# MEDICAL WHEELS









#### THE COMPANY

EMES A.S was established as a multi-partner firm in 1998 by well-known traders who have been doing business in the world markets. In a short time, the company became a strong trademark an made an appearance both in domestic and foreign markets. It has attained a high quality in the production and increased the standard product kids to more than 9.000 to date. This way, the company became more competitive not only country-wide but also Worldwide. EMES A.S., with its dynamic and self-renewing nature has determined its vision to be the most preferred and reliable trademark globally, and to export mostly to the European countries and subsequently to more than 67 countries of Middle East, Africa, Balkans and Middle Asia.

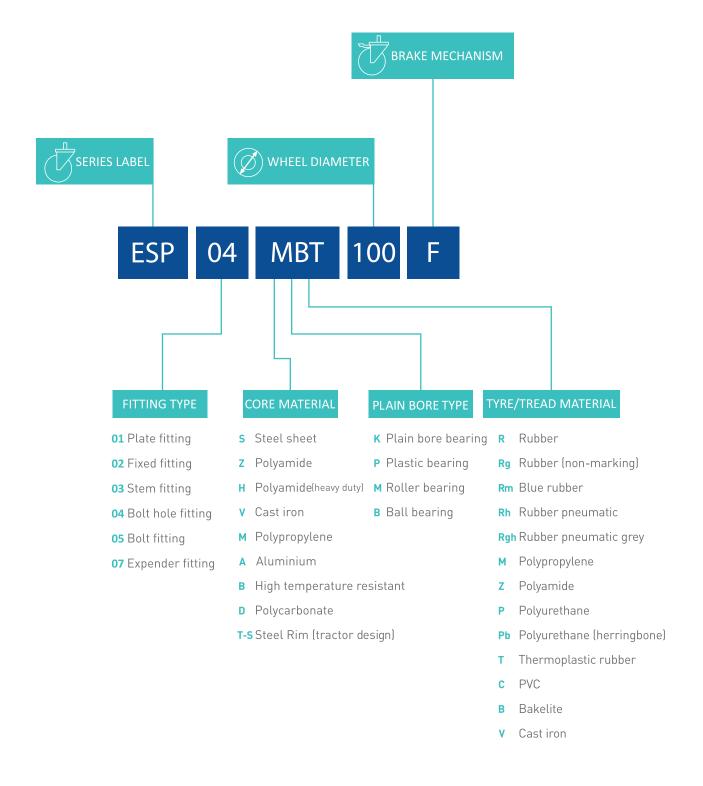
EMES A.S. works taking into consideration the principle of "absolute customer satisfaction" which is part of the quality policy of the company thanks to its well-trained technical staff in a modern facility of 10.000 sqm² covered area. The company has arranged a special human resource with a highly creative team by maintaining an internationally recognised quality standart. It is the first company in Turkey which has the Certificate of DIN EN ISO 9001:2015. Our mission is to offer more reliable, high quality and aesthetic designed products to our costumers, and to follow the developments and innovations in the sector for making them part of our quality policy. We strive to provide our domestic and international customers with the best products and services which reflect the "Made in Turkiye" quality, and help them find the most suitable solutions for their needs.







## PRODUCT CODING SYSTEM





#### FITTING TYPES









#### Plate Fitting:

Plate fitting is generally used for light duty, transport equipment and heavy duty castors. The castors are fitted to any equipment with a flat base by means of bolts and nuts

The following specifications have to be considered when selecting plate fitting: plate size, hole spacing, hole diameter

#### Stem Fitting:

Stem fitting is generally used for light duty and transport equipment castors. These castors are fitted by means of a plug-in

The following specifications have to be considered when selecting stem fitting: stem diameter, stem lenght

#### Bolt Hole Fitting:

Bolt hole fitting is generally used for light duty and transport equipment castors. Bolt hole fitting, a connection element is pushed through the bolt of the swivel head

The following specifications have to be considered when selecting bolt hole fitting: hole diameter

