

# **Spool Valves and Accessories**

1500,1600,1650 series





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Rotork is the global market leader in valve automation and flow control. Our products and services are helping organisations around the world to improve efficiency, assure safety and protect the environment.

We strive always for technical excellence, innovation and the highest quality standards in everything we do. As a result, our people and products remain at the forefront of flow control technology. Uncompromising reliability is a feature of our entire product range, from our flagship electric actuator range through to our pneumatic, hydraulic and electro-hydraulic actuators, as well as instruments, gearboxes and valve accessories.

Rotork is committed to providing first class support to each client throughout the whole life of their plant, from initial site surveys to installation, maintenance, audits and repair. From our network of national and international offices, our engineers work around the clock to maintain our position of trust.

Rotork. Keeping the world flowing.

### Introduction

Rotork Midland is a specialist designer and manufacturer of 1/4" to 1" compact spool valves with a full range of mechanical, air and solenoid operators available. Suitable for use in industrial and severe environments, we have a range of solutions for all your control valve requirements.









**Certification Options Available** 













### 1500 Series spool valves - 1/4" Pilot operated

A range of 3/2 and 5/2 pilot operated spool valves in stainless steel for use on gases.

### **Features and Benefits**

- Specifically designed for severe environments
- 3/2 and 5/2 Versions
- 316L stainless steel construction
- Designed for actuator control
- NACE option available

### **Media & Ambient Temperature Range**

- -20 to + 180 °C (-4 to +356 °F)
- Low temperature version
   -50° to +90 °C (-58 to +248 °F)

Note: When product is ordered as /ATEX ambient temperature is limited to +40  $^{\circ}$ C (104  $^{\circ}$ F) Ex II 2G c T6.

### **Working Pressure**

• 12 bar (174 psi) maximum

### **Ports NPT (BSP Option Available)**

- 1/4" NPT line port
- 1/8" NPT pilot ports

### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available

Note: To prevent freezing of the condensate within the product, the media dew point must be at least 10 °C below the lowest ambient temperature the product will be exposed to.



### **Construction Materials**

- Body: 316L stainless steel
- Spool: 316 stainless steel
- Spring: 316 stainless steel
- Seals: Fluoroelastomer (EPDM¹ on low temperature options)
- The use of lubrication upstream of the product is not recommended for low temperature applications.

### **Maximum Flow**

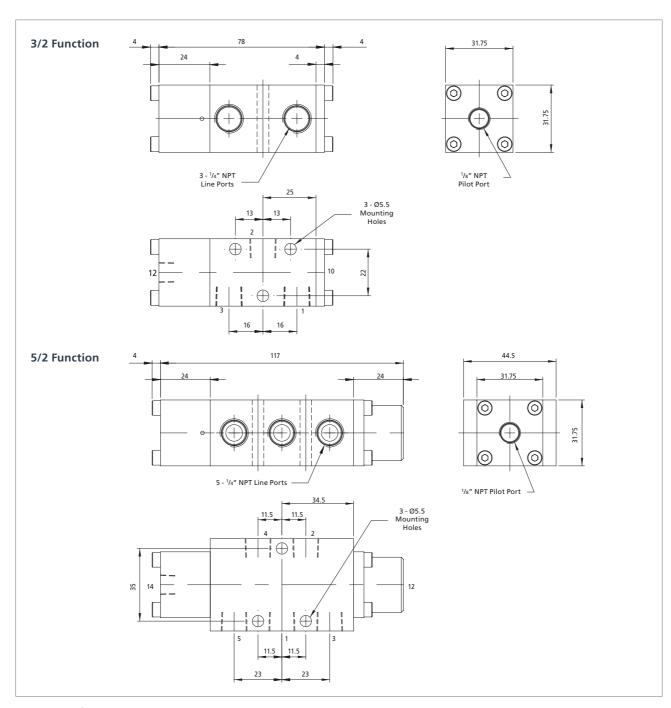
At 6 bar, 1 bar differential:

- 3/2 valves 1,000 l/min (35.3 SCFM)
- 5/2 valves 1,200 l/min (42.4 SCFM)

**Certification Options Available** 



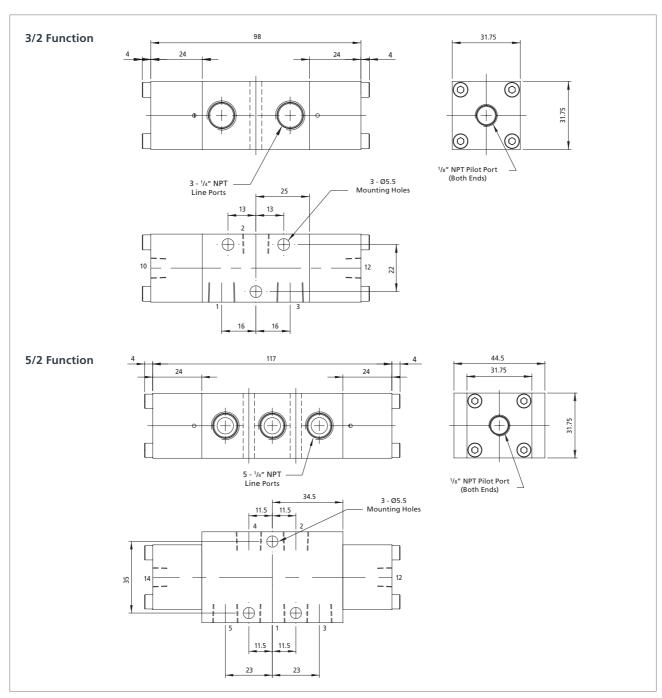
# 1500 Series spool valves - 1/4" Pilot operated spring-return



### **Ordering Information**

Ordering information									
	Product Code	Low Temperature Version	Function	Min Pilot Pressure	Weight (kg)	cv	Symbol	Product	
	2326M21-VR2B	2326M21-ER2B	3/2	2.3 Bar	0.55	1.0	10 12		
	2526M21-VR2B	2526M21-ER2B	5/2	3.5 Bar	1.0	1.2	12 14	= + +	

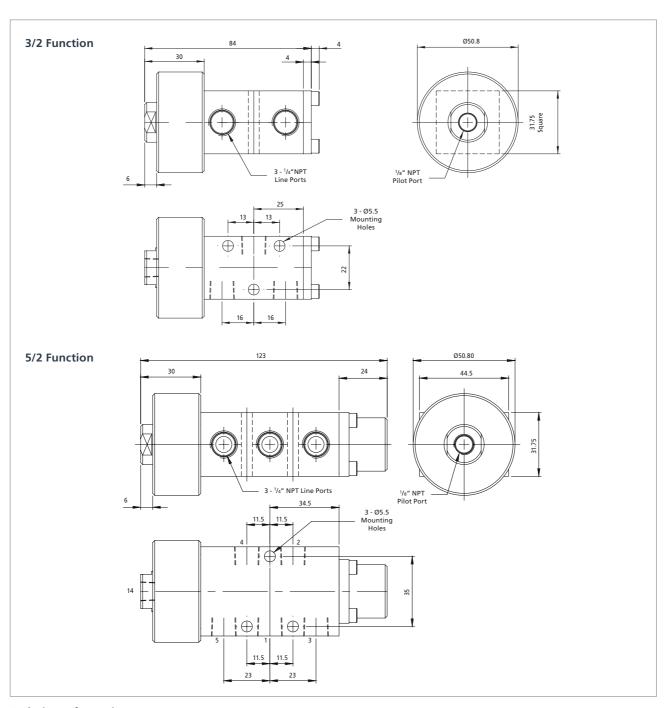
# 1500 Series spool valves - 1/4" Double pilot operated



### **Ordering Information**

oracimg imoini							
Product Code	Low Temperature Function		Min Pilot Pressure	Weight (kg)	cv	Symbol	Product
2326B11-VR2B	2326B11-ER2B	3/2	1.3 Bar	0.70	1.0	10 12	o oll
2526B11-VR2B	2526B11-ER2B	5/2	2.3 Bar	1.0	1.2	12 2 4 14	1000

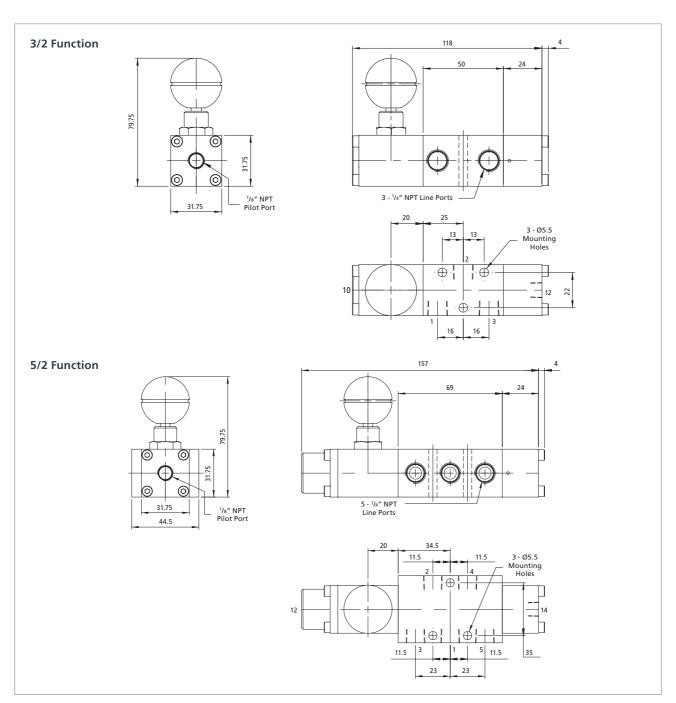
# 1500 Series spool valves - 1/4" Pilot servo operated spring-return



### **Ordering Information**

Product Code	roduct Code Low Temperature Version		Min Pilot Pressure	Weight (kg)	cv	Symbol	Product			
2326M211VR2B	2326M211ER2B	3/2	0.8 Bar	0.80	1.0	10 12				
2526M211VR2B	2526M211ER2B	5/2	1.2 Bar	1.25	1.2	12 14	0000			

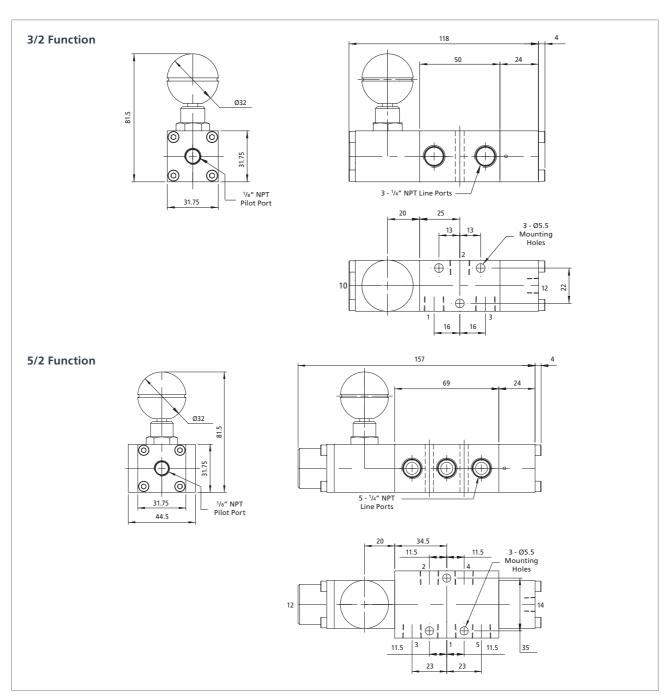
# 1500 Series spool valves - 1/4" Pilot operated latchlock manual reset



### **Ordering Information**

ordering interin							
Product Code	Low Temperature Version	Function	Min Pilot Pressure	Weight (kg)	cv	Symbol	Product
2326M212VR2B	2326M212ER2B	3/2	3 Bar	0.93	1.0	10 112	
2526M212VR2B	2526M212ER2B	5/2	5 Bar	1.38	1.2	12 3 1 5	

# 1500 Series spool valves - 1/4" Pilot operated reverse latchlock manual reset



### **Ordering Information**

ordering initiality							
Product Code	Low Temperature Version	Function	Min Pilot Pressure	Weight (kg)	cv	Symbol	Product
2326M218VR2B	2326M218ER2B	3/2	3 Bar	0.93	1.0	10 112	
2526M218VR2B	2526M218ER2B	5/2	5 Bar	1.38	1.2	12 14	

### 1500 Series spool valves - 1/4" Mechanically operated spring-return

A range of 3/2 and 5/2 mechanically operated spool valves in stainless steel for use on gases.

### **Features and Benefits**

- Specifically designed for severe environments
- 3/2 and 5/2 versions
- 316L stainless steel construction
- Designed for actuator control
- NACE option available

### **Media & Ambient Temperature Range**

- -20 to + 180 °C (-4 to +356 °F)
- Low temperature version
   -50 to +90 °C (-58 to +248 °F)

Notes: When product is ordered as /ATEX ambient temperature is limited to +40 °C (104 °F) Ex II 2G c T6.

For part numbers 2326M28 (see pg.12), Media and Ambient temperature range is -20 to +75  $^{\circ}$ C (-4 to +167  $^{\circ}$ F).

### **Working Pressure**

• 12 bar (174 psi) maximum

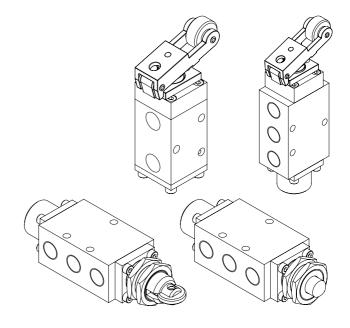
### Ports NPT (BSP Option Available)

1/4" NPT line ports

### **Operating Media**

- Gases filtered lubricated or non-lubricated
- · Air, inert gas, sweet (natural) gases
- Sour gas option available

Note: To prevent freezing of the condensate within the product, the media dew point must be at least 10 °C below the lowest ambient temperature the product will be exposed to.



### **Construction Materials**

- Body: 316L stainless steel
- Spool: 316 stainless steel
- Spring: 316 stainless steel
- Seals: Fluoroelastomer (EPDM¹ on low temperature options)
- Plunger Gaiter (roller lever operated valve only): Nitrile rubber (Note the gaiter is not fitted to low temperature options)
- Roller (standard option): Acetal Roller (low temp option): 316 stainless Steel
- The use of lubrication upstream of the product is not recommended for low temperature applications.

