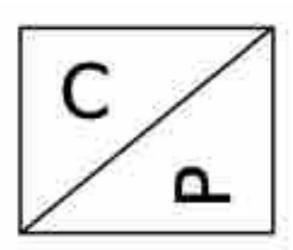
### Pressure transducer



4. Pressure transducer

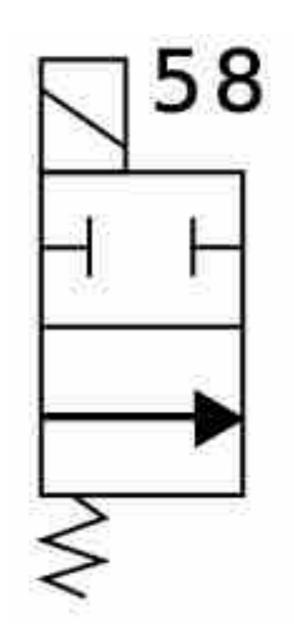


TDH40

## Solenoid valve



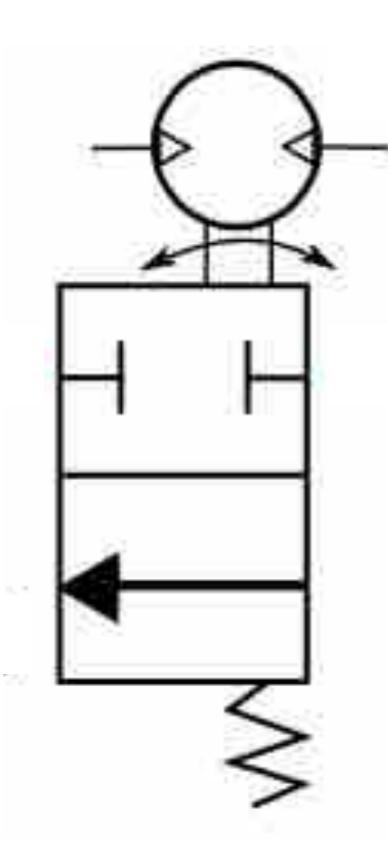
# Solenoid valve High pressure vent valve





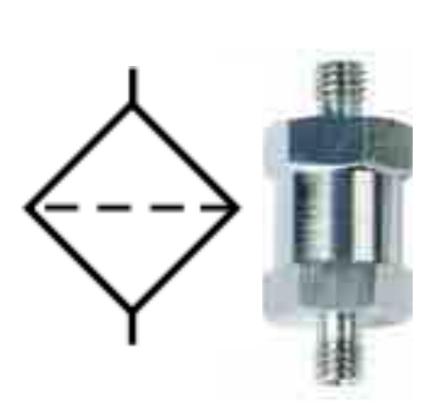
58. Fuel Vent Valve (solenoid) Clark cooper solenoid valve

