

BE Series

Regulators - Pressure Reducing

DBEXX2025X012

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure

6000 psig / 414 bar

Maximum Outlet Pressure

See Part Number Selector

Design Proof Pressure

150% maximum rated pressure

Leakage

Bubble-tight

Operating Temperature

See Part Number Selector

Flow Capacity

$C_v = 0.02$

MEDIA CONTACT MATERIALS

Body

Brass, Nickel-plated Aluminum, 316 Stainless Steel

Piston

Brass (Brass and Aluminum bodies only)

316 Stainless Steel (316 Stainless Steel bodies only)

Seat

PTFE, CTFE, Polyimide

O-Ring

Buna-N, Viton®, Ethylene Propylene (E.P.), Urethane

Filter

Bronze, Stainless Steel

OTHER

Weight

0.5 lbs / 0.2 kg

Viton® is a registered trademark of E.I. du Pont de Nemours and Company.



TESCOM BE Series regulator functions alone, as a pilot source or can be used to convert most TESCOM low pressure regulators into a two-stage pressure reducer.

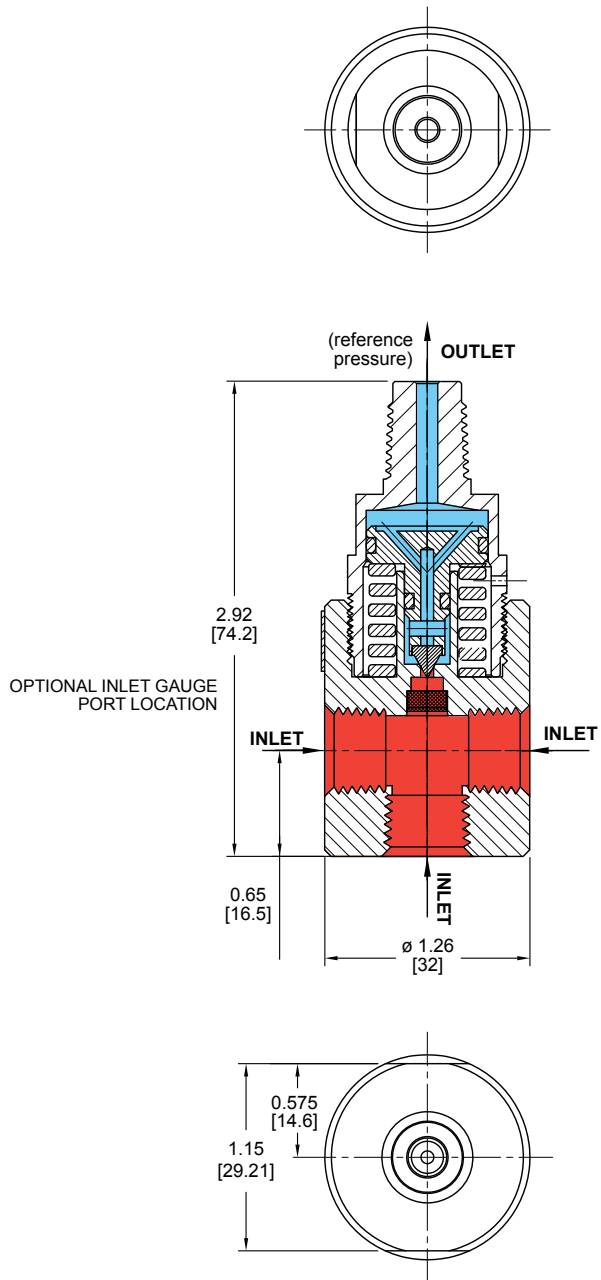
Applications

- Rough cut regulator
- Can be combined with a one-stage regulator to create a two-stage regulator
- Tee-ed in for a pilot source
- Non-venting

