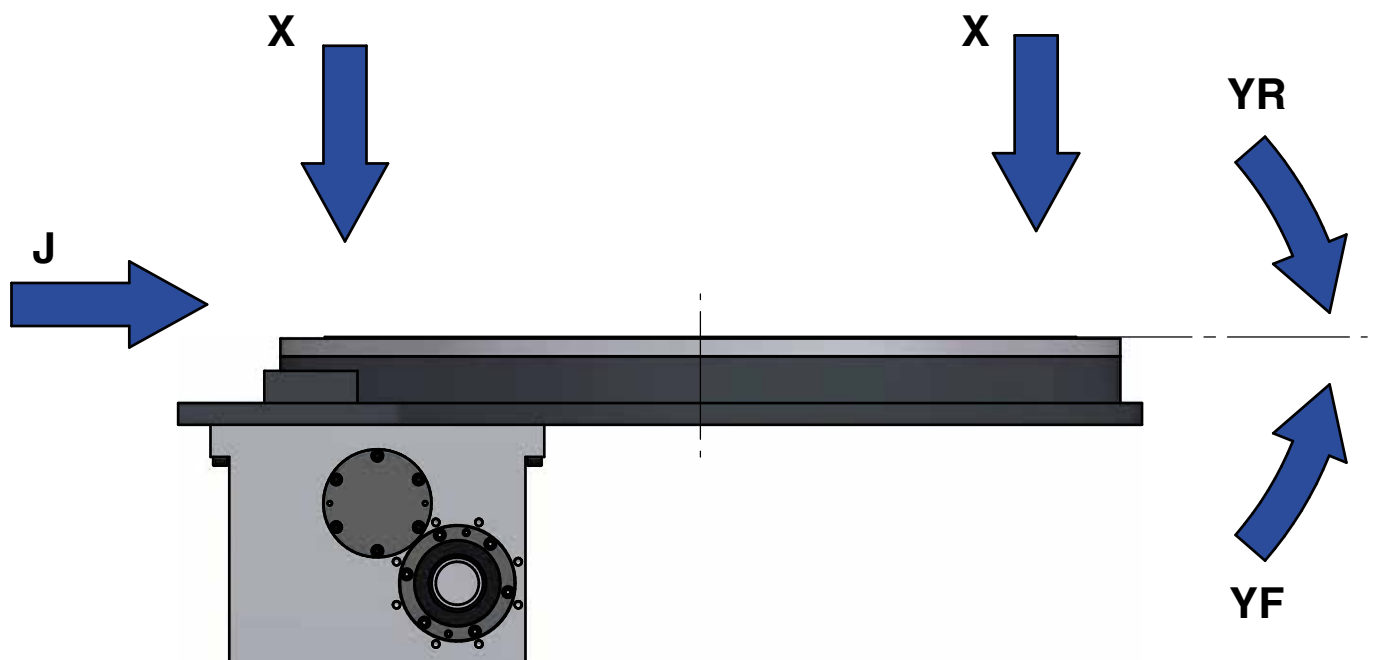


IL GRAFICO È INDICATIVO, PER IDENTIFICARE UN CORRETTO DIMENSIONAMENTO, CONSIGLIAMO DI RICHIEDERE UN CALCOLO DEDICATO AL NOSTRO UFFICIO TECNICO
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ROTARY RINGS

