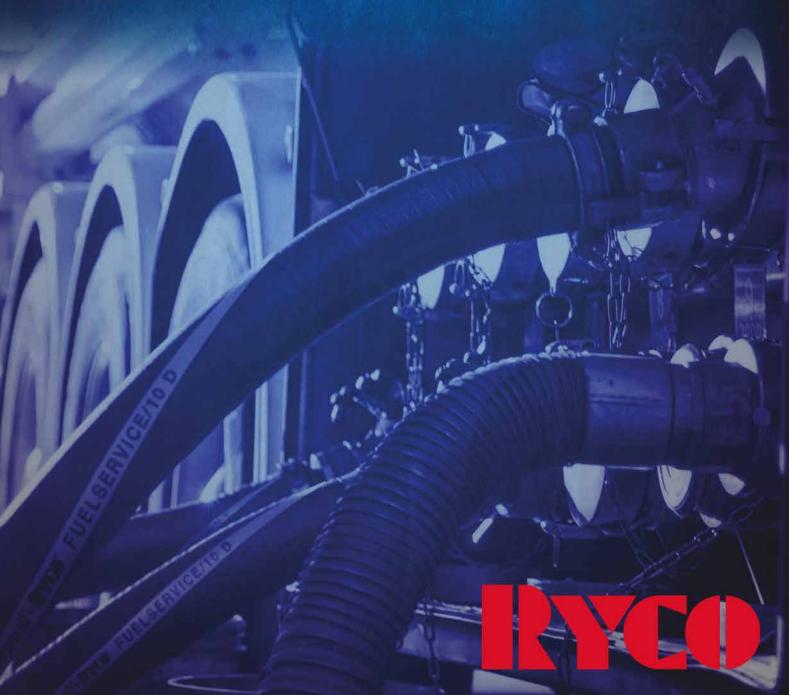
INDUSTRIAL HOSES PRODUCT CATALOGUE

2024









RYCO. COMPANY.

RYCO started manufacturing hoses, fittings and filters in 1946. As the hydraulics industry evolved, the Company expanded its range and the main product line soon became high-pressure hydraulic hose and fittings. RYCO's simple belief of "Higher Technology Equals Greater Performance" applies throughout the Company. The Company's research and development centres and testing facilities are dedicated to developing innovative products and pioneering new processes in fluid conveying systems technology. Our specialised equipment and technology enable us to manufacture our large range of products efficiently and cost effectively.

"HIGHER TECHNOLOGY EQUALS GREATER PERFORMANCE"

RYCO. MISSION STATEMENT.

Our Mission is to listen to our customers and deliver the highest quality and technologically superior fluid conveying connection products and solutions.

RYCO. COMPANY VISION.

Our vision is to be the premier supplier and service provider of choice in every market we participate in.

RYCO. QUALITY.

RYCO is certified to current version of ISO 9001 "Quality Management Systems - Requirements" by BSI. British Standards Institute (Certificate No. FS 604893). Company Policy is to supply products and services that meet or exceed our industry standards. These standards include SAE, EN (DIN), AS, ISO, JIS, BS and BCS. The bottom line in Quality Control (QC) & Quality Assurance (QA) is Customer Confidence & Customer Satisfaction.

OUR AIM IS ZERO DEFECTS

RYCO. PRODUCT IDENTIFICATION.

All RYCO products are clearly branded with a unique RYCO part number and batch code, where practical. In today's quality conscious world, RYCO's invaluable batch coding system takes traceability and customer assurance to new levels. Not everyone is an expert in thread identification. Time and money are often wasted identifying goods or despatching the wrong item. Using clearly branded RYCO products reduces the chance of error, saving you time and money.

IF IT'S NOT BRANDED - IT'S NOT RYCO

RYCO. WAREHOUSE & DISTRIBUTION.

At RYCO, we understand that when you need your product, you need it fast. Our network of warehouses and distributors gives the greatest product availability to our customers. Our comprehensive ordering and despatch system ensures that your orders are correct before leaving the warehouse.

WE PRIDE OURSELVES ON SHIPPING CORRECTLY

DISCLAIMER: We reserve the right to alter the design, or discontinue any of the company's products or services without notice. While every effort has been made to ensure the accuracy of the information contained in this publication, our Company Policy of continual research and product development necessitates changes and refinements which may not be reflected in the following pages. If in doubt, please contact your nearest sales office. Illustrations are not to scale, and are indicative only.

© 2024 Manuli Ryco group. All rights reserved. Content is owned by Manuli Ryco group and not to be copied or distributed without prior written authorisation. Trademarks and Logos that appear in the documentation are protected and registered by applicable law.

RYCO TERMS OF SALE. Please refer to www.ryco-hydraulics.com for RYCO's Terms of Sale.

INTRODUCTION

ABOUT US

THE COMPANY

Originally an Australian-owned company, RYCO has built a strong reputation since it commenced manufacturing of hydraulic hose and fittings in Melbourne, Australia back in 1946. In 2020 RYCO merged with the Manuli Rubber Industries group, resulting in the creation of the Manuli Ryco group.

The culture of engineering excellence, customer-focus and highest quality products is continued by the Manuli Ryco Innovation Centres, which are edicated to improving product and pioneering new technologies and processes in fluid conveying systems.

The RYCO quality range of hose and fittings is supported by a network of loyal and committed distributors around the world, with RYCO products being supplied to a wide range of industries including mining, construction, utilities, defence, marine, oil & gas, OEMs and more. RYCO continue to expand its product range to meet growing needs of worldwide industry.

GLOBAL RESOURCES

In today's competitive international business environment, the requirements for suppliers and customers to work closely together are greater than ever before.

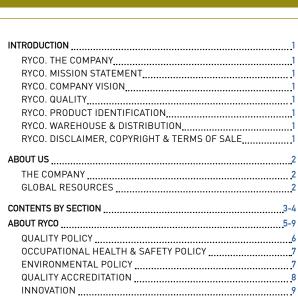
RYCO has expanded its horizons and developed its manufacturing and distribution business on a global scale, working with industries in diverse sectors. RYCO has offices, warehouses and fully Quality Accredited manufacturing centres strategically placed in North America, Europe, China, India and Malaysia.

With such an extensive global footprint, RYCO can ensure quality product is delivered to our customers, whenever and wherever required.









ALPHA-NUMERIC INDEX ______10

	AGRAGENICA DO C
HOSES	11-70

HOSES INDEX BY APPLICATION	
HOSES INDEX BY WORKING PRESSURE	16-17
WATER, AIR & STEAM HOSES	18-33
MULTISERVICE	18-21
GLACIER	
WATERFLAT	
FIREX	
AIRSERVICE	26-27
AIRKING	28
STEAMER	29-30
STEAMSAFE	31
COOLER	32
COOLSERVICE	33
ANTI-STATIC FUEL HOSES	2/ 52
FUEL DISPENSED	
FUELDISPENSER	
FUELTRUCKFUELFLEX	
FUELTANKER	
MUDSERVICE	
PROGAS LPG	
CHEMICAL HOSES	54-58
CHEMKING	54-58
FOOD & BEVERAGE HOSES	59-63
BREWERS	
MILKYWAY	
MULTIF00D	
ABRAFOOD	
ABRASIVE HOSES	
ABRAFLAT	
SANDSERVICE	65
ABRASERVICE	66-70

INTRODUCTION

CONTENTS BY SECTION





VISUAL INDEX	72-74
INDUSTRIAL COUPLINGS	72
FERRULES	72
COUPLING INSERTS	73-74
BEVELLED TO WELD.	7 3
BSP FEMALE FRONT SEAL FULL HEXAGON	7 3
BSP FEMALE FRONT SEAL GROOVE HEXAGON	7 3
BSP MALE FRONT SEAL	73
FIXED FLANGE	
SWIVEL FLANGE	73
VICTAULIC GROOVED END.	74
CALIFORNIA RAISED END	74



INDUSTRIAL HOSE ASSEMBLY EQUIPMENT	76-78
DECOILER	76
INDUSTRIAL DECOILER	
INSERT PUSHING MACHINES	
M 2000 INS	
CUTTING MACHINES	77
M 75 CUT	<u>7</u> 7
M 90 CUT	
MDH 15 CUT	
CRIMPING MACHINES	78
MB 450-200	
MS 320 OPEN HEAD	
MS 550 / MS 550-16	

SELECTING THE CORRECT HOSE 80-81
CHOOSING THE CORRECT HOSE80-81
APPLICATION80
DELIVERY OR SUCTION 80
PRESSURE80
FLUID COMPATIBILITY80
TEMPERATURE81
ENVIRONMENT AND LOCATION81
MECHANICAL STRESS 81
ABRASION RESISTANCE 81
FITTINGS 81
FLUID COMPATIBILITY 82-91
POLYMERS USED IN INDUSTRIAL HOSES 82
CHEMICAL COMPATIBILITY CHART FOR INDUSTRIAL HOSES83
LEGEND OF HOSE TYPES BY TUBE COMPOUND83
COMPATIBILITY BEHAVIOUR OF TUBE POLYMERS CONTACTING
FLUIDS 84-91
EXAMPLES OF SUBSTANCES IN CHEMICAL FAMILIES91
APPENDICES 92-94
CLEANING & SANITIZATION OF FOOD GRADE HOSES 92
BRANDING OF HOSES 93
STORAGE OF HOSES AND ASSEMBLIES 93
HANDLING AND USAGE OF HOSES AND ASSEMBLIES93-94





RYCO QUALITY, SAFETY AND ENVIRONMENTAL POLICIES

RYCO's mission is to exceed the expectations of our customers, shareholders, stakeholders and employees through continuous improvement.

We are driven by innovation, teamwork and the integrity of our people whilst embracing community, cultural, quality, environmental and health and safety awareness. RYCO achieve this objective through the integration of the QEHS Management System into day-to-day operations of all of the company's facilities.

WE ARE DRIVEN BY INNOVATION, TEAMWORK AND THE INTEGRITY OF OUR PEOPLE.

INTRODUCTION

ABOUT RYCO - POLICIES

QUALITY POLICY

RYCO specialises in the design, manufacture, distribution and sales of a comprehensive range of high pressure hydraulic hoses and fittings. The Company operates on a global scale and its products service a wide range of industrial applications.

Since 1946 RYCO has established an enviable reputation for expertise, service, quality and delivery.

RYCO's Mission is to exceed our customers', shareholders', suppliers' and employees' expectations through continuous improvement driven by innovation, teamwork and the integrity of our people whilst embracing community, cultural and environmental awareness.

RYCO's Quality system and policy requires compliance with applicable industry standards, statutory regulations, world best practice philosophy, value added processes, service and efficiency.

RYCO Management shall ensure that suitable infrastructure and resources are provided and utilised to guarantee Quality is not compromised.

Quality is the responsibility of all RYCO personnel.

The RYCO Quality System is based on "ISO 9001, Quality Management Systems - Requirements".



QUALITY IS THE RESPONSIBILITY OF ALL RYCO PERSONNEL



OCCUPATIONAL HEALTH AND SAFETY POLICY

RYCO specialises in the design, manufacture and sales of a comprehensive range of high pressure hydraulic hoses and fittings. The Company operates on a global scale and its products service a wide range of industrial applications.

RYCO is committed to protecting the health and safety of employees, contractors, visitors and the general public in the workplace. RYCO shall fulfil this commitment through a health and safety management system that is integrated with RYCO's business activities related to products, services and people.

RYCO employees, contractors and visitors have a duty of care to take reasonable care for their own health and safety and for the health and safety of persons who may be affected by their actions and inactions in the workplace.

RYCO will take reasonably practical steps to improve workplace health and safety conditions and to prevent injury and illness to its employees, contractors, visitors and the general public.

This Policy applies to RYCO fixed and mobile workplaces and persons attending those workplaces. This Policy will be reviewed from time to time for Continuous Improvement, changes to legislation, industry best practices and policy directions within RYCO.

ENVIRONMENTAL POLICY

RYCO specialises in the design, manufacture and sales of a comprehensive range of high pressure hydraulic hoses and fittings. The Company operates on a global scale and its products service a wide range of industrial applications.

RYCO is committed to compliance with applicable environmental legislation, regulations and any other requirements to which RYCO subscribes.

RYCO operates a program of continual improvement in environmental performance and pollution prevention, aiming to minimise the environmental impacts resulting from relevant activities.

This Policy applies to RYCO fixed and mobile workplaces and persons attending those workplaces. This Policy will be reviewed from time to time for Continuous Improvement, changes to legislation, industry best practices and policy directions within RYCO.





INTRODUCTION

ABOUT RYCO - QUALITY ACCREDITATION

RYCO QUALITY ACCREDITATION

RYCO Hydraulics is certified to current version of ISO 9001 "Quality Management Systems - Requirements" by bsi. British Standards Institute (Certificate No. FS 604893). Company Policy is to supply products and services that meet or exceed our industry standards.

These standards include SAE, EN (DIN), AS, ISO, JIS, BS and BCS.

The bottom line in Quality Control (QC) & Quality Assurance (QA) is Customer Confidence & Customer Satisfaction.





Certificate of Registration

QUALITY MANAGEMENT SYSTEM - ISO 9001:2015

This is to certify that:

RYCO Hydraulics / RYCO 24.7 19 Whitehall Street Footscray VIC 3011

Holds Certificate Number:

FS 604893

and operates a Quality Management System which complies with the requirements of ISO 9001:2015 for the following scope:

Design, manufacture and supply of hydraulic hose assemblies, hose couplings, fittings, adaptors and pneumatic couplings and adaptors for the marine, mining, agricultural, automotive and general industries. RYCO 24/7 offers a complete mobile service and replacement facility for users of hoses and tubes in hydraulic and pneumatic systems. RYCO 24/7 mobile connector specialists provide on-call, onsite servicing for emergency breakdown and or repair maintenance work for hose and tube systems.

For and on behalf of BSI:

Chris Cheung, Head of Compliance & Risk - Asia Pacific

Original Registration Date: 1995-04-06 Latest Revision Date: 2018-08-29 Effective Date: 2018-08-10 Expiry Date: 2021-09-22

Page: 1 of 4







...making excellence a habit."

This certificate was issued electronically and remains the property of BSI Group ANZ Pty Limited, ACN 078 659 211 and is bound by the conditions of contract. This certificate can be verified at www.bsi-global.com/clientDirectory. Further clarifications regarding the scope of this certificate and the applicability of ISO 9001:2015 requirements may be obtained by consulting the organization. This certificate is valid only if provided original copies are in complete set.

Information and Contact: BSI, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP. Tel: + 44 345 080 9000 BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK. Information and Contact: BSI Group ANZ Pty Limited, ACN 078 659 211: Suite 2, Level 7, 15 Talavera Road, Macquarie Park, NSW 2113 A Member of the BSI Group of Companies.



- ISO 9001: Quality
- ✓ ISO 14001: Environment
- √ OHSAS 18001: Safety

AS/NZS ISO 9001 A Company Policy.



INNOVATION

RYCO's commitment to innovation and continuous improvement ensure that we can deliver tomorrow's solutions today. We believe that our global strength in engineering, innovation and product development provide our customers a high level of service and solutions unparalleled in the industry.

All product development is co-ordinated by the Manuli Ryco Innovation Centre (MRIC), based in Bologna, Italy. With multiple MRIC design and development locations around the world, our design teams have the skills, equipment and knowledge they require to continually improve our products to surpass the performance requirements as demanded by our customers and industry standards.

RYCO's product range is continually expanding and evolving, providing improved efficiency, higher working pressures and increased safety standards.

"WE DESIGN OUR PRODUCT FOR TOMORROW'S REQUIREMENTS, TODAY."

RYCO's technical knowledge and expertise makes us a leader in our industry. Our policy of high investment in technology ensures that we not only maintain our position in the industry, but also continually improve and develop products that surpass industry standards.



INTRODUCTION

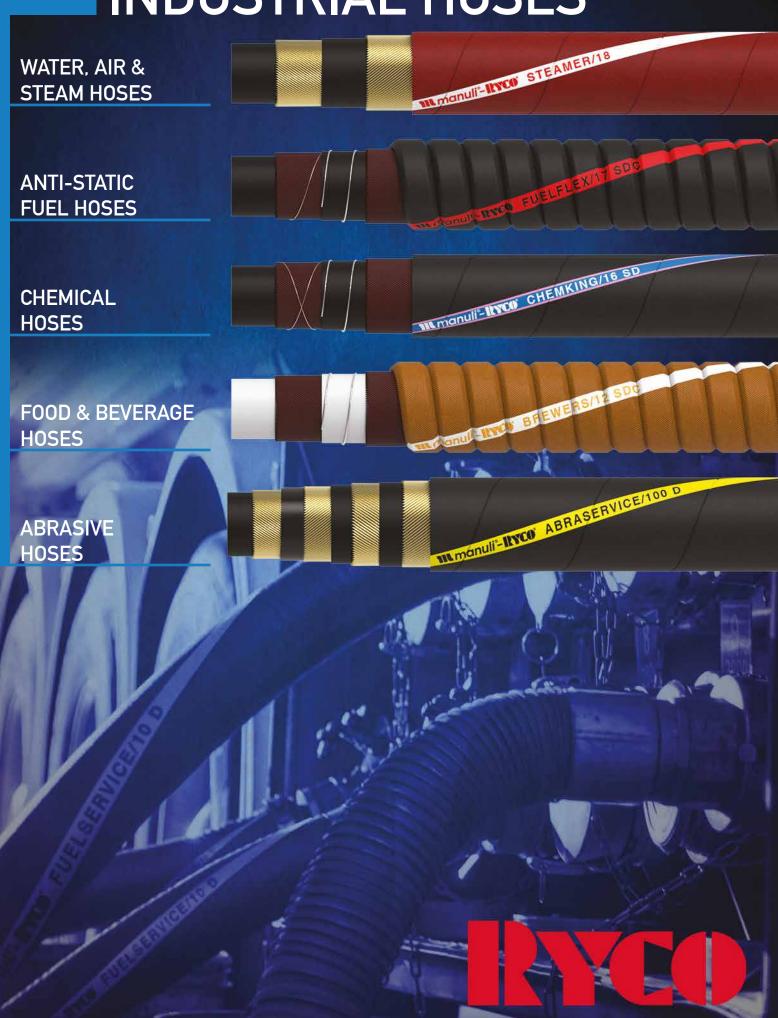
ALPHA-NUMERIC INDEX

ABRADRY	64
ABRAF00D/10	.63
ABRASERVICE/10 D	66
ABRASERVICE/10 SD	67
ABRASERVICE/100 D	70
ABRASERVICE/35 SD	68
ABRASERVICE/40 D	69
ABRASION RESISTANCE, HOSE SELECTION	81
AIRKING/40	28
AIRSERVICE	26
AIRSERVICE/27	27
APPLICATION, HOSE SELECTION	80
ASSEMBLY, HOSE STORAGE	
BEVELLED TO WELD, INSERT	
BRANDING, HOSES	93
BREWERS/12 SD	59
BREWERS/12 SDC	60
BSP FEMALE FRONT SEAL FULL HEXAGON, INSERT	.73
BSP FEMALE FRONT SEAL GROOVE HEXAGON, INSERT	73
BSP MALE FRONT SEAL, INSERT	73
CALIFORNIA RAISED END, INSERT	74
CHEMICAL COMPATIBILITY	
CHEMKING/10 D	
CHEMKING/10 SD	
CHEMKING/16 SD	58
CHEMKING/16 SDA	57
CHEMKING/16 SDE	.56
CLEANING & SANITIZATION, FOOD GRADE HOSES	92
COOLER/5	32
COOLSERVICE/G	33
COUPLINGS INSERTS	75
DELIVERY OR SUCTION, HOSE SELECTION	80
ENVIRONMENT & LOCATION, HOSE SELECTION	
FERRULES	
FIREX	
FITTINGS, HOSE SELECTION	. 81
FIXED FLANGE, INSERT	73
FLUID COMPATIBILITY, CHART	84
FLUID COMPATIBILITY, HOSE SELECTION	80
FOOD GRADE HOSES, CLEANING & SANITIZATION	
FUELDISPENSER/D	45
FUELDISPENSER/SD	
FUELSERVICE/10 D	
FUELSERVICE/10 R4	
FUELSERVICE/10 SD	36
FUELSERVICE/16 D	38
FUELSERVICE/16 SD	
FUELSERVICE/20 D EN 1825-B	
FUELSERVICE/20 D EN 1825-C	
FUELSERVICE/20 SD EN 1825-E	42
FUELSERVICE/21 D	43
FUELSERVICE/21 SD	44

FUELTANKER/10 SD	
FUELTRUCK/16 D	4
FUELTRUCK/16 SD	
FULL FLOW, FERRULE	7
GLACIER/100	2
GLACIER/60	
HANDLING	93
HOSE ASSEMBLY STORAGE	93
HOSE BRANDING	
HOSE HANDLING & USAGE	9
HOSE MAINTENANCE	
HOSE REPAIR	94
HOSE STORAGE	93
HOSE TYPES, BY TUBE COMPOUND	8
INDUSTRIAL DECOILER	
M 2000 INS	
M 75 CUT	7
M 90 CUT	
MAINTENANCE, HOSE	
MB 450-200	
MDH 15 CUT	7
MECHANICAL STRESS, HOSE SELECTION	8
MILKYWAY/10 SD	
MS 320 OPEN HEAD	
MS 550	
MS 550-16	78
MUDSERVICE/28 D	
MULTIF00D/10 SD	62
MULTISERVICE/12 D	
MULTISERVICE/12 SD	19
MULTISERVICE/21 D	
MULTISERVICE/21 SD	2
POLYMERS USED IN INDUSTRIAL HOSES	
PRE-USAGE, HOSE HANDLING & STORAGE	<u>9</u> 3
PRESSURE, HOSE SELECTION	
PROGAS LPG D	
PROGAS LPG SD	
REPAIR, HOSE	
SANDSERVICE/21 D	6
SANITIZATION, CLEANING, FOOD GRADE HOSES	97
SELECTING THE CORRECT HOSE	
SERRATED, FERRULE	
STEAMER/18	
STEAMER/18 OR	30
STEAMSAFE/7	₃
SUBSTANCES IN CHEMICAL FAMILIES	
SWIVEL FLANGE, INSERT	
TEMPERATURE, HOSE SELECTION	
TUBE COMPOUND, HOSE TYPES	8
USAGE, HOSE HANDLING & STORAGE	
VICTAULIC GROOVED END, INSERT	7

FUELSFLEX/17 SDC ______49

INDUSTRIAL HOSES



HOSE

HOSES INDEX BY APPLICATION

НС	SE SERIES		RECOMMEND	MATERI TUBE	AL TYPE COVER	HOSE STRUCTURE
WA	TER, STEAM &	AIR HOSES				
<u>18</u>	MULTISERVICE/12 D	Committee and the same	WATER & AIR HOSE	SBR	SBR	HIGH TENSILE SYNTHETIC CORD
<u>19</u>	MULTISERVICE/12 SD	THE REAL PROPERTY AND ADDRESS OF THE PARTY AND	WATER & AIR HOSE	SBR	SBR	HIGH TENSILE SYNTHETIC CORD & STEEL HELIX BODY WIRE
<u>20</u>	MULTISERVICE/21 D	CONTRACT BUILDING	WATER & AIR HOSE, HEAVY DUTY	SBR	SBR	HIGH TENSILE SYNTHETIC CORD
<u>21</u>	MULTISERVICE/21 SD	THE RESIDENCE AND ADDRESS OF THE PARTY OF TH	WATER & AIR HOSE, HEAVY DUTY	SBR	SBR	HIGH TENSILE SYNTHETIC CORD & STEEL HELIX BODY WIRE
<u>22</u>	GLACIER/60		WATER HOSE FOR SNOW GUNS	EPDM	EPDM	HIGH TENSILE SYNTHETIC CORD
<u>23</u>	GLACIER/100		WATER HOSE FOR SNOW GUNS	EPDM	EPDM	HIGH TENSILE STEEL WIRE SPIRALS
<u>24</u>	WATERFLAT 5/10	CONTROL TO SERVICE STATE OF THE PARTY OF THE	LAYFLAT HOSE FOR GENERAL PURPOSE WATER	SBR	SBR	HIGH TENSILE SYNTHETIC CORD
<u>25</u>	FIREX		ABS APPROVED FIRE SUPPRESSION HOSE	CR	CR	HIGH TENSILE STEEL WIRE SPIRALS; GLASS-FIBRE
<u>26</u>	AIRSERVICE		AIR COMPRESSOR HOSE, HEAVY DUTY	SBR	NBR/PVC	TWO WIRE BRAIDS OR MULTIPLE PIECES OF HIGH TENSILE STEEL WIRE SPIRALS
<u>27</u>	AIRSERVICE/27		WATER & AIR COMPRESSOR HOSE, HEAVY DUTY	SBR	NBR/PVC	HIGH TENSILE TEXTILE LAYERS
<u>28</u>	AIRKING/40		HEAVY DUTY PNEUMATIC TOOLS	ЕРМ	EPDM	HIGH TENSILE SYNTHETIC CORD
<u>29</u>	STEAMER/18	THE REAL PROPERTY AND ADDRESS OF THE PARTY AND	STEAM & VAPOUR HOSE	ЕРМ	ЕРМ	HIGH TENSILE STEEL WIRE SPIRALS
30	STEAMER/18 OR	THE REAL PROPERTY.	STEAM & VAPOUR HOSE	ЕРМ	ЕРМ	HIGH TENSILE STEEL WIRE SPIRALS
<u>31</u>	STEAMSAFE/7		STEAM & VAPOUR HOSE FOR FOOD INDUSTRY CLEANING	ЕРМ	EPDM	HIGH TENSILE SYNTHETIC CORD
32	COOLER/5	COMMISSION BOOKERS	INDUSTRY & GENERAL PURPOSE COOLING HOSE	VMQ	VMQ	HIGH TENSILE SYNTHETIC CORD & STEEL HELIX BODY WIRE
<u>33</u>	COOLSERVICE/G	Mary Place College Active Co.	HIGH FLEXIBILITY WATER GLYCOL COOLING HOSE	EPDM	EPDM	HIGH TENSILE SYNTHETIC CORD & STEEL HELIX BODY WIRE



