

# Track series

Extending the working range of MOTOMAN robots in many applications such as welding, handling and machine tending.



### High performance tracks





#### Key benefits

- Extending the working range for MOTOMAN robots in all joining processes, as well as in applications for handling and machine tending.
- TSL tracks are fully synchronized with the robot control system. Operation and programming are carried out using the teach pendant of the robot.
- Featuring outstanding YASKAWA product quality and distinguished by flexibility, precision and performance.
- The carrier, guide blocks and rack drive are coordinated with the robot and its application.

#### Optional equipment

- Additional carriage in order to mount a second robot, thereby increasing flexibility and performance, an additional carriage can be integrated on the larger track.
- Automatic lubricating unit to minimize maintenance work and increase availability, optionally available for the linear guides and rack drive, either separately or in combination.
- Range limitation for precise definition of the effective working range of the robot. These range limitations can be defined for two to four zones depending on the track.
- Holders for supply components in order to install additional components, such as weld current controllers, wire drums or other application specific equipment directly in the application system.
- **Integrated cable carrier** mounted on the left or right.
- Customised variants for special applications (painting, coating) or special dimensions are available on request.

# TS-100D

#### Controlled by YRC1000 micro Controlled by YRC1000

- Easy to install and operate.
- High speed.
- Short delivery times.

With its narrow design, the TS-100D can place the robot very close to an object, and thus make the most of the robot's working range. Available as a two, three- or four-meters long floor mounted track with a ceiling mount on a gantry as an option.

#### Options

YASKAWA TS-100D

- Automatic lubrication of rack and guide blocks.
- Robot stands 200, 300 and 400 mm.
- Mounted on a gantry (pillars from 1600 to 2400 mm.)



Technical data		TS-100D YRC1000micro	<b>TS-100D</b> YRC1000
Maximum payload		100 kg	100 kg
Motor size		0.9 kW	1.3 kW
Maximum velocity		2.25 m/sec	3.0 m/sec
Acceleration velocity		3.2 m/sec <sup>2</sup>	4.5 m/sec <sup>2</sup>
Duty cycle		100%	100%
Suitable for industrial robots		MOTOMAN-GP7/GP8	MOTOMAN-GP7/GP8
Mounting options		Floor	Floor
Weight	2 meter 3 meter 4 meter	170 kg 220 kg 290 kg	170 kg 220 kg 290 kg

# TSL-600SY

### Controlled by YRC1000



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- Outstanding speed.
- Quiet operation.
- Dedicated arc welding track.

The TSL-600 is a floor mounted track with one robot carrier. Available in two, three or four meter total length.

#### Options

- Automatic lubrication (rack and guide blocks).
- Robot stands in different heights.
- Bracket for wire barrel.





Technical data	TSL-600 SY
Maximum payload	600 kg
Maximum speed	2.14 m/s
ED	50%
Acceleration velocity	2.38 m/s <sup>2</sup>
Travel 500 mm   1000 mm	0.85 sec 1.16 sec
Repetitive position accuracy	±0.05 mm
Height (H) including robot stand	687, 887, 1087, 1287 or 1487 mm
Standard length (L)	2,3 or 4 meter
Travel length (stroke)	L-850 mm

### TSL-1000SY

### Controlled by YRC1000



- Outstanding speed.
- Quiet operation.
- For high payload robots.

The TSL-1000 is a floor mounted track for one robot carrier, with a second carrier as an option. Built in two- or four meter modules, it is easy to extend to a suitable length up to 24 meters. Longer tracks may be available on request.

### Options

- Automatic lubrication (rack and guide blocks).
- Second carrier.
- Brackets for wire barrel.
- Left mounted cable chain.





Technical data	TSL-1000 SY
Maximum payload	1000 kg
Maximum speed	1.8 m/s
ED	50%
Acceleration velocity	1.6 m/s <sup>2</sup>
Travel 500 mm   1000 mm 1000 mm	1.0 sec 1.38 sec
Repetitive position accuracy	±0.06 mm
Height (H) including robot stand	467*, 687, 887, 1087, 1287, 1487 mm
Standard length (L)	2, 4, 6 and up to 24 meter (in 2 meter steps)
Travel length, stroke (TL)	L -850 mm (L -1065 mm)*

# TSL-2000SY

### Controlled by YRC1000



- Outstanding speed.
- Quiet operation.
- For high payload robots.

Floor mounted track for one robot carrier, and an optional second carrier. The initial four-meter module can be extended by two meters up to 24 meters in total. For shelf robots we recommend a robot stand in order to utilise the robot's full working range.

### Options

- Automatic lubrication of rack and guide blocks.
- Robot stands 250, 400 and 600 mm.
- Mechanical zeroing function.



Robot stand (option)			
h1	Н		
250 mm	461 mm		
400 mm	611 mm		
600 mm	811 mm		

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Technical data	TSL-2000 SY
Maximum payload	2000 kg
Maximum speed	1.8 m/s
ED	50%
Acceleration velocity	2.25 m/s <sup>2</sup>
Travel 1200 mm	1.45 sec
Repetitive position accuracy	±0.08 mm
Height	236 mm
Height (H) including robot stand	461, 611, 811, 1334 mm
Standard length (L)	4, 6, 8 etc. up to 24 m (in 2m/steps) *)
Travel length, stroke (TL)	L -1340 mm

\*) Other lengths can be quoted upon request.

# TSL-4000SY

### Controlled by YRC1000



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- Outstanding speed.
- Quiet operation.
- For high payload robots.

Floor mounted track for one robot carrier, and an optional second carrier. The initial four-meter module can be extended by two meters up to 24 meters in total. For shelf robots we recommend a robot stand in order to utilise the robot's full working range.

### Options

- Automatic lubrication of rack and guide blocks.
- Robot stands 250, 400 and 600 mm.
- Mechanical zeroing function.
- Second carrier.

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Robot stand (option)			
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250 mm	461 mm		
400 mm	611 mm		
600 mm	811 mm		

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Technical data	TSL-4000 SY
Maximum payload	4000 kg
Maximum speed	1.6 m/s
ED	50%
Acceleration velocity	2.0 m/s <sup>2</sup>
Travel 1200 mm	1.55 sec
Repetitive position accuracy	±0.08 mm
Height	236 mm
Height (H) including robot stand	461, 611, 811, 1334 mm
Standard length (L)	4, 6, 8 etc. up to 24 m (in 2m/steps) *)
Travel length, stroke (TL)	L -1340 mm

\*) Other lengths can be quoted upon request.

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