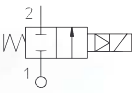


21HT - 21IH SERIES

Solenoid Valves, 2-way, Combined acting

21HT, **21HF** and **21IH** are combined acting solenoid valves which do not require a minimum operating pressure differential.
These valves are suitable for vacuum operations.
21HT series is provided with fiber reinforced diaphragms for optimized durability.



TECHNICAL DATA

PORT CONNECTION	G 3/8 ÷ G 1 1/2		
SEALING MATERIALS	NBR+PA		FKM+PA
FLUID TEMPERATURE	-10°C + 90°C		-10°C + 140°C
FLUIDS	AIR, INERT GASES, WATER		oils, gasoline, diesel
VISCOSITY	max. 12 cSt		
TUBE Ø - COIL WIDTH - SERIES	Ex d	ø 13 mm - 30 mm	BDV08 (class H)
INSTALLATION	as required, preferably with actuator upright		
PROTECTION DEGREE	Ex d	IP67 EN 60529 (DIN 40050) with cable gland IP67 or higher	

MATERIALS

BODY, ORIFICE	Brass UNI EN 12165 CW617N or stainless steel AISI 316
ARMATURE TUBE	Stainless steel AISI Series 300
FIXED CORE	Stainless steel AISI Series 400
PLUNGER	Stainless steel AISI Series 400
PHASE DISPLACEMENT RING	Copper (Cu 99,9%) or gold plated copper
SPRING	Stainless steel AISI Series 300
SEALING	Y=NBR+PA, V=FKM+PA

- **CE**
  - 2014/35/EU (LVD)
  - 2014/30/EU (EMC)
  - 2014/68/EU (PED) art. 4.3 up to 1", cat. I module A above 1"
  - 2014/34/EU (ATEX). Refer to next pages for the complete marking.

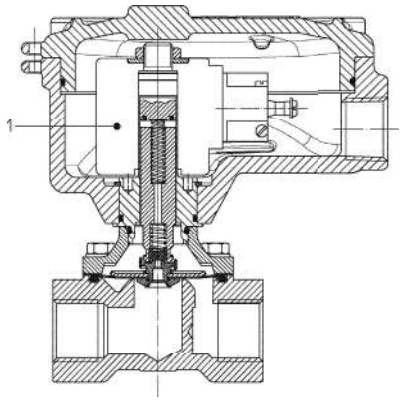
- **INDUSTRIAL OXYGEN**
  Special versions suitable for contact with industrial oxygen are available.
  Please refer to codification options.

- **UL** regognized and **VDE** approved coils are available for this series, please refer to coil section.

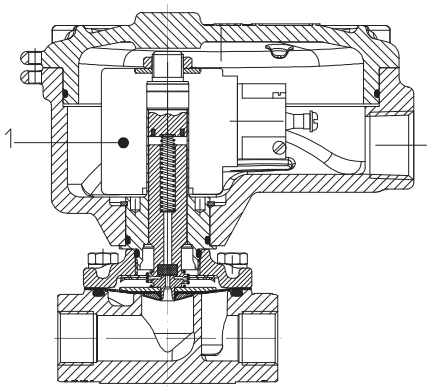
- The fluids listed in the "technical data" tables should be considered as a recommendation. Please check the chemical compatibility of the fluids with the materials of the valve at RFQ stage.
- For spare parts list please refer to the dedicated chapter.

Please read and agree our GENERAL CONDITIONS before placing an order. All the information are exclusive ownership of ODE S.r.l. All rights reserved ©ODE S.r.l.

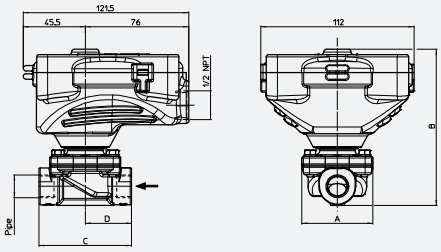
NC, BRASS, Ex d

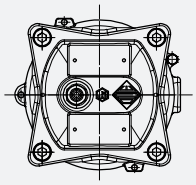


NC, STAINLESS STEEL, Ex d



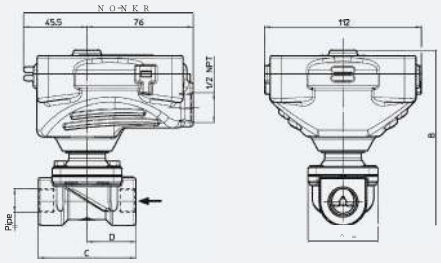
DRAWING 1





PIPE	DIMENSIONS [mm]			
ISO 228/1	A	B	C	D
G3/8	50	113	56	28
G1/2	50	125	70	35
G3/4	50	125	70	35
G1	65	131	104	52

DRAWING 2



PIPE	DIMENSIONS [mm]			
ISO 228/1	A	B	C	D
G3/8	52	114,5	68	34
G1/2	52	114,5	68	34
G3/4	58	123	75	37,5
G1	65	131	90	45
G1 1/4	94	126,5	128	64
G1 1/2	94	126,5	128	64

PIPE	ORIFICE SIZE	Kv	COIL SERIES	PRESSURE [bar]				CODE		DRAWING REFERENCE
				MIN	MOPD		PS	BRASS	STAINLESS STEEL	
ISO 228/1	Ø [mm]	[l/min]			AC	DC				
G3/8	11	20	BDV08	0	14	5	16	21HT3KIY110	-	1
	15	40	BDV08	0	14	6	16	-	21IH3KIV150	2
G1/2	16	40	BDV08	0	14	5	16	21HT4KIY160	-	1
		50	BDV08	0	14	6	16	-	21IH4KIV160	2
G3/4	16	40	BDV08	0	14	5	16	21HT5KIY160	-	1
	20	60	BDV08	0	14	6	16	-	21IH6KIV200	2
G1	25	120	BDV08	0	6	-	16	21HT6KIY250	-	1
		140	BDV08	0	14	3	16	-	21IH6KIV250	2
G1 1/4	35	300	BDV08	0	8	-	16	-	21IH7KIV350	2
G1 1/2	40	320	BDV08	0	8	-	16	-	21IH8KIV400	2

According to Directive 2014/34/EU ATEX
II 2G Ex d IIC T6 o T5 Gb
II 2D Ex tb IIIC T80°C o T95°C Db IP67

■ For sealing different from NBR+PA or FKM+PA replace the letter "Y" and "V" with the ones corresponding to the other materials.
Y = NBR+PA, V = FKM + PA.

I	II	III	IV	V	VI	VII
2	1	HT	3	K	Y	110

CODIFICATION

I. NUMBER OF WAYS
2 - 2-way

II. NUMBER OF ELEMENTS
1 - 1 element

III. SERIES
HT - Brass body
IH - StSt body

IV. CONNECTIONS
3 - G3/8
4 - G1/2
5 - G3/4
6 - G1
7 - G1 1/4
8 - G1 1/2

V. CORE TUBE TYPE
KI - for 2/2 NC valves, Ex d

VI. SEALING MATERIAL
for HT and IH series
Y - NBR+PA
V - FKM+PA

VII. ORIFICE Ø [mm] MULTIPLIED BY 10