#### **Custom solenoid valve**

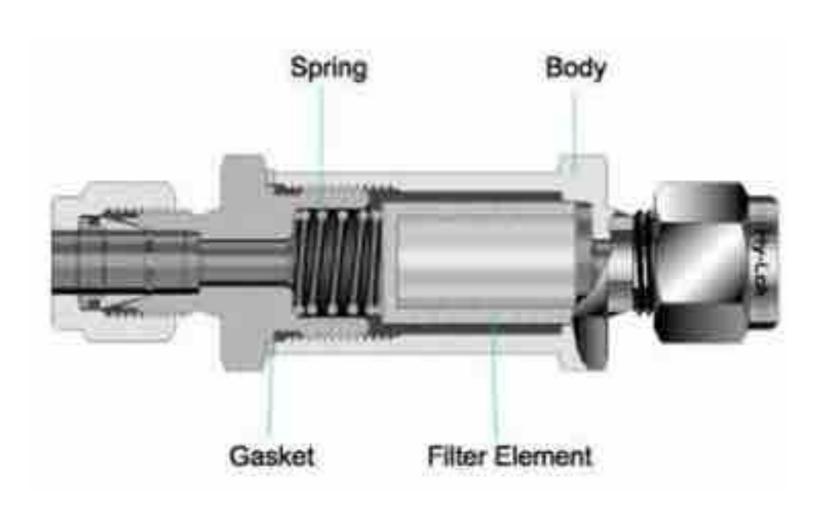


68. Main Fuel Valve - Electrically actuated Ball valve assembly (In house product)

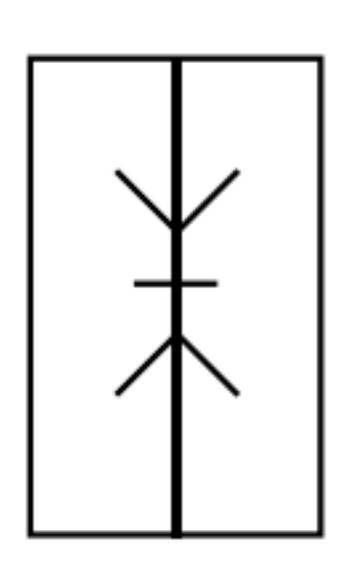
### Micron inline filter







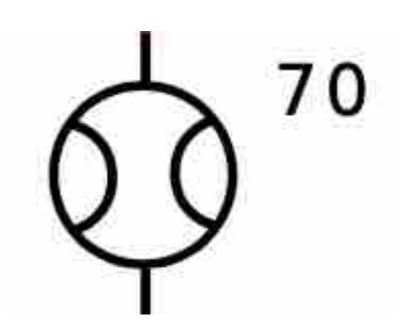
#### **Quick disconnect**



46. Swagelock Quick disconnect (SSQF4B4PM , SSQF4S4PM)



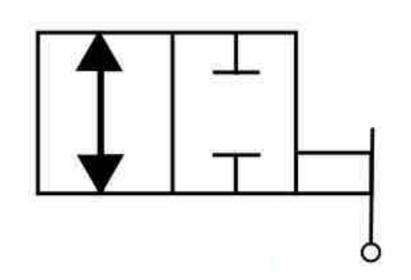
## Flow meter





70. Flowmeter

