# Series 740 - inch



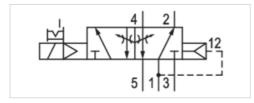




# 5/2-directional valve, Series 740

- 5/2
- Qn = 700-950 I/min
- Pipe connection
- Compressed air connection output : Ø 10 3/8" 5/16" (Ø 8)
- Can be assembled into blocks
- Manual override : with detent, without detent
- single solenoid
- With air spring return





Version Diaphragm poppet valve

Activation Electrically
Sealing principle Soft sealing

Blocking principle Plate principle Single base plate principle

Working pressure min./max. 1.4 ... 10 bar
Ambient temperature min./max. -15 ... 50 °C
Medium temperature min./max. -15 ... 50 °C
Medium Compressed air

Max. particle size 50 μm

Oil content of compressed air 0 ... 5 mg/m³

Nominal flow Qn See table below

Connector standard EN 175301-803:2006

Protection class with connection IP65

Reverse polarity protection Protected against polarity reversal Compatibility index See table below

Duty cycle 100 %

Typ. switch-on time 16 ms

Typ. switch-off time 36 ms

Mounting on manifold strip PRS strip

Weight See table below



# Technical data

Part No.	MO	Compressed air connection	Compressed air connection
		Input	Output
R432015405	<u> </u>	Ø 10	Ø 10
R432002436	<u>-</u>	3/8"	3/8"
R432016656	<u> </u>	3/8"	3/8"
R432016657	<u>-</u>	3/8″	3/8"
R432008894	<u> </u>	3/8"	3/8"
5727490220	<u> </u>	3/8″	3/8"
R432016658	<u> </u>	3/8"	3/8"
5727495270	<u>-</u>	3/8"	3/8"
R432016655	<u> </u>	3/8"	3/8"
R432016649		5/16" (Ø 8)	5/16" (Ø 8)
R432016647	<u> </u>	5/16" (Ø 8)	5/16" (Ø 8)
R432016650	<u>-</u>	5/16" (Ø 8)	5/16" (Ø 8)
R432016648		5/16" (Ø 8)	5/16" (Ø 8)

Part No.	Compressed air connection	Operational voltage	Operational voltage
	Exhaust	DC	AC 50 Hz
R432015405	M14x1	-	-
R432002436	M14x1	-	-
R432016656	M14x1	6 V	-
R432016657	M14x1	12 V	-
R432008894	M14x1	24 V	-
5727490220	M14x1	24 V	-
R432016658	M14x1	-	24 V
5727495270	M14x1	-	110 V
R432016655	M14x1	-	220 V
R432016649	M14x1	24 V	-
R432016647	M14x1	-	110 V
R432016650	M14x1	-	24 V
R432016648	M14x1	-	220 V

Part No.	Operational	Voltage tolerance	Voltage tolerance	Voltage tolerance
	voltage			
	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz
R432015405	-	-	-	-
R432002436	-	-	-	-
R432016656	-	-10% / +10%	-	-
R432016657	-	-10% / +10%	-	-
R432008894	-	-10% / +10%	-	-
5727490220	-	-10% / +10%	-	-
R432016658	24 V	-	-20% / +10%	-10% / +20%
5727495270	110 V	-	-20% / +10%	-10% / +20%
R432016655	220 V	-	-20% / +10%	-10% / +20%
R432016649	-	-10% / +10%	-	-
R432016647	110 V	-	-20% / +10%	-10% / +20%
R432016650	24 V	-	-20% / +10%	-10% / +20%
R432016648	220 V	-	-20% / +10%	-10% / +20%

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Part No.	Power consumption	Holding power	Switch-on power	Nominal flow	Compatibility index
	DC	AC 50 Hz	AC 50 Hz	Qn	
R432015405	-	-	-	950 l/min	14
R432002436	-	-	-	700 l/min	14
R432016656	2.7 W	-	-	700 l/min	13 14
R432016657	2.7 W	-	-	700 l/min	13 14
R432008894	2.7 W	-	-	700 l/min	13 14
5727490220	2.7 W	-	-	700 l/min	13
R432016658	-	3.7 VA	6.4 VA	700 l/min	13 14
5727495270	-	3.7 VA	6.4 VA	700 l/min	13
R432016655	-	3.7 VA	6.4 VA	700 l/min	13 14
R432016649	2.7 W	-	-	700 l/min	13 14
R432016647	-	3.7 VA	6.4 VA	700 l/min	13 14
R432016650	-	3.7 VA	6.4 VA	700 l/min	13 14
R432016648	-	3.7 VA	6.4 VA	700 l/min	13 14

Part No.	Throttle	Valve plug connector	basic valve with electrical connector
R432015405	with throttle	-	Basic valve without coil
R432002436	with throttle	-	Basic valve without coil
R432016656	with throttle	Without valve plug connector	-
R432016657	with throttle	Without valve plug connector	-
R432008894	with throttle	With valve plug connector	-
5727490220	with throttle	Without valve plug connector	-
R432016658	with throttle	Without valve plug connector	-
5727495270	with throttle	Without valve plug connector	-
R432016655	with throttle	Without valve plug connector	-
R432016649	with throttle	Without valve plug connector	-
R432016647	with throttle	Without valve plug connector	-
R432016650	with throttle	Without valve plug connector	-
R432016648	with throttle	Without valve plug connector	-

