

Trommelmotoren / *Drummotors*

**TM 620A75**



**KRAUTER®**

ELEKTROMASCHINEN

## Auswahltabelle *selection table*

TYPE TM 620A75	Power kW	Beltspeed m/s at 50 Hz				Min. L mm Design A	Full load curr. 400 V - 50 Hz I = ... A	Weight kg L=850
		Beltpull N						
<b>440 Z</b>	<b>30,0</b>	<b>3,90</b> 7310	<b>3,10</b> 9190	<b>2,50</b> 11400		950	52,0	820 (L=950)
<b>430 Z</b>	<b>22,0</b>	<b>3,90</b> 5360	<b>3,10</b> 6740	<b>2,50</b> 8360	<b>2,00</b> 10450	850	37,0	700
<b>425 Z</b>	<b>18,5</b>	<b>3,90</b> 4505	<b>3,10</b> 5670	<b>2,50</b> 7030	<b>2,00</b> 8790	850	32,0	690
<b>620 Z</b>	<b>15,0</b>	<b>2,60</b> 5480	<b>2,10</b> 6785	<b>1,60</b> 8905	<b>1,25</b> 11400	850	31,5	700
<b>815 Z</b>	<b>11,0</b>	<b>2,00</b> 5225	<b>1,50</b> 6965	<b>1,25</b> 8360	<b>1,00</b> 10450	850	26,0	700

Verfügbare Standard-Gurtbreiten: 850 - 900 - 950 - 1000 - 1050 - 1100 - 1150 - 1400 - 1600 mm

Wenn eine elektromechanische Bremse eingebaut ist, erhöht sich die minimale Gurtbreite um 150 mm.

Das Gesamtgewicht eines Trommelmotors erhöht sich um ca. 38,7 kg. pro 100 mm

Verfügbares Drehmoment: (Beltpull N x Trommeldurchmesser m) / 2 Nm

*Available standard facewidth's: 850 - 900 - 950 - 1000 - 1050 - 1100 - 1150 - 1400 - 1600 mm*

*When an electro-mechanical brake is fitted, the minimum facewidth is increased by 150 mm*

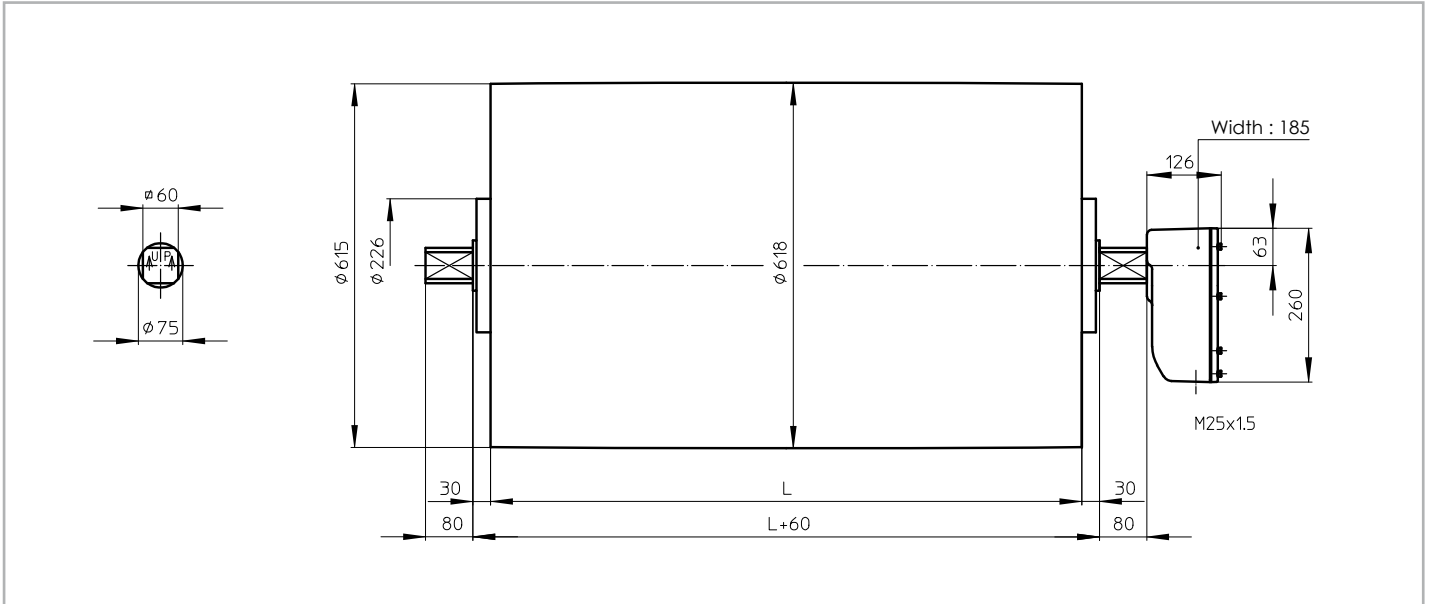
*The total weight of a Drummotor grows approx. 38,7 kg. per 100 mm*