Features and Benefits

- Material: Nickel-plated Aluminum, Brass, and 316 Stainless Steel
- Positive shut-off for leak integrity
- Reverse decaying inlet characteristic for sensitive equipment applications
- Preset at factory for a set of standard operating conditions
- Low flow applications: $C_v = 0.02$
- 6000 psig / 414 bar inlet, 0-450 psig / 0-31 bar outlet
- Various porting configurations for gauges and relief valves

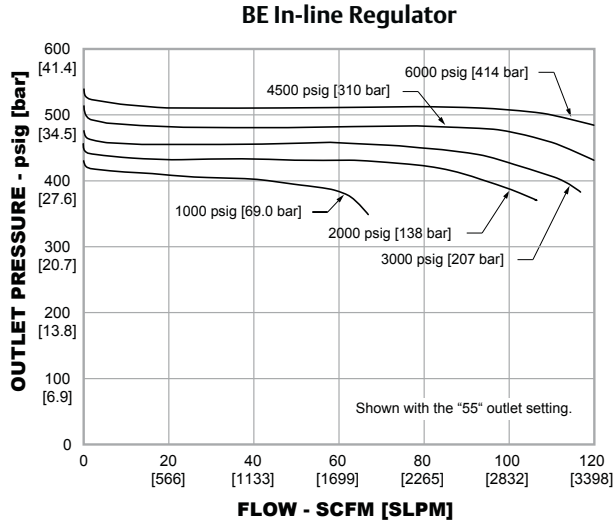
BE Series Regulator Drawing



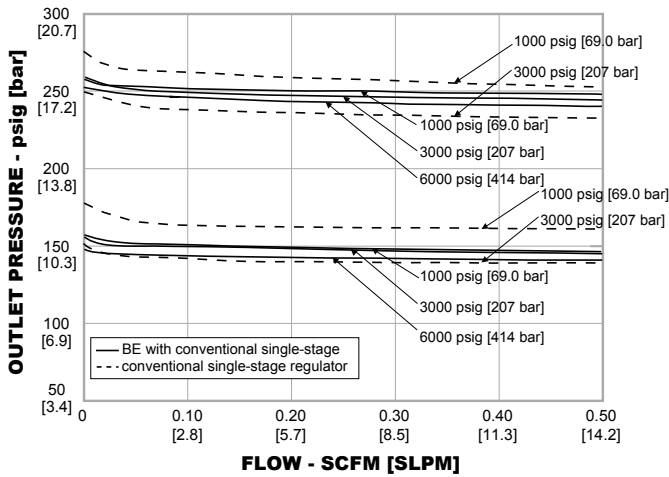
All dimensions are reference & nominal
Metric [millimeter] equivalents are in brackets

BE Series Regulator Flow Charts

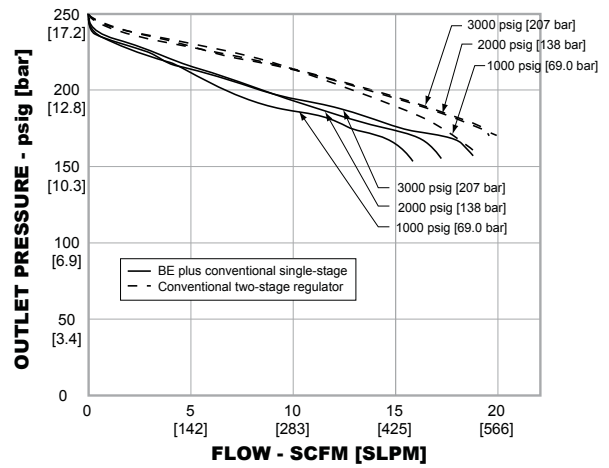
For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCOM catalog or on www.tescom.com.



**Conventional Single-Stage Regulator
vs.
BE In-line Regulator Plus Conventional
Single-Stage Regulator**



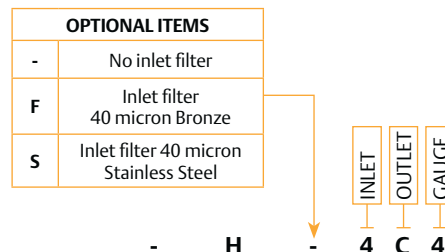
**Conventional Two-Stage Regulator
vs.
BE In-line Regulator Plus Conventional
Single-Stage Regulator**



BE Series Regulator Part Number Selector

Repair Kits, Accessories & Modifications may be available for this product. Please contact TESCOM for more information.

