

## MODEL PCX PRESSURE COMPENSATORS

*Designed to balance the internal pressure of oil filled subsea equipment and hydraulic systems with the ambient pressure of the surrounding sea water, Tecnadyme's PCX pressure compensators have been proven in the world's harshest subsea environments for many years.*

*The displaced volume of the PCX pressure compensators ranges from 1.3 cubic inches (0.021 liters) for the Model PC1X to 587 cubic inches (9.6 liters) for the PC12X unit.*

*All PCX pressure compensators are rated for operation to full ocean depth.*

*Employing a spring loaded rolling diaphragm, made from a high strength fabric reinforced neoprene material, the PCX pressure compensators maintain the internal oil pressure 4-7psi (0.25-0.5 bar) above ambient. In the event of a leak in the customer's oil filled system, the slightly higher pressure of the internal oil prevents water intrusion, thereby protecting the internal equipment from water damage. And since the rolling diaphragm of the PCX pressure compensators eliminates all piston and rod seals, leaks are virtually eliminated for the highest reliability.*

*A telescoping stainless steel rod, visible in the photo, provides instant visual feedback of the piston position and the remaining volume in the compensator.*

*The housings of the PCX pressure compensators are manufactured from hard anodized 6061-T6 aluminum and the spring and all hardware are made from passivated 18-8 stainless steel. Optional housing materials include Type 303/321 stainless steel and 3Al2.5V titanium. Titanium assemblies also utilize titanium hardware and springs.*

*All sizes of the PCX pressure compensators can be fitted with an internal magnetically tripped reed switch to indicate when the resevoir volume is fully depleted. All sizes can also be fitted with internal pressure sensors, water detectors and temperature sensors.*

*The PC6X and larger sizes of PCX pressue compensators can be fitted with internal string potentiometers that return an accurate (to within 0.5mm) analog signal indicating remaining compensator volume.*

*The PC10X, PC11X and PC12X can also be fitted with internal pressure accumulators, used to store a reserve volume of high pressure (3,000psi, 210 bar) hydraulic oil for hydraulic power unit applications.*

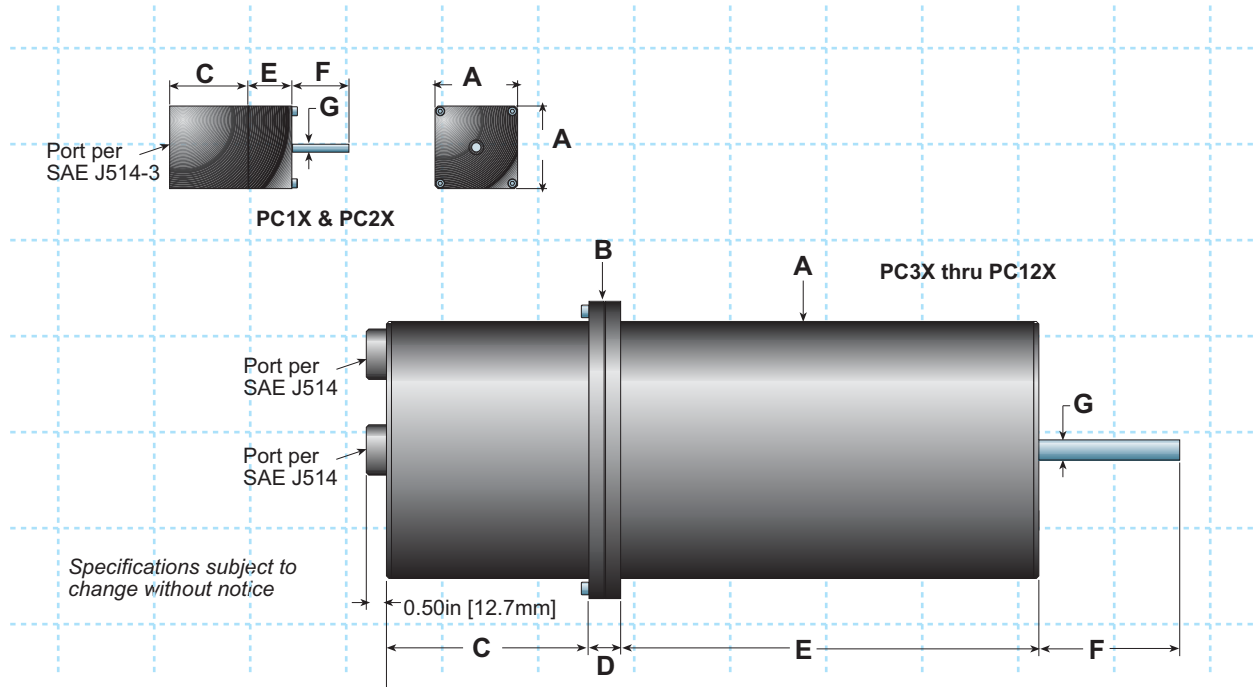
*Custom variations of all PCX models include hydraulic port fittings to suit customer systems as well as additional port fittings and increased residual volume so the that PCX compensator can also serve as the active hydraulic tank in hydraulic power applications.*

