



Danfoss

Weatherhead Core Hydraulics Hose Products

Master Catalog

Sometimes less is more.

Focused products, smarter choices.

Eaton is taking a new approach to helping you succeed by reducing the complexity of our hydraulics hose and fittings product offering, while developing new, more intuitive ways to help you find the right product fast. We know that your workforce demographics, regulatory environment and global economics require a new approach, and we're proactively leading the charge with a smaller—but smarter—hydraulics offering to help you spend less time combing through product options and more time competing in expanded markets, improving responsiveness, and closing new business.



Premium

Our new core premium hoses for OEM or aftermarket use exceed industry standards for pressure, temperature and abrasion resistance, with options adapted to handle your toughest jobs. Look for  Diamond Advantage hoses for the highest pressure and temperature ratings to extend the life of your hose.



Standard

Eaton Winner[®] hoses meet all industry standards for pressure, temperature and abrasion resistance, offering the right product at a competitive price point for OEM markets.



	Premium	Premium Low Temp.	Premium High Temp.	Premium Abrasion	Standard
Operating Temperature Range	 High: 260°F Low: -40°F	 High: 212°F Low: -70°F	 High: 302°F Low: -40°F	 High: 212°F Low: -40°F	 High: 212°F Low: -40°F
Cover Abrasion Resistance	 WeatherSHIELD™ Coverings (8x greater than standard)			 RhinoHide II™ Coverings (700x greater than standard)	 Standard Abrasion (10,000 Cycles per ISO 6945)
Bend Radius	 1/2 bend	 1/2 bend	 Full bend	 1/2 bend	 1/2 bend
Impulse Life	 Eaton Premium: All premium hoses exceed industry specifications for impulse cycles.				 Eaton Standard
Fluid Compatibility and Rubber Compounding	 Eaton Premium				 Eaton Standard
Certifications	SAE EN ISO Customer specs U.S. Coast Guard	SAE EN MSHA Customer specs	SAE EN Customer specs U.S. Coast Guard	SAE EN Customer specs	SAE EN MSHA Customer specs

Fittings



Z-Series

Eaton's best-selling one-piece "Bite-the-wire" style hose fitting that is qualified with virtually all Weatherhead one and two wire braided hydraulic hoses.



4S/6S Spiral Series

A higher performing spiral hose assembly for the most demanding applications while using a simple more user-friendly hose and hose fitting assembly process. Industry leading class "0" cool-down leakage and higher operating performance.



Two-piece Winner

A competitive non-skive two-piece hose fitting that is qualified with the Eaton Winner standard hoses.

1-Wire Braided

Premium

H180 WeatherSHIELD™ Hydraulic Hose



Exceeds SAE 100R1 AT Type S, EN 857 1SC, ISO 1436-1 Type 1SC Performance



Diamond Advantage

- Pressure
- Temperature
- Abrasion Resistance

Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
H18004	6.4	0.25	12.9	0.51	255	3,700	1,020	14,800	50	1.97	0.14	0.09
H18006	9.5	0.38	16.3	0.64	235	3,400	940	13,600	63	2.48	0.22	0.15
H18008	12.7	0.50	19.9	0.78	221	3,200	883	12,800	90	3.54	0.29	0.20
H18010	15.9	0.63	22.3	0.88	140	2,025	559	8,100	100	3.94	0.28	0.19
H18012	19.0	0.75	26.0	1.02	138	2,000	552	8,000	120	4.72	0.37	0.25
H18016	25.4	1.00	34.0	1.34	103	1,500	414	6,000	150	5.91	0.54	0.36
H18020	31.8	1.25	41.5	1.63	69	1,000	276	4,000	210	8.27	0.68	0.45
H18024	38.1	1.50	47.9	1.89	52	750	207	3,000	250	9.84	0.80	0.54
H18032	50.8	2.00	64.0	2.52	41	600	166	2,400	315	12.40	1.29	0.87

Operating Temperature:

-46°C to +127°C (-50°F to +260°F)

Fittings:



Standard

EC115 Hydraulic Hose



Meets EN 857 Type 1SC

Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC115-04	6.4	0.25	12.6	0.50	225	3,250	900	13,000	50	1.97	0.18	0.12
EC115-06	9.5	0.38	16.0	0.63	180	2,600	720	10,400	63	2.48	0.26	0.17
EC115-08	12.7	0.50	19.4	0.77	160	2,300	640	9,200	90	3.54	0.34	0.23
EC115-10	15.9	0.62	22.4	0.88	130	1,900	520	7,600	100	3.94	0.42	0.28
EC115-12	19.0	0.75	26.0	1.02	105	1,525	420	6,100	120	4.72	0.50	0.34
EC115-16	25.4	1.00	33.8	1.33	88	1,275	352	5,100	160	6.30	0.74	0.50
EC115-20	31.8	1.25	41.2	1.62	63	925	252	3,700	210	8.27	0.99	0.67
EC115-24	38.1	1.50	48.0	1.89	50	725	200	2,900	300	11.81	1.20	0.81
EC115-32	50.8	2.00	61.0	2.41	40	580	160	2,320	400	15.75	1.50	1.01

Operating Temperature :

-40°C to +100°C (-40°F to +212°F)

Fittings:



Z-Series



Two-piece Winner

Inner Tube:

Synthetic rubber

Reinforcement:

1 steel braid

Cover:

WeatherSHIELD™ synthetic rubber

Typical Application:

Low & medium pressure hydraulic systems, petroleum & water-based fluids, construction equipment, and agriculture equipment.

MSHA Approved

Inner Tube:

Synthetic rubber

Reinforcement:

1 steel braid

Cover:

Synthetic rubber

Typical Application:

Hydraulic system service with petroleum and water-based fluids, for general industrial service.

MSHA Approved

Premium High Temp. H190H WeatherBLAZE™

Exceeds SAE 100R1 AT Type S, EN 853 1SN, ISO 1436-1 Type 1SN Performance



Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
H190H04	6.4	0.25	13.5	0.53	225	3,250	900	13,000	100	4.00	0.25	0.17
H190H06	9.7	0.38	17.5	0.69	215	3,125	860	12,500	125	5.00	0.37	0.25
H190H08	12.7	0.50	20.6	0.81	175	2,550	700	10,200	180	7.00	0.45	0.30
H190H10	16.0	0.63	23.9	0.94	140	2,050	560	8,200	205	8.00	0.54	0.36
H190H12	19.1	0.75	27.7	1.09	125	1,800	500	7,200	240	9.50	0.68	0.46
H190H16	25.4	1.00	35.8	1.41	90	1,300	360	5,200	300	12.00	0.98	0.66
H190H20	31.8	1.25	43.9	1.73	65	950	260	3,800	420	16.50	1.26	0.85
H190H24	38.1	1.50	52.1	2.05	50	725	200	2,900	500	19.69	1.58	1.06
H190H32	50.8	2.00	65.5	2.58	40	580	160	2,320	630	24.80	2.04	1.37

Operating Temperature:

-40°C to +150°C (-40°F to +302°F)

Fittings:



Inner Tube:

CPE

Reinforcement:

1 steel braid

Cover:

CPE black

Typical Application:

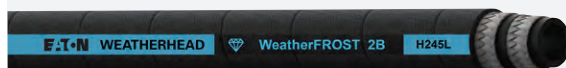
Transfer of hydraulic fluid, water and air.

MSHA Approved
ISO 1436a

Premium Low Temp.

Use compatible 2-Wire Braided Premium Low Temperature hose

H245L WeatherFROST™



Full specs on page 7

Exceeds SAE 100R16 Type S, EN 857 Type 2SC, ISO 11237-1 Type 2SC Performance

Premium Abrasion H145R RhinoHide II™

Abrasion Resistant Constant Pressure Hydraulic Hose

Exceeds SAE 100R17 Performance



Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
H145R04	6.4	0.25	12.7	0.50	210	3,050	840	12,200	50	1.97	0.22	0.15
H145R06	9.5	0.38	16.6	0.65	210	3,050	840	12,200	65	2.56	0.34	0.23
H145R08	12.7	0.50	20.9	0.82	210	3,050	840	12,200	90	3.54	0.48	0.32

Operating Temperature:

-40°C to +100°C (-40°F to +212°F)

Fittings:



Inner Tube:

Nitrile

Reinforcement:

1 steel braid

Cover:

Abrasion resistant UHMWPE

Typical Application:

3,000 PSI constant working pressure hose with abrasion resistant cover. Ideal for logging, construction, mining and other off highway applications.