Example for selecting a part number:



BASIC SERIES	BODY AND BONNET MATERIAL	NOMINAL OUTLET SETTING P1 psig / bar			O-RING MATERIAL	SEAT MATERIAL	OPERATING TEMPERATURE	PORTING CONFIGURATION (Side View)	INLET, OUTLET AND GAUGE PORTS											
		1000 / 69.0	3000 / 207	6000 / 414																
BE	1 – Brass	05 – 25 / 1.7	60 / 4.1	120 / 8.3	BT – Buna-N	PTFE	-40°F to 165°F -40°C to 74°C -15°F to 250°F -26°C to 121°C -40°F to 250°F -40°C to 121°C	A – no gauge ports	2 – 1/8" Female NPTF											
		3 – Nickel-plated Aluminum	10 – 50 / 3.4	95 / 6.6	160 / 11.0			VT – Viton®	-40°F to 165°F -40°C to 74°C -40°F to 250°F -40°C to 121°C	F – one gauge port	4 – 1/4" Female NPTF									
			20 – 160 / 11.0	200 / 13.8	260 / 17.9			ET – E.P.		-40°F to 165°F -40°C to 74°C		B – 1/8" Male NPTF								
	6 – 316 Stainless Steel	25 – 220 / 15.2	250 / 17.2	330 / 22.8	UT – Urethane		CTFE	-40°F to 140°F -40°C to 60°C -15°F to 140°F -26°C to 60°C -40°F to 140°F -40°C to 60°C -40°F to 140°F -40°C to 60°C	H – two gauge ports			C – 1/4" Male NPTF								
		55 – 510 / 35.2	550 / 37.9	600 / 41.4	BC – Buna-N				-40°F to 140°F -40°C to 60°C		E – 1/8" Female SAE									
			VC – Viton®	-40°F to 165°F -40°C to 74°C -15°F to 400°F -26°C to 204°C	-40°F to 250°F -40°C to 121°C -40°F to 165°F -40°C to 74°C						EC – E.P.	-40°F to 140°F -40°C to 60°C		F – 1/4" Female SAE						
	UC – Urethane	BY – Buna-N	Polyimide			-40°F to 165°F -40°C to 74°C	-40°F to 165°F -40°C to 74°C	-40°F to 165°F -40°C to 74°C	Note: Porting configuration could restrict gauge port orientation.	H – 1/8" Male SAE										
	VC – Viton®	UY – Urethane		-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C					I – 1/4" Male SAE										
	EC – E.P.	BY – Buna-N								-40°F to 165°F -40°C to 74°C	-40°F to 165°F -40°C to 74°C	-40°F to 165°F -40°C to 74°C	-40°F to 165°F -40°C to 74°C	-40°F to 165°F -40°C to 74°C	-40°F to 165°F -40°C to 74°C					
	UC – Urethane	UY – Urethane														-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C
	VC – Viton®	UY – Urethane	-40°F to 140°F -40°C to 60°C			-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C											
	EC – E.P.	UY – Urethane		-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C															
UC – Urethane	UY – Urethane	-40°F to 140°F -40°C to 60°C								-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C						
VC – Viton®	UY – Urethane														-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C
EC – E.P.	UY – Urethane		-40°F to 140°F -40°C to 60°C			-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C											
UC – Urethane	UY – Urethane			-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C															
VC – Viton®	UY – Urethane	-40°F to 140°F -40°C to 60°C								-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C						
EC – E.P.	UY – Urethane														-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C
UC – Urethane	UY – Urethane		-40°F to 140°F -40°C to 60°C			-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C	-40°F to 140°F -40°C to 60°C											