

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
$C_V = 3.3, 6.0, 12.0^* \text{ or } 20.0$

MEDIA CONTACT MATERIALS

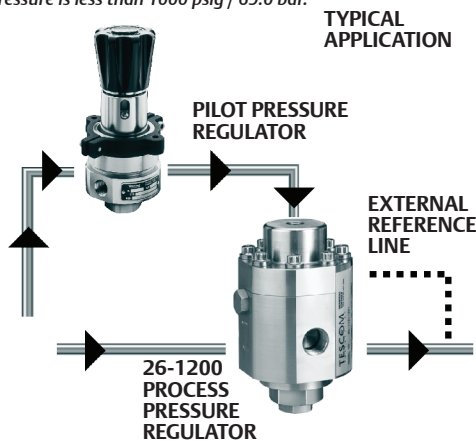
Body
303 Stainless Steel, 316 Stainless Steel
Seat
PCTFE or Polyimide (Vespel®)
Diaphragm
Nitrile, Buna-N or FKM (Viton®-A)
O-Rings
Nitrile, Buna-N or FKM (Viton®-A)
Back-up Rings
PTFE
Remaining Parts
300 Series Stainless Steel

OTHER

Cleaning
CGA 4.1 and ASTM G93

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

*For extended temperature applications, consult TESCOM.

26-1200 Series Regulator Specifications

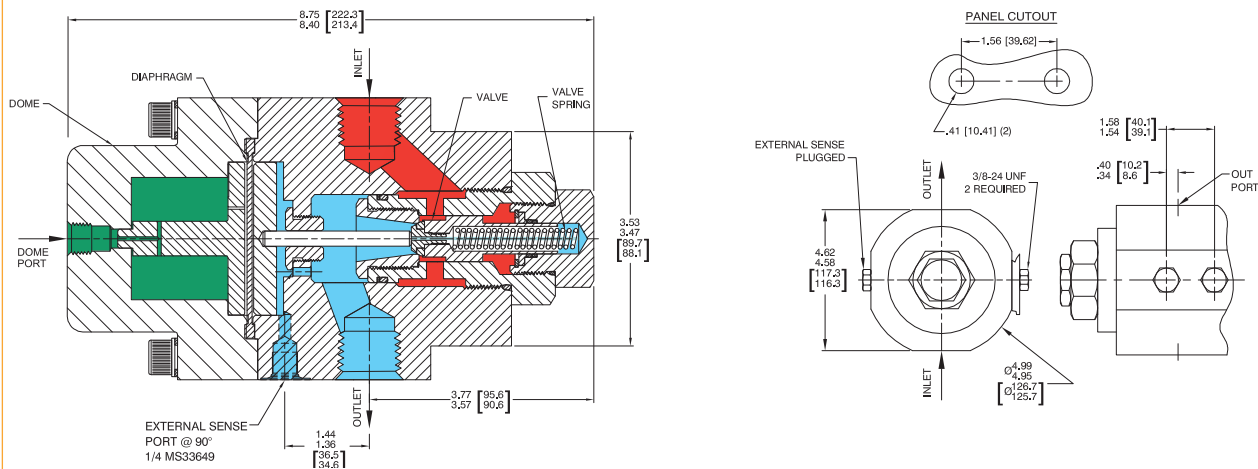
CV	OPERATING PARAMETERS <i>Pressure rating per criteria of ANSI/ASME B31.3</i>	MEDIA CONTACT MATERIALS	OTHER
C_v = 12.0	Maximum Inlet Pressure 6000 psig / 414 bar Operating Temperature* -15°F to 165°F / -26°C to 74°C Flow Capacity C _v = 12.0	Body 316 Stainless Steel Seat Polyimide (Vespel®) Diaphragm 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.

