

Handhabungstechnik
Motore & Getriebe
Pneumatik
Hydraulik
Systemlösungen

as-tec
Mechatronik GmbH

Produktkatalog

MAC 3/2 Wegeventile

Serie 53 - 1/4" 3/8"



Über Uns

Die Firma **as-tec Mechatronik GmbH** ist ein herstellerunabhängiger Lieferant von Systemlösungen und Komponenten für pneumatische, hydraulische und elektrische Antriebs- und Steuerungstechnik.

Wir bieten unseren Kunden für ihre Projekte im Maschinen- und Anlagenbau, beziehungsweise für die Instandhaltung ihrer Fertigungseinrichtungen die am besten geeigneten Produkte aus unserem herstellerübergreifenden Produktportfolio.

In unserer Werkstätte produzieren wir kundenspezifische Lösungen wie zum Beispiel Ventileinheiten, Schaltschränke und Sonderzylinder. Weiters halten wir sowohl Standardkomponenten als auch speziell für Kunden bevorratete Produkte auf Lager.

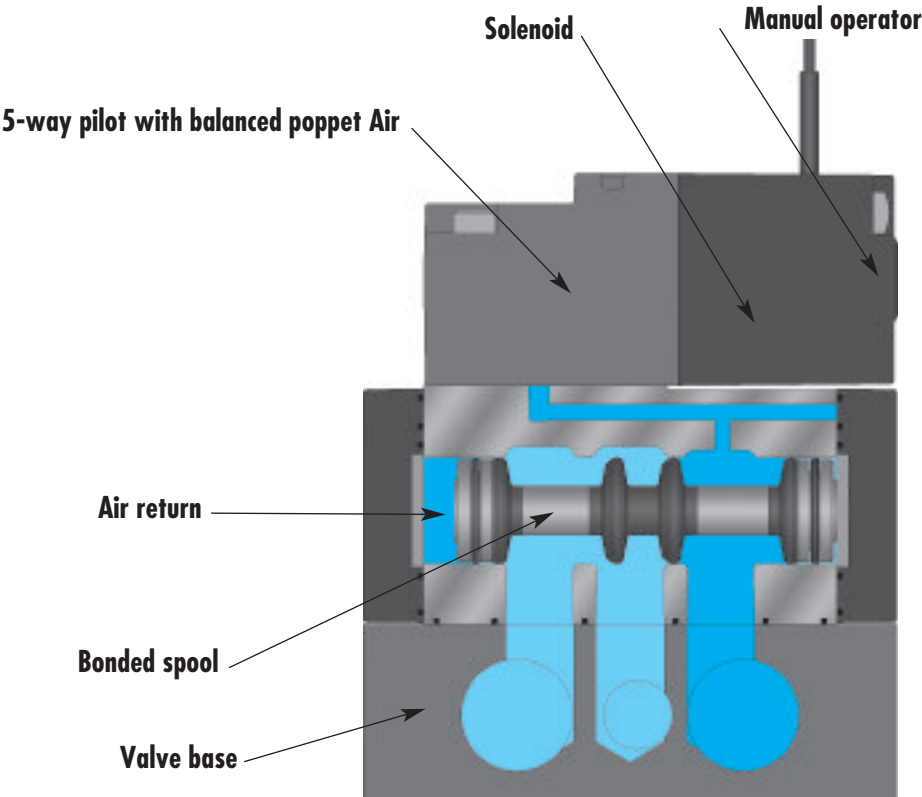


Direct solenoid and solenoid pilot operated valves
 8 mm valve

Individual mounting

Inline	
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Series



SERIES FEATURES

- The 4-way pilot develops maximum shifting force both ways
- Memory spring available
- Balanced spool, immune to variations of pressure
- Short stroke with high flow
- Bonded spool with minimum friction, shifting in a glass-like finished bore.
- Pilot with balanced poppet, high flow, short and consistent response times.
- Wiping effect eliminates sticking
- Long life service.