### **Maximum Flow**

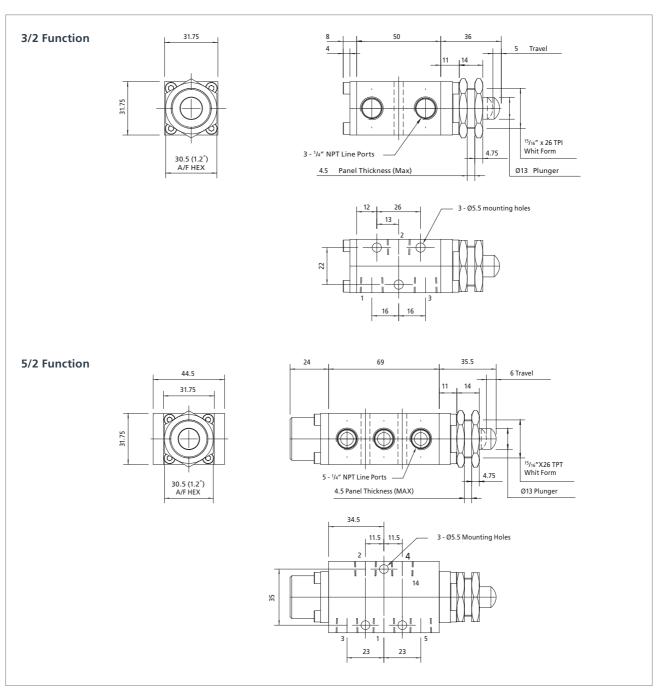
At 6 bar, 1 bar differential:

- 3/2 valves 1,000 l/min (35.3 SCFM)
- 5/2 valves 1,200 l/min (42.4 SCFM)

**Certification Options Available** 



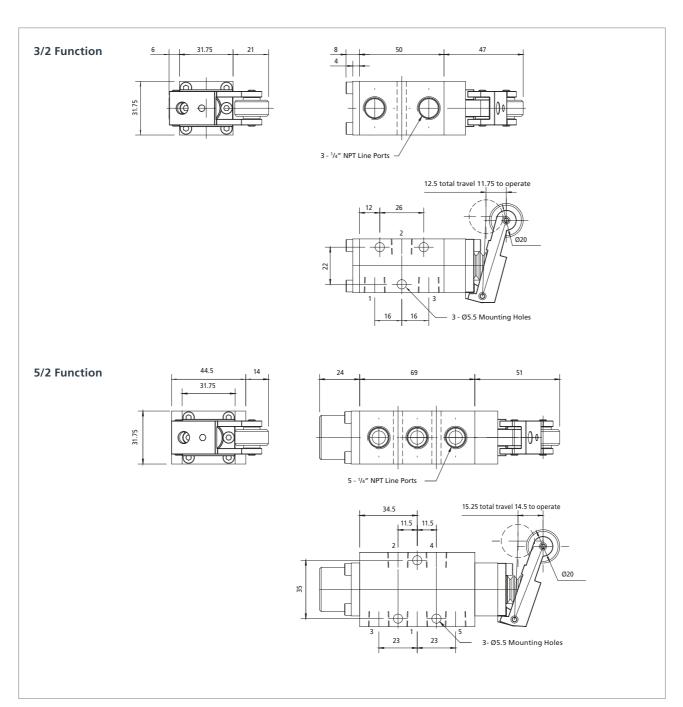
# 1500 Series spool valves - 1/4" Plunger operated spring-return



### **Ordering Information**

ordering initiality							
Product Code	Low Temperature Version	Function	Operating Force (N)	Weight (kg)	cv	Symbol	Product
2326M26-VR2B	2326M26-ER2B	3/2	76	0.46	1.0	10 12	
2526M26-VR2B	2526M26-ER2B	5/2	89	1.10	1.2	12 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	

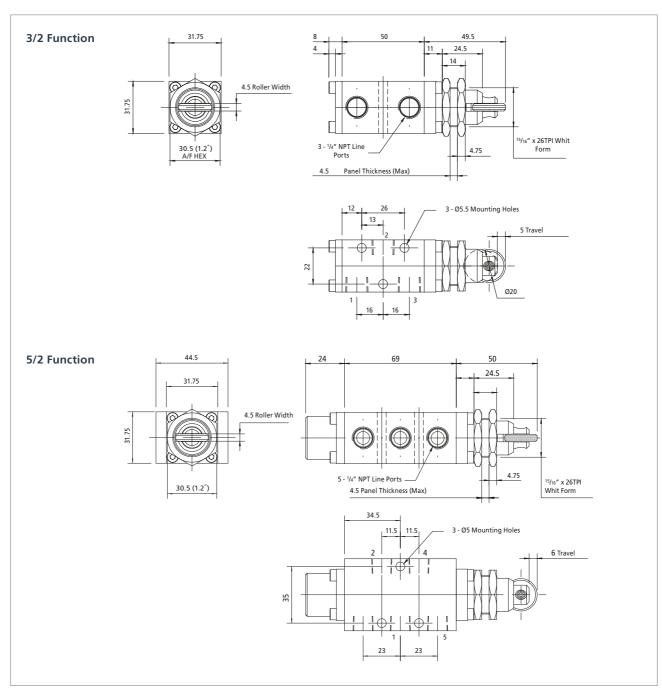
# 1500 Series spool valves - 1/4" Roller lever operated spring-return



### **Ordering Information**

ordering interin							
Product Code	Low Temperature Version	Function	Operating Force (N)	Weight (kg)	cv	Symbol	Product
2326M28-VR2B	2326M28-ER2B	3/2	38	0.55	1.0	10 2 12	
2526M28-VR2B	2526M28-ER2B	5/2	40	1.00	1.2	12 12 14 14	600

# 1500 Series spool valves - 1/4" Roller operated spring-return



### **Ordering Information**

Ordering inform	lation							
Product Code	Low Temperature Version	Function	Options	Operating Force (N)	Weight (kg)	CV	Symbol	Product
2326M2C-VR2B	2326M2C-ER2B	3/2	Without lock nuts	76	0.48	1.0	10 12	
2326M2C5VR2B	2326M2C5ER2B	3/2	With lock nuts	76	0.48	1.0	1 3	
2526M2C-VR2B	2526M2C-ER2B	5/2	Without lock nuts	89	1.12	1.2	2 4	
2526M2C5VR2B	2526M2C5ER2B	5/2	With lock nuts	89	1.12	1.2	3 1 5	9000

### 1500 Series spool valves - 1/4" Manually operated spring-return

A range of 3/2 and 5/2 manually operated spool valves in stainless steel for use on gases.

### **Features and Benefits**

- Specifically designed for severe environments
- 3/2 and 5/2 versions
- 316L stainless steel construction
- Designed for actuator control
- NACE option available

### **Media & Ambient Temperature Range**

- -20 to +180 °C (-4 to +356 °F)
- Low temperature version
   -50 to +90 °C (-58 to +248 °F)

Notes: When product is ordered as /ATEX ambient temperature is limited to +40 °C (104 °F) Ex II 2G c T6.

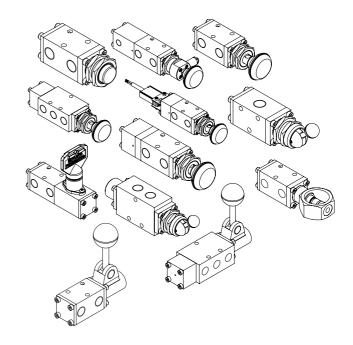
Excludes fusible bulb valve, please refer to separate temperature ratings on page 25.

### **Working Pressure**

• 12 bar (174 psi) maximum

### Ports NPT (BSP Option Available)

- 1/4" NPT line port
- 1/8" NPT pilot ports



### **Operating Media**

- · Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available

Note: To prevent freezing of the condensate within the product, the media dew point must be at least 10  $^{\circ}$ C below the lowest ambient temperature the product will be exposed to.

### **Construction Materials**

- Body: 316L stainless steel
- Spool: 316 stainless steel
- Spring: 316 stainless steel
- Seals: Fluoroelastomer (EPDM¹ on low temperature options)
- The use of lubrication upstream of the product is not recommended for low temperature applications.

### **Maximum Flow**

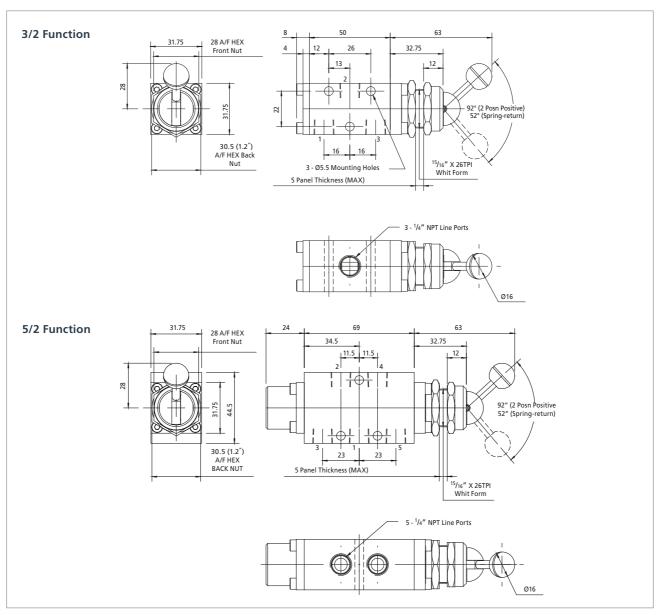
At 6 bar, 1 bar differential:

- 3/2 valves 1,000 l/min (35.3 SCFM)
- 5/2 valves 1,200 l/min (42.4 SCFM)

**Certification Options Available** 



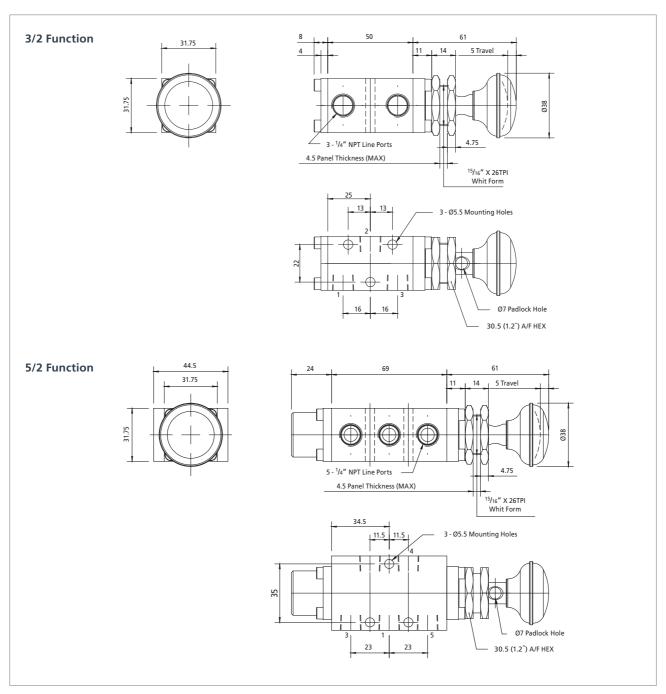
# 1500 Series spool valves - 1/4" Manually operated switch 2 position positive 1/4" Manually operated switch spring-return



### **Ordering Information**

Ordering into								
Product Code	Low Temperature Version	Function	Options	Operating Force (N)	Weight (kg)	cv	Symbol	Product
2326B00-VR2B	2326B00-ER2B	3/2	3/2 manually operated switch 2 position positive detent	13	0.80	1.0	10 12	
2326M20-VR2B	2326M20-ER2B	3/2	3/2 manually operated switch spring-return	13	0.80	1.0	10 11 12	
2526B00-VR2B	2526B00-ER2B	5/2	5/2 manually operated switch 2 position positive	16	1.10	1.2	12 14 14	
2526M20-VR2B	2526M20-ER2B	5/2	5/2 manually operated switch spring-return	16	1.10	1.2	12 14 14	

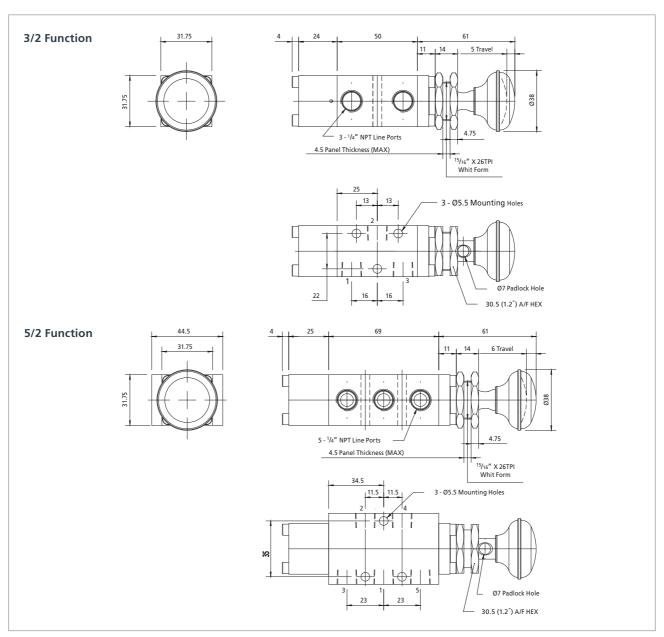
# 1500 Series spool valves - 1/4" Pad operated spring-return



### **Ordering Information**

3								
Product Code	Low Temperature Version	Function	Options	Operating Force (N)	Weight (kg)	cv	Symbol	Product
2326M27-VR2B	2326M27-ER2B	3/2	Without lock nuts	76	0.50	1.0	10 112	
2326M275VR2B	2326M275ER2B	3/2	With lock nuts	76	0.50	1.0	1 3	
2526M27-VR2B	2526M27-ER2B	5/2	Without lock nuts	89	0.95	1.2	2 4	A
2526M275VR2B	2526M275ER2B	5/2	With lock nuts	89	0.95	1.2	3 1 5	- * * * -

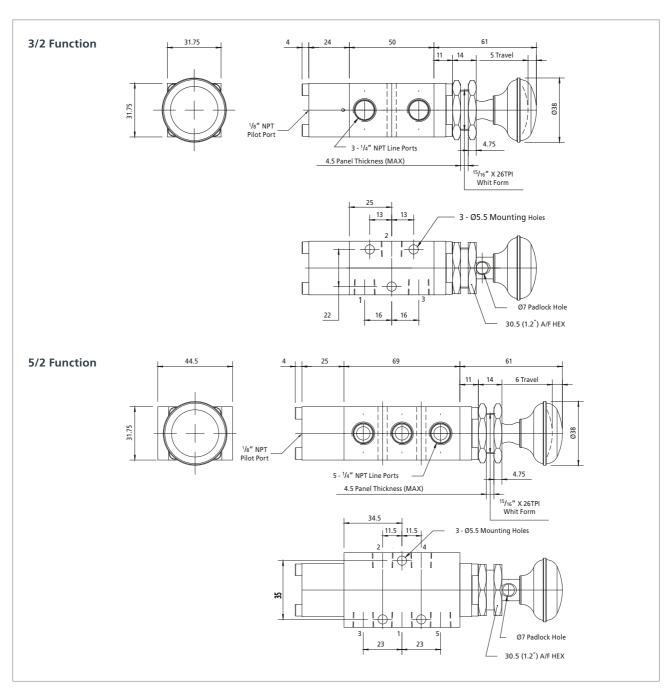
# 1500 Series spool valves - 1/4" Pad operated push pull with DETENT 1/4" Pad operated push pull



### **Ordering Information**

Product Code	Low Temperature Version	Function	Options	Weight (kg)	cv	Symbol	Product
2326B77-VR2B	2326B77-ER2B	3/2	3/2 pad operated push pull	0.61	1.0	10 12	
2326B775VR2B	2326B775ER2B	3/2	3/2 pad operated push pull with lock nuts	0.63	1.0	1 3	=0
2326B773VR2B	2326B773ER2B	3/2	3/2 pad operated push pull with detent c/w lock nuts	0.63	1.0	10 12	
2526B77-VR2B	2526B77-ER2B	5/2	5/2 pad operated push pull	0.93	1.2	12 14	
2526B775VR2B	2526B775ER2B	5/2	5/2 pad operated push pull with lock nuts	0.95	1.2	3 1 5	
2526B773VR2B	2526B773ER2B	5/2	5/2 pad operated push pull with detent	0.95	1.2	12 14	

