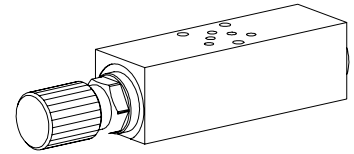


**Throttle valve
Sandwich construction**

- Q_{max} = 15 l/min
- Q_{Nmax} = 8 l/min
- p_{max} = 315 bar

NG3-Mini[®]

DESCRIPTION

Sandwich type throttle valves based on an M18x1,5 screw type throttle cartridge in accordance with ISO 7789. Adjustment available: „S“ = screw adjustment, „D“ = knob adjustment, „K“ = Lock adjustment (see data sheet no. 2.4-510). The sandwich plate and also the knob on the galvanised cartridge are in clear anodised aluminium, for weight saving and corrosion protection.

FUNCTION

A fine thread on the adjustable throttle reveals an annular gap or triangular notch. The volume flow is zero when the throttle is screwed in (the metal sealing edge seals completely). The valve flow is bidirectional.

APPLICATION

Sandwich type throttle valves can be used anywhere where volume flows have to be infinitely controlled in both directions without taking pressure fluctuations into account. These sandwich valves are ideal for machine tools and also all types of handling operation. Mini-3 throttle valves are used wherever light, extremely compact hydraulic control units are needed.

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TYPE CODE

Throttle valve		DN	<input type="checkbox"/>	S	A03	-	<input type="checkbox"/>	-	<input type="checkbox"/>	#	<input type="checkbox"/>
Setting versions:	Screw	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Knob	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Lock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sandwich construction		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interface NG3-Mini		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restriction in:	P	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	A and B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	T	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Standard nominal volume flow rates:		$Q_N = 0,32$ l/min	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(at 10 bar valve pressure loss)		$Q_N = 3,2$ l/min	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		$Q_N = 8$ l/min	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Design-Index (Subject to change)											

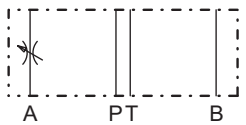


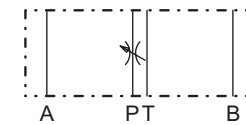
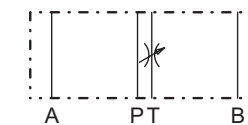
GENERAL SPECIFICATIONS

Denomination	Throttle valve
Nominal size	NG3-Mini according to Wandfluh standard
Construction	Sandwich construction
Mounting	3 holes for socket head cap screw M4 or studs M4
Connections	Threaded connection plates, Multi-flange plates, Longitudinal stacking system
Ambient temperature	-20...+50° C
Mounting position	any
Fastening torque	$M_D = 2,8$ Nm (Qual. 8.8) for fastening screws $M_D = 30$ Nm for screw-in cartridge
Weight	Depending on the type 0,22...0,57 kg

HYDRAULIC SPECIFICATIONS

Fluid	Mineral oil, other fluid on request
Contamination efficiency	ISO 4406:1999, class 20/18/14...21/19/15 (Required filtration grade $\beta_{10...25} \geq 75$ refer to data sheet 1.0-50/2)
Viscosity range	12 mm ² /s...320 mm ² /s
Fluid temperature	-20...+70° C
Peak pressure	$p_{max} = 315$ bar
Nominal volume flow rates	$Q_N = 0,32$ l/min, $Q_N = 3,2$ l/min $Q_N = 8$ l/min Q_N at 10 bar valve pressure loss
Max. volume flow	$Q_{max} = 15$ l/min
Leakage volume flow	Almost leak free with closed restrictor
For additional informations refer to data sheet no 2.4-510. (For $Q_N = 8$ l/min please take the screw-in cartridge DN.PM18-25)	

TYPE LIST / FUNCTION

				
DN.SA03-A	DN.SA03-B	DN.SA03-AB	DN.SA03-P	DN.SA03-T

