





M8 Sensor Cordsets - Black 80°C PUR - Unshielded

(Lateral flex - up to 10 million cycles)





# Wires	Configuration	0.3 M	0.6 M	1 M	1.5 M	2 M	3 M	5 M	10 M	15 M	20 M	CMAT
M8 3-pos. A-code 	Female Straight / Open End	-	-	-	1669712	1504822	1669725	1669628	1694101	1425245	1405489	1697580/.../...
	Female 90° / Open End	-	-	-	1669738	1504835	1669741	1669631	1694169	-	-	1697603/.../...
	Male Straight / Open End	-	-	1500198	1681664	-	1681677	1681680	1693584	-	-	1697548/.../...
	Male 90° / Open End	-	-	-	1681693	-	1681703	1681716	1694114	-	-	1697551/.../...
	Male Straight / Female Straight	1681907	1681910	1696978	1681923	1500237	1681936	1693319	1693322	-	-	1697632/.../...
	Male Straight / Female 90°	1681949	1681952	1696581	1681965	1501317	1681978	1693270	-	-	-	1697645/.../...
	Male 90° / Female Straight	1682029	1682032	-	1682045	-	1682058	-	-	-	-	1697661/.../...
Male 90° / Female 90°	1682061	1682074	-	1682087	-	1682090	-	-	-	-	1697674/.../...	
M8 4-pos. A-code 	Female Straight / Open End	-	-	-	1681842	-	1681855	1681868	1683484	1578780	1683507	1697771/.../...
	Female 90° / Open End	-	-	-	1681871	-	1681884	1681897	1694172	-	1405487	1697784/.../...
	Male Straight / Open End	-	-	-	1681787	-	1681790	1681800	1694143	-	-	1697755/.../...
	Male 90° / Open End	-	-	-	1681813	-	1681826	1681839	1694156	-	-	1697768/.../...
	Male Straight / Female Straight	1682142	1682155	-	1682168	1420545	1682171	-	-	-	-	1697797/.../...
	Male Straight / Female 90°	1682184	1682197	-	1682207	-	1682210	-	-	-	-	1697807/.../...
	Male 90° / Female Straight	1682223	1682236	-	1682249	-	1682252	-	-	-	-	1697810/.../...
Male 90° / Female 90°	1682265	1682278	-	1682281	-	1682294	-	-	-	-	1697823/.../...	



M8 Sensor Cordsets - Black 80°C PUR - Braided Shield

(Lateral flex - up to 10 million cycles)



# Wires	Configuration	0.3 M	0.6 M	1 M	1.5 M	2 M	3 M	5 M	10 M	15 M	20 M	CMAT
M8 3-pos. A-code 	Female Straight / Open End	-	-	-	1521711	-	1521724	1521737	1521740	-	-	1521753/.../...
	Female 90° / Open End	-	-	-	1521766	-	1521779	1521782	1521795	-	-	1521805/.../...
	Male Straight / Open End	-	-	-	1521614	-	1521527	1521630	1521643	-	-	1521656/.../...
	Male 90° / Open End	-	-	-	1521669	-	1521672	1521685	1521698	-	-	1521708/.../...
	Male Straight / Female Straight	1456310	1456323	-	1455285	-	1455298	-	1455308	1455311	-	1552052/.../...
	Male Straight / Female 90°	-	-	-	-	-	-	-	-	-	-	1552065/.../...
	Male 90° / Female Straight	-	-	-	-	-	-	-	-	-	-	1552078/.../...
Male 90° / Female 90°	-	-	-	-	-	-	-	-	-	-	1552081/.../...	
M8 4-pos. A-code 	Female Straight / Open End	-	-	-	1521915	-	1521928	1521931	1521944	1400362	-	1521957/.../...
	Female 90° / Open End	-	-	-	1521960	-	1521973	1521986	1521999	-	-	1522008/.../...
	Male Straight / Open End	-	-	-	1521818	-	1521821	1521834	1521847	-	-	1521850/.../...
	Male 90° / Open End	-	-	-	1521863	-	1521876	1521889	1521892	-	-	1521902/.../...
	Male Straight / Female Straight	1574580	1455722	1574593	1455735	-	1574603	1571525	1571538	1574632	1401312	1552094/.../...
	Male Straight / Female 90°	-	-	-	-	-	-	-	-	-	-	1552104/.../...
	Male 90° / Female Straight	-	-	-	-	-	-	-	-	-	-	1552117/.../...
Male 90° / Female 90°	-	-	-	-	-	-	-	-	-	-	1552120/.../...	

