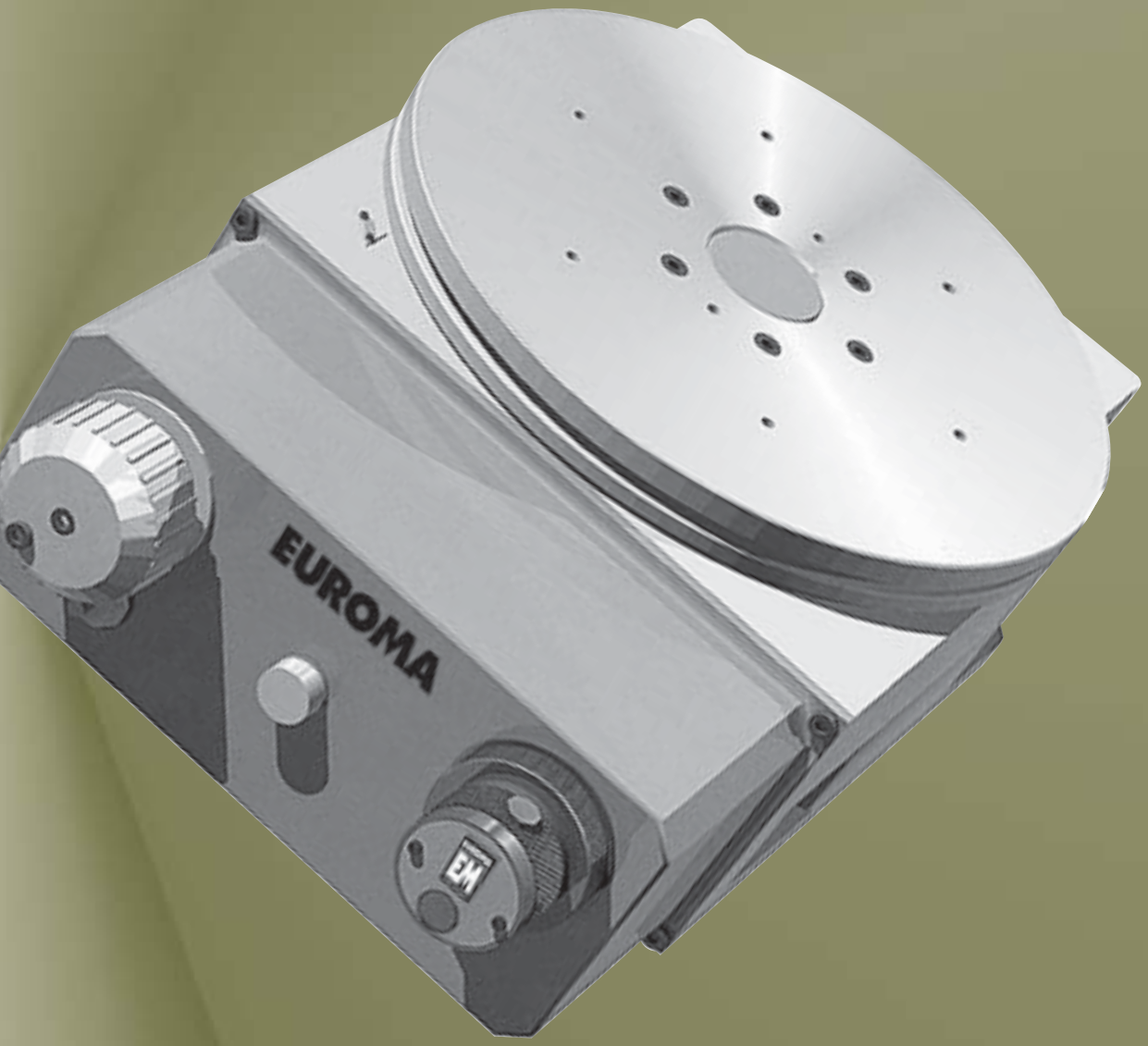
EUROMA®

INDEXING TABLES

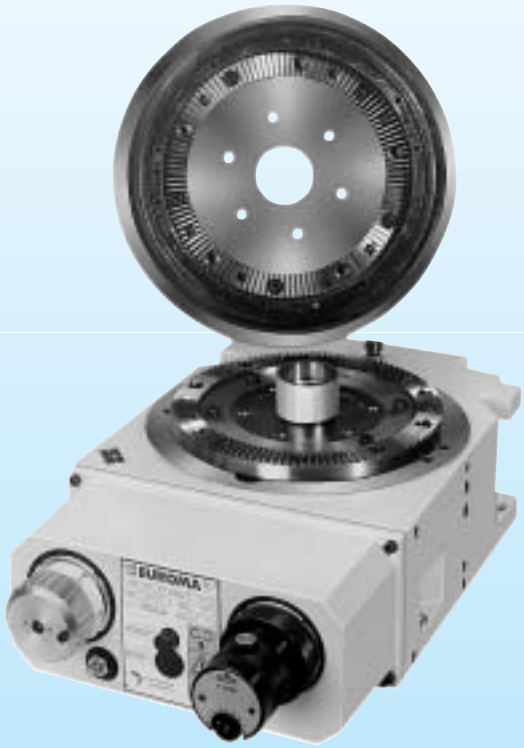


T.H.350-345

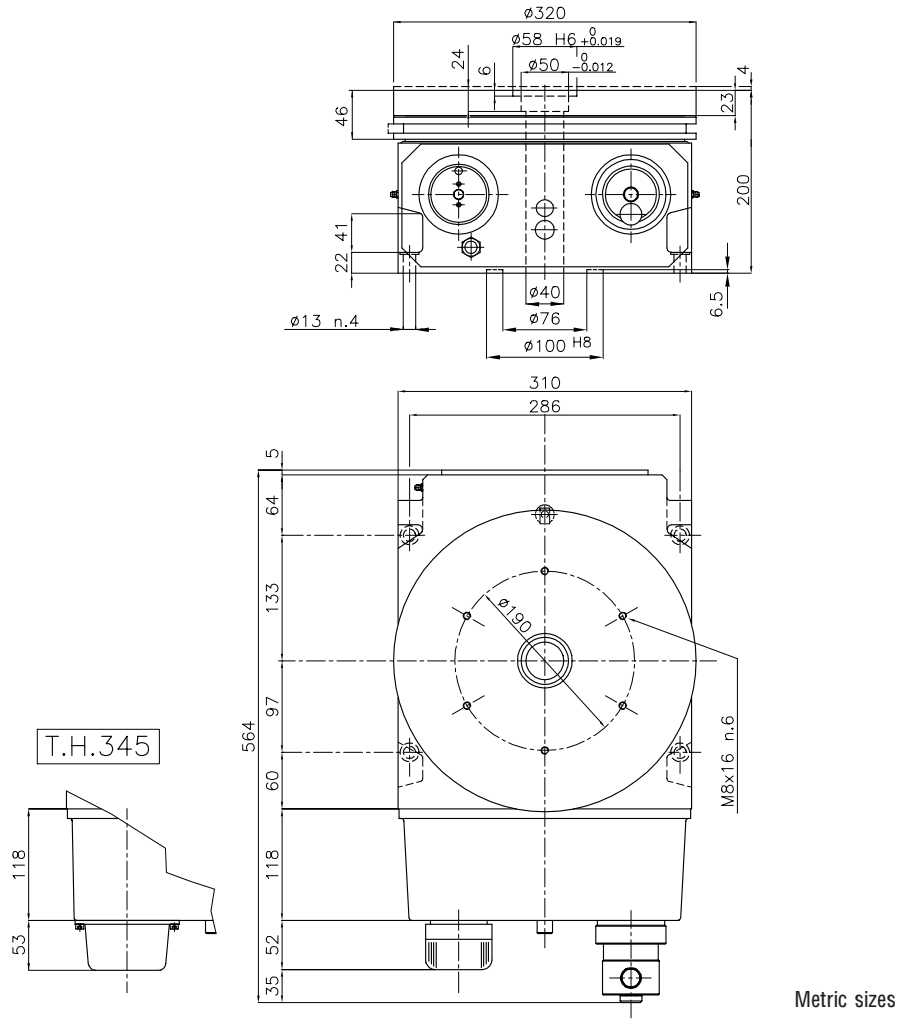
HIRTH INDEXING TABLE

The pneumatic table T.H.350 is an essential part of rotary transfer machines for machining operations, or any other purpose.
The plate's drive is via double rack and pinion device and front gears coupling ensure a proper movement of the required load.
The plate is accurately positioned by two, 250mm (9.84") diameter, 120 teeth, hardened and ground HIRTH gears rings, for high stability against all strains on the plate (torque).
When stationary, the plate's HIRTH gears are firmly held engaged by a high pneumatic axial thrust to ensure maximum rigidity.
Plate indexes after lifting 4mm (.157")
Number of indexings / rev. is set by means of an external setting wheel (max. 6 options).
Table configurations:
- quick station change =T.H.350
- station change with distance pieces =T.H.345

On model T.HPE.350, start of the table must be done through one 5/2 double solenoid valve.
On model T.HPE.345, start of the table must be done through two 5/2 double solenoid valve.
Table is also available in a totally pneumatic version (model T.HPP.350).
Please note the range of our standard accessories on the next page. The table is prearranged for emergency stop control.



