

Characteristics to VDI 3290			Pressures quoted as gauge pressure		
Characteristics	Symbol	Unit	Description		
General Features					
Type			Spool valve		
Mounting			2 screws M6 (M3)		
Tube connection			Thread		
Port Size			G 1/8; 7.4 deep		
Weight (mass)		kg	0.247 - permanent signal version 0.382 - impulse version		
Installation			In any position		
Ambient temperature range	$\vartheta_{\min}^{\max}$	°C °C	-10 +60	Note: When using below freezing point (°C) it is necessary to consult us.	
Medium temperature range	$\vartheta_{\min}^{\max}$	°C °C	-10 +70		
Medium			Filtered compressed air		
Lubrication			With or without oil mist lubrication ¹⁾		
Pneumatic Characteristics					
Nominal pressure	p _n	bar	6		
Operating pressure range	p _{min} p _{max}	bar bar	Permanent signal version 2 10		(0-10 Type S)
	p _{min} p _{max}	bar bar	Impulse version 1.5 10		
Nominal flow	Q _N	l/min	450		
Actuation					
Electrical			Pilot operated, pilot operated with external pilot air		
Actuation pressure range (Type S)	p _{st min} p _{st max}	bar bar	2 10	permanent signal version	
	p _{st min} p _{st max}	bar bar	1.5 10	impulse version	
Voltage			AC		DC
Nominal voltage*	Standard version	U _n	V	220	24
	Low watt. version	U _n	V	220	24
	Ex-proof-version **	U _n	V	220	24
				Further voltages available on request	
Initial power consumption	Standard version		VA (W)	8.5	2.5
	Low watt. version		VA (W)	6.6	2.1
	Ex-proof-version **		VA (W)	5.0	5.1
Continuous consumption	Standard version		VA (W)	6.0	2.5
	Low watt. version		VA (W)	3.9	2.1
	Ex-proof-version **		VA (W)	5.0	5.1
Duty cycle		ED	%	100	
Electrical protection				IP65 to DIN 40050 (with plug)	
Insulating Material				F (Ex-version E) to VDE 0580	
Connection				Plug to DIN 43650 form B ²⁾ Ex-version: cable1200 mm long	

* See Order Instructions for details

** For explosion-proof versions different technical requirements apply, according to Declaration of Conformity

¹⁾ We recommend the use of mineral oil type VG32 to ISO 3448²⁾ Plug for low wattage version available in DIN 43650 form A

3/2 Way Valve

G1/8

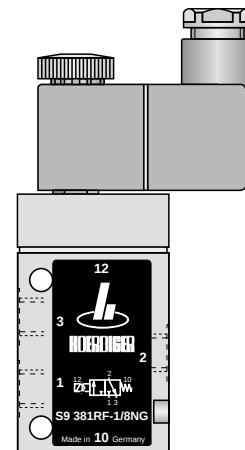
Actuation:
Electrically pilot operated
with standard solenoids
- by permanent signal
- by impulse