НС	OSE SERIES	RECOMMEND	MATERI TUBE	AL TYPE COVER	HOSE STRUCTURE
ANT	I-STATIC FUEL HOSES				
<u>34</u>	FUELSERVICE/5 SDC	FUEL HOSE WITH HIGH FLEXIBILITY	NBR	CR	HIGH TENSILE SYNTHETIC CORD, STEEL HELIX BODY WIRE & COPPER GROUNDING WIRES
<u>35</u>	FUELSERVICE/10 D	FUEL & OIL HOSE	NBR	SBR	HIGH TENSILE SYNTHETIC CORD & COPPER GROUNDING WIRES
<u>36</u>	FUELSERVICE/10 SD	FUEL & OIL HOSE	NBR	SBR	HIGH TENSILE SYNTHETIC CORD, STEEL HELIX BODY WIRE & COPPER GROUNDING WIRES
<u>37</u>	FUELSERVICE/10 R4	FUEL & OIL HOSE	NBR	SBR	HIGH TENSILE SYNTHETIC CORD, STEEL HELIX BODY WIRE & COPPER GROUNDING WIRES
<u>38</u>	FUELSERVICE/16 D	EN 12115 FUEL & MINERAL OIL HOSE	NBR	CR	HIGH TENSILE SYNTHETIC CORD & COPPER GROUNDING WIRES
<u>39</u>	FUELSERVICE/16 SD	EN 12115 FUEL & MINERAL OIL HOSE	NBR	CR	HIGH TENSILE SYNTHETIC CORD, STEEL HELIX BODY WIRE & COPPER GROUNDING WIRES
<u>40</u>	FUELSERVICE/20 D EN 1825-B	EN 1825 TYPE B FUEL HOSE FOR AIRCRAFT REFUELLING	NBR	CR	HIGH TENSILE SYNTHETIC CORD & COPPER GROUNDING WIRES
<u>41</u>	FUELSERVICE/20 D EN 1825-C	EN 1825 TYPE C FUEL HOSE FOR AIRCRAFT REFUELLING	NBR	CR	HIGH TENSILE SYNTHETIC CORD
<u>42</u>	FUELSERVICE/20 SD EN 1825-E	EN 1825 TYPE E FUEL HOSE FOR AIRCRAFT REFUELLING	NBR	CR	HIGH TENSILE SYNTHETIC CORD, STEEL HELIX BODY WIRE & COPPER GROUNDING WIRES
<u>43</u>	FUELSERVICE/21 D	FUEL & OIL HOSE, HEAVY DUTY	NBR	SBR	HIGH TENSILE SYNTHETIC CORD & COPPER GROUNDING WIRES
<u>44</u>	FUELSERVICE/21 SD	FUEL & OIL HOSE, HEAVY DUTY	NBR	SBR	HIGH TENSILE SYNTHETIC CORD, STEEL HELIX BODY WIRE & COPPER GROUNDING WIRES
<u>45</u>	FUELDISPENSER/D	EN 1360 TYPE 1 FUEL & MINERAL OIL HOSE	NBR	CR	HIGH TENSILE SYNTHETIC CORD & COPPER GROUNDING WIRES
<u>46</u>	FUELDISPENSER/SD	EN 1360 TYPE 2 FUEL & MINERAL OIL HOSE	NBR	CR	HIGH TENSILE SYNTHETIC CORD, STEEL HELIX BODY WIRE & COPPER GROUNDING WIRES
<u>47</u>	FUELTRUCK/16 D	EN 1761 TYPE D HOSE FOR TRUCK SYSTEMS	NBR	CR	HIGH TENSILE SYNTHETIC CORD & COPPER GROUNDING WIRES
<u>48</u>	FUELTRUCK/16 SD	EN 1761 TYPE SD HOSE FOR TRUCK SYSTEMS	NBR	CR	HIGH TENSILE SYNTHETIC CORD, STEEL HELIX BODY WIRE & COPPER GROUNDING WIRES
<u>49</u>	FUELFLEX/17 SDC	FUEL DELIVERY WITH HIGH FLEXIBILITY	NBR	CR	HIGH TENSILE SYNTHETIC CORD, STEEL HELIX BODY WIRE & COPPER GROUNDING WIRES

HOSES INDEX BY APPLICATION

НС	SE SERIES		RECOMMEND	MATERI TUBE	AL TYPE	HOSE STRUCTURE
ANT	I-STATIC FUEL	. HOSES (CONT.)				
<u>50</u>	FUELTANKER/10 SD		FUEL DELIVERY WITH HIGH ABRASION RESISTANCE	NBR	NBR/PVC	HIGH TENSILE SYNTHETIC CORD, THERMOPLASTIC OUTER HELIX & COPPER GROUNDING WIRES
<u>51</u>	MUDSERVICE/28 D	The state of the s	DRILLING MUDS, OIL & ABRASIVE SLURRIES	X-NBR	CR	HIGH TENSILE SYNTHETIC CORD & COPPER GROUNDING WIRES
<u>52</u>	PROGAS LPG D	CONTRACTOR AND ADDRESS OF THE PARTY OF THE P	LPG HOSE	NBR	CR	HIGH TENSILE SYNTHETIC CORD
<u>53</u>	PROGAS LPG SD	COMMISSION OF THE PARTY OF THE	LPG HOSE	NBR	CR	HIGH TENSILE SYNTHETIC CORD & STEEL HELIX BODY WIRE
CHE	MICAL HOSES					
<u>54</u>	CHEMKING/10 D	W. SOUTH CHEROMOTE S.	FKM HOSE FOR AGGRESSIVE CHEMICALS	FKM	CR	HIGH TENSILE SYNTHETIC CORD
<u>55</u>	CHEMKING/10 SD	ACCORDANCE OF LABORRATE AND	FKM HOSE FOR AGGRESSIVE CHEMICALS	FKM	CR	HIGH TENSILE SYNTHETIC CORD & STEEL HELIX BODY WIRE
<u>56</u>	CHEMKING/16 SDE	XII VIII VIII VIII VIII VIII VIII VIII	EN 12115 ANTI-STATIC EPDM HOSE FOR CHEMICAL PRODUCTS	EPDM	CR	HIGH TENSILE SYNTHETIC CORD, STEEL HELIX BODY WIRE & COPPER GROUNDING WIRES
<u>57</u>	CHEMKING/16 SDA	Marine and College Col	EN 12115 ANTI-STATIC UHMWPE HOSE FOR CHEMICAL PRODUCTS	UHMWPE	CR	HIGH TENSILE SYNTHETIC CORD, STEEL HELIX BODY WIRE & COPPER GROUNDING WIRES
<u>58</u>	CHEMKING/16 SD	NO STATE OF THE PROPERTY OF THE PARTY OF THE	EN 12115 FEP HOSE FOR CHEMICAL PRODUCTS	FEP	CR	HIGH TENSILE SYNTHETIC CORD, STEEL HELIX BODY WIRE & COPPER GROUNDING WIRES
F00	D & BEVERAGI	E HOSES				
<u>59</u>	BREWERS/12 SD		BEER, WINE & ALCOHOL HOSE	BIIR	EPDM	HIGH TENSILE SYNTHETIC CORD & STEEL HELIX BODY WIRE
<u>60</u>	BREWERS/12 SDC		BEER, WINE & ALCOHOL HOSE	BIIR	EPDM	HIGH TENSILE SYNTHETIC CORD & STEEL HELIX BODY WIRE
<u>61</u>	MILKYWAY/ 10 SD	CONTROL TO A MANAGEMENT OF THE PARTY OF THE	MILK & FATTY FOODS HOSE	NBR	NBR	HIGH TENSILE SYNTHETIC CORD & STEEL HELIX BODY WIRE
<u>62</u>	MULTIFOOD/10 SD	CHANGE TO SUMMERS	MULTI-PURPOSE LIQUID FOOD HOSE	EPDM	EPDM	HIGH TENSILE SYNTHETIC CORD & 2 STEEL HELIX BODY WIRES
<u>63</u>	ABRAFOOD/10	CONTRACTOR MANAGEMENT	LAYFLAT HOSE FOR DRY FOODS	NR	CR	HIGH TENSILE SYNTHETIC CORD & COPPER GROUNDING WIRES



НС	SE SERIES		RECOMMEND	MATERIA TUBE	AL TYPE COVER	HOSE STRUCTURE
ABR	ASIVE HOSES					
<u>64</u>	ABRADRY	Controller for Million	LAYFLAT HOSE FOR ABRASIVE DRY MATERIALS	NR/SBR	SBR/NR/ PVC	HIGH TENSILE SYNTHETIC CORD
<u>65</u>	SANDSERVICE/21 D	Committee and the second	SANDBLASTING & ABRASIVE FLUID HOSE	NR/SBR	NR/SBR	HIGH TENSILE SYNTHETIC CORD
<u>66</u>	ABRASERVICE/10 D	Committee of the Commit	ABRASIVE FLUID HOSE, HEAVY DUTY	NR/SBR	NR/SBR	HIGH TENSILE SYNTHETIC CORD,COPPER GROUNDING WIRES
<u>67</u>	ABRASERVICE/10 SD	- Townson Control of the Control of	ABRASIVE FLUID HOSE, HEAVY DUTY	NR/SBR	NR/SBR	HIGH TENSILE SYNTHETIC CORD, STEEL HELIX BODY WIRE & COPPER GROUNDING WIRES
<u>68</u>	ABRASERVICE/35 SD	S. T. T. S. T.	REVERSE CYCLE DRILLING HOSE	NR/SBR	NR/SBR	HIGH TENSILE SYNTHETIC CORD & STEEL HELIX BODY WIRE
<u>69</u>	ABRASERVICE/40 D	Committee Millianne	PLASTER SPRAYING HOSE	NR/SBR	NR/SBR	HIGH TENSILE SYNTHETIC CORD
<u>70</u>	ABRASERVICE/100 D	THE REAL PROPERTY AND ADDRESS OF THE PARTY AND	HIGH-PRESSURE CONCRETE PUMPING HOSE	NR/SBR	NR/SBR	HIGH TENSILE STEEL CORD

HOSE

HOSES INDEX BY WORKING PRESSURE

DN	6	8	10	12	16	19	22	25	31	35	38	40	45	51	63	76	89	90	102	127	152	203	254		457	609
INCH	1/4"	⁵ /16"	3/8"	1/2"	⁵ /8"	3/4"	7/8"	1"	1 ¹ / ₄ "	1 ³ /8"	1 ¹ /2"	1 ⁹ / ₁₆ "	13/4"	2"	2 ¹ /2"	3"	3 ¹ / ₂ "	3 ³⁵ / ₆₄ "	4"	5"	6"	8"	10"	12"	18"	24"
ABRADRY																		6	4	4	4	4				
ABRAFOOD/10																			10	10						
ABRASERVICE/10 D														10		10										
ABRASERVICE/10 SD														10	10	10			10	10						
ABRASERVICE/35 SD															35	35			35							
ABRASERVICE/40 D						40		40	40	40	40			40												
ABRASERVICE/100 D														100	100	100			100	100						
AIRKING/40														40		40			40							
AIRSERVICE						45		45	45		45			45	45	45			35							
AIRSERVICE/27				27		27		27	27		27			27		27										
BREWERS/12 SD						12		12	12		12			12	12	12			12							
BREWERS/12 SDC									12		12			12	12	12			12							
CHEMKING/10 D	10	10	10	10	10	10		10	10		10			10												
CHEMKING/10 SD						10		10	10		10			10	10	10			10							
CHEMKING/16 SD				16		16		16	16		16			16												
CHEMKING/16 SDA						16		16	16		16			16	16	16			16							
CHEMKING/16 SDE						16		16	16		16			16	16	16			16							
COOLER/5					5	5		5	5		5			5		5			5							
COOLSERVICE/G					5	5	5	5	5		5															
FIREX														20		20			20	20	20					
FUELDISPENSER/D				16	16	16		16	16		16															
FUELDISPENSER/SD						16		16	16		16															
FUELFLEX/17 SDC						17		17	17		17			17	17	17			17		17					
FUELSERVICE/5 SDC						5		5	5		5			5	5	5			5							
FUELSERVICE/10 D						10		10	10		10			10	10	10										
FUELSERVICE/10 SD						10		10	10		10			10	10	10			10	10	10			10		
FUELSERVICE/10 R4						21		17	14		11	10	10	10	10	10			10	10						

RYCO

HOSES INDEX BY WORKING PRESSURE

DN	6	8	10	12	16	19	22	25	31	35	38	40	45	51	63	76	89	90	102	127	152	203	254	305	457	609
INCH	1/4"	⁵ /16"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	11/4"	13/8"	11/2"	1 ⁹ / ₁₆ "	13/4"	2"	21/2"	3"	31/2"	3 ³⁵ / ₆₄ "	4"	5"	6"	8"	10"	12"	18"	24"
FUELSERVICE/16 D						16		16	16		16			16	16	16			16							
FUELSERVICE/16 SD						16		16	16		16			16	16	16			16							
FUELSERVICE/20 D EN 1825-B						20		20	20		20			20	20	20			20							
FUELSERVICE/20 D EN 1825-C						20		20	20		20			20	20	20			20							
FUELSERVICE/20 D EN 1825-E						20		20	20		20			20	20	20			20							
FUELSERVICE/21 D						21		21	21		21			21	21	21										
FUELSERVICE/21 SD														21		21			21		21	21				
FUELTANKER/10 SD														10	10	10			10							
FUELTRUCK/16 D						16		16	16		16			16	16	16			16	16	16					
FUELTRUCK/16 SD						16		16	16		16			16	16	16			16	16	16					
GLACIER/100								100	100		100															
GLACIER/60								60	60		60															
MILKYWAY/ 10 SD						10		10	10		10			10	10	10			10							
MUDSERVICE/28 D																28			28	28	28					
MULTIFOOD/10 SD											10			10	10	10			10							
MULTISERVICE/12 D				12		12		12	12		12			12	12	12										
MULTISERVICE/12 SD						12		12	12		12			12	12	12			12		12					
MULTISERVICE/21 D				21		21		21	21		21			21	21	21										
MULTISERVICE/21 SD														21		21			21		21					
PROGAS LPG D				25	25	25		25	25		25			25	25	25			25							
PROGAS LPG SD				25	25	25		25	25		25			25	25	25			25							
SANDSERVICE/21 D						21		21	21		21			21												
STEAMER/18				18	18	18		18	18		18			18	18	18			18							
STEAMER/18 OR				18	18	18		18	18		18			18	18	18			18							
STEAMSAFE/7			7	7	7	7		7																		
WATERFLAT 5/10														10		10			10		10	10	10	10	5	5

MULTISERVICE/12 D

WATER & AIR HOSE



TUBE:

Black, smooth, synthetic SBR rubber

REINFORCEMENT:

High tensile synthetic cord

COVER:

Black synthetic SBR rubber, long lasting, weathering and ozone resistant $\,$

KEY FEATURES:

- Softwall delivery structure
- Highly robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

 Water or compressed air, to be used in mining, construction, shipyards, etc.

TEMPERATURE RANGE:

From -35°C to + 80°C (-31°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

MULTISEI WATER & PART NO	AIR HOS		NOM HOS		WOR	MUM KING SURE	BU	MUM RST SURE	BE	MUM ND DIUS	AVEF WEI		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80007013*	12	1/2"	20.6	0.81	12	170	36	520	90	3.54	206	0.14	SR+D08000 SERIES
H80007019*	19	3/4"	31.0	1.22	12	170	36	520	110	4.33	453	0.30	SR+D08000 SERIES
H80007025*	25	1"	37.4	1.47	12	170	36	520	135	5.31	565	0.38	SR+D08000 SERIES
H80007031*	31	1.1/4"	44.0	1.73	12	170	36	520	165	6.50	720	0.48	SR+D08000 SERIES
H80007038*	38	1.1/2"	52.1	2.05	12	170	36	520	205	8.07	773	0.52	SR+D08000 SERIES
H80007051*	51	2"	65.3	2.57	12	170	36	520	260	10.24	1,026	0.69	SR+D08000 SERIES
H80007063*	63	2.1/2"	78.5	3.09	12	170	36	520	360	14.17	1,520	1.02	SR+D08000 SERIES
H80007076*	76	3"	94.1	3.70	12	170	36	520	470	18.50	1,849	1.24	SR+D08000 SERIES



MULTISERVICE/12 SD

WATER & AIR HOSE



TURF:

Black, smooth, synthetic SBR rubber

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire

COVER

Black synthetic SBR rubber, long lasting, weathering and ozone resistant $\,$

KEY FEATURES:

- Hardwall suction and delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m (DN19 DN102); 30.5m (DN152)

APPLICATION & FLUIDS:

 Water or compressed air, to be used in mining, construction, shipyards, etc.

TEMPERATURE RANGE:

From -35°C to +80°C (-31°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

MULTISER WATER & PART NO	AIR HOS			INAL E OD	MAXI WOR PRES	KING	MINI BUI PRES	RST	MINI BE RAC		AVEF WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80008019*	19	3/4"	28.1	1.11	12	170	36	520	100	3.94	384	0.26	SR+D08000 SERIES
H80008025*	25	1"	34.5	1.36	12	170	36	520	125	4.92	482	0.32	SR+D08000 SERIES
H80008031*	31	1.1/4"	41.1	1.62	12	170	36	520	150	5.91	605	0.41	SR+D08000 SERIES
H80008038*	38	1.1/2"	47.5	1.87	12	170	36	520	190	7.48	701	0.47	SR+D08000 SERIES
H80008051*	51	2"	61.3	2.41	12	170	36	520	250	9.84	1,122	0.75	SR+D08000 SERIES
H80008063*	63	2.1/2"	74.4	2.93	12	170	36	520	350	13.78	1,600	1.07	SR+D08000 SERIES
H80008076*	76	3"	87.5	3.44	12	170	36	520	450	17.72	2,203	1.48	SR+D08000 SERIES
H80008102*	102	4"	114.3	4.50	12	170	36	520	500	19.69	3,330	2.24	SR+D08000 SERIES
H80008152*	152	6"	172.0	6.77	12	170	36	520	760	29.92	6,600	4.48	MARKET FITTINGS

MULTISERVICE/21 D

WATER & AIR HOSE HEAVY DUTY



THRE.

Black, smooth, synthetic SBR rubber

REINFORCEMENT:

High tensile synthetic cord

COVER:

Black synthetic SBR rubber, long lasting, weathering and ozone resistant $\,$

KEY FEATURES:

- Softwall delivery structure
- Highly robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

 Water or compressed air, to be used inheavy duty mining, construction, shipyards, etc.

TEMPERATURE RANGE:

From -35°C to + 80°C (-31°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

MULTISEF WATER & HEAV PART NO	AIR HOS Y DUTY		NOM HOS		MAXI WOR PRES		BUI	MUM RST SURE	BE	MUM ND DIUS	AVEF WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80009013*	12	1/2"	20.6	0.81	21	300	63	910	90	3.54	215	0.14	SR+D08000 SERIES
H80009019*	19	3/4"	31.6	1.24	21	300	63	910	110	4.33	457	0.31	SR+D08000 SERIES
H80009025*	25	1"	38.2	1.50	21	300	63	910	135	5.31	519	0.35	SR+D08000 SERIES
H80009031*	31	1.1/4"	45.0	1.77	21	300	63	910	165	6.5	659	0.44	SR+D08000 SERIES
H80009038*	38	1.1/2"	51.6	2.03	21	300	63	910	205	8.07	928	0.62	SR+D08000 SERIES
H80009051*	51	2"	65.0	2.56	21	300	63	910	260	10.24	1,224	0.82	SR+D08000 SERIES
H80009063*	63	2.1/2"	78.9	3.11	21	300	63	910	360	14.17	1,583	1.06	SR+D08000 SERIES
H80009076*	76	3"	94.0	3.70	21	300	63	910	470	18.5	1,849	1.24	SR+D08000 SERIES

ASSEMBLY MACHINES



MULTISERVICE/21 SD

WATER & AIR HOSE HEAVY DUTY



TURF:

Black, smooth, synthetic SBR rubber

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire

COVER

Black synthetic SBR rubber, long lasting, weathering and ozone resistant $\,$

KEY FEATURES:

- hardwall suction and delivery structure
- Compact, lightweight and flexible
- Highly robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 61m (DN19 DN102); 30.5m (DN152)

APPLICATION & FLUIDS:

 Water or compressed air, to be used in heavy duty mining, construction, shipyards, etc.

TEMPERATURE RANGE:

From -35°C to + 80°C (-31°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

MULTISER WATER & HEAV PART NO			NOM HOS	INAL E OD	WOR	MUM KING SURE	MINI BUI PRES	RST	MINI BE RAD	ND	AVER WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80022051*	51	2"	61.3	2.41	21	300	63	910	250	9.84	1,130	0.76	SR+D08000 SERIES
H80022076*	76	3"	88.3	3.48	21	300	63	910	450	17.72	2,285	1.53	SR+D08000 SERIES
H80022102*	102	4"	115.1	4.53	21	300	63	910	500	19.69	3,378	2.27	SR+D08000 SERIES
H80022152*	152	6"	174.0	6.85	21	300	63	910	760	29.92	6,800	4.57	MARKET FITTINGS

GLACIER/60

WATER HOSE FOR SNOW GUNS



TUBE:

Black EPDM rubber

REINFORCEMENT:

High tensile synthetic cord

COVER:

Blue, synthetic EPDM rubber; abrasion, weathering and ozone resistant

KEY FEATURES:

- Hardwall delivery structure
- Compact, lightweight and flexible
- Highly robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

• Delivery hose for water in snow gun equipment

TEMPERATURE RANGE:

From -40°C to + 120°C (-40°F to +248°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

GLA WATER HOSE	CIER/60 FOR SNOV	/GUNS][[MAXI	MUM	MINI	MUM	MINI	MUM	V	V	
PART NO	HOSE	SIZE		INAL E OD		KING SURE	BUI PRES	RST SURE	BE RAD	ND IUS	AVEF WEI	RAGE GHT	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80054025*	25	1"	39.0	1.54	60	900	180	2,700	100	3.94	810	0.54	SR+D08000 SERIES
H80054031*	31	1.1/4"	46.0	1.81	60	900	180	2,700	128	5.04	990	0.66	SR+D08000 SERIES
H80054038*	38	1.1/2"	52.0	2.05	60	900	180	2,700	152	5.98	1,140	0.76	SR+D08000 SERIES

ASSEMBLY MACHINES

COUPLINGS



GLACIER/100

WATER HOSE FOR SNOW GUNS



TUBE:

Black EPDM rubber

REINFORCEMENT:

High tensile steel spirals

COVER:

Blue, synthetic EPDM rubber; abrasion, weathering and ozone resistant

KEY FEATURES:

- Hardwall delivery structure
- Compact, lightweight and flexible
- Highly robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

• Delivery hose for water in snow gun equipment

TEMPERATURE RANGE:

From -40°C to + 120°C (-40°F to +248°F).

WORKING PRESSURE:

Maximum working pressures are based on 2.5:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

GLACI WATER HOSE F	IER/100 OR SNOV	/ GUNS	<u>[</u>)			V	V	
PART NO	HOSE	SIZE		INAL E OD	WOR	MUM KING SURE	BU	MUM RST SURE	MINI BE RAD	ND	AVEF WEI		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80055025*	25	1"	40.0	1.57	100	1,500	250	3,750	110	4.33	1,300	0.87	SR+D08000 SERIES
H80055031*	31	1.1/4"	47.0	1.85	100	1,500	250	3,750	140	5.51	1,740	1.16	SR+D08000 SERIES
H80055038*	38	1.1/2"	54.0	2.13	100	1,500	250	3,750	170	6.69	2,250	1.50	SR+D08000 SERIES

WATERFLAT 5/10

LAYFLAT DELIVERY HOSE FOR GENERAL PURPOSE WATER



TUBE:

Black SBR rubber

REINFORCEMENT:

High tensile synthetic cord

COVER:

Black synthetic SBR rubber, abrasion and weathering resistant

KEY FEATURES:

- · Layflat delivery hose
- · Compact, lightweight and flexible
- Highly robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 61m (DN51 DN102); 30.5m (DN152 - DN203); 12m (DN254 - DN609)

APPLICATION & FLUIDS:

- Water, liquid fertilizer and non-corrosive inert fluids for irrigation
- Submersible pumps and general industrial applications

TEMPERATURE RANGE:

From -30°C to + 80°C (-22°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

Market fittings

WATERF LAYFLAT DELIN GENERAL PU PART NO	RPOSE W	SE FOR	NOM HOS		MAXI WOR PRES		MINI BUI PRES	RST	MINI BE RAD		AVEF WEI	AGE	COUPLING SERIES
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80056051*	51	2"	59.0	2.32	10	150	30	450	-	-	580	0.39	MARKET FITTINGS
H80056076*	76	3"	84.0	3.30	10	150	30	450	-	-	1,180	0.79	MARKET FITTINGS
H80056102*	102	4"	111.0	4.37	10	150	30	450	-	-	1,570	1.05	MARKET FITTINGS
H80056152*	152	6"	162.0	6.37	10	150	30	450	-	-	2,650	1.77	MARKET FITTINGS
H80056203*	203	8"	215.0	8.46	10	150	30	450	-	-	5,320	3.55	MARKET FITTINGS
H80056254*	254	10"	267.0	10.51	10	150	30	450	-	-	7,180	4.79	MARKET FITTINGS
H80056305*	305	12'	319.0	12.56	10	150	30	450	-	-	9,260	6.17	MARKET FITTINGS
H80056457*	457	18"	476.0	18.74	5	75	15	225	-	-	18,400	12.27	MARKET FITTINGS
H80056609*	609	24"	635.0	25.00	5	75	15	225	-	-	31,200	20.80	MARKET FITTINGS



FIREX

FIRE SUPPRESSION HOSE ABS APPROVED FOR OFFSHORE



TUBE:

Black CR rubber

REINFORCEMENT:

High tensile steel spirals

COVER:

Glass-fibre layers, co-vulcanized with an external layer of red CR rubber; fire, sea-water, abrasion and ozone resistant (black cover available on request)

KEY FEATURES:

- Hardwall delivery structure
- Highly robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

• Delivery hose for fire-water deluge hose applications on oil rigs

TEMPERATURE RANGE:

From -40°C to + 100°C (-40°F to +212°F).

WORKING PRESSURE:

Maximum working pressures are based on 5:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

EN 15540:1999 (800°C X 30') / ABS approval (required)

COUPLINGS:

Market fittings

FIRE SUPPR ABS APPROVED PART NO	FOR OFF		NOM HOS	INAL E OD		MUM KING SURE	MINII BUI PRES	RST	MINI BE RAD	ND	AVEF WEI	RAGE	COUPLING SERIES
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80016051*	51	2"	80.0	3.15	20	300	100	1,500	420	16.54	4,900	3.27	MARKET FITTINGS
H80016076*	76	3"	108.0	4.25	20	300	100	1,500	535	21.06	7,500	5.00	MARKET FITTINGS
H80016102*	102	4"	134.0	5.28	20	300	100	1,500	640	25.20	11,000	7.33	MARKET FITTINGS
H80016127*	127	5"	160.0	6.30	20	300	100	1,500	1,100	43.31	13,400	8.93	MARKET FITTINGS
H80016152*	152	6"	185.0	7.28	20	300	100	1,500	1,210	47.64	15,700	10.47	MARKET FITTINGS

AIRSERVICE

AIR COMPRESSOR HOSE HEAVY DUTY



TURF:

Black, smooth, synthetic SBR rubber

REINFORCEMENT:

Two wire braids or multiple piles of high tensile steel wire spirals

COVER

Yellow synthetic NBR/PVC rubber, long lasting, weathering and ozone resistant $\,$

KEY FEATURES:

- · Heavy duty softwall delivery structure
- Robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

- High pressure compressed air and oil traces, to be used in mining, construction, etc.
- Typically used in compressed air systems and power transmission.

