

# OEM

## JET SPINDLE CARTRIDGES

2026 | Metric



**SWISS Jet**



**SPEED Jet**



**POWER Jet**

### High-Speed Sub-Spindle cartridges, supporting ER11 and now ER8

FEATURE	BENEFIT
NEW cartridge design	On-sight maintenance
BLE Sensor	Works with an iOS or Android device - FREE of Charge
High precision ER8 & ER11 Collet & NUT	Supports cutting tools with 4 & 6mm shank
Low run out	Accuracy up to 3 microns
Optimal performance	Output power of large jet spindle in mini size design
High speed precision ball bearings	High speed machining up to 55,000 RPM
All the options	Power, Speed and Power & Speed
Full Support for OEMs	Cartridge design is ideal for OEM Holder manufacturers
NEW high-pressure turbine	Spindle powered by 15 to 70 bar high pressure coolant

## Opportunity

- ▶ Add High-Speed Sub-Spindle to your offer
- ▶ Milling, Turning and Swiss design options
- ▶ Plug and Play design - no cables or gears
- ▶ Customermize holders to your needs
- ▶ Works in almost any position
- ▶ Just connect like any holder



## Operating Data

JET SPINDLE OPERATING PARAMETERS						SWISS JET	
HIGH PRESSURE COOLANT (BAR)	15 BAR	20 BAR	25 BAR	35 BAR	45 BAR	Terms of Use	
Min Coolant Supply Diameter [mm]	4.0					Collet	ER8 AA/UP
Min flow rate (L/min)	12	14	16	18	20	Runout	3 Microns
Rotational spindle speed [RPM]*	30,000	36,000	38,000	46,000	56,000	Warranty	1 Year

**\* Notes:**

- Rotational spindle speed is based on coolant pressure and flow rate.
- Coolant pressure is measured at the spindle inlet.

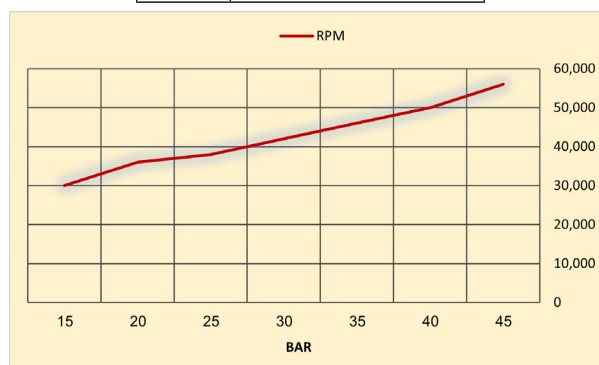
Max. Tool Diameter [mm]	Application	P	M	N [Al]	N [Cu]	S [Ti]
	Drilling	2.0		3.0	2.0	
	Profile Milling	3.0	4.0			
	Slot Milling	3.0	4.0	3.0		
	Shoulder Milling	3.0	4.0	6.0		
	Chamfering	6.0				
	Deburring					
	Engraving					



### JET SPINDLE OPERATING PARAMETERS

- MILLING**
- Slotting - up to D=4.0mm, ap= 0.05D
  - Shouldering - up to D=6.0mm, ae=0.1D & ap=0.1D
- THREAD MILLING**
- Max. M3 thread
- DRILLING**
- Max drill dia. 3.00mm
- DEBURRING**
- Max tool dia. 6.00mm
  - Can use 45 to 60 degree end-mill
- ENGRAVING**
- Max tool dia. 6.00mm
  - Max Ap 0.25mm

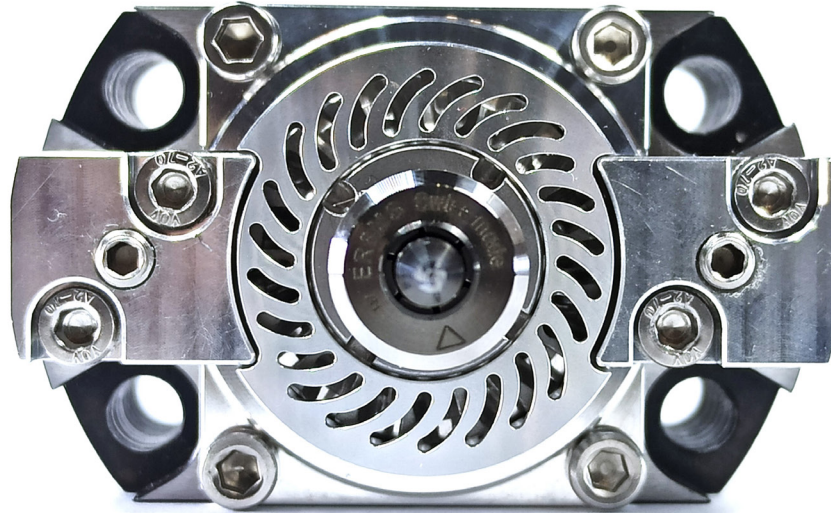
BAR	Idle Speed RPM
15	30,000
20	36,000
25	38,000
30	42,000
35	46,000
40	50,000
45	56,000



