Spare Parts List

IsoPak® Biochromatography Process Columns

Column Diameters 440/630/800 mm Column Diameters 1000 mm Column Diameters 1200/1400 mm



MilliporeSigma is the U.S. and Canada Life Science business of Merck KGaA, Darmstadt, Germany.



www.sigmaaldrich.com



Millipore®

Spare Parts

To help you select and manage the spare parts required for your system, our experts have performed a risk assessment to determine which parts to keep in stock.

The risk assessment is based on our experience; each customer must perform their individual risk assessment for their process, to ensure alignment with our strategy, and review the stock requirements accordingly.

As a result of this risk assessment, we defined 3 categories of spare parts:

Type of parts	Description	Stock recommendation			
Preventive maintenance parts					
	Not replacing wear and tear parts as recommended can impact system functionality and may result in system shutdown.				
Critical parts	These parts have been identified as most critical to avoiding system downtime and are recommended to be kept in stock for immediate availability.	1 part per unit			
All other parts	All other individual parts.	Risk-based customer decision			

Based on our risk analysis, preventive maintenance and critical spare parts are essential to keep your equipment running. We recommend keeping preventive maintenance and critical spare parts in stock.

For additional information, please visit: SigmaAldrich.com/product-services

Spare Parts and Accessories for IsoPak[™] Columns

Slurry Transfer Skids

Description	Inlet Piping Dimension	Connection	Weight	Dimensions	Catalogue No.
STS-I					
Slurry Transfer Skid 1	OD 1 in.—Dia 25.4 x 1.65	TC $1^{1/2}$ in.	170 kg	L900 x W700 x H1330	MSP88440001
Flexible Hose	OD 1 in.—Dia 25.4 x 1.65	TC $1^{1/2}$ in.			FTP97448*
Pressure gauge + T, STS 1, Pressure gauge WIKA 233.50/990.22					FTP97450*
Umbilicals Umbilical PNEU/ELECT FF+MM 3 m Long					FTP97449*
STS-II					
Slurry Transfer Skid 2	OD 1 $^{1}/_{2}$ in.—Dia 38.1 x 1.65	TC $1^{1}/_{2}$ in.	190 kg	L900 x W700 x H1330	MSP88440002
Flexible Hose	OD 1 1/2 in.—Dia 38.1 x 1.65	TC $1^{1/2}$ in.			FTP97451*
Pressure gauge + T, STS 2, Pressure gauge WIKA 233.50/990.22					FTP97452*
Umbilicals UMBILICAL PNEU/ELECT FF+MM 3 m Long					FTP97449*

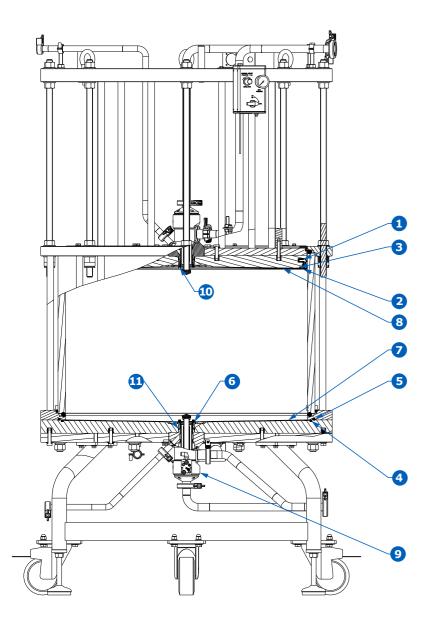
Other Spare Parts

Catalogue No.	Product Description	Criticality
SPK94630001	Quick-release nut and washer for IP630 (M16)	Other
SPK94440001	Quick-release nut and washer for IP440 (M12)	Other
SPK94000046	Quick-release nut and washer for IP800-1000-1200-1400 (M20)	Other
SPK94630002	10X Elastomer retaining ring for split quick-release nut M16	Other
SPK94000047	10X Elastomer retaining ring for split quick-release nut M20	Other
SPK94440002	10X Elastomer retaining ring for split quick-release nut M12	Other

* To be ordered separately. Required to run the STS

For additional information, please contact your local Technical Service representative.