*These color items are not in the standard global catalog. There may be a higher MIN or Standard Pack.





*Additional lengths available in Excel version of this document



M12 Sensor Cordsets - Black 80°C PUR - Unshielded



(Lateral flex - up to 10 million cycles)

# Wires	Configuration	0.3 M	0.6 M	1 M	1.5 M	2 M	3 M	5 M	10 M	15 M	20 M	CMAT
M12 3-pos. A-code 	Female Straight / Open End	-	-	-	1694486	-	1694499	1683510	1693034	1694088	1693982	1696688/.../...
	Female 90° / Open End	-	-	-	1694509	-	1694512	1694525	1694538	1501980	1570173	1696714/.../...
	Male Straight / Open End	-	-	-	1668014	-	1668027	1668030	1682566	-	1683581	1696662/.../...
	Male 90° / Open End	-	-	-	1668137	-	1668140	1668153	1694444	-	-	1696675/.../...
	Male Straight / Female Straight	1681509	1681512	1698084	1681525	1694033	1681538	1693021	1694091	1501977	-	1696756/.../...
	Male Straight / Female 90°	1681541	1681554	1502374	1681567	1502387	1681570	1694253	-	-	-	1696772/.../...
	Male 90° / Female Straight	1071521	1071558	-	1071561	-	1071562	-	-	-	-	-
	Male 90° / Female 90°	-	-	-	-	-	-	-	-	-	-	-
M12 4-pos. A-code 	Female Straight / Open End	-	-	1400420	1668108	1533576	1668111	1668124	1683002	1502730	1500224	1696963/.../...
	Female 90° / Open End	-	-	1400422	1668221	1400423	1668234	1668247	1681389	1502743	1545001	1696989/.../...
	Male Straight / Open End	1530142	-	1500499	1668043	1693801	1668056	1668069	1682993	-	-	1696947/.../...
	Male 90° / Open End	-	-	-	1668166	-	1668179	1668182	1694457	-	-	1696950/.../...
	Male Straight / Female Straight	1668357	1668360	1699850	1668373	1693571	1668386	1694075	1500402	1696332	-	1697001/.../...
	Male Straight / Female 90°	1668470	1668483	1550070	1668496	-	1668506	1696400	1696442	-	-	1697014/.../...
	Male 90° / Female Straight	1668593	1668603	-	1668616	1544947	1668629	1544950	-	-	-	1697030/.../...
	Male 90° / Female 90°	1668713	1668726	-	1668739	1504589	1668742	-	-	-	-	1697043/.../...
M12 5-pos. A-code 	Female Straight / Open End	-	-	1400421	1669822	1504848	1669835	1669848	1683374	1693597	1500376	1697111/.../...
	Female 90° / Open End	-	-	1400424	1669851	-	1669864	1669877	1694541	1402146	-	1697124/.../...
	Male Straight / Open End	-	-	1564354	1669767	1554474	1669770	1669783	1683361	-	-	1697098/.../...
	Male 90° / Open End	-	-	-	1669796	-	1669806	1669819	1694460	-	-	1697108/.../...
	Male Straight / Female Straight	1681583	1681596	-	1681606	1694758	1681619	1533615	1403889	1534724	-	1697140/.../...
	Male Straight / Female 90°	1681622	1681635	-	1681648	-	1681651	-	1416448	-	-	1697153/.../...
	Male 90° / Female Straight	-	-	-	-	-	-	-	-	-	-	1508734/.../...
	Male 90° / Female 90°	-	-	1081234	-	-	-	-	-	-	-	1529506/.../...
M12 8-pos. A-code 	Female Straight / Open End	-	-	-	1522590	1520356	1522600	1520369	1520372	1528879	1520385	1522613/.../...
	Female 90° / Open End	-	-	-	1522626	-	1522639	1522642	1522655	-	-	1522668/.../...
	Male Straight / Open End	-	-	-	1522493	1401348	1522503	1522516	1522529	-	-	1522532/.../...
	Male 90° / Open End	-	-	-	1522545	-	1522558	1522561	1522574	-	-	1522587/.../...
	Male Straight / Female Straight	1522671	1522684	-	1522697	-	1522707	1529166	1529179	-	-	1522710/.../...
	Male Straight / Female 90°	1522723	1522736	-	1522749	-	1522752	-	-	-	-	1522765/.../...
	Male 90° / Female Straight	-	-	-	-	-	-	-	-	-	-	1551969/.../...
	Male 90° / Female 90°	-	-	-	-	-	-	-	-	1539376	-	1551972/.../...