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ISO 01

ISO 02

ISO 1

ISO 2

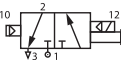
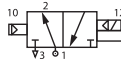
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Function	Port size	Flow [Max]	Individual mounting	Series
3/2 NO-NC	G1/4" - G3/8"	2000 NI/min	Inline	

OPERATIONAL BENEFITS

- The 4-way pilot develops maximum shifting forces both ways
- Memory spring available
- Balanced spool, immune to variations of pressure, also provides high flow
- Short stroke with high flow
- Bonded spool with minimum friction, shifting in a glass-like finished bore
- Pilot with balanced poppet, high flow, short and consistent response times.
- Wiping effect eliminates sticking
- Long service life

HOW TO ORDER

Port size	Pilot air	NC Valve	NO Valve
			
G1/4"	Internal	53A-1AC-XX-X- xxx-xxx	53A-2AC-XX-X- xxx-xxx
G3/8"		53A-1AD-XX-X- xxx-xxx	53A-2AD-XX-X- xxx-xxx
G1/4"	External from 10 end	53A-1BC-XX-X- xxx-xxx	53A-2BC-XX-X- xxx-xxx
	External from 12 end	53A-1CC-XX-X- xxx-xxx	53A-2CC-XX-X- xxx-xxx
G3/8"	External from 10 end	53A-1BD-XX-X- xxx-xxx	53A-2BD-XX-X- xxx-xxx
	External from 12 end	53A-1CD-XX-X- xxx-xxx	53A-2CD-XX-X- xxx-xxx



SOLENOID OPERATOR ➤

DM-D xxx-xxx *			
XX Voltage	X Wire length	X Manual operator	XX Electrical connection
JA 110 V~/50Hz	A 45 cm	1 Non-locking	BA Flying leads
JB 220 V~/50Hz	B 60 cm	2 Locking	KA Mini square connector
JC 24 V~/50Hz	J* 15 cm		KD Mini square connector with light
FB 24 V=/1,8W	*For use with "J" & "K" type connectors		
DA 24 V=/5,4W			JB Rectangular connector
DF 24 V=/12,7W			JD Rectangular connector with light

