26-1200 Series

Regulators - Pressure Reducing

D26120540X012

Specifications

For other materials or modifications, please consult TESCOM.

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure
3600 and 6000 psig
248 and 414 bar

Outlet Pressure
To maximum inlet

Design Proof Pressure
150% maximum rated operating

Leakage
Bubble-tight

Flow Capacity
C_V = 3.3, 6.0, 12.0* or 20.0

MEDIA CONTACT MATERIALS

Body
303 Stainless Steel, 316 Stainless Steel

Seat
PCTFE or Polyimide (Vespel®)

Diaphragm
Nitrile, Buna-N or FKM (Viton®-A)

O-Rings
Nitrile, Buna-N or FKM (Viton®-A)

Back-up Rings
PTFE

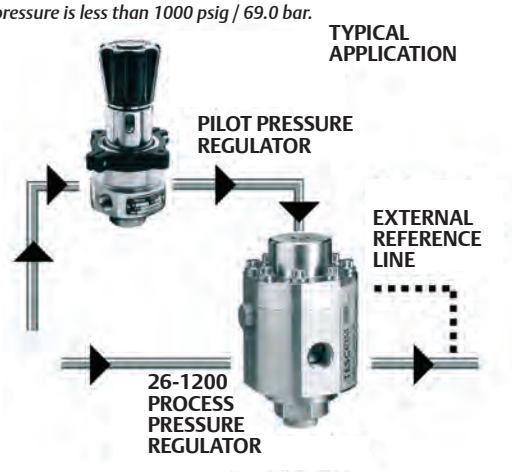
Remaining Parts
300 Series Stainless Steel

OTHER

Cleaning
CGA 4.1 and ASTM G93

Teflon®, Tefzel®, Vespel®, and Viton® are registered trademarks of E.I. du Pont de Nemours and Company.

**A secondary pressure drop due to the outlet cross-hole can significantly affect the rated flow capacity. Contact TESCOM for flow curve data when outlet pressure is less than 1000 psig / 69.0 bar.*



TESCOM 26-1200 Series dome loaded, high flow pressure reducing regulator is externally loaded with 6000 psig / 414 bar maximum inlet and outlet pressures. The 26-1200 Series offers four C_V ratings, balanced main valve, and available external sensing.

Applications

- Rocket engine testing
- Fueling
- Facilities supply
- Natural gas pipeline

Features and Benefits

- Diaphragm or piston sensed
- Modular construction for easy service
- External sensing available for improved accuracy
- Balanced main valve increases seat life
- Mounts in any position
- Low droop and lockup

26-1200 SERIES

26-1200 Series Regulator Specifications

CV	OPERATING PARAMETERS *Pressure rating per criteria of ANSI/ASME B31.3*	MEDIA CONTACT MATERIALS	OTHER
C_V = 3.3	**Maximum Inlet Pressure** **Stainless Steel Body:** 6000 psig / 414 bar **Operating Temperature*** -40°F to 165°F / -40°C to 74°C **Flow Capacity** C_V = 3.3	**Body** 303 Stainless Steel or 316 Stainless Steel **Seat** PCTFE or Vespel® **Diaphragm** Nitrile, Buna-N **Back-up Rings** PTFE **Gasket** PCTFE **Retaining Ring** 15-7 Stainless Steel **Valve Cap** 17-4 Stainless Steel **Remaining Parts** 300 Series Stainless Steel	**Weight** **Stainless Steel:** 25 lbs / 11.3 kg
C_V = 6.0	**Maximum Inlet Pressure** **Vespel:** 6000 psig / 414 bar **PCTFE or ETFE (Tefzel®):** 3600 psig / 248 bar **Operating Temperature*** **Nitrile, Buna-N:** -40°F to 165°F / -40°C to 74°C **FKM (Viton®-A):** -15°F to 165°F / -26°C to 74°C **Flow Capacity** C_V = 6.0	**Body** 316 Stainless Steel **Seat** PCTFE or Polyimide (Vespel®) **Diaphragm** Buna-N or FKM (Viton®-A) **O-Rings** Nitrile, Buna-N or FKM (Viton®-A) **Back-up Rings** PTFE **Connecting Rod** 17-4 Stainless Steel **Valve** Nitronic 60 **Remaining Parts** 300 Series Stainless Steel	**Weight** **Stainless Steel:** 40 lbs / 18.1 kg

