

50120DL SERIES

Dome Loaded, High Flow
Pressure Reducing Regulators



Premier 50120DL Series dome loaded, single stage, high flow, piston sensed, pressure reducing regulators, designed for inlet pressures up to 6000 PSIG (*413.69 bar*), and Cv 12.0. The 50120DL features an externally loaded 1:1 dome load with a max outlet pressure of 6000 PSIG (*413.69 bar*).

FEATURES

- Flow capacity (Cv): 12.0
- 6000 PSIG (*413.69 bar*) max inlet pressure
- Piston Sensed
- 1:1 Dome load
- Economical pricing
- Machined bar stock body eliminates porosity found in castings
- Optional external sensing port

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

SPECIFICATIONS

- **MAXIMUM INLET PRESSURE:**
 - 6000 PSIG (413.69 bar)
- **MAXIMUM OUTLET PRESSURE:**
 - 6000 PSIG (413.69 bar)
- **FLOW (Cv):** 12.0

MATERIALS OF CONSTRUCTION

- **BODY:**
 - 316 Stainless Steel
- **BONNET:**
 - 17-4 PH Stainless Steel
- **PISTON:**
 - 316 Stainless Steel
- **MAIN VALVE:**
 - 17-4 PH Stainless Steel
- **MAIN VALVE SEAT:**
 - PEEK®
 - Vespel® SP-1
 - PCTFE (3600 PSIG MAX)
- **O-RING SEAL OPTIONS:**
 - Viton®
 - Buna-N
 - EPDM
- **BACK-UP RING:**
 - PTFE

PORTING

- **INLET/OUTLET OPTIONS:**
 - GRAYLOC 2" GR14 (WELDED)
 - GRAYLOC 2" GR20 (WELDED)
 - 1" FNPT
 - 1.5" FNPT
 - 2" FNPT (3600 PSIG MAX)
 - 1" SAE AS5202*
 - 2" SAE AS5202* (3600 PSIG MAX)
 - 1" SAE J1926
 - 2" SAE J1926 (3600 PSIG MAX)
 - 2" 1500# RF (3600 PSIG MAX)
 - 2" 2500# RF
- *SAE AS5202 supersedes MS33649*
- **DOMES PORT OPTIONS:**
 - 1/4" FNPT
 - 1/4" SAE AS5202
 - 1/4" SAE J1926

OPTIONS

- Private Label
- External sensing port
- Surface mount

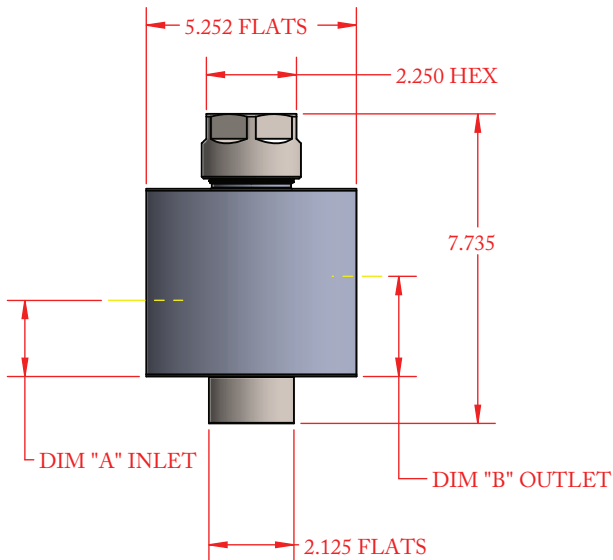
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PEEK® is a registered trademark of Victrex PLC

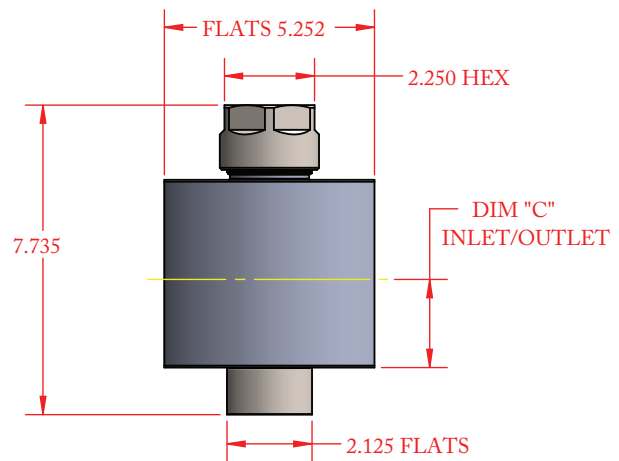
Contact factory for material certifications. Fees may apply.