Part No.	Reverse polarity protection	ATEX	Weight
R432015405	-	ATEX optional	0.22 kg
R432002436	-	ATEX optional	0.221 kg
R432016656	Protected against polarity reversal	-	0.317 kg
R432016657	Protected against polarity reversal	-	0.317 kg
R432008894	Protected against polarity reversal	-	0.339 kg
5727490220	Protected against polarity reversal	-	-
R432016658	Protected against polarity reversal	-	0.317 kg
5727495270	Protected against polarity reversal	-	-
R432016655	Protected against polarity reversal	-	0.317 kg
R432016649	Protected against polarity reversal	-	0.317 kg
R432016647	Protected against polarity reversal	-	0.317 kg
R432016650	Protected against polarity reversal	-	0.317 kg
R432016648	Protected against polarity reversal	-	0.317 kg

Nominal flow Qn at 87 psi and  $\Delta p$  = 15 psi, MO = Manual override



## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

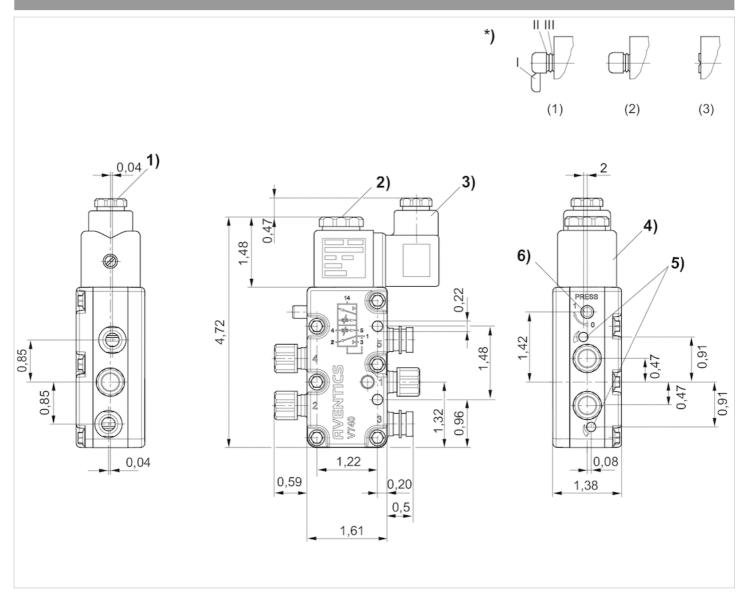
#### Technical information

Material	
Housing	Polyarylamide Polyoxymethylene
Seals	Acrylonitrile butadiene rubber



## Dimensions

#### Dimensions in inches



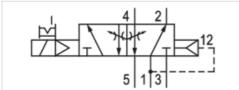
1) Gland fitting M16x1.52) M5 internal thread accessible under cap3) Valve plug connector can be rotated at 90° intervals4) Coil can be plugged at 45° intervals5) Flow control screw for exhausts 5 (R) and 3 (S)6) Manual override and position indicator\*): Manual override:Manual actuation: (1) with detent - push and turn into position 1 (2) without detent - remove segment I - push onlyActuation with tool: (3) with detent - remove segments up to II - push with tool and turn into position 1



# 5/2-directional valve, Series 740-CP

- 5/2
- Pipe connection
- Compressed air connection output: 3/8"
- Electrical connection: Plug, EN 175301-803, form B, 3-pin
- corrosion-protected
- Can be assembled into blocks
- Manual override : with detent, without detent
- single solenoid
- With air spring return
- Pilot : Internal





Version

Activation

Pilot

Sealing principle

Blocking principle

Working pressure min./max.

Ambient temperature min./max. Medium temperature min./max.

Medium

Max. particle size

Oil content of compressed air

Connector standard

Protection class with connection

Reverse polarity protection

Compatibility index

Duty cycle

Typ. switch-on time

Typ. switch-off time

Typ. Switch-on time

Mounting on manifold strip

Weight

Diaphragm poppet valve

Electrically

Internal

Soft sealing

Plate principle Single base plate principle

2 ... 10 bar

-15 ... 50 °C

-15 ... 50 °C

Compressed air

50 µm

0 ... 5 mg/m<sup>3</sup>

EN 175301-803:2006

IP65

Protected against polarity reversal

14

100 %

16 ms

36 ms

PRS strip

0.326 kg



# Technical data

Part No.	MO	Compressed air connection	Compressed air connection
		Input	Output
R432015590	<u> </u>	3/8"	3/8″
R432015613	r r	3/8"	3/8″
R432015592	<u> </u>	3/8"	3/8″
R432015614	r r	3/8"	3/8″
R432015591	<u> </u>	3/8"	3/8″
R432015594	<u> </u>	3/8"	3/8″
R432015616	<u> </u>	3/8"	3/8″
R432015593	×	3/8"	3/8″
R432015615	<u> </u>	3/8"	3/8″

Part No.	Compressed air connection	Operational voltage	Operational voltage
	Exhaust	DC	AC 50 Hz
R432015590	M14x1	-	110 V
R432015613	M14x1	-	110 V
R432015592	M14x1	12 V	-
R432015614	M14x1	12 V	-
R432015591	M14x1	-	220 V
R432015594	M14x1	-	24 V
R432015616	M14x1	-	24 V
R432015593	M14x1	24 V	-
R432015615	M14x1	24 V	-

Part No.	Operational	Voltage tolerance	Voltage tolerance	Voltage tolerance
	voltage	DC	A C 50 H-	AC CO 11-
	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz
R432015590	110 V	-	-20% / +10%	-10% / +20%
R432015613	110 V	-	-20% / +10%	-10% / +20%
R432015592	-	-10% / +10%	-	-
R432015614	-	-10% / +10%	-	-
R432015591	220 V	-	-20% / +10%	-10% / +20%
R432015594	-	-	-20% / +10%	-
R432015616	-	-	-20% / +10%	-
R432015593	-	-10% / +10%	-	-
R432015615	-	-10% / +10%	-	-