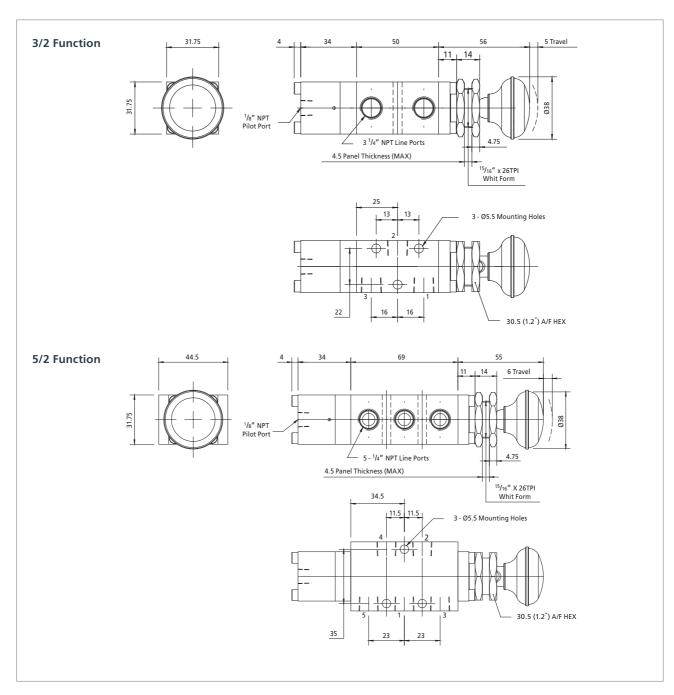
# 1500 Series spool valves - 1/4" Pad operated pilot air return



### **Ordering Information**

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Product Code	Low Temperature Version	Function	Options	Min pilot pressure	Weight (kg)	cv	Symbol	Product				
2326B17-VR2B	2326B17-ER2B	3/2	Without lock nuts	1.3 Bar	0.63	1.0	10 12					
2326B175VR2B	2326B175ER2B	3/2	With lock nuts	1.3 Bar	0.63	1.0	10 12					
2526B17-VR2B	2526B17-ER2B	5/2	Without lock nuts	2.3 Bar	0.95	1.2	2 4					
2526B175VR2B	2526B175ER2B	5/2	With lock nuts	2.3 Bar	0.95	1.2	3 1 5	Locol May				

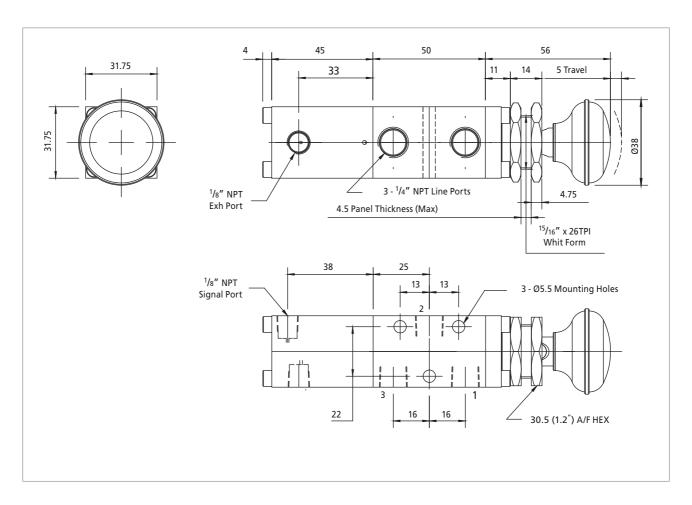
# 1500 Series spool valves - 1/4" Pad (to pull) or pilot operated spring-return



### **Ordering Information**

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Product Code	Low Temperature Version	Function	Options	Operating Force (N)	Weight (kg)	cv	Symbol	Product				
2326M2F-VR2B	2326M2F-ER2B	3/2	Without lock nuts	76	0.65	1.0	12 10					
2326M2F5VR2B	2326M2F5ER2B	3/2	With lock nuts	76	0.65	1.0	3 1					
2526M2F-VR2B	2526M2F-ER2B	5/2	Without lock nuts	89	1.00	1.2	2 4					
2526M2F5VR2B	2526M2F5ER2B	5/2	With lock nuts	89	1.00	1.2	3 1 5	Macooli J				

# 1500 Series spool valves - 1/4" 3/2 Pad (to pull) spring-return with pilot latch



### **Ordering Information**

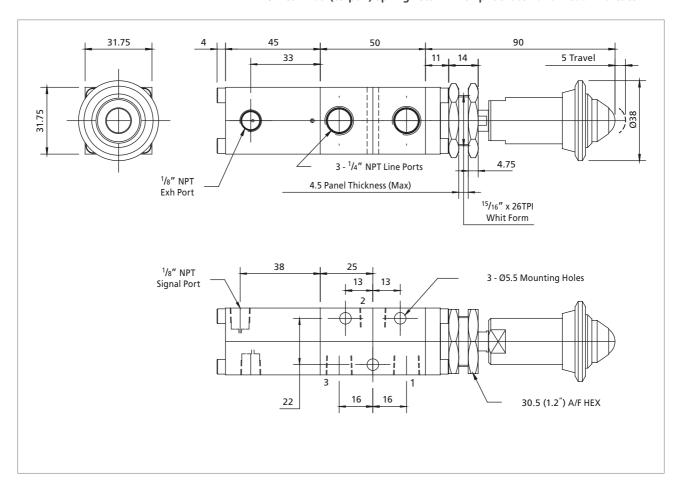
Product Code	Low Temperature Version	Operating Force (N)	Weight (kg)	cv	Symbol	Product
2326M276VR2B	2326M276ER2B	76	0.75	1.0	10 12	

If ATEX certification is required suffix product code with '/ATEX'

### Pad operated, spring-return with pilot latch

If a pilot pressure of 1.5 to 10 bar (21 to 145 psi) is present at pilot ports when the knob is pulled out, the pilot pressure will hold the valve in the operated position against the return spring. If the pilot pressure falls to 0.5 bar (7 psi) or less the valve will be reset to its unoperated position. The valve cannot be operated by pilot pressure alone, manual operation must take place first.

# 1500 Series spool valves - Relay Valve Range 1/4" 3/2 Pad (to pull) spring-return with pilot latch and visual indicator



### **Ordering Information**

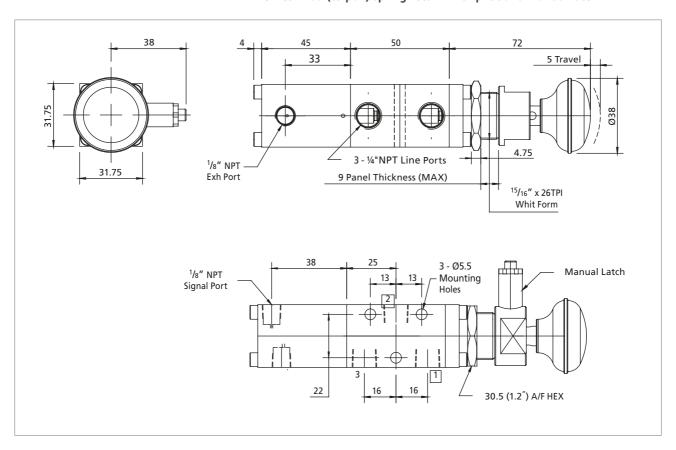
Product Code	Low Temperature Version	Operating Force (N)	Weight (kg)	cv	Symbol	Product
2326M27JVR2B	2326M27JER2B	76	0.90	1.0	10 12	

If ATEX certification is required suffix product code with '/ATEX'

# Pad operated, spring-return with pilot latch and visual indicator

The visual indicator will show RED when the valve is closed. If a pilot signal is applied the valve will not operate. When the valve is operated (via the pad) the pilot signal latches the valve in the operated position and the visual indicator will show GREEN - on loss of the pilot signal the valve will reset and the visual indicator will show RED again - reintroduction of the pilot signal will not operate the valve.

# 1500 Series spool valves - Relay Valve Range 1/4" 3/2 Pad (to pull) spring-return with pilot and manual latch



### **Ordering Information**

Product Code	Low Temperature Version	Operating Force (N)	Weight (kg)	CV	Symbol	Product
2326M27AVR2B	2326M27AER2B	76	0.85	1.0	10 12	

If ATEX certification is required suffix product code with '/ATEX'

### Pad operated, spring-return with pilot latch and manual latch pin

### **Manual Operation:**

To operate the valve, pull out the pad, if the pad is released the valve will return to the un-operated position.

To leave valve operated press down the manual latch pin when pad is pulled out, then release the pad so that the manual latch pin engages. To return valve to its un-operated position, pull out the pad, this will dis-engage the manual latch pin, then release the pad.

### **Pilot Signal Operation:**

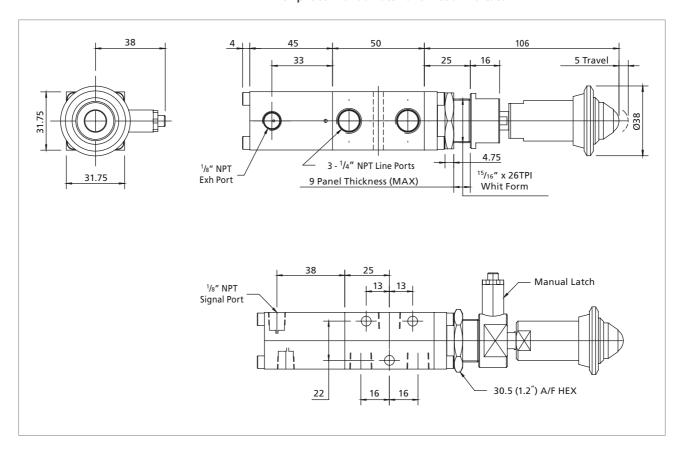
To operate the valve, pull out the pad and apply a pilot pressure of between 3 to 10 bar to the signal port, the valve will remain operated until the pilot pressure is lost.

The valve cannot be operated by pilot pressure alone, pad must be pulled out first.

### Releasing the manual latch with pilot signal:

If the valve has been manual operated and latched, this can be released by applying a pilot pressure to the signal port, this will release the manual latch, so when pilot pressure is lost the valve will return to the un-operated position.

# 1500 Series spool valves - Relay Valve Range - ¼" 3/2 Pad (to pull) spring-return with pilot / manual latch and visual indicator



### **Ordering Information**

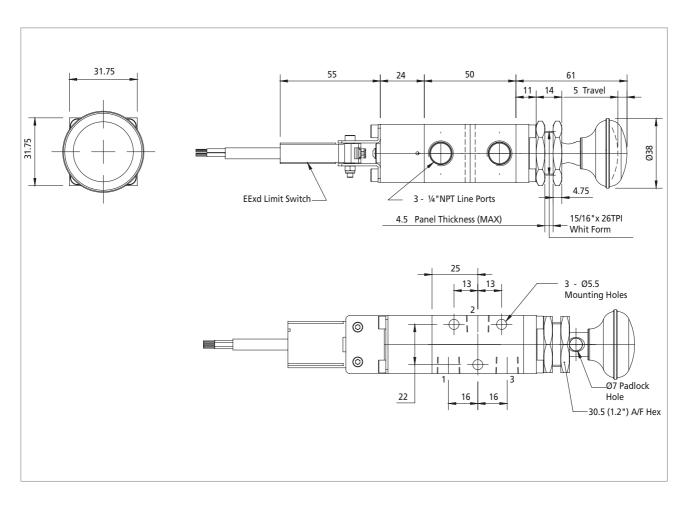
Product Code	Low Temperature Version	Operating Force (N)	Weight (kg)	CV	Symbol	Product
2326M27HVR2B	2326M27HER2B	76	1.00	1.0	10 12	

If ATEX certification is required suffix product code with '/ATEX'

# Pad operated, spring-return with pilot / manual latch pin and visual indicator

The visual indicator will show RED when the valve is closed. The valve is operated by pulling out the pad - the latch pin when pressed while releasing the pad will hold the valve in the open position - the visual indicator will still show RED. When a pilot signal is applied the latch pin is released and the visual indicator will show GREEN - on loss of the pilot signal the valve closes and the visual indicator will show RED - reintroduction of the pilot signal will not operate the valve.

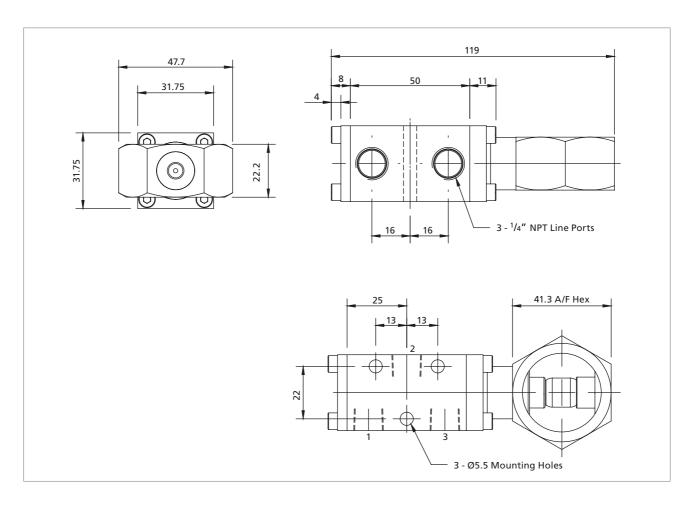
# 1500 Series spool valves - 1/4" 3/2 Pad operated (push-pull) with position indicator switch



### **Ordering Information**

Product Code	Low Temperature Version	Operating Force (N)	Weight (kg)	CV	Symbol	Product
2326B77-V1657A	2326B77-E1657A	76	0.65	1.0	2 2 1 3 1 3	

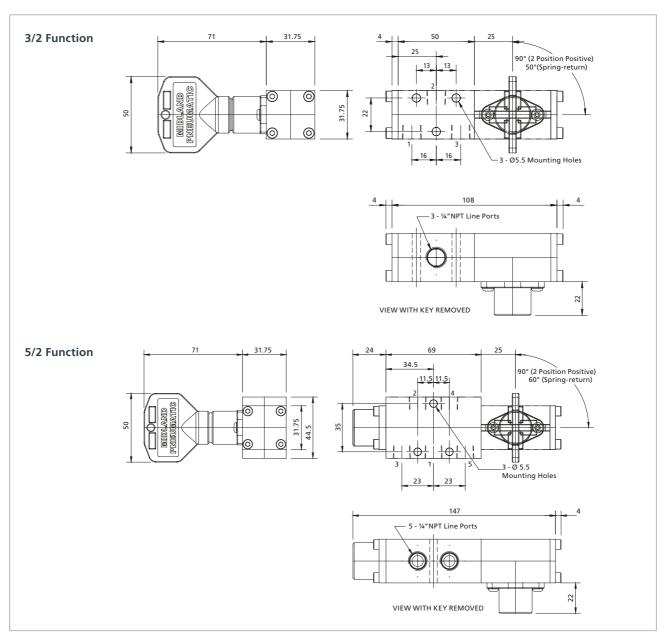
# 1500 Series spool valves - 1/4" 3/2 Fusible bulb operated



### **Ordering Information**

Product Code	Standard Operating Temperature °C (°F)	Weight (kg)	CV	Symbol	Product					
2326M2T-VR2B	68 (154)	0.85	1.0	10 12						
Alternative ope	rating temperatures availa	able suffix product	code with sele	ection from options below: e.g.	2326M2T-VR2B093					
		For 79 °C (174	°F) - Suffix wi	th 079						
	For 93 °C (199 °F) - Suffix with 093									
For 141 °C (286 °F) - Suffix with 141										
Note: Other temperatures not shown above available on request.										