*Available torque: (Beltpull N x drum diameter m) / 2 Nm*

# Abmessungen *Dimensions*

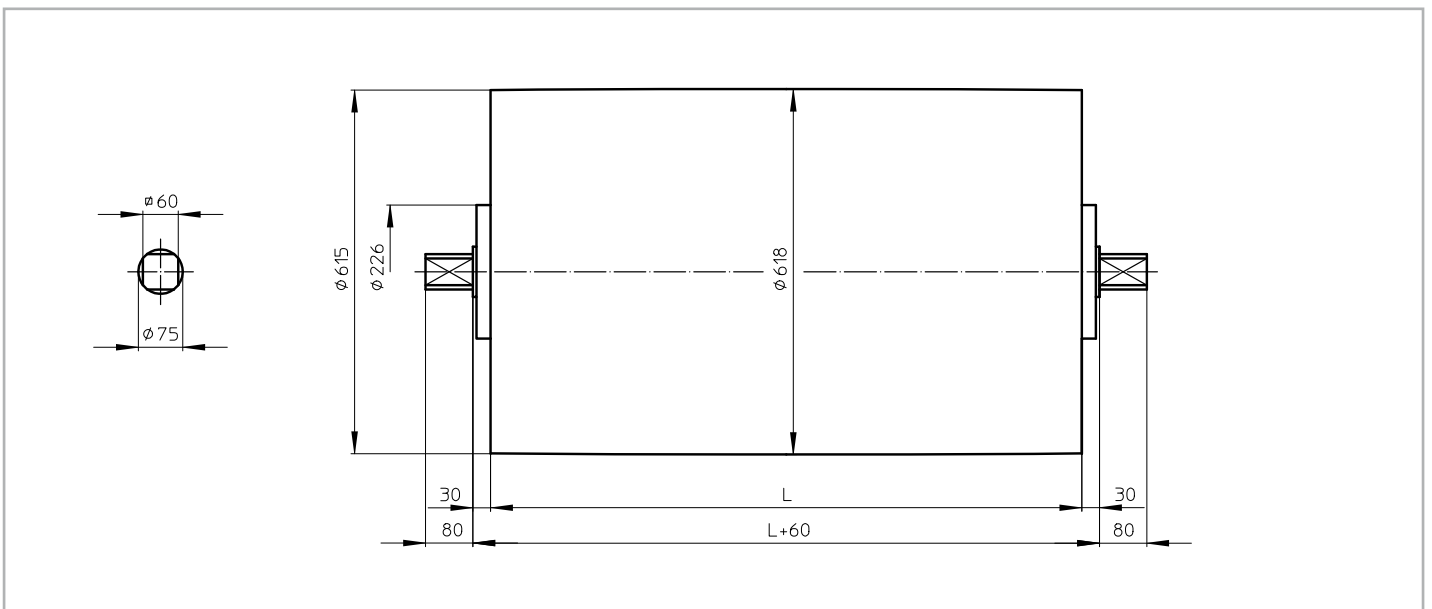
## TM 620A75

TM 620A75, Trommelmotor aus Normalstahl und Gusseisenklemmkasten *TM 620A75, mild steel drum motor with cast iron junction box*



