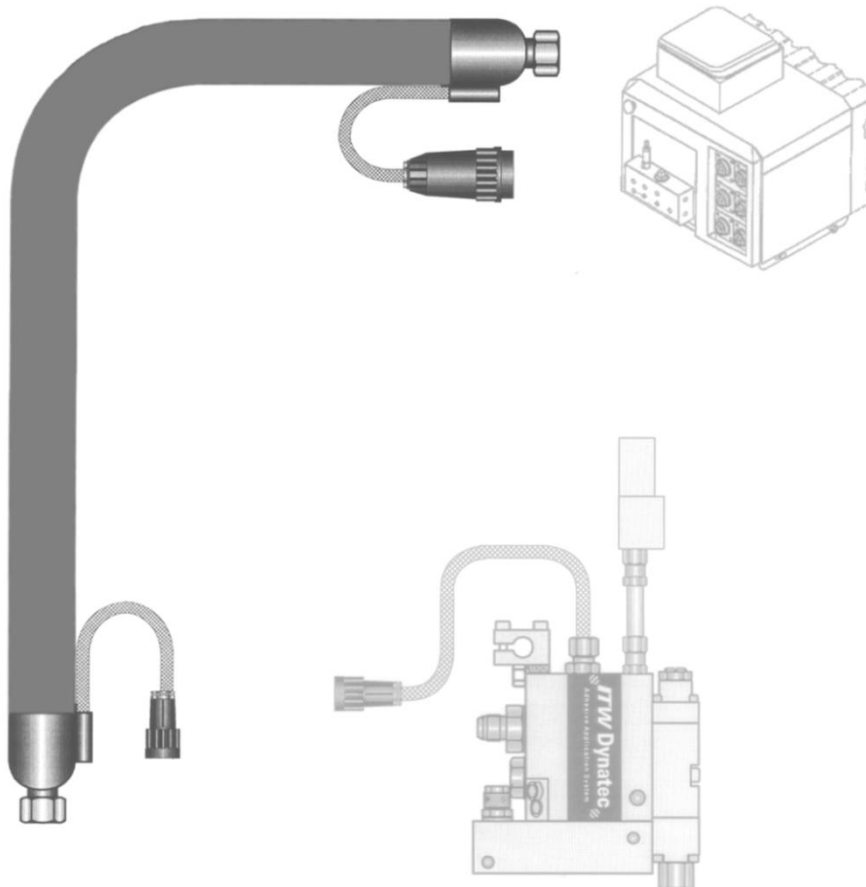




Adhesive Application Solutions • ISO 9001 certified

Dynaflex

Hot melt hoses



IMPORTANT! - READ ALL INSTRUCTIONS BEFORE OPERATING THIS EQUIPMENT

It is the customer's responsibility to have all operators and service personnel read and understand this information.
Contact your ITW Dynatec customer service representative for additional copies.

NOTICE! Please be sure to include the serial number of your application system each time you order replacement parts and/or supplies. This will enable us to send you the correct items that you need.