Series S9

S9 381.-1/8



Variants:
S = with external piloted air



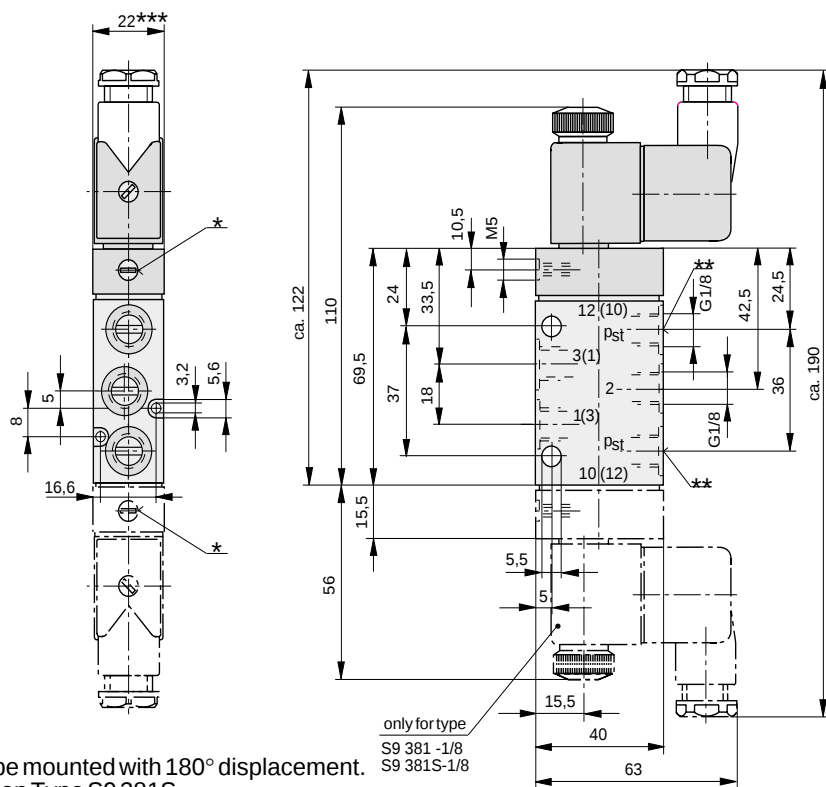
HOERBIGER

ORIGA

For product group list see 3.42.001E

Data Sheet No. 3.42.005E-1

Dimensions (mm)



- * Manual override can be mounted with 180° displacement.
 ** Pilot air ports p_{st} - only on Type S9 381S
 *** Solenoid width is 30 mm on ex-proof version and low wattage coil version.

Order Instructions

Actuation	Return	Symbol	Type	Order Instructions Order No.
Electrical by permanent signal	Spring return		S9 381RF-1/8-NG-..	PA 10297-..33
			S9 381RF-1/8-NO-..	PA 10298-..33
with external pilot air	Spring return		S9 381S-RF-1/8-..	PA 10300-..33
Electrical by impulse	Electrical by impulse		S9 381-1/8-..	PA 10299-..33
with external pilot air	with external pilot air		S9 381S-1/8-..	PA 10301-..33

Solenoid version	Nominal voltage	Applicable for	Key code
Standard version	220 V/50 (60) Hz	110 V=	61
	24 V=	60 V/50 (60) Hz	02
Low wattage version	24 V=		13
	220 V/50 (60) Hz		69
Ex-proof version *	24 V=		48
	220 V/50 (60) Hz		98

* For explosion-proof versions different technical requirements apply, according to Declaration of Conformity

Further voltages available on request.

Characteristics to VDI 3290		Pressures quoted as gauge pressure			
Characteristics		Symbol	Unit	Description	
General Features					
Type				Spool valve	
Mounting				2 screws M6 (M4)	
Tube connection				Thread	
Port size				G 1/4; 11 deep	
Weight (mass)			kg	0.5 - permanent signal version 0.6 - impulse version	
Installation				In any position	
Ambient temperature range		$\vartheta_{\min}$ $\vartheta_{\max}$	°C °C	-10 +60	Note: When using below freezing point (°C) it is necessary to consult us.
Medium temperature range		$\vartheta_{\min}$ $\vartheta_{\max}$	°C °C	-10 +70	
Medium				Filtered compressed air	
Lubrication				With or without oil mist lubrication ¹⁾	
Pneumatic Characteristics					
Nominal pressure		p _n	bar	6	
Operating pressure range		p _{min} p _{max}	bar bar	Permanent signal version 2 10	(0-10 Type S)
		p _{min} p _{max}	bar bar	Impulse version 1.5 (381) 10	
Nominal flow		Q _N	l/min	1300	
Actuation					
Electrical				Pilot operated, pilot operated with external pilot air	
Actuation pressure range (Type S)		p _{st min} p _{st max}	bar bar	Permanent signal version 2 10	
		p _{st min} p _{st max}	bar bar	Impulse version 1.5 (381) 10	2.5 (382)
Voltage				AC	DC
Nominal voltage*	Standard version	U _n	V	220	24
	Low watt. version	U _n	V	220	24
	Ex-proof-version **	U _n	V	220	24
				Further voltages available on request	
Initial power consumption	Standard version		VA (W)	8.5	2.5
	Low watt. version		VA (W)	6.6	2.1
	Ex-proof-version **		VA (W)	5.0	5.1
Continuous consumption	Standard version		VA (W)	6.0	2.5
	Low watt. version		VA (W)	3.9	2.1
	Ex-proof-version **		VA (W)	5.0	5.1
Duty cycle		ED	%	100	100
Electrical protection				IP65 to DIN 40050 (with plug)	
Insulating material				F (Ex-vers. E) to VDE 0580	
Connection				Plug to DIN 43650 form B ²⁾ Ex-version: Cable 1200 mm long	