TEMPERATURE RANGE:

From -40°C to +80°C (-40°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

AIR COMPR	Y DUTY	OSE E SIZE	NOM HOS		WOR	MUM KING SURE	BU	MUM RST SURE	BE	MUM ND DIUS	AVEF WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80010019*	19	3/4"	31.4	1.24	45	650	180	2,610	95	3.74	780	0.52	SR+D08000 SERIES
H80010025*	25	1"	37.8	1.49	45	650	180	2,610	125	4.92	1,014	0.68	SR+D08000 SERIES
H80010031*	31	1.1/4"	44.8	1.76	45	650	180	2,610	160	6.30	1,283	0.86	SR+D08000 SERIES
H80010038*	38	1.1/2"	51.2	2.02	45	650	180	2,610	190	7.48	1,534	1.03	SR+D08000 SERIES
H80010051*	51	2"	65.0	2.56	45	650	180	2,610	255	10.04	2,277	1.53	SR+D08000 SERIES
H80010063*	63	2.1/2"	79.4	3.13	35	500	140	2,030	315	12.40	2,915	1.95	SR+D08000 SERIES
H80010076*	76	3"	94.2	3.71	35	500	140	2,030	380	14.96	4,068	2.73	SR+D08000 SERIES
H80010102*	102	4"	122.0	4.80	35	500	140	2,030	510	20.08	5,800	3.85	SR+D08000 SERIES

ASSEMBLY MACHINES



AIRSERVICE/27

WATER & AIR COMPRESSOR HOSE HEAVY DUTY



TUBE

Black, synthetic SBR rubber, resistant to oil traces

REINFORCEMENT:

High tensile textile layers

COVER:

Yellow synthetic NBR/PVC rubber, long lasting, weathering and ozone resistant $\,$

KEY FEATURES:

- Softwall delivery structure
- Highly robust heavy duty hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

• Water or compressed air with oil traces, to be used in mining, construction, etc.

TEMPERATURE RANGE:

From -35°C to +80°C (-31°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

WATER & AIR CO	Y DUTY	OR HOSE		IINAL E OD		MUM KING SURE	MINI BUI PRES		MINI BE RAD		AVEF WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80017013*	12	1/2"	20.6	0.81	27	400	81	1,175	100	3.93	246	0.16	SR+D08000 SERIES
H80017019*	19	3/4"	30.3	1.19	27	400	81	1,175	150	5.90	466	0.31	SR+D08000 SERIES
H80017025*	25	1"	36.8	1.45	27	400	81	1,175	185	7.28	589	0.39	SR+D08000 SERIES
H80017031*	31	1.1/4"	43.3	1.70	27	400	81	1,175	320	12.59	749	0.50	SR+D08000 SERIES
H80017038*	38	1.1/2"	48.9	1.93	27	400	81	1,175	380	14.96	898	0.60	SR+D08000 SERIES
H80017051*	51	2"	62.1	2.44	27	400	81	1,175	500	19.68	1,195	0.80	SR+D08000 SERIES
H80007076*	76	3"	88.5	3.48	27	400	81	1,175	750	29.52	1,986	1.33	SR+D08000 SERIES

AIRKING/40

HEAVY DUTY PNEUMATIC TOOLS IN RAILWAYS, ROAD CONSTRUCTION, MINING, TUNNELLING ETC.



TUBE:

Black, EPM rubber

REINFORCEMENT:

High tensile synthetic cord

COVER:

Black EPDM rubber, abrasion and weathering resistant (yellow cover available on request) $\,$

KEY FEATURES:

- Hardwall delivery structure
- Compact and flexible
- Highly robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

 Delivery hose for high temperature compressed air suitable for heavy duty pneumatic tools in road construction, railway works, tunnelling and mining

TEMPERATURE RANGE:

From -30°C to + 160°C (-22°F to +320°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

HEAVY DUTY PNE RAILWAYS, ROAD	CONSTR	RUCTION,]((*			V	V	
MINING, TUN PART NO		ESIZE	NOM HOS	INAL E OD		MUM KING SURE	BUI	MUM RST SURE	BE	MUM ND DIUS	AVEF WEI		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80053051*	51	2"	70.0	2.75	40	600	120	1,800	500	19.69	1,930	1.71	SR+D08000 SERIES
H80053076*	76	3"	100.0	3.94	40	600	120	1,800	740	29.13	3,750	3.32	SR+D08000 SERIES
H80053102*	102	4"	128.0	5.05	40	600	120	1,800	970	38.19	5,120	4.53	SR+D08000 SERIES



STEAMER/18

STEAM & VAPOUR HOSE



TUBE:

Black EPM rubber

REINFORCEMENT:

High tensile steel reinforcement

COVER:

Red synthetic EPM pink-pricked rubber, abrasion, weathering and ozone resistant

KEY FEATURES:

- Hardwall delivery structure
- Compact, lightweight and flexible
- Highly robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 40m

APPLICATION & FLUIDS:

- Delivery of high pressure saturated steam
- Suitable for steam cleaning of tanks and pipelines in the petrochemical industry

TEMPERATURE RANGE:

From -40°C to + 210°C (-40°F to +410°F).

WORKING PRESSURE:

Maximum working pressures are based on 10:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

ISO 6134 - Type 2 Class A Grade M

COUPLINGS:

Market fittings

STEAMER/18 STEAM & VAPOUR HOSE PART NO HOSE SIZE		NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE		MINIMUM BEND RADIUS		AVERAGE WEIGHT		COUPLING SERIES	
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80037012*	12	1/2"	25.0	0.98	18	270	180	2,700	120	4.72	530	0.35	MARKET FITTINGS
H80037016*	16	5/8"	30.0	1.18	18	270	180	2,700	155	6.10	750	0.50	MARKET FITTINGS
H80037019*	19	3/4"	33.0	1.30	18	270	180	2,700	185	7.28	780	0.52	MARKET FITTINGS
H80037025*	25	1"	40.0	1.57	18	270	180	2,700	240	9.45	1,030	0.69	MARKET FITTINGS
H80037031*	31	1.1/4"	48.0	1.89	18	270	180	2,700	330	12.99	1,410	0.94	MARKET FITTINGS
H80037038*	38	1.1/2"	54.0	2.13	18	270	180	2,700	390	15.35	1,780	1.19	MARKET FITTINGS
H80037051*	51	2"	69.0	2.72	18	270	180	2,700	520	20.47	2,580	1.72	MARKET FITTINGS
H80037063*	63	2.1/2"	81.0	3.19	18	270	180	2,700	640	25.20	3,160	2.11	MARKET FITTINGS
H80037076*	76	3"	94.0	3.70	18	270	180	2,700	745	29.33	4,020	2.68	MARKET FITTINGS
H80037102*	102	4"	122.0	4.80	18	270	180	2,700	990	38.98	6,220	4.15	MARKET FITTINGS

STEAMER/18 OR

STEAM & VAPOUR HOSE



TUBE:

Black EPM rubber

REINFORCEMENT:

High tensile steel reinforcement

COVER:

Red synthetic EPM pink-pricked rubber, oil, abrasion, weathering and ozone resistant $\,$

KEY FEATURES:

- Hardwall delivery structure
- Compact, lightweight and flexible
- Highly robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 40m

APPLICATION & FLUIDS:

- Delivery of high pressure saturated steam
- Suitable for steam cleaning of tanks and pipelines in the petrochemical industry

TEMPERATURE RANGE:

From -40°C to + 210°C (-40°F to +410°F).

WORKING PRESSURE:

Maximum working pressures are based on 10:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

ISO 6134 - Type 2 Class B Grade M

COUPLINGS:

Market fittings

STEAMER/18 OR STEAM & VAPOUR HOSE PART NO HOSE SIZE		NOMINAL HOSE OD PRESSURE		KING	MINIMUM BURST PRESSURE		MINIMUM BEND RADIUS		AVERAGE WEIGHT		COUPLING SERIES		
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80038012*	12	1/2"	25.0	0.98	18	270	180	2,700	120	4.72	530	0.35	MARKET FITTINGS
H80038016*	16	5/8"	30.0	1.18	18	270	180	2,700	155	6.10	750	0.50	MARKET FITTINGS
H80038019*	19	3/4"	33.0	1.30	18	270	180	2,700	185	7.28	780	0.52	MARKET FITTINGS
H80038025*	25	1"	40.0	1.57	18	270	180	2,700	240	9.45	1,030	0.69	MARKET FITTINGS
H80038031*	31	1.1/4"	48.0	1.89	18	270	180	2,700	330	12.99	1,410	0.94	MARKET FITTINGS
H80038038*	38	1.1/2"	54.0	2.13	18	270	180	2,700	390	15.35	1,780	1.19	MARKET FITTINGS
H80038051*	51	2"	69.0	2.72	18	270	180	2,700	520	20.47	2,580	1.72	MARKET FITTINGS
H80038063*	63	2.1/2"	81.0	3.19	18	270	180	2,700	640	25.2	3,160	2.11	MARKET FITTINGS
H80038076*	76	3"	94.0	3.70	18	270	180	2,700	745	29.33	4,020	2.68	MARKET FITTINGS
H80038102*	102	4"	122.0	4.80	18	270	180	2,700	990	38.98	6,220	4.15	MARKET FITTINGS



STEAMSAFE/7

STEAM & VAPOUR HOSE FOR FOOD INDUSTRY CLEANING



TUBE:

White EPM rubber

REINFORCEMENT:

High tensile synthetic cord

COVER:

Blue synthetic EPDM rubber, abrasion, weathering and ozone resistant

KEY FEATURES:

- Hardwall delivery structure
- · Compact, lightweight and flexible
- Highly robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 20m (DN10); 40m (DN12 DN16); 61m (DN19 DN25)

APPLICATION & FLUIDS:

- Potable hot water mixed with steam and detergents
- Suitable for washdown and sterilization in the food industry

TEMPERATURE RANGE:

From -40°C to + 170°C (-40°F to +338°F).

WORKING PRESSURE:

Maximum working pressures are based on 10:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

FDA Title 21, art. 177.2600 for aqueous foods

COUPLINGS:

Market fittings

STEAM & VAPOUR	STEAMSAFE/7 VAPOUR HOSE FOR FOOD DUSTRY CLEANING NO HOSE SIZE		NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE		MINIMUM BEND RADIUS		AVERAGE WEIGHT		COUPLING SERIES
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80040010*	10	3/8"	20.0	0.79	7	105	70	1,050	55	2.17	280	0.19	MARKET FITTINGS
H80040012*	12	1/2"	23.0	0.91	7	105	70	1,050	65	2.56	370	0.25	MARKET FITTINGS
H80040016*	16	5/8"	26.0	1.02	7	105	70	1,050	85	3.35	430	0.29	MARKET FITTINGS
H80040019*	19	3/4"	31.0	1.22	7	105	70	1,050	100	3.94	580	0.39	MARKET FITTINGS
H80040025*	25	1"	37.0	1.46	7	105	70	1,050	125	4.92	750	0.50	MARKET FITTINGS

COOLER/5

INDUSTRY & GENERAL PURPOSE WATER COOLING HOSE



TUBE:

Red, VMQ silicone

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire

COVER:

Red VMQ sliicone, high temperature and weathering resistant

KEY FEATURES:

- Hardwall suction and delivery structure
- Compact, lightweight and flexible
- Highly robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 40m (DN16 to DN76); 20m (DN102)

APPLICATION & FLUIDS:

• Suction & delivery of hot air and water in engine cooling systems

TEMPERATURE RANGE:

From -60°C to + 200°C (-76°F to +392°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

INDUSTRY & GEN	COOLER/5 INDUSTRY & GENERAL PURPOSE WATER COOLING HOSE PART NO HOSE SIZE		NOMINAL HOSE OD		MAXIMUM WORKING PRESSURE		MINIMUM BURST PRESSURE		MINIMUM BEND RADIUS		AVERAGE WEIGHT		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80041016*	16	5/8"	26.0	1.02	5	75	15	225	80	3.15	400	0.27	SR+D08000 SERIES
H80041019*	19	3/4"	29.0	1.14	5	75	15	225	95	3.74	450	0.30	SR+D08000 SERIES
H80041025*	25	1"	35.0	1.38	5	75	15	225	125	4.92	580	0.39	SR+D08000 SERIES
H80041031*	31	1.1/4"	42.0	1.65	5	75	15	225	160	6.30	680	0.45	SR+D08000 SERIES
H80041038*	38	1.1/2"	48.0	1.89	5	75	15	225	190	7.48	830	0.55	SR+D08000 SERIES
H80041051*	51	2"	61.0	2.40	5	75	15	225	260	10.24	1,300	0.87	SR+D08000 SERIES
H80041076*	76	3"	96.0	3.78	5	75	15	225	380	14.96	1,900	1.27	SR+D08000 SERIES
H80041102*	102	4"	114.0	4.49	5	75	15	225	480	18.90	2,810	1.87	SR+D08000 SERIES



COOLSERVICE/G

HIGH FLEXIBILITY WATER GLYCOL COOLING SUCTION & DELIVERY HOSE



TUBE:

EPDM rubber

REINFORCEMENT:

High tensile synthetic cord and steel helix body wire

COVER:

Environmental resistant synthetic rubber, flat corrugated cover style

KEY FEATURES:

- Hardwall hose used for the suction and delivery of water-glycol cooling lines at high temperature
- Flat corrugated (grooved) cover for improved flexibility and reduced bend radius
- Long lasting in severe applications
- Resistance to Vacuum
- Max. length: 61m

APPLICATION & FLUIDS:

- Suction and Delivery hose for hot water and coolant fluids, applied in engine cooling and heating systems
- · Radiator hose
- Outstanding flexibility, installation in very narrow spaces
- Water and water-glycol solutions

TEMPERATURE RANGE:

From -40°C to + 125°C (-40°F to +257°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

HIGH FLEXIBILIT COOLING SUCT	ON & DE			INAL E OD	WOR	MUM KING SURE	BU	MUM RST SURE	MINI BE RAD		AVERAGE WEIGHT		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80059016*	16	5/8"	26.3	1.03	5	75	20	290	33	1.29	450	0.30	SR+D08000 SERIES
H80059019*	19	3/4"	29.3	1.15	5	75	20	290	36	1.41	500	0.34	SR+D08000 SERIES
H80059022*	22	7/8"	34.5	1.37	5	75	20	290	36	1.41	540	0.36	SR+D08000 SERIES
H80059025*	25	1"	37.0	1.46	5	75	20	290	36	1.41	580	0.39	SR+D08000 SERIES
H80059031*	31	1.1/4"	44.0	1.73	5	75	20	290	50	1.96	730	0.49	SR+D08000 SERIES
H80059038*	38	1.1/2"	50.5	1.99	5	75	20	290	70	2.76	980	0.66	SR+D08000 SERIES

ANTI-STATIC FUEL HOSES

FUELSERVICE/5 SDC

FUEL SUCTION & DELIVERY HOSE WITH HIGH FLEXIBILITY



TUBE:

Black NBR rubber

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire and 2 crossing copper wires for grounding

COVER

Black synthetic, normal corrugated CR rubber, anti-static (R<10 6 Ohm/m), oil, fuel, abrasion and weathering resistant

KEY FEATURES:

- Hardwall suction and delivery structure
- Normal corrugated cover offers lowest bend radius in category
- Compact, lightweight and extremely flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

 Fuels, oils, petroleum & its derivatives with aromatic content up to 50%

TEMPERATURE RANGE:

From -30°C to + 100°C (-22°F to +212°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

FUELSERY FUEL SUCTION & WITH HIGH PART NO	& DELIVEI FLEXIBIL	RY HOSE	NOM HOS		MAXI WOR PRES	KING	NG BURST		MINIMUM BEND RADIUS		AVERAGE WEIGHT		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80024019*	19	3/4"	30.0	1.18	5	75	15	225	20	0.79	500	0.33	SR+D08000 SERIES
H80024025*	25	1"	36.0	1.42	5	75	15	225	25	0.98	610	0.41	SR+D08000 SERIES
H80024031*	31	1.1/4"	43.0	1.69	5	75	15	225	30	1.18	740	0.49	SR+D08000 SERIES
H80024038*	38	1.1/2"	49.0	1.93	5	75	15	225	40	1.57	830	0.55	SR+D08000 SERIES
H80024051*	51	2"	62.0	2.44	5	75	15	225	50	1.97	1,150	0.77	SR+D08000 SERIES
H80024063*	63	2.1/2"	76.0	2.99	5	75	15	225	65	2.56	1,370	0.91	SR+D08000 SERIES
H80024076*	76	3"	88.0	3.46	5	75	15	225	75	2.95	1,810	1.21	SR+D08000 SERIES
H80024102*	102	4"	115.0	4.53	5	75	15	225	110	4.33	2,700	1.80	SR+D08000 SERIES



FUELSERVICE/10 D

FUEL & OIL HOSE



TUBE:

Black NBR rubber

REINFORCEMENT:

High tensile synthetic cord and 2 crossing copper wires for grounding

COVER

Black synthetic SBR rubber, long lasting, weathering and ozone resistant $\,$

KEY FEATURES:

- Softwall delivery structure
- Highly robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

• Fuels, oils and diesel with aromatic content up to 50%

TEMPERATURE RANGE:

From -30°C to + 90°C (-22°F to +194°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

FUELSER FUEL & (PART NO	OIL HOSE			INAL E OD	WOR	MUM KING SURE	MINI BUI PRES	RST	BE	MUM ND DIUS	AVEF WEI		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80004019*	19	3/4"	31.4	1.24	10	150	31	450	90	3.54	503	0.34	SR+D08000 SERIES
H80004025*	25	1"	37.8	1.49	10	150	31	450	115	4.53	629	0.42	SR+D08000 SERIES
H80004031*	31	1.1/4"	44.4	1.75	10	150	31	450	150	5.91	788	0.53	SR+D08000 SERIES
H80004038*	38	1.1/2"	52.5	2.07	10	150	31	450	180	7.09	857	0.58	SR+D08000 SERIES
H80004051*	51	2"	65.3	2.57	10	150	31	450	240	9.45	1,129	0.76	SR+D08000 SERIES
H80004063*	63	2.1/2"	78.5	3.09	10	150	31	450	300	11.81	1,679	1.13	SR+D08000 SERIES
H80004076*	76	3"	94.3	3.71	10	150	31	450	380	14.96	2,045	1.37	SR+D08000 SERIES

FUELSERVICE/10 SD

FUEL & OIL HOSE



TUBE:

Black NBR rubber

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire and 2 crossing copper wires for grounding $\,$

COVER

Black synthetic SBR rubber, long lasting, weathering and ozone resistant $\,$

KEY FEATURES:

- Hardwall suction and delivery structure
- · Compact, lightweight and flexible
- Highly robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 61m (DN19 DN102); 30.5m (DN127 - DN 152); 12m (DN305)

APPLICATION & FLUIDS:

• Fuels, oils and diesel with aromatic content up to 50%

TEMPERATURE RANGE:

From -30°C to + 90°C (-22°F to +194°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

FUELSER FUEL & I PART NO	OIL HOSE		NOM HOS		WOR	MUM KING SURE	MINI BUI PRES	RST	MINII BE RAD	ND	AVER WEI	AGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80005019*	19	3/4"	28.1	1.11	10	150	31	450	80	3.15	413	0.28	SR+D08000 SERIES
H80005025*	25	1"	34.5	1.36	10	150	31	450	105	4.13	521	0.35	SR+D08000 SERIES
H80005031*	31	1.1/4"	41.1	1.62	10	150	31	450	135	5.31	637	0.43	SR+D08000 SERIES
H80005038*	38	1.1/2"	47.5	1.87	10	150	31	450	165	6.50	760	0.51	SR+D08000 SERIES
H80005051*	51	2"	61.3	2.41	10	150	31	450	230	9.06	1,217	0.82	SR+D08000 SERIES
H80005063*	63	2.1/2"	74.4	2.93	10	150	31	450	290	11.42	1,723	1.15	SR+D08000 SERIES
H80005076*	76	3"	87.5	3.44	10	150	31	450	360	14.17	2,386	1.60	SR+D08000 SERIES
H80005102*	102	4"	114.9	4.52	10	150	31	450	450	17.72	3,530	2.37	SR+D08000 SERIES
H80005127*	127	5"	145.0	5.71	10	150	31	450	510	20.08	5,800	3.90	MARKET FITTINGS
H80005152*	152	6"	170.0	6.69	10	150	31	450	610	24.02	7,200	4.85	MARKET FITTINGS
H80005305*	305	12"	325.0	12.80	10	150	31	450	1,200	47.24	10,200	6.80	MARKET FITTINGS



FUELSERVICE/10 R4

FUEL & OIL HOSE



TUBE:

Black NBR rubber

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire and 2 crossing copper wires for grounding

COVED.

Black synthetic SBR rubber, long lasting, weathering and ozone and oil resistant $\,$

KEY FEATURES:

- Suitable as SAE j517 Type 100R4
- Hardwall suction and delivery structure
- Compact, lightweight and flexible
- Highly robust hose structure
- Long lasting in severe applications
- Long length assemblies available Max length: 61m (DN19 DN102); 30.5m (DN127)
- Vacuum performance: -0.9 bar

APPLICATION & FLUIDS:

• Fuels and oils with aromatic content up to 50%

TEMPERATURE RANGE:

From -30°C to + 90°C (-22°F to +194°F) Hydraulic oils temperature range: -40°C to 100°C (-40°F to 212°F)

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

Exceeds SAE 100R4

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

FUELSER FUEL & I PART NO	OIL HOSE		NOM HOS	INAL E OD		MUM KING SURE	BUI	MUM RST SURE	MINI BE RAD	ND	AVER WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80064019*	19	3/4"	29.5	1.16	21	300	84	1,218	80	3.14	530	0.36	SR+D08000 SERIES
H80064025*	25	1"	36.0	1.41	17	240	70	1,015	100	3.93	660	0.44	SR+D08000 SERIES
H80064031*	31	1.1/4"	42.5	1.67	14	200	56	812	130	5.11	810	0.54	SR+D08000 SERIES
H80064038*	38	1.1/2"	49.5	1.94	11	160	44	638	170	6.69	1,050	0.71	SR+D08000 SERIES
H80064040*	40	1.9/16"	50.0	1.97	10	150	40	580	170	6.69	1,280	0.85	MARKET FITTINGS
H80064045*	45	1.3/4"	56.0	2.20	10	150	40	580	180	7.09	1,490	0.99	MARKET FITTINGS
H80064051*	51	2"	61.5	2.42	10	150	40	580	200	7.87	1,217	0.82	SR+D08000 SERIES
H80064063*	63	2.1/2"	74.5	2.93	10	150	40	580	250	9.84	1,723	1.16	SR+D08000 SERIES
H80064076*	76	3"	88.5	3.48	10	150	40	580	300	11.81	2,500	1.68	SR+D08000 SERIES
H80064102*	102	4"	116.0	4.56	10	150	40	580	400	15.74	3,600	2.42	SR+D08000 SERIES
H80064127*	127	5"	144.0	5.67	10	150	40	580	510	20.08	5,360	3.57	MARKET FITTINGS

FUELSERVICE/16 D

FUEL & MINERAL OIL DELIVERY HOSE EN 12115



TUBF.

Black anti-static NBR rubber

REINFORCEMENT:

High tensile synthetic cord and 2 crossing copper wires for grounding

COVER-

Black synthetic CR rubber, fire-proof, anti-static (R<1G 0hm/m), chemical, ozone and weathering resistant

KEY FEATURES:

- Hardwall delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

- Fuels, oils, petroleum & its derivatives with aromatic content up to 50%
- Cover compound is tested an approved according to EN 60079-0:2012 $\{R \le 10^9 \text{ Ohm/m}\}$
- Hose structure designed to assure and maintain the requirements for the ATEX working conditions

TEMPERATURE RANGE:

From -30°C to + 80°C (-22°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

EN 12115 (Grade Ω/T) / TRbF; EN 60079-0

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

FUELSER FUEL & MINER/ HOSE E PART NO	AL OIL DE N 12115		NOM HOS	INAL E OD	WOR	MUM KING SURE	BU	MUM RST SURE	BE	MUM ND DIUS	AVEF WEI		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80028019*	19	3/4"	31.0	1.22	16	240	64	960	125	4.92	600	0.40	SR+D08000 SERIES
H80028025*	25	1"	37.0	1.46	16	240	64	960	150	5.91	890	0.59	SR+D08000 SERIES
H80028031*	31	1.1/4"	44.0	1.73	16	240	64	960	175	6.89	1,000	0.67	SR+D08000 SERIES
H80028038*	38	1.1/2"	51.0	2.01	16	240	64	960	225	8.86	1,350	0.90	SR+D08000 SERIES
H80028051*	51	2"	67.0	2.64	16	240	64	960	275	10.83	2,000	1.33	SR+D08000 SERIES
H80028063*	63	2.1/2"	80.0	3.15	16	240	64	960	300	11.81	2,500	1.67	SR+D08000 SERIES
H80028076*	76	3"	92.0	3.62	16	240	64	960	350	13.78	2,850	1.90	SR+D08000 SERIES
H80028102*	102	4"	122.0	4.80	16	240	64	960	450	17.72	4,150	2.77	SR+D08000 SERIES



FUELSERVICE/16 SD

FUEL & MINERAL OIL SUCTION & DELIVERY HOSE EN 12115



TURF:

Black anti-static NBR rubber

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire and 2 crossing copper wires for grounding $\,$

COVED.

