



COMPONENT CATALOG
TIP CONTROLS

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Hyva tip controls

Hyva offers a complete range of tip controls to engage the power take-off and valves in your hydraulic system. The standard Hyva controls meet every local legislation with safety features such as the automatic P.T.O. disengagement. This control makes driving with an engaged P.T.O. impossible. The tipping controls are standard delivered with three positions; tip, lower and automatic neutral locking position. Hyva tipping controls have incorporated push-pull air tube (6mm) couplings.

Standard Hyva tip controls

The following controls are available:

- Tip control for P.T.O.
- Tip control for tipping valve
- Tip control for P.T.O. & tipping valve

They are available with or without spring return on tip control. The control for P.T.O./valve has an automatic disengage on the P.T.O. switch as an option.

The standard controls are equipped with a warning light to show that the P.T.O. is engaged. Perfectly proportional lowering is possible in combination with the Hyva HT valve. Proportional lowering makes partially unloading ever so easy. Detailed specification sheets are available on request.

Narrow tip controls with additions for multi-sections

The multi-section tip control can be used in cases where more functions should be controlled, for instance tail doors, multi-kaps or hookloaders. The tipping control is ideal for small cabin spaces.

Basic section for tipplers

The multi-section tip control always starts with the basic section 14750430, which is a double acting, double proportional section to operate (tipping) valves. The lever of the basic section is spring return to both sides up to 30° of the handle. When the operator pushes to full 32° the lever can be locked in the both end positions. In the basic section 2 threaded holes M6 at 58 mm pitch are available for fitting the valve on a mounting plate.

Extra sections

Additional up to 8 sections can be fitted. Following extra sections are available:

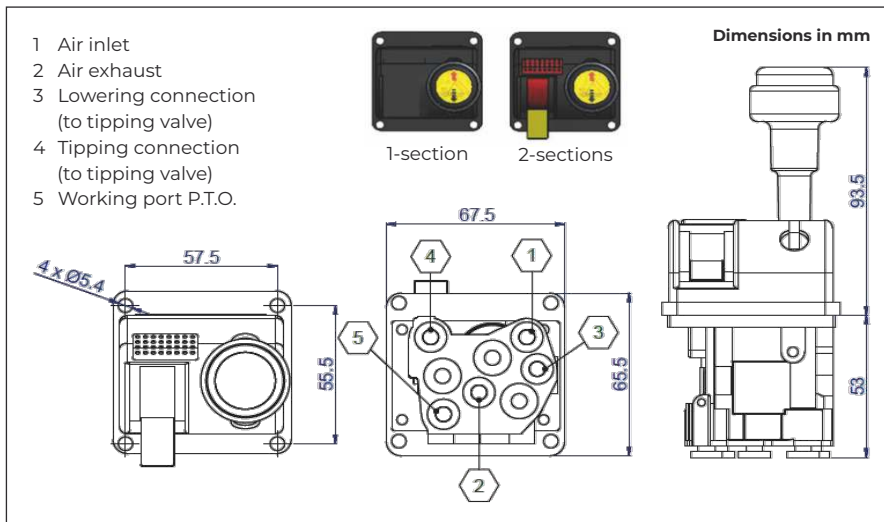
- 14750460 as an extra 4/3 section to operate non-proportional valves with 3 positions.
- 14750455 as an extra 3/2 section to operate non-proportional valves with 2 positions.

Code system for tip controls

Tip control	2	TS/LF	PNL	1	= one section		
Tip control			Operation	Description tip control	2	= two sections	TS/LS = Tip spring return, lower spring
	2		Sections		MS	= Multi sections	TF/LF = Tip fixed, lower fixed
		TS/LF	First section				TS/LF = Tip spring return, lower fixed
			PNL	Second section etc.			DA = Double action or 4/3 section
							PN = P.T.O. or 3/2 section with manual disengagement
							PNL = P.T.O. or 3/2 section with manual disengagement + Lamp
							PA = P.T.O. or 3/2 section with automatic disengagement
							PAL = P.T.O. or 3/2 section with automatic disengagement + Lamp

