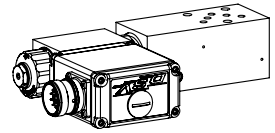
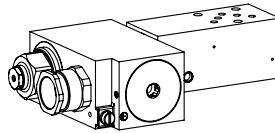
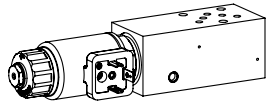


- Proportional 2-way flow control valve**
Flange- and sandwich construction
- Direct operated, pressure compensated
 - $p_{max} = 350 \text{ bar}$

NG4-Mini[®]

DESCRIPTION

Direct operated, pressure compensated proportional flow control valve in flange- and sandwich construction. Proportional flow control screw-in cartridges M22x1,5 acc. to ISO 7789 are installed. In the sandwich plates for A, B and AB line, a bypass check valve for reversed free flow is installed. A bypass non-return valve plate for the flange valve, for free flow from B to A, can be ordered separately. The flange body is painted, the sandwich plates are phosphatized.

FUNCTION

The 2-way flow control valve with series connected pressure balance (primary controller) serves to maintain the speed of a consumer constant independent of the load.

APPLICATION

Proportional flow control valves in flange- and sandwich construction are suitable for precise feed control systems, where the supply flow has to be maintained constant with a changing load. Depending on the application, a distinction is made between controlling the forward flow or the return flow. Mini-4 proportional flow control valves are used where hydraulic systems have to be both light and compact.

TYPE CODE

Flow control valve			Q	N	<input type="checkbox"/>	<input type="checkbox"/>	A04 -	<input type="text"/>	-	<input type="text"/>	#	<input type="checkbox"/>
Normally closed												
Proportional		<input type="checkbox"/> P										
Proportional Ex-proof		<input type="checkbox"/> B										
Flange construction		<input type="checkbox"/> F										
Sandwich construction		<input type="checkbox"/> S										
Mounting interface acc. to Wandfluh standard, NG4-Mini												
Type list / Function												
Flange construction	Sandwich construction	Sandwich construction	Sandwich construction									
A → B	in P	Meter-out flow control	Meter-in flow control									
<input type="checkbox"/> A/B	<input type="checkbox"/> P	in A	in A									
	in T	in B	in B									
	<input type="checkbox"/> T	in A und B	in A und B									
		<input type="checkbox"/> AB	<input type="checkbox"/> ABV									
Nominal volume flow level, nominal voltage, etc. of the built-in screw-in cartridge												
Examples:	QNPFA04 - A/B -	<input type="text" value="8 - G24/WD - D1"/>										
	QNPFA04 - A -	<input type="text" value="16 - G12/MEA1"/>										
Design-Index (Subject to change)												

GENERAL SPECIFICATIONS

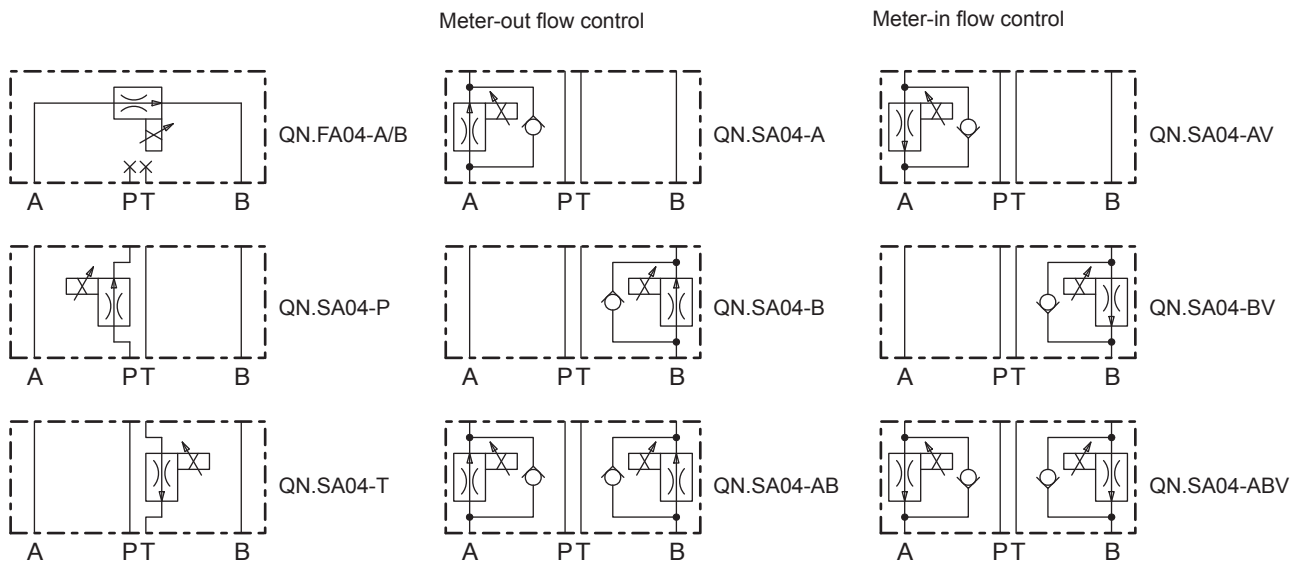
Description	Direct operated proportional 2-way flow control valve	
Nominal size	NG4-Mini according to Wandfluh standard	
Construction	Flange- and sandwich construction	
Operation	Proportional solenoid	
Mounting	3 holes for socket cap screws M5 or studs screws M5	
Connection	Threaded connection plates Multi-flange subplates Longitudinal stacking system	
Weight	• Flange type	m = 0,46 kg
(without screw-in cartridge)	• Sandwich type P,T,A,B	m = 0,95 kg
	• Sandwich type AB	m = 1,22 kg