Black synthetic CR rubber, fire-proof, anti-static (R<1G 0hm/m), chemical, ozone and weathering resistant

KEY FEATURES:

- · Hardwall suction and delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

- Fuels, oils, petroleum & its derivatives with aromatic content up to 50%
- Cover compound is tested an approved according to EN 60079-0:2012 $(R \le 10^9 \text{ Ohm/m})$
- Hose structure designed to assure and maintain the requirements for the ATEX working conditions

TEMPERATURE RANGE:

From -30°C to +80°C (-22°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

EN 12115 (Grade Ω/T) / TRbF; EN 60079-0

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

FUELSER FUEL & MINERA DELIVERY HO PART NO	L OIL SU DSE EN 1:	CTION &	NOM HOS		WOR	MUM KING SURE	BUI	MUM RST SURE	BE	MUM ND DIUS	AVEF WEI		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80029019*	19	3/4"	31.0	1.22	16	240	64	960	125	4.92	700	0.47	SR+D08000 SERIES
H80029025*	25	1"	37.0	1.46	16	240	64	960	150	5.91	900	0.60	SR+D08000 SERIES
H80029031*	31	1.1/4"	44.0	1.73	16	240	64	960	175	6.89	1,200	0.80	SR+D08000 SERIES
H80029038*	38	1.1/2"	51.0	2.01	16	240	64	960	225	8.86	1,500	1.00	SR+D08000 SERIES
H80029051*	51	2"	67.0	2.64	16	240	64	960	275	10.83	2,300	1.53	SR+D08000 SERIES
H80029063*	63	2.1/2"	80.0	3.15	16	240	64	960	300	11.81	2,800	1.87	SR+D08000 SERIES
H80029076*	76	3"	92.0	3.62	16	240	64	960	350	13.78	3,300	2.20	SR+D08000 SERIES
H80029102*	102	4"	118.0	4.65	12	180	48	720	450	17.72	4,700	3.13	SR+D08000 SERIES

FUELSERVICE/20 D EN 1825-B

FUEL DELIVERY AIRCRAFT GROUND REFUELLING EN 1825 TYPE B



TUBE:

Black NBR rubber

REINFORCEMENT:

High tensile synthetic cord and 2 crossing copper wires for grounding

Black synthetic CR rubber, fire-proof, anti-static, chemical, ozone and weathering resistant

KEY FEATURES:

- Hardwall delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

- · Aircraft ground refuelling
- Fuels, oils, petroleum & its derivatives with aromatic content up to 50%

TEMPERATURE RANGE:

From -30°C to + 70°C (-22°F to +158°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

EN 1825 Type B / TRbF

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

FUELSERVICE/ FUEL DELIVE GROUND R EN 182! PART NO	RY, AIRCF EFUELLII TYPE B	RAFT	NOM HOS	INAL E OD	WOR	MUM KING SURE	BU	MUM RST SURE	BE	MUM ND DIUS		V RAGE GHT	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80032019*	19	3/4"	29.0	1.14	20	300	80	1,200	113	4.45	520	0.35	SR+D08000 SERIES
H80032025*	25	1"	38.0	1.50	20	300	80	1,200	150	5.91	840	0.56	SR+D08000 SERIES
H80032031*	31	1.1/4"	45.0	1.77	20	300	80	1,200	200	7.87	1,000	0.67	SR+D08000 SERIES
H80032038*	38	1.1/2"	51.0	2.01	20	300	80	1,200	230	9.06	1,160	0.77	SR+D08000 SERIES
H80032051*	51	2"	65.0	2.56	20	300	80	1,200	305	12.01	1,700	1.13	SR+D08000 SERIES
H80032063*	63	2.1/2"	79.0	3.11	20	300	80	1,200	390	15.35	2,070	1.38	SR+D08000 SERIES
H80032076*	76	3"	92.0	3.62	20	300	80	1,200	460	18.11	2,560	1.71	SR+D08000 SERIES
H80032102*	102	4"	120.0	4.72	20	300	80	1,200	610	24.02	3,740	2.49	SR+D08000 SERIES

ASSEMBLY MACHINES

COUPLINGS



FUELSERVICE/20 D EN 1825-C

FUEL DELIVERY AIRCRAFT GROUND REFUELLING EN 1825 TYPE C



TUBE:

Black NBR conductive rubber

REINFORCEMENT:

High tensile synthetic cord

COVER:

Black synthetic CR rubber, fire-proof, anti-static (R<10 6 Ohm.m), chemical, ozone and weathering resistant

KEY FEATURES:

- Hardwall delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

- Aircraft ground refuelling
- Fuels, oils, petroleum & its derivatives with aromatic content up to 50%

TEMPERATURE RANGE:

From -30°C to + 70°C (-22°F to +158°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

EN 1825 Type C / TRbF

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

FUELSERVICE/ FUEL DELIVE GROUND R EN 1829 PART NO	RY, AIRCI EFUELLI 5 TYPE C	RAFT	NOM HOS	INAL E OD		MUM KING SURE	BUI	MUM RST SURE	BE	MUM ND DIUS	AVER WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80033019*	19	3/4"	29.0	1.14	20	300	80	1,200	113	4.45	520	0.35	SR+D08000 SERIES
H80033025*	25	1"	38.0	1.50	20	300	80	1,200	150	5.91	840	0.56	SR+D08000 SERIES
H80033031*	31	1.1/4"	45.0	1.77	20	300	80	1,200	200	7.87	1,000	0.67	SR+D08000 SERIES
H80033038*	38	1.1/2"	51.0	2.01	20	300	80	1,200	230	9.06	1,160	0.77	SR+D08000 SERIES
H80033051*	51	2"	65.0	2.56	20	300	80	1,200	305	12.01	1,700	1.13	SR+D08000 SERIES
H80033063*	63	2.1/2"	79.0	3.11	20	300	80	1,200	390	15.35	2,070	1.38	SR+D08000 SERIES
H80033076*	76	3"	92.0	3.62	20	300	80	1,200	460	18.11	2,560	1.71	SR+D08000 SERIES
H80033102*	102	4"	120.0	4.72	20	300	80	1,200	610	24.02	3,740	2.49	SR+D08000 SERIES

FUELSERVICE/20 SD EN 1825-E

FUEL SUCTION & DELIVERY AIRCRAFT GROUND REFUELLING EN 1825 TYPE E



TUBE:

Black NBR anti-static rubber

REINFORCEMENT:

High tensile synthetic cord and 2 crossing copper wires for grounding

COVER-

Black synthetic CR rubber, fire-proof, anti-static (R<10 6 0hm.m), chemical, ozone and weathering resistant

KEY FEATURES:

- Hardwall suction and delivery structure
- · Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

- Aircraft ground refuelling
- Fuels, oils, petroleum & its derivatives with aromatic content up to 50%

TEMPERATURE RANGE:

From -30°C to + 70°C (-22°F to +158°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

EN 1825 Type E / TRbF

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

FUELSERVICE/ FUEL DELIVE GROUND R EN 1829 PART NO	RY, AIRCI EFUELLI 5 TYPE E	RAFT	NOM HOS	INAL E OD	WOR	MUM KING SURE	BU	MUM RST SURE	BE	MUM ND DIUS	AVEF WEI		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80034019*	19	3/4"	31.0	1.22	20	300	80	1,200	85	3.35	690	0.46	SR+D08000 SERIES
H80034025*	25	1"	39.0	1.54	20	300	80	1,200	115	4.53	970	0.65	SR+D08000 SERIES
H80034031*	31	1.1/4"	46.0	1.81	20	300	80	1,200	150	5.91	1,220	0.81	SR+D08000 SERIES
H80034038*	38	1.1/2"	53.0	2.09	20	300	80	1,200	180	7.09	1,590	1.06	SR+D08000 SERIES
H80034051*	51	2"	67.0	2.64	20	300	80	1,200	250	9.84	2,320	1.55	SR+D08000 SERIES
H80034063*	63	2.1/2"	81.0	3.19	20	300	80	1,200	325	12.80	2,860	1.91	SR+D08000 SERIES
H80034076*	76	3"	95.0	3.74	20	300	80	1,200	400	15.75	3,700	2.47	SR+D08000 SERIES
H80034102*	102	4"	123.0	4.84	20	300	80	1,200	550	21.65	5,170	3.45	SR+D08000 SERIES



FUELSERVICE/21 D

FUEL & OIL HOSE HEAVY DUTY



TUBE:

Black NBR rubber

REINFORCEMENT:

High tensile synthetic cord with 2 crossing copper wires for grounding

COVER

Black synthetic SBR rubber, long lasting, ozone and weathering resistant $\,$

KEY FEATURES:

- Softwall delivery structure
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

• Fuels, oils, & diesel with aromatic content up to 50%

TEMPERATURE RANGE:

From -30°C to + 90°C (-22°F to +194°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

	IL HOSE YDUTY	D E SIZE		INAL E OD		MUM KING SURE	MINI BUI PRES	RST	MINI BE RAC	ND	AVEF WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80006019*	19	3/4"	31.4	1.24	21	300	63	910	90	3.54	508	0.34	SR+D08000 SERIES
H80006025*	25	1"	38.2	1.50	21	300	63	910	115	4.53	575	0.39	SR+D08000 SERIES
H80006031*	31	1.1/4"	45.0	1.77	21	300	63	910	150	5.91	729	0.49	SR+D08000 SERIES
H80006038*	38	1.1/2"	51.6	2.03	21	300	63	910	180	7.09	1,027	0.69	SR+D08000 SERIES
H80006051*	51	2"	62.1	2.44	21	300	63	910	240	9.45	1,293	0.87	SR+D08000 SERIES
H80006063*	63	2.1/2"	78.2	3.08	21	300	63	910	300	11.81	1,746	1.17	SR+D08000 SERIES
H80006076*	76	3"	88.9	3.50	21	300	63	910	380	14.96	2,039	1.37	SR+D08000 SERIES

FUELSERVICE/21 SD

FUEL & OIL HOSE HEAVY DUTY



TURF:

NBR rubber, abrasion resistant, thick tube

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire and 2 crossing copper wires for grounding $\,$

COVFR-

Black synthetic SBR rubber, long lasting, ozone and weathering resistant $\,$

KEY FEATURES:

- Hardwall delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m (DN51 DN102); 30.5m (DN127 - DN203)

APPLICATION & FLUIDS:

• Fuels, oils, & diesel with aromatic content up to 50%

TEMPERATURE RANGE:

From -30°C to + 90°C (-22°F to +194°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

	IL HOSE Y DUTY	SD E SIZE	NOM HOS			MUM KING SURE	BUI	MUM RST SURE	BE	MUM OUUS	AVEF WEI		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80020051*	51	2"	62.1	2.44	21	300	63	910	230	9.06	1,288	0.86	SR+D08000 SERIES
H80020076*	76	3"	88.9	3.50	21	300	63	910	360	14.17	2,497	1.67	SR+D08000 SERIES
H80020102*	102	4"	115.1	4.53	21	300	63	910	510	20.08	3,633	2.44	SR+D08000 SERIES
H80020152*	152	6"	174.0	6.85	21	300	63	910	610	24.02	8,250	5.55	MARKET FITTINGS
H80020203*	203	8"	230.0	9.06	21	300	63	910	800	31.50	12,300	8.28	MARKET FITTINGS



FUELDISPENSER/D

FUEL & MINERAL OIL DELIVERY EN 1360 TYPE 1



TUBE:

Black NBR rubber

REINFORCEMENT:

 $\label{thm:light} \mbox{High tensile synthetic cord with 2 crossing copper wires for grounding}$

COVER

Black synthetic CR rubber, fire-proof, anti-static (R<1G 0hm/m), chemical, ozone and weathering resistant

KEY FEATURES:

- Hardwall suction and delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

• Fuels, oils, petroleum & its derivatives with aromatic content up to 50%

TEMPERATURE RANGE:

From -30°C to + 70°C (-22°F to +158°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

EN 1360 Type 1

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

FUELDISF FUEL & MINERA EN 1360 PART NO	AL OIL DE DTYPE 1		NOM HOS		WOR	MUM KING SURE	BU	MUM RST SURE	BE	MUM ND DIUS	AVEF WEI		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80026012*	12	1/2"	22.0	0.87	16	240	48	720	60	2.36	340	0.23	SR+D08000 SERIES
H80026016*	16	5/8"	26.0	1.02	16	240	48	720	80	3.15	480	0.32	SR+D08000 SERIES
H80026019*	19	3/4"	30.0	1.18	16	240	48	720	100	3.94	530	0.35	SR+D08000 SERIES
H80026025*	25	1"	38.0	1.50	16	240	48	720	150	5.91	740	0.49	SR+D08000 SERIES
H80026031*	31	1.1/4"	45.0	1.77	16	240	48	720	175	6.89	1,100	0.73	SR+D08000 SERIES
H80026038*	38	1.1/2"	51.0	2.01	16	240	48	720	225	8.86	1,240	0.83	SR+D08000 SERIES

FUELDISPENSER/SD

FUEL & MINERAL OIL SUCTION & DELIVERY EN 1360 TYPE 1



TUBF.

Black anti-static NBR rubber

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire and 2 crossing copper wires for grounding

COVER

Black synthetic CR rubber, fire-proof, anti-static, chemical, ozone and weathering resistant

KEY FEATURES:

- Hardwall suction and delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

 Fuels, oils, petroleum & its derivatives with aromatic content up to 50%

TEMPERATURE RANGE:

From -30°C to +70°C (-22°F to +158°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

EN 1360 Type 2 / TRbF

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

FUELDISP FUEL & MINERA DELIVERY EN	LOIL SU	CTION &	NOM	JINAI	MAXI	MUM KING	MINII		MINI BE	MUM	V	•	COURS IN CERSIES
PART NO	HOSE	E SIZE		E OD		SURE	PRES		RAD		WEI		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80027019*	19	3/4"	30.0	1.18	16	240	48	720	100	3.94	630	0.42	SR+D08000 SERIES
H80027025*	25	1"	38.0	1.50	16	240	48	720	150	5.91	930	0.62	SR+D08000 SERIES
H80027031*	31	1.1/4"	45.0	1.77	16	240	48	720	175	6.89	1,180	0.79	SR+D08000 SERIES
H80027038*	38	1.1/2"	51.0	2.01	16	240	48	720	225	8.86	1,450	0.97	SR+D08000 SERIES

Refer to the latest RYCO Industrial Hose Crimp Charts for crimping details $\label{eq:continuous} % \begin{center} \end{continuous} \begin{center} \end{center} \begin{ce$



FUELTRUCK/16 D

FUEL & MINERAL OIL DELIVERY HOSE FOR TRUCK SYSTEMS EN 1761 TYPE D



TUBE:

Black NBR rubber

REINFORCEMENT:

 $\label{lightensile} \mbox{High tensile synthetic cord with 2 crossing copper wires for grounding}$

COVER

Black synthetic CR rubber, fire-proof, anti-static, chemical, ozone and weathering resistant $\,$

KEY FEATURES:

- · Hardwall suction and delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m (DN19 DN102); 30.5m (DN127 - DN152)

APPLICATION & FLUIDS:

 Fuels, oils, petroleum & its derivatives with aromatic content up to 50%

TEMPERATURE RANGE:

From -30°C to +70°C (-22°F to +158°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

EN 1761 Type D

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series Market fittings

FUELTRU FUEL & MINERA HOSE FOR TRI EN 1761 PART NO	L OIL DE UCK SYS ^T TYPE D	LIVERY	NOM HOS		MAXI WOR PRES		MINII BUI PRES	RST	BE	MUM ND DIUS	AVER WEI	AGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80030019*	19	3/4"	31.0	1.22	16	240	48	720	125	4.92	630	0.42	SR+D08000 SERIES
H80030025*	25	1"	37.0	1.46	16	240	48	720	150	5.91	730	0.49	SR+D08000 SERIES
H80030031*	31	1.1/4"	44.0	1.73	16	240	48	720	175	6.89	940	0.63	SR+D08000 SERIES
H80030038*	38	1.1/2"	51.0	2.01	16	240	48	720	225	8.86	1,190	0.79	SR+D08000 SERIES
H80030051*	51	2"	67.0	2.64	16	240	48	720	275	10.83	2,000	1.33	SR+D08000 SERIES
H80030063*	63	2.1/2"	79.0	3.11	16	240	48	720	300	11.81	2,240	1.49	SR+D08000 SERIES
H80030076*	76	3"	92.0	3.62	16	240	48	720	350	13.78	2,730	1.82	SR+D08000 SERIES
H80030102*	102	4"	118.0	4.65	16	240	48	720	450	17.72	3,700	2.47	SR+D08000 SERIES
H80030127*	127	5"	145.0	5.71	16	240	48	720	635	25.00	4,820	3.21	MARKET FITTINGS
H80030152*	152	6"	172.0	6.77	16	240	48	720	750	29.53	6,140	4.09	MARKET FITTINGS

FUELTRUCK/16 SD

FUEL & MINERAL OIL SUCTION & DELIVERY HOSE FOR TRUCK SYSTEMS EN 1761 TYPE SD



TUBE:

Black NBR rubber

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire and 2 crossing copper wires for grounding

COVER

Black synthetic CR rubber, fire-proof, anti-static, chemical, ozone and weathering resistant

KEY FEATURES:

- Hardwall suction and delivery structure
- · Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m (DN19 DN102); 30.5m (DN127 - DN152)

APPLICATION & FLUIDS:

 Fuels, oils, petroleum & its derivatives with aromatic content up to 50%

TEMPERATURE RANGE:

From -30°C to + 70°C (-22°F to +158°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

EN 1761 Type SD

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series Market fittings

FUELTRU FUEL & MINER. & DELIVERY HO SYSTEMS EN PART NO	AL OIL SI DSE FOR 1761 TYF	JCTION TRUCK	NOM HOS		WOR	MUM KING SURE	MINI BUI PRES		MINI BE RAD		AVEF WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80031019*	19	3/4"	31.0	1.22	16	240	48	720	125	4.92	670	0.45	SR+D08000 SERIES
H80031025*	25	1"	37.0	1.46	16	240	48	720	150	5.91	810	0.54	SR+D08000 SERIES
H80031031*	31	1.1/4"	44.0	1.73	16	240	48	720	175	6.89	1,040	0.69	SR+D08000 SERIES
H80031038*	38	1.1/2"	51.0	2.01	16	240	48	720	225	8.86	1,380	0.92	SR+D08000 SERIES
H80031051*	51	2"	67.0	2.64	16	240	48	720	275	10.83	2,220	1.48	SR+D08000 SERIES
H80031063*	63	2.1/2"	79.0	3.11	16	240	48	720	300	11.81	2,630	1.75	SR+D08000 SERIES
H80031076*	76	3"	92.0	3.62	16	240	48	720	350	13.78	3,380	2.25	SR+D08000 SERIES
H80031102*	102	4"	118.0	4.65	16	240	48	720	450	17.72	4,420	2.95	SR+D08000 SERIES
H80031127*	127	5"	145.0	5.71	16	240	48	720	635	25.00	5,800	3.87	MARKET FITTINGS
H80031152	152	6"	172.0	6.77	16	240	48	720	750	29.53	8,150	5.43	MARKET FITTINGS



FUELFLEX/17 SDC

FUEL SUCTION &
DELIVERY HOSE WITH HIGH
FLEXIBILITY



TUBE:

Black NBR rubber

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire and copper wire for grounding $% \left(1\right) =\left(1\right) +\left(1\right$

COVED.

Black synthetic, normal corrugated CR rubber, anti-static (R<10 6 Ohm/m), oil, fuel, abrasion and weathering resistant

KEY FEATURES:

- Hardwall suction and delivery structure
- Normal corrugated cover offers lowest bend radius in category
- Compact, lightweight and extremely flexible
- Outstanding abrasion resistance
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m (DN19 DN102); 30.5m (DN152)

APPLICATION & FLUIDS:

• Fuels, oils, petroleum & its derivatives with aromatic content up to 60%

TEMPERATURE RANGE:

From -30°C to + 100°C (-22°F to +212°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

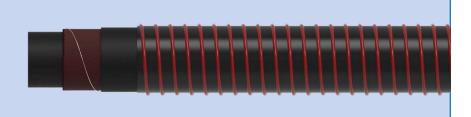
TWO-PIECE CRIMP

SR + D08000 Series Market fittings

FUELFLE FUEL SUCTION 8 WITH HIGH PART NO	DELIVEI FLEXIBIL	RY HOSE	NOM HOS	INAL E OD	MAXI WOR PRES	KING	MINII BUF PRES		BE	MUM ND DIUS	AVER WEI	AGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80025019*	19	3/4"	31.0	1.22	17	255	68	1,020	19	0.75	670	0.45	SR+D08000 SERIES
H80025025*	25	1"	37.0	1.46	17	255	68	1,020	25	0.98	840	0.56	SR+D08000 SERIES
H80025031*	31	1.1/4"	44.0	1.73	17	255	68	1,020	32	1.26	980	0.65	SR+D08000 SERIES
H80025038*	38	1.1/2"	49.0	1.93	17	255	68	1,020	38	1.50	1,120	0.75	SR+D08000 SERIES
H80025051*	51	2"	64.0	2.48	17	255	68	1,020	51	2.01	1,480	0.99	SR+D08000 SERIES
H80025063*	63	2.1/2"	77.0	3.03	15	225	60	900	63	2.48	1,950	1.30	SR+D08000 SERIES
H80025076*	76	3"	89.0	3.50	15	225	60	900	76	2.99	2,150	1.43	SR+D08000 SERIES
H80025102*	102	4"	117.0	4.61	10	150	40	600	102	4.02	3,000	2.00	SR+D08000 SERIES
H80025152*	152	6"	170.0	6.69	10	150	40	600	152	5.98	5,700	3.80	MARKET FITTINGS

FUELTANKER/10 SD

FUEL & MINERAL OIL SUCTION & DELIVERY HOSE



TUBE:

Black anti-static NBR rubber

REINFORCEMENT:

High tensile synthetic cord and copper wire for grounding

COVED.

Black, smooth, glossy NBR/PVC rubber with red thermoplastic spiral, resistant to abrasion, ozone and weathering

KEY FEATURES:

- Hardwall suction and delivery structure
- Compact, lightweight and flexible
- Extreme abrasion resistance
- Designed for tankers
- Long length assemblies available Max length: 40m

APPLICATION & FLUIDS:

- Suction & delivery hose for mineral oils, diesel fuel and gasoline with aromatic contents up to 50%
- Very light and flexible
- Extraordinarily resistant to abrasion
- Ideal for fuel distribution company road tankers

TEMPERATURE RANGE:

From -40°C to +80°C (-40°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

Market fittings

FUELTAN FUEL & MINERA DELIVE	L OIL SU RY HOSE		NOM HOS	INAL E OD	WOR	MUM KING SURE	MINII BUI PRES	RST	MINI BE RAD	ND	AVEF WEI	RAGE	COUPLING SERIES
TARTINO	11031	JIZL	1103	LOD	TILLS	JUIL	TILLS	JUIL	IVAL	7103	VV L1	0111	COOP EINO SERIES
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80060051*	51	2"	60.0	2.36	10	150	30	450	110	4.33	1,550	1.05	MARKET FITTINGS
H80060063*	63	2.1/2"	73.5	2.89	10	150	30	450	138	5.43	1,970	1.33	MARKET FITTINGS
H80060076*	76	3"	86.0	3.39	10	150	30	450	170	6.69	2,250	1.52	MARKET FITTINGS
H80060102*	102	4"	116.0	4.57	10	150	30	450	230	9.06	3,000	2.02	MARKET FITTINGS

Refer to the latest RYCO Industrial Hose Crimp Charts for crimping details

Remarks

Hose wall thickness: DN 51: 4.5mm; DN 63 & DN 76: 5.0mm; DN 102: 7.0mm

Red thermoplastic spiral diameter: DN 51 & DN 63: 6mm; DN 76 & DN 102: 8mm



MUDSERVICE/28 D

DELIVERY HOSE FOR DRILLING MUDS, OIL & ABRASIVE SLURRIES



TUBE:

Black X-NBR rubber

REINFORCEMENT:

High tensile synthetic cord with 2 crossing copper wires for grounding

COVER

Black CR rubber, flame retardant, oil, grease, sea water and ozone resistance $% \left(1\right) =\left(1\right) \left(1\right) \left($

KEY FEATURES:

- Hardwall suction and delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m (DN76 DN102); 30.5m (DN127 - DN152)

APPLICATION & FLUIDS:

- Delivery of petroleum muds, drilling rig services and crude oil with aromatic contents up to 50%
- Fracking operations in oilfields

TEMPERATURE RANGE:

From -30°C to +80°C (-22°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

Market fittings

MUDSER DELIVERY HOS MUDS, OIL & ABI PART NO	RASIVE SL	ILLING	NOM HOS		WOR	MUM KING SURE	MINII BUF PRES	RST	MINI BE RAD	ND	AVEF WEI		COUPLING SERIES
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80035076*	76	3"	96.0	3.78	28	400	112	1,600	559	22.01	3,700	3.27	MARKET FITTINGS
H80035102*	102	4"	124.0	4.88	28	400	112	1,600	762	30.00	4,900	4.33	MARKET FITTINGS
H80035127*	127	5"	153.0	6.02	28	400	112	1,600	1,118	44.02	7,000	6.19	MARKET FITTINGS
H80035152*	152	6"	178.0	7.01	28	400	112	1,600	1,524	60.00	8,400	7.43	MARKET FITTINGS

Refer to the latest RYCO Industrial Hose Crimp Charts for crimping details $\label{eq:continuous} % \begin{center} \end{continuous} \begin{center} \end{center} \begin{ce$

PROGAS LPG D

DELIVERY HOSE FOR LPG



TUBF:

Black NBR conductive rubber

REINFORCEMENT:

High tensile synthetic cord

COVER:

Black, pin-pricked CR rubber, fire-proof, anti-static (R<10 6 Ohm/m), oil, abrasion and weathering resistant

KEY FEATURES:

- Hardwall delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

• Delivery hose for LPG

TEMPERATURE RANGE:

From -30°C to + 70°C (-22°F to +158°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

EN 1762 Type D / TRbF

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

PROGA DELIVERY HO PART NO		LPG E SIZE	NOM HOS	INAL E OD		MUM KING SURE	MINI BUI PRES		MINI BE RAD	ND	AVER WEI		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80011012*	12	1/2"	23.0	0.91	25	375	100	1,500	100	3.94	390	0.26	SR+D08000 SERIES
H80011016*	16	5/8"	26.0	1.02	25	375	100	1,500	120	4.72	470	0.31	SR+D08000 SERIES
H80011019*	19	3/4"	31.0	1.22	25	375	100	1,500	160	6.30	630	0.42	SR+D08000 SERIES
H80011025*	25	1"	38.0	1.50	25	375	100	1,500	200	7.87	840	0.56	SR+D08000 SERIES
H80011031*	31	1.1/4"	45.0	1.77	25	375	100	1,500	250	9.84	1,050	0.70	SR+D08000 SERIES
H80011038*	38	1.1/2"	52.0	2.05	25	375	100	1,500	320	12.60	1,200	0.80	SR+D08000 SERIES
H80011051*	51	2"	67.0	2.64	25	375	100	1,500	400	15.75	1,830	1.22	SR+D08000 SERIES
H80011063*	63	2.1/2"	81.0	3.19	25	375	100	1,500	550	21.65	2,500	1.67	SR+D08000 SERIES
H80011076*	76	3"	94.0	3.70	25	375	100	1,500	650	25.59	3,020	2.01	SR+D08000 SERIES
H80011102*	102	4"	120.0	4.72	25	375	100	1,500	800	31.50	3,860	2.57	SR+D08000 SERIES



PROGAS LPG SD

SUCTION & DELIVERY HOSE FOR LPG



TUBE:

Black NBR conductive rubber

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire

COVER

Black, pin-pricked CR rubber, fire-proof, anti-static (R<10 6 Ohm/m), oil, abrasion and weathering resistant

KEY FEATURES:

- Hardwall suction & delivery structure
- · Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

• Suction and delivery hose for LPG

TEMPERATURE RANGE:

From -30°C to + 70°C (-22°F to +158°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

