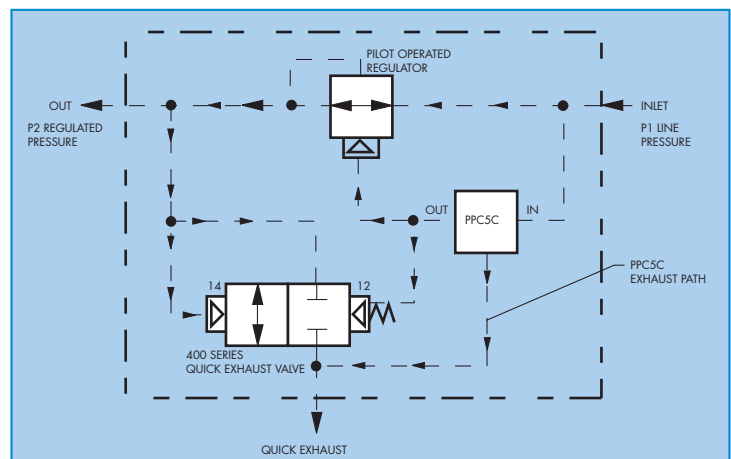


Section 2 Proportional Quick Exhaust

OPERATION OF THE PQE

1. The pilot operated regulator and the PPC5C are both fed from a common inlet.
2. The "out" port of the PPC5C sends pressure to the pilot port of the pilot operated regulator and to the "12" end of the 400 Series Quick Exhaust Valve. The secondary pressure of the pilot operated regulator is sent to the output port of the block and it is also sent to the "14" end and inlet of the 400 Series Quick Exhaust Valve.
3. The outlet pressure of the PPC5C along with the memory spring in the 400 Series valve will keep the valve in a closed state as the unit increases pressure.
4. To reduce pressure, drop the PPC5C's signal. This will lower the pressure on the "12" end of the 400 Series valve. The "14" end of the 400 Series valve now has higher pressure causing a snap-action shifting of the 400 Series valve which will quickly exhaust the downstream pressure to the new selected pressure.

Note: Below 20 psi, the P.Q.E. has reduced exhausting capabilities due to the memory spring in the 400 Series Quick Exhaust Valve and modifications to the pilot operated regulator.





Proportional quick exhaust

Port size	Flow [Max] [Cv/Nl/min]	Individual mounting	Series
1/4" - 3/8"	1.3/1300	analog	

OPERATIONAL BENEFITS

1. Accurate pressure control.
2. Fast response.
3. High flow.
4. Quick exhaust function.
5. Unaffected by change in line pressure.
6. Long life.
7. Designed to meet Nema 4 specifications.
8. Analog control.
9. Analog or TTL feedback.
10. Closed loop system.

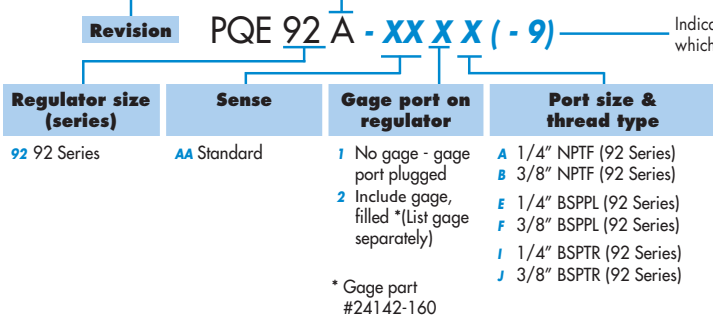


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HOW TO ORDER

PROPORTIONAL QUICK EXHAUST



Indicates unit is to be assembled with PPC, which is ordered separately

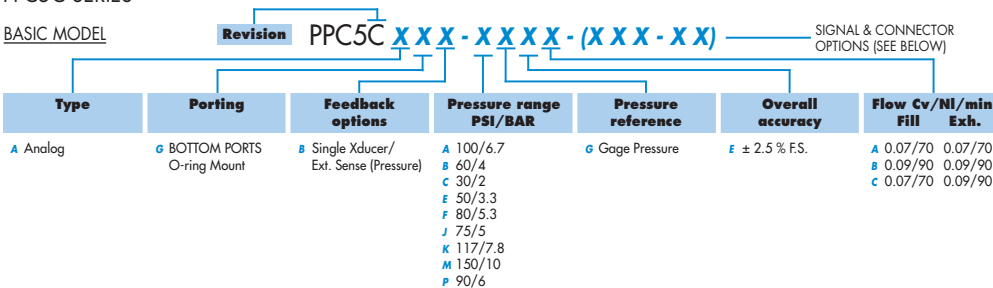
EXAMPLE : PQE92A - AA1B - 9
PPC5C - AGB- AGEA - BBB - C0 - 9

