

# T90

## Ball Screw Drive, Slide Guide

- » Ordering key - see page 218
- » Accessories - see page 137
- » Additional data - see page 195

### General Specifications

Parameter	T90
Profile size (w × h) [mm]	90 × 92
Type of screw	ball screw with single nut
Protection class	IP65
Lubrication	One point lubrication of ballscrew
Included accessories	–

### Performance Specifications

Parameter		T90
Stroke length (S max), maximum	[mm]	1500
Linear speed, maximum	[m/s]	2,0
Acceleration, maximum	[m/s <sup>2</sup> ]	8
Repeatability	[± mm]	0,05
Input speed, maximum	[rpm]	
screw diameter/lead 25/05 mm		4000
screw diameter/lead 25/10, 25/25 mm		4800
screw diameter/lead 32/20, 32/32 mm		3750
Operation temperature limits	[°C]	-20 – 70
Dynamic load (F <sub>x</sub> ), maximum	[N]	
screw diameter 25 mm		10000
screw diameter 32 mm		20000
Dynamic load (F <sub>y</sub> ), maximum	[N]	
screw diameter 25 mm		300 <sup>1</sup>
screw diameter 32 mm		500 <sup>1</sup>
Dynamic load (F <sub>z</sub> ), maximum	[N]	
screw diameter 25 mm		300 <sup>1</sup>
screw diameter 32 mm		500 <sup>1</sup>
Dynamic load torque (M <sub>z</sub> , M <sub>y</sub> ), maximum	[Nm]	150 <sup>1</sup>
Drive shaft force (F <sub>rd</sub> ), maximum	[N]	
screw diameter 25 mm		1000
screw diameter 32 mm		1300
Drive shaft torque (M <sub>ta</sub> ), maximum	[Nm]	
screw diameter 25 mm		48
screw diameter 32 mm		93

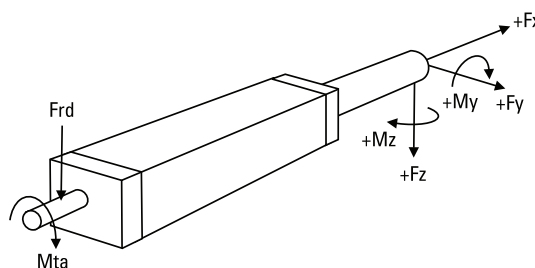
<sup>1</sup> Value for the complete unit

### Rod Idle Torque (M<sub>idle</sub>) [Nm]

Input speed [rpm]	Screw lead [mm]				
	p = 5	p = 10	p = 20	p = 25	p = 32
500	1,5	1,5	3,0	2,0	3,5

M<sub>idle</sub> = the input torque needed to move the rod with no load on it.

### Definition of Forces



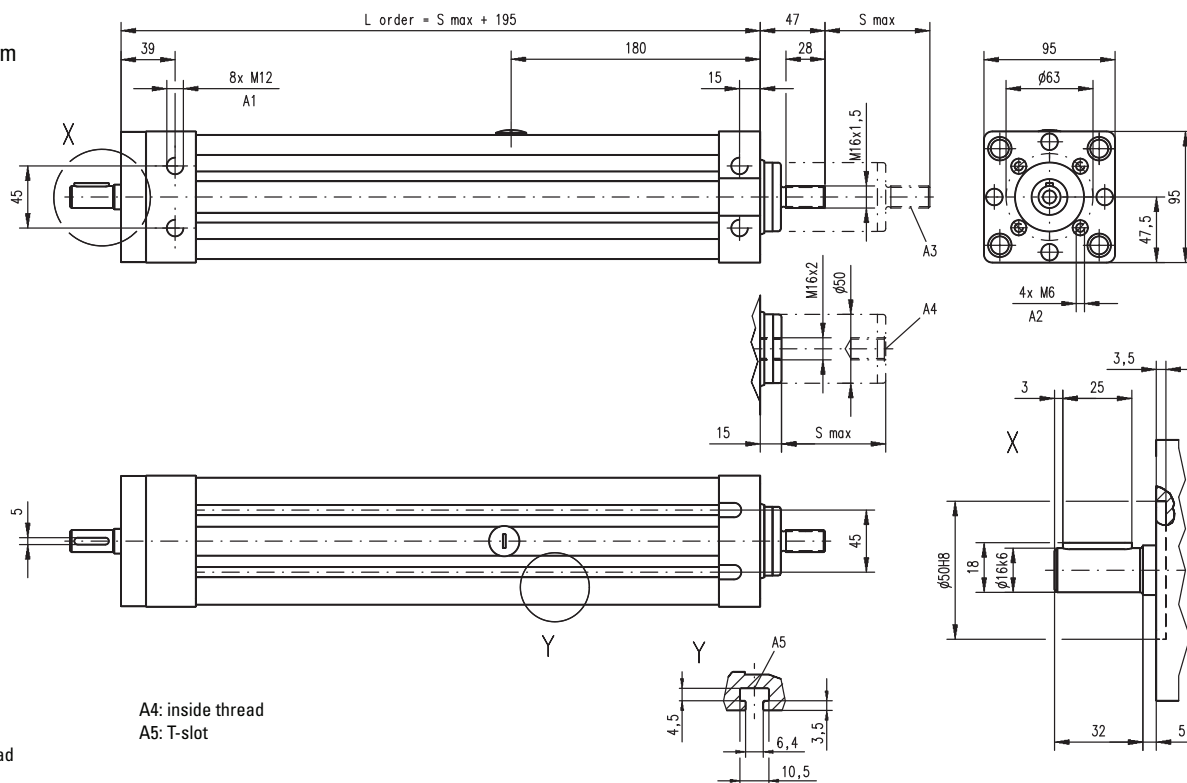
### Performance Specifications

Parameter		T90
Screw versions, diameter (d <sub>o</sub> ) / lead (p) [mm]		25/05, 25/10, 25/25 32/20, 32/32
Weight of units with screw diameter 25 mm	[kg]	
of unit with zero stroke		8,16
of every 100 mm of stroke		1,62
of the rod with zero stroke		0,52
of every 100 mm of rod		0,60
Weight of units with screw diameter 32 mm	[kg]	
of unit with zero stroke		10,64
of every 100 mm of stroke		1,80
of the rod with zero stroke		0,55
of every 100 mm of rod		0,60

# T90

## Ball Screw Drive, Slide Guide

T09-B25  
screw  $\varnothing 25$  mm



T09-B32  
screw  $\varnothing 32$  mm