## KT 620A75

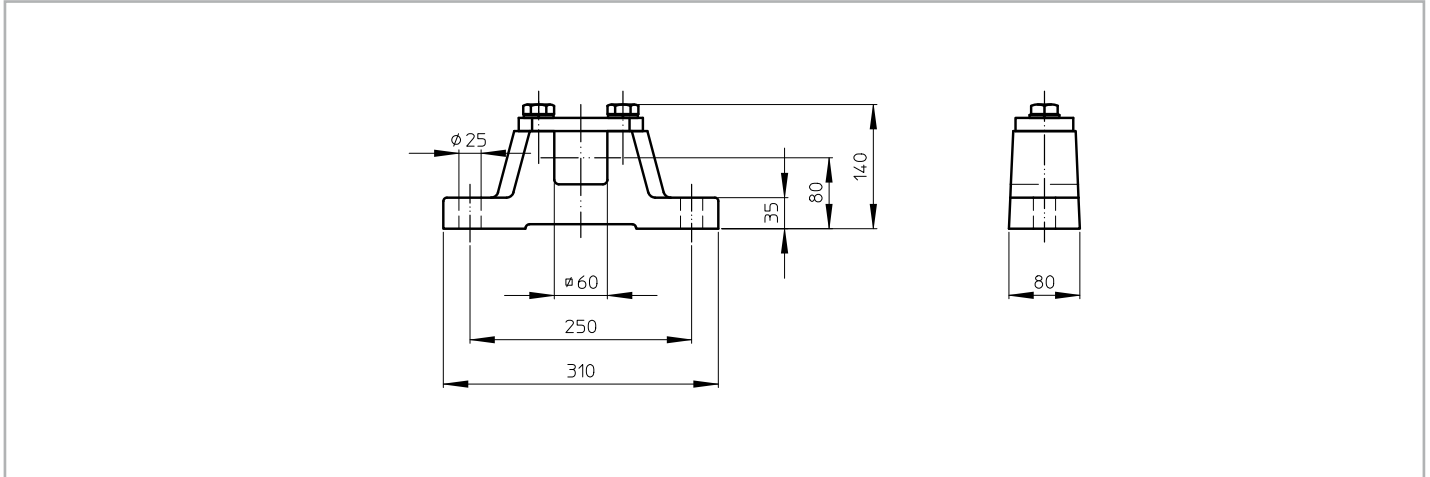
KT 620A75, Normalstahltrommel *KT 620A75 mild steel tail drum*



# Abmessungen Halterung / Kabelausgang Dimensions bracket / Cable exit

## AB 75

AB 75 Halterung aus Gusseisen oder Edelstahl *AB 75, cast iron or stainless steel bracket Weight: 22 kg per pair*



Das Standarddesign eines TM 620A75 besteht aus einer Anschlussdose aus Gusseisen.

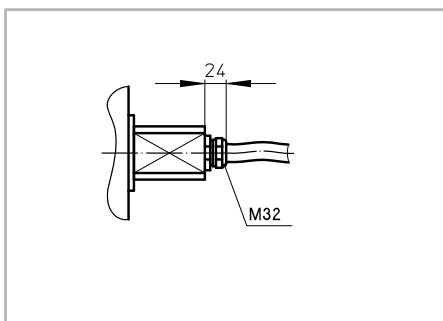
Bei der Konstruktion aus rostfreiem Stahl (Edelstahl) kann dies entweder eine PU-beschichtete Gusseisen- oder eine Edelstahl-Anschlussdose sein.