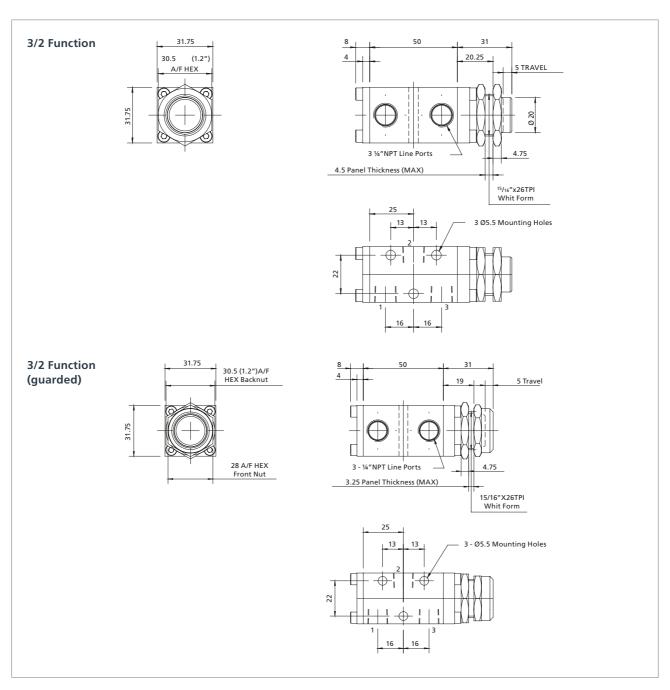
# 1500 Series spool valves - 1/4" Key operated 2 position positive 1/4" Key operated spring-return



### **Ordering Information**

Product Code	Low Temperature Version	Function	Туре	Weight (kg)	CV	Symbol	Product
2326BRR-VR2B	2326BRR-ER2B	3/2	Positive	0.50	1.0	10 12	
2326M2R-VR2B	2326M2R-ER2B	3/2	Spring-return	0.50	1.0	10 12	000
2526BRR-VR2B	2526BRR-ER2B	5/2	Positive	0.55	1.2	12 2 4 0 14	
2526M2R-VR2B	2526M2R-ER2B	5/2	Spring-return	0.55	1.2	12 12 14	000

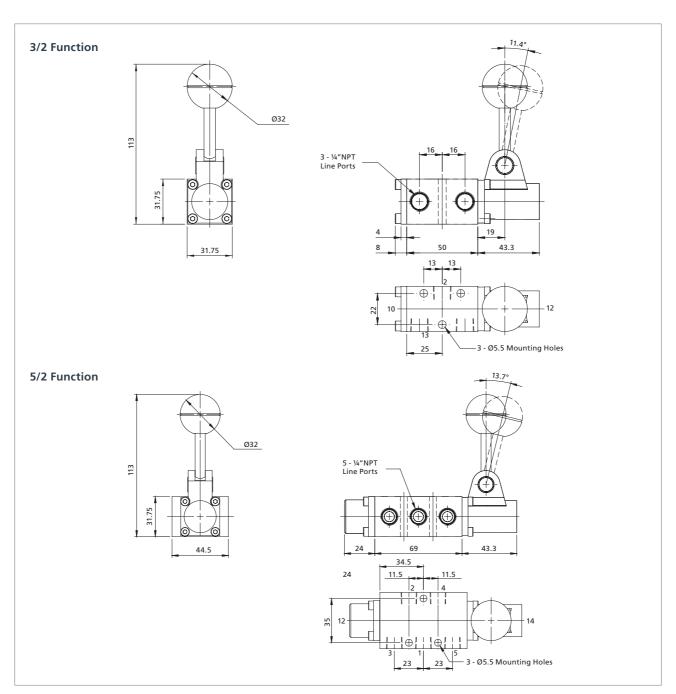
# 1500 Series spool valves - 1/4" Button operated spring-return



### **Ordering Information**

Product Code	Low Temperature Version	Function	Operating Force (N)	Weight (kg)	CV	Symbol	Product
2326M2G-VR2B	2326M2G-ER2B	3/2	76	0.50	1.0	10 11 12	
2326M2GGVR2B	2326M2GGER2B	3/2 guarded	76	0.55	1.0	10 11 12	

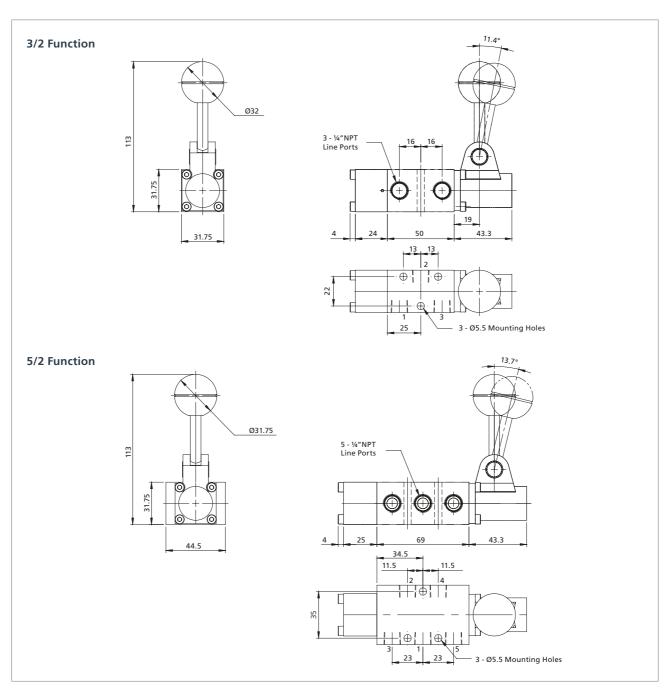
# 1500 Series spool valves - 1/4" Lever operated spring-return



### **Ordering Information**

Product Code	Low Temperature Version	Function	Operating Force (N)	Weight (kg)	cv	Symbol	Product
2326M25-VR2B	2326M25-ER2B	3/2	13	0.65	1.0	10 12	
2526M25-VR2B	2526M25-ER2B	5/2	16	1.10	1.2	12 14 14	1000

# 1500 Series spool valves - 1/4" Lever operated (detented)



### **Ordering Information**

Product Code	Low Temperature Version	Function	Operating Force (N)	Weight (kg)	CV	Symbol	Product
2326B553VR2B	2326B553ER2B	3/2	13	0.80	1.0	10 2 12	
2526B553VR2B	2526B553ER2B	5/2	16	1.10	1.2	12 2 4 14	O O

# 1500 Series spool valves - 1/4" Pilot solenoid operated spring-return

A range of 3/2 and 5/2 solenoid operated spool valves in stainless steel for use on gases.

### **Features and Benefits**

- Specifically designed for severe environments
- 3/2 and 5/2 versions
- 316L stainless steel construction
- Designed for actuator control
- NACE option available

### **Media & Ambient Temperature Range**

Please refer to solenoid selection chart on page 62.

### **Working Pressure**

• 12 bar (174 psi) maximum

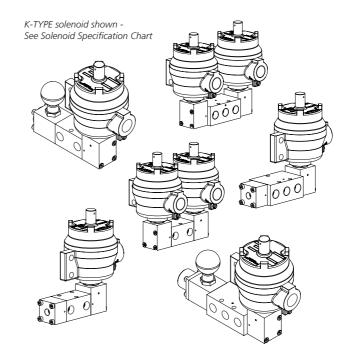
### Ports NPT (BSP Option Available)

- 1/4" NPT line port
- 1/8" NPT pilot ports

### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available

Note: To prevent freezing of the condensate within the product, the media dew point must be at least 10 °C below the lowest ambient temperature the product will be exposed to.



### **Construction Materials**

- Body: 316L stainless steel
- Spool: 316 stainless steel
- Spring: 316 stainless steel
- Seals: Fluoroelastomer (EPDM<sup>1</sup> on low temperature options)
- The use of lubrication upstream of the product is not recommended for low temperature applications.

### **Maximum Flow**

At 6 bar, 1 bar differential:

- 3/2 valves 1,000 l/min (35.3 SCFM)
- 5/2 valves 1,200 l/min (42.4 SCFM)

### **Certification Options Available**





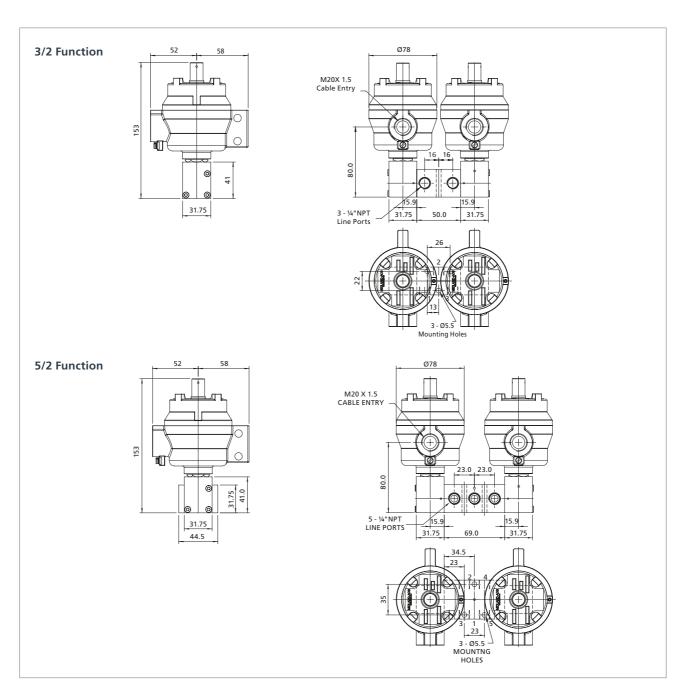








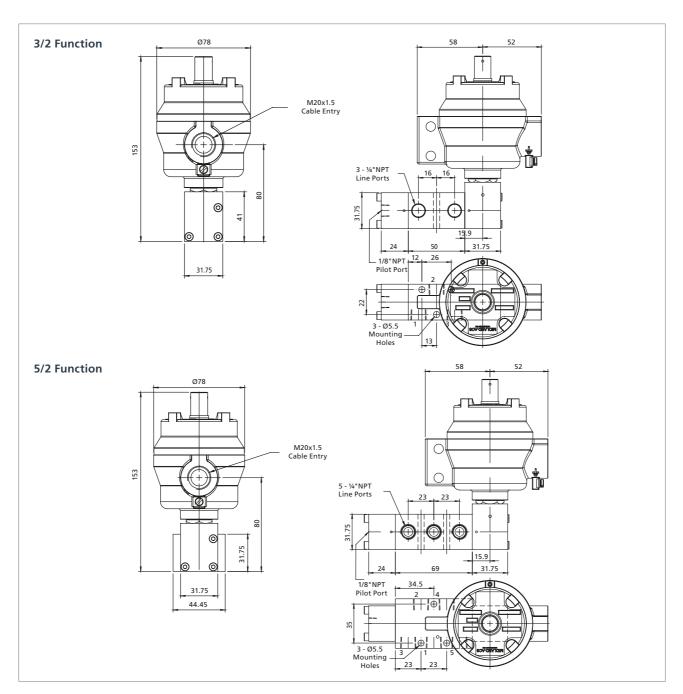
# 1500 Series spool valves - 1/4" Double pilot solenoid operated



Product Code	Low Temperature Version	Function	Min Working Pressure	Weight (kg)	CV	Symbol	Product
2326B33-VR2B*#	2326B33-ER2B*#	3/2	2 Bar	0.71 + Solenoids	1.0	10 -12	
2526B33-VR2B*#	2526B33-ER2B*#	5/2	2 Bar	1.02 + Solenoids	1.2	12 - 14	

 $<sup>^{\</sup>star}$  Denotes solenoid type. See page 61-62; # Denotes Voltage. See page 61

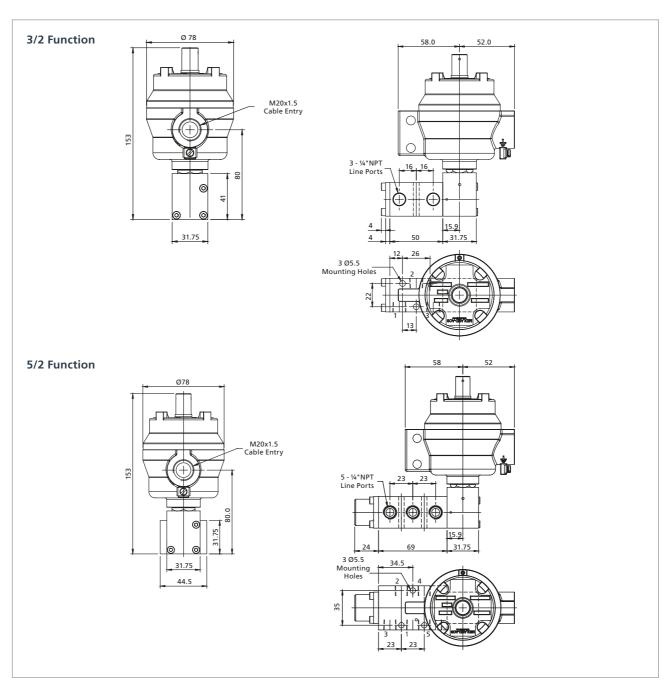
# 1500 Series spool valves - 1/4" Pilot solenoid operated pilot air return



Product Code	Low Temperature Version	Function	Min Working Pressure	Weight (kg)	CV	Symbol	Product
2326B13-VR2B*#	2326B13-ER2B*#	3/2	3 Bar	0.71 + Solenoid	1.0	10 12	
2526B13-VR2B*#	2526B13-ER2B*#	5/2	3 Bar	1.01 + Solenoid	1.2	12 14	

<sup>\*</sup> Denotes solenoid type. See page 61-62; # Denotes Voltage. See page 61

