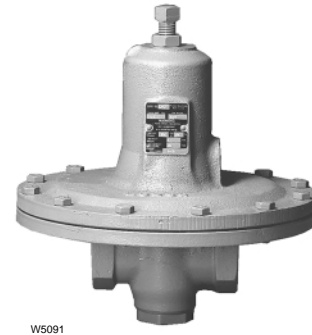


95L Series Pressure-Reducing Regulators



- **Compact, High-Capacity, Direct-Operated Low-Pressure Regulators**
- **Sizes from DN 8 through DN 25 or 1/4 through 1 Inch**
- **Temperatures to 232°C or 450°F**
- **Inlet Pressures to 20.7 Bar or 300 Psig**
- **Outlet Pressure Settings from 0.14 to 2.1 Bar or 2 to 30 Psig**
- **Metal or Elastomer Seats**
- **Air, Process Gases, Liquids, and Steam Service**

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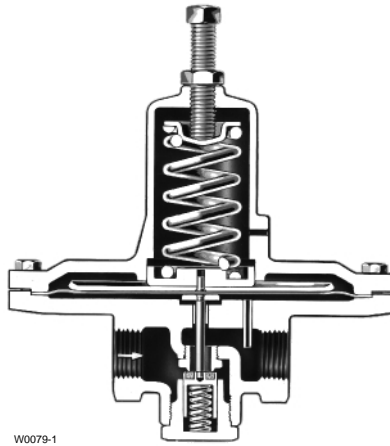


Industrial Regulators

95L Series

The 95L Series regulators are compact, rugged, direct-operated low-pressure regulators for outlet pressures of 0.14 to 2.1 bar or 2 to 30 psig. The units are available in DN 8 through DN 25 or 1/4 through 1-inch sizes and are offered in several different end connection styles. These regulators are designed to handle inlet pressures up to 20.7 bar or 300 psig and temperatures from 198° to 232°C or 325° to 450°C.

The Type 95LD low-pressure regulator uses spring force to maintain a pressure differential between the spring case loading pressure and regulator outlet pressure.



- **Rugged Construction**
- **Versatility**
- **Optional Elastomer Seats for Tight Shutoff up to 232 °C or 450 °F**
- **In-line Maintenance**
- **High Stability**
- **Differential Pressure Capability**
- **Rugged Construction**

Selections

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Construction	Type Number
Outlet pressures from 0.14 to 2.1 bar or 2 to 30 psig	95L
Differential pressures from 0.14 bar to 2.1 bar or 2 to 30 psig with handwheel and packing box	95LD
Outlet pressures from 0.14 to 1.0 bar or 2 to 15 psig for cold temperature applications down to -198°C or -325°F	95LC

Body Sizes and End Connections

BODY SIZE	END CONNECTION STYLE	
	Cast iron	Steel, Stainless Steel, Hastelloy C, or Monel
DN 8 or 1/4	NPT Screwed	NPT Screwed
DN 15, DN 20, DN 25 or 1/2, 3/4, 1 inch	NPT Screwed	NPT Screwed, Class 150 raised-face flanged, Class 300 raised-face flanged, or PN 16/25/40

Industrial Regulators

95L Series

Materials

Body and Bonnet (or Body, Bonnet, and Pilot)

Body	Spring Case	Regulator Spring	Valve Spring
Cast iron, WCC steel, CF8M stainless steel, Hastelloy C, or Monel	Cast iron, WCB steel, or CF8M stainless steel	Zinc-plated steel (95L and 95LD) or 17-7PH (95LC)	S30200 stainless steel (95L and 95LD) or Inconel (95LC)

Trim

PART NAME	ELASTOMER SEAT		METAL SEAT	
	Standard	Optional	Standard	Optional
Diaphragm	Neoprene or fluoroelastomer (FKM)	S30200 stainless steel, Ethylenepropylene (EPDM), Monel, or Hastelloy C PRFE Protector available with elastomeric diaphragm	S30200 stainless steel	Monel or Hastelloy C
Valve plug guide	Brass or S41600 stainless steel	S31600 stainless steel, Monel, or Hastelloy C	S41600 stainless steel	S31600 stainless steel, Monel, or Hastelloy C
Valve plug (metal seat) or disk holder and disk (elastomer seat)	---	---	S41600 stainless steel	S31600 stainless steel, Monel, or Hastelloy C
	Brass or S41600 stainless steel disk holder with neoprene or fluoroelastomer (FKM) disk	S31600 stainless steel, Monel, or Hastelloy C disk holder with PTFE, ethylenepropylene (EPDM), or perfluoroelastomer (FFKM) disk	---	---
Orifice	Brass or S41600 stainless steel	S31600 stainless steel, Monel, or Hastelloy C	S41600 stainless steel	S31600 stainless steel, Monel, or Hastelloy C
Stem assembly	Brass or S41600 stainless steel	S31600 stainless steel, Monel, or Hastelloy C	S41600 stainless steel	S31600 stainless steel, Monel, or Hastelloy C