Axial and radial loads

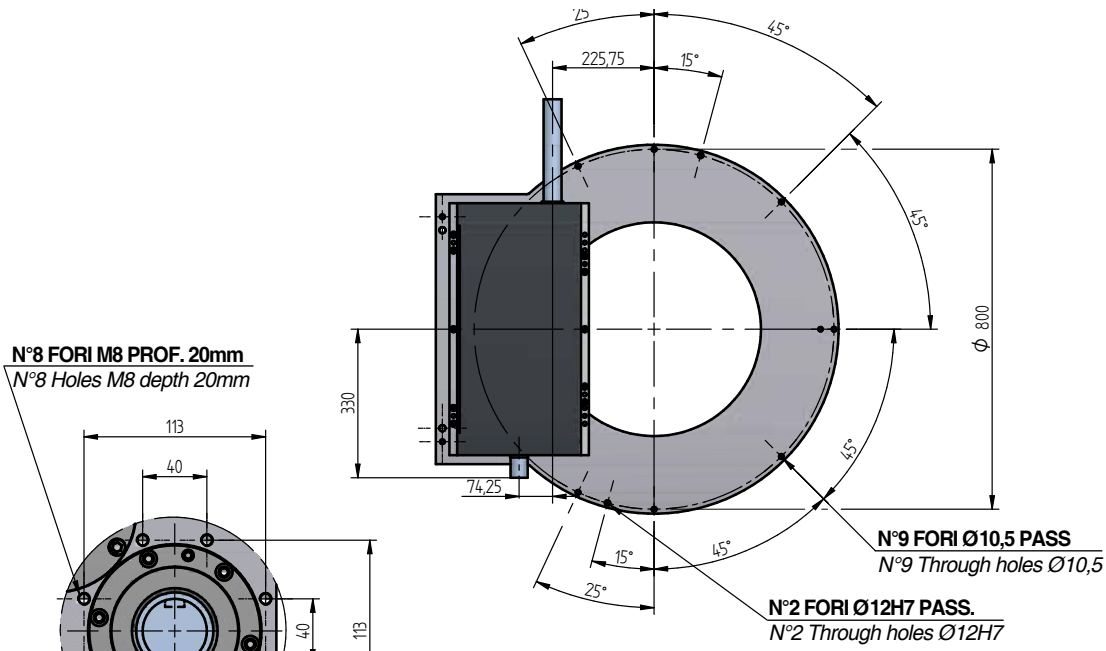
Tipo Type ring	X Carico assiale Axial load	J Carico radiale Radial load	YR Momento ribaltante Overturning torque
	N		Nm
ARI800	21000	21000	2500
ARI800 R	32000	32000	5500



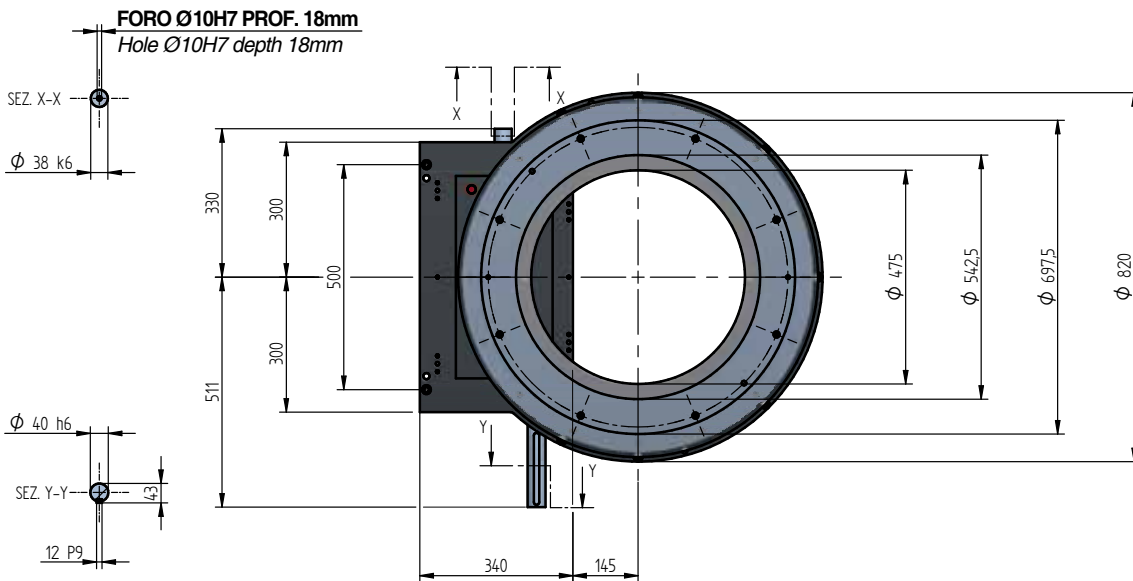
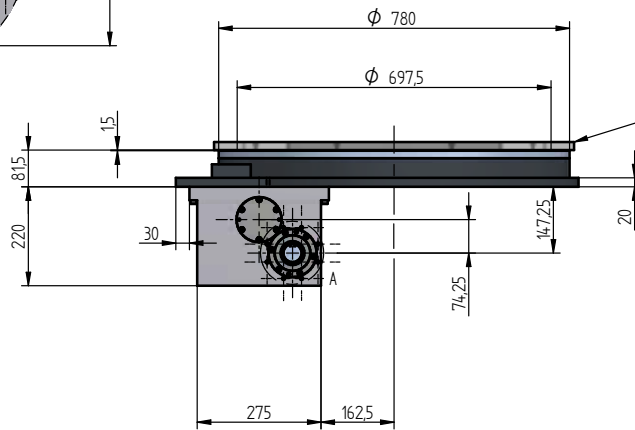
Anello rotante