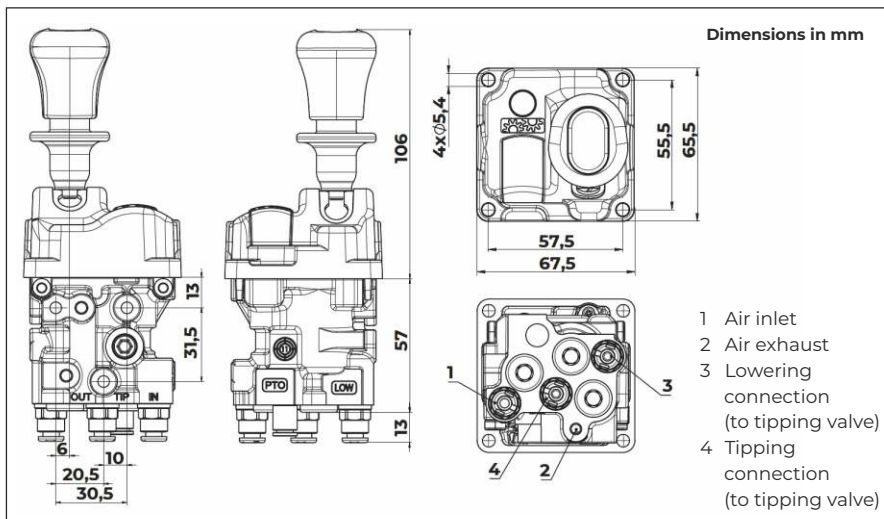
PROPORTIONAL TIP CONTROL 1- AND 2-SECTIONS (ALUMINIUM HOUSING)

Part no.	Description	Section(s)	Max. pressure (bar)	Min. pressure (bar)	Voltage lamp (V)	Hose connections	Tipping	PTO disengage
14750667H	TIP CONTROL-AIR-TS/LF	1	12	5	24	6 mm	Spring	-
14750665H	TIP CONTROL-AIR-TF/LF	1	12	5	24	6 mm	Fixed	-
14750646H	TIP-PTO CONTROL-AIR-TS/LF-PNL	2	12	5	24	6 mm	Spring	Manual
14750652H	TIP-PTO CONTROL-AIR-TS/LF-PAL	2	12	5	24	6 mm	Spring	Automatic
14750644H	TIP-PTO CONTROL-AIR-TF/LF-PNL	2	12	5	24	6 mm	Fixed	Manual
14750650H	TIP-PTO CONTROL-AIR-TF/LF-PAL	2	12	5	24	6 mm	Fixed	Automatic



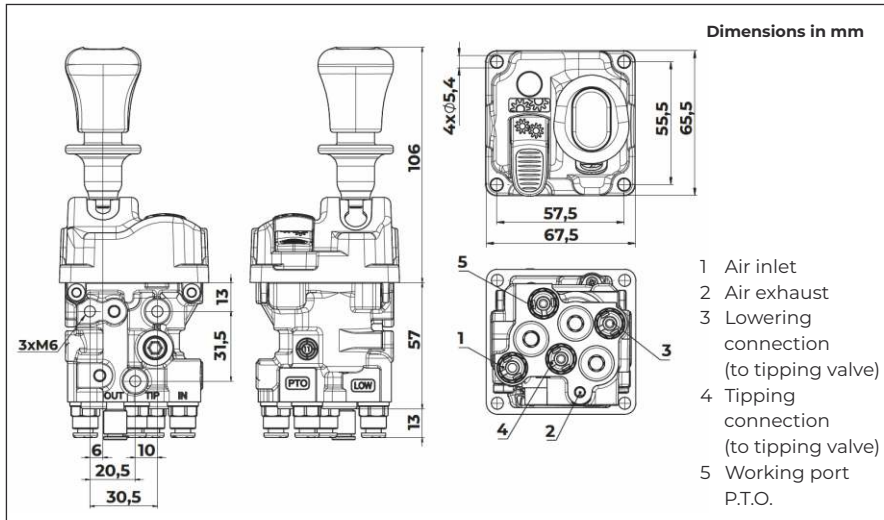
PROPORTIONAL TIP CONTROL 1-SECTION (ALUMINIUM HOUSING)

Part no.	Description	Section	Max. pressure (bar)	Min. pressure (bar)	Hose connection	Tipping	PTO Disengage
02119002	TIP CONTROL PNEUMATIC-1-TS/LF	1	12	5	6 mm	Spring	-
02119012	TIP CONTROL PNEUMATIC-1-TS/LS	1	12	5	6 mm	Spring	-
02119022	TIP CONTROL PNEUMATIC-1-TF/LF	1	12	5	6 mm	Fixed	-