**For extended temperature applications, consult TESCOM.*

26-1200 Series Regulator Specifications

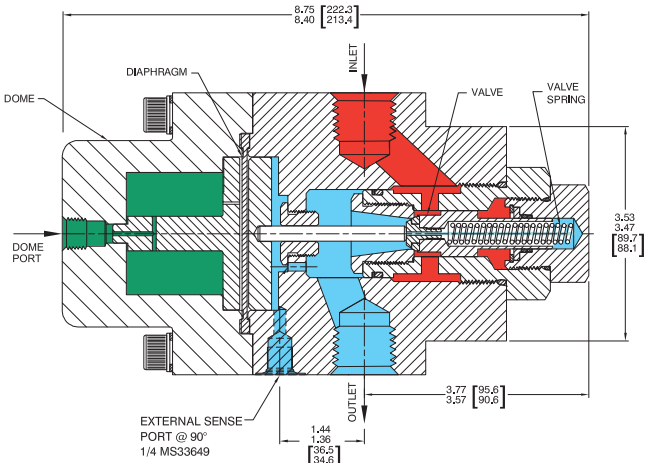
CV	OPERATING PARAMETERS *Pressure rating per criteria of ANSI/ASME B31.3*	MEDIA CONTACT MATERIALS	OTHER
C_V = 12.0	**Maximum Inlet Pressure** 6000 psig / 414 bar **Operating Temperature*** -15°F to 165°F / -26°C to 74°C **Flow Capacity** C_V = 12.0	**Body** 316 Stainless Steel **Seat** Polyimide (Vespel®) **Diaphragm** FKM (Viton®-A) **O-Rings** FKM (Viton®-A) **Back-up Rings** PTFE **Connecting Rod** 17-4 Stainless Steel **Valve** Nitronic 60 **Remaining Parts** 300 Series Stainless Steel	**Weight** **Stainless Steel:** 60 lbs / 27.2 kg
C_V = 20.0	**Maximum Inlet Pressure** 3600 psig / 248 bar **Operating Temperature*** -40°F to 200°F / -40°C to 93°C **Flow Capacity** C_V = 20.0	**Body** 316 Series Stainless Steel **Seat** PCTFE, Peek, Polyimide (Vespel® SP1) **O-Rings** Nitrile, Buna-N or FKM (Viton®-A) **Back-up Rings** PTFE **Valve** Nitronic 60 **Remaining Parts** 316 Series Stainless Steel	**Weight** **Stainless Steel:** 130 lbs / 58.9 kg

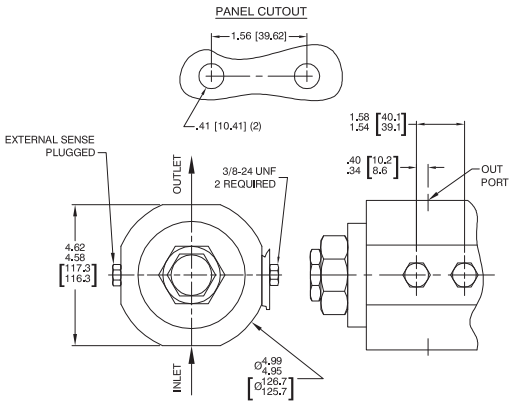
**For extended temperature applications, consult TESCOM.*