TECHNICAL FEATURES	
PLATE O/DIAMETER mm (inch)	320 (12.60")
DIRECTION OF ROTATION	CLOCK WISE
ANGULAR INDEXING ACCURACY	± 5"
INDEXING ACCURACY ON PLATE O/DIA mm (inch)	± 0.004 (± .00016")
PLATE TO BASE PARALLELISM mm (inch)	0.02 (.0008")
PLATE FLATNESS mm (inch)	0.02 (.0008")
PLATE LOCKING FORCE AT 6 bar (87 P.S.I.)	15800 N (3488 lbs)
PLATE DRIVING TORQUE AT 6 bar (87 P.S.I.)	100 Nm (74 ft.lb)
MAX MOMENT OF INERTIA kgm^2 (ft^2.lb)	20 (474)
WEIGHT Kgs (lbs)	88 (194)
STANDARD COLOUR-RAL	7035



Metric sizes

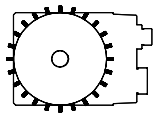
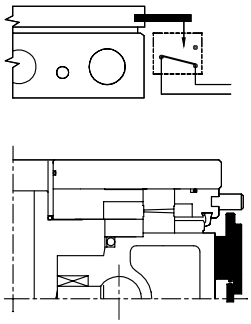
TABLE	CODE	INDEXINGS
QUICK STATION CHANGE		
T.HPE.350	10560010	3-4-5-6-8-10 12-15-20-24-30 40-60-120

Table is supplied set on your required number of indexings, Ex. 3-5-12-30-40-120

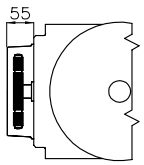
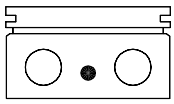
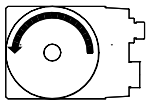
STATION CHANGE WITH DISTANCE PIECES		
T.HPE.345	10560050	3-4-5-6-8-10 12-15-20-24-30 40-60-120

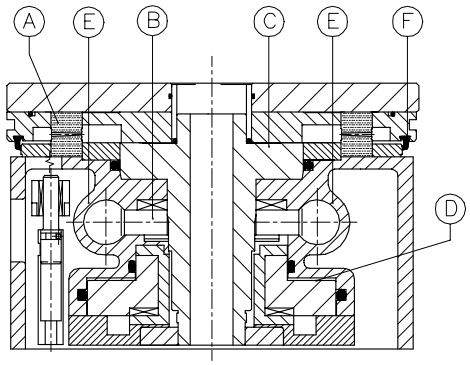
Table is supplied with one rack stop distance piece suitable for the selected n° of stations.

ACCESSORIES

PLATE POSITION PINS	CODE
	28020250
PLATE POSITION MICRO-SWITCH	CODE
	28020200

ACCESSORIES

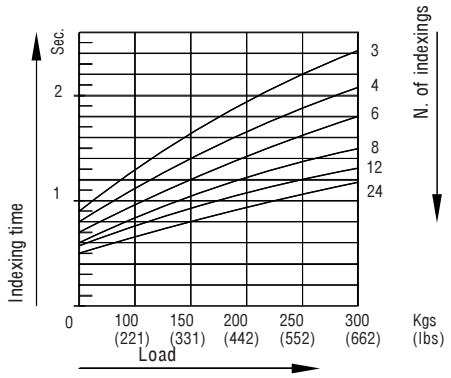
FITTED SOLENOID VALVE	CODE
	28020220
MANUAL START BUTTON	CODE
	28020210
COUNTER-CLOCKWISE ROTATION	CODE
	M9910050



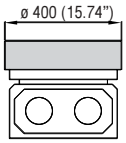
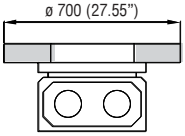
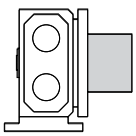
A HIRTH gear rings
B Front gear coupling
C Plate lifting piston
D Plate locking piston
E Plate rotation rack
F Sealing lip ring

OVERALL CYCLE TIME (load type "B")

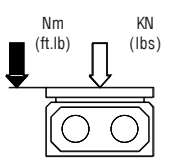
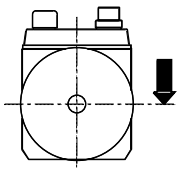
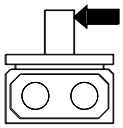
TOTAL TIME = PLATE TRAVEL + RACK RETURN (0.5 sec. 4-6 IND. ; 0.3 sec. 8-12-24 IND.)



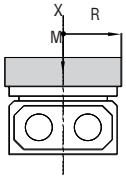
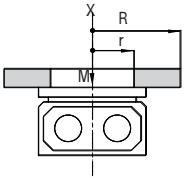
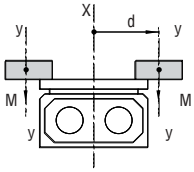
LIMIT LOAD ON PLATE

A	B	C
		
400 Kgs (883 lbs)	250 Kgs (551 lbs)	120 Kgs (265 lbs)

LIMIT STRESSES ON PLATE (6 bar)

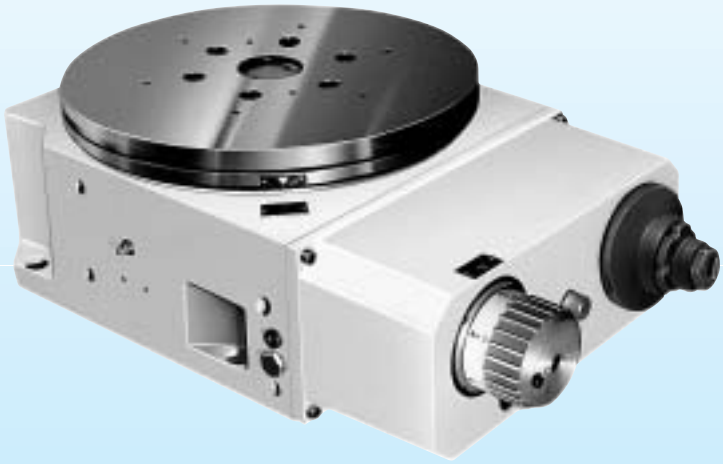
		
1400 (1031) ⇩ 30 (6623)	950 Nm (700 ft.lb)	600 Nm (442 ft.lb)

MOMENT OF INERTIA CALCULATION I= moment of inertia kgm^2 (ft^2.lb) - M= mass kg (lbs) - R-r,d= radious m (ft)

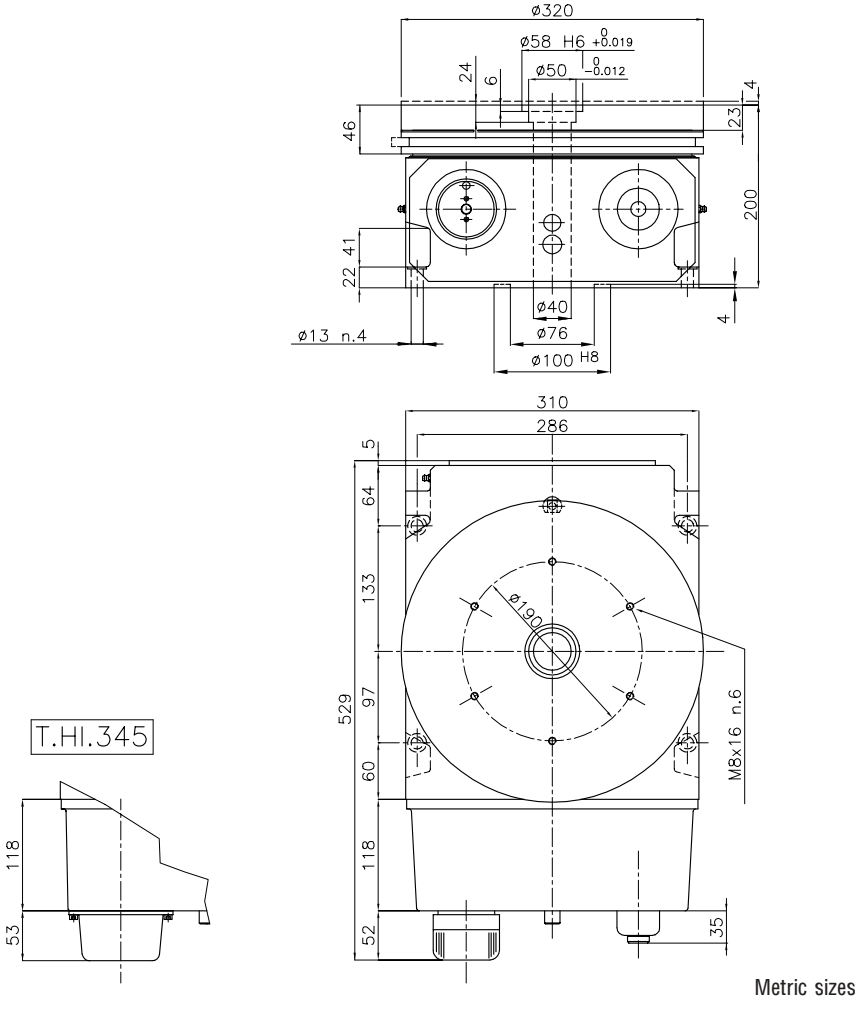
EVENLY DISTRIBUTED LOAD	RING TYPE LOAD DISTRIBUTION	FIXTURES LOADING
		
$I = 1/2 \cdot M \cdot R^2$	$I = 1/2 \cdot M \cdot (R^2 + r^2)$	$I = M \cdot d^2 \cdot n°$

The hydraulic table T.HI.350 is an essential part of rotary transfer machines for machining operations, or any other purpose.
The plate's drive is via double rack and pinion device and front gears coupling ensure a proper movement of the required load.
The plate is accurately positioned by two, 250mm (9.84") diameter, 120 teeth, hardened and ground HIRTH gears rings, for high stability against all strains on the plate (torque).
When stationary, the plate's HIRTH gears are firmly held engaged by a high hydraulic axial thrust to ensure maximum rigidity.
Plate indexes after lifting 4mm (.157")
Table configurations:
- quick station change =T.HI.350
- station change with distance pieces =T.HI.345

On model T.HI.350, start of the table must be done through one 5/2 double solenoid valve, one flow regulator and a suitable power pack.
On model T.HI.345, start of the table must be done through two 5/2 double solenoid valve, one flow regulator and a suitable power pack.
The table is prearranged for the emergency stop control.



