

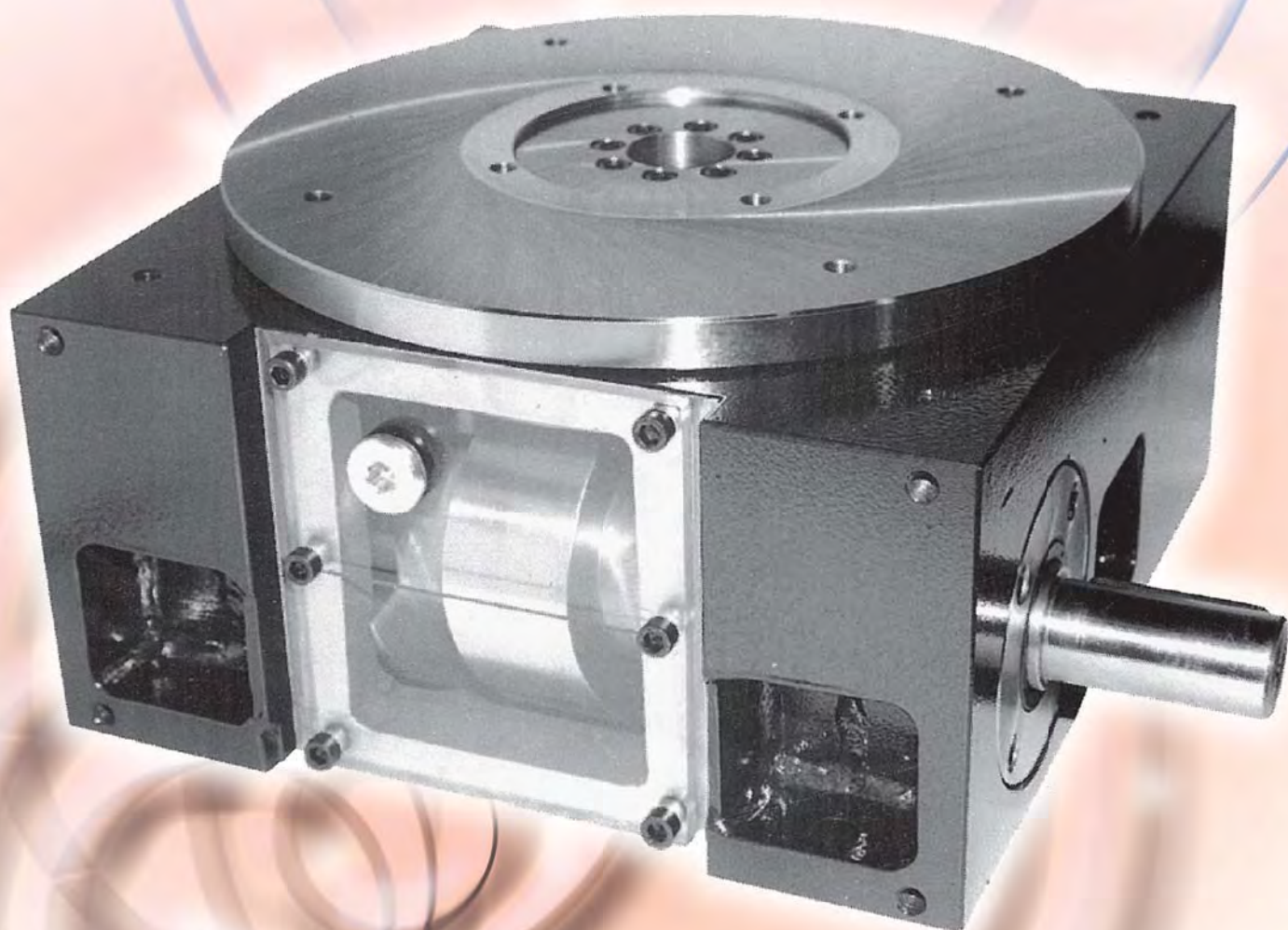
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ITALPLANT

transfer systems



MK 1



Globocilindrical® CAM indexers

Mk1 Globocylindrical Cam Indexing Table

Scope

The Mk1 Tables have been designed and developed for those applications requiring an accurate, reliable and moderately priced indexing mechanisms.

Features

The indexing mechanism consists of two main elements :

- The Turret, carrying heavy duty high precision roller followers. The number of followers depends on the number of stops. At least two followers are in contact, and preloaded, with the cam profile.

- The Cam, driving the turret. The cam is cylindrical and the pitch curve of its slot depends on the MOTION LAW.

A portion of the pitch curve is straight ; during the rotation of the cam this portion does not rotate the turret and the output shaft remains stationary. The cam angle of this straight path is defined as DWELL ANGLE. The other portion of the pitch curve rotates the output shaft and is defined as INDEX ANGLE.

The path of the pitch curve causing rotation is defined mathematically in order to get the best dynamic performance of the load.

We are quite prepared to meet special requirements from our customers.

Standard motion laws

The following motion laws are the most used in indexing mechanisms because of their superior kinematic and dynamic response. These laws are described by continuous velocity and acceleration functions having initial and final values equal to zero.

These laws are the following :

CYCLOIDAL : The curve has a relatively high peak acceleration but the generated vibration is the lowest obtainable from all cam laws because it has no steps.

MODIFIED SINE : The acceleration of this curve consists of a sinusoidal portion followed by half a cosine curve. This motion law has the smoothest blending between the acceleration and deceleration peaks.

MODIFIED TRAPEZOIDAL : Derived from the modified sine with a constant acceleration stretch inserted in the middle. It has the lowest acceleration peak of all standard motion laws.

MODIFIED SINE WITH CONSTANT VELOCITY STRETCH : Derived from the modified sine by inserting a constant velocity stretch of appropriate length in the middle ; on this stretch the acceleration is zero. The mean peak velocity is reduced. This law is useful for long stroke applications.

Velocity limits

Normally 250 cycles/min.

For applications above 100 cycles/min please contact our office.

Table type selection

Modern automatic machinery needs maximum possible dwell times and minimum possible indexing time. However, lengthening the indexing time improves the overall performance by reducing the elastic vibrations and the torque necessary to overcome the inertia because the motion law becomes smoother and accelerations as well as velocities are lower.

Because the torques depending on the inertia are directly proportional to the square of the number of cycles per minute and inversely proportional to the square of the indexing angle the best solution is a compromise between indexing time and dwell time.

Precision

During dwell the output shaft is positioned with tolerance of ± 0.025 mm measured on the working pitch diameter of the rollers. The precision of the mechanism components when stopped during dwell time depends also on the design.

Note

A catalogue on diskette is available on request.

