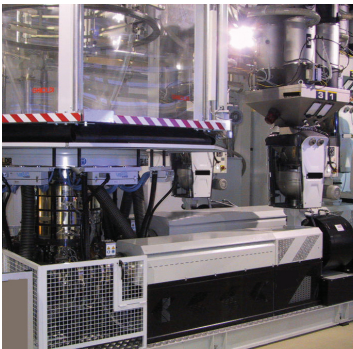


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Torque Motors for Extruders

Solutions for the plastics industry



ENGINEERING YOUR SUCCESS.

An innovative solution for extruders

An advantageous “direct drive” alternative to costly gearbox based systems in extruders applications

Parker torque motors are permanent magnet brushless servo motors, especially designed to replace direct current or induction motors associated with gearboxes on extruders applications.

Designed to deliver high torque at low speed without any additional mechanical transmission system, their usage results in more compact, more efficient, less noisy and maintenance free drive systems.

Example of energy savings

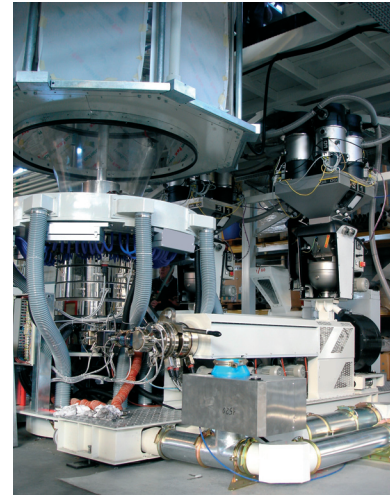
Gearbox suppression has an immediate impact on the overall installation's efficiency, resulting in energy savings.

Example :

- 100 kW extruder,
- 7200h annual operating
- Energy cost: 0,10 €/kWh

Overall efficiency improvement due to the installation of a torque Motor: 5%

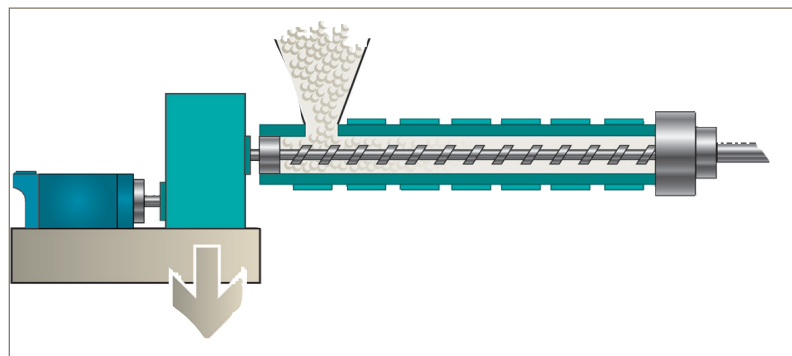
Annual savings 3600 €



DC or induction Motor - Gearbox required

DISADVANTAGES

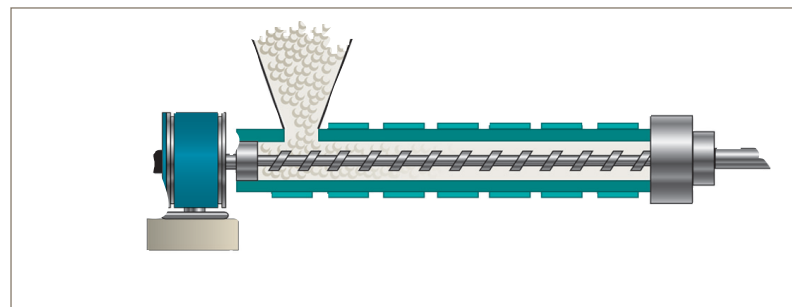
- ☹ DC Motor maintenance
- ☹ Gearbox maintenance
- ☹ High energy consumption
- ☹ Important dimensions
- ☹ Noisy solution



Parker Torque Motor without Gearbox

ADVANTAGES

- ☺ No maintenance
- ☺ Reduced energy consumption (by about 5%)
- ☺ Silent operation (European Directive 2003/10/CE)
- ☺ Increased compactness



Product overview

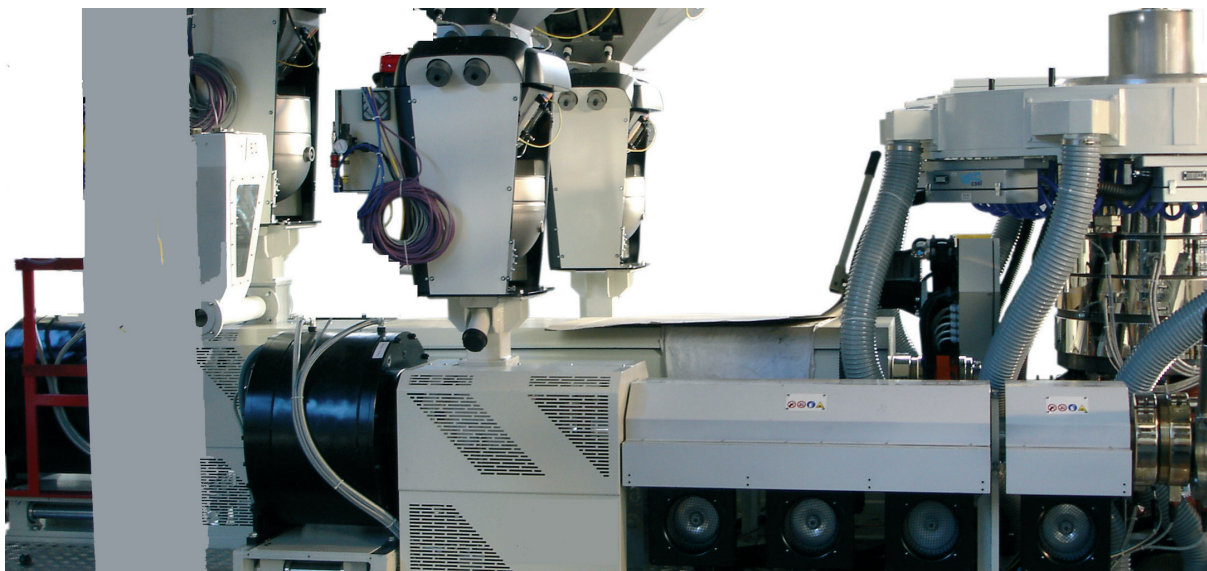
More than just motors, Parker Torque Motors are complete and ready-to-use “direct drives” systems, especially designed to fully and effectively respond to Plastics and Rubber industries specific needs.

Result of a close cooperation with machine builders and end-users, those innovative “direct drive” solutions integrate various dedicated features, such as: a generously sized, integrated thrust bearing to support back pressure from the screw, as well as specific mechanisms allowing for quick and easy removal of the screw from the motor...

Delivering torques up to 22 100 N.m, at speeds ranging from 50 to 500 rpm, Parker Torque Motors represent the perfect alternative to gearbox based systems, for extruders applications of power up to 320 kW.