*These color items are not in the standard global catalog. There may be a higher MIN or Standard Pack.





*Additional lengths available in Excel version of this document



M12 Sensor Cordsets - Black 80°C PUR - Braided Shield



(Lateral flex - up to 10 million cycles)

# Wires	Configuration	0.3 M	0.6 M	1 M	1.5 M	2 M	3 M	5 M	10 M	15 M	20 M	CMAT
M12 3-pos. A-code 	Female Straight / Open End	-	-	-	1682786	-	1682799	1682809	1500680	1529124	1405512	1697441/.../...
	Female 90° / Open End	-	-	-	1682812	-	1682825	1682838	1500693	-	-	1697454/.../...
	Male Straight / Open End	-	-	-	1682650	-	1682663	1682676	1500664	-	-	1697425/.../...
	Male 90° / Open End	-	-	-	1682689	-	1682692	1682702	1500677	-	-	1697438/.../...
	Male Straight / Female Straight	1500800	1500813	-	1500826	-	1500839	-	-	-	-	1536049/.../...
	Male Straight / Female 90°	1500923	1500936	-	1500949	-	1500952	-	-	-	-	1536052/.../...
	Male 90° / Female Straight	-	-	-	-	1528688	-	-	-	-	-	1536065/.../...
	Male 90° / Female 90°	-	-	-	-	-	-	-	-	-	-	1536078/.../...
M12 4-pos. A-code 	Female Straight / Open End	-	-	-	1682841	-	1682854	1682867	1500716	1515109	1515112	1697483/.../...
	Female 90° / Open End	-	-	-	1682906	-	1682919	1682922	1500729	1529014	1514511	1697496/.../...
	Male Straight / Open End	-	-	-	1682715	-	1682618	1682647	1694389	1519286	-	1697467/.../...
	Male 90° / Open End	-	-	-	1682870	-	1682883	1682896	1500703	-	-	1697470/.../...
	Male Straight / Female Straight	1500842	1500855	-	1500868	-	1500871	1507049	1508132	-	-	1536081/.../...
	Male Straight / Female 90°	1500965	1500978	-	1500981	-	1500994	-	-	-	-	1536094/.../...
	Male 90° / Female Straight	-	-	-	-	-	-	-	-	-	-	1536104/.../...
	Male 90° / Female 90°	-	-	-	-	-	-	-	-	-	-	1536117/.../...
M12 5-pos. A-code 	Female Straight / Open End	1531073	-	-	1682935	-	1682948	1682951	1500758	1402998	1528701	1697522/.../...
	Female 90° / Open End	-	1012022	-	1682964	-	1682977	1682980	1500761	-	-	1697535/.../...
	Male Straight / Open End	-	-	-	1682728	1525814	1682744	1682731	1500732	-	1424081	1697506/.../...
	Male 90° / Open End	-	-	-	1682757	-	1682760	1682773	1500745	-	-	1697519/.../...
	Male Straight / Female Straight	1500884	1500897	-	1500907	1513910	1500910	1693092	1529661	1530841	1535668	1536120/.../...
	Male Straight / Female 90°	1501003	1501029	-	1501045	-	1501058	-	-	-	-	1536133/.../...
	Male 90° / Female Straight	-	-	-	-	-	-	-	-	-	-	1536146/.../...
	Male 90° / Female 90°	-	-	-	-	-	-	-	-	-	-	1536159/.../...
M12 8-pos. A-code 	Female Straight / Open End	-	-	-	1522862	-	1522875	1522888	1522891	-	1569113	1522901/.../...
	Female 90° / Open End	-	-	-	1522914	-	1522927	1522930	1522943	-	-	1522956/.../...
	Male Straight / Open End	-	-	-	1522778	-	1522781	1526981	1522794	-	1570157	1522804/.../...
	Male 90° / Open End	-	-	-	1522817	-	1522820	1522833	1522846	-	-	1522859/.../...
	Male Straight / Female Straight	1522969	1522972	-	1522985	-	1522998	-	1425237	-	-	1523007/.../...
	Male Straight / Female 90°	1523010	1523023	-	1523036	-	1523049	-	-	-	-	1523052/.../...
	Male 90° / Female Straight	-	-	-	-	-	-	-	-	-	-	1551998/.../...
	Male 90° / Female 90°	-	-	-	-	-	-	-	-	-	-	1552007/.../...

