

Throttle valve type ED, restrictor check valve type RD and RDF

Throttle valves are a type of flow valve. They affect the volumetric flow for single and double-acting consumers.

The valve type ED, RD and RDF can be integrated directly in the line.

Features and benefits:

- Sensitively adjustable
- Wear-resistant

Intended applications:

- General hydraulic systems



Nomenclature:	Throttle Restrictor check valves
Design:	Individual valve for pipe mounting Screw-in valve
Adjustment:	Manually adjustable (handle, adjusting knob) Tool adjustable
p_{max}:	500 bar
Q_{max}:	12...130 lpm

Design and order coding example

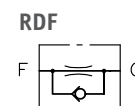
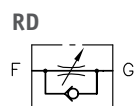
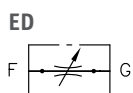
RD 11 - K
RDF 21 /1,0

- Adjustability**
- Type ED and RD only
 - Without labelling = manually (wing bolt/lock nut)
 - K = tool adjustable (setting spindle/lock nut)

- Fixed throttles** **Diameter in mm, type RDF**
- 0.4 - 0.6 (in increments of 0.1)
 - 0.8 - 2.0 (in increments of 0.2)
 - 2.5 - 5.5 (in increments of 0.5)

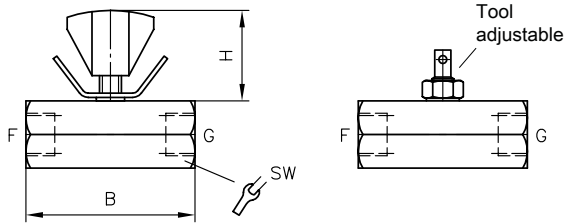
- Basic type, size**
- Type ED, type RD, type RDF, size 1 to 5
 - Slot-type throttles, available with or without built-in check valve

Function

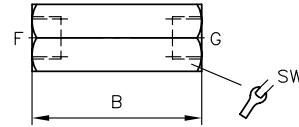


General parameters and dimensions

ED.. and RD..



RDF..



1)	Q_{max} [lpm] ²⁾	p_{max} [bar]	Ports (BSPP)	Dimensions [mm]			m [g]
				H	B	SW = a/f	
ED 11..	12	500	G 1/4	23.5	52	SW 24	180
RD 11..				23.5			
RDF 11/..				-			
ED 21..	30	500	G 3/8	24	52	SW 27	215
RD 21..				24			
RDF 21/..				-			
ED 31..	60	500	G 1/2	32.5	62	SW 32	340
RD 31..				32.5			
RDF 31/..				-			
ED 41..	80	500	G 3/4	41	72	SW 41	655
RD 41..				41			
RDF 41/..				-			
ED 51..	130	500	G 1	46.5	82	SW 46	835
RD 51..				46.5			
RDF 51/..				-			

- 1) The throttle diameter with type RDF can be only altered by replacing the orifice. Depending on size, diameters between 0.6 and 4 mm are available.
 2) These figures correspond to completely opened throttle and represent a back pressure of approx. 50 bar (throttled direction of flow)

Associated technical data sheets:

- Throttle and restrictor check valves
type ED, RD and RDF: [D 7540](#), [D 2570](#)

Similar products:

- Throttle valves type Q, QR, QV, FG: [D 7730](#), [D 7275](#)
- Throttle valve and throttle check valve type CQ, CQR and CQV:
[D 7713](#)
- Restrictor check valves type EB, BE, BC: [D 6465](#), [D 7555 B](#),
[D 6969 B](#)