* See Order Instructions for details

** For explosion-proof versions different technical requirements apply,
according to Declaration of Conformity¹⁾ We recommend the use of mineral oil type VG32 to ISO 3448²⁾ Plug for low wattage version available in DIN 43650 form A.

For product group list see 3.52.001E

Data Sheet No. 3.52.006E-1

3/2 Way Valve

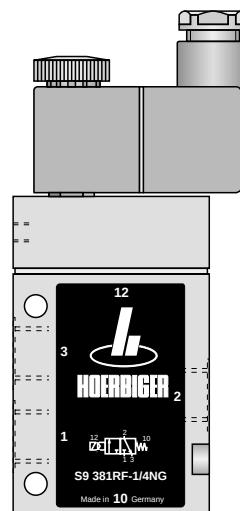
G1/4

Actuation:**Electrically pilot operated
with standard solenoids**

- by permanent signal
- by impulse

Series S9**S9 38.****Variants:**

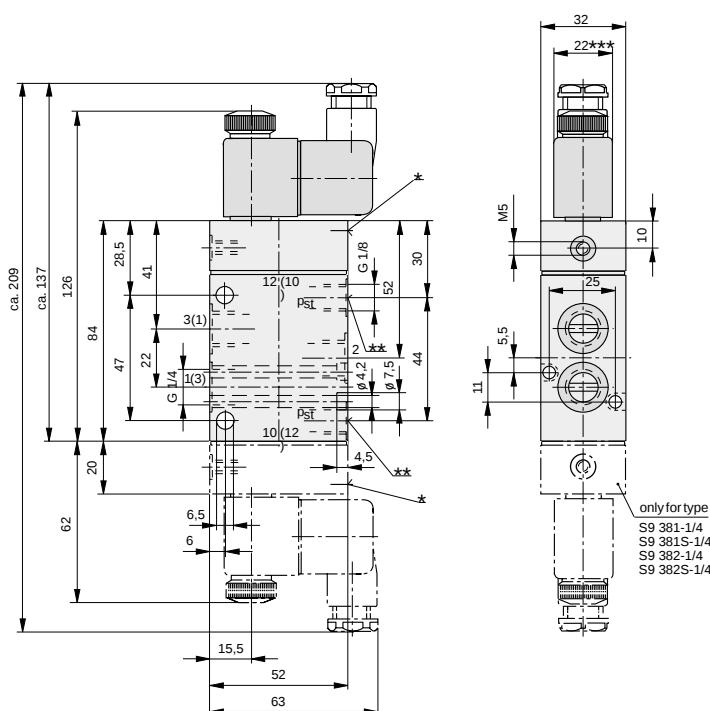
S = with external pilot air



HOERBIGER

ORIGA

Dimensions (mm)



- * Manual override
- ** Pilot connection p_{st} only required for Types S9 381S and S9 382S
- *** Solenoid width is 30 mm on ex-proof version and low wattage coil version.

