4/2 Way Solenoid Valve Servo-Assisted





5413

Circuit Function G

G 1/4, Polyamide Body



High Flow Rates

Application: Actuation of large,

Manual Override as Standard

Type 5413 is a 4/2 way solenoid valve with a poppet design. An epoxy-encapsulated 3/2 way pilot solenoid valve provides the control.

The valve consists basically of two inter-connected 3/2 way valves of opposite function feeding ports A (NC) and B (NO). A min. pressure differential of 1 bar is required to provide reliable switching. The valves can be multi-manifold mounted into assemblies on double-channel manifolds for main air supply and exhaust.

Process Specification

Materials Body

DTS 1000011019 EN Version: A Status: RL (released | freigegeben | validé) printed: 19.04.2013

Valve internals Sealing Fluids

Temperatures Fluid Ambient Operating voltages

Voltage tolerance Duty cycle Electrical connection

Rating Installation Polyamide with moulded-in metal threads Stainless Steel NBR Neutral media, e.g. lubricated or unlubricated compressed air

-10 up to +60°C Max. +55°C 24 V/DC 24 / 110 / 230 V/50-60 Hz ±10% 100% continuously rated Tag connectors according to DIN 43650 A for cable plugs type 2508 (see accessories) IP 65 (with cable plug) As required (preferably solenoid system upright)

Flow rate: QNn-value air [l/min] Measured at +20°C, 6 bar pressure at valve inlet, 1 bar pressure difference.

Pressure ranges (bar) Measured as overpressure to the atmospheric pressure

*) Applied supply pressure must be 1 bar above the pilot pressure of the valve actuator.

Orifice	QNn	Port	Electrical power		Response		Press.	Weight	
DN	value	conn.	consur	nption		times		range	
	air ¹⁾		AC inrush	AC hold	DC	opening	closing		
[mm]	[l/min]	[inch]	[VA]	[VA]	[W]	[ms]	[ms]	[bar]	[kg]
6.0	900	G 1/4	11	6	2	50	30	1 – 10	0.4

externally piloted valves





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Specifications - Ordering Chart (Other Versions on Request) for Type 5413

(with standard-cable plug 0-250 V AC/DC							
Circuit function	Orifice	Port connection	QNn-value	Pressure range Voltage / Frequency Item-No.		Item-No.	
	DN		air¹)				
	[mm]	[inch]	[l/min]	[bar]	[V/Hz]		
G	6	G 1/4	900	1 – 10	024/DC 024/50-60 110/50-60 230/50-60	134 615 Q 134 616 R 134 617 J 134 618 T	

Specifications - Ordering Chart for Light Alloy Manifolds

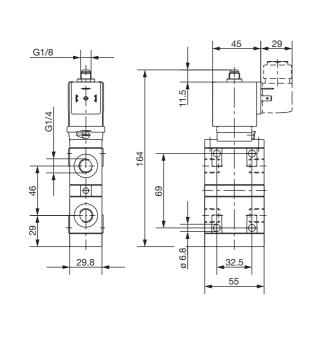
Double Channel (for pressure and exhaust port) incl. mounting screws M5 x 60 DIN 912 and O-rings 11 x 2.5

No. of valves	Hole spacing	Total length	Item-No.
	[mm]	[mm]	
2	93	78	005 686 T
3	126	111	005 688 D
4	159	144	005 719 B
5	192	177	005 696 V
6	225	210	005 626 W
7	258	243	005 738 E
8	291	276	005 724 Y
9	324	309	005 739 F
10	357	342	005 740 L
11	390	375	005 804 S
12	423	408	005 700 M

Single Channel (for pressure port) incl. banjo bolts and seals

No. of valves	Hole spacing	Total length	Item-No.			
	[mm]	[mm]				
2	77	93	005 811 Q			
3	110		005 717 Z			
4	143	159	005 843 Y			
5	176	192	005 776 C			
6	209	225	005 718 A			

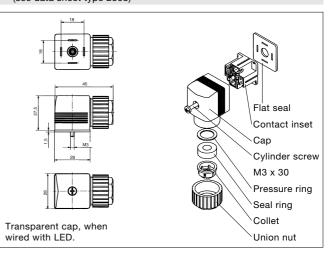
Dimensions [mm]



Ordering Chart for Accessories

Device/	Features	Item-No.
Accessory		
Cable plugs ¹⁾ Type 2508	Standard cable plug, 0-250 V AC/DC (standard-delivery) ¹⁾	008 376 N
	with LED, 12–24 V AC/DC	008 360 S
	with LED, 100-120 V AC/DC	008 361 P
	with LED + varistor, 12-24 V AC/DC	008 367 M
	with LED + varistor, 100-120 V AC/DC	008 368 W
	with LED + varistor, 200-240 V AC/DC	008 369 X
	(optional wirings and connection speci- fications see data sheet Type 2508)	

¹⁾ The standard cable plug (0-250 V AC/DC), Order-No. 008 376 N is part of the standard delivery. Ordering of optional cable plugs with separate item number. A wide selection of further cable plugs is available (see data sheet type 2508)



We reserve the right to make technical changes without notice. 102-GB/ 1-0228