26-1200 SERIES

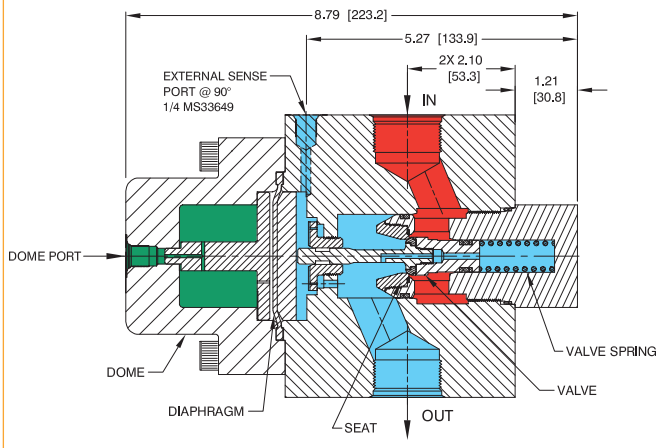
26-1200 Series Regulator Drawings

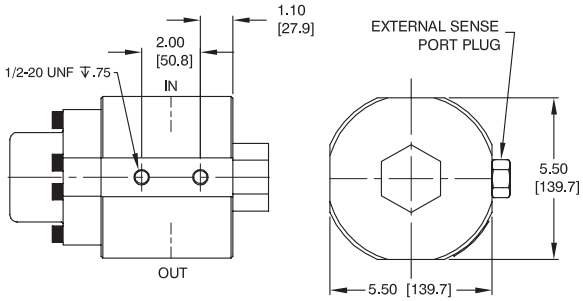
C_V = 3.3 - 1/2" [12.7] ORIFICE





C_V = 6.0 - 5/8" [15.9] ORIFICE

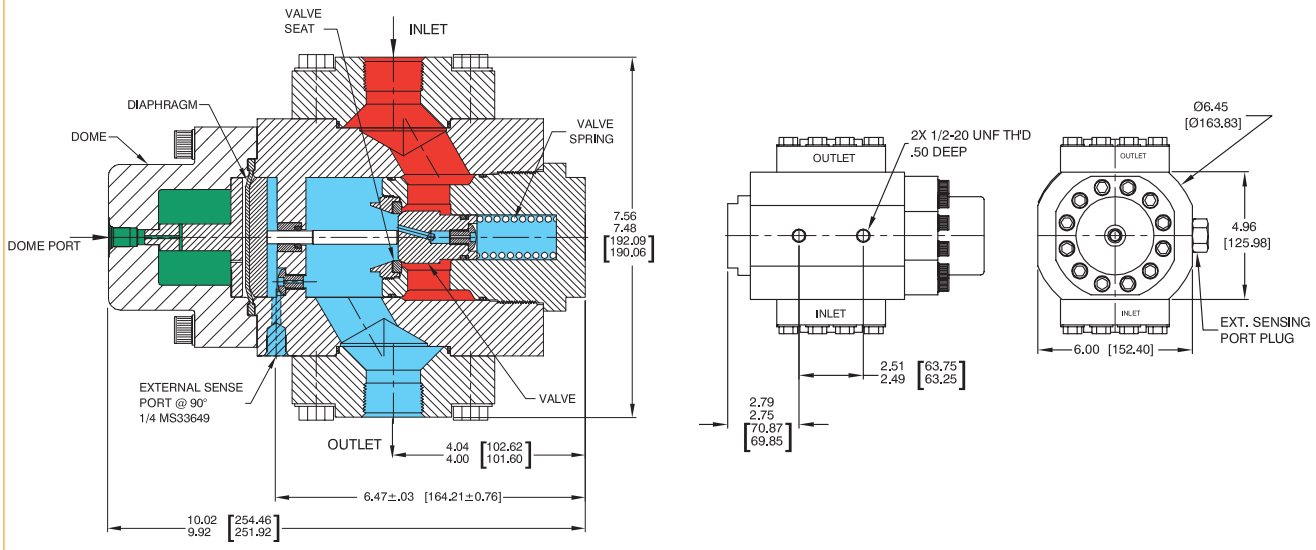




All dimensions are reference & nominal
Metric [millimeter] equivalents are in brackets

