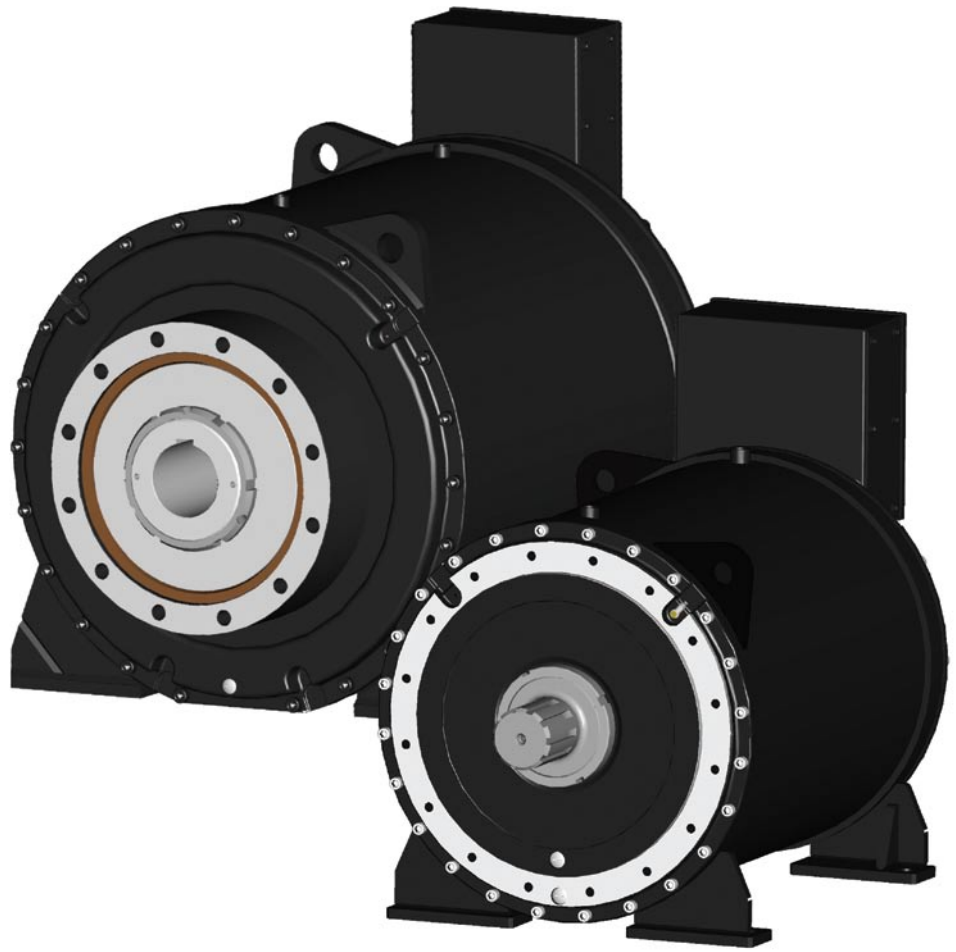


aerospace  
climate control  
**electromechanical**  
filtration  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding



# Torque Motors

Product catalog



ENGINEERING YOUR SUCCESS.

# TMW Torque Motors

1200 to 22,000 Nm  
Up to 500 rpm



## Overview

Parker TMW Torque Motors are innovative direct drive solutions based on brushless technology. Especially designed for low speed operation, they advantageously replace traditional gearbox based systems in applications such as extruders and injection molding machines, as well as winders, mixers, crushers, presses, etc.

## Main characteristics

**HIGH TORQUE AT LOW SPEED**

**NO GEARBOX**

**HIGH TORQUE DENSITY**

**SILENT OPERATION**

**CUSTOMIZED MECHANICAL INTERFACE**

**INTEGRATED THRUST BEARING (OPTION)**

## Technical data

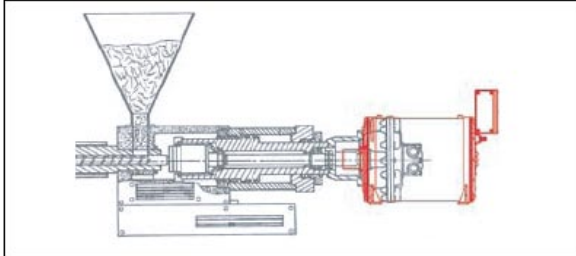
Motor type	Permanent-magnet synchronous motor
Magnet material	Nd-Fe-B
Number of poles	24, 36 or 48 (depends on shaft height)
Type of construction	IMB3, IMB5 (EN60034-7)
Shaft heights	200 mm 315 mm 400 mm
Degree of protection	IP54
Rated voltage	400 VAC and 480 VAC
Connections	Terminal box for power cable, PTC probes and KTY sensors, connector for encoder signals
Insulation of the stator winding	Class F according to EN 60034-1
Thermal protection	2 PTC probes and 1 KTY sensor
Temperature range	0 to +40°C
Storage	-20 to +60°C
Vibration severity	Grade N
Paint finish	Black

