



Ultra-High Purity/ Ultra-High Flow

maximum 150 or 250 PSIG in/ ranges of 0-30, 0-60 & 0-100 PSIG out
free poppet or tied diaphragm

23 Series

Specifications

- ❑ **Operating Parameters**
 - pressure rating per criteria of ANSI/ASME B31.3
 - maximum rated inlet pressure 150 or 250 PSIG
(10.5 or 17.6 kg/cm²)
 - outlet pressure ranges 0-30, 0-60, & 0-100 PSIG
(0-2.1, 0-4.2 & 0-7.0 kg/cm²)
 - design proof pressure . . . 150% of maximum rated pressure
 - certified maximum
 - inboard leak rate <1 x 10⁻⁹ atm cc/sec He
 - operating temperature:
 - Teflon® seat . . . -40° F to +160° F (-40° C to +71° C)
 - PCTFE seat . . . -40° F to +200° F (-40° C to +93° C)
 - flow capacity C_v = 1.8
- ❑ **Media Contact Materials**
 - body 316L VAR SST with Electropolish or
316L VAR SST with Precision Electro-Polish (P.E.P)
 - valve seat Teflon® or PCTFE
 - diaphragm 316L Stainless Steel
 - stem 316L Stainless Steel
 - seal 316 Stainless Steel
 - remaining parts 316 Stainless Steel
- ❑ **Internal Surface Finish** . . 5 R_a or 10 R_a microinch
(.13 or .25 micrometer)
- ❑ **Connections**
 - Welded female or male VCR®
 - Tube stubs
 - High Purity Internal Connections (H.P.I.C.)
 - Internal style of VCR®, compatible with male swivel VCR®.
- ❑ **Cleaning** DI water electronic grade cleaned,
ES500 Particle Certified for regulators
with Precision Electro-Polish (P.E.P.)
- ❑ **Internal Volume** 18.5 cc with 1/2" VCR
- ❑ **Weight** 3.2 lbs. (1.5 kg)

