

# Valves for oil (hydraulic) and neutral liquids (max. 100 bar)

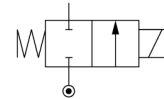
# 2/2



## Direct operated

Port size	Orifice (mm)	Flow factors (L/min)		Admissible differential pressure bar			Fluid temp. °C	Seat disc	Reference numbers				Power consumption (W)		Wt. (g)	El. Part Group *	Dim ref.
		kv	Qmax	Min	Max	DC			AC	Global valve reference	Valve reference no.	Housing	Coil	DC			

Normally closed



## Brass body/Pipe mounting

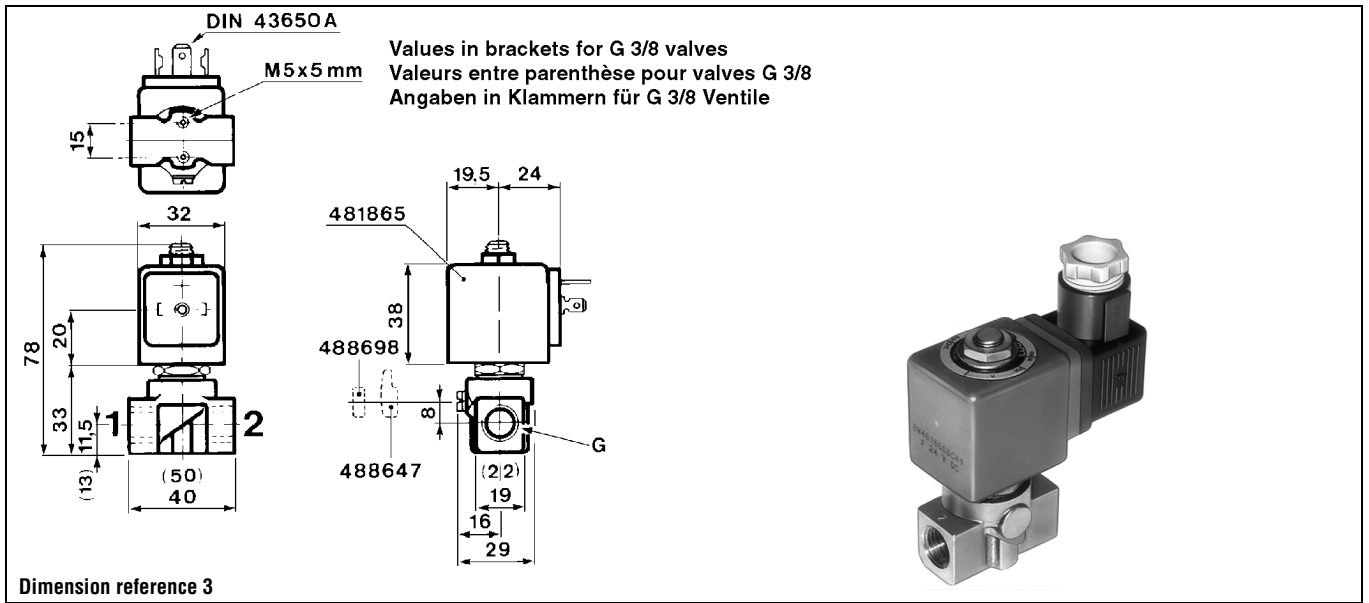
1/8	1.5	1.5	12.5	0	25	60	75	PCTFE	7121KBG1GF00	E121K14	2995	481865	9	8	300	2	3	
	1.5	1.5	12.5	0	30	70	75	PCTFE			4270	481000	8	8	420	2		
	1.5	1.5	12.5	0	55	70	75	PCTFE			4270	486265	14	14	430			
		2.5	3.5	25	0	10	28	100	Ruby	7121KBG1LR00	E121K23	2995	481865	9	8	300	2	3
		2.5	3.5	25	0	12	34	130	Ruby			4270	481000	8	8	420	2	
		2.5	3.5	25	0	22	50	120	Ruby			4270	486265	14	14	430		
	1/4	1.2	0.85	8.5	0	36	80	100	Ruby	7121KBG2ER00	E121K65	2995	481865	9	8	290		3
		1.2	0.85	8.5	0	43	100	130	Ruby			4270	481000	8	8	410		
		1.2	0.85	8.5	0	75	100	120	Ruby			4270	486265	14	14	420		
		1.5	1.5	12.5	0	25	60	75	PCTFE	7121KBG2GF00	E121K04	2995	481865	9	8	290	2	3
		1.5	1.5	12.5	0	30	70	75	PCTFE			4270	481000	8	8	410	2	
		1.5	1.5	12.5	0	55	70	75	PCTFE			4270	486265	14	14	420		
		1.5	1.5	15	0	25	60	100	Ruby	7121KBG2GR00	E121K67	2995	481865	9	8	290		3
		1.5	1.5	15	0	30	75	130	Ruby			4270	481000	8	8	410		
		1.5	1.5	15	0	55	100	120	Ruby			4270	486265	14	14	420		
		2.5	3.5	25	0	10	28	100	Ruby	7121KBG2LR00	E121K63	2995	481865	9	8	290		3
		2.5	3.5	25	0	12	34	130	Ruby			4270	481000	8	8	410		
		2.5	3.5	25	0	22	50	120	Ruby			4270	486265	14	14	420		
		3	4.5	27	0	7	20	75	PCTFE	7121KBG2NF00	E121K03	2995	481865	9	8	290	2	3
		3	4.5	27	0	8.5	25	75	PCTFE			4270	481000	8	8	410	2	
		3	4.5	27	0	15	36	75	PCTFE			4270	486265	14	14	420		
	3	4.5	27	0	7	20	100	Ruby	7121KBG2NR00	E121K64	2995	481865	9	8	290		3	
	3	4.5	27	0	8.5	25	130	Ruby			4270	481000	8	8	410			
	3	4.5	27	0	15	36	120	Ruby			4270	486265	14	14	420			