## Variants and options

Shaft End	<ul style="list-style-type: none"> <li>■ Solid or hollow shaft with key or keyway, spline profile DIN 5480 and DIN 5463.</li> <li>■ Customized interfaces available on request</li> </ul>
Bearings	<ul style="list-style-type: none"> <li>■ Ball bearings</li> <li>■ Roller bearings</li> </ul>
Encoder systems	<ul style="list-style-type: none"> <li>■ Absolute single turn Endat encoder</li> <li>■ Resolver</li> </ul>
Terminal box orientation	<ul style="list-style-type: none"> <li>■ At the rear on the top</li> <li>■ At the rear on the left or right side</li> </ul>
Extruder specific features	<ul style="list-style-type: none"> <li>■ Integrated thrust bearing</li> <li>■ Screw extraction and cooling mechanisms</li> <li>■ Customized mechanical interface</li> </ul>

# Applications and benefits

## Injection molding machines



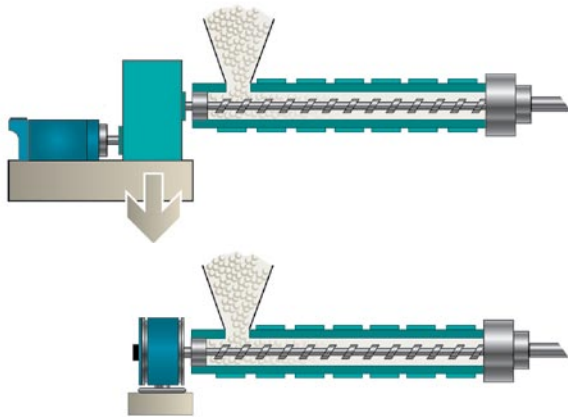
Allowing to reach up to 30% energy savings, as well as increased productivity, Parker TMW torque motors are the ideal replacement solution for hydraulic motors used to drive plasticization units on injection moulding machines.

Especially designed to deliver high torques at low speeds with no gearbox, TMW Torque motors allow for fast and easy replacement of hydraulic motors from Parker MR series, thanks to compatible mechanical interfaces.

## Advantages :

- **Up to 30% energy savings :**  
Contrary to hydraulic motors, electrical motors only consume energy when required. They also have better efficiencies.
- **Increased productivity :**  
Thanks to electrical motors, plasticization can be done in parallel with other operations, such as injection, clamping and ejection, which is not feasible with hydraulic solutions.

## Extruders



Parker torque motors are the perfect alternative to direct current or induction motors associated with gearboxes on extruders applications.

Result of a close cooperation with machine builders and end-users, Parker torque motors are available with various dedicated options for extruders applications, such as : integrated thrust bearing to support back pressure from the screw, specific mechanisms allowing for quick and easy removal of the screw from the motor...

## Advantages :

- **Maintenance savings :**  
No gearbox means no more maintenance associated to it. Furthermore, as a brushless motor, the torque motor itself does not require any maintenance.
- **Energy savings :**  
In high power continuous process applications, the use of torque motors generates significant energy savings thanks to the suppression of mechanical losses of the gearbox.
- **Reduced footprint**
- **Simplified installation**
- **Silent operation and reduced vibrations**

# 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				
Model	Bearings	Ordering code		Dimensions drawings
		Bearings	Mechanical Interface	
TMW200	Ball bearings	00	002	see p.9
	Roller bearings	01	001	see p.9
	Thrust bearing 29420	20	001	see p.13
	Thrust bearing 29424	24	002	see p.13
TMW300	Ball bearings	00	004	see p.9
	Roller bearings	01	003	see p.9
	Thrust bearing 29422	22	003	see p.14
	Thrust bearing 29426	26	004	see p.14
	Thrust bearing 29430	30	005	see p.14
TMW400	Ball bearings	00	006	see p.10
	Roller bearings	01	005	see p.10
	Thrust bearing 29430	30	006	see p.15
	Thrust bearing 29434	34	007	see p.15
	Thrust bearing 29440	40	008	see p.15

**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 <sup>(1)</sup>

Model	Pn (kW)	Nn (rpm)	Mn (Nm)	In (Arms)	Nmax (rpm)	Mmax <sup>(2)</sup> (Nm)	Inertia (kgm <sup>2</sup> )	Water flow rate (l/min)	Drive reference <sup>(2)</sup>
<b>50 - 75 rpm</b>									
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
<b>75 - 100 rpm</b>									
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
<b>100 - 125 rpm</b>									
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 <sup>(3)</sup>

<sup>(1)</sup> Other speeds available, consult us.

