



*Industrial Control and  
Pneumatic Products*

*Innovative Environmental Solutions*

**tyco** | Flow Control | **Environmental Systems**

## General Industrial Control Valves



Goyen's process and fluid control valves. Solenoid pilot operated, normally closed or normally open general purpose control valves available to suit gas, water, steam and light oil application.

Solenoid actuated, direct lift valves in normally open or normally closed configurations, stainless steel valves and PTFE plastic valves for corrosive applications.

Goyen manufactures and distributes valves that are designed for specific applications relating to the control of gas, fuel, air or water. There are two principal types of operation for solenoid valves – direct lift and pilot operated.

### Direct Lift Valves

In these models, movement of the plunger directly opens or closes the valve as the sealing disc is attached to the plunger. The valve will operate from zero pressure differential to its maximum rated pressure.

### Pilot Operated Valves

These models are equipped with a diaphragm or piston which provides the seal for the main valve orifice. These valves are used to handle much greater flow or pressure requirements than direct acting valves.

Two designs of pilot operated valves are available, either a floating diaphragm which requires a small pressure drop across the main valve orifice to remain in the open position, or a coupled diaphragm which is mechanically held open via a direct linkage to the solenoid plunger. The coupled design will operate with zero pressure drop across the main valve orifice.

Both Direct Lift and Pilot Operated Valves are available in normally open or normally closed configuration.

### 2-way Valves

These valves have one inlet port and one outlet port and are used as an on/off valve to control the flow of liquids or gases.

### 3-way Valves

These valves enable the application and release of pressure from closed end systems, such as single acting cylinders.

### General Industrial Control Valves - Direct Lift

#### Q3M Series - 2 way - Normally Closed

Model	Pipe Size		Pressure		Orifice Size		Cv	Kv
	mm	inch	kPa	psi	mm	inch		
1Q3M	3	1/8	0-2550	0-370	1.6	0.062	0.1	0.09
2Q3M	3	1/8	0-1000	0-150	2.4	0.093	0.2	0.17
3Q3M	3	1/8	0-700	0-100	2.8	0.109	0.3	0.26
4Q3M	3	1/8	0-500	0-75	3.2	0.125	0.3	0.26

#### B6M and BL Series - 2 way - Normally Closed

Model	Pipe Size		Pressure		Orifice Size		Cv	Kv
	mm	inch	kPa	psi	mm	inch		
1B6M	6	1/4	0-2100	0-300	1.6	0.062	0.1	0.09
2B6M	6	1/4	0-1200	0-175	2.4	0.093	0.2	0.17
4B6M	6	1/4	0-1000	0-150	3.2	0.125	0.3	0.26
5B6M	6	1/4	0-400	0-60	4.8	0.187	0.5	0.43
6B6M	6	1/4	0-200	0-30	6.0	0.235	0.7	0.6
10BL2	10	3/8	0-70	0-10	9.5	0.375	2.1	1.81
12BL2	12	1/2	0-40	0-6	12.7	0.500	3.5	3.01

#### B6M and Q3M Series - 2 way - Normally Open

Model	Pipe Size		Pressure		Orifice Size		Cv	Kv
	mm	inch	kPa	psi	mm	inch		
1Q3M	3	1/8	0-860	0-125	1.6	0.062	0.1	0.09
2Q3M	3	1/8	0-400	0-60	2.4	0.093	0.2	0.17
4Q3M	3	1/8	0-200	0-30	3.2	0.125	0.3	0.26
1B6M	6	1/4	0-2100	0-300	1.6	0.062	0.1	0.09
2B6M	6	1/4	0-1200	0-175	2.4	0.093	0.2	0.17
4B6M	6	1/4	0-1000	0-150	3.2	0.125	0.3	0.26

#### Q3M and B6M Series - 3 way - Normally Closed and Normally Open

Model	Pipe Size		Pressure		Orifice Size		Cv	Kv
	mm	inch	kPa	psi	mm	inch		
1Q3M3	3	1/8	0-860	0-125	1.6	0.062	0.1	0.09
2Q3M3	3	1/8	0-400	0-60	2.4	0.093	0.2	0.17
4Q3M3	3	1/8	0-200	0-30	3.2	0.125	0.3	0.26
1B6M3	6	1/4	0-860	0-125	1.6	0.062	0.1	0.09
2B6M3	6	1/4	0-400	0-60	2.4	0.093	0.2	0.17
4B6M3	6	1/4	0-200	0-30	3.2	0.125	0.3	0.26

Port threads standard in 'RC' and 'NPT'. Others available on request.

## General Industrial Control Valves



### BW-BWJ Series - Operation and Installation

#### Installation

Check the valves identification label for correct part number, working pressure and power supply requirements. Only suitably qualified personnel should install and maintain this product.

#### Mounting

These valves are designed to be mounted in any position or orientation. It is preferable to mount the valve horizontally with the solenoid coil vertically uppermost. This will minimise the accumulation of sediment in the moving parts of the valve.

Goyen strongly recommend the use of a strainer or filter immediately upstream of the valve to ensure optimum life and performance.

#### Piping Connections

Ensure that the valve is installed with the arrow pointing in the direction of flow. Thread sealant or tape should be applied sparingly to the male threads only. Excessive use of sealant is wasteful and could lead to blockage or valve failure.

When tightening pipework into the valve do not use the valve or solenoid as a lever. Minimise strain on the valve body by ensuring that pipework is well aligned and supported.

#### Safety

Before commencing any service to a valve always ensure that electrical power is isolated from the valve and the valve is relieved from fluid pressure.

### Pilot Operated Control Valves

#### BW Series - Brass Body - Normally Closed

Model	Pipe Size		Pressure		Orifice Size		Cv	Kv
	mm	inch	kPa	psi	mm	inch		
6BW2	6	1/4	20-1000	3-150	6.4	0.25	1.1	0.95
10BW2	10	3/8	20-1000	3-150	9.5	0.38	2.1	1.81
12BW2	12	1/2	20-1000	3-150	12.7	0.50	3.5	3.01
20BW2	20	3/4	20-1000	3-150	19.0	0.75	7.7	6.62
25BW3	25	1	20-1000	3-150	25.4	1.00	13.2	11.35
40BW2	40	1 1/2	20-1000	3-150	38.1	1.50	24.0	20.64

#### QW Series - Brass Body - Normally Closed

Model	Pipe Size		Pressure		Orifice Size		Cv	Kv
	mm	inch	kPa	psi	mm	inch		
6QW2	6	1/4	20-1000	3-150	6.4	0.25	1.1	0.95
10QW2	10	3/8	20-1000	3-150	9.5	0.38	2.1	1.81
12QW2	12	1/2	20-1000	3-150	12.7	0.50	3.5	3.01

#### BWJ Series - Brass Body - Normally Closed

Model	Pipe Size		Pressure		Orifice Size		Cv	Kv
	mm	inch	kPa	psi	mm	inch		
6BWJ2	6	1/4	0-1000	0-150	6.4	0.25	1.1	0.95
10BWJ2	10	3/8	0-1000	0-150	9.5	0.38	2.1	1.81
12BWJ2	12	1/2	0-1000	0-150	12.7	0.50	3.5	3.01
20BWJ2	20	3/4	0-700	0-100	19.0	0.75	7.7	6.62
25BWJ2	25	1	0-400	0-60	25.4	1.00	13.2	11.35

#### QWJ Series - Brass Body - Normally Closed

Model	Pipe Size		Pressure		Orifice Size		Cv	Kv
	mm	inch	kPa	psi	mm	inch		
6QWJ2	6	1/4	0-1000	0-150	6.4	0.25	1.1	0.95
10QWJ2	10	3/8	0-1000	0-150	9.5	0.38	2.1	1.81
12QWJ2	12	1/2	0-1000	0-150	12.7	0.50	3.5	3.01

#### BW Series - Brass Body - Normally Open

Model	Pipe Size		Pressure		Orifice Size		Cv	Kv
	mm	inch	kPa	psi	mm	inch		
12BW2-NO	12	1/2	20-1000	3-150	12.7	0.50	3.5	3.01
20BW2-NO	20	3/4	20-1000	3-150	19.0	0.75	7.7	6.62
25BW3-NO	25	1	20-1000	3-150	25.4	1.00	13.2	11.35
40BW2-NO	40	1 1/2	20-1000	3-150	38.1	1.50	24.0	20.64

#### BXX Series - Brass Body - Normally Open - Air to Close

Model	Pipe Size		Pressure		Orifice Size		Cv	Kv
	mm	inch	kPa	psi	mm	inch		
6BXX2	6	1/4	70-1000	10-150	6.4	0.25	1.1	0.95
10BXX2	10	3/8	70-1000	10-150	9.5	0.38	2.1	1.81
12BXX2	12	1/2	70-1000	10-150	12.7	0.50	3.5	3.01
20BXX2	20	3/4	70-1000	10-150	19.0	0.75	7.7	6.62
25BXX2	25	1	70-1000	10-150	25.4	1.00	13.2	11.35

Port threads standard in 'RC' and 'NPT'. Others available on request.

### Wiring

Wiring installation must comply with your local electrical codes, within Australia this code is AS/NZS 3000:2001.

Valves designed for use in hazardous locations are covered by further standards such as AS/NZS 2381.1:2005 and AS/NZS 2381.2:2006.

Only approved conduits or cable seals should be used in these installations. Never remove covers or seals from hazardous rated equipment before isolating the power supply.

*Note: Most solenoid valves are designed for either AC or DC power supply and are so constructed that conversion from one type to the other may require changing the whole top section of the valve.*

The normally open range of BW valves do not differ in AC versus DC construction.

### Troubleshooting

Valve fails to open when power is applied:

- No power to the coil due to faulty wiring or a blown fuse.
- Open circuit coil or internally shorted to earth.
- Supply voltage may be less than 85% of nominal rating.
- Fluid pressure may exceed maximum rating.

