



## RD\*T-Q\*\* Instruction Manual

### Instructions

The valves are safety valves that set and limit the maximum operating pressure. The setting may not be changed.

The valves must only be used in mineral oil. The approved temperature depends on sealing material chosen.

### Maintenance

No maintenance is required.

### Port Location

See attached drawing for port configuration.

### Function

The pressure at port 1 of the valve is effective on the bottom side of the piston. Via holes and cross holes it is also effective in the spring chamber and therefore on the upper side of the piston. The effective area on the bottom side is given by the seat diameter. The effective area on the upper side is given by the seal diameter. Since the seat diameter is larger than the seal diameter the piston is unbalanced. A pressure differential from port 1 to port 2 pushes the piston against the spring. The preload of the spring determines the crack pressure of the valve.

If the pressure differential times the effective area exceeds the setting of the valve the piston moves and opens a flow path from port 1 to port 2.

### Safe Operating Limits

Please see attached drawing for designed pressure ranges, capacity, and operating temperature limits.

Pressure surge must not exceed 1.1 times the maximum allowable pressure.

### Valve installation

The valve is a cartridge valve. It needs to be installed in the matching cavity with the torque given on the data sheet (RDDT: cavity T-10A, torque 45-50 Nm, RDFT cavity T-3A, 60-65 Nm). The working pressure to be limited needs to be connected to port 1 of the valve.

### Commissioning

No commissioning is required since the valve is pre-set.

### Inspection

The end user is responsible for establishing an inspection program if required by government regulations.

### Marking

See included drawing for marking information. Date code explanation shown at right.

Date Codes			
Year	Months	Days	
Year ↓ SAA6 ↑↑ Month      Day	A = January	A = 1st	Q = 17th
	B = February	B = 2nd	R = 18th
	C = March	C = 3rd	S = 19th
	D = April	D = 4th	T = 20th
	E = May	E = 5th	U = 21st
	F = June	F = 6th	V = 22nd
	G = July	G = 7th	W = 23rd
	H = August	H = 8th	X = 24th
	I = September	I = 9th	Y = 25th
	J = October	J = 10th	Z = 26th
	K = November	K = 11th	5 = 27th
	L = December	L = 12th	6 = 28th
	M = 13th	7 = 29th	
	N = 14th	8 = 30th	
	O = 15th	9 = 31st	
	P = 16th		

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