

## 6116DL SERIES

Dome Loaded, High Pressure, High Flow, Hydraulic  
Back Pressure Regulators



Premier 6116DL Series regulators are high pressure, high flow, hydraulic, piston sensed, back pressure regulators rated for inlet pressures up to 10000 psig / 689.5 bar and Cv 1.0, or 2.0. Premier 6116DL Series regulators are available in a variety of materials for seamless integration into your desired application.

### FEATURES

- High flow capacity (Cv): 1.0, or 2.0
- Compatible with electro-pneumatic controllers
- Optional surface mounting holes
- Machined bar stock body eliminates porosity found in castings

**SOME APPLICATIONS WILL REQUIRE A CUSTOM SOLUTION.**  
CONTACT PREMIER INDUSTRIES TO REQUEST A MODIFICATION  
OR A CUSTOM DESIGN.

## SPECIFICATIONS

- **MAXIMUM INLET PRESSURE:**
  - 6000 PSIG / 413.7 bar  
(316 stainless steel body, standard)
  - 10000 PSIG / 689.48 bar  
(17-4 stainless steel body)
- **CONTROL PRESSURE RANGES:**
  - 50-6000 PSIG (3.5-413.7 bar)
  - 100-10000 PSIG (689.48 bar)
- **FLOW (Cv):** 1.0, or 2.0
- **AMBIENT OPERATING TEMPERATURE:\*\***
  - -15°F/-26°C to 212°F/100°C (BUNA-N)
  - -65°F/-54°C to 302°F/150°C (EPDM)
  - -4°F/-20°C to 400°F/204°C (VITON)
  - 0°F/-18°C to 620°F/327°C (KALREZ® 7075)

\*\* Lower temperature compounds available

## MATERIALS OF CONSTRUCTION

- **BODY MATERIAL OPTIONS:**
  - 316 Stainless Steel
  - 17-4 Stainless Steel
- **DOME:**
  - 17-4 Stainless Steel
- **MAIN VALVE STEM:**
  - 17-4 Stainless Steel
- **MAIN VALVE SEAT:**
  - 316 Stainless Steel
- **O-RING MATERIAL OPTIONS:**
  - Buna-N
  - Viton-A®
  - EPDM
  - Kalrez 7075®
- **BACK-UP RINGS:**
  - PTFE &/OR PCTFE
- **WETTED, OTHER:**
  - 316 Stainless Steel, 17-4 Stainless Steel

## PORTING

- **INLET & OUTLET OPTIONS:**
  - 1/2" FNPT, SAE J1926, SAE AS5202
  - 3/4" FNPT, SAE J1926, SAE AS5202
  - 1" FNPT, SAE J1926, SAE AS5202
- **GAUGE PORT:** 1/4" FNPT
- **LOAD PORT:**
  - 1/4" FNPT (standard)
  - 1/4" SAE AS5202
  - 1/4" SAE J1926
  - 1/8" FNPT

## OPTIONS

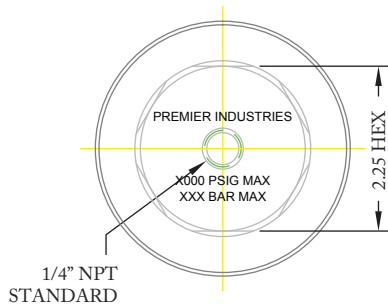
- Surface mounting holes
- Vespel valve seat

SAE AS5202 supersedes MS33649

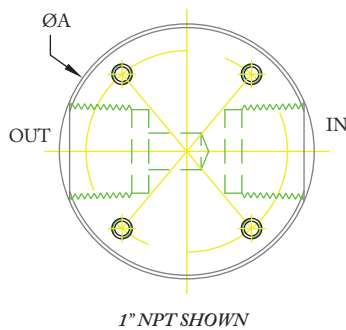
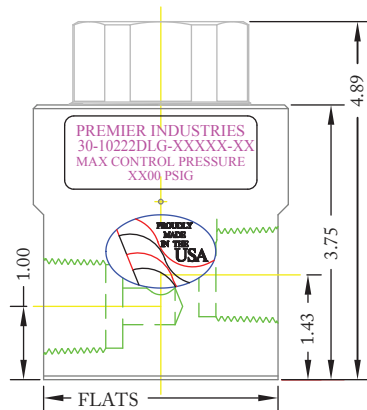
Viton-A®, Vespel®, and Kalrez® are registered trademarks  
of E.I. duPont de Nemours & Company.

Contact factory for material certifications. Fees may apply.

**PART NUMBER: 30-10222DL**



PORT TYPE	ØA	FLATS
NPT	Ø3.23	—
1" NPT	Ø3.48	3.20
1/2" SAE	Ø3.48	3.32
3/4" SAE	Ø3.98	3.72
1" SAE	Ø3.98	3.62



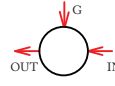

*Optional Surface  
mounting holes:  
1/4-20 UNC X .5 DP  
bolt circle subject to body dia.*

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Back Pressure Regulators

PART NUMBER	-	1	2	3	4	5	-	6 7	-	MODS
30-10222DL	-						-		-	

316 STAINLESS STEEL MAIN VALVE SEAT (STANDARD)

1	CONTROL PRESSURE BODY MATERIAL
6	50-6000 PSIG (3.5-413.7 Bar) 316 Stainless Steel Body
7	100-10000 PSIG (6.89-413.7 Bar) 17-4 Stainless Steel Body
2	Cv (FLOW)
1	Cv 1.0
2	Cv 2.0
3	PORT CONFIGURATIONS (FROM TOP)
H	
S	 (STANDARD)

4	PORT SIZE (INLET/OUTLET)
8	1/2"
T	3/4"
W	1"
<i>GAUGE PORTS: 1/4" FNPT DOME PORT: 1/4" FNPT</i>	
5	PORT TYPE (INLET/OUTLET)
1	FNPT
2	SAE J1926
3	SAE AS5202*
<i>*SAE AS5202 supersedes MS33649</i>	
67	O-RING MATERIAL
00	BUNA-N
02	VITON-A®
05	EPDM
11	KALREZ® 7075

MODIFICATIONS	
BLANK	NONE
AS	1/4" SAE AS5202 DOME PORT
E	1/8" FNPT DOME PORT
J	1/4" SAE J1926 DOME PORT
SM	SURFACE MOUNT
V	VESPEL VALVE SEAT

*6000 PSIG MAX INLET (316 stainless steel body)  
10000 PSIG MAX INLET (17-4 stainless steel body)*  
The end user is responsible to ensure adequate fittings are used to connect regulator to plumbing  
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