TECHNICAL FEATURES	
PLATE O/DIAMETER mm (inch)	320 (12.60")
DIRECTION OF ROTATION	CLOCK WISE
ANGULAR INDEXING ACCURACY	± 5"
INDEXING ACCURACY ON PLATE O/DIA mm (inch)	± 0.004 (± .00016")
PLATE TO BASE PARALLELISM mm (inch)	0.02 (.0008")
PLATE FLATNESS mm (inch)	0.02 (.0008")
PLATE LOCKING FORCE AT 30 bar (435 P.S.I.)	18000 N (3968 lbs)
PLATE DRIVING TORQUE AT 30 bar (435 P.S.I.)	350 Nm (258 ft.lb)
MAX MOMENT OF INERTIA kgm^2 (ft^2.lb)	20 474
WEIGHT Kgs (lbs)	88 (194)
STANDARD COLOUR-RAL	7035



Metric sizes

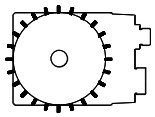
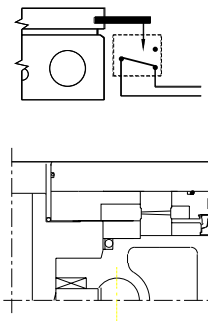
TABLE	CODE	INDEXINGS
QUICK STATION CHANGE		
T.HI.350	10560040	3-4-5-6-8-10 12-15-20-24-30 40-60-120

Table is supplied with 6 indexing settings to choose, Ex. 3-5-12-30-40-120

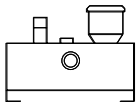
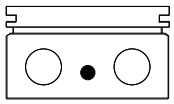
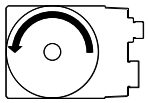
STATION CHANGE WITH DISTANCE PIECES		
T.HI.345	10560060	3-4-5-6-8-10 12-15-20-24-30 40-60-120

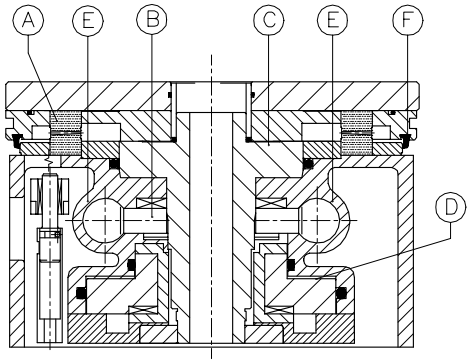
Table is supplied with one rack stop distance piece suitable for the selected n° of stations.

ACCESSORIES

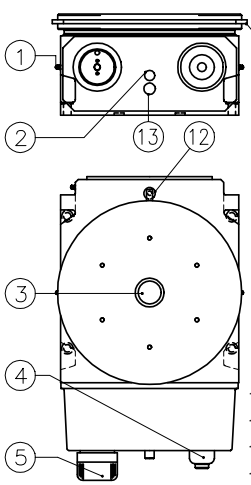
PLATE POSITION PINS	CODE
	28020250
PLATE POSITION MICRO-SWITCH	CODE
	28020200

ACCESSORIES

HYDRAULIC POWER PACK	CODE
	Please consult engineering office
MANUAL START BUTTON	CODE
	28020210
ANTI-CLOCKWISE ROTATION	CODE
	M9910050

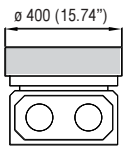
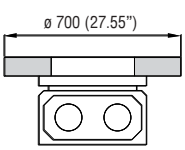
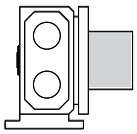


A HIRTH gear rings
B Front gears coupling
C Plate lifting piston
D Plate locking piston
E Plate rotation racks
F Sealing lip ring

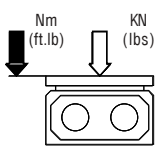
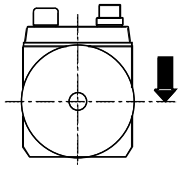
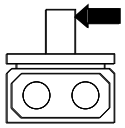


1 Grease nipples (3-off)
2 Selector wheel knob
3 Through center hole
4 Hydraulic damper
5 Indexings selector wheel
6 Electric cables inlet
7 Plate lift oil inlet
8 Plate drop and lock oil inlet
9 Plate rotation oil inlet
10 Rack return stroke oil inlet
11 Plate position pins code 28020250
12 Plate position switch code 28020200
13 Manual start button code 28020210 (optional)

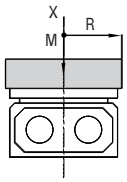
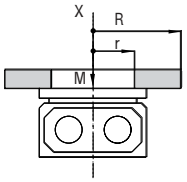
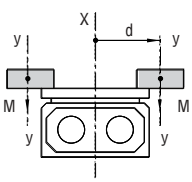
LIMIT LOAD ON PLATE

		
400 Kgs (883 lbs)	250 kgs (551 lbs)	120 kgs (265 lbs)

LIMIT STRESSES ON PLATE (25 bar)

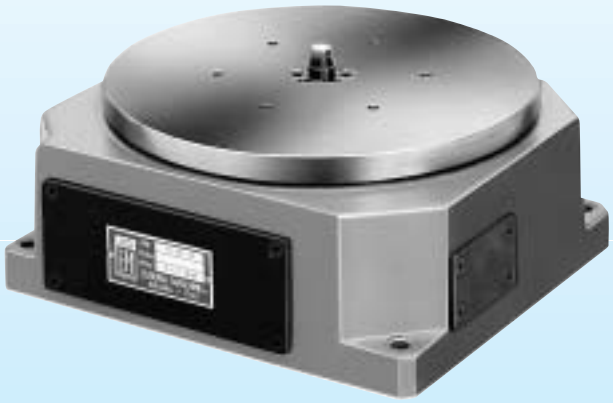
		
⬇1600 (1180) ⇩ 30 (6623)	1080 Nm (796 ft.lb)	680 Nm (501 ft.lb)

MOMENT OF INERTIA CALCULATION I= moment of inertia kgm^2 (ft^{2}lb) - M= mas kg (lbs) - R-r,d= radious m (ft)

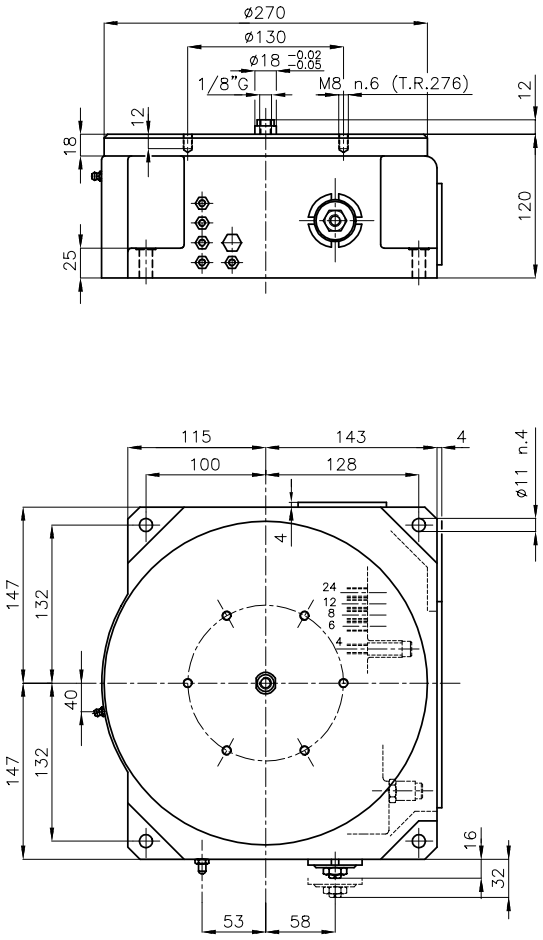
EVENLY DISTRIBUTED LOAD	RING TYPE LOAD DISTRIBUTION	FIXTURES LOADING
		
$I = 1/2 \cdot M \cdot R^2$	$I = 1/2 \cdot M \cdot (R^2 + r^2)$	$I = M \cdot d^2 \cdot n°$

The pneumatic indexing tables T.P.271-T.R.276 are suitable for chip removal transfer machines and all cases where it is necessary to transfer small parts.
The plate is driven by a very compact rack and pinion swinging device, which is totally contained within the table frame. This enables the optimum utilization of the space surrounding the table.
These tables are also fitted with a center swivel joint to supply air line to the fixtures mounted on the plate.
When indexing the 270 mm (10.63") dia plate does not lift.
The indexing setting device.is supplied as a standard..
In model T.R.276 the locking is guaranteed by a mechanical interlock which fits into the plate.
Tables can be supplied fitted with:
- pneumatic damper = FP
- hydraulic damper = FH

For 2 and 3 indexings, the "double index device" is required.
Please note the range of our standard accessories on the opposite page.