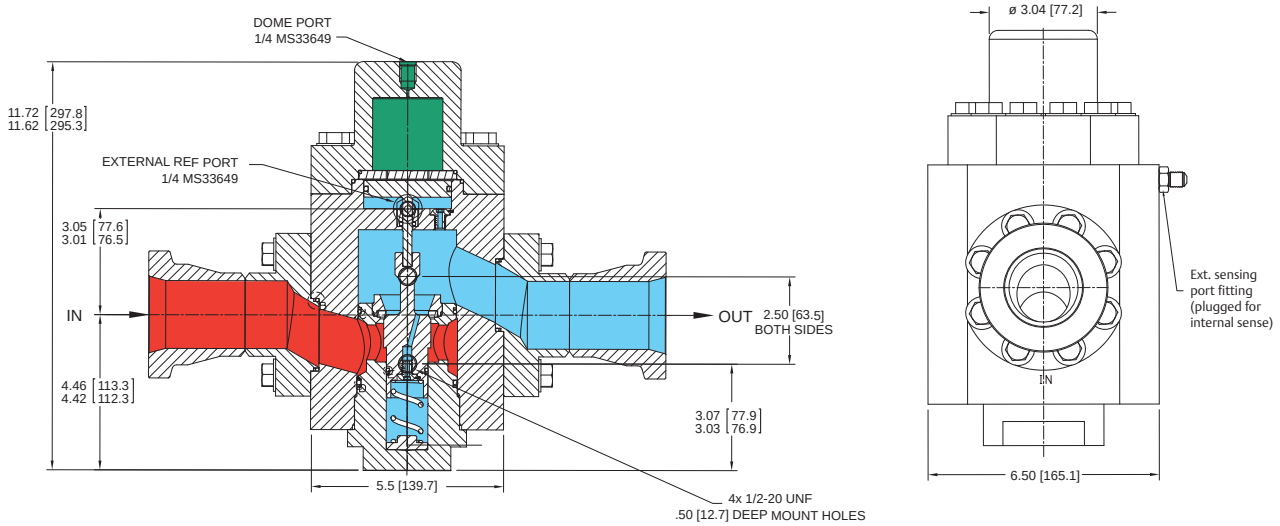
26-1200 Series Regulator Drawings

C_V = 12.0 - 1" [25.4] ORIFICE



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

C_V = 20.0 - 1.25" [31.75] ORIFICE



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

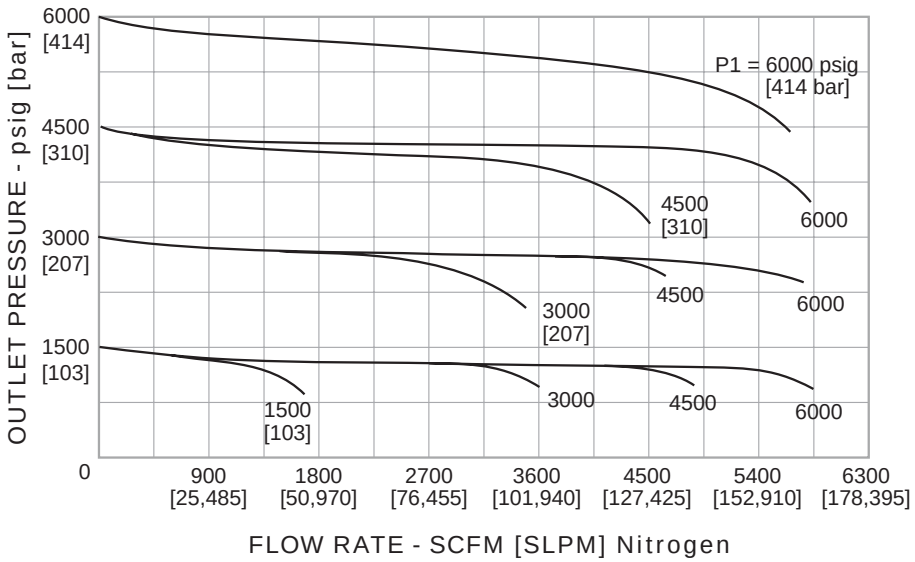
26-1200 SERIES

26-1200 Series Regulator Flow Chart

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.

