

26-1200 Series

Regulators - Pressure Reducing

D26120540X012

Specifications

For other materials or modifications, please consult TESCO.

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

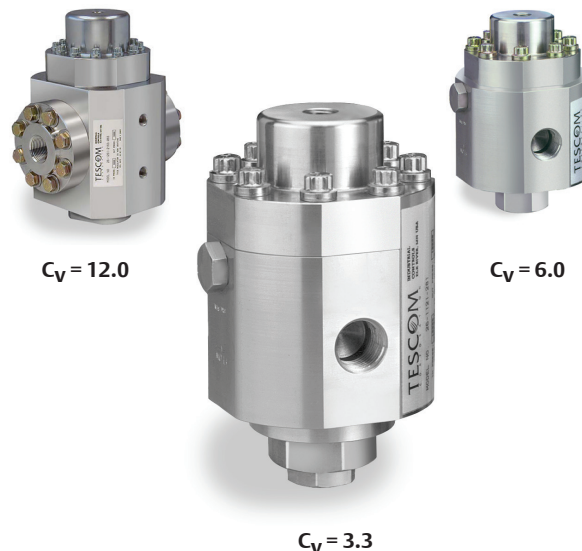
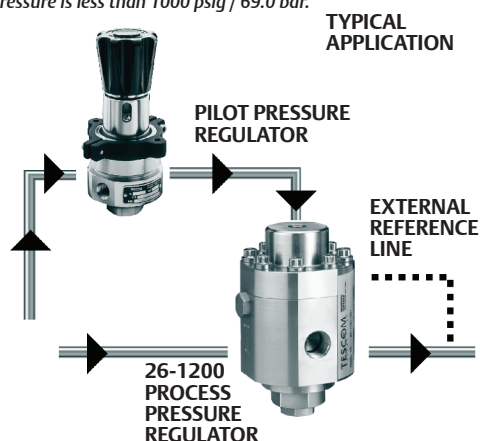
OTHER

Cleaning

CGA 4.1 and ASTM G93

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*A secondary pressure drop due to the outlet cross-hole can significantly affect the rated flow capacity. Contact TESCO 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	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

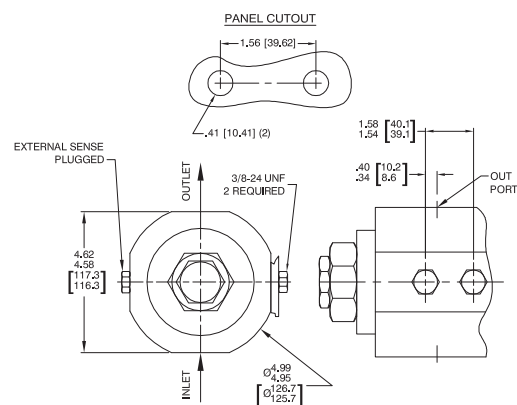
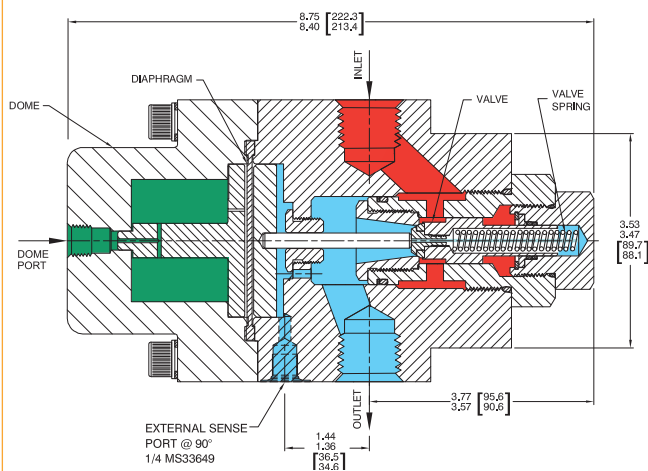
CV	OPERATING PARAMETERS <i>Pressure rating per criteria of ANSI/ASME B31.3</i>	MEDIA CONTACT MATERIALS	OTHER
C_V = 12.0	Maximum Inlet Pressure 6000 psig / 414 bar Operating Temperature* -15°F to 165°F / -26°C to 74°C Flow Capacity C _V = 12.0	Body 316 Stainless Steel Seat Polyimide (Vespel®) Diaphragm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