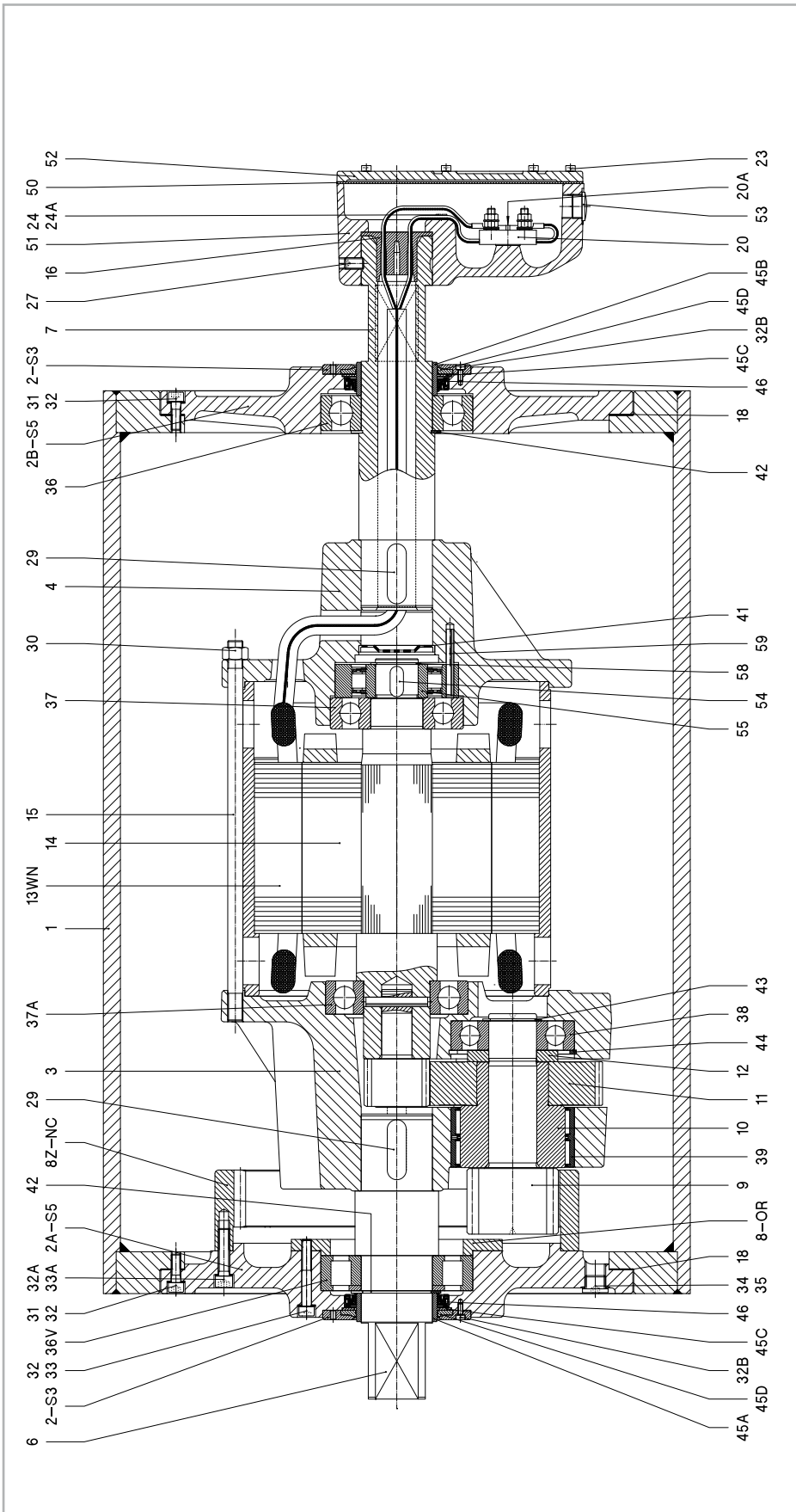
Auf Wunsch kann ein Trommelmotor mit einem Kabel ausgestattet werden. In diesem Fall ist es wichtig, die verfügbare Spannung (vorzugsweise 1 Spannung), die Länge des Kabels, ob das Kabel abgeschirmt ist oder nicht, und die Art des Kabelausgangs zu kennen. Der verfügbare Kabelausgang ist unten dargestellt.

*Standard design of a TM 620A75 is with a cast iron junctionbox. For stainless steel design, this can be either a cast iron PU coated or stainless steel junctionbox. On request a Drum motor can be fitted with a cable. In this case it is important to know the available voltage (preferably 1 voltage), the length of the cable, whether the cable is shielded or not and the type of cable exit. The available cable exit is shown below.*