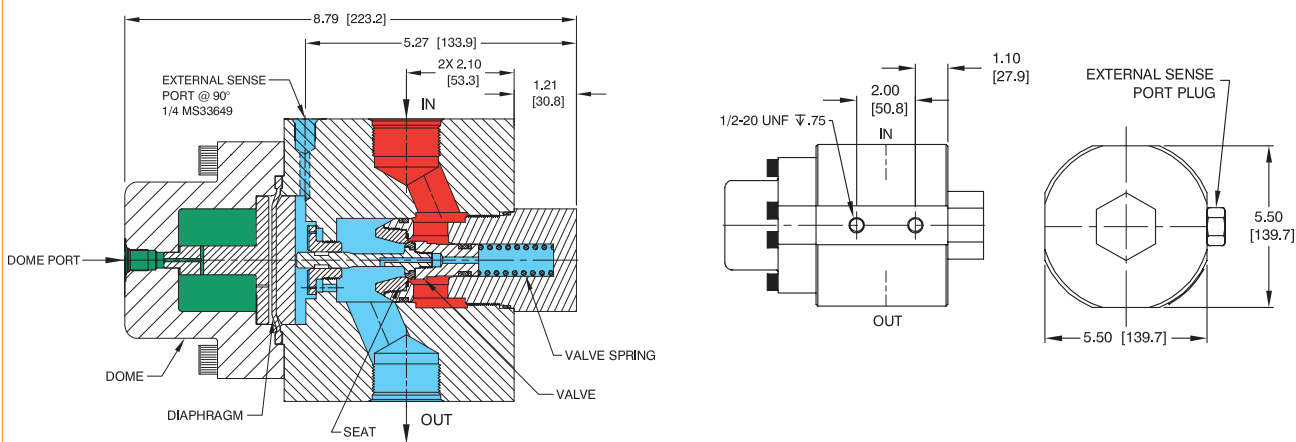
26-1200 SERIES

26-1200 Series Regulator Drawings

$C_v = 3.3 - 1/2" [12.7]$ ORIFICE



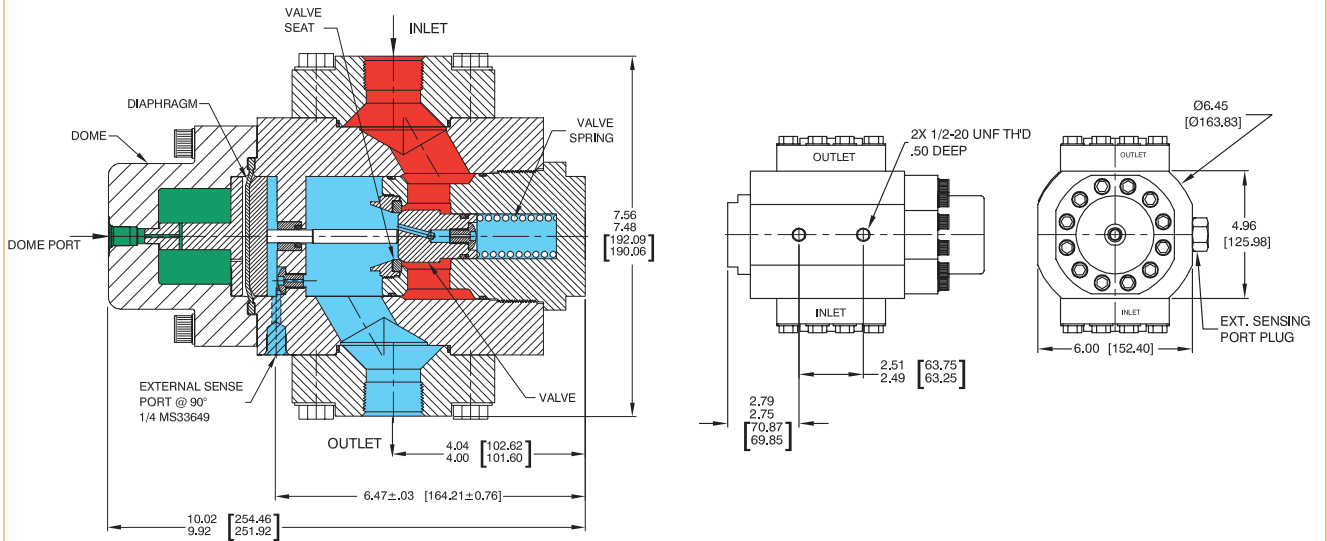
$C_v = 6.0 - 5/8" [15.9]$ ORIFICE



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