Valve leaks or fails to close:

- Debris caught in moving parts of valve or bleed hole in diaphragm is blocked.

Valve noisy (humming) with AC operation:

- Debris caught between plunger and iron top.

*Note: A metallic click should be heard when power is applied. This should indicate correct solenoid function.*

### Maintenance

Ensure that fluids flowing through the valve are as free from dirt and foreign matter as conditions allow.

Operate the valve on a regular basis and at least monthly.

Periodic inspection and cleaning of the valve's internal components is highly recommended. Maintenance periods will be dictated by individual situations and the type of fluids handled.

Only genuine Goyen repair kits are recommended.

### Spare Parts

(Kits consist of plunger, spring, seals and diaphragm)

#### BW Normally Closed Series

Valve Model Seal Kits	Diaphragm and Seal Material		
	NBR (Nitrile)	FMK (Viton)	EPDM
6BW2(AC)	KM1628	KM1721	KM1725
6BW2(DC)	KM1656	KM1660	KM1892
10BW2(AC)	KM1628	KM1721	KM1725
10BW2(DC)	KM1656	KM1660	KM1892
12BW2(AC)	KM1626	KM1722	KM1726
12BW2(DC)	KM1657	KM1661	KM1893
20BW2(AC)	KM1627	KM1723	KM1727
20BW2(DC)	KM1658	KM1662	KM1894
25BW3(AC)	KM3013	KM3010	KM3011
25BW3(DC)	KM3017	KM3014	KM3016
40BW2(AC)	KM1459	KM1460	KM1462
40BW2(DC)	KM2423	KM2424	KM2425

#### BW Normally Open Series

Valve Model Seal Kits:	Diaphragm and Seal Material		
	NBR (Nitrile)	FMK (Viton)	EPDM
12BW2-NO	KM1783	KM1784	KM1785
20BW2-NO	KM1928	KM1929	KM1930
25BW3-NO	KM1647	KM1648	KM1649
40BW2-NO	KM1786	KM1787	KM1788

#### Pilot Kits:

All Models	KM1789	KM1790	KM1791
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#### BWJ Normally Closed Series

Valve Model Seal Kits	Diaphragm and Seal Material		
	NBR (Nitrile)	FMK (Viton)	EPDM
6BWJ2(AC)	KM1584	KM1596	KM1600
6BWJ2(DC)	KM1664	KM1668	KM1918
10BWJ2(AC)	KM1584	KM1596	KM1600
10BWJ2(DC)	KM1664	KM1668	KM1918
12BWJ2(AC)	KM1585	KM1597	KM1601
12BWJ2(DC)	KM1665	KM1669	KM1919
20BWJ2(AC)	KM1586	KM1598	KM1602
20BWJ2(DC)	KM1666	KM1670	KM1920
25BWJ2(AC)	KM1587	KM1599	KM1603
25BWJ2(DC)	KM1667	KM1671	KM1921

#### BW - Normally Closed - Hazardous

Valve Model Seal Kits	Diaphragm and Seal Material		
	NBR (Nitrile)	FMK (Viton)	EPDM
12BW2-H(AC)	KM1827	KM1828	KM1829
12BW2-H(DC)	KM1830	KM1831	KM1832
20BW2-H(AC)	KM1833	KM1834	KM1835
20BW2-H(DC)	KM1836	KM1837	KM1839
25BW3-H(AC)	KM1838	KM1840	KM1841
40BW2-H(AC)	KM1845	KM1846	KM1847

**Special notes:** The pressure ratings shown in this catalogue are intended to cover both AC and DC voltages, with hot coils and -15% supply voltages. If your particular requirement exceeds the pressure ratings shown, please contact your nearest Goyen Sales Office for advice. In all cases ambient temperature is taken to be 25°C (77°F). The Cv factor denotes the number of US Gallons of water per minute at 60°F that a valve can pass, with a pressure drop of 1psi across the main seat.

The metric equivalent of Cv is Kv - cubic metres of water per hour at 20°C with a pressure drop of 1 bar. Kv = 0.86Cv

## General Industrial Control Valves

### Spare Parts (cont'd)

(Kits consist of plunger, spring, seals and diaphragm)

#### BXX Series

Valve Model Seal Kits:	Diaphragm and Seal Material		
	NBR (Nitrile)	FMK (Viton)	EPDM
6BXX2	KM1208A	KM1521	KM2392
10BXX2	KM1208A	KM1521	KM2392
12BXX2	KM1211A	KM1773	KM1991
20BXX2	KM1212A	KM 1523	KM 1992
25BXX2	KM2551	KM 1524	KM 1993

#### Direct Lift Valves - 3 way

Valve Model Seal Kits:	Seal Material		
	NBR (Nitrile)	FMK (Viton)	EPDM
Q3M3 NC	KM2450	KM2452	KM2454
Q3M3 NO	KM2551	KM2552	KM2553
B6M3 NC	KM1337	KM1416	KM1418
B6M3 NO	KM1336	KM1413	KM1415

#### Direct Lift Valves - 2 way - Normally Open

Valve Model Seal Kits:	Seal Material		
	NBR (Nitrile)	FMK (Viton)	EPDM
Q3M	KM2551	KM2552	KM2553
B6M	KM1336	KM1413	KM1415

#### Direct Lift Valves - 2 Way - Normally Closed

Valve Model Seal Kits:	Seal Material		
	NBR (Nitrile)	FMK (Viton)	EPDM
Q3M (AC/DC)	KM1347	KM1348	KM1469
B6M (AC)	KM1349	KM1350	KM1408
B6M (DC)	KM2447	KM2448	KM2449
10BL2 (AC)	KM1423	KM2403	KM2404
10BL2 (DC)	KM2402	KM2411	KM2412
12BL2 (AC)	KM1427	KM2405	KM2406
12BL2 (DC)	KM3015	KM2413	KM2414

## Solenoid Coil Options



### Solenoid Coils

All coils are continuously rated within +10 to -15 of nominal voltage and encapsulated in a moisture and abrasion resistant self extinguishing nylon.

Coil insulation is 'Class B' rated at 130°C.

### B Series Coils

**BD:** Basic Coil and Enclosure  
Coil and junction box enclosure provides 8 UNC, coil and earth terminals with M20 x 1.5 or 1/2" NPSC conduit entry.

Protection Class: IP31; NEMA 1

**BC:** Open frame coil with exposed 8 UNC screw terminals, for connection within a cabinet or other enclosure.

**BR:** Plug in coil and DIN40050 socket with PG11 cable gland, for internal or external installation. Weather, dust and hose proof. Protection Class: IP65; NEMA4

**BH:** Explosion proof enclosure for hazardous locations. Protection Class: ExdIIB Class I Zone 1, Class II; IP65; DIP.

### AC - B Coils

Volts	Hz	Inrush mA	Holding mA	Watts
12	50	4040	1670	10
24	50	2000	830	10
24	60	1720	660	10
32	50	1260	520	8
48	50	980	380	8
48	60	1070	410	10
110	50	405	157	9
110	60	496	195	11
120	60	370	142	9
240	50	172	70	9
415	50	80	30	7

### DC - B Coils

Volts	Hz	Holding mA	Watts
12	DC	1200	15
24	DC	596	15
32	DC	322	11
48	DC	302	15
74	DC	148	11
110	DC	113	13
240	DC	54	13

Coils not available in 32 Volts 60 Hz AC



### Q Series Coils

**Q2:** Basic Coil  
6mm [1/4"] spade terminals for push on connections within a cabinet or other enclosure.

**QD:** Coil and junction box enclosure provides 6 UNC coil and 8 UNC earth terminals, with an M20 x 1.5 or 1/2" NPSC conduit entry. Protection Class: IP31; NEMA 1

**QR:** Plug in coil and DIN40050 socket with PG11 cable gland, for internal or external installation. Weather, dust and hose proof. Protection Class: IP65, NEMA4.

**QF:** 450mm [18"] integral flying leads for direct connection to terminal strip, controller or junction box.

**QE:** Electronic module incorporating a pulse and hold circuit. Coil features low power consumption, low heat rise and zero hum. Available in 240VAC, 24VDC and 12VDC. Standard 6mm spade connector.

**QT2:** 6 UNC screw terminals for direct wiring within a cabinet or other enclosure.

### AC - Q Coils

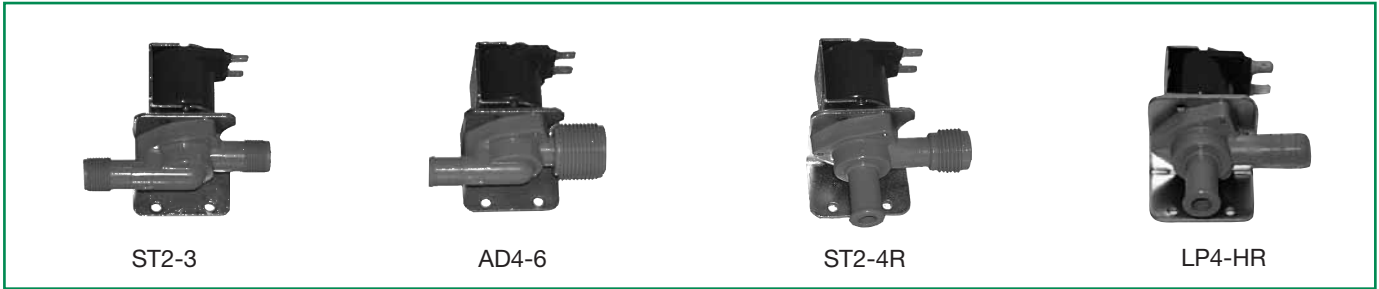
Volts	Hz	Inrush mA	Holding mA	Watts
12	50	1238	788	8
24	50	800	520	8
24	60	822	510	8
32	50	590	370	8
32	60	490	285	8
110	50	192	123	8
110	60	160	94	8
120	60	180	110	8
240	50	86	55	8
415	50	36	22	5

### DC - Q Coils

Volts	Hz	Holding mA	Watts
12	DC	719	9
24	DC	364	9
32	DC	262	9
48	DC	188	9
74	DC	116	9
110	DC	81	9
240	DC	39	10

Coils not available in 48 Volts 50 Hz AC and 48 Volts 60 Hz AC

## General Industrial Control Valves



### Moulded Plastic Valves

#### Description and Typical Applications

Goyen manufactures three basic series of moulded plastic solenoid valves - ST2, LP4 and AD4.