SOLENOID OPERATOR ➤

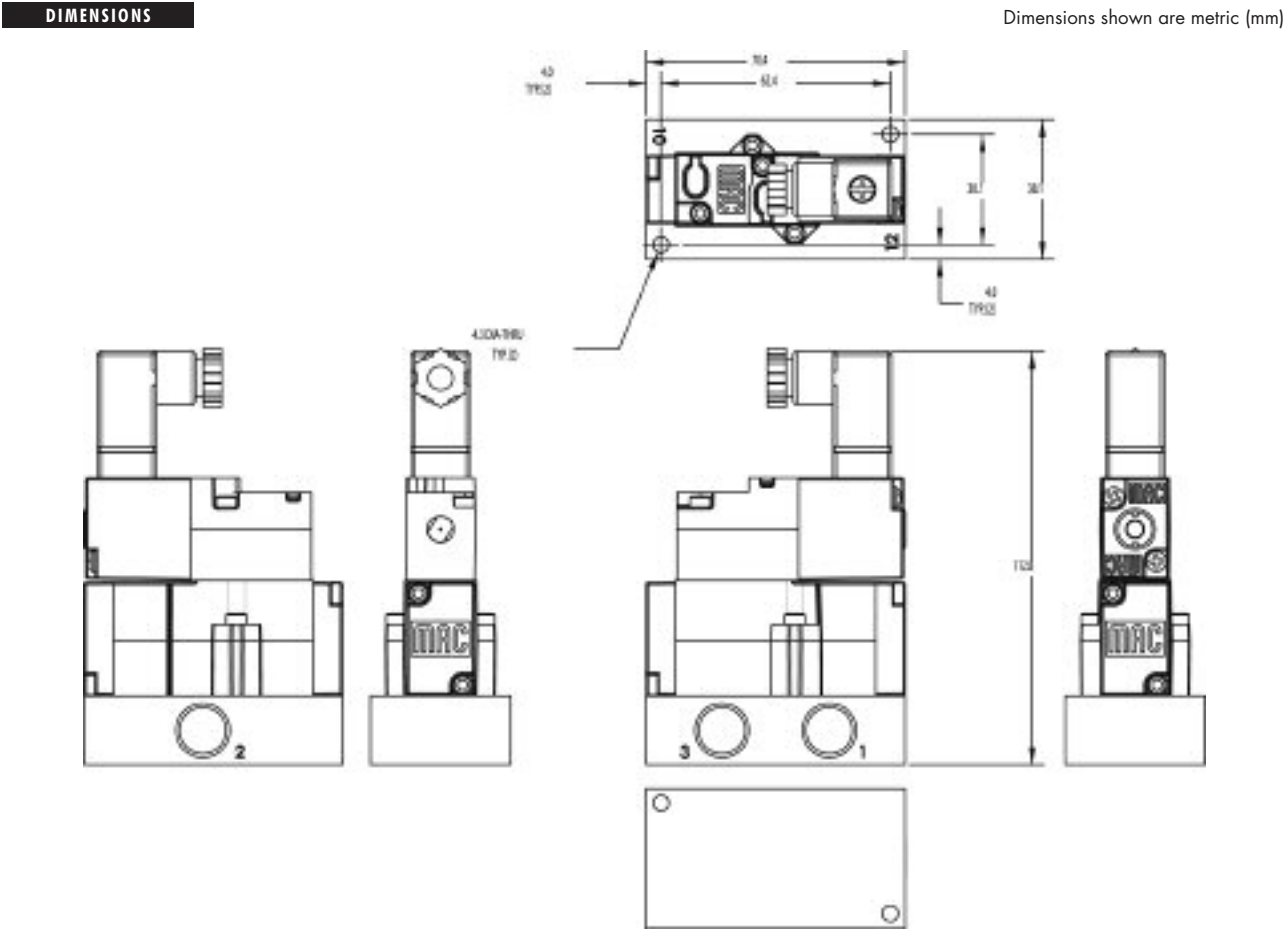
GM-G xxx-xxx **			
XX Voltage	X Wire length	X Manual operator	XX Electrical connection
DC 24 V=/1,8W	A 45 cm	1 Non-locking	BA Flying leads
DD 24 V=/2,5W	B 60 cm	2 Locking	BT Flying leads with light
DF 24 V=/4W	C 90 cm		KA Mini connector
			KT Mini connector with light
			GA MAC JAC solenoid plug-in wire assembly

* Other options available, see page 385.
 ** Other options available, see page 389.

OPTIONS

53A- X -AC-xx-xxxx-xxx
For Memory spring Replace by 5 (Normally closed) Replace by 6 (Normally open)

TECHNICAL DATA	
Fluid :	Compressed air, vacuum, inert gases
Pressure range :	Internal Pilot : 1,3 to 8 bar External Pilot : Vacuum to 8 bar
Lubrication :	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration :	40 µ
Temperature range :	-18°C to +50°C
Orifice :	8,5 mm
Flow :	G1/4" : 1700 Nl/min (Cv 1.7) – G3/8" : 2000 Nl/min (Cv 2.0)
Coil :	Epoxy encapsulated - Class A wires – 100% ED
Voltage range :	-15% to +10% of nominal voltage
Protection :	Consult factory
Power :	1,0 to 5,4W (Higher wattages available)
Options :	NPTF threads





Direct solenoid and solenoid pilot operated valves

Function	Port size	Flow (Max)	Individual Mounting	Series
3/2 NO-NC	1/4" – 3/8"	2.0 Cv	Inline	53

OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting force both ways
2. Memory spring available
3. Balanced spool, immune to variations of pressure, also provides high flow
4. Short stroke with high flow
5. Bonded spool with minimum friction, shifting in a glass-like finished bore
6. Pilot with balanced poppet, high flow, short and consistent response times.
7. Wiping effect eliminates sticking
8. Long service life