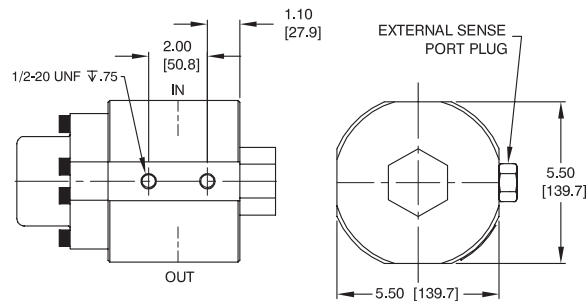
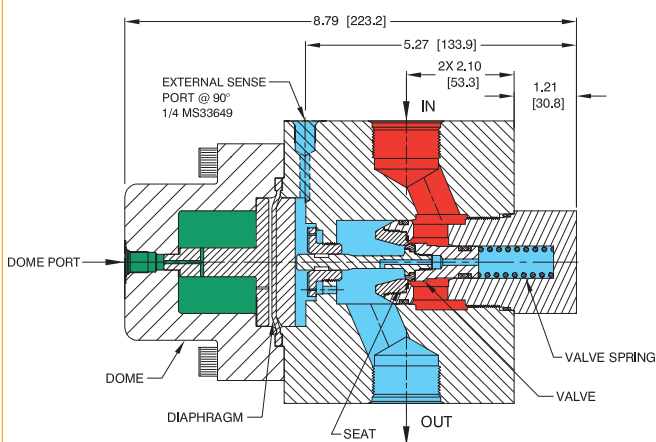
26-1200 SERIES