NEW MK 1 RANGE

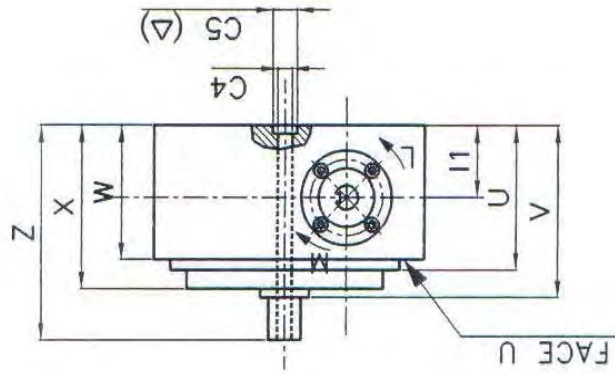
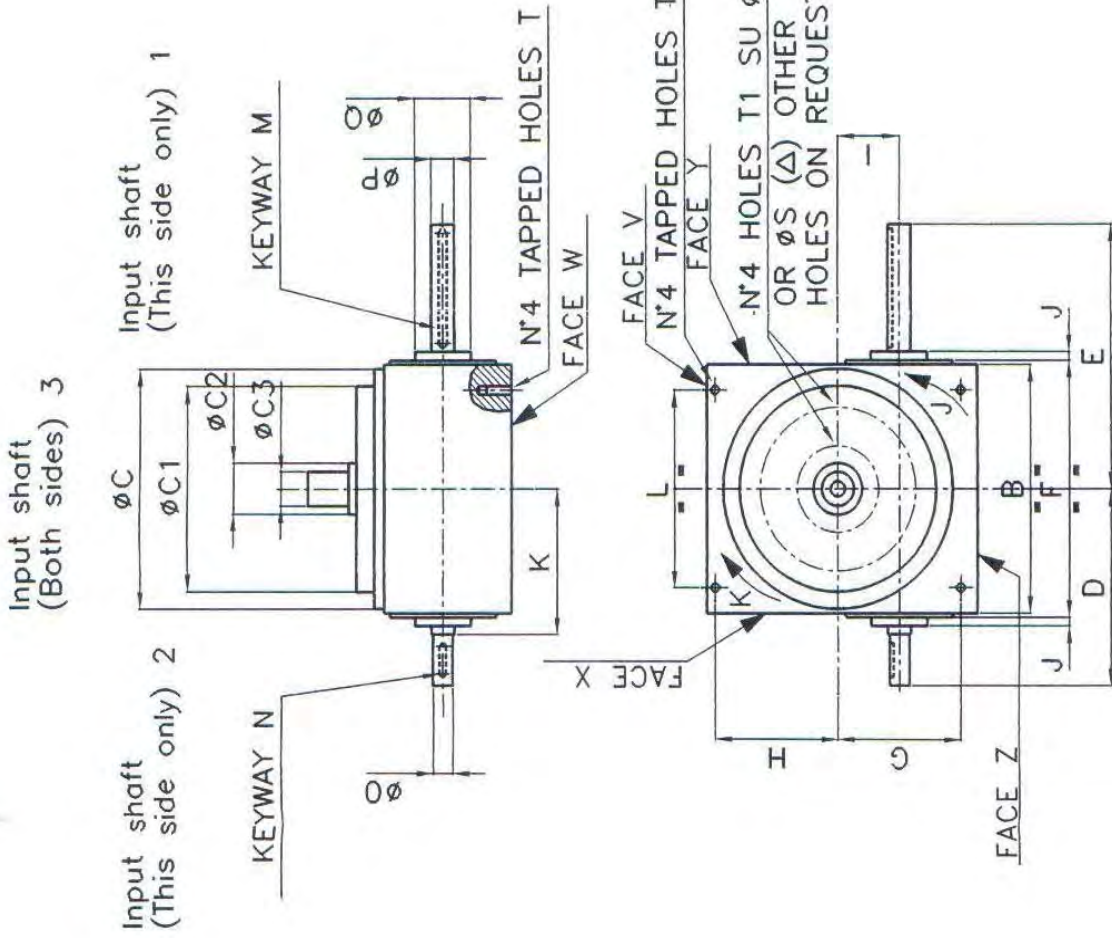
1. GLOBOCYLINDRICAL CAM (PATENT PENDING)
2. LARGE OUTPUT FLANGE (274 mm DIA ON MK1-80)
3. BOX-LIKE HOUSING
4. NITRIDED CAM ON REQUEST
5. HIGH RIGIDITY CAST IRON HOUSING
6. HIGH CAPACITY ROLLER FOLLOWERS (1" DIA. ON MK1-80)
7. TOTALLY INTERCHANGEABLE WITH OTHER PRODUCERS INDEXERS
8. EXCLUSIVE FAST REPLACEMENT OF ROLLER FOLLOWERS
9. TAPER ROLLER BEARINGS
10. TWO PERSPEX INSPECTION COVERS



ITALPLANT

**GLOBOCYLINDRICAL CAM
INDEXING TABLES**

MK1-37.5



KEYWAY WILL BE IN THIS POSITION WHEN CAM IS ON THE CENTRE OF DWELL PERIOD

TABLE POSITION SHOWN DURING DWELL

"Δ" OPTIONAL ON REQUEST

DIMENSIONS

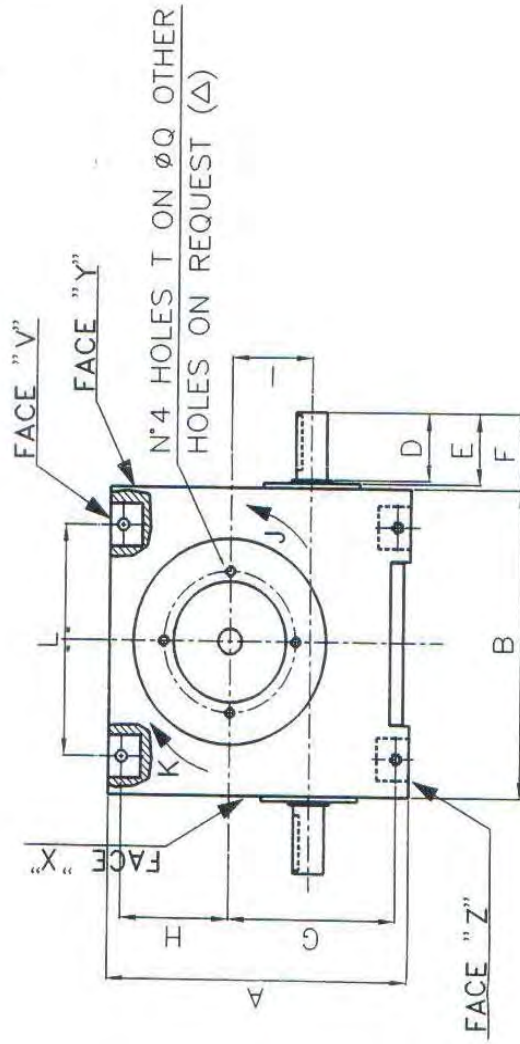
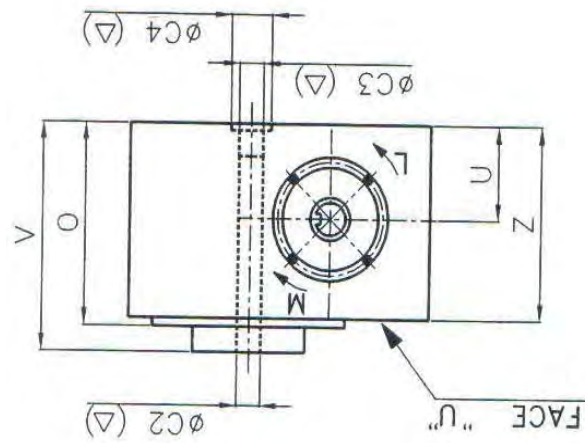
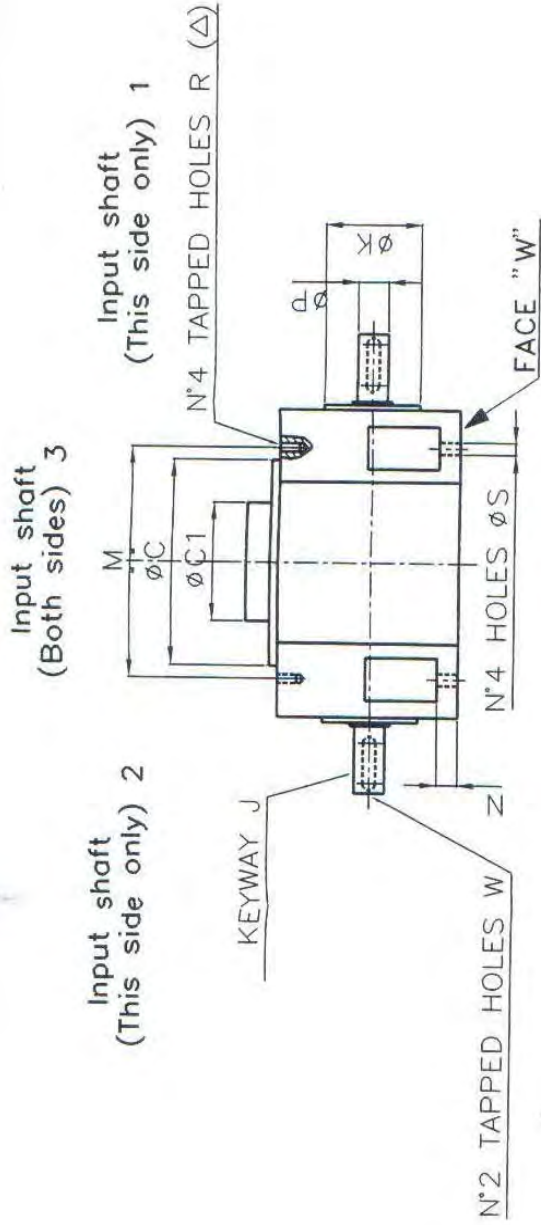
	MK1 37,5
A	165
B	145
C	140 h7
C1	120
C2	30 h7
C3	20 h7
C4	9 H11
C5	15 H7
D	115
E	155
F	150
G	75
H	70
I	37,5
I1	42
J	5
K	85
L	115
M	5x5x70
N	4x4x25
O	12 K6
P	14 K6
Q	34 f7
R	95
S	50
T	M6x15
T1	M5x12
U	84
V	100
W	78
X	95
Z	125



