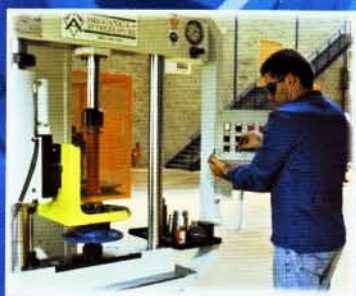




MOTOVARIO



**SPAGGIARI
TRASMISSIONI**



SERVICE FACTOR

The service factor (f.s.) depends on the operating conditions the reduction unit is subjected to.

The parameters that need to be taken into consideration to select the most adequate service factor correctly comprise:

- type of load of the operated machine : **A - B - C**
- length of daily operating time: **hours/day (Δ)**
- start-up frequency: **starts/hour (*)**

TYPE OF LOAD: **A** - uniform $f_a \leq 0.3$
 B - moderate shocks $f_a \leq 3$
 C - heavy shocks $f_a \leq 10$

$f_a = J_e/J_m$

- J_e (kgm^2) moment of reduced external inertia at the drive-shaft

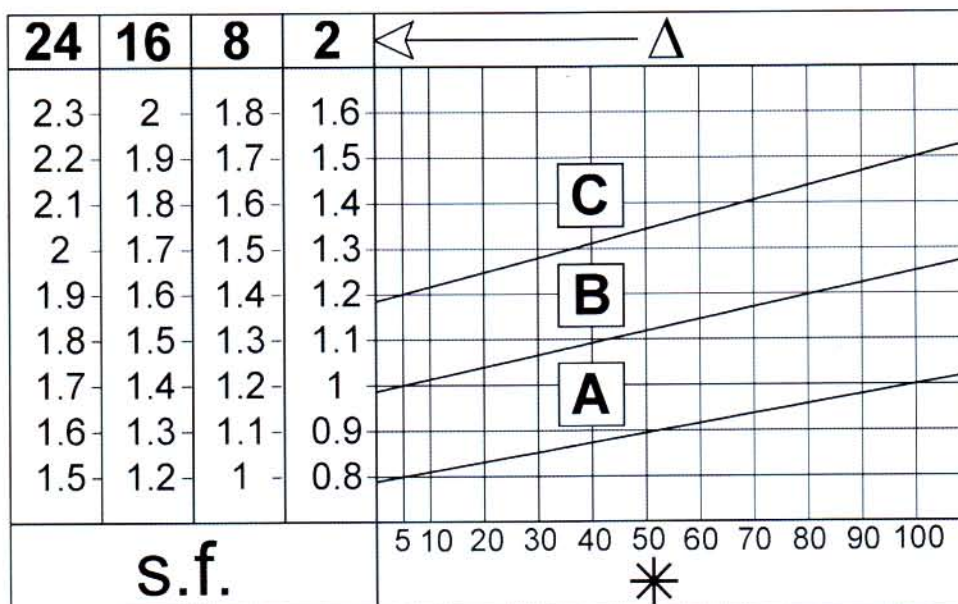
- J_m (kgm^2) moment of inertia of motor

If $f_a > 10$ call our Technical Service.

A -Screw feeders for light materials, fans, assembly lines, conveyor belts for light materials, small mixers, lifts, cleaning machines, fillers, control machines.

B -Winding devices, woodworking machine feeders, goods lifts, balancers, threading machines, medium mixers, conveyor belts for heavy materials, winches, sliding doors, fertilizer scrapers, packing machines, concrete mixers, crane mechanisms, milling cutters, folding machines, gear pumps.

C -Mixers for heavy materials, shears, presses, centrifuges, rotating supports, winches and lifts for heavy materials, grinding lathes, stone mills, bucket elevators, drilling machines, hammer mills, cam presses, folding machines, turntables, tumbling barrels, vibrators, shredders.