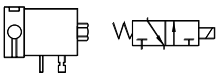
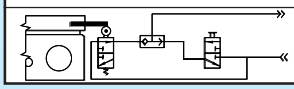
TECHNICAL FEATURES		
PLATE O/DIAMETER mm (inch)		270 (10.63")
DIRECTION OF ROTATION		CLOCK WISE
ANGULAR INDEXING ACCURACY	T.P.271	±60"
	T.R.276	±30"
INDEXING ACCURACY ON PLATE O/DIA mm (inch)	T.P.271	± 0.04 (± .002")
	T.R.276	± 0.02 (± .001")
PLATE TO BASE PARALLELISM mm (inch)	T.P.271	± 0.04 (± .002")
	T.R.276	± 0.03 (± .001")
PLATE FLATNESS mm (inch)	T.P.271	± 0.04 (± .002")
	T.R.276	± 0.03 (± .001")
PLATE DRIVING TORQUE AT 6 bar (87 P.S.I.)		50 Nm (37 ft.lb)
MAX MOMENT OF INERTIA kgm² (ft².lb)	FP	0.8 (19)
MAX MOMENT OF INERTIA kgm² (ft².lb)	FH	3.6 (85)
WEIGHT Kgs (lbs)		33 (72)
STANDARD COLOUR-RAL		7035



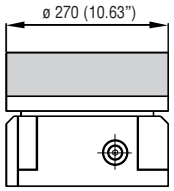
Metric sizes

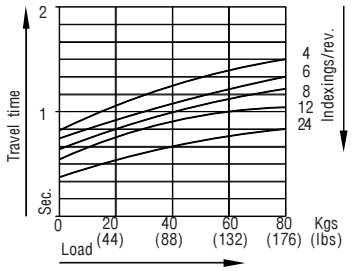
TABLE		INDEXINGS
MODEL	CODE	STANDARD
T.P.271.FP	10518010	4-6-8-12-24
T.P.271.FH	10518015	4-6-8-12-24
T.R.276.12.FP	10522010	4-6-12
T.R.276.12.FH	10522015	4-6-12
T.R.276.24.FP	10522020	4-6-8-12-24
T.R.276.24.FH	10522025	4-6-8-12-24

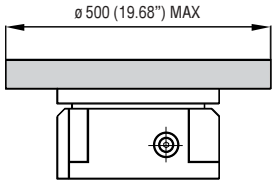
ACCESSORIES

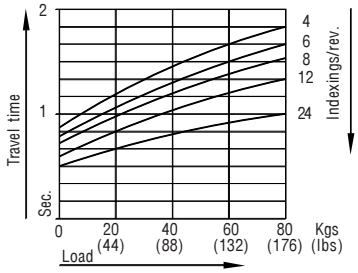
SOLENOID VALVE	CODE
	43525025
REMOTE START BUTTON	CODE
	Please consult engineering office
DOUBLE INDEX DEVICE	CODE
	28020405

TOTAL INDEXING TIME



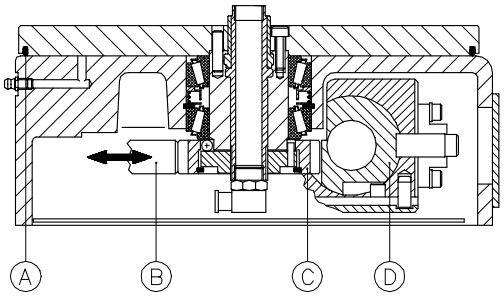






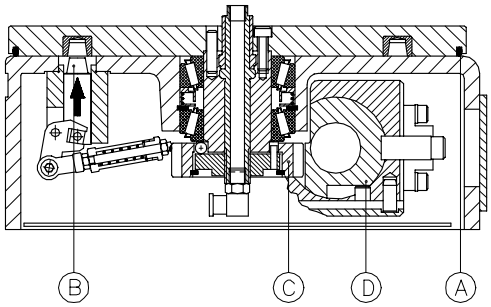
TOTAL TIME = PLATE TRAVEL + RACK RETURN (0.5 sec. 4-6 IND./0.3 sec. 8-12-24 IND.)

T.P.271



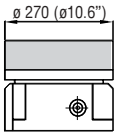
A Plate rotation sealing ring
B Retaining paw
C Rotation and index pinion
D Operating rack

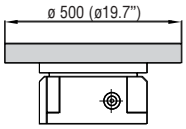
T.R.276



A Plate rotation sealing ring
B Retaining paw
C Rotation and index pinion
D Operating rack

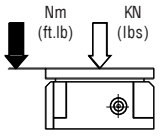
LIMIT LOAD ON PLATE

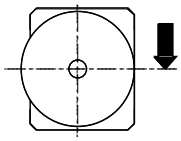




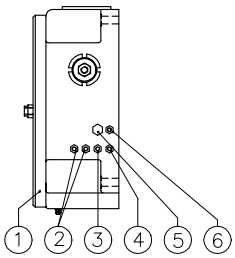
T.P.271.FP - T.R.276.FP	T.P.271.FH - T.R.276.FH	T.P.271.FP - T.R.276.FP	T.P.271.FH - T.R.276.FH
40 Kgs (88 lbs)	80 kgs (176 lbs)	25 kgs (55 lbs)	80 kgs (176 lbs)

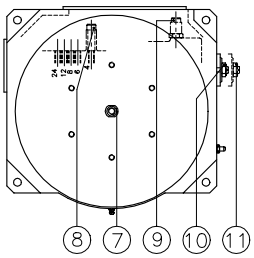
LIMIT STRESSES ON PLATE (6 bar)





T.P.271 - T.R.276	T.P.271 - T.R.276
⬇ 280 (206) ⇩ 10 (2208)	50 Nm (37 ft.lb)

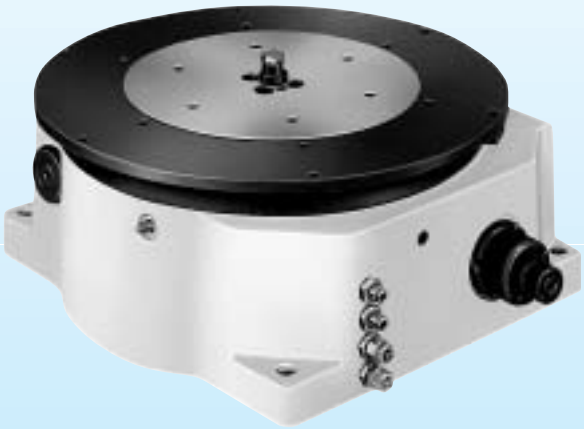




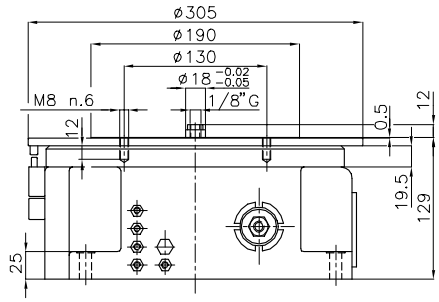
1 Rotating plate ø 270 mm.(10.63")
2 Table control ports
3 Main airline inlet
4 Center air supply inlet
5 Micro-switch bables inlet
6 Emergency stop signal inlet
7 Central air supply outlet
8 Stop block for 4-6-8-12-24 indexings
9 Plate speed adjusting screw
10 Pneumatic damper "FP"
11 Hydraulic damper "FH"

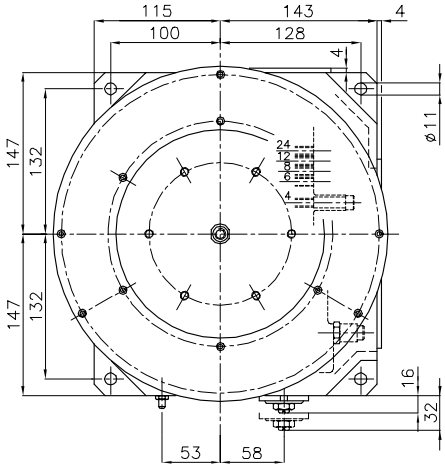
The pneumatic indexing table T.R.278 is suitable for rotary transfer machines and automatic assembly operations.
The plate is driven by a very compact rack and pinion swinging device, which is totally contained within the table frame. This enables the optimum utilization of the space surrounding the table.
Plate is positioned and locked by a tapered pin fitting into relative seats.
An anular circular area around the plate is also utilized to produce a pneumatic force to hold it firmly against the base.
Table T.P.278 is also fitted with a centre swivel joint to supply air line to the fixtures mounted on the plate.
The 305 mm (12.01") dia plate does not lift.
The indexing setting device is supplied as a standard.
Table can be fitted with:
- pneumatic damper =TR.278.FP
- hydraulic damper =TR.278.FH

For 2 and 3 indexings, the "double index device" is required.
Please note the range of our standard accessories on the opposite page.



TECHNICAL FEATURES	
PLATE O/DIAMETER mm (inch)	305 (12.01")
DIRECTION OF ROTATION	CLOCK WISE
ANGULAR INDEXING ACCURACY	± 30"
INDEXING ACCURACY ON PLATE O/DIA mm (inch)	± 0.02 (± .001")
PLATE TO BASE PARALLELISM mm (inch)	0.03 (.001")
PLATE FLATNESS mm (inch)	0.03 (.001")
PLATE LOCKING FORCE AT 6 bar (87 P.S.I.)	4400 N (971 lbs)
PLATE DRIVING TORQUE AT 6 bar (87 P.S.I.)	50 Nm (37 ft.lb)
MAX MOMENT OF INERTIA kgm² (ft².lb) 278.FP	0.8 (19)
MAX MOMENT OF INERTIA kgm² (ft².lb) 278.FH	3.6 (85)
WEIGHT Kgs (lbs)	34 (75)
STANDARD COLOUR-RAL	7035