Part No.	Power consumption	Holding power	Switch-on power	Throttle
	DC	AC 50 Hz	AC 50 Hz	
R432015590	-	3.7 VA	6.4 VA	with throttle
R432015613	-	3.7 VA	6.4 VA	with throttle
R432015592	2.7 W	-	-	with throttle
R432015614	2.7 W	-	-	with throttle
R432015591	-	3.7 VA	6.4 VA	with throttle
R432015594	-	2.7 VA	-	with throttle
R432015616	-	2.7 VA	-	with throttle
R432015593	2.7 W	-	-	with throttle
R432015615	2.7 W	-	-	with throttle





Part No.	Valve plug connector	
R432015590	Without valve plug connector	-
R432015613	Without valve plug connector	1)
R432015592	Without valve plug connector	-
R432015614	Without valve plug connector	1)
R432015591	Without valve plug connector	-
R432015594	Without valve plug connector	-
R432015616	Without valve plug connector	1)
R432015593	Without valve plug connector	-
R432015615	Without valve plug connector	1)

Nominal flow Qn at 6 bar and  $\Delta p$  = 1 bar, MO = Manual override

1) with LED

## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

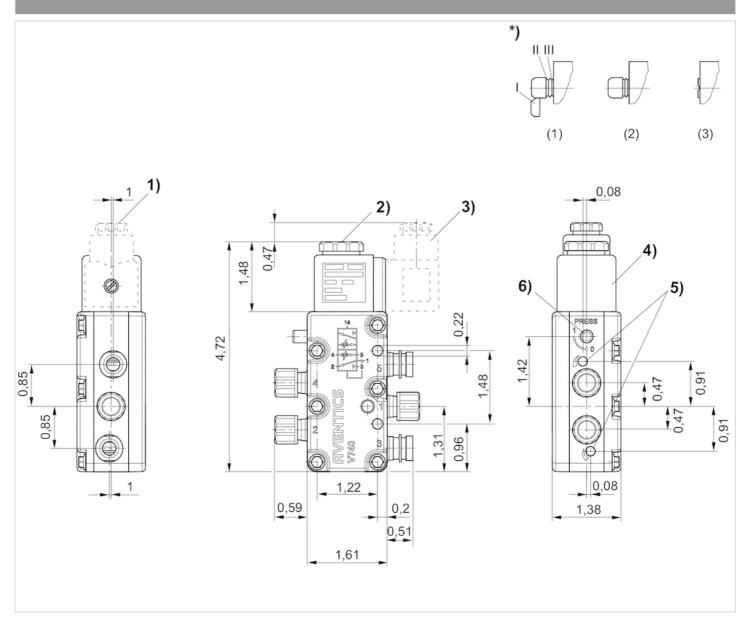
## Technical information

Material	
Housing	Polyoxymethylene
Seals	Acrylonitrile butadiene rubber
Front plate	Polyarylamide



## Dimensions

#### Dimensions in inches



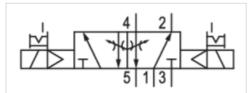
1) Gland fitting M16x1.52) M5 internal thread accessible under cap3) Valve plug connector can be rotated at 90° intervals4) Coil can be plugged at 45° intervals5) Flow control screw for exhausts 5 (R) and 3 (S)6) Manual override and position indicator\*): Manual override:Manual actuation: (1) with detent - push and turn into position 1 (2) without detent - remove segment I - push onlyActuation with tool: (3) with detent - remove segments up to II - push with tool and turn into position 1



# 5/2-directional valve, Series 740-CP

- 5/2
- Qn = 700 I/min
- Pipe connection
- Compressed air connection output: 3/8"
- Electrical connection: Plug, EN 175301-803, form A
- corrosion-protected
- Can be assembled into blocksManual override : with detent
- double solenoidPilot : Internal





Version

Activation

Pilot

Sealing principle

Blocking principle

Working pressure min./max.

Ambient temperature min./max. Medium temperature min./max.

Medium

Max. particle size

Oil content of compressed air

Nominal flow Qn

Connector standard

Protection class with connection

Reverse polarity protection

Compatibility index

Duty cycle

Typ. switch-on time

Mounting on manifold strip

Weight

Diaphragm poppet valve

Electrically

Internal

Soft sealing

Single base plate principle Plate principle

2 ... 10 bar

-15 ... 50 °C

-15 ... 50 °C

Compressed air

50 µm

0 ... 5 mg/m<sup>3</sup>

700 l/min

EN 175301-803:2006

IP65

Protected against polarity reversal

14

100 %

40 ms

PRS strip

0.52 kg



## Technical data

Part No.	MO	Compressed air connection	Compressed air connection
		Input	Output
R432015597		3/8"	3/8"
R432015617		3/8"	3/8"
R432015598	<u> </u>	3/8"	3/8"
R432015618		3/8″	3/8"
R432015599		3/8"	3/8"
R432015619		3/8"	3/8"

Part No.	Compressed air connection	Operational voltage	Operational voltage
	Exhaust	DC	AC 50 Hz
R432015597	M14x1	-	110 V
R432015617	M14x1	-	110 V
R432015598	M14x1	-	220 V
R432015618	M14x1	-	220 V
R432015599	M14x1	24 V	-
R432015619	M14x1	24 V	-

