

2/2-WAY SOLENOID VALVE

TYPE 70



O₂ oxygene applications



DESCRIPTION

Valve type 70 is a 2/2-way force pilot operated solenoid valve for general applications with gases and liquids for high flow rates.

CONSTRUCTION

Body material	brass
Internal parts	brass and stainless steel
Sealing material	NBR, EPDM, FPM
Voltages	24 V DC, 24 V 50Hz, 230 V 50Hz
Connections	G3/8 - G2

ON REQUEST

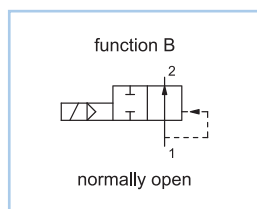
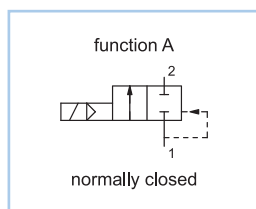
Valve for oxygene applications
 Non-standard coil voltages
 Higher ambient temperature range
 Non-standard equipment
 Manual override

SWITCHING PRESSURE

Ports	Normally closed in bar	Normally open in bar
G3/8	14,0	14,0
G1/2	14,0	14,0
G3/4	14,0	14,0
G1	14,0	14,0
G1 1/4	10,0	8,0
G1 1/2	10,0	7,5
G2	10,0	5,0

See details on the website

VARIANTS



DETAILED INFORMATION

General	
type of construction	2/2-way poppet valve, with diaphragm, normally closed NC or normally open NO, coil 360° rotatable
operation	electrically, on request: manual override
ports	G3/8 – G2
ambient temperature	-20°C to +50°C, higher acceptable ambient temperature range on request
fluid temperature	dependent on sealing material and coil
viscosity	max. 21 mm ² /s (cst)
material	body: brass plunger tube: AISI 303 internal parts: brass and stainless steel sealing: see type selection
mounting	installation into fixed piping system
installation	only with vertical fixed solenoid coil
unit of supply	without connector

Electrical	
voltage	DC voltage or AC voltage
standard voltages	24 V DC, 24 V 50Hz, 230 V 50Hz
non-standard voltage on request	6 V - 200 V DC, 12 V - 240 V 50Hz or 60Hz
acceptable voltage tolerance	±10%
power consumption	see specifications at solenoid coils
coil temperature classification	temperature class F (155°C), winding & coil E3 temperature class H (180°C)
duty cycle	100%, continuous operation
protection class	IP65 according DIN EN 60529 (DIN 40050) with correctly mounted connector

Pneumatic – Hydraulic	
fluid	all liquids and gases, non-aggressive to the used material
max. valve body pressure	PN 16
response time	depending on operating pressure and fluid
non-standard equipment on request	coil type with cable, bright nickel-plated or chemical nickel-plated, coils for temperature class H (180°C)

2/2-WAY SOLENOID VALVE

TYPE 70



O₂ oxygene applications

CONFIGURATION & PRESSURE RANGE

Coil power consumption at 20°C			
coil type	inrush power 50Hz in VA	rated power 50Hz in VA	power DC in W
E1AA	32	14	12
E2AA	42	19	17
E3AE	70	32	27
F1AA	70	35	27
G1AA	80	40	32

Sealing material	Code	Fluid temperature	Applicable for
NBR (Perbunan)	B	-10°C to 80°C	neutral gases and liquids
EPDM	E	-10°C to 130°C	hot water, steam, not for oil and grease
FPM	V	-10°C to 130°C	oil, petrol, oxygen