The ST2 series are normally closed, pilot operated diaphragm valves, with typical applications on dish and glass washing machines, agricultural spraying equipment and vending machines.

The LP4 series are normally closed, direct lift solenoid valves with typical applications in vending machines.

The AD4 series are also a normally closed, direct lift solenoid valve, but a sealed diaphragm has been included to isolate the upper sections of the valve from the media being controlled. Typical applications are dispensing and vending equipment.

#### Construction

The ST2, the LP4 and the AD4 are available in either a 'straight through', or a 'right angle' configuration. The inlet connections can be either:

- 1/2" hose [-H]
- RP 3/8 [-3]
- RP 1/2 [-4]
- RP 3/4 [-6]

The outlet connections can be either:

- 1/2" hose
- RP 3/8

The ST2 is available in Nylon 6/6. The LP4 and AD4 are available in Nylon 6/6 [Blue], Polysulphone [Beige] and ABS [Black]. Diaphragm and/or seal materials may be Nitrile [BunaN], Viton or EPDM depending on the valve - see table.

#### Electrical

Coil types Q2, QT2 and QF are available [see page 6 for details], in AC and DC voltages. The duty cycle of the ST2 is 50% with maximum 'on' time of 30 minutes at 25°C ambient. The AD4 and LP4 have 100% duty cycle.

#### Spare parts

Kits contain plunger, spring seals and diaphragm if required. Kit numbers are listed below.

### Valve Performance Data

Base Series	Orifice		Working Pressure		Diaphragm and/or Seal Material		Cv
	mm	inch	kPa	psi			
ST2	9.5	3/8	20-1000	3-150	Nitrile/Viton		1.9
LP4	9.5	3/8	0-21	0-3	EPDM		1.9
AD4	9.5	3/8	0-7	0-1	EPDM		1.9

Max. Fluid Temperature = 82°C

Max. ambient 25°C for this fluid temperature

### Repair Kit

Base Series	Diaphragm and/or Seal Material	Repair Kit	
		AC	DC
ST2	Nitrile	KM1673	KM1673
ST2	Viton	KM1682	KM1682
LP4	EPDM	KM2139	KM2545
AD4	EPDM	KM2134	KM2135
AD4	Silicone	KM3121	KM3122

## Gas Control Valves



### Gas Control Valves

#### Low pressure

Goyen manufacture a range of normally closed, direct lift valves for use as shut-off valves for appliances and combustion burner systems.

#### Application

Principally used as safety shut-off valves for fuel gases such as town gas, L.P.G. and natural gas. Also used in industrial gas applications such as nitrogen, argon, carbon dioxide and acetylene. Typical product applications include:

**Domestic:** Gas cooking appliances, gas heaters, water heaters.

**Industrial:** Furnaces, boilers, water heaters, laboratory applications and welding equipment.

**Commercial:** Commercial gas appliances. Also used in marine, motor vehicle, campervan and mobile home gas installations.

#### High pressure

This range of pilot operated diaphragm valves are built specifically to handle compressed air or gases up to pressures of 1000 kPa (150 psi).

#### Application

Used as isolating valves in compressed air lines or in gas lines where the pressure exceeds the capability of the direct lift valves.

#### Construction

Bodies and covers are pressure diecast aluminium. Ferrule tubes, plungers, and springs are of 300 & 400 series stainless steel. Seals and diaphragms are Nitrile rubber, suitable for temperature ranges of -40°C (-40°F) to +60°C (+140°F). Coils are either Q or B series depending on the model. QLS2 valves are only available with the QE series coil.

#### Low Pressure Valves

Model	Pipe Size		Pressure		Orifice Size		Flow Factor		Approvals
	mm	inch	kPa	psi	mm	inch	Cv	Kv	
6QLS	6	1/4	0-7	0-1	6.4	0.250	1.1	0.95	1, 3
10QLS	10	3/8	0-7	0-1	9.5	0.375	2.1	1.81	1, 3
6QLS2	6	1/4	0-7	0-1	6.4	0.250	1.1	0.95	1, 3
10QLS2	10	3/8	0-7	0-1	9.5	0.375	2.1	1.81	1, 3
6QG	6	1/4	0-20	0-3	6.4	0.250	1.1	0.95	UL
10QG	10	3/8	0-20	0-3	9.5	0.375	2.1	1.81	UL
12BAL	12	1/2	0-7	0-1	12.7	0.500	3.5	3.01	
20BAL	20	3/4	0-10	0-1.5	19	0.750	7.7	6.62	3, UL

Approvals:

1 = Australian Gas Association AS4629-2005 Class 1

3 = Australian Gas Association AS4629-2005 Class 3

UL = UL429 Safety Shut-off valve

#### High Pressure Valves

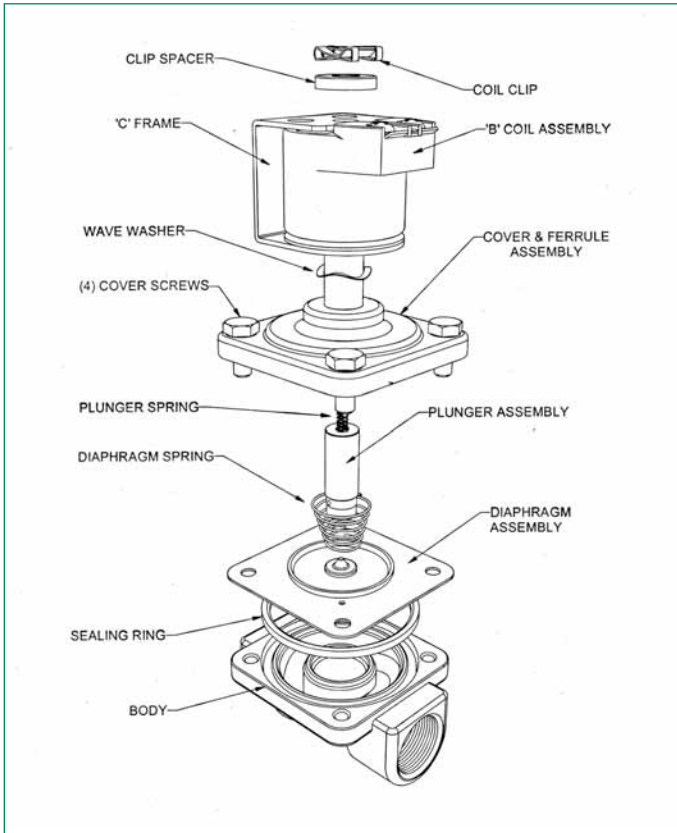
Model	Pipe Size		Pressure		Orifice Size		Flow Factor	
	mm	inch	kPa	psi	mm	inch	Cv	Kv
12QA2	12	1/2	20-1000	3-150	12.7	0.500	3.5	3.01
12BA2	12	1/2	20-1000	3-150	12.7	0.500	3.5	3.01
20BG	20	3/4	20-225	3-36	19.0	0.750	7.7	6.62

#### Repair Kits

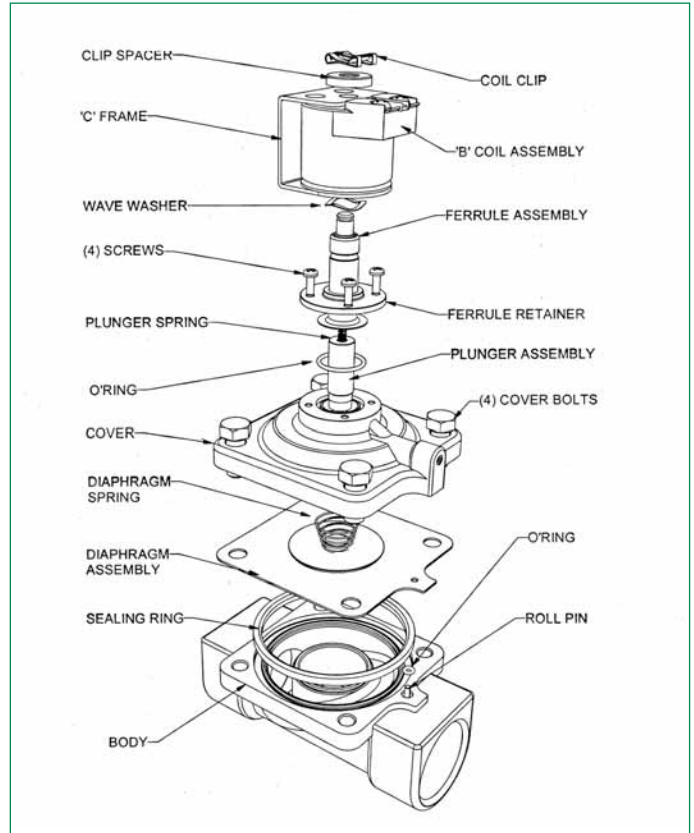
Model	Gas Class	Kits AC	Kits DC
6QLS/10QLS	Class 1	KM3088	KM3088
6QLS/10QLS	Class 3	KM2654	KM2654
6QLS2/10QLS2	Class 1	KM2374	KM2374
6QLS2/10QLS2	Class 3	KM3089	KM3089
6QG	-	KM1975	-
10QG	-	KM1975	-
12BAL	-	KM2038	KM2359
20BAL	-	KM3109	KM2512
12QA2	-	KM1905	KM2499
12BA2	-	KM1626	KM1657
20BG	-	KM2157	KM2545