EN 1762 Type SD / TRbF

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

SUCTION & DI	LPG	HOSE ESIZE	NOM HOS	INAL E OD	MAXI WOR PRES	KING	MINI BUI PRES		BE	MUM ND DIUS	AVER WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80057012*	12	1/2"	23.0	0.91	25	375	100	1,500	55	2.17	440	0.29	SR+D08000 SERIES
H80057016*	16	5/8"	26.0	1.02	25	375	100	1,500	75	2.95	520	0.35	SR+D08000 SERIES
H80057019*	19	3/4"	31.0	1.22	25	375	100	1,500	100	3.94	680	0.45	SR+D08000 SERIES
H80057025*	25	1"	38.0	1.50	25	375	100	1,500	140	5.51	900	0.60	SR+D08000 SERIES
H80057031*	31	1.1/4"	45.0	1.77	25	375	100	1,500	190	7.48	1,180	0.79	SR+D08000 SERIES
H80057038*	38	1.1/2"	52.0	2.05	25	375	100	1,500	200	7.87	1,500	1.00	SR+D08000 SERIES
H80057051*	51	2"	67.0	2.64	25	375	100	1,500	280	11.02	2,200	1.47	SR+D08000 SERIES
H80057063*	63	2.1/2"	81.0	3.19	25	375	100	1,500	380	14.96	2,900	1.93	SR+D08000 SERIES
H80057076*	76	3"	94.0	3.70	25	375	100	1,500	460	18.11	3,580	2.39	SR+D08000 SERIES
H80057102*	102	4"	120.0	4.72	25	375	100	1,500	625	24.61	4,560	3.04	SR+D08000 SERIES

CHEMICAL HOSES

CHEMKING/10 D

FKM DELIVERY HOSE FOR AGGRESSIVE CHEMICALS



TUBE:

Black FKM rubber

REINFORCEMENT:

High tensile synthetic cord

COVER:

Black synthetic CR rubber, chemical, oil, ozone and weathering resistant $\,$

KEY FEATURES:

- Hardwall delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 20m (DN6 DN10); 40m (DN12 - DN51)

APPLICATION & FLUIDS:

• Delivery of aggressive chemicals and acids in high concentrations

TEMPERATURE RANGE:

From -35°C to + 100°C (-31°F to +212°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

CHEMKI FKM DELIVEI AGGRESSIVE PART NO	CHEMIC		NOM HOS		MAXI WOR PRES		MINII BUI PRES	RST	MINI BE RAD	ND	AVER WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80049006*	6	1/4"	16.0	0.63	10	150	40	600	-	-	270	0.18	SR+D08000 SERIES
H80049008*	8	5/16"	18.0	0.71	10	150	40	600	-	-	320	0.21	SR+D08000 SERIES
H80049010*	10	3/8"	20.0	0.79	10	150	40	600	-	-	380	0.25	SR+D08000 SERIES
H80049012*	12	1/2"	23.0	0.91	10	150	40	600	-	-	450	0.30	SR+D08000 SERIES
H80049016*	16	5/8"	26.0	1.02	10	150	40	600	-	-	530	0.35	SR+D08000 SERIES
H80049019*	19	3/4"	29.0	1.14	10	150	40	600	-	-	600	0.40	SR+D08000 SERIES
H80049025*	25	1"	35.0	1.38	10	150	40	600	-	-	750	0.50	SR+D08000 SERIES
H80049031*	31	1.1/4"	44.0	1.73	10	150	40	600	-	-	1,150	0.77	SR+D08000 SERIES
H80049038*	38	1.1/2"	50.0	1.97	10	150	40	600	-	-	1,330	0.89	SR+D08000 SERIES
H80049051*	51	2"	65.0	2.56	10	150	40	600	-	-	2,100	1.40	SR+D08000 SERIES



CHEMKING/10 SD

FKM SUCTION & DELIVERY HOSE FOR AGGRESSIVE CHEMICALS



TUBE:

Black FKM rubber

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire

COVER

Black synthetic CR rubber, chemical, oil, ozone and weathering resistant $\,$

KEY FEATURES:

- Hardwall delivery structure
- · Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 40m

APPLICATION & FLUIDS:

• Delivery of aggressive chemicals and acids in high concentrations

TEMPERATURE RANGE:

From -35°C to + 100°C (-31°F to +212°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

CHEMKI FKM SUCTION & FOR AGGRESS PART NO	IVE CHEM	RYHOSE		IINAL E OD	WOR	MUM KING SURE	MINI BUI PRES	RST	BE	MUM ND DIUS	AVER WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80050019*	19	3/4"	31.0	1.22	10	150	40	600	85	3.35	740	0.49	SR+D08000 SERIES
H80050025*	25	1"	37.0	1.46	10	150	40	600	112	4.41	960	0.64	SR+D08000 SERIES
H80050031*	31	1.1/4"	44.0	1.73	10	150	40	600	144	5.67	1,250	0.83	SR+D08000 SERIES
H80050038*	38	1.1/2"	51.0	2.01	10	150	40	600	171	6.73	1,400	0.93	SR+D08000 SERIES
H80050051*	51	2"	67.0	2.64	10	150	40	600	229	9.02	2,150	1.43	SR+D08000 SERIES
H80050063*	63	2.1/2"	80.0	3.15	10	150	40	600	317	12.48	2,600	1.73	SR+D08000 SERIES
H80050076*	76	3"	92.0	3.62	10	150	40	600	380	14.96	3,200	2.13	SR+D08000 SERIES
H80050102*	102	4"	118.0	4.65	10	150	40	600	510	20.08	4,600	3.07	SR+D08000 SERIES

CHEMICAL HOSES

CHEMKING/16 SDE

ANTI-STATIC EPDM SUCTION & DELIVERY HOSE FOR CHEMICAL PRODUCTS EN 12115



TUBF.

Black, smooth anti-static EPDM rubber

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire and 2 crossing copper wires for grounding

COVER

Black synthetic CR rubber, fire-proof, anti-static (R<1M 0hm/m), chemical, ozone and weathering resistant

KEY FEATURES:

- Hardwall suction and delivery structure
- · Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

- Suction and delivery of chemicals as per EN12115
- Fireproof and anti-static cover (R < 10⁶ 0hm/m)

TEMPERATURE RANGE:

From -40°C to + 100°C (-40°F to +212°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

EN 12115 (Grade Ω) / TRbF

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

	PDM SUC FOR CH OUCTS 12115	TION &	NOM HOS		WOR	MUM KING SURE	MINI BUI PRES		MINI BE RAD		AVER WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80061019*	19	3/4"	31.0	1.22	16	240	64	960	125	4.92	700	0.47	SR+D08000 SERIES
H80061025*	25	1"	37.0	1.46	16	240	64	960	150	5.91	920	0.62	SR+D08000 SERIES
H80061031*	31	1.1/4"	44.0	1.73	16	240	64	960	175	6.89	1,090	0.73	SR+D08000 SERIES
H80061038*	38	1.1/2"	51.0	2.01	16	240	64	960	225	8.86	1,350	0.91	SR+D08000 SERIES
H80061051*	51	2"	67.0	2.64	16	240	64	960	275	10.83	1,840	1.24	SR+D08000 SERIES
H80061063*	63	2.1/2"	80.0	3.15	16	240	64	960	300	11.81	2,540	1.71	SR+D08000 SERIES
H80061076*	76	3"	92.0	3.62	16	240	64	960	350	13.78	3,200	2.15	SR+D08000 SERIES
H80061102*	102	4"	118.0	4.65	12	180	48	720	450	17.71	4,430	2.98	SR+D08000 SERIES



CHEMKING/16 SDA

ANTI-STATIC UHMWPE SUCTION & DELIVERY HOSE FOR CHEMICAL PRODUCTS EN 12115



TUBE:

Black conductive UHMWPE

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire and 2 crossing copper wires for grounding $\,$

COVED.

Black synthetic CR rubber, fire-proof, anti-static (R<1G 0hm/m), chemical, ozone and weathering resistant

KEY FEATURES:

- Hardwall suction and delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

- Suction & delivery for chemicals, oils, fuels and bunkering
- Cover compound is tested an approved according to EN 60079-0:2012 (R $\leq 10^9$ Ohm/m)
- Hose structure designed to assure and maintain the requirements for the ATEX working conditions

TEMPERATURE RANGE:

From -20°C to + 100°C (-4°F to +212°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

EN 12115 (Grade Ω/T) / TRbF / FDA; EN 60079-0

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

	MWPES EFORCH OUCTS 2115	UCTION	NOM HOS		MAXI WOR PRES	KING	MINI BUI PRES		MINI BE RAE	ND	AVER WEI		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80047019*	19	3/4"	31.0	1.22	16	240	64	960	125	4.92	710	0.47	SR+D08000 SERIES
H80047025*	25	1"	37.0	1.46	16	240	64	960	150	5.91	870	0.58	SR+D08000 SERIES
H80047031*	31	1.1/4"	44.0	1.73	16	240	64	960	175	6.89	1,070	0.71	SR+D08000 SERIES
H80047038*	38	1.1/2"	51.0	2.01	16	240	64	960	225	8.86	1,350	0.90	SR+D08000 SERIES
H80047051*	51	2"	67.0	2.64	16	240	64	960	275	10.83	2,290	1.53	SR+D08000 SERIES
H80047063*	63	2.1/2"	80.0	3.15	16	240	64	960	300	11.81	2,510	1.67	SR+D08000 SERIES
H80047076*	76	3"	92.0	3.62	16	240	64	960	350	13.78	3,080	2.05	SR+D08000 SERIES
H80047102*	102	4"	118.0	4.65	12	180	48	720	450	17.71	4,510	3.01	SR+D08000 SERIES

CHEMICAL HOSES

CHEMKING/16 SD

FEP SUCTION & DELIVERY HOSE FOR CHEMICAL PRODUCTS EN 12115



TURF:

White glossy non-conductive FEP (Fluorinated ethylene propylene)

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire and 2 crossing copper wires for grounding

COVED.

Black synthetic CR rubber, fire-proof, anti-static (R<10 6 Ohm/m), chemical, ozone and weathering resistant

KEY FEATURES:

- Hardwall delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

- Suction & delivery for chemicals, petroleum and food stuffs as per EN 12115 specifications
- Hose tube is FDA approved

TEMPERATURE RANGE:

From -50°C to + 170°C (-58°F to +338°F).

WORKING PRESSURE:

Maximum working pressures are based on 4:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

EN 12115 (Grade M) / TRbF / FDA

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

FEP SUCTION 8 FOR CHEMIC	:AL PRODI 12115 	Y HOSE		IINAL E OD	WOR	MUM KING SURE	BU	MUM RST SURE	MINI BE RAD		AVEF WEI		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80048012*	12	1/2"	25.0	0.98	16	240	64	960	84	3.31	320	0.21	SR+D08000 SERIES
H80048019*	19	3/4"	31.0	1.22	16	240	64	960	125	4.92	470	0.31	SR+D08000 SERIES
H80048025*	25	1"	37.0	1.46	16	240	64	960	150	5.91	580	0.39	SR+D08000 SERIES
H80048031*	31	1.1/4"	44.0	1.73	16	240	64	960	175	6.89	920	0.61	SR+D08000 SERIES
H80048038*	38	1.1/2"	51.0	2.01	16	240	64	960	225	8.86	1,200	0.80	SR+D08000 SERIES
H80048051*	51	2"	67.0	2.64	16	240	64	960	275	10.83	2,120	1.41	SR+D08000 SERIES



BREWERS/12 SD

BEER, WINE & ALCOHOL SUCTION & DELIVERY HOSE



TURF:

White BIIR (butyl) rubber, food quality, odourless & taste-free

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire

COVER:

Orange EPDM rubber, ozone, abrasion and weathering resistant

KEY FEATURES:

- Hardwall suction and delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

• Suction and delivery for beer, wine, alcohol and soft drinks

TEMPERATURE RANGE:

From -40°C to + 120°C (-40°F to +248°F) - sterilization at 110°C / 230°F for 30 minutes

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

FDA title 21 art. 177.2600 (e) for liquid foods; BfR; ADI free; CE 1935/2004; PHTHALATE free

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

BREWEI BEER, WINE & AI & DELIVE PART NO	ERY HOSE	SUCTION	NOM HOS	INAL E OD	WOR	MUM KING SURE	MINII BUF PRES		MINI BE RAE	ND	AVEF WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80042019*	19	3/4"	32.0	1.26	12	180	36	540	80	3.15	780	0.52	SR+D08000 SERIES
H80042025*	25	1"	38.0	1.50	12	180	36	540	115	4.53	920	0.61	SR+D08000 SERIES
H80042031*	31	1.1/4"	46.0	1.81	12	180	36	540	145	5.71	1,190	0.79	SR+D08000 SERIES
H80042038*	38	1.1/2"	52.0	2.05	12	180	36	540	180	7.09	1,480	0.99	SR+D08000 SERIES
H80042051*	51	2"	65.0	2.56	12	180	36	540	245	9.65	1,890	1.26	SR+D08000 SERIES
H80042063*	63	2.1/2"	81.0	3.19	12	180	36	540	340	13.39	2,910	1.94	SR+D08000 SERIES
H80042076*	76	3"	95.0	3.74	12	180	36	540	410	16.14	3,410	2.27	SR+D08000 SERIES
H80042102*	102	4"	122.0	4.80	12	180	36	540	580	22.83	4,960	3.31	SR+D08000 SERIES

FOOD & BEVERAGE HOSES

BREWERS/12 SDC

BEER, WINE & ALCOHOL SUCTION & DELIVERY HOSE IMPROVED FLEXIBILITY



TUBF.

White BIIR (butyl) rubber, food quality, odourless & taste-free

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire

COVER

Orange, normal corrugated EPDM rubber, ozone, abrasion and weathering resistant $\,$

KEY FEATURES:

- · Hardwall suction and delivery structure
- Normal corrugated cover for improved flexibility
- Compact, lightweight
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

· Suction and delivery for beer, wine, alcohol and soft drinks

TEMPERATURE RANGE:

From -40°C to + 120°C (-40°F to +248°F) - sterilization at 110°C / 230°F for 30 minutes

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

FDA title 21 art. 177.2600 (e) for liquid foods; BfR; ADI free; CE 1935/2004; PHTHALATE free

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

BEER, WINE & . & DELI	VERY HOSI D FLEXIBIL I	SUCTION E	NOM	IINAL E OD	WOR	MUM KING SURE	BUI	MUM RST SURE	BE	MUM ND DIUS	AVEF WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80043031*	31	1.1/4"	46.0	1.81	12	180	36	540	115	4.53	1,040	0.69	SR+D08000 SERIES
H80043038*	38	1.1/2"	52.0	2.05	12	180	36	540	140	5.51	1,510	1.01	SR+D08000 SERIES
H80043051*	51	2"	65.0	2.56	12	180	36	540	195	7.68	1,950	1.30	SR+D08000 SERIES
H80043063*	63	2.1/2"	81.0	3.19	12	180	36	540	270	10.63	3,100	2.07	SR+D08000 SERIES
H80043076*	76	3"	95.0	3.74	12	180	36	540	285	11.22	3,600	2.40	SR+D08000 SERIES
H80043102*	102	4"	122.0	4.80	12	180	36	540	335	13.19	5,100	3.40	SR+D08000 SERIES



MILKYWAY/10 SD

MILK & FATTY FOODS SUCTION & DELIVERY HOSE



TURF:

White NBR rubber, food quality odourless and taste-free

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire

COVER:

Blue NBR rubber, ozone, abrasion and weathering resistant

KEY FEATURES:

- Hardwall suction and delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

· Suction and delivery of milk and fatty foods

TEMPERATURE RANGE:

From -40°C to + 80°C (-40°F to +176°F) - sterilization at 110°C / 230°F for 30 minutes

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

FDA title 21 art. 177.2600 (f) for fatty foods; BfR; ADI free; D.M. 21/03/73; CE 1935/2004; PHTHALATE free

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

MILK & FATTY FO	RY HOSE	CTION &	NOM HOS		WOR	MUM KING SURE	MINI BUI PRES		BE	MUM ND DIUS	AVEF WEI		COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80044019*	19	3/4"	29.0	1.14	10	150	30	450	40	1.57	650	0.43	SR+D08000 SERIES
H80044025*	25	1"	35.0	1.38	10	150	30	450	55	2.17	820	0.55	SR+D08000 SERIES
H80044031*	31	1.1/4"	44.0	1.73	10	150	30	450	74	2.91	1,250	0.83	SR+D08000 SERIES
H80044038*	38	1.1/2"	50.0	1.97	10	150	30	450	86	3.39	1,450	0.97	SR+D08000 SERIES
H80044051*	51	2"	64.0	2.52	10	150	30	450	112	4.41	1,960	1.31	SR+D08000 SERIES
H80044063*	63	2.1/2"	77.0	3.03	10	150	30	450	136	5.35	2,450	1.63	SR+D08000 SERIES
H80044076*	76	3"	90.0	3.54	10	150	30	450	160	6.30	2,970	1.98	SR+D08000 SERIES
H80044102*	102	4"	116.0	4.57	10	150	30	450	380	14.96	6,700	4.47	SR+D08000 SERIES

FOOD & BEVERAGE HOSES

MULTIFOOD/10 SD

MULTI-PURPOSE LIQUID FOOD SUCTION & DELIVERY HOSE



TUBE:

White EPDM rubber, food quality odourless and taste-free $\,$

REINFORCEMENT:

 $High\ tensile\ synthetic\ cord\ with\ 2\ steel\ helix\ body\ wireS$

COVER:

Blue EPDM rubber, ozone, abrasion and weathering resistant

KEY FEATURES:

- Hardwall suction and delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

- Suction & delivery multi-purpose hose,
- Fatty foods, wine, beer, potable water etc.

TEMPERATURE RANGE:

From -40°C to + 140°C (-40°F to +284°F) - sterilization at 110°C / 230°F for 30 minutes

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

FDA title 21 art. 177.2600 (f) for fatty foods; BfR; ADI free; D.M. 21/03/73; CE 1935/2004; PHTHALATE free

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

MULTIFO MULTI-PURPO: SUCTION & D PART NO	SE LIQUIC ELIVERY I	FOOD	NOM HOS	INAL E OD		MUM KING SURE	BUI	MUM RST SURE	BE	MUM IND DIUS	AVEF WEI	 RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80045038*	38	1.1/2"	50.0	1.97	10	150	30	450	150	5.91	1,440	0.96	SR+D08000 SERIES
H80045051*	51	2"	63.0	2.48	10	150	30	450	205	8.07	2,100	1.40	SR+D08000 SERIES
H80045063*	63	2.1/2"	78.0	3.07	10	150	30	450	285	11.22	2,530	1.69	SR+D08000 SERIES
H80045076*	76	3"	91.0	3.58	10	150	30	450	390	15.35	3,220	2.15	SR+D08000 SERIES
H80045102*	102	4"	120.0	4.72	10	150	30	450	500	19.69	4,630	3.09	SR+D08000 SERIES



ABRAFOOD/10

LAYFLAT HOSE FOR DRY FOODS (GRAINS, SEED, RICE ETC.)



TUBF.

White NR rubber, food quality odourless and taste-free

REINFORCEMENT:

High tensile synthetic cord and 2 crossed copper wires for hose grounding $% \left(1\right) =\left(1\right) \left(1\right)$

COVER

Black CR rubber, fire proof, anti-static (R<1G 0hm/m), chemical, ozone and weathering resistant

KEY FEATURES:

- Layflat delivery structure
- Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

- Delivery hose for dry and abrasive food stuffs (eg: grains, seed, rice, sugar, flour and animal food)
- Cover compound is tested an approved according to EN 60079-0:2012 (R ≤ 10° 0hm/m)
- Hose structure designed to assure and maintain the requirements for the ATEX working conditions

TEMPERATURE RANGE:

From -40°C to + 80°C (-40°F to +176°F) - sterilization at 110°C / 230°F for 30 minutes

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

FDA title 21 art. 177.2600 (a, b, c, d) for dry foods; BfR; ADI free; D.M. 21/03/73; CE 1935/2004; PHTHALATE free; EN 60079

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series Market fittings

LAYFLAT HOSE	ABRAFOOD/10 HOSE FOR DRY FOODS NS, SEED, RICE ETC.) NO HOSE SIZE		NOM HOS	INAL E OD		MUM KING SURE	MINI BUI PRES		MINI BE RAD	ND	AVER WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN inch		mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80046102*	102	4"	112.0	4.41	10	150	30	450	-	-	2,430	1.62	SR+D08000 SERIES
H80046152*	152	6"	166.0	6.54	10	150	30	450	-	-	4,790	3.19	MARKET FITTINGS

ABRASIVE HOSES

ABRADRY

LAYFLAT DELIVERY HOSE FOR CONCRETE, SAND, GRAVEL & OTHER ABRASIVE DRY MATERIALS



TUBE:

Black NR/SBR rubber

REINFORCEMENT:

High tensile synthetic cord

COVER:

Black synthetic SBR/NR/PVC rubber, anti-static, abrasion and weathering resistant

KEY FEATURES:

- Layflat delivery structure
- · Compact, lightweight and flexible
- Robust hose structure for longer life in severe applications
- Long length assemblies available Max length: 61m (up to DN102); 30.5m (DN127 - DN203)

APPLICATION & FLUIDS:

• Delivery hose for dry abrasive materials, concrete, sand and gravel

TEMPERATURE RANGE:

From -40°C to +70°C (-40°F to +158°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

APPLICABLE SPECS:

DIN 53516 70 ±5mm³

COUPLINGS:

Market fittings

ABR LAYFLAT DELN CONCRETE, SA OTHER ABRASIV PART NO	AND, GRA E DRY MA	AVEL &	NOM HOS		WOR	MUM KING SURE	MINI BUI PRES		BE	MUM OND DIUS	AVEF WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80051090*	90	3-35/64"	100.0	3.94	6	90	18	270	-	-	1,250	0.83	MARKET FITTINGS
H80051102*	102	4"	112.0	4.41	4	60	12	180	-	-	1,390	0.93	MARKET FITTINGS
H80051127*	127	5"	137.0	5.39	4	60	12	180	-	-	1,720 1.15		MARKET FITTINGS
H80051152*	152	6"	162.0	6.38	4	60	12	180	-	-	2,050	1.37	MARKET FITTINGS
H80051203*	203	8"	213.0	8.39	4	60	12	180	-	-	2,740	1.83	MARKET FITTINGS



SANDSERVICE/21 D

SANDBLASTING & ABRASIVE FLUID HOSE



TURF:

Black, NR/SBR rubber, abrasion resistant thick tube

REINFORCEMENT:

High tensile synthetic cord

COVER:

Black, NR/SBR rubber, abrasion resistant

KEY FEATURES:

- Softwall delivery structure
- Highly robust construction
- Long life in extreme conditions
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

 Sand blasting or transfer of highly abrasive materials such as grit and gravel

TEMPERATURE RANGE:

From -40°C to + 80°C (-40°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

SANDSEF SANDBLASTIN FLUID PART NO	NG & ABR HOSE		NOM HOS	INAL E OD		MUM KING SURE	MINI BUI PRES	RST	MINI BE RAD	ND	AVEF WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80019019*	19	3/4"	32.8	1.29	21	300	63	910	90	3.54	524	0.35	SR+D08000 SERIES
H80019025*	25	1"	39.2	1.54	21	300	63	910	115	4.53	668	0.45	SR+D08000 SERIES
H80019031*	31	1.1/4"	49.0	1.93	21	300	63	910	150	5.91	1,072	0.72	SR+D08000 SERIES
H80019038*	38	1.1/2"	56.8	2.24	21	300	63	910	180	7.09	1,575	1.06	SR+D08000 SERIES
H80019051*	51	2"	71.4	2.81	21	300	63	910	240	9.45	2,326	1.56	SR+D08000 SERIES

ABRASIVE HOSES

ABRASERVICE/10 D

ABRASIVE FLUID HOSE HEAVY DUTY



TUBF:

Black, NR/SBR rubber, abrasion resistant thick tube

REINFORCEMENT:

High tensile synthetic cord with 2 crossing copper wires for grounding

Black, NR/SBR rubber, abrasion resistant

KEY FEATURES:

- Softwall delivery structure
- · High resistance to continuous abrasion
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

• Dry and liquid abrasive mix transfer

TEMPERATURE RANGE:

From -40°C to +80°C (-40°F to +176°F).

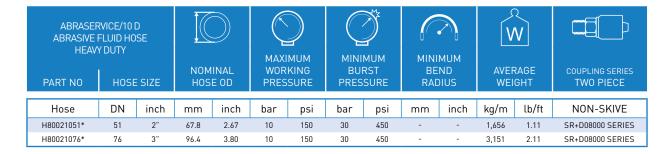
WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series





ABRASERVICE/10 SD

ABRASIVE FLUID HOSE HEAVY DUTY



TURF-

Black, NR/SBR rubber, abrasion resistant thick tube

REINFORCEMENT:

High tensile synthetic cord with steel helix body wire and 2 crossing copper wires for grounding $\,$

COVFR-

Black, NR/SBR rubber, abrasion resistant

KEY FEATURES:

- Hardwall suction & delivery structure
- High resistance to continuous abrasion
- Long length assemblies available Max length: 61m (DN51 DN102); 30.5m (DN127)

APPLICATION & FLUIDS:

• Dry and liquid abrasive mix transfer

TEMPERATURE RANGE:

From -40°C to +80°C (-40°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

ABRASIVE I HEAV	ABRASERVICE/10 SD ABRASIVE FLUID HOSE HEAVY DUTY PART NO HOSE SIZE		NOM HOS			MUM KING SURE	MINII BUF PRES	RST	BE	MUM ND DIUS	AVER WEI	RAGE	COUPLING SERIES TWO PIECE
TARTINO	RT NO HOSE SIZE		1103	L 0D	TILLS	JOILE	TRES	JOILE	IVAL	, , , , ,	***	0111	10011202
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80012051*	51	2"	69.6	2.74	10	150	30	450	200	7.87	2,392	1.60	SR+D08000 SERIES
H80012063*	63	2.1/2"	85.5	3.37	10	150	30	450	250	9.84	3,636	2.44	SR+D08000 SERIES
H80012076*	76	3"	98.4	3.87	10	150	30	450	300	11.81	4,590	3.08	SR+D08000 SERIES
H80012102*	102	4"	124.6	4.91	10	150	30	450	450	17.72	6,019	4.04	SR+D08000 SERIES
H80012127*	127	5"	149.0	5.87	10	150	30	450	600	23.62	7,250	3.45	MARKET FITTINGS

ABRASIVE HOSES

ABRASERVICE/35 SD

REVERSE CYCLE DRILLING HOSE



TUBF.