Part No.	Operational	Voltage tolerance	Voltage tolerance
	voltage		
	AC 60 Hz	AC 50 Hz	AC 60 Hz
R432015597	110 V	-20% / +10%	-10% / +20%
R432015617	110 V	-20% / +10%	-10% / +20%
R432015598	220 V	-20% / +10%	-10% / +20%
R432015618	220 V	-20% / +10%	-10% / +20%
R432015599	-	-	-
R432015619	-	-	-

Part No.	Power consumption DC	Holding power AC 50 Hz	Switch-on power AC 50 Hz	Throttle
R432015597	-	3.7 VA	6.4 VA	with throttle
R432015617	-	3.7 VA	6.4 VA	with throttle
R432015598	-	3.7 VA	6.4 VA	with throttle
R432015618	-	3.7 VA	6.4 VA	with throttle
R432015599	2.7 W	-	-	with throttle
R432015619	2.7 W	-	-	with throttle

Part No.	Valve plug connector	
R432015597	Without valve plug connector	1)
R432015617	Without valve plug connector	2)
R432015598	Without valve plug connector	1)
R432015618	Without valve plug connector	2)
R432015599	Without valve plug connector	1)
R432015619	Without valve plug connector	2)

Nominal flow Qn at 6 bar and  $\Delta p$  = 1 bar, MO = Manual override

- 1) Valve plug connector with status display
- 2) Valve plug connector without status display

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## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

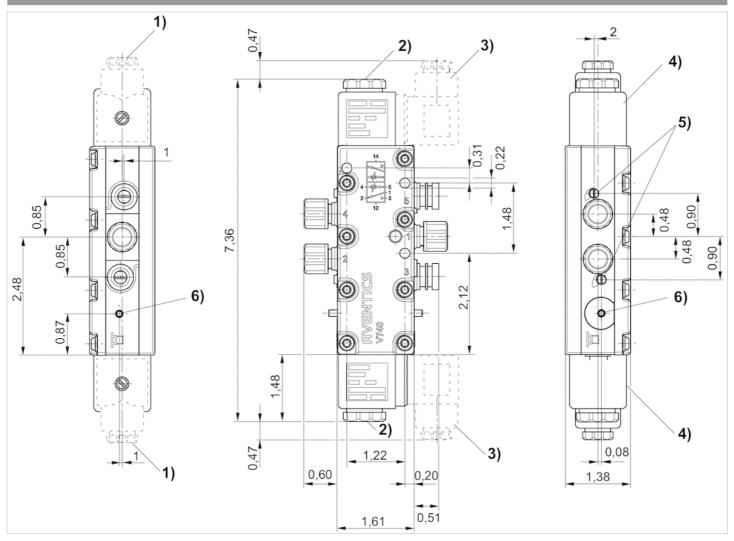
## Technical information

Material	
Housing	Polyoxymethylene
Seals	Acrylonitrile butadiene rubber
Front plate	Polyarylamide



## Dimensions

#### Dimensions in inches



1) Gland fitting M16x1.52) M5 internal thread accessible under cap3) Valve plug connector can be rotated at 90° intervals4) Coil can be plugged at 45° intervals5) Flow control screw for exhausts 5 (R) and 3 (S)6) Manual override and position indicator



# 5/2-directional valve, Series 740

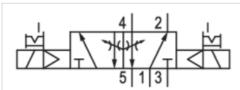
- 5/2
- Qn = 700-950 I/min
- Pipe connection

Compressed air connection output: 3/8" Ø 10 5/16" (Ø 8)
Electrical connection: Plug, EN 175301-803, form A

Can be assembled into blocksManual override : with detent

double solenoidPilot : Internal





Version

Activation

Pilot

Sealing principle

Blocking principle

Working pressure min./max.

Ambient temperature min./max.

Medium temperature min./max.

Medium

Max. particle size

Oil content of compressed air

Nominal flow Qn

Connector standard

Protection class with connection

Reverse polarity protection

Compatibility index

Duty cycle

Typ. switch-on time

Mounting on manifold strip

Weight

Diaphragm poppet valve

Electrically

Internal

Soft sealing

Single base plate principle Plate principle

1.5 ... 10 bar

-15 ... 50 °C

-15 ... 50 °C

Compressed air

50 µm

0 ... 5 mg/m<sup>3</sup>

See table below

EN 175301-803:2006

IP65

Protected against polarity reversal

See table below

100 %

40 ms

PRS strip

See table below



# Technical data

Part No.	MO	Compressed air connection	Compressed air connection
		Input	Output
R432002437		3/8"	3/8"
R432015410		Ø 10	Ø 10
R432016661	 	3/8"	3/8"
R432030385		5/16" (Ø 8)	5/16" (Ø 8)
R432016662		3/8"	3/8"
R432016654		5/16" (Ø 8)	5/16" (Ø 8)
R432016664		3/8"	3/8″
R432016663		3/8"	3/8"
R432016653	   <u>~</u>	5/16" (Ø 8)	5/16" (Ø 8)
R432016651		5/16" (Ø 8)	5/16" (Ø 8)
R432016659	   <u>~</u>	3/8"	3/8"
R432016652		5/16" (Ø 8)	5/16" (Ø 8)
R432016660	<u> </u>	3/8"	3/8"

Part No.	Compressed air connection	Operational voltage	Operational voltage
	Exhaust	DC	AC 50 Hz
R432002437	M14x1	-	-
R432015410	M14x1	-	-
R432016661	M14x1	6 V	-
R432030385	M14x1	12 V	-
R432016662	M14x1	12 V	-
R432016654	M14x1	-	24 V
R432016664	M14x1	-	24 V
R432016663	M14x1	24 V	-
R432016653	M14x1	24 V	-
R432016651	M14x1	-	110 V
R432016659	M14x1	-	110 V
R432016652	M14x1	-	220 V
R432016660	M14x1	-	220 V