Order Instructions

Actuation	Return	Symbol	Type	Order Instructions Order No.
Electrical by permanent signal	Spring return		S9 381RF-1/4-NG-..	PA 12716-...33
			S9 381RF-1/4-NO-..	PA 12717-...33
with external pilot air	Spring return		S9 381S-RF-1/4-..	PA 12719-...33
Electrical by impulse	Electrical by impulse		S9 381-1/4-..	PA 12718-...33
with external pilot air	with external pilot air		S9 381S-1/4-..	PA 12720-...33
Electrical by impulse differential piston	Electrical by impulse		S9 382-1/4-..	PA 12721-...33
with external pilot air differential piston	Electrical by impulse		S9 382S-1/4-..	PA 12722-...33

Solenoid version	Nominal voltage	Applicable for	Key code
Standard version	220 V/50 (60) Hz	110 V=	61
	24 V=	48 V/50 (60) Hz	02
Low wattage version	24 V=		13
	220 V/50 (60) Hz		69
Ex-proof version *	24 V=		48
	220 V/50 (60) Hz		98

* For explosion-proof versions different technical requirements apply, according to Declaration of Conformity

Further voltages available on request.

Characteristics to VDI 3290		Pressures quoted as gauge pressure			
Characteristics	Symbol	Unit	Description		
General Features					
Type			Spool valve		
Mounting			2 screws M6		
Tube connection			Thread		
Port size			G 1/2; 16 deep		
Weight (mass)		kg	0.77 - permanent signal version 0.60 - impulse version		
Installation			In any position		
Ambient temperature range	$\vartheta_{\min}^{\max}$	°C °C	-10 +60	Note: When using below freezing point (°C) it is necessary to consult us.	
Medium temperature range	$\vartheta_{\min}^{\max}$	°C °C	-10 +70		
Medium			Filtered compressed air		
Lubrication			With or without oil mist lubrication ¹⁾		
Pneumatic Characteristics					
Nominal pressure	p _n	bar	6		
Operating pressure range	$p_{\min}^{\max}$	bar bar	Permanent signal version 2.2 10		(0-10 Type S)
	$p_{\min}^{\max}$	bar bar	Impulse version 1.5 (381) 2.5 (382) 10		
Nominal flow	Q _N	l/min	3500		
Actuation					
Electrical				Pilot operated Pilot operated with external pilot air	
Actuation pressure range (Type S)	$p_{\text{st min}}^{\text{st max}}$	bar bar	Permanent signal version 2.2 10		
	$p_{\text{st min}}^{\text{st max}}$	bar bar	Impulse version 1.5 (381) 10		2.5 (382)
Voltage				AC	DC
Nominal voltage*	Standard version	U _n	V	220	24
	Low watt. version	U _n	V	220	24
	Ex-proof-version **	U _n	V	220	24
				Further voltages available on request	
Initial power consumption	Standard version		VA (W)	11	4.8
	Low watt. version		VA (W)	7.8	2.7
	Ex-proof-version **		VA (W)	5.0	5.1
Continuous consumption	Standard version		VA (W)	8.5	4.8
	Low watt. version		VA (W)	4.9	2.7
	Ex-proof-version **		VA (W)	5.0	5.1
Duty cycle		ED	%	100	
Electrical protection				IP65 to DIN 40050 (with plug)	
Insulating material				F (Ex-version E) to VDE 0580	
Connection				Plug to DIN 43650 form B ²⁾ Ex-version: Cable 1200 mm long	

* See Order Instructions for details

** For explosion-proof versions different technical requirements apply,
according to Declaration of Conformity¹⁾ We recommend the use of mineral oil type VG32 to ISO 3448²⁾ Plug for low wattage version available in DIN 43650 form A.