ITW Dynatec Service: +49-(0)2104-915134

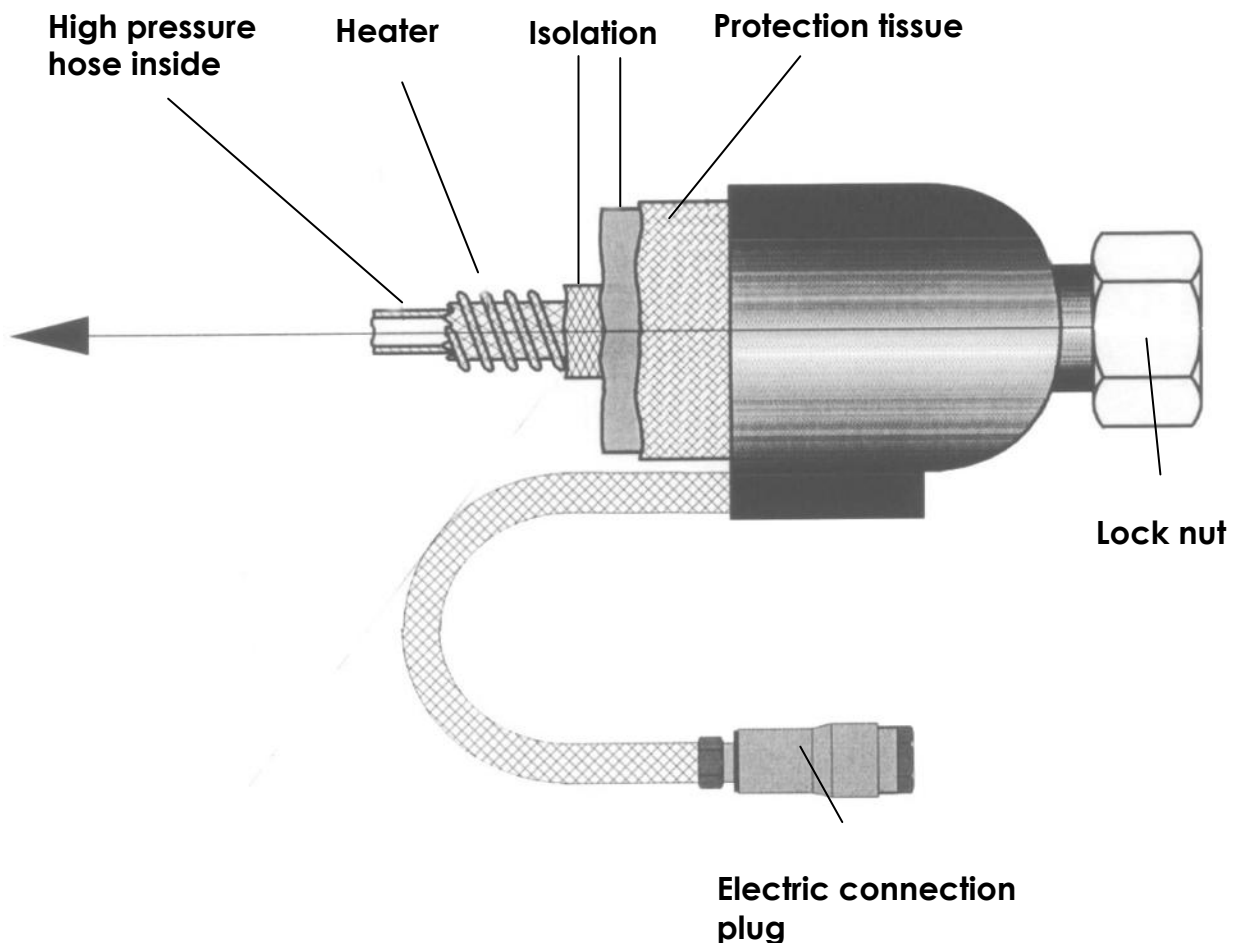
Inhalt

Description	3
Specifications	4
Installation Instructions	5
To Disconnect Hose from ASU or Applicator	5
Hose installation diagram	6
Hose installation tips	7
Checking Heating element and temperature sensor	9
Accessories.....	11
Dynaflex hoses.....	12
Challenger hose Sensor Ni 120.....	13

Description

Adhesive supply hoses are electrically-heated, flexible conduits designed for the transfer of hot melt material from an adhesive supply unit (ASU) to an applicator (head or handgun). Hoses are heated by resistance heaters which are wrapped around the hose core and covered with a high temperature insulation. Hose temperature is regulated by the ASU's controller. A sensor located in the hose provides temperature information to the controller.

DYNACONTROL hoses are used to deliver hot-melt material from a Dynamelt or Dynamini ASU to an ITW Dynatec applicator (either a dispensing head or a hand-held applicator). These hoses provide through wiring for power, sensor and chassis ground in the applicator. All Dynacontrol hoses feature PT-100 RTD sensors.



