

Solenoid Valves

Direct-acting, EEx m II T 4, Normally Closed
Type 21A, 1/8" - 1/4"

APPLICATION

Low cost direct-acting solenoid valve for on-off control of non-aggressive fluids and gases, air, oil or water, compatible with materials of construction. For use in explosive atmospheres.

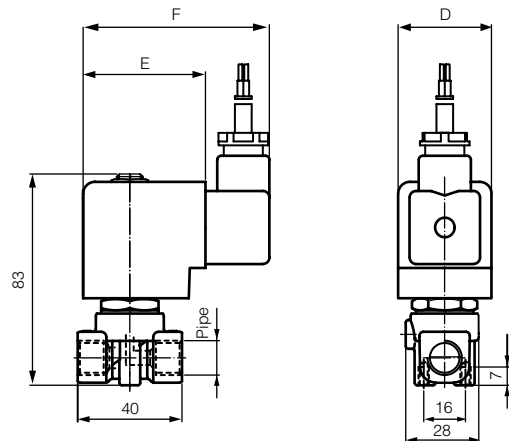
FEATURES

- Simple design – low cost
- Choice of orifice sizes and seal materials
- Compact design

TECHNICAL DATA

Functions:	Normally closed, energised to open
Ambient temp:	-20°C to +50°C
Fluid temp:	+80°C
Viscosity:	Max. 53 Cst. 7°E
Materials:	Body: brass; tube and tube nut: stainless steel; seal: FKM (V)
Coil voltage:	24V DC; 24V, 100V and 230V, 50Hz
Voltage tolerance:	+/-10%
Consumption:	DC: approx. 10 watts
Duty cycle:	100% continuous rating
Protection class:	IP 65 to DIN 40050
Coil insulation:	Class H

DIMENSIONS (mm)



TYPE	D mm	E mm	F mm
T	36	47	71.4

FLOW & PRESSURE RATING CHART (bar)

Pipe ISO 228/1	Code	Max Viscosity		Ø mm	Kv m³/h	Power Watt	Pressure bar		
		Cst	°E				Min.	M.O.P.D.	
G 1/8"	21A3QDV15	12	~2	1.5	0.08	10	0	AC	DC
	21A3QDV20	37	~5	2	0.12			16	16
	21A3QDV25	53	~7	2.5	0.15			14	9
	21A3QDV30			3	0.18			10	6
	21A3QDV45			4.5	0.38			5	2
G 1/4"	21A2QDV15	12	~2	1.5	0.08			16	16
	21A2QDV20	37	~5	2	0.12			16	16
	21A2QDV25	53	~7	2.5	0.15			14	9
	21A2QDV30			3	0.18			10	6
	21A2QDV45			4.5	0.38			5	2
	21A2QDV55			5.5	0.54			3	1

According to Directive 2014/34/EU ATEX

Solenoid Valves

Direct-acting, EEx d II T 6, Normally Closed
Type 21A, 1/8" - 1/4"

APPLICATION

Direct-acting solenoid valve for on-off control of non-aggressive fluids and gases, air, oil or water, compatible with materials of construction. For use in explosive atmospheres.

FEATURES

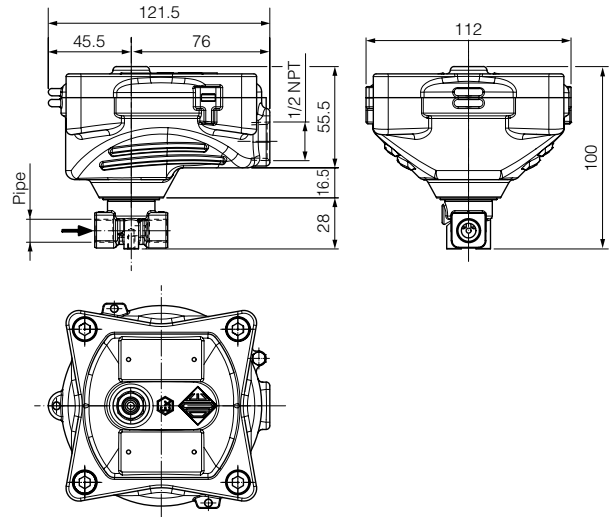
- Simple design
- Choice of orifice sizes