<sup>(2)</sup> 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

<sup>(3)</sup> Consult Factory

# TMW Series - 400 VAC Power Supply <sup>(1)</sup>

Model	Pn (kW)	Nn (rpm)	Mn (Nm)	In (Arms)	Nmax (rpm)	Mmax <sup>(2)</sup> (Nm)	Inertia (kgm <sup>2</sup> )	Water flow rate	Drive reference <sup>(2)</sup>
<b>125 - 150 rpm</b>									
TMW207LS	31	130	2280	70	160	3380	1,00	15	890SD-432730E
TMW208LT	39	140	2630	86	175	3910	1,03	18	890SD-432870E
TMW305LP	59	145	3900	118	180	5880	4,40	17	890SD-433105F
TMW308LN	100	145	6560	198	180	9870	6,50	28	890SD-433216G
TMW406LJ	160	150	10200	306	180	15300	16,20	29	890SD-433361G
TMW408LL	198	135	14000	388	165	21000	19,40	38	890SD-433480H
TMW40ALH	270	145	17800	526	180	26800	25,10	48	890SD/4/0685K <sup>(3)</sup>
TMW40CLG	318	140	21700	626	175	32500	25,90	57	890SD/4/0798K <sup>(3)</sup>
<b>150 - 175 rpm</b>									
TMW204LR	22	175	1210	47	215	1810	0,75	9	890SD-532590D
TMW206LR	33	165	1920	71	205	2850	0,81	13	890SD-432730E
TMW207LR	39	165	2270	85	205	3380	1,00	16	890SD-432870E
TMW305LN	67	165	3880	133	205	5880	4,40	17	890SD-433145F
TMW306LN	82	165	4760	161	205	7200	4,55	21	890SD-433180F
TMW308LM	116	170	6530	225	210	9870	6,50	28	890SD-433250G
TMW30ALN	135	155	8330	268	190	12500	6,80	35	890SD-433316G
TMW406LI	185	175	10100	353	215	15300	16,20	29	890SD-433420H
TMW408LJ	226	155	13900	434	190	21000	19,40	38	890SD-433520H
TMW40ALE	324	175	17700	626	205	26800	25,10	48	890SD/4/0798K <sup>(3)</sup>
<b>175 - 200 rpm</b>									
TMW206LQ	40	200	1910	83	250	2850	0,81	13	890SD-432870E
TMW208LQ	55	200	2620	114	250	3910	1,03	18	890SD-433105F
TMW304LM	58	185	3000	114	230	4550	3,45	14	890SD-433105F
TMW306LL	99	200	4730	191	240	7200	4,55	21	890SD-433216G
TMW308LK	136	200	6490	261	250	9870	6,50	28	890SD-433316G
TMW30ALL	156	180	8290	305	225	12500	6,80	35	890SD-433361G
TMW406LH	209	200	10000	391	250	15300	16,20	29	890SD-433480H <sup>(3)</sup>
TMW408LF	289	200	13800	538	250	21000	19,40	39	890SD/4/0685K <sup>(3)</sup>
<b>200 - 250 rpm</b>									
TMW205LQ	34	205	1560	70	255	2320	0,78	11	890SD-432730E
TMW207LN	59	250	2260	119	310	3380	1,00	16	890SD-433105F
TMW208LP	63	230	2620	128	280	3910	1,03	18	890SD-433145F
TMW304LL	67	215	2980	128	265	4550	3,45	14	890SD-433145F
TMW305LK	87	215	3840	165	265	5880	4,40	18	890SD-433180F
TMW306LI	118	240	4690	224	300	7200	4,55	21	890SD-433250G
TMW308LH	165	245	6420	311	305	9870	6,50	29	890SD-433361G
TMW30ALJ	185	215	8230	354	265	12500	6,80	35	890SD-433420H
TMW30ALH	210	245	8170	396	305	12500	6,80	36	890SD-433480H <sup>(3)</sup>
TMW406LG	239	230	9930	440	285	15300	16,20	30	890SD-433520H <sup>(3)</sup>

<sup>(1)</sup> Other speeds available, consult us.