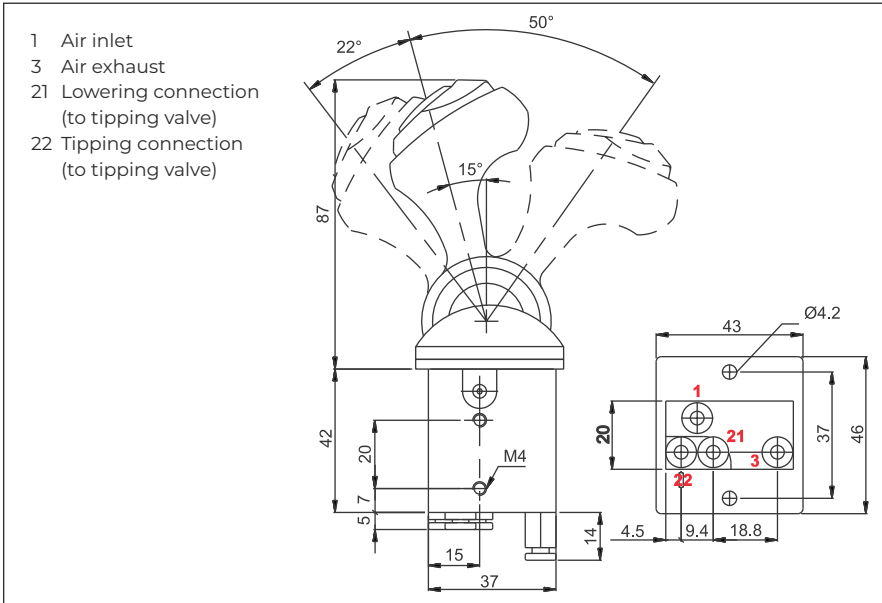
PROPORTIONAL TIP CONTROL 2-SECTIONS (ALUMINIUM HOUSING)

Part no.	Description	Sections	Max. pressure (bar)	Min. pressure (bar)	Voltage lamp (V)	Hose connection	Tipping	PTO Disengage
02119010	TIP-PTO CONTROL PNEUMATIC-2-TS/LF-PNL	2	12	5	24	6 mm	Spring	Manual
02119014	TIP-PTO CONTROL PNEUMATIC-2-TS/LS-PNL	2	12	5	24	6 mm	Spring	Manual
02119031	TIP-PTO CONTROL PNEUMATIC-2-TF/LF-PNL	2	12	5	24	6 mm	Fixed	Manual
02119001	TIP-PTO CONTROL PNEUMATIC-2-TS/LF-PAL	2	12	5	24	6 mm	Spring	Automatic
02119015	TIP-PTO CONTROL PNEUMATIC-2-TS/LS-PAL	2	12	5	24	6 mm	Spring	Automatic
02119021	TIP-PTO CONTROL PNEUMATIC-2-TF/LF-PAL	2	12	5	24	6 mm	Fixed	Automatic



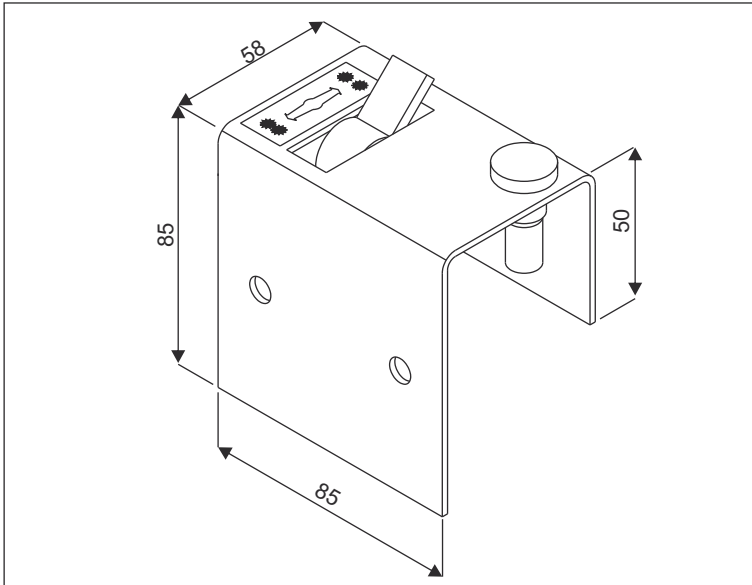
PROPORTIONAL TIP CONTROL 1-SECTION (DASHBOARD TYPE)