26-1200 Series Regulator Drawings

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



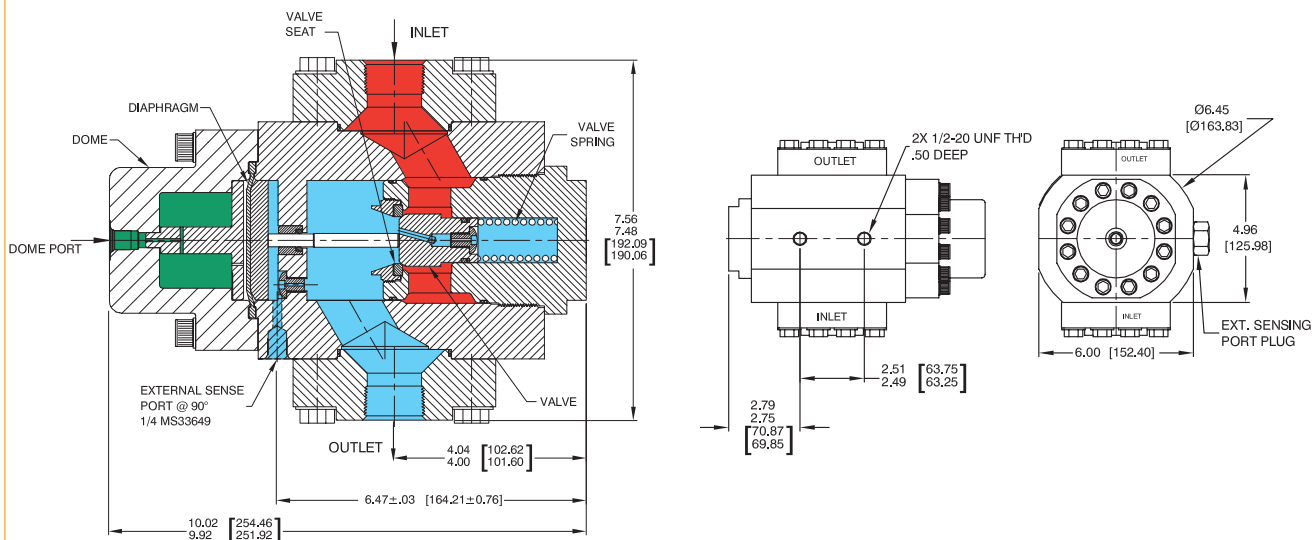
$C_v = 6.0 - 5/8" [15.9]$ ORIFICE



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

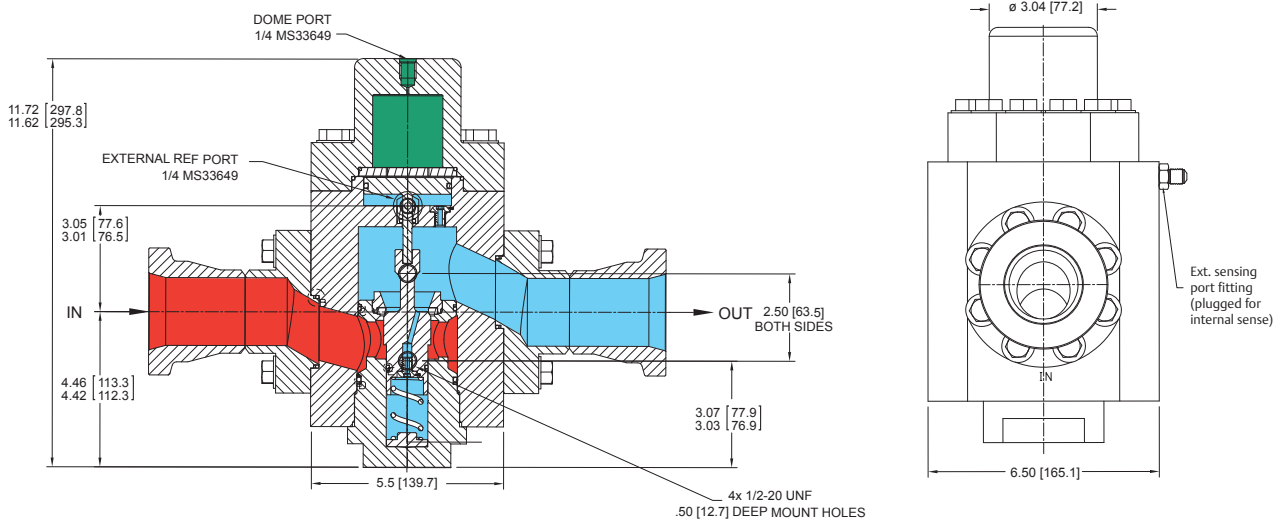
26-1200 Series Regulator Drawings

$C_v = 12.0 - 1" [25.4]$ 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

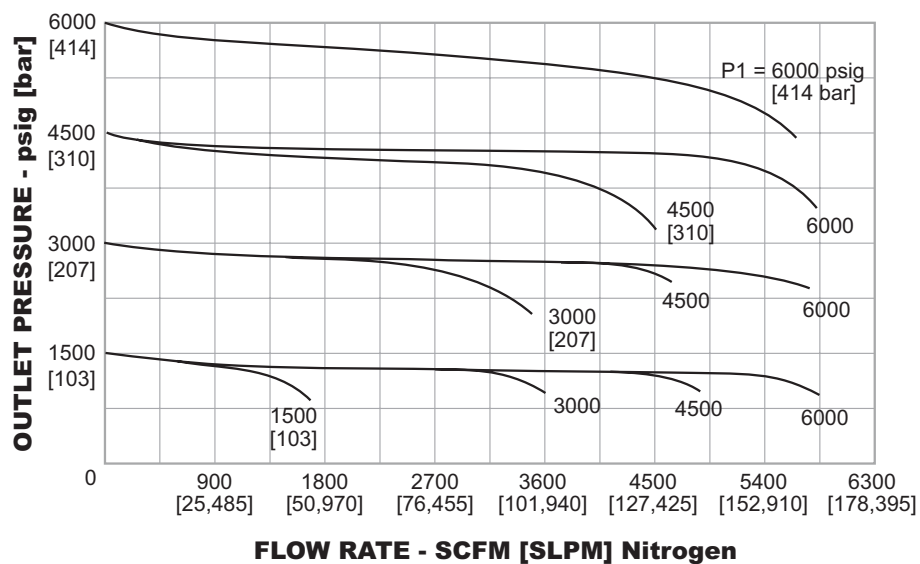