Table continued on page 88

### Notes:

\* See Electrical Parts Group table at end of section

# Valves for oil (hydraulic) and neutral liquids 2/2 - Direct operated

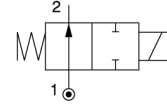


## Valves for oil (hydraulic) and neutral liquids 2/2 - Direct operated

Port size	Orifice (mm)	Flow factors (L/min)		Admissible differential pressure bar			Fluid temp. °C	Seat disc	Reference numbers				Power consumption (W)		Wt. (g)	El. Part Group *	Dim ref.
		kv	Qmax	Min	Max	DC			AC	Global valve reference	Valve reference no.	Housing	Coil	DC			
G																	

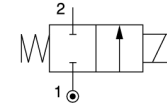
### Brass body/Pipe mounting

Normally open



1/8	2.5	3.5	-	0	-	30	140	Ruby	7122KBG1LR00	<b>122K9363</b>	<b>4270</b>	<b>481044</b>	-	14	445		4
	2.5	3.5	-	0	30	30	140	Ruby			<b>4270</b>	<b>486265</b>	14	14	455		
1/4	1.5	1.5	8	0	30	30	100	PCTFE	7122KBG2GF00	<b>122K84</b>	<b>2995</b>	<b>481865</b>	9	8	290	2	3
	1.5	1.5	8	0	30	30	120	PCTFE			<b>4270</b>	<b>481000</b>	8	8	410	2	
	1.5	1.5	9.5	0	40	40	100	Ruby	7122KBG2GR00	<b>122K8408</b>	<b>2995</b>	<b>481865</b>	9	8	290	2	3
	1.5	1.5	9.5	0	40	40	130	Ruby			<b>4270</b>	<b>481000</b>	8	8	410	2	
	2.5	3.5	-	0	-	30	140	Ruby	7122KBG2LR00	<b>122K8363</b>	<b>4270</b>	<b>481044</b>	-	14	425		4
	2.5	3.5	-	0	30	30	140	Ruby			<b>4270</b>	<b>486265</b>	14	14	435		