2-Wire Braided

Premium

H280 WeatherSHIELD™ Hydraulic Hose



Exceeds SAE 100R16 Type S, EN 857 Type 2SC, ISO 11237-1 Type 2SC Performance



Diamond Advantage

- Pressure
- Temperature
- Abrasion Resistance

Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
H28004	6.4	0.25	14.1	0.56	448	6,500	1,792	26,000	50	1.97	0.33	0.22
H28006	9.5	0.38	17.4	0.69	400	5,800	1,600	23,200	65	2.56	0.43	0.29
H28008	12.7	0.50	20.8	0.82	345	5,000	1,380	20,000	90	3.54	0.58	0.39
H28010	15.9	0.62	24.9	0.98	276	4,000	1,104	16,000	100	3.94	0.65	0.44
H28012	19.0	0.75	28.4	1.12	241	3,500	964	14,000	120	4.72	0.79	0.53
H28016	25.4	1.00	35.7	1.41	207	3,000	828	12,000	150	5.91	1.07	0.72
H28020	31.8	1.25	43.3	1.71	172	2,500	688	10,000	210	8.27	1.62	1.09
H28024	38.1	1.50	51.5	2.03	138	2,000	552	8,000	250	9.84	2.08	1.40
H28032	50.8	2.00	63.9	2.52	110	1,600	440	6,400	315	12.40	2.82	1.90

Operating Temperature:

Petroleum based Hydraulic Fluids: -46°C to +127°C (-50°F to +260°F)

Water based Hydraulic Fluids: -46°C to +70°C (-50°F to +158°F)

Fittings:



Z-Series

Standard

EC215 Hydraulic Hose



Meets EN 857 Type 2SC

Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC215-04	6.4	0.25	13.5	0.53	400	5,800	1,600	23,200	50	1.97	0.28	0.19
EC215-06	9.5	0.38	17.5	0.69	345	5,000	1,380	20,000	65	2.56	0.41	0.28
EC215-08	12.7	0.50	20.8	0.82	275	4,000	1,100	16,000	90	3.54	0.57	0.38
EC215-10	15.9	0.62	24.0	0.94	250	3,650	1,000	14,600	100	3.94	0.68	0.46
EC215-12	19.0	0.75	27.9	1.10	215	3,125	860	12,500	120	4.72	0.81	0.54
EC215-16	25.4	1.00	35.7	1.40	165	2,400	660	9,600	160	6.30	1.17	0.79
EC215-20	31.8	1.25	43.9	1.73	125	1,800	500	7,200	250	9.84	1.56	1.05
EC215-24	38.1	1.50	51.0	2.01	100	1,450	400	5,800	300	11.81	1.81	1.22
EC215-32	50.8	2.00	63.4	2.50	90	1,300	360	5,200	400	15.75	2.36	1.59

Operating Temperature :

-40°C to +100°C (-40°F to +212°F)

Fittings:



Z-Series



Two-piece Winner

Inner Tube:

Synthetic rubber

Reinforcement:

2 steel braids

Cover:

WeatherSHIELD™ synthetic rubber

Typical Application:

Low & medium pressure hydraulic systems, petroleum & water-based fluids, construction equipment, agriculture equipment.

MSHA Approved

Inner Tube:

Synthetic rubber

Reinforcement:

2 steel braids

Cover:

Synthetic rubber

Typical Application:

Hydraulic system service with petroleum and waterbased fluids, for general industrial service.

MSHA Approved

Premium High Temp. H290H WeatherBLAZE™

Exceeds SAE 100R2AT Type S, EN 853 2SN, ISO 1436-1 Type 2SN Performance



Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
H290H04	6.4	0.25	15.2	0.60	400	5,800	1,600	23,200	102	4.02	0.4	0.27
H290H06	9.5	0.38	19.1	0.75	345	5,000	1,380	20,000	125	4.92	0.58	0.39
H290H08	12.7	0.50	22.1	0.87	293	4,250	1,172	17,000	180	7.09	0.68	0.46
H290H10	15.9	0.62	25.2	0.99	250	3,650	1,000	14,600	205	8.07	0.8	0.54
H290H12	19.0	0.75	29.5	1.16	215	3,125	860	12,500	240	9.45	1	0.67
H290H16	25.4	1.00	37.9	1.49	175	2,550	700	10,200	300	11.81	1.44	0.97
H290H20	31.8	1.25	48.8	1.92	155	2,250	620	9,000	420	16.54	2.38	1.60
H290H24	38.1	1.50	54.6	2.15	125	1,800	500	7,200	500	19.68	2.59	1.74
H290H32	50.8	2.00	68.6	2.70	105	1525	420	6,100	630	24.80	3.38	2.27

Operating Temperature:

-40°C to +150°C (-40°F to +302°F)

Fittings:



Inner Tube:

CPE

Reinforcement:

2 steel braids

Cover:

CPE black

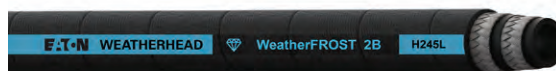
Typical Application:

High pressure hose for hydraulic fluid applications.

MSHA Approved

Premium Low Temp. H245L WeatherFROST™

Exceeds SAE 100R16 Type S, EN 857 Type 2SC, ISO 11237-1 Type 2SC Performance



Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
H245L04	6.4	0.25	14.2	0.56	414	6,000	1,656	24,000	51	2.00	0.30	0.20
H245L06	9.5	0.38	17.3	0.68	345	5,000	1,380	20,000	64	2.50	0.40	0.27
H245L08	12.7	0.50	20.8	0.82	310	4,500	1,240	18,000	89	3.50	0.58	0.39
H245L10	15.9	0.62	24.9	0.98	276	4,000	1,104	16,000	102	4.00	0.74	0.50
H245L12	19.0	0.75	28.4	1.12	241	3,500	964	14,000	121	4.75	0.92	0.62
H245L16	25.4	1.00	35.8	1.41	193	2,800	772	11,200	152	6.00	1.22	0.82
H245L20	31.8	1.25	43.4	1.71	159	2,300	636	9,200	210	8.25	1.59	1.07
H245L24	38.1	1.50	51.6	2.03	138	2,000	552	8,000	254	10.00	2.11	1.42
H245L32	50.8	2.00	63.8	2.51	103	1,500	412	6,000	318	12.50	2.80	1.88

Operating Temperature:

-57°C to +100°C (-70°F to +212°F)



Diamond Advantage

- Pressure
- Temperature
- Abrasion Resistance

Fittings:



Inner Tube:

Weatherhead brand exclusive low temperature compound tube

Reinforcement:

2 steel braids

Cover:

WeatherSHIELD™ synthetic rubber

Typical Application:

Low temperature flexing and hydraulic system service with petroleum and water-base fluids. For use in frigid environments on construction equipment and other mobile applications.

MSHA Approved

Premium Abrasion H145R RhinoHide II™

Abrasion Resistant Constant Pressure Hydraulic Hose

Exceeds SAE 100R17 Performance



Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
H145R10	15.9	0.62	23.6	0.93	210	3,050	840	12,200	100	3.94	0.76	0.51
H145R12	19.0	0.75	27.9	1.10	210	3,050	840	12,200	120	4.72	0.94	0.63
H145R16	25.4	1.00	36.1	1.42	210	3,050	840	12,200	150	5.91	1.24	0.83

Operating Temperature:

-40°C to +100°C (-40°F to +212°F)

Fittings:



Inner Tube:

Nitrile

Reinforcement:

2 steel braids

Cover:

Abrasion resistant UHMWPE

Typical Application:

3,000 PSI constant working pressure hose with abrasion resistant cover. Ideal for logging, construction, mining and other off highway applications.

Premium

H430 High Pressure Spiral Hydraulic Hose



Exceeds SAE 100R12, EN 856 Type R12, EN 856 Type 4SP Performance



Diamond Advantage

- Pressure
- Temperature
- Abrasion Resistance

Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
H43006	9.5	0.38	20.3	0.80	448	6,500	1,792	26,000	62.5	2.46	0.71	0.47
H43008	12.7	0.50	23.6	0.93	415	6,000	1,660	24,000	90.0	3.54	0.88	0.59
H43010	15.9	0.62	27.4	1.08	415	6,000	1,660	24,000	100.0	3.94	1.04	0.70
H43012	19.0	0.75	30.7	1.21	380	5,500	1,520	22,000	120.0	4.72	1.34	0.90
H43016	25.4	1.00	37.9	1.49	350	5,100	1,400	20,400	150.0	5.91	1.79	1.20
H43020	31.8	1.25	46.6	1.84	310	4,500	1,240	18,000	210.0	8.27	2.23	1.50
H43024	38.1	1.50	53.9	2.12	275	4,000	1,100	16,000	250.0	9.84	3.03	2.03
H43032	50.8	2.00	66.8	2.63	275	4,000	1,100	16,000	320.0	12.60	4.38	2.94

Operating Temperature:

-40°C to +127°C (-40°F to +260°F)

Fittings:



4S Series

Inner Tube:

Synthetic rubber

Reinforcement:

4 wire spiral

Cover:

WeatherSHIELD™ synthetic rubber

Typical Application:

For very high pressure hydraulic lines subjected to pressure surges and flexing. Typical applications include construction, mining, farming, and high performance industrial equipment.