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**GLOBOCYLINDRICAL CAM
INDEXING TABLES**

**MK1-50
MK1-210**



KEYWAY WILL BE IN THIS POSITION WHEN CAM IS ON THE CENTRE OF A DWELL PERIOD

TABLE POSITION SHOWN DURING DWELL

" Δ " OPTIONALS ON REQUEST

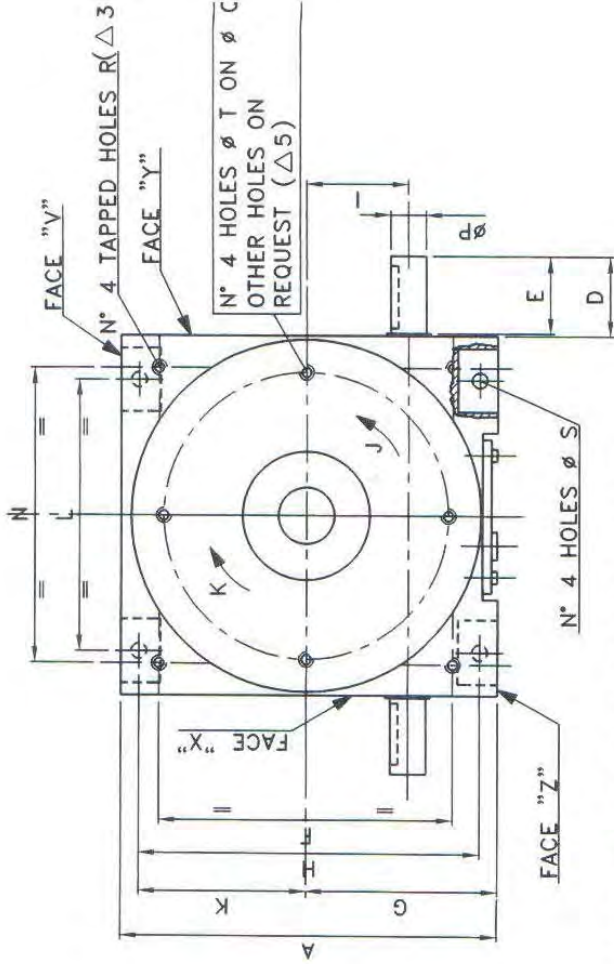
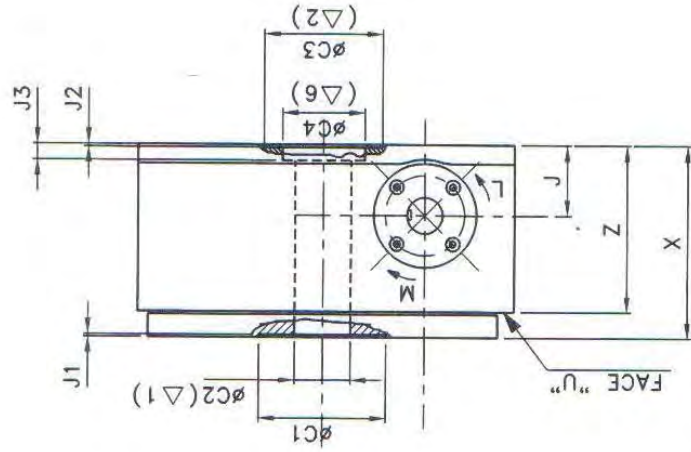
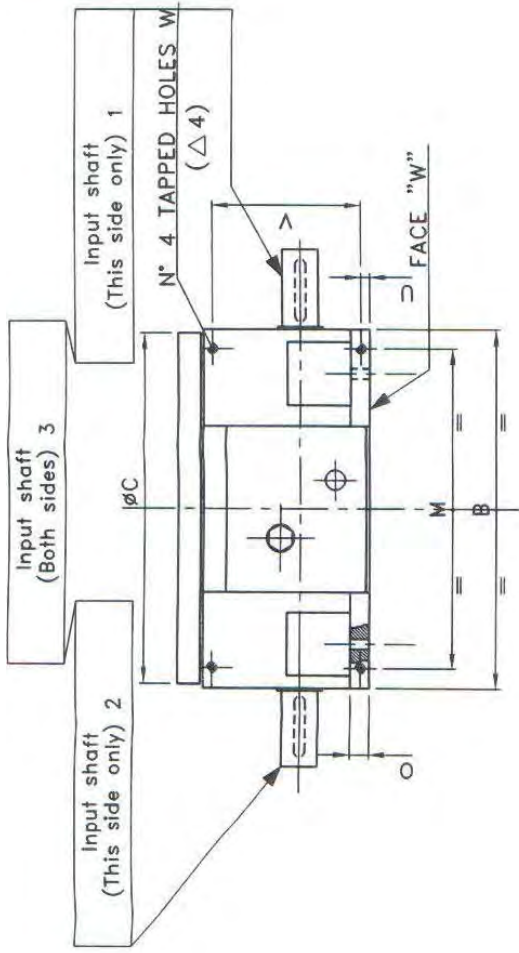
DIMENSIONS

	MK1 50	MK1 210
A	187	650
B	180	600
C	120	510
C1	70 h7	200 h7
C2	14.8	58.9
C3	15	60
C4	25	100
D	40	100
E	42	102
F	45	105
G	104	335
H	67	265
I	50	210
J	6x6x30	12x8x100
K	60 f8	170 f8
L	135	500
M	135	500
N	13	30
O	118	290
P	19 k6	42 k6
Q	82	400
R	M6x12	M16x30
S	7	17
T	M6x15	M14x30
U	55	140
V	133	315
W	M6x15	M16x36
Z	113	280
Mass(Kg)	40	500



ITALPLANT
GLOBOCYLINDRICAL CAM
INDEXING TABLES

- MK1-47
- MK1-60
- MK1-65
- MK1-80
- MK1-100
- MK1-140
- MK1-200



KEYWAY WILL BE IN THIS POSITION WHEN CAM IS ON THE CENTRE OF A DWELL PERIOD

TABLE POSITION SHOWN DURING DWELL

“Δ” OPTIONALS ON REQUEST

DIMENSIONS

	MK1 47	MK1 60	MK1 65	MK1 80	MK1 100	MK1 140	MK1 200
A	198	236	236	290	360	485	670
B	190	226	226	280	350	470	650
C	185	220	220	274	344	460	620
C1	68H7	80H7	80H7	100H7	120H7	160H7	225H7
C2	15	31	31	33	45,1	70	100
C3	55H7	65H7	65H7	85H7	92H7	132H7	180H7
C4	15H8			35H8	45H8		100H8
C4*	25H8	30H8	30H8	48H8	53H8	76H8	125H8
D	41,5	52	52	62	65	85	115
E	40	50	50	60	60	80	110
F	164	190	190	230	280	320	440
G	103	123	123	150	185	250	345
H	178	212	212	266	330	455	630
I	47	60	65	80	100	140	200
J	41	53	53	57	76	108	145
J1	3	3	3	3	5	6	5
J2	3	3	3	3	8	10	11
J3					28		
K	85	101	101	128	160	220	305
L	140	170	170	200	250	340	500
M	170	204	204	250	310	400	560
N	164	190	190	230	280	420	570
O	12	12	12	15	20	25	30
P	19k6	24k6	24k6	28k6	28k6	32k6	42k6
Q	135,5	171	171	223	282	380	530
R	M6x10	M8x12	M8x12	M8x12	M10x20	M12x25	M16x30
S	9	11	11	14	14	14	18
T	M6x10	M6x10	M6x10	M8x12	M8x16	M12x20	M16x18
U	5	5	5	7	8	12	15
V	75	100	100	118	156	215	280
W	M6x11	M6x11	M6x11	M8x11	M8x15	M12x25	M16x30
X	105	128	151	150	200	270	345
Z	87	111	111	132	175	244	317
Mass (Kg)	40	52	52	70	100	200	540