Black, anti-static NR/SBR rubber, abrasion resistant thick tube REINFORCEMENT:

High tensile synthetic cord and steel helix body wire

COVER:

Black, anti-static NR/SBR rubber, abrasion resistant

KEY FEATURES:

- High robustness of the hose structures
- Long lasting in severe applications
- · High abrasion resistance of the tube compound
- Max Length: 61m

APPLICATION & FLUIDS:

Drilling slurry with stones and mixed materials during reverse cycle drilling operations

TEMPERATURE RANGE:

From -40°C to +80°C (-40°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

Market fittings

ABRASER REVERSE CYCLE			NOM		MAXI WOR		MINI		MINI BE		V	V	
PART NO	HOSE SIZE		HOS			SURE	PRES		RAD		WEI		COUPLING SERIES
Hose	DN	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80018063*	63	2.1/2"	90.0	3.54	35	508	105	1,523	250	9.80	4,327	2.91	MARKET FITTINGS
H80018076*	76	3"	105.0	4.13	35	508	105	1,523	300	11.8	5,714	3.84	MARKET FITTINGS
H80018102*	102	4"	136.0	5.35	35	508	105	1,523	400	15.75	9,272	6.23	MARKET FITTINGS



ABRASERVICE/40 D

PLASTER SPRAYING HOSE



TURF-

Black, NR/SBR rubber, abrasion resistant thick tube

REINFORCEMENT:

High tensile synthetic cord

COVER:

Black, NR/SBR rubber, abrasion resistant

KEY FEATURES:

- Softwall delivery structure
- High resistance to continuous abrasion
- Long length assemblies available Max length: 61m

APPLICATION & FLUIDS:

 Mortar, gypsum, grout spraying at open air, indoor or underground construction sites, etc.

TEMPERATURE RANGE:

From -40°C to +80°C (-40°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 3:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

	ABRASERVIVE/40 D LASTER SPRAYING HOSE ART NO HOSE SIZE			IINAL E OD		MUM KING SURE	BU	MUM RST SSURE	BE	MUM ND DIUS	AVEF WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	inch	mm	mm inch		psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80014019*	19	3/4"	32.5	1.28	40	580	120	1,740	150	5.90	540	0.36	SR+D08000 SERIES
H80014025*	25	1"	39.3	1.55	40	580	120	1,740	170	6.69	682	0.46	SR+D08000 SERIES
H80014031*	31	1.1/4"	45.2	1.78	40	580	120	1,740	200	7.87	883	0.59	SR+D08000 SERIES
H80014035*	35	1.3/8"	51.0	2.01	40	580	120	1,740	200	7.87	1,101	0.74	SR+D08000 SERIES
H80014038*	38	1.1/2"	54.6	2.15	40	580	120	1,740	230	9.05	1,236	0.83	SR+D08000 SERIES
H80014051*	51	2"	67.8 2.67		40	580	120	1,740	270	10.62	1,852	1.24	SR+D08000 SERIES

ABRASIVE HOSES

ABRASERVICE/100 D

DELIVERY HOSE FOR HIGH-PRESSURE CONCRETE PUMPING



TUBF:

Black, anti-static NR/SBR rubber, abrasion resistant thick tube

REINFORCEMENT:

High tensile steel cord

COVER:

Black, anti-static NR/SBR rubber, abrasion and weathering resistant

KEY FEATURES:

- Hardwall delivery structure
- Robust hose structure for longer life in severe applications
- High abrasion resistance
- Integrated crimped fitting solution
- Long length assemblies available Max length: 40m

APPLICATION & FLUIDS:

High-pressure pumping of concrete, plaster, bentonite etc. in construction

TEMPERATURE RANGE:

From -40°C to + 80°C (-40°F to +176°F).

WORKING PRESSURE:

Maximum working pressures are based on 2.5:1 safety factor (maximum working pressure to minimum burst pressure).

COUPLINGS:

TWO-PIECE CRIMP

SR + D08000 Series

ABRASER DELIVERY HO PRESSURE CON PART NO	SE FOR H CRETE PI	IIGH-	REINFOR O		NOM HOS			MUM KING SURE	BU	MUM RST SURE	MINI BE RAD		AVEF WEI	RAGE	COUPLING SERIES TWO PIECE
Hose	DN	Dash	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	kg/m	lb/ft	NON-SKIVE
H80015051*	51	2"	66.0	2.59	70.6	2.78	100	1,450	250	3,626	250	9.84	2,991	2.01	FF + D08000 SERIES
H80015063*	63	2.1/2"	78.4	3.08	83.0	3.27	100	1,450	250	3,626	320	12.59	3,688	2.48	FF + D08000 SERIES
H80015076*	76	3"	90.8	3.57	95.4	3.76	100	1,450	250	3,626	380	14.96	4,404	2.96	FF + D08000 SERIES
H80015089*	89	3.1/2"	105.0	4.13	109.6	4.31	100	1,450	250	3,626	450	17.71	5,353	3.60	FF + D08000 SERIES
H80015102*	102	4"	117.0	4.6	122.5	4.82	100	1,450	250	3,626	500	19.68	6,363	4.28	FF + D08000 SERIES
H80015127*	127	5"	147.0	5.79	153.0	6.02	100	1,450	250	3,625	630	24.80	11,000	7.39	FF + D08000 SERIES



COUPLINGS

INDUSTRIAL COUPLINGS

The RYCO range of industrial couplings for crimped hose connections comprises 2 families, the Serrated Range and Full Flow:

- Serrated Range (SR) universal solution for low and medium pressure hose lines
- Full Flow (FF) Couplings for high pressure lines, designed to provide low resistance to flowing of concrete during working operations (such as Abraservice/100 D)

Theses fittings are available upon request. Please contact your local RYCO representative with your requirements.

FERRULES

LIMOLLS											
	DI	N 16	19	22	25	31	38	51	63	76	102
	Ind	ch 5/8"	3/4"	7/8"	1"	11/4"	11/2"	2"	21/2"	3"	4"
	Siz	ze -10	-12	-14	-16	-20	-24	-32	-40	-48	-64
SERRATED											
FULL FLOW											

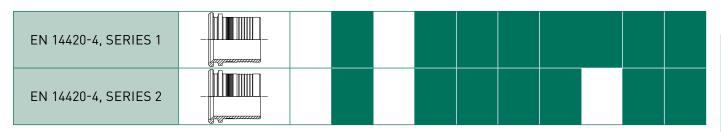




COUPLING INSERTS

DN	16	19	22	25	31	38	51	63	76	102
Inch	5/8"	3/4"	7/8"	1"	11/4"	11/2"	2"	21/2"	3"	4"
Size	-10	-12	-14	-16	-20	-24	-32	-40	-48	-64

BEVELLED TO WELD



BSP FEMALE FRONT SEAL FULL HEXAGON



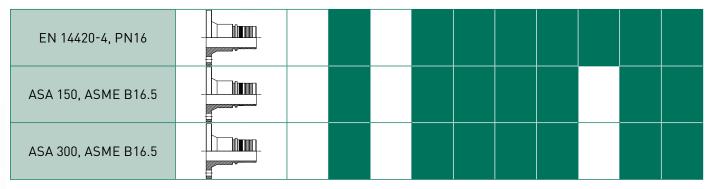
BSP FEMALE FRONT SEAL GROOVE HEXAGON



BSP MALE FRONT SEAL



FIXED FLANGE



SWIVEL FLANGE



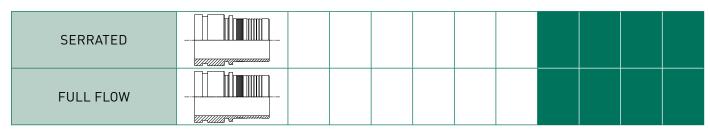
COUPLINGS

INDUSTRIAL COUPLINGS

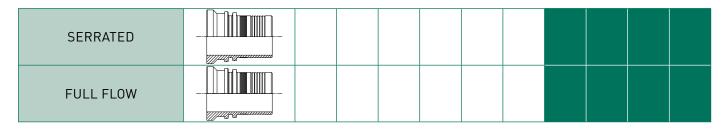
COUPLING INSERTS

DN	16	19	22	25	31	38	51	63	76	102
Inch	5/8"	3/4"	7/8"	1"	11/4"	11/2"	2"	21/2"	3"	4"
Size	-10	-12	-14	-16	-20	-24	-32	-40	-48	-64

VICTAULIC GROOVED END



CALIFORNIA RAISED END



ASSEMBLY MACHINES



ASSEMBLY MACHINES

INDUSTRIAL HOSE ASSEMBLY EQUIPMENT

As one of the world's leading suppliers of hose connector solutions RYCO is able to offer some of the most technically advanced, robust and reliable hose assembly equipment on the market today.

With a product range that encompasses all stages of the hose assembly process, the RYCO range of assembly machines can cater for everything, from on-site repairs to high volume, large-bore production cells.

Full details of the entire range can be found on the RYCO website, but some machines that are specifically suited to industrial hose assembly operations can be found below:

DECOILER

Heavy duty, motorised decoiler suitable for large-bore hoses up to 6". Ideally suited to industrial hose assembly operations at both the start and end of the assembly process. Adjustable centre pins allow the user to determine the inner coil diameter and prevent accidental kinking of the hose.



INDUSTRIAL DECOILER

- Max. Capacity: 6"
- Adjustable centre pins
- Remote start / stop controller
- High torque 3kW motor with speed control

INSERT PUSHING MACHINES

A compact and sturdy unit, designed to facilitate the assembly of medium- to large-bore hoses up to 6". With a stroke of 300mm and an insertion force of 2,000 N, this powerful machine takes the strain out of the hose assembly process.



M 2000 INS

- Max. Capacity: 6"
- Manual insert centring device
- Joystick operated clamping and insertion
- Available with both automatic and manual operation

INDUSTRIAL HOSE ASSEMBLY EQUIPMENT

CUTTING MACHINES

A range of powerful and versatile hose cutting machines for medium- and large-bore hoses. Designed for maximum safety and cutting efficiency, these machines vary in capacity from 3" to a massive 10".



M 75 CUT

- Max. Capacity: 3"
- Powerful 7.5kW motor
- High visibility
- Integrated safety cover



M 90 CUT

- Max. Capacity: 3½"
- Heavy duty design
- Electronic soft start
- Integrated smoke extraction



MDH 15 CUT

- Max. Capacity: 10"
- Sensor for blade tensioning
- Water cooling system
- Automatic cutting cycle

ASSEMBLY MACHINES

INDUSTRIAL HOSE ASSEMBLY EQUIPMENT

CRIMPING MACHINES

Some of the most efficient and powerful crimping machines available on the market today. Crimping large-bore industrial hoses up to 16" is a highly specialised task that only a select few crimping machines can manage. Coupled with their intelligent design to facilitate handling of large hoses, these machines are essential additions to any industrial hose assembly workshop.



MB 450-200

- Max. Capacity: 6"
- Crimp force up to 450 tonnes
- Ergonomic and robust
- Large opening and long master dies



MS 320 OPEN HEAD

- Max. Capacity: 6"
- Crimp force up to 320 tonnes
- Lateral opening and no limit on end connector dimension
- Separate power pack and integrated safety system



MS 550 / MS 550-16

- Max. Capacity: 12" / 16"
- Crimp force up to 550 tonnes
- Safe Crimp System (SCS) control
- Step crimping capability



SELECTING THE CORRECT HOSE

The RYCO Industrial Hoses range is a specialised selection of products dedicated to the conveyance of specific substances in non-hydraulic applications. Each hose type has been designed to cope with the unique rigours associated with the transport of substances as diverse as fluids, solids and gases. This dedicated range of products is made from the highest quality materials using state-of-the-art manufacturing techniques to ensure quality, reliability and long service life.



The RYCO Industrial Hoses range comprises the following product categories:

WATER, AIR & STEAM HOSES - Dedicated to the transport of water, steam and compressed air.

FUEL HOSES - Dedicated to the transport of fuels, oils and fluids with an aromatic content of up to 50%.

CHEMICAL HOSES - Dedicated to the transport of highly aggressive chemicals.

FOOD & BEVERAGE HOSES - Dedicated to the transport of beverages and solid and liquid foodstuffs.

ABRASIVE HOSES - Dedicated to the transport of abrasive fluids such as concrete, plaster, cement and dry powders.

CHOOSING THE CORRECT HOSE

In order to choose a hose suitable for a specific use it is necessary to determine at least the following basic points:

APPLICATION

RYCO Industrial Hoses have been designed to suit specific types of applications such as water, air, fuel, etc, which should be considered when selecting a hose type.

DELIVERY OR SUCTION

Delivery and suction of materials require different properties in hose structure. In addition to the high strength cords of delivery hoses, suction hoses have an interior helical wire to prevent hose collapse during suction.

PRESSURE

The maximum working pressure of the system should be evaluated when selecting an industrial hose. The working pressure allowance should include any peaks and surges that can occur during normal usage.

FLUID COMPATIBILITY

The nature, designation, concentration, temperature and state (liquid, solid, gaseous) of the conveyed fluid must be determined. In the case of solid substances the granulometry, density and quantity of the solid substance should be considered as well as the nature, speed and flow of the fluid carrying it.



TEMPERATURE

Ambient temperatures should be considered when selecting hose types.

ENVIRONMENT AND LOCATION

The environmental factors which could affect hose performance and service life should be evaluated when selecting a hose. Factors such as humidity, exposure to atmospheric agents etc. should be considered. Environmental conditions such as UV rays, ozone, sea water, chemicals and aggressive elements can cause premature degradation of the hose. Also consider whether the hose will be located on the ground, suspended or immersed in a liquid.

MECHANICAL STRESS

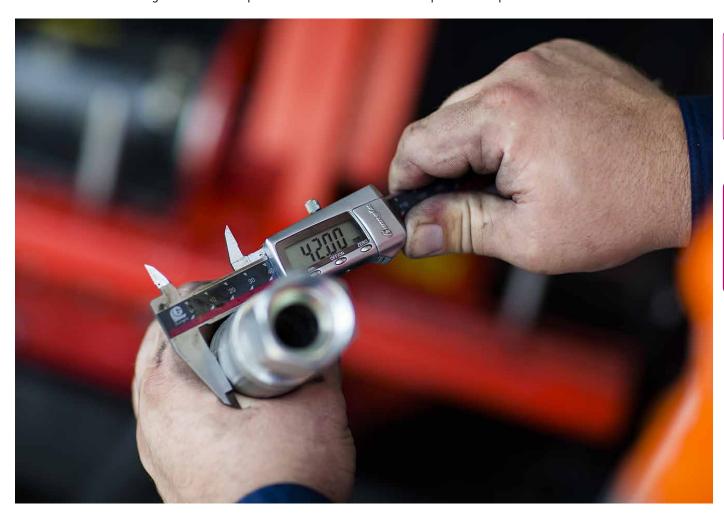
The minimum bend radius (ref. product data sheet) required must be evaluated as well as any stresses related to traction, torsion, bending, vibration, compression, deflection and longitudinal or transversal loads.

ABRASION RESISTANCE

RYCO Industrial Hoses are manufactured to ensure a good overall resistance to abrasion. However, if the hose is to be used in conditions where there may be excessive corrosion, dragging or impact then it is advisable to use additional protection to prevent untimely wear of the cover.

FITTINGS

In order to guarantee safe and reliable performance, the fittings used must be selected according to the manufacturer's recommendation(s). The complete assembly must guarantee the working pressure listed by the hose manufacturer and fittings must be crimped in accordance to the latest published specifications.



FLUID COMPATIBILITY

POLYMERS USED IN INDUSTRIAL HOSES

Main Characteristics and Resistance Information

			_			RESI	STANC	E T0:		
ELASTOMER	INTERNATIONAL SYMBOL	COMMON / TRADE NAME	PHYSICAL STRENGTH	ABRASION	WEATHER / OZONE	GAS PERMEATION	MINERAL OILS	GASOLINES	HIGH TEMPERATURES	LOW TEMPERATURES
NATURAL RUBBER	NR	GUM RUBBER	Е	Е	Р	G	Р	Р	F	G
ACRYLONITRILE-BUTADIENE	NBR	NITRILE (BUNA-N)	G	F	Р	G	E	Е	G	F
STYRENE-BUTADIENE	SBR	BUNA-S	Е	Е	Р	G	Р	Р	F	G
POLYCHLOROPRENE	CR	NEOPRENE	E	Е	G	G	G	F	G	G
CHLORINATED ISOBUTYLENE-ISOPRENE	CIIR	CHLORO BUTYL	F	Р	Е	E	Р	Р	Е	Е
BROMOBUTYL RUBBER	BIIR	BROMO BUTYL	G	Р	Е	E	Р	Р	Е	Е
CHLOROSULFONATED POLYETHYLENE	CSM	HYPALON	G	F	Е	Е	G	F	Е	G
CHLORINATED POYETHYLENE	СМ	CPE	G	F	Е	G	G	G	Е	G
ETHYLENE PROPYLENE DIENE	EPDM	EPDM	G	F	Е	F	Р	Р	Е	Е
ETHYLENE PROPYLENE COPOLYMER	EPM	EPM	G	F	Е	G	Р	Р	Е	Е
ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE	UHMWPE	UHPE	G	Е	Е	G	G	G	F	G
POLYESTER RESIN	PET	PET	G	Е	G	G	G	G	G	G
POLYAMID RESIN	PA	NYLON	G	Е	Е	Е	Е	Е	Е	G
POLYURETHANE	PU	URETHANE	Е	Е	G	F	G	F	G	Е
POLYVINYL CHLORIDE (PLASTICIZED)	PVC	PVC	F	G	Е	G	G	G	Р	Р
FLUORINATED ETHYLENE PROPYLENE	PTFE	TEFLON	G	F	E	Е	E	Е	Е	G
SILICONE	VMQ	SILICONE	G	G	G	G	F	F	Е	Е
FLUOROPOLYMER	FKM	VITON	G	G	Е	Е	Е	Е	Е	Е
CARBOXYLATED NITRILE RUBBER	X-NBR	CARBOXYLATED NITRILE	G	Е	G	G	E	Е	G	G
FLUORINATED ETHYLENE PROPYLENE	FEP	FEP	G	G	G	G	Е	Е	Е	G

LEGEND (IN ORDER OF PERFORMANCE)

 $\boldsymbol{\mathsf{E}}$ - Excellent

G - Good

F - Fair

P - Poor



CHEMICAL COMPATIBILITY CHART FOR INDUSTRIAL HOSES

BEHAVIOUR TO CHEMICALS FOR INDUSTRIAL HOSES APPLICATIONS

BASED ON LITERATURE DATA

TUBE POLYMERS IN CONTACT WITH THE FLUID

RYCO Industrial Hoses are designed for fluid transfer applications with a specific transfer fluid which is specified in the relevant hose data sheet. They are not intended for diversified applications with various chemicals.

The following recommendations regarding generic chemicals are based on literature data regarding the polymers used for the tube compound. The actual field results of the fluid conveyed in the hose should be carefully tested and field validated by users.

LEGEND OF HOSE TYPES BY TUBE COMPOUNDS

TUBE COMPOUND CATEGORIES	HOSE TYPES
NITRILE (NBR)	FUELSERVICE/5 SDC, FUELSERVICE/10 D, FUELSERVICE/10 SD, FUELSERVICE/10 R4, FUELSERVICE/16 D, FUELSERVICE/21 D, FUELSERVICE/21 SD, FUELDISPENSER/D, FUELDISPENSER/SD, FUELTRUCK/16 D, FUELTRUCK/16 SD, FUELFLEX/17 SDC, PROGAS LPG D, PROGAS LPG SD MILKYWAY/10 SD,
STYRENE-BUTADIENE (SBR)	MULTISERVICE/12 D, MULTISERVICE/12 SD, MULTISERVICE/21 D, MULTISERVICE/21 SD, AIRSERVICE, AIRSERVICE/27, WATERFLAT 5/10,
NATURAL RUBBER (NR)	ABRAFOOD/10, ABRADRY, SANDSERVICE/21 D, ABRASERVICE/10 D, ABRASERVICE/10 SD, ABRASERVICE/35 SD, ABRASERVICE/40 D, ABRASERVICE/100 D
VINYL-METHYL-SILICONE (VMQ)	COOLER/5
ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM)	GLACIER/60, GLACIER/100, MULTIFOOD/10 SD, CHEMKING/16 SDE, COOLSERVICE/G
POLYCHLOROPRENE (CR)	FIREX
ETHYLENE-PROPYLENE (EPM)	AIRKING/40, STEAMER/18, STEAMER/18 OR, STEAMSAFE/7
CARBOXYLATED NITRILE (X-NBR)	MUDSERVICE/28 D
FLUOROELASTOMER (FKM)	CHEMKING/10 D, CHEMKING/10 SD
ULTRA-HIGH MOLECULAR WEIGHT POLYETHYLENE (UHMWPE)	CHEMKING/16 SDA
FLUORINATED-ETHYLENE-PROPYLENE (FEP)	CHEMKING/16 SD
BUTYL (BIIR)	BREWERS/12 SD, BREWERS/12 SDC

LEGEND OF RATINGS

E = Excellent - Small or negligible changes of compound properties: no problem for use. Service life can exceed the expectations.

G = **Good** - There are only minor changes of some compound properties. Service life is normally in line with state of the art (standard) expectations.

FT = Field Test recommended - A field test is recommended to allow the end user to either validate the selection in the actual working conditions or to reject the selection. Compatibility data shows significant changes on some compound properties, service life can be reduced. Higher durability can be achieved with reduced severity of working conditions (temperature in particular) or with an upgraded hose selection. After the results of the recommended field test, if the end user decides to use the selected hoses under his validation, the end users assumes all responsibility with regard to any possible effects and consequences arising out of the using of hoses in the actual working conditions and RYCO cannot be held responsible for any claims in relation to or connected with the hoses for which it was recommended to perform a field test.

X = Not recommended - Unsuitable, severe effects on physical properties.

REMARKS

O-Rings used with couplings must also be considered for chemical compatibility with the fluid to be conveyed. This includes fittings containing internal O-Rings. Standard O-Ring of RYCO fittings are made of Nitrile rubber (NBR). If you use special fluids or very high temperatures, different O-Ring materials should be used, contact RYCO for specific information.

FLUID COMPATIBILITY

CON	IPATIBILITY BEHAVIOUR OF TOBE POLYMERS CONTA	1011	INOI	LUI	כטו	IDAJE	אוט טו	LIIER	AIUK	E DAI	4)
	CHEMICALS	NBR / X-NBR	CHLOROPRENE	SBR	N.	EPDM / EPM	CIIR	ΝΜΛ	FΚ	FEP	UHMWPE
	ACETALDEHYDE	Χ	FT	FT	G	G	G	Ε	G	Ε	Ε
	ACETHIL ACETONE	Χ	Е	Χ	Χ	Е	-	Χ	Χ	Е	Χ
_	ACETIC ACID 10%	G	Е	G	FT	Е	G	FT	G	Е	Е
	ACETIC ACID 50%	Χ	FT	Χ	Χ	G	G	FT	G	Е	FT
_	ACETIC ACID GLACIAL 100%	Χ	Х	Χ	Χ	FT	G	FT	Χ	Е	G
	ACETIC ANHYDRIDE 50%	FT	FT	G	Χ	Е	G	Е	Χ	Е	FT
	ACETONE	Χ	FT	FT	Х	Е	Е	G	Χ	Е	Е
	ACETYLENE (GAS)	Е	Е	Е	G	Е	G	Е	Е	Е	Е
	ACRYLIC NITRATE	Χ	Е	G	-	Е	-	G	G	Е	Е
-	ADIPIC ACID	Е	Е	Е	-	Е	-	-	Е	Е	Е
_	AIR ATMOSPHERIC UP TO °C	70	80	70	70	120	120	175	200	100	90
-	AIR COMPRESSED UP TO °C	Χ	80	Χ	Χ	Χ	120	175	200	100	90
-	ALIMENTARY VINEGAR	Е	Е	Е	FT	Е	-	Е	FT	Е	Е
-	ALLYL CHLORIDE	Χ	Х	Х	-	Χ	-	Е	-	Е	Х
_	ALUMINIUM ACETATE (AQUEOUS)	Е	Е	Е	FT	Е	Е	Х	-	Е	Е
	ALUMINIUM AND POTASSIUM SULPHATE (DOUBLE)	G	Е	Е	G	Е	Е	G	Е	Е	Е
-	ALUMINIUM CHLORIDE (AQUEOUS)	Е	Е	Е	G	Е	Е	Х	Е	Е	Е
-	ALUMINIUM FLUORIDE	Е	Е	Е	FT	Е	Е	Е	Е	Е	Е
-	ALUMINIUM HYDROXIDE	E	E	E	G	E	-	E	E	E	E
-	ALUMINIUM NITRATE (AQUEOUS)	E	E	E	G	E	Е	G	-	E	E
-	ALUMINIUM PHOSPHATE (AQUEOUS)	E	E	E	-	E	-	E	E	E	E
A	AMMONIA (AQUEOUS)	E	E		FT		G	E	E	E	E
^ -	AMMONIA (LIQUID)	G	G	G	FT	E	G	FT	X	E	E
-	AMMONIA 20°C (VAPOUR)	E	E	E	-	E	G	E	E	E	E
-	AMMONIUM CARBONATE (AQUEOUS)	G	E	G	-	E	E	G	E	E	E
-	AMMONIUM CHLORIDE (AQUEOUS)	E	E	E	G	E	E	E	E	E	E
-	AMMONIUM DIPHOSFATE (AQUEOUS)	E	E	E	-	E	E	G	E	E	E
-	AMMONIUM METAPHOSPHATE	E	E	E	-	E	E	E	E	E	E
-	AMMONIUM NITRATE	E	E	E	-	E	E	G	-	E	-
-	AMMONIUM NITRATE (AQUEOUS)	E	E	E	FT	E	E	E	Е	E	E
-	AMMONIUM PERSULPHATE (AQUEOUS)	E	E	E	-	E	E	E	-	E	E
-	AMMONIUM PHOSPHATE (AQUEOUS)	E	E	E	G	E	E	G	Е	E	E
-	AMMONIUM SULPHATE	E	E	E			E		E		
-	AMMONIUM THIOCYANATE	E	E	E	G -	E E	E	E E	-	E E	E E
-		X	X	X	X	X	X	FT		E	X
-	AMYLICAL COLLO		_								
_	AMYLIC ALCOHOL	E	E	E	FT	E	G	E	E	E	E
-	ANILINE	X	FT	X	Х	X	G	G	G	E	E
-	ANIMAL GLUE	E	E	G	-	FT	-	E	E	E	E
_	ANTIMONY CHLORIDE 50%	FT	E	E	-	E	Х	X	E	E	E
	AQUA REGIA	G	X	X	X	FT	-	FT	G	E	X
	ARGON (GAS)	E	E	E	G	E	E	E	E	E	E
-	ARSENIC ACID	E	E	G	FT	E	E	E	E	E	E
	ASPHALT	G	G	X	X	X	X	G	E	E	E
_	BARIUM CHLORIDE (AQUEOUS)	E	E	E	G	E	E	E	E	E	E
_	BARIUM HYDROXIDE	E	E	E	G	E	Е	E	E	E	E
	BARIUM SULPHATE	E	E	E	G	E	-	E	E	E	E
	BENZALDEHYDE	X	X	FT	X	G	E	FT	G	E	-
	BENZENE, BENZOL	X	X	X	X	X	X	X	G	E	X
	BENZOIC ACID (AQUEOUS)	X	X	X	X	X	Х	X	E	E	E
	BENZYL ALCOHOL	X	FT	G	Х	E	-	Е	E	E	FT
В	BENZYL BENZOATE	Х	X	X	-	G	G	-	E	E	-
	BENZYL CHLORIDE	X	FT	FT	-	X	X	G	E	E	FT
	BISMUTH CARBONATE	E	E	E	-	E	Е	Е	E	E	E
	BISULPHATE (S02 SOLUTION)	FT	-	E	-	Е	-	-	Е	Е	E
	BITUMEN UP TO °C	120	X	X	-	X	X	X	180	130	X
	BORIC ACID (AQUEOUS)	Е	E	Е	-	Е	Е	FT	Е	Е	Е
	BRINE (KITCHEN SALT SOLUTION)	Е	E	Е	G	Е	E	Е	E	Е	Е
	BROMINE	Х	Х	Х	Х	Х	Х	Х	Е	Е	Χ



