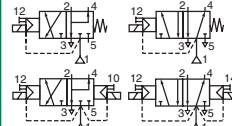




SOLENOID VALVES

single/dual pilot operated
aluminium body -40°C
“NAMUR” style 1/4



3/2
5/2

Series
551

FEATURES

- The monostable spool valves in conformity with IEC 61508 Standard (2010 route 2_H version) have TÜV (551 series) certified with integrity levels: SIL 2 for HFT = 0 / SIL 3 for HFT = 1
- The NAMUR version has all ports on the same side and with the same threads for a better resistance to water, dust and better fitting connection
- The valve technology offers environmental protection against the ingress of liquids, dusts or any other foreign matter (environmentally-protected construction)
- Can be externally piloted (external air pilot supply) to convert valve to zero minimum operation by flipping a gasket
- The solenoid valves exist with all protection mode: Ex d, Ex e mb, Ex m and Ex ia

GENERAL

Differential pressure

2 - 10 bar [1 bar = 100 kPa]

Flow (Q_v at 6 bar)

1/4 = 700 l/min (ANR)

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas, filtered	-40°C to +60°C	NBR (nitrile) + PUR (polyurethane)

MATERIALS IN CONTACT WITH FLUID

(*) Ensure that the compatibility of the fluids in contact with the materials is verified

Body	Aluminium, black anodized with PBT spring return
End cover (spring return)	Glass-filled PA
Interface plates	Glass-filled PA
Spool valve internal parts	Zamak, stainless steel, (POM), aluminium
Pilot internal parts	Refer to specific solenoid catalogue pages
Pilot end covers	Aluminium
Core tube	Stainless steel
Core and plughut	Stainless steel
Core spring	Stainless steel
Seals	NBR + PUR
Top disc	PA
Disc holder	POM
Cartridge (low power)	Welded, packless AISI 430
Seat	Brass
Seat insert	POM
Shading coil	Copper
Rider rings (low power)	PTFE

CONSTRUCTION

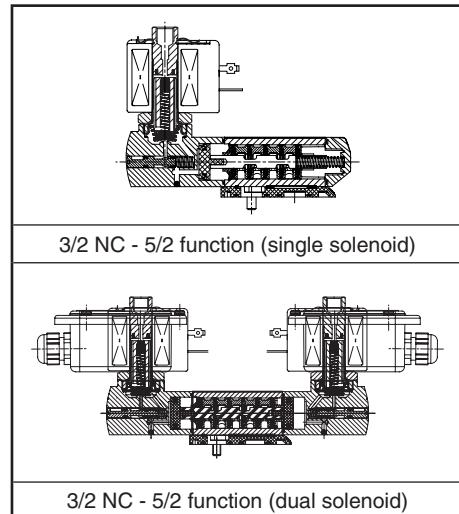
Screws of valve assembly

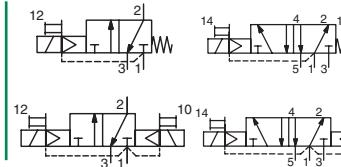
Stainless steel

SPECIFICATIONS

pipe size	orifice size	flow coefficient kv	operating pressure differential (bar)			power level	prefix optional solenoids							basic catalogue number				
			min. ⁽³⁾	max. (PS)			ATEX / IECEX											
				air (*)			7 & 9		Ex d	Ex e mb	Ex mb	Ex ia	EM	PV	LI	LISC		
				~	=		~/=	EF	LPKF	NF						SC		
3/2 NC - 5/2 - Solenoid air pilot operated - spring return (monostable)																		
1/4	6	0,6	10	0/2	10	10	10,5W/9W	-	-	●	-	●	●	-	-	●	❖551A482 (2)	
1/4	6	0,6	10	0/2	10	10	10,5W/9W	●	-	-	-	-	-	-	-	-	❖551G482 (2)	
1/4	6	0,6	10	0/2	10	10	2,4W/0,5W	-	○	●	-	●	○	○	-	●	❖551A382 (2)	
1/4	6	0,6	10	0/2	10	10	2,4W/0,5W	○	-	-	-	-	-	-	-	-	❖551G382 (2)	
1/4	6	0,6	10	0/2	10	10	0,5W	-	-	-	-	-	-	○	-	-	❖551B282 (2)	
3/2 NC - 5/2 - Solenoid air pilot operated and return (bistable)																		
1/4	6	0,6	10	0/2	10	10	10,5W/9W	-	-	●	-	●	●	-	-	-	●	❖551A484
1/4	6	0,6	10	0/2	10	10	10,5W/9W	●	-	-	-	-	-	-	-	-	❖551G484	
1/4	6	0,6	10	0/2	10	10	2,4W/0,5W	-	○	●	-	●	○	○	-	●	❖551A384	
1/4	6	0,6	10	0/2	10	10	2,4W/0,5W	○	-	-	-	-	-	-	-	-	❖551G384	
1/4	6	0,6	10	0/2	10	10	0,5W	-	-	-	-	-	-	○	-	-	❖551B284	