LUBRICATION

	ST 003 ÷ 100 SF 003 ÷ 100 TXF 002 ÷ 010	H A30 ÷ A60 H 030 ÷ 140 RT2-40 RF2-40		NMRV 110 ÷ 150		NMRV 025 ÷ 105 SW 030 ÷ 105 PC 063 ÷ 090
	Mineral oil	Mineral oil		Mineral oil		Synthetic oil
T °C ISO VG...	(-25) ÷ (+40) ISO VG 32	(-5) ÷ (+40) ISO VG 220	(-15) ÷ (+25) ISO VG 150	(-5) ÷ (+40) ISO VG 460	(-15) ÷ (+25) ISO VG 220	(-25) ÷ (+50) ISO VG 320
AGIP	A.T.F. DEXRON	BLASIA 220	BLASIA 150	BLASIA 460	BLASIA 220	TELIUM VSF320
SHELL	A.T.F. DEXRON	OMALA OIL220	OMALA OIL150	OMALA OIL460	OMALA OIL220	TIVELA OIL SC320
ESSO	A.T.F. DEXRON	SPARTAN EP220	SPARTAN EP150	SPARTAN EP460	SPARTAN EP220	S220
MOBIL	MOBIL A.T.F. 220	MOBILGEAR 630	MOBILGEAR 629	MOBILGEAR 634	MOBILGEAR 630	GLYGOYLE 30
CASTROL	TQ DEXRON II	ALPHA MAX 220	ALPHA MAX 150	ALPHA MAX 460	ALPHA MAX 220	ALPHASYN PG320
BP	AUTRAN DX	ENERGOL GR-XP220	ENERGOL GR-XP150	ENERGOL GR-XP460	ENERGOL GR-XP220	ENERGOL SG-XP320

MOTOR - VARIATORS



TXF...



TXF(SF)+H...



TXF(SF)+NMRV...



ST...

S... PERFORMANCE

VARIATOR SIZE	MOTOR (kW)	MOTOR POLES	VARIATOR		VARIATOR + DIFFERENTIAL	
			OUTPUT SPEED (RPM)	OUTPUT TORQUE (Nm)	OUTPUT SPEED (RPM)	MAX. OUTPUT TORQUE (Nm)
S_003	0.15	6	125-620	4.0-2.1	-	-
	0.22	4	190-950	4.0-2.0	-	-
	0.37	2	380-1900	4.0-1.7	-	-
S_005	0.25	6	122-610	6.0-3.0	0-610	6.0
	0.25	4	190-950	6.0-2.0	-	-
	0.37	4	190-950	6.0-3.0	0-950	6.0
	0.55	4	190-950	6.0-4.4	0-950	6.0
	0.55	2	380-1900	6.0-2.2	0-1900	6.0
	0.75	2	380-1900	6.0-3.0	0-1900	6.0
S_010	0.55	6	122-610	12.0-6.6	0-610	12.0
	0.55	4	190-950	12.0-4.4	-	-
	0.75	4	190-950	12.0-6.0	0-950	12.0
	1.1	4	190-950	12.0-8.8	0-950	12.0
	1.1	2	380-1900	12.0-4.4	0-1900	12.0
	1.5	2	380-1900	12.0-6.0	0-1900	12.0
S_020	1.1	6	122-660	24.0-13.5	0-660	24.0
	1.1	4	190-1000	24.0-9.0	0-1000	24.0
	1.5	4	190-1000	24.0-12.0	0-1000	24.0
	2.2	4	190-1000	24.0-18.0	0-1000	24.0
	1.5	2	380-2000	24.0-6.0	0-2000	24.0
	2.2	2	380-2000	24.0-9.0	0-2000	24.0
S_030	1.5	6	122-660	48.0-18.0	0-660	48.0
	2.2	4	190-1000	48.0-18.0	0-1000	48.0
	3	4	190-1000	48.0-24.0	0-1000	48.0
S_050	2.2	6	122-660	64.0-27.0	0-660	64.0
	4	4	190-1000	64.0-32.0	0-1000	64.0
	4.8	4	190-1000	64.0-40.0	0-1000	64.0
S_100	5.5	6	122-660	144.0-66.0	0-660	144.0
	5.5	4	190-1000	144.0-44.0	0-1000	144.0
	7.5	4	190-1000	144.0-60.0	0-1000	144.0
	11.0	4	190-1000	144.0-88.0	0-1000	144.0