## Features

The SWISS Jet Spindle supports all Swiss type lathes, with **Plug and Play**, high-precision, high-speed sub spindles, that are as simple to install as any sleeve holder tool. Runout up to 3 microns at the ER 8 cone, speed up to 56,000 RPM and power combine to ensure faster, higher quality machining with extended tool life for small cutting tools with shanks up to 5.00 mm or 3/16” diameter.

## Clamping and Coolant



When machining at high speeds you must have a high precision spindle that provides the speed, accuracy and power using high-precision nut & collet to optimize dynamic balancing with pinpointed coolant to the cutting edge. **Assures a simple tool change with no setup time and a low runout.**

Coolant outlets from the turbine outlet and a nozzle point to the cutting edge.

## SWISS Nut & Collet

ER 8 High Precision Nut

ER 8 High Precision Collet  
Ø 4.00 mm (5/32") -  
(Recommended - not included)



## SWISS Wrench & Spanner

ER 8 Wrench  
9mm Spanner



## Customers

### High Pressure Coolant Driven Jet Spindle for All Milling & Turning Centers - PlugnPlay!

**Prerequisites to Qualify Customer:**

1. Coolant flows through the main CNC machine spindle
2. Min. coolant pressure, of main spindle outlet: 15 bar (POWER Jet)
3. Max. coolant pressure, of main spindle outlet: 70 bar (POWER Jet)
4. Minimum flow rate: 10 l/min
5. Filter element: Min. 100 µm
6. Active mist collector
7. When using emulsion coolant, use an anti-foaming agent additive suitable for emulsion
8. When using oil-based coolant, high-pressure increases oil fumes:
9. a. Use appropriate means of fire protection  
b. Use anti-dissolution additive suitable for oil
10. During replacement of coolant or coolant filter:
  - a. Remove Jet Spindle from the ATC.
  - b. Run high pressure coolant pump for 10 sec before reinstalling Jet spindle in ATC.
11. Max. viscosity 15 mm<sup>2</sup>/s.





## POWER & SPEED

JET SPINDLE OPERATING PARAMETERS					POWER JET	
HIGH PRESSURE COOLANT (BAR)	15 BAR	20 BAR	40 BAR	70 BAR	Terms of Use	
Min Coolant Supply Diameter [mm]	4.0				Collet	ER11 AA/UP
Min flow rate (L/min)	10	12	16	22	Runout	3 Microns
Rotational spindle speed [RPM]*	20,000	25,000	35,000	45,000	Warranty	1 Year
Max power (W) / torque (Nmm)	53 / 20	71 / 27	188 / 57	409 / 93		

**\* Notes:**

- Rotational spindle speed is based on coolant pressure and flow rate.
- Coolant pressure is measured at the spindle inlet.

Max. Tool Diameter [mm]	Application	P	M	N [Al]	N [Cu]	S [Ti]
	Drilling		3.0		4.0	3.0
Slot Milling		6.0	4.0	6.0	4.0	
Profile Milling		6.0				
Shoulder Milling						
Chamfering						
Deburring						
Engraving						



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**SPEED Jet**



## SPEED FOR SMALL TOOLS

JET SPINDLE OPERATING PARAMETERS				SPEED JET	
HIGH PRESSURE COOLANT (BAR)	20 BAR	30 BAR	40 BAR	Terms of Use	
Min Coolant Supply Diameter [mm]	4.0			Collet	ER11 AA/UP
Min flow rate (L/min)	10	15	20	Runout	3 Microns
Rotational spindle speed [RPM]*	33,000	44,000	55,000	Warranty	1 Year
Max power (W) / torque (Nmm)	37 / 12	76 / 18	115 / 25		

**\* Notes:**

- Rotational spindle speed is based on coolant pressure and flow rate.
- Coolant pressure is measured at the spindle inlet.