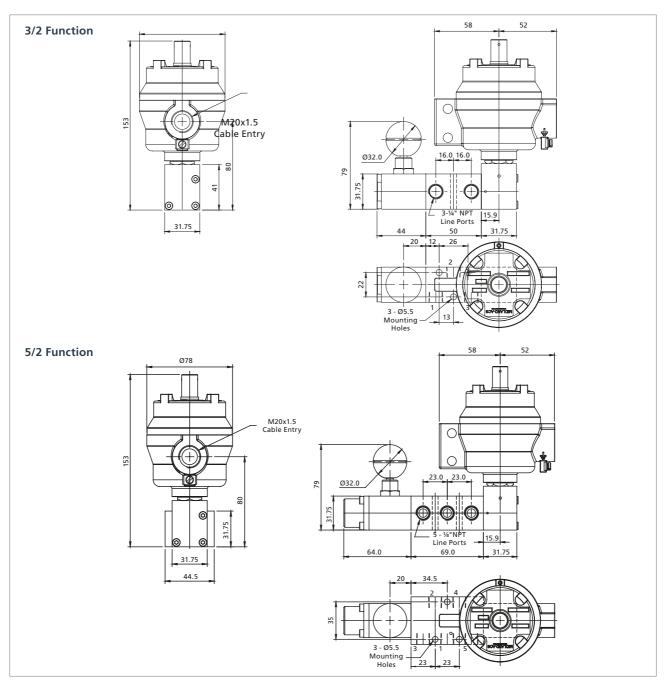
# 1500 Series spool valves - 1/4" Pilot solenoid operated spring-return



Product Code	Low Temperature Version	Function	Min Working Pressure	Weight (kg)	CV	Symbol	Product
2326M23-VR2B*#	2326M23-ER2B*#	3/2	3 Bar	0.56 + Solenoid	1.0	10 112	
2526M23-VR2B*#	2526M23-ER2B*#	5/2	3 Bar	1.01 + Solenoid	1.2	12 12 14	

 $<sup>^{\</sup>star}$  Denotes solenoid type. See page 61-62; # Denotes Voltage. See page 61

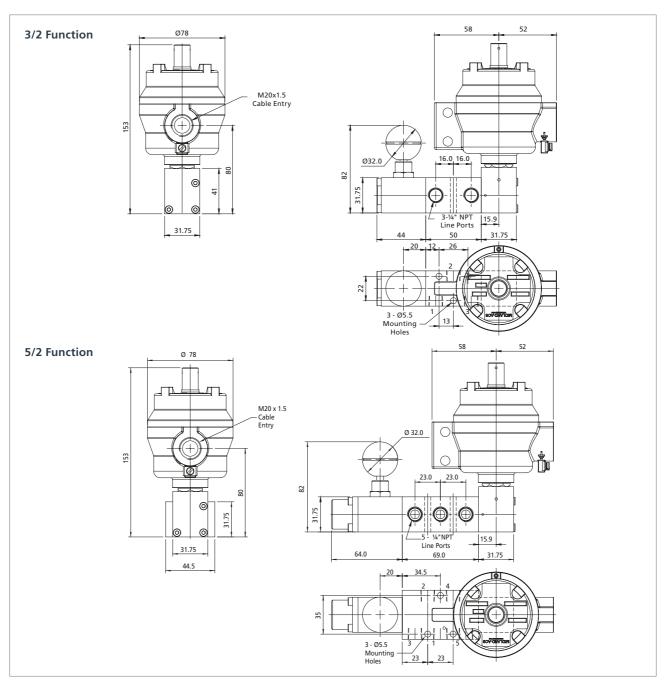
# 1500 Series spool valves - 1/4" Pilot solenoid operated latchlock manual reset



Product Code	Low Temperature Version	Function	Min Working Pressure	Weight (kg)	CV	Symbol	Product
2326M232VR2B*#	2326M232ER2B*#	3/2	3 Bar	0.94 + Solenoid	1.0	10 2 12	
2526M232VR2B*#	2526M232ER2B*#	5/2	3 Bar	1.39 + Solenoid	1.2	12 14	

<sup>\*</sup> Denotes solenoid type. See page 61-62; # Denotes Voltage. See page 61

# 1500 Series spool valves - 1/4" Pilot solenoid operated reverse latchlock manual reset



Product Code	Low Temperature Version	Function	Min Working Pressure	Weight (kg)	CV	Symbol	Product
2326M238VR2B*#	2326M238ER2B*#	3/2	3 Bar	0.94 + Solenoid	1.0	10 2 12	
2526M238VR2B*#	2526M238ER2B*#	5/2	3 Bar	1.39 + Solenoid	1.2	12 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

<sup>\*</sup> Denotes solenoid type. See page 61-62; # Denotes Voltage. See page 61

### 1600 Series spool valves - 1/2" Pilot operated

A range of 3/2 and 5/2 pilot operated spool valves in stainless steel for use on gases.

### **Features and Benefits**

- Specifically designed for severe environments
- 3/2 and 5/2 versions
- 316L stainless steel construction
- Designed for actuator control
- NACE option available

### **Media & Ambient Temperature Range**

- -20 to + 180 °C (-4 to +356 °F)
- Low temperature version -50 to +90 °C (-58 to +248 °F)

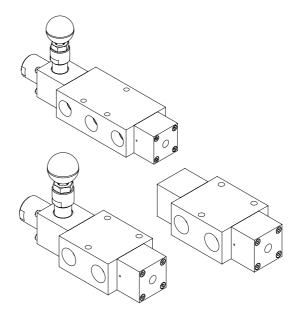
Note: When product is ordered as /ATEX ambient temperature is limited to +40 °C (104 °F) Ex II 2G c T6.

### **Working Pressure**

• 12 bar (174 psi) maximum

### Ports NPT (BSP Option Available)

- 1/2" NPT line port
- 1/8" NPT pilot ports



### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available

Note: To prevent freezing of the condensate within the product, the media dew point must be at least 10 °C below the lowest ambient temperature the product will be exposed to.

### **Construction Materials**

- Body: 316L stainless steel
- Spool: 316 stainless steel
- Spring: 316 stainless steel
- Seals: Fluoroelastomer (EPDM<sup>1</sup> on low temperature options)
- The use of lubrication upstream of the product is not recommended for low temperature applications.

### **Maximum Flow**

At 6 bar, 1 bar differential:

- 3/2 valves 3,500 l/min (123 SCFM)
- 5/2 valves 3,500 l/min (123 SCFM)

### **Certification Options Available**





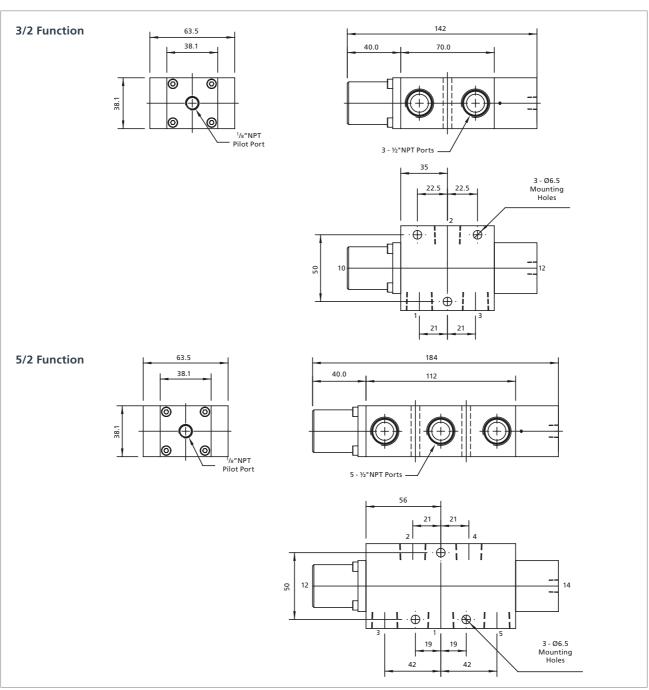








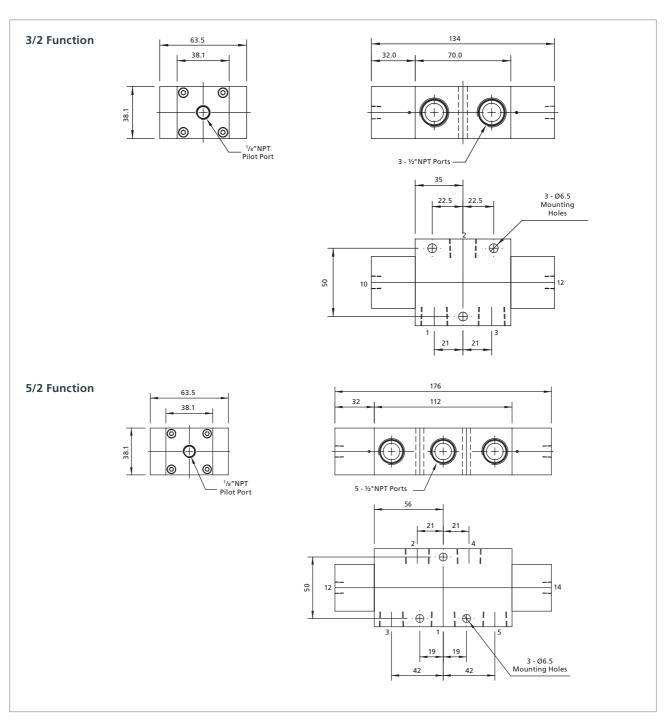
# 1600 Series spool valves - 1/2" Pilot operated spring-return



# **Ordering Information**

Product Code	Low Temperature Version	Function	Min Working Pressure	Weight (kg)	CV	Symbol	Product
4326M21-VS2B	4326M21-ES2B	3/2	3 Bar	1.40	3.5	10 11 12	
4526M21-VS2B	4526M21-ES2B	5/2	3 Bar	2.00	3.5	12 114	

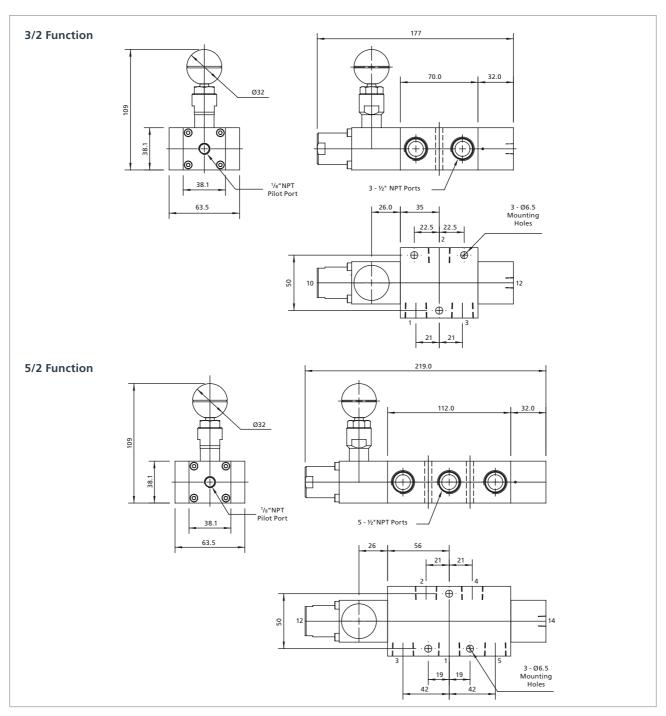
# 1600 Series spool valves - 1/2" Double pilot operated



### **Ordering Information**

Product Code	Low Temperature Version	Function	Min Working Pressure	Weight (kg)	CV	Symbol	Product
4326B11-VS2B	4326B11-ES2B	3/2	2 Bar	1.50	3.5	10 2 12	
4526B11-VS2B	4526B11-ES2B	5/2	2 Bar	2.10	3.5	12 3 1 5	

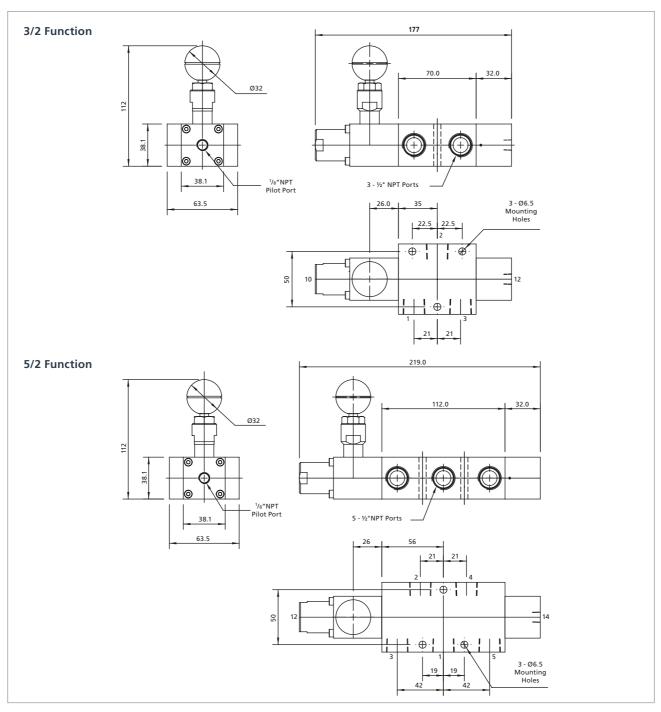
# 1600 Series spool valves - ½" Pilot operated latchlock manual reset



# **Ordering Information**

Ordering inform	ation						
Product Code	Low Temperature Version	Function	Min Working Pressure	Weight (kg)	cv	Symbol	Product
4326M212VS2B	4326M212ES2B	3/2	2 Bar	2.00	3.5	10 12	
4526M212VS2B	4526M212ES2B	5/2	2 Bar	2.60	3.5	12 14	Q Coop

# 1600 Series spool valves - 1/2" Pilot operated reverse latchlock manual reset



# **Ordering Information**

Product Code	Low Temperature Version	Function	Min Working Pressure	Weight (kg)	CV	Symbol	Product
4326M218VS2B	4326M218ES2B	3/2	2 Bar	2.00	3.5	10 2 12	
4526M218VS2B	4526M218ES2B	5/2	2 Bar	2.60	3.5	2 4	

# 1600 Series spool valves - ½" Mechanically operated spring-return

A range of 3/2 and 5/2 manually operated spool valves in stainless steel for use on gases.

#### **Features and Benefits**

- Specifically designed for severe environments
- 3/2 and 5/2 versions
- 316L stainless steel construction
- Designed for actuator control
- NACE option available

# **Media & Ambient Temperature Range**

- -20 to + 180 °C (-4 to +356 °F)
- Low temperature version
   -50 to +90 °C (-58 to +248 °F)

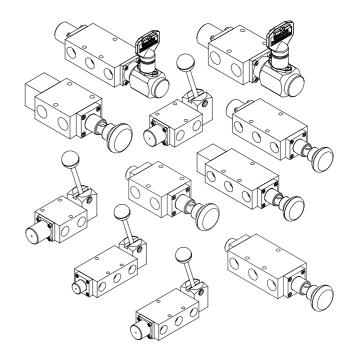
Note: When product is ordered as /ATEX ambient temperature is limited to +40  $^{\circ}$ C (104  $^{\circ}$ F) Ex II 2G c T6.

### **Working Pressure**

• 12 bar (174 psi) maximum

### Ports NPT (BSP Option Available)

- 1/2" NPT line port
- 1/8" NPT pilot ports



### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available

Note: To prevent freezing of the condensate within the product, the media dew point must be at least 10  $^{\circ}$ C below the lowest ambient temperature the product will be exposed to.

# **Construction Materials**

- Body: 316L stainless steel
- Spool: 316 stainless steel
- Spring: 316 stainless steel
- Seals: Fluoroelastomer<sup>1</sup>
- The use of lubrication upstream of the product is not recommended for low temperature applications.