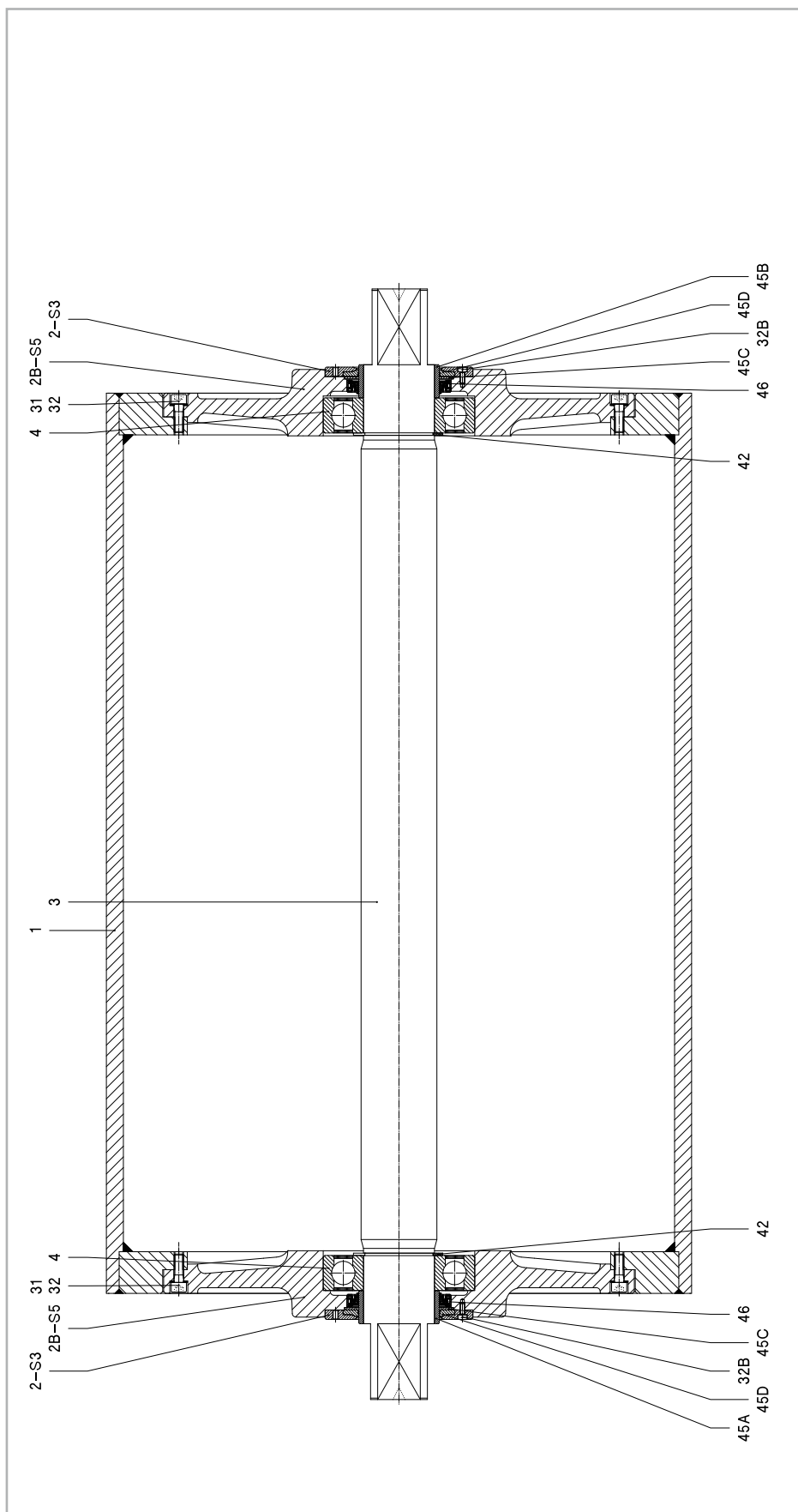
## Option 1

Gerader Kabelausgang mit Kabelverschraubung *Straight cable exit with cable gland*





1	Shell	29	Key	37	Ballbearing	46	Cassette seal
2A-S5	Endflange	30	Nut	37A	Ballbearing	50	Seal
2B-S5	Endflange	31	Int. hex screw	38	Ballbearing	51	Junctionbox
2-S3	Endplate	32	Washer	39	Needlebearing	52	Junctionbox cover
3	Gearhousing	32A	Washer	41	Disc	53	Stopping plug
4	Motorflange	32B	Int. hex screw	42	Circlip	54	Key
6	Shaftend	33	Int. hex screw	43	Circlip	55	Backstop
7	Hollow shaft	33A	Int. hex screw	44	Circlip	57	Dataplate
8Z-NC	Internal gear	34	Fillerplug	45A	Bearing race	58	Circlip
8-OR	Locking ring	35	Washer	45B	Bearing race	59	Spiral pin
9/10	Pinion with bush	36	Ballbearing	45C	Support ring		
11	Gear	36V	Cyl. roller bearing	45D	Wiper		



1	Shell	32B	Int. hex screw
2B-S5	Endflange	42	Circlip
2-S3	Endplate	45B	Bearing race
3	Shaft	45C	Shim plated
4	Ballbearing	45D	Wiper
31	Int. hex screw	46	Cassette seal
32	Washer		

## Material

The external parts of the Drummotor are made from mild steel and cast iron. Depending on the application it is also possible to manufacture in stainless steel (complete or part). You can choose between stainless steel 304 (general food industry) and stainless steel 316 (salt water applications).