NORMALLY CLOSED VALVES

Type 70A, normally closed													
type (order- no.)	NW DN in mm	ports	maximum differential pressure in bar										kv- value in m ³ /h
			coil E1AA		coil E2AA		coil E3AE		coil F1AA		coil G1AA		
			50Hz	DC	50Hz	DC	50Hz	DC	50Hz	DC	50Hz	DC	
70A-3.-A...	16	G3/8	11,0	-	14,0	1,5	14,0	6,0	14,0	12,0	-	-	3,5
70A-4.-A...	16	G1/2	11,0	-	14,0	1,5	14,0	6,0	14,0	12,0	-	-	3,8
70A-5.-A...	20	G3/4	11,0	-	14,0	1,5	14,0	6,0	14,0	12,0	-	-	4,7
70A-6.-A...	25	G1	11,0	-	14,0	1,5	14,0	6,0	14,0	9,0	-	-	5,5
70A-7.-A...	32	G1 1/4	-	-	-	-	-	-	10,0	2,5	10,0	9,0	13,0
70A-8.-A...	40	G1 1/2	-	-	-	-	-	-	10,0	1,5	10,0	7,0	16,8
70A-9.-A...	50	G2	-	-	-	-	-	-	10,0	1,2	10,0	5,0	30,2

NORMALLY OPEN VALVES

Type 70B, normally open											
type (order-no.)	NW DN in mm	ports	maximum differential pressure in bar								kv-value in m ³ /h
			coil E1AA		coil E2AA		coil E3AE		coil F1AA		
			50Hz	DC	50Hz	DC	50Hz	DC	50H	DC	
70B-3.-A...	16	G3/8	12,0	-	12,0	12,0	12,0	12,0	14,0	14,0	3,5
70B-4.-A...	16	G1/2	12,0	-	12,0	12,0	12,0	12,0	14,0	14,0	3,8
70B-5.-A...	20	G3/4	12,0	-	12,0	12,0	12,0	12,0	14,0	14,0	4,7
70B-6.-A...	25	G1	12,0	-	12,0	12,0	12,0	12,0	14,0	14,0	5,5
70B-7.-A...	32	G1 1/4	-	-	-	-	-	-	8,0	8,0	13,0
70B-8.-A...	40	G1 1/2	-	-	-	-	-	-	7,5	7,5	16,8
70B-9.-A...	50	G2	-	-	-	-	-	-	5,0	5,0	30,2

ORDER CODE

Type 70A, normally closed										
order code	70	A	-	6	B	-	A	E3AE	02400	
Type 70B, normally open										
order code	70	B	-	6	B	-	A	E3AE	02400	
Code decoding										
type	type 70, force pilot operated, body: brass, plunger tube: stainless steel									
function	A = normally closed, B = normally open									
ports	3 = G3/8, 4 = G1/2, 5 = G3/4, 6 = G1, 7 = G1 1/4, 8 = G1 1/2, 9 = G2									
seal material	B = NBR (Perbunan), E = EPDM, V = FPM									
short circuit ring	A = copper short circuit ring, X = without short circuit ring									
coil type	see specifications of the particular coil									
supply voltage	always 5-digits, see code for standard voltage									