TECHNICAL DATA

Functions:	Normally closed, energised to open
Ambient temp:	-20°C to +50°C
Fluid temp:	+80°C
Viscosity:	Max. 53 Cst. 7°E
Materials:	Body: brass; tube and tube nut stainless steel; seals: FKM (V)
Coil voltage:	See page 26
Voltage tolerance:	+/-10%
Consumption:	DC: approx. 8 watts
Duty cycle:	100% continuous rating
Protection class:	IP 67
Coil insulation:	Class F



DIMENSIONS (mm)



FLOW & PRESSURE RATING CHART (bar)

Pipe ISO 228/1	Code	Max Viscosity		Ø mm	Kv m³/h	Power Watt	Pressure bar M.O.P.D.		
		Cst	°E				Min.	AC	DC
G'⁄₈"	21A3KIV15	12	~2	1.5	0.08	8	0	30	18
	21A3KIV20	37	~5	2	0.12			22	16
	21A3KIV25	53	~7	2.5	0.19			14	9
	21A3KIV30			3	0.124			10	6
G'⁄₄"	21A2KIV15	12	~2	1.5	0.08			30	18
	21A2KIV20	37	~5	2	0.12			22	16
	21A2KIV25	53	~7	2.5	0.19			14	9
	21A2KIV30			3	0.24			10	6

According to Directive 2014/34/EU ATEX

Solenoid Valves

Servo-acting, EEx m II T 4, Normally Closed
Type 21A, $\frac{3}{8}$ " - $\frac{1}{2}$ "

APPLICATION

Servo-acting solenoid valve for on-off control of non-aggressive fluids and gases, air, oil or water, compatible with materials of construction. For use in explosive atmospheres.

FEATURES

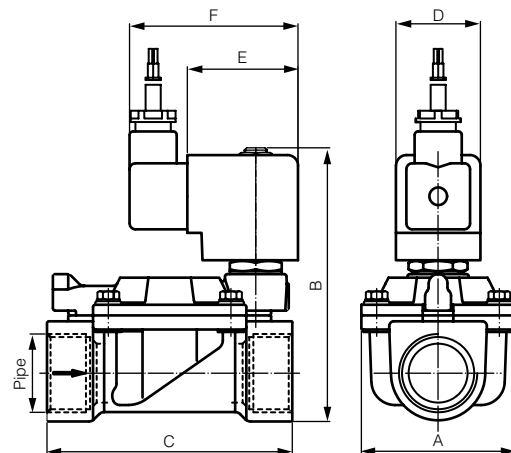
- Simple design
- Choice of port sizes
- Compact design

TECHNICAL DATA

Functions: Normally closed, energised to open
Ambient temp: -20°C to +50°C
Fluid temp: +80°C
Viscosity: Max. 12 Cst. 2°E
Materials: Body: brass; tube and tube nut: stainless steel; seal: FKM (V)
Coil voltage: 24V DC; 24V, 100V and 230V, 50Hz
Voltage tolerance: +/-10%
Consumption: DC: approx. 10 watts
Duty cycle: 100% continuous rating
Protection class: IP 65 to DIN 40050
Coil insulation: Class H



DIMENSIONS (mm)



Code	Pipe ISO 228/1	A mm	B mm	C mm
21WA3QDV130	G $\frac{3}{8}$ "	40	103	60
21WA4QDV130	G $\frac{1}{2}$ "	40	103	66

TYPE	D mm	E mm	F mm
T	36	47	71.4

FLOW & PRESSURE RATING CHART (bar)

Pipe ISO 228/1	Code	Max Viscosity		$\varnothing$ mm	Kv m ³ /h	Power Watt	Pressure bar M.O.P.D.		
		Cst	°E				Min.	AC	DC
G $\frac{3}{8}$ "	21WA3QDV130	12	~2	13	3.6	8	0.2	16	16
G $\frac{1}{2}$ "	21WA4QDV130	12	~2	13	4.2				

According to Directive 2014/34/EU ATEX

Solenoid Valves

Servo-acting, EEx d II T 6, Normally Closed
Type 21WA, $\frac{3}{8}$ " - $\frac{1}{2}$ "

APPLICATION

Servo-acting solenoid valve for on-off control of non-aggressive fluids and gases, air, oil or water, compatible with materials of construction. For use in explosive atmospheres.