Part No.	Operational	Voltage tolerance	Voltage tolerance	Voltage tolerance
	voltage			
	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz
R432002437	-	-	-	-
R432015410	-	-	-	-
R432016661	-	-10% / +10%	-	-
R432030385	-	-10% / +10%	-	-
R432016662	-	-10% / +10%	-	-
R432016654	-	-	-20% / +10%	-10% / +20%
R432016664	-	-	-20% / +10%	-10% / +20%
R432016663	-	-10% / +10%	-	-
R432016653	-	-10% / +10%	-	-
R432016651	110 V	-	-20% / +10%	-10% / +20%
R432016659	110 V	-	-20% / +10%	-10% / +20%
R432016652	220 V	-	-20% / +10%	-10% / +20%
R432016660	220 V	-	-20% / +10%	-10% / +20%

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Part No.	Power consumption	Holding power	Switch-on power	Nominal flow	Compatibility index
	DC	AC 50 Hz	AC 50 Hz	Qn	
R432002437	-	-	-	700 l/min	14
R432015410	-	-	-	950 l/min	14
R432016661	2.7 W	-	-	700 l/min	13 14
R432030385	2.7 W	-	-	700 l/min	13 14
R432016662	2.7 W	-	-	700 l/min	13 14
R432016654	-	-	-	700 l/min	13 14
R432016664	2.7 W	-	-	700 l/min	13 14
R432016663	2.7 W	-	-	700 l/min	13 14
R432016653	2.7 W	-	-	700 l/min	13 14
R432016651	-	3.7 VA	6.4 VA	700 l/min	13 14
R432016659	-	3.7 VA	6.4 VA	700 l/min	13 14
R432016652	-	3.7 VA	6.4 VA	700 l/min	13 14
R432016660	-	3.7 VA	6.4 VA	700 l/min	13 14

Part No.	Throttle	Valve plug connector	basic valve with electrical connector
R432002437	with throttle	-	Basic valve without coil
R432015410	with throttle	-	Basic valve without coil
R432016661	with throttle	Without valve plug connector	-
R432030385	with throttle	Without valve plug connector	-
R432016662	with throttle	Without valve plug connector	-
R432016654	with throttle	Without valve plug connector	-
R432016664	with throttle	Without valve plug connector	-
R432016663	with throttle	Without valve plug connector	-
R432016653	with throttle	Without valve plug connector	-
R432016651	with throttle	Without valve plug connector	-
R432016659	with throttle	Without valve plug connector	-
R432016652	with throttle	Without valve plug connector	-
R432016660	with throttle	Without valve plug connector	-

Part No.	Reverse polarity protection	ATEX	Weight
R432002437	-	ATEX optional	0.319 kg
R432015410	-	ATEX optional	0.316 kg
R432016661	Protected against polarity reversal	-	0.505 kg
R432030385	Protected against polarity reversal	-	0.505 kg
R432016662	Protected against polarity reversal	-	0.505 kg
R432016654	Protected against polarity reversal	-	0.505 kg
R432016664	Protected against polarity reversal	-	0.505 kg
R432016663	Protected against polarity reversal	-	0.505 kg
R432016653	Protected against polarity reversal	-	0.505 kg
R432016651	Protected against polarity reversal	-	0.505 kg
R432016659	Protected against polarity reversal	-	0.505 kg
R432016652	Protected against polarity reversal	-	0.505 kg
R432016660	Protected against polarity reversal	-	0.505 kg

Nominal flow Qn at 6 bar and  $\Delta p$  = 1 bar, MO = Manual override





#### Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

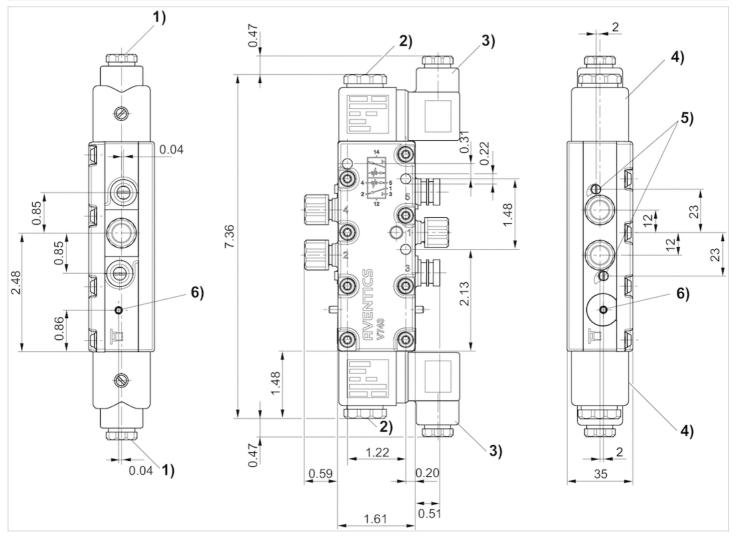
ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

#### Technical information

Material	
Housing	Polyoxymethylene
Seals	Acrylonitrile butadiene rubber

#### Dimensions

#### Dimensions in inches



1) Gland fitting M16x1.52) M5 internal thread accessible under cap3) Valve plug connector can be rotated at 90° intervals4) Coil can be



plugged at 45° intervals5) Flow control screw for exhausts 5 (R) and 3 (S)6) Manual override and position indicator



