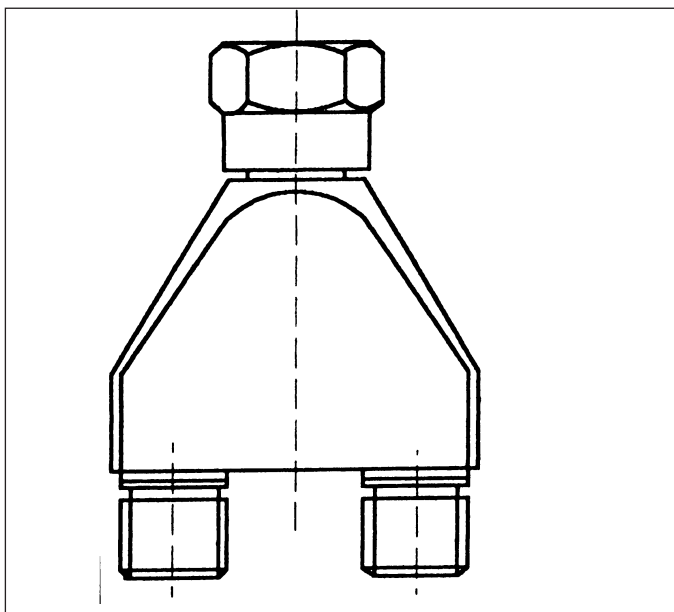




# RECIRCULATING Y BLOCKS

SERVICE BULLETIN

SB-YB-08



## LOW PRESSURE Y BLOCKS MWP 20 BAR

### DESCRIPTION

Low pressure recirculating Y Blocks are designed for use in circulating systems and hot spray systems.

### GENERAL USE

These Y blocks are, in general, used for paint circulation and hot spray systems, they can also be used as a two outlet adaptor, for air or fluids.

### OPERATION

Select the model required and fit to the spray gun inlet. It is most important to fit directly to the gun inlet to avoid undue non circulating areas which can allow metallic separation for instance or in the case of heated systems can allow cooling in a non recirculating whip hose.

**IT IS ESSENTIAL THAT THE 74-700 AND 74-900 MODEL RANGES ARE NOT USED FOR HIGH PRESSURE DUTY.**

### CIRCULATING SYSTEM OPERATION

In modern circulating systems where material needs to be kept moving up to the spray gun, particularly with automotive materials and metallics, the use of twin lines to the spray gun, one flow and one return is becoming increasingly common and important.

The incidence of contamination and particle build up that can occur in concentric systems is avoided and as a result paint rejects are reduced.

Where it is desirable to allow the operator to achieve full trigger pull at the spray gun for reduced fatigue, but where it is also essential to have controlled fluid flow at the fluid tip, then the recirculating Y Block fitted with restrictor is available. This device is designed to permit full fluid flow through the block from flow to return whilst enabling the flow to the outlet to be controlled by adjusting the integral flow control needle, which can reduce the flow rate, when flowing, to the desired rate. This is a flow restrictor **not a fluid regulator**.

### HOT SPRAY OPERATION

To enable paint to be heated and to retain that heat in standard uninsulated fluid hoses, it is necessary to recirculate the paint through a paint heater.

## WARNING

Haloogenated Hydrocarbon Solvents – for example 1.1.1 TRICHLOROETHANE AND METHYLENE CHLORIDE can chemically react with aluminium and galvanized or zinc coated parts and cause an explosion hazard. Read the label or data sheet for the material you intend to spray for your own safety. **Do not use spray materials containing these solvents with this equipment.**

### FLUID INJECTION HAZARD

The pressures in use in airless spraying equipment frequently up to 7250 PSI can penetrate the skin and inject potentially large quantities of toxic fluid into the body. Such an injection at its worst could cause the loss of a limb or other permanent disability. Extreme caution must be exercised when using any airless spray equipment. Any injection must be treated seriously and promptly. Only trained personnel should use airless spray equipment.

**NEVER** use a gun without a tip guard.

**NEVER** aim a gun at any part of the body or at any person under any circumstances.

**NEVER** permit any part of the body to come in contact with the fluid stream at any point.

**NEVER** dismantle the equipment without first shutting off all air and fluid supplies and then not before releasing all the pressure in the system.

**NEVER** leave the gun unattended or unlocked when not in use. Always apply the trigger lock.

**NEVER** attempt to back flush a gun by holding a rag in front like you can with a conventional spray gun. You cannot back flush an airless gun. Don't attempt it.

**ALWAYS** release the pressure before trying to remove a blocked tip which has failed to clear on reversal.

**NEVER** remove a blocked tip when the system is pressurized.

The paint is moved through the heater by a pump to the spray gun, through a recirculating Y Block then back to the pump for recirculating yet again through the heater. A back pressure regulator controls the rate of flow.

