Laying It On The Line.
Critical data at a glance.
Introducing a new look for our rubber hydraulic hoses. Our new intelligent laylines utilize a clean bold simplified look that incorporates easy to read icons and provides critical hose information at a glance. Our premium hoses will have a colored background distinguishing it from our standard hose lines.
Our new standard laylines will have white and colored text but no colored background. This will make it easy to distinguish between our standard and premium hoses.
WINNER EC215-06

® 9.5 mm (0.38 in)

DN10

-40°C to +100°C
-40°F to +212°F

345 BAR (5000 PSI) HALF BEND

1A•Z

2R•2pc

EN857 2SC • ISO 18752

• AGENCY SPECS

• TEMPERATURE

• CORE FITTINGS

• MATCHMATE
Transportation, manufacturing, construction—these industries depend on innovative, expertly-engineered systems to get important jobs done. Designing and assembling these hard-working, complex machines requires innovative thinking—combined with the tools and proven parts to turn these ideas into durable, dependable solutions.

For decades, Eaton has earned a strong reputation for helping engineers, OEMs and end users tackle their performance and uptime challenges by delivering rubber hydraulic hoses that provide superior quality—including longer service life, improved flexibility, lighter weight and enhanced durability.

But Eaton also remains committed to simplifying the complexities associated with forward-thinking, industry-changing systems. Consistent system performance starts with efficient design and assembly. And both of these tasks rely on identifying the right parts for every application—every time. That’s why we refreshed our rubber hydraulic hose laylines to make hydraulic assembly more intuitive than ever. Whether you design systems that move, turn, mold, lift, dig or haul, Eaton has the right hose for the job—and a simple way to identify it. Our new laylines are easier to read, present critical information in a consistent order and include helpful graphics and pictograms which allow users around the world to easily identify key performance characteristics.

Additionally, all of our rubber hydraulic hoses will use a single hose & fitting system and unified support names for familiar performance features—like abrasion resistance and ultra-abrasion resistance. The Winner line of standard hoses will also adopt this MatchMate fitting system to promote seamless identification across all three hose lines. Together, these changes will create a more cohesive portfolio of premium and standard rubber hoses that equips engineers, OEMs and end users to meet the complex and growing needs of tomorrow’s machines.
When it comes to building the platforms and systems that drive the machines of the future, complex engineering makes it all possible. In hydraulics, specific hose capabilities and certifications must be tailored to the unique requirements of each application to optimize performance, maximize uptime and protect user safety. Eaton’s new laylines distill this complex engineering down into its essential parts for easy identification and simple assembly. Every key piece of information is located in one place, ensuring the right hose—with the right capabilities for the job—is easy to identify every time.

**Enhanced readability:** Eaton’s new laylines take the guesswork out of system assembly. Each layline is easy to read, including important information about the hose—such as the brand, part number, size, abrasion resistance, key specifications, pressure, temp and qualified fitting series.

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<table>
<thead>
<tr>
<th>BRAND</th>
<th>AGENCY SPECS</th>
<th>PRESSURE</th>
<th>TEMP.</th>
<th>BEND</th>
<th>FITTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>GH493-6</td>
<td>DURA-TUFF</td>
<td>EXCEEDS SAE 100R12 / EN856 TYPE R12</td>
<td>MSHA IC-84/19 • ABS • DNV-GL</td>
<td>448 BAR (6500 PSI)</td>
<td>HALF BEND</td>
</tr>
</tbody>
</table>
Understanding layline terminology

Rugged covers, high temperatures, low temperatures: get the right hose.

The new layline design also introduces straightforward terminology. Instantly identify enhanced features like abrasion resistance and flexibility by checking the sub-brand section of the layline.

- **AQP HIGH-TEMP**: Our high-temp hose can withstand temperatures up to 302 (F) /150 (C)
- **LOW-TEMP**: Our low-temp hose can withstand temperatures as low as -70 (F)
- **DURA-TUFF**: Premium abrasion-resistant hose cover; 8x greater than the ISO 6945 industry standard
- **BRUISER**: Premium abrasion-resistant hose cover; 700x greater than the ISO 6945 industry standard
Agency specifications:
Know which hose is up for the job.

Hose agency specifications are clearly defined on each hose. SAE, ISO, MSHA, DNV-GL, USCG designation are displayed clearly on each hose, taking the guess work out of hose qualifications.

In addition, many of Eaton’s premium hydraulic hoses exceed SAE and EN specifications to offer superior performance. We will now consistently note this and other specification-related terms on the layline as noted in the chart below.

<table>
<thead>
<tr>
<th>Term</th>
<th>Product performance compared to SAE or EN requirements (excluding dimensions)</th>
<th>Product meets the SAE or EN dimensional specification</th>
<th>Example as shown on layline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exceeds</td>
<td>Exceeds at least one specification requirement and meets the others.</td>
<td>Yes</td>
<td>Exceeds EN857 1SC</td>
</tr>
<tr>
<td>Exceeds... Performance</td>
<td>Exceeds at least one specification requirement and meets the others.</td>
<td>No</td>
<td>Exceeds EN857 1SC Performance</td>
</tr>
<tr>
<td>n/a – no listed term</td>
<td>Meets all but does not exceed any specification requirements</td>
<td>Yes</td>
<td>EN857 1SC</td>
</tr>
<tr>
<td>Performance</td>
<td>Meets all but does not exceed any specification requirements</td>
<td>No</td>
<td>EN857 1SC Performance</td>
</tr>
<tr>
<td>Type</td>
<td>n/a – industry standard does not exist for this size in a series</td>
<td>n/a</td>
<td>100R16 Type</td>
</tr>
<tr>
<td>Symbols</td>
<td>Definition</td>
<td>Example</td>
<td></td>
</tr>
<tr>
<td>/</td>
<td>If the same term applies to both standards, the term will be used in front of the leading standard with this symbol</td>
<td>Exceeds SAE 100R16 / EN 857 2SC</td>
<td></td>
</tr>
<tr>
<td>•</td>
<td>If different terms apply to the two standards, the standards will be separated with this symbol</td>
<td>Exceeds SAE 100R16 • EN 857 2SC Type</td>
<td></td>
</tr>
</tbody>
</table>
The new layline design also introduces easy-to-identify icons and pictograms, which allow more users around the world to intuitively identify performance characteristics associated with each of Eaton’s rubber hydraulic hoses. Icons include temperature, bend radius, pressure, correct fitting type and more.
Each SAE hose standard specifies the minimum bend radius of a hose. This is defined as the smallest diameter the hose can be bent without kinking. However, Eaton recognizes that merely meeting a standard is often not good enough for the tight routing needs of your applications. Many of our core hoses have long been engineered to perform at half or even one-third of the bend radius required by SAE.