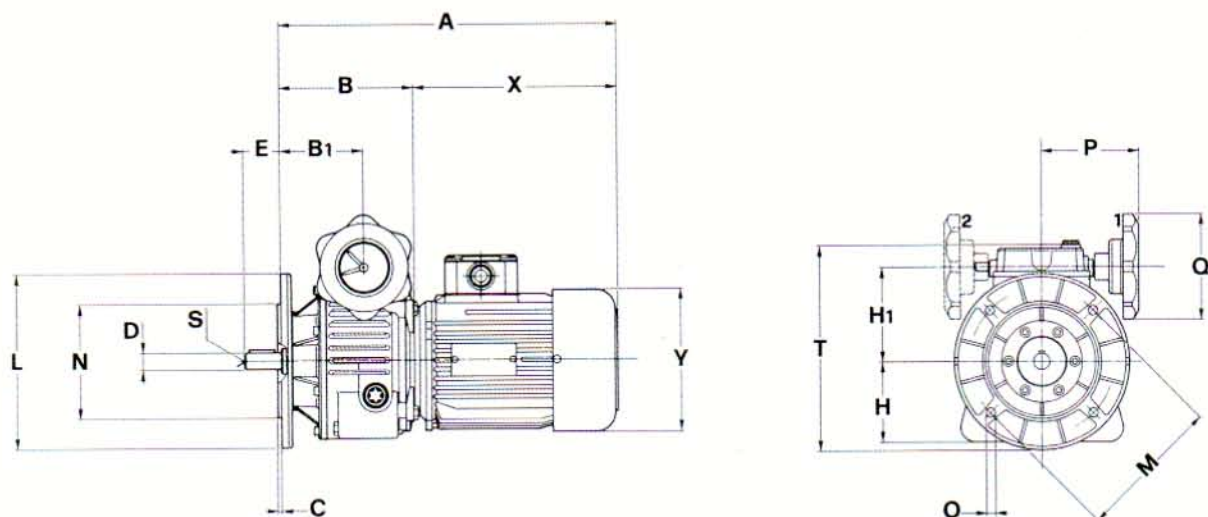
TXF... PERFORMANCE

n1	MOTOR	VARIATOR	n2 max	n2 min	M2 min	M2 max
2800	0.37kW/2P	TXF002/063	1760	340	1.7	4
	0.55kW/2P	TXF005/071	2000	340	2.2	6
	0.75kW/2P	TXF005/071	2000	340	3	6
	0.75kW/2P	TXF005/080	1900	540	3.2	6
	1.1kW/2P	TXF005/080	1900	540	4.7	6
	1.1kW/2P	TXF010/080	2000	340	4.4	12
	1.5kW/2P	TXF005/080	1900	540	6	6
	1.5kW/2P	TXF010/080	2000	340	6	12
	1.5kW/2P	TXF010/090	1900	540	6.3	12
	2.2kW/2P	TXF010/090	1900	540	9.3	12

n1	MOTOR	VARIATOR	n2 max	n2 min	M2 min	M2 max
1400	0.22kW/4P	TXF002/063	880	170	2	4
	0.25kW/4P	TXF005/071	1000	170	2	6
	0.37kW/4P	TXF005/071	1000	170	3	6
	0.55kW/4P	TXF005/080	950	270	4.6	6
	0.55kW/4P	TXF010/080	1000	170	4.4	12
	0.75kW/4P	TXF005/080	950	270	6	6
	0.75kW/4P	TXF010/080	1000	170	6	12
	1.1kW/4P	TXF010/090	950	270	9.1	12
	1.5kW/4P	TXF010/090	950	270	12	12