NOTE :

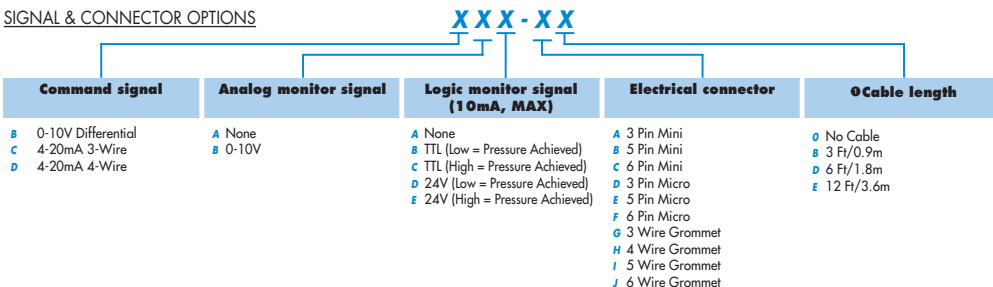
PPC5C must be ordered separately. Reference "How to order" for the analog PPC5C.

PPC5C SERIES

BASIC MODEL



SIGNAL & CONNECTOR OPTIONS



IMPORTANT ! READ NOTES BEFORE ORDERING

● For options "0" (no cable), choose electrical connector options "A" through "F" only.

PPC TYPE

Analog, single transducer external sense, bottom O-ring mount

ELECTRICAL DATA

Reference PPC5C specifications

PHYSICAL DATA

Connector :	Reference PPC5C specifications
Enclosure :	Aluminum, sealed
Mounting :	Any plane
Ambient temperature range :	0 to 50°C (32°F to 120°F)