#### **Bolt Fitting:**

Bolt fitting is generally used for light duty castors. These castors are fitted to the transport unit by means of a threaded pin which is tightened to thread or clindrical hole and a nut

The following specifications have to be considered when selecting bolt fitting: screw diameter, screw lenght

#### **Expander Fitting:**

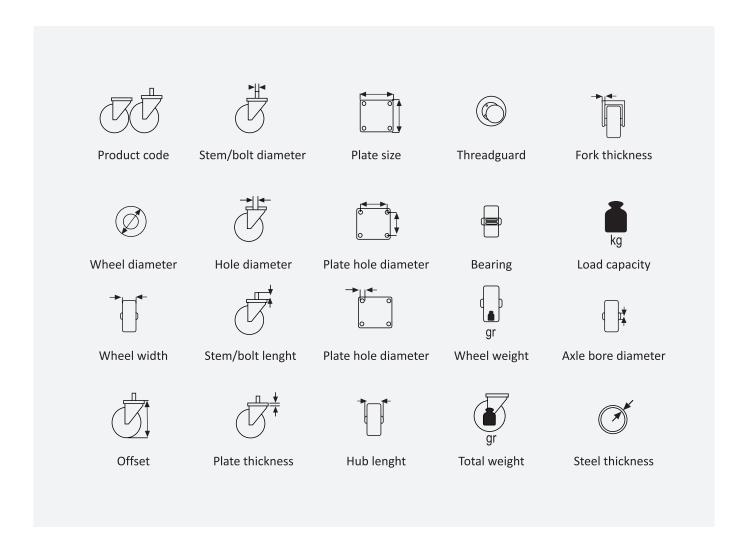
Expander fitting is generally used for light duty castors. The castor is fitted by means of a synthetic expander which is inserted in to a hole or a round square tube

The following specifications have to be considered when selecting expander fitting: tube shape (round or square), internal tube diamater



#### **Symbols**

Symbols in the catalog are shown below



(-): Without threadguard

(+): Optional

(S): Standard

All lenght : (mm)

Product weight : (gr)
Load capacity : (kg)



#### **Wheel Bearing Types**



#### Ball Bearing

The ball bearing is generally used for heavy duty castors and transport ball bearing equipment castors. It is resistant to shocks easy and silent rolling. It has the smallest bearing play, lubricated with long-life grease and is maintenance-free under standard conditions. In addition to the standard type ball bearing is also available in stainless steel type.



#### Roller Bearing

The roller bearing is generally used for light duty castors and short distances transport equipment. It is resistant to shocks, strong, lubricated with long-life grease and is maintenance-free under standard conditions. In addition to the standard type roller bearing is also available in stainless steel type.



#### Plain Bore Bearing

The plain ball bearing is generally used for light duty castors, and short distances transport equipment. It is resistant to shocks and water. It is a simple, durable wheel, maintenance-free under standard conditions and cost-effective bearing.





#### Determine the required load capacity

The required load capacity of a wheel or castor is calculated from the weight of the unit and its maximum load, divided by the number of wheels or castors used.

#### **Appropite castor**

Load capacity with the necessary load capacity can be found by using the formula below.

$$C = \frac{E+L}{N} \times S$$

C: Minimum load capacity of the castor

E: Weight of the unit (tare)

L: Maximum load

N: Number of wheels or castor used

S: Safety factor (1,5<E<2,0)

A much more simple method to obtain the minimum load capacity can be applied by dividing the weight of the loaded device to one less of the number of castors. For this purpose the following formula can be used.

 $C = \frac{\text{Total weight}}{\text{Number of castors-1}}$ 

#### Select the required wheel bearing type

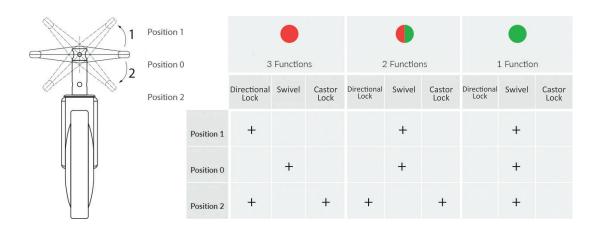
To select a suitable bearing, the load, speed, environmental influences and the amount of force need to bring the transport unit into motion need to be considered.