Part no.	Description	Section(s)	Max. pressure (bar)	Min. pressure (bar)	Air hose connections	Mounting holes
14750668H	TIP CONTROL-AIR-TS/LF	1	10	5	4 x 2.5	M4



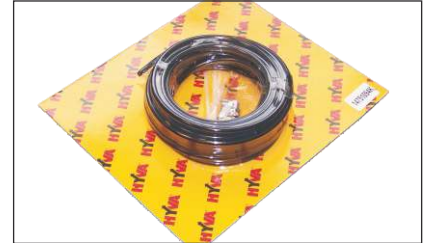
TIP CONTROL 1-SECTION (P.T.O. CONTROL)

Part no.	Description	Max. pressure (bar)	Min. pressure (bar)	Air hose connections
14751082H	PTO CONTROL AIR - PNL	12	5	M12



AIR TUBE KIT 1-SECTION CONTROL FOR P.T.O.

Part no.	Description	Qty.
14751094K	AIR KIT FOR P.T.O. CONSISTING OF:	
09225005	T-PIECE AIR TUBE 6MM PUSH-IN	1
1487500715	AIR TUBE 4X6MM (15M)	1
14875500	TIE-WRAP BLACK FOR 6MM AIR TUBE	4



AIR TUBE KIT 2-SECTION CONTROL FOR P.T.O. & VALVE

Part no.	Description	Qty.
14750119K	AIR TUBE KIT FOR P.T.O./VALVE CONSISTING OF:	
09225005	T-PIECE AIR TUBE 6MM PUSH-IN	1
1487500725	AIR TUBE 4X6MM (25M)	1
14875500	TIE-WRAP BLACK FOR 6MM AIR TUBE	8

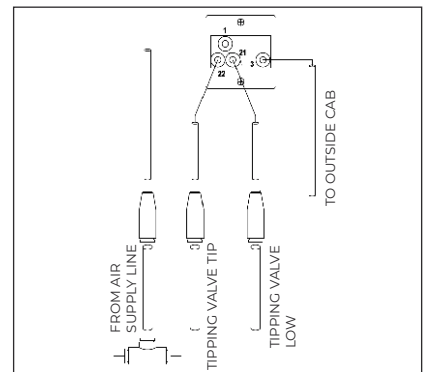


Part no.	Description	Qty.
14750120K	AIR TUBE KIT FOR P.T.O./VALVE CONSISTING OF:	
09225005	T-PIECE AIR TUBE 6MM PUSH-IN	1
14875030	AIR TUBE 3 LINES / JACKET 4X6MM (8M)	1
14875500	TIE-WRAP BLACK FOR 6MM AIR TUBE	5

Part no.	Description	Qty.
14750121K	AIR TUBE KIT VALVE 2 IN 1 CONSISTING OF:	
09225005	T-PIECE AIR TUBE 6MM PUSH-IN	1
14875031	AIR TUBE 2 LINES / JACKET 4X6MM (8M)	1
14875500	TIE-WRAP BLACK FOR 6MM AIR TUBE	5

AIR TUBE KIT 1-SECTION CONTROL (DASHBOARD TYPE)

Part no.	Description	Qty.
14750125K	AIR TUBE KIT 4 TO 6MM FOR 14750668H CONSISTING OF:	
09235619Z	AIR TUBE 4X2.5MM (5M)	1
1487500725	AIR TUBE 4X6MM (25M)	1
09225046	CONNECTORS 4 TO 6MM AIR TUBE	3
14875500	TIE-WRAP BLACK FOR 6MM AIR TUBE	8
09225005	T-PIECE AIR TUBE 6MM PUSH-IN	1