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

<sup>(3)</sup> Consult Factory

# TMW Series - 400 VAC Power Supply <sup>(1)</sup>

Model	Pn (kW)	Nn (rpm)	Mn (Nm)	In (Arms)	Nmax (rpm)	Mmax <sup>(2)</sup> (Nm)	Inertia (kgm <sup>2</sup> )	Water flow rate (l/min)	Drive reference <sup>(2)</sup>
<b>250 - 300 rpm</b>									
TMW204LP	35	280	1200	70	350	1810	0,75	9	890SD-432730E
TMW205LP	42	260	1550	85	325	2320	0,78	11	890SD-432870E
TMW206LM	60	300	1900	116	375	2850	0,81	14	890SD-433105F
TMW207LM	68	290	2250	134	360	3380	1,00	16	890SD-433145F
TMW304LH	90	295	2920	167	350	4550	3,45	15	890SD-433180F
TMW305LH	105	265	3800	196	325	5880	4,40	18	890SD-433216G
TMW305LF	116	295	3770	217	365	5880	4,40	18	890SD-433250G
TMW308LG	183	275	6370	343	340	9870	6,50	29	890SD-433420H <sup>(3)</sup>
<b>300 - 350 rpm</b>									
TMW204LM	45	355	1200	85	440	1810	0,75	9	890SD-432870E
TMW206LL	69	350	1890	131	435	2850	0,81	14	890SD-433145F
TMW208LL	84	310	2600	163	385	3910	1,03	18	890SD-433180F
TMW306LG	147	305	4610	271	370	7200	4,55,	22	890SD-433316G
TMW306LF	154	320	4590	283	385	7200	4,55	22	890SD-433361G <sup>(3)</sup>
<b>350 - 400 rpm</b>									
TMW205LL	60	370	1540	113	460	2320	0,78	11	890SD-433105F
TMW205LK	64	400	1530	128	500	2320	0,78	11	890SD-433145F
TMW206LJ	79	400	1880	151	500	2850	0,81	14	890SD-433180F
TMW207LJ	88	375	2240	167	465	3380	1,00	16	890SD-433180F
TMW207LI	93	400	2230	181	500	3380	1,00	16	890SD-433216G
TMW208LJ	102	375	2580	193	465	3910	1,03	18	890SD-433216G
TMW208LH	108	400	2580	213	500	3910	1,03	18	890SD-433250G
TMW304LE	109	365	2860	199	425	4550	3,45	15	890SD-433216G
TMW304LC	119	400	2830	220	475	4550	3,45	15	890SD-433250G <sup>(3)</sup>
TMW305LC	149	390	3660	271	450	5880	4,40	19	890SD-433316G <sup>(3)</sup>

<sup>(1)</sup> Other speeds available, consult us.

<sup>(2)</sup> 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

<sup>(3)</sup> Consult Factory

# TMW Series - 480 VAC Power Supply <sup>(1)</sup>

Model	Pn (kW)	Nn (rpm)	Mn (Nm)	In (Arms)	Nmax (rpm)	Mmax <sup>(2)</sup> (Nm)	Inertia (kgm <sup>2</sup> )	Water flow rate (l/min)	Drive reference <sup>(2)</sup>
<b>50 - 75 rpm</b>									
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
<b>75 - 100 rpm</b>									
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
<b>100 - 125 rpm</b>									
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
<b>125 - 150 rpm</b>									
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 <sup>(3)</sup>

<sup>(1)</sup> Other speeds available, consult us.

<sup>(2)</sup> 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

<sup>(3)</sup> Consult Factory

# TMW Series - 480 VAC Power Supply <sup>(1)</sup>

Model	Pn (kW)	Nn (rpm)	Mn (Nm)	In (Arms)	Nmax (rpm)	Mmax <sup>(2)</sup> (Nm)	Inertia (kgm <sup>2</sup> )	Water flow rate (l/min)	Drive reference <sup>(2)</sup>
<b>150 - 175 rpm</b>									
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 <sup>(3)</sup>
TMW40CLG	394	175	21500	621	215	32500	25,90	57	890SD/4/0798K <sup>(3)</sup>
<b>175 - 200 rpm</b>									
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
<b>200 - 225 rpm</b>									
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 <sup>(3)</sup>
<b>225 - 250 rpm</b>									
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 <sup>(3)</sup>
TMW408LF	342	240	13600	532	295	21000	19,40	39	890SD/4/0685K <sup>(3)</sup>

<sup>(1)</sup> Other speeds available, consult us.

<sup>(2)</sup> 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

<sup>(3)</sup> Consult Factory

# TMW Series - 480 VAC Power Supply <sup>(1)</sup>

Model	Pn (kW)	Nn (rpm)	Mn (Nm)	In (Arms)	Nmax (rpm)	Mmax <sup>(2)</sup> (Nm)	Inertia (kgm <sup>2</sup> )	Water flow rate (l/min)	Drive reference <sup>(2)</sup>
<b>250 - 300 rpm</b>									
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 <sup>(3)</sup>
TMW406LG	281	275	9770	433	340	15300	16,20	30	890SD-433520H <sup>(3)</sup>
<b>300 - 350 rpm</b>									
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 <sup>(3)</sup>
<b>350 - 400 rpm</b>									
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 <sup>(3)</sup>
<b>400 - 450 rpm</b>									
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
<b>450 - 500 rpm</b>									
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 <sup>(3)</sup>
TMW305LC	175	470	3550	264	540	5880	4,40	19	890SD-433316G <sup>(3)</sup>

<sup>(1)</sup> Other speeds available, consult us.