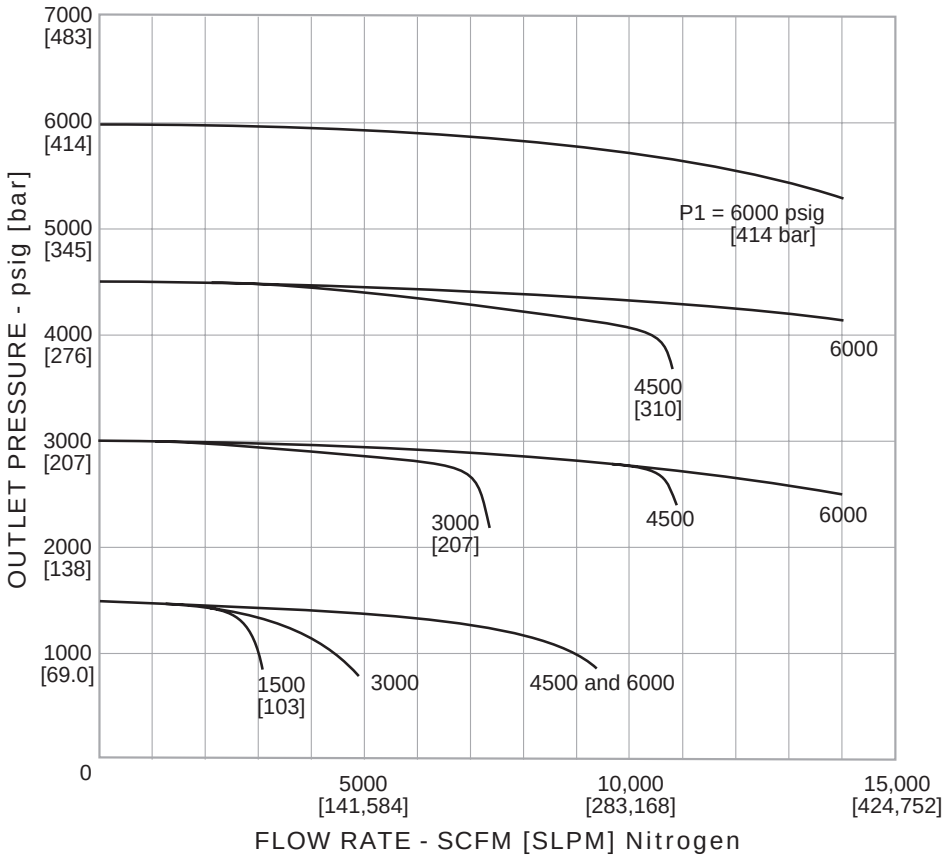
C_V = 3.3

Model No. 26-1261-3161



C_V = 6.0

Model No. 26-126T-3162-076

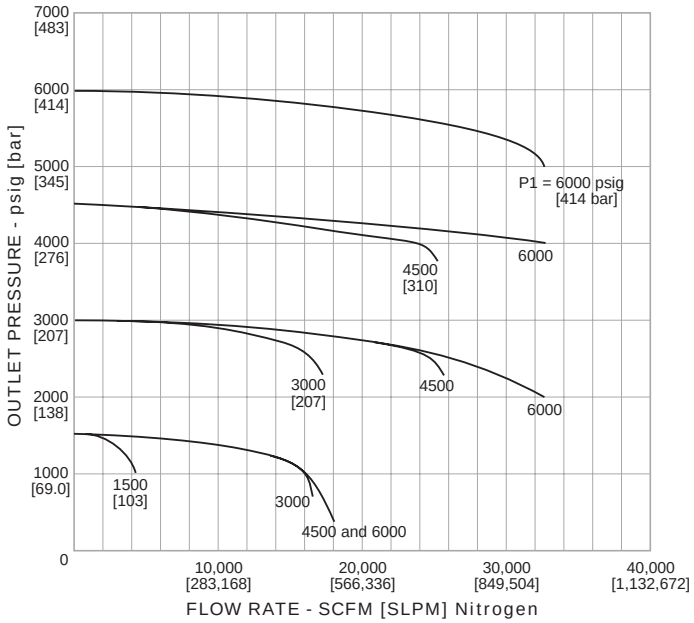


26-1200 Series Regulator Flow Charts

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.

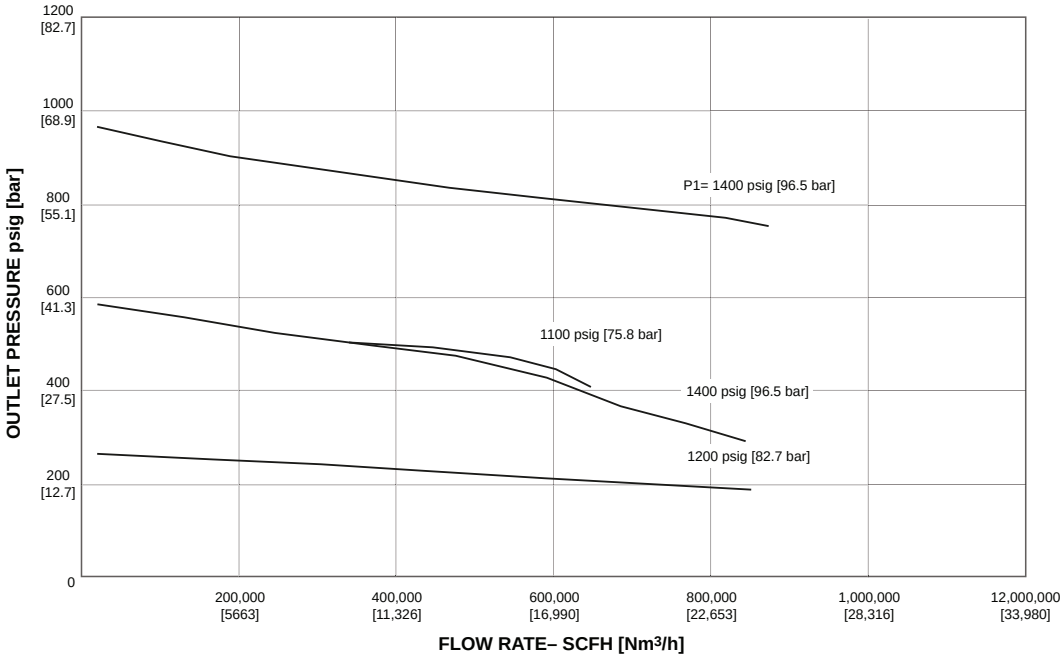
C_V = 12.0

Model No. 26-1261-2163-083



C_V = 20.0

Model No. 26-126V-CLE5-164



The curves above were generated using analytical methods - error is estimated at ±10%

26-1200 SERIES

26-1200 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:

C_V = 3.3

26-12 2 1 - 3 16 1

BASIC SERIES	BODY MATERIAL	LOADING METHOD	INLET AND OUTLET PORT TYPE	DOME PORT	PORT SIZE	ORIFICE SIZE
26-12	**2** – 303 Stainless Steel **6** – 316 Stainless Steel	**1** – External	**1** – SAE **2** – NPTF **3** – MS33649	1/4" MS33649 1/4" NPTF 1/4" MS33649	**12** – 3/4" **16** – 1"	**1** – 1/2" 12.7 mm