Normally closed



### Brass body/Sub-base mounting

SB	1.5	1.5	12.5	0	25	60	75	PCTFE	7121FBF4GF00	<b>E121F44</b>	<b>2995</b>	<b>481865</b>	9	8	250	2	12
	1.5	1.5	12.5	0	30	70	75	PCTFE			<b>4270</b>	<b>481000</b>	8	8	370	2	
	1.5	1.5	12.5	0	55	70	75	PCTFE			<b>4270</b>	<b>486265</b>	14	14	380	2	
	1.5	1.5	15	0	25	60	100	Ruby	7121FBF4GR00	<b>121F67</b>	<b>2995</b>	<b>481865</b>	9	8	255	2	12
	1.5	1.5	15	0	30	75	130	Ruby			<b>4270</b>	<b>481000</b>	8	8	375	2	
	1.5	1.5	15	0	55	100	120	Ruby			<b>4270</b>	<b>486265</b>	14	14	385	2	
	2.5	3.5	25	0	10	28	100	Ruby	7121FBF4LR00	<b>121F63</b>	<b>2995</b>	<b>481865</b>	9	8	255	2	12
	2.5	3.5	25	0	12	34	130	Ruby			<b>4270</b>	<b>481000</b>	8	8	375	2	
	2.5	3.5	25	0	22	50	120	Ruby			<b>4270</b>	<b>486265</b>	14	14	385	2	
	3	4.5	27	0	7	20	75	PCTFE	7121FBF4NF00	<b>E121F43</b>	<b>2995</b>	<b>481865</b>	9	8	250	2	12
	3	4.5	27	0	8.5	25	75	PCTFE			<b>4270</b>	<b>481000</b>	8	8	370	2	
	3	4.5	27	0	15	36	75	PCTFE			<b>4270</b>	<b>486265</b>	14	14	380	2	
3	4.5	27	0	7	20	100	Ruby	7121FBF4NR00	<b>121F64</b>	<b>2995</b>	<b>481865</b>	9	8	255	2	12	
3	4.5	27	0	8.5	25	130	Ruby			<b>4270</b>	<b>481000</b>	8	8	375	2		
3	4.5	27	0	15	36	120	Ruby			<b>4270</b>	<b>486265</b>	14	14	385	2		

**Notes:**

\* See Electrical Parts Group table at end of section

## Valves for oil (hydraulic) and neutral liquids 2/2 - Direct operated

**DIN 43650A**

M5x5 mm

Values in brackets for G 3/8 valves  
Valeurs entre parenthèse pour valves G 3/8  
Angaben in Klammern für G 3/8 Ventile

Technical drawing showing front, side, and detail views of a 2/2-way direct-operated valve. Dimensions include: 15, 32, 78, 20, 33, 11.5, 13, 50, 40, 19.5, 24, 481865, 38, 488698, 8, 488647, (2.2), 19, 16, 29. A 3D perspective view shows the valve with a solenoid coil and a G 3/8 port.

**Dimension reference 3**

M5x6mm

$\phi$  Pg 9

Technical drawing showing front, side, and detail views of a 2/2-way direct-operated valve. Dimensions include: 15, 44, 85.5, 12, 33, 11.3, 40, 22, 41, 37, 19, 14, 13, 31. A 3D perspective view shows the valve with a solenoid coil and a Pg 9 port.

**Dimension reference 4**

**DIN 43650A**

$\phi$  9,3

$\phi$  4,3

Technical drawing showing front, side, and detail views of a 2/2-way direct-operated valve. Dimensions include: 24, 10,2, 24, 32, 64, 20, 20, 32, 19,5, 24, 38, 481865, 32. A 3D perspective view shows the valve with a solenoid coil and two G 3/8 ports.

**Dimension reference 12**

# Valves for oil (hydraulic) and neutral liquids

# 2/2

## Applications

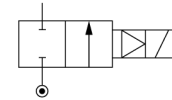
Pilot operated valves are ideally suited to shut-off applications of liquids with high flow and pressure. A minimum operating pressure is required: refer to tables.



## Pilot operated

Port size	Orifice (mm)	Flow factors (L/min)		Admissible differential pressure bar			Fluid temp. °C	Seat disc	Reference numbers				Power consumption (W)		Wt. (g)	El. Part Group *	Dim ref.
		kv	Qmax	Min	Max	DC			AC	Global valve reference	Valve reference no.	Housing	Coil	DC			