MSHA Approved Marine Application J1942/1 - Hydraulic only, ABS

Standard

EC415 Hydraulic Hose



Meets SAE 100R12

Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC415-06	9.5	0.38	20.3	0.80	280	4,050	1120	16,200	125	4.92	0.60	0.40
EC415-08	12.7	0.50	23.8	0.94	280	4,050	1120	16,200	180	7.09	0.74	0.50
EC415-10	15.9	0.62	27.7	1.09	280	4,050	1120	16,200	200	7.87	1.03	0.69
EC415-12	19.0	0.75	30.7	1.21	280	4,050	1120	16,200	240	9.45	1.16	0.78
EC415-16	25.4	1.00	38.0	1.50	280	4,050	1120	16,200	300	11.81	1.76	1.18
EC415-20	31.8	1.25	47.0	1.85	210	3,050	840	12,200	420	16.54	2.46	1.65
EC415-24	38.1	1.50	53.5	2.11	175	2,550	700	10,200	500	19.68	2.87	1.92
EC415-32	50.8	2.00	66.7	2.63	175	2,550	700	10,200	630	24.80	4.03	2.70

Operating Temperature:

-40°C to +121°C (-40°F to +250°F)

Fittings:



4S Series

Inner Tube:

Synthetic rubber

Reinforcement:

4 wire spiral

Cover:

Synthetic rubber

Typical Application:

Hydraulic systems service with petroleum and water based fluids, for general use.

MSHA Approved

Premium High Temp. EC525 Hydraulic Hose

Exceeds SAE 100R12, EN 856 Type R12 Performance



Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC525-12	19.1	0.75	30.7	1.21	345	5,000	1380	20,000	241.3	9.50	1.28	0.86
EC525-16	25.4	1.00	37.9	1.49	345	5,000	1380	20,000	304.8	12.00	1.73	1.16
EC525-20	31.8	1.25	46.6	1.84	240	3,500	960	14,000	419.1	16.50	2.30	1.55
EC525-24	38.1	1.50	53.9	2.12	240	3,500	960	14,000	508.0	20.00	2.95	1.99
EC525-32	50.8	2.00	67.3	2.65	225	3,250	900	13,000	635.0	25.00	4.40	2.97

Operating Temperature:

-40°C to +150°C (-40°F to +302°F)

Fittings:



4S Series

Inner Tube:

Synthetic rubber

Reinforcement:

4 wire spiral

Cover:

Synthetic rubber

Typical Application:

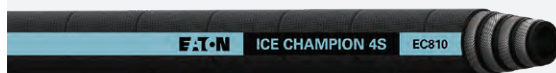
Hydraulic system service with petroleum, fire-resistant and water based fluids. Fuel and lubricating systems. For additional approved hydraulics fluids reference the fluid compatibility charts shown in Eaton catalogs.

MSHA Approved

Premium Low Temp.

Use compatible Spiral R15 Premium Low Temp. hose

EC810 Hydraulic Hose



Exceeds SAE 100R15, EN 856 Type R15 Performance

Full specs on page 13

Premium Abrasion H430R RhinoHide II™ High Pressure Hydraulic Hose

Exceeds SAE 100R12, EN 856 Type R12 Performance



Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
H430R06	9.5	0.38	20.3	0.80	280	4,050	1,120	16,200	125	4.92	0.74	0.50
H430R08	12.7	0.50	23.2	0.92	280	4,050	1,120	16,200	180	7.09	0.86	0.58
H430R10	15.9	0.62	27.4	1.08	280	4,050	1,120	16,200	200	7.87	1.04	0.70
H430R12	19.0	0.75	30.7	1.21	280	4,050	1,120	16,200	240	9.45	1.29	0.87
H430R16	25.4	1.00	38.0	1.50	280	4,050	1,120	16,200	300	11.81	2.08	1.40
H430R20	31.8	1.25	47.0	1.85	210	3,050	840	12,200	420	16.54	2.74	1.84
H430R24	38.1	1.50	53.5	2.11	175	2,550	700	10,200	500	19.69	3.12	2.10
H430R32	50.8	2.00	66.7	2.63	175	2,550	700	10,200	640	25.20	4.18	2.81

Operating Temperature:

-40°C to +121°C (-40°F to +250°F)

Fittings:



4S Series

Inner Tube:

Nitrile

Reinforcement:

4 wire spiral

Cover:

UHMWPE

Typical Application:

High abrasion applications. Hydraulic system service with petroleum and water-base fluids, for general industrial service.

Premium

H471 WeatherFORCE - FLEX 5000™ Hose



Exceeds SAE 100R13, EN 856 Type R13, ISO 3862 Type R13 Performance

Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
H47112	19.0	0.75	31.0	1.22	350	5,100	1,400	20,400	121	4.75	1.28	0.86
H47116	25.4	1.00	38.4	1.51	350	5,100	1,400	20,400	152	6.00	1.85	1.24
H47120	31.8	1.25	45.5	1.79	350	5,100	1,400	20,400	210	8.25	2.50	1.68
H47124	31.8	1.50	53.5	2.11	350	5,100	1,400	20,400	254	10.00	3.38	2.27
H47132	50.8	2.00	71.8	2.83	350	5,100	1,400	20,400	476	18.75	6.07	4.08

Temp. Range:

-40°C to +127°C (-40°F to +260°F)

Fittings:



4S/6S Series

Inner Tube:

Synthetic rubber

Reinforcement:

-12 to -24 size: 4 wire spiral
-32 size: 6 wire spiral

Cover:

Synthetic cover

Typical Application:

High pressure hydraulic system service with petroleum and water-base fluids

MSHA Approved

Standard

EC420 Hydraulic Hose



Meets SAE 100R13

Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC420-12	19.0	0.75	32.1	1.27	350	5,100	1,400	20,400	240	9.45	1.54	1.03
EC420-16	25.4	1.00	38.7	1.53	350	5,100	1,400	20,400	300	11.81	2.01	1.35
EC420-20	31.8	1.25	49.8	1.96	350	5,100	1,400	20,400	420	16.54	3.78	2.54
EC420-24	38.1	1.50	57.3	2.26	350	5,100	1,400	20,400	500	19.69	4.73	3.18
EC420-32	50.8	2.00	71.6	2.82	350	5,100	1,400	20,400	630	24.80	6.26	4.21

Operating Temperature :

-40°C to +121°C (-40°F to +250°F)

Fittings:



4S/6S Series

Inner Tube:

Synthetic rubber

Reinforcement:

-12, -16 size: 4 wire spiral
-20 to -32 size: 6 wire spiral

Cover:

Synthetic rubber

Typical Application:

Suitable for use in hydraulic systems with high peak pressures and arduous operating conditions.

MSHA Approved

Premium High Temp.

Use compatible Spiral R12 Premium High Temp. hose

EC525 Hydraulic Hose



Full specs on page 9

Exceeds SAE 100R12, EN 856 Type R12 Performance

Premium Low Temp.

Use compatible Spiral R15 Premium High Temp. hose

EC810 Hydraulic Hose



Full specs on page 13

Exceeds SAE 100R15, EN 856 Type R15 Performance

Premium Abrasion

Use compatible Spiral R12 Premium High Temp. hose

H430R RhinoHide II™ High Pressure Hydraulic Hose



Full specs on page 9

Exceeds SAE 100R12, EN 856 Type R12 Performance

Spiral R15

Premium

EC600 X-FLEX Hydraulic Hose



Exceeds SAE 100R15, ISO 18752-DC Performance

Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC600-12	19.1	0.75	32.2	1.27	420	6,100	1,680	24,400	135	5.31	1.52	1.01
EC600-16	25.4	1.00	38.6	1.52	420	6,100	1,680	24,400	165	6.5	2.04	1.36
EC600-20	31.8	1.25	49.7	1.96	420	6,100	1,680	24,400	225	8.86	3.89	2.61

Operating Temperature :

-40°C to +121°C (-40°F to +250°F)

Fittings:



4S/6S Series

Inner Tube:

Synthetic rubber

Reinforcement:

-12, -16 size: 4 wire spiral
-20 size: 6 wire spiral

Cover:

WeatherSHIELD™
high abrasion synthetic rubber

Typical Application:

Hydraulic system service with petroleum and water-based fluids, for general industrial service.

MSHA Approved

Standard

EC615 Hydraulic Hose



SAE 100R15 Performance

Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC615-16	25.4	1.00	38.7	1.52	420	6,100	1,680	24,400	330	12.99	2.00	1.35
EC615-20	31.8	1.25	49.8	1.96	420	6,100	1,680	24,400	445	17.52	3.77	2.53
EC615-24	38.1	1.50	57.3	2.26	420	6,100	1,680	24,400	530	20.87	5.17	3.47

Operating Temperature :

-40°C to +121°C (-40°F to +250°F)

Fittings:



4S/6S Series

Inner Tube:

Synthetic rubber

Reinforcement:

-16 size: 4 wire spiral
-20, -24 size: 6 wire spiral

Cover:

Synthetic rubber

Typical Application:

Suitable for use in hydraulic and oil systems.