# 5/4-directional valve, Series 740

- 5/4
- Qn = 700 I/min
- pressurized center
- Pipe connection
- Compressed air connection output: 3/8"
- Electrical connection: Plug, EN 175301-803, form A
- Can be assembled into blocksManual override : without detent

double solenoidPilot : Internal



Version Diaphragm poppet valve
Activation Electrically

Sealing principle Soft sealing

Blocking principle Single base plate principle Plate principle

Internal

Working pressure min./max. 3 ... 10 bar

Ambient temperature min./max. -15 ... 50 °C

Medium temperature min./max. -15 ... 50 °C

Medium Compressed air

Max. particle size 50  $\mu m$  Oil content of compressed air 0 ... 5  $mg/m^3$ 

Nominal flow Qn 700 I/min

Connector standard EN 175301-803:2006
Protection class with connection IP65

nteetion dass with connection in o

Reverse polarity protection

Compatibility index

Duty cycle

Pilot

Typ. switch-on time
Typ. switch-off time

Mounting on manifold strip

Weight

Protected against polarity reversal

14 100 % 20 ms 54 ms PRS strip 0.551 kg



# Technical data

Part No.		MO		Compressed air connection
				Input
R432016665	75 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		pressurized center	3/8"
R432016667	70 X 11 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		pressurized center	3/8"
R432016666	75 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		pressurized center	3/8"
R432006669	75 X 11 X 11 4 7		pressurized center	3/8"
R432016668	75 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		pressurized center	3/8"
R432002439	75 X 11 X 11 4 7		pressurized center	3/8"
R432016673	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		pressurized center	3/8"
R432002438	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		pressurized center	3/8"
R432016670	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		pressurized center	3/8"
R432016671	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		pressurized center	3/8"
R432016672	75 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		pressurized center	3/8"
R432016674	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		pressurized center	3/8"
R432016675	75 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		pressurized center	3/8"
5727855302	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		pressurized center	3/8"

Part No.	Compressed air connection	Compressed air connection
	Output	Exhaust
R432016665	3/8"	M14x1
R432016667	3/8"	M14x1
R432016666	3/8"	M14x1
R432006669	3/8"	M14x1
R432016668	3/8"	M14x1
R432002439	3/8"	M14x1
R432016673	3/8"	M14x1
R432002438	3/8"	M14x1
R432016670	3/8"	M14x1
R432016671	3/8"	M14x1
R432016672	3/8"	M14x1
R432016674	3/8"	M14x1
R432016675	3/8"	M14x1
5727855302	3/8"	M14x1

Part No.	Operational	Operational	Operational
	voltage	voltage	voltage
	DC	AC 50 Hz	AC 60 Hz
R432016665	-	110 V	110 V
R432016667	12 V	-	-
R432016666	-	220 V	220 V
R432006669	-	24 V	24 V
R432016668	24 V	-	-
R432002439	-	-	-
R432016673	12 V	-	-
R432002438	-	-	-
R432016670	-	110 V	110 V
R432016671	-	220 V	220 V
R432016672	6 V	-	-



Part No.	Operational voltage DC	Operational voltage AC 50 Hz	Operational voltage AC 60 Hz
R432016674	24 V	-	-
R432016675	-	24 V	24 V
5727855302	-	-	-

Part No.	Voltage tolerance	Voltage tolerance	Voltage tolerance	Power consumption
	DC	AC 50 Hz	AC 60 Hz	DC
R432016665	-	-20% / +10%	-10% / +20%	-
R432016667	-10% / +10%	-	-	2.7 W
R432016666	-	-20% / +10%	-10% / +20%	-
R432006669	-	-20% / +10%	-10% / +20%	2.7 W
R432016668	-10% / +10%	-	-	2.7 W
R432002439	-	-	-	-
R432016673	-10% / +10%	-	-	2.7 W
R432002438	-	-	-	-
R432016670	-	-20% / +10%	-10% / +20%	-
R432016671	-	-20% / +10%	-10% / +20%	-
R432016672	-10% / +10%	-	-	2.7 W
R432016674	-10% / +10%	-	-	2.7 W
R432016675	-	-20% / +10%	-10% / +20%	2.7 W
5727855302	-	-	-	-

Part No.	Holding power	Switch-on power	Valve plug connector
	AC 50 Hz	AC 50 Hz	
R432016665	3.7 VA	6.4 VA	Without valve plug connector
R432016667	-	-	Without valve plug connector
R432016666	3.7 VA	6.4 VA	Without valve plug connector
R432006669	-	-	Without valve plug connector
R432016668	-	-	Without valve plug connector
R432002439	-	-	Without valve plug connector
R432016673	-	-	Without valve plug connector
R432002438	-	-	Without valve plug connector
R432016670	3.7 VA	6.4 VA	Without valve plug connector
R432016671	3.7 VA	6.4 VA	Without valve plug connector
R432016672	-	-	Without valve plug connector
R432016674	-	-	Without valve plug connector
R432016675	-	-	Without valve plug connector
5727855302	-	-	Without valve plug connector

Part No.	basic valve with electrical connector
R432016665	-
R432016667	-
R432016666	-
R432006669	-
R432016668	-
R432002439	Basic valve without coil
R432016673	-
R432002438	Basic valve without coil



Part No.	basic valve with electrical connector	
R432016670	_	
R432016671	-	
R432016672	-	
R432016674	-	
R432016675	-	
5727855302	Basic valve without coil	

Nominal flow Qn at 6 bar and  $\Delta p = 1$  bar, MO = Manual override

#### Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

ATEX optional: ATEX version can be produced by combining the basic valve without coil with an ATEX coil. ATEX ID: see ATEX coils catalog page.

NOTE:

In order to ensure the operating function of the valve, do not fall below the minimum operating pressure of 3 bar!