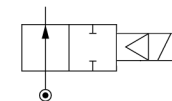
Normally closed



## Brass body/Pipe mounting

1/4	8	36	36	0.3	2	25	40	100	FKM	7321HBG2SV00	E321H21	1	2995	481865	9	8	800	2	9	
	8	36	36	0.3	30	40	100	FKM						4270	481000	8	8	920	2	
	8	36	36	0.3	2	40	40	100	FKM					4270	486265	14	14	930	2	
	8	36	36	0.3	2	25	40	100	NBR	7321HBG2SN00	E321H11	1	2995	481865	9	8	800	2	9	
	8	36	36	0.3	2	30	40	100	NBR					4270	481000	8	8	920	2	
3/8	11	50	50	0.3	2	25	40	100	FKM	7321HBG3TV00	E321H23	1	2995	481865	9	8	780	2	9	
	11	50	50	0.3	2	30	40	120	FKM					4270	481000	8	8	900	2	
	11	50	50	0.3	2	40	40	140	FKM					4270	486265	14	14	910	2	
	11	50	50	0.3	2	25	40	100	NBR	7321HBG3TN00	E321H13	1	2995	481865	9	8	780	2	9	
	11	50	50	0.3	2	30	40	100	NBR					4270	481000	8	8	900	2	
1/2	14.5	60	60	0.3	2	25	40	100	FKM	7321HBG4UV00	E321H25	1	2995	481865	9	8	740	2	9	
	14.5	60	60	0.3	2	30	40	120	FKM					4270	481000	8	8	860	2	
	14.5	60	60	0.3	2	40	40	140	FKM					4270	486265	14	14	870	2	
	14.5	60	60	0.3	2	25	40	100	NBR	7321HBG4UN00	E321H15	1	2995	481865	9	8	740	2	9	
	14.5	60	60	0.3	2	30	40	100	NBR					4270	481000	8	8	860	2	

Normally open



## Brass body/Pipe mounting

1/4	8	36	36	0.3	2	40	40	100	FKM	7322HBG2SV00	322H7106	1	2995	481865	9	8	820		9	
	8	36	36	0.3	2	40	40	120	FKM					4270	481000	8	8	940		
	8	36	36	0.3	2	40	40	140	FKM					4270	486265	14	14	950		