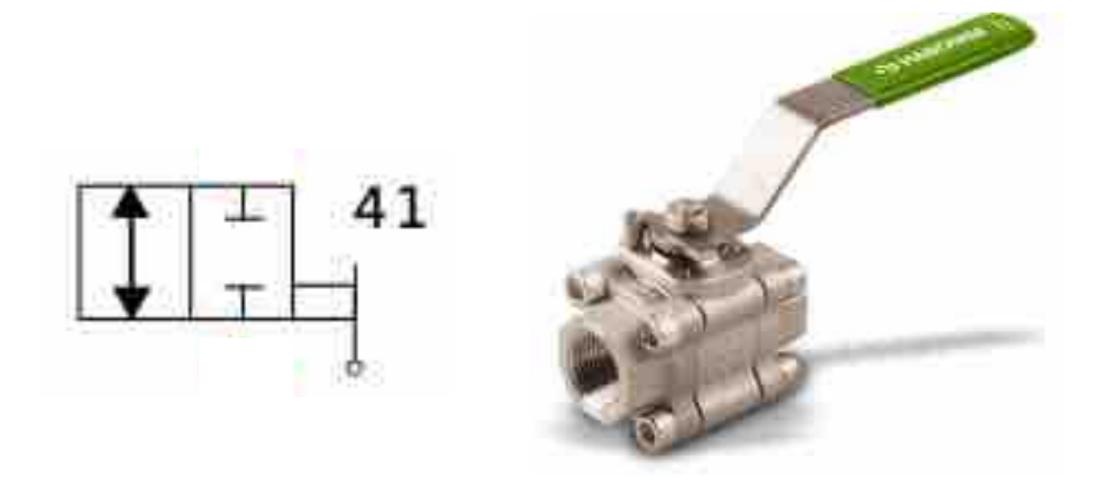
## **Ball valve**





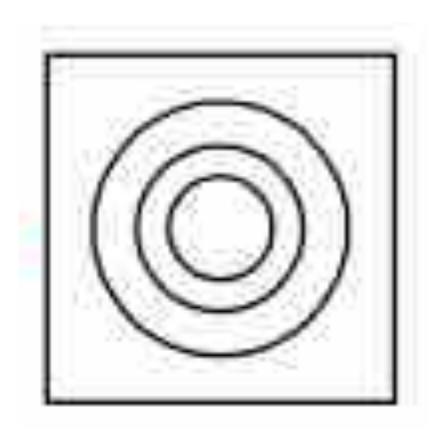
5. Ball Valve1/2 NPT Female

# Ball valve (LOX compatible)



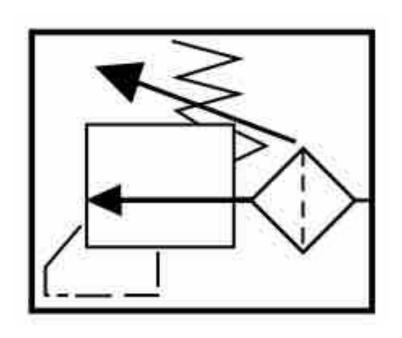
41. HABONIM
Three piece ball valve
05C47C- 6666AT/NPT-LD

#### **Custom ball valve**

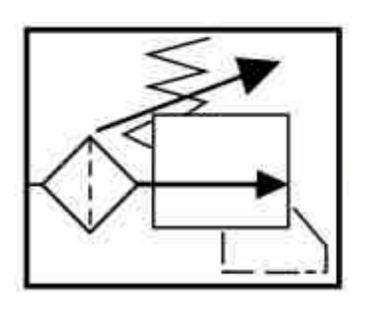


- 68. Main Fuel Valve
- Electrically actuated Ball valve assembly (In house product)