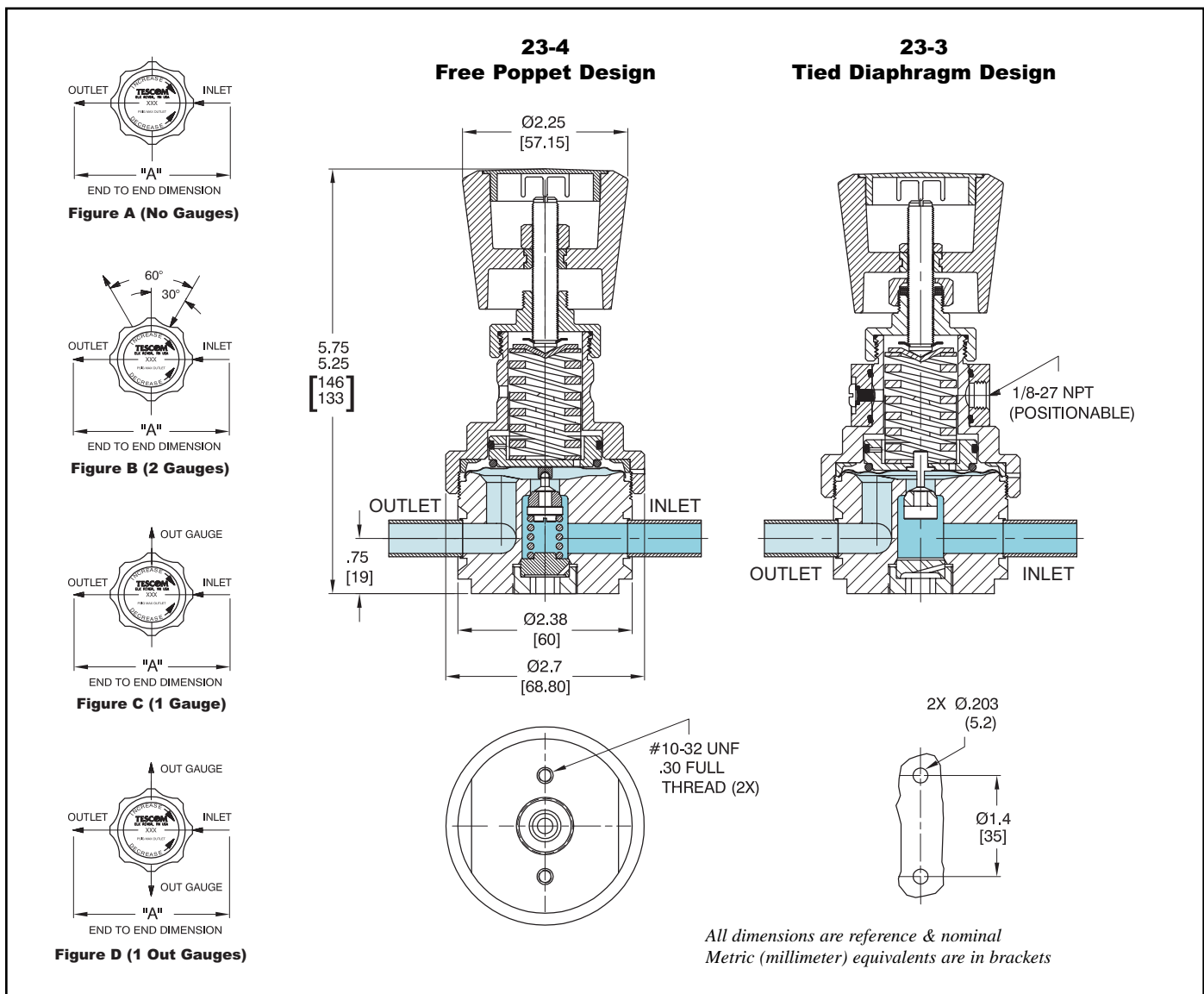


Advantages

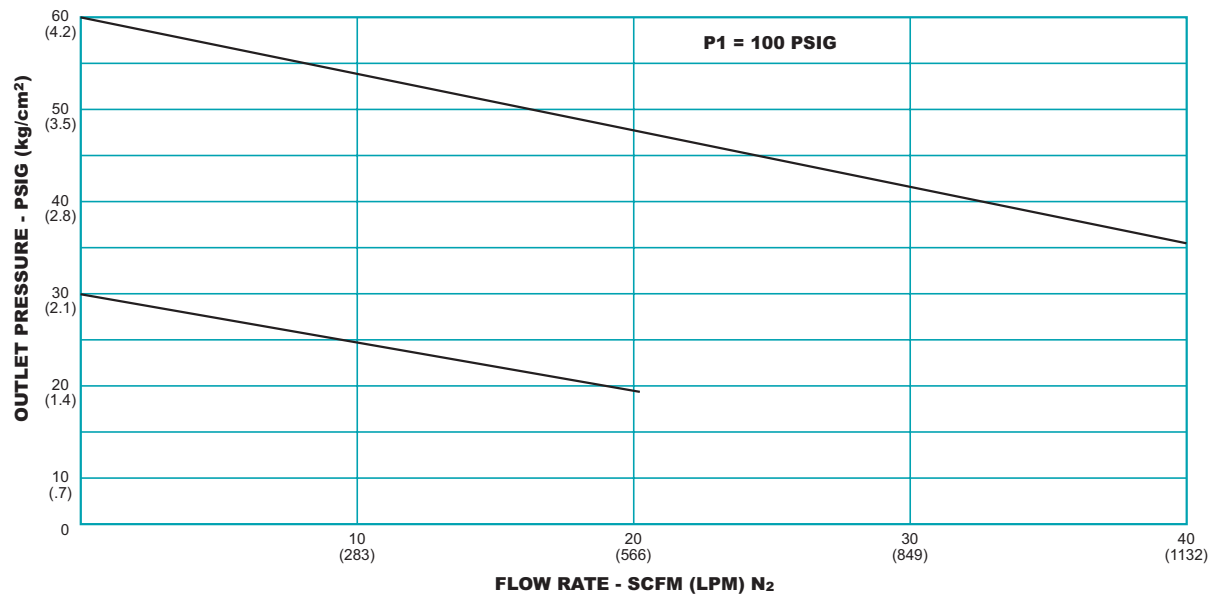
- Smooth unobstructed flow path for complete purging
- Threadless construction (23-4 Series)
- Springless & threadless construction (23-3 Series)
- Tescom's Precision Electro-Polishing (P.E.P.) available
- Positive shut-off seal with positionable bonnet or free poppet design
- Excellent leak integrity is created by metal to metal diaphragm to body seal

