



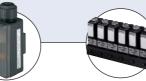
# 3/2-way Solenoid Valve, direct-acting, NC or NO

- Electrical connection cable plug, Form A
- With or without manual override as standard
- Threaded port and sub-base versions
- Impulse version optional

Type 6014 can be combined with...









Type 2508

Cable Plug

Type 1078

Timer unit

Type 6014

Multiple manifold (e.g. 6-fold)

ASI cable plug

This direct-acting 3/2-way solenoid valve may be mounted singly or in flange version on a manifold. FKM high quality seal material can be used for a lot of different mediums. The valve is

also suitable for technical vacuum.

### Circuit function C



3/2-way valve NC, outlet 2 relieved

#### Circuit function D



3/2-way valve NO, outlet 2 normally pressurized

### **Circuit function T**



3/2-way, universal valve

Technical data	
Body material	Brass or stainless steel, polyamide (sub-base)
Seal material	FKM (EPDM on request)
Medium	Neutral gases and fluids (e.g. compressed air, town gas, natural gas, water, hydraulic oil, petrol). Suitable for technical vacuum
<b>Medium temperature</b> Polyamide coil (FKM seal)	-10° to +100°C (PA coil) to 120°C Epoxy coil
Ambient temperature	-10 to +55°C
Viscosity	Max. 21 mm2/s
Port connection	G 1/8, G 1/4, sub-base
Operating voltage	24 V DC, 24 V/50 Hz, 230 V/50 Hz (other voltages on request)
Voltage tolerance	±10%
<b>Duty cycle / single valve</b> Assembly	100% continuous rating Intermittent operation 60% (30 min) or with 5 W coil (on request)
Electrical connection According to	DIN EN 175301-803 Form A for Cable Plug,Type 2508 (see Ordering chart for accessories)
Installation	As required, preferably with actuator upright
Protection class	IP65 with Cable Plug
Coil insulation class	Polyamide class B (Epoxy class H on request)
Coil material	Polyamide (Epoxy on request)
Orifice	DN 1.5- 2.5



### Technical data

# Power consumption

Orifice	Power consumption							
[mm] [mm]	Inrush AC [VA]	Hold AC ( [VA]	hot coil) [W]	DC hot / cold coil [W]				
1.5-2.5	24	17	8	8/9				

# Response times

Orifice	Response times AC and DC				
[mm]	Opening [ms]	Closing [ms]			
1.5	10-15	15-20			
2.0	10-15	15-20			
2.5	15-20	10-22			

#### Response times [ms]:

Measured at valve outlet at 6 bar and +20°C. Opening: Pressure build-up 0 - 90%, to

Closing: Pressure relief 100 to 10%

### Utilisation in another circuit function

Valves with circuit functions (WW) C, D and T are fitted with different springs. If used in some other circuit function, the permissible operating pressure may change (see table below).

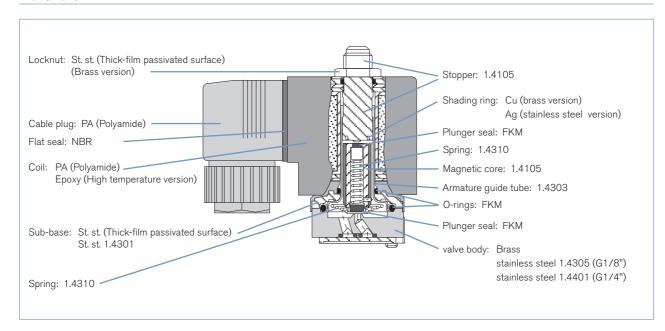
	Version version	Max. operating pressure [bar] for valve application in circuit function					
DN	Circuit function	A	В	С	D	Т	
1.5	С	16	22	16	2	2	
	D	2	2.5	2	16	2	
	Т	10	16	10	6	6	
2.0	С	10	14	10	1	1	
	D	1	1.5	1	10	1	
	Т	6	10	6	4	4	
2.5	С	6	9	6	0.7	0.7	
	D	0.7	1	0.7	6	0.7	
	T	3.5	6	3.5	2.5	2.5	

### Connections

For the positions marked with \*, \*\* or \*\*\* in the drawing, the connections are marked with the letters shown in the table above, depending on the circuit function. Unused connections in circuit functions A or B will be closed off with a blanking plug or cap nut.