## Pressure regulator



7. Pressure Regulator (LOX side)

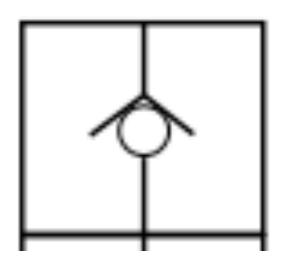


11. PressureRegulator(Fuel side)



Pressure regulator

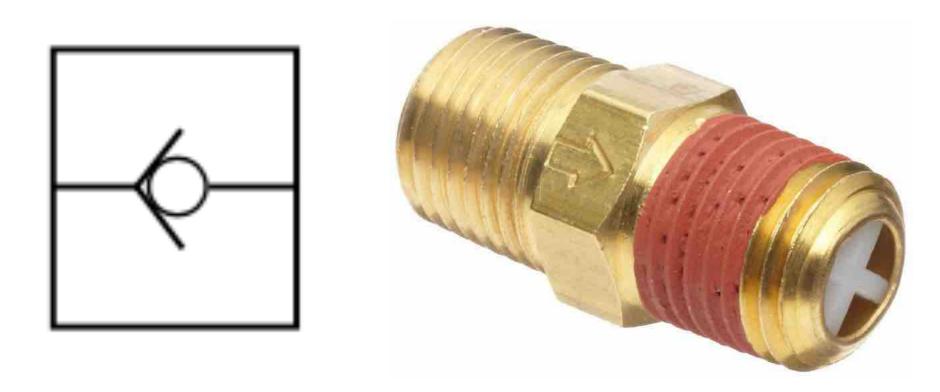
#### **Check valve**





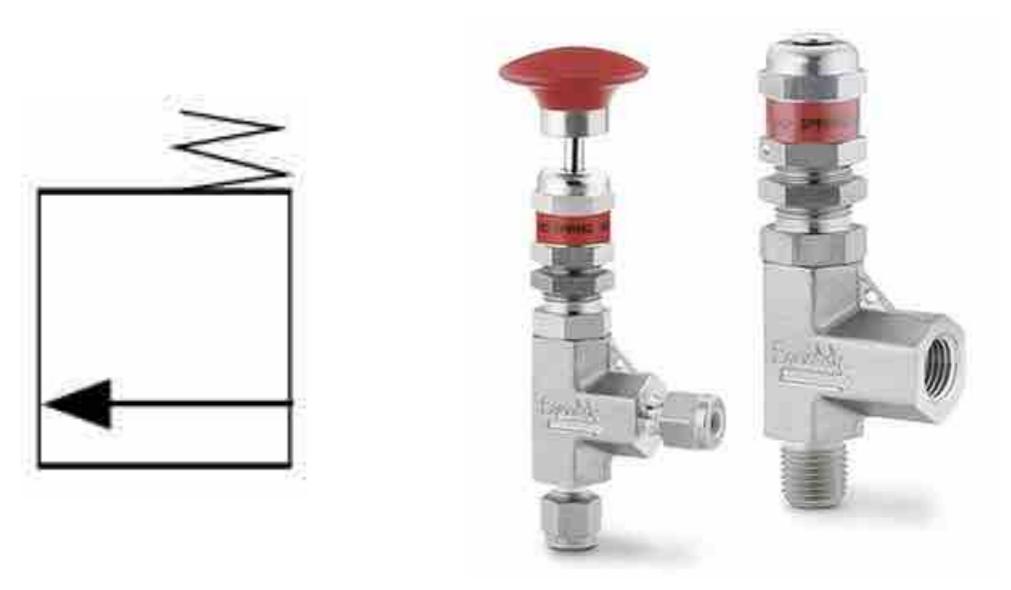
10. Poppet Check Valve,Fixed Pressure,1/4 in. FNPT,1 psig (0.07 bar)

# Check valve (high pressure back-flow prevention)



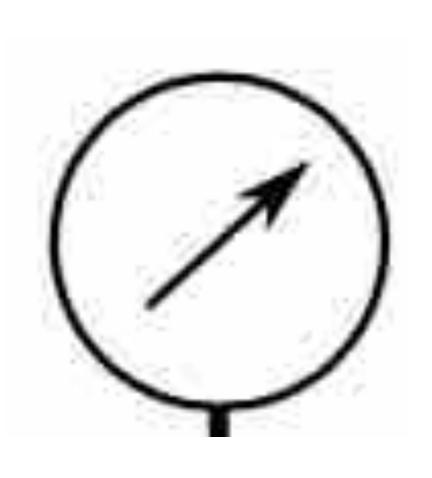
40. Compact High-Pressure Backflow-Prevention Valve for Water, Brass Body, 1/4 NPTF Male