26-1200 SERIES

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

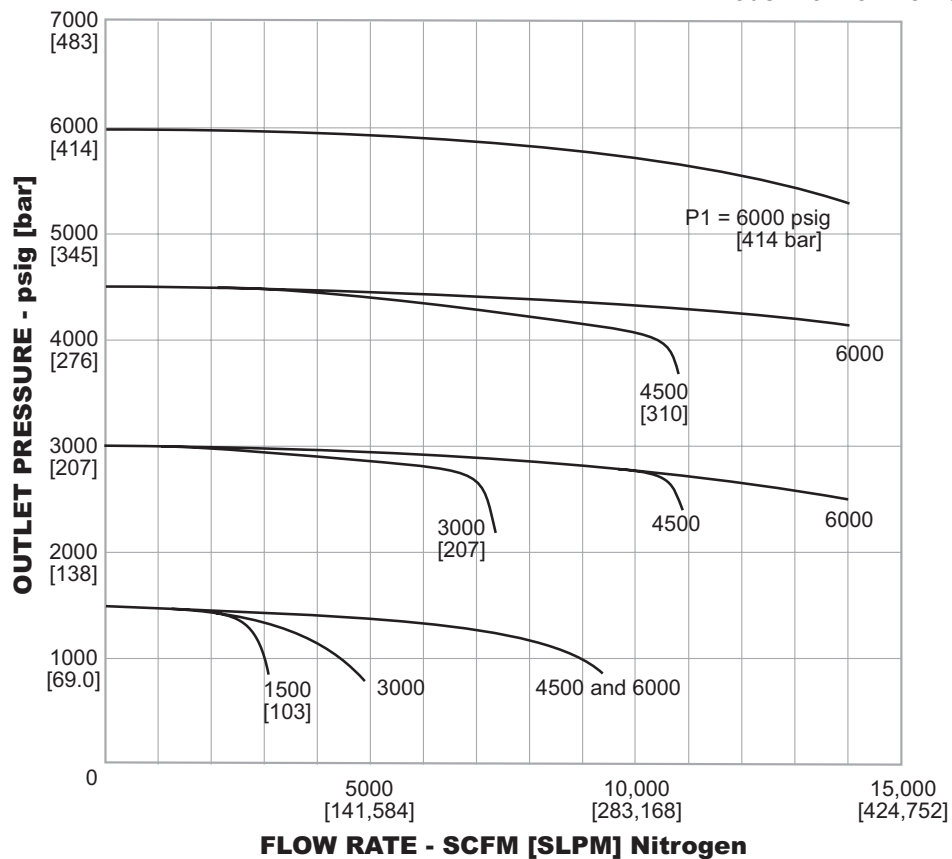
$C_v = 3.3$

Model No. 26-1261-3161



$C_v = 6.0$

Model No. 26-126T-3162-076

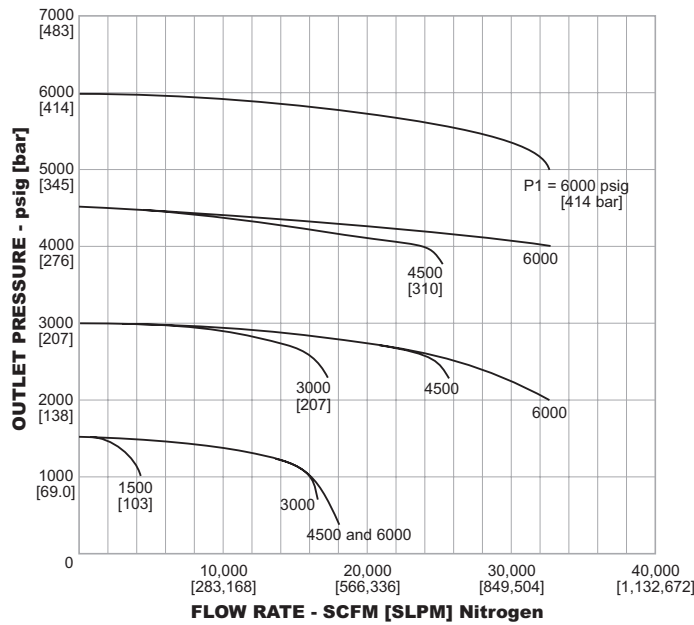


26-1200 Series Regulator Flow Charts

For more information on how to read flow curves, please refer to the Flow Curves and Calculations document (debul2007x012) in the TESCO catalog