Restrictor models can also be used when desirable.

## HIGH PRESSURE Y BLOCKS MWP 400 BAR

### DESCRIPTION

High pressure recirculating Y Blocks are designed for use generally with heated airless systems where recirculation to the spray gun is essential.

### GENERAL USE

These high pressure Y blocks can also be used as a two outlet adaptor, take note the bore is 4mm and may not suit heavy materials.

Select the model required and fit it to the spray gun inlet. It is important to avoid using a whip with heated system when it is important to avoid temperature loss.

Whilst the recirculating block may be fitted at the base of a gun handle it should be remembered that this type of gun is not best suited for use with hot spray systems. If paint flows through the handle (due to temperature) operators would suffer heat transfer.

Once again this model can be used as a two outlet adaptor at the pump outlet. Note the bore size as already stated.

## SPECIFICATIONS

### LOW PRESSURE RANGE

Weight	85 grams approx.
Dimensions	60 x 44 x 12 approx. mm.
Construction	Body aluminium anodized – 74-700 and 74-900 series Body stainless steel – 74-500 series Nipples stainless steel 304 Needle stainless steel 304 Body S.S.304 75-500 and 74-800 series
MWP	20 bar restrictor model 74-700 and 500 series 100 bar non restrictor models 74-900 series

### HIGH PRESSURE RANGE

Weight	100 grams approx.
Dimensions	60 x 42 x 12 approx. mm.
Construction	All stainless steel
MWP	400 bar 74-800 series

## MODEL RANGE

### LOW PRESSURE

#### NON RESTRICTOR MODELS - ALUMINIUM

Part no	2 x inlets	1 x outlet
74-911/27	1/4" NPS (M)	1/4" BSP (F)
<b>74-922/27*</b>	<b>1/4" BSP (M)</b>	<b>1/4" NPS (F)</b>
74-941/27	1/4" BSP (M)	3/8" BSP (F)
74-944/27	3/8" BSP (M)	3/8" BSP (F)
74-925/27	1/4" NPS (M)	3/8" NPS (F)
74-981/27	1/4" BSP (M)	M16 x 1.5 (F)
74-988/27	M16 x 1.5 (M)	M16 x 1.5 (F)
<b>74-955/27*</b>	<b>3/8" NPS (M)</b>	<b>3/8" NPS (F)</b>

#### RESTRICTOR MODELS - ALUMINIUM

74-711/27	1/4" BSP (M)	1/4" BSP (F)
74-722/27	1/4" NPS (M)	1/4" NPS (F)
<b>74-741/27*</b>	<b>1/4" BSP (M)</b>	<b>3/8" BSP (F)</b>
74-744/27	3/8" BSP (M)	3/8" BSP (F)
74-752/27	1/4" NPS (M)	3/8" NPS (F)
74-781/27	1/4" BSP (M)	M16 x 1.5 (F)
74-788/27	M16 x 1.5 (M)	M16 x 1.5 (F)

#### RESTRICTOR MODELS - STAINLESS STEEL

74-511/30	1/4" BSP (M)	1/4" BSP (F)
74-522/30	1/4" NPS (M)	1/4" NPS (F)
<b>74-541/30*</b>	<b>1/4" BSP (M)</b>	<b>1/4" BSP (F)</b>
74-544/30	3/8" BSP (M)	3/8" BSP (F)
74-552/30	1/4" NPS (M)	3/8" NPS (F)
74-555/30	3/8" NPS (M)	3/8" NPS (F)
<b>74-588/30*</b>	<b>M16 x 1.5 (M)</b>	<b>M16 x 1.5 (F)</b>

### HIGH PRESSURE

#### NON RESTRICTOR MODELS ONLY

Part no	2 x inlets	1 x outlet
<b>74-811/30*</b>	<b>1/4" BSP (M)</b>	<b>1/4" BSP (F)</b>
<b>74-822/30*</b>	<b>1/4" NPS (M)</b>	<b>1/4" NPS (F)</b>
74-841/30	1/4" BSP (M)	1/4" BSP (F)
<b>74-844/30*</b>	<b>3/8" BSP (M)</b>	<b>3/8" BSP (F)</b>
74-852/30	1/4" NPS (M)	3/8" NPS (F)
74-855/30	3/8" NPS (M)	3/8" NPS (F)
74-888/30	M16 x 1.5 (M)	M16 x 1.5 (F)
<b>74-842/30*</b>	<b>3/8" NSP (M)</b>	<b>3/8" NPS (F)</b>

\*Asterisked items are stock ranges.

Other combinations of BSP, NPS and metric may be requested to special order at extra cost. Models asterisked are the most popular and are generally available ex stock or on short lead time.