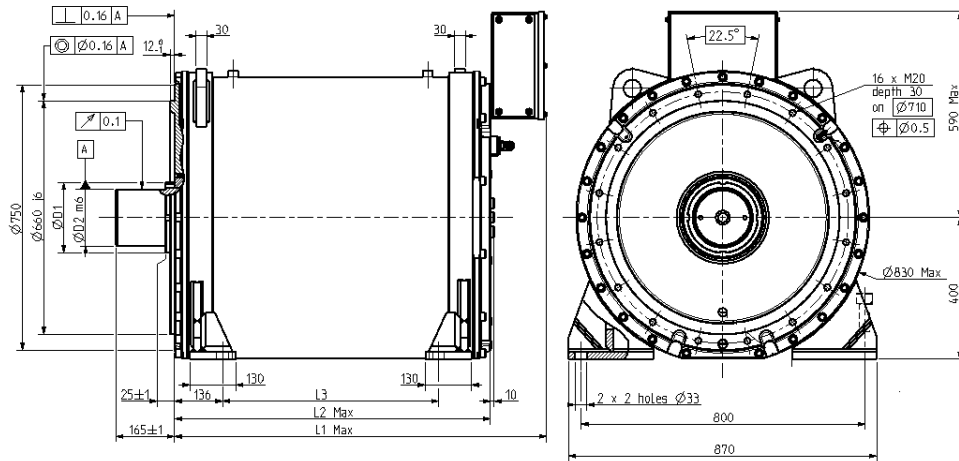
<sup>(2)</sup> This reference corresponds to the optimum drive for operation at the nominal point of the motor, without overload.  
Warning : this drive does not allow to reach the maximum torque of the motor, and has to be adapted regarding the application requirements

<sup>(3)</sup> Consult Factory



# Dimension drawings

TMW400 with solid shaft

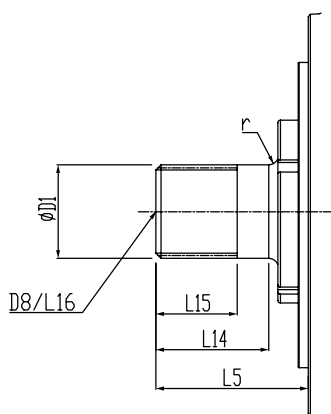


Model	L1 Max	L2 Max	L3	D3		D4		Weight
				Ball Bearings	Roller Bearings	Ball Bearings	Roller Bearings	
TMW406	754	594	310	240	200	190 m6	160 m6	1290
TMW408	854	694	410	240	200	190 m6	160 m6	1430
TMW40A	1054	894	610	240	200	190 m6	160 m6	1620
TMW40C	1054	894	610	240	200	190 m6	160 m6	1700

Shaft End options

Solid shaft DIN 5463

DIN 5463

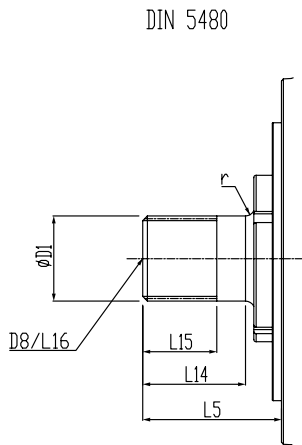


DIN 5463								
Torque Motors	L5	L14	L15	L16	øD1 DIN 5463	øD8	r	
TMW204	140	130	105	42	B8x46x54	M20	10	
TMW205	140	130	105	42	B8x46x54	M20	10	
TMW206	140	130	95	42	B8x52x60	M20	10	
TMW207	140	130	95	42	B8x52x60	M20	10	
TMW208	140	130	95	42	B8x52x60	M20	10	
TMW304	150	105	95	42	B8x52x60	M20	15	
TMW305	150	105	75	42	B8x62x72	M20	15	
TMW306	150	105	75	42	B10x72x82	M20	15	
TMW308	150	105	75	42	B10x72x82	M20	15	
TMW30A	150	105	75	50	B10x82x92	M24	15	
TMW404	165	120	95	42	B10x72x82	M20	20	
TMW405	165	120	95	50	B10x82x92	M24	20	
TMW406	165	120	90	50	B10x102x112	M24	20	
TMW408	165	120	90	50	B10x102x112	M24	20	
TMW40A	165	120	90	50	B10x112x126	M24	20	
TMW40C	165	120	90	50	B10x112x126	M24	20	