**Construction**

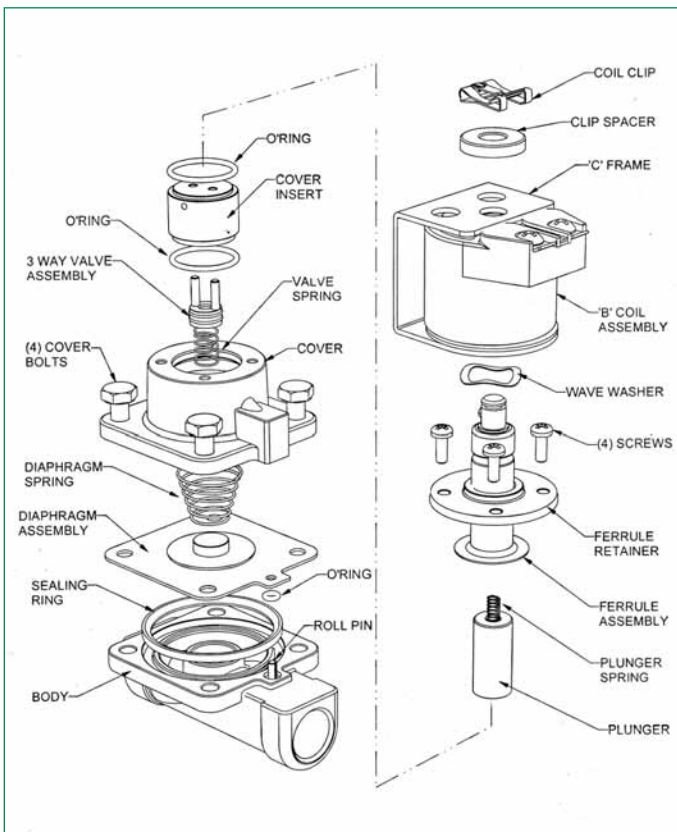
**6, 10, 12, 20BW2 Valves Normally Closed Typical Construction**



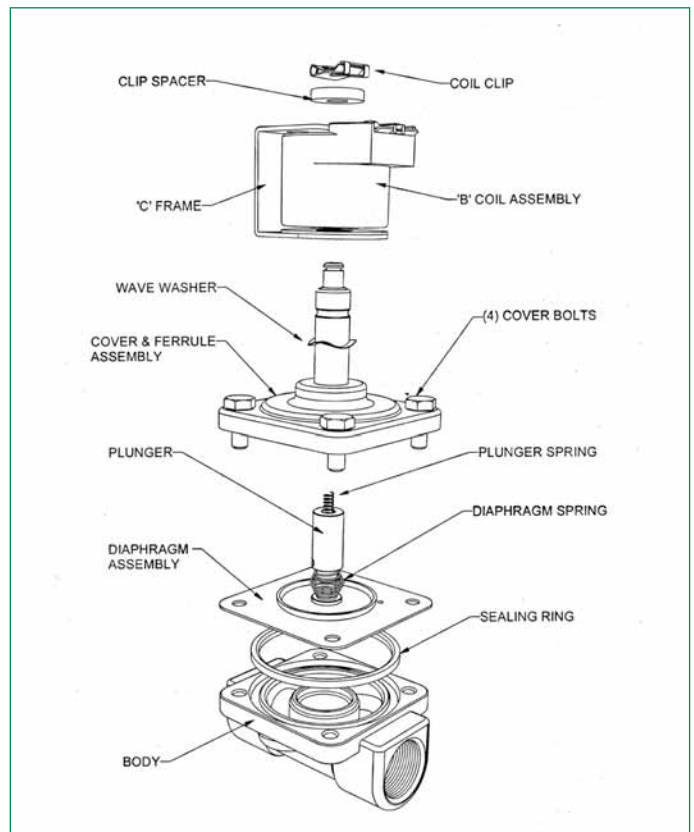
**25BW3 and 40BW2 Valves Normally Closed Typical Construction**



**BW2 Valves Normally Open - Typical Construction**



**BWJ2 Series Normally Closed - Typical Construction**



**A complete Modular Air Preparation System**

**WILKERSON**



**Australasian Market Only**

An engineered range by Wilkerson Corporation comprising:

- Filters
- Regulators
- Lubricators
- Coalescing Filters

All designed to prepare compressed air for usage in process control, tooling and other industrial pneumatic applications.

While compressed air is an essential power source in most industries. It is susceptible to contamination from dirt, rust, pipe scale, oil, aerosols and

moisture, all of which can inhibit product quality and production line efficiency.

It is a fact that more than 60% of all pneumatic equipment failures are caused by contamination from one of these sources and the resulting malfunction of just one system component can ruin product or shut down your entire production line.

Wilkerson's comprehensive range of modular air line filters, regulators and lubricators provides a customised solution to almost any pneumatic control application.

The interchangeability of the components provides flexibility in system specification and ease of installation, assembly and mounting.

Wilkerson's renowned state of the art engineering and quality control ensures high flow rates with low pressure drops and reliable long-term operation.

The new 08 Miniature series features the same robust construction, fine tolerances and high flow characteristics of the regular range but in a compact design to allow even more options in system design and specification.

**Air Preparation Equipment**

**Filters**

Model	Description	Pipe Thread G	Max Flow L/min	Max Pressure kPa	Max Temp °C	Bowl Capacity ml	Height mm	Width mm	Depth mm	Weight kg
F08-C1-SK00*	Manual Drain/Plastic Bowl	1/8	700	1030	52.0	12	116.3	40.0	42.7	0.20
F08-C2-SK00*	Manual Drain/Plastic Bowl	1/4	1400	1030	52.0	12	116.3	40.0	42.7	0.20
F08-C1-SR00*	Automatic Piston Drain/Plastic Bowl	1/8	700	1030	52.0	12	116.3	40.0	42.7	0.20
F08-C2-SR00*	Automatic Piston Drain/Plastic Bowl	1/4	1400	1030	52.0	12	116.3	40.0	42.7	0.20
F18-C2-SK00*	Manual Drain/Plastic Bowl	1/4	3100	1030	52.0	50	188.0	60.0	60.0	0.50
F18-C3-SK00*	Manual Drain/Plastic Bowl	3/8	3400	1030	52.0	50	188.0	60.0	60.0	0.50
F18-C3-SH00*	Metal Bowl/Sight Gauge/Auto Drain	3/8	3400	1030	65.5	50	179.0	60.0	69.0	0.50
F28-C4-SK00*	Manual Drain/Plastic Bowl	1/2	4500	1030	52.0	85	213.0	73.0	73.0	0.77
F18-C2-SG00*	Automatic Mechanical Drain/Plastic Bowl	1/4	3100	1030	52.0	50	179.0	60.0	60.0	0.50
F18-C3-SG00*	Automatic Mechanical Drain/Plastic Bowl	3/8	3400	1030	52.0	50	179.0	60.0	60.0	0.50
F18-C4-SG00*	Automatic Mechanical Drain/Plastic Bowl	1/2	4100	1030	52.0	50	179.0	60.0	60.0	0.50
F28-C4-SG00*	Automatic Mechanical Drain/Plastic Bowl	1/2	4500	1030	52.0	85	204.0	73.0	73.0	0.77
F28-C4-SL00*	Metal Bowl/Sight Gauge/Manual Drain	1/2	4500	1030	65.5	85	213.0	73.0	82.0	0.77

\*Micron Rating: 5

**Lubricators**

Model	Description	Pipe Thread G	Max Flow L/min	Max Pressure kPa	Max Temp °C	Bowl Capacity ml	Height mm	Width mm	Depth mm	Weight kg
L08-C1-LK00*	Manual Drain/Plastic Bowl	1/8	665	1030	52.0	18	143.5	40	43	0.27
L08-C2-LK00*	Manual Drain/Plastic Bowl	1/4	1630	1030	52.0	18	143.5	40	43	0.27
L18-C2-LK00*	Manual Drain/Plastic Bowl	1/4	2490	1030	52.0	121	212.0	60	60	0.54
L18-C3-LK00	Manual Drain/Plastic Bowl	3/8	2550	1030	52.0	121	212.0	60	60	0.54
L18-C4-LK00*	Manual Drain/Plastic Bowl	1/2	2720	1030	52.0	121	212.0	60	60	0.54
L28-C4-LK00*	Manual Drain/Plastic Bowl	1/2	5210	1030	52.0	181	238.0	74	74	0.86