Specifications

Dynaflex hose NW8			
Order number	length (m)	length (ft)	Power(W)
102137	0,6	2	86
101083	1,2	4	112
101084	1,8	6	130
101085	2,4	8	210
101086	3,0	10	250
101087	3,6	12	400
101088	4,8	16	530
102138	6,0	20	560
101089	7,2	24	672

General technical data

- minimum bending radius 200 mm
- burst pressure 180 bar
- operating temperature 200 °C
- heating time approximately 17 minutes
- outside diameter approximately 31,75 mm
- nominal diameter 8 mm
- color orange

Installation Instructions

Before installing any hose to an ASU, make sure the ASU's power switch is OFF.



DANGER HIGH VOLTAGE

ITW Dynatec systems use electrical power that can be life threatening. Disconnect and lock out input power to the application system before connecting, disconnecting or troubleshooting any hose(s).

Dynaflex hoses connect to the ASU with both an adhesive port connection on the filter outlet manifold and a 15-pin electrical connector. The opposite end of the hose connects to the applicator (head or handgun) with both an adhesive inlet connection and a 9-pin electrical connector.

Refer to the Hose Installation Diagram on page 6 as a general guide. Observe the following cautions when connecting and routing adhesive hoses.



CAUTION: When tightening hose swivel fittings, hold the hose and cuff to prevent the hose from rotating.

CAUTION: If the hose is cold and contains adhesive, it may be damaged if bent. To avoid this, turn on power to the hoses and wait until the ASU's readout indicates that they are at operating temperature before routing them around surrounding machinery.

Always comply with the minimum bend radii listed on page 8 of this manual.
CAUTION: Do not allow hose to be covered by machinery or by any type of solid conduit, pipe, tubing, etc.

To Disconnect Hose from ASU or Applicator

Never attempt to disconnect a hose from its adhesive port without first assuring that all system pressure has been relieved.