Rotary index ring

ARI800



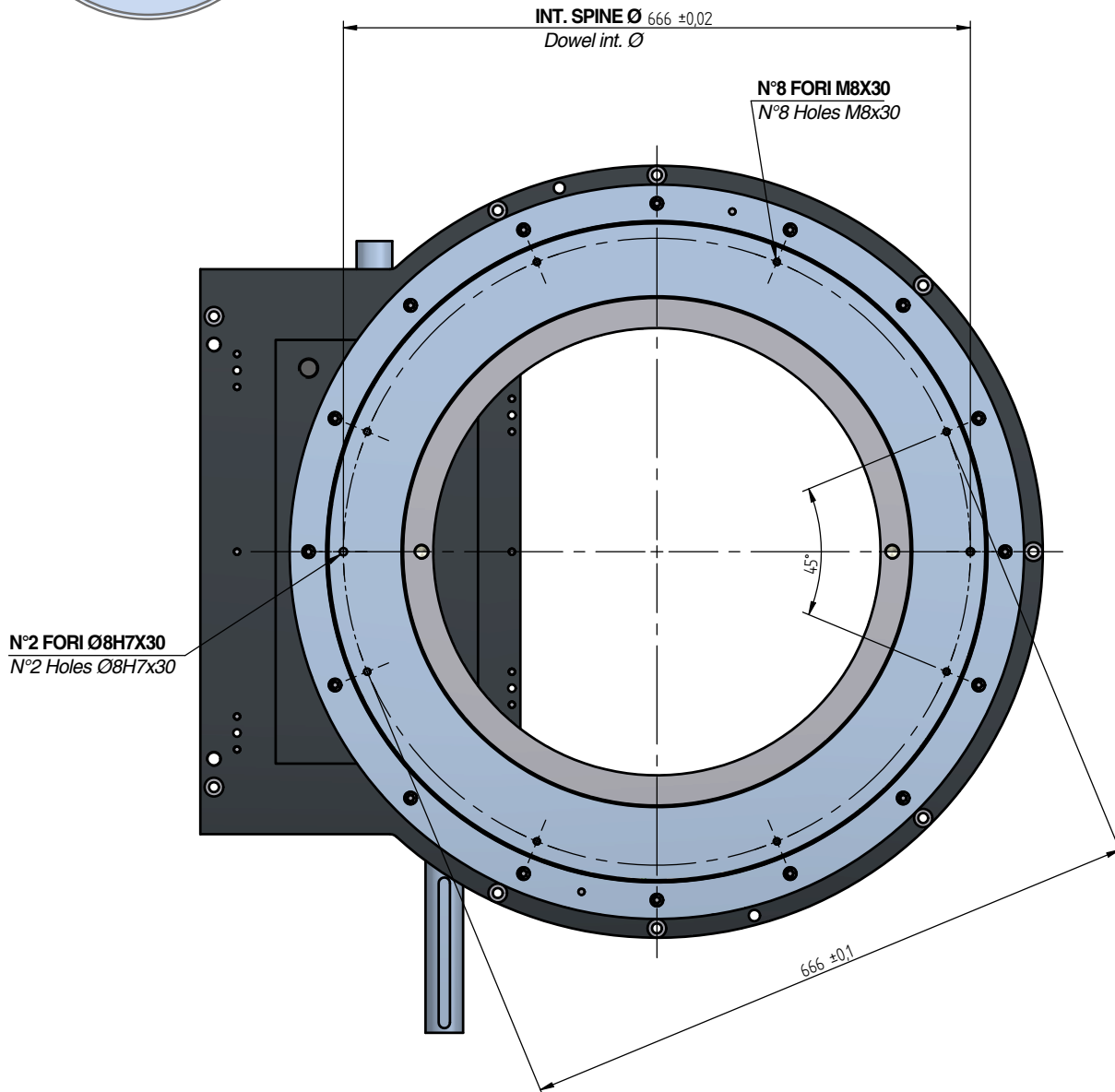
IL PIATTO ROTANTE SUPPLEMENTARE E' SOGGETTO A SOVRAPPREZZO E NON FA PARTE DELLA FORNITURA. IL COSTO VIENE CALCOLATO SEPARATAMENTE SECONDO LE SPECIFICHE DEL CLIENTE.
The additional rotating plate it is subject to extra charge and not part of the supply. The cost is calculated separately second customer specifications.