* Dimension C4 on request

MK1 37,5

N° OF STOPS	INDEX Deg	LAV MOTION	Mr Nm	MI Nm	INT.INERTIA kg+m ²	MODEL NUMBER
2 STOP	330	MSC50	56	56	0,0027	37,5 A2 S8 330
	270	MSC33	60	62	0,0025	37,5 A3 S8 270
3 STOP	330	MSC33	60	62	0,0025	37,5 A3 S8 330
	240	MSC20	64	65	0,0027	37,5 A4 S8 240
4 STOP	270	MS	64	66	0,0027	37,5 A4 S8 270
	310	MS	64	66	0,0027	37,5 A4 S8 310
	160	MSC33	64	64	0,0025	37,5 A6 S8 160
6 STOP	180	MSC30	64	65	0,0025	37,5 A6 S8 180
	240	MSC15	64	65	0,0025	37,5 A6 S8 240
	270	MS	65	66	0,0025	37,5 A6 S8 270
	310	MS	65	66	0,0025	37,5 A6 S8 310
8 STOP	160	MSC20	64	65	0,0027	37,5 A8 S8 160
	180	MSC15	64	65	0,0027	37,5 A8 S8 180
	240	MS	65	66	0,0027	37,5 A8 S8 240
	280	MS	65	66	0,0027	37,5 A8 S8 270
	310	MS	65	66	0,0027	37,5 A8 S8 310
10 STOP	120	MSC20	46	46	0,0028	37,5 A10 S8 120
	160	MSC15	46	46	0,0028	37,5 A10 S8 160
	180	MS	46	46	0,0028	37,5 A10 S8 180
	240	MS	46	46	0,0028	37,5 A10 S8 240
	270	MS	4	46	0,0028	37,5 A10 S8 270
	310	MS	46	46	0,0028	37,5 A10 S8 310
12 STOP	120	MS	44	47	0,0029	37,5 A12 S8 120
	160	MS	44	47	0,0029	37,5 A12 S8 160
	180	MS	45	47	0,0029	37,5 A12 S8 180
	240	MS	46	47	0,0029	37,5 A12 S8 240
	270	MS	46	47	0,0029	37,5 A12 S8 270
	310	MS	46	47	0,0029	37,5 A12 S8 310
16 STOP	120	MS	64	66	0,0027	37,5 A16 S8 120
	160	MS	64	66	0,0027	37,5 A16 S8 160
	180	MS	65	66	0,0027	37,5 A16 S8 180
	240	MS	65	67	0,0027	37,5 A16 S8 240
	270	MS	65	67	0,0027	37,5 A16 S8 270
	310	MS	65	67	0,0027	37,5 A16 S8 310
20 STOP	120	MS	46	46	0,0028	37,5 A20 S8 120
	160	MS	46	46	0,0028	37,5 A20 S8 160
	180	MS	46	46	0,0028	37,5 A20 S8 180
	240	MS	47	46	0,0028	37,5 A20 S8 240
	270	MS	47	46	0,0028	37,5 A20 S8 270
	310	MS	47	46	0,0028	37,5 A20 S8 310
24 STOP	120	MS	39	42	0,0029	37,5 A24 S8 120
	160	MS	39	42	0,0029	37,5 A24 S8 160
	180	MS	39	42	0,0029	37,5 A24 S8 180
	240	MS	40	42	0,0029	37,5 A24 S8 240
	270	MS	40	42	0,0029	37,5 A24 S8 270
	310	MS	40	42	0,0029	37,5 A24 S8 310

MK1 47

N° OF STOPS	INDEX Deg	LAW MOTION	Mr Nm	MI Nm	INT.INERTIA kg*m ²	MODEL NUMBER
2 STOP	330	MSC50	45	39	0.025	47 A2S10 330
3 STOP	270	MSC50	53	49	0.025	47 A3S10 270
	330	MSC45	53	48	0.025	47 A3S10 330
4 STOP	240	MSC50	57	53	0.026	47 A4S10 240
	270	MSC20	56	51	0.026	47 A4S10 270
	310	MS	55	50	0.026	47 A4S10 310
6 STOP	160	MSC66	72	70	0.025	47 A6S12 160
	180	MSC33	73	70	0.025	47 A6S12 180
	240	MSC20	77	72	0.025	47 A6S12 240
	270	MS	76	73	0.025	47 A6S12 270
	310	MS	76	72	0.025	47 A6S12 310
8 STOP	160	MSC25	140	137	0.026	47 A8S12 160
	180	MSC20	142	141	0.026	47 A8S12 180
	240	MSC15	142	140	0.026	47 A8S12 240
	270	MS	140	140	0.026	47 A8S12 270
	310	MS	140	138	0.026	47 A8S12 310
10 STOP	120	MSC33	153	152	0.027	47 A10S12 120
	160	MSC15	154	152	0.027	47 A10S12 160
	180	MSC15	156	153	0.027	47 A10S12 180
	240	MS	154	152	0.027	47 A10S12 240
	270	MS	154	152	0.027	47 A10S12 270
	310	MS	153	151	0.027	47 A10S12 310
12 STOP	120	MSC33	93	90	0.028	47 A12S12 120
	160	MSC20	96	93	0.028	47 A12S12 160
	180	MSC20	97	94	0.028	47 A12S12 180
	240	MSC15	97	94	0.028	47 A12S12 240
	270	MS	96	93	0.028	47 A12S12 270
	310	MS	96	93	0.028	47 A12S12 310
16 STOP	120	MSC33	99	97	0.026	47 A12S12 120
	160	MSC20	104	102	0.026	47 A12S12 160
	180	MSC20	105	100	0.026	47 A12S12 180
	240	MSC20	105	99	0.026	47 A12S12 240
	270	MS	100	96	0.026	47 A12S12 270
	310	MS	100	95	0.026	47 A12S12 310
20 STOP	120	MSC20	77	73	0.027	47 A20S10 120
	160	MSC15	81	78	0.027	47A20S10 160
	180	MSC15	83	85	0.027	47A20S10 180
	240	MSC15	82	85	0.027	47 A20S10 240
	270	MS	79	76	0.027	47A20S10 270
	310	MS	80	74	0.027	47A20S10 310
24 STOP	120	MSC20	90	86	0.028	47 A24S10 120
	160	MSC15	96	90	0.028	47 A24S10 160
	180	MSC15	96	90	0.028	47 A24S10 180
	240	MSC15	95	92	0.028	47 A24S10 240
	270	MS	96	88	0.028	47 A24S10 270
	310	MS	96	88	0.028	47 A24S10 310

MK1 50

N° OF STOPS	INDEX Deg	LAW MOTION	Mr Nm	MI Nm	INT.INERTIA kg*m ²	MODEL NUMBER
2 STOP	330	MSC50	78	85	0,0071	50 A2 S10 330
	270	MSC50	90	92	0,0069	50 A3 S10 270
3 STOP	330	MSC50	90	92	0,0069	50 A3 S10 330
	240	MSC50	95	95	0,0071	50 A4 S10 240
4 STOP	270	MSC33	95	95	0,0071	50 A4 S10 270
	310	MS	95	95	0,0071	50 A4 S10 310
	160	MSC50	95	95	0,0069	50 A6 S10 160
6 STOP	180	MSC33	95	95	0,0069	50 A6 S10 180
	240	MSC20	95	95	0,0069	50 A6 S10 240
	270	MSC15	95	95	0,0069	50 A6 S10 270
	310	MS	95	95	0,0069	50 A6 S10 310
	160	MSC33	98	102	0,0071	50 A8 S10 160
8 STOP	180	MSC33	99	102	0,0071	50 A8 S10 180
	240	MSC20	99	102	0,0071	50 A8 S10 240
	270	MS	100	102	0,0071	50 A8 S10 270
	310	MS	100	102	0,0071	50 A8 S10 310
	120	MSC20	99	103	0,0073	50 A10 S10 120
10 STOP	160	MSC15	99	103	0,0073	50 A10 S10 160
	180	MS	99	103	0,0073	50 A10 S10 180
	240	MS	101	105	0,0073	50 A10 S10 240
	270	MS	101	105	0,0073	50 A10 S10 270
	310	MS	101	105	0,0073	50 A10 S10 310
	120	MSC15	98	100	0,0075	50 A12 S10 120
12 STOP	160	MS	98	100	0,0075	50 A12 S10 160
	180	MS	99	100	0,0075	50 A12 S10 180
	240	MS	99	101	0,0075	50 A12 S10 240
	270	MS	99	101	0,0075	50 A12 S10 270
	310	MS	99	101	0,0075	50 A12 S10 310
	120	MS	98	100	0,0071	50 A16 S10 120
16 STOP	160	MS	99	100	0,0071	50 A16 S10 160
	180	MS	100	100	0,0071	50 A16 S10 180
	240	MS	100	100	0,0071	50 A16 S10 240
	270	MS	100	100	0,0071	50 A16 S10 270
	310	MS	100	100	0,0071	50 A16 S10 310
	120	MS	97	101	0,0073	50 A20 S10 120
20 STOP	160	MS	98	101	0,0073	50 A20 S10 160
	180	MS	98	101	0,0072	50 A20 S10 180
	240	MS	99	101	0,0073	50 A20 S10 240
	270	MS	100	101	0,0075	50 A20 S10 270
	310	MS	100	101	0,0073	50 A20 S10 310
	120	MS	97	100	0,0075	50 A24 S10 120
24 STOP	160	MS	97	100	0,0075	50 A24 S10 160
	180	MS	98	100	0,0075	50 A24 S10 180
	240	MS	99	100	0,0075	50 A24 S10 240
	270	MS	100	100	0,0075	50 A24 S10 270
	310	MS	100	100	0,0075	50 A24 S10 310