## Backstop - Brake

If an inclined belt conveyor is stopped fully loaded, it could run backwards.

To prevent this we can install a backstop. One of the bearings in the Drummotor is replaced by a one way bearing. The way this bearing is installed determines the direction of rotation of the drum. TBRH indicates a cw rotation and TBLH ccw.

In situations where a Drummotor needs to be able to drive in both directions it is not possible to use a backstop. In this case we use a brake. When an declined belt or a horizontal belt needs to be stopped quickly to pick or place items a brake is the best solution.

## Inclined position

Sometimes a Drummotor needs to be installed on an inclined or even vertical position. This is possible, but we need to make adjustments to the oil level in the drum as the oil will flow to the lower side of the Drummotor causing the top bearing to run without lubrication. To prevent problems we will need to know the installation angle so we can fill the drum with extra oil and fit a double sealed bearing on the upper side.

## Thermal protection

A Krauter Drummotor can be fitted with thermal protection. This consists of either a thermistor (PTC) or bi-metal (klixon). We install these on each phase of the electric motor.

## Encoder - Sensor bearing

In certain applications it is required to measure the speed or position of a conveyor belt. For this type of application we can install an encoder or sensor bearing to accurately measure rotational speed of the Drummotor.

The accuracy needed will determine the type of encoder or sensor used.

## Lagging

The power produced by the Drummotor has to be transferred to the belt and lagging is used to give more friction between the Drummotor and the conveyor belt. Krauter can fit your Drummotor with different kinds of lagging.

There is a difference between cold and hot vulcanised lagging. Cold vulcanised means the lagging is glued to the Drummotor usually in sheet form and the join 'welded' together. Hot vulcanising is a process where the shell is wrapped around with thin layers of rubber. The shell with the rubber is then baked in an autoclave fusing the layers together creating a seamless finish.

It is possible to cut grooves (e.g chevron or diamond) in the lagging.

## Sprockets

Do you wish to use a Drummotor to drive modular belts? Krauter can help you! Fitting sprockets suitable for various types of modular belts is a simple solution. The Drummotor is manufactured with a cylindrical shell and machined with a patented 'keying' system. The sprockets are simply 'slid' on and locked securely into position.



## Sealings for mild steel Drummotors

RB sealing - IP 66



This is Krauter's standard sealing. This type of sealing will work in most conditions.

RBS sealing - IP 66



This sealing is specifically designed for those applications where high water pressure is used for cleaning.

HD sealing - IP 66



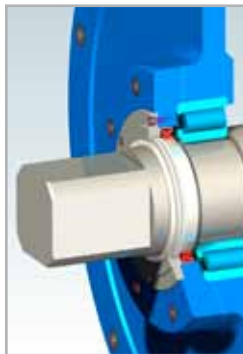
This sealing is designed for abrasive applications, like sand, gravel and soil.

HDW sealing - IP 66



These sealings are designed for extreme abrasive conditions. Choice of seal depends on the material to be conveyed.

HDLR sealing - IP 66



## Sealings for stainless steel Drummotors

CR sealing - IP 66



This is our standard sealing for stainless steel Drummotors, a very effective, multi labyrinth sealing.

UW sealing - IP 68



This sealing is suitable for under water applications. The maximum depth is approx 2,5 m.