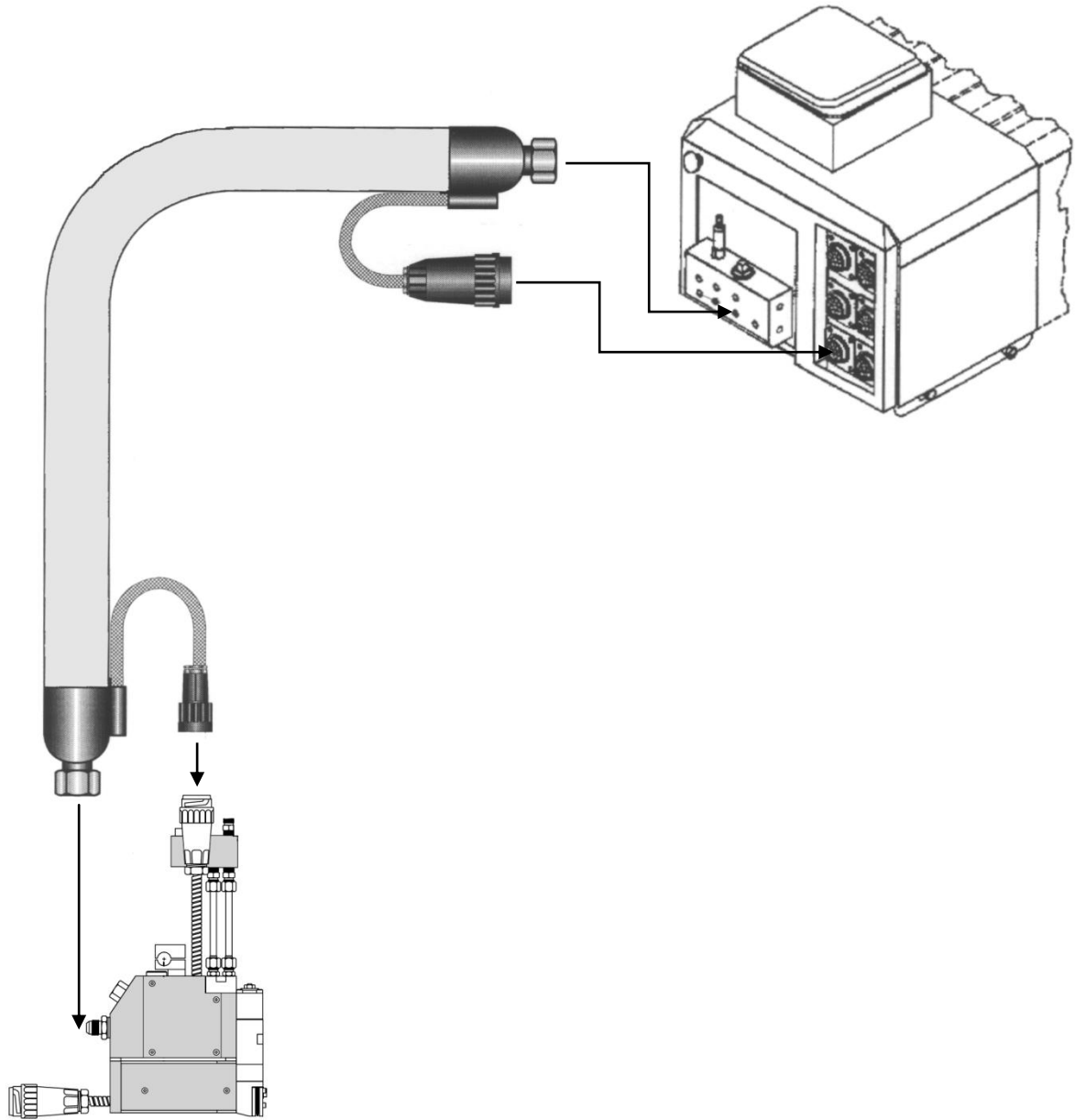


WARNING: HIGH PRESSURE, HOT ADHESIVE

When disconnecting a hose or hose cap, hot adhesive can escape from both the manifold and from the end of the hose under high pressure. Wear a face shield, gloves and protective clothing. Stand clear until all pressure is relieved.

Before disconnecting a hose, turn the ASU's pump/motor OFF. Then activate the applicator to relieve adhesive pressure in the system.