MK1 60

N° OF STOPS	INDEX Deg	LAW MOTION	Mr Nm	MI Nm	INT.INERTIA kg*m ²	MODEL NUMBER
2 STOP	330	MSC50	126	152	0.05	60 A2S10 330
3 STOP	270	MSC50	152	161	0.05	60 A3S10 270
	330	MSC50	152	166	0.05	60 A3S10 330
4 STOP	240	MSC50	220	205	0.052	60 A4S12 240
	270	MSC20	222	210	0.052	60 A4S12 270
	310	MSC15	221	210	0.052	60 A4S12 310
6 STOP	160	MSC50	290	293	0.05	60 A6S12 160
	180	MSC33	298	298	0.05	60 A6S12 180
	240	MSC20	307	297	0.05	60 A6S12 240
	270	MS	300	298	0.05	60 A6S12 270
	310	MS	300	299	0.05	60 A6S12 310
8 STOP	160	MSC33	328	310	0.052	60 A8S12 160
	180	MSC20	330	332	0.052	60 A8S12 180
	240	MS	330	333	0.052	60 A8S12 240
	270	MS	329	329	0.052	60 A8S12 270
	310	MS	329	330	0.052	60 A8S12 310
10 STOP	120	MSC33	310	302	0.054	60 A10S12 120
	160	MSC20	323	318	0.054	60 A10S12 160
	180	MSC15	323	325	0.054	60 A10S12 180
	240	MS	324	324	0.054	60 A10S12 240
	270	MS	320	325	0.054	60 A10S12 270
	310	MS	319	324	0.054	60 A10S12 310
12 STOP	120	MSC20	240	239	0.0562	60 A12S12 120
	160	MSC20	245	240	0.0562	60 A12S12 160
	180	MS	260	258	0.0562	60 A12S12 180
	240	MS	261	262	0.0562	60 A12S12 240
	270	MS	260	262	0.0562	60 A12S12 270
	310	MS	260	259	0.0562	60 A12S12 310
16 STOP	120	MSC20	244	243	0.052	60 A16S12 120
	160	MSC15	249	244	0.052	60 A16S12 160
	180	MS	264	262	0.052	60 A16S12 180
	240	MS	265	264	0.052	60 A16S12 240
	270	MS	264	266	0.052	60 A16S12 270
	310	MS	264	263	0.052	60 A16S12 310
20 STOP	120	MSC20	242	241	0.054	60 A20S10 120
	160	MSC15	247	242	0.054	60 A20S10 160
	180	MSC15	262	260	0.054	60 A20S10 180
	240	MS	263	262	0.054	60 A20S10 240
	270	MS	262	264	0.054	60 A20S10 270
	310	MS	262	261	0.054	60 A20S10 310
24 STOP	120	MSC20	243	241	0.0562	60 A24S10 120
	160	MSC15	248	243	0.0562	60 A24S10 160
	180	MS	264	262	0.0562	60 A24S10 180
	240	MS	265	264	0.0562	60 A24S10 240
	270	MS	263	265	0.0562	60 A24S10 270
	310	MS	263	262	0.0562	60 A24S10 310

MK1 65

N° OF STOP	INDEX Deg	LAW MOTION	Mr Nm	MI Nm	INT.INERTIA kg*m2	MODEL NUMBER
2 STOP	330	MSC33	151	182,4	0.06	65 A2S12 330
3 STOP	270	MSC33	243	258	0.08	65 A3S16 270
	330	MS	243	266	0.08	65 A3S16 330
4 STOP	240	MSC33	293	273	0.07	65 A4S16 240
	270	MS	296	280	0.07	65 A4S16 270
	310	MS	295	280	0.07	65 A4S16 310
6 STOP	160	MSC50	387	391	0.065	65 A6S16 160
	180	MSC33	397	397	0.065	65 A6S16 180
	240	MS	409	396	0.065	65 A6S16 240
	270	MS	400	397	0.065	65 A6S16 270
	310	MS	400	399	0.065	65 A6S16 310
8 STOP	160	MSC33	437	413	0.07	65 A8S16 160
	180	MS	440	443	0.07	65 A8S16 180
	240	MS	440	444	0.07	65 A8S16 240
	270	MS	439	439	0.07	65 A8S16 270
	310	MS	439	440	0.07	65 A8S16 310
10 STOP	120	MSC33	310	302	0.054	65 A10S12 120
	160	MS	323	318	0.054	65 A10S12 160
	180	MS	323	325	0.054	65 A10S12 180
	240	MS	324	324	0.054	65 A10S12 240
	270	MS	320	325	0.054	65 A10S12 270
	310	MS	319	324	0.054	65A10S12 310
12 STOP	120	MS	240	239	0.0562	65 A12S12 120
	160	MS	245	240	0.0562	65 A12S12 160
	180	MS	260	258	0.0562	65 A12S12 180
	240	MS	261	262	0.0562	65 A12S12 240
	270	MS	260	262	0.0562	65 A12S12 270
	310	MS	260	259	0.0562	65 A12S12 310
16 STOP	120	MS	325	324	0.007	65 A16S16 120
	160	MS	332	325	0.007	65 A16S16 160
	180	MS	352	349	0.007	65 A16S16 180
	240	MS	353	352	0.007	65 A16S16 240
	270	MS	352	355	0.007	65 A16S16 270
	310	MS	352	351	0.007	65 A16S16 310
20 STOP	120	MS	387	386	0.0864	65 A20S10 120
	160	MS	395	387	0.0864	65 A20S12 160
	180	MS	419	416	0.0864	65 A20S12 180
	240	MS	421	419	0.0864	65 A20S12 240
	270	MS	419	422	0.0864	65 A20S12 270
	310	MS	419	418	0.0864	65 A20S12 310
24 STOP	120	MS	389	386	0.09	65 A24S12 120
	160	MS	397	389	0.09	65 A24S12 160
	180	MS	482	419	0.09	65 A24S12 180
	240	MS	424	422	0.09	65 A24S12 240
	270	MS	421	424	0.09	65 A24S12 270
	310	MS	421	419	0.09	65 A24S12 310