HOW TO ORDER

Port size	Pilot air	NC Valve	NO Valve
1/4" NPTF	Internal	53A-1AA-XX-XXXX-XXX	53A-2AA-XX-XXXX-XXX
3/8" NPTF		53A-1AB-XX-XXXX-XXX	53A-2AB-XX-XXXX-XXX
1/4" NPTF	External from 10 end	53A-1BA-XX-XXXX-XXX	53A-2BA-XX-XXXX-XXX
	from 12 end	53A-1CA-XX-XXXX-XXX	53A-2CA-XX-XXXX-XXX
3/8" NPTF	External from 10 end	53A-1BB-XX-XXXX-XXX	53A-2BB-XX-XXXX-XXX
	from 12 end	53A-1CB-XX-XXXX-XXX	53A-2CB-XX-XXXX-XXX

SOLENOID OPERATOR

DM – D XX X – X XX

XX	Voltage	X	Wire length	X	Manual Operator	XX	Electrical connection
JA	110/50, 120/60	A	18"	1	Non locking	BA	Flying leads
JB	220/50, 240/60	B	24"	2	Locking	KA	Mini square connector
JC	24/60	J [†]	6"			KD	Mini square connector with light
FB	24VDC (1,8W)					JB	Rectangular connector
DA	24VDC (5,4W)					JD	Rectangular connector with light
DF	24VDC (12,7W)						

[†] For use with "J" and "K" type connectors

GM – G XX X – X XX

XX	Voltage	X	Wire length	X	Manual Operator	XX	Electrical connection
DC	24VDC (1,8W)	A	18"	1	Non locking	BA	Flying leads
DD	24VDC (2,5W)	B	24"	2	Locking	BT	Flying leads with light
DF	24VDC (4,0W)	C	36"			KA	Solenoid plug-in wire assembly
						KT	Solenoid plug-in wire assembly with light
						GA	MAC JAC solenoid plug-in wire assembly

OPTIONS

53A- X A A-XX-XXXX-XXX

- For valve less base
- For memory spring

Replace by 0
Replace by 5 (Normally closed)
Replace by 6 (Normally open)