Technical specifications

• Torque range	1200 – 22100 N.m (water-cooling)
• Shaft heights	200, 315 or 400 mm
• Rated Voltage	400 VAC and 480 VAC
• Speed	50 – 500 rpm (size dependent) - Field weakening operation up to $1.2x n_{rated}$ - Other speeds available on request
• Cooling	Water Jacket as standard - Natural ventilation with derating (consult us)
• Mounting	IMB3
• Protection degree	IP 54
• Thermal protection	1 x KTY sensor and 2 x PTC probes - Temperature alarm and default
• Shaft end	Hollow shaft with keyway as standard - Customized interfaces available on request
• Thrust bearing	SKF 294 __E as standard
• Feedback sensor	Endat Encoder as standard Direct Endat Encoder with hollow shaft (option) Resolver (option)



Product code

T M W 3 0 6 L X C 2 0

Product Series
TM: Torque Motors

Cooling Method
W: Water cooling (standard)
A: Natural Ventilation
(available with derating, consult us)

Shaft Height
20: 200 mm
30: 315 mm
40: 400 mm

Torque/Speed Characteristics
(see motors data tables)

Feedback Sensor

Type	Code	Cable Ref. for AC890	Cable Ref. for Compax 3
Endat Encoder (Standard)	C	CS4UV1F3R0xxx*	CC3UV1F3R0xxx*
Direct Endat encoder with hollow shaft (Option)	B	CS4UV1F3R0xxx*	CC3UV1F3R0xxx*
Resolver (Option)	A	CS4UA1F1R0xxx*	CC3UA1F1R0xxx*

* xxx = Cable length in meter

Thrust Bearing
Example : 20 = 29420

Base Configurations					
Motor Model	Thrust Bearing	Availability	Ordering Code		Dimensions Drawing
			Thrust Bearing	Mechanical Interface	
TMW204...208	SKF 29420	Standard	20	001	See p. 12
	SKF 29424	Option	24	002	See p. 13
TMW304	SKF 29422	Standard	22	003	See p. 14
	SKF 29426	Option	26	004	See p. 15
	SKF 29430	Option	30	005	See p. 16
TMW305...30A	SKF 29422	Option	22	003	See p. 14
	SKF 29426	Standard	26	004	See p. 15
	SKF 29430	Option	30	005	See p. 16
TMW406	SKF 29430	Standard	30	006	See p. 17
	SKF 29434	Option	34	007	See p. 18
	SKF 29440	Option	40	008	See p. 19
TMW407...40C	SKF 29430	Option	30	006	See p. 17
	SKF 29434	Standard	34	007	See p. 18
	SKF 29440	Option	40	008	See p. 19
All	No thrust bearing, with ball bearings	Option	00	Consult us	
All	No thrust bearing, with roller bearings	Option	01	Consult us	

U F R 0 0 0 3

Mechanical Interface

Code	Dimensions drawings
001	See p 12
002	See p 13
003	See p 14
004	See p 15
005	See p 16
006	See p 17
007	See p 18
008	See p 19

Shaft type
See Table below

Code	Shaft End	Availability
0	Hollow Shaft with keyway	Standard
1	Hollow Shaft with spline profile, (DIN 5480)	Option
2	Hollow Shaft with spline profile (DIN 5463)	Option
5	Full Shaft with spline profile (DIN 5480)	Option
6	Full Shaft with spline profile (DIN 5463)	Option
7	Full shaft, smooth	Option
8	Full shaft, with keyway	Option
9	Special shaft (Consult us)	Option

Extruder Screw Extraction/Cooling

F: Frontside extruder screw extraction

P: Frontside extruder screw extraction
Extruder screw cooling possibility

R: Backside extruder screw extraction (consult us)
Extruder screw cooling possibility

Z: No screw extraction - No screw cooling possibility

Terminal Box

U: Upper Rear (Standard)

R: At the rear on the Right side (front view) (Option)

L: At the rear on the Left side (front view) (Option)

TMW Series - 400 VAC Power Supply ⁽¹⁾

Model	Pn (kW)	Nn (rpm)	Mn (Nm)	In (Arms)	Nmax (rpm)	Mmax ⁽²⁾ (Nm)	Inertia (kgm ²)	Water flow rate (l/min)	Drive reference ⁽²⁾
50 - 75 rpm									
TMW305LU	29	70	3940	68	80	5880	4,40	17	890SD-432730E
TMW306LV	38	75	4830	86	85	7200	4,55	20	890SD-432870E
TMW406LV	81	75	10300	169	90	15300	16,20	28	890SD-433180F
TMW408LW	90	60	14200	197	75	21000	19,40	37	890SD-433216G
TMW40ALW	95	50	18200	219	60	26800	25,10	47	890SD-433250G
TMW40CLW	116	50	22100	271	60	32500	25,90	56	890SD-433316G
TMW40CLS	161	70	22000	348	85	32500	25,90	56	890SD-433420H
75 - 100 rpm									
TMW304LR	32	100	3040	70	115	4550	3,45	14	890SD-432730E
TMW305LT	39	95	3930	84	115	5880	4,40	17	890SD-432870E
TMW308LU	59	85	6620	133	105	9870	6,50	27	890SD-433145F
TMW30ALU	71	80	8430	163	95	12500	6,80	34	890SD-433180F
TMW30ALS	88	100	8410	191	125	12500	6,80	34	890SD-433216G
TMW406LS	108	100	10300	216	125	15300	16,20	28	890SD-433250G
TMW408LS	126	85	14200	261	105	21000	19,40	38	890SD-433316G
TMW408LP	148	100	14100	306	120	21000	19,40	38	890SD-433361G
TMW40ALQ	151	80	18100	313	100	26800	25,10	47	890SD-433361G
TMW40CLK	207	90	21900	428	110	32500	25,90	57	890SD-433520H
100 - 125 rpm									
TMW204LU	15	120	1220	35	140	1810	0,75	9	890SD-532450D
TMW205LT	21	125	1570	47	155	2320	0,78	11	890SD-532590D
TMW208LU	30	110	2640	71	125	3910	1,03	18	890SD-432730E
TMW304LQ	40	125	3030	81	150	4550	3,45	14	890SD-432870E
TMW306LS	53	105	4810	115	130	7200	4,55	21	890SD-433105F
TMW306LR	63	125	4800	129	155	7200	4,55	21	890SD-433145F
TMW308LQ	79	115	6590	167	140	9870	6,50	28	890SD-433180F
TMW30ALQ	105	120	8380	216	150	12500	6,80	34	890SD-433250G
TMW406LP	134	125	10200	266	155	15300	16,20	29	890SD-433316G
TMW40ALM	198	105	18000	398	130	26800	25,10	47	890SD-433480H
TMW40ALK	225	120	17900	446	150	26800	25,10	48	890SD-433590J
TMW40CLI	274	120	21800	536	150	32500	25,90	57	890SD/4/0685K ⁽³⁾

⁽¹⁾ Other speeds available, consult us.