MK1 80

N° OF STOPS	INDEX Deg	LAW MOTION	Mr Nm	MI Nm	INT.INERTIA kg*m ²	MODEL NUMBER
2 STOP	330	CYC50	243	252	0.139	80 A2S12 330
	270	MSC50	316	320	0.139	80 A3S12 270
3 STOP	330	MSC50	315	318	0.139	80 A3S12 330
	240	MSC66	268	280	0.141	80 A4S16 240
4 STOP	270	MSC20	278	287	0.141	80 A4S16 270
	310	MSC20	270	287	0.141	80 A4S16 310
6 STOP	160	MSC66	727	732	0.139	80 A6S16 160
	180	MSC50	732	733	0.139	80 A6S16 180
	240	MSC20	732	725	0.139	80 A6S16 240
	270	MS	730	724	0.139	80 A6S16 270
	310	MS	728	724	0.139	80 A6S16 310
8 STOP	160	MSC33	814	816	0.141	80 A8S16 160
	180	MSC20	820	813	0.141	80 A8S16 180
	240	MS	820	815	0.141	80 A8S16 240
	270	MS	818	810	0.141	80 A8S16 270
	310	MS	817	810	0.141	80 A8S16 310
10 STOP	120	MSC20	842	860	0.145	80 A10S16 120
	160	MSC20	866	868	0.145	80 A10S16 160
	180	MSC15	870	864	0.145	80 A10S16 180
	240	MS	870	866	0.145	80 A10S16 240
	270	MS	868	863	0.145	80 A10S16 270
	310	MS	867	860	0.145	80 A10S16 310
12 STOP	120	MSC20	443	445	0.148	80 A12S16 120
	160	MSC20	447	448	0.148	80 A12S16 160
	180	MSC15	449	449	0.148	80 A12S16 180
	240	MS	450	446	0.148	80 A12S16 240
	270	MS	445	443	0.148	80 A12S16 270
	310	MS	445	442	0.148	80 A12S16 310
16 STOP	120	MSC33	457	460	0.141	80 A16S16 120
	160	MSC20	461	464	0.141	80 A16S16 160
	180	CYC	465	465	0.141	80 A16S16 180
	240	MS	465	464	0.141	80 A16S16 240
	270	MS	462	460	0.141	80 A16S16 270
	310	MS	462	459	0.141	80 A16S16 310
20 STOP	120	MSC33	397	400	0.145	80 A20S12 120
	160	MSC20	401	410	0.145	80 A20S12 160
	180	MSC15	410	415	0.145	80 A20S12 180
	240	MS	410	419	0.145	80 A20S12 240
	270	MS	402	399	0.145	80 A20S12 270
	310	MS	402	398	0.145	80 A20S12 310
24 STOP	120	MSC33	412	401	0.148	80 A24S12 120
	160	MSC25	423	411	0.148	80 A24S12 160
	180	MSC20	436	410	0.148	80 A24S12 180
	240	MS	437	450	0.148	80 A24S12 240
	270	MS	425	428	0.148	80 A24S12 270
	310	MS	424	427	0.148	80 A24S12 310

MK1 100

N° OF STOPS	INDEX Deg	LAW MOTION	Mr Nm	MI Nm	INT.INERTIA kg*m ²	MODEL NUMBER
2 STOP	330	MSC50	805	800	0.379	100 A2S16 330
3 STOP	270	MSC50	888	888	0.379	100 A3S16 270
	330	MSC50	888	886	0.379	100 A3S16 330
4 STOP	240	MSC50	895	902	0.388	100 A4S16 240
	270	MSC20	892	900	0.388	100 A4S16 270
	310	MS	890	899	0.388	100 A4S16 310
6 STOP	160	MSC66	1710	1722	0.379	100 A6S20 160
	180	MSC33	1738	1752	0.379	100 A6S20 180
	240	MSC20	1745	1760	0.379	100 A6S20 240
	270	MSC15	1740	1735	0.379	100 A6S20 270
	310	MS	1735	1735	0.379	100 A6S20 310
8 STOP	160	MSC33	1877	1894	0.388	100 A8S20 160
	180	MSC20	1900	1912	0.388	100 A8S20 180
	240	MS	1925	1925	0.388	100 A8S20 240
	270	MS	1918	1912	0.388	100 A8S20 270
	310	MS	1918	1909	0.388	100 A8S20 310
10 STOP	120	MSC33	2000	2000	0.397	100 A10S20 120
	160	MSC20	2020	2022	0.397	100 A10S20 160
	180	MSC15	2023	2023	0.397	100 A10S20 180
	240	MS	2023	2018	0.397	100 A10S20 240
	270	MS	2022	2015	0.397	100 A10S20 270
	310	MS	2018	2010	0.397	100 A10S20 310
12 STOP	120	MSC33	1530	1550	0.403	100 A12S20 120
	160	MSC20	1560	1545	0.403	100 A12S20 160
	180	MSC15	1575	1557	0.403	100 A12S20 180
	240	MS	1575	1562	0.403	100 A12S20 240
	270	MS	1550	1546	0.403	100 A12S20 270
	310	MS	1546	1540	0.403	100 A12S20 310
16 STOP	120	MSC50	2212	2236	0.388	100 A16S20 120
	160	MSC45	2220	2240	0.388	100 A16S20 160
	180	MSC35	2260	2258	0.388	100 A16S20 180
	240	MS	2262	2245	0.388	100 A16S20 240
	270	MS	2250	2248	0.388	100 A16S20 270
	310	MS	2250	2250	0.388	100 A16S20 310
20 STOP	120	MSC50	1640	1650	0.397	100 A20S16 120
	160	MSC33	1652	1652	0.397	100 A20S16 160
	180	MSC25	1678	1680	0.397	100 A20S16 180
	240	MS	1680	1682	0.397	100 A20S16 240
	270	MS	1647	1650	0.397	100 A20S16 270
	310	MS	1646	1648	0.397	100 A20S16 310
24 STOP	120	MSC45	1644	1654	0.403	100 A24S16 120
	160	MSC33	1656	1656	0.403	100 A24S16 160
	180	MSC25	1682	1684	0.403	100 A24S16 180
	240	CYC	1684	1686	0.403	100 A24S16 240
	270	MS	1651	1654	0.403	100 A24S16 270
	310	MS	1650	1652	0.403	100 A24S16 310

MK1 140

N° OF STOPS	INDEX Deg	LAW MOTION	Mr Nm	MI Nm	INT.INERTIA kg*m ²	MODEL NUMBER
2 STOP	330	MSC66	2415	2400	0.836	140 A2S20 330
3 STOP	270	MSC50	3455	3453	0.836	140 A3S20 270
	330	MSC50	3450	3450	0.836	140 A3S20 330
4 STOP	240	MSC50	4681	4658	0.842	140 A4S24 240
	270	MSC25	4685	4655	0.842	140 A4S24 270
	310	MSC20	4679	4655	0.842	140 A4S24 310
6 STOP	160	CYC50	4210	4222	0.836	140 A6S24 160
	180	MSC35	4245	4237	0.836	140 A6S24 180
	240	MSC25	4270	4235	0.836	140 A6S24 240
	270	MS	4230	4218	0.836	140 A6S24 270
	310	MS	4220	4218	0.836	140 A6S24 310
8 STOP	160	CYC50	4208	4220	0.842	140 A8S24 160
	180	MSC35	4244	4236	0.842	140 A8S24 180
	240	MSC25	4268	4235	0.842	140 A8S24 240
	270	MS	4229	4217	0.842	140 A8S24 270
	310	MS	4219	4217	0.842	140 A8S24 310
10 STOP	120	MSC50	4200	4220	0.853	140 A10S24 120
	160	MSC35	4210	4226	0.853	140 A10S24 160
	180	MSC25	4212	4224	0.853	140 A10S24 180
	240	MSC20	4272	4239	0.853	140 A10S24 240
	270	MS	4233	4221	0.853	140 A10S24 270
	310	MS	4223	4221	0.853	140 A10S24 310
12 STOP	120	MSC50	4205	4213	0.862	140 A12S24 120
	160	MSC35	4215	4219	0.862	140 A12S24 160
	180	MSC25	4217	4213	0.862	140 A12S24 180
	240	MSC20	4277	4233	0.862	140 A12S24 240
	270	MS	4238	4215	0.862	140 A12S24 270
	310	MS	4220	4215	0.862	140 A12S24 310
16 STOP	120	MSC35	3588	3645	0.842	140 A16S24 120
	160	MSC35	3656	3660	0.842	140 A16S24 160
	180	MSC25	3668	3671	0.842	140 A16S24 180
	240	MSC25	3670	3673	0.842	140 A16S24 240
	270	MS	3667	3662	0.842	140 A16S24 270
	310	MS	3665	3660	0.842	140 A16S24 310
20 STOP	120	MSC45	3302	3310	0.853	140 A20S20 120
	160	MSC25	3326	3320	0.853	140 A20S20 160
	180	MSC25	3348	3323	0.853	140 A20S20 180
	240	MSC20	3350	3325	0.853	140 A20S20 240
	270	MS	3327	3320	0.853	140 A20S20 270
	310	MS	3325	3320	0.853	140 A20S20 310
24 STOP	120	MSC45	3800	3807	0.862	140 A24S20 120
	160	MSC33	3820	3820	0.862	140 A24S20 160
	180	MSC25	3824	3827	0.862	140 A24S20 180
	240	MSC15	3835	3837	0.862	140 A24S20 240
	270	MS	3822	3835	0.862	140 A24S20 270
	310	MS	3821	3834	0.862	140 A24S20 310