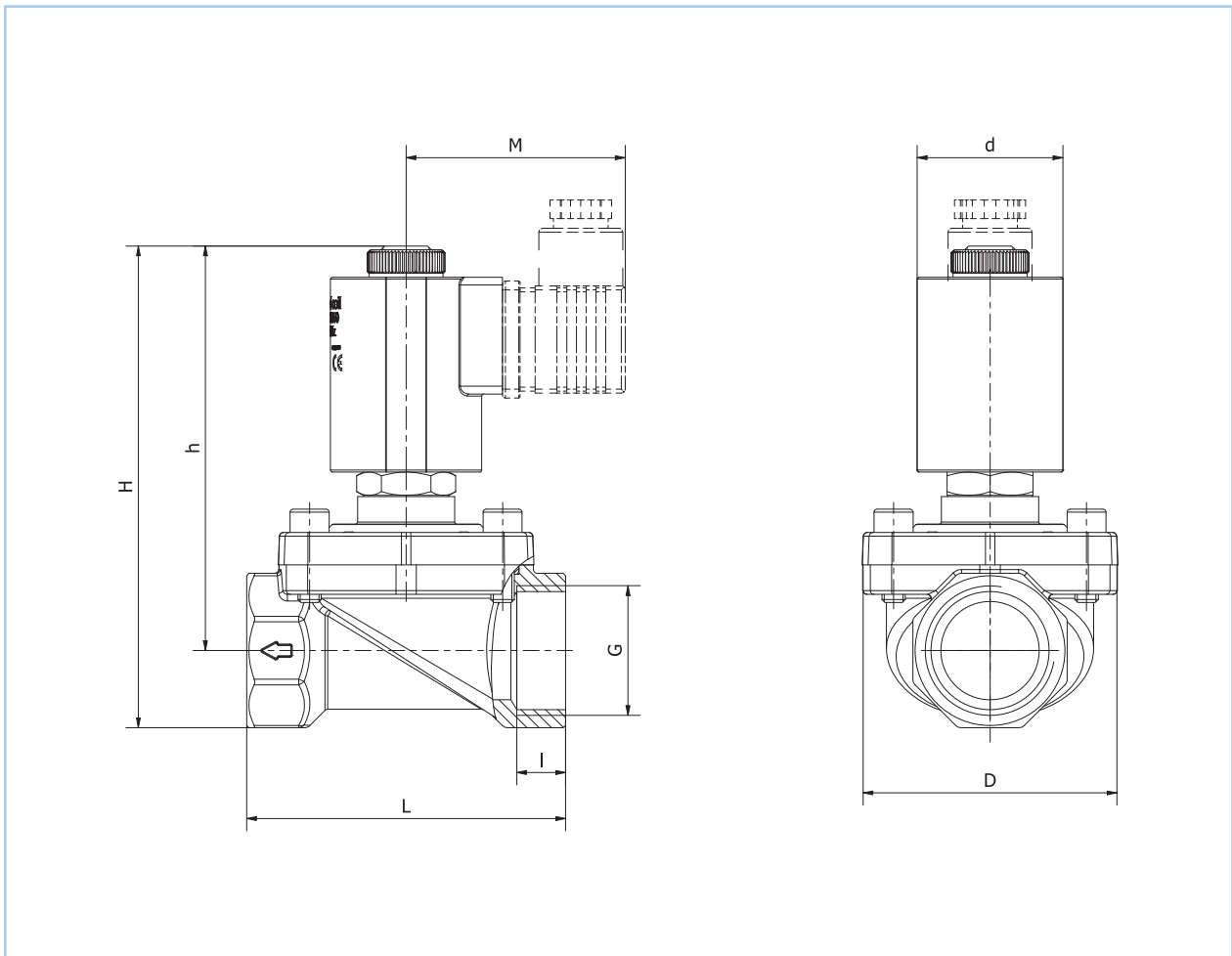
2/2-WAY SOLENOID VALVE

TYPE 70



O_2 oxygene applications

DIMENSIONS



Dimension table for type 70 in mm, approx. weight in g												
coil	G	type 70A		type 70B		M	d	L	I	D	approx. weight in g	
		H	h	H	h						70A	70B
E1	G3/8	100	87	118	104,5	52,5	30	60	12	45	530	620
E3	G3/8	100	87	118	104,5	54	36	60	12	45	610	700
F1	G3/8	111	98	130	117	55	39	60	12	45	680	800
E1	G1/2	101	88	118	105	52,5	30	60	12	45	500	590
E3	G1/2	101	88	118	105	54	36	60	12	45	580	670
F1	G1/2	111	98	130	117	55	39	60	12	45	650	770
E1	G3/4	106,5	90,5	124	108	52,5	30	68	11	50	560	650
E3	G3/4	106,5	90,5	124	108	54	36	68	11	50	640	730
F1	G3/4	117	100,5	136	119,5	55	39	68	11	50	710	830
E1	G1	114	94,5	132	112	52,5	30	82	11	65	830	920
E3	G1	114	94,5	132	112	54	36	82	11	65	910	1 000
F1	G1	125	104,5	144	123,5	55	39	82	11	65	980	1 100
F1	G1 1/4	136	111,5	155	130,5	55	39	102	18	82	1 520	1 640
G1	G1 1/4	149	124	170	144,5	61	46	102	18	82	1 750	1 840
F1	G1 1/2	142	114	161	133	55	39	110	22	85	1 740	1 860
G1	G1 1/2	155	127	175,5	147,5	61	46	110	22	85	1 970	2 060
F1	G2	156	122	175	141	55	39	134	22	108	2 770	2 890
G1	G2	167,5	133,5	188	154	61	46	134	22	108	3 000	3 090