For the first time, our laylines will now indicate when a hose exceeds the SAE bend radius requirement. This improvement in bend means easier routing, better performance and reduced hose length requirements.

SAE bend radius
Flexibility that works.
As part of this layline refresh, all of Eaton’s rubber hydraulic hoses will now utilize the simple, intuitive MatchMate hose & fitting system. For Aeroquip users, this system is the exact same one they have used for years.

### Simplified compatibility.
Fittings that match.

**Spiral**
- Number of rings on fitting correspond to 4S or 6S icons on layline

**Braided**
- Number of rings on fitting correspond to ring icons on layline

**Matchmate:**
- 1A on fitting pairs with layline 1A

**Braided:**
- Number of rings on fitting correspond to ring icons on layline

- 1-wire braided
- 2-wire braided
Fittings you can trust.
Reliable fittings that last.

- **Dura-Kote plating technology**
  - Hose fittings that will now offer 3x the corrosion protection on carbon steel fittings as compared to competitive hose fittings. Eaton’s Dura-Kote fittings provide up to 1000 hours of corrosion protection. This is a huge step forward in metal fitting corrosion protection.

- **3X Carbon Steel Corrosion Protection**

- **Dura-Seal technology**
  - This patent-pending innovation from Eaton eliminates hose assembly cool-down leakage, while extending hose assembly life, reducing equipment down-time.

- **Class 0 Cool-Down Leakage Protection**
Fitting Information Simplified

Fittings for every application
Braided. Spiral. Reusable.

Braided hose fittings

**Premium**
1A (TTC-series)

- **Features:**
  - New Dura-Kote plating technology for up to 1,000 hours of corrosion resistance
  - Bite the wire technology for best in class connection and sealing
  - Class zero leakage SAE J1176 on approved hose styles
  - Over 550 Z-Series part numbers available
  - Eaton’s MatchMate program provides identification markings on the hose, hose fittings, and crimp dies for quick and easy assembly

**Standard**
Two-piece Winner

- **Features:**
  - Non-skive, two-piece crimp fitting
  - One nipple part number for both EC115 & EC215 standard hoses
  - Meets industry specifications when used with the EC115 & EC215 standard hoses
  - Clear silver hexavalent chromium-free plating
  - Carbon steel material

Spiral hose fittings

**Premium**
4S/6S spiral series

- **Features:**
  - New Dura-Kote plating technology for up to 1,000 hours of corrosion resistance
  - New patent pending Dura-Seal technology to eliminate hose assembly cool-down leakage
  - Class zero leakage SAE J1176 on approved hose styles
  - Eaton’s MatchMate spiral - hose/fitting identification system program provides identification markings on the hose, hose fittings, and crimp dies for quick and easy assembly

Reusable fittings

**Premium**
Reusable

- **Features:**
  - New Dura-Kote plating technology for up to 1,000 hours of corrosion resistance
  - Engineered to provide peak performance with Eaton’s core braided hose products
  - Can be assembled in the field without special tooling
  - Reduced downtime
  - Quick repair

1AA8FR8 08Z-S68 09820
4SA16FJ16 12820
6S24FL24 15720
Hose layline color guide*:
Understanding color designations.

Easily identify 1 or 2 wire braid, spiral, and temperature designations with Eaton’s color coded laylines.

*These are general color guidelines there are some exceptions to this guide. There is no color distinction between ultra-abrasion and premium abrasion.
Beyond the layline
Eaton hoses include information beyond the layline.

Quality Assurance:
The new laylines offer enhanced traceability. Ink jet-printed information on the backside of each hose will include date codes and the country of origin. Additionally, some laylines will include embossed features that stand up to the toughest, dirtiest, most abrasive use cases—ensuring proper traceability and protecting quality no matter the job.

Consistent order of information:
As reducing costs and increasing uptime become a greater focus across industries, operating with efficiency is key. Eaton’s new laylines offer a standardized, consistent order of information to help speed accurate part identification. Additionally, we’ve standardized key information on both product lines with embossed and ink jet laylines that will ensure consistent placement of important information.
Putting fluid conveyance information at your fingertips

1. Searchable fluid conveyance product information:
   • Part numbers
   • Sizes
   • Performance and specifications
   • Branding information
2. Literature and videos
3. Product value propositions
4. Crimp specifications
5. Competitor cross reference tool
6. Coupling cross reference tool
7. Custom bin label tool
8. 2D/3D cad models
9. Hose assembly configurator
10. Marketplace (authenticated PowerSource only)
11. List prices and lead times (authenticated PowerSource only)

To access these tools and more, visit and log in to PowerSource from My.Eaton.com and then select tools.