⁽²⁾ This reference corresponds to the optimum drive for operation at the nominal point of the motor, without overload.
Warning : this drive does not allow to reach the maximum torque of the motor, and has to be adapted regarding the application requirements

⁽³⁾ Consult Factory

TMW Series - 400 VAC Power Supply ⁽¹⁾

Model	Pn (kW)	Nn (rpm)	Mn (Nm)	In (Arms)	Nmax (rpm)	Mmax ⁽²⁾ (Nm)	Inertia (kgm ²)	Water flow rate (l/min)	Drive reference ⁽²⁾
50 - 75 rpm									
TMW305LU	29	70	3940	68	80	5880	4,40	17	890SD-432730E
TMW306LV	38	75	4830	86	85	7200	4,55	20	890SD-432870E
TMW406LV	81	75	10300	169	90	15300	16,20	28	890SD-433180F
TMW408LW	90	60	14200	197	75	21000	19,40	37	890SD-433216G
TMW40ALW	95	50	18200	219	60	26800	25,10	47	890SD-433250G
TMW40CLW	116	50	22100	271	60	32500	25,90	56	890SD-433316G
TMW40CLS	161	70	22000	348	85	32500	25,90	56	890SD-433420H
75 - 100 rpm									
TMW304LR	32	100	3040	70	115	4550	3,45	14	890SD-432730E
TMW305LT	39	95	3930	84	115	5880	4,40	17	890SD-432870E
TMW308LU	59	85	6620	133	105	9870	6,50	27	890SD-433145F
TMW30ALU	71	80	8430	163	95	12500	6,80	34	890SD-433180F
TMW30ALS	88	100	8410	191	125	12500	6,80	34	890SD-433216G
TMW406LS	108	100	10300	216	125	15300	16,20	28	890SD-433250G
TMW408LS	126	85	14200	261	105	21000	19,40	38	890SD-433316G
TMW408LP	148	100	14100	306	120	21000	19,40	38	890SD-433361G
TMW40ALQ	151	80	18100	313	100	26800	25,10	47	890SD-433361G
TMW40CLK	207	90	21900	428	110	32500	25,90	57	890SD-433520H
100 - 125 rpm									
TMW204LU	15	120	1220	35	140	1810	0,75	9	890SD-532450D
TMW205LT	21	125	1570	47	155	2320	0,78	11	890SD-532590D
TMW208LU	30	110	2640	71	125	3910	1,03	18	890SD-432730E
TMW304LQ	40	125	3030	81	150	4550	3,45	14	890SD-432870E
TMW306LS	53	105	4810	115	130	7200	4,55	21	890SD-433105F
TMW306LR	63	125	4800	129	155	7200	4,55	21	890SD-433145F
TMW308LQ	79	115	6590	167	140	9870	6,50	28	890SD-433180F
TMW30ALQ	105	120	8380	216	150	12500	6,80	34	890SD-433250G
TMW406LP	134	125	10200	266	155	15300	16,20	29	890SD-433316G
TMW40ALM	198	105	18000	398	130	26800	25,10	47	890SD-433480H
TMW40ALK	225	120	17900	446	150	26800	25,10	48	890SD-433590J
TMW40CLI	274	120	21800	536	150	32500	25,90	57	890SD/4/0685K ⁽³⁾

⁽¹⁾ Other speeds available, consult us.

⁽²⁾ This reference corresponds to the optimum drive for operation at the nominal point of the motor, without overload.
Warning : this drive does not allow to reach the maximum torque of the motor, and has to be adapted regarding the application requirements

⁽³⁾ Consult Factory

TMW Series - 400 VAC Power Supply ⁽¹⁾

Model	Pn (kW)	Nn (rpm)	Mn (Nm)	In (Arms)	Nmax (rpm)	Mmax ⁽²⁾ (Nm)	Inertia (kgm ²)	Water flow rate (l/min)	Drive reference ⁽²⁾
50 - 75 rpm									
TMW305LU	29	70	3940	68	80	5880	4,40	17	890SD-432730E
TMW306LV	38	75	4830	86	85	7200	4,55	20	890SD-432870E
TMW406LV	81	75	10300	169	90	15300	16,20	28	890SD-433180F
TMW408LW	90	60	14200	197	75	21000	19,40	37	890SD-433216G
TMW40ALW	95	50	18200	219	60	26800	25,10	47	890SD-433250G
TMW40CLW	116	50	22100	271	60	32500	25,90	56	890SD-433316G
TMW40CLS	161	70	22000	348	85	32500	25,90	56	890SD-433420H
75 - 100 rpm									
TMW304LR	32	100	3040	70	115	4550	3,45	14	890SD-432730E
TMW305LT	39	95	3930	84	115	5880	4,40	17	890SD-432870E
TMW308LU	59	85	6620	133	105	9870	6,50	27	890SD-433145F
TMW30ALU	71	80	8430	163	95	12500	6,80	34	890SD-433180F
TMW30ALS	88	100	8410	191	125	12500	6,80	34	890SD-433216G
TMW406LS	108	100	10300	216	125	15300	16,20	28	890SD-433250G
TMW408LS	126	85	14200	261	105	21000	19,40	38	890SD-433316G
TMW408LP	148	100	14100	306	120	21000	19,40	38	890SD-433361G
TMW40ALQ	151	80	18100	313	100	26800	25,10	47	890SD-433361G
TMW40CLK	207	90	21900	428	110	32500	25,90	57	890SD-433520H
100 - 125 rpm									
TMW204LU	15	120	1220	35	140	1810	0,75	9	890SD-532450D
TMW205LT	21	125	1570	47	155	2320	0,78	11	890SD-532590D
TMW208LU	30	110	2640	71	125	3910	1,03	18	890SD-432730E
TMW304LQ	40	125	3030	81	150	4550	3,45	14	890SD-432870E
TMW306LS	53	105	4810	115	130	7200	4,55	21	890SD-433105F
TMW306LR	63	125	4800	129	155	7200	4,55	21	890SD-433145F
TMW308LQ	79	115	6590	167	140	9870	6,50	28	890SD-433180F
TMW30ALQ	105	120	8380	216	150	12500	6,80	34	890SD-433250G
TMW406LP	134	125	10200	266	155	15300	16,20	29	890SD-433316G
TMW40ALM	198	105	18000	398	130	26800	25,10	47	890SD-433480H
TMW40ALK	225	120	17900	446	150	26800	25,10	48	890SD-433590J
TMW40CLI	274	120	21800	536	150	32500	25,90	57	890SD/4/0685K ⁽³⁾

⁽¹⁾ Other speeds available, consult us.

⁽²⁾ This reference corresponds to the optimum drive for operation at the nominal point of the motor, without overload.
Warning : this drive does not allow to reach the maximum torque of the motor, and has to be adapted regarding the application requirements