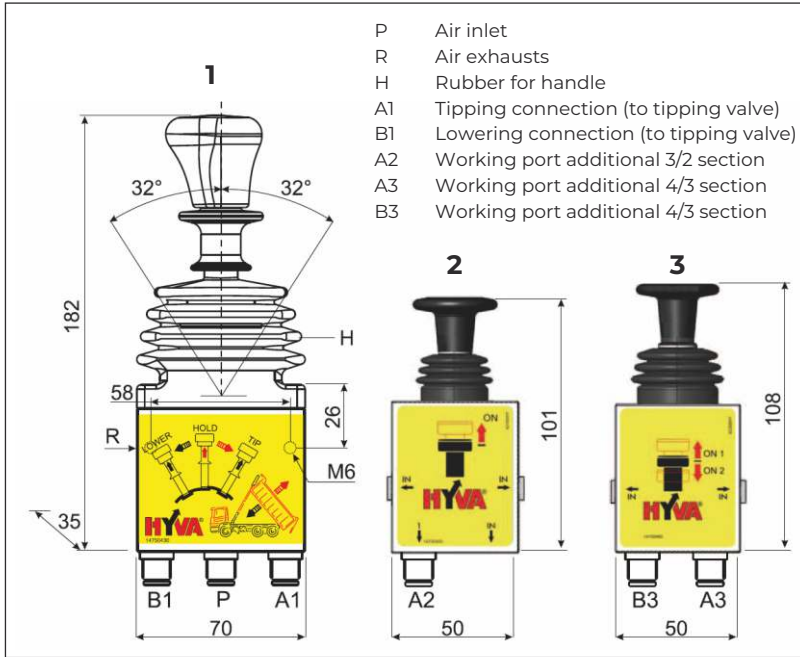
SUPPORT FOR PROPORTIONAL TIP CONTROL

Part no.	Description	Weight (kg)
09205002	SUPPORT TIP CONTROL 147506XX-SERIES	0.44
09232002	SUPPORT TIP CONTROL 147506XX-SERIES STANDARD	0.18
02119000	BRACKET KIT FOR TIP CONTROL 147506XX-SERIES AND 021190XX-SERIES	0.15
02119105	SUPPORT BRACKET TIP CONTROL 25MM HANDLE	0.25



PROPORTIONAL TIP CONTROL MULTI-SECTION WITH OPTIONAL ADDITIONAL SECTIONS

Part no.	Description	Pos.	Max. pressure (bar)	Min. pressure (bar)	Ports			
					A (mm)	B (mm)	P (mm)	R (mm)
14750430	TIP CONTROL FLAT MODEL MS-AIR-TF/LF	1	12	5	6	6	6	6
14750440	TIP CONTROL FLAT MODEL MS-AIR-TS/LF	1	12	5	6	6	6	6
14750455	TIP CONTROL FLAT MODEL-AIR-3/2 SECTION	2	12	5	6	-	-	-
14750460	TIP CONTROL FLAT MODEL-AIR-4/3 SECTION	3	12	5	6	6	-	-



MOUNTING KIT FOR PROPORTIONAL MULTI-SECTION TIP CONTROLS*

Part no.	Description
14750511	MOUNTING KIT FOR ONE EXTRA SECTION
14750512	MOUNTING KIT FOR TWO EXTRA SECTIONS
14750513	MOUNTING KIT FOR THREE EXTRA SECTIONS

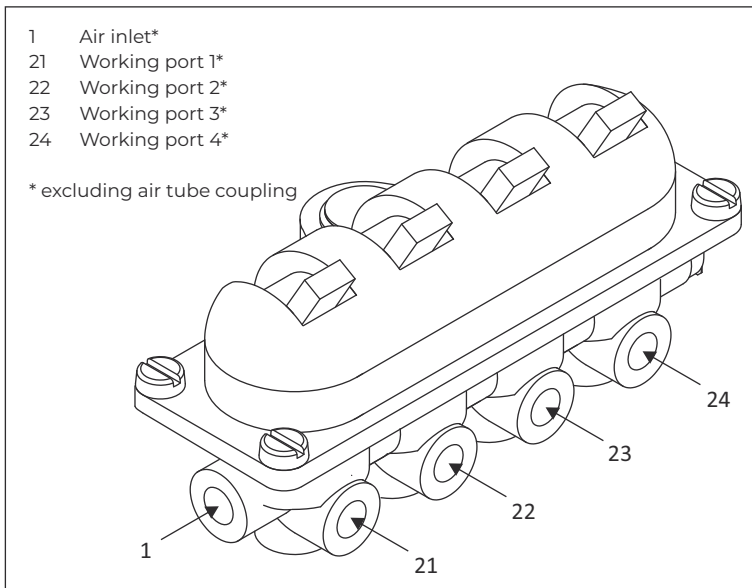
* Not interchangeable with H-series

The components should be ordered and will be supplied as loose parts and should be assembled during installation. To combine the valves you need to order mounting kits for the extra sections. Mounting kit numbers are 1475051x, where x is the number of sections you want to add (so 14750513 for three extra sections). The pneumatic hose sizes must have 6 mm OD, because connectors are integrated in the tip control.