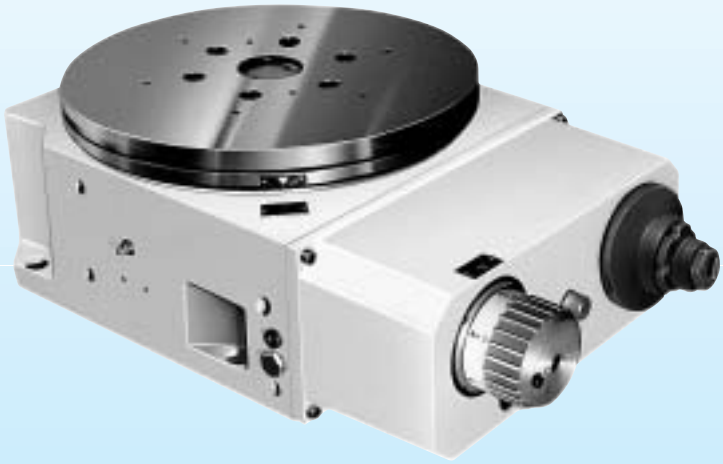




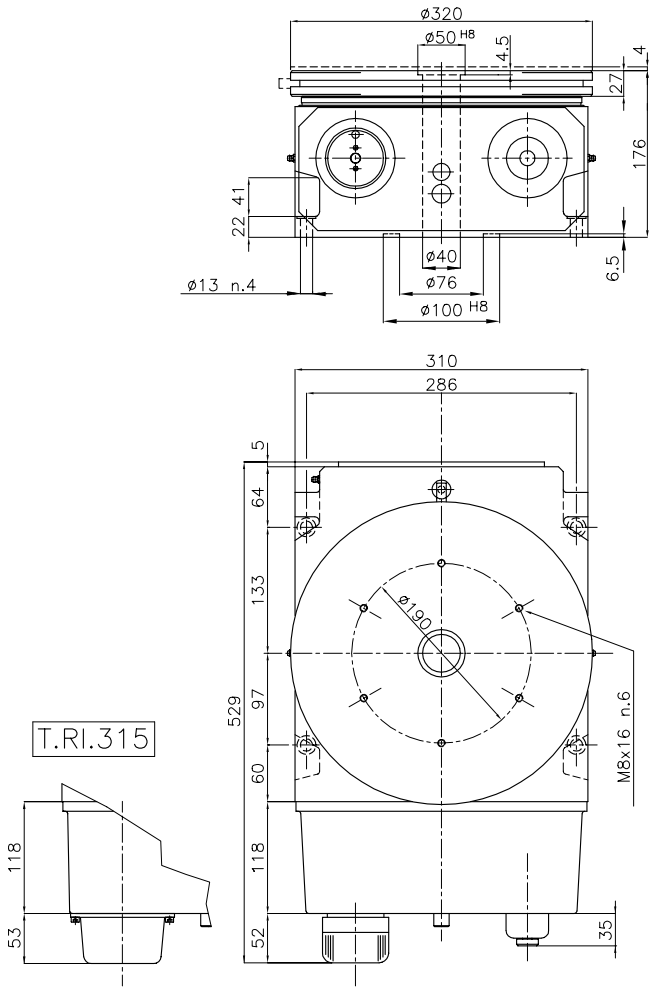
Metric sizes

The hydraulic table T.RI.320 is an essential part of rotary transfer machines for machining operations, or any other purpose.
The plate's drive is via double rack and pinion device and front gears coupling ensure a proper movement of the required load.
The plate is accurately positioned and held by two tapered pins fitting into diametrically opposite seats.
When stationary, the plate is hydraulically locked hard against the base to ensure that no vibration occurs during machining.
The 320 mm (12.60") dia plate rotates after lifting 4 mm (.157").
The table can feature:
- quick station change =T.RI.320
- station change with distance pieces =T.RI.315

T.RI.320-315 tables must be started through two 5/2 double solenoid valve, one flow regulator and a suitable power pack.
Manufacturing tollerances are same as model T.R.320.
Please note the range of our standard accessories on the opposite page.



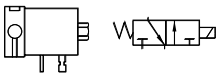
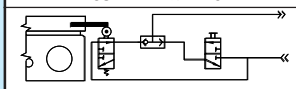
TECHNICAL FEATURES	
PLATE O/DIAMETER mm (inch)	320 (12.60")
DIRECTION OF ROTATION	CLOCK WISE
ANGULAR INDEXING ACCURACY	± 10"
INDEXING ACCURACY ON PLATE O/DIA mm (inch)	± 0.007 (± 0.00028)
PLATE TO BASE PARALLELISM mm (inch)	0.02 (.0008")
PLATE FLATNESS mm (inch)	0.02 (.0008")
PLATE LOCKING FORCE AT 30 bar (435 P.S.I.)	18000 N (3968 lbs)
PLATE DRIVING TORQUE AT 30 bar (435 P.S.I.)	350 Nm (258 ft.lb)
MAX MOMENT OF INERTIA kgm^2 (ft^2.lb)	20 (474)
WEIGHT Kgs (lbs)	85 (187)
STANDARD COLOUR-RAL	7035



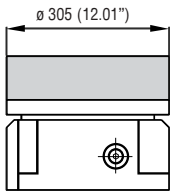
Metric sizes

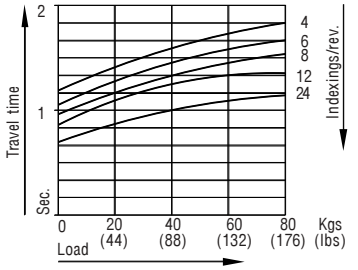
TABLE		INDEXINGS
MODEL	CODE	STANDARD
T.R.278.12.FP	10525110	4-6-12
T.R.278.12.FH	10525010	4-6-12
T.R.278.24.FP	10525120	4-6-8-12-24
T.R.278.24.FH	10525020	4-6-8-12-24

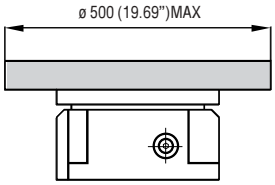
ACCESSORIES

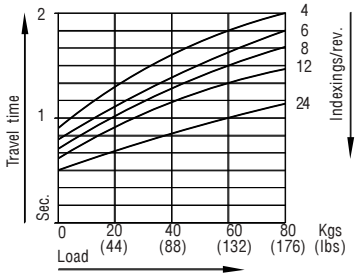
SOLENOID VALVE	CODE
	43525025
REMOTE START BUTTON	CODE
	Please consult engineering office
DOUBLE INDEX DEVICE	CODE
	28020400

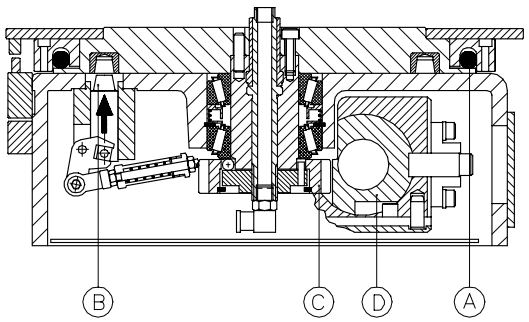
TOTAL INDEXING TIME









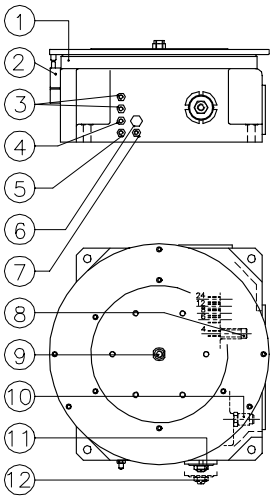


A Plate rotation sealing ring

B Retaining pin

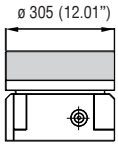
C Rotation and index pinion

D Operating rack

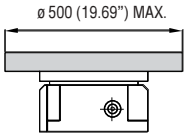


1 190/305mm (7.48"/12.01") Dia rotating plate
2 Double index device
3 Table control ports
4 Main airline inlet
5 Center air supply inlet
6 Emergency stop signal inlet
7 Micro-switch cables inlet
8 Stop block for 4-6-8-12-24 indexings
9 Central air supply outlet
10 Plate speed adjusting screw
11 Pneumatic damper "FP"
12 Hydraulic damper "FH"

LIMIT LOAD ON PLATE

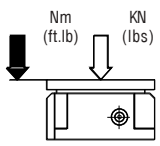


80 kgs (176 lbs)

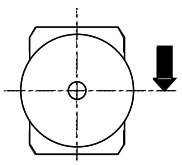


80 kgs (176 lbs)

LIMIT STRESSES ON PLATE (6 bar)

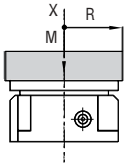
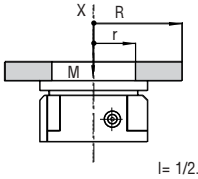
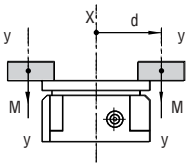


280 (206) 10 (2208)



200 Nm (146 ft.lb)

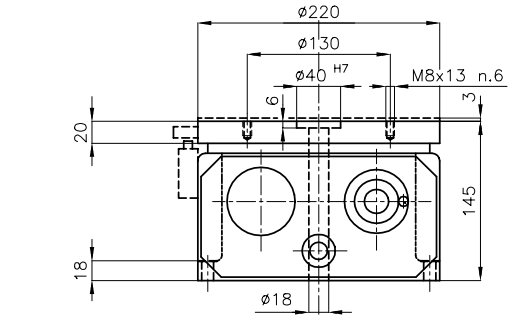
MOMENT OF INERTIA CALCULATION I= moment of inertia kgm^2 (ft^2.lb) - M= mas kg (lbs) - R-r,d= radious m (ft)

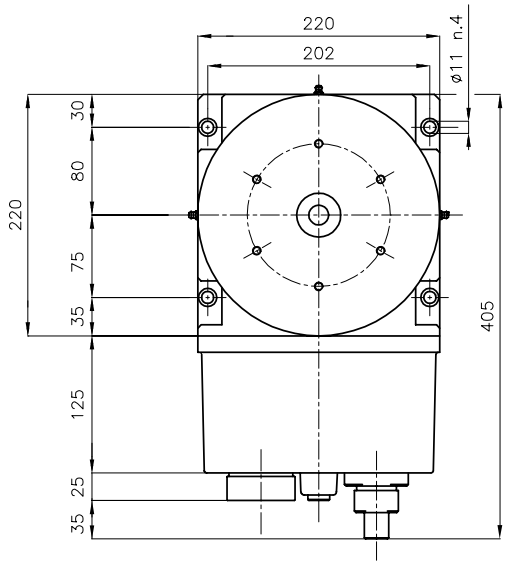
EVENLY DISTRIBUTED LOAD	RING TYPE LOAD DISTRIBUTION	FIXTURES LOADING
		
$I = 1/2.\ M\ .\ R^2$	$I = 1/2.\ M\ .\ (R^2 + r^2)$	$I = M\ .\ d^2.\ n°$

The pneumatic table T.R.222 is an essential part of rotary transfer machines for machining operations or any other purpose.
The plate's drive is via double rack and pinion device and front gears coupling ensure a proper movement of the required load.
The plate is accurately positioned and held by two tapered pins fitting into diametrically opposite seats.
When stationary, the plate is pneumatically locked hard against the base to ensure that no vibration occurs during machining.
The 220 mm (8.66") dia plate rotates after lifting 3 mm (.118").
Change of indexing is done by means of an external setting wheel.
Table configurations:
- pneumatically operated with electric controls = T.RPE.222
- pneumatically operated and controlled = T.RPP.222

On model T.RPE.222, start of the table must be done through one a double solenoid valve.
T.RPP.222 model is fitted with manual start button as standard.
Please note the range of our standard accessories on the opposite page.