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FEATURES

- The monostable spool valves in conformity with IEC 61508 Standard (2010 route 2_H version) have TÜV (551 series) certified with integrity levels: SIL 2 for HFT = 0 / SIL 3 for HFT = 1
- The spool valve exists in 3/2 NC, 5/2, threaded ports
- The valve offers environmental protection against the ingress of liquids, dusts or any other foreign matter (environmentally-protected construction)
- Can be externally piloted (external air pilot supply) to convert valve to zero minimum operation by flipping a gasket
- The solenoid valves exist with all protection mode: Ex d, Ex e mb, Ex m and Ex ia

GENERAL

Differential pressure 2 - 10 bar [1 bar = 100 kPa]
Flow (Qv at 6 bar) 1/4 = 860 l/min (ANR)

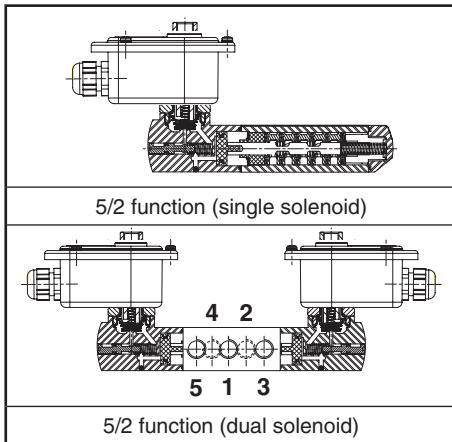
fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas, filtered	-40°C to +60°C	NBR (nitrile) + PUR (polyurethane)



MATERIALS IN CONTACT WITH FLUID

(*) Ensure that the compatibility of the fluids in contact with the materials is verified

Body	Aluminium, black anodized with PBT spring return
End cover (spring return)	Glass-filled PA
Spool valve internal parts	Zamak, stainless steel, (POM), aluminium
Pilot internal parts	Refer to specific solenoid catalogue pages
Pilot end covers	Aluminium
Core tube	Stainless steel
Core and plugnut	Stainless steel
Core spring	Stainless steel
Seals	NBR + PUR
Top disc	PA
Disc holder	POM
Cartridge (low power)	Welded, packless AISI 430
Seat	Brass
Seat insert	POM
Shading coil	Copper
Rider rings (low power)	PTFE



CONSTRUCTION

Screws of valve assembly Stainless steel

SPECIFICATIONS

pipe size	orifice size	flow coefficient kv	operating pressure differential (bar)		power level	prefix optional solenoids							basic catalogue number	
			min. (3)	max. (PS)		ATEX / IECEx					IP65			
				air (*)		~	=	~/=	EF	LPKF	NF			
3/2 NC - Solenoid air pilot operated - spring return (monostable)														
1/4	6	0,6	10	0/2	10	10	10,5W/9W	-	-	●	-	-	-	●
1/4	6	0,6	10	0/2	10	10	10,5W/9W	●	-	○	-	-	-	●
1/4	6	0,6	10	0/2	10	10	2,4W/0,5W	-	○	●	-	-	-	●
1/4	6	0,6	10	0/2	10	10	2,4W/0,5W	○	-	-	-	-	-	●
1/4	6	0,6	10	0/2	10	10	0,5W	-	-	-	-	-	-	●
3/2 NC - Solenoid air pilot operated and return (bistable)														
1/4	6	0,6	10	0/2	10	10	10,5W/9W	-	-	●	-	-	-	●
1/4	6	0,6	10	0/2	10	10	10,5W/9W	●	-	○	-	-	-	●
1/4	6	0,6	10	0/2	10	10	2,4W/0,5W	-	○	●	-	-	-	●
1/4	6	0,6	10	0/2	10	10	2,4W/0,5W	○	-	-	-	-	-	●
1/4	6	0,6	10	0/2	10	10	0,5W	-	-	-	-	-	-	●
5/2 - Solenoid air pilot operated - spring return (monostable)														
1/4	6	0,6	10	0/2	10	10	10,5W/9W	-	-	●	-	-	-	●
1/4	6	0,6	10	0/2	10	10	10,5W/9W	●	-	○	-	-	-	●
1/4	6	0,6	10	0/2	10	10	2,4W/0,5W	-	○	●	-	-	-	●
1/4	6	0,6	10	0/2	10	10	2,4W/0,5W	○	-	-	-	-	-	●
1/4	6	0,6	10	0/2	10	10	0,5W	-	-	-	-	-	-	●
5/2 - Solenoid air pilot operated and return (bistable)														
1/4	6	0,6	10	0/2	10	10	10,5W/9W	-	-	●	-	-	-	●
1/4	6	0,6	10	0/2	10	10	10,5W/9W	●	-	○	-	-	-	●
1/4	6	0,6	10	0/2	10	10	2,4W/0,5W	-	○	●	-	-	-	●
1/4	6	0,6	10	0/2	10	10	2,4W/0,5W	○	-	-	-	-	-	●
1/4	6	0,6	10	0/2	10	10	0,5W	-	-	-	-	-	-	●

❖ Select 8 for NPT ANSI 1.20.3 or select G for ISO G (228/1) ● Available feature ○ Available feature in DC only - Not available

(2) Certified IEC 61508 Functional Safety data, use suffix "SL".

(3) Zero minimum is only achieved if external pressure is applied.