Direct solenoid and solenoid pilot operated valves

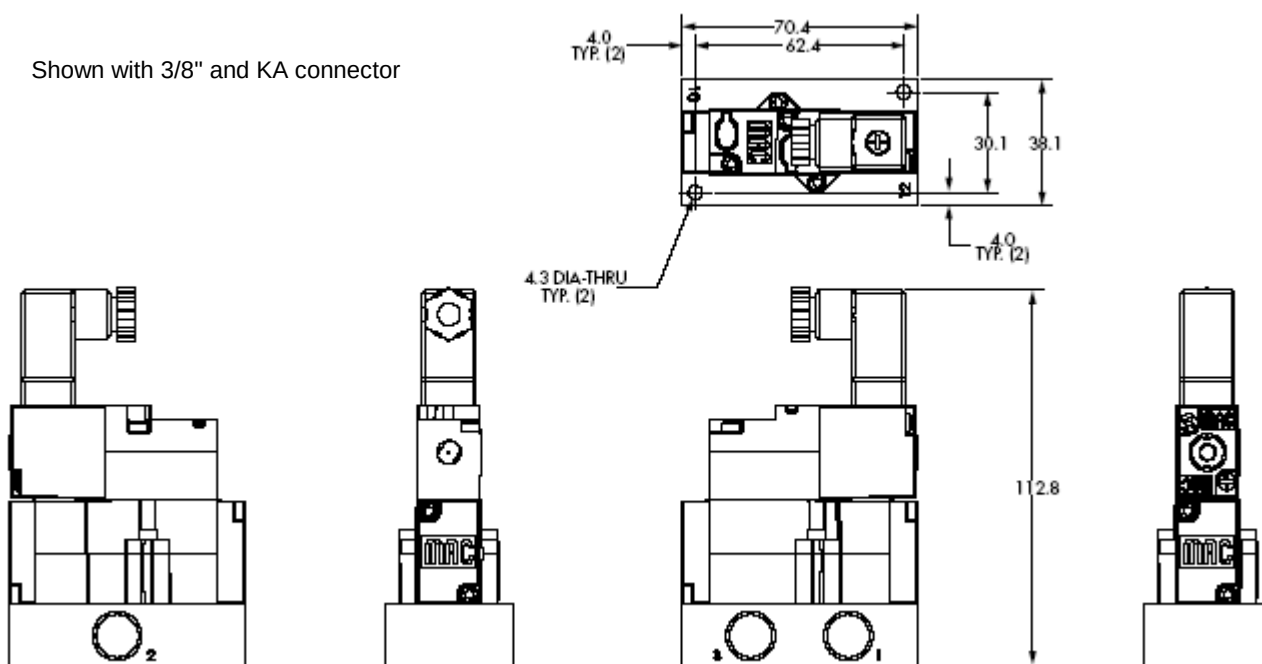
TECHNICAL DATA

Fluid:	Compressed air, vacuum, inert gases
Pressure range:	Internal pilot: 20 to 120 PSI (Memory spring option: 35-120 PSI) External pilot: Vacuum to 120 PSI
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration:	40μ
Temperature range:	0°F to 120°F (-18°C to +50°C)
Orifice:	8,5 mm
Flow:	1/4": Cv 1.7 – 3/8": Cv 2.0
Coil:	Epoxy encapsulated - Class A wires – 100% ED (specify mod. 0449)
Voltage range:	-15% to +10% of nominal voltage
Protection:	IP54 (GM pilot) – IP64 (DM pilot)
Power:	1,0 to 5,4W (Higher wattages available)

Options: BSPP threads

DIMENSIONS

Shown with 3/8" and KA connector





Direct solenoid and solenoid pilot operated valves

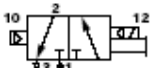
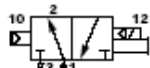
Function	Port size	Flow (Max)	Circuit bar mounting	Series
3/2 NO-NC	1/4" -3/8"	Cv 2.0	Non plug-in	53

OPERATIONAL BENEFITS

1. The 4-way pilot develops maximum shifting force both ways
2. Memory spring available
3. Balanced spool, immune to variations of pressure, also provides high flow
4. Short stroke with high flow
5. Bonded spool with minimum friction, shifting in a glass-like finished bore
6. Pilot with balanced poppet, high flow, short and consistent response times.
7. Wiping effect eliminates sticking
8. Long service life



HOW TO ORDER

Pilot air	NC Valve	NO Valve
		
Internal	53A-1A0- xx-xxxx-xxx	53A-2A0- xx-xxxx-xxx
External from 10 end	53A-1B0- xx-xxxx-xxx	53A-2B0- xx-xxxx-xxx
External from 12 end	53A-1C0- xx-xxxx-xxx	53A-2C0- xx-xxxx-xxx

SOLENOID OPERATOR

DM - D **xx x** - **x xx**

XX	Voltage	X	Wire length	X	Manual Operator	XX	Electrical connection
JA	110/50, 120/60	A	18"	1	Non locking	BA	Flying leads
JB	220/50, 240/60	B	24"	2	Locking	KA	Mini square connector
JC	24/60	J [†]	6"			KD	Mini square connector with light
FB	24VDC (1,8W)					JB	Rectangular connector
DA	24VDC (5,4W)					JD	Rectangular connector with light
DF	24VDC (12,7W)						

[†] For use with "J" and "K" type connectors

GM - G **xx x** - **x xx**

XX	Voltage	X	Wire length	X	Manual Operator	XX	Electrical connection
DC	24VDC (1,8W)	A	18"	1	Non locking	BA	Flying leads
DD	24VDC (2,5W)	B	24"	2	Locking	BT	Flying leads with light
DF	24VDC (4,0W)	C	36"			KA	Solenoid plug-in wire assembly
						KT	Solenoid plug-in wire assembly with light
						GA	MAC JAC solenoid plug-in wire assembly

