

MOTORIZED PULLEYS FOR BELT CONVEYORS BULK HANDLING

GENERAL CATALOGUE

Moving ahead.





Motorized Pulley 800M, H & 800HD, Ø 800 mm

To match your requirements in diameter 800 mm, our product range offers two different loading performances for your BULK applications:

- 800M, 800H
- 800HD

You have a choice.

Therefore, it is important to notice the differences to choose the right type of pulley for the right application based on estimated belt tension (radial load) = T1+T2. The actual radial load **MUST** be **LESS** than the max. allowable radial load shown in this catalogue.

Be aware of increased belt tensions using multi-ply thick heavy belts and/or larger belt widths.

Motor/gearbox of 800M has its origin from 630H.

800M, H & 800HD are designed for HEAVY DUTY applications and they provide the necessary torque, belt pull and allowable belt tension in order to handle the toughest, irregular & most extreme and brutal working conditions.

STANDARD SPECIFICATION of Motorized Pulley

- Crowned mild steel Ø 800 mm steel shell painted yellow - min. layer of 60 µm
- Bolted powder coated cast iron bearing housings and covers, all painted yellow – min. layer of 60 µm
- Mild steel shafts
- Shaft sealing system - degree of protection IP66/67 (EN60034-5)
- Cast iron terminal box painted yellow – min. layer of 60 µm
- 3-phase induction motors with thermal protector
- Voltage: 3-phase single voltage. Most common voltages available. Please specify!
- Motor winding insulation Class F
- Dynamically balanced rotor
- Two oil plugs each fitted with a magnet to filter the oil
- Yellow painted cast steel mounting brackets – one type AL & one type ALO
- Oil change recommended every 20.000 operational hours
- Maximum RL – Please inquire!
- Non standard RL's available
- To be used in horizontal positions ±5 degree only!
- Special speeds available on request.

SEMI-RUST-FREE options

TS11

- Painted mild steel shell – min. layer of 120 µm
- Painted cast iron end housings – min. layer of 120 µm
- Stainless steel covers with labyrinth grooves – AISI 304 range
- Nitrided shaft sleeves
- Zinc-plated oil plugs – each with magnet
- Zinc-plated exterior bolts
- Shaft sealing system – degree of protection IP66/67 (EN60034-5)
- Painted terminal box – min. layer of 120 µm
- Nickel plated mounting brackets with labyrinth grooves

TS12

- As TS11, but without re-greasable seals.
- Covers - standard

Please note:

- FDA & USDA food grade recognized oil and grease are NOT included in TS11 & TS12, but available on request.

When ordering, please specify the required voltage, electrical connection and eventual TS-number, options, brackets and idler pulleys.

- Environmental considerations: page 77-78
- Technical precautions: pages 81-92
- Optional extras: page 65 and back cover
- Connection Diagrams: page 100.