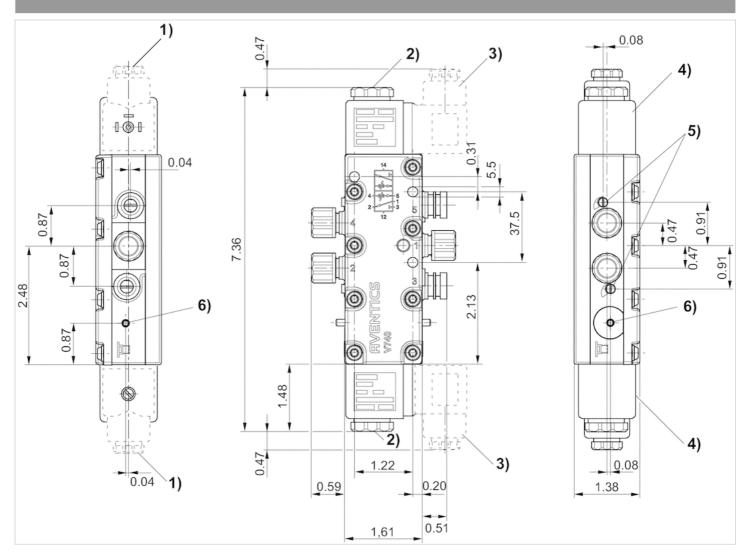
## Technical information

Material	
Housing	Polyoxymethylene
Seals	Acrylonitrile butadiene rubber



## Dimensions

#### Dimensions in inches



- 1) gland fitting M16x1,5
- 2) M5 internal thread accessible under cap
- 3) el. connector can be fixed at 90° intervals
- 4) coil can be mounted at 45° intervals
- 5) throttle screw for exhausts 5 (R) and 3 (S)
- 6) manual override and position indicator

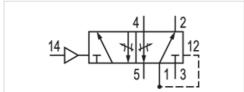




# 5/2-directional valve, Series 740

- Qn = 700 I/min
- Compressed air connection output 3/8"
- Pipe connection
- Can be assembled into blocks
- Manual override without





Version Diaphragm poppet valve
Activation pneumatically
Pilot Internal

Pilot Internal
Sealing principle Soft sealing

Blocking principle Single base plate principle Plate principle

Flow rate value Qn 700 l/min

Working pressure min./max. 1.5 ... 10 bar

Ambient temperature min./max. -15 ... 60 °C

Medium temperature min./max. -15 ... 60 °C

Medium Compressed air

Max. particle size 50 µm

Oil content of compressed air 0 ... 5 mg/m³

Mounting on manifold strip PRS strip

Weight 0.18 kg

## Technical data

Part No.	Compressed air connection	Compressed air connection
	Input	Output
R432013808	3/8"	3/8″

Part No.	Compressed air connection	Compressed air connection	Throttle
	Exhaust	Pilot control exhaust	
R432013808	3/8"	3/8″	with throttle

See diagram, Nominal flow Qn at p1 = 6.3 bar and  $\Delta p$  = 1 bar

#### Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

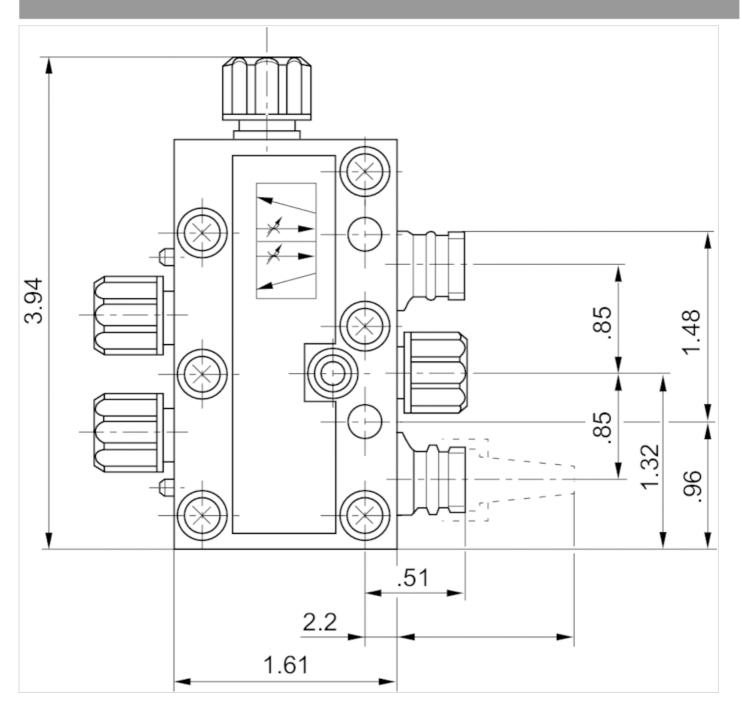


# Technical information

Material	
Housing	Polyarylamide Polyarylamide
Seals	Acrylonitrile butadiene rubber

## Dimensions

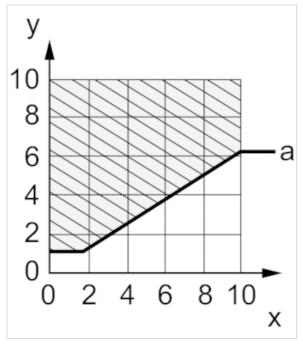
## Dimensions in inches





## Diagrams

#### Pilot pressure range



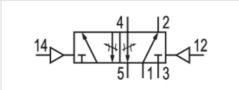
- x: Working pressure ( 0 bar ... 10 bar )
- y: Pilot pressure ( 1 bar ... 6 bar )
- a: Min. pilot pressure at port 14 (Z) depending on working pressure