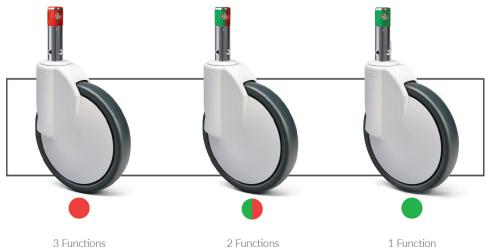


#### **ECH SERIES**

- Load capacity 150 Kg
- **Bracket:** Bracked made of steel, zinc plated and swivel head, shock resistant, high performance plastic side and top thread guards
- Wheel: Resistant against foulty grounds, polypropylene core and thermoplastic thread wheel











Swivel Castor/Brake	Ø mm	mm	mm	mm	mm	mm	mm	gr	kg
ECH 03 MBT 125 F	125	32	159	32	50	40	2,5	992	150
ECH 03 MBT 150 F	150	32	183	32	50	38	2,5	1135	150
ECH 03 ZBP 200 F	200	32	226	32	50	60	3	1427	150

Central Lock



Swivel Castor/Brake	Ø mm	mm	mm	mm	mm	mm	→ mm	gr	kg
ECH 03 MBT 125 F	125	32	159	32	50	40	2,5	992	150
ECH 03 MBT 150 F	150	32	183	32	50	38	2,5	1135	150
ECH 03 ZBP 200 F	200	32	226	32	50	60	3	1427	150

Directional & Central Lock



Swivel Castor	Ø mm	mm	mm	mm	mm	mm	mm	gr	kg
ECH 03 MBT 125	125	32	159	28	41	40	2,5	980	150
ECH 03 MBT 150	150	32	183	28	41	38	2,5	1122	150
ECH 03 ZBP 200	200	32	226	28	41	60	3	1408	150

Swivel without brake



Swivel Castor/Brake	Ø mm	mm	mm	mm	mm	mm	mm	gr	kg
ECH 03 MBT 125 F	125	32	159	28	94	40	2,5	1080	150
ECH 03 MBT 150 F	150	32	183	28	94	38	2,5	1225	150
ECH 03 ZBP 200 F	200	32	226	28	94	60	3	1537	150

Directional & Central Lock



Swivel Castor/Brake	Ø mm	mm	mm	mm	mm	mm	mm	gr	kg
ECH 03 MBT 125 F	125	32	159	28	94	40	2,5	1080	150
ECH 03 MBT 150 F	150	32	183	28	94	38	2,5	1225	150
ECH 03 ZBP 200 F	200	32	226	28	94	60	3	1537	150

Central Lock



#### **EC SERIES**

- Load Capacity 90 Kg
- **Bracket:** Bracket made of plastic, gray (RAL 9002) double ball bearing swivel head, wheel axle with riveted
- Wheel: Wheel centre made of polypropylene, thermoplastic rubber tread, plastic threadguards, ball bearing
- Fitting Type: Plate, stem, bolt hole, bolt, expander fitting types





Swivel Castor	Ø mm	mm	mm	mm	mm	mm	gr	kg	©
EC 01 MBT 100	100	32	138	78x68	56x46	5,7	538	80	S
EC 01 MBT 125	125	32	165	78x68	56x46	7,5	764	90	S



Swivel Castor/Brake	Ø mm	mm	mm	mm	mm	mm	gr	kg	©
EC 01 MBT 100 F	100	32	138	78x68	56x46	5,7	586	80	S
EC 01 MBT 125 F	125	32	165	78x68	56x46	7.5	816	90	S



#### **ESP SERIES**

- Load Capacity 90 Kg
- **Bracket:** Centre made of plastic, gray or black colour options (RAL 9002), double ball bearing swivel head wheel axle with riveted
- Wheel: Centre made of polypropylene, thermoplastic rubber option, plastic threadguard, ball bearing type
- Fitting Type: Plate, hole fitting types





