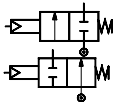


Externally operated valves  
2/2-way straight-seat  
Type HP230N

Externally operated 2/2-way straight-seat valves



Unpressurized closed/ open

Type **HP230N**  
For neutral liquids, gases and steam  
DN 2.5 - 13 B

G 1/4 - G 1/2

Features



- For robust industrial application
- For hot water, oil, compressed air, steam and similar neutral media
- Differential pressure: up to 40 bar
- Viscosity: up to 400 cSt
- Media temperature: up to +180 °C
- Ambient temperature: up to +50°C
- Thread connections from G 1/4 to G 1/2
- Control connections NC: G 1/8  
NO: M5
- Unpressurized closed (NC) and unpressurized opened (NO) versions
- Closing against flow direction
- Stainless steel versions for aggressive fluids: Please contact Danfoss.

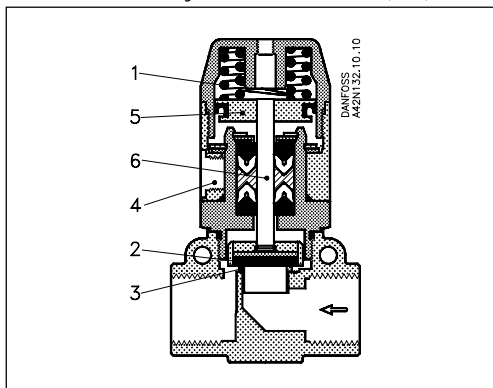
Technical data

Design	Piston operated; straight-seated	
Installation	Optional	
Nominal pressure	PN 40	
Pressure range	See ordering	
Max. test pressure	Valve body:	1.5 x max. differential pressure
	Control head:	10 bar
Ambient temperature	-30 to +50°C	
Media temperature	-30 to +180°C	
Viscosity	max. 400 cSt	
Control medium	Neutral liquids and gases up to 40 cSt.	
Materials	Valve body:	Brass
	Internal parts:	Stainless steel/ brass
	Seal material:	PTFE (Teflon) <sup>1)</sup>

<sup>1)</sup> Also available with EPDM- or FKM seal material - please contact Danfoss

Function

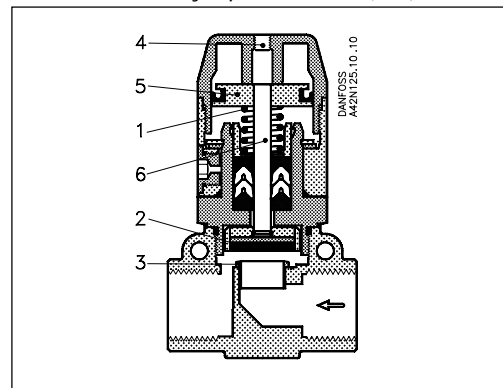
HP230N normally closed version (NC)



1. Spring
2. Seat gasket
3. Valve seat
4. Control connection
5. Control piston
6. Spindle

The valve is kept closed by the spring (1), which presses the seat gasket (2) against the valve seat (3). When pressure is applied to the control connection (4), the control piston (5), the spindle (6) and thus the seat gasket (2) are raised, and the valve opens.

HP230N normally open version (NO)

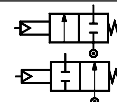


The valve is kept open by the spring (1), which keeps the seat gasket (2) away from the valve seat (3). When pressure is applied to the control connection (4), the control piston (5), the spindle (6) and thus the seat gasket (2) are lowered, and the valve closes against the pressure of the medium.