# Dimension drawings

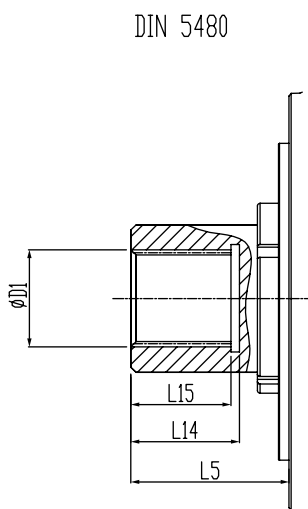
## Shaft End options

### Solid shaft DIN 5480



DIN 5480							
Torque Motors	L5	L14	L15	L16	$\phi D1$ DIN 5480	$\phi D8$	r
TMW204	140	130	105	42	W55x3x17-8e	M20	10
TMW205	140	130	105	42	W55x3x17-8e	M20	10
TMW206	140	130	95	42	W60x3x18-8e	M20	10
TMW207	140	130	95	42	W60x3x18-8e	M20	10
TMW208	140	130	95	42	W60x3x18-8e	M20	10
TMW304	150	105	95	42	W60x3x18-8e	M20	15
TMW305	150	105	75	42	W70x3x22-8e	M20	15
TMW306	150	105	75	42	W80x3x26-8e	M20	15
TMW308	150	105	75	42	W80x3x26-8e	M20	15
TMW30A	150	105	75	50	W90x4x21-8e	M24	15
TMW404	165	120	95	42	W80x3x26-8e	M20	20
TMW405	165	120	95	50	W90x4x21-8e	M24	20
TMW406	165	120	90	50	W110x4x26-8e	M24	20
TMW408	165	120	90	50	W110x4x26-8e	M24	20
TMW40A	165	120	90	50	W120x4x28-8e	M24	20
TMW40C	165	120	90	50	W120x4x28-8e	M24	20

### Hollow shaft DIN 5480

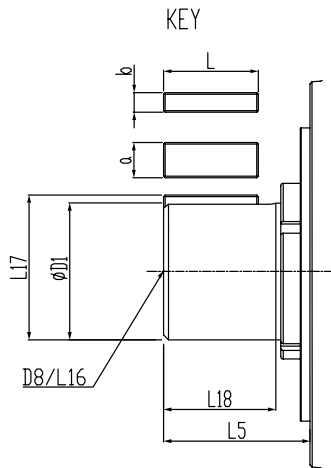


DIN 5480 Hollow shaft						
Torque Motors	L5	L14	L15	$\phi D1$ DIN 5480	$\phi D8$	r
TMW204	140	43.1	38.1	N47x2x22-9H	M20	10
TMW205	140	43.1	38.1	N47x2x22-9H	M20	10
TMW206	140	49	44	N55x3x17-9H	M20	10
TMW207	140	49	44	N55x3x17-9H	M20	10
TMW208	140	49	44	N55x3x17-9H	M20	10
TMW304	150	49	44	N55x3x17-9H	M20	15
TMW305	150	57.9	50	N65x3x20-9H	M20	15
TMW306	150	64.8	56.9	N75x3x24-9H	M20	15
TMW308	150	64.8	56.9	N75x3x24-9H	M20	15
TMW30A	150	69.9	62	N85x3x27-9H	M24	15
TMW404	165	64.8	56.9	N75x3x24-9H	M20	20
TMW405	165	69.9	62	N85x3x27-9H	M24	20
TMW406	165	82	68	N100x3x32-9H	M24	20
TMW408	165	82	68	N100x3x32-9H	M24	20
TMW40A	165	89.9	76	N110x3x35-9H	M24	20
TMW40C	165	89.9	76	N110x3x35-9H	M24	20