*These color items are not in the standard global catalog. There may be a higher MIN or Standard Pack.

*Additional lengths available in Excel version of this document

M12 Robotic Cordsets - Gray 105°C TPE-U - Unshielded

(Torsional flex - up to 1 million cycles. Lateral flex - up to 15 million cycles)

# Wires	Configuration	0.3 M	0.6 M	1 M	1.5 M	2 M	3 M	5 M	10 M	15 M	20 M	CMAT
M12 3-pos. A-code	Female Straight / Open End	-	-	-	1456679	-	1456682	1456695	1456705	-	-	1696688/.../...
	Female 90° / Open End	-	-	-	1454260	-	1456718	1454273	1454299	-	-	1696714/.../...
	Male Straight / Open End	-	-	-	1456734	-	1456747	1456750	1456763	-	-	1696662/.../...
	Male 90° / Open End	-	-	-	1456899	-	1456909	1456912	1456925	-	-	1696675/.../...
	Male Straight / Female Straight	1456776	1456789	-	1456792	-	1456802	-	-	-	-	1696756/.../...
	Male Straight / Female 90°	1456815	1456828	-	1456831	-	1456844	-	-	-	-	1696772/.../...
M12 4-pos. A-code	Female Straight / Open End	-	-	-	1456938	-	1456941	1567322	1567335	-	-	1696963/.../...
	Female 90° / Open End	-	-	-	1456954	-	1456967	1456970	1456983	-	-	1696989/.../...
	Male Straight / Open End	-	-	-	1457018	-	1457021	1457034	1457047	-	-	1696947/.../...
	Male 90° / Open End	-	-	-	1457128	-	1457131	1457144	1457157	-	-	1696950/.../...
	Male Straight / Female Straight	1457050	1457063	1567267	1567270	1567283	1457076	1567296	1567306	-	-	1697001/.../...
	Male Straight / Female 90°	1457089	1567225	-	1567238	-	1457092	-	-	-	-	1697014/.../...
M12 5-pos. A-code	Female Straight / Open End	-	-	-	1454419	-	1457160	1454422	1454448	-	-	1697111/.../...
	Female 90° / Open End	-	-	-	1457173	-	1457186	1457199	1457209	-	-	1697124/.../...
	Male Straight / Open End	-	-	-	1457225	-	1457238	1457241	1457254	-	-	1697098/.../...
	Male 90° / Open End	-	-	-	1457322	-	1457335	1457348	1457351	-	-	1697108/.../...
	Male Straight / Female Straight	1457267	1454561	1454574	1454587	-	1457270	1423574	1408370	1042821	1042823	1697140/.../...
	Male Straight / Female 90°	1457283	1454516	-	1454532	1454545	1457296	-	-	-	-	1697153/.../...

*5-pos global articles use [802] cable with GN/YL 5th wire. 5-pos North American articles use [800] cable with GY 5th wire. 8-position also available in NA program.

