

FEATURES

- Reliability: long service life of 30 million cycles
- Choice of internal/external supply with selector seals (vacuum use to -0,950 bar)
- Modular assembly with joinable subbases
- Subbases with side or bottom ports

GENERAL

Fluid

Operating pressure

Pilot pressure

Ambient temperature

Flow (Qv at 6 bar)

Flow coefficients

- conforming to ISO 6358

- conforming to NF E29312

Response time

Life

Base

Subbase

ISO 1	ISO 2	ISO 3
Air or neutral gas, filtered, lubricated or not		
+3 to +10 bar (with internal supply to pilot)		
- 0,950 to +12 bar (with external supply to pilot)		
Can be used with vacuum - 0,950 bar max.		
See specifications tables		
- 10°C to +60°C		
1400 l/min (ANR)	2800 l/min (ANR)	4200 l/min (ANR)
C = 5,8 x 10 ⁻⁸ m ³ /s.Pa (sonic conductance)		
b = 0,28 (absolute static pressure)		
Kv = 20 (l/min)		
See tables choice of equipment		
30 millions of cycles		15 millions of cycles
ISO 5599/01 sizes 1-2-3 - AFNOR NF E49080		
Single subbase ISO/AFNOR NF E49085		
Joinable subbase ISO/VDMA 24345		
Joinable subbase with integrated functions		



CONSTRUCTION

Cover

Painted steel

Pilot and return assembly

POM (polyacetal)

Seals

NBR (nitrile) and PUR (polyurethane)

Internal parts

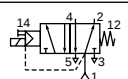
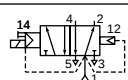
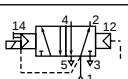
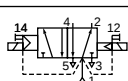
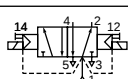
POM (polyacetal), light alloy

ELECTRICAL CHARACTERISTICS

pilot	voltage		consumption		insulation class	protection degree	electrical connection
			inrush	hold			
series 189	~	24V-48V-115V-230V/50Hz	6 VA	3,5 VA (2,5 W)	F	IP 65	spade plug size 22 connector, DIN 43650, 11 mm, industry standard B rotatable by 180°
	=	24V-48V	2,5 W				
series 190	~	24V-48V-115V-230V/50 Hz	9 VA	4 VA (3 W)	F	IP 65	spade plug size 30 connector, ISO4400/EN175301-803, form A, rotatable by 90°
	=	24V-48V	3 W				

The solenoid valve 190 is dual-voltage (24V~, 12V=) (48V~, 24V=) (115V~, 48V=) (230V~, 110V=)

SPECIFICATIONS 5/2

function 5/2 symbol	operators pilot (14) solenoid air operated return (12)	size	response time (1) (ms)		pilot pressure (bar)		2 catalogue numbers		
			ener-gized	de-ener-gized	min.	max.	valve	+ solenoid pilot quantity & catalogue number with standard connector	(M)
	spring return	ISO 1	25	66	3	10	54191023	+ 1x { 18900001 - 19000005 19000006 19000017	●
		ISO 2	19	68	2,5		54292023		
		ISO 3	45	130	3		54391023		
	differential return	ISO 1	41	45	3	10	54191024		×
		ISO 2	32	49	2		54292024		
		ISO 3	71	82	3		54391024		
	air return	ISO 1	21	-	1,5	10	54191025		●
		ISO 2	16		1,5		54292025		
		ISO 3	28		1,5		54391025		
	solenoid differential return	ISO 1	16	18	3	10	54191026	+ 2x { 18900001 - 19000005 19000006 19000017	●
		ISO 2	15	16	2		54292026		
		ISO 3	21	23	3		54391026		
	Solenoid air operated return	ISO 1	17	16	1,5	10	54191027		×
		ISO 2	16	15	1,5		54292027		
		ISO 3	26	25	1,5		54391027		

(M) Type of manual operator on pilot(s): × : without ● : maintained ▼ : impulse

(1) With solenoid valve series 190

SPECIFICATIONS 5/3

function 5/3 symbol	operators pilot (14) return (12) solenoid air operated	size	response time (1) (ms)		pilot pressure (bar)		2 catalogue numbers		
			ener- gized	de-ener- gized	min.	max.	valve	+ solenoid pilot quantity & catalogue number with standard connector	(M)
	pressure held W1	ISO 1	16	17	3	10	54191028	+ 1x { 18900001 - 19000005 19000006 19000017	● × ● ▼
		ISO 2	16	16			54292028		
		ISO 3	27	26			54391028		
	pressure applied W2	ISO 1	44	18	3	10	54191030		
		ISO 2	54	18			54292030		
		ISO 3	93	27			54391029		
	pressure release W3	ISO 1	17	47	3	10	54191029		
		ISO 2	19	61			54292029		
		ISO 3	29	28			54391030		

(M) Type of manual operator on pilot : × : without ● : maintained ▼ : impulse

(1) With solenoid valve series 190

OPTIONS

- Solenoid valve pilot 3/2 series 192 in 3 versions
- Equipment with manual testers so that the spool position can be checked
- Material and solenoid pilot valve for use in potentially **explosive atmospheres** caused by gases or dusts - ATEX directive 94/9/EC (consult our ATEX - X019 catalogue)
- Connector with cable 2m long (see "Coils and accessories" section)
- Connector with transil protection (see "Coils and accessories" section)
- Solenoid valve with plug and built-in visual control and protection :

Solenoid valve **without** connector — **+** — Connector with built-in visual control and VDR/RC protection

type of valve	(M)	catalogue number solenoid valve without connector	catalogue number (~ / =)			
			24V	48V	115V	230V
189 NC	●	18900002	88122405	88122406	88122407	88122410
190 NC	×	19000013				
	●	19000014				
	▼	19000018	88122603	88122604	88122605	88122608
192 NC (2)	×	19200022				
	●	19200023				
	▼	19200024				

(M) Type of manual operator on pilot(s) : × : without ● : maintained ▼ : impulse

(2) Solenoid valve series 192 - 3/2 NC - Ø 2,1mm with exhaust in base

SUBBASES AND ACCESSORIES : see next pages