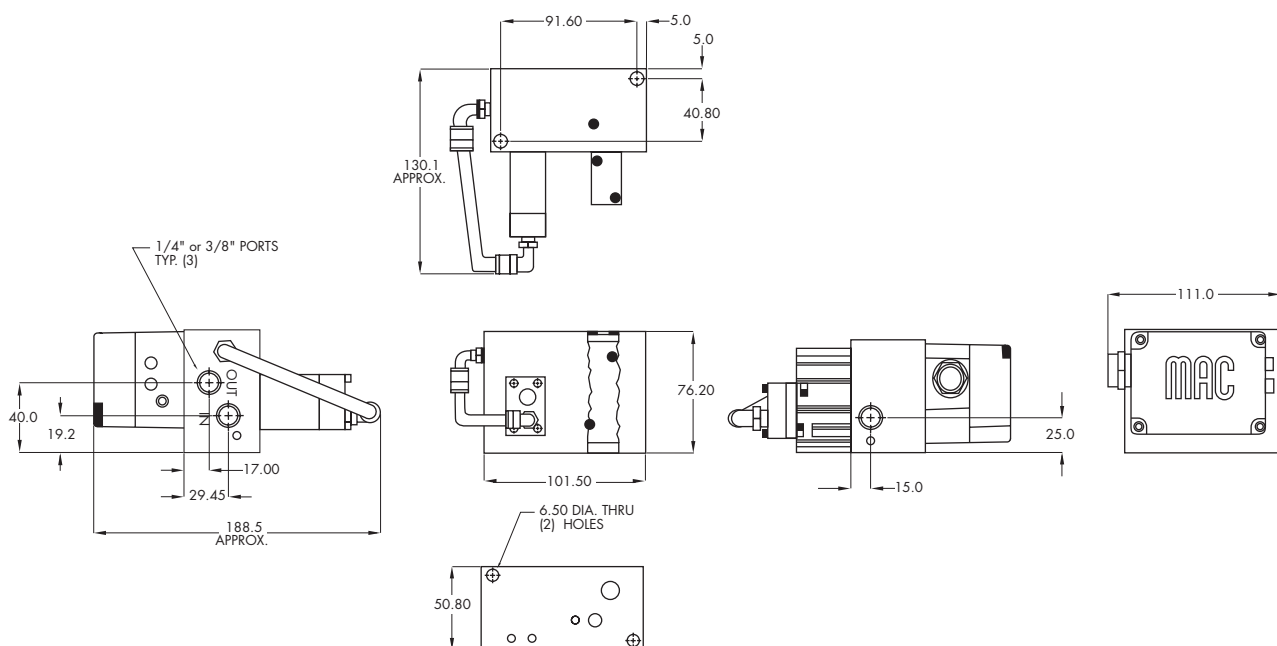
PNEUMATIC DATA

Inlet pressure :	120 PSI max	
Fluids :	Air or inert gases	
Lubrication :	Not required. However, if used, a medium aniline point oil is recommended	
Filtration :	40 micron	
*Output pressure :	20 to 100 PSI	
Overall accuracy :	2.5% full scale	
All ports :	1/4, 3/8, NPTF, BSPPL, BSPTR	
Flows :		
Output flow :	1/4" ports: Cv 0.94	3/8" ports: Cv 1.2
Exhaust flow :	1/4" ports: Cv 1.3	3/8" ports: Cv 1.3
**Output volume requirements :	Port size	Output volume at end of output pipe
		Minimum length of output pipe
	1/4"	100 Cu. in. and larger 50 to 99 Cu. in.
		12" 50"
	3/8"	100 Cu. in. and larger 50 to 99 Cu. in.
		24" 50"

* The quick exhaust portion of the PQE was not designed to be used at pressures below 20 PSIG. The PQE will exhaust below 20 PSIG but at a very reduced rate. Also, the minimum pressure change (from higher to lower) that will allow the quick exhaust to function is 3 PSIG.

** This is the minimum output volume and output piping required to keep the unit stable. Configurations below these minimums should be tested on a case by case basis.

DIMENSIONS





Proportional quick exhaust

Port size	Flow [Max] [Cv/NI/min]	Individual mounting	Series
1/4" - 3/8"	1.3/1300	digital	

OPERATIONAL BENEFITS

1. Accurate pressure control.
2. Fast response.
3. High flow.
4. Quick exhaust function.
5. Unaffected by change in line pressure.
6. Long life.
7. Designed to meet Nema 4 specifications.
8. Digital control.
9. Analog or TTL feedback.
10. Closed loop system.