⁽³⁾ Consult Factory

TMW Series - 480 VAC Power Supply ⁽¹⁾

Model	Pn (kW)	Nn (rpm)	Mn (Nm)	In (Arms)	Nmax (rpm)	Mmax ⁽²⁾ (Nm)	Inertia (kgm ²)	Water flow rate (l/min)	Drive reference ⁽²⁾
50 - 75 rpm									
TMW408LW	112	75	14200	196	90	21000	19,40	37	890SD-433216G
TMW40ALW	114	60	18100	219	70	26800	25,10	47	890SD-433250G
TMW40CLW	150	65	22000	271	75	32500	25,90	56	890SD-433316G
75 - 100 rpm									
TMW305LU	35	85	3930	67	95	5880	4,40	17	890SD-432730E
TMW306LV	45	90	4820	86	100	7200	4,55	20	890SD-432870E
TMW30ALU	88	100	8410	162	120	12500	6,80	34	890SD-433216G
TMW406LV	97	90	10300	169	105	15300	16,20	28	890SD-433216G
TMW40ALQ	179	95	18000	312	115	26800	25,10	47	890SD-433361G
TMW40CLS	195	85	22000	347	100	32500	25,90	56	890SD-433420H
100 - 125 rpm									
TMW304LR	40	125	3030	70	140	4550	3,45	14	890SD-432730E
TMW305LT	47	115	3920	84	135	5880	4,40	17	890SD-432870E
TMW308LU	76	110	6600	133	135	9870	6,50	27	890SD-433156F
TMW30ALS	110	125	8370	190	155	12500	6,80	34	890SD-433216G
TMW406LS	129	120	10200	215	145	15300	16,20	28	890SD-433250G
TMW408LS	155	105	14100	260	125	21000	19,40	38	890SD-433316G
TMW408LP	184	125	14100	304	145	21000	19,40	38	890SD-433361G
TMW40CLK	252	110	21800	426	130	32500	25,90	57	890SD-433520H
125 - 150 rpm									
TMW204LU	19	150	1210	35	170	1810	0,75	9	890SD-532450D
TMW208LU	37	135	2630	71	150	3910	1,03	18	890SD-432730E
TMW304LQ	47	150	3020	81	180	4550	3,45	14	890SD-432870E
TMW306LS	68	135	4790	114	165	7200	4,55	21	890SD-433145F
TMW308LQ	100	145	6560	167	175	9870	6,50	28	890SD-433216G
TMW30ALQ	127	145	8350	215	180	12500	6,80	34	890SD-433250G
TMW40ALM	243	130	17900	396	160	26800	25,10	47	890SD-433480H
TMW40ALK	271	145	17800	444	180	26800	25,10	48	890SD-433590J
TMW40CLI	329	145	21700	533	180	32500	25,90	57	890SD/4/0685K ⁽³⁾

⁽¹⁾ Other speeds available, consult us.

⁽²⁾ This reference corresponds to the optimum drive for operation at the nominal point of the motor, without overload.
Warning : this drive does not allow to reach the maximum torque of the motor, and has to be adapted regarding the application requirements

⁽³⁾ Consult Factory

TMW Series - 480 VAC Power Supply ⁽¹⁾

Model	Pn (kW)	Nn (rpm)	Mn (Nm)	In (Arms)	Nmax (rpm)	Mmax ⁽²⁾ (Nm)	Inertia (kgm ²)	Water flow rate (l/min)	Drive reference ⁽²⁾
150 - 175 rpm									
TMW205LT	25	155	1560	47	190	2320	0,78	11	890SD-532590D
TMW207LS	38	160	2270	70	195	3380	1,00	15	890SD-432730E
TMW208LT	48	175	2630	86	215	3910	1,03	18	890SD-432870E
TMW305LP	71	175	3880	117	215	5880	4,40	17	890SD-433145F
TMW306LR	77	155	4770	128	190	7200	4,55	21	890SD-433145F
TMW308LN	120	175	6520	197	215	9870	6,50	28	890SD-433216G
TMW406LP	165	155	10100	264	190	15300	16,20	29	890SD-433316G
TMW408LL	240	165	13900	385	200	21000	19,40	38	890SD-433480H
TMW40ALH	324	175	17700	522	215	26800	25,10	48	890SD/4/0685K ⁽³⁾
TMW40CLG	394	175	21500	621	215	32500	25,90	57	890SD/4/0798K ⁽³⁾
175 - 200 rpm									
TMW306LN	99	200	4730	160	245	7200	4,55	21	890SD-433216G
TMW30ALN	165	190	8270	267	230	12500	6,80	35	890SD-433316G
TMW406LJ	190	180	10100	304	215	15300	16,20	29	890SD-433361G
TMW408LJ	268	185	13800	431	225	21000	19,40	38	890SD-433520H
200 - 225 rpm									
TMW204LR	27	215	1210	47	260	1810	0,75	9	890SD-532590D
TMW206LR	41	205	1910	71	250	2850	0,81	13	890SD-432730E
TMW207LR	49	205	2270	84	250	3380	1,00	16	890SD-432870E
TMW304LM	70	225	2970	113	275	4550	3,45	14	890SD-433145F
TMW305LN	83	205	3850	132	250	5880	4,40	17	890SD-433156F
TMW308LM	139	205	6480	224	250	9870	6,50	28	890SD-433250G
TMW30ALL	189	220	8220	303	275	12500	6,80	35	890SD-433361G
TMW406LI	225	215	9970	349	260	15300	16,20	29	890SD-433420H
TMW40ALE	393	215	17500	619	250	26800	25,10	48	890SD/4/0798K ⁽³⁾
225 - 250 rpm									
TMW206LQ	50	250	1900	83	310	2850	0,81	13	890SD-432870E
TMW208LQ	68	250	2610	114	310	3910	1,03	18	890SD-433145F
TMW306LL	120	245	4680	189	290	7200	4,55	21	890SD-433216G
TMW308LK	162	240	6430	259	300	9870	6,50	28	890SD-433316G
TMW406LH	249	240	9890	387	300	15300	16,20	29	890SD-433480H ⁽³⁾
TMW408LF	342	240	13600	532	295	21000	19,40	39	890SD/4/0685K ⁽³⁾

⁽¹⁾ Other speeds available, consult us.

⁽²⁾ This reference corresponds to the optimum drive for operation at the nominal point of the motor, without overload.
Warning : this drive does not allow to reach the maximum torque of the motor, and has to be adapted regarding the application requirements

⁽³⁾ Consult Factory

TMW Series - 480 VAC Power Supply ⁽¹⁾

Model	Pn (kW)	Nn (rpm)	Mn (Nm)	In (Arms)	Nmax (rpm)	Mmax ⁽²⁾ (Nm)	Inertia (kgm ²)	Water flow rate (l/min)	Drive reference ⁽²⁾
250 - 300 rpm									
TMW205LQ	42	255	1550	69	315	2320	0,78	11	890SD-432730E
TMW208LP	78	285	2600	127	345	3910	1,03	18	890SD-433145F
TMW304LL	80	260	2950	127	320	4550	3,45	14	890SD-433145F
TMW305LK	104	260	3800	164	320	5880	4,40	18	890SD-433216G
TMW306LI	143	295	4620	221	365	7200	4,55	21	890SD-433250G
TMW308LH	199	300	6330	307	370	9870	6,50	29	890SD-433361G
TMW30ALJ	222	260	8140	351	320	12500	6,80	35	890SD-433420H
TMW30ALH	253	300	8060	391	370	12500	6,80	36	890SD-433480H ⁽³⁾
TMW406LG	281	275	9770	433	340	15300	16,20	30	890SD-433520H ⁽³⁾
300 - 350 rpm									
TMW204LP	43	345	1200	69	430	1810	0,75	9	890SD-432730E
TMW205LP	52	320	1550	84	400	2320	0,78	11	890SD-432870E
TMW207LN	73	310	2250	118	380	3380	1,00	16	890SD-433145F
TMW305LH	125	320	3740	194	390	5880	4,40	18	890SD-433216G
TMW308LG	220	335	6270	338	410	9870	6,50	29	890SD-433420H ⁽³⁾
350 - 400 rpm									
TMW206LM	72	365	1890	116	455	2850	0,81	14	890SD-433145F
TMW207LM	83	355	2240	134	440	3380	1,00	16	890SD-433156F
TMW208LL	102	375	2590	162	465	3910	1,03	18	890SD-433216G
TMW304LH	107	355	2870	164	420	4550	3,45	15	890SD-433216G
TMW305LF	139	360	3700	213	445	5880	4,40	18	890SD-433250G
TMW306LG	175	370	4520	266	445	7200	4,55	22	890SD-433316G
TMW306LF	181	385	4500	278	460	7200	4,55	22	890SD-433361G ⁽³⁾
400 - 450 rpm									
TMW204LM	54	435	1190	85	535	1810	0,75	9	890SD-432870E
TMW205LL	72	450	1530	113	555	2320	0,78	11	890SD-433145F
TMW206LL	83	420	1880	131	520	2850	0,81	14	890SD-433156F
TMW207LJ	106	455	2220	166	560	3380	1,00	16	890SD-433216G
TMW208LJ	122	455	2570	192	560	3910	1,03	18	890SD-433216G
TMW304LE	129	440	2790	194	510	4550	3,45	15	890SD-433216G
450 - 500 rpm									
TMW205LK	81	511	1520	127	630	2320	0,78	11	890SD-433145F
TMW206LJ	97	495	1860	150	615	2850	0,81	14	890SD-433216G
TMW207LI	116	500	2210	180	625	3380	1,00	16	890SD-433216G
TMW208LH	136	510	2550	211	635	3910	1,03	18	890SD-433250G
TMW304LC	143	500	2720	213	590	4550	3,45	15	890SD-433250G ⁽³⁾
TMW305LC	175	470	3550	264	540	5880	4,40	19	890SD-433316G ⁽³⁾