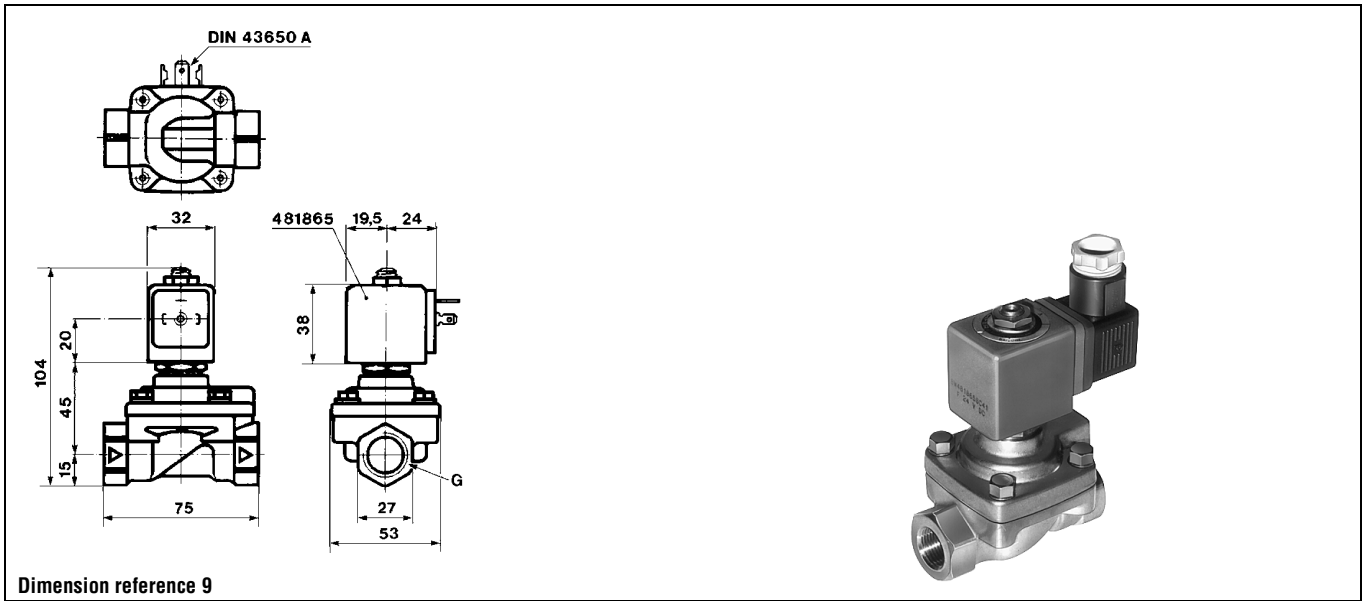
Table continued on page 92

### Notes:

\* See Electrical Parts Group table at end of section

1. Pilot seat discs from ruby (synthetic)
2. Minimum pressure differential = 0.3 bar for opening and 0 bar for closing

**Valves for oil (hydraulic) and neutral liquids 2/2 - Pilot operated**

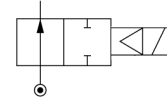


## Valves for oil (hydraulic) and neutral liquids 2/2 - Pilot operated

Port size	Orifice (mm)	Flow factors (L/min)		Admissible differential pressure bar			Fluid temp. °C	Seat disc	Reference numbers				Power consumption (W)		Wt. (g)	El. Part Group *	Dim ref.
		kv	Qmax	Min	Max				Global valve reference	Valve reference no.	Housing	Coil	DC	AC			

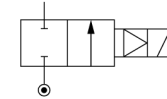
### Brass body/Pipe mounting

Normally open



1/4	8	36	36	0.3	2	25	40	100	NBR	7322HBG2SN00	322H71	1	2995	481865	9	8	840		9	
	8	36	36	0.3	2	30	40	100	NBR					4270	481000	8	8	960		
3/8	11	50	50	0.3	2	40	40	100	FKM	7322HBG3TV00	322H7306	1	2995	481865	9	8	800		9	
	11	50	50	0.3	2	40	40	100	FKM					4270	481000	8	8	920		
	11	50	50	0.3	2	40	40	140	FKM					4270	486265	14	14	930		
	11	50	50	0.3	2	40	40	100	NBR	7322HBG3TN00	322H73	1	2995	481865	9	8	800		9	
	11	50	50	0.3	2	40	40	100	NBR				4270	481000	8	8	920			
1/2	14.5	60	60	0.3	2	40	40	100	FKM	7322HBG4UV00	322H7506	1	2995	481865	9	8	760		9	
	14.5	60	60	0.3	2	40	40	120	FKM					4270	481000	8	8	880		
	14.5	60	60	0.3	2	40	40	140	FKM					4270	486265	14	14	890		
	14.5	60	60	0.3	2	40	40	100	NBR	7322HBG4UN00	322H75	1	2995	481865	9	8	760		9	
	14.5	60	60	0.3	2	40	40	100	NBR				4270	481000	8	8	880			

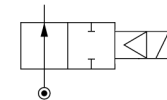
Normally closed



### Brass body/Sub-base mounting

SB	14	45	45	0.3	2	25	40	100	FKM	7321FBF3TV00	E321F3202	1	2995	481865	9	8	650	2	13	
	14	45	45	0.3	2	30	40	120	FKM					4270	481000	8	8	770	2	
	14	45	45	0.3	2	40	40	120	FKM					4270	486265	14	14	780	2	
	14	45	45	0.3		25	40	100	NBR	7321FBF3TN00	E321F32	1	2995	481865	9	8	650	2	13	
	14	45	45	0.3		30	40	100	NBR					4270	481000	8	8	770	2	
	14	45	45	0.3		40	40	100	NBR					4270	486265	14	14	780	2	

Normally open



### Brass body/Sub-base mounting

SB	14	45	45	0.3	2	40	40	100	FKM	7322FBF3TV00	322F7206	1	2995	481865	9	8	650		13	
	14	45	45	0.3	2	40	40	120	FKM					4270	481000	8	8	770		
	14	45	45	0.3	2	40	40	140	FKM					4270	486265	14	14	780		
	14	45	45	0.3	2	40	40	75	NBR	7322FBF3TN00	322F72	1	2995	481865	9	8	650		13	
	14	45	45	0.3	2	40	40	75	NBR					4270	481000	8	8	770		
	14	45	45	0.3	2	40	40	75	NBR					4270	481000	8	8	770		

#### Notes:

- \* See Electrical Parts Group table at end of section
- 1. Pilot seat discs from ruby (synthetic)
- 2. Minimum pressure differential = 0.3 bar for opening and 0 bar for closing

**Valves for oil (hydraulic) and neutral liquids 2/2 - Pilot operated**