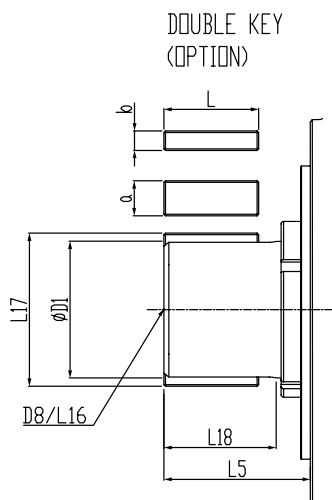
# Dimension drawings

Shaft End options

Solid shaft with Key / Double Key

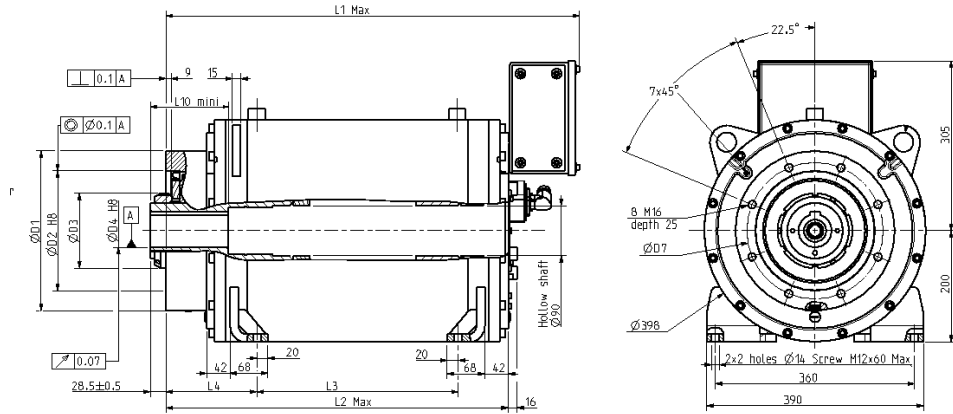


KEY							
Torque Motors	L5	L16	L17	L18	L x a x b	$\phi D1$	$\phi D8$
TMW204	140	42	59.3	88	80 x 16 x 10	55	M20
TMW205	140	42	59.3	88	80 x 16 x 10	55	M20
TMW206	140	42	69.4	94	85 x 18 x 11	65	M20
TMW207	140	42	69.4	94	85 x 18 x 11	65	M20
TMW208	140	42	80.4	100	90 x 20 x 12	75	M20
TMW304	150	42	80.4	100	90 x 20 x 12	75	M20
TMW305	150	42	85.4	100	90 x 20 x 12	80	M20
TMW306	150	50	95.4	120	110 x 25 x 14	90	M24
TMW308	150	50	116.4	120	110 x 25 x 14	110	M24
TMW30A	150	50	127.4	120	110 x 28 x 16	120	M24
TMW404	165	50	116.4	120	110 x 32 x 18	110	M20
TMW405	165	50	127.4	120	110 x 28 x 16	120	M24
TMW406	165	50	137.4	130	110 x 32 x 18	130	M24
TMW408	165	60	159.4	130	120 x 36 x 20	150	M30
TMW40A	165	60	185.4	130	120 x 45 x 25	175	M30
TMW40C	165	60	200.4	130	120 x 45 x 25	190	M30



# Dimension drawings

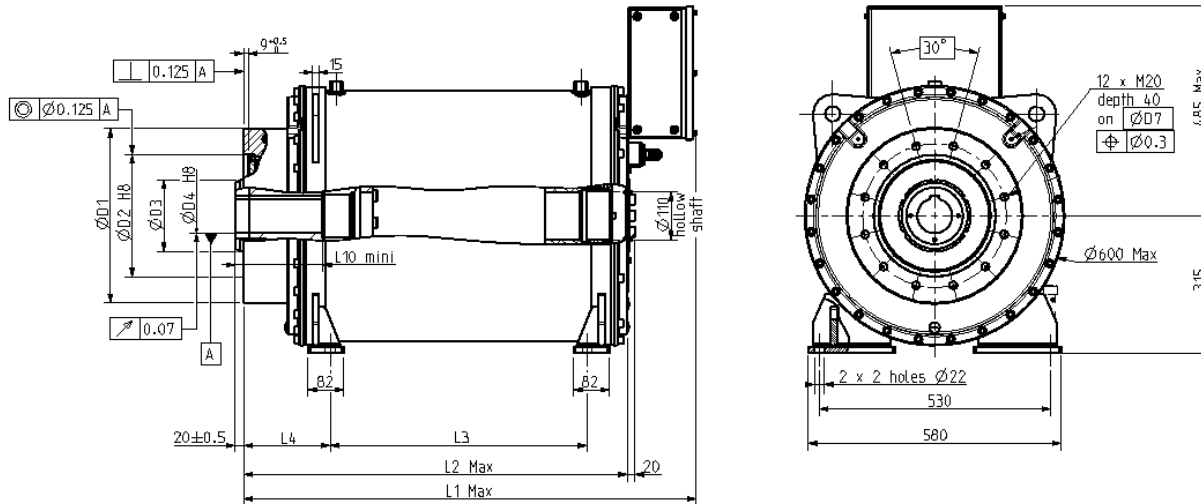
## TMW200 with thrust-bearing



Model	Thrust bearing	L1 Max	L2 Max	L3	L4	L10 Mini	D1	D2	D3	D4	D7	Weight
TMW204	29420	750	620	362	163	140	286.5	215 H8	135	60h8	245	335
	29424	760	630	362	174	151	350	255 H8	155	80h8	300	365
TMW205	29420	750	620	362	163	140	286.5	215 H8	135	60h8	245	350
	29424	760	630	362	174	151	350	255 H8	155	80h8	300	380
TMW206	29420	750	620	362	163	140	286.5	215 H8	135	60h8	245	365
	29424	760	630	362	174	151	350	255 H8	155	80h8	300	395
TMW207	29420	850	720	462	163	140	286.5	215 H8	135	60h8	245	405
	29424	860	730	462	174	151	350	255 H8	155	80h8	300	435
TMW208	29420	850	720	462	163	140	286.5	215 H8	135	60h8	245	420
	29424	860	730	462	174	151	350	255 H8	155	80h8	300	450