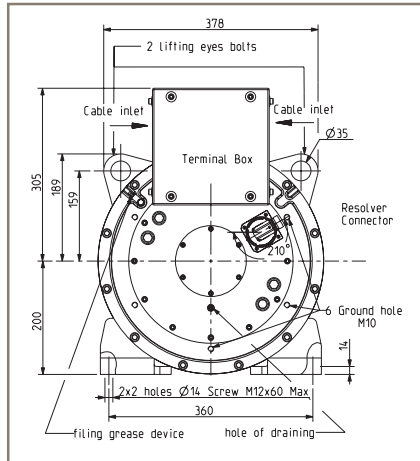
⁽¹⁾ Other speeds available, consult us.

⁽²⁾ This reference corresponds to the optimum drive for operation at the nominal point of the motor, without overload.
Warning : this drive does not allow to reach the maximum torque of the motor, and has to be adapted regarding the application requirements

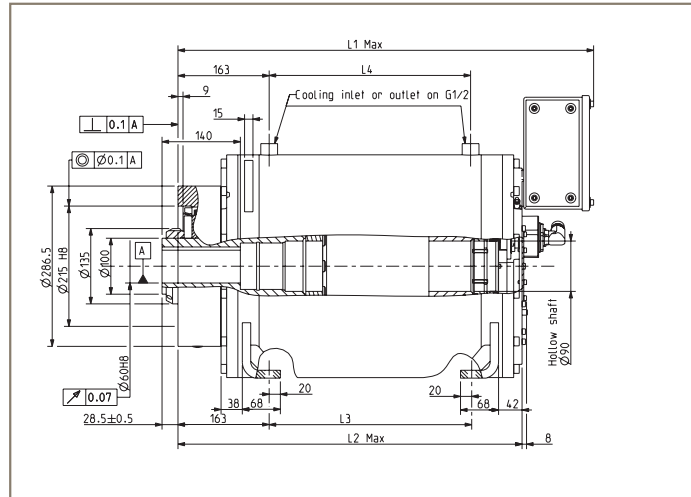
⁽³⁾ Consult Factory

Dimensions Drawings : Shaft Height 200 mm / Thrust Bearing 29420

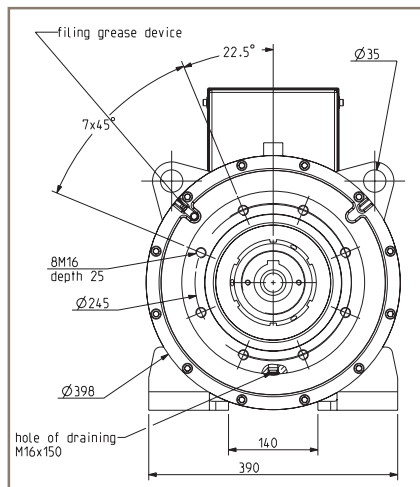
Rear view



Side view



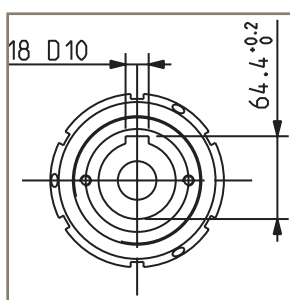
Front view



Dimensions (mm) and weight (kg)

Model	L1 Max	L2 Max	L3	L4	Weight
TMW204	750	620	362	360	335
TMW205	750	620	362	360	350
TMW206	750	620	362	360	365
TMW207	850	720	462	460	405
TMW208	850	720	462	460	420

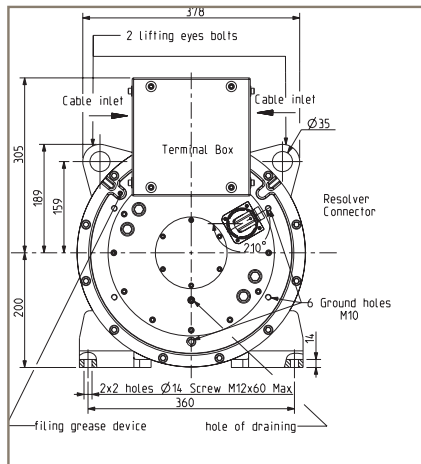
Shaft End



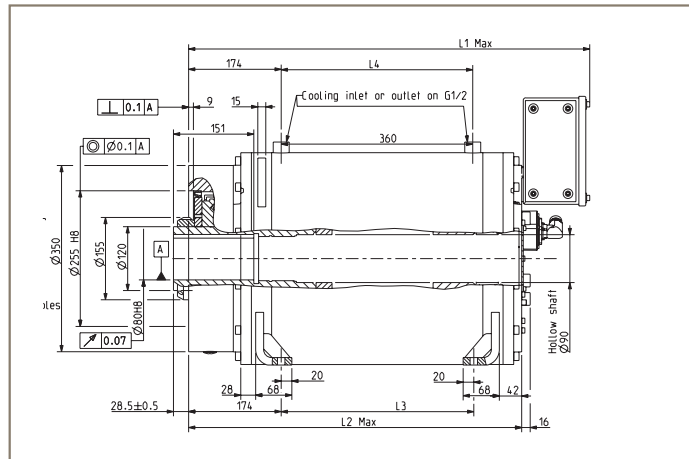
Dimensions Drawings :

Shaft Height 200 mm / Thrust Bearing 29424

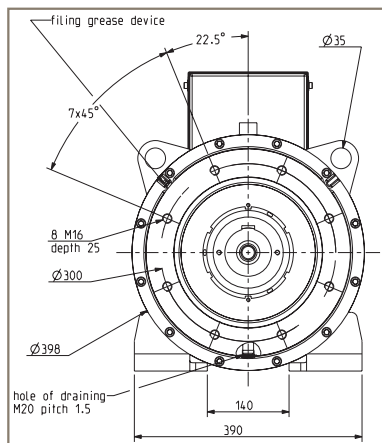
Rear view



Side view



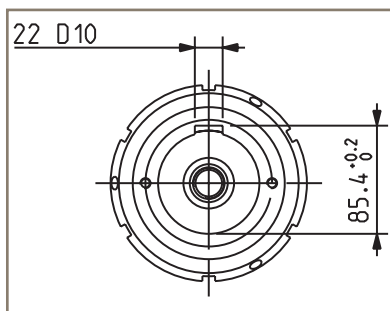
Front view



Dimensions (mm) and weight (kg)