Circuit function	Connection Type				
	*	**	***		
Α	Р	blank off	Α		
В	blank off	В	Р		
С	Р	R	Α		
D	R	Р	В		
Т	Р	R	Α		

### **Materials**





# Ordering chart for valves (other versions on request)

### Valves with threaded port

Valves with threaded p	ort									
	Ē	Ę		2 -	Effective coil power [W]	Item no	. per voltage / fr	equency		
E	Orifice [mm]	Port connection	<u> </u>	Pressure range [bar] ²	<u>ĕ</u>	ပ		_		
Circuit	fice	ı, E	Kv value water [m3/h] ¹⟩	egi ige	ecti	024/DC	024/50	230/50		
를 를	Ori	P 00	E & K	Pre	Po Eff	024	024	23(		
Brass body										
without manual override										
C 3/2-way valve NC	1.5	G 1/8	0.07	0 - 16	8	125 329	125 331	125 332		
2(A)	2.0	G 1/8	0.11	0 - 10	8	125 333	125 334	125 336		
		G 1/4	0.11	0 - 10	8	125 348	126 138	126 140		
1(P)3(R)	2.5	G <b>[mm]</b> 1/8	0.16	0 - 6	8	125 341	125 340	125 342		
		G 1/4	0.16	0 - 6	8	126 142	126 143	126 145		
<b>D</b> 3/2 way valve, NO	1.5	G 1/8	0.07	0 - 16	8	126 195	126 196	125 355		
2(B)	2.0	G 1/8	0.11	0 - 10	8	125 357	125 358	125 360		
		G 1/4	0.11	0 - 10	8	126 198	126 199	126 201		
1(P)3(R)	2.5	G 1/8	0.16	0 - 6	8	125 363	126 202	126 204		
		G 1/4	0.16	0 - 6	8	126 205	126 206	126 208		
T 3/2-way Universal valve	1.5	G 1/8	0.07	0 - 7	8	126 150	126 151	126 153		
A(2) 1(P)(R)3										
with manual override										
C 3/2-way valve NC	2.0	G 1/8	0.11	0 - 10	8	125 337	125 338	125 339		
2(A) 1(P)3(R)		G 1/4	0.11	0 - 10	8	125 349	126 147	126 149		
<b>D</b> 3/2 way valve, NO	2.0	G 1/8	0.11	0 - 10	8	126 209	125 361	126 211		
2(B) 1(P)3(R)		G 1/4	0.11	0 - 10	8	126 212	126 213	126 215		
Stainless steel body										
C 3/2-way valve NC	1.5	G 1/8	0.07	0 - 16	8	126 216	126 217	126 219		
	2.0	G 1/8	0.11	0 - 10	8	126 220	126 221	126 223		
1(P)3(R)	2.0	G 1/4	0.11	0 - 10	8	126 224	126 225	126 227		
T 3/2-way, universal valve	1.5	G 1/8	0.07	0 - 7	8	126 228	126 229	126 231		
1(P)(R)3										

<sup>1)</sup> Measured at +20 °C, 1 bar2) pressure difference

Please note that the cable plug has to be ordered separately, see accessories on page 6 and separate datasheet for Type 2508.

<sup>&</sup>lt;sup>2)</sup> Measured as overpressure to the atmospheric pressure



# Ordering chart for valves (other versions on request)

Valves with sub-base body without cable plug

	Ē		r] 2)	<b>5</b>	Item no. per voltage / frequency			
Circuit	Orifice [mm]	Kv value water [m3/h] <sup>1)</sup>	Pressure range [bar] ²	Effective coil power [W]	024/DC	024/50	230/50	
Brass body								
without manual override								
C 3/2-way valve NC	1.5	0.07	0 - 16	8	126 154	126 155	125 366	
2(A) 1(P)3(R)	2.0	0.11	0 - 10	8	125 367	125 368	125 370	
<b>D</b> 3/2 way valve, NO	2.0	0.11	0 - 10	8	126 161	126 162	125 383	
with manual override								
C 3/2-way valve NC	1.5	0.07	0 - 10	5	126 403	126 404	126 406	
2(A)	1.5	0.07	0 - 16	8	126 157	126 158	126 160	
	2.0	0.11	0 - 6	5	126 407	126 408	126 410	
1(P)3(R)	2.0	0.11	0 - 10	8	125 371	125 372	125 374	
Polyamide body material								
without manual override								
© 3/2-way valve NC	1.5	0.07	0 - 10	5	126 390	126 391	126 393	
with manual override								
C 3/2-way valve NC	1.5	0.07	0 - 10	5	126 396	126 397	126 399	

<sup>1)</sup> Measured at +20 °C, 1 bar 2) pressure difference

Please note that the cable plug has to be ordered separately, see accessories on page 6 and separate datasheet for Type 2508.