## A complete modular Air Preparation system

**WILKERSON**

### Australasian Market Only

#### Air Preparation Equipment

##### Coalescing Filters

Model	Description	Pipe Thread G	Element	Max Flow L/min	Max Pressure kPa	Max Temp °C	Bowl Capacity ml	Height mm	Width mm	Depth mm	Weight kg
M08-C2-BK00	Manual Drain/Plastic Bowl	1/4	B	310	1030	52.0	12	116.3	40.1	42.7	0.2
M08-C2-BR00	Auto Piston Drain/Plastic Bowl	1/4	B	310	1030	52.0	12	116.3	40.1	42.7	0.2
M08-C2-CK00*	Manual Drain/Plastic Bowl	1/4	C	310	1030	52.0	12	116.3	40.1	42.7	0.2
M08-C2-CL00*	Manual Drain/Metal Bowl	1/4	C	310	1030	65.5	12	116.3	40.1	42.7	0.2
M08-C2-CR00	Auto Piston Drain/Plastic Bowl	1/4	C	310	1030	52.0	12	116.3	40.1	42.7	0.2
M08-C2-DK00*	Manual Drain/Plastic Bowl	1/4	D	310	1030	52.0	12	116.3	40.1	42.7	0.2
M08-C2-DR00*	Auto Piston Drain/Plastic Bowl	1/4	D	310	1030	52.0	12	116.3	40.1	42.7	0.2
M18-C2-CK00*	Manual Drain/Plastic Bowl	1/4	C	1130	1030	52.0	50	209.0	60.0	60.0	0.5
M18-C3-CK00	Manual Drain/Plastic Bowl	3/8	C	1245	1030	52.0	50	209.0	60.0	60.0	0.5
M18-C3-DL00*	Manual Drain/Metal Bowl	3/8	D	1245	1030	65.5	50	209.0	60	60	0.5
M18-C4-CG00*	Auto Drain/Plastic Bowl	1/2	C	1360	1030	52.0	50	200.0	60	60	0.5
M18-C4-CH00*	Auto Drain/Metal Bowl	1/2	C	1360	1030	65.5	50	200.0	60	60	0.5
M18-C4-CK00*	Manual Drain/Plastic Bowl	1/2	C	1360	1030	52.0	50	209.0	60	60	0.5
M18-C4-DL00*	Manual Drain/Metal Bowl	1/2	D	1360	1030	65.5	50	209.0	60	60	0.5
M28-C4-CK00*	Manual Drain/Plastic Bowl	1/2	C	2550	1030	52.0	85	235.0	73.0	73.0	0.8
M18-C2-CG00*	Automatic Drain/Plastic Bowl	1/4	C	1130	1030	52.0	50	200.0	60.0	60.0	0.5
M18-C3-CG00*	Automatic Drain/Plastic Bowl	3/8	C	1245	1030	52.0	50	200.0	60.0	60.0	0.5
M28-C4-CG00	Automatic Drain/Plastic Bowl	1/2	C	2550	1030	52.0	85	226.0	73.0	73.0	0.8
M28-C4-DK00*	Manual Drain/Plastic Bowl	1/2	D	2550	1030	52.0	85	235	73	73	0.8

\* Stocked Items.

Elements: B = 0.5 Micron - Oil removing, C = 0.01 Micron - Oil removing, D = 0.003 Micron - Oil absorption activated carbon.

#### Filter/Regulators

##### (Plastic Bowl, Relieving Diaphragm)

Model	Description	Pipe Thread G	Max Flow L/min	Spring Range kPa**	Max Temp °C	Bowl Capacity ml	Height mm	Width mm	Depth mm	Weight kg
B08-C1-FK00*	Manual Drain	1/8	790	0-860	52	12	164	40	43	0.36
B08-C1-FKGO	Manual Drain/Gauge 0-160psi	1/8	790	0-860	52	12	164	40	65	0.36
B08-C1-FRGO	Piston Drain/Gauge 0-160psi	1/8	790	0-860	52	12	164	40	65	0.36
B08-C2-FK00*	Manual Drain	1/4	1190	0-860	52	12	164	40	43	0.36
B08-C2-FKGO	Manual Drain/Gauge 0-160psi	1/4	1190	0-860	52	12	164	40	65	0.36
B08-C2-FR00*	Auto Piston Drain	1/4	1190	0-860	52	12	164	40	65	0.36
B08-C2-FRGO	Piston Drain/Gauge 0-160psi	1/4	1190	0-860	52	12	164	40	65	0.36
B18-C2-FK00*	Manual Drain	1/4	2490	0-860	52	51	254	60	60	0.67
B18-C2-FKGO	Manual Drain/Gauge 0-160psi	1/4	2490	0-860	52	51	254	60	95	0.67
B18-C2-FGG0	Auto Drain/Gauge 0-160psi	1/4	2490	0-860	52	51	245	60	95	0.67
B18-C3-FK00*	Manual Drain	3/8	3310	0-860	52	51	254	60	60	0.67
B18-C3-FKGO	Manual Drain/Gauge 0-160psi	3/8	3310	0-860	52	51	254	60	95	0.67
B18-C3-FGG0	Auto Drain/Gauge 0-160psi	3/8	3310	0-860	52	51	245	60	95	0.67
B18-C4-FG00*	Auto Mechanical Drain	1/2	3420	0-860	52	51	245	60	60	0.67
B28-C4-FK00*	Manual Drain	1/2	4670	0-860	52	85	291	74	74	1.11
B28-C4-FKGO*	Manual Drain/Gauge 0-160psi	1/2	4670	0-860	52	85	291	74	108	1.11
B28-C4-FGG0	Auto Drain/Gauge 0-160psi	1/2	4670	0-860	52	85	282	74	108	1.11

Micron Rating: 5

\* Stocked Items.

\*\* Maximum supply pressure = 1030 kPa.

**A complete modular Air Preparation system**

**WILKERSON**



**Australasian Market Only**

**Air Preparation Equipment**

**Regulators**

Model	Description	Pipe Thread G	Max Flow L/min	Spring Range kPa**	Max Temp °C	Height mm	Width mm	Depth mm	Weight kg
R08-C1-F000*	Relieving	1/8	800	0-860	65.5	100	40	40	0.31
R08-C1-F0G0	Relieving/Gauge 0-160psi	1/8	800	0-860	65.5	100	40	65	0.31
R08-C2-F000*	Relieving	1/4	1200	0-860	65.5	100	40	40	0.31
R08-C2-F0G0	Relieving/Gauge 0-160psi	1/4	1200	0-860	65.5	100	40	65	0.31
R08-C2-K000*	Relieving	1/4	1200	0-410	65.5	100	40	40	0.31
R08-C1-R000	Non Relieving	1/8	800	0-860	65.5	100	40	40	0.31
R08-C1-R0G0	Non Relieving/Gauge 0-160psi	1/8	800	0-860	65.5	100	40	65	0.31
R08-C2-R000	Non Relieving	1/4	1200	0-860	65.5	100	40	40	0.31
R08-C2-R0G0	Non Relieving/Gauge 0-160psi	1/4	1200	0-860	65.5	100	40	65	0.31
R18-C2-F000*	Relieving	1/4	2300	0-860	65.5	136	60	60	0.53
R18-C2-F0G0	Relieving/Gauge 0-160psi	1/4	2300	0-860	65.5	136	60	94	0.53
R18-C3-F000*	Relieving	3/8	2700	0-860	65.5	136	60	60	0.53
R18-C3-F0G0	Relieving/Gauge 0-160psi	3/8	2700	0-860	65.5	136	60	94	0.53
R18-C3-G000*	Relieving	3/8	2700	0-1720	65.5	136	60	60	0.53
R18-C4-F000*	Relieving	1/2	2700	0-860	65.5	136	60	60	0.53
R28-C4-F000	Relieving	1/2	4800	0-860	65.5	149	73	73	0.77
R28-C4-F0G0	Relieving/Gauge 0-160psi	1/2	4800	0-860	65.5	149	73	108	0.77
R18-C2-R000	Non Relieving	1/4	2300	0-860	65.5	136	60	60	0.53
R18-C2-R0G0	Non Relieving/Gauge 0-160psi	1/4	2300	0-860	65.5	136	60	94	0.53
R18-C3-R000	Non Relieving	3/8	2700	0-860	65.5	136	60	60	0.53
R18-C3-R0G0	Non Relieving/Gauge 0-160psi	3/8	2700	0-860	65.5	136	60	94	0.53
R28-C3-F000*	Relieving	3/8	4600	0-860	65.5	149	73	73	0.77
R28-C4-F000*	Relieving	1/2	4800	0-860	65.5	149	73	73	0.77
R28-C4-G000*	Relieving	1/2	4800	0-1720	65.5	149	73	73	0.77
R28-C4-R000	Non Relieving	1/2	4800	0-860	65.5	149	73	73	0.77
R28-C4-R0G0	Non Relieving/Gauge 0-160psi	1/2	4800	0-860	65.5	149	73	108	0.77

\* Stocked Items.

\*\* Maximum supply pressure = 2000 kPa.

**Other Products**

Model	Description	Pipe Thread G	Max Flow L/min	Max Pressure kPa	Max Temp °C	Auxiliary Port G	Height mm	Width mm	Depth mm	Weight kg
V08-C1-0000	Safety Lockout Valve	1/8	1560	1030	65.5	-	61	63	40	0.30
V08-C2-0000	Safety Lockout Valve	1/4	2830	1030	65.5	-	61	63	40	0.30
N08-C2-0000	Diverter Block	1/4	3770	2070	65.5	1/4	36	42	40	0.30
V18-C2-0000*	Safety Lockout Valve	1/4	3990	1030	65.5	-	80	49	81	0.33
V18-C3-0000	Safety Lockout Valve	3/8	6120	1030	65.5	-	80	49	81	0.33
V18-C4-0000	Safety Lockout Valve	1/2	7700	1030	65.5	-	80	49	81	0.33
N18-C4-0000	Diverter Block	1/2	11330	2070	65.5	3/8	48	48	60	0.12

\* Stocked Items Goyen offers the full range of Wilkerson's innovative fluid power products

## A total pneumatic system solution



Goyen's pneumatic control valve range is manufactured to ISO9001 standards that ensures quality assurance in design, development and production. Goyen have been manufacturing and supplying quality pneumatic products to the Australian market for over 60 years. Our success has been based on providing quality products, on time and at a competitive price, backed by customer service that is second to none.

Goyen's pneumatic control valve range includes solenoid and air pilot operated valves, in a standard range of switching positions, size and coil voltages, poppet and lever, foot activated manual air valves, quick exhaust and hold back valves as well as ISO 5599 base mounted valves.

In addition to the products detailed in this catalogue, Goyen manufactures and supplies a comprehensive range of pneumatic products aimed at providing users with total system solutions.

### Single Piloted Valves

Goyen's single piloted valves are supplied with internal air return as standard. Spring return or spring and air return are optional.

