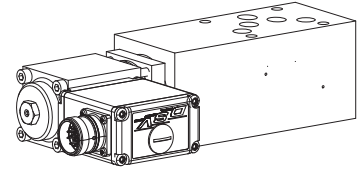
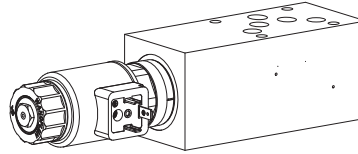


Proportional throttle valve
Flange and sandwich construction

- Direct operated, not pressure compensated
- $p_{max} = 350 \text{ bar}$

NG10
 ISO 4401-05

DESCRIPTION

Directly operated proportional throttle valve in sandwich construction. Screw-in cartridge M33x2 in accordance with ISO 7789. In sandwich types for A and B line, a by-pass check valve for reversed free flow is incorporated. The flange body is painted, the sandwich plates are phosphatised.

FUNCTION

The force controlled proportional solenoid running in the fluid acts directly on the control spool which opens or closes the triangular shaped throttling notches in the cartridge body. The throttle opening, and therefore the flow volume, changes proportionally to the current absorption of the proportional solenoid. When the solenoid is without current, the control spool is held in the closed position by a spring. To control the valve proportional amplifiers are available from Wandfluh (see register 1.13).

APPLICATION

Proportional throttle valves are suitable for precise feed control systems. An extremely sensitive opening and closing response allows a smooth control of movements in stationary or mobile installations, e.g. machine tools, public vehicles.

TYPE CODE

Throttle valve			D	N	P	<input type="checkbox"/>	A10	-	<input type="checkbox"/>	-	<input type="checkbox"/>	#	<input type="checkbox"/>
Normally closed													
Proportional						P							
Proportional with integrated electronics						V							
Flange construction						F							
Sandwich construction						S							
Interface NG10													
Flange throttle in:	A to B					A/B							
Sandwich throttle in:	P					P							
	A and B					AB	A				A		
	T					T	B				B		
Nominal volume flow level, etc.: see data sheet of the installed screw-in cartridges													
Examples:	DNPFA10 - A/B - <input type="text" value="32"/> - G24/WD - HBO <input type="text" value=""/>												
	DNVSA10 - P - <input type="text" value="63"/> - 12A1 <input type="text" value=""/>												
Design-Index (Subject to change)													

GENERAL SPECIFICATIONS

Description	Proportional throttle valve
Nominal size	NG10 acc. to ISO 4401-05
Construction	Flange and sandwich
Operations	Proportional solenoid
Mounting	4 mounting holes for. zyl.screws M6 or double ended screws M6
Connection	Threaded connection plates Multi-flange subplates Longitudinal stacking system
Weight	Depending on the type m = 3,0...6,0 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.	Q_{max} *
DNPPM33	normally closed	2.6-551	65 l/min
DNPPM33**	normally closed	2.6-550	65 l/min
DNVPM33	normally closed, with integrated electronics	2.6-560	65 l/min

* Can deviate from the values on the data sheets of the screw-in cartridges.
 ** Do not use anymore for new applications.


REMARK!

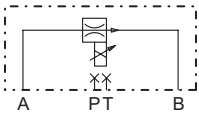
Detailed performance data and additional hydraulic and electric specifications may be drawn from the data sheets of the corresponding installed screw-in cartridge.


CAUTION!

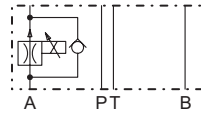
The performance data, especially the „**pressure-flow-characteristic**“, on the data sheets of the screw-in cartridges, refer to the screw-in cartridges only. The additional pressure drop of the flange body, resp. sandwich body must be taken into consideration.

SYMBOLS / DIMENSIONS

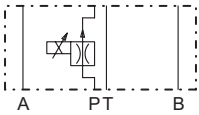
DN.FA10-A/B



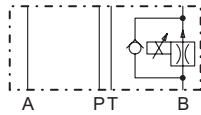
DN.SA10-A



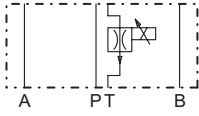
DN.SA10-P



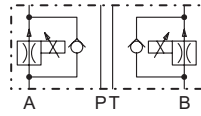
DN.SA10-B



DN.SA10-T



DN.SA10-AB

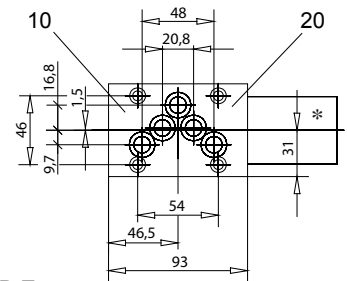
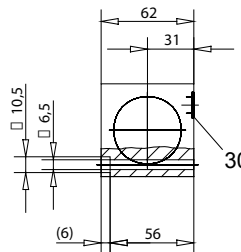


* The envelop dimensions of the screw-in cartridge are shown on their corresponding data sheets.

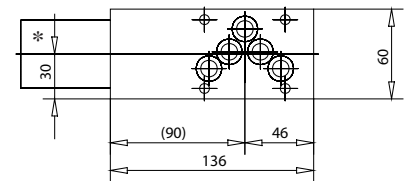
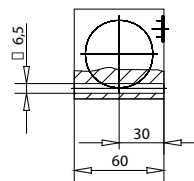
PARTS LIST

Position	Article	Description
10	136.5201	Flange body
	136.5621	Sandwich pate P
	136.5624	Sandwich pate T
	136.6633	Sandwich pate A
	136.6634	Sandwich pate B
	136.6631	Sandwich pate AB
20	642.8 . . .	Screw-in cartridge
30	160.2140	sandwich construction P, T
30	160.2120	O-Ring ID 12,42x1,78 for sandwich construction A, B, AB
	160.2132	O-Ring ID 13,10x2,62 in line with RV

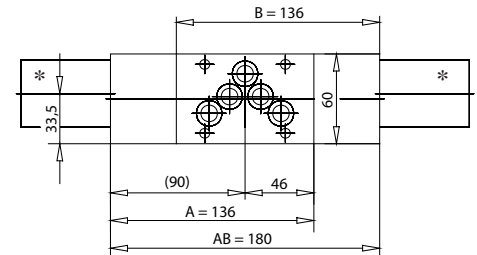
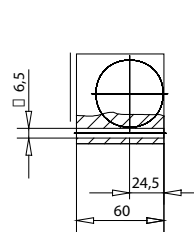
Flange construction DN.FA10-A/B



Sandwich construction DN.SA10-P, T



Sandwich construction DN.SA10-A, B, AB


ACCESSORIES

Proportional amplifier

Register 1.13

Technical explanation see data sheet 1.0-100