OPTIONAL EXTRAS

Motorized Pulley 800M, H & 800HD

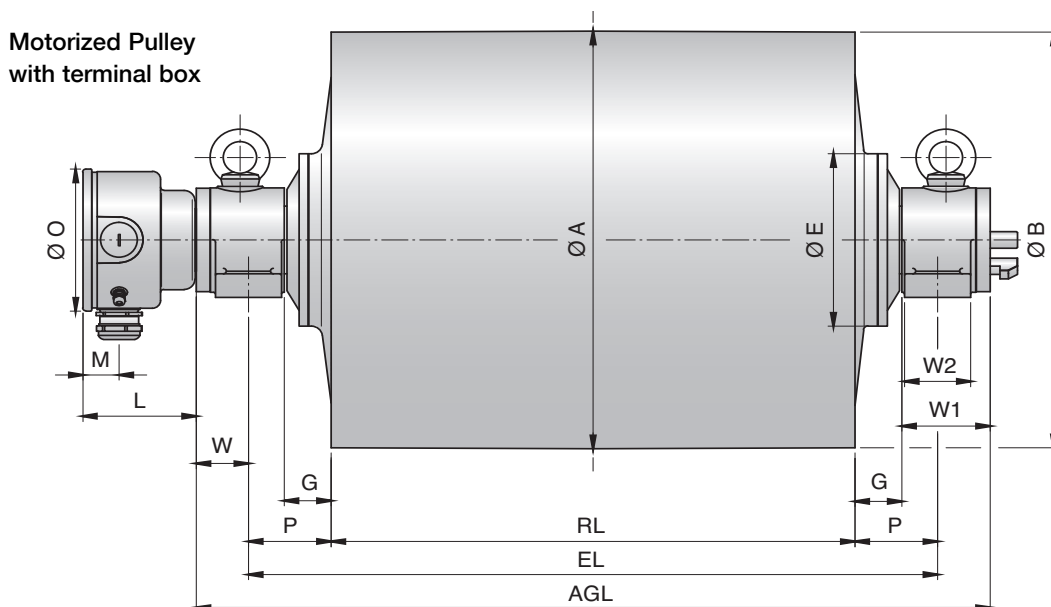
Specification	800M	800H/HD
Semi-rust-free option Re-greasable labyrinth seals!	TS11	TS11
Semi-rust-free option Standard seals!	TS12	TS12
Dust explosion proof Motorized Pulleys - ATEX 95 - Zone 22 - for applications handling of dusty grain etc. According to European Directive 94/9/EC.	On request!	On request!
Re-greasable labyrinth seals - mild steel	x	x
Black rubber lagging - STANDARD specifications: - Smooth lagging - Hardness 60 ±5 Shore A - Diamond lagging - Hardness 60 ±5 Shore A	o 10 mm 10 mm	o 10 mm 10 mm
White smooth rubber lagging (FDA). Oil, fat & grease resistant	x	x
SPECIAL lagging available on request - e.g. hot vulcanized, ceramic etc.	x	x
External brake shaft for connection to mechanical brake	x	x
Mechanical backstop	x	x
Insulation class F - Allowable ambient temperature: -25°C-+40°C	Std.	Std.
Insulation class H with synthetic oil	x	x
Parallel shell	x	x
Thermal protector	Std.	Std.
IP66/67 cast iron terminal box painted yellow	Std.	Std.
Shaft sealing system - degree of protection IP66/67 (EN60034-5)	Std.	Std.
3-phase single voltage (3 x 400 V) or (3 x 690V), 50 Hz, with +/-10% tolerance - DIN IEC 38	Std.	Std.
Special voltages - 50 and/or 60Hz Please specify!	x	x
Dual voltage - delta/star - connection possibility!	x	x
CSA approved motors - available on request only!	x	x

x = Optional extra's

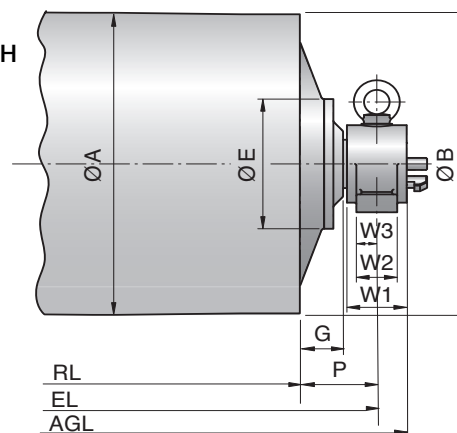
o = An option with certain limitations. Please refer to Technical precautions pages 81-92!

Std. = Fitted as standard

Motorized Pulley 800M, H & 800HD, Ø 800 mm

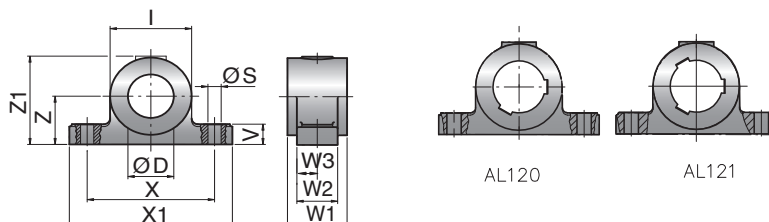


Idler Pulley
UT630M / UT630H



Type	A mm	B mm	C mm	D mm	E mm	G mm	L mm	M mm	O mm	P mm
800M	800	796	-	90	268	88	166	54	230	150
800H/HD	800	796	-	120	330	80	206	67	260	150
UT630M	630	626	-	90	226	85	-	-	-	150
UT630H	630	626	-	120	330	75	-	-	-	150

