

iFLOW ACTUATION HOSES

Actuation hoses connect between pneumatic actuators, the pilot container and the master iFLOW container, and connect the manual-pneumatic actuator. Johnson Controls supply two lengths; 580 mm and 700 mm. The hose contains brass male swivel ends and when fitting to the pneumatic actuators, requires no sealing tape. Avoid twisting the hose during installation.

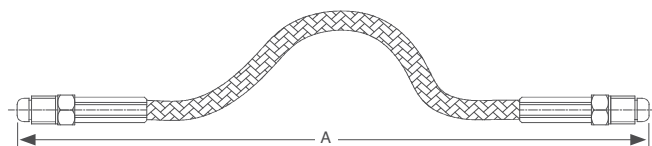


FIGURE 3-16
iFLOW ACTUATION HOSES
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Location on system

The iFLOW actuation hoses fit between the pneumatic actuators, the pilot container and the master iFLOW container. For installation instructions see Section 4 - Installing the Actuation Hoses.

Operating instructions

The iFLOW actuation hose is a pressure connector and requires no operating instructions.

Maintenance instructions

If faults or suspected faults arise, contact customer services to organise a replacement part.

TABLE 3-3: ACTUATION HOSE DETAILS

Part number	Length Dimension A	Container
30506014	580 mm	Subordinate to subordinate 80 L pilot actuated
30506015 30506016*	580 mm	Master to subordinate 80 L metron actuated
30522001	700 mm	Subordinate to subordinate 140 L pilot actuated
		Pilot to subordinate
30522003 30522004*	700 mm	Master to subordinate 140 L metron actuated

* Secondary (dual) supply component.

Dual supply components

Primary and secondary supply components maintain the supply chain and allow adequate stock levels to fully support customers and installers. The customer may receive secondary supply components if insufficient stock levels occur to complete the order with primary supply components.


Technical information

Type:	Primary supply (PTFE)	Primary supply (2SC)	Secondary supply (2SNK)
Hose construction:	Stainless steel wire braid PTFE liner	Twin steel wire braid 2SC liner	Twin steel wire braid 2SNK liner
Connection:	1/4 in. BSPP Male swivel union (brass)	1/4 in. BSPP Male swivel union (brass)	1/4 in. BSPP Male swivel union (brass)
Internal hose inner diameter:	5.8 mm to 6.2 mm	6.2 mm to 7.0 mm	6.2 mm to 7.0 mm
Connection inner diameter:	4 mm	4 mm	4 mm
Maximum working pressure:	260 bar	420 bar	450 bar
Minimum burst pressure:	700 bar	1680 bar	1800 bar
Bend angle:	360°	360°	360°
Minimum bend radius:	30 mm	50 mm	45 mm
Approvals and listings:	VdS	VdS	VdS
Certification:	EN 12094-8	EN 12094-8	EN 12094-8
CE certification number:	0786-CPR-30099	0786-CPR-30150	0786-CPR-30150
Year of CE marking:	2009	2012	2016
CE marking requirements:	Manufacturer, part number, batch number, working pressure, hose type, CE0786	Manufacturer, part number, batch number, working pressure, hose type, CE0786	Manufacturer, part number, batch number, working pressure, hose type, CE0786
Method of marking:	Engraving	Engraving	Engraving
Weight:	0.12 kg (Part number 30506014) 0.14 kg (Part number 30522001)	0.25 kg (Part number 30506015) 0.29 kg (Part number 30522003)	0.26 kg (Part number 30506016) 0.31 kg (Part number 30522004)
Type of connector:	Type 3	Type 3	Type 3


PNEUMATIC ACTUATION COMPONENTS

This section lists typical examples of fittings required for the actuation system and does not limit the use of other acceptable fittings.

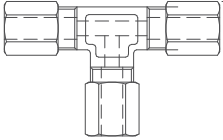
6 mm copper nickel pipe

Part number	Description	Picture	Technical information	
30804068	The copper nickel pipe (suitable for bending) connects pressure activated devices to the system, such as subordinate containers and a pressure switch, for example.	 025023	Material:	Copper nickel alloy
			Specification:	CN102
			Maximum working pressure:	149.5 bar
			Supplied length:	Cut to a maximum length of 25 m
			Weight:	0.078 kg/m

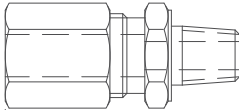
6 mm half hard pipe

Part number	Description	Picture	Technical information	
308.002.002	Where the system requires extensive actuation runs, the installer can use 6 mm half hard copper pipe. Johnson Controls supply this in 3 m lengths. It is unsuitable for bending.	 025023	Material:	Phosphorous de-oxidised copper
			Specification:	BS6017 grade Cu-DHP
			Maximum working pressure:	149.5 bar
			Supplied length:	3 m
			Weight:	0.078 kg/m

6 mm compression tee

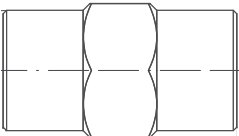
Part Number	Description	Picture	Technical information	
30880015	The 6 mm compression tee primarily connects pilot lines from one subordinate container to the next.	 025024	Material:	Brass
			Connection:	6 mm DIN 2353 compression fittings
			Overall size:	60 mm x 37.5 mm
			Weight:	0.064 kg

6 mm stud coupling

Part number	Description	Picture	Technical information	
30880007	The pilot line uses 6 mm stud coupling with copper nickel pipe. The stud coupling fits into the pneumatic actuator. It comes supplied with the pilot containers and fits into the pilot valve adaptor (Part number 35116381) as an alternative to the pilot actuation hose.	 025025	Material:	Brass
			Connection:	1/4 in. BSPT
			Overall size:	33.5 mm x 16 mm
			Weight:	0.024 kg


PNEUMATIC ACTUATION COMPONENTS (Continued)

1/4 in. BSP socket

Part number	Description	Picture	Technical information	
30880008	On systems using both 6 mm copper nickel pipe and flexible actuation hoses, a 1/4 in. BSP socket makes the connection. One side of the socket connects to the actuation hose (Part number 30506014 for 550 mm or 30522001 for 700 mm). The other side of the socket connects to the pilot line copper nickel pipe through the 1/4 in. BSPT × 6 mm stud coupling (Part number 30880007).		Material:	Brass
			Type:	3000 lb fitting
			Connection:	1/4 in. BSPP Female
			Overall size:	35 mm × 20 mm hex
			Weight:	0.057 kg

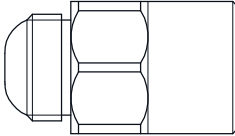
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1/4 in. Dowty seal

Part number	Description	Picture	Technical information	
31199816	The Dowty seal adaptor seals component assemblies.		Material:	Nitrile and steel
			Hardness:	85 ± 5 shore A
			Overall size:	2.03 mm × Dia 20.57 mm
			Weight:	0.005 kg

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1/4 in. bull nose adaptor

Part number	Description	Picture	Technical information	
30880009	The 1/4 in. bull nose adaptor can be used for a flexible actuation hose connection to the selector valves when copper piping is not required. The 1/4in. Dowty seal (Part number 31199816) should be used to complete the connection.		Material:	Brass
			Hardness:	G 1/4 in. Male x G 1/4 in. Female
			Overall size:	26 mm x Dia 18 mm
			Weight:	0.03 kg

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