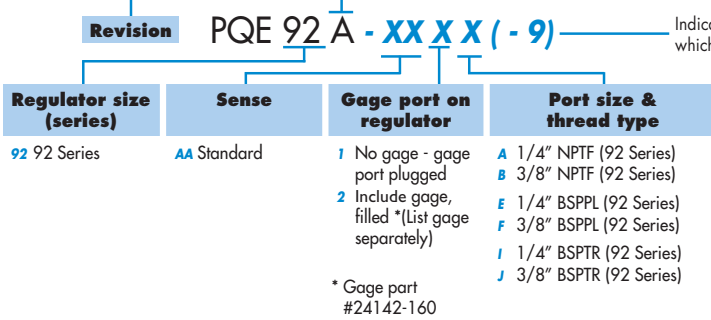


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92

HOW TO ORDER

PROPORTIONAL QUICK EXHAUST



Indicates unit is to be assembled with PPC, which is ordered separately

EXAMPLE : PQE92A - AA1B - 9
PPC5C DGB- AGEA - AAA - 9

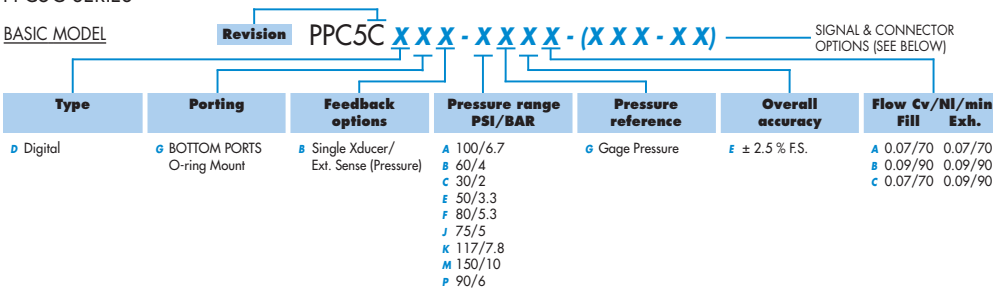
92 Series style regulator, standard sense, no gage, 3/8" NPTF ports. Digital PPC, bottom o-ring mount, external sense, 100 psi range, gage reference, 2.5% accuracy, with .07 flow (fill and exhaust), 4 bit sinking/positive command signal, no analog or logic signal, 6-pin mini connector, no cable.

NOTE :

PPC5C must be ordered separately. Reference "How to order" for the digital PPC5C.

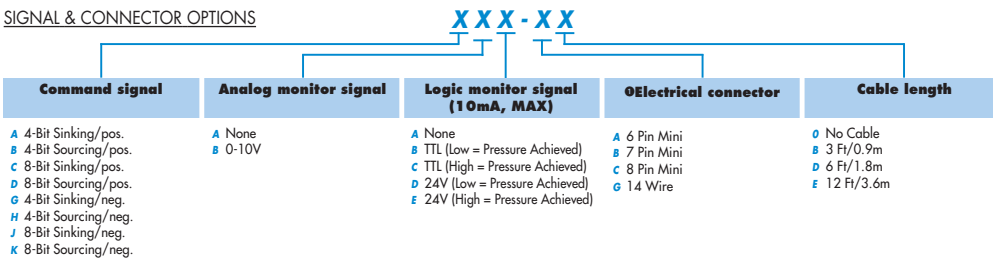
PPC5C SERIES

BASIC MODEL



SIGNAL & CONNECTOR OPTIONS (SEE BELOW)

SIGNAL & CONNECTOR OPTIONS



IMPORTANT ! READ NOTES BEFORE ORDERING

- All connector options are available with the 4-Bit command signal. Options "A", "B" and "C" can be supplied with or without a cable. Option "G" requires a cable. Select length from table. The 4-Bit command signal without the analog monitor signal (AMS) or logic monitor signal (LMS) requires a 6 Pin connector. For the AMS or LMS options, add one pin for each. The 8-Bit command signal can only use option "G". Select cable length from table.

PPC TYPE

Digital, single transducer external sense, bottom O-ring mount

ELECTRICAL DATA

Reference PPC5C specifications

PHYSICAL DATA

Connector :	Reference PPC5C specifications
Enclosure :	Aluminum, sealed
Mounting :	Any plane
Ambient temperature range :	0 to 50°C (32°F to 120°F)

PNEUMATIC DATA

Inlet pressure :	120 PSI max	
Fluids :	Air or inert gases	
Lubrication :	Not required. However, if used, a medium aniline point oil is recommended	
Filtration :	40 micron	
*Output pressure :	20 to 100 PSI	
Overall accuracy :	2.5% full scale	
All ports :	1/4, 3/8, NPTF, BSPPL, BSPTR	
Flows :		
Output flow :	1/4" ports: Cv 0.94	3/8" ports: Cv 1.2
Exhaust flow :	1/4" ports: Cv 1.3	3/8" ports: Cv 1.3
**Output volume requirements :	Port size	Output volume at end of output pipe
		Minimum length of output pipe
	1/4"	100 Cu. in. and larger 50 to 99 Cu. in.
		12" 50"
	3/8"	100 Cu. in. and larger 50 to 99 Cu. in.
		24" 50"

* The quick exhaust portion of the PQE was not designed to be used at pressures below 20 PSIG. The PQE will exhaust below 20 PSIG but at a very reduced rate. Also, the minimum pressure change (from higher to lower) that will allow the quick exhaust to function is 3 PSIG.

** This is the minimum output volume and output piping required to keep the unit stable. Configurations below these minimums should be tested on a case by case basis.

DIMENSIONS