MK1 200

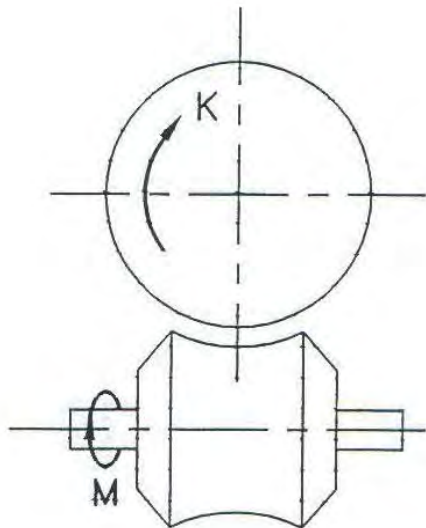
N° OF STOPS	INDEX Deg	LAW MOTION	Mr Nm	MI Nm	INT.INERTIA kg*m ²	MODEL NUMBER
2 STOP	330	MSC66	6180	5849	2.709	200 A2S24 330
	270	MSC50	8175	8088	2.709	200 A3S24 270
3 STOP	330	MSC50	8170	8090	2.709	200 A3S24 330
	240	MSC50	11740	11700	2.821	200 A4S30 240
4 STOP	270	MSC25	11793	11700	2.821	200 A4S30 270
	310	MSC20	11780	11690	2.821	200 A4S30 310
	160	MSC50	10311	10400	2.709	200 A6S30 160
6 STOP	180	MSC45	10571	10498	2.709	200 A6S30 180
	240	MSC33	10662	10600	2.709	200 A6S30 240
	270	MSC20	10650	10592	2.709	200 A6S30 270
	310	MS	10645	10585	2.709	200 A6S30 310
	160	MSC33	11215	11247	2.821	200 A8S30 160
8 STOP	180	MSC25	11524	11524	2.821	200 A8S30 180
	240	MSC15	11672	11537	2.821	200 A8S30 240
	270	MS	11560	11503	2.821	200 A8S30 270
	310	MS	11550	11500	2.821	200 A8S30 310
	120	MSC45	11847	11930	2.921	200 A10S30 120
10 STOP	160	MSC33	11877	11945	2.921	200 A10S30 160
	180	MSC25	12047	12016	2.921	200 A10S30 180
	240	MSC20	12060	12019	2.921	200 A10S30 240
	270	MS	12053	12018	2.921	200 A10S30 270
	310	MS	12040	12010	2.921	200 A10S30 310
	120	MSC50	12109	12201	2.933	200 A12S30 120
12 STOP	160	MSC33	12122	12242	2.933	200 A12S30 160
	180	MSC25	12357	12356	2.933	200 A12S30 180
	240	MSC15	12370	12335	2.933	200 A12S30 240
	270	MS	12360	12323	2.933	200 A12S30 270
	310	MS	12350	12320	2.933	200 A12S30 310
	120	MSC50	8501	8622	2.821	200 A16S24 120
16 STOP	160	MSC33	8594	8643	2.821	200 A16S24 160
	180	MSC25	8686	8685	2.821	200 A16S24 180
	240	MSC15	8702	8687	2.821	200 A16S24 240
	270	MS	8657	8647	2.821	200 A16S24 270
	310	MS	8650	8640	2.821	200 A16S24 310
	120	MSC50	8686	8702	2.921	200 A20S24 120
20 STOP	160	MSC33	8712	8721	2.921	200 A20S24 160
	180	MSC25	8762	8744	2.921	200 A20S24 180
	240	MSC15	8790	8737	2.921	200 A20S24 240
	270	MS	8750	8724	2.921	200 A20S24 270
	310	MS	8732	8712	2.921	200 A20S24 310
	120	MSC50	8787	8803	2.933	200 A24S24 120
24 STOP	160	MSC45	8814	8824	2.933	200 A24S24 160
	180	MSC33	8863	8845	2.933	200 A24S24 180
	240	MSC20	8892	8838	2.933	200 A24S24 240
	270	MS	8852	8825	2.933	200 A24S24 270
	310	MS	8833	8813	2.933	200 A24S24 310

MK1 210

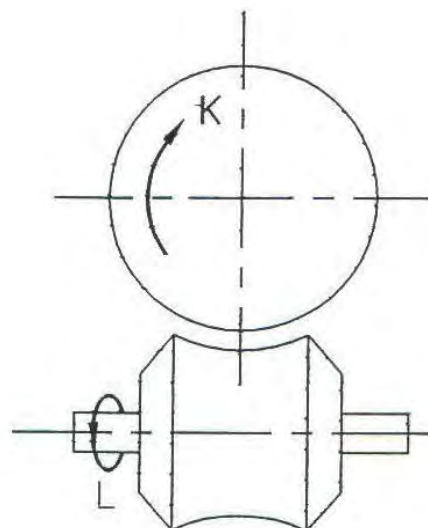
N° OF STOPS	INDEX Deg	LAW MOTION	Mr Nm	MI Nm	INT.INERTIA kg*m ²	MODEL NUMBER
2 STOP	330	MSC50	1750	2070	4,74	210 A2 S32 330
	270	MSC50	2400	2440	4,74	210 A3 S32 270
3 STOP	330	MSC33	2402	2440	4,74	210 A3 S32 330
	240	MSC50	2595	2620	4,74	210 A4 S32 240
4 STOP	270	MSC33	2595	2620	4,74	210 A4 S32 270
	310	MS	2595	2620	4,74	210 A4 S32 310
	160	MSC50	2960	3000	4,82	210 A6 S32 160
6 STOP	180	MSC33	2965	3000	4,82	210 A6 S32 180
	240	MSC20	2980	3000	4,82	210 A6 S32 240
	270	MSC10	2980	3000	4,82	210 A6 S32 270
	310	MS	2987	3000	4,82	210 A6 S32 310
	160	MSC33	2970	3070	4,74	210 A8 S32 160
8 STOP	180	MSC20	3005	3070	4,74	210 A8 S32 180
	240	MSC15	3005	3070	4,74	210 A8 S32 240
	270	MS	3005	3070	4,74	210 A8 S32 270
	310	MS	3010	3070	4,74	210 A8 S32 310
	120	MSC20	2800	2990	4,82	210 A10 S32 120
10 STOP	160	MSC10	2810	2990	4,82	210 A10 S32 160
	180	MS	2870	3000	4,82	210 A10 S32 180
	240	MS	2890	3000	4,82	210 A10 S32 240
	270	MS	2890	3100	4,82	210 A10 S32 270
	310	MS	3000	3100	4,82	210 A10 S32 310
120	MSC10	2910	3020	4,82	210 A12 S32 120	
12 STOP	160	MS	2950	3020	4,82	210 A12 S32 160
	180	MS	3000	3050	4,82	210 A12 S32 180
	240	MS	3010	3050	4,82	210 A12 S32 240
	270	MS	3010	3050	4,82	210 A12 S32 270
	310	MS	3010	3050	4,82	210 A12 S32 310
120	MS	2900	2990	4,93	210 A16 S32 120	
16 STOP	160	MS	2910	2990	4,93	210 A16 S32 160
	180	MS	2990	3000	4,93	210 A16 S32 180
	240	MS	2990	3000	4,93	210 A16 S32 240
	270	MS	2990	3000	4,93	210 A16 S32 270
	310	MS	2990	3000	4,93	210 A16 S32 310
120	MS	2050	2100	4,79	210 A20 S32 120	
20 STOP	160	MS	2050	2100	4,79	210 A20 S32 160
	180	MS	2060	2100	4,79	210 A20 S32 180
	240	MS	2065	2100	4,79	210 A20 S32 240
	270	MS	2065	2100	4,79	210 A20 S32 270
	310	MS	2065	2100	4,79	210 A20 S32 310
120	MS	1490	1550	4,82	210 A24 S32 120	
24 STOP	160	MS	1490	1550	4,82	210 A24 S32 160
	180	MS	1495	1550	4,82	210 A24 S32 180
	240	MS	1510	1550	4,82	210 A24 S32 240
	270	MS	1510	1550	4,82	210 A24 S32 270
	310	MS	1510	1550	4,82	210 A24 S32 310