Teflon® is a registered trademark of Du Pont.
VCR® is a registered trademark of Cajon Co.






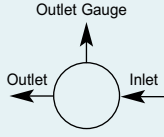
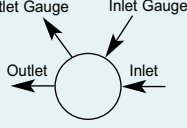
Flow Chart



Part Number Selector

example part number:

23-3 B 1 5 AA GF4GF4 Z

BASIC SERIES	INLET PRESSURE INTERNAL SURFACE FINISHES & BODY/TRIM/ SEAT MATERIAL	OUTLET PRESSURE	ADJUSTMENT METHOD & COLOR	PORTING CONFIGURATION - TYPE & SIZE*		OPTIONS CHOOSE ONE ONLY
				GAUGE PORT OPTIONS	INLET & OUTLET PORT END-TO-END DIMENSION 'A'	
23-3 Tied diaphragm/ positive shut-off 23-4 Free-poppet	B 250 PSIG - 10 Ra finishes - 316L VAR SST body w/Precision Electro-Polish (P.E.P.) ¹ - 316 SST trim - PCTFE seat C 150 PSIG - 10 Ra finishes - 316L VAR SST body w/Precision Electro-Polish (P.E.P.) ¹ - 316 SST trim - Teflon® seat E 250 PSIG - 5 Ra finishes - 316L VAR SST body w/Precision Electro-Polish (P.E.P.) ² - 316 SST trim - PCTFE seat F 150 PSIG - 5 Ra finishes - 316L VAR SST body w/Precision Electro-Polish (P.E.P.) ² - 316 SST trim - Teflon® seat	0 30 PSIG 1 60 PSIG 2 100 PSIG	5 Handknob – White		EN7EN7 1/4" MVCR, fixed 3.97"	Z None T Test Report (typical) (Includes Helium Leak Certification & Particle Count Certification) C Certification of Conformance E Centerline to bottom (.680") 4 Electropolished only (no P.E.P.) (available with 23-XB and 23-XC only) ^{1, 2}
				AA No gauge ports	HF4HF4 1/2" FVCR 5.59"	
					GF4GF4 1/2" MVCR 5.59"	
				AB 1/4" H.P.I.C. AC 1/4" FVCR AE 1/4" MVCR, fixed AD 1/4" MVCR, swivel	FB7FB7 1/2" Tube 3.70"	
					UR2UR2 3/4" Tube 5.75"	
				AM 1/4" H.P.I.C. AN 1/4" FVCR AR 1/4" MVCR, fixed AP 1/4" MVCR, swivel		
* Consult factory for other porting configurations, type and size.						

1- 23-X Regulators are available with Electropolish only (10 Ra microinch finishes), select '4' from the OPTIONS section when ordering a 23-XB or 23-XC to forfeit the Precision Electro-Polish (P.E.P.) process.
 2- 23-X Regulators with 5 Ra microinch finishes are available with Precision Electro-Polish (P.E.P.) only. Do not select a '4' in the OPTIONS section when ordering a 23-XE or 23-XF.



WARNING! Do not attempt to select, install, use or maintain this product until you have read and fully understood the Tescom Safety, Installation & Operation Precautions.

NOTE: Product availability and specifications contained herein are subject to change without notice. Consult local distributor or factory for potential revisions and/or service related issues.

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