FEATURES

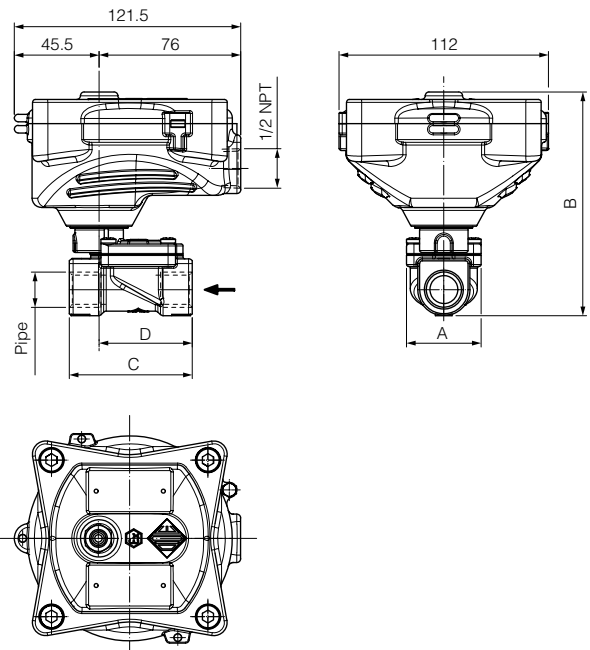
- Simple design
- Choice of port sizes

TECHNICAL DATA

Functions:	Normally closed, energised to open
Ambient temp:	-20°C to +50°C
Fluid temp:	+80°C
Viscosity:	Max. 12 Cst. 2°E
Materials:	Body: brass; tube and tube nut: stainless steel.; seal: FKM (V)
Coil voltage:	See page 26
Voltage tolerance:	+/-10%
Consumption:	DC: approx. 8 watts
Duty cycle:	100% continuous rating
Protection class:	IP 67
Coil insulation:	Class F



DIMENSIONS (mm)



Code	Pipe ISO 228/1	A mm	B mm	C mm	D mm
21WA3KIV130	G $\frac{3}{8}$ "	40	1120	60	47
21WA4KIV130	G $\frac{1}{2}$ "	40	120	66	50

FLOW & PRESSURE RATING CHART (bar)

Pipe ISO 228/1	Code	Max Viscosity		$\varnothing$ mm	Kv m ³ /h	Power Watt	Min.	Pressure bar M.O.P.D.	
		Cst	°E					AC	DC
G $\frac{3}{8}$ "	21WA3KIV130	12	~2	13	3.6	8	0.2	16	16
G $\frac{1}{2}$ "	21WA4KIV130	12	~2	13	4.2				

According to Directive 2014/34/EU ATEX

Solenoid Valves

Servo-acting, EEx m II T 4, Normally Closed
Type 21W, $\frac{3}{4}$ " - 1"

APPLICATION

Servo-acting solenoid valve for on-off control of non-aggressive fluids and gases, air, oil or water, compatible with materials of construction. For use in explosive atmospheres.

FEATURES

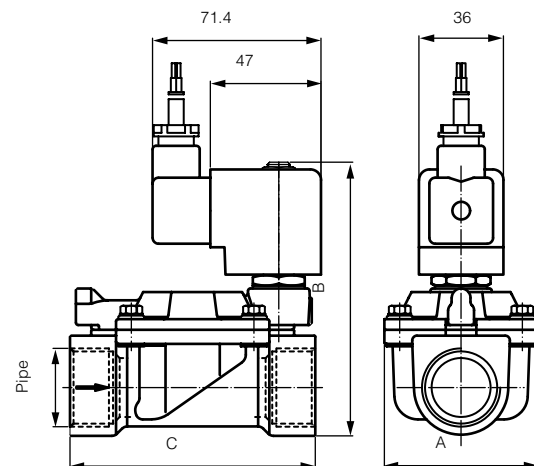
- Simple design
- Choice of port sizes
- Compact design

TECHNICAL DATA

Functions:	Normally closed, energised to open
Ambient temp:	-20°C to +50°C
Fluid temp:	+80°C
Viscosity:	Max. 12 Cst. 2°E
Materials:	Body: brass; tube and tube nut: stainless steel; seal: FKM (V)
Coil voltage:	24V DC; 24V, 100V and 230V, 50Hz
Voltage tolerance:	+/-10%
Consumption:	DC: approx. 10 watts
Duty cycle:	100% continuous rating
Protection class:	IP 65 to DIN 40050
Coil insulation:	Class H