Mounting brackets
AL90 & ALO90
AL120 & ALO120
AL121 & ALO121



Motorized Pulleys & Idler Pulleys (UT) Type	Material	Bracket description	Dimensions											Weight kg	
			D mm	I mm	S mm	V mm	W mm	W1 mm	W2 mm	W3 mm	X mm	X1 mm	Z mm		Z1 mm
800M & UT630M	Cast steel	AL90/ALO90	90	160	26	42	58.5	117	80	58.5	250	320	100	183	19.0
800H & UT630H	Cast steel	AL120/ALO120	120	200	33	50	95	160	120	65.0	300	370	110	213	38.0
800HD & UT 630HD	Cast steel	AL121/ALO121	120	200	33	50	95	160	120	65.0	300	370	110	213	38.0



Motorized Pulley 800M, Ø 800 mm

50 Hz

Motor Power kW/HP	No. of Poles	Gear stage	Nominal belt speed at Full Load 50Hz m/sec	Torque Nm	Belt Pull N	Max. Radial Load T1+T2 N	Min. RL	Type	Weight in kg for STANDARD width								Type of Bracket
									Dimension RL in mm (RL >2000 mm available on request)								
									950	1000	1050	1100	1150	1200	1250	per 50 mm up to 2000	
22.0/30.0	8	2	1.25	6688	16720	73600	950	800M	935	948	960	973	985	995	1005	13 kg	AL90/ALO90
			1.60	5223	13058												
			2.00	4178	10445												
			2.50	3343	8358												
			3.15	2653	6633												
30.0/40.0	8	2	1.60	7122	17805	98100	950	800M	975	988	1000	1013	1025	1035	1045	13 kg	AL90/ALO90
			2.00	5698	14245												
			2.50	4558	11395												
			3.15	3617	9043												
37.0/50.0	6	2	2.00	7030	17575	98100	950	800M	975	988	1000	1013	1025	1035	1045	13 kg	AL90/ALO90
			2.50	5622	14055												
			3.15	4462	11155												
			4.00	3513	8783												
45.0/61.0	4	2	3.15	5426	13565	88300	950	800M	995	1008	1020	1033	1045	1055	1065	13 kg	AL90/ALO90
			4.00	4273	10683												
55.0/75.0	4	2	3.15	6584	14581	88300	950	800M	995	1008	1020	1033	1045	1055	1065	13 kg	AL90/ALO90
			4.00	5223	13058												
Idler Pulley						98100	750	UT630M	327	336	345	354	362	371	380	9 kg	AL90/ALO90

Motorized Pulley 800H/HD, Ø 800 mm

50 Hz

Motor Power kW/HP	No. of Poles	Gear stage	Nominal belt speed at Full Load m/sec	Torque Nm	Belt Pull N	Max. Radial Load T1+T2 N	Min. RL	Type	Weight in kg for STANDARD width								Type of Bracket
									Dimension RL in mm (RL >2000 mm available on request)								
									1400	1450	1500	1550	1600	1650	1700	per 50 mm up to 2000	
55.0/75.0	8	3	1.00	20884	54974	200000	1300	800HD	2390	2420	2450	2455	2485	2515	2546	30kg	AL121/ALO121
	6		1.25	16707	41300												
	8		1.60	13052	32630												
75.0/100.0	6	2	2.00	10450	26125	200000	1150	800H	2150	2175	2200	2225	2250	2275	2300	25 kg	AL120/ALO120
			2.50	8360	20900												
			3.15	6635	16588												
			4.00	5225	13063												
			4.50	4644	11610												
90.0/120.0	6	3	1.25	22527	56318	200000	1300	800HD	2390	2420	2450	2455	2485	2515	2546	30kg	AL121/ALO121
			1.60	18496	46240												
			2.00	14244	35610												
			2.50	11395	28488												
			3.15	9044	22610												
110.0/150.0	4	2	4.00	7122	17805	200000	1400	800H	2200	2225	2250	2275	2300	2325	2350	25 kg	AL120/ALO120
			4.50	6331	15828												
			1.60	21181	52953												
			2.00	18496	46240												
			2.50	13674	34185												
132.0/180.0	4	3	3.15	10852	27130	180000	1550	800HD	2200	2225	2250	2275	2300	2325	2350	25 kg	AL120/ALO120
			4.00	8546	21365												
			4.50	7597	18993												
			2.00	21915	54789												
			2.50	17994	44984												
132.0/180.0	4	2	3.15	13264	33160	180000	1400	800H	2175	2200	2225	2250	2275	2300	2325	25 kg	AL120/ALO120
			4.00	10445	26113												
			4.50	9265	23163												
			2.50	21592	53981												
			3.15	15153	37882												
132.0/180.0	4	2	4.00	12535	31338	180000	1400	800H	2215	2240	2265	2290	2315	2340	2365	25 kg	AL120/ALO120
			4.50	11142	27855												
			4.50	11142	27855												
Idler Pulley						200000	1150	UT630H	700	715	730	745	760	775	790	15 kg	AL120/ALO120