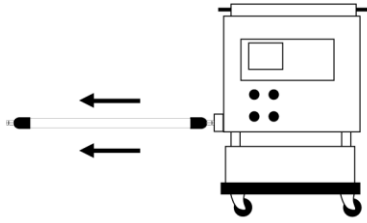
Hose installation diagram



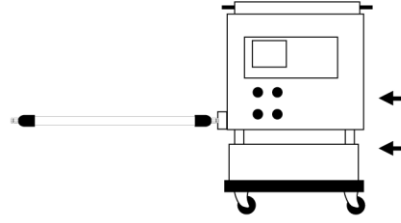
Hose installation tips

Wrong

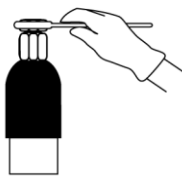
Right



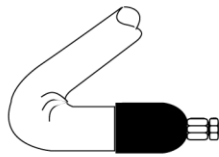
DO NOT PULL HOSE TO MOVE UNIT



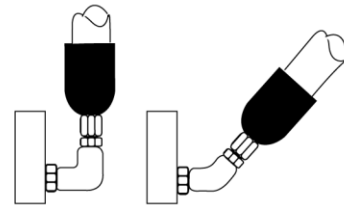
PUSH DON'T PULL



USE TWO WRENCHES TO ADJUST FITTINGS



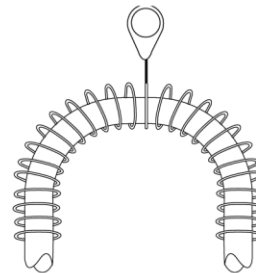
DON'T BEND OR CRIMP HOSE



USE 45 or 90 HOSE FITTINGS

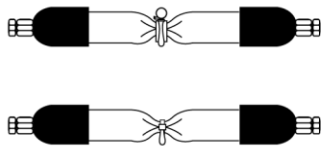


DO NOT HANG HOSE WITHOUT SUPPORT

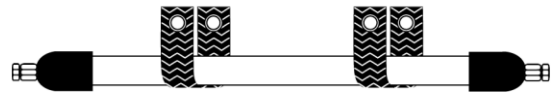


Wrong

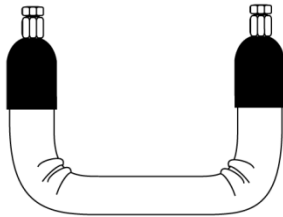
Right



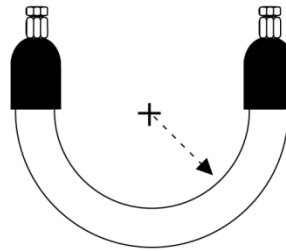
DO NOT CLAMP, SQUEEZE OR TIE HOSE



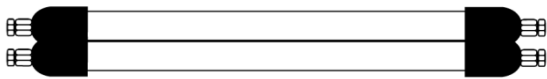
USE HOSE SUPPORT



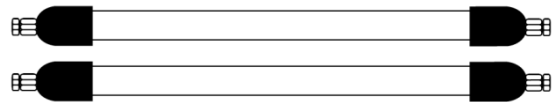
DO NOT FLEX GLUE FILLED HOSE WHEN COLD!



ALLOW GLUE FILLED HOSES TO HEAT UP BEFORE FLEXING!



DO NOT SQUEEZE OR PRESS HOSES TOGETHER



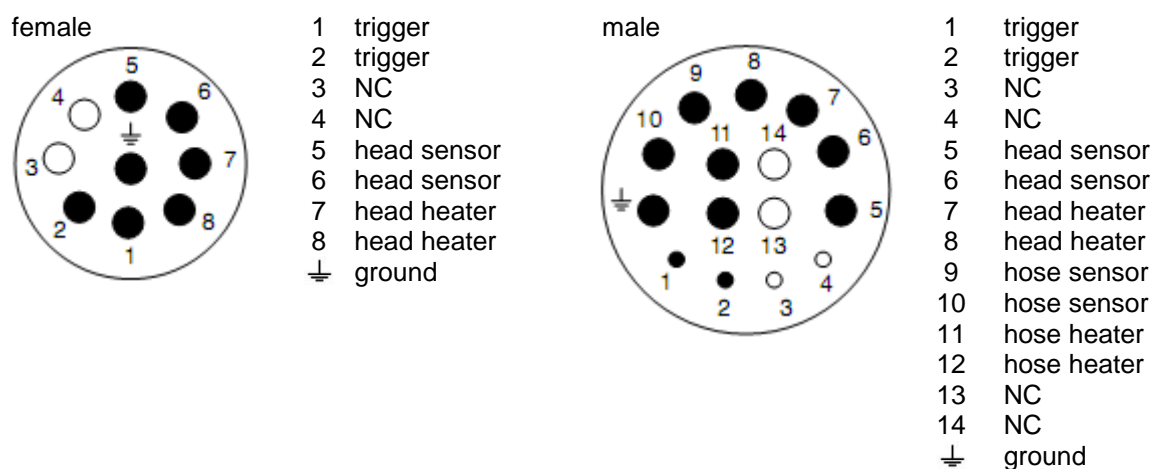
ALLOW ADEQUATE SPACE BETWEEN HOSES

Checking Heating element and temperature sensor

1. turn of the main power and pressure
2. disconnect the hose from the tank
3. checking the resistance of the heater



For example: The temperature sensor is a 100 Ohm platinum RTD. The resistance is about 110 – 180 Ohm it depends of the temperature of the hose and the length of the hose.

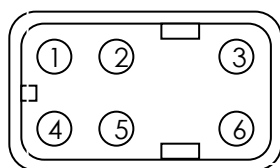


The connectors shown from the front.