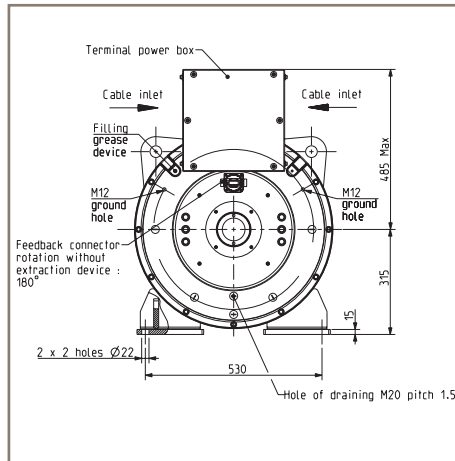
Model	L1 Max	L2 Max	L3	L4	Weight
TMW204	760	630	362	360	365
TMW205	760	630	362	360	380
TMW206	760	630	362	360	395
TMW207	860	730	462	460	435
TMW208	860	730	462	460	450

Shaft End

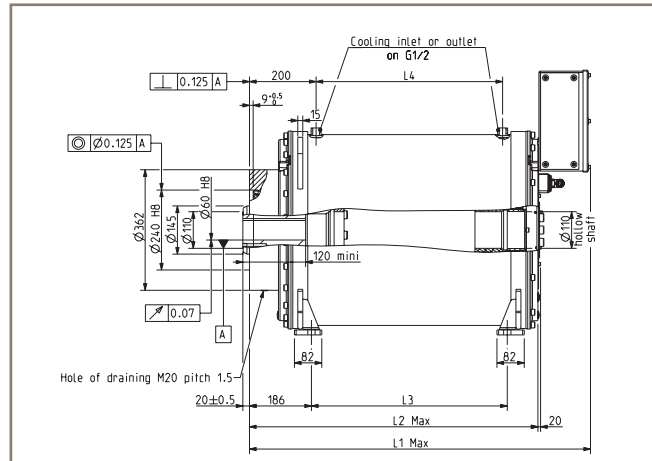


Dimensions Drawings : Shaft Height 315 mm / Thrust Bearing 29422

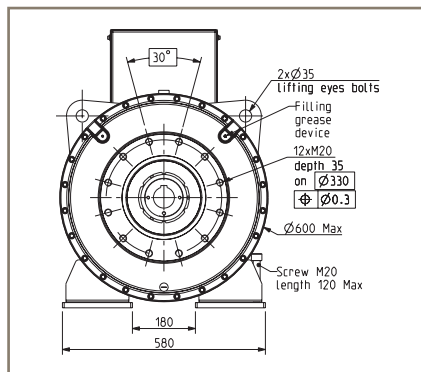
Rear view



Side view



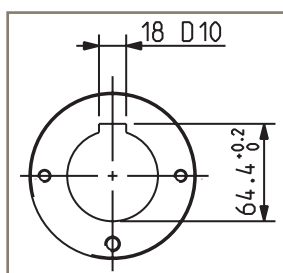
Front view



Dimensions (mm) and weight (kg)

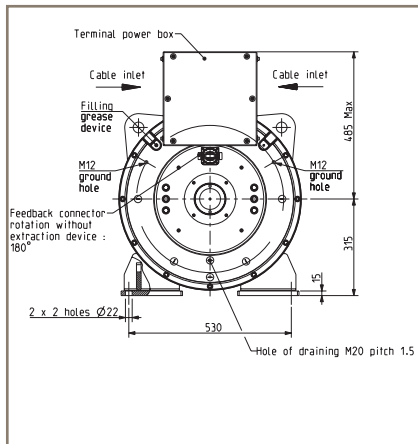
Model	L1 Max	L2 Max	L3	L4	Weight
TMW304	730	570	288	260	585
TMW305	830	670	388	360	645
TMW306	830	670	388	360	665
TMW308	1030	870	588	560	780
TMW30A	1030	870	588	560	820

Shaft End

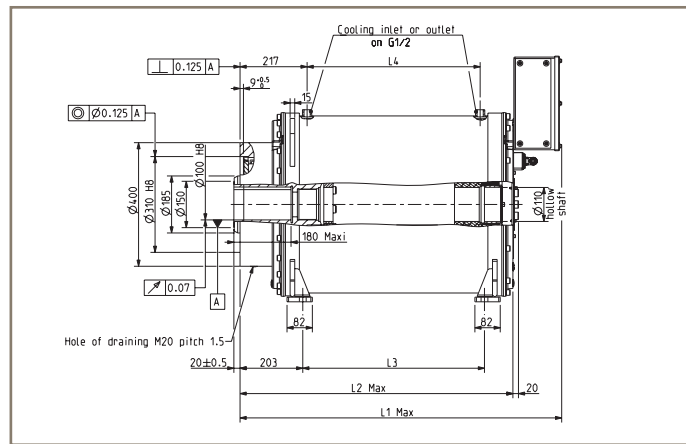


Dimensions Drawings : Shaft Height 315 mm / Thrust Bearing 29430

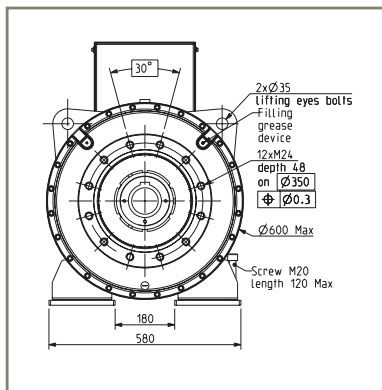
Rear view



Side view

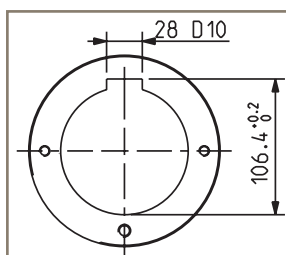


Front view



Dimensions (mm) and weight (kg)					
Model	L1 Max	L2 Max	L3	L4	Weight
TMW304	745	585	288	260	605
TMW305	845	685	388	360	665
TMW306	845	685	388	360	685
TMW308	1045	885	588	560	800
TMW30A	1045	885	588	560	840

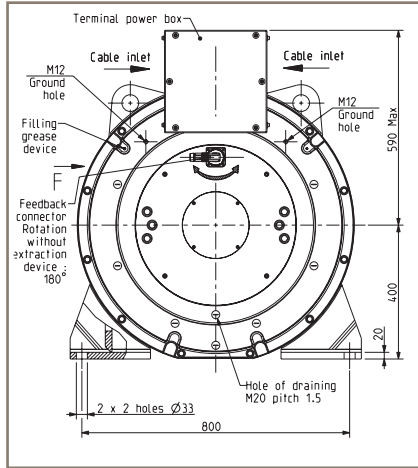
Shaft End



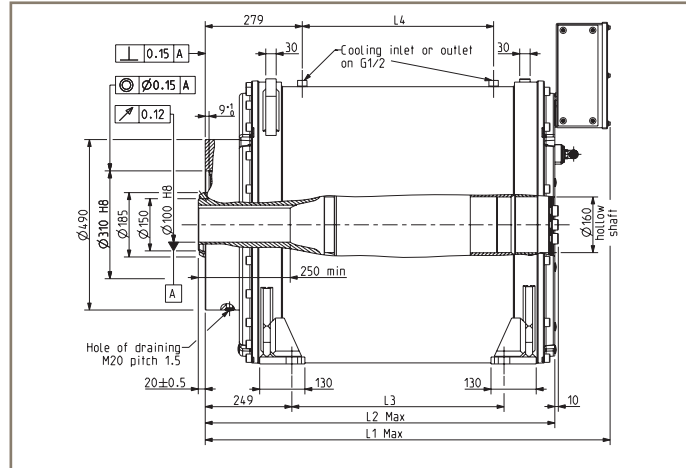
Dimensions Drawings :