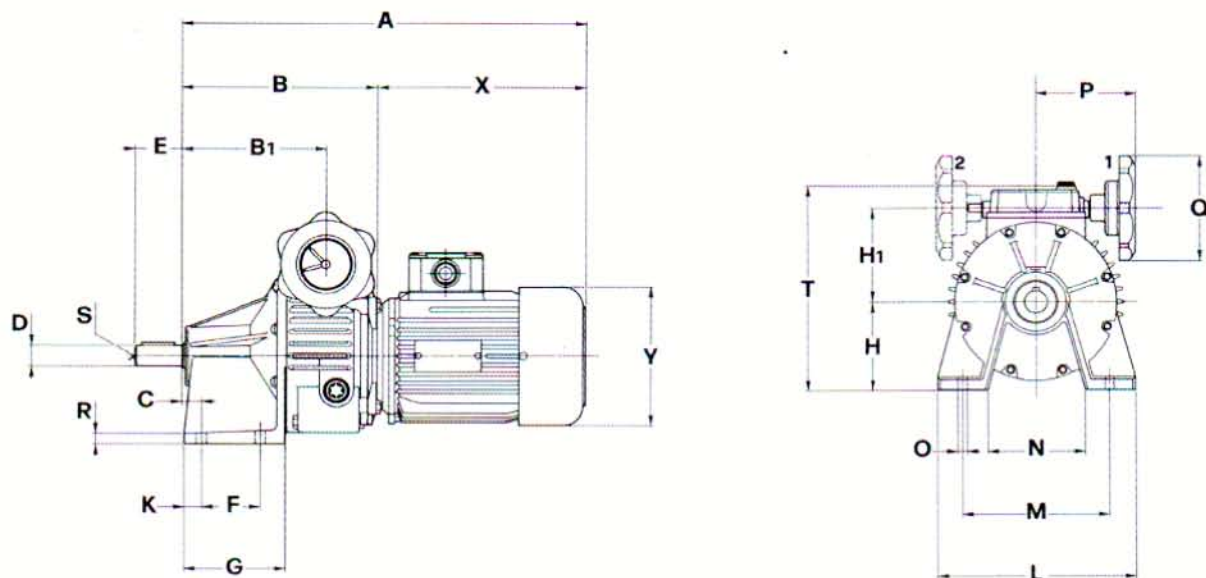
n1	MOTOR	VARIATOR	n2 max	n2 min	M2 min	M2 max
900	0.15kW/6P	TXF002/063	566	109	2.1	4
	0.25kW/6P	TXF005/071	643	109	3	6
	0.37kW/6P	TXF005/080	611	174	4.7	6
	0.55kW/6P	TXF005/080	611	174	6	6
	0.55kW/6P	TXF010/080	643	109	6.6	12
	0.75kW/6P	TXF010/090	611	174	9.5	12
	1.1kW/6P	TXF010/090	611	174	12	12