DIMENSIONS (mm)



Code	Pipe ISO 228/1	A mm	B mm	C mm	D mm	E mm	F mm
21W3QDV190	G $\frac{3}{4}$ "	65	111	104	36	47	71.4
21W4QDV250	G1"	65	118	104	36	47	71.4

FLOW & PRESSURE RATING CHART (bar)

Pipe ISO 228/1	Code	Max Viscosity		Ø mm	Kv m³/h	Power Watt	Pressure bar M.O.P.D.		
		Cst	°E				Min.	AC	DC
G $\frac{3}{4}$ "	21W3QDV190	12	~2	19	8.4	8	0.2	16	16
G1"	21W4QDV250	12	~2	25	11				

According to Directive 2014/34/EU ATEX

Solenoid Valves

Servo-acting, EEx d II T 6, Normally Closed
Type 21W, 3/4" - 1"

APPLICATION

Servo-acting solenoid valve for on-off control of non-aggressive fluids and gases, air, oil or water, compatible with materials of construction. For use in explosive atmospheres.

FEATURES

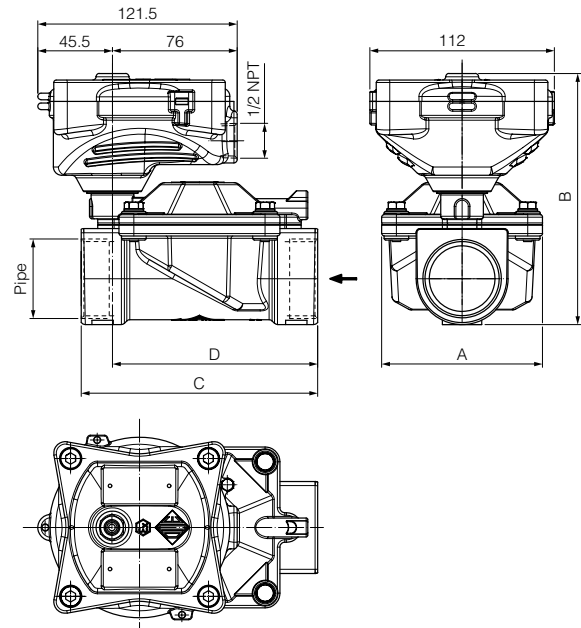
- Simple design
- Choice of orifice sizes and seal materials

TECHNICAL DATA

Functions:	Normally closed, energised to open
Ambient temp:	-20°C to +50°C
Fluid temp:	+80°C
Viscosity:	Max. 21 Cst. 2°E
Materials:	Body: brass; tube and tube nut: stainless steel; seal: FKM (V)
Coil voltage:	See page 26
Voltage tolerance:	+/-10%
Consumption:	DC: approx. 8 watts
Duty cycle:	100% continuous rating
Protection class:	IP 67
Coil insulation:	Class F



DIMENSIONS (mm)



Code	Pipe ISO 228/1	A mm	B mm	C mm	D mm
21W3KIV190	G 3/4"	65	128	104	89
21W4KIV250	G 1"	65	136	104	8
21W5KIV350	G 1 1/4"	98	153	144	125
21W6KIV400	G 1 1/2"	98	153	144	125
21W7KIV500	G 2"	118	155	172	150

FLOW & PRESSURE RATING CHART (bar)

Pipe ISO 228/1	Code	Max Viscosity		Ø mm	Kv m³/h	Power Watt	Min.	Pressure bar M.O.P.D.	
		Cst	°E					AC	DC
G 3/4"	21W3KIV190	12	~2	19	8.4	8	0.2	16	16
G 1"	21W4KIV250			25	11.4				
G 1 1/4"	21W5KIV350			35	24			10	10
G 1 1/2"	21W6KIV400			40	31.2				
G 2"	21W7KIV500			50	45				

According to Directive 2014/34/EU ATEX

Solenoid Valves

Coupled Diaphragm, EEx d II T 6, Normally Closed
Type 21HT, $\frac{3}{8}$ " - 1"

APPLICATION

Solenoid valves Type 21HT are normally closed valves, energised to open and similar in design to servo-acting valves but with the diaphragm coupled to the solenoid plunger. This enables the valve to operate at zero pressure and without the need for a pressure differential, thus overcoming the problems associated with gravity feed systems.