MSHA Approved

Premium High Temp.

Use compatible Spiral R12 Premium High Temp. hose

EC525 Hydraulic Hose



Exceeds SAE 100R12, EN 856 Type R12 Performance

Full specs on page 9

Premium Low Temp. Ice Champion™ EC810



Exceeds SAE 100R15, EN 856 Type R15 Performance

Part #	Hose I.D.		Hose O.D. (nominal)		Working Pressure		Min. Burst Pressure		Min. Bend Radius		Weight	
	mm	in	mm	in	bar	psi	bar	psi	mm	in	kg/m	lbs/ft
EC810-12	19.0	0.75	32.2	1.27	420	6,100	1,680	24,400	280	11.02	1.61	1.08
EC810-16	25.4	1.00	39.0	1.54	420	6,100	1,680	24,400	340	13.39	2.02	1.36
EC810-20	31.8	1.25	49.4	1.95	420	6,100	1,680	24,400	420	16.54	3.55	2.39
EC810-24	38.1	1.50	57.3	2.26	420	6,100	1,680	24,400	510	20.08	4.74	3.19
EC810-32	50.8	2.00	71.1	2.80	420	6,100	1,490	21,610	630	24.80	6.70	4.50

Operating Temperature :

-57°C to +100°C (-70°F to +212°F)

Fittings:



4S/6S Series

Inner Tube:

Exclusive low temperature tube

Reinforcement:

-12, -16 size: 4 wire spiral
-20 to -32 size: 6 wire spiral

Cover:

MSHA approved abrasion resistant rubber

Typical Application:

Hydraulic system with petroleum based fluids for low temperature applications.

MSHA Approved

Premium Abrasion

Use compatible Spiral R12 Premium High Temp. hose

H430R RhinoHide II™ High Pressure Hydraulic Hose



Exceeds SAE 100R13, EN 856 Type R13, ISO 3862 3862 Type R13 Performance

Full specs on page 9

Braided Hose Fittings

Premium Z-Series



Features:

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

Standard Two-piece Winner



Features:

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

Spiral Hose Fittings

Premium 4S/6S Spiral Series



Features:

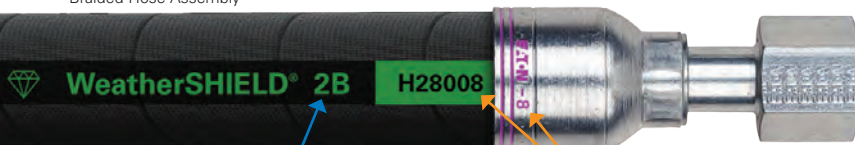
- New **DURA-KOTE™** plating technology for up to 1,000 hours of corrosion resistance
- New patent pending **DURA-SEAL™** technology to eliminate hose assembly cool-down leakage
- Class zero leakage SAE J1176 on approved hose styles
- Eaton's **WeatherMATCH®** spiral - hose/ fitting identification system program provides identification markings on the hose, hose fittings, and crimp dies for quick and easy assembly

Engineered Assemblies

Eaton's Weatherhead hoses and fittings are engineered and qualified to work as a system ensuring your confidence in a high quality hose assembly. The 4-Step WeatherMATCH® system for braided and spiral hose assemblies ensures proper mating of hose and qualified fittings.

4 Step Hose Identification System

Braided Hose Assembly



Number of rings on socket correspond to hose identifier

Spiral Hose Assembly



Hose dash size is displayed on the socket

DURA-KOTE™ Plating Technology

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

3X Carbon Steel Corrosion Protection



DURA-SEAL™ Technology

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

Class 0 Cool-Down Leakage Protection



Complete nipple part number:

	4S	A	12	FJ	A	16
Product Group _____						
4S = Spiral non-skive fitting part number for four-spiral hose						
6S = Spiral non-skive fitting part number for six-spiral hose						
Material stock code _____						
A = inch hex stock or metric equivalent						
Terminal end connection size* _____						
Terminal end connection code _____						
BF = BSP Female Swivel (1 Hex)						
BP = BSP Male Parallel						
BT = BSP Male Tapered						
CT = CAT Flange						
DK = 24° Male (light duty)						
DL = DKO Female Swivel (light duty)						
DS = DKO Female Swivel (heavy duty)						
EK = 24° Male (heavy duty)						
FH = SAE Code 62 Flange						
FJ = SAE JIC 37° Female Swivel						
FL = SAE Code 61 Flange						
FR = ORS Female Swivel						
FS = SAE 45° Flare Female Swivel						
JF = JIS Female Swivel						
JM = BSP Female Swivel (2 Hexes)						
KF = Komatsu Female Swivel						
KS = Komatsu Split Flange						
MB = Male O-Ring Boss (ORB)						
MF = Male Inverted Flare						
MJ = SAE JIC 37° Male Rigid						
MP = Male Pipe Rigid						
MR = ORS Male						
PF = Female Pipe Swivel						
PS = Male Pipe Swivel						
Terminal end connecting configuration _____						
If nipple has a straight configuration, then this position collapses						
A = 45° D = 22 1/2° H = 110°						
B = 90°, standard E = 67 1/2°						
or short drop F = 30°						
C = 90° long drop G = 60°						
Hose size* _____						
Material designation _____						
C = stainless steel, if fitting is zinc plated carbon steel (standard), this position collapses.						

Weatherhead Core Hydraulic Hose Products Brochure

Newly designed tooling sets by machine group

Eaton is taking a new approach to helping you succeed by reducing the complexity of our hose and fitting products. This smarter range of key core products will make it easier for you to master our product portfolio, offer your business greater differentiation and reduce your overhead. But we're not stopping there. Eaton is introducing newly designed tooling sets by machine group that will cover over 80% of your core product crimping needs. This means less issues on your end; from nesting diameters, sticking collets, and other interface problems that we have engineered away. It's as easy as 1-2-3.

Once you've ordered the correct tooling package for your machine simply (refer to back of this sheet):

1. Select your core hose and fitting product combination. (making sure that application and regulatory requirements are met)
2. Based on the hose size, and the corresponding fitting selected, select the correct color coded collet. (using the chart at right)
3. Based on the crimp machine being used, refer to our core product tooling reference to determine if any spacer rings are required for your assembly.

Features & benefits

- Fitting locators are built into the collets
- Dies are designed for a specific fitting series
- Collet Cages are color coded by size
- Metal Collets are color coded by fitting series
- Part numbers and fitting series are **CLEARLY** labeled on the collet and spacer rings

Hose Dash Size	Collet Cage Color Code	Z Series Collet	4S Series Collet	6S Series Collet
		Black	Silver	Olive
-04	Red		N/A	N/A
-06	Yellow			N/A
-08	Blue			N/A
-10	Orange			N/A
-12	Green			N/A
-16	Black			N/A
-20	White			
-24	Dark Red			
-32	Dark Green			

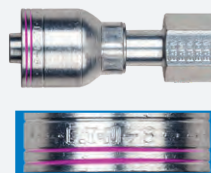
T-400 Crimp Example



Hose	H28006
Fitting	Z-Series
Die Collet Color	Black
Die Collet Cage Color	Yellow

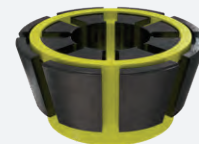


+



Match the rings on the Z-Series Fitting to the hose identifier.

+



Use the table above to select the right colored collet for a perfect crimp.

Four tooling packages are conveniently offered to cover Eaton's most popular crimp machine models.

Follow this guide to determine what crimp machine support tooling is needed to crimp the hoses found in this brochure.

Optimized Tooling Conversion Packages

These tooling packages are designed for converting existing crimpers. New crimper replacement will require a different tooling package.