TIP CONTROL MULTI-SECTION FLANGE MOUNTED

Part no.	Description	Max. pressure (bar)	Min. pressure (bar)	Ports				
				1	21	22	23	24
14750210H	TIP CONTROL-1-TF/LF-PNL	12	5	M12X1.25	M12X1.25	-	-	-
14750220H	TIP CONTROL-1-TF/LF-PN	12	5	M12x1.25	M12X1.25	-	-	-
14750230H	TIP CONTROL-2-TF/LF-PNL	12	5	M12x1.25	M12X1.25	M12X1.25	-	-
14750240H	TIP CONTROL-2-TF/LF-PN	12	5	M12X1.25	M12X1.25	M12X1.25	-	-
14750250H	TIP CONTROL-3-TF/LF-PNL	12	5	M12X1.25	M12X1.25	M12X1.25	M12X1.25	-
14750270H	TIP CONTROL-4-TF/LF-PNL	12	5	M12X1.25	M12X1.25	M12X1.25	M12X1.25	M12X1.25
14750285H	TIP CONTROL-2-TS/LS-PNL	12	5	M12X1.25	M12X1.25	M12X1.25	-	-

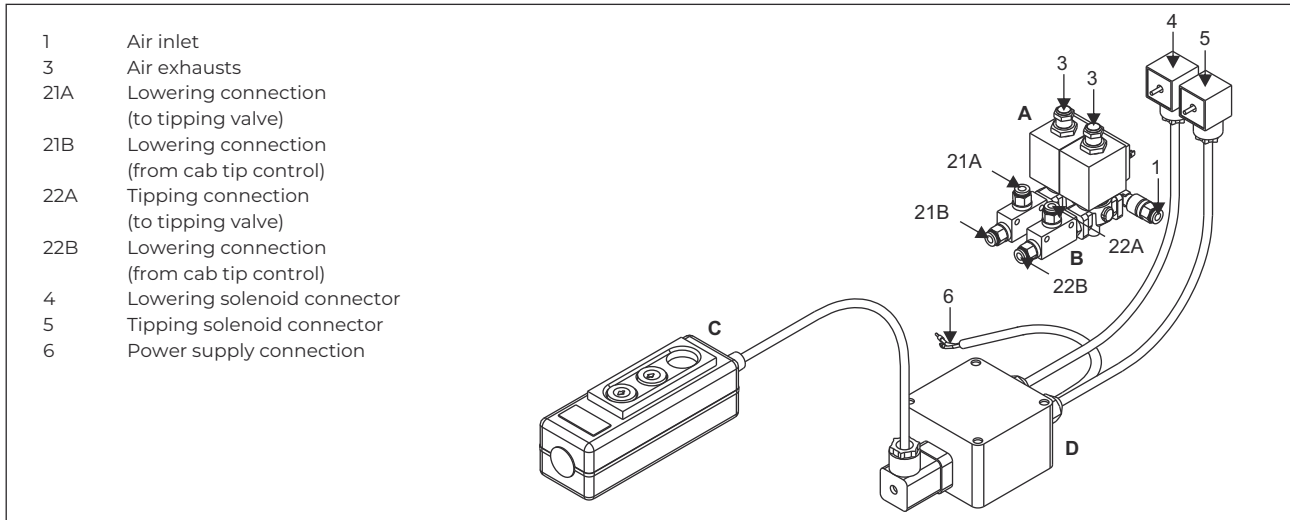


The range of flange mounted air controls is designed to feed pneumatically controlled equipment economically. Versions range from 1 to 4 bi-stable sections, are easy to mount, have one single air inlet and an exhaust directly into the atmosphere. PNL versions are equipped with a warning light.

Each section (3/2) passes air pressure to the connected equipment. When placed back in rest (bottom) position the exhaust is opened. Equipment fitted with a spring return (for instance PTO or most directional control valves) can be operated using one switch. For a typical 3/3 tipping valve 2 switches are required which can be extended for every extra function required such as PTO or slow-lowering feature.