FEATURES

- Operate from zero pressure, no differential required
- Coil replacement without exposing fluid

TYPES AVAILABLE

G $\frac{3}{8}$ " to 1", with 8 watt coils

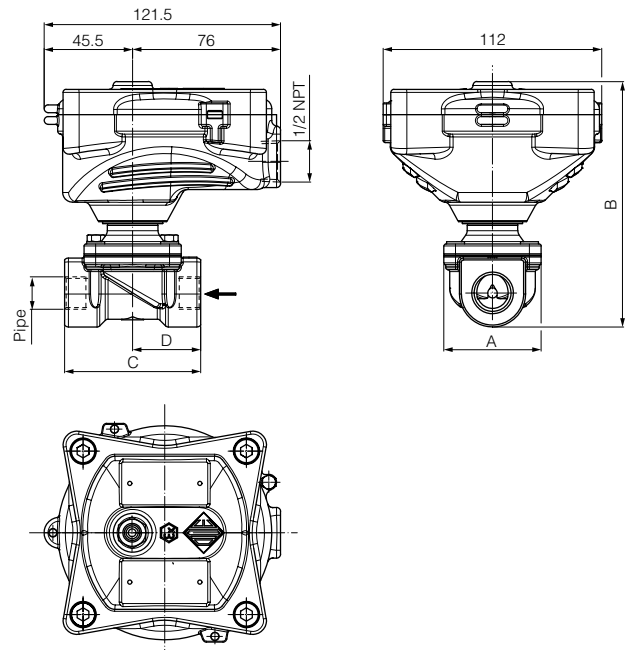
TECHNICAL DATA

Ambient temp:	-10°C to +80°C
Fluid temp:	+140°C
Viscosity:	Max. 12 Cst. 2°E
Materials:	Body: brass; tube and plunger: stainless steel
Seal:	Viton
Coil voltage:	See page 26
Voltage tolerance:	+10% -5% DC +10% -15% AC
Consumption:	8 watts 25/14 VA
Duty cycle:	100% continuous rating
Protection class:	IP 67
Coil insulation:	Class F

Code	Pipe ISO 228/1	A mm	B mm	C mm	D mm
21HT3KIV110	G $\frac{3}{8}$ "	50	113	56	28
21HT4KIV160	G $\frac{1}{2}$ "	50	125	70	35
21HT5KIV160	G $\frac{3}{4}$ "	50	125	70	35
21HT6KIV250	G1"	65	131	104	52



DIMENSIONS (mm)



FLOW & PRESSURE RATING CHART (bar)

Pipe ISO 228/1	Code	Max Viscosity		Ø mm	Kv m³/h	Power Watt	Min.	Pressure bar M.O.P.D.	
		Cst	°E					AC	DC
G $\frac{3}{8}$ "	21HT3KIV110	12	~2	11	1.2	8	0	14	5
G $\frac{1}{2}$ "	21HT4KIV160			16	2.4				
G $\frac{3}{4}$ "	21HT5KIV160			16	2.4				
G1"	21HT6KIV250			25	7.2			6	-

According to Directive 2014/34/EU ATEX

Solenoid Valves

Coupled Diaphragm, EEx d II T 6, Normally Closed, Stainless Steel
Type 21IH, $\frac{3}{8}$ " - $1\frac{1}{2}$ "

APPLICATION

Solenoid valves Type 21IH are normally closed valves, energised to open and similar in design to servo-acting valves but with the diaphragm coupled to the solenoid plunger. This enables the valve to operate at zero pressure and without the need for a pressure differential, thus overcoming the problems associated with gravity feed systems.

FEATURES

- Operate from zero pressure, no differential required
- Coil replacement without exposing fluid