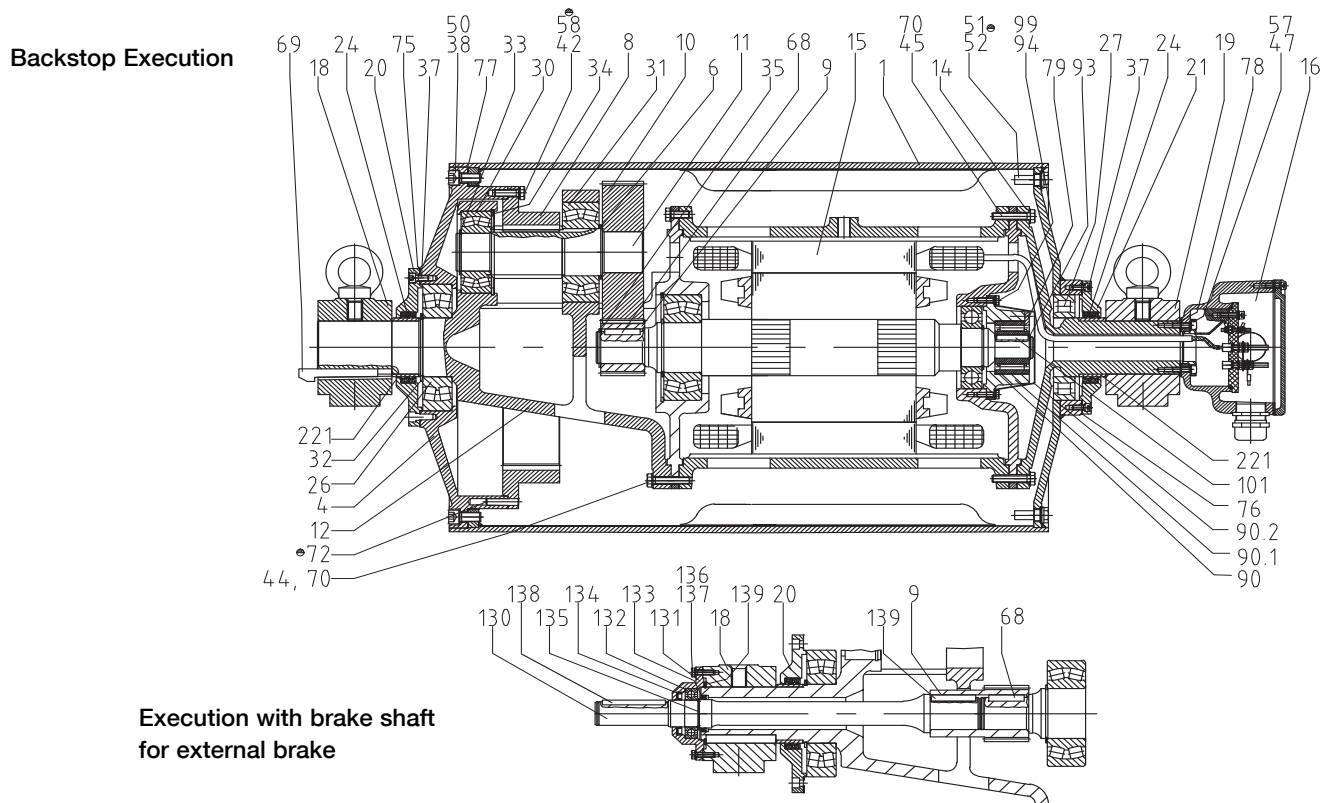
Sectional drawings: please refer to pages 68-70!