DIMENSIONS AND CLEARANCES OF SF MOTOR - VARIATOR



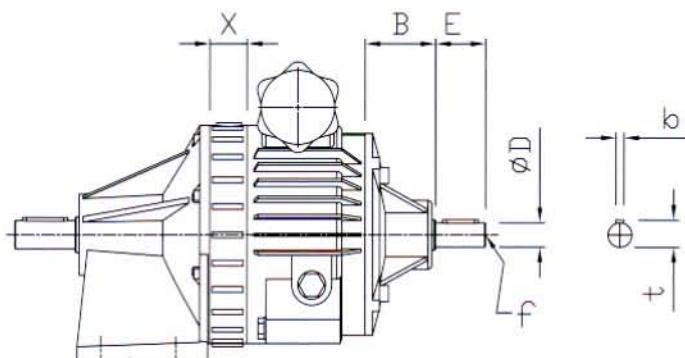
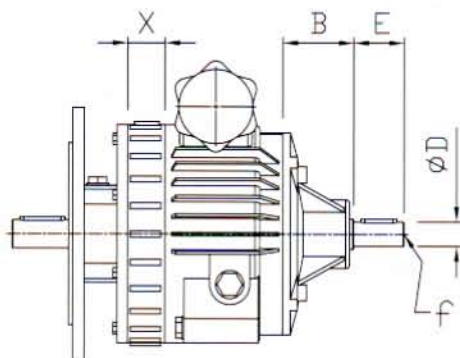
TYPE	A	B	B1	C	D	E	H	H1	L	M	N	O	P	Q	S	T	X	Y
SF-003	288	103	65.5	3	11	23	58	75	140	115	95	9	97	90	M4	165	185	122
				3.5	14	30			160	130	110	9			M5	175		
SF-005	337.5	127.5	78.5	3.5	14	30	70	88	160	130	110	9	97	90	M5	188	210	137
				3.5	19	40			200	165	130	11			M6	208		
SF-010	382.5	152.5	94.5	3.5	19	40	90	107	160	130	110	9	107	90	M6	223	230	158
				3.5	24	50			200	165	130	11			M8	233		
SF-020	443	173	105.5	3.5	24	50	108	126	200	165	130	11	117	90	M8	260	270	177
				4	28	60			250	215	180	14			M10	277		
SF-030/050	547.5	207.5	123.5	4	28	60	134	158.5	250	215	180	14	155	120	M10	320.5	340	197
				5	38	80			300	265	230	14			M12	336.5		
SF-100	688	266	164.5	5	38	80	165	205.5	300	265	230	14	183	120	M12	398.5	402	253
				5	42	80			350	300	250	18			M12	408.5		