### **Maximum Flow**

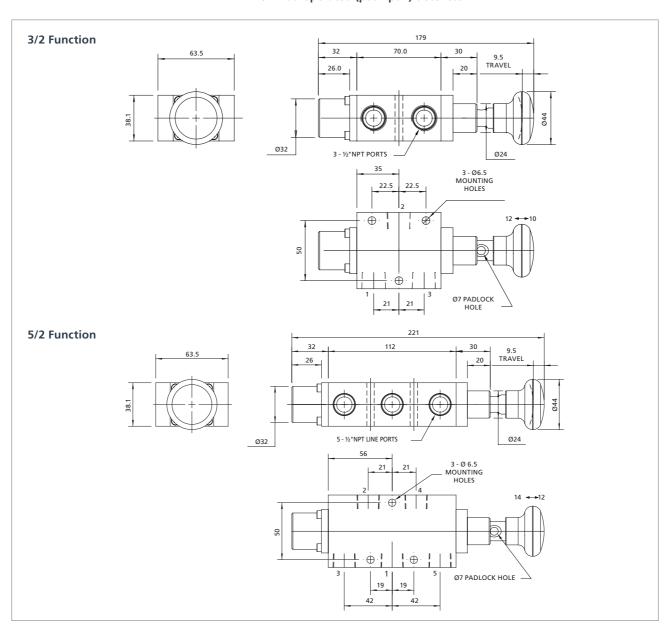
At 6 bar, 1 bar differential:

- 3/2 valves 1,000 l/min (35.3 SCFM)
- 5/2 valves 1,200 l/min (42.4 SCFM)

**Certification Options Available** 



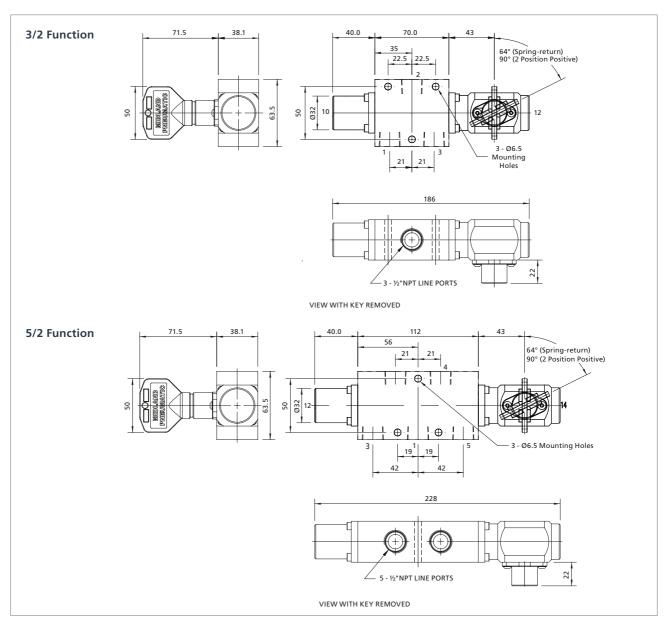
# 1600 Series spool valves - ½" Pad operated (push pull) ½" Pad operated (push pull) detented



#### **Ordering Information**

Ordering inform							
Product Code	Low Temperature Version	Description	Operating Force (N)	Weight (kg)	CV	Symbol	Product
4326B77-VS2B	4326B77-ES2B	3/2 pad operated push pull	112	1.30	3.5	10 2 12	
4326B773VS2B	4326B773ES2B	3/2 pad operated push pull with detent	112	1.40	3.5	10 2 12	- E & A
4526B77-VS2B	4526B77-ES2B	5/2 pad operated push pull	112	1.90	3.5	12 14	
4526B773VS2B	4526B773ES2B	5/2 pad operated push pull with detent	112	2.00	3.5	12 2 4 14	6000

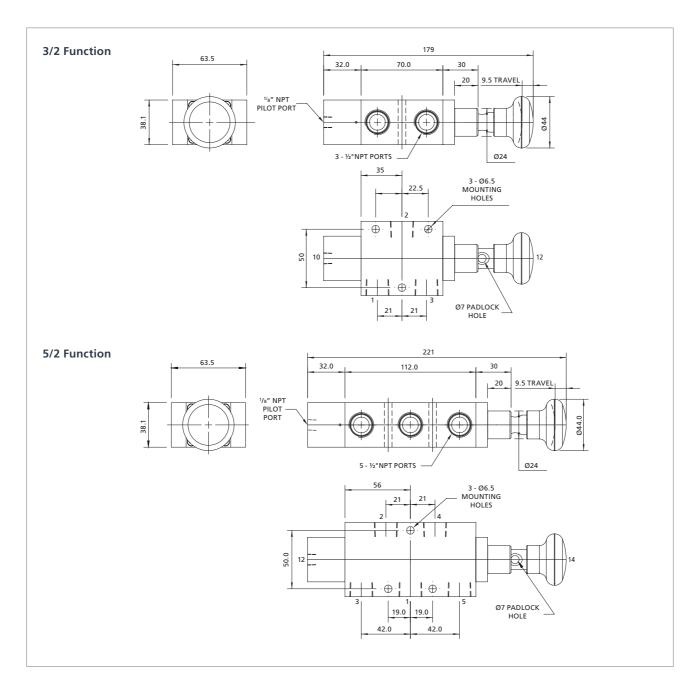
# 1600 Series spool valves - ½" Key operated 2 position positive ½" Key operated spring-return



#### **Ordering Information**

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Product Code	Low Temperature Version	Description	Operating Force (N)	Weight (kg)	CV	Symbol	Product
4326BRR-VS2B	4326BRR-ES2B	3/2 key operated 2 position positive	61	1.75	3.5	10 12	
4326M2R-VS2B	4326M2R-ES2B	3/2 key operated spring-return	61	1.75	3.5	10 12	
4526BRR-VS2B	4526BRR-ES2B	5/2 key operated 2 position positive	61	2.4	3.5	12 14 14	
4526M2R-VS2B	4526M2R-ES2B	5/2 key operated spring-return	61	2.4	3.5	12 12 14	

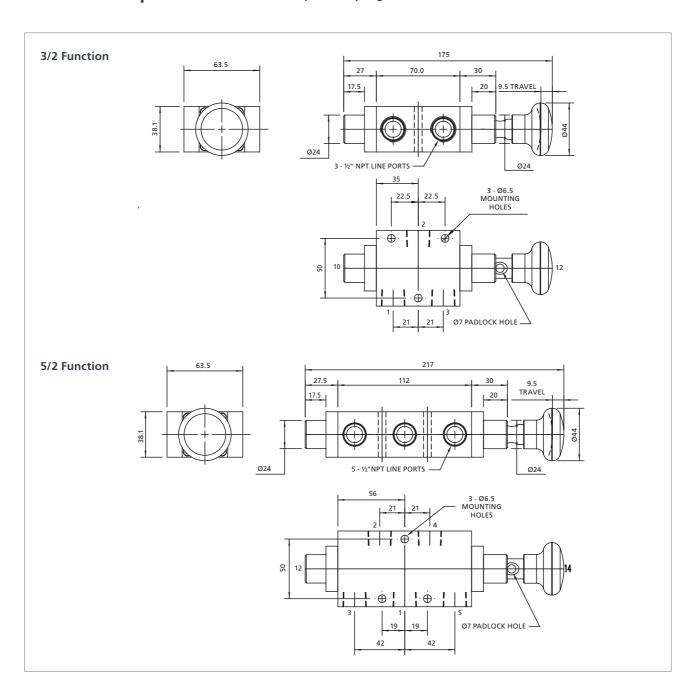
# 1600 Series spool valves - Pad operated pilot return



# **Ordering Information**

Product Code	Low Temperature Version	Function	Operating Force (N)	Weight (kg)	CV	Symbol	Product
4326B17-VS2B	4326B17-ES2B	3/2	112	1.50	3.5	10 2 12	
4526B17-VS2B	4526B17-ES2B	5/2	112	2.10	3.5	12 2 4 14	

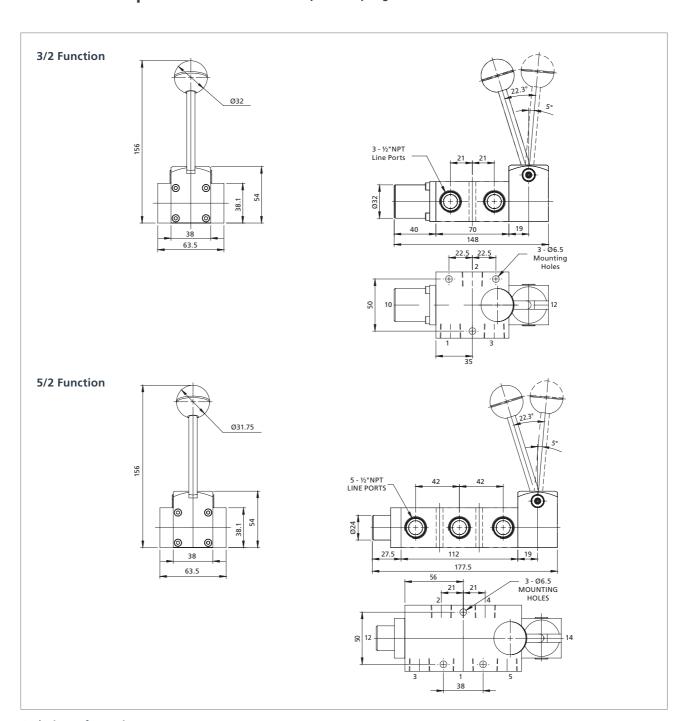
# 1600 Series spool valves - Pad operated spring-return



# **Ordering Information**

Product Code	Low Temperature Version	Function	Operating Force (N)	Weight (kg)	CV	Symbol	Product
4326M27-VS2B	4326M27-ES2B	3/2	112	1.35	3.5	10 12	
4526M27-VS2B	4526M27-ES2B	5/2	112	1.95	3.5	12 14	€≡0

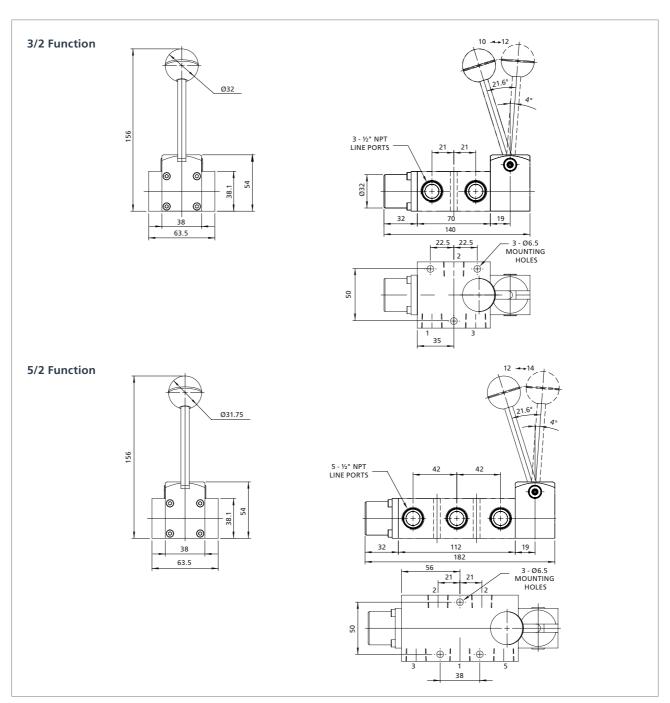
# 1600 Series spool valves - Lever operated spring-return



# **Ordering Information**

ordering intern							
Product Code	Low Temperature Version	Function	Operating Force (N)	Weight (kg)	cv	Symbol	Product
4326M25-VS2B	4326M25-ES2B	3/2	61	1.40	3.5	10 11 12	
4526M25-VS2B	4526M25-ES2B	5/2	61	2.0	3.5	12 14	

# 1600 Series spool valves - Lever operated (detented)



# **Ordering Information**

oracining initiation							
Product Code	Low Temperature Version	Function	Operating Force (N)	Weight (kg)	cv	Symbol	Product
4326B553VS2B	4326B553ES2B	3/2	61	1.50	3.5	10 2 12	
4526B553VS2B	4526B553ES2B	5/2	61	2.10	3.5	12 2 4 14	0000

# 1600 Series spool valves - 1/2" Pilot operated spring-return

A range of 3/2 and 5/2 solenoid operated spool valves in stainless steel for use on gases.

#### **Features and Benefits**

- Specifically designed for severe environments
- 3/2 and 5/2 versions
- 316L stainless steel construction
- Designed for actuator control
- NACE option available

# **Media & Ambient Temperature Range**

Please refer to solenoid selection chart on page 62.

#### **Working Pressure**

• 12 bar (174 psi) maximum

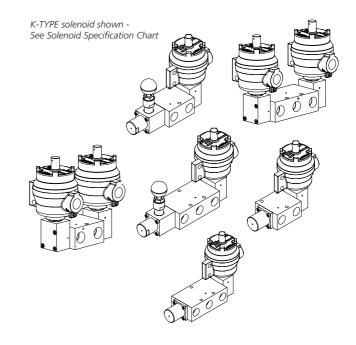
#### Ports NPT (BSP Option Available)

- 1/2" NPT line port
- 1/8" NPT pilot ports

### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available

Note: To prevent freezing of the condensate within the product, the media dew point must be at least 10 °C below the lowest ambient temperature the product will be exposed to.



#### **Construction Materials**

- Body: 316L stainless steel
- Spool: 316 stainless steel
- Spring: 316 stainless steel
- Seals: Fluoroelastomer<sup>1</sup>
- The use of lubrication upstream of the product is not recommended for low temperature applications.