3/2 Way Valve

G1/2

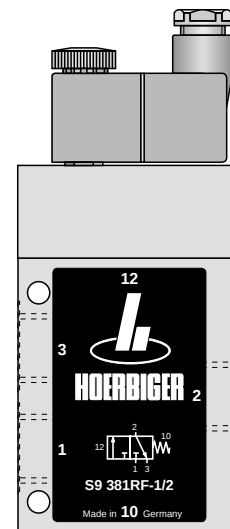
Actuation:
Electrically pilot operated
with standard solenoids
- by permanent signal
- by impulse

Series S9

S9 38.



Variants:
S = with external pilot air



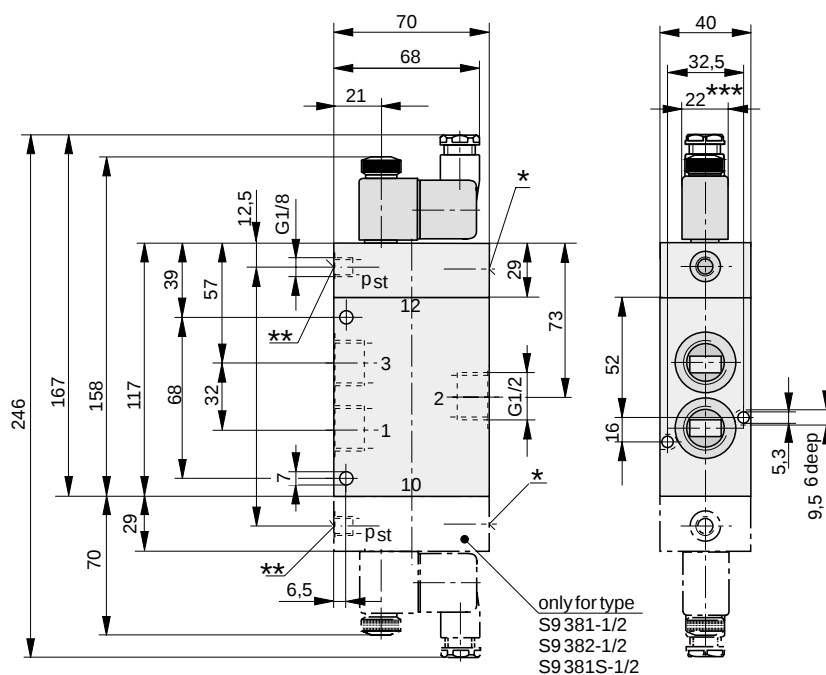
HOERBIGER

ORIGA

For product group list see 3.53.001E

Data Sheet No. 3.53.005E-1

Dimensions (mm)



* Manual override

** Pilot connection p_{st} only required for types S9 581S

*** Solenoid width is 30 mm on ex-proof version and low wattage coil version

Order Instructions

Actuation	Return	Symbol	Type	Order Instructions Order No.
Electrical by permanent signal	Spring return		S9 381RF-1/2-NG	PA 16412-...33
			S9 381RF-1/2-NO	PA 16413-...33
with external pilot air	Spring return		S9 381S-RF-1/2-...	PA 16415-...33
Electrical by impulse	Electrical by impulse		S9 381-1/2-...	PA 16414-...33
with external pilot air	with external pilot air		S9 381S-1/2-...	PA 16417-...33
Electrical by impulse Differentialkolben	Electrical by impulse		S9 382-1/2-...	PA 16418-...33
with external pilot air differential piston	Electrical by impulse		S9 382S-1/2-...	PA 16419-...33

Solenoid version	Nominal voltage	Applicable for	Key code
Standard version	220 V/50 (60) Hz	110 V=	61
	24 V=	48 V/50 (60) Hz	02
Low wattage version	24 V=		13
	220 V/50 (60) Hz		69
Ex-proof version *	24 V=		48
	220 V/50 (60) Hz		98

* For explosion-proof versions different technical requirements apply, according to Declaration of Conformity

Further voltages available on request.