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Temperatures

Metal Parts

MATERIAL	95L	95LC	95L	95LC
	°C		°F	
Cast iron	-40 to 208	Not available	-40 to 406	Not available
Steel	-29 to 232	Not available	-20 to 450	Not available
Stainless steel	-40 to 232	-198 to 38	-40 to 450	-325 to 100

Trim (or Soft Parts)

MATERIAL	TEMPERATURE RANGE		NOTE
	°C	°F	
Neoprene	-40 to 82	-40 to 180	Teflon (PTFE) is for use with Type 95LC construction
Fluoroelastomer (FKM)	-18 to 149 hot water limited to 93	0 to 300 hot water limited to 200	
Nitrile	-40 to 82	-40 to 180	
Ethylenepropylene (EPDM)	-40 to 232	-40 to 450	
Teflon (PTFE) (Refer to the note)	-198 to 232	-325 to 450	

Industrial Regulators

95L Series

Pressures Maximum

BODY MATERIALS	END CONNECTION STYLES	MAXIMUM INLET PRESSURE		MAXIMUM OUTLET (CASING) PRESSURE	
		Bar	Psig	Bar	Psig
Cast iron	NPT	17.2	250	3.4	50
Steel	Class 150 raised-face flange	19.6	285	8.6	125
Stainless steel	Class 150 raised-face flange	18.9	275	8.6	125
Steel or stainless steel	NPT, Class 300 raised-face flange, or socket-welding ends	20.7	300	8.6	125

Outlet Pressure Ranges

TYPE NUMBER	BODY SIZE	OUTLET PRESSURE RANGE		SPRING WIRE DIAMETER		SPRING PART NUMBER AND COLOR	NOTE
		Bar	Psig	mm	Inches		
95L and 95LD	DN 8 or 1/4 inch	0.14 to 0.41 0.34 to 1.0 0.90 to 2.1	2 to 6 5 to 15 13 to 30	3.76 4.37 5.26	0.148 0.172 0.207	1E392527022 Yellow 1E392627012 Green 1E392727142 Red	Pressure ranges given for Types 95L and 95LC regulators indicate actual outlet pressure. For Type 96LD regulators, the pressure ranges indicate the differential pressure that can be obtained with the indicated spring. The differential pressure (spring setting) is added to the spring case loading pressure to determine the actual outlet pressure. All springs can be backed off to 0 bar or 0 psig.
	DN 15 or 1/2 inch	0.14 to 0.41 0.34 to 1.0 0.90 to 2.1	2 to 6 5 to 15 13 to 30	7.13 5.94 7.13	0.281 0.234 0.281	1E395627022 Yellow 1D745527142 Green 1E395727192 Red	
	DN 20, DN 25 or 3/4, 1 inch	0.14 to 0.41 0.34 to 1.0 0.90 to 2.1	2 to 6 5 to 15 13 to 30	7.77 8.71 10.3	0.306 0.343 0.406	1E398927022 Yellow 1E399027142 Green 1E399127162 Red	
95LC	DN 8 or 1/4 inch	0.14 to 0.41 0.34 to 1.0	2 to 6 5 to 15	4.87 7.16	0.192 0.282	14B9941X012 Unpainted 14B9940X012 Unpainted	
	DN 15 or 1/2 inch	0.14 to 0.41 0.14 to 0.41	2 to 6 2 to 6	7.16 9.52	0.282 0.375	14B9943X012 Unpainted 14B9942X012 Unpainted	
	DN 20 or DN 25 or 3/4, 1 inch	0.14 to 0.41 0.34 to 1.0	2 to 6 5 to 15	11.0 14.2	0.437 0.562	14B9944X012 Unpainted 14B9945X012 Unpainted	

Flow Coefficients

BODY SIZE	WIDE-OPEN COEFFICIENTS (FOR RELIEF SIZING)			C ₁	K _m
	C _v	C _g	C _s		
DN 8 or 1/4 inch	0.8	28	1.40	35	0.82
DN 15 or 1/2 inch	1.9	67	3.35	35	0.71
DN 20, DN 25 or 3/4, 1 inch	4.4	156	7.80	35	0.67

Options

PTFE diaphragm protector

Only a brief overview is presented here. For more detailed information, such as capacities and dimensions, refer to the companion catalog, the Fisher Regulator Handbook.