

# Axis RL89 Motorised Pulley

## General features

- Diameter Ø89mm
- Low noise enclosed planetary gearbox
- All steel gear system
- Roller lengths from 500mm to 1500mm
- Three phase motor
- 95 watt input power
- Insulation Class F
- Galvanised or stainless steel shell
- Life lubricated with synthetic grease
- Straight cable gland with 3m flying cable



## Axis RL89 Benefits

### Economy

The Axis RL89 requires fewer additional components when compared to a traditional pallet conveying system. When specifying the Axis RL89, consideration must be given to the following advantages:

- **Reduced Maintenance:** The gearing of the Axis RL89 is life lubricated and does not require maintenance.
- **Reduced Components:** No external motor and reducer, chain, sprockets and tensioner.
- **Simplified Conveyor Structure:** Elimination of protection covers enables reduced side frame height.
- **Faster Assembly:** Reduced components allows quicker project commissioning.
- **Faster Installation:** Conveyors can be shipped fully assembled for easy site installation.
- **Gravity Rollers Construction:** As only the Axis RL89 provides motorisation, the support rollers do not require additional welded sprockets.

### Modularity

- The Axis RL89 has the same diameter as gravity rollers commonly found in the handling market. This allows simple retrofitting to existing systems without modifications.
- The enclosed drive system allows handling systems to be utilised aggressive environments. The Axis RL89 requires no grease application and is impervious to dust and particles etc. The Axis RL89 is particularly suitable for use in food safe areas.
- The modular construction of a conveyor system using the Axis RL89 allows fast interchangeability of rollers and should a single motor become damaged it can be removed without stopping production or creating costly down-time.

### Safety

The enclosed drive of the Axis RL89 eliminates danger to personal working in the general proximity as no pinch points are created in its operation. This means protective covers and guarding may not be required.

Greased components of a traditional pallet conveying system present contamination issues not present when the Axis RL89 is utilised. The shell can be supplied in galvanised drawn steel, or stainless steel for food safe areas.

# Axis RL89 Applications

- Logistics
- Bagging and Product Batching

- Airport Freight
- Production Lines



Aggressive environment application



Production application with turntable



Food production facility where pallets need to be moved without forklift use, preventing possible contamination .