Tabla Bağlantılı	Ø mm	mm	mm	mm	mm	mm mm	gr	kg	0
ESP 01 MBT 100	100	32	140	68x78	46x56	7	547	90	S
ESP 01 MBT 125	125	32	169	68x78	46x56	7	658	100	S



Tabla Bağlantılı, Frenli	Ø mm	mm	mm	mm	mm	mm	gr	kg	©
ESP 01 MBT 100 F	100	32	140	68x78	46x56	7	581	90	S
ESP 01 MBT 125 F	125	32	169	68x78	46x56	7	696	100	S



Pim Bağlantılı	Ø mm	mm	mm	mm	mm	mm	gr	kg	©
ESP 03 MBT 100	100	32	137	22	42	7	574	90	S
ESP 03 MBT 125	125	32	167	22	50	7	680	100	S



Pim Bağlantılı, Frenli	Ø mm	mm	mm	mm	mm	mm	gr	kg	©
ESP 03 MBT 100 F	100	32	137	22	42	7	608	90	S
ESP 03 MBT 125 F	125	32	167	22	50	7	723	100	S





Delik Bağlantılı	Ø mm	mm	mm	mm mm	gr	kg	©
ESP 04 MBT 100	100	32	137	10-12	409	90	S
ESP 04 MBT 125	125	32	166	10-12	525	100	S



Delik Bağlantılı, Frenli	Ø mm	mm	mm	mm T	gr	kg	©
ESP 04 MBT 100 F	100	32	137	10-12	443	90	S
ESP 04 MBT 125 F	125	32	166	10-12	563	100	S



Civata Bağlantılı	Ø mm	mm	mm	mm	mm	mm	gr	kg	©
ESP 05 MBT 100	100	32	143	M16-5/8	30	7	502	90	S
ESP 05 MBT 125	125	32	173	M16-5/8	30	7	610	100	S



Civata Bağlantılı, Frenli	Ø	mm	mm	mm mm	mm	mm	gr	kg	©
ESP 05 MBT 100 F	100	32	143	M16-5/8	30	7	540	90	S
ESP 05 MBT 125 F	125	32	173	M16-5/8	30	7	651	100	S



### **EQ SERIES**

- Load capacity 50 Kg
- **Bracket:** PP core, TPE tread or PA core TPU tread, polypropylene or polyamide core
- **Wheel:** Wheel centre made of polyamide, thermoplastic polyurethane tread, without threadguards, plain bore bearing
- Fitting Type: Plate and bolt fitting types





Swivel Castor	Ø mm	mm	Ħ mm	mm	mm	mm	mm	gr	kg	©
EQ 01 ZKP 50	50	10	47	50x50	38x38	68	18	119	40	-
EQ 01 ZKP 75	75	10	55	65x65	45x45	93	22	265	50	-
EQ 01 ZBP 100	100	15	64	65x65	45x45	64	31	525	110	-



Swivel Castor/Brake	Ø mm	mm	Ħ mm	mm	mm	mm	mm	gr	kg	
EQ 01 ZKP 50 F	50	10	47	50x50	38x38	68	18	125	40	-
EQ 01 ZKP 75 F	75	10	55	65x65	45x45	93	22	279	50	-
EQ 01 ZBP 100 F	100	15	64	65x65	45x45	64	31	545	110	-



#### **ER SERIES**

- Load Capacity 150 Kg
- **Bracket:** Made of pressed steel, white zinc plated, double ball bearing swivel head, wheel axle with bolt and nut
- **Wheel:** centre made of polypropylene, plain bore and ball bearing types, rubber or thermoplastic rubber options
- Fitting Type: Plate, fixed, stem bolt hole, bolt expander fitting types