Tooling for Crimp Machines: T-400, T-460*, T-462*, T-465*

Package Part Number T400TP-1001



Crimps: H180 with Z series sizes -04, -06, -08
H280 with Z series sizes -04, -06, -08, -12, -16

Package Contents

Part Number	Description	Part Number	Description
ET313DC-4Z	4Z Braided Collet	ET400AR-10	Bowl
ET313DC-6Z	6Z Braided Collet	ET313SR-090A	H180 4-8 Ring
ET313DC-8Z	8Z Braided Collet	ET400SR-280A	H280 12-16 Ring
ET400DC-12Z	12Z Braided Collet		
ET400DC-16Z	16Z Braided Collet		

T-400 machines older than 1980 will not crimp -12 and -16 size due to limited stroke

* Will not crimp -12 and -16 sizes

Tooling for Crimp Machines: ET1000

Package Part Number ET1000TP-1001



Crimps: H180/H280 with Z series sizes -04, -06, -08, -12, -16
H430 with 4S/6S sizes -08, -12, -16

Package Contents

Part Number	Description	Part Number	Description
ET313DC-4Z	4Z Braided Collet	ET313SR-090A	H180 Ring 4,6,8
ET313DC-6Z	6Z Braided Collet	ET425SR-150A	H180 Ring 12,16
ET313DC-8Z	8Z Braided Collet	ET313DC-4S8	4S8 Spiral Collet
ET1000DC-12Z	12Z Braided Collet	ET1000DC-4S12	4S12 Spiral Collet
ET1000DC-16Z	16Z Braided Collet	ET1000DC-4S16	4S16 Spiral Collet

Tooling for Crimp Machines: T-420, T-480

Package Part Number T420TP-1001



Crimps: H180/H280 with Z series sizes -04, -06, -08, -12, -16
H430 with 4S/6S sizes -08, -12, -16, -20

Package Contents

Part Number	Description	Part Number	Description
ET425DC-4Z	4Z Braided Collet	ET425SR-105A	H180 Ring
ET425DC-6Z	6Z Braided Collet	ET425DC-4S8	4S8 Spiral Collet
ET425DC-8Z	8Z Braided Collet	ET425DC-4S12	4S12 Spiral Collet
ET425DC-12Z	12Z Braided Collet	ET425DC-4S16	4S16 Spiral Collet
ET425DC-16Z	16Z Braided Collet	ET425DC-4S20	4S20 Spiral Collet
ET425AR-14	Bowl		

Tooling for Crimp Machines: ET4000, ET4001, T-410*, T-440*

Package Part Number ET4001TP-1001



Crimps: H180/H280 with Z series sizes -04, -06, -08, -12, -16
H430 with 4S/6S sizes -08, -12, -16, -20, -24, -32

Package Contents

Part Number	Description	Part Number	Description
ET525DC-4Z	4Z Braided Collet	ET525DC-4S8	4S8 Spiral Collet
ET525DC-6Z	6Z Braided Collet	ET525DC-4S12	4S12 Spiral Collet
ET525DC-8Z	8Z Braided Collet	ET525DC-4S16	4S16 Spiral Collet
ET525DC-12Z	12Z Braided Collet	ET525DC-4S20	4S20 Spiral Collet
ET525DC-16Z	16Z Braided Collet	ET575DC-4S24	4S24 Spiral Collet
ET525SR-120A	H180 Ring	ET575DC-4S32	4S32 Spiral Collet
ET575SR-135A	H43032 Ring		

* These machines can not crimp 4S24, 4S32, 6S24, or 6S32 fittings

Tooling Reference

■ Standard Hose
 ■ Premium Hose
 ■ Premium High Temp. Hose
 ■ Premium Low Temp. Hose
 ■ Premium Abrasion Hose

T-400



T-400

Dash Size	Part Type	Part #	1-Wire Braided				2-Wire Braided				Spiral R12		
			EC115	H180	H190H	H145R	EC215	H280	H290H	H245L	EC415	H430	H430R
-04	Machine Bowl	T-400-8	X	X	X	X	X	X	X	X			
	Collet	ET313DC-4Z	X	X	X	X	X	X	X	X			
	Spacer Ring	ET313SR-090A		X									
	Spacer Ring	ET313SR-075A	X		X								
	Spacer Ring	FSD*						X					
	Spacer Ring	ET313SR-045A					X						
	Spacer Ring	ET313SR-030A								X			
	Spacer Ring	ET313SR-060A				X							
-06	Spacer Ring	ET313SR-015D							X				
	Machine Bowl	T-400-8	X	X	X	X	X	X	X	X	X	X	X
	Collet	ET313DC-6Z	X	X	X	X	X	X	X	X			
	Collet	ET313DC-4S6									X	X	X
	Spacer Ring	ET313SR-090A	X	X	X								
	Spacer Ring	ET313SR-075A				X							
	Spacer Ring	FSD*					X	X				X	X
	Spacer Ring	ET313SR-015A									X		
-08	Spacer Ring	ET313SR-030A								X			
	Spacer Ring	ET313SR-030D							X				
	Machine Bowl	T-400-8	X	X	X	X	X	X	X	X	X	X	X
	Collet	ET313DC-8Z	X	X	X	X	X	X	X	X			
	Collet	ET313DC-4S8									X	X	X
	Spacer Ring	ET313SR-090A	X	X									
	Spacer Ring	ET313SR-045A			X								
	Spacer Ring	ET313SR-060A				X							
-10	Spacer Ring	FSD*						X			X	X	X
	Spacer Ring	ET313SR-030A					X						
	Spacer Ring	ET313SR-030D								X			
	Spacer Ring	ET313SR-060D							X				
	Machine Bowl	T-400-8	X	X	X	X	X	X	X	X	X	X	X
	Collet	ET313DC-10Z	X	X	X	X	X	X	X	X			
	Collet	ET313DC-4S10									X	X	X
	Spacer Ring	ET313SR-180A		X									
-12	Spacer Ring	ET313SR-150A	X										
	Spacer Ring	ET313SR-120A			X								
	Spacer Ring	FSD*				X		X		X		X	X
	Spacer Ring	ET313SR-060A					X						
	Spacer Ring	ET313SR-015D							X				
	Spacer Ring	ET313SR-030D									X		
	Machine Bowl	ET400AR-10					X	X	X	X			
	Collet	ET400DC-12Z					X	X		X			
-16	Spacer Ring	ET400SR-280A					X	X		X			
	Machine Bowl	ET400AR-10					X	X	X	X			
	Collet	ET400DC-16Z					X	X		X			
	Spacer Ring	ET400SR-250A					X						

T-400 machines older than 1980 will not crimp -12 and -16 size due to limited stroke

* A spacer ring is required for this crimper, but any cupped 5 inch spacer ring FSD will work (examples include ET313SR-015D and T-400-10)

Tooling is included in crimper tooling conversion package.

■ Standard Hose
 ■ Premium Hose
 ■ Premium High Temp. Hose
 ■ Premium Low Temp. Hose
 ■ Premium Abrasion Hose

T-460, T-462, T-465



T-460



T-462



T-465

Dash Size	Part Type	Part #	1-Wire Braided				2-Wire Braided				Spiral R12		
			EC115	H180	H190H	H145R	EC215	H280	H290H	H245L	EC415	H430	H430R
-04	Machine Bowl	Integrated	X	X	X	X	X	X	X	X			
	Collet	ET313DC-4Z	X	X	X	X	X	X	X	X			
	Spacer Ring	ET313SR-090A		X									
	Spacer Ring	ET313SR-075A	X		X								
	Spacer Ring	FSD*					X						
	Spacer Ring	ET313SR-045A					X						
	Spacer Ring	ET313SR-030A								X			
	Spacer Ring	ET313SR-060A				X							
	Spacer Ring	ET313SR-015D							X				
-06	Machine Bowl	Integrated	X	X	X	X	X	X	X	X	X	X	X
	Collet	ET313DC-6Z	X	X	X	X	X	X	X	X			
	Collet	ET313DC-4S6									X	X	X
	Spacer Ring	ET313SR-090A	X	X	X								
	Spacer Ring	ET313SR-075A				X							
	Spacer Ring	FSD*					X	X				X	X
	Spacer Ring	ET313SR-015A									X		
	Spacer Ring	ET313SR-030A								X			
	Spacer Ring	ET313SR-030D							X				
-08	Machine Bowl	Integrated	X	X	X	X	X	X	X	X	X	X	X
	Collet	ET313DC-8Z	X	X	X	X	X	X	X	X			
	Collet	ET313DC-4S8									X	X	X
	Spacer Ring	ET313SR-090A	X	X									
	Spacer Ring	ET313SR-045A			X								
	Spacer Ring	ET313SR-060A				X							
	Spacer Ring	FSD*					X				X	X	X
	Spacer Ring	ET313SR-030A					X						
	Spacer Ring	ET313SR-030D								X			
-10	Machine Bowl	Integrated	X	X	X	X	X	X	X	X	X	X	X
	Collet	ET313DC-10Z	X	X	X	X	X	X	X	X			
	Collet	ET313DC-4S10									X	X	X
	Spacer Ring	ET313SR-180A		X									
	Spacer Ring	ET313SR-150A	X										
	Spacer Ring	ET313SR-120A			X								
	Spacer Ring	FSD*				X	X			X		X	X
	Spacer Ring	ET313SR-060A					X						
	Spacer Ring	ET313SR-015D							X				
	Spacer Ring	ET313SR-030D									X		

* A spacer ring is required for this crimper, but any cupped 5 inch spacer ring FSD will work (examples include ET313SR-015D and T-400-10).

Tooling is included in crimper tooling conversion package.