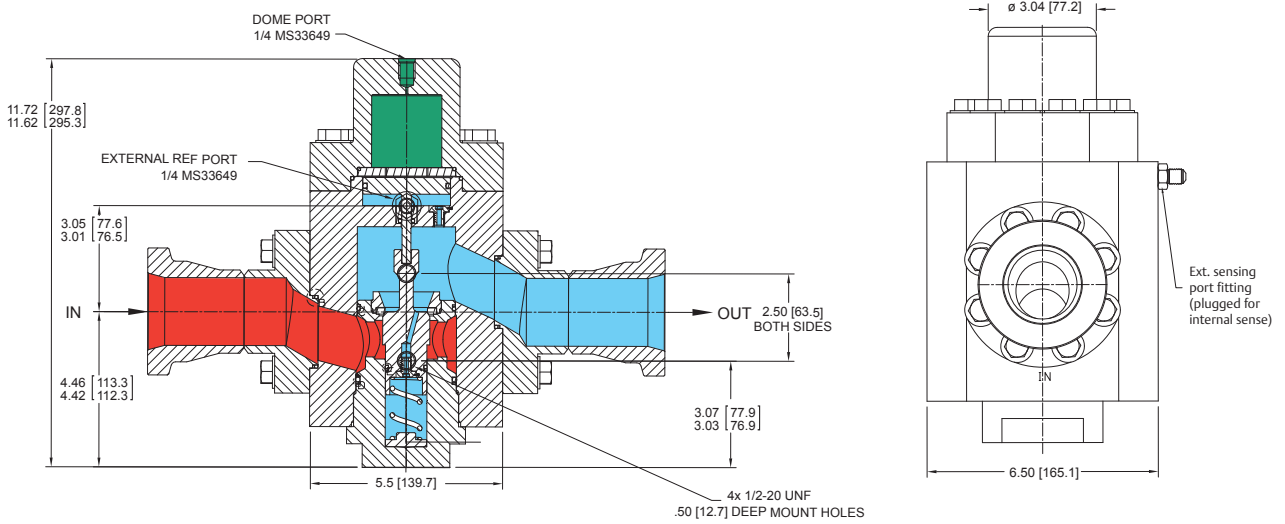
26-1200 Series Regulator Drawings

$C_v = 12.0 - 1" [25.4]$ 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

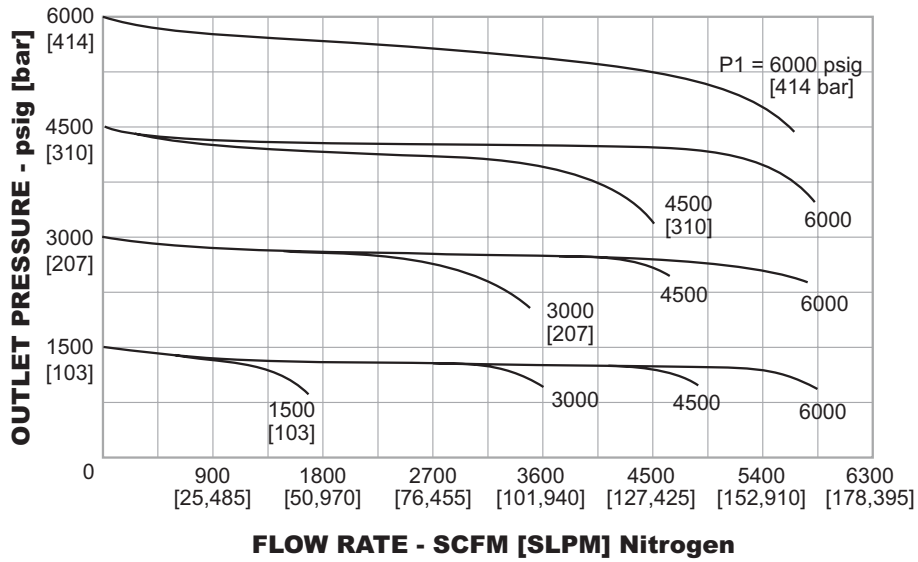
26-1200 SERIES

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.