ELECTRO PNEUMATIC CONTROL 2-SECTIONS WITH PNEUMATIC CABIN CONNECTION

Part no.	Description	Max. pressure (bar)	Min. pressure (bar)	Ports				Voltage (V)
				(1)	(3)	(21)	(22)	
14752201	ELECTRO PNEUMATIC DUAL CONTROL - 2 - TS/LF	12	5	G $\frac{1}{8}$ "	G $\frac{1}{8}$ "	G $\frac{1}{8}$ "	G $\frac{1}{8}$ "	24



This control is generally used to control the tipping and lowering connection of the tipping valve.

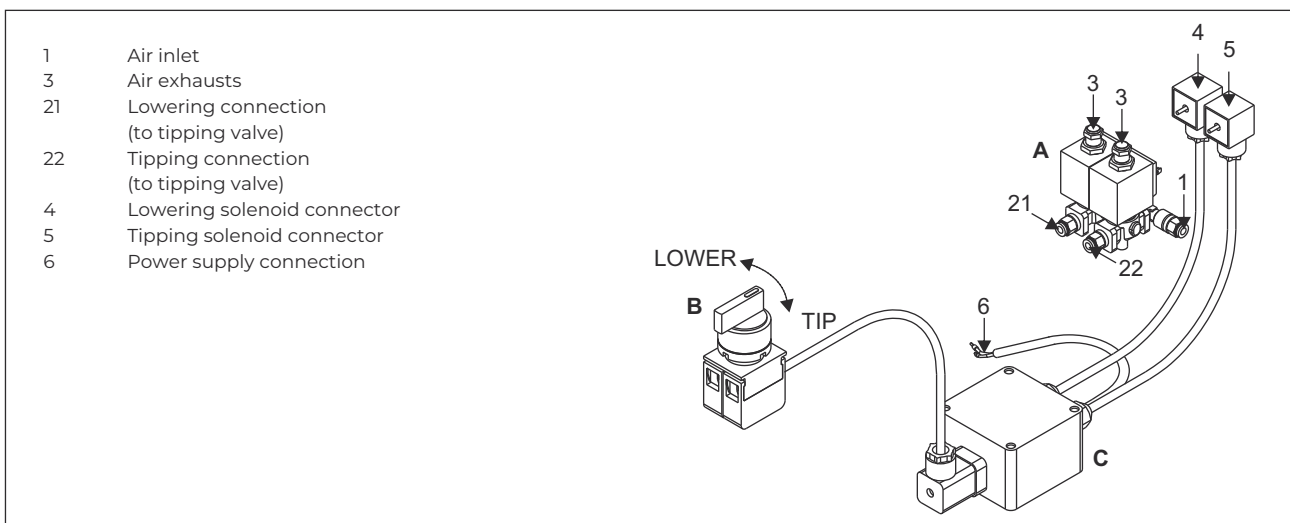
It is also possible to use the working ports 21A and 22A to control for any other tip controlled parts like P.T.O. or rear flap closing.

SPARE PARTS

Pos.	Part no.	Description	Qty.
A	14752221	Electro pneumatic valves (complete)	1
B	14752222	Shuttle valve set	1
C	14752225	Remote control	1
D	14752226	Connecting box	1

ELECTRO PNEUMATIC CONTROL 2-SECTIONS

Part no.	Description	Max. pressure (bar)	Min. pressure (bar)	Ports				Voltage (V)
				(1)	(3)	(21)	(22)	
14752200	ELECTRO PNEUMATIC CONTROL - 2 - TS/LF	12	5	G $\frac{1}{8}$ "	G $\frac{1}{8}$ "	G $\frac{1}{8}$ "	G $\frac{1}{8}$ "	24



This control is generally used to control the tipping and lowering connection of the tipping valve.

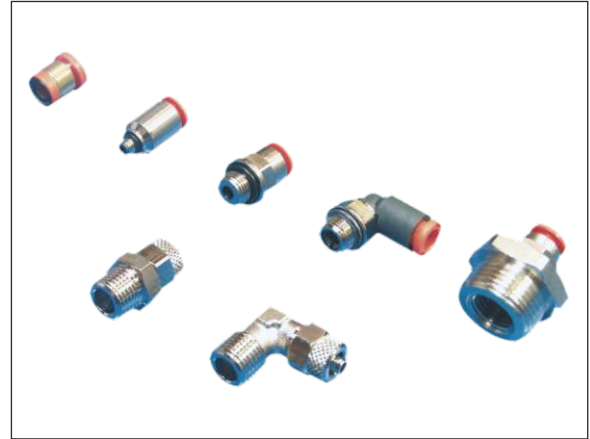
It is also possible to use the working ports 21 and 22 to control for any other tip controlled parts like P.T.O. or rear flap closing.