KG 350 kg

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										

ARI 1200

ANGOLI DI CAMMA REALIZZABILI
FEASIBLE CAM TRANSFER ANGLES

Tolleranza Anelli Rotanti

Tolerances of indexing rings

Tolleranza di ripetibilità

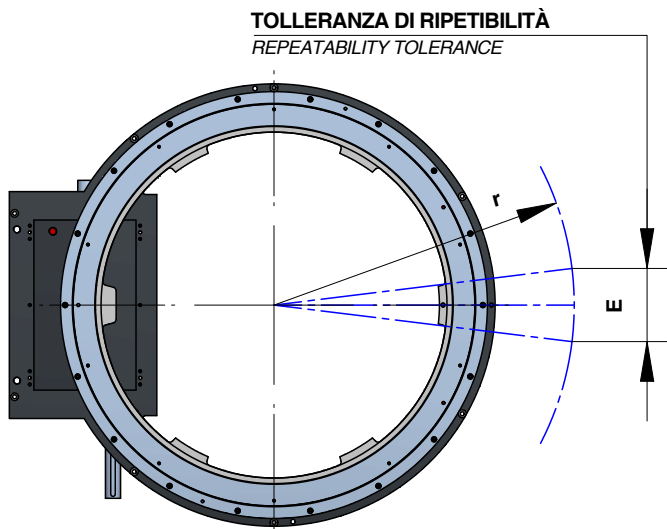
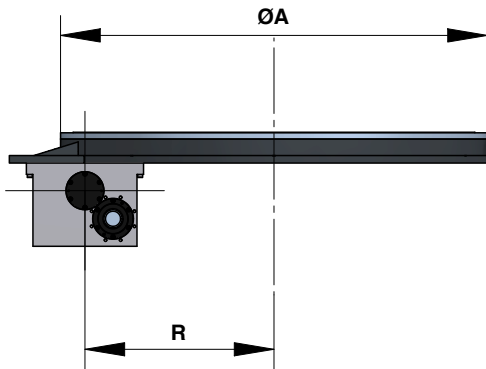
Repeatability tolerance:

- R : 500 mm
- EE: ±0,03 mm

Ripetibilità - Repeatability E (+/- mm)	R = 500	R = 800	R = 1100
Standard	0,030	0,048	0,066