### **Maximum Flow**

At 6 bar, 1 bar differential:

- 3/2 valves 3,500 l/min (123 SCFM)
- 5/2 valves 3,500 l/min (123 SCFM)

# **Certification Options Available**





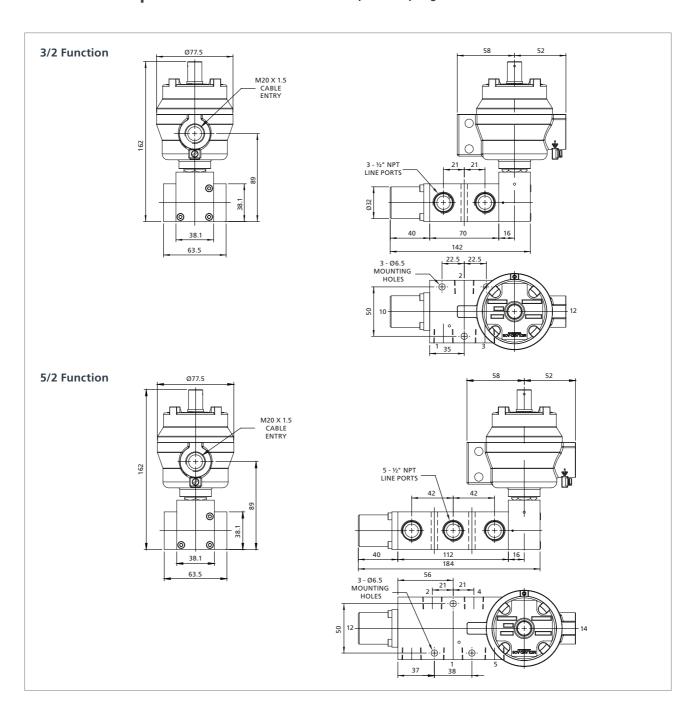








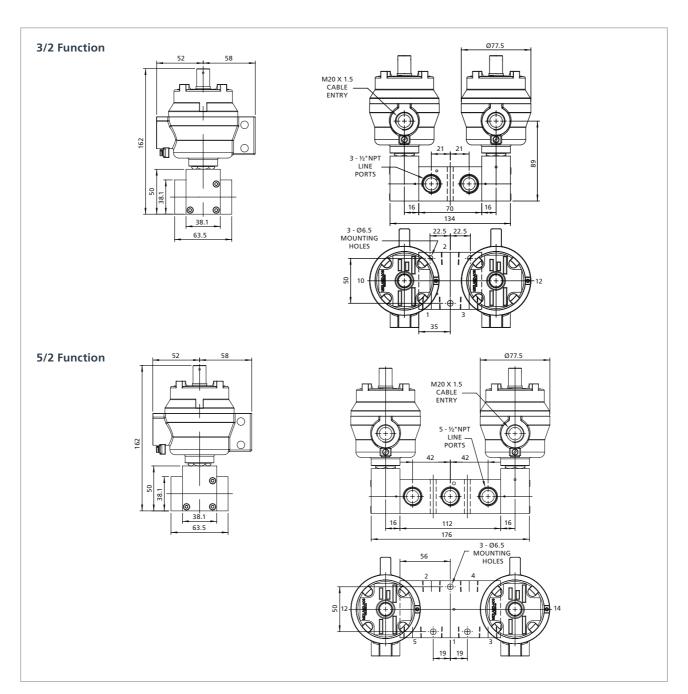
# 1600 Series spool valves - Pilot solenoid operated spring-return



Product Code	Low Temperature Version	Function	Min Working Pressure	Weight (kg)	cv	Symbol	Product
4326M23-VS2B*#	4326M23-ES2B*#	3/2	3 Bar	1.50 + Solenoid	3.5	10 10 12	
4526M23-VS2B*#	4526M23-ES2B*#	5/2	3 Bar	2.10 + Solenoid	3.5	12 12 14	

<sup>\*</sup> Denotes solenoid type. See page 61-62; # Denotes Voltage. See page 61

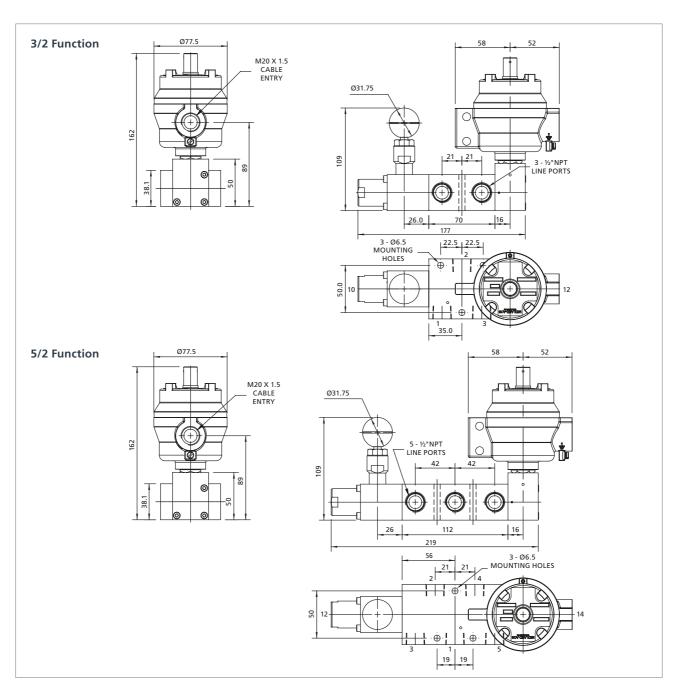
# 1600 Series spool valves - Double pilot solenoid operated



Product Code	Low Temperature Version	Function	Min Working Pressure	Weight (kg)	cv	Symbol	Product
4326B33-VS2B*#	4326B33-ES2B*#	3/2	2 Bar	1.70 + Solenoids	3.5	10 2 12	
4526B33-VS2B*#	4526B33-ES2B*#	5/2	2 Bar	2.30 + Solenoids	3.5	12 2 4 7 7 14	

<sup>\*</sup> Denotes solenoid type. See page 61-62; # Denotes Voltage. See page 61

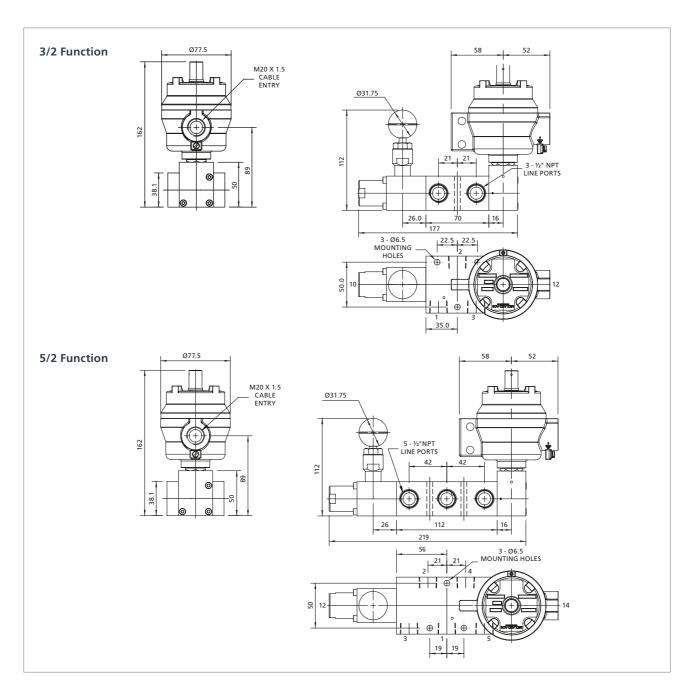
# 1600 Series spool valves - Pilot solenoid operated latchlock manual reset



Product Code	Low Temperature Version	Function	Min Working Pressure	Weight (kg)	CV	Symbol	Product
4326M232VS2B*#	4326M232ES2B*#	3/2	3 Bar	2.10 + Solenoid	3.5	10 2 12	
4526M232VS2B*#	4526M232ES2B*#	5/2	3 Bar	2.70 + Solenoid	3.5	12 3 5 1 14	

<sup>\*</sup> Denotes solenoid type. See page 61-62; # Denotes Voltage. See page 61

# 1600 Series spool valves - Pilot solenoid operated reverse latchlock manual reset



Product Code	Low Temperature Version	Function	Min Working Pressure	Weight (kg)	cv	Symbol	Product
4326M238VS2B*#	4326M238ES2B*#	3/2	3 Bar	2.10 + Solenoid	3.5	10 2 12	
4526M238VS2B*#	4526M238ES2B*#	5/2	3 Bar	2.70 + Solenoid	3.5	12 2 4 14	a de la constantina della cons

<sup>\*</sup> Denotes solenoid type. See page 61-62; # Denotes Voltage. See page 61

# 1650 Series spool valves - 3/4" & 1" Pilot operated

A range of 3/2 and 5/2 pilot operated spool valves in stainless steel for use on gases.

#### **Features and Benefits**

- Specifically designed for severe environments
- 3/2 and 5/2 versions
- 316L stainless steel construction
- Designed for actuator control
- NACE option available

# **Media & Ambient Temperature Range**

- -20 to + 180 °C (-4 to +356 °F)
- Low temperature version
   -50 to +90 °C (-58 to +248 °F)

### **Working Pressure**

• 12 bar (174 psi) maximum

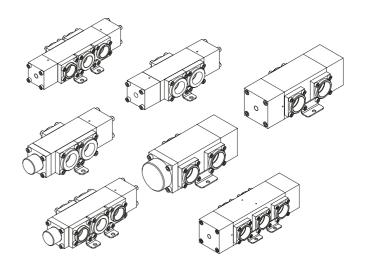
### Ports NPT (BSP Option Available)

- 3/4" & 1" NPT line port
- 1/8" NPT pilot ports

#### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available

Note: To prevent freezing of the condensate within the product, the media dew point must be at least 10 °C below the lowest ambient temperature the product will be exposed to.



# **Construction Materials**

- Body: 316L stainless steel
- Spool: 316 stainless steel
- Spring: 316 stainless steel
- Seals: Fluoroelastomer<sup>1</sup>
- <sup>1</sup> The use of lubrication upstream of the product is not recommended for low temperature applications.

### **Maximum Flow**

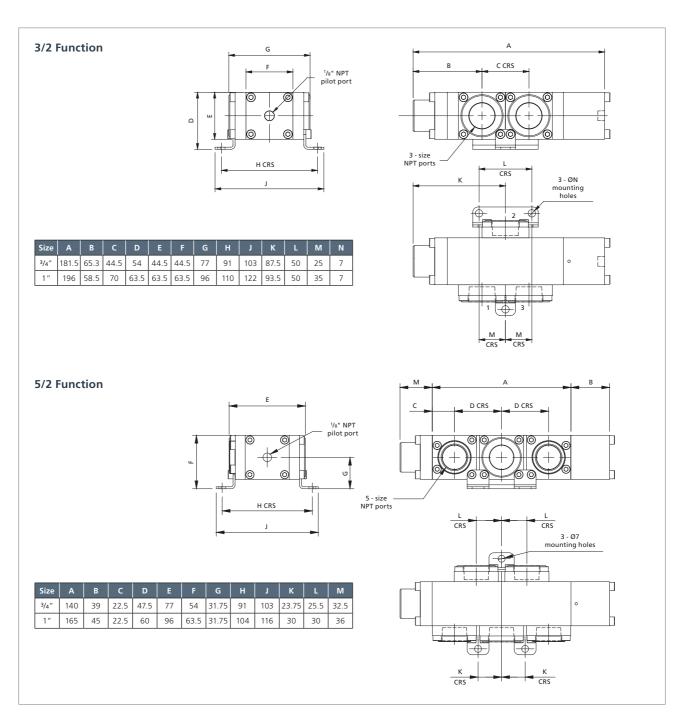
At 6 bar, 1 bar differential:

- 3/4" valves 9,000 l/min (318 SCFM)
- 1" valves 13,500 l/min (477 SCFM)

**Certification Options Available** 

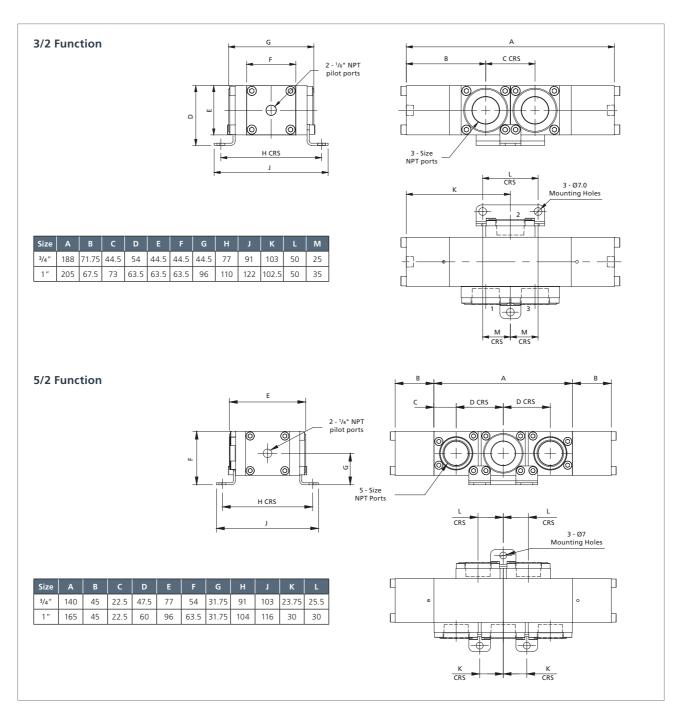


# 1650 Series spool valves - 3/4" & 1" Pilot operated spring-return



Product Code	Low Temperature Version	Function	Size	Weight (kg)	CV	Symbol	Product
6326M21-VS2B	6326M21-ES2B	3/2	3/4″	2.5	9.0	10 112	
8326M21-VS2B	8326M21-ES2B	3/2	1"	5.3	13.5	1 3	
6526M21-VS2B	6526M21-ES2B	5/2	3/4″	3.2	9.0	2 4	
8526M21-VS2B	8526M21-ES2B	5/2	1"	7.5	13.5	3 1 5	

# 1650 Series spool valves - ¾" & 1" Double pilot operated



Product Code	Low Temperature Version	Function	Size	Weight (kg)	CV	Symbol	Product	
6326B11-VS2B	6326B11-ES2B	3/2	3/4″	2.5	9.0	2		
8326B11-VS2B	8326B11-ES2B	3/2	1"	5.4	13.5	1 3		
6526B11-VS2B	6526B11-ES2B	5/2	3/4"	3.4	9.0	2 4		
8526B11-VS2B	8526B11-ES2B	5/2	1"	7.5	13.5	3 1 5		

# 1650 Series spool valves - 3/4" & 1" Manually operated

A 3/2 manually operated spool valve in stainless steel for use on gases.

#### **Features and Benefits**

- Specifically designed for severe environments
- 316L stainless steel construction
- Designed for actuator control
- NACE option available

### **Media & Ambient Temperature Range**

- -20 to + 180 °C (-4 to +356 °F)
- Low temperature version
   -50 to +90 °C (-58 to +248 °F)

### **Working Pressure**

• 12 bar (174 psi) maximum

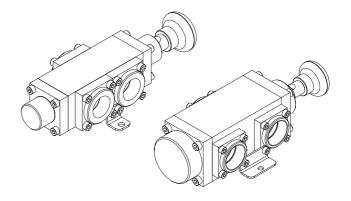
### Ports NPT (BSP Option Available)

- 3/4" & 1" NPT line port
- 1/8" NPT pilot ports

### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available

Note: To prevent freezing of the condensate within the product, the media dew point must be at least 10 °C below the lowest ambient temperature the product will be exposed to.



# **Construction Materials**

- Body: 316L stainless steel
- Spool: 316 stainless steel
- Spring: 316 stainless steel
- Seals: Fluoroelastomer<sup>1</sup>
- The use of lubrication upstream of the product is not recommended for low temperature applications.