Logistics applications with shuttle transfers

## Axis RL89 Layout Options

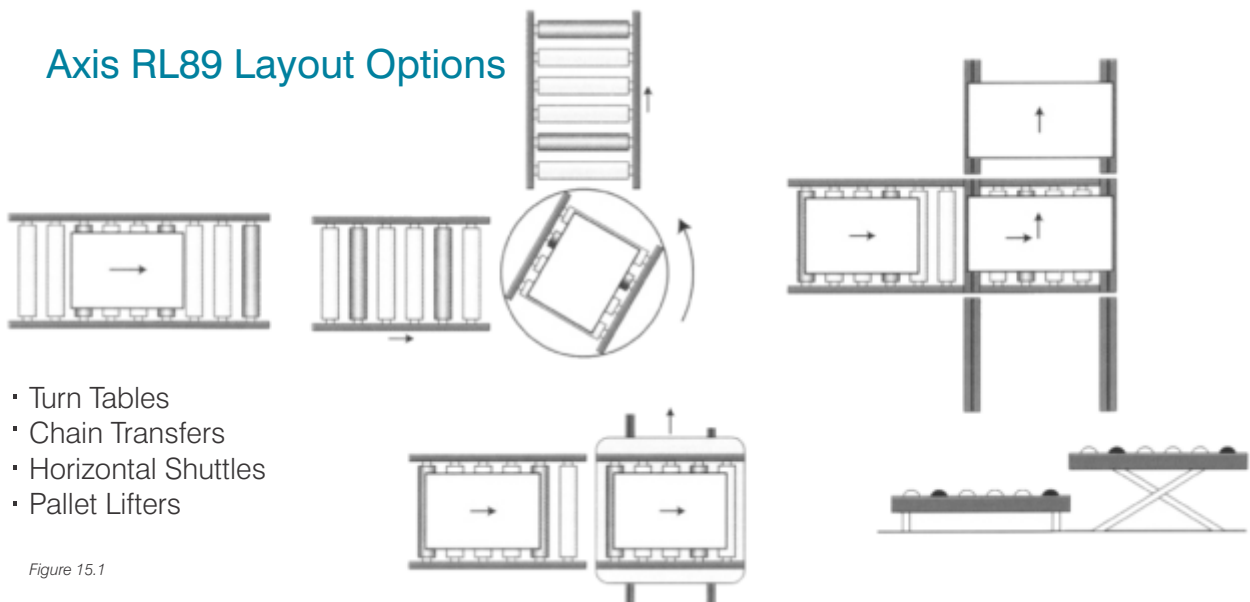


Figure 15.1

# Axis RL89 Motorised Pulley

## Axis RL89 Dimensions

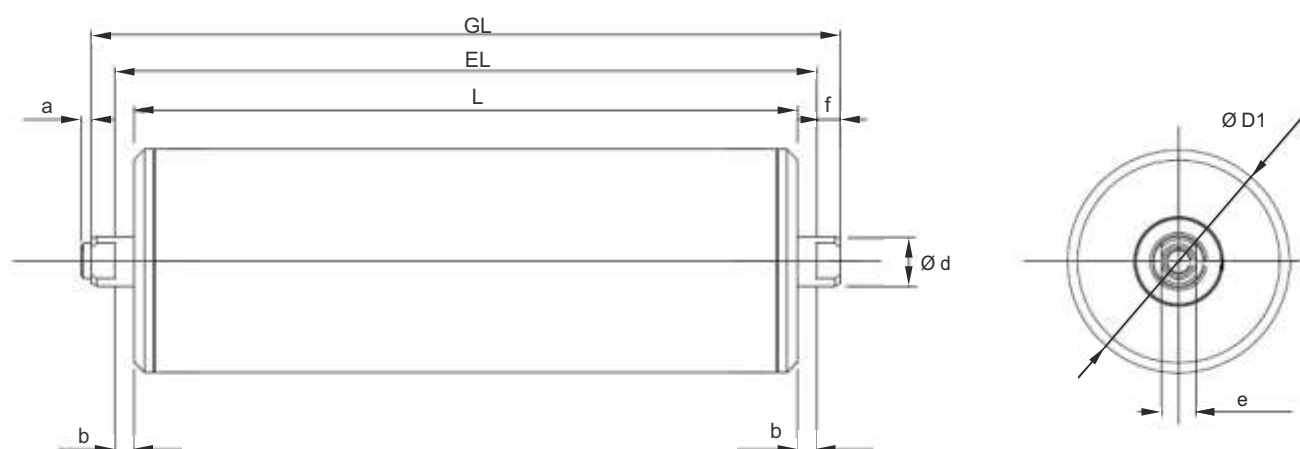


Figure 15.2

Dimensions in mm

MOTORISED ROLLER								
Size	Type	Ø D1	a	Ø d	e	f	b	EL
89	RL89	89	4	20	14	10	11	L + 22
GRAVITY ROLLER								
89	UT89	89		20			1	

Dimensions can vary according to the application and bearings used

## Axis RL89 Performance Data

TYPE	POWER	SPEED	TORQUE	STARTING TORQUE	NOMINAL TENSION	STARTING TENSION	POWER INPUT 400V (50Hz)	DRUM LENGTH L min.	WEIGHT L=1200mm
	[kW]	[m/s]	[N]	[N]	[Nm]	[Nm]	[A]	[mm]	[kg]
RL89	0,95 2-pole	0,06	31,8	72,5	714	1629	3x230/400V 0,45/0,26	600	14,3
		0,086	22,4	51,0	503	1146			
		0,095	19,9	45,3	447	1018			
		0,12	15,8	35,9	354	807			
		0,135	14,0	31,9	314	716			
		0,15	12,4	28,2	278	634			
		0,17	11,2	25,5	251	573			
		0,19	9,90	22,5	222	505			
		0,22	8,80	20,1	198	453			
		0,25	7,80	17,8	175	400			
		0,36	5,60	12,8	128	288			

# Axis RL89 Motorised Pulley

## Weight of Conveyed Pallets

RATIO	SPEED	TANGENTIAL FORCE	MAXIMUM WEIGHT
[i]	[m/min]	[daN]	[kg]
53	14.6	16	600
60	12.9	19	750
67	11.4	22	850
76	10.1	25	900
84	9.1	27	1000
95	8.1	31	1200
108	7.1	35	1350
135	5.7	44	1500
152	5.0	49	1700
216	3.6	70	2000

## Maximum Loading

LENGTH	STATIC LOAD
[MM]	[kg]
700	370
800	320
900	280
1000	260
1100	225
1200	210
1300	190
1400	275
1500	160

## Axis RL89 Motor Information

MOTOR	SPECIFICATION
Three Phase	-
Absorbed Power [P1]	95W
Output Power [P2]	50W
Speed	2500 tr / min
Nominal Torque	0,19Nm
Thermal Protection	Yes

# Axis UT89 Gravity Roller

The Axis UT89 gravity roller is designed for use with the RL89 motorised pulley for handling applications. They are suitable for use in heavy duty applications with high static load ratings. Standard lengths are available up to 1500mm wide.

## General features

- Heavy duty galvanised steel or stainless steel shell
- Swaged or pressed precision bearing options
- 20mm mild or stainless steel shaft
- M12 x 30 tapped or shaft flat mounting options