TECHNICAL FEATURES	
PLATE O/DIAMETER mm (inch)	220 (8.66")
DIRECTION OF ROTATION	CLOCK WISE
ANGULAR INDEXING ACCURACY	± 10"
INDEXING ACCURACY ON PLATE O/DIA mm (inch)	± 0.005 (± .00019")
PLATE TO BASE PARALLELISM mm (inch)	0.03 (.0012")
PLATE FLATNESS mm (inch)	0.02 (.0008")
PLATE LOCKING FORCE AT 6 bar (87 P.S.I.)	4000 N (883 lbs)
PLATE DRIVING TORQUE AT 6 bar (87 P.S.I.)	50 Nm (37 ft.lb)
MAX MOMENT OF INERTIA kgm² (ft².lb) T.RPE / T.RPP	7.5 (178)
WEIGHT Kgs (lbs)	38 (84)
STANDARD COLOUR-RAL	7035





Metric sizes

EUROMA®

T.R.320

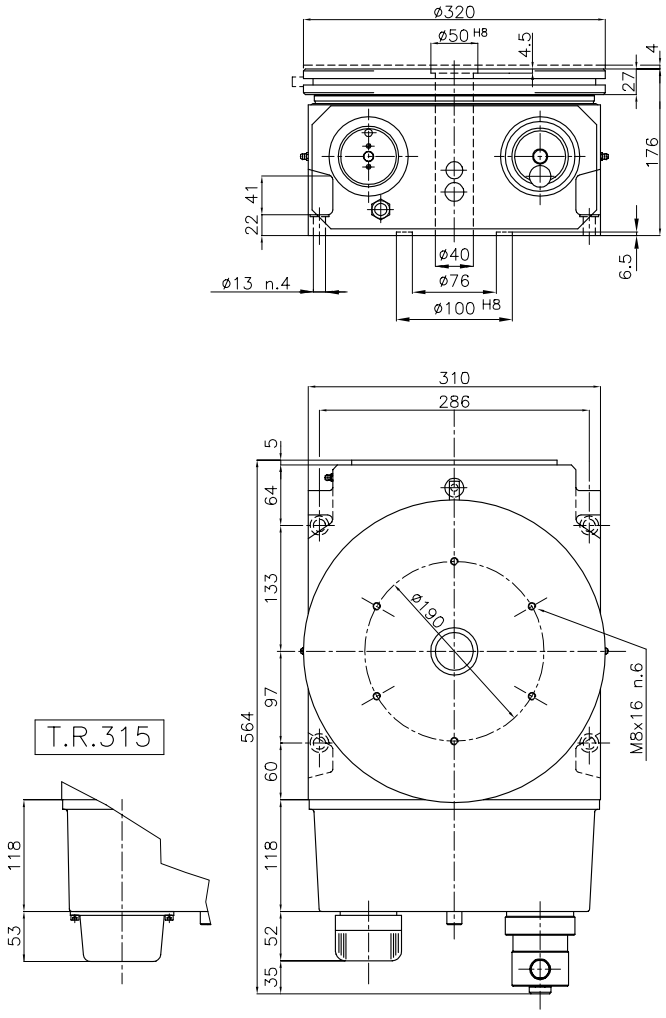
T.R.315

INDEXING TABLE

The pneumatic table T.R.320 is an essential part of rotary transfer machines for machining operations or any other purpose.
The plate's drive is via double rack and pinion device and front gears coupling ensure a proper movement of the required load.
The plate is accurately positioned and held by two tapered pins fitting into diametrically opposite seats.
When stationary, the plate is pneumatically locked hard against the base to ensure that no vibration occurs during machining. The 320 mm (12.60") dia plate rotates after lifting 4 mm (.157").
The table can feature:
- quick station change,
  DE.20 hydraulic damper = T.R.320
- station change with distance pieces,
  DE.20 hydraulic damper = T.R.315

On models T.R.320 - 319, start of the table must be done through one 5/2 double solenoid valve.
On models T.R.315 - 314, start of the table must be done through two 5/2 double solenoid valves.
Table is also available in a totally pneumatic version (model T.RPP.320). Please note the range of our standard accessories on the opposite page. The table is prearranged for the emergency stop control.

TECHNICAL FEATURES		
PLATE O/DIAMETER mm (inch)		320 (12.60")
DIRECTION OF ROTATION		CLOCK WISE
ANGULAR INDEXING ACCURACY		± 10"
INDEXING ACCURACY ON PLATE O/DIA mm (inch)		± 0.007 (± .00028)
PLATE TO BASE PARALLELISM mm (inch)		0.02 (.0008")
PLATE FLATNESS mm (inch)		0.02 (.0008")
PLATE LOCKING FORCE AT 6 bar (87 P.S.I.)		15800 N (3488 lbs)
PLATE DRIVING TORQUE AT 6 bar (87 P.S.I.)		100 Nm (74 ft.lb)
MAX MOMENT OF INERTIA kgm² (ft².lb)	T.R.320-315	20 (474)
	T.R.319-314	10 (237)
WEIGHT Kgs (lbs)		85 (187)
STANDARD COLOUR-RAL		7035

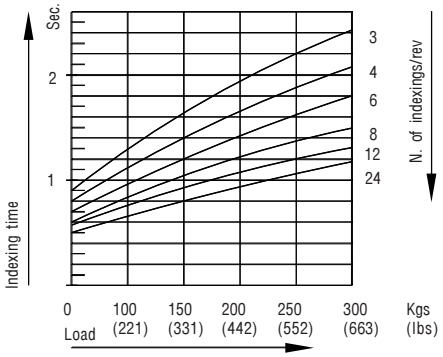


Metric sizes

TABLE	CODE	INDEXINGS
QUICK STATION CHANGE - DE.20 HYDRAULIC DAMPER		
T.RPE.320.12	10535010	3-4-6-12
T.RPE.320.24	10535025	3-4-6-8-12-24
T.RPE.320.14	10535015	7-14
T.RPE.320.18	10535020	3-6-9-18
T.RPE.320.30	10535030	3-5-6-10-15-30
T.RPE.320.10	10535037	3-4-5-6-8-10
T.RPP.320.12	10535040	3-4-6-12
T.RPP.320.24	10535055	3-4-6-8-12-24
T.RPP.320.14	10535045	17-14
T.RPP.320.18	10535050	3-6-9-18
T.RPP.320.30	10535060	3-5-6-15-30
T.RPP.320.10	10535067	3-4-5-6-8-10
STATION CHANGE WITH DISTANCE PIECES -DE.20 HYDRAULIC DAMPER		
T.RPE.315.12	10533010	3-4-6-12
T.RPE.315.24	10533012	3-4-6-8-12-24
T.RPE.315.14	10533014	7-14
T.RPE.315.18	10533016	3-6-9-18
T.RPE.315.30	10533018	3-5-6-10-15-30
T.RPE.315	10533020	3-4-5-6-8-10

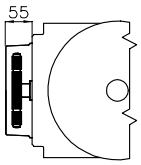
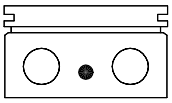
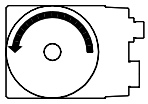
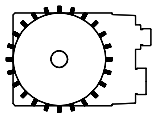
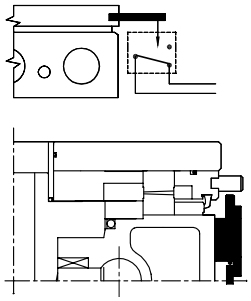
OVERALL CYCLE TIME

LOAD TYPE "B"

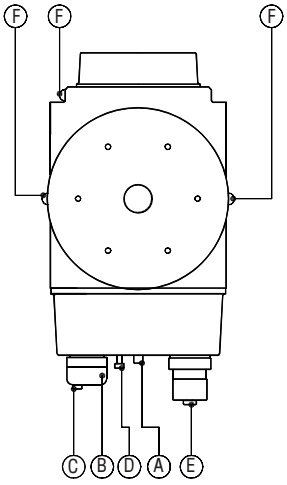


TOTAL TIME = PLATE TRAVEL + RACK RETURN
(0.5 sec. 4-6 IND./0.3 sec. 8-12-24 IND.)

ACCESSORIES

FITTED SOLENOID VALVE	CODE
	28020220 (solo per 320)
MANUAL START BUTTON	CODE
	28020210
ANTI-CLOCKWISE ROTATION	CODE
	M9910050
PLATE POSITION PINS	CODE
	28020250
PLATE POSITION MICRO-SWITCH	CODE
	28020200

INITIAL SETTING



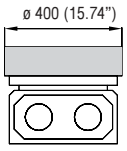
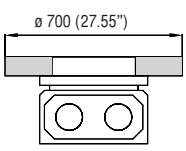
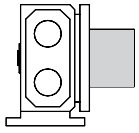
1- **Indexings change (TR.320 - TR.319)**: when plate is stationary, press and hold button A, rotate wheel B and lock it with screw C.

2- **Plate speed (TR.320 - TR.319):** adjust knurrled knob D.

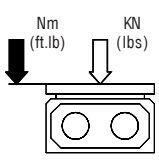
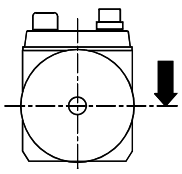
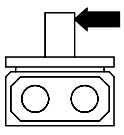
3- **Plate damper:** set it by referring to dial E, on the damper.

4- **Lubrification:** through grease nipples F.