### **Maximum Flow**

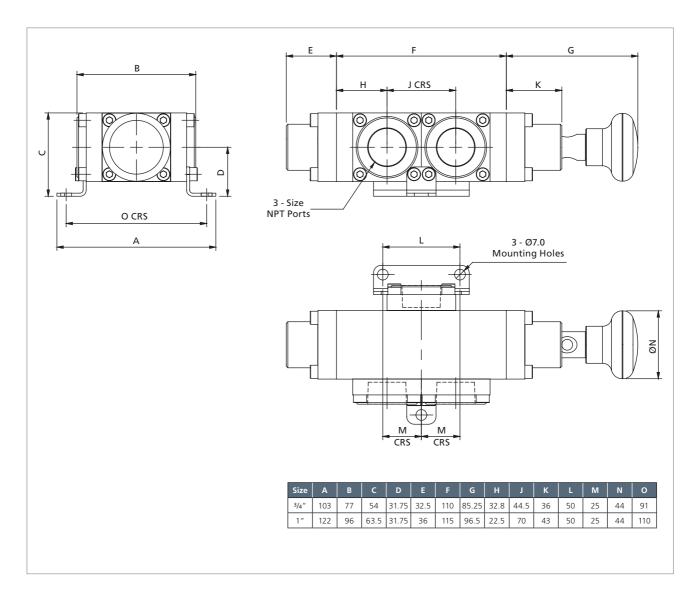
At 6 bar, 1 bar differential:

- 3/4" valves 9,000 L/Min (318 SCFM)
- 1" valves 13,500 L/Min (477 SCFM)

**Certification Options Available** 



# 1650 Series spool valves - 3/4" & 1" 3/2 Pad operated spring-return



Product Code	Low Temperature Version	Size	Weight (kg)	CV	Symbol	Product
6326M27-VS2B	6326M27-ES2B	3/4"	2.4	9.0	2 10 10 12	
8326M27-VS2B	8326M27-ES2B	1"	4.8	13.5	1 3	

# 1650 Series spool valves - 3/4" & 1" Pilot solenoid operated

A range of 3/2 and 5/2 solenoid operated spool valves in stainless steel for use on gases.

**Features and Benefits** 

- Specifically designed for severe environments
- 3/2 and 5/2 versions
- 316L stainless steel construction
- Designed for actuator control
- NACE option available

# **Media & Ambient Temperature Range**

Please refer to solenoid selection chart on page 62.

#### **Working Pressure**

• 12 bar (174 psi) maximum

### Ports NPT (BSP Option Available)

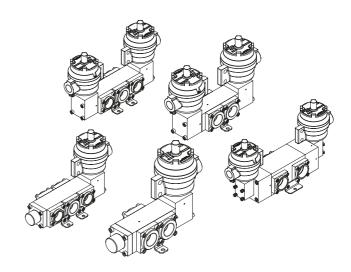
- 3/4" & 1" NPT line port
- 1/8" NPT pilot ports

### **Operating Media**

- Gases filtered lubricated or non-lubricated
- Air, inert gas, sweet (natural) gases
- Sour gas option available

Note: To prevent freezing of the condensate within the product, the media dew point must be at least 10 °C below the lowest ambient temperature the product will be exposed to.

K-TYPE solenoid shown -See Solenoid Specification Chart



#### **Construction Materials**

- Body: 316L stainless steel
- Spool: 316 stainless steel
- Spring: 316 stainless steel
- Seals: Fluoroelastomer<sup>1</sup>
- The use of lubrication upstream of the product is not recommended for low temperature applications.

### **Maximum Flow**

At 6 bar, 1 bar differential:

- 3/4" valves 9,000 L/Min (318 SCFM)
- 1" valves 13,500 L/Min (477 SCFM)

# **Certification Options Available**





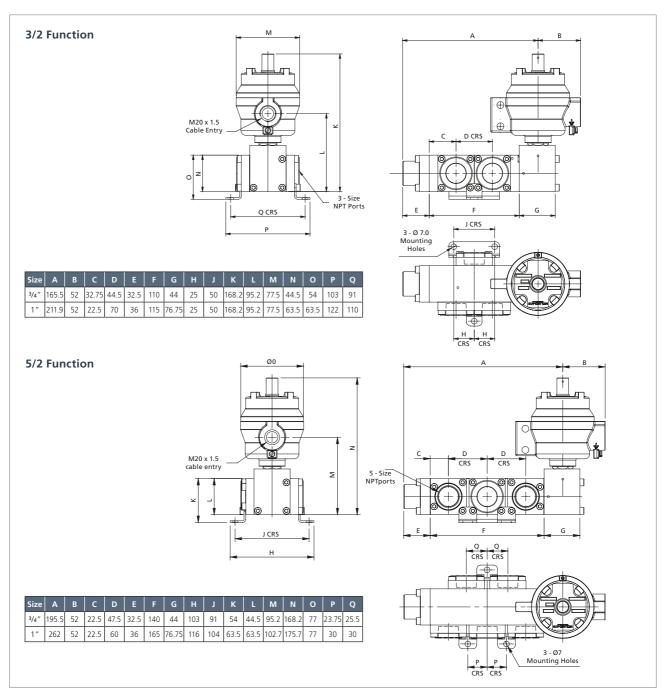








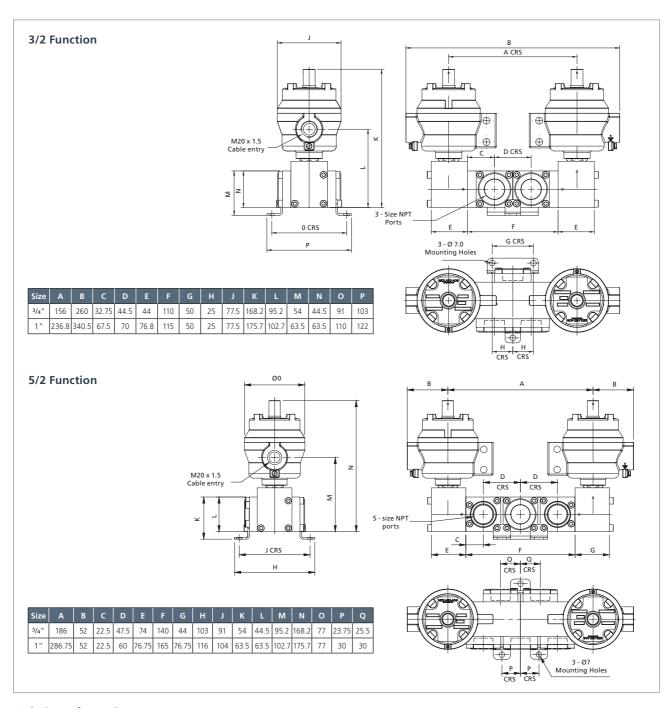
# 1650 Series spool valves - 3/4" & 1" Pilot solenoid operated spring-return



Product Code	Low Temperature Version	Function	Size	Weight (kg)	CV	Symbol	Product
6326M23-VS2B*#	6326M23-ES2B*#	3/2	3/4″	4.2	9.0	10 12	
8326M23-VS2B*#	8326M23-ES2B*#	3/2	1"	7.1	13.5	3	
6526M23-VS2B*#	6526M23-ES2B*#	5/2	3/4"	5.0	9.0	2 4	
8526M23-VS2B*#	8526M23-ES2B*#	5/2	1"	8.6	13.5	3 5	THE PARTY OF THE P

<sup>\*</sup> Denotes solenoid type. See page 61-62; # Denotes Voltage. See page 61

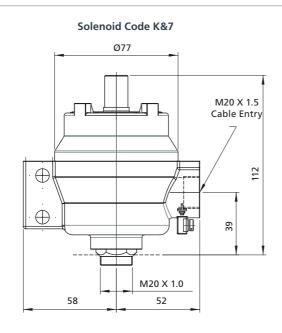
# 1650 Series spool valves - 3/4" & 1" Double solenoid operated spring-return



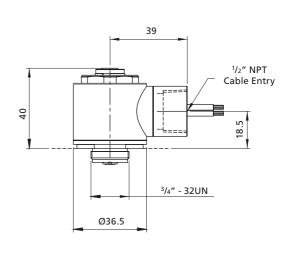
Product Code	Low Temperature Version	Function	Size	Weight (kg)	CV	Symbol	Product
6326B33-VS2B*#	6326B33-ES2B*#	3/2	3/4"	6.2	9.0	10 - 12	
8326B33-VS2B*#	8326B33-ES2B*#	3/2	1"	9.2	13.5	3	
6526B33-VS2B*#	6526B33-ES2B*#	5/2	3/4"	7.0	9.0	12 -714	
8526B33-VS2B*#	8526B33-ES2B*#	5/2	1"	10.8	13.85	3 5	

<sup>\*</sup> Denotes solenoid type. See page 61-62; # Denotes Voltage. See page 61

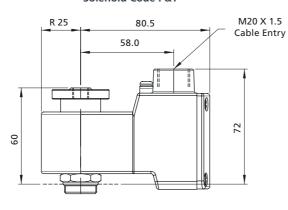
# 1500, 1600 & 1650 Series spool valves – Solenoid operators for use with pilot solenoid spool valves



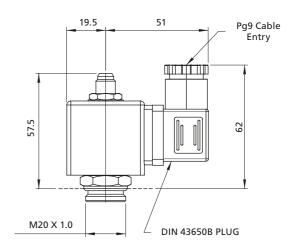
# Solenoid Code CL



Solenoid Code P&T



Solenoid Code 4



Voltages

Code	Voltage				
С	12 VDC				
D	24 VDC				
F	48 VDC				
М	110 VAC 50/60 Hz				
S	220 VAC 50 Hz				
Υ	28 VDC				

# 1500, 1600 & 1650 Series spool valves

# Solenoid specifications

Model Code	К	7	CL	Р	Т	4
Type of Protection	Exd IIC T6	Exd IIC T4	NEMA 7 & 9	Eex me II T4/T5	Eex ia IIC T6	Non-hazardous
Approved Area	Zones 1 and 2	Zones 1 and 2	Class I, Div 1, Group C & D. Class II, Div 1, Groups E, F, & G. Class II, Div 2, Groups C, D, E, F & G	Zones 1 and 2	Zones 0	None
Degree of Protection	IP67 (NEMA Equivalent: 6)	IP67 (NEMA Equivalent: 6)	NEMA 4 (IP55)	IP66 (NEMA Equivalent: 4X)	IP66 (NEMA Equivalent: 4X)	IP65 (NEMA Equivalent: 4)
Housing	316 Stainless Steel alt Aluminium Epoxy coated	316 Stainless Steel alt Aluminium Epoxy coated	Stainless Steel. Coil potted	Glass reinforced Polyamid (Stainless Steel conduit hub)	Glass reinforced Polyamid	Moulded plastic
Cable Entry	M20 x 1.5 (Optional <sup>1</sup> / <sub>2</sub> " NPT consult factory for code)	M20 x 1.5 (Optional <sup>1</sup> / <sub>2</sub> " NPT consult factory for code)	½" NPT or 24" flying lead	M20 x 1.5	M20 x 1.5	DIN plug
Power Consumption AC/DC	5W 22.4 VA (110 VAC) 23.4 VA (120 VAC)	5 W 22.4 VA (110 VAC) 23.4 VA (120 VAC)	1.8 W / 1.8 W	7.5 W (DC)	2.3 W (24 VDC)	9 W (DC) 9 W (Inrush 32 VA) (AC)
Maximum Admissable Surface Temp	85 °C (185 °F)	135 °C (275 °F)	160 °C (320 °F)	T4 135 °C (275 °F) T5 100 °C (212 °F)	85 °C (185 °F)	N/A
Maximum Ambient Temperature	40 °C (104 °F)	80 °C (176 °F)	40 °C (104 °F)	T4 75 °C (167 °F) T5 40 °C (104 °F)	65 °C (149 °F)	50 °C (122 °F)
Maximum Fluid Temperature	40 °C (104 °F)	80 °C (176 °F)	105 °C (221 °F)	T4 75 °C (167 °F) T5 40 °C (104 °F)	75 °C (167 °F)	75 °C (167 °F)
Solenoid Weight (kg)	1.62	1.62	0.29	0.63	0.53	0.20
Approved Standard	ATEX, CSA, UL, IECEX & EAC	ATEX, CSA, UL, IECEX & EAC	UL Listed / CSA Certified	ATEX, IECEX	ATEX, IECEX	

NOTE:
'T' type solenoid only available with 28 VDC coil (Y).

# **Service and Support**

Rotork understand the value of prompt, punctual and superior site services. Rotork Site Services have specialist expertise, insight and experience in service support for mission-critical flow control and instrumentation solutions for oil and gas, water and wastewater, power, chemical process and industrial applications. We offer global frontline support backed by dedicated in- house experts.

Rotork Site Services is comprised of two main areas; Lifetime Management and Site Services. Lifetime Management is the suite of services within Rotork Site Services which help you manage the risk associated with aging assets and includes our Reliability Services offering. Site Services comprises essential actuator service, repair, maintenance and upgrades.

# **Lifetime Management**

The services available within Lifetime Management offer a complete solution to managing the risks associated with the life cycle of your equipment and their obsolescence (which compromise reliable performance and valuable uptime).

The aim of Lifetime Management is to provide you with constant support and minimum- to- no disruption to your production flow. It is a customisable service offering designed to seamlessly maintain and improve your assets. We manage the inherent risks associated with advances in technology, component obsolescence and ageing equipment for you. We are committed to helping customers maximise the continuous, fault-free operation and working life of their actuators. Supporting the continuous and reliable operation of your plant allows for improved performance and increases in valuable uptime.

# **Lifetime Management covers:**

- Reliability Services
  - Health Check
  - Planned Maintenance
  - Enhanced Warranty
  - Predictive Maintenance
- Upgrade Services (retrofit)
- Planned Shutdown Support (service or run time)
- Life Cycle Services (based on years in service or run time)
- Overhauls/Refurbishment
- Customised Spares Programme
- Training
- Consultancy

### **Site Services**

Rotork's Site Services comprises the essential on-site actuator service, repair, maintenance and upgrades part of our service offering, plus the commissioning of new actuators and applications. It includes off-site work completed at a Rotork Support Centre including recertification, automation, testing and product selection.

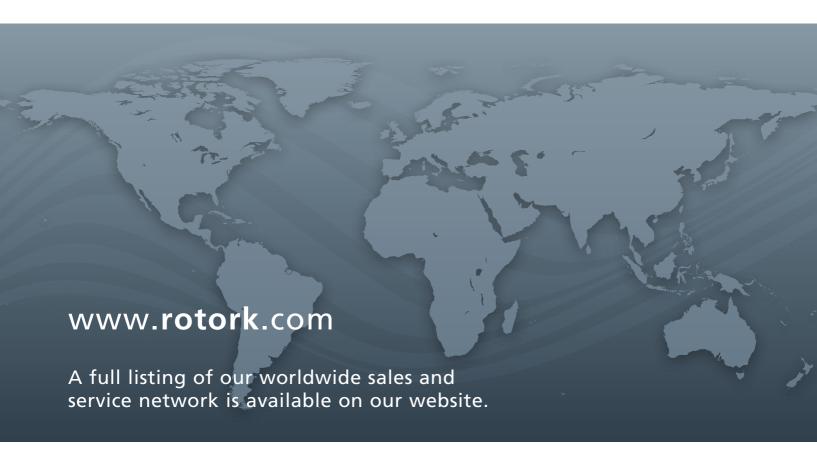
Our decades of experience in the industrial actuation and flow control markets means that customers can rely on us to understand their problems and to deliver reliable, economic solutions. Rotork's talented and experienced engineers have an in-depth understanding of the problems that are faced in the field and they know how to fix them.

On sites where providing evidence of valid asset certification is a legal requirement, Rotork engineers can carry out the necessary OEM level inspections and provide the statutory paperwork to comply with regulations.

- Planned Shutdown Support
- Actuator Workshop Overhaul
- Field Support
- Valve Automation Services
  - On-site
  - Off-site
- Global Support







Rotork Midland Ltd. Patrick Gregory Road Wolverhampton WV11 3DZ, UK

tel +44 (0)1902 305 678 email sales.midland@rotork.com