# Dimension drawings

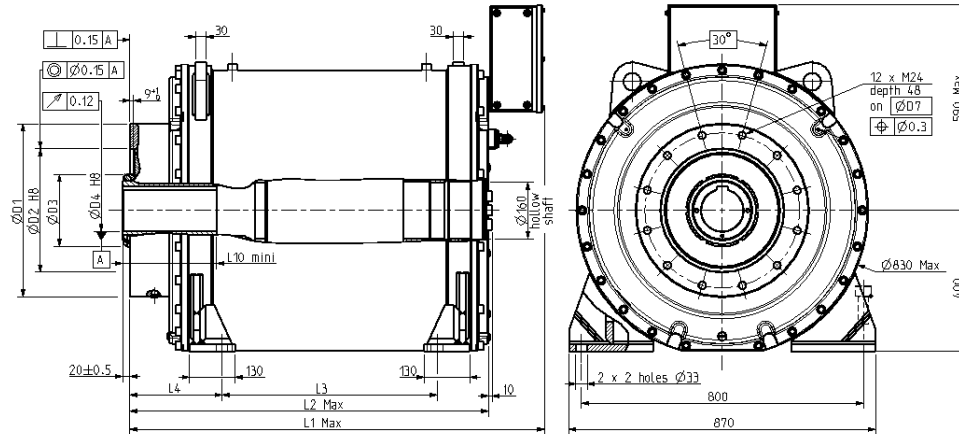
## TMW315 with thrust-bearing



Model	Thrust bearing	L1 Max	L2 Max	L3	L4	L10 Mini	D1	D2	D3	D4	D7	Weight
TMW304	29422	730	570	288	186	120	362	240 H8	145	100 H8	330	585
	29426	740	580	288	198	160	362	280 H8	165	100 H8	330	585
	29430	745	585	288	203	180	400	310 H8	185	120 H8	350	605
TMW305	29422	830	670	388	186	120	362	240 H8	145	100 H8	330	645
	29426	840	680	388	198	160	362	280 H8	165	100 H8	330	645
	29430	845	685	388	203	180	400	310 H8	185	120 H8	350	665
TMW306	29422	830	670	388	186	120	362	240 H8	145	100 H8	330	665
	29426	840	680	388	198	160	362	280 H8	165	100 H8	330	665
	29430	845	685	388	203	180	400	310 H8	185	120 H8	350	685
TMW308	29422	1030	870	588	186	120	362	240 H8	145	100 H8	330	780
	29426	1040	880	588	198	160	362	280 H8	165	100 H8	330	780
	29430	1045	885	588	203	180	400	310 H8	185	120 H8	350	800
TMW30A	29422	1030	870	588	186	120	362	240 H8	145	100 H8	330	820
	29426	1040	880	588	198	160	362	280 H8	165	100 H8	330	820
	29430	1045	885	588	203	180	400	310 H8	185	120 H8	350	840

# Dimension drawings

## TMW400 with thrust-bearing



Model	Thrust bearing	L1 Max	L2 Max	L3	L4	L10 Mini	D1	D2	D3	D4	D7	Weight
TMW406	29430	867	707	310	249	250	490	310 H8	185	100 H8	380	1410
	29434	880	720	310	262	250	490	350 H8	205	120 H8	440	1410
	29440	899	739	310	281	250	510	410 H8	235	120 H8	460	1445
TMW408	29430	967	807	410	249	250	490	310 H8	185	100 H8	380	1550
	29434	980	820	410	262	250	490	350 H8	205	120 H8	440	1550
	29440	999	839	410	281	250	510	410 H8	235	120 H8	460	1585
TMW40A	29430	1167	1007	610	249	250	490	310 H8	185	100 H8	380	1740
	29434	1180	1020	610	262	250	490	350 H8	205	120 H8	440	1750
	29440	1199	1039	610	281	250	510	410 H8	235	120 H8	460	1775
TMW40C	29430	1167	1007	610	249	250	490	310 H8	185	100 H8	380	1820
	29434	1180	1020	610	262	250	490	350 H8	205	120 H8	440	1820
	29440	1199	1039	610	281	250	510	410 H8	235	120 H8	460	1855

# User data check-list for extruders

## GENERAL APPLICATION DATA

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

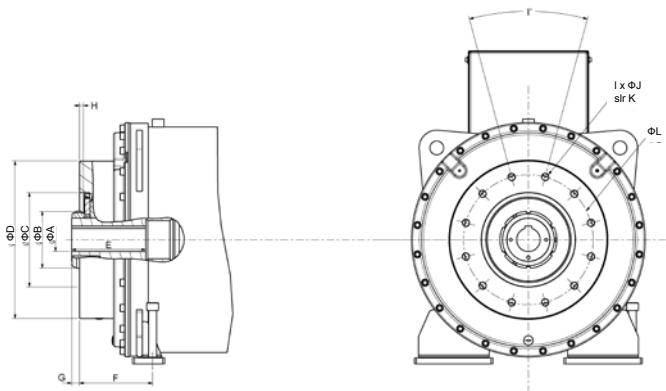
## EXTRUDER DATA

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 : \_\_\_\_\_

<b>EXTRUDER DATA :</b>	SCREW DIAMETER [mm]	BACK PRESSURE [bar]

**MOTOR DATA :**

<b>SPEED</b> <b>POWER</b> <b>TORQUE</b>	BASE SPEED	MAX. FIELD WEAKENING SPEED	
			[RPM]
			[kW]
			[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

# Sales Offices

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Fax : +32 67 280 999

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Fax: +55 12 3954 5262

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Parker Motion and Control  
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PVD3624GB Ed 07-2008



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