PART NUMBER: 30-10638

OFFSET PORT CONFIGURATIONS



IN-LINE PORT CONFIGURATIONS



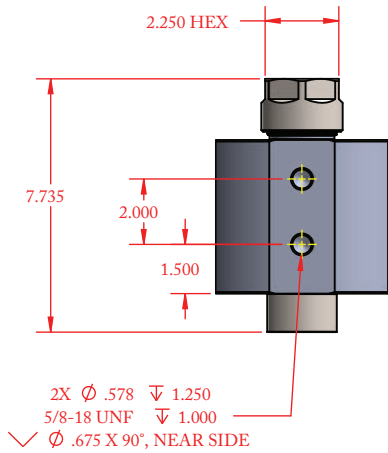
OFFSET PORT DIMENSIONS

PART#	DIM "A" (IN)	DIM "B" (OUT)
30-10638-XXX-12	1.50"	3.20"
30-10638-XXX-22	1.90"	3.20"
30-10638-XXX-13	1.50"	3.20"
30-10638-XXX-14	1.50"	3.20"

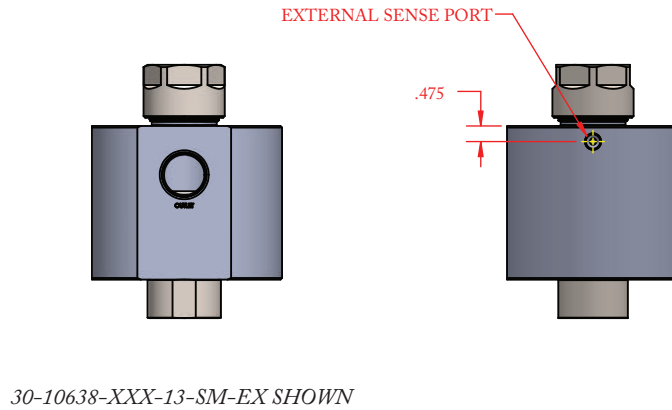
INLINE PORT DIMENSIONS

PART#	DIM "C"
30-10638-XXX-32	2.45"
30-10638-XXX-23	2.25"
30-10638-XXX-24	2.25"

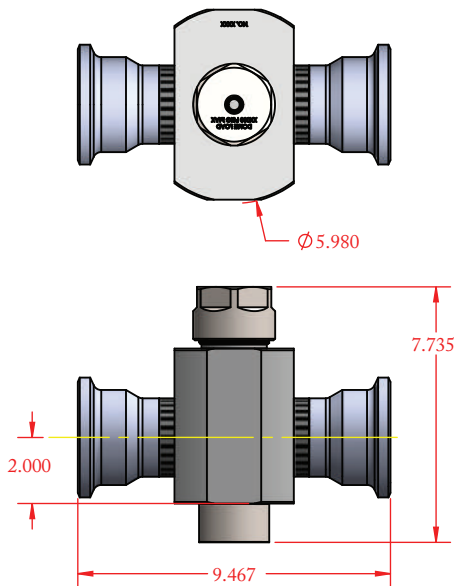
SURFACE MOUNT



EXTERNAL SENSING PORT

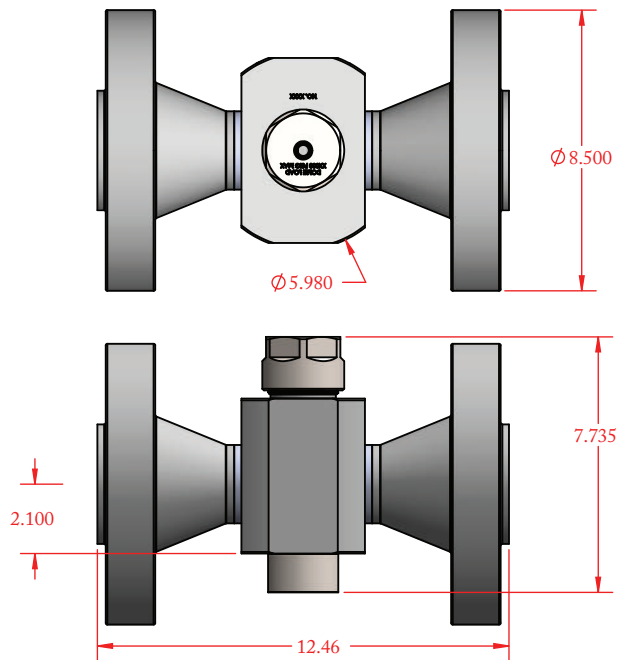


GRAYLOC HUB CONFIGURATION



30-10638-XXX-11 (SHOWN ABOVE)

2" 1500# RF FLANGE CONNECTION



30-10638-XXX-15 (SHOWN ABOVE)

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PART #	-	1	2	3	-	4 5	-	MODS
30-10638	-				-		-	

1	SEAT MATERIAL
1	Vespel SP-1®
2	PEEK®
3	PCTFE (3600 PSIG MAX)
2	O-RING MATERIAL
1	Buna-N
2	Viton®
3	EPDM
3	DOME PORT
1	1/4" FNPT
2	1/4" SAE J1926
3	1/4" SAE AS5202

4 5	INLET/OUTLET PORT SIZE/TYPE
11	GRAYLOC 2" GR14 (WELDED)
21	GRAYLOC 2" GR20 (WELDED) (3600 PSIG MAX)
12	1" FNPT
22	1.5" FNPT
32	2" FNPT (3600 PSIG MAX)
13	1" SAE AS5202
23	2" SAE AS5202 (3600 PSIG MAX)
14	1" SAE J1926
24	2" SAE J1926 (3600 PSIG MAX)
15	2" 1500# RF (3600 PSIG MAX)
25	2" 2500# RF

MODIFICATIONS	
BLANK	NONE
E1	1/4" FNPT external sensing port
E2	1/4" SAE J1926 external sensing port
E3	1/4" SAE AS5202 external sensing port
SM	Surface mount

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