TYPES AVAILABLE

$G\frac{3}{8}$ " to $1\frac{1}{2}$ ", with 8 watt coils

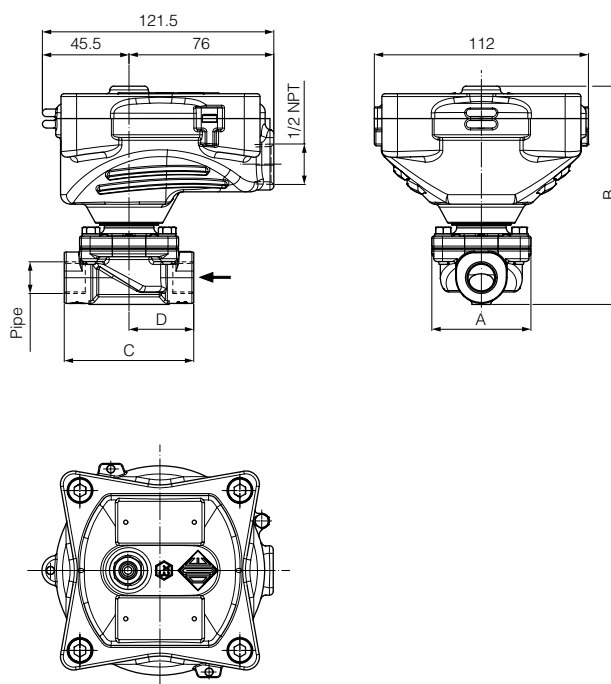
TECHNICAL DATA

Ambient temp:	-10°C to +80°C
Fluid temp:	+140°C
Viscosity:	Max. 12 Cst. 2°E
Materials:	Body: brass; tube and plunger: stainless steel
Seal:	Viton
Coil voltage:	See page 26
Voltage tolerance:	+10% -5% DC +10% -15% AC
Consumption:	8 watts 25/14 VA
Duty cycle:	100% continuous rating
Protection class:	IP 67
Coil insulation:	Class F

Code	Pipe ISO 228/1	A mm	B mm	C mm	D mm
21IH3KIV150	$G\frac{3}{8}$ "	52	114.5	68	34
21IH4KIV160	$G\frac{1}{2}$ "	52	114.5	68	34
21IH5KIV200	$G\frac{3}{4}$ "	58	123	75	37.5
21IH6KIV250	G1"	65	131	90	45
21IH7KIV350	$G1\frac{1}{4}$ "	94	126.5	128	64
21IH8KIV400	$G1\frac{1}{2}$ "	94	126.5	128	64



DIMENSIONS (mm)



FLOW & PRESSURE RATING CHART (bar)

Pipe ISO 228/1	Code	Max Viscosity		Ø mm	Kv m³/h	Power Watt	Pressure bar M.O.P.D.		
		Cst	°E				Min.	AC	DC
$G\frac{3}{8}$ "	21IH3KIV150	12	~2	15	2.4	8	0	14	6
$G\frac{1}{2}$ "	21IH4KIV160			16	3				
$G\frac{3}{4}$ "	21IH5KIV200			20	3.6				
G1"	21IH6KIV250			25	8.4				
$G1\frac{1}{4}$ "	21IH7KIV350			35	18			9	3
$G1\frac{1}{2}$ "	21IH8KIV400			40	20.4				
								9	-

According to Directive 2014/34/EU ATEX

Solenoid Valves

Direct-acting, EEx m II T 4, Normally Closed, Stainless Steel
Type 21L, 1/4"

APPLICATION

Normally closed solenoid valve with body and metal parts of stainless steel. Ports G1/4". For use in explosive atmospheres.

FEATURES

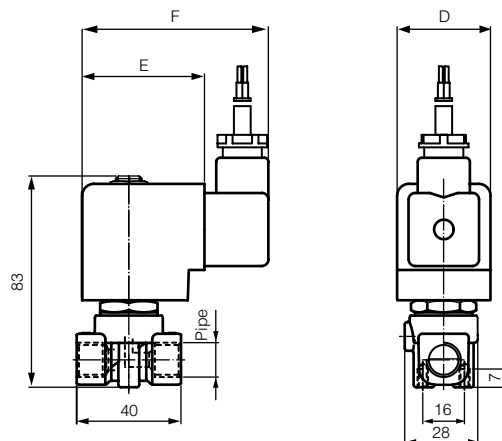
- Simple design
- Choice of orifice sizes
- Compact design
- 316 stainless steel body

TECHNICAL DATA

Functions:	Normally closed, energised to open
Ambient temp:	-20°C to +50°C
Fluid temp:	+80°C
Viscosity:	Max. 37 Cst. 5°E
Materials:	Body: 316 stainless steel; inner parts: 430F stainless steel; seal: FKM (V)
Coil voltage:	24V DC; 24V, 100V and 230V, 50Hz
Voltage tolerance:	+/-10%
Consumption:	DC: 10 watts max.
Duty cycle:	100% continuous rating
Protection class:	IP 65 to DIN 40050
Coil insulation:	Class H