SPARE PARTS

Pos.	Part no.	Description	Qty.
A	14752221	Electro pneumatic valves (complete)	1
B	14754222	Electric tipping switch	1
C	14752226	Connecting box	1

AIR COUPLINGS

Part no.	Description
14810515	AIR COUPLING - 00 - M5 - 6MM - PUSH-IN
14810517	AIR COUPLING - 00 - 1/8" BSPOT - 6MM - PUSH-IN
14810566	AIR COUPLING - 90 - 1/8" BSPOT - 6MM - PUSH-IN
09225041	AIR COUPLING - 00 - 1/4" BSPOT - 6MM - PUSH-IN
14811005	AIR COUPLING - 00 - M22 - 6MM - PUSH-IN
01915290H	AIR COUPLING - 00 - M12 - 6MM
01915307	AIR COUPLING - 90 - M12 - 6MM



AIR TUBE CONNECTORS

Part no.	Description
09225046	AIR COUPLING - 00 - 4MM - 6MM
09225001	AIR COUPLING - 00 - 6MM - 6MM
09225002	AIR COUPLING - 00 - 8MM - 8MM
09225003	AIR COUPLING - 00 - 10MM - 10MM
09225004	AIR COUPLING - 00 - 12MM - 12MM



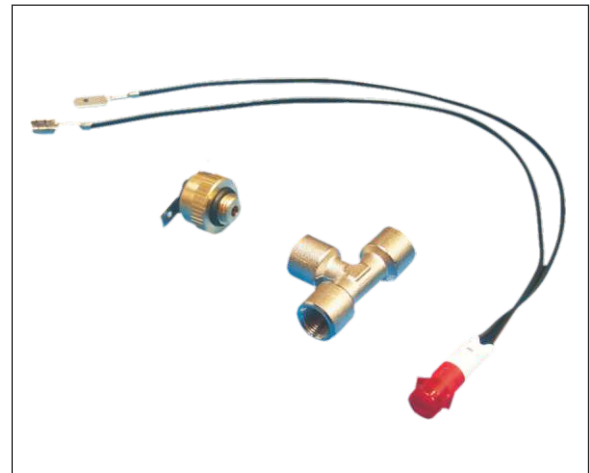
T-PIECE FOR AIR TUBE

Part no.	Description
09225005	T-PIECE FOR AIR TUBE 6MM - PUSH-IN



PNEUMATIC PRESSURE INDICATOR

Part no.	Description
09225010	T-PIECE PNEUMATIC 3X 1/8" BSPIT
01964001H	PRESSURE SWITCH PNEUMATIC 1/8" BSPOT
01964000H	CONTROL LIGHT



AIR TUBE

Part no.	Description
1487500715	AIR TUBE - L=15M - 4X6MM
1487500720	AIR TUBE - L=20M - 4X6MM
1487500725	AIR TUBE - L=25M - 4X6MM
1487500730	AIR TUBE - L=30M - 4X6MM
1487500735	AIR TUBE - L=35M - 4X6MM



AIR TUBE MULTI-LINES

Part no.	Description
01967140H	AIR TUBE 3 LINES / 1 JACKET L=100m 6X4mm
01967143H	AIR TUBE 2 LINES / 1 JACKET L=100m 6X4mm
14875030	AIR TUBE 3 LINES / 1 JACKET L=8M - 4X6MM
14875031	AIR TUBE 2 LINES / 1 JACKET L=8M - 4X6MM



110 countries
+3,500 employees
20,000 customers
+30 subsidiaries
12 production facilities



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or follow us on:



Hyva Holding B.V.
Antonie van Leeuwenhoekweg 37
2408 AK Alphen aan den Rijn
The Netherlands
Telephone: +31 (0)172 - 42 35 55
Telefax: +31 (0)172 - 42 08 80
info@hyva.com
www.hyva.com



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