## PARTS LIST

### LOW PRESSURE RANGE

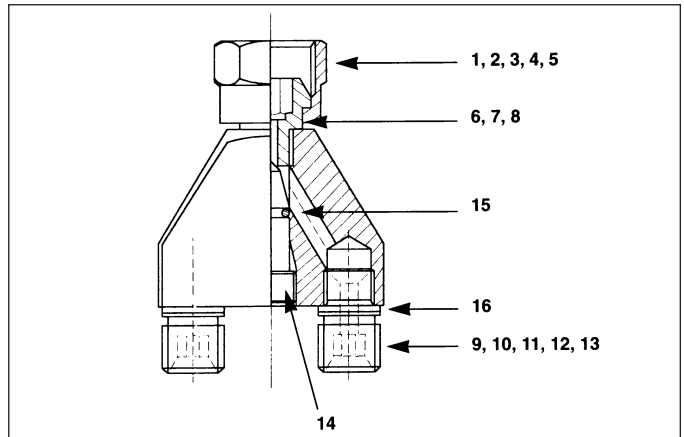
Item no	Part no	Description
1	176-002	1/4" BSP nut
2	176-001	1/4" NPS nut
3	176-009	3/8" BSP nut
4	176-008	3/8" NPS nut
5	120-034	M16 x 1.5 nut
6	174-716/30	Neck for 3/8" nut
7	174-714/30	Neck for 1/4" nut
8	174716/30	Neck for M16 nut
9	174-801/30	Flow/return nipple 1/4" BSP
10	174-802/30	Flow/return nipple 1/4" NPS
11	174-808/30	Flow/return nipple M16 x 1.5
12	174-804/30	Flow/return nipple 3/8" BSP

13	174-805/30	Flow/return nipple 3/8" NPS
14	174-702/30	Restrictor needle valve
15	174-703/21	O Ring
16	174-801/31	Copper seal

### HIGH PRESSURE RANGE

Item no	Part no	Description
9	174-801/30	1/4" BSP male nipple
10	174-802/30	1/4" NPS male nipple
11	174-808/30	M16 x 1.5 male nipple
12	174-804/30	3/8" BSP male nipple
13	174-805/30	3/8" NPS male nipple
14	74-502/30	Needle restrictor
15	74-503/21	O Ring

NO OTHER PARTS ARE AVAILABLE. Swivel nuts are crimped to a one piece body in stainless steel.



## SERVICE PROCEDURES

**HIGH PRESSURE** These units require only normal thorough correct cleaning with compatible solvents to the paint in use. Check each time when fitting for thread condition and damage and for clear passageways. Rectify as required. Inlet nipples are secured with LOCTITE.

**LOW PRESSURE** Restrictor models feature a replaceable adjusting screw and 'O' ring. To service the unit clean correctly and thoroughly with solvent compatible with the paint in use. Replace the needle and 'O' ring if worn or leaking. Non restrictor models should be merely cleaned and inspected for damage.

Neck inserts and inlet nipples are secured with LOCTITE. It may be necessary to gently heat the block if removal or replacement of these parts becomes necessary.

Tools required for this service: Inlet nipples – 3mm Allen key; Restrictor valve – 5mm Allen key. No other special tools required.

#### SWITZERLAND

EXIT SA / EXITFLEX SA  
Tel: +41 22 9999299  
Fax: +41 22 3642505  
e-mail: info@exitflex.com  
web: www.exitflex.com

#### SWEDEN

Exitflex AB  
Tel: +46 300 31970  
Fax: +46 300 564780  
e-mail: info@exitflex.se  
web: www.exitflex.se

#### GERMANY

Exitflex GmbH  
Tel: +49 911 9983046  
Fax: +49 911 9983045  
e-mail: info@exitflex.de  
web: www.exitflex.de

#### AUSTRALASIA & ASIA

Exitflex Dana Marketing Pty Ltd  
Tel: +61 3 9752 8918  
Fax: +61 3 9011 6179  
e-mail: dandn@iprimus.com.au

#### UNITED KINGDOM

Exitflex (UK) Ltd  
Tel: +44 1202 478334  
Fax: +44 1202 488110  
e-mail: sales@exitflex.co.uk  
web: www.exitflex.co.uk

#### POLAND

Exitflex PL Sp.zo.o  
Tel: +41 58 6207041  
Fax: +41 58 6207041  
e-mail: biuro@exitflex.pl  
www.exitflex.com  
www.exitflex.pl

#### USA

Exitflex USA  
Tel: +1 732 512 9141  
Fax: +1 732 512 9145  
e-mail: mail@exitflexusa.com  
web: www.exitflexusa.com

#### DISTRIBUTED BY

For spare parts and service