<sup>&</sup>lt;sup>2)</sup> Measured as overpressure to the atmospheric pressure



# Ordering chart for valves, impulse version (other versions on request)

All valves with AC10-coil (32 mm), impulse Version, seal material FKM, thermic insulation class H (epoxy coil), medium temperature -10° up to +120°C, without manual override and Cable Plug

Circuit function	Port connection		Orifice [mm]	Kv value water [m3/h] <sup>1)</sup>	Pressure range [bar] <sup>৩</sup>	Power consumption DC (hot/cold coil) [W]	voltage/	oo. per frequency 'Hz]
C 3/2-way valve,	Brass body							
output 2 exhausted	Threaded port	G 1/8	1.5	0.07	0-16	7	209 280	209 284
2(A) 1(P)3(R)			2.0	0.11	0-10	7	209 281	209 285
	Sub-base	sub-base	1.5	0.07	0-16	7	209 278	209 282
1(F)3(K)			2.0	0.11	0-10	7	209 279	209 283

<sup>1)</sup> Measured at +20 °C, 1 bar2) pressure difference

Please note that the cable plug has to be ordered separately, see accessories on page 6 and separate datasheet for Type 2508.

### Activation of the impulse version with inverse polarity operation

The polarity is labelled on the valve	Specifications	Terminal connections
- switch ON +	valve (P-seat) will be opened	(+) on terminal 2 and (-) on terminal 1 (see below)
+ switch OFF -	valve (P-seat) will be closes	(+) on terminal 1 and (-) on terminal 2 (see below)



**Note**: Only cable plug without circuitry should be used together with impulse version!

# Further versions on request



Materials

Epoxy coil according to Form A Seal material EPDM



Voltage

Non-standard voltages



Port connection With banjo nut



Approvals ATEX, UL, CSA



Additional Orifice: 1.2mm, 3.0mm

<sup>&</sup>lt;sup>2)</sup> Measured as overpressure to the atmospheric pressure

# burkert

# Ordering chart for accessory

# Cable plug Type 2508 according to DIN EN 175301-803 Form A

Circuitry	Voltage/ Frequency	Item no.			
None (standard)	0 - 250 V AC/DC	008 376			
with LED	12 - 24 V AC/DC	008 360			
with LED and varistor	12 - 24 V AC/DC	008 367			
with LED and varistor	200- 240V	008 369			
with inverter 1)	24V DC	on request			
further versions see datasheet Type 2508					

<sup>&</sup>lt;sup>1</sup> The inverter plug includes an electronic which is specially adapted for an electrical control with 3 wires lnput 3 wire technology, common "-" polarity, two split "+" polarity.
Output suitable for impulse model for Type 6013/6014



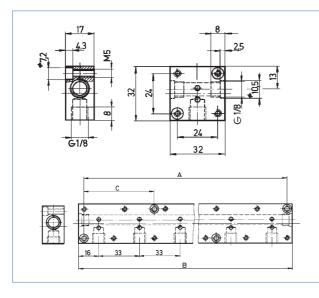
The delivery of a cable plug includes the flat seal and the fixing screw. For other cable plug versions acc. to DIN EN 175301-803 Form A (previously DIN 43650), see separate datasheet Type 2508. Click on the box "More info." and you will come to our website for this product where you

can download the datasheet.

### Ordering chart for Manifolds

Accessory	Features				Item no.
Single manifold	in aluminium black anodized				005 020
Multiple manifold	in aluminium	Hole spacing A [mm]	Total length B [mm]	Hole spacing C [mm]	
	2 valves	57	65	-	005 023
	3 valves	90	98	-	005 286
	4 valves	123	131	-	005 287
	5 valves	156	164	57	005 035
	6 valves	189	197	57	005 038
	8 valves	255	263	90	005 386
	10 valves	321	329	90	005 764
Covering plate	,	with plugs and O-ring, for c	closing off unused valve pos	sitions	005 630

Manifolds in Brass or stainless steel on request



## Manifold mounting

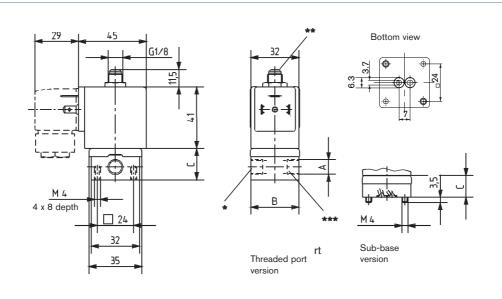
With manifold mounting, please comply with the permissible duty cycle (5 W models with 100% continuous rating or 8 W model with 60% duty cycle). The pressure port for the manifold is designated with P (R), and the outlet port with A (B). Only connect together ports with the same designation.

2/2-way valves of Type 6013 can be operated together on a manifold with 3/2-way valves of Type 6014, circuit function C (not D or TI) if the operating pressures agree according to the rating plates. The manifolds can also be expanded if the valve functions are taken into consideration.

**Caution!** Unused, open valve ports must be closed off with covering plates (see ordering chart above).



# Dimensions [mm]



Dimensions [mm]							
version	A	В	С				
Threaded port without manual override	G 1/8	32	20.8				
	G 1/4	46	26.8				
Threaded port with manual override	G 1/8	32	20.8				
	G 1/4	46	26.8				
Sub-base	_	32	14.3				

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