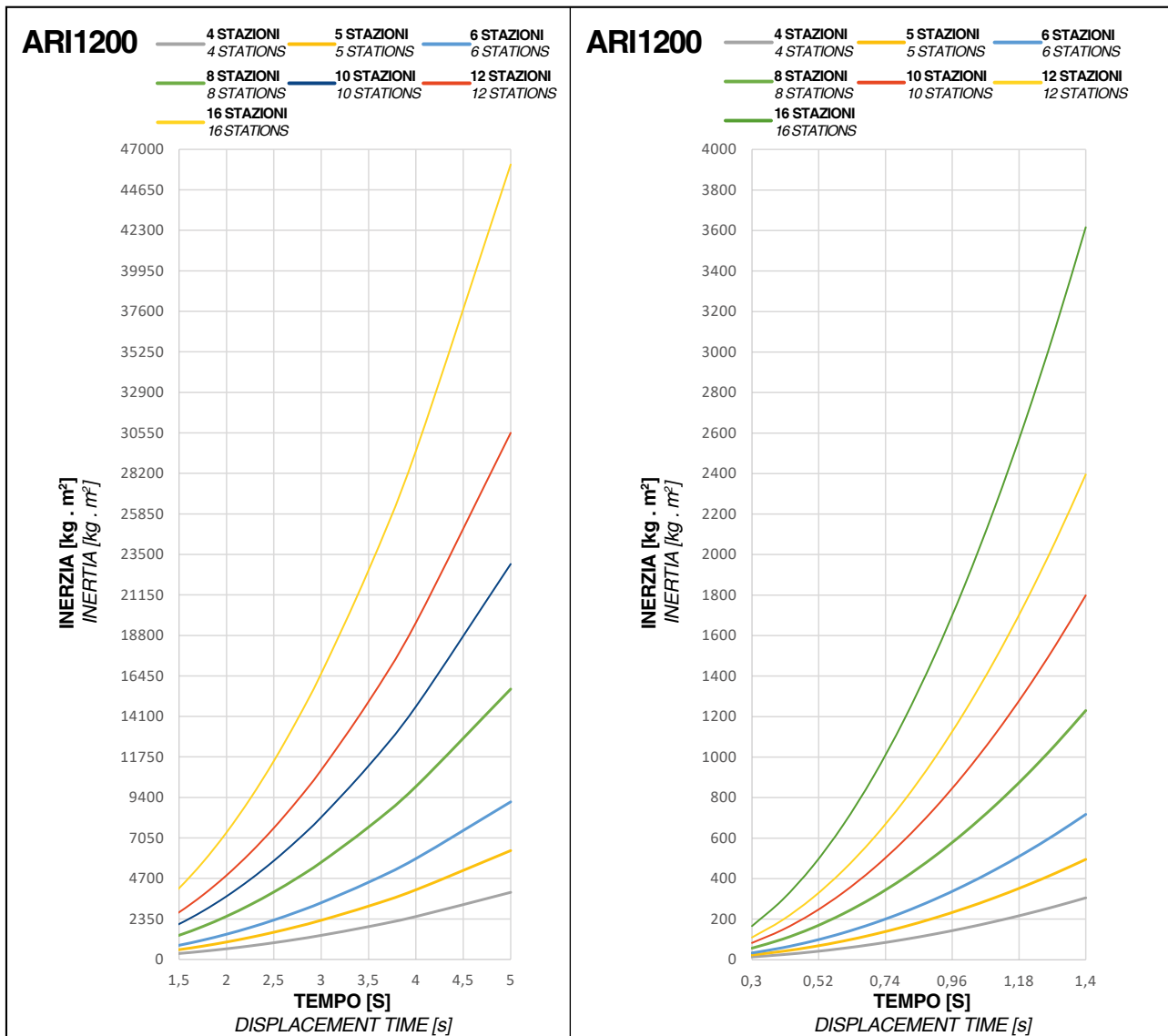
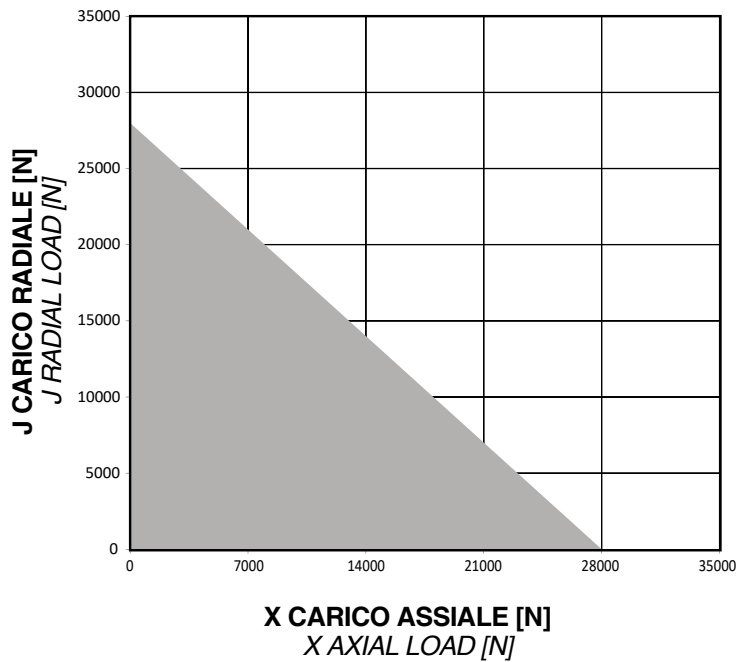
Planarità disco/Disc flatness:

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



ROTARY RINGS

Max axial and radial loads



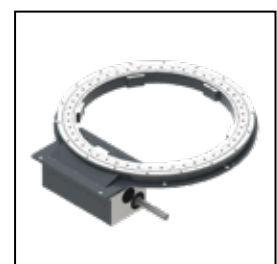
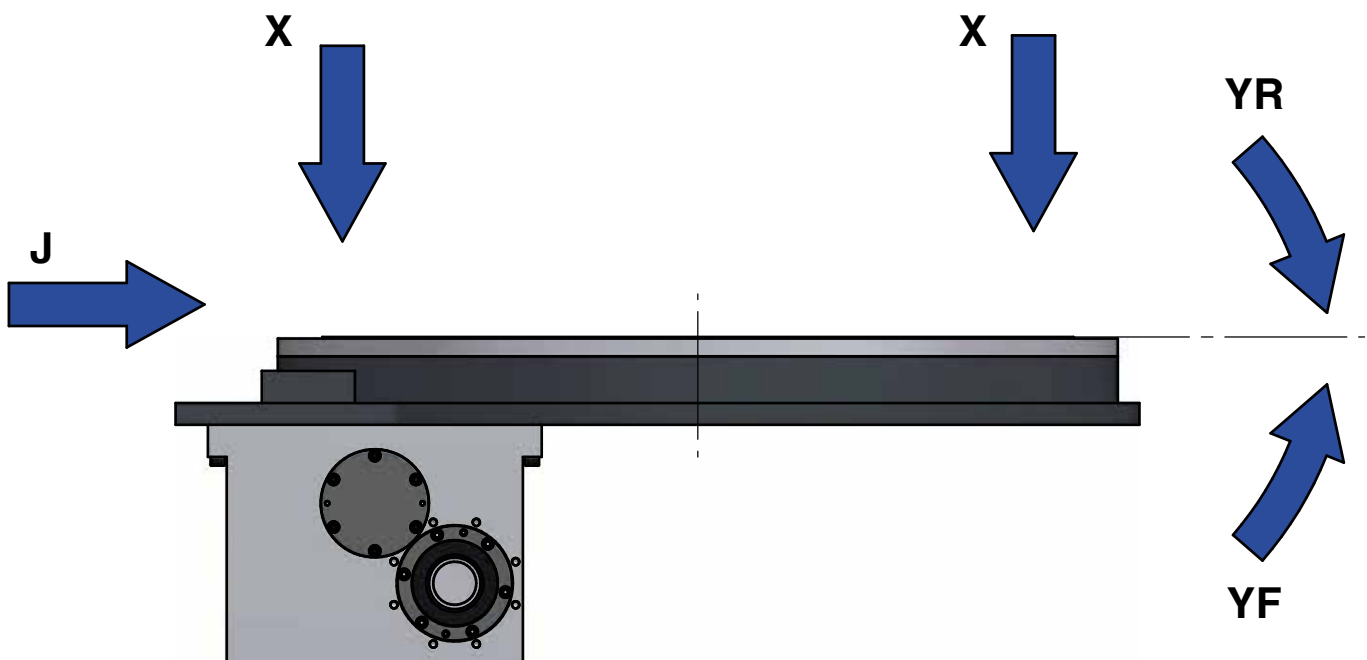
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Carichi assiali e radiali