LIMIT LOAD ON PLATE

A	B	C
		
400 Kgs (883 lbs)	250 (551) 150 (331)	120 kgs (265 lbs)

LIMIT STRESSES ON PLATE (6 bar)

		
1400 (1031) 30 (6623)	600 Nm (442 ft.lb)	600 Nm (442 ft.lb)

MOMENT OF INERTIA CALCULATION I= moment of inertia kgm^2 (ft^2.lb) - M= mass kg (lbs) - R-r,d= radious m (ft)

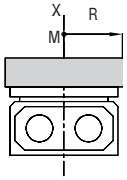
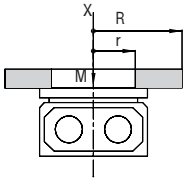
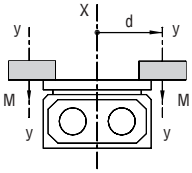
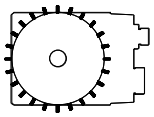
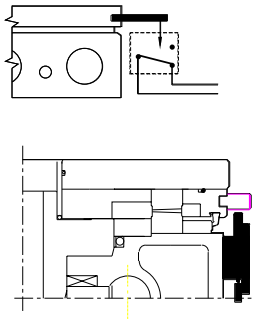
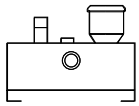
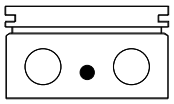
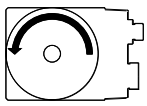
EVENLY DISTRIBUTED LOAD	RING TYPE LOAD DISTRIBUTION	FIXTURES LOADING
		
$I = 1/2 \cdot M \cdot R^2$	$I = 1/2 \cdot M \cdot (R^2 + r^2)$	$I = M \cdot d^2 \cdot n°$

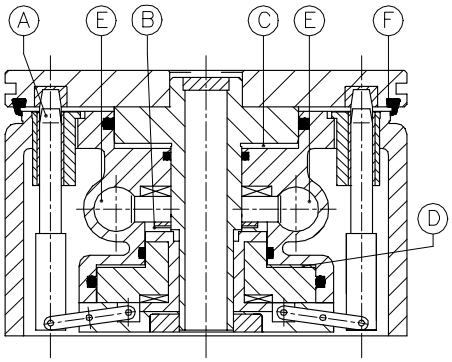
TABLE	CODE	INDEXINGS
QUICK STATION CHANGE		
T.RI.320.12	10535250	3-4-6-12
T.RI.320.24	10535252	3-4-6-8-12-24
T.RI.320.14	10535254	7-14
T.RI.320.18	10535256	3-6-9-18
T.RI.320.30	10535258	3-5-6-10-15-30
T.RI.320.10	10535300	3-4-5-6-8-10
STATION CHANGE WITH DISTANCE PIECES		
T.RI.315.12	10533030	3-4-6-12
T.RI.315.24	10533032	3-4-6-8-12-24
T.RI.315.14	10533034	7-14
T.RI.315.18	10533036	3-6-9-18
T.RI.315.30	10533038	3-5-6-10-15-30
T.RI.315.10	10533040	3-4-5-6-8-10

ACCESSORIES

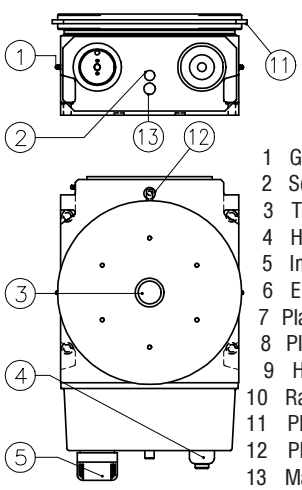
PLATE POSITION PINS	CODE
	28020250
PLATE POSITION MICRO-SWITCH	CODE
	28020200

ACCESSORIES

HYDRAULIC POWER PACK	CODE
	Please consult engineering office
MANUAL START BUTTON	CODE
	28020210
ANTI-CLOCKWISE ROTATION	CODE
	M9910050

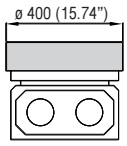
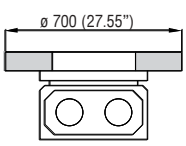
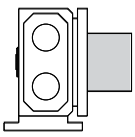


A Tapered positioning pins
B Front gears coupling
C Plate lifting piston
D Plate locking piston
E Plate rotation racks
F Sealing lip ring

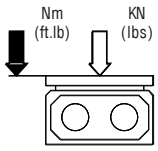
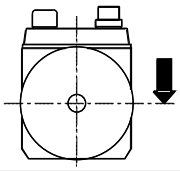
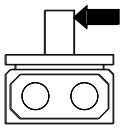


1 Gease nipples (3-off)
2 Selector wheel button
3 Through center hole
4 Hydraulic damper
5 Indexings selector wheel
6 Electrical connection port
7 Plate lift oil inlet
8 Plate drop/lock oil inlet
9 Hydraulic connection ports
10 Rack return stroke oil inlet
11 Plate position pins code 28020250
12 Plate position micro-switch code 28020200
13 Manual start button code 28020210 (optional)

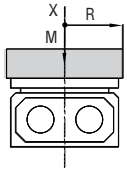
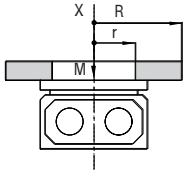
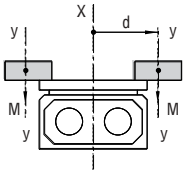
LIMIT LOAD ON PLATE

		
T.RI.320 - 315	T.RI.320 - 315	T.RI.320 - 315
400 Kgs (883 lbs)	250 kgs (551 lbs)	120 kgs (265 lbs)

LIMIT STRESSES ON PLATE (25 bar)

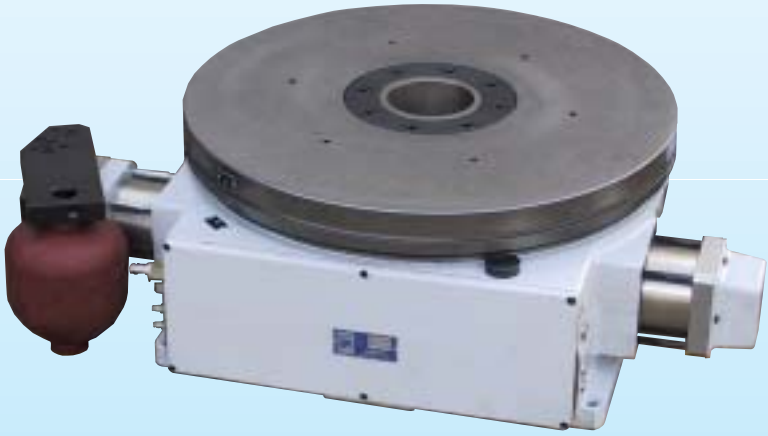
		
T.RI.320 - 315	T.RI.320 -315	T.RI.320 - 315
⬇1600 (1180) ⇩30 (6623)	680 Nm (501 ft.lb)	680 Nm (501 ft.lb)

MOMENT OF INERTIA CALCULATION I= moment of inertia kgm^2 (ft^2.lb) - M= mas kg (lbs) - R-r,d= radious m (ft)

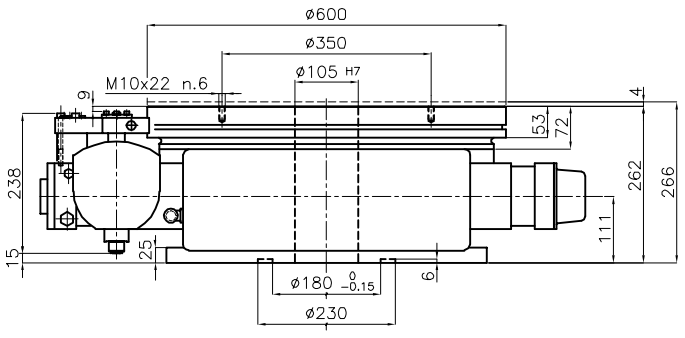
EVENLY DISTRIBUTED LOAD	RING TYPE LOAD DISTRIBUTION	FIXTURES LOADING
		
I= 1/2 . M . R²	I= 1/2 . M . (R²+r²)	I= M . d² . n°

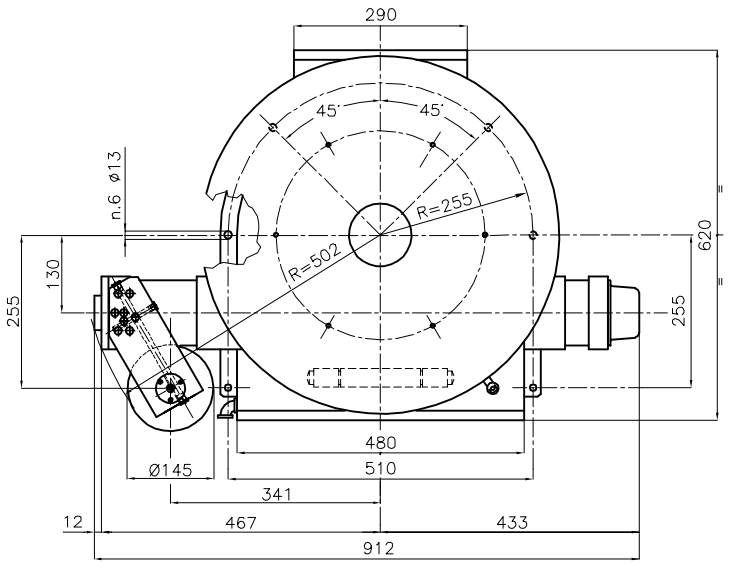
The pneumatic table T.R.600 is an essential part of rotary transfer machines for machining operations where heavy and large components must be indexed.
The plate's drive is via single rack and pinion device and front gears coupling ensure a proper movement of the required load.
The plate is accurately positioned and held by two tapered pins fitting into diametrically opposite seats.
When stationary, the plate is pneumatically locked hard against the base to ensure that no vibration occurs during machining.
Plate's rotation speed is controlled in its full length by a pneumo-hydraulic unit.
The 600 mm (23.62") dia plate rotates after lifting 4 mm (.157").
Table configurations:
- pneumatically operated with electric controls = T.RPE.600
- pneumatically operated and controlled = T.RPP.600

On model T.RPE.600, start of the table must be done through one 5/2 double solenoid valve.
T.RPP.600 model is fitted with manual start button as standard.
Please note the range of our standard accessories on the opposite page.