Shaft Height 400 mm / Thrust Bearing 29430

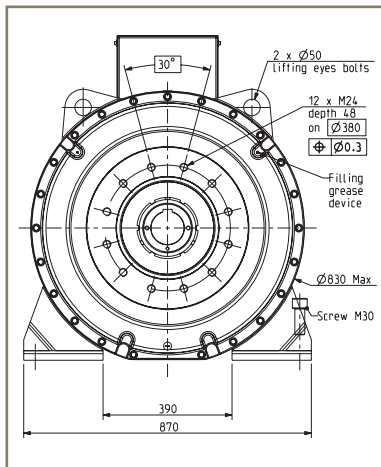
Rear view



Side view



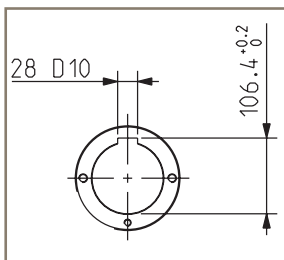
Front view



Dimensions (mm) and weight (kg)

Model	L1 Max	L2 Max	L3	L4	Weight
TMW406	867	707	310	250	1410
TMW408	967	807	410	350	1550
TMW40A	1167	1007	610	550	1740
TMW40C	1167	1007	610	550	1820

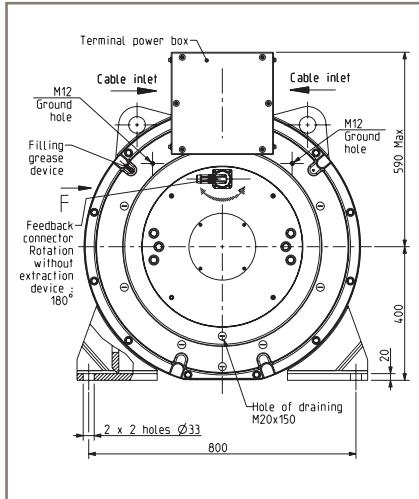
Shaft End



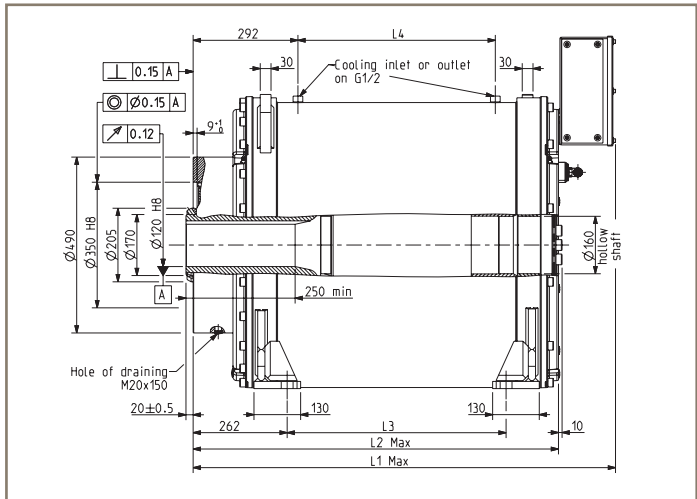
Dimensions Drawings :

Shaft Height 400 mm / Thrust Bearing 29434

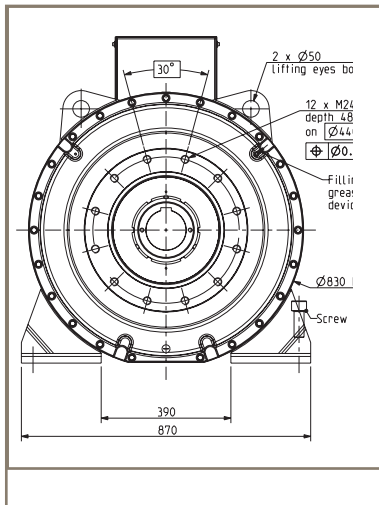
Rear view



Side view



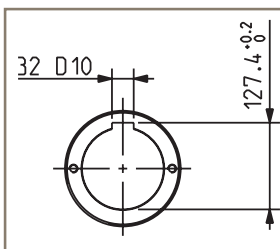
Front view



Dimensions (mm) and weight (kg)

Model	L1 Max	L2 Max	L3	L4	Weight
TMW406	880	720	310	250	1410
TMW408	980	820	410	350	1550
TMW40A	1180	1020	610	550	1750
TMW40C	1180	1020	610	550	1820

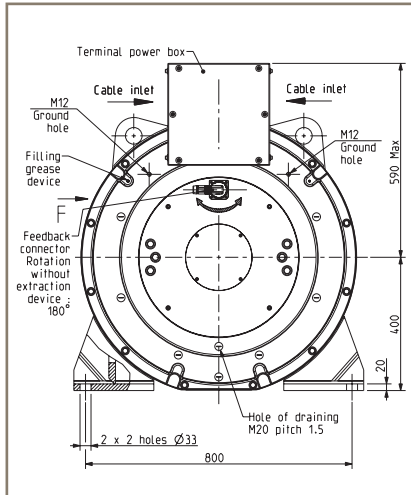
Shaft End



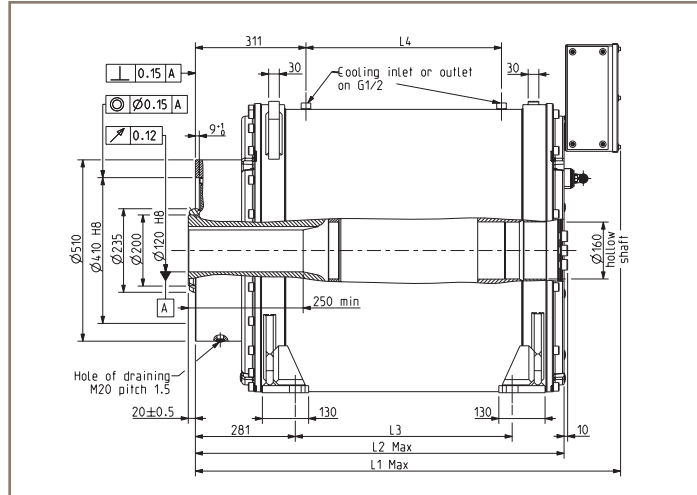
Dimensions Drawings :