COIV	IPATIBILITY BEHAVIOUR OF TOBE POLYMERS CONTA	CII	INU	LUI	טט	BASE	אט ט.	LIIER	ATUR	E DAT	AJ
	CHEMICALS	NBR / X-NBR	CHLOROPRENE	SBR	N N	EPDM / EPM	CIIR	VMQ	FΚ	FEP	UHMWPE
	BROMINE WATER	Χ	X	Χ	Χ	Χ	Χ	Χ	Ε	Ε	Х
	BROMOBENZENE	Χ	Х	Χ	Χ	Χ	-	Χ	Ε	Е	Χ
	BROMOCHLOROMETHANE	Χ	Χ	Χ	Χ	FT	Χ	Χ	Е	Е	Х
	BUTADIENE	Χ	G	Χ	Χ	FT	Χ	-	Е	Е	Е
_	BUTANE (GAS)	Е	Е	G	Χ	G	Χ	FT	Е	Е	Х
_	BUTANE (LIQUID)	Е	Е	Χ	Χ	Χ	Χ	FT	Е	Е	Е
_	BUTIL ACETATE	Χ	Х	FT	Χ	G	G	FT	Χ	Е	-
_	BUTYL ALCOHOL (BUTANOL)	Е	Е	Е	G	Е	G	G	Е	Е	Х
	BUTYL AMINE	FT	Х	Χ	-	Х	Χ	G	Χ	Е	-
В -	BUTYL BENZOATE	Χ	Х	Χ	-	Е	Χ	-	Е	Е	-
_	BUTYL ETHER	Е	G	Х	Х	FT	FT	FT	-	Е	Е
_	BUTYL GLYCOLE	Е	FT	Е	-	Е	G	G	Е	Е	Е
_	BUTYL OIL	-	Х	Х	Х	G	-	-	Е	Е	-
_	BUTYL PHTALATE (DIBUTYL PHTHALATE)	FT	FT	FT	Х	G	-	G	G	Е	FT
_	BUTYL STEARATE	G	Х	X	X	FT	Х	E	E	E	Х
_	BUTYLENE (LIQUID)	G	FT	FT	-	G	X	-	E	E	Х
-	BUTYRALDEHYDE (BUTIRIC ALDEHYDE)	FT	G	FT	Х	G	E	FT	-	E	E
-	BUTYRIC ACID (AQUEOUS)	Х	FT	Х	G	G	G	G	FT	E	X
	CALCIUM ACETATE	G	G	E	Х	E	E	-	X	E	E
_	CALCIUM BICARBONATE	E	E	E	E	E	E	Е	E	E	E
-		E	E	E		E		E			
_	CALCIUM BISULPHATE (AQUEOUS)		_		G		E		E	E	E
_	CALCIUM BISULPHITE	FT	G	G	G	E	E	G	E	E	E
-	CALCIUM CARBONATE	E	E	E	G	E	E	E	E	E	E
_	CALCIUM CHLORIDE (AQUEOUS)	Е	E	E _	G	E	E	E	E	E	E
_	CALCIUM HYDROXIDE (AQUEOUS)	G	E	E	G	E	E	G	Е	E	E
_	CALCIUM NITRATE	E	E	E	G	E	E	G	E	E	E
_	CALCIUM OXIDE	Е	E	Е	-	Е	E	G	E	Е	Е
_	CALCIUM SULPHATE (AQUEOUS)	Е	Е	Е	G	Е	Е	Е	E	Е	E
_	CALCIUM SULPHIDE	G	E	G	G	Е	G	G	Е	Е	-
_	CARBON OXIDE (CARBON MONOXIDE)	G	G	G	-	FT	E	Е	E	Е	Е
_	CARBONIC ACID GAS	Е	Е	Е	G	Е	Е	Е	E	Е	Е
_	CARBONIC ANHYDRIDE	Е	G	Χ	Χ	G	E	Е	Е	Е	Е
_	CARBONIC GAS	Е	Е	Е	-	Е	-	Е	Е	Е	Е
_	CASTOR OIL	Е	E	Е	-	G	FT	Е	Е	Е	FT
	CELLULOSE ACETATE	Е	FT	FT	Χ	G	G	Е	-	Е	Е
	CHLORIC ACID (AQUEOUS)	G	FT	Е	-	Е	Е	Е	Е	Е	E
	CHLORINATED WATER 3%	FT	G	FT	FT	FT	Ε	G	G	Е	G
C -	CHLORINE (DRY)	FT	Х	G	Χ	FT	Χ	Χ	Ε	Е	Х
	CHLORINE (HUMID)	Χ	Х	FT	Χ	FT	-	Χ	Ε	Е	Χ
	CHLORO PEROXIDE	Χ	Χ	Χ	-	FT	-	FT	Е	Ε	Χ
	CHLORODIPHENIL	Χ	Х	Χ	-	Χ	-	G	Е	Е	Е
	CHLOROFORM (TRICHLOROMETHANE)	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Е	Е	Х
_	CHLOROSULFONIC ACID	Χ	Х	Χ	Χ	Χ	Χ	Χ	Χ	Е	Χ
_	CHROMIC ACID 10%	Χ	Х	Χ	Χ	G	Χ	FT	Е	Е	Е
_	CHROMIC ACID 25%	Χ	Х	Χ	Х	G	Х	Χ	Е	Е	Е
_	CHROMIC ACID 50%	Х	Х	Х	Х	G	Х	Χ	E	Е	FT
	CITRIC ACID	E	E	G	G	E	G	E	E	E	E
	COAL TETRACHLORIDE	FT	X	X	-	X	Х	X	E	E	X
	COCONUT OIL	E	G	X	Х	E	FT	E	E	E	Х
	COLZA OIL	G	G	X	X	E	-	X	E	E	-
	COPPER CHLORIDE	E	E	E	FT	E	E	E	E	E	Е
	COPPER CYANIDE	E	E	E	FT	E	E	E	E	E	E
	COPPER HYDROXIDE	X	G	E	-	E	-	E	-	E	E
-	COPPER NITRATE	E	E	E	FT	E	-	E	Е	E	E
-	COPPER SULPHATE (AQUEOUS)	E	E	E		E	G	E	E	E	E
	COPPER SULPHATE (AQUEOUS) CORN OIL	E	G		FT	G	FT	E	E	E	
-			_	X	X						X
_	COTTONSEED OIL	E	G	X	X	E	FT	G	E	E	E
	CREOSOTE	Х	Х	Х	Х	G	X	G	Е	Е	Х

FLUID COMPATIBILITY

001	TRATIBILITY BEHAVIOUR OF TOBE POLIMERS CONTA	1011	1401	LO	כם	(DAJL	D 014	LIILI	AION	L DAI	۸)
	CHEMICALS	NBR / X-NBR	CHLOROPRENE	SBR	NR	ЕРОМ / ЕРМ	CIIR	VMQ	Ε Ε Ε	FEP	UHMWPE
	CRESOLS	FT	FT	Χ	Χ	Χ	-	G	Е	Е	Χ
	CRUDE OIL	FT	Х	Х	Χ	Χ	Χ	Х	Е	Е	FT
С	CYCLOEXANE (HEXAIDROBENZENE)	Е	Х	Х	Х	Х	Х	Х	E	Е	Е
-	CYCLOEXANOL	G	E	G	X	X	-	G	E	E	E
-	CYCLOHEXANONE	X	X	X	X	FT	G	G	X	E	E
	DECAHYDRONAPHTALENE (DECALIN)	G	X	X	X	X	Х	Х	E	E	E
-		E	E	E	FT	E	E	E	E	E	E
-	DETERGENTS SYNTHETIC 20°C		_				E				
-	DIACETONE ALCOHOL	X	FT	X	FT	E		E	X	E	G
-	DIAMINE ETHYLENE	G	E	E	FT	Е	-	FT	G	E	Е
-	DIBENZYL ETHER	Х	X	X	Х	G	G	G	E	E	-
	DIBUTHYL PHTLATE	G	FT	FT	Х	Х	FT	-	G	E	FT
_	DIBUTHYL SEBACATE	Χ	Х	Х	Χ	G	FT	Е	G	Е	Е
	DIBUTHYLAMINE	Χ	Х	Χ	Χ	Χ	Χ	FT	Χ	Е	-
	DIBUTHYLKETONE	Χ	FT	FT	Χ	G	G	-	-	Е	G
	DICHLORBENZENE	FT	Χ	Χ	Χ	Χ	Χ	Χ	Ε	Е	FT
	DICHLORETHYLENE	Χ	Χ	Χ	Χ	Χ	Χ	Χ	G	Е	Χ
	DICHLOROMETHANE	FT	Χ	Χ	Χ	Χ	Χ	Χ	G	Е	Χ
-	DIESEL FUEL (50°C) - FLUID TRANSFER ONLY	Е	FT	Х	Х	Χ	Χ	Х	Е	Е	Χ
-	DIESEL FUEL BIO RME	Е	FT	Х	Х	Х	Х	Х	Е	Е	Х
-	DIESEL OIL	G	FT	X	X	X	X	X	E	E	G
-	DIETHANOLAMINE	FT	-	-	FT	E	E	-	-	E	E
D .	DIETHYL ESTER OF ADIPIC ACID	X	FT	FT	-	E	-	-	Х	E	-
			_								
-	DIETHYL ETHER	X	FT	X	X	X		X	X	E	X
_	DIETHYLAMINE	FT	FT	G	FT	G	-	G	Х	E	FT
-	DIETHYLBENZENE	Х	Х	Х	Х	Х	Х	Х	-	Е	-
	DIETHYLENE GLYCOL	Е	E	Е	G	E	-	G	Е	E	E
_	DIETHYLPHTALATE (DEPH)	Х	Х	Х	Х	Х	-	-	FT	Е	E
_	DIMETHYLAMINE	Х	Х	X	FT	G	-	-	Х	E	FT
	DIMETHYLANILINE	Χ	Х	FT	-	G	Χ	G	Е	Е	-
	DIMETHYLETHER	FT	FT	Χ	Χ	Χ	-	-	FT	Е	G
	DIMETHYLFORMAMIDE	G	FT	Е	-	G	G	G	Χ	Ε	Ε
	DIOCTYL PHTHALATE	Χ	Χ	Χ	Χ	G	-	FT	G	Е	FT
	DIOCTYL SEBACATE	Х	Х	Χ	-	G	FT	FT	G	Е	-
	DIOXIN	Х	Х	Χ	-	G	G	Χ	Χ	Е	Е
	DIPHELYL	FT	Х	Χ	-	Χ	Χ	Χ	Е	Е	G
-	DIPHENIL OXIDE	Χ	Х	Χ	-	Χ	-	G	FT	Е	-
-	DISTILLED WATER	Е	Е	Е	Е	Е	Е	Е	Е	Е	Е
-	DODECYL ALCOHOL	Е	Е	-	-	Е	G	-	Е	Е	
	EPICHLOROHYDRIN (LIQUID)	X	X	Х	-	G	G	Х	X	E	Е
-	ESSENCES WITH HIGH AROMATIC CONTENT	G	FT	X	-	X	X	X	E	E	X
-	ESSENCES WITH LOW AROMATIC CONTENT	E	FT	X	-	X	X	X	E	E	X
-	ESSENTIAL OILS	G	X	X	Х	-	X	X	E	E	X
-		E	_	X	-					E	
-	ETHANE (GAS)		G			X	X	FT	E		E
-	ETHANOLAMINE	G	E	E	FT	E	G	FT	G	E	E
-	ETHIL ACETATE	Х	FT	FT	Х	G	G	G	Х	E	G
	ETHYL ACRYLATE (ETHYLACRILIC ESTER)	Х	FT	FT	Х	G	G	G	Х	Е	-
	ETHYL ALCOHOL	Е	E	Е	G	Е	Е	Е	Е	Е	Е
E	ETHYL BENZENE	FT	Х	Χ	Х	Х	Χ	Х	G	Е	Х
	ETHYL BROMIDE	Е	Е	G	-	Е	Χ	Χ	Е	Е	G
	ETHYL CHLORIDE (CHLOROETHYL)	Χ	Χ	Χ	Χ	Χ	FT	Χ	G	Е	Χ
	ETHYL ETHER	Х	FT	Χ	Χ	Χ		Χ	Χ	Е	Х
	ETHYL GLYCOL	Χ	Χ	G	-	G	G	-	Χ	Е	Е
	ETHYL MERCAPTAN	Х	FT	Х	-	FT	Χ	FT	Χ	Е	-
	ETHYLENE (GAS)	Е	G	Χ	Х	-	Χ	G	Е	Е	Е
	ETHYLENE CHLORIDE (DICHLOROETHYLENE)	FT	FT	FT	Х	G	Х	Х	Е	Е	Х
	ETHYLENE GLYCOL	Е	E	G	G	E	E	E	E	E	E
	ETHYLENE OXIDE	X	X	X	-	FT	FT	X	X	E	X
	···									_	



001	TRANSIENT BEHAVIOUR OF TOBE FOLIMERS CONTR	1011	1401	LO	כם	(DA3L	חט טו	LIILK	AIUK	LDAI	AJ
	CHEMICALS	NBR / X-NBR	CHLOROPRENE	SBR	NR	EPDM / EPM	CIIR	VMQ	ЯХ М	FEP	UHMWPE
	FERROUS CHLORIDE (AQUEOUS)	Е	E	Ε	G	Е	-	Е	Ε	Е	Е
	FERROUS SULPHATE	Ε	Е	Ε	-	Е	-	Ε	Ε	Ε	E
	FLUORINE	-	-	-	-	FT	-	-	G	Е	Χ
	FLUOROBENZENE	Χ	Χ	Χ	-	Χ	Χ	Χ	Ε	Е	-
	FLUOROBORIC ACID 65%	G	G	G	FT	G	-	Χ	-	Е	Е
	FLUOROSILICIC ACID	G	FT	Е	FT	G	-	Χ	Χ	Е	Е
	FORMALDEHYDE	G	G	G	FT	G	G	Е	E	Е	Е
F	FORMALIN	G	Е	Е	FT	Е	-	G	Е	Е	Е
	FORMIC ACID	G	Е	Е	FT	Е	-	G	FT	Е	G
	FUEL A (ISO-OCTANE)	Е	FT	Χ	Χ	Χ	Χ	Χ	Е	Е	Х
	FUEL B (70% ISO-OCTANE, 30% TOLUENE)	G	FT	Χ	Χ	Χ	Χ	Χ	Е	Е	Х
	FUEL C (50% ISO-OCTANE, 50% TOLUENE)	G	Χ	Χ	Χ	Χ	Χ	Χ	E	Е	Х
	FUEL HIGH AROMATIC	FT	Χ	Χ	Χ	Χ	Χ	Χ	E	Е	Х
	FUEL LOW AROMATIC	G	Х	Χ	Χ	Χ	Χ	Χ	Е	Е	Х
	FURFURYL ALCOHOL	Χ	G	G	Χ	G	G	G	FT	Е	Х
	GALLIC ACID	Χ	Χ	FT	-	G	G	Е	E	Е	Е
	GLUCOSE	Е	Е	Е	G	Е	Е	Е	Е	Е	Е
G	GLYCERINE	Е	Е	Е	G	Е	Е	Е	FT	Е	Е
	GREASY ACIDS IN GENERAL	G	G	FT	-	FT	Χ	FT	Е	Е	FT
	HELIUM	Е	Е	Е	G	Е	Е	Е	Е	Е	Е
	HEPTANE	Е	G	Х	Χ	Χ	Χ	Χ	Е	Е	Е
	HEXALDEHYDE	Х	G	FT	Х	G	G	FT	-	Е	Е
	HEXANE	Е	Е	Х	Χ	Χ	Χ	Χ	Е	Е	Е
	HEXIL ALCOHOL (HEXANOL)	G	G	Е	G	Е	-	FT	-	Е	Е
	HYDRAULIC BRAKES FLUID	G	FT	Χ	Χ	Χ	FT	Χ	Е	Е	G
	HYDRAULIC OILS ESTER BASED	G	Χ	Х	Χ	G	Χ	Х	G	G	-
	HYDRAULIC OILS GLYCOL BASED	Е	G	Х	Χ	Е	FT	G	FT	Е	Е
	HYDRAULIC OILS MINERAL BASED	Е	FT	Χ	Χ	Χ	Χ	Х	E	Е	FT
	HYDRAULIC OILS PHOSPHATE ESTER BASED	Χ	Х	Χ	Χ	G	G	G	Е	Е	Х
	HYDRAZINE	G	G	G	Χ	Е	Е	Χ	Χ	Е	Е
	HYDRAZINE HYDRATE (AQUEOUS)	FT	FT	Χ	Χ	Е	G	FT	Е	Е	Е
Н	HYDROBROMIC ACID	FT	G	FT	G	G	Е	G	Е	Е	Е
	HYDROCHLORIC ACID (GAS)	Χ	Х	Χ	Χ	G	G	-	Χ	Е	Е
	HYDROCHLORIC ACID 15% (MURIATIC ACID)	G	FT	Е	G	Е	FT	Е	Е	Е	Е
	HYDROCHLORIC ACID 38% (MURIATIC ACID)	FT	FT	G	FT	Е	Χ	FT	E	Е	Е
	HYDROCYANIC ACID 20%	FT	FT	Х	Χ	Е	-	G	Е	Е	-
	HYDROFLUORIC ACID 10%	FT	Χ	FT	Χ	Χ	-	Е	G	Е	G
	HYDROFLUORIC ACID 30%	Χ	Х	Χ	Χ	Χ	-	Е	G	Е	G
	HYDROFLUORIC ACID 75%	Χ	Х	Х	Х	Χ	-	G	G	Е	Х
	HYDROGEN (GAS)	Е	E	G	FT	Е	G	FT	E	Е	E
	HYDROGEN PEROXIDE 10% (PERHYDROL)	FT	Χ	FT	Χ	G	G	Е	G	Е	G
	HYDROGEN PEROXIDE 30% (PERHYDROL)	Χ	Х	Х	Χ	G	G	Е	Е	Е	Е
	HYDROGEN SULPHIDE	Χ	FT	Х	Χ	Е	Е	-	G	-	-
	IODINE (ALCOHOLIC SOL. 5-10%)	G	Х	G	-	G	-	Х	E	Е	FT
	ISOBUTYL ALCOHOL	G	Е	G	FT	Е	Е	Е	Е	Е	Е
	ISO-OCTANE	Е	G	Х	Х	Х	Χ	Е	Е	Е	Х
	ISOPROPYL ACETATE	Χ	Х	FT	Х	G	G	G	Х	Е	-
I	ISOPROPYL ALCOHOL	G	Е	Е	G	Е	Е	E	Е	Е	Е
	ISOPROPYL BENZOL	Χ	Х	Х	G	Х	-	Х	Е	Е	-
	ISOPROPYL CHLORIDE	Х	-	Χ	-	Х	-	-	Е	Е	-
	ISOPROPYL ETHER	FT	FT	Χ	Х	FT	Х	-	FT	Е	FT
K	KEROSENE	G	FT	Х	X	Х	X	FT	E	E	Х
	LACTIC ACID (AQUEOUS)	FT	FT	G	FT	G	G	E	E	E	G
	LANOLIN	E	G	X	-	FT	-	FT	E	E	G
	LAURYL ALCOHOL	E	E	-	-	E	-	-	E	E	-
L	LEAD ACETATE (AQUEOUS)	E	E	E	FT	E	E	E	-	 E	Е
	LEAD NITRATE	E	E	E	-	E	E	G	-	E	-
	LEAD SULPHATE	E	E	E	G	E	E	E	_	E	Е
	LINSEED OIL	E	G	X	Х	FT	FT	E	E	E	X
		_								_	

FLUID COMPATIBILITY

CON	IPATIBILITY BEHAVIOUR OF TOBE POLYMERS CONTA	1011	INO I	LU	כטו	(BASE	אט ט.	LIIER	KATUR	E DAI	AJ
	CHEMICALS	NBR / X-NBR	CHLOROPRENE	SBR	N R	EPDM / EPM	CIIR	VMQ	FKM	FEP	UHMWPE
	MAGNESIUM CHLORIDE (AQUEOUS)	Е	Е	Е	G	Е	Е	Е	E	Е	Е
	MAGNESIUM HYDROXIDE	G	Е	G	FT	Е	Е	-	Е	Е	-
	MAGNESIUM SILICATE (TALC)	Е	Е	Е	-	Е	Е	Е	Е	Е	Е
	MAGNESIUM SULPHATE	G	Е	G	G	Е	Е	Е	Е	Е	Е
-	MAGNESIUM SULPHITE (AQUEOUS)	Е	Е	Е	-	Е	Е	Е	Е	Е	Е
-	MALEIC ACID (AQUEOUS)	Х	Х	FT	Х	FT	Х		Е	Е	Е
-	MALIC ACID (AQUEOUS)	E	E	E	FT	E	X	E	E	E	E
-	MERCURY	E	E	E	G	 E	E	 E	E	 E	E
-	MERCURY CHLORIDE	FT	G	E	-	E	E	E	E	E	E
-	MERCURY NITRATE	E	E	E	-	E	E	E	-	E	E
-	MESITYL OXYDE	X			X		X				-
-			X	X		G		X	X	E	
М	METHANE (GAS)	E	FT	X	X	FT	X	FT	E	E	E
-	METHIL ACETATE	X	X	X	X	G	G	X	Х	E	E
-	METHYL ALCOHOL (METHANOL)	E	E	E	G	E	E	Е	G	E	Е
	METHYL CHLORIDE	Х	Х	FT	Х	G	FT	Х	FT	Е	Х
_	METHYL GLYCOL	-	G	Х	-	G	-	-	Х	E	Е
_	METHYL PHTHALATE	Χ	Х	Χ	-	G	-	-	G	E	-
	METHYLAMINE (AQUEOUS)	Χ	Е	Е	-	Е	-	-	Е	Е	E
	METHYLETHYLKETONE	Χ	Х	Χ	Χ	G	FT	FT	Χ	Е	Е
	METHYLISOBUTHYLKETONE	Χ	Х	Χ	-	FT	FT	FT	Χ	Е	Е
	METHYLMETACRYLATE	Χ	Х	Χ	Χ	Χ	Χ	-	Χ	Е	G
	MILK	-	-	-	-	Е	Е	G	-	G	Е
	MONOCHLOROACETIC ACID	Χ	Х	Χ	FT	G	Е	Χ	Χ	Е	Χ
	MONOCHLOROBENZOL	Χ	Х	Χ	-	Х	-	FT	G	Е	Х
	NAPHTA (OIL)	Е	Х	Х	Х	Х	Х	G	Е	Е	Х
-	NATURAL GAS	Е	Е	Е	Х	Е	Х	Х	Е	Е	Е
-	NATURAL GAS (HUMID)	Е	Е	FT	Х	FT	Х	Х	Е	Е	G
-	NICKEL SULPHATE (AQUEOUS)	Е	Е	Е	G	Е	Е	Е	Е	E	Е
-	NITRIC ACID 10%	FT	FT	FT	X	E	-	FT	G	E	E
-	NITRIC ACID 25%	Х	Х	X	Х	E	-	X	G	E	E
-	NITRIC ACID 40%	X	Х	X	Х	G	-	Х	G	E	X
N -	NITRIC ACID 60%	X	X	X	X	FT	_	X	G	E	Х
-	NITROBENZENE	X	X	FT	X	X	FT	X	G	E	X
-	NITROGEN	E	E	E	G	E	E	E	E	E	E
-	NITROPROPANE	X	X	X	-	G	G	X	X	E	-
-	NITROTOLUENE	FT	X	X	-	FT	FT	-	FT	E	Е
-	NITROUS OXIDE (GAS)	E	E	E	G	E		Е	E	E	E
-	NONYLALCOHOL (NONANOL)	X	E	X	-	E	-	G	E	E	E
	OCTANE	E	FT	X	Х	X	Х	Х	E	E	E
-	OCTYL ALCOHOL	G	E	G	FT	E	G	G	E	E	E
-	OIL & GREASES ANIMAL BASED	E	G	Х	X	G	Х	FT	E	E	E
-	OIL & GREASES MINERALS BASED UP TO °C	120	80	X	X	X	X	X	200	130	70
-	OIL & GREASES SILICONE BASED OIL & GREASES SILICONE BASED	E	E	E	G	E	X	G	E	E	E
-		E	FG		X	FT	FT	FT	E	E	G
-	OIL & GREASES VEGETABLE BASED			FT					_		
0	OIL IRM (ASTM) N°1, 100°C	E	G	X	X	X	X	G	E	E	G
-	OIL IRM (ASTM) N°2, 100°C	E	G	X	X	X	X	FT	G	E	FT
-	OIL IRM (ASTM) N°3, 100°C	E	FT	X	X	X	X	FT	G	E	FT
	OLEIC ACID	G	FT	X	X	X	X	X	G	E	G
	OLIVE OIL	Е	E	X	Х	FT	G	G	E	E	Е
	OXALIC ACID	G	G	G	X	G	Е	E	E	E	Е
	OXYGEN UP TO °C	Х	90	Х	FT	120	120	175	200	130	70
	OZONE	Х	G	X	Х	Е	G	Е	Е	Е	G
	PALM OIL	Е	G	Χ	Х	Е	G	Е	Е	Е	Х
	PALMITIC ACID	FT	G	FT	Χ	FT	G	Е	G	Е	Е
Р	PARAFFIN, PARAFFIN OIL	Е	G	Х	Х	FT	Χ	G	Е	Е	FT
	PARAFORMALDEHYDE	G	G	FT	-	G	Е	Е	G	Е	Е
	PENTACHLOROPHENOL	Χ	Х	Χ	-	G	Е	FT	-	Е	
	PENTANE	Е	Е	Х	Х	Х	Х	Χ	-	Е	Х