### Solenoid Valves

Goyen solenoid valves are supplied with a monostable manual test as standard. Bistable manual test or no manual test are optional.

## Pneumatic Control Valves

### Solenoid Pilot Spool Valves

Description	P/n	Operator	Port/Pos.	Port Size	Op. Press (kPa)
1/4" Ports	6TSS3/2*	Single Pilot	3/2	1/4	250-1000
1/4" Ports	6TDS3/2*	Double Pilot	3/2	1/4	250-1000
1/4" Ports	6TSS5/2*	Single Pilot	5/2	1/4	250-1000
1/4" Ports	6TDS5/2*	Double Pilot	5/2	1/4	250-1000
1/4" Ports	6TDS5/3P*	Double Pilot	5/3PC	1/4	300-1000
1/4" Ports	6TDS5/3C*	Double Pilot	5/3CC	1/4	300-1000
1/2" Ports	12TSS3/2*	Single Pilot	3/2	1/2	250-1000
1/2" Ports	12TDS3/2*	Double Pilot	3/2	1/2	250-1000
1/2" Ports	12TSS5/2*	Single Pilot	5/2	1/2	250-1000
1/2" Ports	12TDS5/2*	Double Pilot	5/2	1/2	250-1000
1/2" Ports	12TDS5/3P*	Double Pilot	5/3 PC	1/2	300-1000
1/2" Ports	12TDS5/3C*	Double Pilot	5/3 CC	1/2	300-1000

\* See Coil Selection table

### Pilot Air Valves - 3/2

Model	Model (Built in flow control)	Number of Valves ManifolDED Together	Operator	Port Size	Operating Pressure (kPa)
PAV	PAV1-M	1	Direct Solenoid	1/4	0-1000
PAV-2	PAV2-M	2	Direct Solenoid	1/4	0-1000
PAV-3	PAV3-M	3	Direct Solenoid	1/4	0-1000
PAV-4	PAV4-M	4	Direct Solenoid	1/4	0-1000
PAV-5	PAV5-M	5	Direct Solenoid	1/4	0-1000
PAV-6	PAV6-M	6	Direct Solenoid	1/4	0-1000

### Repair Kits

Number	Description	Port/Pos.	Port Size
KM636	Single Solenoid and Single Air	3/2 and 5/2	1/4 and 1/2
KM689	Double Solenoid and Double Air	3/2 and 5/2	1/4 and 1/2
KM686	Double Solenoid and Double Air	5/3PC and 5/3CC	1/4 and 1/2
KM1797	Plunger Kit (per solenoid)		
KM1699	Plunger and Ferrule Kit		
KM1939	Lever Dust Boot		
KM393	Lever/Foot Valve Seal Kit		
KM703	Poppet Valve Seal Kit		

PC = All Ports Closed

CC = Load Ports Open to Exhaust

Port threads standard in 'G' and 'NPT'

### Typical Flow Rates at 700 kPa (100 PSI)

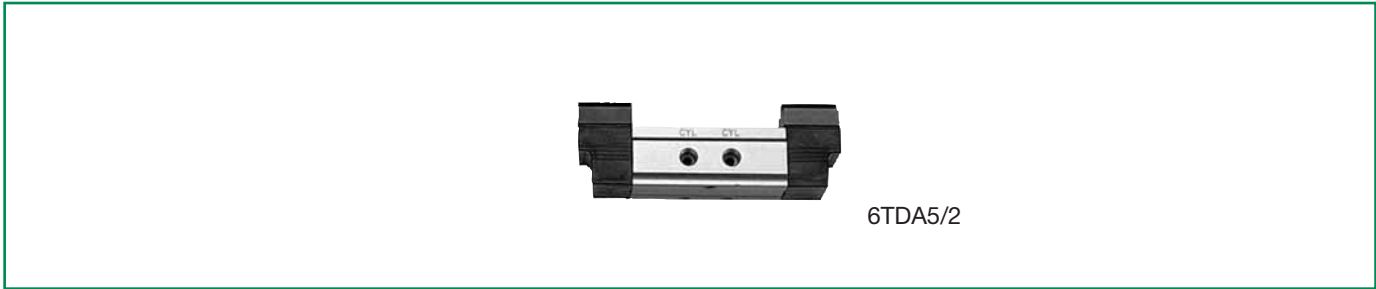
**Spool valves:** G1/4" 1200 l/min (40cfm), G1/2" 3400 l/min (120 cfm)

**Direct Lift Valves:** PAV 250 l/min (9 cfm)

**Poppet Valves:** IN-CYL 650 l/min (23 cfm), CYL-EX 310 l/min (11cfm)

**Operating Temperature Range:** All Valves -20C to +50C

**A total pneumatic system solution**



**ISO5599 Interface Solenoid Valves**

Description	P/n	Operator	Port/Pos.	Op. Press (kPa)
ISO size 2	10ISS5/2*	Single Pilot	5/2	250-1000
ISO size 2	10ISD5/2*	Double Pilot	5/2	250-1000
ISO size 2	10IDS5/3P*	Double Pilot	5/3 PC	300-1000
ISO size 2	10IDS5/3C*	Double Pilot	5/3 CC	300-1000

\* Nominate coil voltage

**Air Piloted Valves - 1/4" and 1/2"**

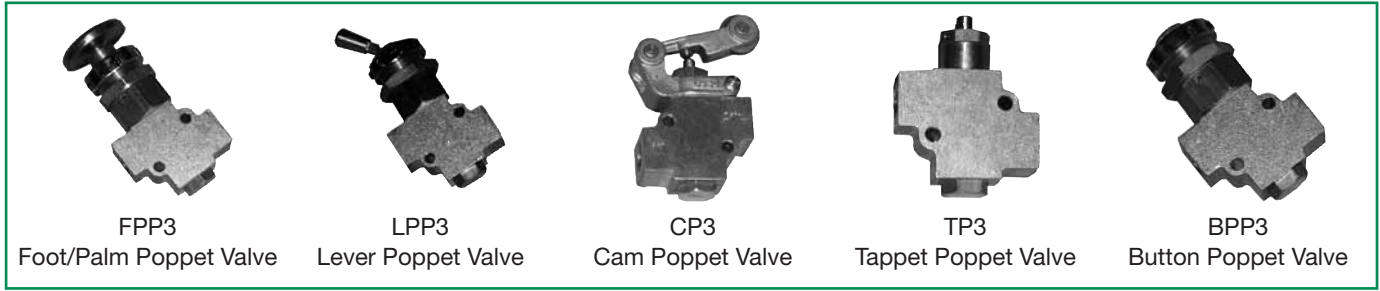
Description	P/n	Operator	Port/Pos.	Port Size		Op. Press (kPa)	
				Main	Pilot	Main	Pilot
1/4" Ports	6TSA3/2	Single Pilot	3/2	1/4	1/4	250-1000	250-1000
1/4" Ports	6TDA3/2	Double Pilot	3/2	1/4	1/4	0-1000	250-1000
1/4" Ports	6TSA5/2	Single Pilot	5/2	1/4	1/4	250-1000	250-1000
1/4" Ports	6TDA5/2	Double Pilot	5/2	1/4	1/4	0-1000	250-1000
1/4" Ports	6TDA5/3P	Double Pilot	5/3 PC	1/4	1/4	0-1000	300-1000
1/4" Ports	6TDA5/3C	Double Pilot	5/3 CC	1/4	1/4	0-1000	300-1000
1/2" Ports	12TSA3/2	Single Pilot	3/2	1/2	1/4	250-1000	250-1000
1/2" Ports	12TDA3/2	Double Pilot	3/2	1/2	1/4	0-1000	250-1000
1/2" Ports	12TSA5/2	Single Pilot	5/2	1/2	1/4	250-1000	250-1000
1/2" Ports	12TDA5/2	Double Pilot	5/2	1/2	1/4	0-1000	250-1000
1/2" Ports	12TDA5/3P	Double Pilot	5/3PC	1/2	1/4	0-1000	300-1000
1/2" Ports	12TDA5/3C	Double Pilot	5/3CC	1/2	1/4	0-1000	300-1000

Port threads standard in 'G' and 'NPT'

**Coil Selection Table**

Coil Voltage	Coil P/n	Explosion Proof Coil P/N
240 50Hz	7043	4D41
110 50/60Hz	7093	4D91
24 50/60Hz	7023	4D21
12DC	70D7	4DD7
24DC	7027	4D27
Connection Type	DIN Terminal Box	Flying lead connection only

## Pneumatic Control Valves



## Pneumatic Control Valves

### Poppet Valves - Manually Operated

P/n	Operator	Port/Pos.*	Port Size	Op. Press (kPa)
LPP3	Lever	3/2	1/4	0-1000
BPP3	Push Button	3/2	1/4	0-1000
FPP3	Foot/Palm Button	3/2	1/4	0-1000
RBP3	Roller Ball	3/2	1/4	0-1000
TP3	Tappet	3/2	1/4	0-1000
AP3	Air Piloted	3/2	1/4	0-1000**
LBP3	Lever Button	3/2	1/4	0-1000
CP3	Cam	3/2	1/4	0-1000
TCP3	Trip Cam	3/2	1/4	0-1000

\* Also available in 2-way

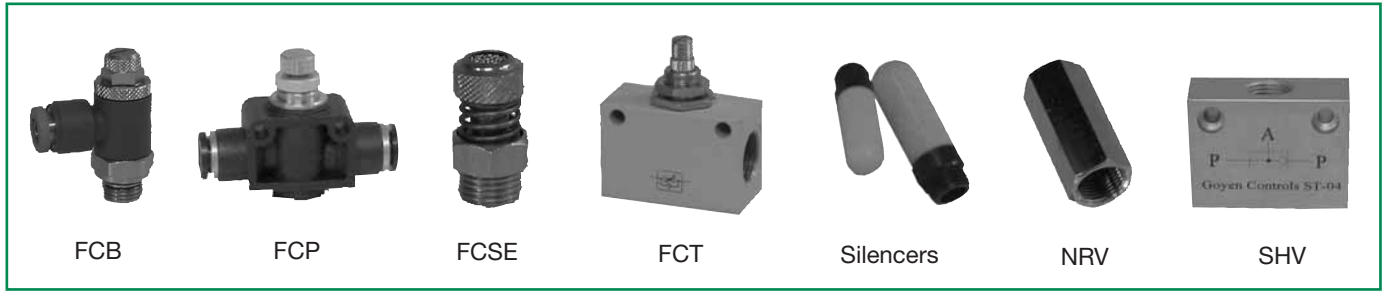
\*\* 275 kPa minimum pilot pressure for 1000 kPa main pressure.