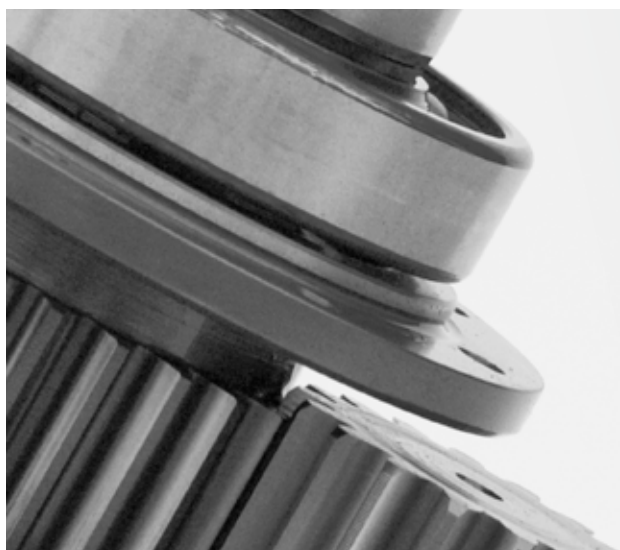
Specification	Standard	Optional
<b>Construction</b>		
Shafts and bolts	Mild steel	Stainless steel
Endflanges	Cast iron	Stainless steel
Shell	Mild steel	Stainless steel
Junctionbox	Cast iron	Cast iron PU coated or stainless steel
Cable		Shielded or non-shielded
Sealing mild steel	RB, HDW, HDLR	RBS, HD
Sealing stainless steel	CR	UW
<b>Shell</b>		
Crowned	•	
Cylindrical		•
Balanced		•
Lagging, cold vulcanised		•
Lagging, hot vulcanised		•
Lagging, FDA approved		•
Fitted with grooves, patterns		•
Sprockets		•
<b>Electro motor</b>		
Three-phase asynchronous	•	
Power supply	400/690 V - 50 Hz	Other voltages and frequencies on request
Twin drive (double power)		•
Insulation class	F	H
Thermal protection		Bi-metal or thermistor
Run by frequency inverter	•	
<b>Other options</b>		
Food grade oil		•
Backstop, mechanical		•
Brake, electro mechanical		•
Clutch brake, electro mechanical		•
Inclined or vertical position		•
Other facewidth's		•
Different shaft designs		•
Encoder or sensor bearing in Drummotor		•
Encoder or sensor bearing in Taildrum		•
<b>Certificates</b>		
CE	•	
UL		•
CSA		•
ATEX zone 22, dust		•

## Produktübersicht *Productoverview*

Drummotor type	TM 100B25	TM 113B25	TM 127.25	TM 138.25	TM 160.25	TM 160.30	TM 215.30	TM 215.40
Drum diameter (mm)	100	113	127	138	160	160	215	215
Shaft diameter (mm)	25	25	25	25	25	30	30	40
Power (kW)	0.05-0.37	0.04-0.55	0.10-1.1	0.10-1.1	0.10-0.75	0.10-2.2	0.10-2.2	0.37-5.5
Speed (m/s)	0.007-3.60	0.008-4.40	0.008-2.60	0.009-2.80	0.13-3.30	0.06-4.00	0.08-5.30	0.12-4.70

Drummotor type	TM 215B50	TM 273.40	TM 315.40	TM 315.50	TM 400A50	TM 400.60	TM 500A60	TM 500A75
Drum diameter (mm)	215	273	315	315	400	400	500	500
Shaft diameter (mm)	50	40	40	50	50	60	60	75
Power (kW)	1.5-4.0	0.37-5.5	0.37-5.5	1.1-11	1.1-11	1.5-22	1.5-22	11-30
Speed (m/s)	0.18-0.31	0.17-5.00	0.18-5.20	0.16-4.40	0.20-4.80	0.20-4.60	0.25-4.70	0.80-3.20

Drummotor type	TM 620A75	TM 630A100	TM 800A100	TM 800A130
Drum diameter (mm)	620	630	800	800
Shaft diameter (mm)	75	100	100	130
Power (kW)	11-30	22-55	22-55	55-132
Speed (m/s)	1.00-3.90	1.00-4.00	1.25-5.10	1.60-4.50



### Design benefits

- Robust, industrial design
- Fully enclosed
- Oil filled
- Well-sized gears and bearings

### Installation advantages -

#### Easy to install

- Compact and reliable
- Easy to clean
- Virtually maintenance free -

#### Low Life Cycle Costs





**Werner Krauter GmbH**

Siemensstraße 2  
D-73037 Göppingen  
Telefon 07161 9383-100  
Telefax 07161 9383-9100  
E-Mail: [info@krauter.de](mailto:info@krauter.de)

[www.krauter.de](http://www.krauter.de)



**KRAUTER®**

ELEKTROMASCHINEN