Isopak[™] Columns Diameter 440/630/800 Spare Parts List

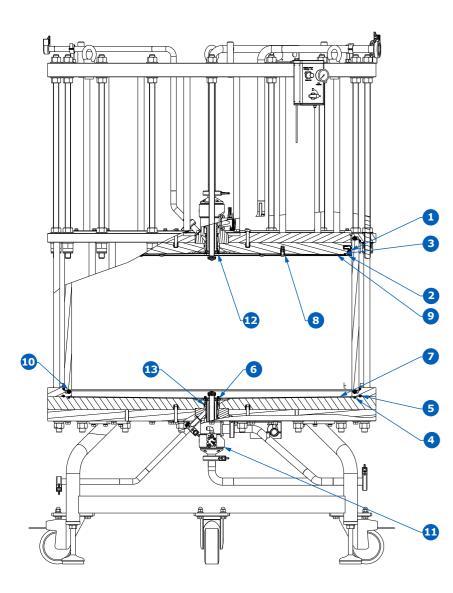


Number	Catalogue No.	Description	Kit Content	Preventive Maintenance (PM), Critical, Others	440	630	800	Field Service Required for Installation and/or setup*	Frequency
# 1	SPK94440010	Diam. 440 Inflatable seal air kit		PM	х			yes	Every 12 months
# 1	SPK94630010	Diam. 630 Inflatable seal air kit	1 inflatable seal	PM		х		yes	Every 12 months
# 1	SPK94800010	Diam. 800 Inflatable seal air kit		PM			х	yes	Every 12 months
# 1	SPK94440011	Inflatable seal liquid		PM	х			yes	Every 12 months
# 1	SPK94630011	Inflatable seal liquid	1 inflatable seal	PM		х		yes	Every 12 months
# 1	SPK94800011	Inflatable seal liquid		PM			х	yes	Every 12 months
# 2 + 3	SPK94440027	Snap rim		PM	х			yes	Every 12 months
# 2 + 3	SPK94630027	Snap rim	1 snap rim + 1 O-ring adjuster flowcell	PM		х		yes	Every 12 months
# 2 + 3	SPK94800027	Snap rim		PM			х	yes	Every 12 months
# 3 + 4 + 5 + 6	SPK94440006	Bed support seal kit	1 O-ring adjuster flowcell	PM	х			yes	Every 12 months
# 3 + 4 + 5 + 6	SPK94630006	Bed support seal kit	+ 1 O-ring bottom	PM		х		yes	Every 12 months
# 3 + 4 + 5 + 6	SPK94800006	Bed support seal kit	+ 1 O-ring tube + 4 sinter ring seal	PM			х	yes	Every 12 months
# 5	SPK94440009	Seal acrylic tube Kit		PM	х			yes	Every 12 months
# 5	SPK94630009	Seal acrylic tube Kit	5 O-ring tube	PM		х		yes	Every 12 months
# 5	SPK94800009	Seal acrylic tube Kit		PM			х	yes	Every 12 months
# 6 + 10 + 11	SPK94000132	Valve seal kit	2 sinter ring seal + 1 sinter ring + 1 seal set for complete valve maintenance	PM	x	х	х	yes	Every 12 months
# 4 + 5 + 6 +7	SPK94440003	Bottom bed support	1 O-ring tube	Critical	х			yes	As required
# 4 + 5 + 6 +7	SPK94630003	Bottom bed support	+ 1 O-ring bottom	Critical		х		yes	As required
# 4 + 5 + 6 +7	SPK94800003	Bottom bed support	+ 2 sinter ring seal + 1 bottom bed support	Critical			х	yes	As required
# 3 + 6 + 8	SPK94440004	Adjuster bed support		Critical	х			yes	As required
# 3 + 6 + 8	SPK94630004	Adjuster bed support	1 O-ring adjuster flowcell + 2 sinter ring seal + 1 adjuster bed support	Critical		х		yes	As required
# 3 + 6 + 8	SPK94800004	Adjuster bed support		Critical			х	yes	As required
# 9	SPK94000131	Valve kit	Complete valve assembled	Critical	х	х	х	yes	As required
# 6 + 10	SPK94000001	Valve sinter ring kit	2 sinter ring seal + 1 sinter ring	Critical	х	х	х	yes	As required
# 6	SPK94000033	Valve sinter ring seal kit	4 sinter ring seal + 1 sinter ring	Critical	х	х	х	yes	As required