DIMENSIONS (mm)



TYPE	D mm	E mm	F mm
T	36	47	71.4

FLOW & PRESSURE RATING CHART (bar)

Pipe ISO 228/1	Code	Max Viscosity		Ø mm	Kv m³/h	Power Watt	Pressure bar M.O.P.D.		
		Cst	°E				Min.	AC	DC
G1/4"	21L2QDV25	53	~7	2.5	0.19	8	0	14	9
	21L2QDV30			3.0	0.24			10	6
	21L2QDV40			4.0	0.30			6	1.7
	21L2QDV55			5.5	0.54			3.5	1

According to Directive 2014/34/EU ATEX

Solenoid Valves

Direct-acting, EEx d II T 6, Normally Closed, Stainless Steel
Type 21L, 1/4"

APPLICATION

Normally closed solenoid valve with body and metal parts of stainless steel. Ports G1/4". For use in explosive atmospheres.

FEATURES

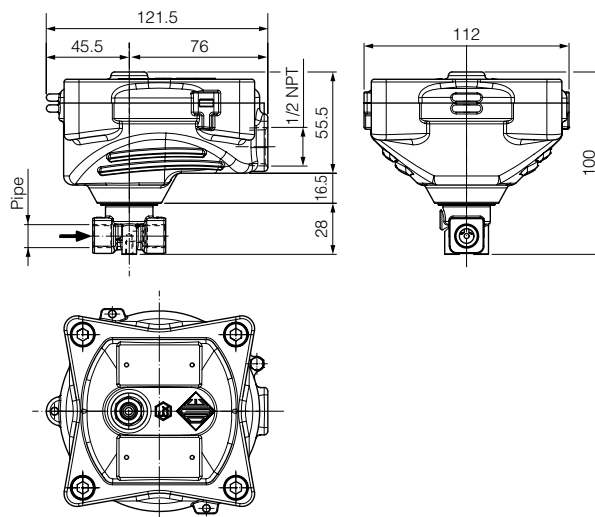
- Simple design
- Choice of orifice sizes
- 316 stainless steel body

TECHNICAL DATA

Functions: Normally closed, energised to open
Ambient temp: -20°C to +50°C
Fluid temp: +140°C
Viscosity: Max. 37 Cst. 5°E
Materials: Body: 316 stainless steel; inner parts: 430F stainless steel; seal: FKM (V)
Coil voltage: See page 26
Voltage tolerance: +/-10%
Consumption: DC: approx. 8 watts
Duty cycle: 100% continuous rating
Protection class: IP 67
Coil insulation: Class F



DIMENSIONS (mm)



FLOW & PRESSURE RATING CHART (bar)

Pipe ISO 228/1	Code	Max Viscosity		Ø mm	Kv m³/h	Power Watt	Min.	Pressure bar M.O.P.D.	
		Cst	°E					AC	DC
G1/4"	21L2KIV25	53	~7	2.5	0.19	8	0	14	9
	21L2KIV30			3.0	0.24			10	6
	21L2KIV40			4.0	0.30			6	1.7
	21L2KIV55			5.5	0.54			3.5	1

According to Directive 2014/34/EU ATEX

Solenoid Valves

Servo-acting, EEx m II T 4, Normally Closed, Stainless Steel
Type 21X, Sizes 1/2" - 1"

APPLICATION

Normally closed solenoid valve with body and metal parts of stainless steel. Ports G1/2" to G1". For use in explosive atmospheres.

FEATURES

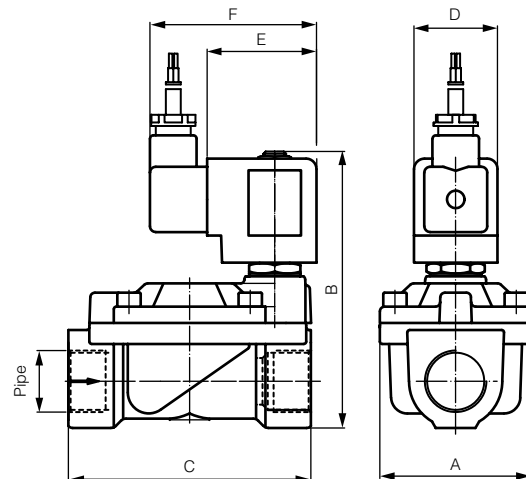
- Simple design
- Choice of port sizes
- 316 stainless steel body

