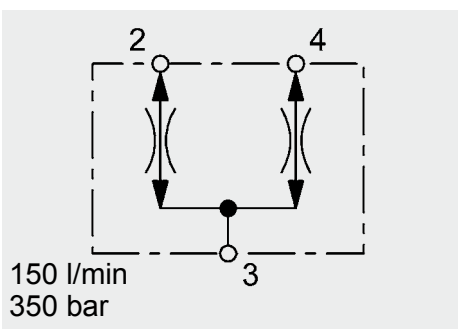


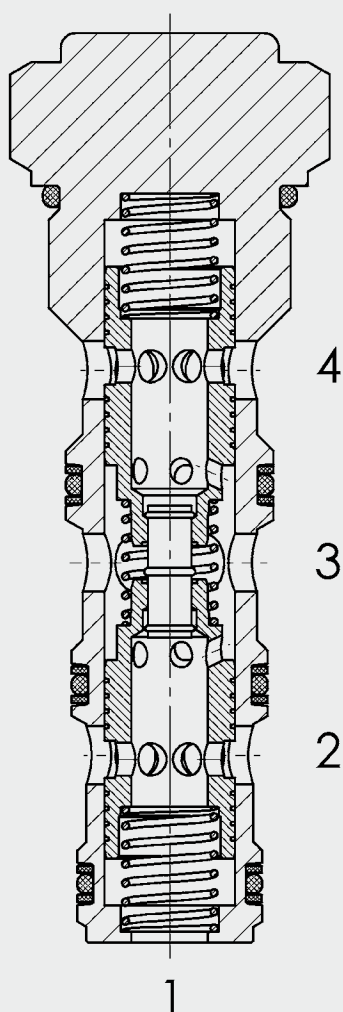
## Flow Divider / Combiner SAE-16 Cartridge – 350 bar

**UNF**

ST16-01



### FUNCTION



\* Note:  
Port 1 is  
not used

The ST16 flow divider is a pressure compensated spring-loaded spool type valve. It divides a flow in two and keeps both flows constant. The division is made according to the specified ratio - from port 3 to ports 2 and 4. As a flow combiner it combines two partial flows together - from ports 2 and 4 to port 3. Port 1 is not used.

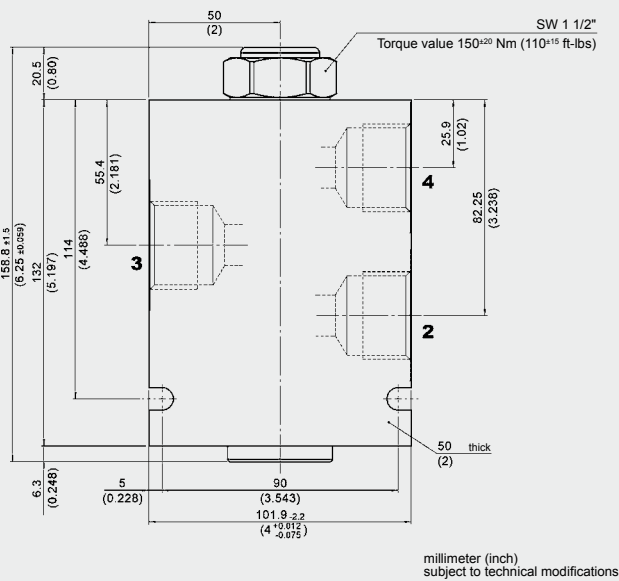
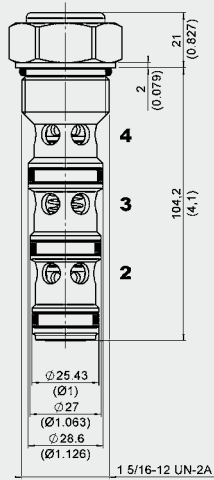
### FEATURES

- External surfaces corrosion-proof
- Hardened and ground internal valve components to ensure minimal wear and extended service life
- Excellent dividing and combining accuracy
- Wide flow range down to 25% of nominal flow rating
- Low pressure drop throughout flow range
- Can be used for differential locks in drive applications
- Synchronizing flow in both operating modes
- Compact design