Axial and radial loads

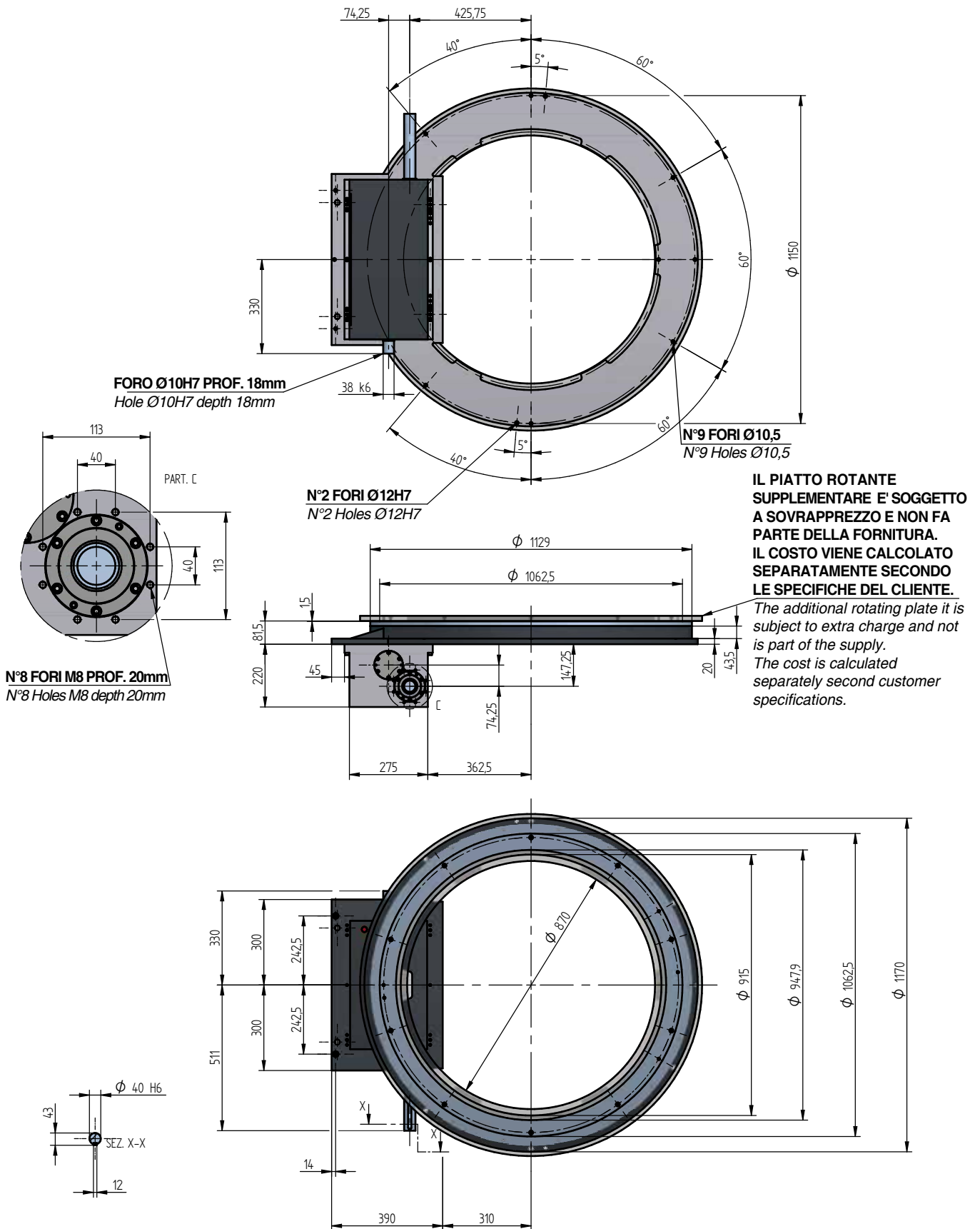
X Carico assiale Axial load	J Carico radiale Radial load	YR Momento ribaltante Overturning torque
N		Nm
28000	28000	3000