Motorized Pulley 500H – 800H, Ø 500 mm – 800 mm

Spare parts list and sectional drawings

Pos.	Description	Pos.	Description	Pos.	Description
1	Shell	26	Bearing	77	Gasket
4	End housing with geared rim	27	Bearing	78	Gasket
6	Distance washer (630H/800H)	30	Bearing	79	Holding plate
8	Geared rim	31	Bearing	85	Motor flange for backstop/brake
9	Rotor pinion	32	Retaining ring	90	Backstop
10	Input wheel	33	Retaining ring	90.1	Backstop housing
11	Output pinion	34	Retaining ring	90.2	Backstop cover
12	Gear box including rear shaft	35	Retaining ring	93	Retaining ring
13	Rear shaft	37	Hexagon socket screw	94	Hexagon head screw
14	Front shaft	38	Hexagon socket screw	99	Spring washer
15	Stator complete	42	Hexagon head screw	101	Key
15.1	Rotor	44	Hexagon head screw	123	Grease nipple
16	Terminal box complete	45	Hexagon head screw	130	Brake shaft
17	Nipple (for 500H/630M only)	47	Hexagon head screw	131	Mounting bracket bearing cover
18	Mounting brackets rear side (AL)	50	Washer	132	Roller bearing
18.1	Mounting bracket with labyrinth – rear side	51	Gasket	133	Brake shaft seal
19	Mounting bracket front side (ALO)	52	Magnetic oil plug	134	Brake shaft seal
19.1	Mounting brackets with labyrinth – front side	57/58	Spring washer	135	Retaining ring
20	Cover – rear side	68	Key	136	Bolts - bearing cover
20.1	Cover with labyrinth groove	69	Gib key	137	Spring lock washer
21	Cover – front side	70	Waved spring washer	138	Key
21.1	Cover with labyrinth groove	72	Grooved pin	139	Retaining ring
24	2 Dust lip seals each side	73	Set screw	140	Key
		75	Gasket	141	Retaining ring
		76	Gasket	221	Hardened bush



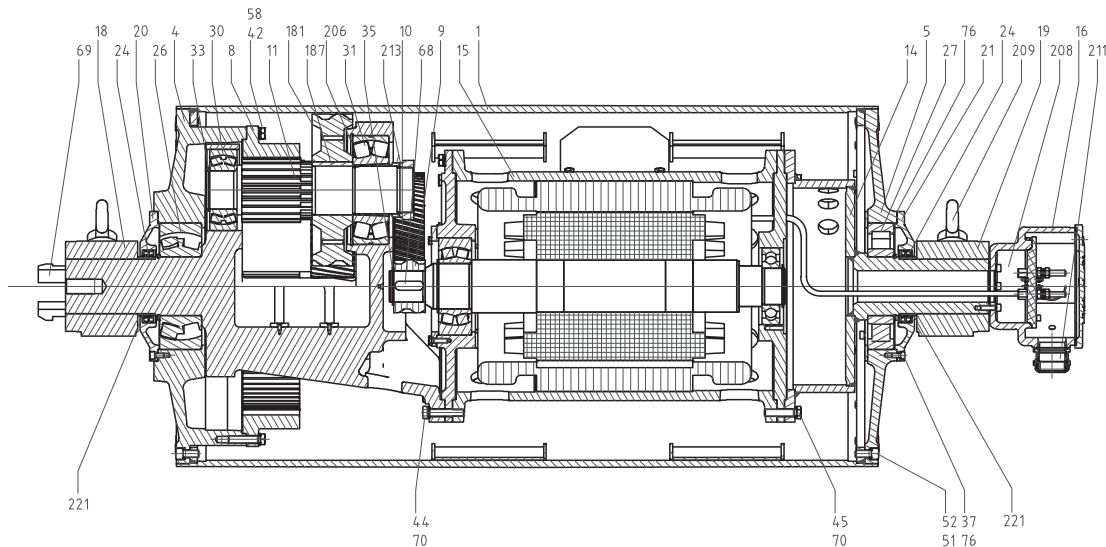
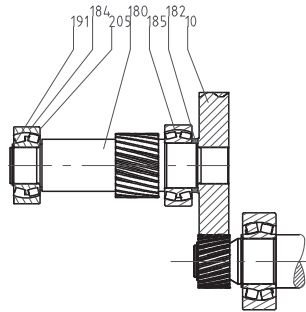


