



"UNPARALLELED PERFORMANCE AND SAFETY UNDER PRESSURE!"®

ExpanTek[®]



Model 35 Series Tube Expansion Tools

- Pressures up to 15,000 psi (1,034 bar)
- 0.24 in. to 1.00 in. OD (6.0 mm to 25.4 mm OD)
- Seals plain end-tubing
- Collet grip and seal on tube OD
- Spring-actuated grip release

DESCRIPTION

The ExpanTek® Model 35 Series Expansion Tool offers fast, snap-on coupling and positive sealing for high-pressure expansion of tubes. When the tools is used with a high-pressure power source, it will quickly expand tubing for HVAC applications and tubular assemblies. The tool can be used with a variety of services including water, oil, and other liquids.

This precision-machined tool is made from heat-treated stainless steel to provide long, trouble-free service for high-pressure expansion applications. Its compact, balanced design is beneficial for applications where the work area is limited.

The Model 35 Series Tool handles standard and metric tube and fitting sizes from 0.24 in. to 1.00 in. (6.0 mm to 25.4 mm) in diameter. Special tube sizes and tool configurations will be considered upon request.

OPERATION

Connect the Model 35 Tool to the pressure line using the optional NuQuip[®] Automatic Air-Bleed Valve attached on the cap side of the tool. Push the tube into the tool until pressed against the internal stop. The collets are activated for positive grip when the service line is pressurized to approximately 50 psi (3.4 bar). Continue to pressurize the tube until desired expansion is reached, *but do not exceed maximum operating pressure*. After the tube expands and the service line pressure drops to 0 psi/bar, the collets will automatically release for quick removal of the tool from the tube.

APPLICATION

The ExpanTek® Model 35 Series Tube Expansion Tool is a snapon tool suitable for high-pressure expansion of tubes with standard OD tolerances and maximum working pressure up to 15,000 psi (1,034 bar). This unique tool when used with a highpressure system will rapidly expand tubing for refrigeration coils, boilers, tubular assemblies, and many other applications.

MATERIALS

Body and Collets: Heat-treated, stainless steel

OPERATION

Collet Grip and Seal:	On tube OD
Gripping:	Normally-open
	Spring-actuated grip release

OPERATING CONDITIONS

Maximum Pressure:	15,000 psi (1,034 bar)
Temperature:	32° F to 120° F (0° C to 49° C)
Services:	Water, oil, and other liquids
Tube OD Range:	0.24 in. to 1.00 in.
	(6.0 mm to 25.4 mm)
OD Tolerance:	Standard tube tolerances

MAXIMUM PRESSURE 15,000 psi 1,034 bar

ExpanTek® Model 35 Series Tube Expansion Tools

Tube OD Range*		Overall		Во	Body		Minimum		Minimum Tube		dard			
Inc	hes	MM		Length		Diameter		Orifice		Swallow		Stop		Standard Port
Min.	Max.	Min.	Max.	Inches	ММ	Inches	MM	Inches	ММ	Inches	ММ	Inches	MM	1011
0.24	0.39	6.0	9.9	6.91	175.4	1.00	25.4	0.19	4.7	0.46	11.7	0.75	19.1	1/4″ NPT
0.39	0.49	9.9	12.5	6.35	161.2	1.25	31.8	0.31	7.9	0.46	11.7	0.75	19.1	3/8″ NPT
0.50	0.63	12.6	16.0	7.36	186.9	1.44	36.5	0.44	11.1	0.46	11.7	0.75	19.1	3/8″ NPT
0.63	0.75	16.0	19.1	n/a	n/a	1.75	44.5	0.56	14.3	0.46	11.7	0.75	19.1	3/8″ NPT
0.75	1.00	19.1	25.4	9.14	232.1	2.25	57.2	0.56	14.3	0.96	24.4	1.25	31.8	3/8″ NPT

Model 35 Series Tool Specifications

* Note: Tools are designed for a dedicated tube diameter and do not cover the entire range noted at each size. A single tube OD must be specified for the collet set.

> Special Configurations Available Upon Request Automatic Air-Bleed Valve Recommended for Optimal Performance

FEATURES

- Seals plain end tubing
- Full-flow, high pre fill rate
- Predetermined internal tube stops requires no measuring
- Special collet design locking principle
- Automatic collet release
- Pressure-compensated design
- Built-in tube end tolerances require no square cut ends
- Compact, balance design
- Precision-machined from heat-treated stainless steel
- Designed for tube expansion applications
- Use with optional NuQuip® Automatic Air-Bleed Valve

BENEFITS

Positive sealing for high-pressure expansion Decreases cycle time Ensures proper tube depth engagement Adapts to shorter length tube (0.68 in., 17.3 mm) Fast tool removal after each operation Contains all high-pressure loads for safe operation Efficient operation saves time Ease of use in limited space applications Provides long, trouble-free service Tools can be used with different test media Eliminates operator attendance during fill cycle



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