SCREW-IN CARTRIDGES INSTALLED

The following screw-in cartridges are used in either the flange body or the sandwich body:

Type	Designation	Data sheet no.	Qmax*
QNPPM22	normally closed	2.6-631	25 l/min
QNPPM22-../ME	normally closed, with integrated electronics	2.6-633	25 l/min
QNBPM22	normally closed, explosion proof Exd	2.6-634	25 l/min

* Can deviate from the values on the data sheets of the screw-in cartridges.

TYPE CHARTS


By turning around valves with meter-out function, meter-in function can be achieved:

- A turns into BV
- B turns into AV
- AB turns into ABV

Valves for flow control are supplied respectively with a sealing plate and an intermediate plate.


REMARK!

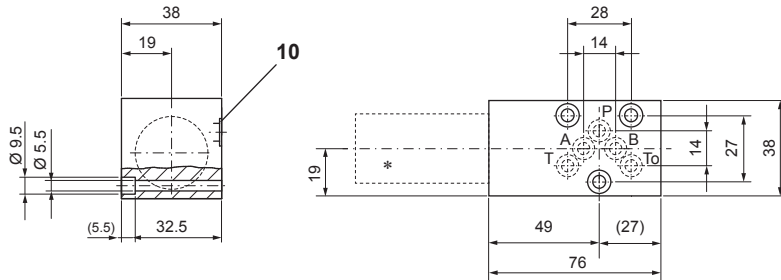
Detailed performance data and additional hydraulic and electric specifications may be drawn from the data sheets of the corresponding installed screw-in cartridge.


CAUTION!

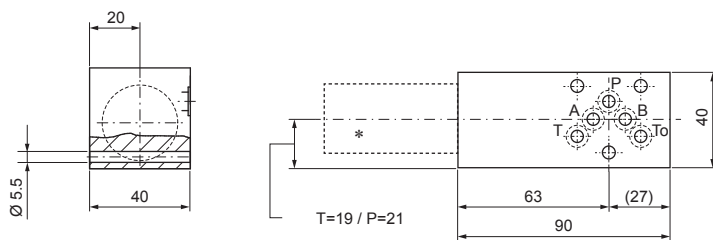
 The performance data, especially the „**pressure-flow-characteristic**„, on the data sheets of the screw-in cartridges, refer to the screw-in cartridges only. The additional pressure drop of the flange body, resp. sandwich body must be taken into consideration.

DIMENSIONS

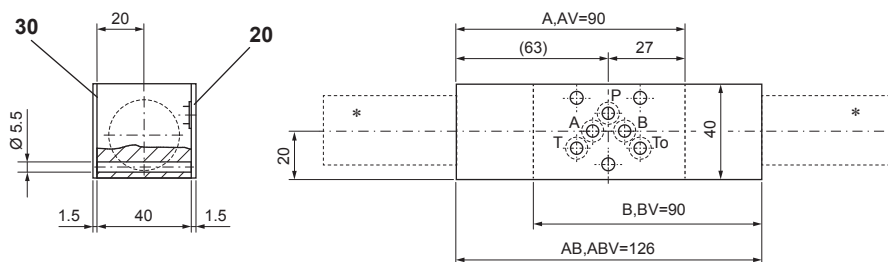
Flange construction QN.FA04 - A/B



Sandwich construction QN.SA04 - P, T



Sandwich construction QN.SA04 - A, B, AB, AV, BV, ABV



* The envelop dimensions of the screw-in cartridge are shown on their corresponding data sheets.

PARTS LIST

Position	Article	Description
10	160.2052	O-ring ID 5,28x1,78
20	173.1700	Intermediate plate BZB4
30	173.1650	Sealing plate BDB4

ACCESSORIES

Proportional amplifier

register 1.13

Technical explanation see data sheet 1.0-100