Motorized Pulley 800HD, Ø 800 mm

Spare parts list and sectional drawings

Pos.	Description	Pos.	Description	Pos.	Description
1	Shell	34	Retaining ring	130	Brake shaft
4	End housing with geared rim	35	Retaining ring	131	Mounting bracket bearing cover
6	Distance washer	37	Hexagon socket screw	132	Roller bearing
8	Geared rim	38	Hexagon socket screw	133	Brake shaft seal
9	Rotor pinion	42	Hexagon head screw	134	Brake shaft seal
10	Input wheel	44	Hexagon head screw	135	Retaining ring
11	Output pinion	45	Hexagon head screw	136	Bolts – bearing cover
12	Gear box – cast steel	47	Hexagon head screw	137	Spring lock washer
13	Rear shaft	50	Washer	138	Key
14	Front shaft	51	Gasket	139	Retaining ring
15	Stator complete	52	Magnetic oil plug	140	Key
16	Terminal box complete	58	Spring washer	188	Retaining ring
20	Cover – gear side	68	key	189	Retaining ring
20.1	Cover with labyrinth groove	69	Gib key	190	Retaining ring
21	Cover – front side	70	Waved spring washer	180	Intermediate pinion shaft
21.1	Cover with labyrinth groove	72	Grooved pin	181	Intermediate pinion
24	2 dust lip seals each side	73	Set screw	182	Distance bushing
26	Bearing	75	Gasket	183	Washer
27	Bearing	76	Gasket	184	Roller bearing
28	Bearing	77	Gasket	185	Roller bearing
30	Bearing	78	Gasket	187	Key
31	Bearing	85	motor flange for backstop	191	Retaining ring
32	Retaining ring	90	backstop complete	192	Retaining ring
33	Retaining ring	123	Grease nipple	193	Distance washer
				194	Set screw
				195	Prevailing torque type hexagon nut
				196	Key
				197	Retaining ring
				205	Retaining ring
				206	Retaining ring
				207	Retaining ring
				208	Protective ring
				209	Eye bolt
				210	Washer
				211	Cable gland
				212	Retaining ring
				220	Insulation plate
				221	Hardened bush

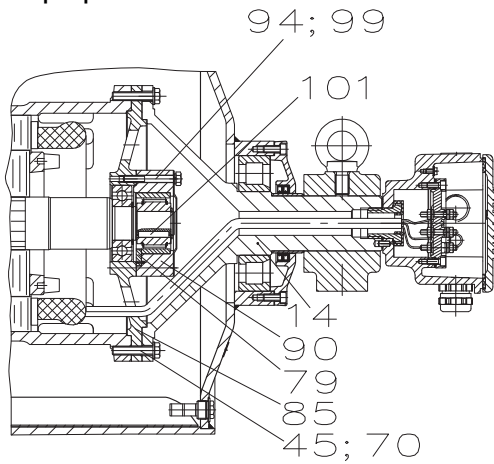
Intermediate stage



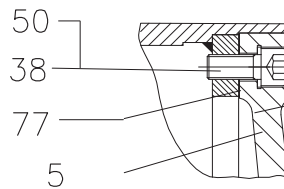
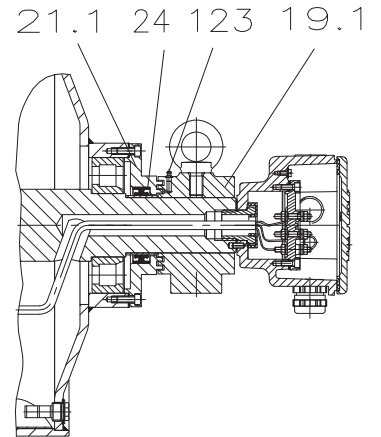
Motorized Pulley 500H - 800HD, Ø500mm - 800mm

Sectional drawings

Backstop Option

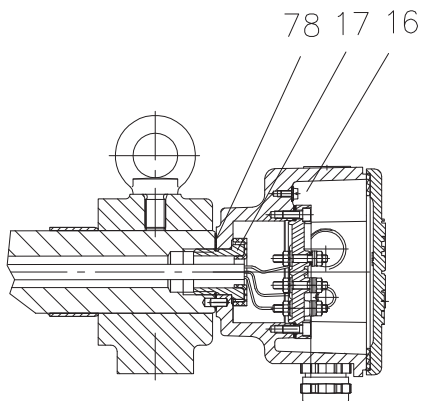


Labyrinth Option



800M-1000HD bolted cast iron end housings at both sides

Terminal box execution for MP type 500H



Terminal execution for MP type 630-800HD