C_V = 6.0

MANDATORY FOR C_V = 6.0

26-12 6 T - 3 16 2 - 076

BASIC SERIES	BODY MATERIAL	DIAPHRAGM/ O-RING	SEAT	TEMPERATURE	INLET AND OUTLET PORT TYPE	DOME PORT	INLET AND OUTLET PORT SIZE	INNER VALVE SIZE	MOD. NUMBER
26-12	**6** – 316 Stainless Steel	**A** – Nitrile, Buna-N **B** – Nitrile, Buna-N **D** – Nitrile, Buna-N **E** – FKM (Viton®-A) **T** – FKM (Viton®-A) **V** – FKM (Viton®-A) **W** – FKM (Viton®-A)	Polyimide (Vespel® SP1) Polyimide (Vespel® SP1) PCTFE Polyimide (Vespel® SP1) PCTFE Polyimide (Vespel® SP1) ETFE (Tefzel®)	-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 -15°F to 300°F -26°C to 149°C -15°F to 165°F -26°C to 74°C -15°F to 300°F -26°C to 149°C -15°F to 165°F -26°C to 74°C	**1** – SAE **2** – NPTF **3** – MS33649	1/4" MS33649 1/4" NPTF 1/4" MS33649	**12** – 3/4" * **16** – 1" **20** – 1-1/4" SAE or MS only	**2** – 5/8" 15.9 mm	**076**

**3/4" ports reduce overall C_V to 5.0*

C_V = 12.0

MANDATORY FOR C_V = 12.0 MODEL

26-12 6 1 - 2 16 3 - 083

BASIC SERIES	BODY MATERIAL	LOADING METHOD	INLET AND OUTLET PORT TYPE	DOME PORT	INLET AND OUTLET PORT SIZE	SENSE TYPE	MODEL NUMBER
26-12	**6** – 316 Stainless Steel	**1** – External	**1** – SAE **2** – NPTF **3** – MS33649	1/4" MS33649 1/4" NPTF 1/4" MS33649	**16** – 1" **20** – 1-1/4"	**3** – Internal **4** – External	**083**

C_V = 20.0

MANDATORY FOR C_V = 20.0

26-12 6 V-C LA 2 - 164

BASIC SERIES	BODY MATERIAL	O-RING	SEAT	TEMPERATURE	INLET & OUTLET PORT TYPE	PRESSURE RANGE	INLET & OUTLET MAX PRESSURE	END TO END DIMENSIONS INCH [MM]	SENSE TYPE	MOD. NUMBER
26-12	**6** – 316 Stainless Steel	**D-C** – Nitrile, Buna-N **D-P** – Nitrile, Buna-N **D-V** – Nitrile, Buna-N **V-C** – FKM (Viton®-A) **V-P** – FKM (Viton®-A) **V-V** – FKM (Viton®-A)	PCTFE PEEK® Polyimide (Vespel® SP1) PCTFE PEEK® Polyimide (Vespel® SP1)	-40°F to 165°F -40°C to 74°C -40°F to 200°F -40°C to 93°C -40°F to 200°F -40°C to 93°C -10°F to 165°F -23°C to 74°C -10°F to 200°F -23°C to 93°C -10°F to 200°F -23 °C to 93°C	**LA–** 2" Grayloc GR20 **LB–** 2" Grayloc GR14 **LC–** 2" 1500# RTJ **LD–** 2" 2500# RTJ **LE–** 2" 1500# RF **LF–** 2" 2500# RF	Low Low Low Low Low Low	3600 PSIG [248 bar] 3600 PSIG [248 bar] 3100 PSIG [214 bar] 3600 PSIG [248 bar] 3100 PSIG [214 bar] 3600 PSIG [248 bar]	14.75 [374.7] 14.75 [374.7] 17.88 [454.0] 19.88 [504.8] 17.75 [450.8] 19.75 [501.6]	**5** – Internal **6** – External	**164**

Note: Contact Engineering for pressures above 3600 PSI/248 bar