### Spool Valves Manually Operated

P/n	Operator	Port/Pos.	Port Size	Op. Press (kPa)
6TF3/2S	Foot	3/2 Spring Ret.	1/4	0-1000
6TF5/2S	Foot	5/2 Spring Ret.	1/4	0-1000
12TF3/2S	Foot	3/2 Spring Ret.	1/2	0-1000
12TF5/2S	Foot	5/2 Spring Ret.	1/2	0-1000
6TL3/2L	Lever	3/2 Detent	1/4	0-1000
6TL3/2S	Lever	3/2 Spring Ret.	1/4	0-1000
6TL5/2L	Lever	5/2 Detent	1/4	0-1000
6TL5/2S	Lever	5/2 Spring Ret.	1/4	0-1000
6TL5/3P	Lever	5/3 PC Spring Ret.	1/4	0-1000
6TL5/3C	Lever	5/3 CC Spring Ret.	1/4	0-1000
6TL5/3PL	Lever	5/3 PC Detent	1/4	0-1000
6TL5/3CL	Lever	5/3 CC Detent	1/4	0-1000
12TL3/2L	Lever	3/2 Detent	1/2	0-1000
12TL3/2S	Lever	3/2 Spring Ret.	1/2	0-1000
12TL5/2L	Lever	5/2 Detent	1/2	0-1000
12TL5/2S	Lever	5/2 Spring Ret.	1/2	0-1000
12TL5/3P	Lever	5/3 PC Spring Ret.	1/2	0-1000
12TL5/3C	Lever	5/3 CC Spring Ret.	1/2	0-1000
12TL5/3PL	Lever	5/3 PC Detent	1/2	0-1000
12TL5/3CL	Lever	5/3 CC Detent	1/2	0-1000
6TB3/2	Button	3/2	1/4	0-1000
6TB3/2L	Button	3/2 Lockable	1/4	0-1000
6TB5/2	Button	5/2	1/4	0-1000
6TB5/2L	Button	5/2 Lockable	1/4	0-1000
12TB3/2	Button	3/2	1/2	0-1000
12TB3/2L	Button	3/2 Lockable	1/2	0-1000
12TB5/2	Button	5/2	1/2	0-1000
12TB5/2L	Button	5/2 Lockable	1/2	0-1000

Port threads standard in 'G' and 'NPT'

## Pneumatic Control Valves



### Ancillary Controls

#### Flow Control Banjo at Cylinder Port - Type FCB

Model No.	Thread Size	Tube O.D. mm
FCB-1/8-4	G1/8	4
FCB-1/4-6	G1/4	6
FCB-1/4-8	G1/4	8
FCB-1/2-12	G1/2	12

#### Flow Control in the Line - Push-in Tube Connections - Type FCP

Model No.	Tube O.D. mm
FCP-4	4
FCP-6	6
FCP-8	8
FCP-12	12

#### Flow Control in the Line - Threaded Connections - Type FCT

Model No.	Thread Size
FCT-1/8	G1/8
FCT-1/4	G1/4
FCT-1/2	G1/2

#### Flow Control/Silencer at Valve Exhaust Port - Type FCSE

Model No.	Thread Size
FCSE-1/8	R1/8
FCSE-1/4	R1/4
FCSE-1/2	R1/2

#### In-line 3/2 Isolation Valve - Type HSV

Model No.	Thread Size
HSV-1/8	G1/8
HSV-1/4	G1/4
HSV-3/8	G3/8
HSV-1/2	G1/2

#### Silencer - Type S

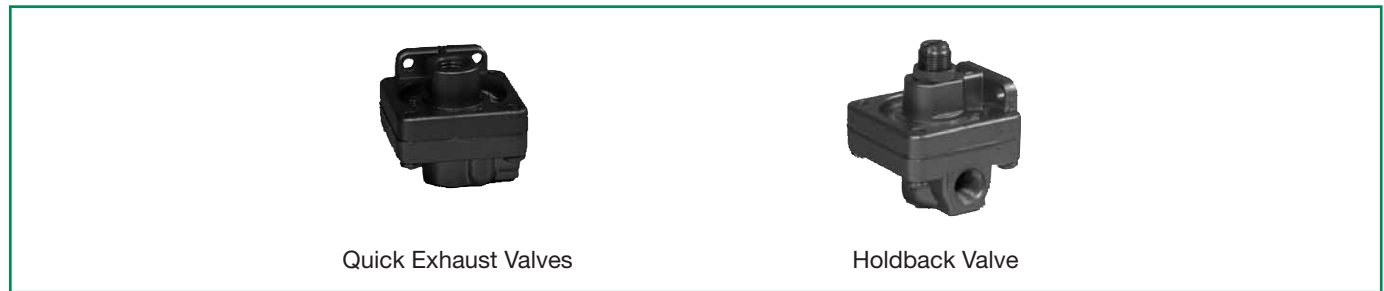
Model No.	Thread Size
S-1/8	R1/8
S-1/4	R1/4
S-3/8	R3/8
S-1/2	R1/2
S-3/4	R3/4
S-1	R1

#### Non-Return Valve - Type NRV

Model No.	Thread Size
NRV-1/8	G1/8
NRV-1/4	G1/4
NRV-1/2	G1/2

#### Shuttle (OR) Valve - Type SHV

Model No.	Thread Size
SHV-1/8	G1/8
SHV-1/4	G1/4
SHV-1/2	G1/2



Quick Exhaust Valves

Holdback Valve

### Quick Exhaust Valves

Model No.	Port Thread	Port Size	Op. Press kPa	PSI
QEV-1/4	G/NPT	1/4	0-1000	0-150
QEV-1/2	G/NPT	1/2	0-1000	0-150

#### Quick Exhaust Valve Repair Kits

Valve Model	Seal Material	Seal Kit
QEV-1/4	Nitrile	KM1319
QEV-1/4	Viton	KM1320
QEV-1/2	Nitrile	KM1547

### Holdback Valves

Model No.	Thread	Port Size	Pressure Settings kPa (PSI)		Pressure Setting Range	
			Opening	Closing	kPa	PSI
HBV-1/4-B	G/NPT	1/4	276 (40)	207 (30)	70 - 345	(10 - 50)
HBV-1/4-O	G/NPT	1/4	345 (50)	276 (40)	70 - 345	(10 - 50)
HBV-1/4-R	G/NPT	1/4	483 (70)	414 (60)	345 - 690	(50 - 100)
HBV-1/4-W	G/NPT	1/4	620 (90)	607 (88)	345 - 690	(50 - 100)

HBV Repair Kit: KM1551

**Push-in Fittings for Metric Tubing**



Swivel Tee Centre-Leg

Straight Adaptor

Stem Adaptor

**Australasian Market Only**

Super Speedfit fittings have been designed for a wide range of industrial applications. They provide a fast and secure way of connecting tubes and offer considerable advantages over conventional fittings.

Complex tubing systems can be assembled more rapidly than traditional methods Super Speedfit fittings are easy to disconnect, simplifying fault finding and maintenance.

*Note: All the fittings in this section are also available in Nickel Plated finish, please use suffix "N".*

**Swivel Tee**

**Centre-Leg Super Thread**

Part No.	Tube O.D. (mm)		Pipe Thread
RM100611	6	x	1/8
RM100612	6	x	1/4

**Straight Adaptor**

Part No.	Tube O.D. (mm)		Pipe Thread
RM010411	4	x	1/8
RM010412	4	x	1/4
RM010511	5	x	1/8
RM010512	5	x	1/4
RM010611	6	x	1/8
RM010612	6	x	1/4
RM010811	8	x	1/8
RM010812	8	x	1/4
RM010813	8	x	3/8
RM011012	10	x	1/4
RM011013	10	x	3/8
RM011014	10	x	1/2
RM011213	12	x	3/8
RM011214	12	x	1/2
RM0104M5	4	x	M5
RM0105M5	5	x	M5
RM0106M5	6	x	M5

**Stem Adaptor**

Part No.	Stem O.D. (mm)		Pipe Thread
RM050411	4	x	1/8
RM050412	4	x	1/4
RM050511	5	x	1/8
RM050512	5	x	1/4
RM050611	6	x	1/8
RM050612	6	x	1/4
RM050811	8	x	1/8
RM050812	8	x	1/4
RM050813	8	x	3/8
RM051012	10	x	1/4
RM051013	10	x	3/8
RM051014	10	x	1/2
RM051213	12	x	3/8
RM051214	12	x	1/2
RM0504M5	4	x	M5
RM0505M5	5	x	M5
RM0506M5	6	x	M5



Equal Straight Connector

Reducing Straight Connector

Reducer

**Equal Straight Connector**

Part No.	Tube O.D. (mm)
RM0404E	4
RM0405E	5
RM0406E	6
RM0408E	8
RM0410E	10
RM0412E	12