SKETCH OF CAM HANDING

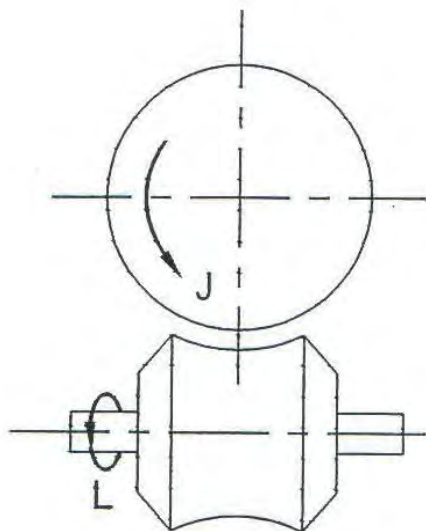
Direction of rotation as viewed
on "face U"



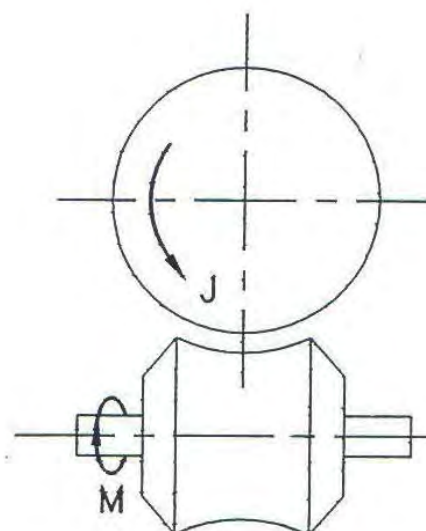
LEFT HAND



RIGHT HAND



LEFT HAND



RIGHT HAND

ATTENTION: If the customer do not choose
the sense of rotation, ITALPLANT will choose
rotation RIGHT HAND

MODELS MK1	INTERNAL FRICTION Mb (N · m)
37,5	7
47	12
50	15
60	22
80	34
100	45
140	60
200	130
210	140

INDEXING TABLE CODE EXAMPLE

MK1 - 100 - A4 - S20 - 310 - U - 2 - D - Δ5

MK-100 : TYPE-SIZE

S: STANDARD CAM (A :NITRIDED CAM)

4: NUMBER OF STOPS

S20: ROLLER FOLLOWER DIAMETER

310: CAM INDEX ANGLE

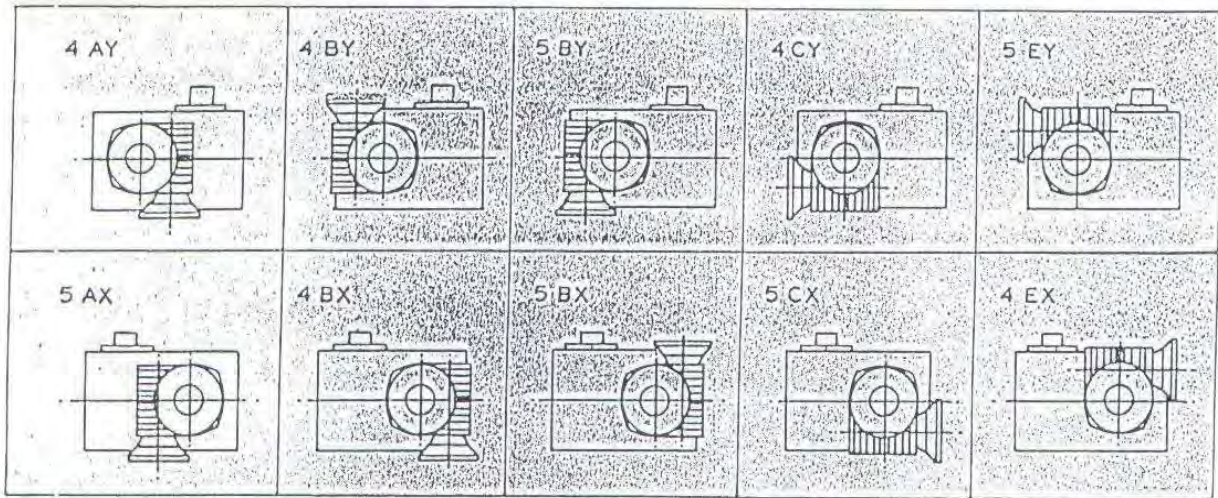
U: MOUNTING HOLE FACE

2: SHAFT PROJECTION

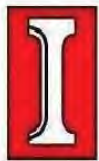
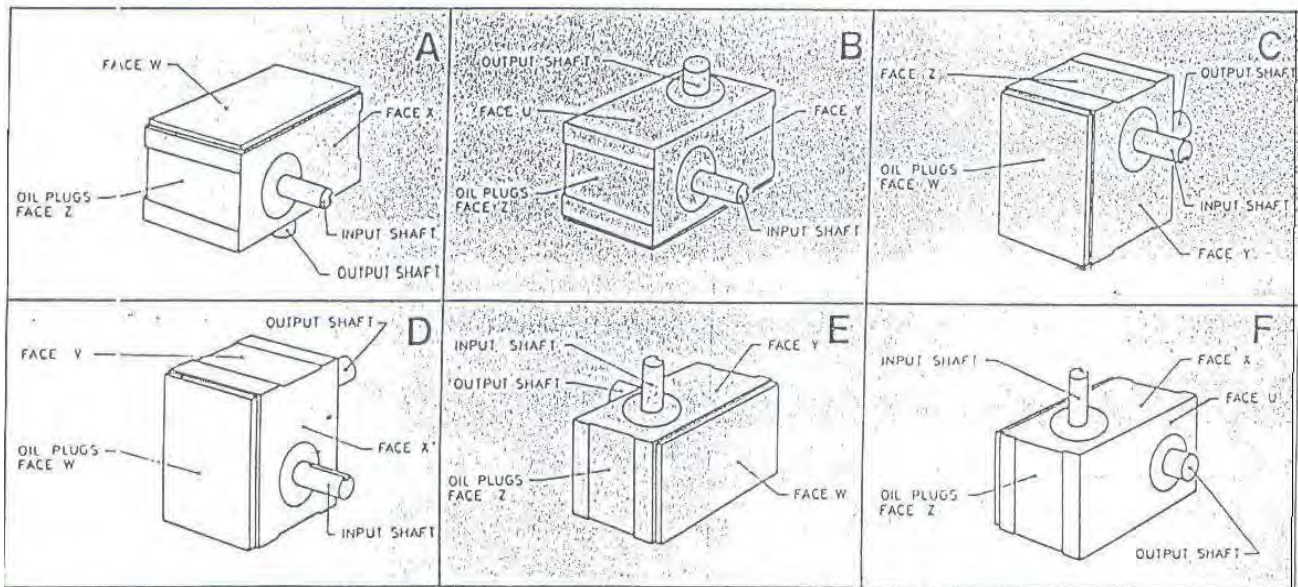
D: MOUNTING POSITION

Δ5: SPECIAL ADDITION ON REQUEST

SPEED REDUCER MOUNTING POSITIONS



INDEXING TABLE MOUNTING POSITION



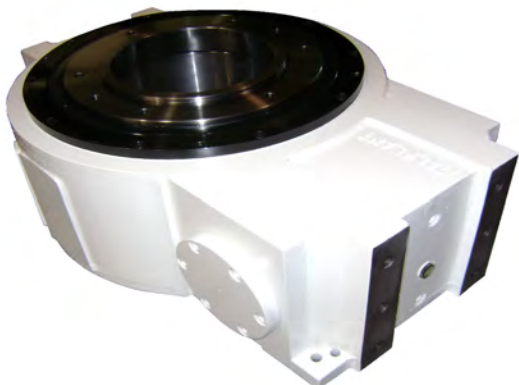
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SAFETY OUTPUT TORQUE LIMITER (SOTL)**
*INTERMITTORI CON REGOLAZIONE DELLA COPPIA TRASMESSA
E LIMITATORE DI COPPIA DI SICUREZZA IN USCITA*



PRECISION LINK CARRIERS
TRASPORTATORI A PASSO DI PRECISIONE



HIGH SPEED TOROIDAL INDEXERS
TESTE A DIVIDERE TOROIDALI AD ALTA VELOCITA'

PLEASE CONTACT OUR TECHNICAL OFFICE FOR FURTHER INFORMATION
CONTATTA IL NOSTRO UFFICIO TECNICO PER ULTERIORI INFORMAZIONI



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