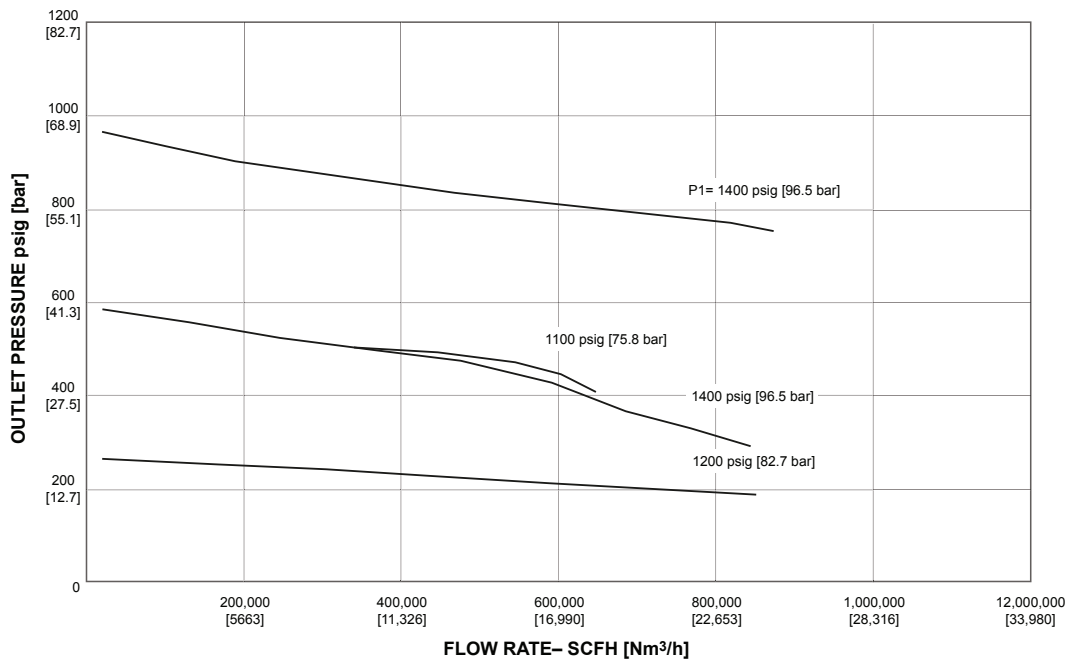
$C_v = 12.0$

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	DOME PORT	INLET AND OUTLET PORT SIZE	INNER VALVE SIZE		MOD. NUMBER
26-12	6 – 316 Stainless Steel	A – Nitrile, Buna-N	Polyimide (Vespel® SP1)	-40°F to 165°F -40°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
		B – Nitrile, Buna-N	Polyimide (Vespel® SP1)	-40°F to 165°F -40°C to 74°C						
		D – Nitrile, Buna-N	PCTFE	-15°F to 300°F -26°C to 149°C						
		E – FKM (Viton®-A)	Polyimide (Vespel® SP1)	-15°F to 165°F -26°C to 74°C						
		T – FKM (Viton®-A)	PCTFE	-15°F to 300°F -26°C to 149°C						
		V – FKM (Viton®-A)	Polyimide (Vespel® SP1)	-15°F to 165°F -26°C to 74°C						
		W – FKM (Viton®-A)	ETFE (Tefzel®)							

* 3/4" ports reduce overall C_v to 5.0

*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	PCTFE PEEK®	-40°F to 165°F -40°C to 74°C	LA– 2" Grayloc GR20	Low	3600 PSIG [248 bar]	14.75 [374.7]	5 – Internal 6 – External	164	
				-40°F to 200°F	LB– 2" Grayloc GR14	Low	3600 PSIG [248 bar]	14.75 [374.7]			
				-40°C to 93°C	LC– 2" 1500# RTJ	Low	3100 PSIG [214 bar]	17.88 [454.0]			
		D-P – Nitrile, Buna-N	Polyimide (Vespel® SP1)	-40°F to 200°F -40°C to 93°C	LD– 2" 2500# RTJ	Low	3600 PSIG [248 bar]	19.88 [504.8]			
				-40°F to 200°F -40°C to 93°C	LE– 2" 1500# RF	Low	3100 PSIG [214 bar]	17.75 [450.8]			
		D-V – Nitrile, Buna-N	PCTFE	-10°F to 165°F -23°C to 74°C	LF– 2" 2500# RF	Low	3600 PSIG [248 bar]	19.75 [501.6]			
				-10°F to 200°F -23°C to 93°C	Note: Contact Engineering for pressures above 3600 PSI/248 bar						
V-C – FKM (Viton®-A)	PEEK®	-23°C to 93°C									
		-10°F to 200°F -23 °C to 93°C									
	V-P – FKM (Viton®-A)	Polyimide (Vespel® SP1)									
	V-V – FKM (Viton®-A)										

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