Means that the part is illustrated

* Replacement and/or setup need to be made by a trained technician

Isopak[™] Columns Diameter 1000 Spare Parts List

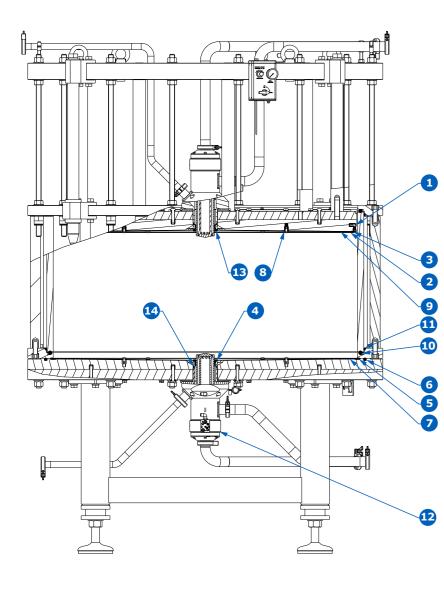


Number	Catalogue No.	Description	Kit Content	Preventive Maintenance (PM), Critical, Others	1000	Field Service Required for Installation and/or setup*	Frequency
# 1	SPK94100010	inflatable seal air	1 inflatable seal	PM	X	ves	Every 12 months
# 1	SPK94100011	Inflatable seal liquid	1 inflatable seal liquid	PM	x	yes	Every 12 months
# 2 + 3 +6	SPK94100027	Snap rim	1 snap rim + 1 O-ring adjuster flowcell + 2 sinter ring seal	PM	х	yes	Every 12 months
# 3 + 4 + 5 + 6	SPK94100006	Bed support seal kit	1 O-ring adjuster flowcell + 1 O-ring bottom flowcell + 1 O-ring bottom tube + 4 sinter ring seal	PM	х	yes	Every 12 months
# 4	SPK94100009	Seal acrylic tube Kit	3 O-ring bottom flowcell	PM	х	yes	Every 12 months
# 6 + 12 + 13	SPK94000132	Valve seal kit	2 sinter ring seal + 1 sinter ring + 1 seal set for complete valve maintenance	PM	х	yes	Every 12 months
# 4 + 5 + 6 +7	SPK94410003	Bottom bed support	1 O-ring bottom flowcell+ 1 O-ring bottom tube + 2 sinter ring seal + 1 bottom bed support	Critical	х	yes	As required
# 3 + 6 + 8 + 9	SPK94410004	Adjuster bed support	1 O-ring adjuster flowcell + 2 sinter ring seal + 8 washer +1 adjuster bed support	Critical	х	yes	As required
# 11	SPK94000136	Valve kit	Complete valve assembled	Critical	х	yes	As required
# 6 + 12	SPK94000001	Valve sinter ring kit	2 sinter ring seal + 1 sinter ring	Critical	х	yes	As required
# 6	SPK94000033	Valve sinter ring seal kit	4 sinter ring seal	Critical	х	yes	As required

Means that the part is illustrated

* Replacement and/or setup need to be made by a trained technician

Isopak[™] Columns Diameter 1200/1400 Spare Parts List



Number	Catalogue No.	Description	Kit Content	Preventive Maintenance (PM), Critical, Others	1200	1400	Field Service Required for Installation and/or setup*	Frequency
# 1	SPK94120010	inflatable seal air	- 1 inflatable seal air	PM	х		yes	Every 12 months
# 1	SPK94140010	inflatable seal air		PM		х	yes	Every 12 months
# 1	SPK94120011	Inflatable seal liquid	1 inflatable and liquid	PM	х		yes	Every 12 months
# 1	SPK94140011	Inflatable seal liquid	- 1 inflatable seal liquid	PM		х	yes	Every 12 months
# 2 + 3 + 4	SPK94120027	Snap rim	1 snap rim + 1 U-section seal (adjsuter)	PM	х		yes	Every 12 months
# 2 + 3 + 4	SPK94140027	Snap rim	+ 2 sinter ring seal	PM		х	yes	Every 12 months
# 3 + 4 + 5 + 6	SPK94120006	Bed support seal kit	1 U-section seal (adjuster) + 4 sinter ring seal	PM	х		yes	Every 12 months
# 3 + 4 + 5 + 6	SPK94140006	Bed support seal kit	+ 1 U-section seal (bottom) + 1 O-ring tube	PM		х	yes	Every 12 months
# 10 + 11	SPK94120009	Seal acrylic tube Kit		PM	х		yes	Every 12 months
# 10 + 11	SPK94140009	Seal acrylic tube Kit	- 2 O-ring + 2 O-ring	PM		х	yes	Every 12 months
# 4 + 13 + 14	SP940000105	Valve seal kit	1 sinter ring seal + 1 sinter ring + 1 seal set for complete valve maintenance	PM	х	х	yes	Every 12 months
# 4 + 5 + 6 + 7 + 8	SPK94120003	Bottom bed support	2 sinter ring seal + 1 U-section seal bottom	Critical	х		yes	As required
# 4 + 5 + 6 + 7 + 8	SPK94140003	Bottom bed support	+ 1 O-ring tube + 1 bottom bed support + 8 1	Critical		х	yes	As required
# 3 + 4 + 8 + 9	SPK94120004	Adjuster bed support	1 U-section seal (adjuster) + 2 sinter ring seal	Critical	х		yes	As required
# 3 + 4 + 8 + 9	SPK94140004	Adjuster bed support	+ 8 washer + 1 adjuster bed support	Critical		х	yes	As required
# 12	SPK94000100	Valve kit	Complete valve assembled	Critical	х	х	yes	As required
# 4 + 13	SPK94000002	Valve sinter ring kit	2 sinter ring seal + 1 sinter ring	Critical	х	х	yes	As required
# 4	SPK94000102	Valve sinter ring seal kit	4 sinter ring seal	Critical	х	х	yes	As required

Means that the part is illustrated

 \ast Replacement and/or setup need to be made by a trained technician

Technical Assistance

For more information, please visit **SigmaAldrich.com/Systems-Services** for up-to-date worldwide contact information

© 2022 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved. MilliporeSigma, the vibrant M, Millipore, Sigma-Aldrich, and Isopak are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources.