Max. Tool Diameter [mm]	Application	P	M	N [Al]	N [Cu]	S [Ti]
	Drilling	2.0		3.0	2.0	
Profile Milling	6.0	4.0	6.0	4.0		
Slot Milling	4.0	3.0	4.0	3.0		
Shoulder Milling	4.0	6.0				
Chamfering	6.0					
Deburring						
Engraving						



## Clamping and Coolant



When machining at high speeds you must have a high precision spindle that provides the speed, accuracy and power using high-precision nut & collet to optimize dynamic balancing with pinpointed coolant to the cutting edge. **Assures a simple tool change with no setup time and a low runout.**

Coolant outlets from the front turbine cover point high pressure coolant directly towards the cutting edge.

## Nut & Collet

NUT ER 11 GHS  
(2 microns runout)

AAA SPEED Precision ER 11  
Collet (1 micron runout)  
(Recommended - not included)



## Tools

Shaft Lock Wrench

Wrench for NUT ER11 GHS

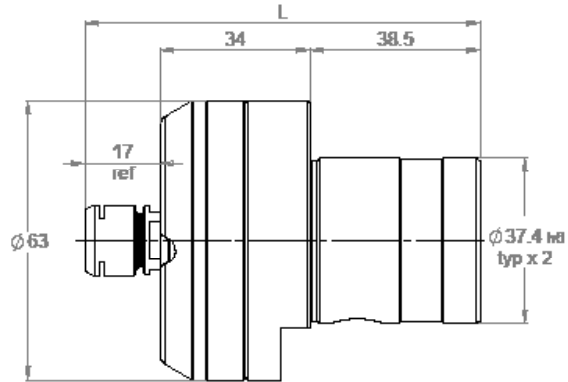
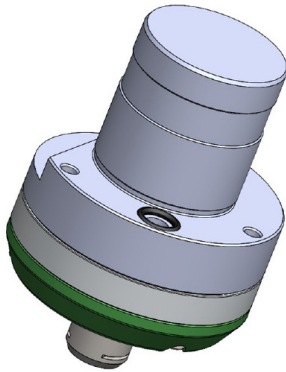


## Catalog

TR Jet

### COMPATIBLE ADAPTOR MODELS

Adapter	TR SPEED Jet	TR POWER Jet
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Designation	P/N	Adapter	L mm	Tool d max mm	Kg
TR SPEED Jet	37-085-996	<b>FLANGE CLAMP</b>	89.30	4.0	0.7

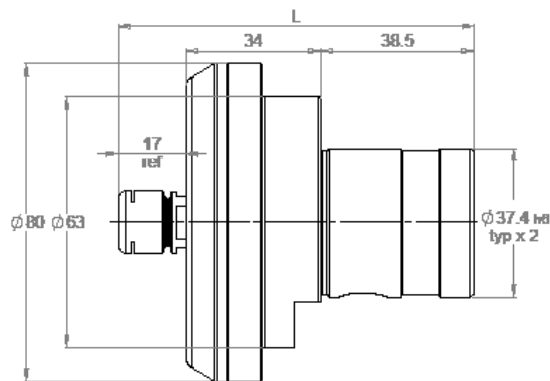
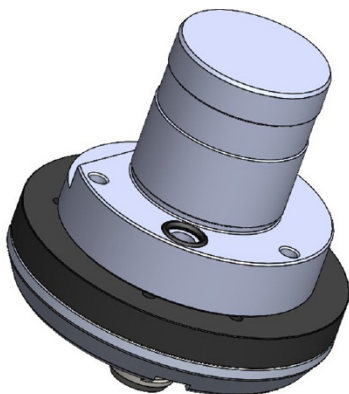
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[TR SPEED Jet Primary View 2D – DXF](#)

[TR SPEED Jet Model 3D Detail – STP](#)

### COMPATIBLE ADAPTOR MODELS

Adapter	TR SPEED Jet	TR POWER Jet
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Designation	P/N	Adapter	L mm	Tool d max mm	Kg
TR POWER Jet	47-085-996	<b>FLANGE CLAMP</b>	89.40	6.0	0.8

