

CTV-MEG®

DATASHEET
CTV-MEG 1" CONN.



CTV-MEG®

Basic Technical Specification

Fluids	
Types	Mono Ethylene Glycol
Minimum flow at 60 bar dP / 870 psi	3 liters/min (0.8 gal/min)
Maximum flow at 60 bar dP / 870 psi	200 liters/min (53 gal/min)
Design Viscosity	Approx. 23.5 cSt [4 °C] with 90/10 % MEG/water mixture
Density	Approx. 1105 kg/m ³ with 90/10 % MEG/water mixture (69 lb/foot ³)
Basic design data	
Working pressure	345 bar (5.000 psi)
Proof test pressure	690 bar (10.000 psi)
Ambient pressure	3000 m water depth (10.000 feet)
Max operating pressure across CTV-MEG	200 bar (2.900 psi)
Design temperature	-10 to + 70 °C (14 °F to 158 °F)
Operating temperature subsea	-5 to + 40 °C (23 °F to 104 °F)
Storage temperature	-20 to + 50 °C (-4 °F to 122 °F)
Flow ratio	Up to 15:1
Contamination	Recommended cleanliness better than SAE AS4059 10B-F, operability up to 12B-F. Min / Max flow opening Ø1 mm / Ø4.5 mm. (0.039"/0.18")
Dimensions L x D	CTV-MEG Assembly Drawings
Weight	Approx. 87 kg dry / 73 kg submerged (192 lbs/161 lbs)
Materials of construction	
External	SAF 2507, Ni50
Wetted parts	SAF 2507, AISI 316, Hastelloy C (pressure transducer inlets), Ni 50, Ni 60
Seals	NBR, POM C, Chemraz, PEEK
Operation	
Control	Electrical remote operated
Drive	Stepper motor with planetary gear
Flow Regulation	Integrated Flow regulation SW function
Electrical motor safety margin	CTV-MEG will operate at 10% above max. operating diff. pressure 200 bar. (2.900 psi)
Time for full travel	Less than 35 minutes
ROV interface	T-bar (standard), API 17D, D-handle, TBA
Installation torque ROV	Min / Max - 120 / 200 Nm. (88.5 / 147.5 ft.lbs)
Maximum 'Not to exceed' torque	220 Nm (162 ft.lbs)
Mounting	Vertical
Flow Meter	
Type	Absolute pressure transducers at SP (upstream) and BP (downstream) Flow Calculated by differential pressure(DP) over the valve vs. valve position.
Measuring accuracy	Better than +/- 5 % of flow rate range in range up to 10 l/min. (2.6 gal/min) Better than +/- 10 % of flow rate range in range above 10 l/min. (2.6 gal/min)
Restriction	None
Position Indication	
Position Indicator	High precision Calculation of position based on stepper motor drive pulses.
Proximity Swith	Integrated prox for movement verification.
Electrical Interfaces	
Connection	Tronic Digitron 4-pin MCE connector.
Wires	Flying leads, 4 off (all 20 AWG)
Power	24 VDC +/- 4 V, 12W nominal when actuator operating, typically 3W idling
Controller protocol	Modbus RTU / CanBus
Controller signals, communication standard	IEC Standard RS485 (2 wires)
Software Download	The Controller supports In Application Programming (IAP).
Hydraulic Interfaces	
Connection	National Couplers Type 1" UO-Series (Metal/Chemraz seal coupler).
Receptacle	
Material	AISI 316
Dimensions L x W x H	1150 x 279.4 x 279.4 mm (45.3"x11"x11") [See Receptacle house Assembly Drawing]
Weight	Approx. 96.5 kg dry / 85 kg submerged (213 lbs / 187 lbs)