TECHNICAL FEATURES	
PLATE O/DIAMETER mm (inch)	600 (23.62")
DIRECTION OF ROTATION	CLOCK WISE
ANGULAR INDEXING ACCURACY	± 10"
INDEXING ACCURACY ON PLATE O/DIA mm (inch)	± 0.015 (± .00059")
PLATE TO BASE PARALLELISM mm (inch)	0.03 (.0012")
PLATE FLATNESS mm (inch)	0.03 (.0012")
PLATE LOCKING FORCE AT 6 bar (87 P.S.I.)	35400 N (7815 lbs)
PLATE DRIVING TORQUE AT 6 bar (87 P.S.I.)	350 Nm (258 ft.lb)
MAX MOMENT OF INERTIA kgm² (ft².lb) T.RPE / T.RPP	100 (237)
WEIGHT Kgs (lbs)	280 (618)
STANDARD COLOUR-RAL	7035

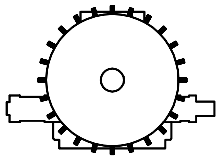
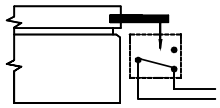




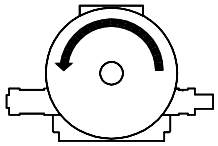
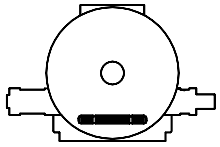
Metric sizes

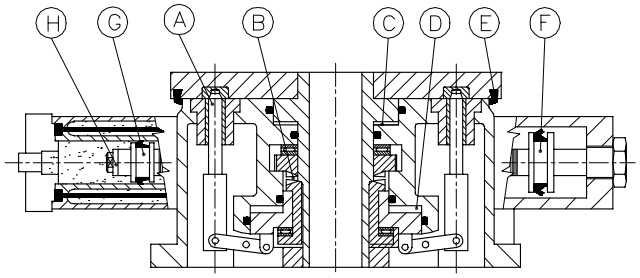
TABLE		INDEXINGS
MODEL	CODE	STANDARD
T.RPE.600.24	10540035	3-4-6-8-12-24
T.RPE.600.10	10540010	5-10
T.RPE.600.14	10540020	7-14
T.RPE.600.16	10540025	4-8-16
T.RPP.600.24	10540065	3-4-6-8-12-24
T.RPP.600.10	10540040	5-10
T.RPP.600.14	10540050	7-14
T.RPP.600.16	10540055	4-8-16

ACCESSORIES

PLATE POSITION PINS	CODE
	28020250
PLATE POSITION MICRO-SWITCH	CODE
	28020290

ACCESSORIES

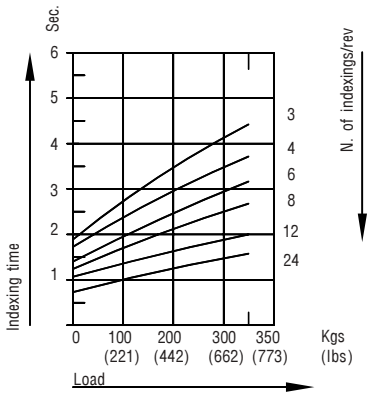
COUNTER-CLOCKWISE ROTATION	CODE
	M9910050
FITTED SOLENOID VALVE	CODE
	28020220



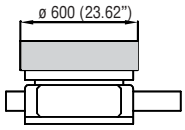
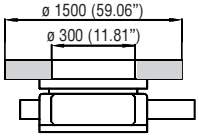
A Tapered positioning pins
B Front gears coupling
C Plate lifting piston
D Plate locking piston
E Sealing lip ring
F Plate rotation control piston
G plate rotation adjustable pneumo-hydraulic unit
H Hydraulic damper

OVERALL CYCLE TIME (load type "B")

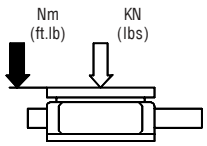
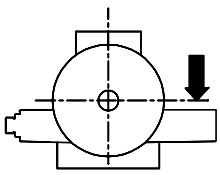
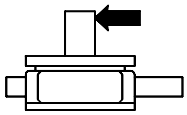
TOTAL TIME = PLATE TRAVEL + RACK RETURN (0.5 sec. 4-6 IND./0.3 sec. 8-12-24 IND.)



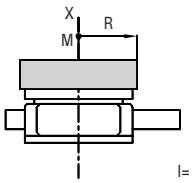
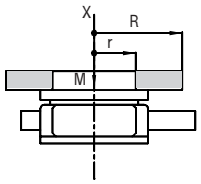
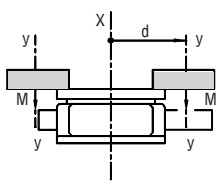
LIMIT LOAD ON PLATE

A	B
	
900 Kgs (1988 lbs)	350 kgs (773 lbs)

LIMIT STRESSES ON PLATE (6 bar)

		
10000 (7370) 3500 (772627)	2000 Nm (1474 ft.lb)	8000 Nm (5896 ft.lb)

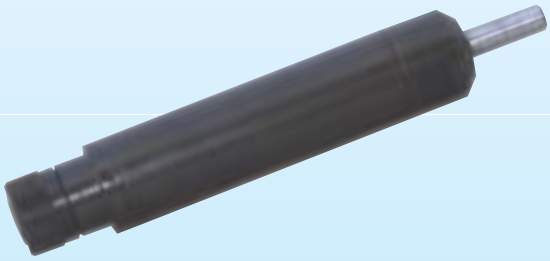
MOMENT OF INERTIA CALCULATION I= moment of inertia kgm^2 (ft^2.lb) - M= mass kg (lbs) - R-r,d= radious m (ft)

EVENLY DISTRIBUTED LOAD	RING TYPE LOAD DISTRIBUTION	FIXTURES LOADING
		
$I = 1/2 \cdot M \cdot R^2$	$I = 1/2 \cdot M \cdot (R^2 + r^2)$	$I = M \cdot d^2 \cdot n°$

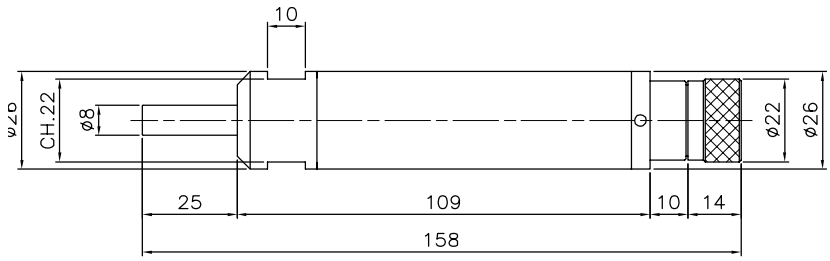
When stopping a moving load, you must guarantee that the mechanical/pneumatic/etc. components are not damaged. To do this in a proper way, a shock absorber or damper is far more valid an alternative than mere springs and cushions. The FR.25 pneumatic damper guarantees the indexing table comes to a soft and gentile arrest which is fundamental for precision positioning.

The FR.25 is offered on Indexing Table models 271-276-278-222.

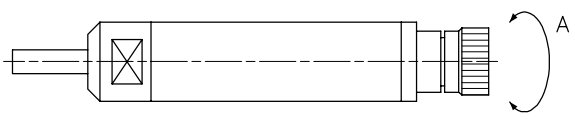
The damper can be refilled using our oil E.KS.250 (code 44030020 for 1 lt.)



TECHNICAL FEATURES	
MODEL	FR.25
STROKE (mm)	25
MAX ENERGY PER CYCLE (Nm)	74
MAX ENERGY PER HOUR (Nm)	70000
MAX STOPPING FORCE (N)	4440
MAX THRUST (N)	1330
WEIGHT (g)	285
CODE	10620020



FEED REGULATOR

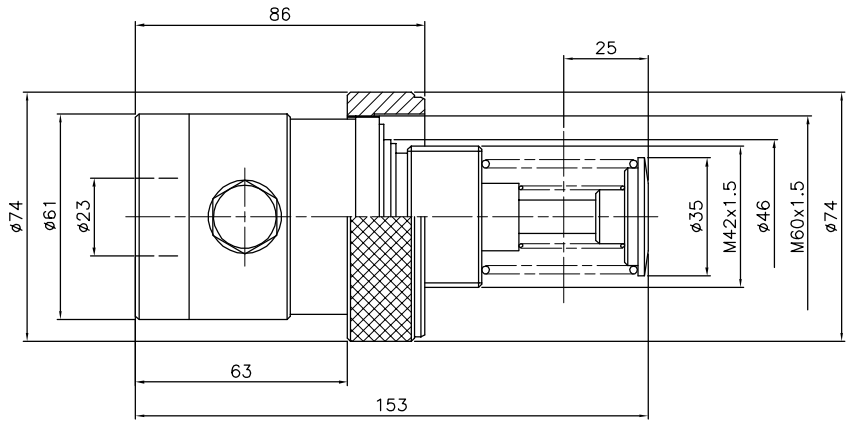


When stopping a moving load, you must guarantee that the mechanical/pneumatic/etc. components are not damaged. To do this in a proper way, a shock absorber or damper is far more valid an alternative than mere springs and cushions. The DE.20 pneumatic damper guarantees the indexing table comes to a soft and gentile arrest which is fundamental for precision positioning.

The DE.20 is offered on Indexing Table models 350-345-320-315.

The damper can be refilled using our oil E.KS.250 (code 44030020 for 1 lt.)

TECHNICAL FEATURES	
MODEL	DE.20
STROKE (mm)	25
MAX ENERGY PER CYCLE (Nm)	260
MAX ENERGY PER HOUR (Nm)	126000
MAX STOPPING FORCE (N)	13000
MAX THRUST (N)	2890
WEIGHT (g)	0.9
CODE	10620010



FEED REGULATOR