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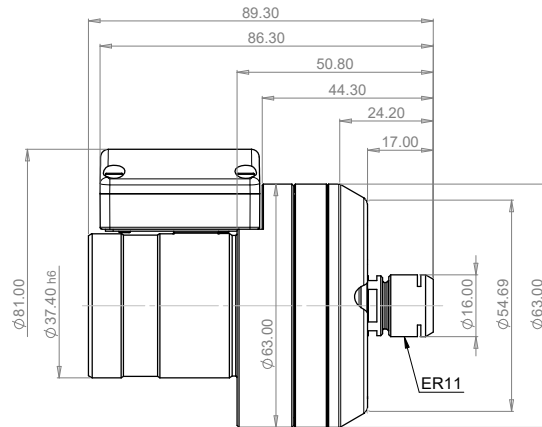
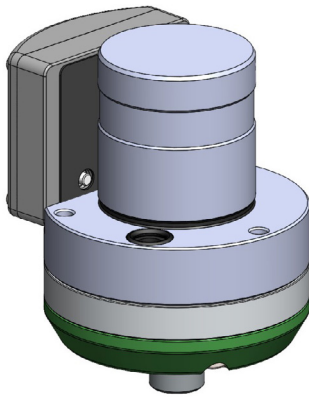
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## Catalog

TR Jet

### COMPATIBLE ADAPTOR MODELS

Adapter	SPEED Jet TR	POWER Jet TR
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Designation	P/N	Adapter	L mm	Tool d max mm	Kg
SPEED Jet TR	37-085-996	<b>FLANGE CLAMP</b>	89.30	4.0	0.7

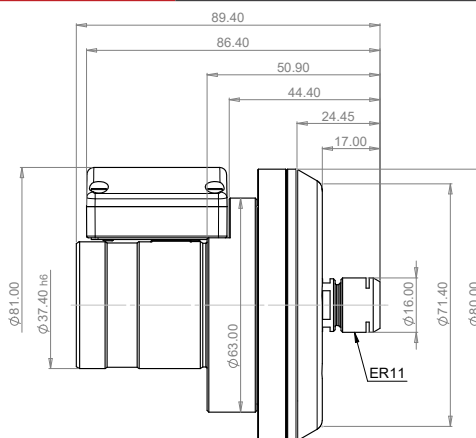
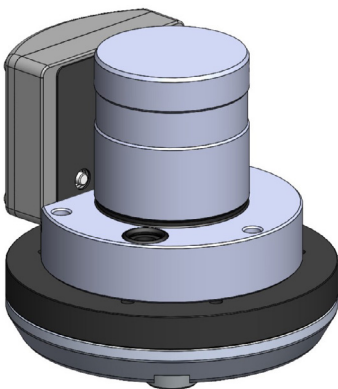
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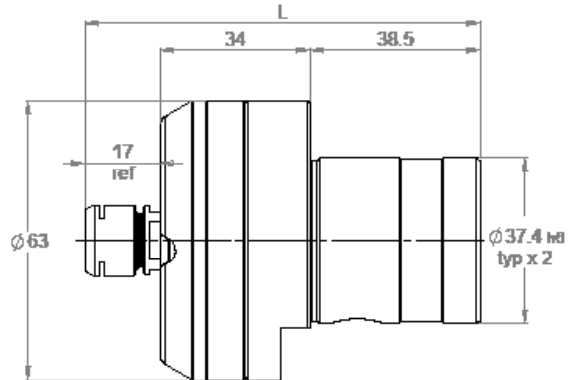
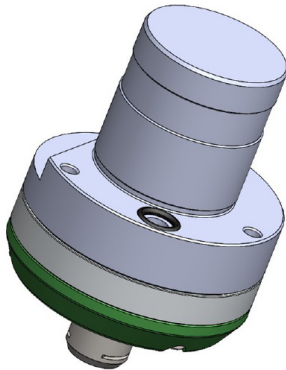
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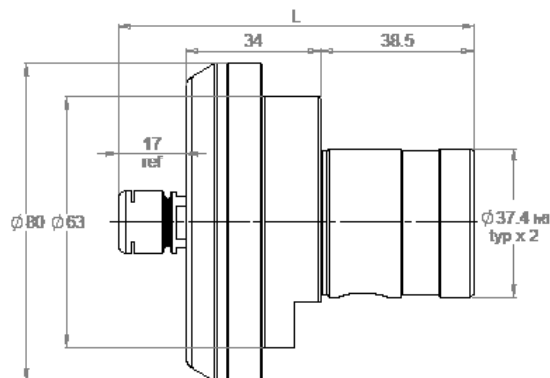
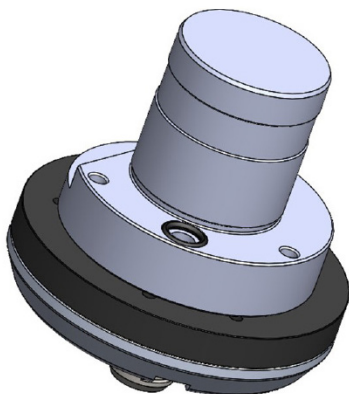
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Requires iPhone 10 or newer. Click on the button below or search “Jet Spindle Monitor” on your device or just scan the QR code.