DIMENSIONS AND CLEARANCES OF ST MOTOR - VARIATOR



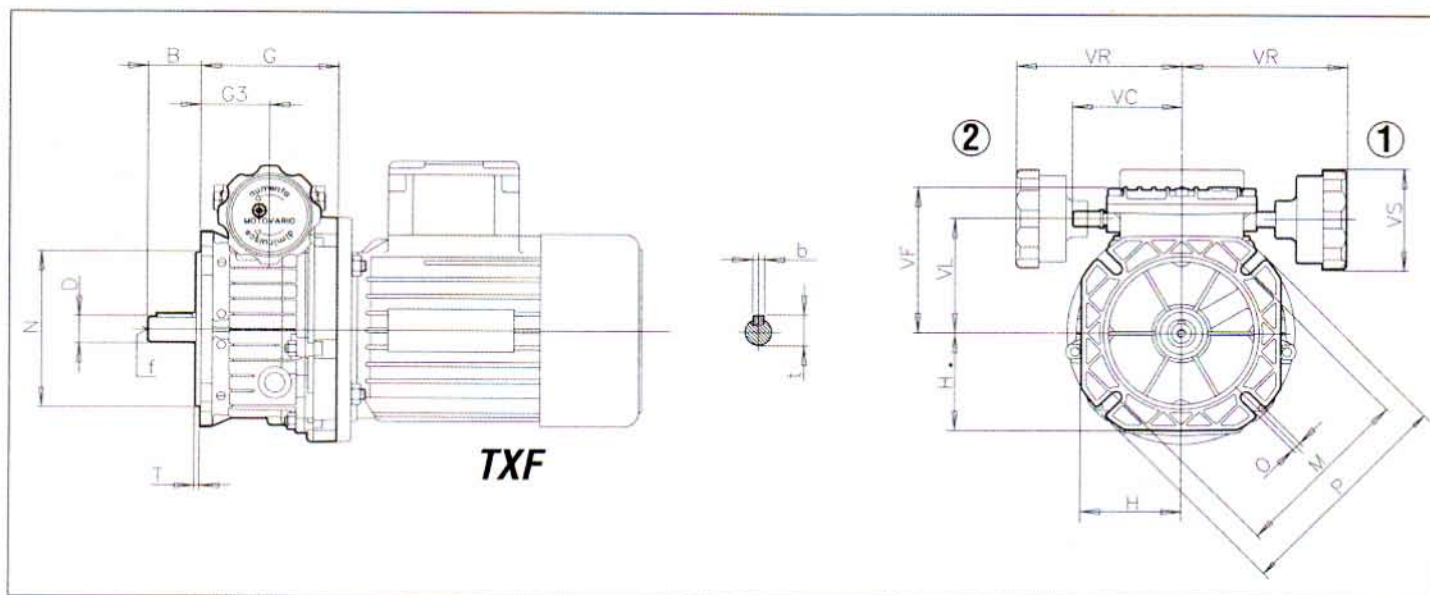
TYPE	A	B	B1	C	D	E	F	G	H	H1	K	L	M	N	O	P	Q	R	S	T	X	Y
ST-003	316	131	93.5	16	14	30	25	60	70	75	15	130	95	60	9	97	90	8	M6	165	185	122
ST-005	387.5	177.5	128.5	16	19	40	55	90	80	88	15	180	150	90	11	97	90	10	M6	188	210	137
ST-010	444.5	214.5	156.5	19.5	24	50	65	110	102	107	18.5	220	165	108	11	107	90	12	M8	235	230	158
ST-020	522	252	184.5	25.5	28	60	75	130	125	126	23.5	250	185	120	14	117	90	14	M8	277	270	177
ST-030/050	634.5	294.5	210.5	29	38	80	85	150	150	158.5	25	310	240	150	18	155	120	16	M10	336.5	340	197
ST-100	776	354	252.5	32	42	80	120	186	190	205.5	29	380	295	195	20	183	120	20	M10	423.5	422	253

DIFFERENTIAL DEVICE / ECE INPUT SHAFT



S						
TYPE	003	005	010	020	030 - 050	100
X	-	37.5	33.5	37	54	54
B	50	50	65	70	95	110
D	11	14	19	24	28	38
E	23	30	40	50	60	80
f	M4	M6	M6	M8	M8	M10
b	4	5	6	8	8	10
t	12.5	16	21.5	27	31	41

TXF - DIMENSIONS



	B	D j6	G	G3	M	N f8	O	P	T	
002/063	23 (30)	11 (14)	82.5	40	115	95	9	140	3	
005/071	30 (40)	14 (19)	94	47	130	110	9	160	3.5	
005/080	30 (40)	14 (19)	104	47	130	110	9	160	3.5	
010/080	40 (50)	19 (24)	120	57	165	130	11	200	3.5	
010/090	40 (50)	19 (24)	120	57	165	130	11	200	3.5	

	VC	VF	VL	VR	VS	H	b	f	t	Kg.
002/063	79.5	91.5	69	116.5	71	62.5	4 (5)	--- (M6)	12.5 (16)	2.3
005/071	79.5	104.5	82	116.5	71	70	5 (6)	M6 (M6)	16 (21.5)	3.3
005/080	79.5	104.5	82	116.5	71	70	5 (6)	M6 (M6)	16 (21.5)	4
010/080	89.5	127	103	126.5	71	90	6 (8)	M6 (M8)	21.5 (27)	6.1
010/090	89.5	127	103	126.5	71	90	6 (8)	M6 (M8)	21.5 (27)	6.7

Dimensions in brackets () are supplied only on request

n1 = Input Speed (RPM)

n2 max = Maximum Output Speed (RPM)

n2 min = Minimum Output Speed (RPM)

kg : Weight without motor

M2 min = Minimum Output Torque (Nm)

M2 max = Maximum Output Torque (Nm)