Externally operated 2/2-way straight-seat valves

G 1/4 - G 1/2

Type HP230N  
For neutral liquids, gases and steam  
DN 2.5 - 13 B

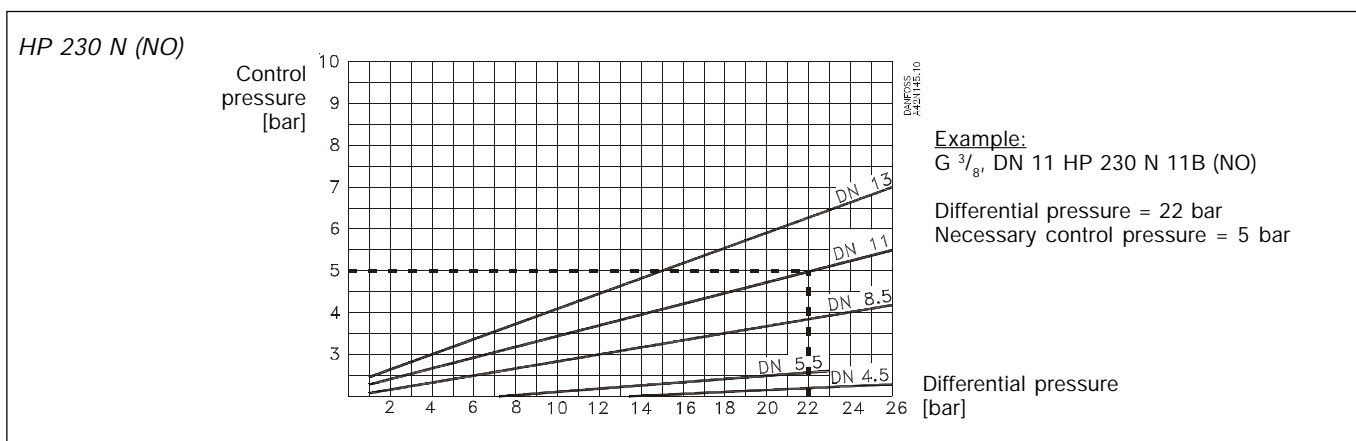


**Ordering - NC function:**  
Closing against the flow direction  
**Ordering - Options:** Please contact Danfoss.

Connection ISO 228/1	Orifice DN	k <sub>v</sub> - value [m <sup>3</sup> /h]	Differential pressure range [bar]	Control pressure [bar]	Type designation		Code no.
					Main type	Specification	
G 1/4	2.5	0.2	0 - 40	3.5 - 10	HP230N 2.5 B	G 14T NC000	042N4100
G 1/4	3.5	0.3	0 - 23	3.5 - 10	HP230N 3.5 B	G 14T NC000	042N4101
G 1/4	4.5	0.5	0 - 40	3.5 - 10	HP230N 4.5 B	G 14T NC000	042N4102
G 1/4	5.5	0.6	0 - 40	3.5 - 10	HP230N 5.5 B	G 14T NC000	042N1018
G 3/8	8.5	1.4	0 - 19	3.5 - 10	HP230N 8.5 B	G 38T NC000	042N1019
G 3/8	8.5	1.4	0 - 40	6.3 - 10	HP230N 8.5 B	G 38T NC101	Option
G 3/8	11	1.7	0 - 11	3.5 - 10	HP230N 11 B	G 38T NC000	042N4103
G 3/8	11	1.7	0 - 25	6.3 - 10	HP230N 11 B	G 38T NC101	Option
G 3/8	13	2.0	0 - 7	3.5 - 10	HP230N 13 B	G 38T NC000	042N4104
G 3/8	13	2.0	0 - 18	6.3 - 10	HP230N 13 B	G 38T NC101	Option
G 1/2	8.5	1.8	0 - 19	3.5 - 10	HP230N 8.5 B	G 12T NC000	042N4105
G 1/2	8.5	1.8	0 - 40	6.3 - 10	HP230N 8.5 B	G 12T NC101	Option
G 1/2	11	2.3	0 - 11	3.5 - 10	HP230N 11 B	G 12T NC000	042N1015
G 1/2	11	2.3	0 - 25	6.3 - 10	HP230N 11 B	G 12T NC101	Option
G 1/2	13	2.6	0 - 7	3.5 - 10	HP230N 13 B	G 12T NC000	042N1017
G 1/2	13	2.6	0 - 18	6.3 - 10	HP230N 13 B	G 12T NC101	Option

**Ordering - NO function:**  
Closing against the flow direction  
**Ordering - Options:** Please contact Danfoss.

Connection ISO 228/1	Orifice DN	k <sub>v</sub> - value [m <sup>3</sup> /h]	Diagram	Type designation		Code no.
				Main type	Specification	
G 1/4	2.5	0.2	See below	HP230N 2.5 B	G 14T NO000	Option
G 1/4	3.5	0.3	See below	HP230N 3.5 B	G 14T NO000	Option
G 1/4	4.5	0.5	See below	HP230N 4.5 B	G 14T NO000	Option
G 1/4	5.5	0.6	See below	HP230N 5.5 B	G 14T NO000	Option
G 3/8	8.5	1.4	See below	HP230N 8.5 B	G 38T NO000	Option
G 3/8	11	1.7	See below	HP230N 11 B	G 38T NO000	Option
G 3/8	13	2.0	See below	HP230N 13 B	G 38T NO000	Option
G 1/2	8.5	1.8	See below	HP230N 8.5 B	G 12T NO000	Option
G 1/2	11	2.3	See below	HP230N 11 B	G 12T NO000	Option
G 1/2	13	2.6	See below	HP230N 13 B	G 12T NO000	Option

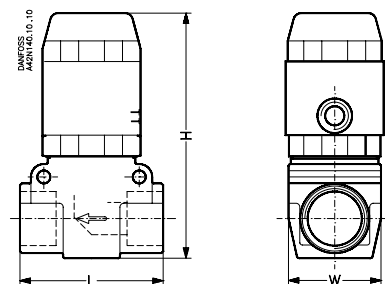


Externally operated 2/2-way straight-seat valves

Type HP230N  
 For neutral liquids, gases and steam  
 DN 2.5 - 13 B

Dimensions and weight

Con- nec- tion	DN	L [mm]	W [mm]	H [mm]	Weight [kg]
1/4"	2.5 - 5.5	42	30	83	0.50
3/8"	8.5 - 13	55	36	95	0.50
1/2"	8.5 - 13	55	36	95	0.60



Control valves, types EV310A and EV310B

Control valves, type EV310A



- Valves for industrial application, such as control
- Available in de-energized closed and de-energized open versions
- Available with or without manual operation

Control valves, type EV310B



- Valves for industrial application, such as control
- Available in de-energized closed and de-energized open versions
- Available with or without manual operation

See separate data sheets DKACV.PD.100.E and DKACV.PD.200.J regarding code numbers, technical data and coil options for Danfoss EV310A and EV310B valves.

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