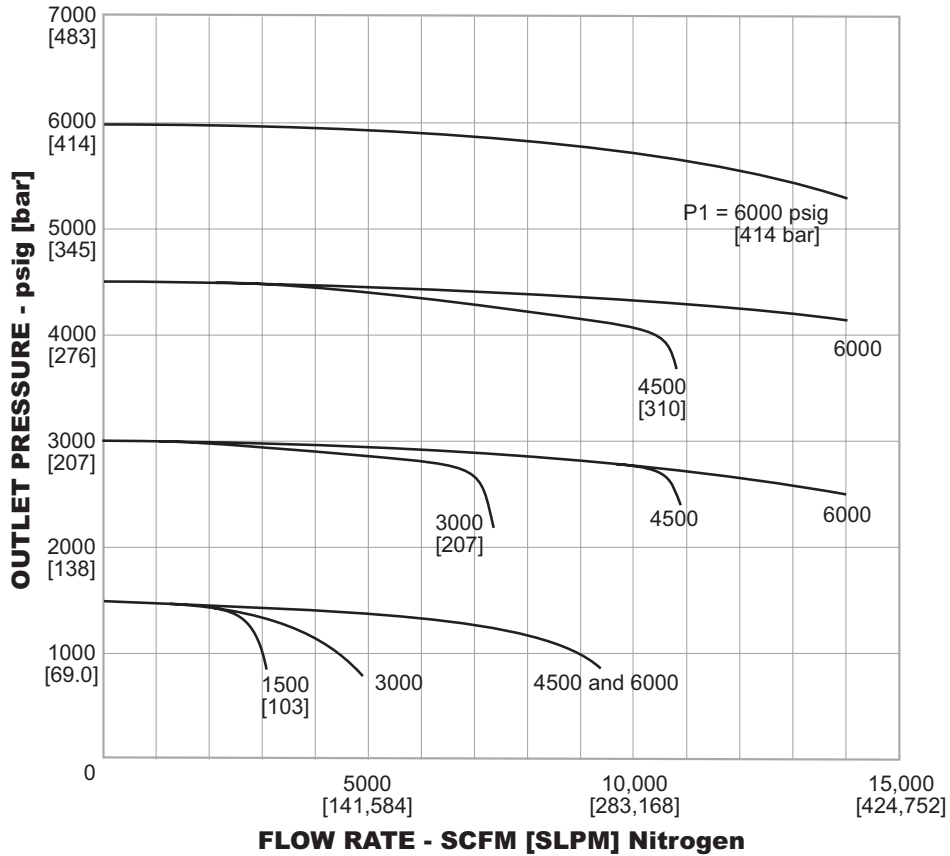
$C_v = 3.3$

Model No. 26-1261-3161



$C_v = 6.0$

Model No. 26-126T-3162-076

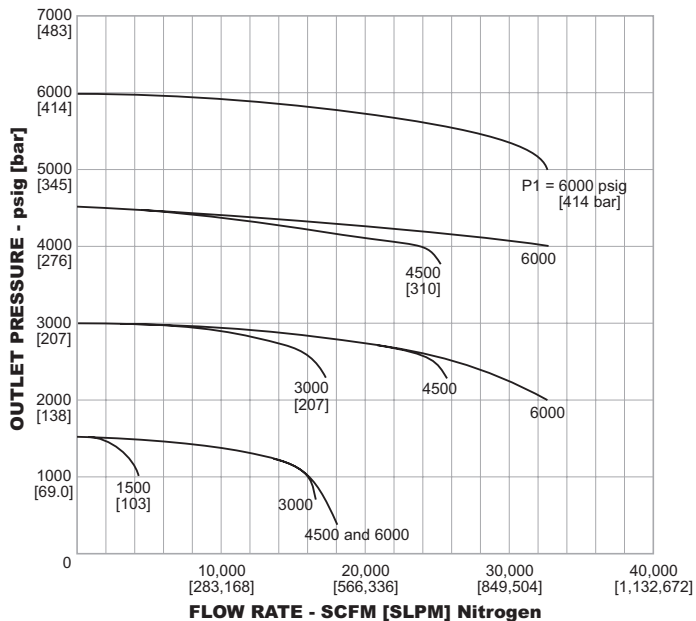


26-1200 Series Regulator Flow Charts

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.

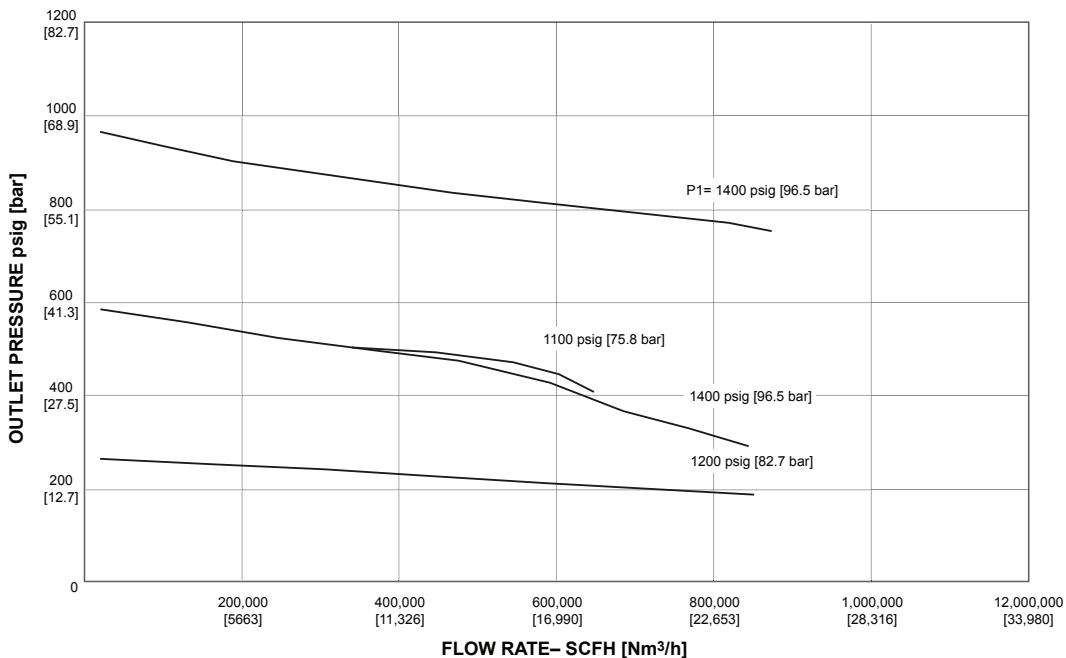
$C_v = 12.0$

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 $\pm 10\%$

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	DOMES 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	DOMES 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 -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	DOMES 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