Tooling Reference

■ Standard Hose
 ■ Premium Hose
 ■ Premium High Temp. Hose
 ■ Premium Low Temp. Hose
 ■ Premium Abrasion Hose

ET1000



ET1000

Dash Size	Part Type	Part #	1-Wire Braided				2-Wire Braided				Spiral R12				Spiral R13		Spiral R15		
			EC115	H180	H190H	H145R	EC215	H280	H290H	H245L	EC415	H430	EC525	H430R	EC420	H471	EC615	EC600	EC810
-04	Machine Bowl	Integrated	X	X	X	X	X	X	X	X									
	Adapter Bowl	ET1000AR-001	X	X	X	X	X	X	X	X									
	Collet	ET313DC-4Z	X	X	X	X	X	X	X	X									
	Spacer Ring	ET313SR-090A		X															
	Spacer Ring	ET313SR-075A	X		X														
	Spacer Ring	ET313SR-060A				X													
	Spacer Ring	FSD**						X											
	Spacer Ring	ET313SR-045A					X												
	Spacer Ring	ET313SR-030A								X									
-06	Machine Bowl	Integrated	X	X	X	X	X	X	X	X	X	X		X					
	Adapter Bowl	ET1000AR-001	X	X	X	X	X	X	X	X	X	X		X					
	Collet	ET313DC-6Z	X	X	X	X	X	X	X	X									
	Collet	ET313DC-4S6									X	X		X					
	Spacer Ring	ET313SR-090A	X	X	X														
	Spacer Ring	ET313SR-075A				X													
	Spacer Ring	FSD**					X	X				X		X					
	Spacer Ring	ET313SR-015A									X								
	Spacer Ring	ET313SR-030A								X									
-08	Machine Bowl	Integrated	X	X	X	X	X	X	X	X	X	X		X					
	Adapter Bowl	ET1000AR-001	X	X	X	X	X	X	X	X	X	X		X					
	Collet	ET313DC-8Z	X	X	X	X	X	X	X	X									
	Collet	ET313DC-4S8									X	X		X					
	Spacer Ring	ET313SR-090A	X	X															
	Spacer Ring	ET313SR-045A			X														
	Spacer Ring	ET313SR-060A				X													
	Spacer Ring	FSD**						X			X	X		X					
	Spacer Ring	ET313SR-030A					X												
-10	Machine Bowl	Integrated	X	X	X	X	X	X	X	X	X	X		X					
	Adapter Bowl	ET1000AR-001	X	X	X	X	X	X	X	X	X	X		X					
	Collet	ET313DC-10Z	X	X	X	X	X	X	X	X									
	Collet	ET313DC-4S10									X	X		X					
	Spacer Ring	ET313SR-150A	X																
	Spacer Ring	ET313SR-180A		X															
	Spacer Ring	ET313SR-120A			X														
	Spacer Ring	FSD**				X		X		X		X		X					
	Spacer Ring	ET313SR-060A					X												
-12	Machine Bowl	Integrated	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
	Collet	ET1000DC-12Z	X	X	X	X	X	X	X	X									
	Collet	ET1000DC-4S12									X	X	X	X	X	X		X	X
	Spacer Ring	ET425SR-075A*	X																
	Spacer Ring	ET425SR-150A*		X															
	Spacer Ring	ET425SR-030D			X														
	Spacer Ring	ET425SR-090D				X													
	Spacer Ring	FSD**					X	X				X			X				
	Spacer Ring	ET425SR-105D							X										
	Spacer Ring	ET425SR-015D								X			X						X
	Spacer Ring	ET425SR-105A*									X								
	Spacer Ring	ET425SR-030A*												X					
	Spacer Ring	ET425SR-015A*														X			
	Spacer Ring	ET425SR-045A*																X	
-16	Machine Bowl	Integrated	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Collet	ET1000DC-16Z	X	X	X	X	X	X	X	X									
	Collet	ET1000DC-4S16									X	X	X	X	X	X	X	X	X
	Spacer Ring	ET425SR-015D	X							X									
	Spacer Ring	ET425SR-150A*		X															
	Spacer Ring	ET425SR-090D			X		X												
	Spacer Ring	ET425SR-045D				X													
	Spacer Ring	FSD**						X				X	X						X
	Spacer Ring	ET425SR-045A																X	
	Spacer Ring	ET425SR-225D							X										
	Spacer Ring	ET425SR-030A*									X				X		X		
	Spacer Ring	ET425SR-015A*												X					
	Spacer Ring	ET425SR-030D														X			

* Requires a ET1000C-0012 pusher extension to be placed on top of these spacer rings

** A spacer ring is required for this crimper, but any cupped 5 inch spacer ring FSD will work (examples include ET313SR-015D and T-400-10)

Tooling is included in crimper tooling conversion package.

■ Standard Hose
 ■ Premium Hose
 ■ Premium High Temp. Hose
 ■ Premium Low Temp. Hose
 ■ Premium Abrasion Hose

T-420, T-480

Dash Size	Part Type	Part #	1-Wire Braided				2-Wire Braided				Spiral R12				Spiral R13		Spiral R15		
			EC115	H180	H190H	H145R	EC215	H280	H290H	H245L	EC415	H430	EC525	H430R	EC420	H471	EC615	EC600	EC810
-04	Machine Bowl	ET425AR-14	X	X	X	X	X	X	X	X									
	Collet	ET425DC-4Z	X	X	X	X	X	X	X	X									
	Spacer Ring	ET425SR-090A	X																
	Spacer Ring	ET425SR-105A		X															
	Spacer Ring	ET425SR-075A			X														
	Spacer Ring	ET425SR-060A				X													
	Spacer Ring	ET425SR-045A					X												
	Spacer Ring	ET425SR-015D						X											
-06	Machine Bowl	ET425AR-14	X	X	X	X	X	X	X	X	X	X		X					
	Collet	ET425DC-6Z	X	X	X	X	X	X	X	X									
	Collet	ET425DC-4S6									X	X		X					
	Spacer Ring	ET425SR-105A	X	X															
	Spacer Ring	ET425SR-090A			X														
	Spacer Ring	ET425SR-075A				X													
	Spacer Ring	ET425SR-045D						X											
	Spacer Ring	ET425SR-030A								X									
-08	Machine Bowl	ET425AR-14	X	X	X	X	X	X	X	X	X	X		X					
	Collet	ET425DC-8Z	X	X	X	X	X	X	X	X									
	Collet	ET425DC-4S8									X	X		X					
	Spacer Ring	ET425SR-030D								X									
	Spacer Ring	ET425SR-060D						X											
	Spacer Ring	ET425SR-090A	X																
	Spacer Ring	ET425SR-105A		X															
	Spacer Ring	ET425SR-045A			X														
-10	Machine Bowl	ET425AR-14	X	X	X	X	X	X	X	X	X	X		X					
	Collet	ET425DC-10Z	X	X	X	X	X	X	X	X									
	Collet	ET425DC-4S10									X	X		X					
	Spacer Ring	ET425SR-165A	X																
	Spacer Ring	ET425SR-195A		X															
	Spacer Ring	ET425SR-120A			X														
	Spacer Ring	ET425SR-060A					X												
	Spacer Ring	ET425SR-015D									X								
-12	Machine Bowl	ET425AR-14	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
	Collet	ET425DC-12Z	X	X	X	X	X	X	X	X									
	Collet	ET425DC-4S12									X	X	X	X	X	X		X	X
	Spacer Ring	ET425SR-060A	X																
	Spacer Ring	ET425SR-105A		X															
	Spacer Ring	ET425SR-015D			X								X						X
	Spacer Ring	ET425SR-075D				X		X											
	Spacer Ring	ET425SR-075A									X								
-16	Machine Bowl	ET425AR-14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Collet	ET425DC-16Z	X	X	X	X	X	X	X	X									
	Collet	ET425DC-4S16									X	X	X	X	X	X	X	X	X
	Spacer Ring	ET425SR-015D	X							X						X			
	Spacer Ring	ET425SR-105A		X															
	Spacer Ring	ET425SR-030D			X														
	Spacer Ring	ET425SR-060D			X		X												
	Spacer Ring	ET425SR-165D						X											
-20	Machine Bowl	ET425AR-14	X	X	X	X	X	X	X	X	X	X	X	X		X			
	Collet	ET425DC-20Z	X	X	X		X	X	X	X									
	Collet	ET425DC-4S20									X	X	X	X		X			
	Spacer Ring	ET425SR-105A	X	X	X														
	Spacer Ring	ET425SR-015D									X								
	Spacer Ring	ET425SR-030D					X												
	Spacer Ring	ET425SR-195D						X											
	Spacer Ring	ET425SR-015A											X						

Tooling is included in crimper tooling conversion package.