*These color items are not in the standard global catalog. There may be a higher MIN or Standard Pack.

*Full weld-resistant cordsets in North American Catalog (pg 68-69)

M12 weld-resistant cordsets for automotive

Our M12 weld-resistant cordsets are designed for the harshest of robotic welding environments. The cable is made with 105°C yellow TPE. It is high flex rated to 10,000,000 bend cycles under both lateral (IC mode) and torsional to 200 million flex. The cable is available in standard and straight versions. Furthermore, our specially designed coupling nuts have a weld dispersion coating to ensure they also meet strict to the coupling nuts and therefore prevent automated welding to the receptacle.

M12 pinout and color chart

Configuration	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Color
Female Straight	1	2	3	4	5	Black
Female 90°	1	2	3	4	5	Black
Male Straight	1	2	3	4	5	Black
Male 90°	1	2	3	4	5	Black

M12 sensor cordsets (unshielded)

Color code: Yellow TPE, 105°C
 Cable length: 0.3 M, 0.6 M, 1 M, 1.5 M, 2 M, 3 M, 5 M, 10 M, 15 M, 20 M

Article	Configuration	0.3 M	0.6 M	1 M	1.5 M	2 M	3 M	5 M	10 M	15 M	20 M
1456679	Female Straight / Open End	-	-	-	1456679	-	1456682	1456695	1456705	-	-
1454260	Female 90° / Open End	-	-	-	1454260	-	1456718	1454273	1454299	-	-
1456734	Male Straight / Open End	-	-	-	1456734	-	1456747	1456750	1456763	-	-
1456899	Male 90° / Open End	-	-	-	1456899	-	1456909	1456912	1456925	-	-
1456776	Male Straight / Female Straight	1456776	1456789	-	1456792	-	1456802	-	-	-	-
1456815	Male Straight / Female 90°	1456815	1456828	-	1456831	-	1456844	-	-	-	-

Additional testing:
 The cables included in this program passed the additional in-house testing according to the DIN/ISO welding spark test. This test demonstrates the performance of cable assemblies and raw cable following exposure to welding sparks. The test includes:
 - Vertical cleaning spark test
 - Horizontal cleaning spark test
 - Transverse spark test

Successful completion of the test is determined by:
 - They are not melted or charred at their coupling mechanism.
 - They continue to be operational and coupling mechanism is easily released.
 - No electrical shorting or disconnection.

*Robotics cable [800] can also be configured using North American CMAT's (M8 cordsets on pg 15. M8 to M12 cordsets on pg 19. M12 cordsets on pg 21)

M8 sensor cordsets (unshielded)

Color code: Yellow TPE, 105°C
 Cable length: 0.3 M, 0.6 M, 1 M, 1.5 M, 2 M, 3 M, 5 M, 10 M, 15 M, 20 M

Article	Configuration	0.3 M	0.6 M	1 M	1.5 M	2 M	3 M	5 M	10 M	15 M	20 M
1456679	Female Straight / Open End	-	-	-	1456679	-	1456682	1456695	1456705	-	-
1454260	Female 90° / Open End	-	-	-	1454260	-	1456718	1454273	1454299	-	-
1456734	Male Straight / Open End	-	-	-	1456734	-	1456747	1456750	1456763	-	-
1456899	Male 90° / Open End	-	-	-	1456899	-	1456909	1456912	1456925	-	-
1456776	Male Straight / Female Straight	1456776	1456789	-	1456792	-	1456802	-	-	-	-
1456815	Male Straight / Female 90°	1456815	1456828	-	1456831	-	1456844	-	-	-	-

M8 full = drain (connected to pin) cordsets

Article	Configuration	0.3 M	0.6 M	1 M	1.5 M	2 M	3 M	5 M	10 M	15 M	20 M
1456679	Female Straight / Open End	-	-	-	1456679	-	1456682	1456695	1456705	-	-
1454260	Female 90° / Open End	-	-	-	1454260	-	1456718	1454273	1454299	-	-
1456734	Male Straight / Open End	-	-	-	1456734	-	1456747	1456750	1456763	-	-
1456899	Male 90° / Open End	-	-	-	1456899	-	1456909	1456912	1456925	-	-
1456776	Male Straight / Female Straight	1456776	1456789	-	1456792	-	1456802	-	-	-	-
1456815	Male Straight / Female 90°	1456815	1456828	-	1456831	-	1456844	-	-	-	-