ARI 1200



ROTARY RINGS

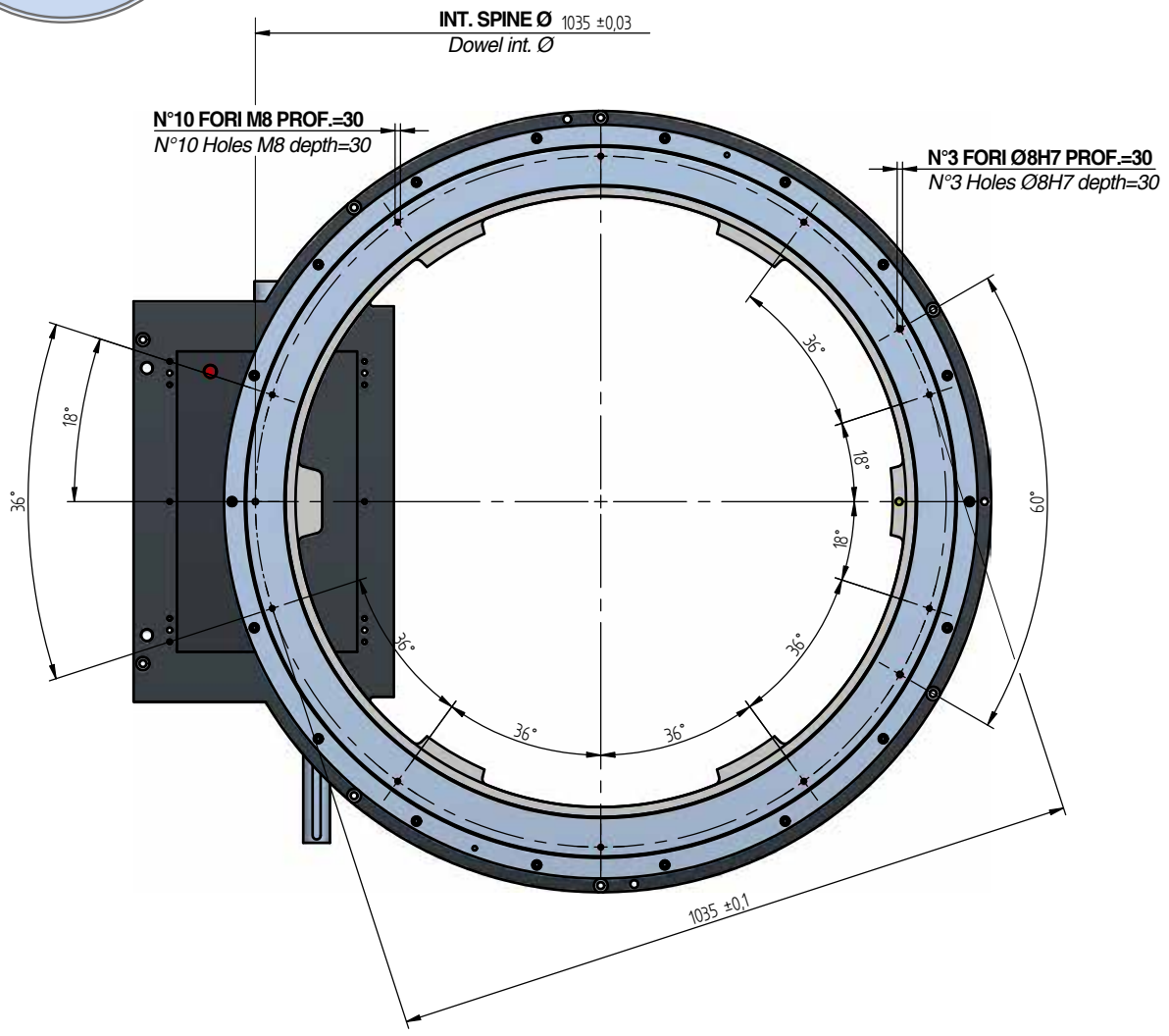
Rotary index ring



Fori per assemblaggio su disco rotante

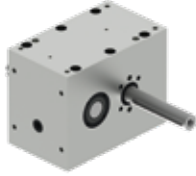
Assembling threaded holes on rotating disk

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

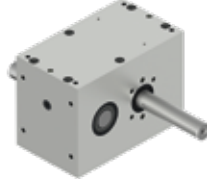


ARI 1200

AP-OP40



AP-OP55



AP-OP70



AP-OP85



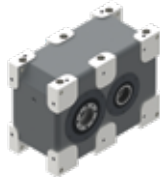
AP-OP110



AP-OP135



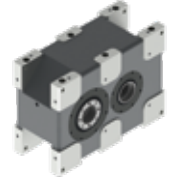
AP-OP165



AP-OP200



AP-OP250



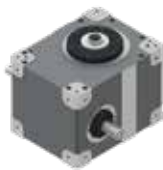
IT-OT15



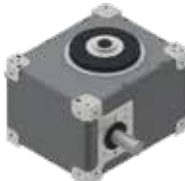
IT-OT25



IT-OT35



IT-OT55



IT-OT75