*The PCX pressure compensators are compatible with all common hydraulic oils, including minerall oil, Shell Tellus (and other ISO compatible hydraulic fluids) and Mil-H-5606 hydraulic fluid (often called Skydrol).*

*Tecnadyne also manufactures a full line of hydraulic power units in which the hydraulic pump is mounted in one end of the compensator and additional fluid volume is provided so that the pump and compensator assembly also serves as the tank.*



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Tecnadyne Part Number	Disp., cu. inch. liters	A Cyl OD, inch mm	B Flange OD, inch mm	C Cap Length, inch mm	D Flange Thick, inch mm	E Cyl. Length, inch mm	F Rod Length, inch mm	G Rod Dia, inch mm
PC1X	1.3	1.750 sq		0.870		1.680	1.240	0.164
	0.021	44.5 sq		22.1		42.7	31.5	4.2
PC2X	3.5	2.000 sq		1.370		2.680	2.240	0.164
	0.057	50.8 sq		34.8		68.1	56.9	4.2
PC3X	13.6	2.500	3.250	2.120	0.400	4.180	3.740	0.250
	0.223	63.5	82.6	53.8	10.2	106.2	95.0	6.4
PC4X	19.2	2.750	3.500	2.370	0.400	4.680	4.240	0.250
	0.315	69.9	88.9	60.2	10.2	118.9	107.7	6.4
PC5X	23.2	3.000	3.750	2.450	0.400	4.925	4.400	0.250
	0.381	76.2	95.3	62.2	10.2	125.1	111.8	6.4
PC6X	65.0	4.250	5.000	3.575	0.525	7.050	6.400	0.500
	1.065	108.0	127.0	90.8	13.3	179.1	162.6	12.7
PC7X	82.3	4.500	5.250	3.865	0.525	7.610	6.980	0.500
	1.349	114.3	133.4	98.2	13.3	193.3	177.3	12.7
PC8X	105.5	5.000	5.750	4.095	0.775	8.205	7.440	0.500
	1.729	127.0	146.1	104.0	19.7	208.4	189.0	12.7
PC9X	149.6	5.500	6.250	4.595	0.775	9.205	8.440	0.500
	2.451	139.7	158.8	116.7	19.7	233.8	214.4	12.7
PC10X	271.0	6.500	7.250	5.720	0.775	11.330	10.440	0.500
	4.441	165.1	184.2	145.3	19.7	287.8	265.2	12.7
PC11X	451.6	8.250	9.000	5.970	1.025	11.830	10.940	0.500
	7.400	209.6	228.6	151.6	26.0	300.5	277.9	12.7
PC12X	586.8	8.750	9.500	6.720	1.025	13.330	12.440	0.500
	9.616	222.3	241.3	170.7	26.0	338.6	316.0	12.7