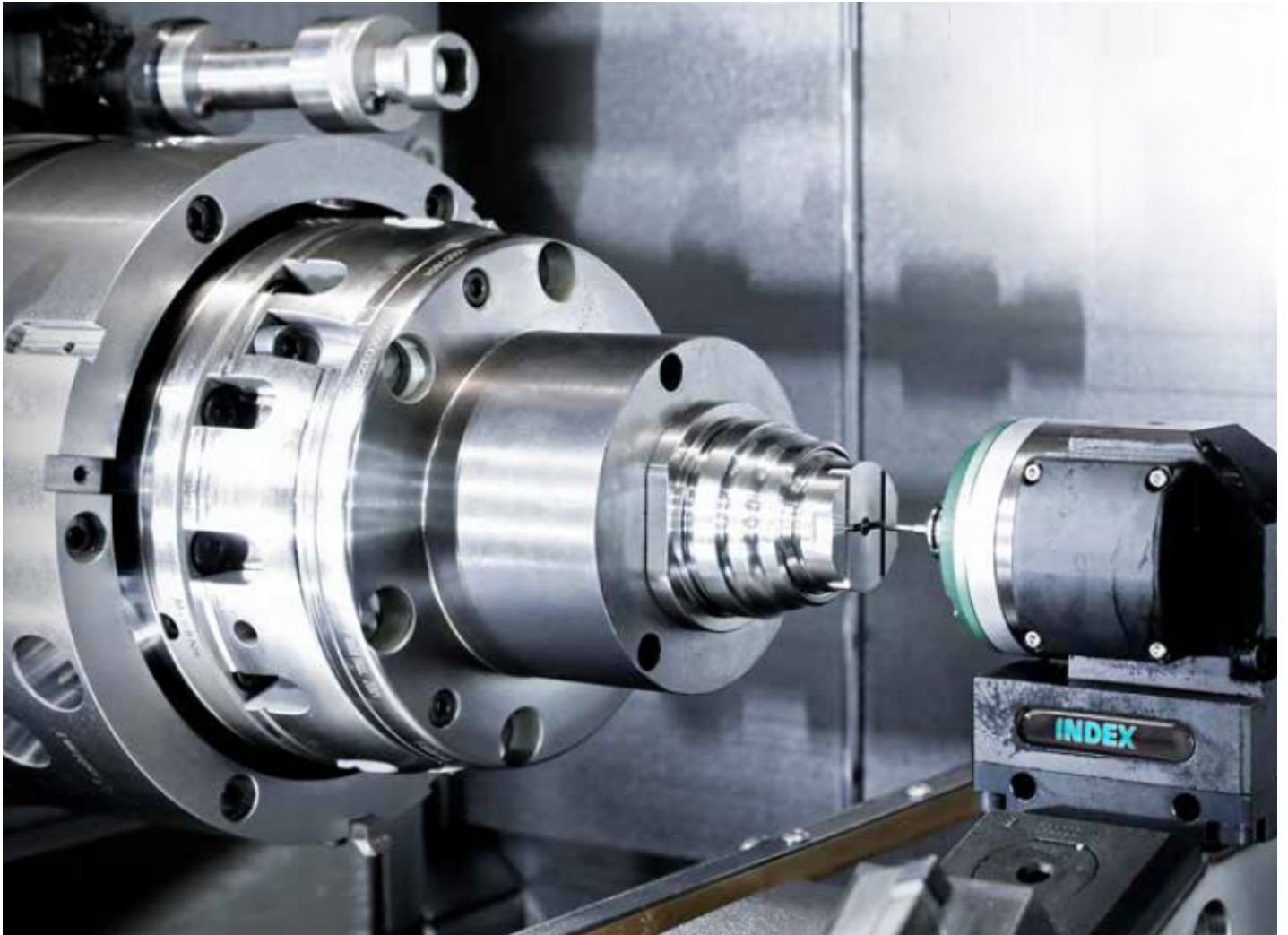


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## PARTNERS



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