Temperature Sensor Resistance Pt100 RTD IEC 751 / DIN EN 60751

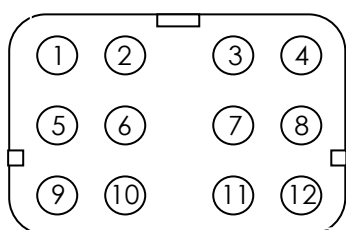
°C	Widerstand in Ω									
	0	1	2	3	4	5	6	7	8	9
20	107,79	108,18	108,57	108,96	109,35	109,73	110,12	110,51	110,90	111,28
30	111,67	112,06	112,45	112,83	113,22	113,61	113,99	114,38	114,77	115,15
40	115,54	115,93	116,31	116,70	117,08	117,47	117,85	118,24	118,62	119,01
50	119,40	119,78	120,16	120,55	120,93	121,32	121,70	122,09	122,47	122,86
60	123,24	123,62	124,01	124,39	124,77	125,16	125,54	125,92	126,31	126,69
70	127,07	127,45	127,84	128,22	128,60	128,98	129,37	129,75	130,13	130,51
80	130,89	131,27	131,66	132,04	132,42	132,80	133,18	133,56	133,94	134,32
90	134,70	135,08	135,46	135,84	136,22	136,60	136,98	137,36	137,74	138,12
100	138,50	138,88	139,26	139,64	140,02	140,39	140,77	141,15	141,53	141,91
110	142,29	142,66	143,04	143,42	143,80	144,17	144,55	144,93	145,31	145,68
120	146,06	146,44	146,81	147,19	147,57	147,94	148,32	148,70	149,07	149,45
130	149,82	150,20	150,57	150,95	151,33	151,70	152,08	152,45	152,83	153,20
140	153,58	153,95	154,32	154,70	155,07	155,45	155,82	156,19	156,57	156,94
150	157,31	157,69	158,06	158,43	158,81	159,18	159,55	159,93	160,30	160,67
160	161,04	161,42	161,79	162,16	162,53	162,90	163,27	163,65	164,02	164,39
170	164,76	165,13	165,50	165,87	166,24	166,61	166,98	167,35	167,72	168,09
180	168,46	168,83	169,20	169,57	169,94	170,31	170,68	171,05	171,42	171,79
190	172,16	172,53	172,90	173,26	173,63	174,00	174,37	174,74	175,10	175,47
200	175,84	176,21	176,57	176,94	177,31	177,68	178,04	178,41	178,78	179,14
210	179,51	179,88	180,24	180,61	180,97	181,34	181,71	182,07	182,44	182,80

female



- 1 ground
- 2 Ni 120, head sensor
- 3 head heater
- 4 Ni 120, head sensor
- 5 NC
- 6 head heater

male



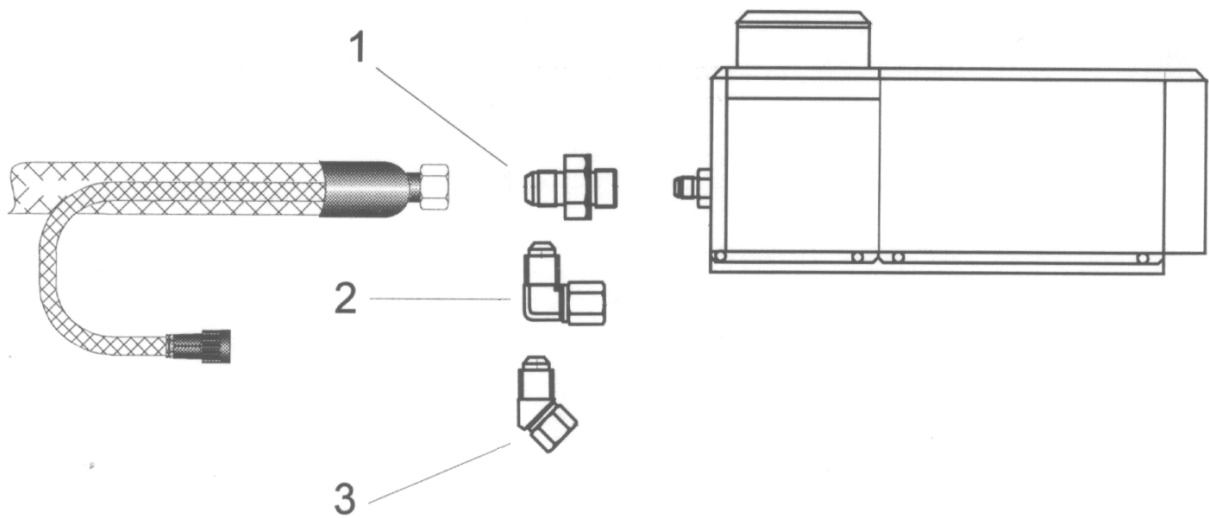
- 1 head heater
- 2 head heater
- 3 Ni 120, head sensor
- 4 hose heater
- 5 NC
- 6 hose heater
- 7 ground
- 8 Ni 120, hose sensor
- 9 NC
- 10 NC
- 11 Ni 120, hose sensor
- 12 Ni 120, head sensor

The connectors shown from the front.