T-420



T-480

Tooling Reference

■ Standard Hose
 ■ Premium Hose
 ■ Premium High Temp. Hose
 ■ Premium Low Temp. Hose
 ■ Premium Abrasion Hose

ET4000, ET4001



ET4000



ET4001

Dash Size	Part Type	Part #	1-Wire Braided				2-Wire Braided				Spiral R12				Spiral R13		Spiral R15		
			EC115	H180	H190H	H145R	EC215	H280	H290H	H245L	EC415	H430	EC525	H430R	EC420	H471	EC615	EC600	EC810
-04	Machine Bowl	ET4000AR-001	X	X	X	X	X	X	X	X									
	Collet	ET525DC-4Z	X	X	X	X	X	X	X	X									
	Spacer Ring	ET525SR-105A	X																
	Spacer Ring	ET525SR-120A		X															
	Spacer Ring	ET525SR-090A			X														
	Spacer Ring	ET525SR-060A					X												
	Spacer Ring	ET525SR-075A				X													
	Spacer Ring	ET525SR-015D							X										
	Spacer Ring	ET525SR-045A								X									
-06	Machine Bowl	ET4000AR-001	X	X	X	X	X	X	X	X	X	X		X					
	Collet	ET525DC-6Z	X	X	X	X	X	X	X	X									
	Collet	ET525DC-4S6									X	X		X					
	Spacer Ring	ET525SR-120A	X	X															
	Spacer Ring	ET525SR-105A			X														
	Spacer Ring	ET525SR-90A				X													
	Spacer Ring	ET525SR-015A									X								
	Spacer Ring	ET525SR-045D							X										
	Spacer Ring	ET525SR-030A								X									
-08	Machine Bowl	ET4000AR-001	X	X	X	X	X	X	X	X	X	X		X					
	Collet	ET525DC-8Z	X	X	X	X	X	X	X	X									
	Collet	ET525DC-4S8									X	X		X					
	Spacer Ring	ET525SR-120A	X	X															
	Spacer Ring	ET525SR-045A			X		X												
	Spacer Ring	ET525SR-090A				X													
	Spacer Ring	ET525SR-015A									X								
	Spacer Ring	ET525SR-075D							X										
	Spacer Ring	ET525SR-030D								X									
-10	Machine Bowl	ET4000AR-001									X	X		X					
	Collet	ET525DC-10Z	X	X	X	X	X	X	X	X									
	Collet	ET525DC-4S10									X	X		X					
	Spacer Ring	ET525SR-195A	X																
	Spacer Ring	ET525SR-225A		X															
	Spacer Ring	ET525SR-150A			X														
	Spacer Ring	ET525SR-015D									X								
	Spacer Ring	ET525SR-075A					X												
	Spacer Ring	ET525SR-030D							X										
-12	Machine Bowl	ET4000AR-001	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X
	Collet	ET525DC-12Z	X	X	X	X	X	X	X	X									
	Collet	ET525DC-4S12									X	X	X	X	X	X		X	X
	Spacer Ring	ET525SR-060A	X																
	Spacer Ring	ET525SR-120A		X															
	Spacer Ring	ET525SR-015D			X					X			X						X
	Spacer Ring	ET525SR-075D				X													
	Spacer Ring	ET525SR-090D							X										
	Spacer Ring	ET525SR-075A									X								
	Spacer Ring	ET525SR-015A											X						
	Spacer Ring	ET525SR-030A												X					X
-16	Machine Bowl	ET4000AR-001	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Collet	ET525DC-16Z	X	X	X	X	X	X	X	X									
	Collet	ET525DC-4S16									X	X	X	X	X	X	X	X	X
	Spacer Ring	ET525SR-015D	X							X						X			
	Spacer Ring	ET525SR-120A		X															
	Spacer Ring	ET525SR-075D			X		X												
	Spacer Ring	ET525SR-030D				X													
	Spacer Ring	ET525SR-030A									X				X		X	X	
	Spacer Ring	ET525SR-180D							X										
	Spacer Ring	ET525SR-015A											X						

Tooling is included in crimper tooling conversion package.

■ Standard Hose
 ■ Premium Hose
 ■ Premium High Temp. Hose
 ■ Premium Low Temp. Hose
 ■ Premium Abrasion Hose

ET4000, ET4001 (cont.)

Dash Size	Part Type	Part #	1-Wire Braided				2-Wire Braided				Spiral R12				Spiral R13		Spiral R15		
			EC115	H180	H190H	H145R	EC215	H280	H290H	H245L	EC415	H430	EC525	H430R	EC420	H471	EC615	EC600	EC810
-20	Machine Bowl	ET4000AR-001	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Collet	ET525DC-20Z	X	X	X		X	X	X	X									
	Collet	ET525DC-4S20									X	X	X	X		X			
	Collet	ET525DC-6S20													X		X	X	X
	Spacer Ring	ET525SR-240A	X	X	X														
	Spacer Ring	ET525SR-090A					X												
	Spacer Ring	ET525SR-120A						X		X									
	Spacer Ring	ET525SR-120D							X										
	Spacer Ring	ET525SR-015D									X							X	
	Spacer Ring	ET525SR-030A												X					
	Spacer Ring	ET525SR-045D													X				
	Spacer Ring	ET525SR-075A														X			
	Spacer Ring	ET525SR-045A															X		
	Machine Bowl	ET4000AR-001	X	X	X	X	X	X	X	X									
-24	Machine Bowl	ET4000AR-002									X	X	X	X	X	X	X		X
	Collet	ET525DC-24Z		X	X		X	X	X	X									
	Collet	ET575DC-4S24									X	X	X	X		X			
	Collet	ET575DC-6S24													X		X		X
	Spacer Ring	ET525SR-225A		X				X											
	Spacer Ring	ET525SR-150A			X														
	Spacer Ring	ET525SR-180A					X												
	Spacer Ring	ET525SR-060D							X										
	Spacer Ring	ET525SR-210A								X									
	Spacer Ring	ET575SR-015A									X								
	Spacer Ring	ET575SR-045D													X				
	Spacer Ring	ET575SR-030A														X			
	Machine Bowl	ET4000AR-001	X	X	X	X	X	X	X	X									
	Machine Bowl	ET4000AR-002									X	X	X	X	X	X			X
	Collet	ET525DC-32Z		X	X		X	X	X	X									
-32	Collet	ET575DC-4S32									X	X	X	X					
	Collet	ET575DC-6S32													X	X			X
	Spacer Ring	ET525SR-180A		X				X		X									
	Spacer Ring	ET525SR-030D			X														
	Spacer Ring	ET525SR-015A							X							X			
	Spacer Ring	ET525SR-120A					X												
	Spacer Ring	ET575SR-060A													X				
	Spacer Ring	ET575SR-120A									X								
	Spacer Ring	ET575SR-135A										X	X	X					
	Spacer Ring	ET575SR-075A																	X

Tooling is included in crimper tooling conversion package.



ET4000



ET4001

Tooling Reference

■ Standard Hose
 ■ Premium Hose
 ■ Premium High Temp. Hose
 ■ Premium Low Temp. Hose
 ■ Premium Abrasion Hose

T-410*, T-440*



T-410

Dash Size	Part Type	Part #	1-Wire Braided				2-Wire Braided				Spiral R12				Spiral R13		Spiral R15		
			EC115	H180	H190H	H145R	EC215	H280	H290H	H245L	EC415	H430	EC525	H430R	EC420	H471	EC615	EC600	EC810
-04	Machine Bowl	T-410-26	X	X	X	X	X	X	X	X									
	Collet	ET525DC-4Z	X	X	X	X	X	X	X	X									
	Spacer Ring	ET525SR-105A	X																
	Spacer Ring	ET525SR-120A		X															
	Spacer Ring	ET525SR-090A			X														
	Spacer Ring	ET525SR-060A					X												
	Spacer Ring	ET525SR-075A				X													
	Spacer Ring	ET525SR-015D						X											
-06	Machine Bowl	T-410-26	X	X	X	X	X	X	X	X	X	X		X					
	Collet	ET525DC-6Z	X	X	X	X	X	X	X	X									
	Collet	ET525DC-4S6									X	X		X					
	Spacer Ring	ET525SR-120A	X	X															
	Spacer Ring	ET525SR-105A			X														
	Spacer Ring	ET525SR-90A				X													
	Spacer Ring	ET525SR-015A								X									
	Spacer Ring	ET525SR-045D						X											
-08	Machine Bowl	T-410-26	X	X	X	X	X	X	X	X	X	X		X					
	Collet	ET525DC-8Z	X	X	X	X	X	X	X	X									
	Collet	ET525DC-4S8									X	X		X					
	Spacer Ring	ET525SR-120A	X	X															
	Spacer Ring	ET525SR-045A			X		X												
	Spacer Ring	ET525SR-090A				X													
	Spacer Ring	ET525SR-015A								X									
	Spacer Ring	ET525SR-075D						X											
-10	Machine Bowl	T-410-26	X	X	X	X	X	X	X	X	X	X		X					
	Collet	ET525DC-10Z	X	X	X	X	X	X	X	X									
	Collet	ET525DC-4S10									X	X		X					
	Spacer Ring	ET525SR-195A	X																
	Spacer Ring	ET525SR-225A		X															
	Spacer Ring	ET525SR-150A			X														
	Spacer Ring	ET525SR-015D								X									
	Spacer Ring	ET525SR-075A					X												
-12	Machine Bowl	T-410-26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	Collet	ET525DC-12Z	X	X	X	X	X	X	X	X									
	Collet	ET525DC-4S12									X	X	X	X	X	X	X	X	
	Spacer Ring	ET525SR-060A	X																
	Spacer Ring	ET525SR-120A		X															
	Spacer Ring	ET525SR-015D			X				X			X						X	
	Spacer Ring	ET525SR-075D				X													
	Spacer Ring	ET525SR-090D						X											
	Spacer Ring	ET525SR-075A								X									
	Spacer Ring	ET525SR-015A										X							
Spacer Ring	ET525SR-030A															X			

* T-410 and T-440 machines can not crimp 4S24, 4S32, 6S24, or 6S32 fittings

Tooling is included in crimper tooling conversion package.