HOW TO ORDER CIRCUIT BAR

Port size	Pilot air	Side cylinder ports	Bottom cylinder ports
1/4" NPTF	Internal	EBM053A-00AAA- xx	EBM053A-00BAA- xx
	External	EBM053A-00ABA- xx	EBM053A-00BBA- xx
3/8" NPTF	Internal	EBM053A-00AAB- xx	EBM053A-00BAB- xx
	External	EBM053A-00ABB- xx	EBM053A-00BBB- xx

xx = Number of stations

Direct solenoid and solenoid pilot operated valves

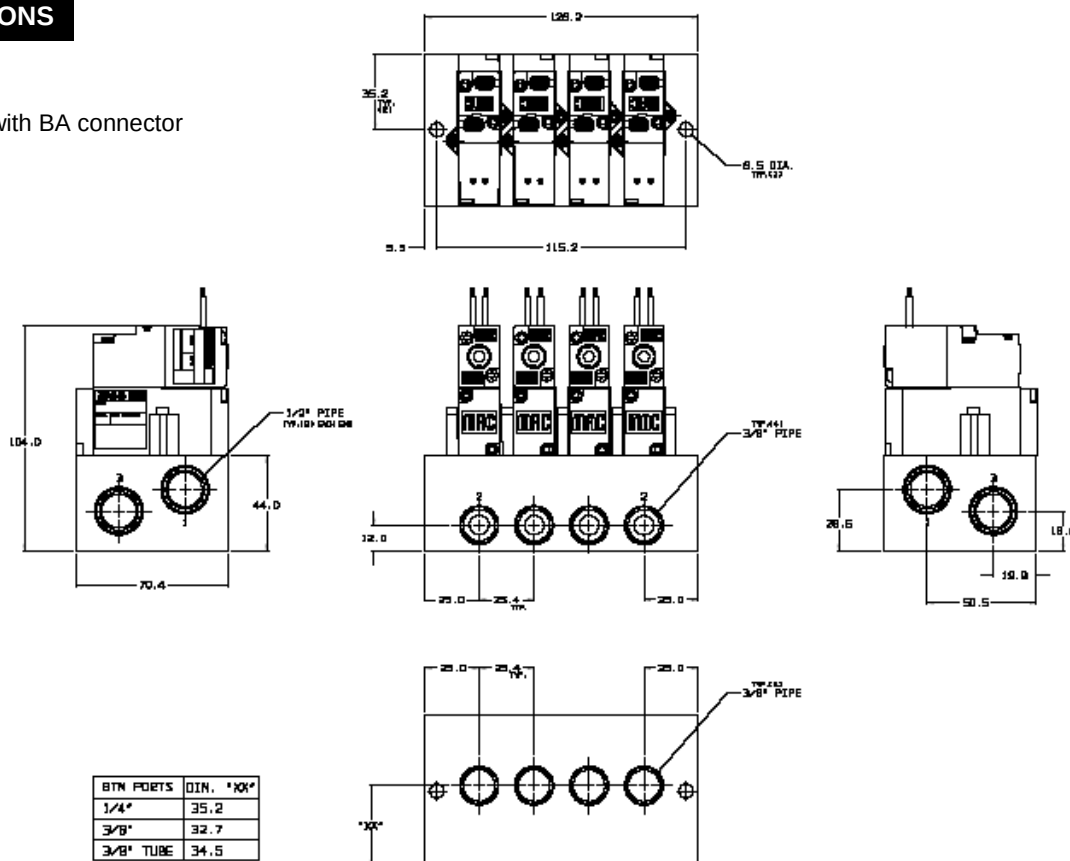
TECHNICAL DATA

Fluid:	Compressed air, vacuum, inert gases
Pressure range:	Internal pilot: 20 to 120 PSI External pilot: Vacuum to 120 PSI
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration:	40μ
Temperature range:	0°F to 120°F (-18°C to +50°C)
Orifice:	8,5 mm
Flow:	1/4": Cv 1.7 – 3/8": Cv 2.0
Coil:	Epoxy encapsulated - Class A wires – 100% ED (specify mod. 0449)
Voltage range:	-15% to +10% of nominal voltage
Protection:	IP54 (GM pilot) – IP64 (DM pilot)
Power:	1,0 to 5,4W (Higher wattages available)

