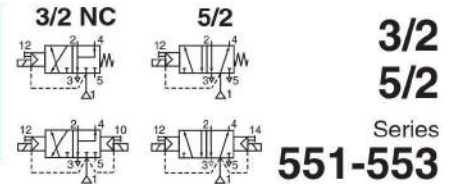




SOLENOID VALVES

pilot operated, spool type
single/dual solenoid (mono/bistable function)
stainless steel body, NAMUR, 1/4 - 1/2



3/2
5/2
Series
551-553

FEATURES

- The monostable spool valves in conformity with IEC 61508 Standard (2010 route 2_H version) have TÜV (551 series) and EXIDA (551-553 series) certified with integrity levels: SIL 2 for HFT = 0 / SIL 3 for HFT = 1
- The solenoid operated spool valves have threaded port connections and "NAMUR" interface
- The same spool valve can be adapted for 3/2 NC or 5/2 functions for controlling double-acting and single-acting actuators
- All the exhaust ports of this spool valve are connectable, providing better environmental protection, particularly recommended for sensitive areas such as clean rooms, and applications in the pharmaceutical and food processing sectors
- 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 satisfy all relevant EC Directives



GENERAL

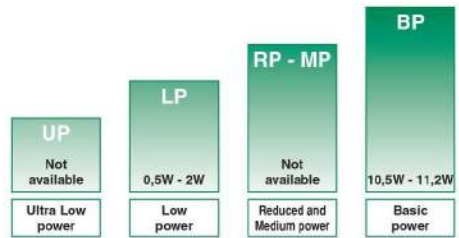
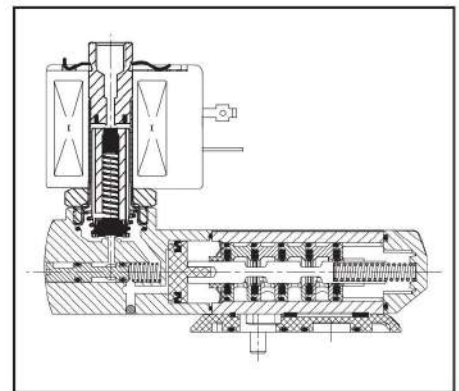
Differential pressure 2 - 10,4 bar [1 bar = 100 kPa]
Flow (Qv at 6 bar) 1/4 = 700 l/min (ANR)
1/2 = 3000 l/min

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas, filtered	551 : - 40°C to + 80°C	VMQ (silicone) + PUR (polyurethane)
	553 : - 40°C to + 60°C	

MATERIALS IN CONTACT WITH FLUID

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

Body, end covers	Stainless steel, AISI 316L
Interface plates	Glass-filled PA
Spool valve internal parts	Stainless steel, POM
Core tube	Stainless steel
Core and plugnut	Stainless steel
Core spring	Stainless steel
Seals & discs	NBR
Top disc	FPM
Disc holder	POM
Cartridge (Low power)	Welded, packless AISI 430
Seat	Stainless steel
Seat insert	POM
Shading coil	Silver
Rider ring (Low power)	PTFE (NF/WSNF solenoids only)



POWER LEVELS - cold electrical holding values (watt)

SPECIFICATIONS

pipe size	orifice size	flow coefficient kv		operating pressure differential (bar)			power level	prefix optional solenoids										basic catalogue number
								min. (2)	max. (PS)		NEMA 7 & 9	ATEX / IECEx					IP65	
									air (*)	~		=	~/=	Ex d	Ex e mb	Ex mb		
(∅)	(mm)	(m³/h)	(l/min)					EF	LPKF	NF	-	EM	PV	(WS)LI	-	SC		
3/2 NC - 5/2 - Solenoid air pilot operated - spring return (monostable)																		
1/4	6	0,60	10	0 / 2	10	10	BP	-	-	●	-	●	●	-	-	●	∅551A409 (1)	
1/4	6	0,60	10	0 / 2	10	10	BP	●	-	-	-	-	-	-	-	-	∅551G409 (2)	
1/4	6	0,60	10	0 / 2	10	10	LP	-	●	●	-	●	○	○	-	-	∅551A309 (1)	
1/4	6	0,60	10	0 / 2	10	10	LP	○	-	-	-	-	-	-	-	-	∅551G309 (1)	
1/2	13	2,49	41,5	0 / 2	10	10	BP	-	-	●	-	●	●	-	-	●	∅553A409 (1)	
1/2	13	2,49	41,5	0 / 2	10	10	BP	●	-	-	-	-	-	-	-	-	∅553G409 (1)	
1/2	13	2,49	41,5	0 / 2	10	10	LP	-	●	●	-	●	○	○	-	-	∅553A309 (1)	
1/2	13	2,49	41,5	0 / 2	10	10	LP	○	-	-	-	-	-	-	-	-	∅553G309 (1)	
3/2 NC - 5/2 - Solenoid air pilot operated and return (bistable)																		
1/4	6	0,60	10	0 / 2	10	10	BP	-	-	●	-	●	●	-	-	●	∅551A410	
1/4	6	0,60	10	0 / 2	10	10	BP	●	-	-	-	-	-	-	-	-	∅551G410	
1/4	6	0,60	10	0 / 2	10	10	LP	-	●	●	-	●	○	○	-	-	∅551A310	
1/4	6	0,60	10	0 / 2	10	10	LP	○	-	-	-	-	-	-	-	-	∅551G310	
1/2	13	2,49	41,5	0 / 2	10	10	BP	-	-	●	-	●	●	-	-	●	∅553A410	
1/2	13	2,49	41,5	0 / 2	10	10	BP	●	-	-	-	-	-	-	-	-	∅553G410	
1/2	13	2,49	41,5	0 / 2	10	10	LP	-	●	●	-	●	○	○	-	-	∅553A310	
1/2	13	2,49	41,5	0 / 2	10	10	LP	○	-	-	-	-	-	-	-	-	∅553G310	

∅ Select 8 for NPT ANSI 1.20.3 or select G for ISO G (228/1) ● Available feature ○ Available feature in DC only

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

(2) Zero minimum is only achieved if external pressure is applied