Shaft Height 400 mm / Thrust Bearing 29440

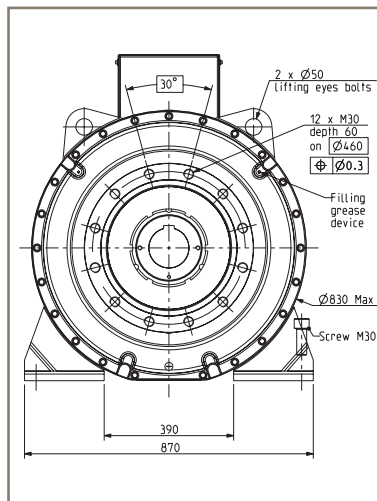
Rear view



Side view

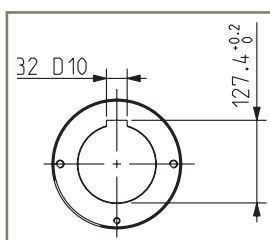


Front view



Dimensions (mm) and weight (kg)					
Model	L1 Max	L2 Max	L3	L4	Weight
TMW406	899	739	310	250	1445
TMW408	999	839	410	350	1585
TMW40A	1199	1039	610	550	1775
TMW40C	1199	1039	610	550	1855

Shaft End



User data check-list

GENERAL APPLICATION DATA

Nominal power		[kW]
Nominal/Max. speed		[rpm]
Nominal/Max. torque		[N.m]
Water cooling availability		[Y/N]

EXTRUDER DATA

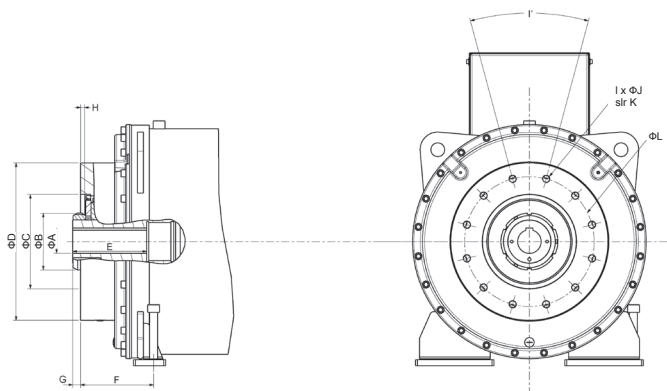
Screw diameter		[mm]
Cylinder pressure		[bar]
Screw extraction		[Front/Back]
Screw cooling		[Y/N]

MECHANICAL INTERFACE

Customized Interface - Dimensions Limits (mm)

Motor		TMW200		TMW300			TMW400		
Thrust bearing		29420	29424	29422	29426	29430	29430	29434	29440
Hollow shaft diameter MAXI	A	60	90	60	80	110	110	120	150
External shaft diameter	B	135	155	145	165	185	185	205	235
Centering diameter MINI	C	215	255	240	280	310	310	350	410
External front diameter	D	286.5	350	400	400	400	490	490	510
Length keyway MAXI (with G maxi)	E	185	185	179	179	179	270	270	270
Front length MINI	F	163	174	186	198	203	249	262	281
Shaft length MINI (with F mini)	G	28.5	28.5	20	20	20	20	20	20
Shaft length MAXI (with F mini)	G	71	60	45	33	28	55	42	23
Centering depth MAXI	H	9	9	9	9	9	9	9	9
Other dimensions	I to L	free	free	free	free	free	free	free	free
Screw Extraction from the Rear									
Hollow shaft diameter MAXI	A	60	80(*)	60	80	90 (*)	110	120	135 (*)

(*) don't forget the key or other part on extruder screw



REQUIRED DRAWINGS

1. Screw interface
2. Barrel interface



ORDERING CONFIRMATION FORM

CUSTOMER : _____ APPLICATION : _____

MOTOR SERIES : TORQUE MOTORS NUMBER OF PIECES : _____

EXTRUDER DATA :	SCREW DIAMETER [mm]	BACK PRESSURE [bar]

MOTOR DATA :

	BASE SPEED	MAX. FIELD WEAKENING SPEED	
SPEED			[RPM]
POWER			[kW]
TORQUE			[N.m]

COOLING METHOD : Water Jacket (W) Natural Ventilation (A)

THRUST BEARING :

- SKF 29420 (20)
- SKF 29422 (22)
- SKF 29426 (26)
- SKF 29430 (30)
- SKF 29434 (34)
- SKF 29440 (40)
- Without Thrust Bearings, with Ball Bearings (00)
- Without Thrust Bearings, with Roller Bearings (01)

SCREW EXTRACTION / COOLING :

- Frontside extrusion screw extraction (F)
- Frontside extrusion screw extraction (P)
Screw cooling possible
- Backside extrusion screw extraction (R)
Screw cooling possible
- No Extrusion screw extraction - No Screw cooling (Z)

FEEDBACK SYSTEM :

- Endat Encoder (C)
- Direct Endat Encoder with hollow shaft (B)
- Resolver (A)

SHAFT END :

- Hollow shaft with keyway (0)
- Hollow shaft with spline profile, DIN 5480 (1)
- Hollow shaft with spline profile, DIN5463 (2)
- Full shaft with spline profile, DIN 5480 (5)
- Full shaft with spline profile, DIN5463 (6)
- Full shaft smooth (7)
- Full shaft with keyway (8)
- Special shaft end (9)

TERMINAL BOX POSITION : (4)

- Rear / Top (U)
- Rear / Left side (front view) (L)
- Rear / Right side (front view) (R)

DIMENSION DRAWING :

PRODUCT ORDER CODE N°:

Remarks :

SSD Parvex

SSD Parvex has been involved in the design and manufacture of electrical motors since its creation in 1948. Year after year, SSD Parvex managed to keep its know-how at the cutting edge of technology, building a complete range of AC, DC and torque motors.

Now part of Parker Hannifin's group, SSD Parvex continues

to bring its unique know-how and experience across various industries, serving machine builders as well as end-users.

- 1969 - DC Axem motors with flat rotor,
- 1994 - Synchronous motors for electrospindles,
- 1999 - Brushless servomotors in kit,
- 2005 - Torque motors



SSD Parvex plant in Dijon

SSD Parvex other solutions



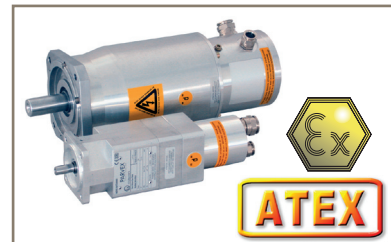
AC890 System drives

- 0.55 to 1000kW
- Power supply 380-500Vac $\pm 10\%$
- Heating control of motor with prealarm
- Standard Fieldbus : Profibus-DP, DeviceNet, Ethernet
- System drives for both AC & Servo motors



NX Series Servomotors

- High dynamic and compact dimensions
- Insulation F class
- Rotor with concentrated-flux rare earth magnets
- 10 poles winding



EX Series - Atex Servomotors

- Explosive atmosphere servomotors according to ATEX 94/9/CE directive
- Maximum compactness, high dynamics
- Protection Flameproof "d" according to EN50018 standard.
- Integrated resolver



Electrospindles HW Series

- Speeds up to 50000 rpm
- High torque at low speed
- Rotor with permanent magnets at low inertia
- Insulation F class



Servomotors in Kit NK/NW

- Direct drive : Accurate and robust mechanics
- Complete and optimized solution including sensor and drive
- Air-cooling or water-cooling
- Integration assistance



DC Servomotors RS-RX Series

- High energy magnets motors
- High acceleration
- Low inertia
- Insulation F class

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Brochure Torque motors PVD3611GB 05/2008



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