TECHNICAL DATA

Functions:	Normally closed, energised to open
Ambient temp:	-20°C to +50°C
Fluid temp:	+80°C
Viscosity:	Max. 37 Cst. 5°E
Materials:	Body: 316 stainless steel; inner parts: 430F stainless steel; seal: FKM (V)
Coil voltage:	24V DC; 24V, 100V and 230V, 50Hz
Voltage tolerance:	+/-10%
Consumption:	DC: approx. 10 watts
Duty cycle:	100% continuous rating
Protection class:	IP 65
Coil insulation:	Class H



DIMENSIONS (mm)



Type	Pipe ISO 228/1	A mm	B mm	C mm
21X2QDV120	G 1/2"	40	103	72
21X3QDV190	G 3/4"	65	115	104
21X4QDV250	G 1"	65	115	104

TYPE	D mm	E mm	F mm
T	36	47	71.4

FLOW & PRESSURE RATING CHART (bar)

Pipe ISO 228/1	Code	Max Viscosity		Ø mm	Kv m³/h	Power Watt	Pressure bar M.O.P.D.		
		Cst	°E				Min.	AC	DC
G 1/2"	21X2QDV120	12	~2	12	2.1	10	0.1	16	16
G 3/4"	21X3QDV190			19	7.8				
G 1"	21X4QDV250			25	9.6				

According to Directive 2014/34/EU ATEX

Solenoid Valves

Servo-acting, EEx d II T 6, Normally Closed, Stainless Steel
Type 21X, Sizes 1/2" - 1"

APPLICATION

Normally closed solenoid valve with body and metal parts of stainless steel. For use in explosive atmospheres.

FEATURES

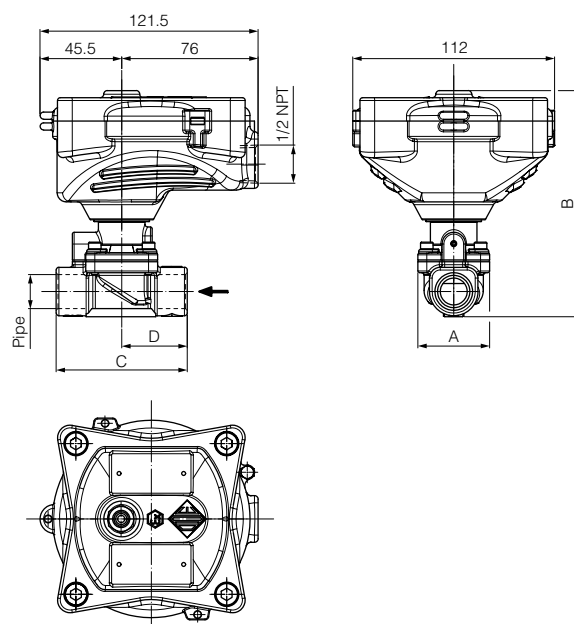
- Simple design
- 316 stainless steel body

TECHNICAL DATA

Functions: Normally closed, energised to open
Ambient temp: -20°C to +50°C
Fluid temp: +80°C
Viscosity: Max. 37 Cst. 5°E
Materials: Body: 316 stainless steel; inner parts: 430F stainless steel; seal: FKM (V)
Coil voltage: See page 26
Voltage tolerance: +/-10%
Consumption: DC: approx. 8 watts
Duty cycle: 100% continuous rating
Protection class: IP 67
Coil insulation: Class F



DIMENSIONS (mm)



Type	Pipe ISO 228/1	A mm	B mm	C mm	D mm
21X2KIV120	G 1/2"	40	120	73	36.5
21X3KIV190	G 3/4"	65	136	104	88.5
21X4KIV250	G 1"	65	136	104	88.5

FLOW & PRESSURE RATING CHART (bar)

Pipe ISO 228/1	Code	Max Viscosity		Ø mm	Kv m³/h	Power Watt	Pressure bar M.O.P.D.	
		Cst	°E				Min.	
G 1/2"	21X2KIV120	12	~2	12	2.1	8	0.1	AC
G 3/4"	21X3KIV190			19	7.8			20
G 1"	21X4KIV250			25	9.6			16

According to Directive 2014/34/EU ATEX