Temperature Sensor Resistance for Ni120 RTD

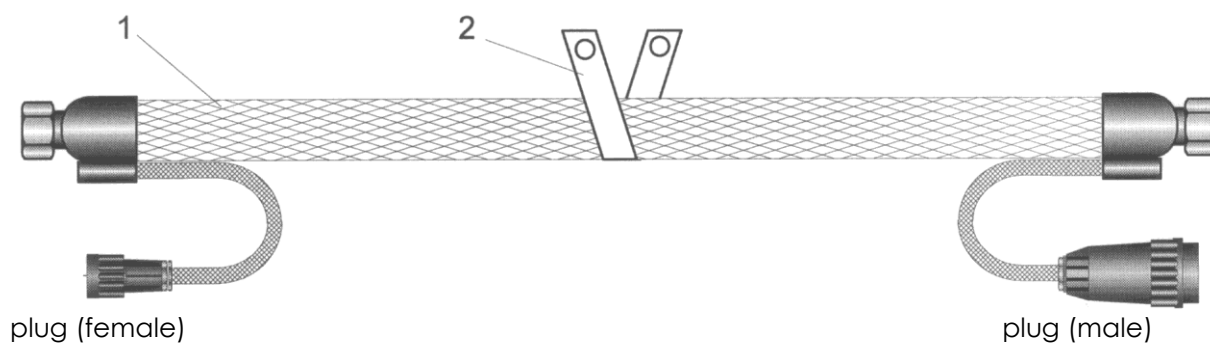
°C	0	1	2	3	4	5	6	7	8	9	10
0	120,0	120,7	121,4	122,1	122,9	123,6	124,28	125,0	125,7	126,4	127,2
10	127,2	127,9	128,6	129,4	130,1	130,8	131,6	132,3	133,0	133,8	134,5
20	134,5	135,3	136,0	136,8	137,5	138,3	139,0	139,8	140,5	141,3	142,1
30	142,1	142,8	143,6	144,4	145,1	145,9	146,7	147,5	148,2	149,0	149,8
40	149,8	150,6	151,4	152,2	153,0	153,8	154,5	155,3	156,1	156,9	157,8
50	157,8	158,6	159,4	160,2	161,0	161,8	162,6	163,4	164,3	165,1	165,9
60	165,9	166,7	167,6	168,4	169,2	170,1	170,9	171,7	172,6	173,4	174,3
70	174,3	175,1	176,0	176,8	177,7	178,5	179,4	180,3	181,1	182,0	182,9
80	182,9	183,7	184,6	185,5	186,3	187,2	188,1	189,0	189,9	190,8	191,6
90	191,6	192,5	193,4	194,3	195,2	196,1	197,0	197,9	198,8	199,7	200,6
100	200,6	201,6	202,5	203,4	204,3	205,2	206,1	207,1	208,0	208,9	209,9
110	209,9	210,8	211,7	212,7	213,6	214,5	215,5	216,4	217,4	218,3	219,3
120	219,3	220,3	221,2	222,2	223,1	224,1	225,1	226,0	227,0	228,0	229,0
130	229,0	229,9	230,9	231,9	232,9	233,9	234,9	235,9	236,8	237,8	238,8
140	238,8	239,8	240,8	241,9	242,9	243,9	244,9	245,9	246,9	247,9	249,0
150	249,0	250,0	251,0	252,0	253,1	254,1	255,1	256,2	257,2	258,3	259,3
160	259,3	260,3	261,4	262,5	263,5	264,6	265,6	266,7	267,8	268,8	269,9
170	269,9	271,0	272,1	273,1	274,2	275,3	276,4	277,5	278,6	279,7	280,8
180	280,8	281,9	283,0	284,1	285,2	286,3	287,4	288,6	289,7	290,8	292,0
190	292,0	293,1	294,2	295,4	296,5	297,7	298,8	300,0	301,1	302,3	303,5
200	303,5	304,6	305,8	307,0	308,2	309,3	310,5	311,7	312,9	314,1	315,3
210	315,3	316,5	317,7	318,9	320,2	321,4	322,6	323,8	325,1	326,3	327,5
220	327,5	328,8	330,0	331,3	332,5	333,8	335,1	336,3	337,6	338,9	340,1
230	340,1	341,4	342,7	344,0	345,3	346,6	347,9	349,2	350,5	351,8	353,1
240	353,1	354,5	355,8	357,1	358,5	359,8	361,1	362,5	363,8	365,2	366,5