## **Relief valve**



15. High Pressure Relief Valve - 1/2 inch

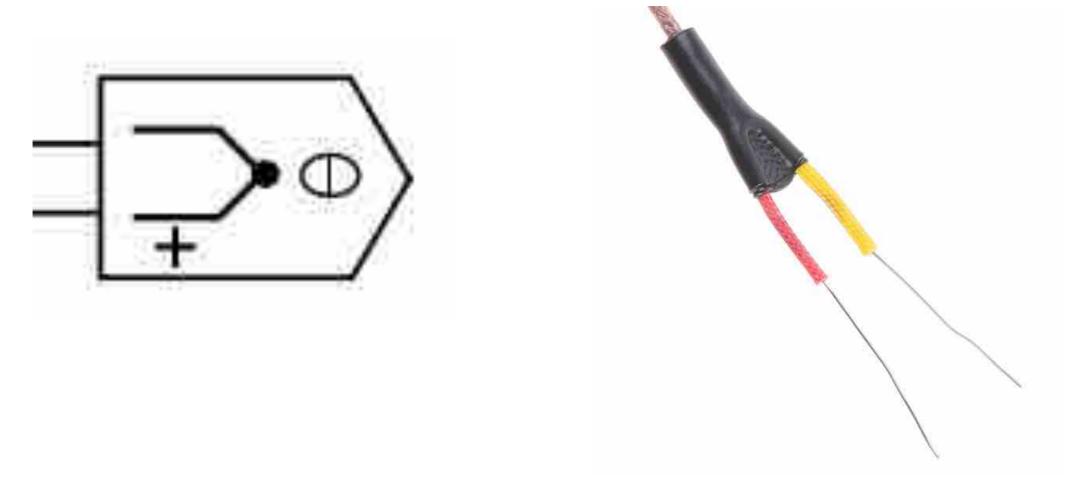
# Pressure gauge



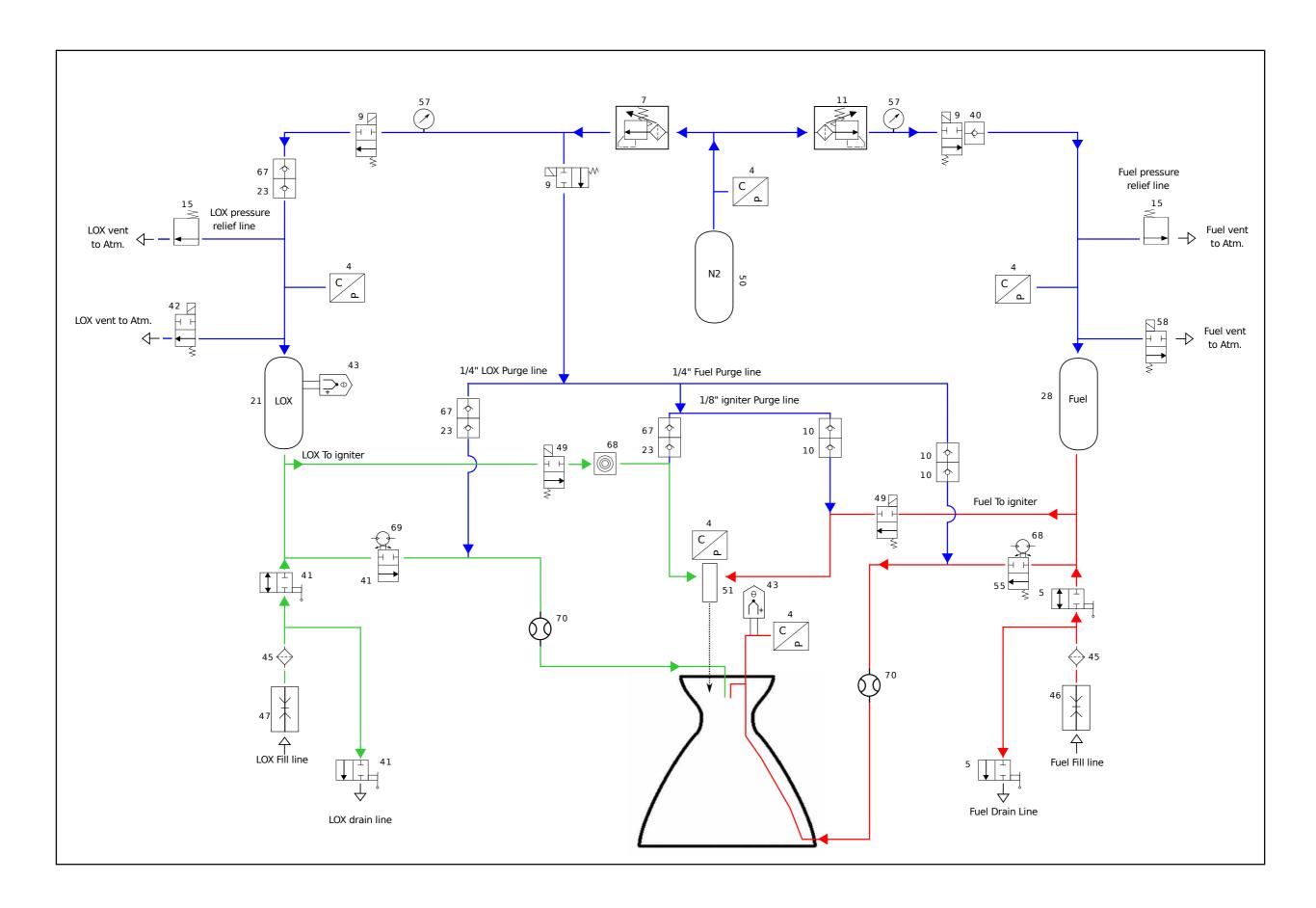


57. Winters600 PSI Pressure Gauge

# Thermocouple Type-K



43. Sparkfun SEN-00251 Temp sense for LOX tank



PSAS	PID Ref #	Part #	Qty	Manufacturer / Distributor	Description
Pressure Panel	4	TDH40	2	Transducers Direc	Pressure Transducer
Test Stand	4	TDH40	3	Transducers Direc	Pressure Transducer
Test Stand	5	4024T730	2	McMaster-Carr	Ball Valve 1/2 NPT Female
Pressure Panel	7	KCY1JRA412A20000	1		Pressure Regulator (LOX side)
Pressure Panel	9	8262H019VDC12	3		ASCO 8262H019 12V DC
Test Stand	10	B-4C4-1	2	Swagelok	Poppet Check Valve, Fixed Pressure, 1/4 in. FNPT, 1 psig (0.07 bar)
Pressure Panel	11		1		Pressure Regulator (Fuel Side)
Test Stand	15	HPRV-500-(pressure)	2		High Pressure Relief Valve - 1/2 inch
Test Stand	21	8HD4G	1		LOX Tank
Test Stand	28	C020	1		Ethanol Tank
Test Stand	40	46105K690	1	McMaster-Carr	Compact High-Pressure Backflow-Prevention Valve for Water, Brass Body, 1/4 NPTF Male