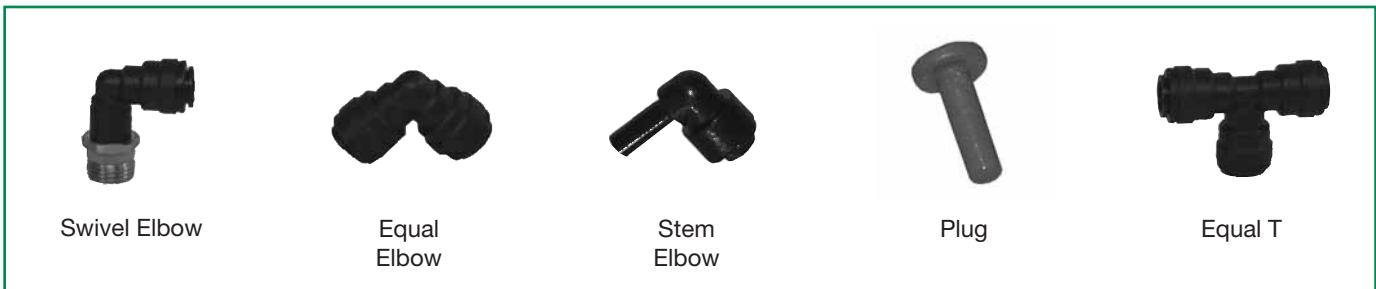
**Reducing Straight Connector**

Part No.	Tube O.D. (mm)	Tube O.D. (mm)
PM200604E	6	4
PM200804E	8	4
PM200806E	8	6
PM201004E	10	4
PM201006E	10	6
PM201008E	10	8
PM201208E	12	8
PM201210E	12	10

**Reducer**

Part No.	Stem O.D. (mm)	Tube O.D. (mm)
PM060504E	5	4
PM060604E	6	4
PM060605E	6	5
PM060804E	8	4
PM060805E	8	5
PM060806E	8	6
PM061006E	10	6
PM061008E	10	8
PM061208E	12	8
PM061210E	12	10

Push-in Fittings for Metric Tubing



**Australasian Market Only**

**Swivel Elbow**

Part No.	Tube O.D. (mm)	Pipe Thread
RM090411	4	x 1/8
RM090412	4	x 1/4
RM090511	5	x 1/8
RM090512	5	x 1/4
RM090611	6	x 1/8
RM090612	6	x 1/4
RM090811	8	x 1/8
RM090812	8	x 1/4
RM090813	8	x 3/8
RM091012	10	x 1/4
RM091013	10	x 3/8
RM091014	10	x 1/2
RM091213	12	x 3/8
RM091214	12	x 1/2
RM0904M5	4	x M5
RM0905M5	5	x M5
RM0906M5	6	x M5

**Equal Elbow**

Part No.	Tube O.D. (mm)
RM0304E	4
RM0305E	5
RM0306E	6
RM0308E	8
RM0310E	10
RM0312E	12

**Plug**

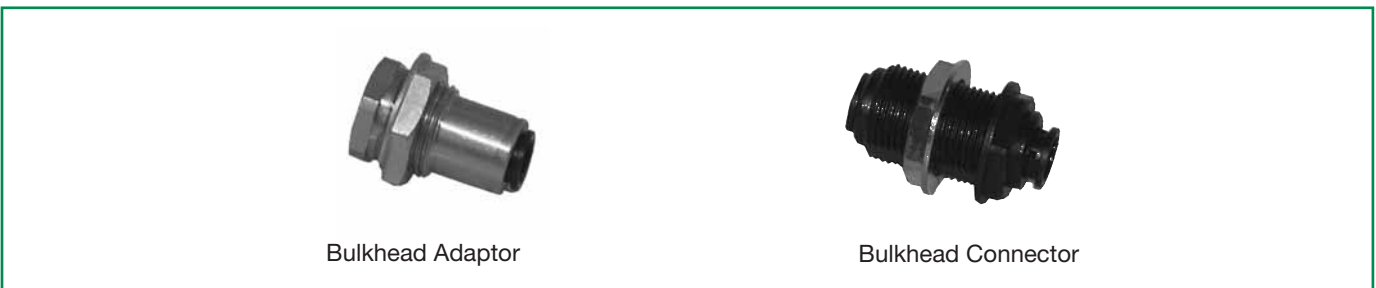
Part No.	Stem O.D. (mm)
PM0804R	4
PM0805R	5
PM0806R	6
PM0808R	8
PM0810R	10
PM0812R	12

**Stem Elbow**

Part No.	Stem O.D. (mm)	Tube O.D. (mm)
PM220404E	4	4
PM220505E	5	5
PM220606E	6	6
PM220808E	8	8
PM221010E	10	10
PM221212E	12	12

**Equal Tee**

Part No.	Tube O.D. (mm)
RM0204E	4
RM0205E	5
RM0206E	6
RM0208E	8
RM0210E	10
RM0212E	12



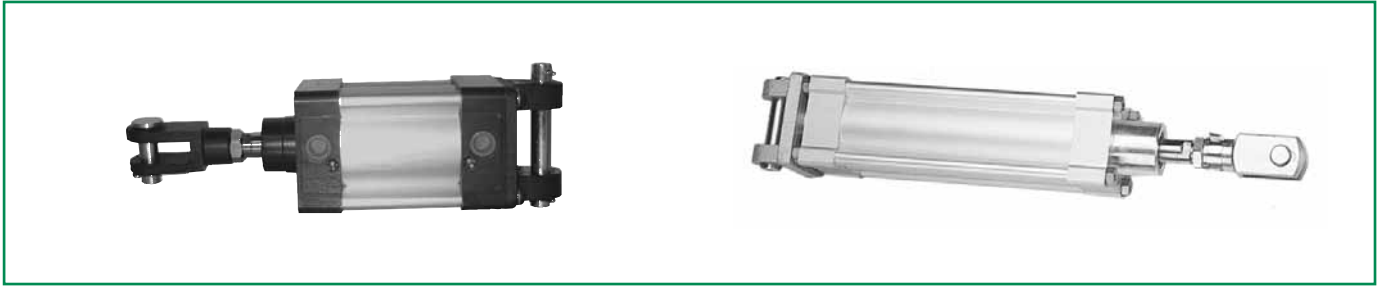
**Bulkhead Adaptor**

Part No.	Tube O.D. (mm)	Fitting Thread	Bulkhead Thread
RM070411	4	G1/8	GB1/4
RM070511	5	G1/8	GB1/4
RM070612	6	G1/4	GB3/8
RM070812	8	G1/4	GB3/8
RM071013	10	G3/8	GB1/2
RM071214	12	G1/2	GB3/4

**Bulkhead Connector**

Part No.	Tube O.D. Both Ends (mm)	Bulkhead Thread
PM1204E	4	GB3/8
PM1205E	5	GB3/8
PM1206E	6	GB3/8
PM1208E	8	GB1/2
PM1210E	10	GB1/2
PM1212E	12	GB3/4

**Pneumatic Actuators** (Available in standard sizes Ø32mm - Ø200mm)



**Australasian Market Only**

<b>PMC-T</b>		<b>032</b>	<b>M</b>	<b>A</b>	<b>- 0250</b>	<b>AC</b>
	<b>Bore size mm</b>	<b>Cylinder type</b>	<b>Cylinder bore mm</b>	<b>Options</b>	<b>Standard stroke mm</b>	<b>Indicates that special features are required</b>
<b>P</b>	32 - 100	Smooth profile	032	<b>A</b> Standard seals, magnetic piston	0025	Omit No special features
<b>T</b>	32 - 200	Tie rod	040	<b>E</b> Rod boot fitted, standard seals, magnetic piston	0050	<b>A</b> WH dimension: Specify in mm
<b>D</b>	32 - 200	Tie rod with centre trunnion	050	<b>F</b> Hitemp seals magnetic piston	0080	<b>B</b> KK dimension: Specify
<b>Centre trunnions for smooth profile cylinders are supplied separately for installer to mount</b>			063	<b>H</b> Rod lock, standard seals, magnetic piston	0100	<b>C</b> AM dimension: Specify in mm
			080	<b>J</b> Rod lock, rod boot fitted, standard seals, magnetic piston	0125	<b>D</b> XI dimension: Specify in mm
			100		0160	<b>E</b> Stop tube: specify stop tube length in mm
			125		0200	<b>F</b> Special paint: Specify type and colour
			160		0250	<b>X</b> Other: Supply all details
			200		0320	
					<b>Non-standard strokes available</b>	
					For double acting cylinder strokes over 1700mm, and for spring return strokes over 100mm	
<b>Piston rod material</b>		<b>Cylinder type/function</b>		<b>Example: PMC-T032MA-0250AC</b>		
<b>Omit</b>	Medium carbon steel, hard chrome plated (standard)	<b>M</b>	Double acting cushioned	<b>A=36; C=18</b>		
<b>G</b>	Stainless steel not available with rod lock	<b>F</b>	Double acting, through rod	PMC Series pneumatic cylinder; tie rod type; 32mm bore; double acting; cushioned; standard seals; magnetic piston; 250mm stroke; WH=36mm; AM=18mm		
		<b>X</b>	Single acting, spring retract *			
		<b>Y</b>	Single acting, spring extend *			

**Standard features**

Dimensions to ISO 6431 and VDMA 24562  
 Hard anodised aluminium cylinder barrel  
 Hard chrome plated medium carbon steel piston rod  
 Magnetic piston  
 Robust ISO standard steel and cast iron mountings  
 Non-lube operation  
 Efficient cushioning with fast breakaway speed  
 Oil retaining bronze rod gland  
 Engineering polymer piston wear strips  
 Prompt nationwide availability

**Options**

Tie rod construction (32 - 200 bore)  
 Smooth profile construction (32 - 100 bore)  
 Piston rod guides (32 - 100 bore)  
 High temperature seals  
 Piston rod locking devices (32 - 125 bore)  
 Reed switch piston position sensors  
 Solid state piston position sensors  
 Piston rod protecting boots  
 Stop tubes for long strokes  
 Spring retract/extend type cylinders



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