Accessories



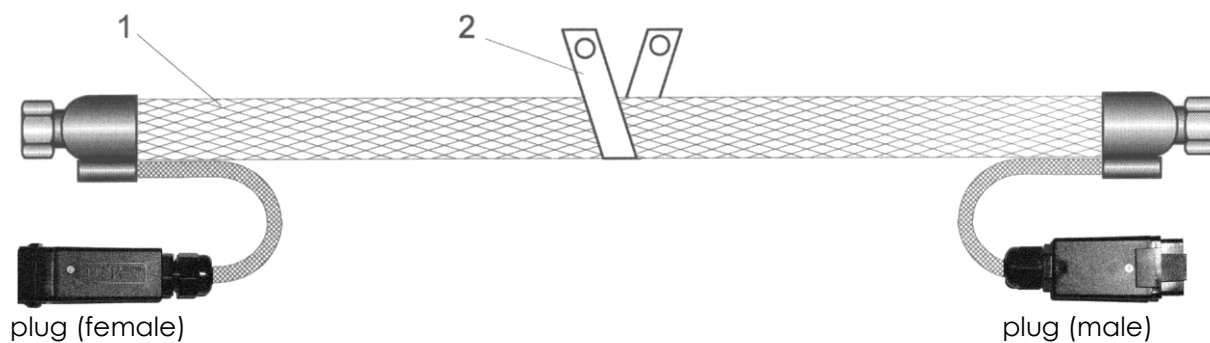
Position	Part	Order number
1	connection socket, straight G1/4 – 9/16-UNFG UNF	07.00600.120
2	elbow union 90°, 9/16G UNF	N07831
3	elbow union 45°, 9/16G UNF	N07830
-	banjo fitting 45°, NW8, adjustable	07.08945.102
-	banjo fitting 90°, NW8, adjustable	07.08990.102

Dynaflex hoses



Position	Order number	Part
1	102137	Dynaflex hose NW8 0,6 m, 86 W
1	101083	Dynaflex hose NW8 1,2 m, 112 W
1	101084	Dynaflex hose NW8 1,8 m, 130 W
1	101085	Dynaflex hose NW8 2,4 m, 210 W
1	101086	Dynaflex hose NW8 3,0 m, 250 W
1	101087	Dynaflex hose NW8 3,6 m, 400 W
1	101088	Dynaflex hose NW8 4,8 m, 530 W
1	102138	Dynaflex hose NW8 6,0 m, 560 W
1	101089	Dynaflex hose NW8 7,2 m, 672 W
2	113342	hose fittings (packaging unit with 5 pieces)

Challenger hose Sensor Ni 120



Position	Order number	Part
1	100120	Challenger hose NW8 1,2 m, 112 W
1	100121	Challenger hose NW8 1,8 m, 168 W
1	100122	Challenger hose NW8 2,4 m, 224 W
1	100123	Challenger hose NW8 3,0 m, 280 W
1	100124	Challenger hose NW8 3,6 m, 336 W
1	100125	Challenger hose NW8 4,8 m, 448 W
1	107842	Challenger hose NW8 6,0 m, 560 W
1	100126	Challenger hose NW8 7,2 m, 672 W
1	107843	Challenger hose NW8 9,2 m, 850 W
2	113342	hose fittings (packaging unit with 5 pieces)