# 5/2-directional valve, Series 740

- Qn = 700 l/min
- Compressed air connection output 3/8"
- double solenoid
- Pipe connection
- Can be assembled into blocks
- Manual override with detent





Version Diaphragm poppet valve
Activation pneumatically
Pilot Internal

Pilot Internal
Sealing principle Soft sealing

Blocking principle Single base plate principle Plate principle

Flow rate value Qn 700 l/min

Working pressure min./max. 1.5 ... 10 bar

Ambient temperature min./max. -15 ... 60 °C

Medium temperature min./max. -15 ... 60 °C

Medium Compressed air

#### Technical data

Part No.	Compressed air connection	Compressed air connection
	Input	Output
R432013810	3/8"	3/8″

Part No.	Compressed air connection Exhaust	Compressed air connection Pilot control exhaust	Throttle
R432013810	3/8"	3/8″	with throttle

See diagram, Nominal flow Qn at p1 = 6.3 bar and  $\Delta p$  = 1 bar

#### Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).



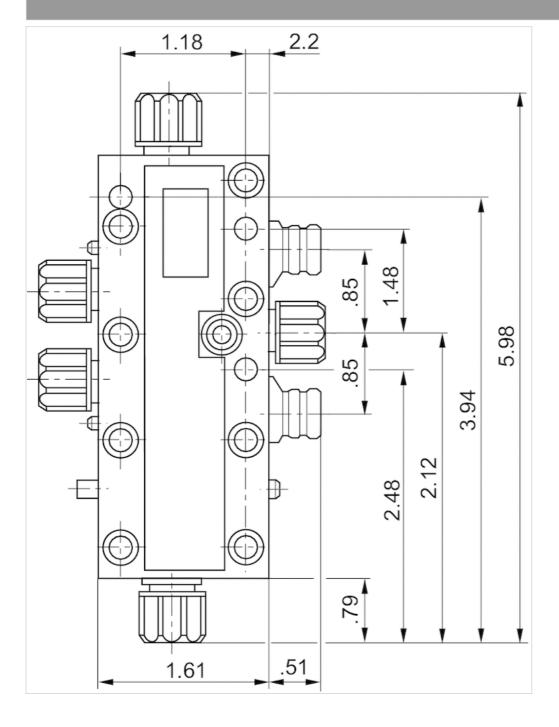


## Technical information

Material	
Housing	Polyoxymethylene
Seals	Acrylonitrile butadiene rubber

## Dimensions

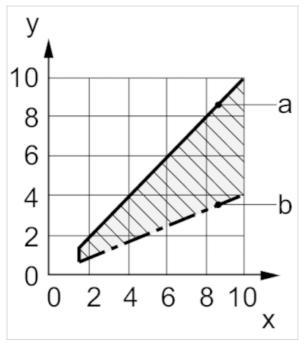
#### Dimensions in inches





## Diagrams

#### Pilot pressure range



x: operating pressure (bar) y: control pressure (bar)

- a: maximum control pressure depending on operating pressure
- b: minimum control pressure depending on operating pressure



# Subbases and accessories



Working pressure min./max. 0 ... 10 bar

Ambient temperature min./max. -15 ... 50 °C

Medium Compressed air

Weight See table below

#### Technical data

Part No.	Position	Туре	Weight
R432013811	1	Supply plate, complete with O-rings	0.245 kg
R432013812	3	End plate	0.092 kg
R432013813	2	Sandwich plate 740, complete with O-rings.	0.089 kg
R432015511	4	Dummy flange for reserve places complete with seals	0.033 kg
R432015512	5	Individual manifold supply pressure kit – mounts underneath manifold segment (not included in scope of delivery)	0.033 kg
R432015880	1	Single subbase (identical to input segment except rear openings are blocked). Used to manifold mount one valve only.	0.245 kg

#### Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

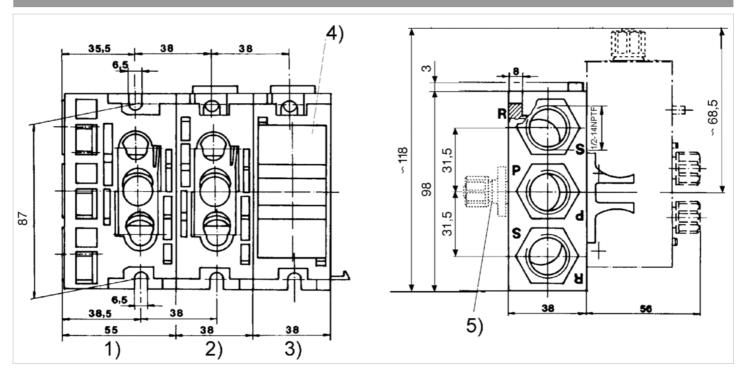
#### Technical information

Material	
Base plate	Polyoxymethylene
Seal	Acrylonitrile butadiene rubber



## Dimensions

#### Dimensions



Tightening torque for all screws max. 35 Nm

- 1) Inlet plate
- 2) Through plate
- 3) End plate
- 4) Dummy flange
- 5) Adapter for separate air supply



## P-manifold



Working pressure min./max. 0 ... 10 bar

Ambient temperature min./max. -15 ... 50 °C

Medium temperature min./max. -25 ... 80 °C

Medium Compressed air

Weight 0.245 kg

#### Technical data

Part No.	Туре
R432015330	Supply plate, complete with O-rings

## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

Material	
Base plate	Polyoxymethylene
Seal	Acrylonitrile butadiene rubber

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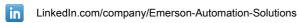


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