Test Stand	41	05C47C- 6666AT/NPT-LD	3		LOX compatable Ball Valve
Test Stand	42	E29LR62	1	Magnatrol	12 V DCSOLENOID VALVE
Test Stand	43	SEN-00251	2	Sparkfun	Temp sense for LOX tank
Test Stand	45	98355K863	2	McMaster-Carr	Micron Inline Filter
Pressure Panel	46	SSQF4B4PM	2	Swagelock	Quick disconnect
Pressure Panel	47	SSQF4S4PM	2	Swagelock	Quick disconnect
Igniter	49	D2011-SB5-T-TO-LC- C203	5	Gems	https://drive.google.com/open? id=0BzZpualyKAXnLS1nNEk2MTB 1TzA
Test Stand	50	Nitrogen K-Bottle	1		Nitrogen K-Bottle
Igniter	51	Custom Printed Sintered Stainless	1	Shapeways	Design in progress
Test Stand	55	Sharpe 39036	1		1/2 in ball valve, main fuel valve
Pressure Panel	57	PFP663ZRR1	2	Winters	Winters 600 PSI Pressure Gauge
Test Stand	58	Fuel Vent Valve (solinoid)	1	Clark Cooper	Fuel Vent Valve (solinoid)
Test Stand	67	LOX compatible check valve	6		
Test Stand	68	Main Fuel Valve	1	In house project	Main Fuel Valve - Electrically actuated Ball valve assembly
Test Stand	69	Main LOX valve	1	In house project	Main LOX Valve - Electrically actuated Ball valve assembly
Test Stand	70	Flow meter	1	I	Flow meter