Options: BSPP threads

DIMENSIONS

Shown with BA connector





Remote air valves

Function	Port size	Flow (Max)	Individual Mounting	Series
3/2	1/4" – 3/8"	2.0 C_v	Inline	53

OPERATIONAL BENEFITS

1. Balanced spool, immune to variations of pressure, also provides high flow.
2. Bonded spool with minimum friction, shifting in a glass-like finished bore.
3. Wiping effect eliminates sticking
4. Long service life
5. Short stroke with high flow



HOW TO ORDER

SINGLE OPERATOR

Port size	Pilot air	Single operator NC Valve	Single operator NO Valve
1/4" NPTF	Internal	53A-1AA-DM-RA11	53A-2AA-DM-RA11
3/8" NPTF		53A-1AB-DM-RA11	53A-2AB-DM-RA11
1/4" NPTF	External from 10 end	53A-1BA-DM-RA11	53A-2BA-DM-RA11
	from 12 end	53A-1CA-DM-RA11	53A-2CA-DM-RA11
3/8" NPTF	External from 10 end	53A-1BB-DM-RA11	53A-2BB-DM-RA11
	from 12 end	53A-1CB-DM-RA11	53A-2CB-DM-RA11

DOUBLE OPERATOR

Port size	Double operator NC Valve	Double operator NO Valve
1/4" NPTF	53A-3DA-RA	53A-4DA-RA
3/8" NPTF	53A-3DB-RA	53A-4DB-RA

OPTIONS

53A- X x X-DM-RA11

Replace by **0** for valve less base

Replace by **5** for N.C. valve with memory spring

Replace by **6** for N.O. valve with memory spring

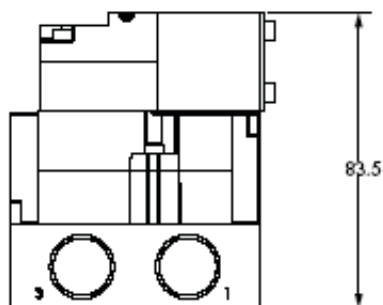
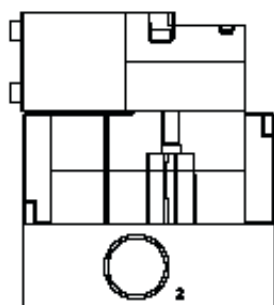
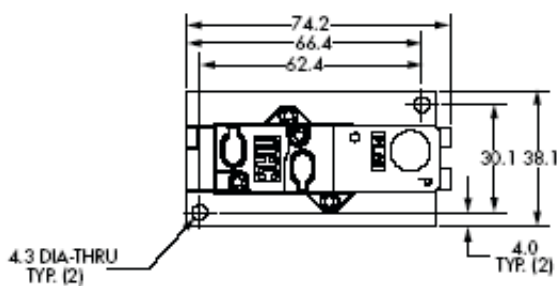
Remote air valves

TECHNICAL DATA

Fluid:	Compressed air, vacuum, inert gases
Pressure range:	Int. pil. & double remote: 20 to 120 PSI Internal pilot with memory spring: 35 to 120 PSI External pilot: vacuum to 120 PSI
Air signal pressure:	Single operator: 35 to 60 PSI - Double operator: 20 to 120 PSI*
Lubrication:	Not required, if used select a medium aniline point lubricant (between 180°F and 210°F)
Filtration:	40μ
Temperature range:	0°F to 120°F (-18°C to +50°C)
Orifice:	8,5 mm
Flow:	2.0 Cv
*Note:	Air signal pressure must be $\geq$ main valve pressure
Options:	BSPP threads

DIMENSIONS

Single remote air shown



Notizen

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