■ Standard Hose
 ■ Premium Hose
 ■ Premium High Temp. Hose
 ■ Premium Low Temp. Hose
 ■ Premium Abrasion Hose

T-410*, T-440* (cont.)

Dash Size	Part Type	Part #	1-Wire Braided				2-Wire Braided				Spiral R12				Spiral R13		Spiral R15		
			EC115	H180	H190H	H145R	EC215	H280	H290H	H245L	EC415	H430	EC525	H430R	EC420	H471	EC615	EC600	EC810
-16	Machine Bowl	T-410-26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Collet	ET525DC-16Z	X	X	X	X	X	X	X	X									
	Collet	ET525DC-4S16									X	X	X	X	X	X	X	X	X
	Spacer Ring	ET525SR-015D	X							X						X			
	Spacer Ring	ET525SR-120A		X															
	Spacer Ring	ET525SR-075D			X		X												
	Spacer Ring	ET525SR-030D				X													
	Spacer Ring	ET525SR-030A									X				X		X	X	
	Spacer Ring	ET525SR-180D							X										
	Spacer Ring	ET525SR-015A												X					
-20	Machine Bowl	T-410-26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X
	Collet	ET525DC-20Z	X	X	X		X	X	X	X									
	Collet	ET525DC-4S20									X	X	X	X		X			
	Collet	ET525DC-6S20													X		X		X
	Spacer Ring	ET525SR-240A	X	X	X														
	Spacer Ring	ET525SR-090A					X												
	Spacer Ring	ET525SR-120A						X		X									
	Spacer Ring	ET525SR-120D							X										
	Spacer Ring	ET525SR-015D									X								
	Spacer Ring	ET525SR-030A												X					
	Spacer Ring	ET525SR-045D													X				
	Spacer Ring	ET525SR-075A														X			
-24	Machine Bowl	T-410-26	X	X	X	X	X	X	X	X									
	Collet	ET525DC-24Z		X	X		X	X	X	X									
	Collet	ET575DC-4S24																	
	Collet	ET575DC-6S24																	
	Spacer Ring	ET525SR-225A		X				X											
	Spacer Ring	ET525SR-150A			X														
	Spacer Ring	ET525SR-180A					X												
	Spacer Ring	ET525SR-060D							X										
	Spacer Ring	ET525SR-210A								X									
	Spacer Ring	ET575SR-015A																	
	Spacer Ring	ET575SR-045D																	
	Spacer Ring	ET575SR-030A																	
	Machine Bowl	T-410-26	X	X	X	X	X	X	X	X									
	Collet	ET525DC-32Z		X	X			X	X	X									
	Collet	ET575DC-4S32																	
-32	Collet	ET575DC-6S32																	
	Spacer Ring	ET525SR-180A		X				X		X									
	Spacer Ring	ET525SR-030D			X														
	Spacer Ring	ET575SR-060A																	
	Spacer Ring	ET525SR-015A							X										
	Spacer Ring	ET575SR-120A																	
	Spacer Ring	ET575SR-135A																	
	Spacer Ring	ET575SR-075A																	

* T-410 and T-440 machines can not crimp 4S24, 4S32, 6S24, or 6S32 fittings

Tooling is included in crimper tooling conversion package.



T-410

Crimp machine comparison chart

Eaton's new lineup of positive stop and variable crimpers includes portable, general service, and industrial production options. Compare our new offering of crimp machines and their associated features to understand which crimper is best for you.



Core crimp machines



ET1187



ET1000



FT1380



T-420



FT1390



ET4001



ET5050

Production volume	Low	Low	Medium	Medium	Medium/high	Medium	High
Type	Variable	Positive stop	Variable	Positive stop	Variable	Positive stop	Variable
Capability-braided (up to)	1 1/4"	1"	1 1/4"	1 1/4"	2"	2"	2"
Capability-spiral (up to)	1"	1"	1 1/4"	1 1/4"	2"	2"	2"
Capability-industrial (up to)	1 1/4"	1"	1 1/4"	1 1/4"	2"	2"	4"
Application	Portable, job shops, maintenance departments	Portable, job shops, maintenance departments	Hose distributors, small assembly shops	Hose distributors, small assembly shops, factory, construction, mines	Hose distributors, assembly shops	Hose distributors, assembly shops, construction, mines	Industrial production facility, specialty
*Pump options	110v, air/hydraulic, 12v, hand pump	110v, air/hydraulic, 12v, hand pump	115v, 230v	110v, 220v	115v, 230v	220v	230v, 380v, 400v, 420v, 440v, 460v, 480v,

*Capabilities based on Eaton core hose and fitting products

*See pump ordering options for each machine for specific kit numbers

Helpful tools and features

We're changing the crimping game.

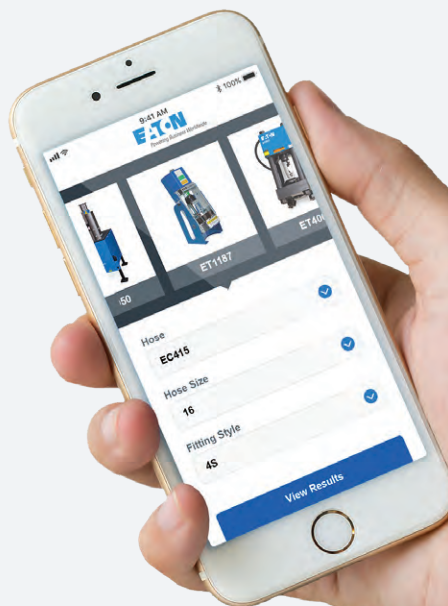
Mobile crimp tool

We've made it easier to help your customers find the proper crimp spec anytime, anywhere with the new mobile crimp spec tool on PowerSource.

Visit www.eaton.com/crimp on your mobile device and follow these steps:

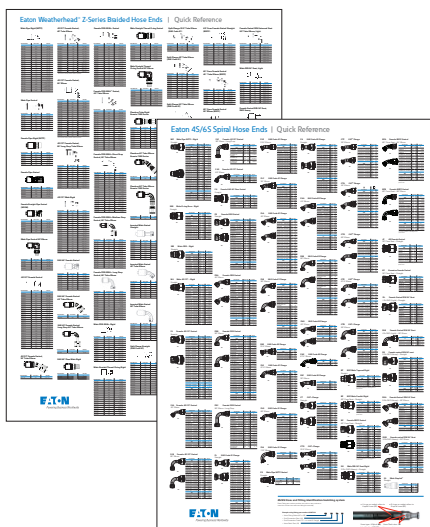
1. Find your machine
2. Select your hose series
3. Select your hose size
4. Find your fitting style

Then view your results. Add the tool to your home screen for even quicker access.



Additional Weatherhead collateral

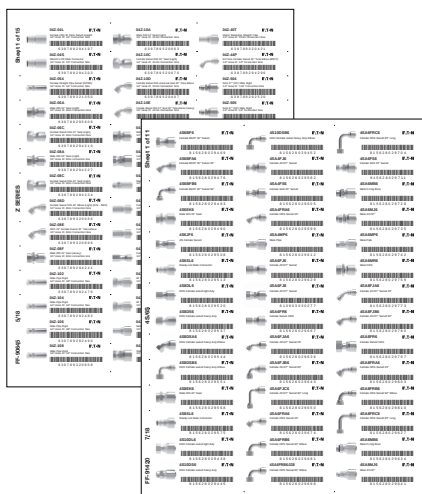
Wall charts



Z Series wall chart
W-HOSP-TT01-E1

4S/6S wall chart
E-HOAS-TT01-E

Label sets



Z Series label set
FF-90645

4S/6S label set
FF-91420

Core tooling label set
FF-91475

Catalogs



Weatherhead master catalog
W-HYOV-MC002-E4

4S/6S Spiral hose fittings
E-HOSP-BB006-E4



mcgillhose.com - sales@mcgillhose.com - 413-525-3977

Danfoss