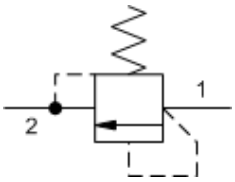
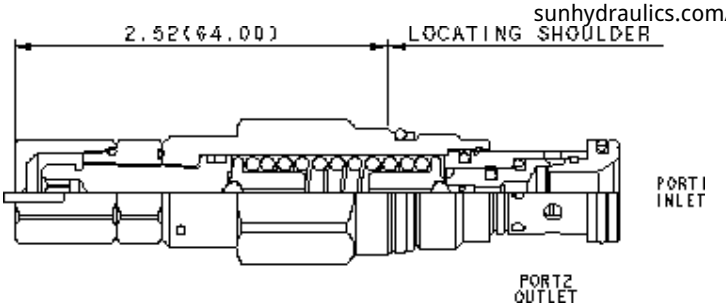
MODEL
RDDT

Direct-acting relief valve, CE marked
SERIES 1 / CAPACITY: 75 L/min. / CAVITY: T-10A

sunhydraulics.com/model/RDDT





CONFIGURATION

Q	Control	Capped and Lockwired
W	Adjustment Range	211 - 314 bar (211 - 314 bar)
N	Seal Material	Buna-N

Direct-acting relief cartridges are normally closed, pressure-limiting valves used to protect hydraulic components from pressure transients. When the pressure at the inlet (port 1) reaches the valve setting, the valve starts to open to tank (port 2), throttling flow to limit the pressure rise. These valves are smooth and quiet, essentially zero leak, dirt tolerant, immune to silting and are very fast.

The CE marked valve is a safety valve that meets the requirements of the European Directive for Pressurized Devices (PED) 2014/68/EU. The valve setting represents the excess operating pressure at which the valve opens. Valve capacity can be determined from the performance curve. It shows an approved flow which depends on the excess operating pressure. As a requirement of the PED, the system pressure at the maximum approved flow is a maximum of 10% above the excess operating pressure.

TECHNICAL DATA

NOTE: DATA MAY VARY BY CONFIGURATION. SEE CONFIGURATION SECTION.

Cavity	T-10A
Series	1
Capacity	75 L/min.
Maximum Valve Leakage at Reseat	0,7 cc/min.
Response Time - Typical	2 ms
Reseat	>90% of setting
Adjustment - No. of CW Turns from Min. to Max. setting	5
Valve Hex Size	22,2 mm
Valve Installation Torque	41 - 47 Nm
Adjustment Screw Internal Hex Size	4 mm
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990310007
Seal kit - Cartridge	Viton: 990310006
Model Weight	0.19 kg.

CONFIGURATION OPTIONS

Model Code Example: RDDTQWN

CONTROL (Q)	ADJUSTMENT RANGE (W)	SEAL MATERIAL (N)
Q Capped and Lockwired	**W** 211 - 314 bar (211 - 314 bar)	**N** Buna-N
	A 100 - 210 bar (100 - 210 bar)	**V** Viton
	B 90 - 99 bar (90 - 99 bar)	
	C 315 - 422 bar (315 - 422 bar)	

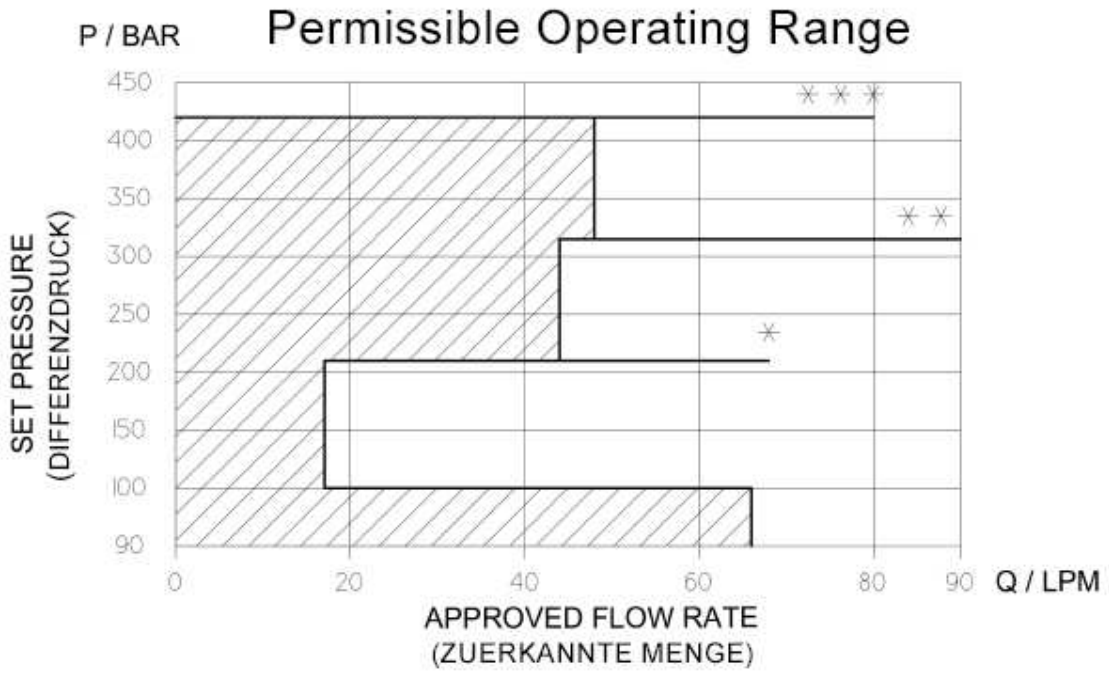
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TECHNICAL FEATURES

- Standard settings for preset valves include:
  - A adjustment range: 100 bar, 140 bar, 160 bar and 210 bar
  - W adjustment range: 250 bar
  - C adjustment range: 330 bar

  Other settings are available upon request.
- At this time RDDT is the only Sun relief valve that is CE marked.
- Each delivery includes:
  - a certificate that documents the pressure setting of the valve and the approved flow rate
  - a declaration of conformity in accordance with the Pressure Equipment Directive (PED) 2014/68/EU
  - an instructions manual
- Pressure settings from 90 bar up to 422 bar are approved and certified by TÜV
- Will accept maximum pressure at port 2; suitable for use in cross port relief circuits.
- Valve is relatively insensitive to varying oil temperatures and oil borne contamination.
- Suitable for use in load holding applications.
- Back pressure on the tank port (port 2) is directly additive to the valve setting at a 1:1 ratio.
- The minimum tensile strength of the material of the manifold that the cartridge is screwed into is 65,000 PSI (448 MPA).
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.

PERFORMANCE CURVES



APPROVED FLOW RATES:
(ZUERKANNTE MENGE)

*	68 LPM @ 210 bar
**	90 LPM @ 315 bar
***	80 LPM@ 420 bar

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