M8-M12 adaptor cordsets (unshielded)

Color code: Yellow TPE, 105°C
 Cable length: 0.3 M, 0.6 M, 1 M, 1.5 M, 2 M, 3 M, 5 M, 10 M, 15 M, 20 M

Article	Configuration	0.3 M	0.6 M	1 M	1.5 M	2 M	3 M	5 M	10 M	15 M	20 M
1456679	Female Straight / Open End	-	-	-	1456679	-	1456682	1456695	1456705	-	-
1454260	Female 90° / Open End	-	-	-	1454260	-	1456718	1454273	1454299	-	-
1456734	Male Straight / Open End	-	-	-	1456734	-	1456747	1456750	1456763	-	-
1456899	Male 90° / Open End	-	-	-	1456899	-	1456909	1456912	1456925	-	-
1456776	Male Straight / Female Straight	1456776	1456789	-	1456792	-	1456802	-	-	-	-
1456815	Male Straight / Female 90°	1456815	1456828	-	1456831	-	1456844	-	-	-	-

M8-M12 adaptor cordsets (Shielded steel shell to coupling nut)

Color code: Yellow TPE, 105°C
 Cable length: 0.3 M, 0.6 M, 1 M, 1.5 M, 2 M, 3 M, 5 M, 10 M, 15 M, 20 M

Article	Configuration	0.3 M	0.6 M	1 M	1.5 M	2 M	3 M	5 M	10 M	15 M	20 M
1456679	Female Straight / Open End	-	-	-	1456679	-	1456682	1456695	1456705	-	-
1454260	Female 90° / Open End	-	-	-	1454260	-	1456718	1454273	1454299	-	-
1456734	Male Straight / Open End	-	-	-	1456734	-	1456747	1456750	1456763	-	-
1456899	Male 90° / Open End	-	-	-	1456899	-	1456909	1456912	1456925	-	-
1456776	Male Straight / Female Straight	1456776	1456789	-	1456792	-	1456802	-	-	-	-
1456815	Male Straight / Female 90°	1456815	1456828	-	1456831	-	1456844	-	-	-	-

M12 sensor cordsets (unshielded)

Color code: Yellow TPE, 105°C
 Cable length: 0.3 M, 0.6 M, 1 M, 1.5 M, 2 M, 3 M, 5 M, 10 M, 15 M, 20 M

Article	Configuration	0.3 M	0.6 M	1 M	1.5 M	2 M	3 M	5 M	10 M	15 M	20 M
1456679	Female Straight / Open End	-	-	-	1456679	-	1456682	1456695	1456705	-	-
1454260	Female 90° / Open End	-	-	-	1454260	-	1456718	1454273	1454299	-	-
1456734	Male Straight / Open End	-	-	-	1456734	-	1456747	1456750	1456763	-	-
1456899	Male 90° / Open End	-	-	-	1456899	-	1456909	1456912	1456925	-	-
1456776	Male Straight / Female Straight	1456776	1456789	-	1456792	-	1456802	-	-	-	-
1456815	Male Straight / Female 90°	1456815	1456828	-	1456831	-	1456844	-	-	-	-

CMAT cable options

Option	Part Number	Part Description	Part
CMAT	1696688	Female Straight / Open End	CMAT
CMAT	1696714	Female 90° / Open End	CMAT
CMAT	1696662	Male Straight / Open End	CMAT
CMAT	1696675	Male 90° / Open End	CMAT
CMAT	1696756	Male Straight / Female Straight	CMAT
CMAT	1696772	Male Straight / Female 90°	CMAT

EXAMPLE CROSS KEY

Configure parts only for selection of cable type and length of cable. Contact your distributor for more information.