

# TORNADO

*TL / TLS and RT / RTS*



**PISTON DESIGNED CYLINDER PRESSURE REGULATORS WITH  
OUTLET PRESSURE ADJUSTABLE TO 100 BAR**

# TORNADO Piston type Regulators

## Heavy duty single stage piston regulators with pressure-gauge

The **TORNADO** single stage, spring-loaded piston type pressure regulator is a time and industry proven design that has evolved from more than 100 years of Messer German engineering experience and technology to ensure the accurate control of industrial gases with minimum outlet pressure fluctuations and comparatively high flowrates.

**TORNADO** piston type regulators is a visibly strong, no nonsense, durable construction that sets the standard for pressure regulators used extensively for pressure vessel testing and testing instruments. The **TORNADO** uses the most up-to-date production and testing facilities to ensure a reliable, versatile, affordable, high performance regulator.

Type TL / RT	Type TLS / RTS	Standard	Gas Type	Inlet Pressure	Outlet Pressure	Art-No. L	Art-No. LS
TL/E-O 100	TLS/E-O 100	DIN	O <sub>2</sub> Oxygen	230 bar/3335 psi	100 bar/1450 psi	770.21218	770.21219
TL/B-O 100	TLS/B-O 100	BSP				770.21230	770.21231
RT/U-O 100	RTS/U-O 100	CGA				770.21407	770.21408
TL/F-O 100	TLS/F-O 100	NFE				770.21409	770.21410
TL/AS-O 100	TLS/AS-O 100	AS				23000 Kpa/3335 psi	10000/1450 psi
TL/E-H 100	TLS/E-H 100	DIN	H <sub>2</sub> Oxygen	230 bar/3335 psi	100 bar/1450 psi	770.21242	770.21243
TL/B-H 100	TLS/B-H 100	BSP				770.21254	770.21255
RT/U-H 100	RTS/U-H 100	CGA				770.21413	770.21414
TL/F-H 100	TLS/F-H 100	NFE				770.21415	770.21416
TL/AS-H 100	TLS/AS-H 100	AS				23000 Kpa/3335 psi	10000/1450 psi
TL/E-Ar 100	TLS/E-Ar 100	DIN	Ar Argon	230 bar/3335 psi	100 bar/1450 psi	770.21266	770.21267
TL/B-Ar 100	TLS/B-Ar 100	BSP				770.21278	770.21279
RT/U-Ar 100	RTS/U-Ar 100	CGA				770.21419	770.21420
TL/F-Ar 100	TLS/F-Ar 100	NFE				770.21421	770.21422
TL/AS-Ar 100	TLS/AS-Ar 100	AS				23000 Kpa/3335 psi	10000/1450 psi
TL/E-N 100	TLS/E-N 100	DIN	N <sub>2</sub> Nitrogen	230 bar/3335 psi	100 bar/1450 psi	770.21298	770.21299
TL/B-N 100	TLS/B-N 100	BSP				770.21310	770.21311
RT/U-N 100	RTS/U-N 100	CGA				770.21425	770.21426
TL/F-N 100	TLS/F-N 100	NFE				770.21427	770.21428
TL/AS-N 100	TLS/AS-N 100	AS				23000 Kpa/3335 psi	10000/1450 psi



Left-side inlet connection  
**TORADO series TL / TLS**

Right-side inlet connection  
**TORADO series RL / RTS**

- Designed in accordance to internationally recognized standards EN ISO, BSP, CGA, NFE and AS.
- Manufactured under the quality management of EN ISO 9001.
- 100% Quality Assurance Testing.
- Heavy duty, durable construction.
- Forged brass body and housing cap.
- Ergonomically designed, colour coded pressure adjusting hand knob for comfortable operation.
- Unique Central Sintered filter
- Soft valve seat to ensure leak tightness and increase life span.
- Inlet and outlet pressure gauge with dual scale.
- Fire-retardant valve seat material.
- Outlet pressure relief valve ensures operator safety.
- Internal limit lock to prevent over pressurising of regulator.
- Unique, integrated, resettable design to limit outlet pressure.
- Large internal engineering to achieve comparatively high gas flow

**MESSER**   
Cutting Systems

Edition 10/12  
Subject to change without notice COM  
© Messer Cutting Systems GmbH  
® registered trademark of  
Messer Cutting Systems GmbH  
Oxyfuel Technology

Messer Cutting Systems GmbH  
Oxyfuel Technology  
Otto-Hahn Straße 2 - 4  
D-64823 Groß-Umstadt Germany  
Phone +49 6078 787-0  
Fax +49 6078 787-150  
E-mail: [info@messer-cs.de](mailto:info@messer-cs.de)  
Internet: [www.messer-cs.de](http://www.messer-cs.de)