### SPECIFICATIONS

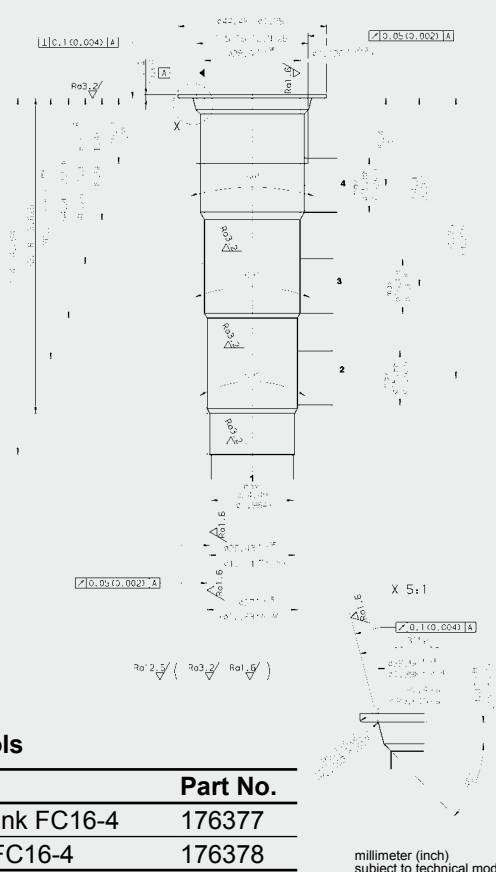
Operating pressure:	max. 350 bar	
Nominal flow:	max. 150 l/min	
Inlet flow:	max. 90 l/min	Code 1212
	max. 115 l/min	Code 1515
	max. 150 l/min	Code 2020
Accuracy:	See performance graph	
Media operating temperature range:	min. -30 °C to max. +100 °C	
Ambient temperature range:	min. -30 °C to max. +100 °C	
Operating fluid:	Hydraulic oil to DIN 51524 Part 1 and 2	
Viscosity range:	min. 7.4 mm <sup>2</sup> /s to max. 420 mm <sup>2</sup> /s	
Filtration:	Class 21/19/16 to ISO 4406 or cleaner	
MTTF <sub>d</sub> :	150 years (see "Conditions and instructions for valves" in brochure 5.300)	
Materials:	Valve body:	free-cutting steel
	Spool:	hardened and ground steel
	Seals:	NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C)
	Back-up rings:	PTFE
Cavity:	FC16-4 (port 1 not used)	
Weight:	0.45 kg	

## DIMENSIONS



## CAVITY

FC16-4



## Form tools

Tool	Part No.
Countersink FC16-4	176377
Reamer FC16-4	176378

millimeter (inch)  
subject to technical modifications

## MODEL CODE

**ST16-01 - C - N - 1212**

**Basic model** \_\_\_\_\_  
Flow divider / Combiner, UNF

**Body and Ports\*** \_\_\_\_\_  
C = cartridge only  
SB8 = G1 ports, steel body  
AB8 = G1 ports, aluminium body  
Versions with line bodies on request

**Seals** \_\_\_\_\_  
N = NBR (standard)  
V = FKM

**Flow rate code & flow range** \_\_\_\_\_

Code	Ratio Port 2 [%]	Ratio Port 4 [%]	Max. inlet flow [l/min]	Balance flow rate [l/min]
1212	50	50	90	6.7
1515	50	50	115	8.3
2020	50	50	150	9.8

## Standard models

Model code	Part No.
ST16-01-C-N-1212	3012922
ST16-01-C-N-1515	3115421
ST16-01-C-N-2020	3012973

## \*Standard in-line bodies

Code	Part No.	Materials:	Ports	Pressure
FH164-SB8	3032902	Steel, zinc-plated	G1	420 bar
FH164-AB8	3037213	Aluminium, anodized	G1	210 bar

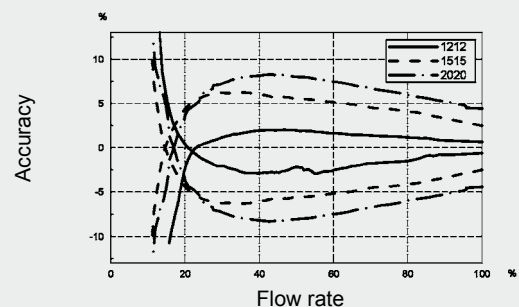
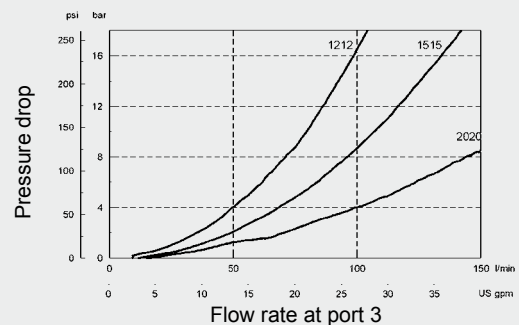
## Seal kits

Code	Material	Part No.
FS164-N SEAL KIT	NBR	3181644
FS164-V SEAL KIT	FKM	3181675

Port 1 is not required and should be closed with threaded plug

## PERFORMANCE

Measured at  $v = 34 \text{ mm}^2/\text{s}$ ,  $T_{\text{oil}} = 46 \text{ }^\circ\text{C}$



## NOTE

The information in this brochure relates to the operating conditions and applications described. For applications or operating conditions not described, please contact the relevant technical department.  
Subject to technical modifications.

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