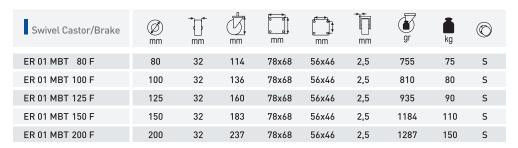








Swivel Castor	Ø mm	mm	mm	mm	mm	mm	gr	kg	©
ER 01 MBT 80	80	32	114	78x68	56x46	2,5	607	75	S
ER 01 MBT 100	100	32	136	78x68	56x46	2 5	665	80	S
ER 01 MBT 125	125	32	160	78x68	56x46	2,5	775	90	S
ER 01 MBT 150	150	32	183	78x68	56x46	2,5	1075	110	S
ER 01 MBT 200	200	32	237	78x68	56x46	2,5	1360	150	S





#### **EP SERIES**

- Load capacity 50 Kg
- **Bracket:** Bracket made of pressed steel, white zinc plated, double ball bearing swivel head, wheel axle with rivited and bolt
- Wheel: Wheel centre made of polyamide, PVC tread without threadguards, plain bore bearing
- Fitting Type: Plate, fixed, stem bolt types













Swivel Castor	Ø mm	mm	mm	mm	mm	mm	gr	kg	©
EP 01 ZKC 50	50	20	74	50x50	38x38	2	218	35	+
EP 01 ZKC 75	75	25	103	65x65	47x47	2	340	50	+



Swivel Castor/Brake	Ø mm	mm	mm	mm	mm	nm	gr	kg	©
EP 01 ZKC 50 F	50	20	74	50x50	38x38	2	245	35	+
EP 01 ZKC 75 F	75	25	103	65x65	47x47	2	385	50	+



#### **EU SERIES**

- Load capacity 55 Kg
- **Bracket:** Bracket made of pressed steel, white zinc plated, double ball bearing swivel head, wheel axle with riveted
- Wheel: Wheel centre made of Polyamide, PVC tread without threadguards, plain bore bearing
- Fitting Type: Plate, fixed, stem bolt types













Swivel Castor	Ø mm	mm	mm mm	mm	mm	mm	gr	kg	©
EU 01 ZKC 50	50	20	71	60x60	46x46	2	215	40	-
EU 01 ZKC 75	75	25	100	60x60	46x46	2	291	55	-



Swivel Castor/Brake	Ø mm	mm	mm	mm	mm	mm	gr	kg	©
EU 01 ZKC 50 F	50	20	71	60x60	46x46	2	265	40	-
EU 01 ZKC 75 F	75	25	100	60x60	46x46	2	345	55	-



#### **ET SERIES**

- Load capacity 80 Kg
- **Bracket:** Bracket made of pressed steel, white zinc plated, double ball bearing swivel head, heel axle with rivited or bolt
- Wheel: Wheel centre made of polyamide, PVC tread without threadguards, plain bore bearing
- O Fitting Type: Plate, fixed, stem bolt types













Swivel Castor	Ø mm	mm	mm	mm	mm	mm	gr	kg	©
ET 01 ZKC 50	50	2x20	77	65x65	47x47	2	313	55	-
ET 01 ZKC 75	75	2x25	101	78x68	56x46	2,5	610	80	+



Swivel Castor/Brake	Ø	mm	mm	mm	mm	mm mm	gr	kg	©
ET 01 ZKC 50 F	50	2x20	77	65x65	47x47	2	369	55	-
ET 01 ZKC 75 F	75	2x25	101	78x68	56x46	2,5	655	80	+



#### **EF SERIES**

- Load Capacity 55 Kg
- **Bracket:** Bracket made of pressed steel, chromium plating, double ball bearing swivel head, wheel axle with riveted
- Wheel: Wheel centre made of Polypropylene, PVC tread, plain bore bearing
- Fitting Type: Plate and bolt fitting types







Swivel Castor	Ø mm	→ mm	mm	mm	mm	mm	gr	kg	0
EF 01 MKC 40	40	35	56	42x40	30x28	1,5	141	40	-
EF 01 MKC 50	50	45	73	50x50	38x38	2	276	55	-



Swivel Castor	Ø	mm	mm	mm	mm	mm	gr	kg	©
EF 05 MKC 40	40	35	61	M10 - 3/8	16	1,5	140	40	-
EF 05 MKC 50	50	45	77	M10 - 3/8	16	2	249	55	_



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