	CHEMICALS	NBR / X-NBR	CHLOROPRENE	SBR	NR	EPDM / EPM	CIIR	VMQ	FKM	FEP	UHMWPE
	DEDOUGADIO (AGUEGUS)	F.T.		0		0		· ·		_	
_	PERCHLORIC ACID (AQUEOUS)	FT	FT	G	X	G	G	X	E	E	E
_	PERCHLOROETHYLENE (TETRACHLOROETHYLENE) PETROLEUM 70°C	FT G	X FT	X	X	X	X	G X	E E	E G	X FT
_	PHENOL (PHENIC ACID)	X	FT	FT	X	X	X	G	E	E	Х
_	PHOSPHORIC ACID 20%	FT	G	FT	G	E	-	G	E	E	E
_	PHOSPHORIC ACID 50%	G	E	E	FT	E	-	G	E	E	E
_	PHOSPHORIC ACID 85%	FT	E	E	FT	E	_	FT	E	E	E
_	PHOSPHOROUS OSSYCHLORIDE (PHOSPHORYL CHLORIDE)	X	X	X	-	E	-	-	E	E	FT
_	PHOSPHORYL CHLORIDE	Х	Х	X	-	G	-	-	E	E	FT
_	PHTHALIC ACID	Х	Е	Е	-	Е	Е	-	Х	Е	Е
	PICRIC ACID (TRINITROPHENOL)	FT	FT	FT	FT	Е	Е	Е	G	Е	Е
	PINE OIL	G	Х	Х	Х	Χ	Χ	G	Е	Е	FT
	POTASSIUM ACETATE (AQUEOUS)	G	G	Χ	Х	Е	Е	Χ	Χ	Е	Е
	POTASSIUM BICARBONATE (AQUEOUS)	Е	Е	Е	G	Е	Ε	Е	Е	E	Е
	POTASSIUM BROMIDE	Е	Е	Е	-	Е	Е	Е	Е	Е	Е
	POTASSIUM CARBONATE (POTASH)	Е	Е	Е	G	Е	Е	Е	Е	Е	Е
	POTASSIUM CHLORATE	Е	Е	Е	-	Е	Е	G	Е	Е	Е
_	POTASSIUM CHLORIDE	Е	Е	Е	G	Е	Е	Е	Е	Е	Е
	POTASSIUM CYANIDE	Е	Е	Е	G	Е	Е	Е	G	Е	Е
_	POTASSIUM DICHROMATE	G	FT	FT	-	Е	Е	Е	Е	Е	Е
_	POTASSIUM HYDROXIDE (CAUSTIC POTASSIUM)	Е	Е	Е	FT	Е	Е	FT	Е	Е	Е
Р -	POTASSIUM HYPOCHLORITE (JAVEL WATER)	G	Х	G	-	G	Е	G	E	Е	FT
_	POTASSIUM IODIDE 10% (AQUEOUS)	Е	E	FT	FT	E	Е	-	Е	Е	Е
_	POTASSIUM NITRATE (AQUEOUS)	Е	E	E	G	E	E	E	E	E	E
_	POTASSIUM PERMANGANATE 10 % (AQUEOUS)	G	FT	FT	-	E	E	Е	E	E	E
_	POTASSIUM PHOSPHATE	E	G	E	-	E	E	X	E	E	E
_	POTASSIUM SULPHATE	E	E	E	-	E	E	E	E	E	E
_	POTASSIUM SULPHITE	E	E	E	- '	E	E	E	E	E	E
_	PROPANE (LIQUID)	E	G	G	X	FT	X	X	E	E	G
_	PROPANE (LIQUID)	E	G	X	X -	X	X	FT	E	E	X
_	PROPIONIC ACID PROPYL ACETATE	X	FT E	X		E E	E G	-	E	E E	E G
_	PROPYL ALCOHOL	G	E	X E	X G	E	E	G	X E	E	E
_	PROPYL AMINE	X	X	X	-	X	E	X	X	E	-
_	PROPYLENE	FT	X	X	X	X	X	X	E	E	-
_	PROPYLENE CHLORIDE	X	X	X	X	X	X	X	-	E	Х
_	PROPYLENE GLYCOL	FT	E	E	G	E	G	E	Е	E	E
-	PROPYLENE GLYCOL	G	E	E	G	E	E	-	E	E	E
_	PROPYLENE OXIDE	Х	X	X	-	G	G	Х	X	E	-
_	PRUSSIC ACID 20% (HYDROCYANIC ACID)	FT	FT	G	Х	E	-	G	G	E	Е
_	PRUSSIC ACID 80% [CONC.]	FT	FT	FT	Х	G	-	G	G	Е	Е
-	PURINE	Е	Е	Е	-	Е	-	Е	Е	Е	Е
_	PYRANOLS (OIL FOR TRANSFORMER)	Е	Х	Х	-	Χ	-	G	Е	Е	FT
_	PYRIDINE	Х	Х	Х	-	Е	G	Х	FT	Е	Е
	SEA WATER (BRINE, BRACKISH)	Е	G	G	G	Е	Е	Е	Е	Е	Е
	SILICA	Е	Е	Е	-	Е	Е	Е	Е	Е	Е
	SOAP AND SOAP SOLUTIONS	Е	Е	Е	FT	Е	Е	Е	Е	Е	Е
	SODIUM ACETATE	Е	Е	Е	Х	Е	FT	Е	G	Е	Е
	SODIUM BICARBONATE	Е	Е	Е	G	Е	Е	Е	Е	Е	Е
	SODIUM BISULPHATE	Е	Е	Е	FT	Е	-	Е	Е	Е	Е
s -	SODIUM BISULPHITE	Е	E	Е	FT	Е	-	Е	E	Е	E
J	SODIUM CARBONATE (SODIUM CALCINATE)	Е	Е	Е	G	Е	Е	Е	Е	Е	Е
	SODIUM CHLORATE	Е	Е	Е	-	Е	Χ	Е	Е	Е	Е
	SODIUM CHLORIDE (KITCHEN SALT)	Е	Е	Е	G	Е	Е	Е	Е	Е	Е
	SODIUM CYANIDE	Е	E	Е	Х	E	-	Е	E	E	Е
	SODIUM DICHROMATE	FT	G	FT	Χ	Е	-	G	Е	Е	Е
	SODIUM FLUORIDE	Е	Е	Е	-	Е	Е	G	Е	Е	Е
	SODIUM HYDROXIDE 20°C (CAUSTIC SODA, SODIUM HYDRATE)	G	Е	Е	Х	Е	Е	G	FT	Е	Е

FLUID COMPATIBILITY

CON	IPATIBILITY BEHAVIOUR OF TOBE POLYMERS CONTA	1011	INO I	LUI	כטו	IBASE	אט ט.	LIIER	AIUR	E DAI	AJ
	CHEMICALS	NBR / X-NBR	CHLOROPRENE	SBR	NR	ЕРОМ / ЕРМ	CIIR	VMQ	FΚ	FEP	UHMWPE
	SODIUM HYDROXIDE CONC. 100°C	X	FT	Χ	Χ	G	G	Χ	Χ	Е	X
	SODIUM HYPOCHLORITE 30%	G	Х	FT	-	Е	G	FT	FT	Е	G
-	SODIUM METAPHOSPHATE	Е	Е	Е	FT	Е	-	Е	Е	Е	Е
-	SODIUM NITRATE	Е	Е	Е	G	Е	Е	Е	Е	Е	Е
	SODIUM PERBORATE	Е	Е	Е	FT	Е	Е	Е	Е	Е	Е
-	SODIUM PEROXIDE	G	FT	G	FT	G	E	X	G	E	-
-	SODIUM PHOSPHATE AND TRISODIC PHOSPHATE	E	E	E	-	E	E	E	E	E	Е
-	SODIUM SILICATE (AQUEOUS)	E	E	E	G	E	E	E	E	E	E
-		E	E	E	-	G	E	E	E	E	E
-	SODIUM SULPHATE (AQUEOUS)				-						
-	SODIUM SULPHITE	E	E	E		E	G	E	E	E	E
-	SODIUM THIOSULPHATE (ANTICHLORINE)	E	E	E	-	E	E	E	E	E	E
-	SOYBEAN OIL	E	G	X	X	FT	FT	E	E	E	X
	STANNOUS CHLORIDE	Е	Е	Е	G	G	Е	G	Е	Е	Е
_	STARCH (AQUEOUS)	Е	Е	Е	-	Е	-	Е	E	Е	Е
_	STARCH SYRUP	Е	Е	Е	-	Е	-	E	Е	Е	Е
	STEARIC ACID	G	G	G	Х	G	G	Е	G	Е	Х
S	STYRENE (MONOMER)	Χ	Χ	Χ	Χ	Χ	Χ	Χ	G	Ε	Χ
	SUGAR (AQUEOUS)	Е	Е	Е	G	Е	Е	Е	Е	Е	Е
	SULPHONITRIC ACID	Χ	Χ	Χ	Χ	Χ	-	Χ	Χ	Е	Х
	SULPHOPHOSPHORIC ACID	Χ	FT	Χ	Χ	G	-	-	Е	Е	FT
	SULPHUR 90°C (MOLTEN)	Х	Х	Х	-	Χ	FT	Е	Е	Е	Х
	SULPHUR DIOXIDE	Χ	FT	Х	Χ	Е	G	FT	Е	Е	G
-	SULPHUR TRIOXIDE	FT	Х	G	Х	G	G	FT	Е	Е	Е
-	SULPHURIC ACID 10%	Е	E	E	FT	E	G	G	E	E	E
-	SULPHURIC ACID 30% (FOR ACCUMULATORS)	G	G	G	FT	E	FT	X	E	E	E
-	SULPHURIC ACID 50%	FT	FT	FT	X	E	Х	X	E	E	E
-	SULPHURIC ACID 75%	X	X	X	X	G	X	X	E	E	FT
-	SULPHURIC ACID 90%	X	X	X	X	FT	X	X	E	E	Х
-	SULPHURIC ACID 70% SULPHURIC ACID OR OLEUM (STEAMING)	X	X	X	X	X	FT	X	E	E	X
-	SULPHUROUS ACID 10% HUMID	FT	FT	FT	FT	E	G	E	G	E	E
-		X	_					FT		E	FT
-	SULPHUROUS ACID 75% HUMID SULPHUROUS HYDROGEN (DRY)		X	X	- X	G G	FT -		G		
-		G	FT	FT				E	E	E	E
	SULPHUROUS HYDROGEN (HUMID)	FT	FT	X	-	G	-	E	E	E	E
-	TALC (MAGNESIUM SILICATE)	Е	E	E	-	E	E	E	E	E	E
	TANNIC ACID	G	G	G	FT	G	E	G	G	E	E
-	TARTARIC ACID (AQUEOUS)	E	E	E	Х	G	G	E	E	E	Е
	TETRACHLOROETHYLENE	G	Х	X	Х	Х	Х	G	Е	Е	Х
	TETRAHYDROFURAN	FT	Х	X	Х	Х	G	-	Х	E	FT
_	TETRALYNE (TETRAHYDRONAPHTALENE)	FT	Х	Х	Х	X	-	Х	E	Е	FT
	TOLUENE, TOLUOL	FT	Х	Χ	Χ	Χ	Χ	Χ	Е	Е	Х
_	TRIBUTYL PHOSPHATE	Χ	Х	Χ	-	Е	Χ	-	Х	Е	E
Т	TRICHLOROETHANE (CHLOROETHANE)	Χ	Х	Χ	Х	Χ	Χ	Χ	Е	Е	Х
	TRICHLOROETHYLENE	FT	Χ	Χ	Χ	Χ	Χ	Χ	G	Ε	Χ
	TRICHLOROMETHANE (CHLOROFORM)	Χ	Χ	Χ	-	Χ	Χ	Χ	E	Е	Χ
	TRICRESYLPHOSPHATE	Χ	FT	Ε	Χ	Е	-	Е	G	Ε	FT
	TRIETHANOLAMINE	G	Ε	FT	FT	FT	G	Е	Е	Е	Е
	TRIETHYLAMINE	FT	-	-	Х	Х	-	-	-	Е	Е
	TRIOCTHYLPHOSPHATE	G	Х	Х	Х	Х	Е	FT	Х	Е	Е
	TRISODIC PHOSPHATE	Е	Е	Е	-	Е	Е	Е	-	Е	Е
	TURPENTINE (ESSENCE, OIL)	E	X	X	Х	X	X	X	E	E	FT
U	UREA	E	E	E	-	E	E	E	E	E	E
	VASELINE	G	G	G	G	G	-	-	-	-	G
V	VINYL ACETATE	E	E	E	Х	E	-	-	G	E	-
	VINYL CHLORIDE (MONOMER)	X	X	G	X	G	Х	Х	E	E	Х
	WATER	E	G	E	E	E	E	G	G	G	G
	WATER STEAM UP TO °C	80	X	X	X	130	130	120	150	120	X
W	WEATHER (EXPOSURE TO): GEN. REG.	X	G		FT	130 E	130 E	E	E	E	G
			_	X			- -		E	E	G
	WOOD OIL	G	FT	Х	Х	Х	_	FT		C	U



COMPATIBILITY BEHAVIOUR OF TUBE POLYMERS CONTACTING FLUIDS (BASED ON LITERATURE DATA)

	CHEMICALS	NBR / X-NBR	CHLOROPRENE	SBR	NR	ЕРОМ / ЕРМ	CIIR	VMQ	FKM	FEP	UHMWPE
X	XYLENE, XYLOLO	Х	Χ	Χ	Χ	Χ	Χ	Χ	G	Е	Χ
^	XYLENOL	Χ	Χ	Χ	-	Χ	Χ	Χ	G	Е	Χ
	ZINC ACETATE (AQUEOUS)	G	G	Χ	G	Е	-	Χ	Χ	Е	Ε
Z	ZINC CHLORIDE (AQUEOUS)	Е	Е	Е	G	Е	Ē	Е	G	Е	Е
	ZINC SULPHATE (AQUEOUS)	Е	Е	Е	G	Е	Е	Е	Е	Е	Е

WARNING

RYCO HAVE NOT PERFORMED TESTING ON FINISHED HOSE ASSEMBLIES WITH ANY OF THE CHEMICALS MENTIONED ABOVE.

THE RATING OF THE TUBE POLYMERS IN RELATION TO SPECIFIC CHEMICALS AND FLUIDS IS BASED ON LITERATURE DATA AND DOES NOT IMPLY ANY GUARANTEE FROM RYCO THAT A HOSE USING THAT SPECIFIC POLYMER IS SUITABLE FOR CONVEYING SAID CHEMICAL OR FLUID. ANY USE OF RYCO INDUSTRIAL HOSES WITH FLUIDS OTHER THAN THOSE SPECIFIED IN THE HOSE DATA SHEETS IS DONE UNDER THE SOLE AND EXCLUSIVE RESPONSIBILITY OF THE END USER AND NO LIABILITY WHATSOEVER CAN BE ATTRIBUTED TO RYCO IN THAT REGARD.

ANY APPLICATION OF INDUSTRIAL HOSES WITH VARIOUS FLUIDS AND CHEMICALS, MUST BE FIELD TESTED AND APPROVED BY USERS.

COMPATIBILITY OF HOSE AND FITTINGS WITH CONVEYED FLUID IS AN ESSENTIAL FACTOR IN AVOIDING CHEMICAL REACTIONS THAT MAY RESULT IN RELEASE OF FLUIDS OR FAILURE OF THE HOSE OR CONNECTION. THIS CHEMICAL COMPATIBILITY GUIDE MUST NOT BE USED IN CONJUNCTION WITH ANY OTHER COMPATIBILITY GUIDES FROM PREVIOUS OR FUTURE CATALOGUE EDITIONS, BULLETINS OR PUBLICATIONS. INCORRECT USE OF THESE CHARTS COULD RESULT IN DEATH, PERSONAL INJURY OR PROPERTY DAMAGE.

EXAMPLES OF SUBSTANCES IN CHEMICAL FAMILIES

The following table summarizes some relevant characteristic substances that are typical representatives of some chemical families used in various industrial sectors

AROMATIC SOLVENTS	BENZENE, CUMENE, P-CUMENE, NAPHTALENE, TOLUENE, XYLENE, CRESOL, STYRENE, CYCLOHEXANOL AND COMBINATIONS					
ALIPHATIC SOLVENTS	PROPANE, BUTANE, PENTANE, HEXANE, HELPTANE, DIPENTENE, TRIPROPYLENE					
HALOGENATED SOLVENTS	CHLOROFORM, DICHLOROBENZENE, DICHLOROETHYLENE, METHYLENBROMIDE, METHYLENCHLORIDE, D SOLVENTS BENZYLCHLORIDE, CARBON TETRACHLORIDE, TRICHLOROETHYLENE, CARBON BISULPHITE, TURNETINE, PERCHLOROETHYLENE, DICHLOROETHANE					
KETONIC SOLVENTS	ACETONE, METHYLKETONE, ISOBUTYLKETONE, METHYLETHYLKETONE, METHYLISOBUTHYLKETONE					
ESTERS SOLVENTS	BUTYL ACETATE, METHYL ACETATE, AMYL ACETATE, ISOBUTYL ACETATE					
AMINES	ANILINE, ETHYLENE DIAMINE, DIETHANOL AMINE, TRIETHANOLAMINE, DIMETHYL AMINE, MONOETHANOLAMINE					
ALCOHOLS	MTHANOL, ETHANOL, PROPANOL, BUTANOL, GLYCEROL					

APPENDICES

CLEANING & SANITIZATION OF FOOD GRADE HOSES

The quality of food products depends on many factors from the composition and hygienic storage conditions of raw materials, to technology, production equipment, environment and stocking methods.

For this reason it is critical that, in addition to using common sense, all required production steps are correctly followed – especially those related to cleaning and sanitization of equipment.

RYCO rubber food hose products are ideal for use in the delivery of many dry and liquid foodstuffs and, if correctly cleaned and sanitized in accordance with industrial norms and specifications, will provide long lasting, reliable foodstuff conveyance with no adverse effects on the quality or taste of the product.

Due to the huge variation in cleaning regulations and requirements in the food industry **RYCO** does not presume to provide a definitive cleaning and sanitization handbook, but rather offers the following recommendations which the end user is free to determine the appropriate schedule and usage of.

Table 1

STEP	PRODUCT	CONC.	TEMP.	MAX. TIME	COMMENTS
PRE-WASH	DRINKING WATER	-	20°C	10 MINS	DRAINAGE & ELIMINATION OF ORGANIC SOLID WASTE
CLEANSING & WHITENING	LIQUID DETERGENT (SEE TABLE 2)	5% - 15%*	MAX. 100°C	15 MINS	SEE MANUFACTURER'S INSTRUCTIONS FOR CORRECT USAGE - MANULI ONLY INDICATES THE TEMPERATURE AND TIME THAT MUST NOT BE EXCEEDED
INTERMEDIATE RINSE	DRINKING WATER	-	20°C	5 MINS	DRAINAGE TO COMPLETE REMOVAL OF ORGANIC WASTE
SANITIZATION	PESTICIDES PURSUANT TO APPLICABLE LAW IN COUNTRY OF USE	5% - 15%*	MAX. 100°C	30 MINS	SEE MANUFACTURER'S INSTRUCTIONS FOR CORRECT USAGE - MANULI ONLY INDICATES THE TEMPERATURE AND TIME THAT MUST NOT BE EXCEEDED
FINAL RINSE	DRINKING WATER	-	20°C	10 MINS	CONTINUE TO FLUSH HOSE UNTIL ALL VISIBLE RESIDUE AND FOAM FROM DETERGENTS AND DISINFECTANTS IS REMOVED
FINAL DRYING & ANTI- MOLD TREATMENT	STATIC: DRAINING DYNAMIC: AIR BLOWING DRY & CLEAN	-	*†	10 MINS	RECOMMENDED TO ENSURE THAT FUTURE HOSE USE DOES NOT RESULT IN TASTE OR SMELL CONTAMINATION OF FOODSTUFFS

^{*} As indicated by the manufacturer

† According to convenience to avoid condensation

The recommendations listed below are intended to prevent damage to the rubber hoses. For more accurate cleaning & sanitization procedures follow your regional and national laws concerning foodstuff hose cleaning.

Table 2

PRODUCT	RUBBER COMPOUNDS	CONCENTRATION	TEMPERATURE			
HOT WATER	ALL	0	MAX. 95°C			
STEAM	ALL	0	MAX. 110°C			
CAUSTIC SODA	ALL	MAX. 2%	MAX. 85°C			
CAUSTIC SUDA	ALL	MAX. 5%	MAX. 25°C			
NITRIC ACID	NO SBR/NR	MAX. 0.1%	MAX. 85°C			
NITRIC ACID	NO SBR/NR	MAX. 2%	MAX. 25°C			
CHLORINE ACETIC ACID	NO SBR/NR	MAX. 1%	MAX. 25°C			
PER ACETIC ACID	NO SBR/NR	MAX. 1.5%	MAX. 25°C			
PHOSPHORIC ACID	NO SBR/NR	MAX. 2%	MAX. 65°C			
OTHER	T.B.C.	T.B.C.	T.B.C.			



BRANDING OF HOSES

RYCO Industrial Hoses are clearly marked with indelible mylar tape and are branded with the Manuli Ryco group logo.

STORAGE OF HOSES AND ASSEMBLIES

All hose products manufactured by RYCO are designed to be robust, reliable and long-lasting. Our proprietary rubber compounds are among some of the most advanced in the world and, as a company, we fully stand behind the quality and reliability of our products.

However, by its nature even the highest quality rubber will degrade over time, and certain environmental conditions have been categorically linked to an increase in the rate at which this deterioration can occur. Industrial standards such as **BS 5244**, **SAE J1273**, **DIN 20066**, **ISO 8331** & **ISO 2230** all vary in their recommendations of safe storage conditions and maximum shelf-life.

RYCO hoses can be safely stored for extended periods in most typical warehousing conditions, but in order to minimise deterioration of stored hoses **RYCO** recommends the following:

- Bulk hoses should be stored for no longer than 6 years (based on hose production date), including no more than 6 months storage time as assemblies.
- Extremes of temperature and humidity, along with abnormal fluctuations in temperature, can affect storage life. **RYCO** recommends a cool, dry storage location away from direct sunlight.
- If bulk hoses are stored coiled, the inside coil diameter should not be less than 2x the minimum bend radius of the specific hose. Coiled hoses should also never be stacked on top of one another.

HANDLING AND USAGE OF HOSES AND ASSEMBLIES

RYCO has a global reputation as one of the premium suppliers of high quality, robust rubber hoses. Our products are designed with ease of use and durability in mind, but as with any technical product it is important that RYCO hoses are used according to their purpose and within their limits of operation. This includes how the hoses are handled both before and during use.

HANDLING

Most precautions necessary when handling RYCO hoses are simple common sense and, as long as the user respects the technical nature of the hose and treats it accordingly, it is unlikely that they will encounter any issues caused due to incorrect handling.

A few considerations to bear in mind are:

- If a hose is twisted do not pull it suddenly to attempt to untwist it.
 - Avoid dragging hoses over abrasive surfaces. If you are moving bulk hose or large assemblies, consider using pallets or other similar methods.

PRE-USAGE

All **RYCO** hoses are made to meet or exceed their stated specifications, so assuming the hose is properly assembled you can be confident that the hose will perform as expected without any issues.

To ensure that the hose is correctly assembled:

- Always ensure that the fittings are fully inserted into the hose and that the ferrule is crimped to the proper diameter according to the crimping data provided by the fitting manufacturer.
- It is advisable to perform pressure and leak testing on all assemblies prior to putting them into service. Testing should be carried out according to the relevant instructions for the testing equipment.

APPENDICES

USAGE

Similarly, general good practice for the intended application will usually prevent any excessive wear or damage to the hose.

A few important considerations are:

- Do not kink or crush the hose as this can irreparably damage the hose reinforcement structure which can lead to bursting.
- Only use the hoses to convey their intended fluids / substances.
- Do not exceed the stated working pressure of the hose.

MAINTENANCE

RYCO hoses are designed to be reliable and easy to maintain. Standard equipment maintenance schedules should be sufficient to ensure that any signs of damage or wear on hoses can be spotted well in advance of them becoming problematic.

REPAIR

Used rubber hoses are not usually considered to be repairable if signs of deterioration are noted during maintenance inspections. However, if damage or wear is limited to the ends of the hose then it may be possible to cut off the worn section and reassemble the hose. However, a reassembled hose will not have the expected service life of a new hose and should still be replaced according to the maintenance schedule as if it were the original hose assembly.



RYCO HYDRAULICS OFFICES

RYCO Hydraulics - USA 1616 Greens Road, Houston, 77032, Texas. United States of America

+1 866 821 7926

RYCO Hydraulics - China 38 Yingri Road, Yingchengzi Industrial Zone, Ganjingzi District, Dalian Liaoning 116036, China +86 411 8886 0006

RYCO Hydraulics - Malaysia Plot 207 Kuala Ketil Ind. Estate, Kuala Ketil, 09300 Malaysia +60 4 415 2500

RYCO Hydraulics - Poland Przedsiębiorców 5, Radomsko, 97-500 Poland

+48 22 540 71 71

RYCO Hydraulics - India Plot No.42 (old No.105) Chennai Bangalore Highways NH4, Sriperumbudur, Tamil Nadu, 602105, India +91 44 6713 0353

RYCO Hydraulics – Mexico Avenida 28. Parque Industrial Lerma, Santa Ana, Lerma de Villada 52000, Mexico +52 72 8285 4687

RYCO Hydraulics – UK Unit 8, Block 5, Shenstone Trading Estate, Bromsgrove Road, Halesowen, B63 3XB, UK +44 121 504 9040

RYCO Hydraulics – Germany Liststraße 1, 89079 Ulm, Germany +49 731 9775638-0

RYCO Hydraulics – Belarus (J.V.) 2 Lokomotivnaya Str., Orsha, Vitebsk Region, 211030, Belarus +375 216 520113

RYCO Hydraulics - Logistics Hub Boiskowa 7A, Legnica, Lower Silesian Voivodeship, 59-220, Poland

MANULI RYCO INNOVATION CENTRES

Manuli Ryco Innovation Centre HQ Via L. Bizzarri. 19 - 40012 Calderara di Reno, Bologna, Italy +39 051 646 4911

Manuli Ryco Innovation Centre -85 Xing Lin Jie Wuzhong Qu, Suzhou Shi, Jiangsu Sheng, 215121, China +86 512 6283 7099

Manuli Ryco Innovation Centre -7 Chemin des Fontenelles 44 140 Le Bignon France +33 240 030 017

Manuli Ryco Innovation Centre -Poland Brzezińska 50, 41-404 Mysłowice, Poland +48 32 222 0207

MANULI RYCO GROUP OFFICES

Manuli Ryco Group HQ Via L. Cadorna, 73 - 20090 Vimodrone, Milano, Italy +39 0262 7131